

Ryder Towing Equipment Ltd

Alvanley House, Alvanley Industrial Estate, Stockport Road East, Bredbury, Stockport, SK6 2DJ
Phone 0161 430 1120 (fax 0161 430 8140)

CarData

Lwpg 2011

The Towbar Electrics Database

for

Towbar Fitters

Quality – Service – Innovation

d.ryder@rydertowing.co.uk

Ryder Towing Equipment Ltd

Alvanley House, Alvanley Ind. Est., Bredbury, Stockport, Cheshire, SK6 2DJ
Phone 0161 430 1120 (fax 0161 430 8140)

To all recipients of the CarData report.

Disclaimer:

By passing on information collected in the Car Data report Ryder Towing Equipment Ltd does not assume responsibility for its accuracy. We are simply passing on data collected in good faith from contributing towbar fitters. It is always the responsibility of the individual fitter to ascertain the conditions that apply in any vehicle he or she is working on and to complete his or her installation accordingly. This information is not published for the use of non-professional fitters of towbar electrical equipment.

Ryder Towing Equipment Ltd
New or updated pages, 2011

Make	Model	Year	New	Partial or Revised
Renault	Grand Modus	2010	Y	
Citroen	C3	2010	Y	
Mercedes	E Class	2010	Y	
Mercedes	C Class	2009	Y	
See also SmartCAN Data CANbus fitting data				

Alfa Romeo	Year	Page
Alfa Romeo 147 All	2001 -	1
Alfa Romeo 147 Saloon etc	2003 -	2
Alfa Romeo 156 All	2000 -	3
Alfa Romeo 164 All	2003 -	4
Alfa Romeo 166 All	1999 -	5

Audi	Year	Page
Audi A3 All	1996 -2003	6
Audi A3 Saloon	July 2003 -	7
Audi A3 Sportback	2009 -	8
Audi A4 All	2009 -	9
Audi A4 All	2002 -	10
Audi A4 All	1996 -2000	11
Audi A4 Saloon	2001 -	12
Audi A4 Tdi Saloon	1996 -2000	13
Audi A5 Saloon etc	Late 2008 -	14
Audi A6 -	2007 -	15
Audi A6 All	July 2004 -	16
Audi A6 All Road	2001 -2004	17
Audi A6 Most	Summer 2001 -2004	18
Audi A6 Saloon etc	1996 -2000	19
Audi A8 All	2003 -	20
Audi Avant All	2005 -	21
Audi Q5 SUV	2009 -	22
Audi Q7 AWD	2006 -	23

BMW	Year	Page
BMW 1 Series All	2005 -	24
BMW 100 All	1990 -1998	25
BMW 3 Series Estate	2010 -	26
BMW 3 Series E90 Saloon	2005 -	27
BMW 3 Series E91 Estate	2005 -	28
BMW 3 Series Compact (E46) All	2002 -	29
BMW 3 Series E46 Saloon etc	Late 2001 -	30
BMW 3 Series Saloon etc	1998 -	31
BMW 3 Series Tourer Estate	Late 1999 -	32
BMW 318i Saloon	2000 -	33
BMW 5 Series (E61) Tourer Estate	July 2004 -	34
BMW 5 Series Saloon etc	Spring 1997 -	35
BMW 5 Series Saloon etc	Spring 2002 -2003	36
BMW 5 Series(39) Tourer Estate	2002 - Spring 2004	37
BMW 7 Series Saloon	Oct 1994 -2000	38
BMW Compact Hatchback	2001 -	39
BMW Mini All	2001 -	40
BMW X1 SUV	2009 -	41
BMW X3 (E83) 4WD	Spring 2004 -	42
BMW X5 4WD	Late 2008 -	43
BMW X5 4WD	2004 -2008	44
BMW X5 4WD	2001 -	45
Cadillac	Year	Page
Cadillac All	2000 -	46
Chevrolet	Year	Page
Chevrolet Blazer 4WD	1995 -2002	47
Chevrolet Captiva AWD	2008 -	48

Chrysler	Year	Page
Chrysler 300C All	2006 -	49
Chrysler Cherokee Jeep 4WD	2006 -	50
Chrysler Cherokee Jeep 4WD	Apr 2002 -	51
Chrysler Cherokee Jeep 4WD	1994 -2000	52
Chrysler Grand Cherokee 4WD	1993 -2000	53
Chrysler Grand Cherokee 4WD	2005 -	54
Chrysler Grand Cherokee 4WD	Mid 2000 -	55
Chrysler Jeep Commander 4WD	2007 -	56
Chrysler Jeep Compass 4WD	2007 -	57
Chrysler Jeep Patriot 4WD	2007 -	58
Chrysler Jeep Wrangler 4WD	1993 -2002	59
Chrysler Jeep Wrangler 4WD	2003 -	60
Chrysler PT cruiser 4WD	2001 -	61
Chrysler Sebring Saloon	2010 -	62
Chrysler Voyager and Grand Voyager MPV	Mar 2001 -	63
Chrysler Voyager and Grand Voyager MPV	Mar 1997 -2001	64

Citroen	Year	Page
Citroen Berlingo 2008 MPV	2008 -	65
Citroen Berlingo All	2003 -	66
Citroen Berlingo Van	1996 -2002	67
Citroen BX Estate	1985 -1994	68
Citroen C2 All	2004 -	69
Citroen C3 Hatchback	2010 -	70
Citroen C3 Picasso MPV	2009 -	71
Citroen C3 Saloon	2002 -	72
Citroen C4 All	2004 -	73
Citroen C4 Picasso MPV	2006 -	74
Citroen C5 (X41) Hatchback	2001 - Oct 2004	75
Citroen C5 Estate	2002 -	76
Citroen C5 Hatchback	Oct 2004 -	77
Citroen C5 Saloon etc	Oct 2008 -	78
Citroen C8 MPV	2003 -	79
Citroen C8 MPV	2007 -	80
Citroen C-Crosser 4WD	2009 -	81
Citroen Despatch Van	2008 -	82
Citroen Despatch Van	2002 -	83
Citroen Multispace MPV	2004 -	84
Citroen Nemo Van	2009 -	85
Citroen Relay Van	2008 -	86
Citroen Relay Van	2001 -	87
Citroen Relay Van	2003 -	88
Citroen Saxo All	1996 -	89
Citroen Synergie MPV	1995 -	90
Citroen Xantia Estate	1995 -	91
Citroen Xantia Hatchback	May 1993 -	92
Citroen Xsara Estate	1998 -	93
Citroen Xsara Estate/ Hatchback	2002 -	94
Citroen Xsara Picasso MPV	2003 -	95
Citroen Xsara Picasso MPV	2000 -	96

Daewoo	Year	Page
Daewoo Kalos All	2003 -	97
Daewoo Korando All	2002 -	98
Daewoo Lacetti Hatchback	2004 -	99
Daewoo Lanos Saloon	1997 -	100
Daewoo Leganza Saloon	1997 -	101
Daewoo Musso Turbo Diesel 4WD	1999 -	102
Daewoo Nubira Estate/Wagon	Late 2002 -	103
Daewoo Nubira Saloon	Late 1999 -	104
Daewoo Tacuma MPV	2001 -	105

Daihatsu	Year	Page
Daihatsu Fourtrack All	2001 -	106
Daihatsu Grand Mare All	2002 -	107
Daihatsu Terios All	Late 2002 -	108
Daihatsu Terios All	2006 -	109
Daihatsu Van	Nov 2003 -	110

Dodge	Year	Page
Dodge Caliber All	2007 -	111
Dodge Journey MPV	2009 -	112
Dodge Nitro All	2007 -	113

Fiat	Year	Page
Fiat 4 x 4 cross -	2008 -	114
Fiat Brava Hatchback	1995 -	115
Fiat Bravo All	2008 -	116
Fiat Bravo QX	2001 -	117
Fiat Croma Estate	2007 -	118
Fiat Doblo All	2001 -	119
Fiat Ducato Van	2001 -	120
Fiat Ducato Van	2006 -	121
Fiat Grande Punto All	2006 -	122
Fiat Idea All	2004 -	123
Fiat Marea Weekend All	2000 -	124
Fiat Multipla MPV	2000 -	125
Fiat Panda Hatchback	2003 -	126
Fiat Punto All	1999 -2001	127
Fiat Punto All	2001 -	128
Fiat Punto All	-1999	129
Fiat Punto Evo Supermini	2010 -	130
Fiat Scudo All	2002 -	131
Fiat Scudo Van	2007 -	132
Fiat Sedici All	2008 -	133
Fiat Seicento All	2002 -	134
Fiat Stilo All	2002 -	135
Fiat Tempra Saloon	Nov 1990 -1995	136
Fiat Ulysse MPV	1995 -	137
Fiat Ulysse MPV	2003 -	138

Ford	Year	Page
Ford Cougar Coupe	1998 -	139
Ford Escort Hatchback	2000 -	140
Ford Explorer All	Jan 1997 -	141
Ford Fiesta All	2001 -	142
Ford Fiesta Hatchback	2009 -	143
Ford Fiesta Saloon etc	2002 -	144
Ford Focus Cmax MPV	Sept 2003 -	145
Ford Focus Estate	1998 -	146
Ford Focus Estate	Jan 2005 -	147
Ford Focus Hatchback	1999 -2004	148
Ford Focus Hatchback	Early 2005 -	149
Ford Fusion All	2002 -	150
Ford Galaxy All	2002 -	151
Ford Galaxy All	1995 -	152
Ford Galaxy MPV	2006 -	153
Ford Kuga All	2008 -	154
Ford Maverick 4WD	2001 -	155
Ford Mondeo All	2001 -	156
Ford Mondeo Mk 4 All	2007 -	157
Ford Probe Hatchback	1995 -	158
Ford Ranger Pickup	1999 -	159
Ford S-max MPV	2006 -	160
Ford Transit Connect SWB/LWB	Jan 2002 - June	161
Ford Transit Connect Van	2006 -	162
Ford Transit Van	2006 -	163
Ford Transit Van	Jan 2001 - June	164

Honda	Year	Page
Honda Accord Estate	Spring 2003 -	165
Honda Accord Saloon	1998 -2002	166
Honda Accord Saloon	2008 -	167
Honda Accord Saloon	2003 -	168
Honda Civic All	2001 -	169
Honda Civic Estate	Apr 1998 -	170
Honda Civic Hatchback	2006 -	171
Honda Civic Stream -	2003 -	172
Honda Civic Stream All	2003 -	173
Honda CRV 4WD	2002 -	174
Honda CRV 4WD	2007 -	175
Honda CRV 4WD	1997 -	176
Honda FR-V All	Dec 2004 -	177
Honda HRV 4WD	1999 -	178
Honda Jazz All	2002 -	179
Honda Legend Saloon etc	1991 -2000	180
Honda Shuttle MPV	June 1995 -	181

Hyundai	Year	Page
Hyundai Accent Hatchback	Jan 2000 -	182
Hyundai Amica All	2000 -	183
Hyundai Elantra Saloon	2001 -	184
Hyundai Getz All	2002 -	185
Hyundai I10 All	2009 -	186
Hyundai I30 All	2007 -	187
Hyundai iX35 All	2010 -	188
Hyundai Lantra Estate	1995 -	189
Hyundai Matrix All	2002 -	190
Hyundai Santa Fe All	2007 -	191
Hyundai Santa Fe All	2002 -	192
Hyundai Sonata Saloon	Sept 2005 -	193
Hyundai Terracan All	2003 -	194
Hyundai Trajet Vanette	2000 -	195
Hyundai Tucson All	2004 -	196

Isuzu	Year	Page
Isuzu Gafter All	2006 -	197
Isuzu Rodeo Pickup	2003 -	198
Isuzu Trooper 4WD	Mid 1996 -	199

Iveco	Year	Page
Iveco Cargo Van	2000 -	200
Iveco Daily All	1999 -	201

Jaguar	Year	Page
Jaguar 'S' Type Saloon	1999 -	202
Jaguar X Type Estate	2003 -	203
Jaguar X Type Saloon	2001 -	204
Jaguar X Type Saloon etc	2006 -	205
Jaguar XJ Saloon	2005 -	206
Jaguar XJ to	-1994	207
Jaguar XJ/ZJ Saloon	1994 -1998	208
Jaguar XK8 All	1998 -	209
Jaguar XS Saloon	2008 -	210

KIA	Year	Page
KIA Carens All	2003 -	211
KIA Carens All	2000 -	212
KIA Ceed Saloon	Late 2007 -	213
KIA Ceed SW	2008 -	214
KIA Magentis All	2002 -	215
KIA Magentis All	2006 -	216
KIA Picanto Hatchback	2004 -	217
KIA Rio II All	2003 -	218
KIA Sedona All	2006 -	219
KIA Sedona All	2001 -	220
KIA Shuma II All	2000 -	221
KIA Sorento All	2002 -	222
KIA Sorento All	2006 -	223
KIA Sorento SUV	2010 -	224
KIA Sportage 4WD	2004 -	225
KIA Sportage 4WD	2001 -	226
KIA Sprtage 3 AWD	2011 -	227
Landrover	Year	Page
Landrover Defender 4WD	1999 -	228
Landrover Discovery 4WD	2001 -	229
Landrover Discovery III 4WD	2005 -	230
Landrover Discovery98/Range Rover 94- 4WD	Nov -	231
Landrover Freelander 4WD	2001 -	232
Landrover Freelander II 4WD	2007 -	233
Landrover Range Rover 4WD	2002 -	234
Landrover Range Rover 4WD	2007 -	235
Landrover Range Rover 94- 4WD	Nov 1994 -	236
Landrover Range Rover Sport 4WD	2005 -	237
LDV	Year	Page
LDV Maxus Van	2006 -	238
Lexus	Year	Page
Lexus IS200 Sport All	2001 -	239
Lexus LS430 Saloon	2001 -	240
Lexus RX300i 4WD	2003 -	241
Lexus RX450H 4WD	2010 -	242
Leyland/LDV	Year	Page
Leyland/LDV Convoy 300/400 Van	2001 -	243
Leyland/LDV Convoy 300/400 Van	2001 -	244

Mazda	Year	Page
Mazda 2 All	2003 -	245
Mazda 3 Hatchback	2004 -	246
Mazda 3 Hatchback	2010 -	247
Mazda 3 Saloon	2004 -	248
Mazda 323 Hatchback	2003 -	249
Mazda 5 MPV	2007 -	250
Mazda 6 All	2002 -	251
Mazda 6 Hatchback	2007 -	252
Mazda 626 All	1997 -	253
Mazda B2500 Pickup	June 1999 -	254
Mazda CX7 SUV	2010 -	255
Mazda Demio All	2003 -	256
Mazda MPV	2000 -	257
Mazda Premacy All	1999 -	258
Mazda RX8 All	2004 -	259
Mazda Tribute All	2001 -	260

Mercedes	Year	Page
Mercedes A Class (W168) Saloon	1997 -	261
Mercedes A Class Saloon	2005 -	262
Mercedes ATGO 7.5 tonne 2WD/4WD	2001 -	263
Mercedes B Class All	2005 -	264
Mercedes C 200 (W203 Series) Coupe	2001 -	265
Mercedes C Class (270) Cdi Estate	2005 -	266
Mercedes C Class Estate	-2000 -	267
Mercedes C Class Estate	2008 -	268
Mercedes C Class Saloon	2006 -	269
Mercedes C Class(C208) Coupe	1997 - May 2002	270
Mercedes C Class(W203) Saloon	Oct 2000 -	271
Mercedes E Class Estate	Feb 2006 -	272
Mercedes E Class W212 Saloon etc	2010 -	273
Mercedes E Class(E240) Saloon	2002 -	274
Mercedes E Class(S211) Estate	2003 -	275
Mercedes E Class(W210) Estate	1996 -	276
Mercedes M Class(W163) 4WD	1998 -	277
Mercedes M Class(W163) 4WD	2006 -	278
Mercedes M Class(W163) 4WD	2000 -	279
Mercedes ML320 Sport	2005 -	280
Mercedes Pre 98 Older models	-	281
Mercedes S Class All	2001 -	282
Mercedes Sprinter Chassis Cab	1995 -	283
Mercedes Sprinter Van	2007 -	284
Mercedes Sprinter Van	2001 -	285
Mercedes Sprinter Van	1995 -2000	286
Mercedes Vito / V Class Van	2000 -	287
Mercedes Vito Viano Van	1996 -	288
Mercedes Vito/V Class Van	2003 -	289

Mitsubishi	Year	Page
Mitsubishi Canter Chassis Cab	1998 -	290
Mitsubishi Carisma All	Oct 1995 -	291
Mitsubishi Colt All	1996 -	292
Mitsubishi Delicia (import) All	-	293
Mitsubishi Galant Estate	Spring 1997 -	294
Mitsubishi Grandis MPV	2004 -	295
Mitsubishi L200 Pickup	Late 1996 -	296
Mitsubishi L200 Pickup	1996 -	297
Mitsubishi Outlander All	2003 -	298
Mitsubishi Shogun 4WD	2005 -	299
Mitsubishi Shogun Challenger 4WD	May 1999 -	300
Mitsubishi Shogun Pinin 4WD	2001 -	301
Mitsubishi Shogun Pinin Junior 4WD	2001 -	302
Mitsubishi Shogun Sport Warrior 4WD	May 2002 -	303
Mitsubishi Shogun SWB Van body 4WD	2002 -	304
Mitsubishi Shogun/ Pajero SWB	2000 -	305
Mitsubishi Shogun/Pajero LWB	2000 -	306
Mitsubishi Single Cab Pickup	2008 -	307
Mitsubishi Space Wagon MPV	Nov 1998 -	308
Mitsubishi Spacestar -	2003 -	309
Nissan	Year	Page
Nissan Almera All	Mar 2000 -	310
Nissan Cabstar E Pickup	2000 -	311
Nissan Micra All	2002 -	312
Nissan Murano All	2005 -	313
Nissan Navara D40 All	-	314
Nissan Navara Pickup	Summer 1998 -	315
Nissan Navara Pickup	Summer 1998 -	316
Nissan Navara Pickup	Aug 2005 -	317
Nissan Note All	2007 -	318
Nissan Pathfinder All	2005 -	319
Nissan Patrol 4WD	2003 -	320
Nissan Primastar Van	2006 -	321
Nissan Primera All	Late 1999 -	322
Nissan Qashqui 4WD	2007 -	323
Nissan Terrano 4WD	2001 -	324
Nissan Terrano II 4WD	1998 -	325
Nissan Tino All	2000 -	326
Nissan Xtrail 4WD	Oct 2007 -	327
Nissan Xtrail 4WD	Oct 2001 -	328

Peugeot	Year	Page
Peugeot 1007 Saloon	2007 -	329
Peugeot 106 Hatchback	1998 -	330
Peugeot 206 All	1998 -	331
Peugeot 207 SW Hatchback	2007 -	332
Peugeot 306 Estate	1997 -	333
Peugeot 306 Estate	Sept 2002 -	334
Peugeot 307 All	Oct 2001 -	335
Peugeot 307 Hatchback	Oct 2005 -	336
Peugeot 307 SW	2007 -	337
Peugeot 307HDI Estate	2002 -	338
Peugeot 308 Hatchback	2007 -	339
Peugeot 4007 4WD	2009 -	340
Peugeot 406 Estate	1999 -2004	341
Peugeot 406 Saloon	1999 -	342
Peugeot 407 All	2004 -	343
Peugeot 607 All	2001 -	344
Peugeot 806 MPV	1995 -	345
Peugeot 807 All	2003 -	346
Peugeot Bippa Van	2009 -	347
Peugeot Boxer Van	2001 -	348
Peugeot Boxer Van	2007 -	349
Peugeot Expert Van	2007 -	350
Peugeot Expert Van	2003 -	351
Peugeot Partner Van	2008 -	352
Peugeot Partner Van	2002 -	353
Porsche	Year	Page
Porsche Cayenne 4WD	2004 -	354
Proton	Year	Page
Proton Jumbuck Pickup Pickup	2003 -	355
Proton Persona All	1997 -	356
Proton Wira Hatchback	2003 -	357

Renault	Year	Page
Renault Avantine MPV	2003 -	358
Renault Clio All	May 1998 -	359
Renault Clio All	Late 2004 -	360
Renault Espace and Grand Espace MPV	1998 -2001	361
Renault Espace MPV	Summer -2002	362
Renault Espace MPV	2003 -	363
Renault Grand Modus MPV	2010 -	364
Renault Kangoo Van	2003 -	365
Renault Koleos All Road	2009 -	366
Renault Laguna All	2001 -	367
Renault Laguna All	1994 -2001	368
Renault Laguna Hatchback	2008 -	369
Renault Laguna Hatchback	2002 -	370
Renault Laguna II Estate	2002 -	371
Renault Master Van	1998 -	372
Renault Megane All	2010 -	373
Renault Megane Coupe, Hatchback	1996 -	374
Renault Megane RX4 All	2000 -	375
Renault Megane Saloon etc	2002 -	376
Renault Megane Scenic	1997 -	377
Renault Megane Scenic MPV	2003 -	378
Renault Megane Sport Tourer All	2003 -	379
Renault Modus -	Sept 2004 -	380
Renault Trafic Van	2001 -	381
Renault Vel Satis Hatchback	2003 -	382

Rover	Year	Page
Rover 200 Hatchback	Oct 1989 -1995	383
Rover 200 Hatchback	1996 -1999	384
Rover 25 Saloon	Late 1999 -2004	385
Rover 400 Saloon	1996 -2000	386
Rover 400 Saloon	1990 -1996	387
Rover 45 Saloon	2000 -	388
Rover 600 Saloon	1993 -1999	389
Rover 75 Saloon	2000 -	390
Rover 75 Tourer Estate	2000 -	391
Rover 800/820 Fastback	1988 -1989	392
Rover MG Series All	1999 -	393

Saab	Year	Page
Saab 9.3 Hatchback	2005 -	394
Saab 900 All	Mid 1994 -	395
Saab 9000CSE Saloon	1996 -	396
Saab 9-3 All	2002 -	397
Saab 9-3 Estate	2003 -	398
Saab 9-3 Hatchback	1998 -2002	399
Saab 9-5 All	2000 -	400
Saab 9-5 Estate	2004 -	401
Saab 9-5 Self-levelling suspension All	2005 -	402

Seat	Year	Page
Seat Alhambra MPV	2001 -	403
Seat Altea All	2004 -	404
Seat Arosa All	1998 -	405
Seat Cordoba All	2003 -	406
Seat Exeo All	2009 -	407
Seat Ibiza Hatchback	Mid 1996 -	408
Seat Ibiza Hatchback	Mid 2002 -	409
Seat Leon/Ibiza All	2006 -	410
Seat Leon/Ibiza All	2000 -	411
Seat Toledo All	2005 -	412
Seat Toledo All	Spring 1999 -	413
Seat Van	1999 -	414

Skoda	Year	Page
Skoda Fabia All	2000 -	415
Skoda Fabia Estate	2008 -	416
Skoda Octavia Estate	Sept 1998 -	417
Skoda Octavia Estate	2005 -	418
Skoda Octavia Hatchback	Sept 2003 -2004	419
Skoda Octavia Hatchback	July 2004 -	420
Skoda Roomster MPV	2007 -	421
Skoda Superb All	2003 -	422
Skoda Yeti AWD	2010 -	423

Smart	Year	Page
Smart Smart Saloon	2008 -	424

Ssangyong	Year	Page
Ssangyong Kyron All	2006 -	425
Ssangyong Musso 4WD	1995 -1999	426
Ssangyong Rexton All	2002 -	427
Ssangyong Rodius -	2006 -	428

Subaru	Year	Page
Subaru Forester AWD Estate	2001 -	429
Subaru Impreza All	1998 -	430
Subaru Legacy All	2001 -	431
Subaru Legacy All	2004 -	432
Subaru Legacy Estate	1996 -	433
Subaru Legacy Outback -	2000 -2001	434

Suzuki	Year	Page
Suzuki Alto All	2005 -	435
Suzuki Baleno 4WD	2002 -	436
Suzuki Grand Vitara All	1998 -	437
Suzuki Ignis All	2001 -	438
Suzuki Jimny All	1998 -	439
Suzuki Liana All	2002 -	440
Suzuki Samurai SWB	1991 -1996	441
Suzuki Super Carry Van	2002 -	442
Suzuki Vitara 4WD	2000 -	443
Suzuki Waggon RT 2WD/4WD	2001 -	444

Tata	Year	Page
Tata Loadbeta All	1994 -	445
Tata Safari All	2003 -	446

Toyota	Year	Page
Toyota Amazon All	2001 -	447
Toyota Auris All	Spring 2007 -	448
Toyota Avensis All	2009 -	449
Toyota Avensis All	June 2008 -	450
Toyota Avensis Estate	Spring 2003 -	451
Toyota Avensis Saloon	2003 -	452
Toyota Avensis Saloon	2001 -	453
Toyota Corolla Hatchback	2002 -	454
Toyota Corolla Verso MPV	May 2004 -	455
Toyota Hi Ace Powervan	Late 1995 -	456
Toyota Hi Lux TY129 Pickup	2000 -	457
Toyota Hilux 2/ Vigo Pickup	2005 -	458
Toyota Hi-Lux Double-cab Pickup	1998 -2000	459
Toyota Hi-Lux Vanette	2002 -	460
Toyota Landcruiser All	2006 -	461
Toyota Landcruiser All	2001 -	462
Toyota Landcruiser VX/Amazon	May 1998 -	463
Toyota Lucida All	1998 -1999	464
Toyota Picnic MPV	1996 -	465
Toyota Previa MPV	2003 -	466
Toyota Previa MPV	1990 -2001	467
Toyota RAV 4 4WD	1994 - Summer 2000	468
Toyota RAV 4 4WD	2006 -	469
Toyota RAV 4 4WD	2000 -	470
Toyota Surf 4WD	-	471
Toyota Verso MPV	2000 -	472
Toyota Verso MPV	2003 -	473
Toyota Yaris Saloon	2003 -	474

Vauxhall/Opel	Year	Page
Vauxhall/Opel Agila All	2000 -	475
Vauxhall/Opel Antara All	2007 -	476
Vauxhall/Opel Astra All	2005 -	477
Vauxhall/Opel Astra All	1998 -	478
Vauxhall/Opel Astra Hatchback	2010 -	479
Vauxhall/Opel Astra Van	2000 -	480
Vauxhall/Opel Astramax Van	Sept 1985 -1993	481
Vauxhall/Opel Combo Van	Nov 2001 -	482
Vauxhall/Opel Corsa All	2000 -	483
Vauxhall/Opel Corsa All	2007 -	484
Vauxhall/Opel Frontera 4WD	2001 -	485
Vauxhall/Opel Insignia Sedan/Hatchback	2009 -	486
Vauxhall/Opel Insignia Sports/Tourer	2009 -	487
Vauxhall/Opel Meriva All	2003 -	488
Vauxhall/Opel Monterey 4WD	2000 -	489
Vauxhall/Opel Movano All	1998 -2006	490
Vauxhall/Opel Omega All	2000 -	491
Vauxhall/Opel Sintra MPV	1997 -	492
Vauxhall/Opel Vectra All	1999 -2001	493
Vauxhall/Opel Vectra and Signum All	2002 -	494
Vauxhall/Opel Vectra Estate	2003 -	495
Vauxhall/Opel Vivaro All	2002 -	496
Vauxhall/Opel Zafira MPV	2005 -	497
Vauxhall/Opel Zafira MPV	1999 -	498

Volkswagen	Year	Page
Volkswagen Beetle All	2001 -	499
Volkswagen Bora Saloon	Late 2000 -	500
Volkswagen Caddy Van	2004 -	501
Volkswagen Caddy Van	1996 -	502
Volkswagen Caravelle Vanette	2002 -	503
Volkswagen Crafter Van	-2007	504
Volkswagen Eos Coupe	Late 2007 -	505
Volkswagen Golf All	2001 -	506
Volkswagen Golf V All	May 2004 -	507
Volkswagen Golf V Plus MPV	Autumn 2005 -	508
Volkswagen LT Van	1996 -2000	509
Volkswagen Passat All	1997 -	510
Volkswagen Passat All	2004 -2005	511
Volkswagen Passat Saloon etc	Late 2005 -	512
Volkswagen Polo Hatchback	Spring 2001 -	513
Volkswagen Sharan MPV	1995 -	514
Volkswagen T5 Chassis Cab	2003 -	515
Volkswagen T5 Van	2003 -	516
Volkswagen Tiguan AWD	2008 -	517
Volkswagen Touran All	2003 -	518
Volkswagen Toureg AWD	2003 -	519
Volkswagen Transporter T4 Van	-	520

Volvo	Year	Page
Volvo 850 Estate	1992 -2000	521
Volvo 850 Saloon etc All	2000 -	522
Volvo C30 All	2007 -	523
Volvo C70 Convertible	2001 -	524
Volvo S40 All	2005 -	525
Volvo S40 All	2000 -	526
Volvo S40 All	2004 -	527
Volvo S60 T5/D5 All	2000 -	528
Volvo S70 All	1997 -2000	529
Volvo S80 Saloon	1998 -	530
Volvo S80 Saloon etc	2001 -	531
Volvo V40 All	2001 -	532
Volvo V50 All	2004 -	533
Volvo V70 Estate	2000 -	534
Volvo V70 Estate	2007 -	535
Volvo XC60 SUV	2009 -	536
Volvo XC70 SUV	2007 -	537
Volvo XC90 SUV	2003 -	538

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet	N/A	4-way: All but flashers	N/A
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>	N/A	N/A	No

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 12 Add Fuse: N/A	Colour: N/A Location: 1 Add Fuse: N/A

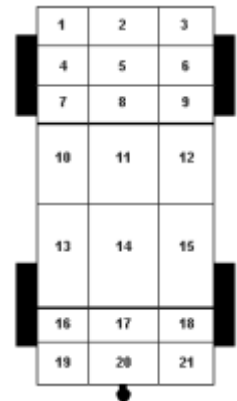
Best Wiring Location	Route to Battery	Fusebox Location
21	Dash, R/H (12)	Steering column (under)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Test with test board to apply realistic loads

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/tan	At hinge boot	19
Fog Light	Grey	Bypass	21
RH Flasher	Purple/tan	Bypass	21
RH Side Light	Black/purple	Bypass	21
Brake Light	Green/lime	At hinge boot	21
LH Side Light	Yellow/black	At hinge boot	19
Reverse	White/black	At hinge boot	21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Alfa Romeo 147 Saloon etc 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

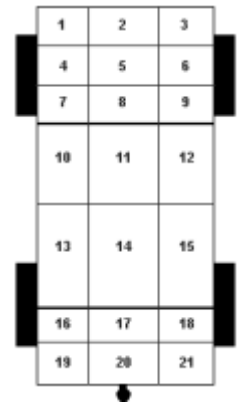
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Straightforward

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Green/black		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		3-way: Side lights only	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

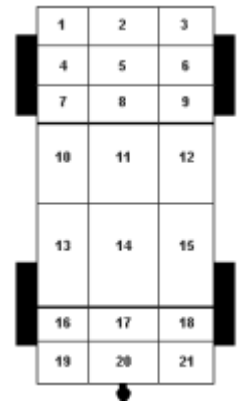
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
2002: Sportswagon needs bypass on stop lights.
Modulated supply: pulse on the brake light circuit requires a TF2217LOGIC or TF2218 Smart7 Bypass
Test with test board to apply realistic loads

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/black		23
Fog Light	Grey	Under top trim	
RH Flasher	Blue		
RH Side Light	Yellow/red	Bypass	
Brake Light	Pink/yellow		
LH Side Light	Yellow/black	Bypass	19
Reverse	White/green	At hinge boot	21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

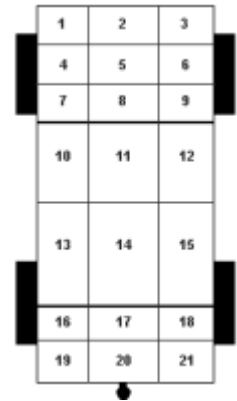
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		3-way: Side lights only	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

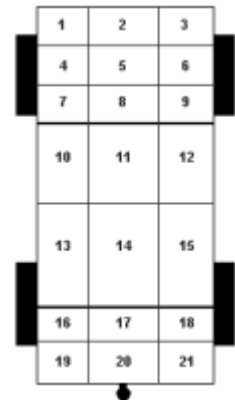
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: don't use the N/S side light wire because in reverse a signal down the N/S circuit brings the trailer side lights on.
Bypass: As indicated above, to avoid overload, malfunction or CPU damage

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/black		
Fog Light	Grey/red	At hinge boot	20
RH Flasher	Light blue/white		
RH Side Light	Yellow/blue		
Brake Light	Green/white		
LH Side Light	Dark blue	Grey/white	
Reverse	Orange	In boot lid loom	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		3-way: Stop & L/R tails	
------------	--	-------------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

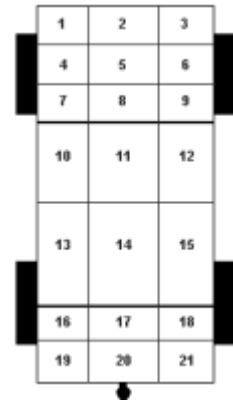
Best Wiring Location	Route to Battery	Fusebox Location
	Footwell L/H (Channel from grommet)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/white		
Brake Light	Red/white		
LH Side Light	Grey/yellow		
Reverse	Black/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

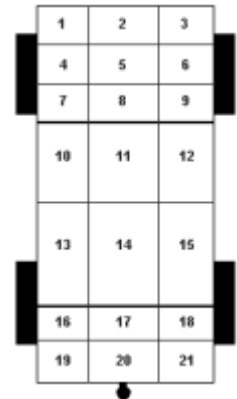
Best Wiring Location	Route to Battery	Fusebox Location
19	Under bonnet	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Access for fog behind n/s panel by white multiplug Sportback model only : Remove large speaker high up on n/s to find Fog & rev in brown plug. POSSIBLE Power source at socket. Position 19

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	White/yellow		See note
RH Flasher	Green/black		
RH Side Light	Grey/red		
Brake Light	White		
LH Side Light	Grey/black		
Reverse	Blue/red		See note



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
18 Wheel arch		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Blue(or green)/red Location: 13 Add Fuse:	Colour: Location: Add Fuse:

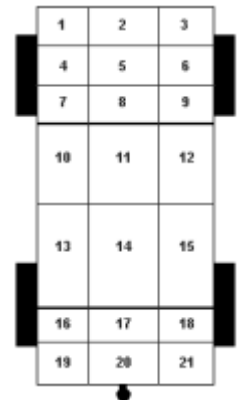
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
POSSIBLE Power source at socket. Position 19

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19 lamp
Fog Light	White/yellow		13
RH Flasher	Green/black		21 lamp
RH Side Light	Grey/red		21 lamp
Brake Light	White		21 lamp
LH Side Light	Grey/black		19 lamp
Reverse	Blue/red		13



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 Grommets rear panel		TF2218/7SMARTLOGIC	
---------------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

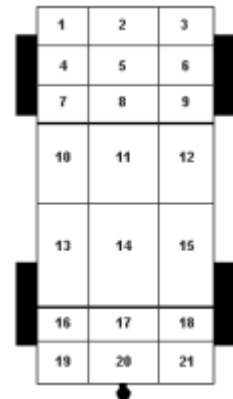
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Check before starting to see if the car you are fitting has bulb-failure monitoring.
Bulb-failure monitor on Stop and Tail
Power bus bar under the dash: remove the bolt-on section of the dash to access: unclip fusebox cover, + 3 screws and unclip top on both sides of st.wheel.Estate has live point at the cig/power point at 21. Red. To access pull down trim cover.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Grey/white		
RH Flasher	Green/black		
RH Side Light	Grey/red		
Brake Light	White/red	on LHS (or Black/red on RHS)	
LH Side Light	Grey/black		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommets rear panel		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

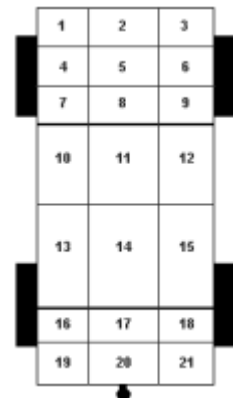
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps	Battery (through bulkhead by)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
2005:Update-12V power o/s in trim panel (Red/purple). Side & Fog light n/s share one wire (Grey/white) in black multiplug,found position 16
Power bus bar under the dash: remove the bolt-on section of the dash to access: unclip fusebox cover, + 3 screws and unclip top on both sides of st.wheel.Estate has live point at the cig/power point at 21. Red. To access pull down trim cover.
Modulated supply: pulse on the brake light circuit requires a TF2217LOGIC or TF2218 Smart7 Bypass
Wiring: Fog & side lights share the same wire. Connect ONLY the fog signal wire from the TF2217LOGIC or TF2218 Smart7 bypass to this wire. Relay will switch both side and fog outputs correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Grey/white		16
RH Flasher	Black/green	2005 Yellow/green	
RH Side Light	Grey/red	2005 Black/red	
Brake Light	Black/red	2005 Black/red	21
LH Side Light	Grey/black	2005 Grey/white	19
Reverse	Blue/red	2005 Blue	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

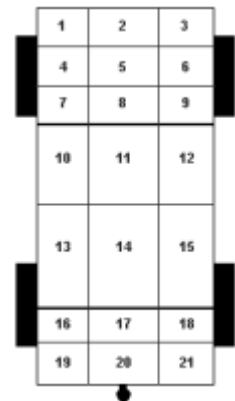
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Models built after April 2009 do not need special adaptation for towing Contact dealer to confirm build date.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/blue		19
Fog Light	Grey/white		18
RH Flasher	Black/green		21
RH Side Light	Grey		18
Brake Light	Grey/blue		21
LH Side Light	Grey		19
Reverse	Black/white		18



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 Grommets rear panel		TF2218/7SMARTLOGIC	
---------------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

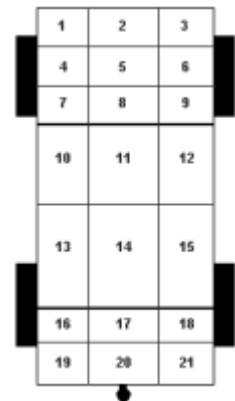
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps	Battery (through bulkhead by)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fuse: side lamp fuse will not support extra load. Fit at least a left/right bypass relay (TF1013). NOTE: Audi recommend use of full bypass set (e.g. TF2218) to avoid costly fault investigations down the line.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Audi A4 Tdi Saloon 1996 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 Grommets rear panel		3-way: Stop & L/R tails	
---------------------------	--	-------------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Under dash Add Fuse:	Colour: Location: Add Fuse:

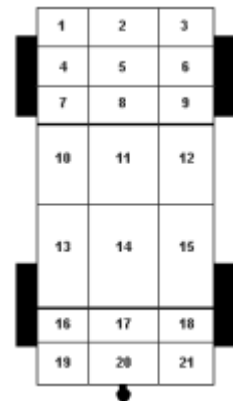
Best Wiring Location	Route to Battery	Fusebox Location
21		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Check before starting to see if the car you are fitting has bulb-failure monitoring.
Power bus bar under the dash: remove the bolt-on section of the dash to access: unclip fusebox cover, + 3 screws and unclip top on both sides of st.wheel.Estate has live point at the cig/power point at 21. Red. To access pull down trim cover.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/green		
Fog Light	Grey/white		
RH Flasher	Black/white		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Black/white		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		See note below	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

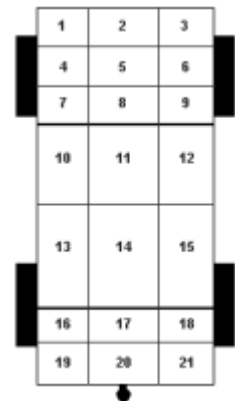
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: Audi A4 and A5, vehicles built March 2008 to March 2009 . Most models need extensive modification to their cooling systems and, possibly a new alternator to accommodate towing. Vehicles built April 2009 and after are OK

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet: number plate light	2m	TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

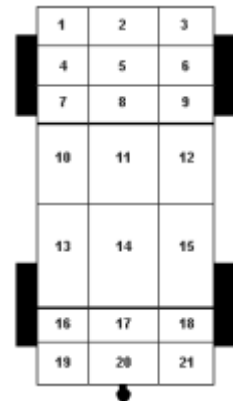
Best Wiring Location	Route to Battery	Fusebox Location
21	Boot RHS 18/21	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.
Wiring: If the single brake connection does not work sidelights and brake correctly, try using the foglight circuit on the relay for the brakes. You will have to use a single bypass for the fog.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Red/grey		19
Fog Light	Green/blue		19 behind side panel
RH Flasher	Grey/red		19
RH Side Light		Shared	19 behind side panel
Brake Light	Grey	Shared	21
LH Side Light		Shared	
Reverse	Black/green		19 behind side panel



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

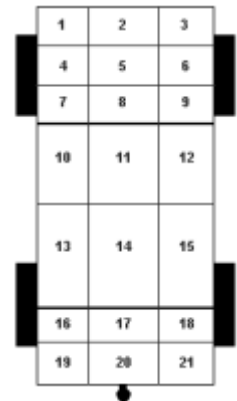
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps	Boot RHS 18/21	Boot RHS 18/21

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Do not disconnect the battery . Wire before replacing bumper
Wiring: Fog & side lights share the same wire. Connect ONLY the fog signal wire from the TF2217LOGIC or TF2218 Smart7 bypass to this wire. Relay will switch both side and fog outputs correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey	Pin 2	JL42/125
Fog Light	Blue/red	Pin 8	21
RH Flasher	Blue	Pin 9	21
RH Side Light		See Note above	
Brake Light	Red/yellow	Grey/red	21 lamp Pin 6
LH Side Light		See Note above	
Reverse	Green/black	Pin 2	21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19		TF2218/7SMARTLOGIC	
----	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

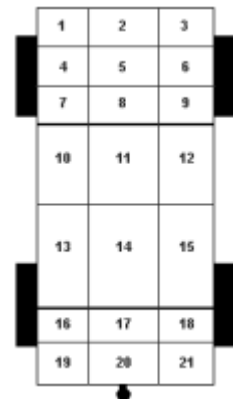
Best Wiring Location	Route to Battery	Fusebox Location
19		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Power bus bar under the dash: remove the bolt-on section of the dash to access: unclip fusebox cover, + 3 screws and unclip top on both sides of st.wheel.Estate has live point at the cig/power point at 21. Red. To access pull down trim cover.
Power feed (30 amp) to lighter socket n/s rear fed by red/blue wire. Don't take off local trim: very hard to refit.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		3-way: Side lights only	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

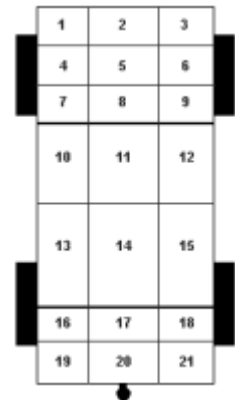
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bulb-failure monitor on Stop and Tail
Bypass: As indicated above, to avoid overload, malfunction or CPU damage

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white	Plug: position 3	
Fog Light	Grey/white	In boot lid loom	20
RH Flasher	Black/green	Plug: position 3	
RH Side Light	Grey/red	Plug: position 5	
Brake Light	Red/black	Plug: position 6	6
LH Side Light	Grey/black	Plug: position 5	5
Reverse	Not recorded		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Audi A6 Saloon etc 1996 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

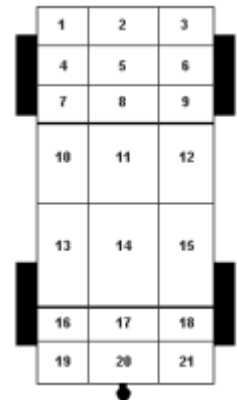
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bulb-failure monitor on Stop and Tail
Bypass: As indicated above, to avoid overload, malfunction or CPU damage

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

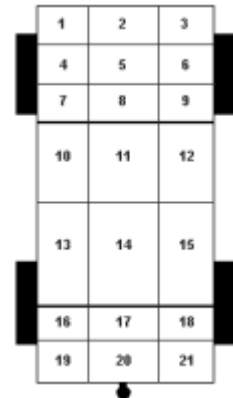
Best Wiring Location	Route to Battery	Fusebox Location
	LED module (by)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Purple/green		
Fog Light	White/brown		
RH Flasher	Blue/white		
RH Side Light	Purple/black		
Brake Light	Black/blue		
LH Side Light	Black/red		
Reverse	Black/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

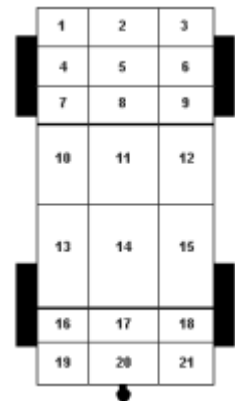
Best Wiring Location	Route to Battery	Fusebox Location
18, 21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		18
Fog Light	Grey/white		18 High multiblock
RH Flasher	Green/yellow		21
RH Side Light	Red/white		21
Brake Light	Red/white		18 Lamp
LH Side Light	Red/white		18 Lamp
Reverse	Blue		18 Lamp



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>	Yes	On dash	

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

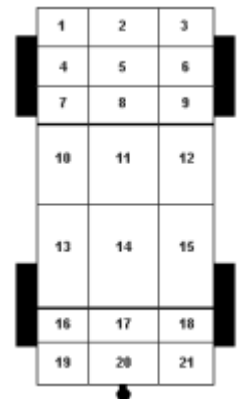
Best Wiring Location	Route to Battery	Fusebox Location
21	Boot	21

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Detect wires with tailgate closed Tailgate lights operate when gate is locked. In fusebox (boot): Black block - LH lights in tailgate Brown Block - RH lights in tailgate. Black plug for bumper lights is NOT in fusebox
Tailgate: Wire from both tailgate lights AND non-tailgate (e.g. bumper) lights. Use TV2601 Twin signal input bridge.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/blue		Fusebox black plug
Fog Light	Grey/white		21
RH Flasher	Green/black		Fusebox, brown plug
RH Side Light	Grey/black	Do not connect	Fusebox, brown plug
Brake Light	Grey/white	Grey/red	Fusebox, brown plug
LH Side Light		Do not connect	Fusebox, brown plug
Reverse	White/black		21 bumper lights plug



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	TF2218/7SMARTLOGIC	CANbus Kit
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>	Yes	On dash	

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

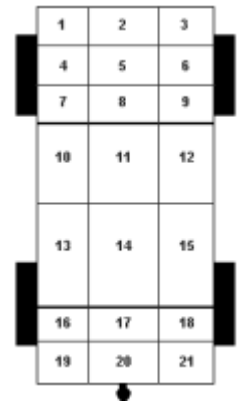
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: Main brake lights flash if you connect trailer brakes directly. Use a bypass on brake circuit at least.
Wiring: Lower brake lights stop working when boot is closed. Wire to high level
Fog light connection at 16/19 on pillar

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Red/black	Blue/red	19
Fog Light	White/black	White/green	16-17 under headlining
RH Flasher	Black/green	Blue/red	19
RH Side Light	Grey/red	Grey/yellow	16-17 under headlining
Brake Light	Red/black	Black/green	19
LH Side Light	Grey/black	Grey/green	16-17 under headlining
Reverse	Red/gold		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

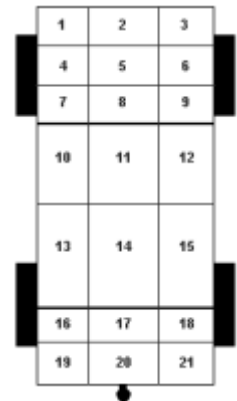
Best Wiring Location	Route to Battery	Fusebox Location
	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.
Wiring: Fog & side lights share the same wire. Connect ONLY the fog signal wire from the TF2217LOGIC or TF2218 Smart7 bypass to this wire. Relay will switch both side and fog outputs correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		
Fog Light	Green/red	Green/yellow	
RH Flasher	Blue/brown		
RH Side Light		Do not connect	
Brake Light	Grey/yellow	Grey/purple	
LH Side Light		Do not connect	
Reverse	Black/blue	Black/purple	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19		1-way	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

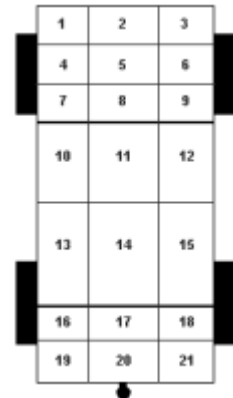
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Grey/white		19
RH Flasher	Black/green		21
RH Side Light	Grey/red		21
Brake Light	Red/black	Bypass	19,22
LH Side Light	Grey/black		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommets rear panel		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

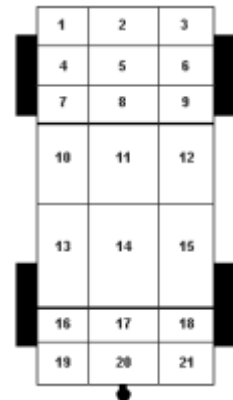
Best Wiring Location	Route to Battery	Fusebox Location
18 over wheel arch	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Side lights on brake wire go off when boot is closed.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/yellow		19
Fog Light	White/yellow		18
RH Flasher	Blue/brown		18
RH Side Light	Yellow/purple	To LED strip	18
Brake Light	Black/blue		18
LH Side Light	Yellow/black	To LED strip	19
Reverse	Black/purple		18



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

BMW 3 Series E90 Saloon 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

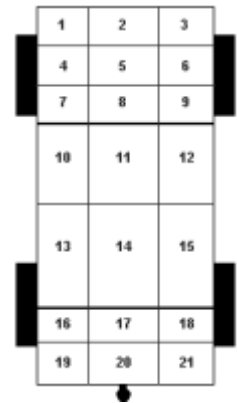
Best Wiring Location	Route to Battery	Fusebox Location
18 over wheel arch	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fog and reverse wire colours may be different at loom over RH wheel arch (18) than at lamps.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/yellow	Blue/green?	19
Fog Light	White/yellow	Red/green	18
RH Flasher	Blue/brown		18
RH Side Light	Grey/yellow		18
Brake Light	Blue/black		18
LH Side Light	Grey/purple		19
Reverse	Black/purple	Blue/yellow	18



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

BMW 3 Series E91 Estate 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

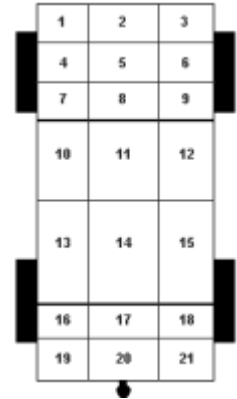
Best Wiring Location	Route to Battery	Fusebox Location
	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		19 lamp
Fog Light	Yellow/white	Red/green	18
RH Flasher	Blue/brown		21
RH Side Light	Grey/yellow		21
Brake Light	Black/blue		
LH Side Light	Grey/purple		19 lamp
Reverse	Black/pink		18



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

BMW 3 Series Compact (E46) All 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

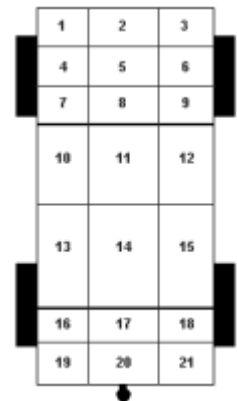
Best Wiring Location	Route to Battery	Fusebox Location
	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		19
Fog Light	Yellow/black		21
RH Flasher	Blue/brown		21
RH Side Light	Grey/yellow		21
Brake Light	Black/green		19 lamp
LH Side Light	Grey/purple		19 lamp
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

BMW 3 Series E46 Saloon etc Late 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet by battery		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Colour Location: 21 Add Fuse:

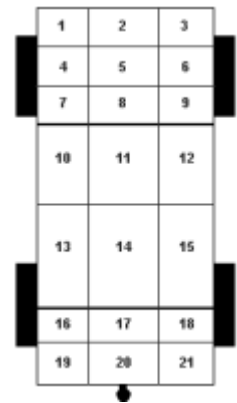
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
After ign on, car's check system may briefly activate buzzer.
Reversing sensors: cut out button on gear lever likely.
Modulated supply: there are 6 x 21 watt sidelight bulbs at the back, including two in the lid. They all come on as side lights (=5W) supplied by a pulsed current. Those in the lid become fog lights when fog is selected. Use TF2217LOGIC or TF2218 (Smart)
Foglights: If you do not have a TF2218 you cannot wire the foglights. Get a plain sidelight signal from the number plate light. Number plate light signal also behind the back seat, RHS, and under RH kick plate .
Number plate light signal also behind the back seat, RHS, and under RH kick plate .

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/yellow	Blue/green?	
Fog Light	Yellow/white	At hinge boot	21
RH Flasher	Blue/brown		
RH Side Light	Black/blue	Grey/yellow	
Brake Light	Yellow/grey	Not at high level	
LH Side Light	Grey/purple		
Reverse	Blue/yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

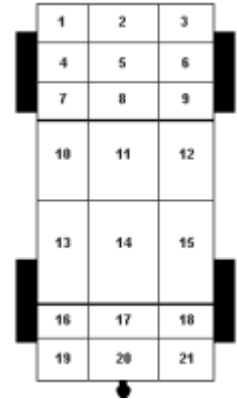
Best Wiring Location	Route to Battery	Fusebox Location
16	Boot RHS 18/21	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		
Fog Light	Yellow/black		18
RH Flasher	Brown/blue		18
RH Side Light	Grey/yellow		
Brake Light	Yellow/black	Black/green	16 or 20
LH Side Light	Grey/purple		
Reverse	Blue/yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

BMW 3 Series Tourer Estate Late 1999 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

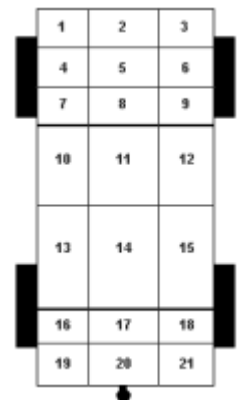
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: use TF2217LOGIC, connect red signal wire only
Foglights: TFC2 cuts out both foglights without problems.
Reversing sensors: cut out button on gear lever likely. Older models may have a manual switch in the boot

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		
Fog Light	Yellow/black	See Note above	
RH Flasher	Brown/blue		
RH Side Light	Grey/yellow		
Brake Light	Yellow/black	See Note above	15
LH Side Light	Grey/purple		
Reverse	Blue/yellow	See Note above	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

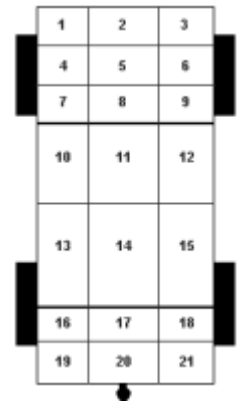
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: use TF2217LOGIC, connect red signal wire only
Reversing sensors: cut out button on gear lever likely. Older models may have a manual switch in the boot
Foglights: TFC2 cuts out both foglights without problems.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		
Fog Light	Black/yellow	See Note above	Battery
RH Flasher	Brown/blue		
RH Side Light	Grey/yellow		
Brake Light	Black/blue	Plug: position 6	21
LH Side Light	Grey/purple		
Reverse	Blue/yellow	See Note above	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

BMW 5 Series (E61) Tourer Estate July 2004 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Rev Sensor grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

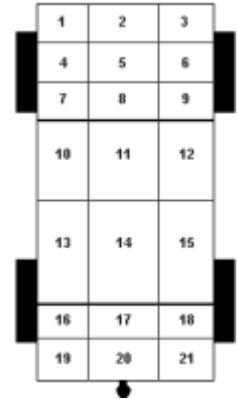
Best Wiring Location	Route to Battery	Fusebox Location
19/21	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/brown		
Fog Light	Yellow/red		
RH Flasher	Blue/brown		
RH Side Light	White/brown		
Brake Light	White/brown		21
LH Side Light	Grey/green		
Reverse	Yellow/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

BMW 5 Series Saloon etc Spring 1997 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

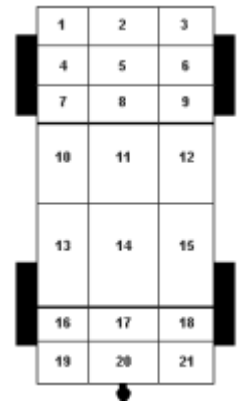
Best Wiring Location	Route to Battery	Fusebox Location
	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Reverse wire in estate: o/s top seat belt anchor
Reversing sensors: cut out button on gear lever likely.
Wire to o/s through BMW grommet in corner near battery

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		
Fog Light	Yellow/black		
RH Flasher	Blue/red		
RH Side Light	Grey/white	Grey/black 2001	
Brake Light	Black/blue		
LH Side Light	Grey/purple		
Reverse	Blue/yellow		Estate: see note



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

BMW 5 Series Saloon etc Spring 2002 -2003

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet	N/A	TF2218/7SMARTLOGIC	2006: Poss TF2218 or TF2217LOGIC
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor N/A	Cut Out Switch, etc. Yes	Mfr's Towing Plug 18

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

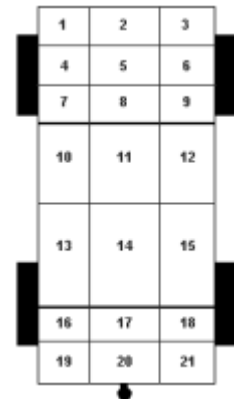
Best Wiring Location	Route to Battery	Fusebox Location
	Boot	12 Side panel

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Modulated supply: fog & brake lights are used as side lights and receive a pulsed signal when sidelights are on. Brake relay chatters unless you use a TF2217LOGIC or a TF2218
Reversing sensors: cut out button on gear lever likely.
Fault condition: when the rear light cluster is unfixd the sidelight stops working. Works again when cluster is refitted.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		23
Fog Light	Yellow/black		21
RH Flasher	Blue/red		19
RH Side Light	Grey/white		21
Brake Light	Black/blue		21
LH Side Light	Grey/purple		19
Reverse	Blue/yellow		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

BMW 5 Series(39) Tourer Estate 2002 - Spring 2004

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

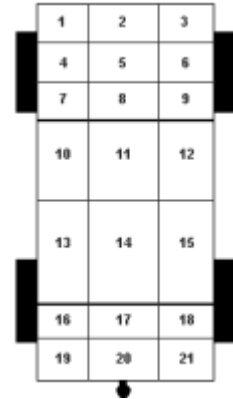
Best Wiring Location	Route to Battery	Fusebox Location
	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		
Fog Light	Yellow/black		15
RH Flasher	Blue/red		
RH Side Light	Grey/white		
Brake Light	Black/blue		
LH Side Light	Grey/purple		
Reverse	Blue/yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

BMW 7 Series Saloon Oct 1994 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

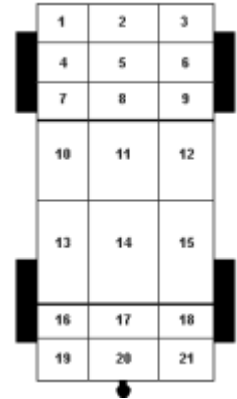
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green	Bypass	
Fog Light	Yellow/black		
RH Flasher	Blue/brown		
RH Side Light	White/brown	Grey/white	
Brake Light	Blue/black		
LH Side Light	Grey/green	Grey/purple	
Reverse	Yellow/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

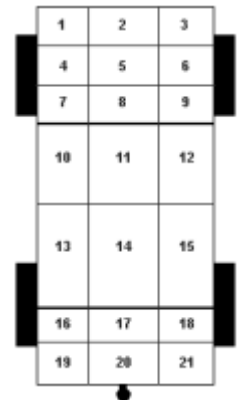
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Reverse sensor sounder under o/s dash kick panel

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		
Fog Light	Yellow/black		
RH Flasher	Brown/blue		
RH Side Light	Grey/yellow		
Brake Light	Yellow/black	19 Black/green	23
LH Side Light	Grey/purple	Grey/pink	
Reverse	Blue/yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21		See note below	
-------	--	----------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

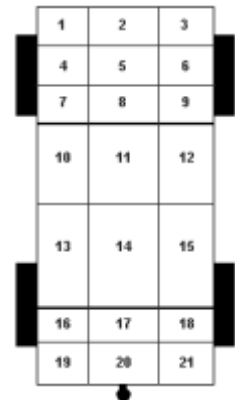
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
2004 convertible model : Bypass req: on brakes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green	Blue/grey?	
Fog Light	Yellow/brown	Yellow/black	
RH Flasher	Blue/brown		
RH Side Light	Grey/yellow		
Brake Light	Black/green	Blue/black?	
LH Side Light	Grey/purple		
Reverse	Not recorded		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

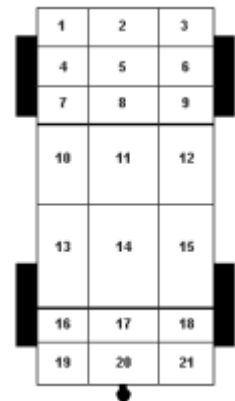
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		
Fog Light	Yellow/white		
RH Flasher	Blue/brown		
RH Side Light		Do not connect	
Brake Light	Black/blue		
LH Side Light		Do not connect	
Reverse	Black/tan		21 lamp



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

BMW X3 (E83) 4WD Spring 2004 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet behind bumper		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>		On gear lever	

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

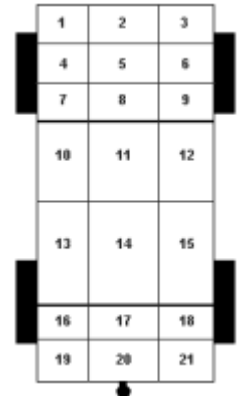
Best Wiring Location	Route to Battery	Fusebox Location
21	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.
Wiring: 2008+ In some vehicles, connect to the side lamp wires

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		20
Fog Light	Yellow/black		18
RH Flasher	Blue/brown		
RH Side Light	Grey/yellow	Do not connect	
Brake Light	Black/blue	-	21
LH Side Light	Grey/purple	Do not connect	
Reverse	Blue/yellow		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

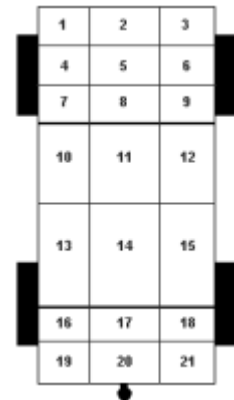
Best Wiring Location	Route to Battery	Fusebox Location
		Boot

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Reverse sensor: may reset reverse sensor to accept towbar. Switch on and off after fitting. (May not)
Fault condition: tick when some lights are on, caused by vehicle test pulse. Ignore. Soundproof relay if necessary.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		20
Fog Light	Yellow/black		20
RH Flasher	Blue/brown		21
RH Side Light	Grey/white		21
Brake Light	Black/blue		21
LH Side Light	Grey/purple		
Reverse	Blue/yellow		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 Add Fuse: 78 (20amp)	Colour: Location: Add Fuse:

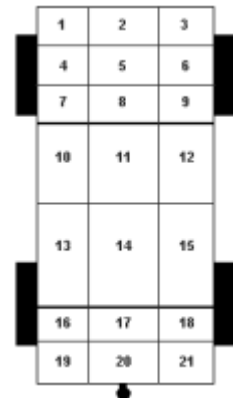
Best Wiring Location	Route to Battery	Fusebox Location
18 Loom		Boot

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Reverse sensor: may reset reverse sensor to accept towbar. Switch on and off after fitting. (May not)
BMW diesels:low battery can cause a tick in the bypass relay. Charge the battery to cure.
Latching: if trailer brake lights latch on,use relay's reverse circuit for brakes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		18
Fog Light	Yellow/black		18
RH Flasher	Blue/brown		18
RH Side Light	Grey/white		18
Brake Light	Blue/black	Yellow/black	18
LH Side Light	Grey/purple		18
Reverse	White/yellow		18



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2302 SmartCAN series
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

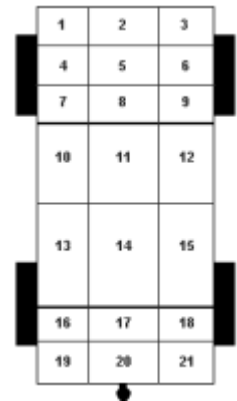
Best Wiring Location	Route to Battery	Fusebox Location
18 Loom		Boot

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
BMW diesels: low battery can cause a tick in the bypass relay. Charge the battery to cure.
Latching: if trailer brake lights latch on, use relay's reverse circuit for brakes
Reverse sensor: may reset reverse sensor to accept towbar. Switch on and off after fitting. (May not)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		18
Fog Light	Yellow/black	Black/white	18
RH Flasher	Blue/black		18
RH Side Light	Grey/white		18
Brake Light	Blue/black	Yellow/black	18 (Check correct wire)
LH Side Light	Grey/purple		18
Reverse	White/yellow		18



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

20 Drill in wheel well	N/A	None	
------------------------	-----	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

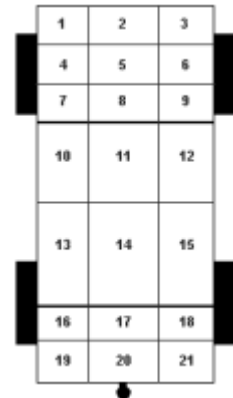
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light blue	Behind trim	23
Fog Light	Red	Behind trim	19
RH Flasher	Dark blue	Behind trim	21
RH Side Light	Violet	Behind trim	21
Brake Light	White	Behind trim	19
LH Side Light	Violet	Behind trim	19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Chevrolet Blazer 4WD 1995 -2002

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Centre chassis member		None	
-----------------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

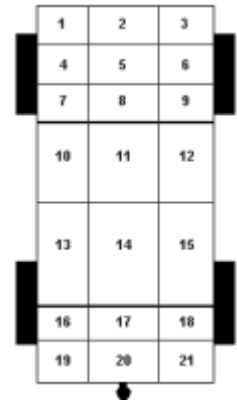
Best Wiring Location	Route to Battery	Fusebox Location
Under carpet		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Green		
RH Flasher	Black		
RH Side Light	Dark green		
Brake Light	Brown		
LH Side Light	Light blue		
Reverse	Brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Chevrolet Captiva AWD 2008 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF1152
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

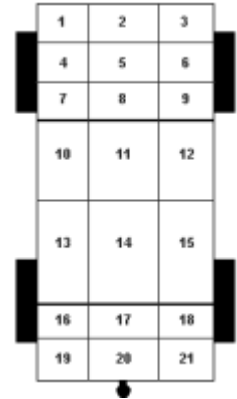
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		19
Fog Light	Brown		19
RH Flasher	Yellow		19
RH Side Light	Blue		19
Brake Light	Red		19
LH Side Light	Blue		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

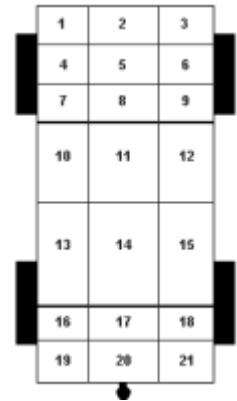
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/green		19 lamp
Fog Light	White/orange		19 lamp
RH Flasher	White/yellow		21
RH Side Light	White/purple		21
Brake Light	Green/white		19 lamp
LH Side Light	White/purple		19 lamp
Reverse	White/green		19 lamp



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Chrysler Cherokee Jeep 4WD 1994 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

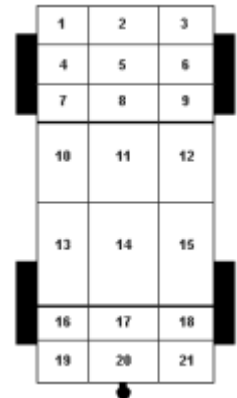
Best Wiring Location	Route to Battery	Fusebox Location
19 Multiblock		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light green	Multiblock	
Fog Light	Brown/white	Multiblock: green/black	
RH Flasher	Light brown		
RH Side Light	Blue/red		
Brake Light	White/brown		
LH Side Light	Blue/red		
Reverse	Brown/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Chrysler Cherokee Jeep 4WD 2006 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m		
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Grey/black Location: 21 Add Fuse:

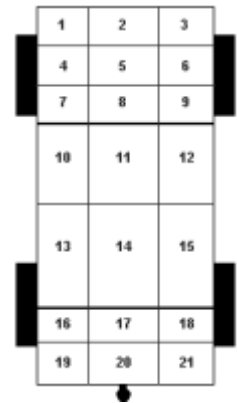
Best Wiring Location	Route to Battery	Fusebox Location
21	Under bonnet 1	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Grommet behind black tray at glove box

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/green		19
Fog Light	White/orange	1 of 3	21
RH Flasher	White/orange	1 of 3	21
RH Side Light	White/orange	1 of 3	21
Brake Light	White/brown		21
LH Side Light	Pink/red		21
Reverse	White/grey		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Chrysler Cherokee Jeep 4WD Apr 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Mfr. Grommet		Some fitters use 7-way TF2217LOGIC/2218	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 4 Add Fuse:	Colour: Location: Add Fuse:

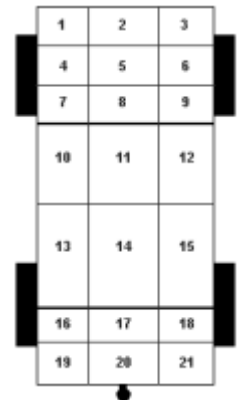
Best Wiring Location	Route to Battery	Fusebox Location
19 Multiblock		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Flasher unit live red/white

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Brown/white		
RH Flasher	Brown/red		
RH Side Light	Green/yellow	White	
Brake Light	White/brown	Pink	
LH Side Light	Black/yellow	White	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Chrysler Grand Cherokee 4WD 1993 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		See note below	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

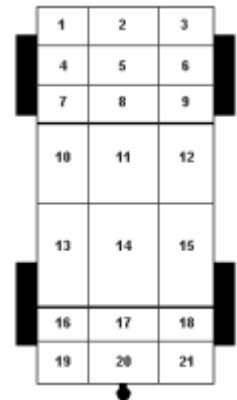
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Remove spare wheel and side trim.
Bypass: if there is a bright orange box in n/s storage comp. this is bulb monitor: use 7-way

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light green		
Fog Light	Green/red	Green/orange	
RH Flasher	Brown		
RH Side Light	Blue/red		
Brake Light	White/brown		
LH Side Light	Blue/red		
Reverse	Brown/green	1 of 2	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Chrysler Grand Cherokee 4WD 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Chassis R/H or in Cab		None	2006: Poss TF2218 or TF2217LOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Under spare wheel

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Red/white Location: Add Fuse:

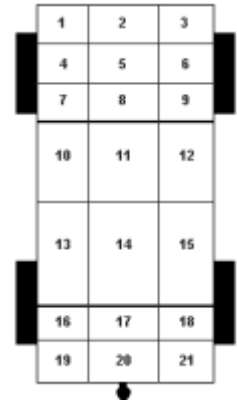
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Mfr's Towing plug under vehicle, on rear cross member.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/green		Multiblock
Fog Light	Red/green		Multiblock
RH Flasher	White/red		Multiblock
RH Side Light	White/purple		Multiblock
Brake Light	White/brown		Multiblock
LH Side Light	White/red		Multiblock
Reverse	Green		Multiblock



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Chrysler Grand Cherokee 4WD Mid 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Mfr. Grommet	2m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse: 15amp before TF1170	Colour: Red/brown Location: 6 Add Fuse:

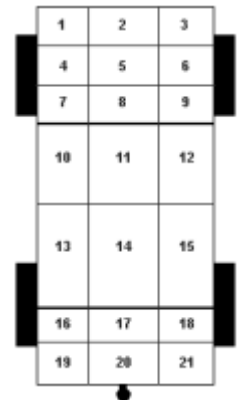
Best Wiring Location	Route to Battery	Fusebox Location
		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Power supply: 2003: towing plug behind l/h side panel linked to connector under bumper.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Green/yellow		
RH Flasher	Grey/red	2004 Brown/red	
RH Side Light	Blue/red	2004 Black/yellow	
Brake Light	White/brown		
LH Side Light	Black/yellow		
Reverse	Purple/black		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Chrysler Jeep Commander 4WD 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet: number plate light			
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			20

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 hinge (21 estate) Add Fuse:	Colour: Location: Add Fuse:

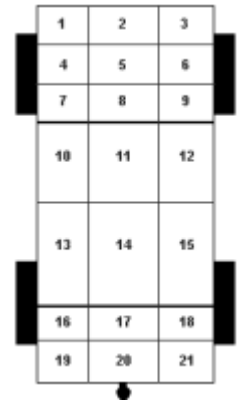
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/dark green		
Fog Light	Red/green		
RH Flasher	White/orange		
RH Side Light	White/purple		
Brake Light	White/brown		
LH Side Light	White/purple		
Reverse	White/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Chrysler Jeep Compass 4WD 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

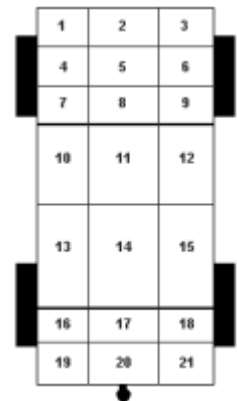
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
12N power at 19. Fused under bonnet pos 5 (20amp) but cable thin. Change fuse to 15amp to protect bypass module. Find separate 12S supply (at battery?)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Turquoise/pink		
Fog Light	White/green		19
RH Flasher	White/yellow		21
RH Side Light	White/black		21
Brake Light	White/red		21
LH Side Light	White/purple		19
Reverse	White/green		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Chrysler Jeep Patriot 4WD 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		Brake circuit	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

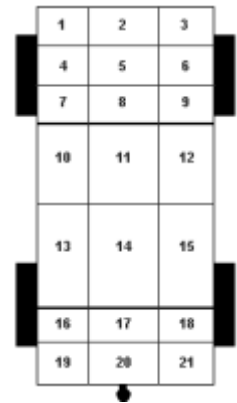
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: Main brake lights flash if you connect trailer brakes directly. Use a bypass on brake circuit at least.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		19
Fog Light	White/green		19
RH Flasher	White/yellow		19
RH Side Light	White/black		19
Brake Light	White/green		To high-level brake light
LH Side Light	White/purple		19
Reverse	White/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Chrysler Jeep Wrangler 4WD 1993 -2002

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

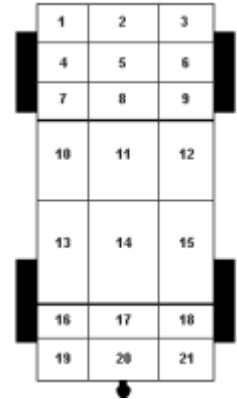
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Brown/white		
RH Flasher	Brown/red		
RH Side Light	Black/yellow	1 wire for L/H, R/H	
Brake Light	White/brown		
LH Side Light	Black/yellow	1 wire for L/H, R/H	
Reverse	Purple/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Chrysler Jeep Wrangler 4WD 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
16 Wheel arch		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

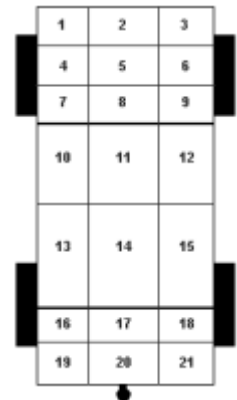
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/red		
Fog Light	Brown/white		
RH Flasher	Black/red		
RH Side Light	Black/yellow		
Brake Light	White/brown		
LH Side Light	Black/yellow		
Reverse	Purple/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Chrysler PT cruiser 4WD 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

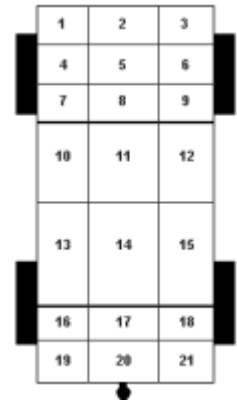
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/purple		
Fog Light	Brown/white		
RH Flasher	Brown/red		
RH Side Light	Yellow/black		
Brake Light	White/orange		
LH Side Light	Yellow/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Chrysler Sebring Saloon 2010 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>	Yes		

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

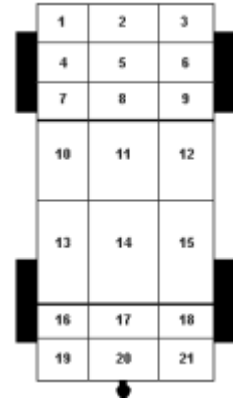
Best Wiring Location	Route to Battery	Fusebox Location
19	Bulkhead L/H	Under bonnet LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/yellow		19
Fog Light	White/green	1 of 2	Hinge grommet
RH Flasher	White/green		21
RH Side Light	White/purple		21
Brake Light	White/orange		19
LH Side Light	White/purple		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Chrysler Voyager and Grand Voyager MPV Mar 1997 -2001

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

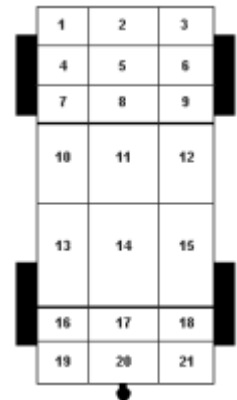
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp	Footwell, L/H (grommet)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Negative reverse: use TF1011 to earth switch it. (See Practical Guide)
Loom also in centre rear

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/purple		
Fog Light	Light green	Neg switched	
RH Flasher	Dark brown/red		
RH Side Light	Green/yellow		
Brake Light	White/brown		
LH Side Light	Dark brown/blue		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Chrysler Voyager and Grand Voyager MPV Mar 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

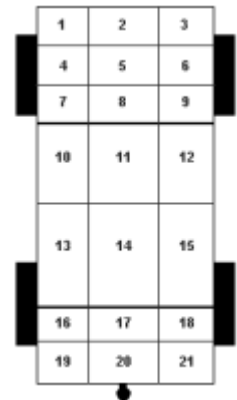
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp	Footwell, L/H (grommet)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Negative fog: use TF1011 to earth switch it. (See Practical Guide) Take power from sidelight or fog will stay on.
Loom also in centre rear under floor trim. Foglight switched earth may be light green.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/green		
Fog Light	White/yellow	Neg switched	
RH Flasher	White/dark brown		
RH Side Light	White/orange		
Brake Light	White/brown		
LH Side Light	White/dark brown		
Reverse	Green/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Citroen Berlingo 2008 MPV 2008 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

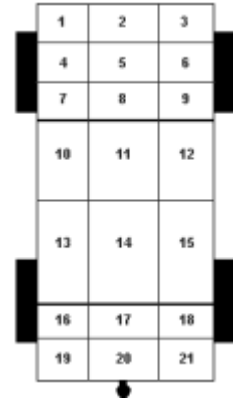
Best Wiring Location	Route to Battery	Fusebox Location
19/21		Glove box

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink		19
Fog Light	Green		21
RH Flasher	Purple		21
RH Side Light	Beige		21
Brake Light	White		19
LH Side Light	Grey		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

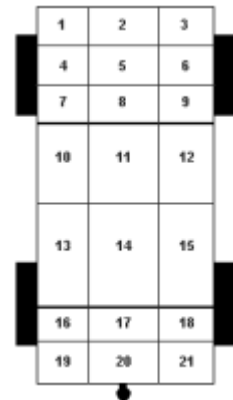
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Overload on either sidelights on late 05+ models will blow other circuits (speedo, etc) Fit TF2217X.
Flasher relay "shuts down" and has to be re-energised by switching off and restarting the vehicle.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green	Plug: position 6	19
Fog Light	Grey	Plug: position 1	19
RH Flasher	Grey	Plug: position 6	21
RH Side Light	Green	Plug: position 3	21
Brake Light	Grey	Plug: position 2	19,22
LH Side Light	Green	Plug: position 3	19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		See note below	
--	--	----------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

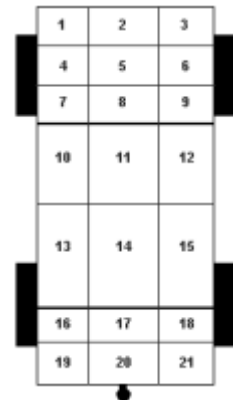
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Flasher relay "shuts down" and has to be re-energised by switching off and restarting the vehicle.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green	Plug: position 6	
Fog Light	Grey	Plug: position 1	
RH Flasher	Grey	Plug: position 6	
RH Side Light	Green	Plug: position 3	
Brake Light	Grey	Plug: position 2	
LH Side Light	Green	Plug: position 3	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

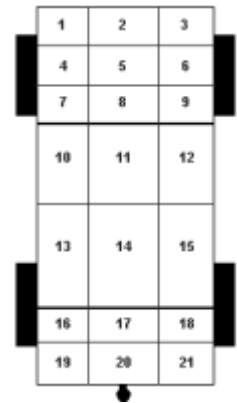
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: do not connect black and brown (side lamps) together or you will overload the fuse.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

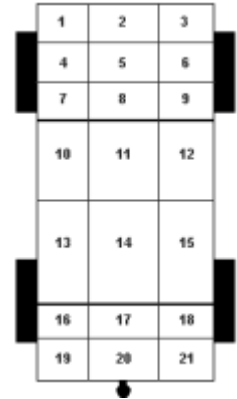
Best Wiring Location	Route to Battery	Fusebox Location
18 over wheel arch	Grommet RH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		
Fog Light	Red	1 of 2	
RH Flasher	Green		
RH Side Light			
Brake Light	Blue		
LH Side Light	Red	1 of 2	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Black Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

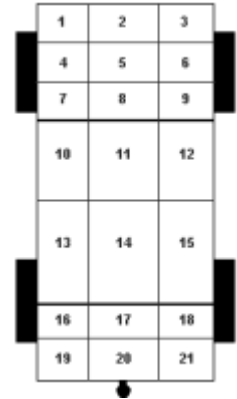
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Brown		
RH Flasher	Grey		
RH Side Light	Green		
Brake Light	Red		
LH Side Light	Purple		
Reverse			



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

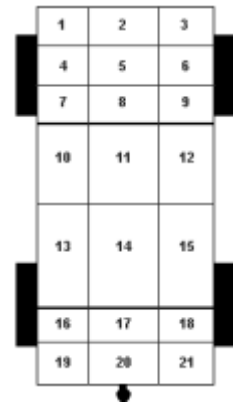
Best Wiring Location	Route to Battery	Fusebox Location
19		Glove box

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Brake lights will not work if bypass not used

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Red	Grey	19
RH Flasher	Green		18
RH Side Light	Yellow		18
Brake Light	Blue	Orange -one of two	19
LH Side Light	Yellow		19
Reverse	Yellow		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

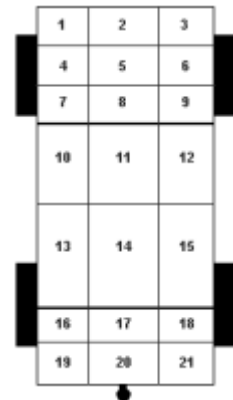
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White	Plug: position 6	
Fog Light	Blue	With black print	21
RH Flasher	Green		
RH Side Light	Red		
Brake Light	Blue		21
LH Side Light	Blue		
Reverse	Yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
-		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

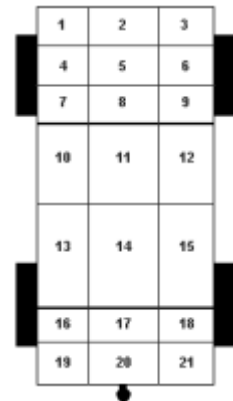
Best Wiring Location	Route to Battery	Fusebox Location
19	Grommet RH bulkhead	Bulkhead L/H

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
2005 Update : High level brake light (1 of 6 White wires) found n/s pillar. None of the rear lights are protected by fuses.
Fault condition: When you check the rear clusters, the indicators may stop working. Refit lamps, power down, lock car and leave for 10 minutes - car will reset.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/green	Red/blue, or Yellow	19
Fog Light	White/red	Grey/brown or Beige	20 multiblock
RH Flasher	White/green	Red/blue or Blue	21
RH Side Light	White/grey		21
Brake Light	Yellow	White	See note
LH Side Light	White/grey	Green	19
Reverse	White	Red/purple 19	20 multiblock



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Citroen C4 Picasso MPV 2006 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

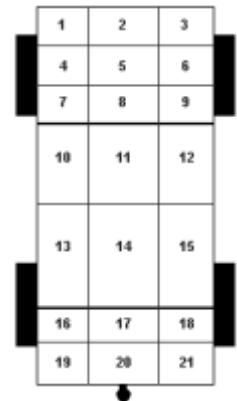
Best Wiring Location	Route to Battery	Fusebox Location
21		Dash, L/H (10)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
2005 Update : High level brake light (1 of 6 White wires) found n/s pillar. None of the rear lights are protected by fuses.
Fault condition: If you disconnect the rear clusters, the indicators will fail to work when you connect again. Power down, lock car and leave for 10 minutes - car will reset.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Purple		19
Fog Light	Purple		19-20
RH Flasher	Brown		21
RH Side Light	Pink		21
Brake Light	White		19
LH Side Light	Yellow		19
Reverse	Green		B9



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Citroen C5 (X41) Hatchback 2001 - Oct 2004

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

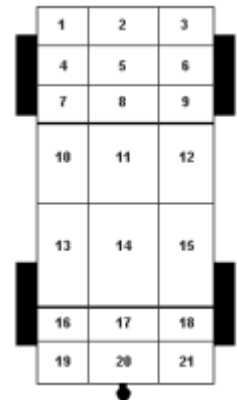
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Colours: Probe all circuits: colours may be same or duplicated
Test in sequence; start up; turn off to reset

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		
Fog Light	White	Grey?	
RH Flasher	White		
RH Side Light	White		
Brake Light	White	Red/white?	
LH Side Light	White		
Reverse	Grey		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>	Fit detachable towball to avoid reversing sensors.		

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse: Slot 10, 15amp	Colour: Location: Add Fuse:

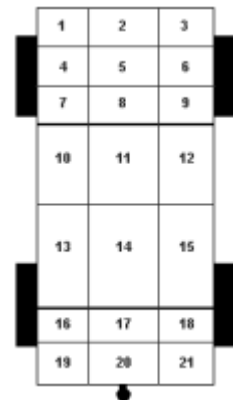
Best Wiring Location	Route to Battery	Fusebox Location
All wires at 16. All white: probe req.		Dash, L/H (10)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Although, previously, no bypass has been recommended on this car, a customer has been recommended by his dealer to fit a bypass.
7-core entry 2004: Wire n/s behind plastic trim. Grommet for 7-core position 18.
Power supply 2004: 3 Wires in plug n/s: Perm feed = Grey ,Switched feed = White
Test in sequence; start up; turn off to reset

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow	2004 White	
Fog Light	Pink	2004 Yellow	
RH Flasher	Yellow	2004 Blue	
RH Side Light	Red	2004 White	
Brake Light	Green	2004 Thick white	
LH Side Light	Red	2004 Yellow	
Reverse	Grey	2004 White	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19		TF2218/7SMARTLOGIC	
----	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Brown Location: 16 Add Fuse: Slot F74, 20 amp mini blade	Colour: Location: Add Fuse: 30

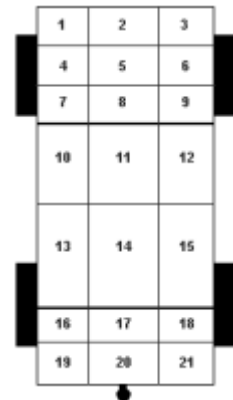
Best Wiring Location	Route to Battery	Fusebox Location
16		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Although, previously, no bypass has been recommended on this car, a customer has been recommended by his dealer to fit a bypass.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Purple		
RH Flasher	Orange		
RH Side Light	Grey		
Brake Light	Green		
LH Side Light	Blue		
Reverse	White		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Citroen C5 Saloon etc Oct 2008 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet in floor	2m	TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Fusebox Add Fuse:	Colour: Location: Add Fuse:

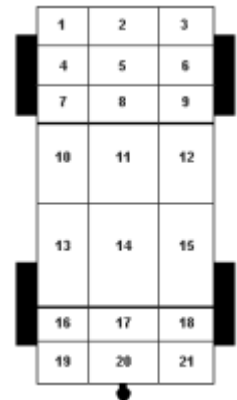
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Halogen reverse lights overheat and fail if left on long. 2 reports.
Warning: Citroen note on loom warns not to add any load above 10 milli amps. (Ryder TF2217/7 series add less tha 1 mA per circuit, so OK

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown		19
Fog Light	White@16/19	Yellow@21	2 pink unclip trim by se
RH Flasher	Blue		21
RH Side Light	Brown		21
Brake Light	Purple	Blue@19	21
LH Side Light	Green		19
Reverse	Green	Blue or Yellow 16	: green unclip trim by se



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Beige Location: 19 or 21 Add Fuse:	Colour: Location: Add Fuse:

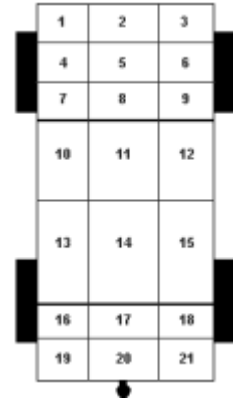
Best Wiring Location	Route to Battery	Fusebox Location
Multiplug, 12 under seat	Along chassis RHS under drivers seat	Under bonnet RH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown	Blue	
Fog Light	White	Brown	
RH Flasher	Blue		
RH Side Light	Yellow		
Brake Light	Grey		
LH Side Light	White		
Reverse	Brown	Purple	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Beige Location: 19 behind side panel Add Fuse:	Colour: Location: Add Fuse:

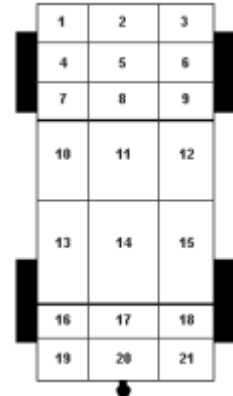
Best Wiring Location	Route to Battery	Fusebox Location
19	Under chassis	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/brown	Light brown	
Fog Light	Brown		
RH Flasher	Blue		21
RH Side Light	Yellow	Red	21
Brake Light	Grey		
LH Side Light	White		
Reverse	Purple		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			18

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

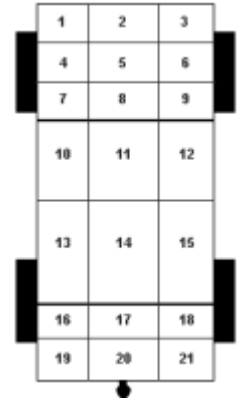
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/silver dots		18
Fog Light	Turquoise		21
RH Flasher	White/silver		18
RH Side Light	Brown		18
Brake Light	Red		18
LH Side Light	Brown		18
Reverse	White/silver		18



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Citroen Despatch Van 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

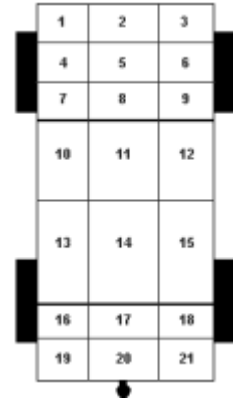
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Beige		
Fog Light	Orange		
RH Flasher	Yellow		
RH Side Light	White		
Brake Light	Orange		
LH Side Light	Yellow		
Reverse	Purple		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

	2m	TF2218/7SMARTLOGIC	
--	----	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Blue Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

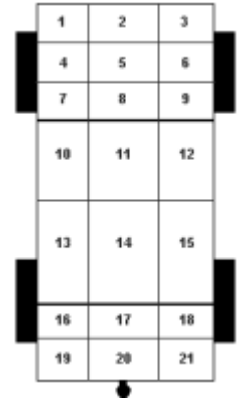
Best Wiring Location	Route to Battery	Fusebox Location
21	Through roof with loom, to fusebox	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19 high up
Fog Light	Red		21
RH Flasher	White		21
RH Side Light	Yellow		21
Brake Light	Green		21
LH Side Light	Brown		19 high up
Reverse	Brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

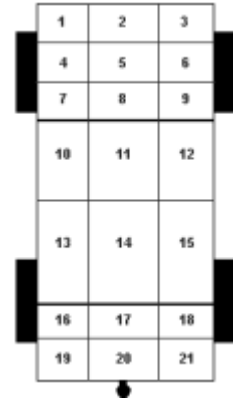
Best Wiring Location	Route to Battery	Fusebox Location
	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		19
Fog Light	Brown		19 lamp
RH Flasher	Cream/tan		21
RH Side Light	Pink		21
Brake Light	Grey	Red	19 lamp
LH Side Light	Cream/tan		19 lamp
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

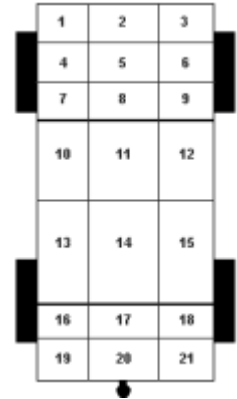
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		19
Fog Light	Brown/grey		19
RH Flasher	Blue/black		21
RH Side Light	Yellow		21
Brake Light	Green/white		19
LH Side Light	Yellow		19
Reverse	Grey/green		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Behind 1/4 Bumper		None	
----------------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

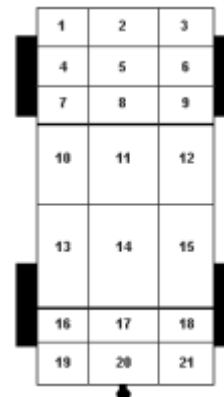
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Front monitor: pre 2003: front monitor can be used. 2003: No indicator wires available at front for front monitor. Wire at back and bring telltale wires through to front. (E.G TF115FL)
Key: spare key issued has a memory and is used to programme new keys if required.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/black		
Fog Light	Grey		
RH Flasher	Blue		
RH Side Light	Yellow/black		
Brake Light	Red/black		
LH Side Light	Yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Behind 1/4 Bumper			
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

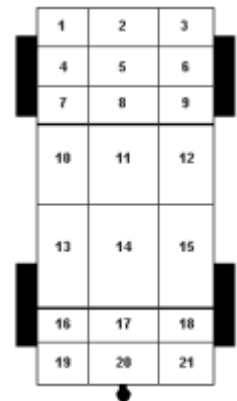
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Front monitor: pre 2003: front monitor can be used. 2003: No indicator wires available at front for front monitor. Wire at back and bring telltale wires through to front. (E.G TF115FL)
Key: spare key issued has a memory and is used to programme new keys if required.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink/white		19
Fog Light	Grey/blue		19
RH Flasher	Blue/black		21
RH Side Light	Yellow/black		21
Brake Light	Red/black		19
LH Side Light	Yellow/red		19
Reverse	Red/white		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

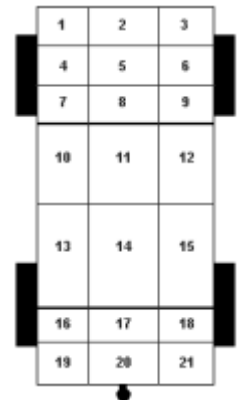
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Brown wire with black trace associated with fog light is a test wire. Do not connect to it.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink/black		21
Fog Light	Brown		
RH Flasher	Pink		21
RH Side Light	Yellow		
Brake Light	Green		21
LH Side Light	Green/yellow		
Reverse	White/green		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

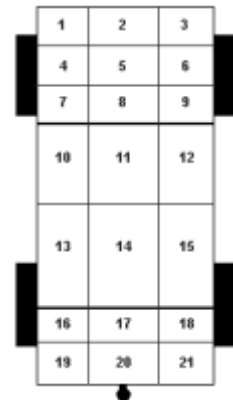
Best Wiring Location	Route to Battery	Fusebox Location
19/21 behind vents		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: If you disconnect the rear clusters you get a fault condition that only the dealer can clear.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Beige		
Fog Light	Green		
RH Flasher	Green		
RH Side Light	Beige		
Brake Light	Red		
LH Side Light	Pink		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet rear floor		TF2218/7SMARTLOGIC	
-----------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse: Slot 8	Colour: Location: Add Fuse:

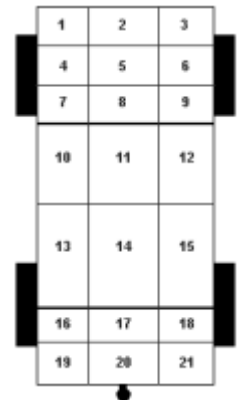
Best Wiring Location	Route to Battery	Fusebox Location
	Footwell RH	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Power supply: 21 on vans. Plug on RHS may affect central locking.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Grey		Loom to roof
RH Flasher	White		
RH Side Light	Green		
Brake Light	Pink		
LH Side Light	Pink		
Reverse	Orange		Loom to roof



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Mfr. Grommet		See note below	
--------------	--	----------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

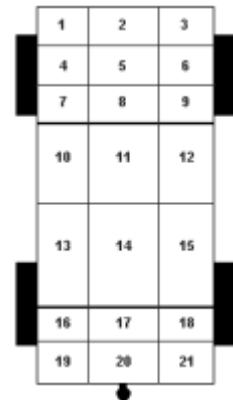
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Multiplug: there is a plug at the O/S rear with fog light and reverse feeds
Bypass: if the flasher relay clicks loudly, the Xantia is multiplexed, otherwise not.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green	Pin 1	
Fog Light	Grey	Pin 2	Multiblock
RH Flasher	Green	Pin 1	21
RH Side Light	Red	Pin 4	21
Brake Light	Green	Pin 3	21
LH Side Light	Green	Pin 4	19
Reverse	Grey		Multiblock



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Citroen Xantia Hatchback May 1993 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Mfr. Grommet		See note below	
--------------	--	----------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

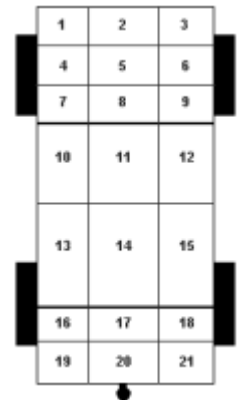
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Multiplug: there is a plug at the O/S rear with fog light and reverse feeds
Bypass: if the flasher relay clicks loudly, the Xantia is multiplexed, otherwise not.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light	Grey		Multiblock
RH Flasher			
RH Side Light	Red		
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet rear floor		Some fitters use 7-way TF2217LOGIC/2218	
-----------------------	--	--	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Location: Add Fuse:

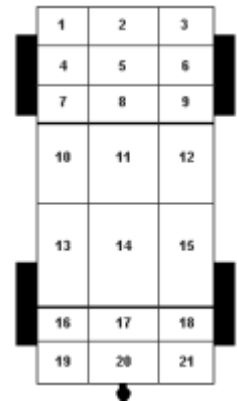
Best Wiring Location	Route to Battery	Fusebox Location
	Throttle cable grommet	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Colours: Probe all circuits: colours may be same or duplicated
Fuse: indicator fuse is under bonnet.
Bypass: Manufacturer's kit uses bypass relays

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Dark fawn		
RH Flasher	Light fawn		
RH Side Light	Yellow		
Brake Light	Grey/red		
LH Side Light	Green		
Reverse	Brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Citroen Xsara Estate/ Hatchback 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet rear floor		? 7-way	
-----------------------	--	---------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 Add Fuse:	Colour: Location: Add Fuse:

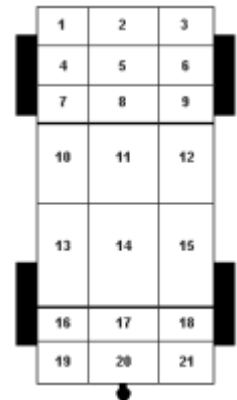
Best Wiring Location	Route to Battery	Fusebox Location
	Throttle cable grommet	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Colours: Probe all circuits: colours may be same or duplicated
Fuse: indicator fuse is under bonnet.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown		
Fog Light	Violet		
RH Flasher	Orange		
RH Side Light	Brown		
Brake Light	Grey		
LH Side Light	Grey		
Reverse	Grey/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Citroen Xsara Picasso MPV 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Location: Add Fuse:

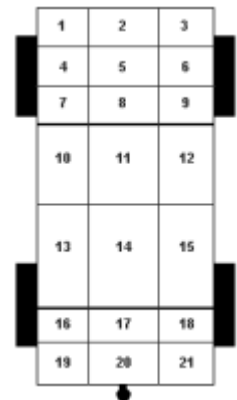
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp	Under seat: 10	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
From 2003 :Full 7-way bypass req:TF2217
Warning: do not interfere with the front end relays.
Citroen kit bypasses indicators. TF110R (2-way bypass with telltale). See reverse also.
Fuse: indicator fuse is under bonnet.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Orange	Grey?	
RH Flasher	White		
RH Side Light	Beige		
Brake Light	Grey	Orange	
LH Side Light	Pink		
Reverse		Bypass	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19		TF2218/7SMARTLOGIC	
----	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse: Slot 1, 15amp	Colour: Location: Add Fuse:

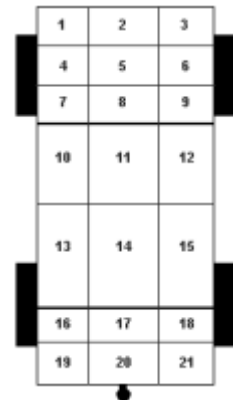
Best Wiring Location	Route to Battery	Fusebox Location
21	Under seat: 10	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: do not interfere with the front end relays.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Lilac	-	21
RH Flasher	White		
RH Side Light	Beige	2004 Red	
Brake Light	Grey	2004 Blue	
LH Side Light	Pink	2004 Red	
Reverse	White	2004 Blue	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

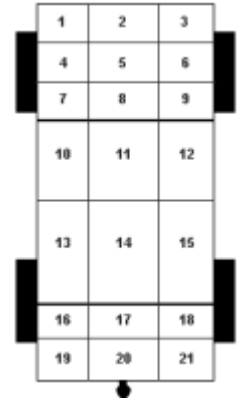
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		15
Fog Light	Red		21
RH Flasher	Blue		19
RH Side Light	Brown/white		19
Brake Light	Brown		19
LH Side Light	Purple		19 lamp
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 Grommets behind lights		None	
------------------------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

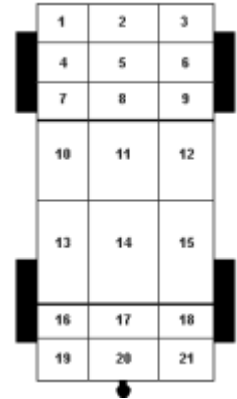
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		
Fog Light	Red		13
RH Flasher	Yellow		
RH Side Light	Green/white		
Brake Light	Green/yellow		
LH Side Light	Green/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Daewoo Lacetti Hatchback 2004 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

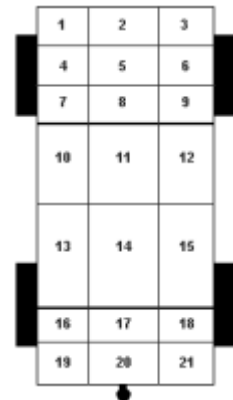
Best Wiring Location	Route to Battery	Fusebox Location
19 Multiblock		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fog wire found in separate multiplug (19)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light blue		
Fog Light	Red	See Note above	
RH Flasher	Dark blue		
RH Side Light	Green/white		
Brake Light	Yellow		
LH Side Light	Purple		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Location: Add Fuse:

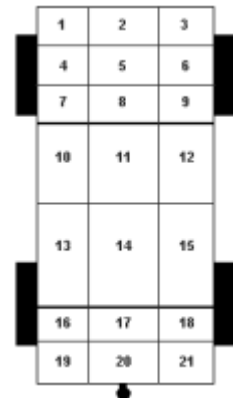
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fog light and reverse harnesses run inside the tailgate. Access them ahead of the rear quarter panel.
Negative reverse: use TF1011 to earth switch it. (See Practical Guide)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light blue		
Fog Light	Red	1 of 4	13
RH Flasher	Blue		
RH Side Light	Brown		
Brake Light	Brown/black		
LH Side Light	Brown/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Centre rear		None	
-------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

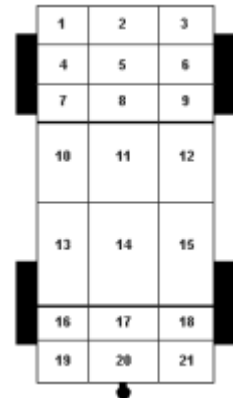
Best Wiring Location	Route to Battery	Fusebox Location
19 Multiblock		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light blue		
Fog Light	Red		
RH Flasher	Dark blue		
RH Side Light	Brown/white		
Brake Light	Light blue		
LH Side Light	Purple		
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Daewoo Musso Turbo Diesel 4WD 1999 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 Rear pocket

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

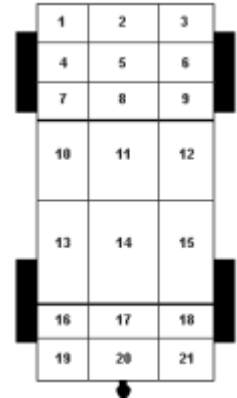
Best Wiring Location	Route to Battery	Fusebox Location
		Footwell RH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
7-core entry O/S rear (Grommet covered in sticky sealant on panel wall.)
Power supply: Take power from fusebox in driver footwell; accessory socket, N/S rear, only rated 10 amps.
Fog and reverse in tailgate: pull back NS rear boot trim, prise out grommet above NS tailgate strut to access wires.O/S wires under O/S door step trim.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		
Fog Light	Red	See Note above	19
RH Flasher	Yellow		
RH Side Light	Green/white		
Brake Light	Green/yellow		
LH Side Light	Green/white		
Reverse	Red/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Daewoo Nubira Estate/Wagon Late 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Drill behind lamp		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

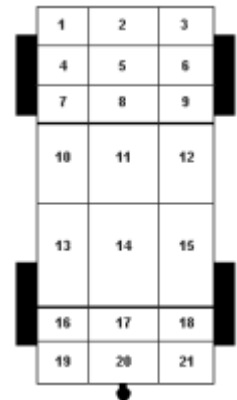
Best Wiring Location	Route to Battery	Fusebox Location
19	Bulkhead LH (harness grommet)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point
Panel lamp fitted: activate with TF2001 or TF2100T if wired.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light	Red		
RH Flasher	Blue		12
RH Side Light	Brown/white		12
Brake Light	Yellow		
LH Side Light	Purple		
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Daewoo Nubira Saloon Late 1999 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

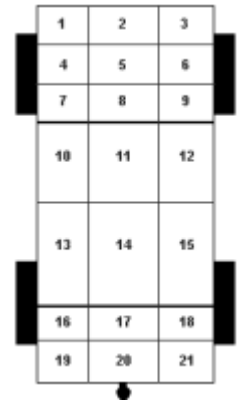
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue	Pale	
Fog Light	Red		
RH Flasher	Blue	Bright	
RH Side Light	Brown/white	Thin	
Brake Light	Yellow		
LH Side Light	Violet	Thin	
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Daewoo Tacuma MPV 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet in floor behind trim		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

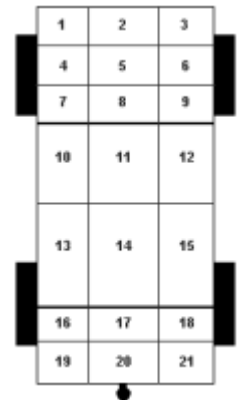
Best Wiring Location	Route to Battery	Fusebox Location
19		Footwell LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point
Panel lamp fitted: activate with TF2001 or TF2100T if wired.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue	1 of 4	
Fog Light	Light blue		Spur off main loom
RH Flasher	White		
RH Side Light	Mauve		
Brake Light	Brown		
LH Side Light	Mauve		
Reverse	Light green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Daihatsu Fourtrack All 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

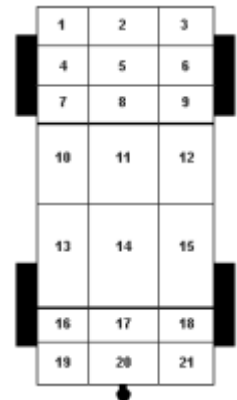
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Polarity: if you fit a front monitor (TF2100T Clone, TF2005T monitor, etc) check the polarity of the car's relay.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Daihatsu Grand Mare All 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet		None	
------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

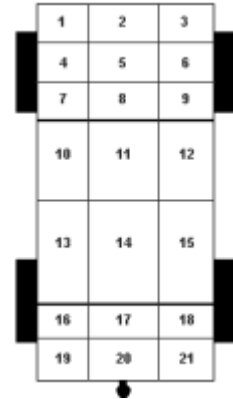
Best Wiring Location	Route to Battery	Fusebox Location Kick panel RH
-----------------------------	-------------------------	--

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Red/yellow		
RH Flasher	Green		
RH Side Light	Red/black		
Brake Light	Red/blue		
LH Side Light	Red/black		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet: number plate light	2m		
-----------------------------	----	--	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

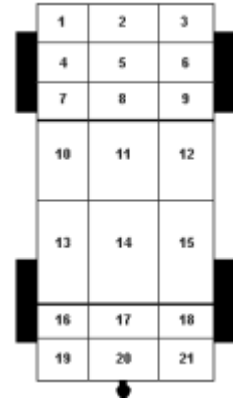
Best Wiring Location	Route to Battery	Fusebox Location
20, 21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		19
Fog Light	Red/black		20
RH Flasher	Green		21
RH Side Light	Red/blue		20
Brake Light	Yellow		19
LH Side Light	Red/blue		20
Reverse	Green/white		20



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Daihatsu Terios All Late 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet rear floor		None	
-----------------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

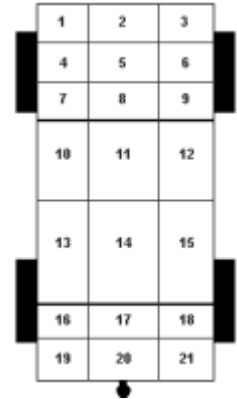
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Red/black		B9
RH Flasher	Green		
RH Side Light	Red/white		
Brake Light	Red/black		
LH Side Light	Red/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

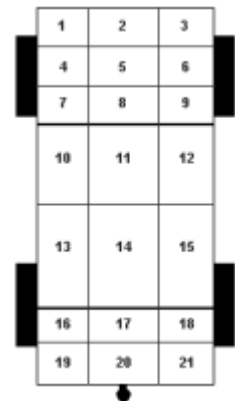
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Main wiring loom and cable entry behind bumper. It is easier to wire the electrics before fitting the towbar, as bumper is very difficult to remove when towbar is fitted first.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red/black		
RH Flasher	Green		
RH Side Light	Red/blue		
Brake Light	Green/yellow		
LH Side Light	Red/blue		
Reverse	Green/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 lamp Add Fuse:	Colour: Location: Add Fuse:

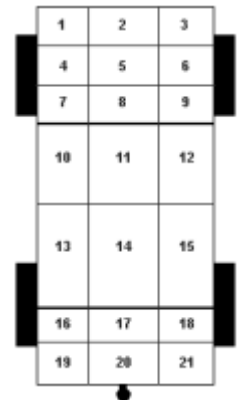
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
1.5hrs

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	White/dark green		
RH Flasher	White/yellow		
RH Side Light	White/black		
Brake Light	White/orange		
LH Side Light	White/purple		
Reverse	White/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Blue/pink Location: 16 Add Fuse: 10 amps at accessory socket	Colour: Location: Add Fuse:

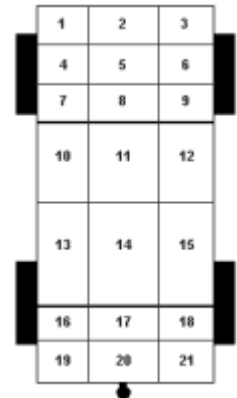
Best Wiring Location	Route to Battery	Fusebox Location
16	Grommet LH bulkhead	Under bonnet LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/green		19
Fog Light	White/orange		Bumper
RH Flasher	White/yellow		21
RH Side Light	White/purple		21
Brake Light	Green/white		19
LH Side Light	White/brown		19
Reverse	White/light green		16-17 under headlining



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

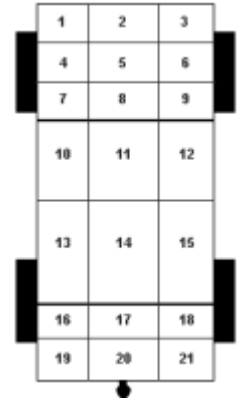
Best Wiring Location	Route to Battery	Fusebox Location
19	Battery (through bulkhead by)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/green	1 of 4	19
Fog Light	White/orange		19
RH Flasher	White/orange		21
RH Side Light	White/purple		21
Brake Light	Dark green/white	1 of 4	19
LH Side Light	White/light green	1 of 4	19
Reverse	White/green	1 of 4	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet: number plate light		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

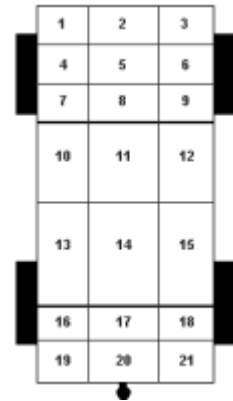
Best Wiring Location	Route to Battery	Fusebox Location
19/21		9

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/red		19
Fog Light	Purple		21
RH Flasher	Grey/green		21
RH Side Light	Red		21
Brake Light	Yellow/black		21
LH Side Light	Blue/brown		19
Reverse	Green		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

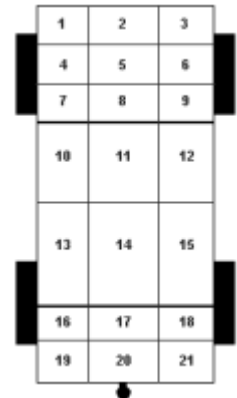
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/black		
Fog Light	Grey/black		
RH Flasher	Blue		
RH Side Light	Yellow/red		
Brake Light	Red/yellow		
LH Side Light	Yellow/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

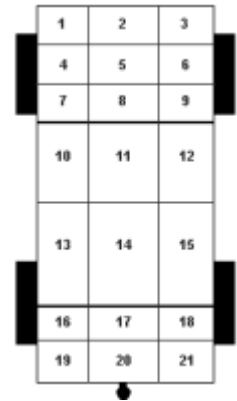
Best Wiring Location	Route to Battery	Fusebox Location
21		Glove box (behind)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		19
Fog Light	Brown/grey		21
RH Flasher	Blue/black		21
RH Side Light	Yellow/black		21
Brake Light	Green/yellow		21
LH Side Light	Yellow/red		19
Reverse	Grey/black		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

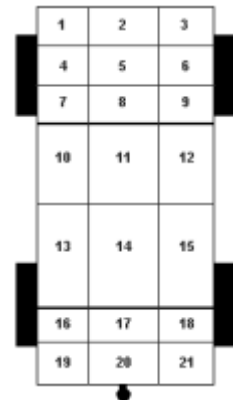
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bypass: single fuse for ignition, indicators, brake, fog and sidelights. Use TF2218/7LOGIC

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher		Bypass	
Fog Light		Bypass	
RH Flasher		Bypass	
RH Side Light		Bypass	
Brake Light		Bypass	
LH Side Light		Bypass	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet: number plate light		TF2218/7SMARTLOGIC	
-----------------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>	Not affected by towbar		

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

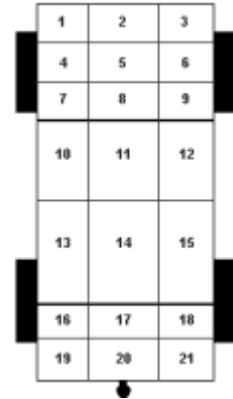
Best Wiring Location	Route to Battery	Fusebox Location
19/21		12

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			19
Fog Light	Brown/black		16
RH Flasher			21
RH Side Light			21
Brake Light			JL42/125
LH Side Light			19
Reverse	Grey/red		16



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

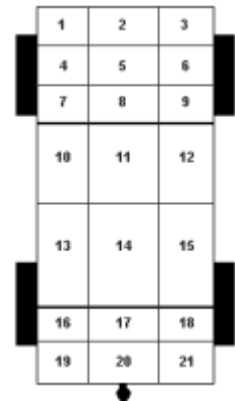
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Power: cables from the battery run under the car in a plastic cover.
Reverse sensor: towbar may not affect reversing sensors.
Fault condition: if any lights do not work (brand new car) check whether fuses have been left out for shipping.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Red/green		
Fog Light	Grey		
RH Flasher	Red		
RH Side Light	Yellow		
Brake Light	Green/yellow		12
LH Side Light	Yellow/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

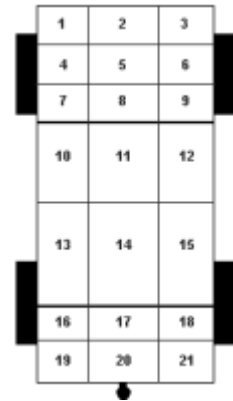
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/black		
Fog Light	Grey		
RH Flasher	Blue		
RH Side Light	Yellow/black		
Brake Light	Red/black		
LH Side Light	Yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

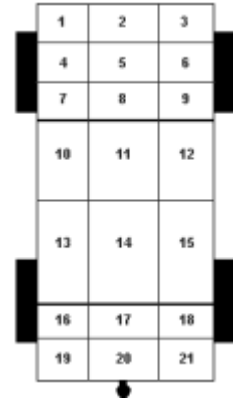
Best Wiring Location	Route to Battery	Fusebox Location
		Under bonnet

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink/black		
Fog Light	Brown		
RH Flasher	Pink		
RH Side Light	Yellow		
Brake Light	Green		
LH Side Light	Green/yellow		
Reverse	White/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Fiat Grande Punto All 2006 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 (21 in Estate) Grommet in floor			
------------------------------------	--	--	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

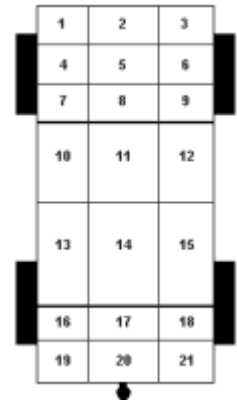
Best Wiring Location	Route to Battery	Fusebox Location
19		Glove box (behind)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink		
Fog Light	Grey		
RH Flasher	Pink/black		
RH Side Light	Yellow/green		
Brake Light	Green/white		
LH Side Light	Yellow/green		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

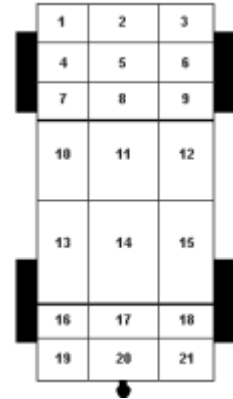
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey		
Fog Light	Pink		19
RH Flasher	White		
RH Side Light	White		
Brake Light	Grey		
LH Side Light	Orange/blue		
Reverse	Red/brown		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Drill in wheel well	4.5m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

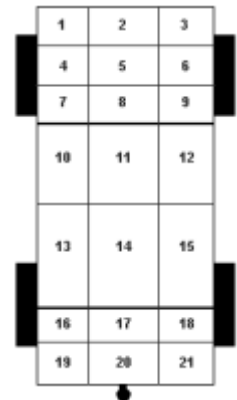
Best Wiring Location	Route to Battery	Fusebox Location
Rear seat	Footwell, L/H (grommet)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/black		
Fog Light	Grey	Bypass	
RH Flasher	Blue		
RH Side Light	Red/yellow		
Brake Light	Black/red	Bypass	
LH Side Light	Black/yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet in floor		Some fitters use 7-way TF2217LOGIC/2218	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: See note Add Fuse:	Colour: Location: Add Fuse:

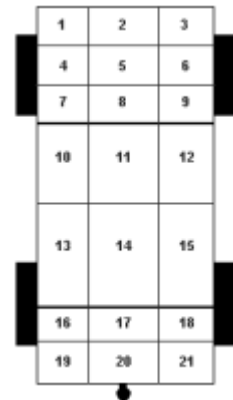
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Power supply at socket in N/S rear trim panel
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/black		
Fog Light	Grey/red		
RH Flasher	Blue		21
RH Side Light	Yellow/red		21
Brake Light	Red/black		
LH Side Light	Yellow/black		
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

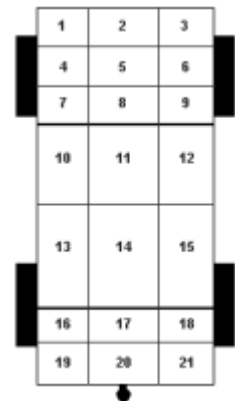
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Main wiring loom and cable entry behind bumper. It is easier to wire the electrics before fitting the towbar, as bumper is very difficult to remove when towbar is fitted first.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink/white		
Fog Light	White		21
RH Flasher	Brown/white		21
RH Side Light	Green/red		
Brake Light	Green/white		
LH Side Light	Yellow/black		
Reverse	Grey		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Drill		None	
-------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

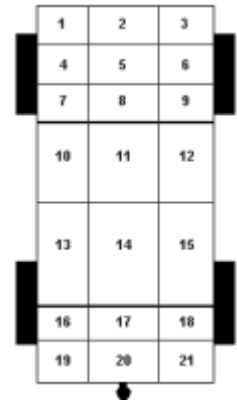
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/blue		
Fog Light	Grey		
RH Flasher	Blue		
RH Side Light	Red/yellow		
Brake Light	Red		
LH Side Light	Yellow/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19		Some fitters use 7-way TF2217LOGIC/2218	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

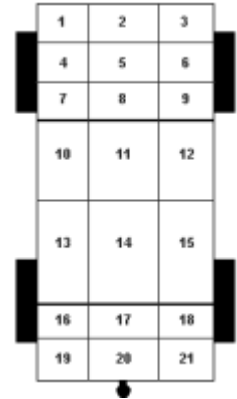
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink/white		
Fog Light	Grey		
RH Flasher	Pink/white		
RH Side Light	Yellow/black		
Brake Light	Green/white		
LH Side Light	Yellow/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19		Some fitters use 7-way TF2217LOGIC/2218	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

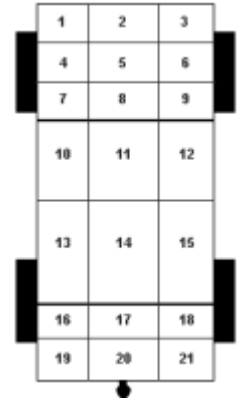
Best Wiring Location	Route to Battery	Fusebox Location
19		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink		
Fog Light	Grey		
RH Flasher	Pink/white		
RH Side Light	Yellow/black		
Brake Light	Green/white		
LH Side Light	Yellow/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
--	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

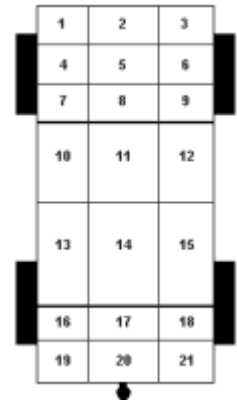
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		
Fog Light	Brown/yellow		
RH Flasher	Blue/black		
RH Side Light	Yellow/black		
Brake Light	Green/white		
LH Side Light	Red/yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19		None	
----	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse: 20	Colour: Location: Add Fuse:

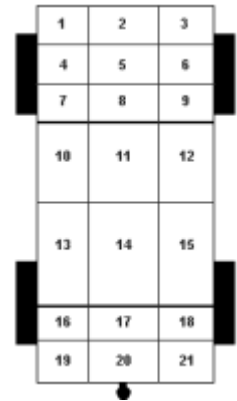
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Cream		
Fog Light	Orange	Violet splits 2 orange	
RH Flasher	Yellow		
RH Side Light	White		
Brake Light	Orange	Green?	
LH Side Light	Yellow		
Reverse	Violet		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Blue Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

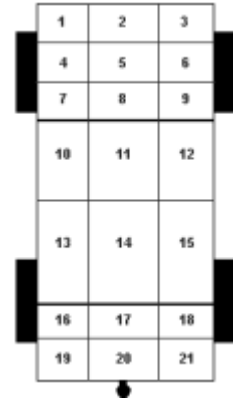
Best Wiring Location	Route to Battery	Fusebox Location
21	Through roof with loom, to fusebox	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19 high up
Fog Light	Red		21
RH Flasher	White		21
RH Side Light	Yellow		21
Brake Light	Green		21
LH Side Light	Brown		19 high up
Reverse	Brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red/blue		
RH Flasher	Blue/white		
RH Side Light	Red/yellow		
Brake Light	Green/white		
LH Side Light	Red/yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21		None	
----	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

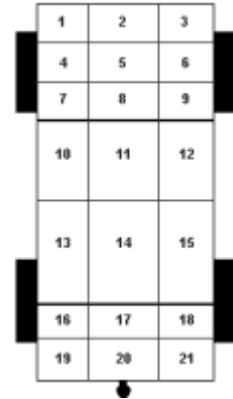
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey		
Fog Light	Blue		
RH Flasher	Grey		
RH Side Light	Yellow		
Brake Light	Red		
LH Side Light	Yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet in floor		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

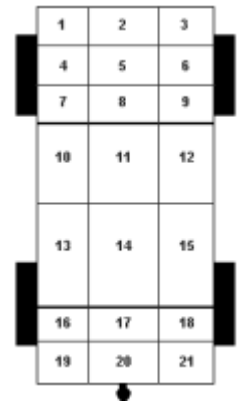
Best Wiring Location	Route to Battery	Fusebox Location
19	Footwell, L/H (grommet)	Steering column (under)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point
Power supply: grommet under LH footwell gives access to battery but skin is double and new hole is required through inner skin.
Fitting: Beware brittle plastic trim.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink	Orange	
Fog Light	Pink or grey	Below boot light (test)	21
RH Flasher	White		19
RH Side Light	Grey/white	White	21
Brake Light	Green	Grey	21
LH Side Light	Brown/black		
Reverse	Grey		10



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Fiat Tempra Saloon Nov 1990 -1995

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

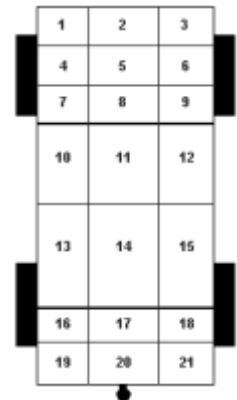
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Front monitor: May take "Midwife" TF2001

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

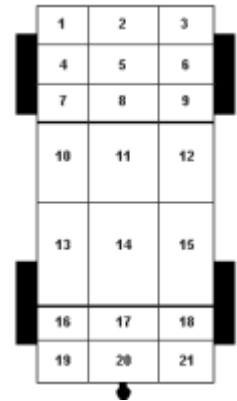
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Grey		
RH Flasher	White		
RH Side Light	Green		
Brake Light	Pink		
LH Side Light	Pink		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet rear floor		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse: See note below	Colour: Location: Add Fuse:

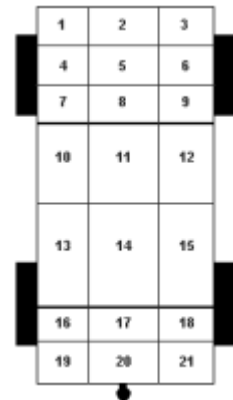
Best Wiring Location	Route to Battery	Fusebox Location
	Footwell RH	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fuse No 8 in fusebox under bonnet or 20amp at No 10 in fusebox under steering wheel.
Power supply: 21 on vans. Plug on RHS may affect central locking.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown	Pin 6	
Fog Light	White	Pin 5	
RH Flasher	Blue	Pin 6	
RH Side Light	Yellow	Pin 1	
Brake Light	White	Pin 2	
LH Side Light	White	Pin 1	19 lamp
Reverse	Brown	Pin 4	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet in boot floor		TF2218/7SMARTLOGIC	
-----------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

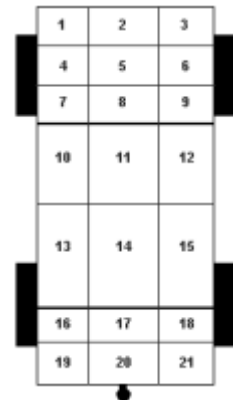
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Orange/yellow		
RH Flasher	Blue/brown		
RH Side Light	Orange		
Brake Light	Purple		
LH Side Light	Orange/white		
Reverse	Purple/orange		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

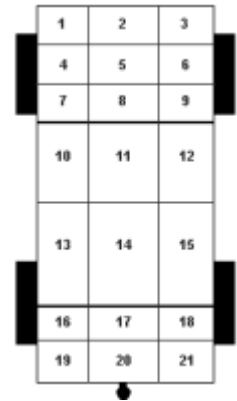
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Purple/yellow		
RH Flasher	Blue/red		
RH Side Light	Orange/black		
Brake Light	Purple		
LH Side Light	Orange		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		Some fitters use 7-way TF2217LOGIC/2218	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

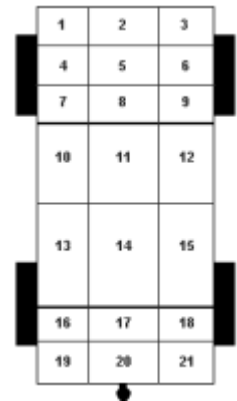
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Do not use the plug you will find hanging down from the loom; this is wired American style. Make your connections on the leads to the rear lamps.
Flasher relay: 5 pin: takes a clone (TF2100T) but check the pin configuration.
Flashers. Two wires to each indicator - don't use large yellow or green as these switch brake lights as well. Permanent live on brakes.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/orange	See Note above	
Fog Light	Green/yellow		
RH Flasher	Orange/blue	See Note above	
RH Side Light	Brown/white		
Brake Light	Green		
LH Side Light	Orange/black		
Reverse	Black/pink		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

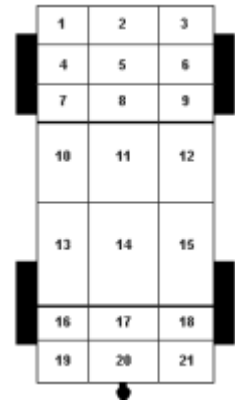
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Purple/yellow		
RH Flasher	Blue/red		
RH Side Light	Orange/white		
Brake Light	Black/purple		
LH Side Light	Orange/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	
------------------------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse: See note below	Colour: Location: Add Fuse:

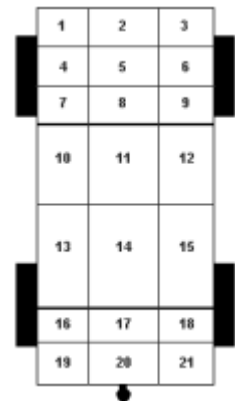
Best Wiring Location	Route to Battery	Fusebox Location
19/21		10

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fuse positions: F8 - 15amps switched f23 - 20A permanent

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/orange		19
Fog Light	Black/green		21
RH Flasher	Green/yellow		21
RH Side Light	White/orange		21
Brake Light	Purple/green		19
LH Side Light	Grey/blue		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 Add Fuse: Slot 31	Colour: Location: Add Fuse:

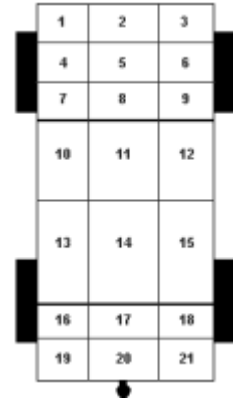
Best Wiring Location	Route to Battery	Fusebox Location
		Glove box (grommet behind)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Green/yellow		
RH Flasher	Blue/red		
RH Side Light	Orange/white		
Brake Light	Green/black		
LH Side Light	Orange/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Ford Focus Cmax MPV Sept 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 16 Add Fuse: Slot 59	Colour: Location: Add Fuse:

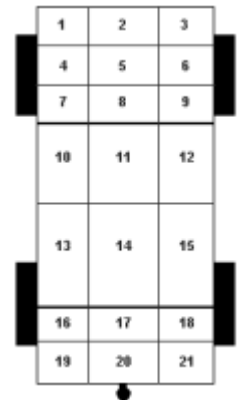
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point
Overload: reported on indicators: so use bypass (Aug 2004)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Yellow/green		
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Black/green	Green/orange	
LH Side Light	Orange	Orange/white	
Reverse	Green/orange		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Drill bung		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

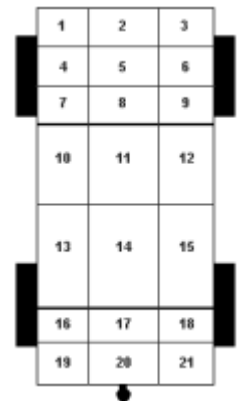
Best Wiring Location	Route to Battery	Fusebox Location
	LH door (via bung under)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Ford advised no 12S!!! (12/10/01) Latest feedback is that the problem concerns power taken from the wrong places. If you go to the battery or the main feed to the fusebox, you should be OK.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Green/yellow		
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Green/red		
LH Side Light	Orange/white		
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	
------------------------------------	--	--------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 behind seat trim Add Fuse: Slot 59	Colour: Location: Add Fuse:

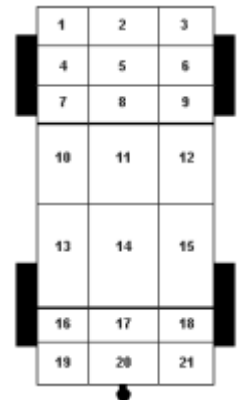
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Trailer power n/s number 59

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Green/yellow		21
RH Flasher	Blue/red		21
RH Side Light	Orange/white		21
Brake Light	Green/red		19
LH Side Light	Orange		19
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Ford Focus Hatchback 1999 -2004

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 behind seat trim Add Fuse: Slot 59	Colour: Location: Add Fuse:

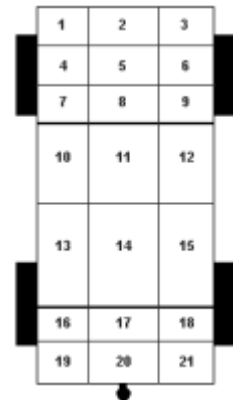
Best Wiring Location	Route to Battery	Fusebox Location
Multiblock (blue)	Grommet by throttle pedal	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wires very thin . Scotchlocks may not be reliable, especially on sidelights. Solder or supersplice recommended.
Difficult to fit

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Yellow/green	Black/green	
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Green/red		
LH Side Light	Orange/white		
Reverse	Green/black		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Ford Focus Hatchback Early 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse: 20	Colour: Location: Add Fuse:

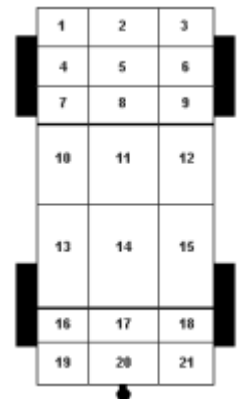
Best Wiring Location	Route to Battery	Fusebox Location
16, 18 Under wheel arch		Dash, L/H (10)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fuse position 119 15amps Look for auxiliary power in trailer module in boot
Warning: AIR BAG WIRES :Found in main loom o/s (Green/orange & Black/orange) n/s (Green/blue & Black)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Green/yellow		21
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Green/black		18
LH Side Light	Orange/white		
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 Add Fuse: Slot 31	Colour: Location: Add Fuse:

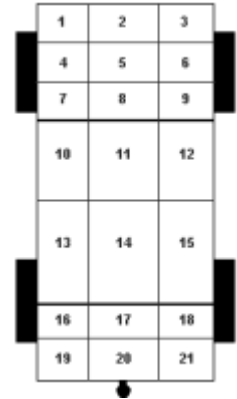
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Green/yellow		
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Green/black		
LH Side Light	Orange/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

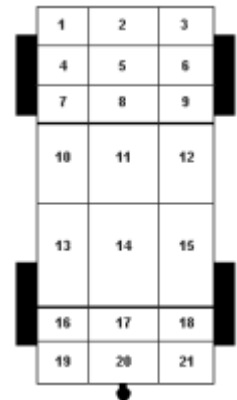
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bypass: digital check gives text bulb-failure warning on dash display: Use TF2218/7LOGIC
Reverse sensor cutout button (radar symbol) on dash or "P" to right of radio

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white	Grey/white	
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/white		
LH Side Light	Grey/white	Grey/black	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Centre rear		TF2218/7SMARTLOGIC	
-------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

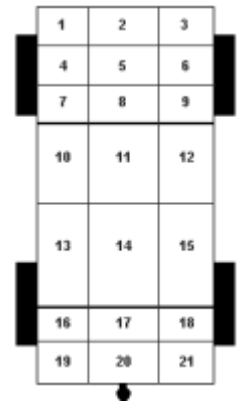
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bypass: digital check gives text bulb-failure warning on dash display: Use TF2218/7LOGIC
Reverse sensor cutout button (radar symbol) on dash or "P" to right of radio
Reverse sensors: bend the tee plate (dog-leg it) back against the bumper to avoid reverse sensors.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/white		
LH Side Light	Grey/white		
Reverse	Black/red		18 Behind jack



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
-		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Blue/red Location: Add Fuse:

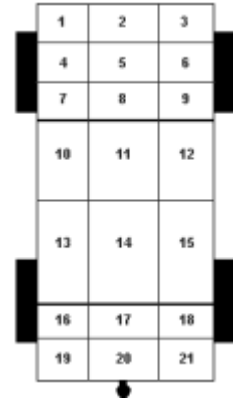
Best Wiring Location	Route to Battery	Fusebox Location
19/21		19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/orange		
Fog Light	Brown/green		
RH Flasher	Green/orange		
RH Side Light	White/orange	Purple/green	
Brake Light	Violet/brown		
LH Side Light	Purple/green		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

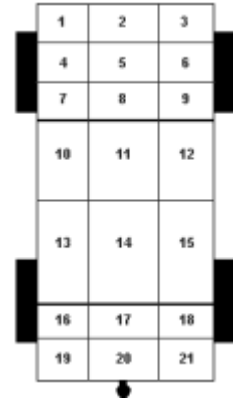
Best Wiring Location	Route to Battery	Fusebox Location
19		Glove box (below)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Green/yellow		19
RH Flasher	Blue/red		21
RH Side Light	Orange		21
Brake Light	Green/red	Green/black	19 or 21
LH Side Light	Orange/white		19
Reverse	Orange/blue		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet		None	TF115FL + TF1011 Reverse
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 lamp Add Fuse:	Colour: Location: Add Fuse:

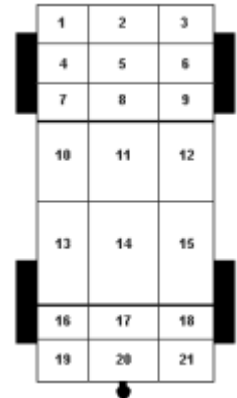
Best Wiring Location	Route to Battery	Fusebox Location
	Along chassis - protect with convoluted tubing	Under bonnet 1

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Straightforward
Negative reverse: use TF1011 to earth switch it. Connect TF1011 white to the switched earth. Connect the orange and red/white of the TF1011 to a switched live from the combi relay otherwise the caravan reverse comes on when ignition is off.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/white		
Fog Light	Green/yellow		
RH Flasher	White/blue		
RH Side Light	Brown		
Brake Light	Green		
LH Side Light	Brown		
Reverse	Orange/yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

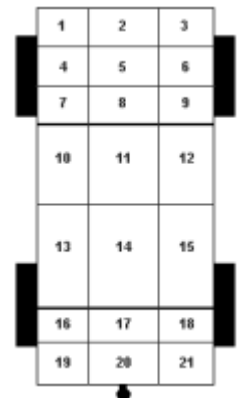
Best Wiring Location	Route to Battery	Fusebox Location
19	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
05 Ghia Model : power plug found behind rear n/s seat belt. The 05 LX Model did not have this plug .
Bypass: Manufacturer's kit uses bypass relays
Power plugs: 2-way plug nr N/S seat-belt reel. Fit mini blade fuses: F74 20 amp activates red wire; F92 makes green/blue ignition-controlled. Both labeled "Trailer". F70 (15A) controls O/S aux socket (orange/black wire)
Split: Estate loom splits L/H R/H

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Green/yellow	Purple/yellow	JL42/125
RH Flasher	Blue/red		21
RH Side Light	Orange	Orange/white	21
Brake Light	Green/red		19
LH Side Light	Orange/black	Orange/white	19
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Blue(or green)/red Location: Fusebox, rear Add Fuse: 15	Colour: Location: Add Fuse: 40 amp special

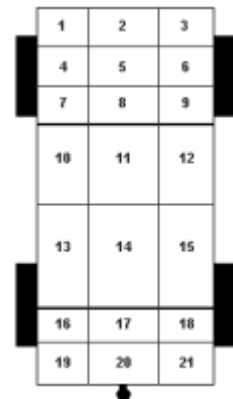
Best Wiring Location	Route to Battery	Fusebox Location
16		19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
If there are twin exhausts, drill below fuse box
Data below refers to bypass fitting only. For SmartCAN fitting, see SmartCAN Data

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/orange	Purple/green	
Fog Light	Dark green/brown	Black	16 multiblock
RH Flasher	Green/orange		21
RH Side Light	White/orange		21
Brake Light	Purple/brown		19
LH Side Light	Purple/green		19
Reverse	Green/brown		16 multiblock



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

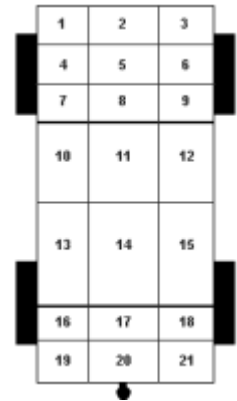
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Brown		
RH Flasher	Green/white		
RH Side Light	Orange		
Brake Light	Green/white		
LH Side Light	Red/green		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Chassis R/H or in Cab	4m if going to cab	None	TF2100T/TF2005T/TF115FL
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

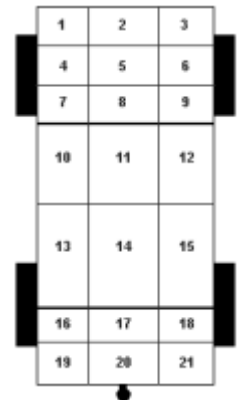
Best Wiring Location	Route to Battery	Fusebox Location
	RHS Grommets by brake servo	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Multiplug: block connector behind large grommet on O/S rear bulkhead. Blank grommet above this gives access to cab from outside.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black	Green/white	
Fog Light	Red/blue		
RH Flasher	Green/white	Green/black	
RH Side Light	Red/black	Shared	
Brake Light	White/green	White/brown	
LH Side Light	Red/black	Shared	
Reverse	Red/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 drain plugs		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Blue/red Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

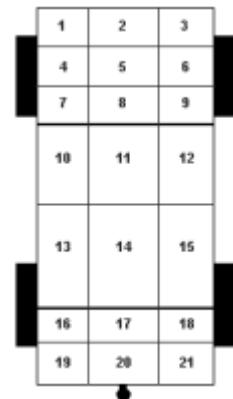
Best Wiring Location	Route to Battery	Fusebox Location
19		19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Multiplug behind bumper is not for lights
Data below refers to bypass fitting only. For SmartCAN fitting, see SmartCAN Data

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/orange		19
Fog Light	Brown/green		19
RH Flasher	Green/orange		21
RH Side Light	White/orange		21
Brake Light	Violet/brown		19
LH Side Light	Purple/green		19
Reverse	Green/brown		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Ford Transit Connect SWB/LWB Jan 2002 - June

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
18 Wheel arch	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse: Slot 46 or 35	Colour: Location: Add Fuse:

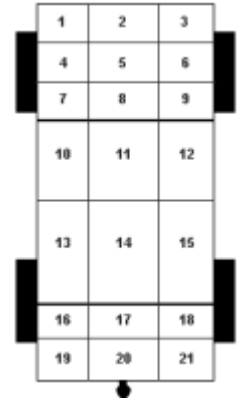
Best Wiring Location	Route to Battery	Fusebox Location
21 Remove cluster		Glove box (behind) 7

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19 lamp
Fog Light	Green/yellow		
RH Flasher	Blue/red		21
RH Side Light	Orange		21
Brake Light	Green/black	Green/red	19
LH Side Light	Orange/white		19 lamp
Reverse	Green/orange		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Ford Transit Connect Van 2006 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse: Slot 46 or 35	Colour: Location: Add Fuse:

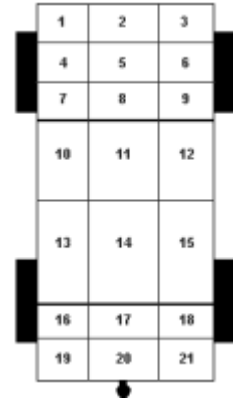
Best Wiring Location	Route to Battery	Fusebox Location
19 (21)		Glove box 10

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Green/yellow		
RH Flasher	Blue/red		21
RH Side Light	Orange		21
Brake Light	Green/red		19
LH Side Light	Orange/white		19
Reverse	Green/orange		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

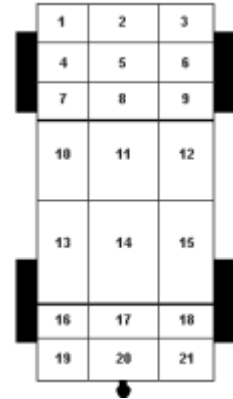
Best Wiring Location	Route to Battery	Fusebox Location
	Under seat: 12	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/orange		21
Fog Light	Red		21
RH Flasher	Green/orange		21
RH Side Light	Yellow/grey		21
Brake Light	Purple/white		21
LH Side Light	Purple/green		21
Reverse	Green/brown		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF2100T
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Under veh by spare

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

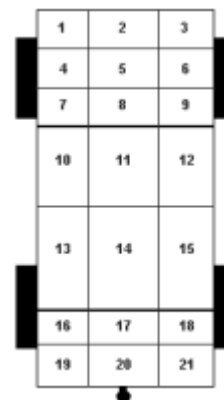
Best Wiring Location	Route to Battery	Fusebox Location
Under 19/20 by spare		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring TF2100T : Pin 1-Red (ind switch) Pin 2- Grey (link) Pin 3-Blue (supply+ve) Pin 4-Grey (link) Pin 5-White (earth)
Flasher monitor: may monitor automatically: check by unplugging trailer board while flashers are operating. If flashers race, vehicle is self-monitoring. Condition is random <input type="checkbox"/> Turn ign off and on, flash three flashes to reset.
New tunable TF2100T and TF2005 work on the latest Transits but check the pin positions.
Tipper. Access loom on NS between metal beams. Main loom runs LHS. Follow this for flying lead buzzer (TF115FL). Store buzzer under NS seat, behind step.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange/yellow		
Fog Light	Green/yellow		
RH Flasher	Orange/blue		
RH Side Light	Orange/black	Thick	
Brake Light	Orange	Orange/black	
LH Side Light	Orange	Thick	
Reverse	Purple/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Honda Accord Estate Spring 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet, rear X member	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

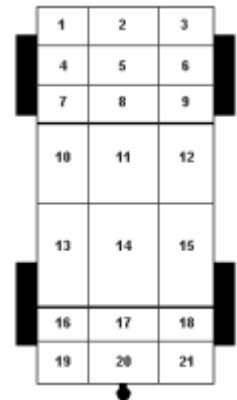
Best Wiring Location	Route to Battery	Fusebox Location
21		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Constant live Green/White at 18, behind panel too thin.
Bypass: Manufacturer's kit uses bypass relays: power from fuse box

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Red/blue		
Fog Light	Red/white		Loom to roof
RH Flasher	Brown		
RH Side Light	Red/black		
Brake Light	White/black		
LH Side Light	Red/black		
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Honda Accord Saloon 1998 -2002

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		Fog (TFC1 or TF1011)	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 by aerial? See note Add Fuse:	Colour: Location: Add Fuse:

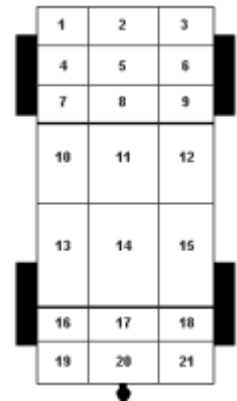
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
CPU: Potential CPU/Relay burn out if overloaded. Use Bypass as indicated.
Fog: 2001 on: no bypass needed on fog
Power socket on SOME only.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Red/green		
RH Flasher	Green/blue		
RH Side Light	Red/black		
Brake Light	Green/white		
LH Side Light	Red/black		
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

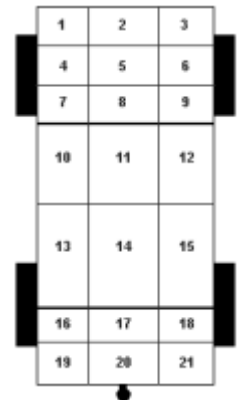
Best Wiring Location	Route to Battery	Fusebox Location
21	Bulkhead L/H	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bypass: Manufacturer's kit uses bypass relays: power from fuse box

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/red		19
Fog Light	Red/white		3: Connector behind se
RH Flasher	Brown		19
RH Side Light	Red/black		19
Brake Light	White/black		19
LH Side Light	Red/black		19
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Honda Accord Saloon 2008 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
--	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

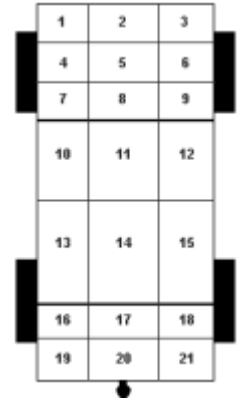
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet at 9	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	White		21 Hinge gaiter
RH Flasher	Green		
RH Side Light	Red		
Brake Light	Green		
LH Side Light	Red		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Mfr. Grommet		None	
--------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 at lamp (not all)

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

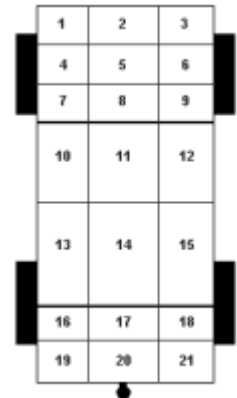
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		19
Fog Light	Red/white		
RH Flasher	Green/yellow		
RH Side Light	Red/orange	Red/yellow	
Brake Light	White/black		
LH Side Light	Red/orange	Red/yellow	
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

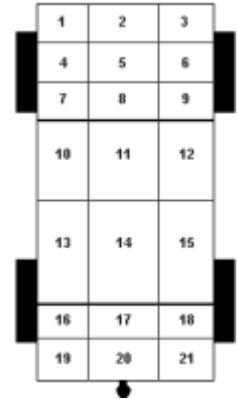
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		
Fog Light	Red/white		
RH Flasher	Green/yellow		
RH Side Light	Red		
Brake Light	Green/white		
LH Side Light	Red/black		
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet: number plate light	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Blue Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

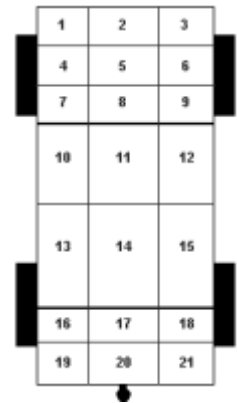
Best Wiring Location	Route to Battery	Fusebox Location
15		Footwell R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Boot trim hard to remove (1.5 hrs)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Yellow		15 - 21
RH Flasher	Brown	3 - Test	15 - 21
RH Side Light	Red		15 - 21
Brake Light	Light green		15 - 21
LH Side Light	Red		19
Reverse	Brown	3 - Test	15



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Centre rear		None	
-------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

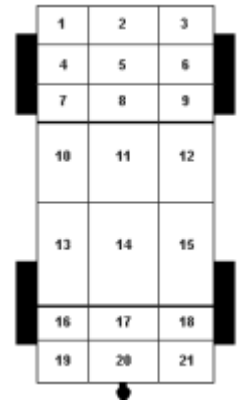
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red/white		
RH Flasher	Green/yellow		
RH Side Light	Red/yellow		
Brake Light	White/black		
LH Side Light	Orange/green		
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Mfr. Grommet		None	
--------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

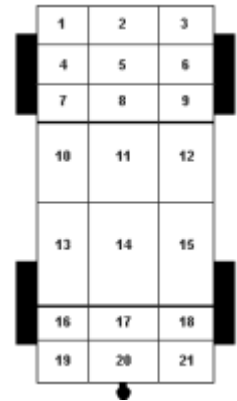
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red/white		
RH Flasher	Green/yellow		
RH Side Light	Red/yellow		
Brake Light	White/black		
LH Side Light	Orange/green		
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

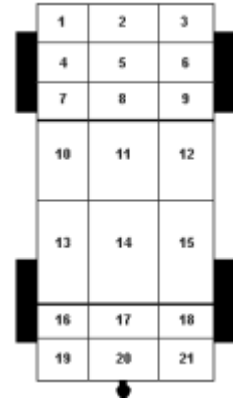
Best Wiring Location	Route to Battery	Fusebox Location
19	Bulkhead LH (harness grommet)	Under bonnet

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red/white		19
RH Flasher	Green/yellow		
RH Side Light	Red/yellow	Red/green	
Brake Light	White/black	White/green	
LH Side Light	Red/yellow	Red/green	
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

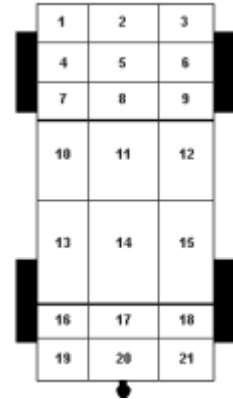
Best Wiring Location	Route to Battery	Fusebox Location
19	Bulkhead LH (harness grommet)	Under bonnet RH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red/white		21
RH Flasher	Green/yellow		
RH Side Light	Red/yellow		
Brake Light	White/black		
LH Side Light	Red/yellow		
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet in floor		None in OEM kit	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Yellow Location: 19 Add Fuse:

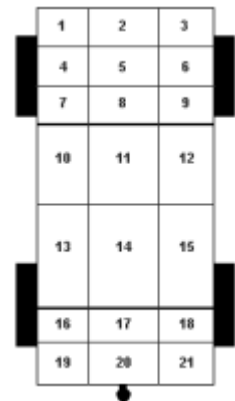
Best Wiring Location	Route to Battery	Fusebox Location
19/21 multiblocks		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wires change colour at multiplug TSP appears to be built in and automatic

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow	on LHS (or Black/red on RHS)	
Fog Light	Red/yellow	Blue/silver	
RH Flasher	Green/yellow	Brown/silver	
RH Side Light	Red/black	Red	
Brake Light	Green/white	Green	
LH Side Light	Red/black	Red	
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet	3m	Some fitters use 7-way TF2217LOGIC/2218	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

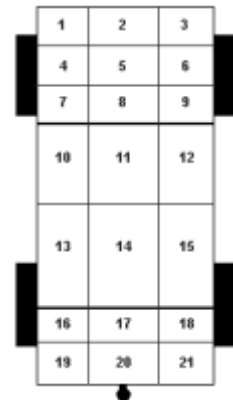
Best Wiring Location	Route to Battery	Fusebox Location
15 under kick plate		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
All wires found under kick plate 15.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey		
Fog Light	Orange		
RH Flasher	Pink		
RH Side Light	Orange		
Brake Light	White		
LH Side Light	Orange		
Reverse	Light green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		Some fitters use 7-way TF2217LOGIC/2218	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox (under dash) Add Fuse:	Colour: Location: Add Fuse:

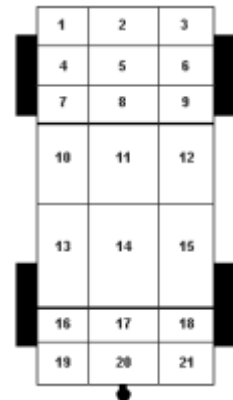
Best Wiring Location	Route to Battery	Fusebox Location
21	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fitting: Boot trim and rear seat come out (1.5 hours)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red	2004 Green/yellow	
Fog Light	Red/yellow		
RH Flasher	Green/yellow		
RH Side Light	Red/black		
Brake Light	Green/white		
LH Side Light	Red/black		
Reverse	Green/black	2004 Green/yellow	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet		Top models-TF2218/7SMARTLOGIC	
------------	--	-------------------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: High/low colours/ pins Location: 9 or 12 multiblock Add Fuse:	Colour: Location: Add Fuse:

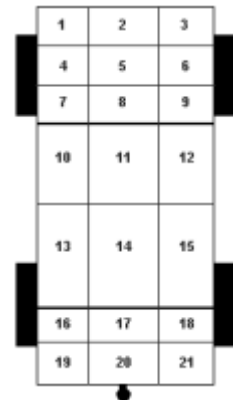
Best Wiring Location	Route to Battery	Fusebox Location
21	Bulkhead L/H	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
2009 on - see alternative colours

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red	Blue	
Fog Light	White	Purple	
RH Flasher	Green/yellow	White	
RH Side Light	Red/black	Grey	
Brake Light	White/black	Light green	
LH Side Light	Red/black	Grey	
Reverse	Green/red		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Honda Legend Saloon etc 1991 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Centre rear		TF1152 or TF1155	
-------------	--	------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

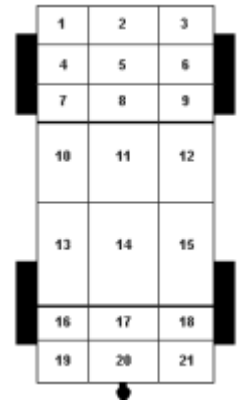
Best Wiring Location	Route to Battery	Fusebox Location
21	Under bonnet	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink/blue		
Fog Light	Black/yellow		
RH Flasher	Green/yellow		
RH Side Light	Red/black		
Brake Light	Green/orange		
LH Side Light	Red/black		
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Honda Shuttle MPV June 1995 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

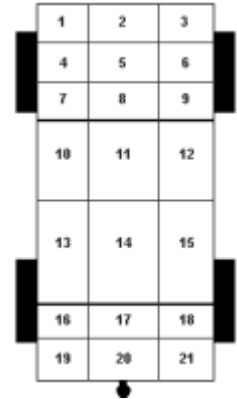
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Tan		
RH Flasher	Green/yellow		
RH Side Light	Red/black		
Brake Light	Green/white		
LH Side Light	Red/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Hyundai Accent Hatchback Jan 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		None	
------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

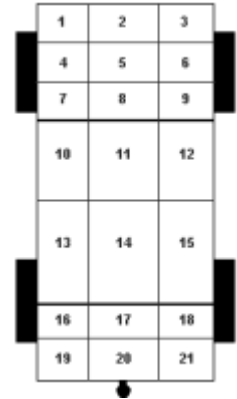
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Light green/black		
RH Flasher	Green/yellow		
RH Side Light	Green/black		
Brake Light	Green		
LH Side Light	Green/red		
Reverse	Red/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Fog-light grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

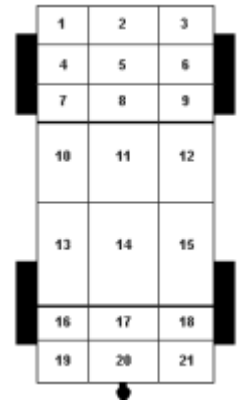
Best Wiring Location	Route to Battery	Fusebox Location
18, 21	RHS Grommets by brake servo	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green or white		23
Fog Light	Red		B9
RH Flasher	Grey		
RH Side Light	Brown/black	Red/blue	
Brake Light	Green		
LH Side Light	Green/white	Red/blue	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Hyundai Elantra Saloon 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

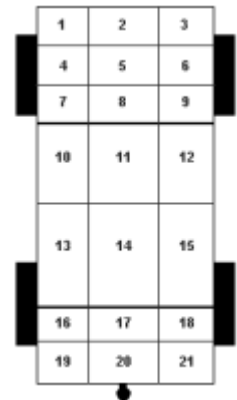
Best Wiring Location	Route to Battery	Fusebox Location
	Under bonnet LH	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: If you pierce a grommet for cable access, make sure you leave it gas tight to avoid fumes getting into the passenger compartment.
Power: Go to battery via blind grommet in footwell at 10 or 12

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow/red		
Fog Light	White/black		13
RH Flasher	Blue		
RH Side Light	Brown/orange		
Brake Light	White		
LH Side Light	Yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Fog light		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

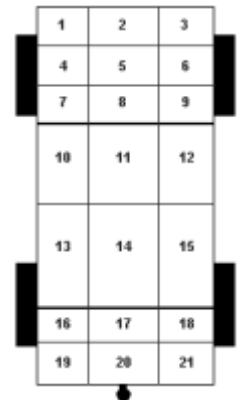
Best Wiring Location	Route to Battery	Fusebox Location
19/21 multiblocks		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Prepare wiring before refitting bumper.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/red		
Fog Light	Green		
RH Flasher	Grey		
RH Side Light	Pink		
Brake Light	Blue		19
LH Side Light	Pink		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None in OEM kit	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

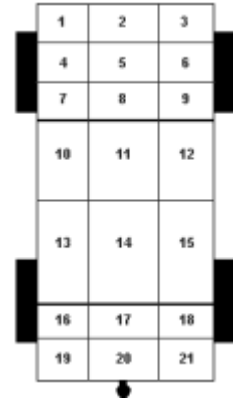
Best Wiring Location	Route to Battery	Fusebox Location
16, 19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey		
Fog Light	Orange		
RH Flasher	White/orange		
RH Side Light	Pink		
Brake Light	Grey/black		
LH Side Light	Red/black		
Reverse	Black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

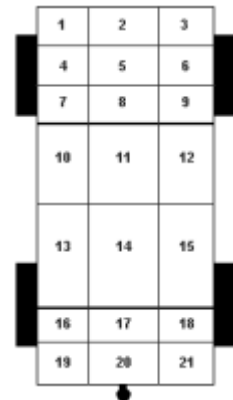
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
7-core entry: insert cable before fitting bar.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow/orange	Grey/orange	19
Fog Light	White/black	Orange	19
RH Flasher	Blue	White/red	21
RH Side Light	Brown/orange	Pink	21
Brake Light	White	Grey/black	19
LH Side Light	Yellow	Red/black	19
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>		On dash	

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

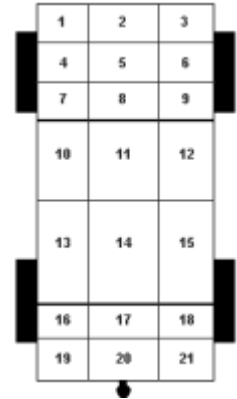
Best Wiring Location	Route to Battery	Fusebox Location
		12

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		16
Fog Light	Green		16
RH Flasher	Green		21
RH Side Light			
Brake Light	Green/black		16
LH Side Light	Green		16
Reverse	Red		16



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Hyundai Lantra Estate 1995 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Fog-light grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

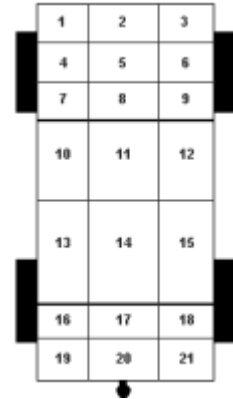
Best Wiring Location	Route to Battery	Fusebox Location
16, 19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		16 multiblock
Fog Light	Light green/black		16 multiblock
RH Flasher	Green/yellow		16 multiblock
RH Side Light	Green/white		16 multiblock
Brake Light	Green		16 multiblock
LH Side Light	Green/red		16 multiblock
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		See note below	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: 19 Add Fuse:

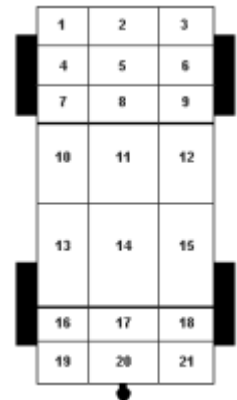
Best Wiring Location	Route to Battery	Fusebox Location
	Down LHS	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Update 2/9/04 : May need bypass on indicators, possible overload reported.
Fog: Not neg-switched 2003

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/orange		
Fog Light	Green	Neg switched	
RH Flasher	Grey	Green at plug	
RH Side Light	Pink	Green/black at plug	
Brake Light	Green		
LH Side Light	Green/orange		
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

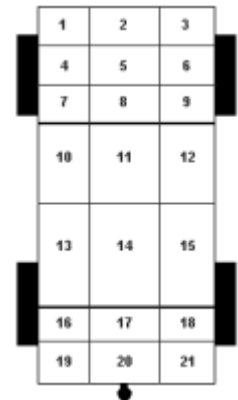
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp	Under chassis	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point
Fog: Not neg-switched 2003

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Red	Neg switched	21
RH Flasher	Green/yellow		
RH Side Light	Green/white		
Brake Light	Green		
LH Side Light	Green/white		
Reverse	Red/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Hyundai Santa Fe All 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet	3m		
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

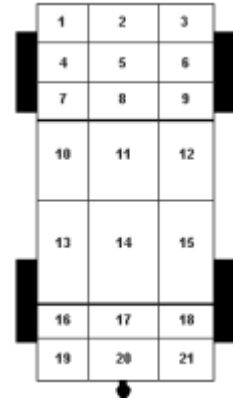
Best Wiring Location	Route to Battery	Fusebox Location
19		12

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Light green		
RH Flasher	Green/black		
RH Side Light	Red/gold		
Brake Light	Blue		
LH Side Light	Red/gold		
Reverse	Blue		B9



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Hyundai Sonata Saloon Sept 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

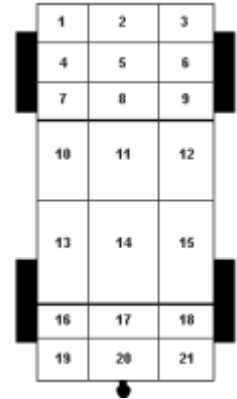
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		
Fog Light	Pink/orange	Two; use either.	
RH Flasher	Green/black		
RH Side Light	Brown/black		
Brake Light	Green	Thick	
LH Side Light	Brown/black		
Reverse	Blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Hyundai Terracan All 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

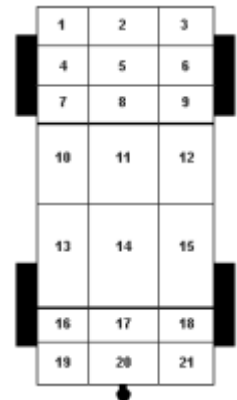
Best Wiring Location	Route to Battery	Fusebox Location Kick panel RH
-----------------------------	-------------------------	--

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/orange		
Fog Light	Blue/red		
RH Flasher	White		
RH Side Light	Green/orange		
Brake Light	Blue		
LH Side Light	Green		
Reverse	Black/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Hyundai Trajet Vanette 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet		None	
------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 10 Add Fuse:	Colour: Orange Location: 16 Add Fuse:

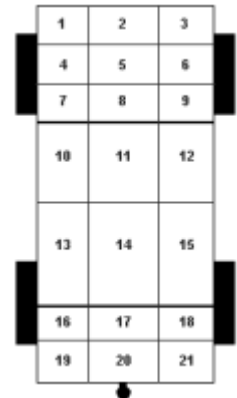
Best Wiring Location	Route to Battery	Fusebox Location
18, 21	Down RHS	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange	Orange/brown	
Fog Light	Red/black	Red/blue	
RH Flasher	Blue		
RH Side Light	Yellow/red		
Brake Light	White		
LH Side Light	Brown	Brown/orange	
Reverse	Yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

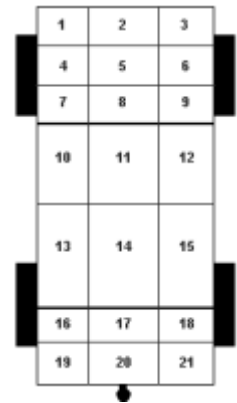
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps	Grommet RH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Trim: Large plastic rope hook buttons do not need to be undone to remove trim.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow/orange		19
Fog Light	White/black		
RH Flasher	Blue		
RH Side Light	Brown/orange		
Brake Light	White		
LH Side Light	Yellow/orange		19
Reverse	Brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
			TF2001
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

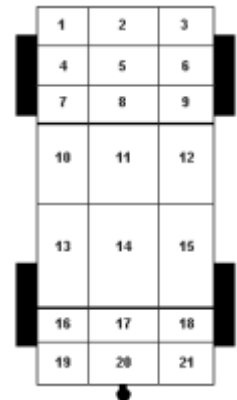
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Flasher relay behind glove box

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red/green		
RH Flasher	Green/white		
RH Side Light	Green/red		
Brake Light	Green		
LH Side Light	Light green/red		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21	2m	None	TF2100T/TF2005T/TF115FL
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Above spare wheel

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Trailer plug Add Fuse:	Colour: Location: Add Fuse:

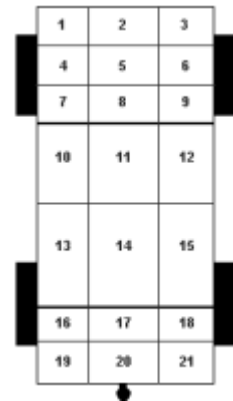
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point
Front monitor: spare panel light position to left of steering column
Earth: take 12S earth wire to battery

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue	2004 Yellow	
Fog Light	Red	Grey	
RH Flasher	Green/blue	2004 Green	
RH Side Light	Green/red	Brown	
Brake Light	Green	2004 Red	
LH Side Light	Green/red	2004 Brown/red	
Reverse	Red/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Isuzu Trooper 4WD Mid 1996 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF2100T/TF2005T/TF115FL
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Behind number plate

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

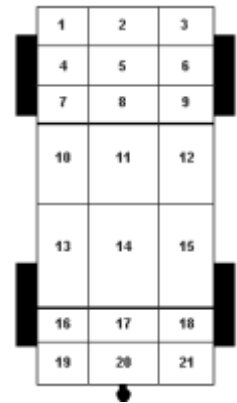
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Power supply: Vehicle may not trip a Smart Combi relay at tick over. This is not a problem but tell owners not to try charging on tick over.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/pink	Green/orange	
Fog Light	Brown/yellow		
RH Flasher	Pink/blue		
RH Side Light	Green/red	Green/red	
Brake Light	Green/yellow		
LH Side Light	Orange/blue	Orange/black	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

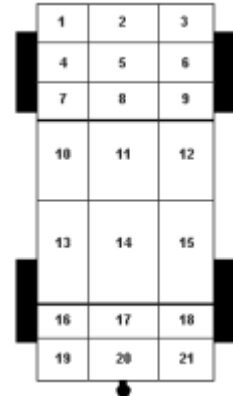
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

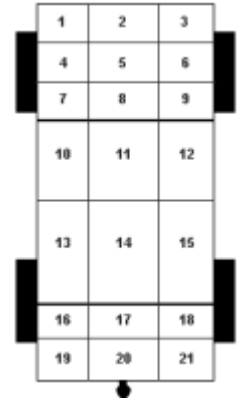
Best Wiring Location	Route to Battery	Fusebox Location
16 under chassis. Use weatherproff box.	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue	1120	
Fog Light	White	2283	
RH Flasher	Blue	1125	
RH Side Light	Yellow	3335	
Brake Light	Blue	1175	
LH Side Light	Yellow	3334	
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2217JAG	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 See notes Add Fuse:	Colour: Location: Add Fuse:

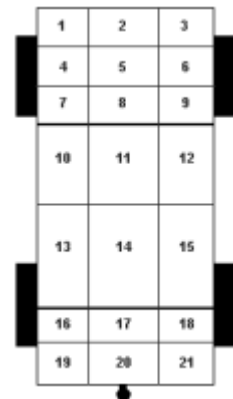
Best Wiring Location	Route to Battery	Fusebox Location
19/21	Boot RHS 18/21	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Earth colours :O/s pin 2 & 6 orange/blue ,N/s pin 2 & 6 orange/yellow. Alt.colours : O/s pin 2 Black/white pin 6 Black/green. N/s pin2 Brown/green pin 6 Brown/white. Fuse 7 in fusebox by spare wheel protects brake lights. TF2217Jag-Pink wire. Connect this to one of the +12V terminals of the relay.
Fault condition: Car powers down about 30mins after switch-off. Change sets off standard relay. Use TF2217JAG
Fit assembly behind nearside panel you remove to access the bumper bolts. Find a block with 3 wires. Yellow blue is towbar power: Jaguar rate it up to 42 watts.. The other two are an earth and a switched live.
Do not use bulb to probe circuits - digital meter only.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/yellow	Black/white	19
Fog Light	Black/yellow	Black/green	19
RH Flasher	Black/blue	Black/green	21
RH Side Light	Black/orange	Black/white	21
Brake Light	Black/orange	Black/orange	19
LH Side Light	Black/white	Black/white	19
Reverse	Green	Black/green	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Brown Location: 19 Add Fuse:	Colour: Location: Add Fuse:

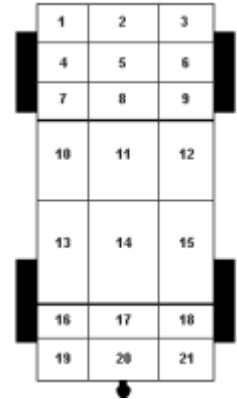
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Green/white		
RH Flasher	Brown/red		
RH Side Light	Orange	2006 Red	
Brake Light	Green/red	2006 Orange	
LH Side Light	Orange/yellow		
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Mfr. Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: B9 Add Fuse: Slot 30, (30amp)	Colour: Location: Add Fuse:

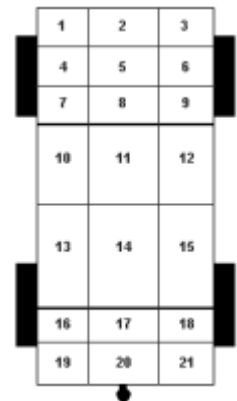
Best Wiring Location	Route to Battery	Fusebox Location
	Down LHS	Under bonnet LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: If faults occur when fitting the relay and the car's body turns live with the ignition turned off, check with dealer to see if the PDI has been done. It needs this to set all electrics correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange/yellow		23
Fog Light	Green/white		19
RH Flasher	Orange	Brown/red	21
RH Side Light	Orange		21
Brake Light	Green/red		19
LH Side Light	Orange		19
Reverse	Green/black		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Brown Location: 19 Add Fuse:	Colour: Location: Add Fuse:

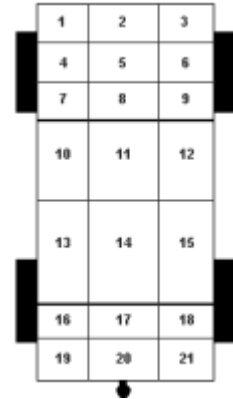
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange/yellow		
Fog Light	Green/white		
RH Flasher	Brown/red		
RH Side Light	Orange	Thin	
Brake Light	Orange	Thick	
LH Side Light	Orange/yellow		
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		See note below	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

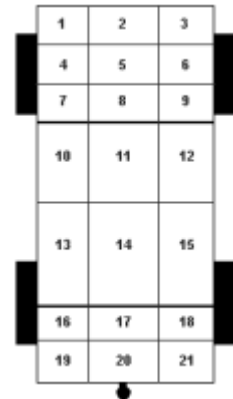
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Report Jan 2006: This car is Neg switched: TF2217Jag relay worked. Pink wire is a selector: Connect it to +12V to make relay neg switched. Pin 1 Number plate light feed is blue in multiplug in boot lid. Goes 0V when lights are on.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Green/brown Location: Add Fuse:

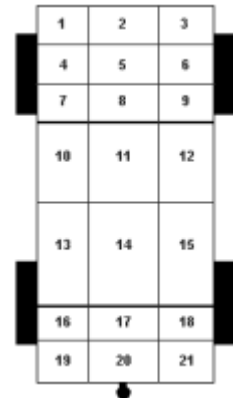
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
To 94 only: Wire with a full bypass set TF2217 and activate the Jag dashboard towing light: Instructions here: There is a yellow bell-shaped socket by the right hand rear wheel arch (in the boot) of many Jaguars. This has three wires: pink/blue, brown/blue and green/brown. We understand that you may use these wires as follows: Pink/blue, if earthed, illuminates the caravan symbol on the dash. You can earth it by connecting it to the "-TT" terminal of the TF2217. Brown/blue can power your 12S or 12N wiring (but not both) Green/brown is an ignition-switched supply. Make loom connections for the bypass relay on the wires to the rear lamps, close to the lamps.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Red/yellow		
RH Flasher	Blue		
RH Side Light	Yellow/green		
Brake Light	Purple/green		
LH Side Light	Red/green		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Jaguar XJ/ZJ Saloon 1994 -1998

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Drill		TF2218/7SMARTLOGIC	
-------	--	--------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

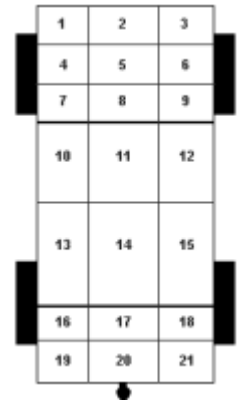
Best Wiring Location	Route to Battery	Fusebox Location
Boot	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Purple/yellow		
RH Flasher	Blue		
RH Side Light	Yellow/green	Green/blue	
Brake Light	Green/blue		
LH Side Light	Purple/green	Red/gold	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

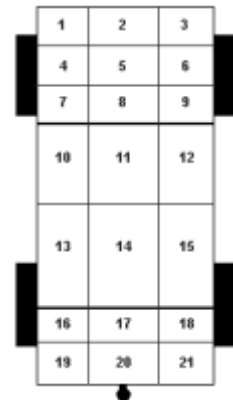
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
See "S" Type

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Orange/black		
RH Flasher	Green/purple		
RH Side Light	Green/red		
Brake Light	Blue/black	LH (RH blue/white)	
LH Side Light	Red/orange		
Reverse	Yellow/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

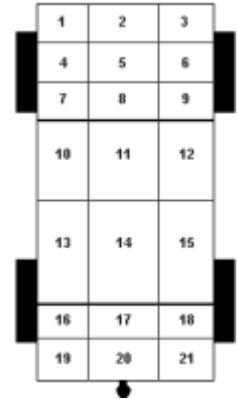
Best Wiring Location	Route to Battery	Fusebox Location
	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/orange		19
Fog Light	White/blue		Boot lid RHS
RH Flasher	Green/orange		21
RH Side Light	White/orange		21
Brake Light	Purple/orange		21
LH Side Light	Purple/green		19
Reverse	Green/brown		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 12 Add Fuse:	Colour: Blue Location: 12 Add Fuse:

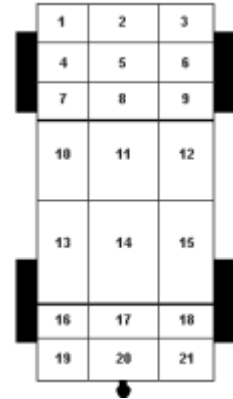
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Brown		
RH Flasher	Green/black		
RH Side Light	Red/green		
Brake Light	Green		
LH Side Light	Red/green		
Reverse	Red/yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

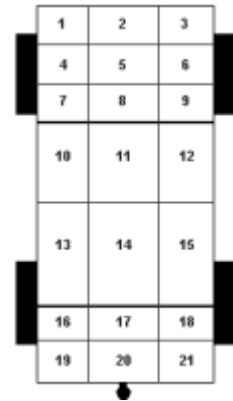
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		19
Fog Light	White/blue		18
RH Flasher	Green/black		19
RH Side Light	Red/blue		19
Brake Light	Dark blue		19
LH Side Light	Red/blue		19
Reverse	White		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
--	--	--------------------	--------------------

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 9 Fusebox Add Fuse:	Colour: Location: Add Fuse:

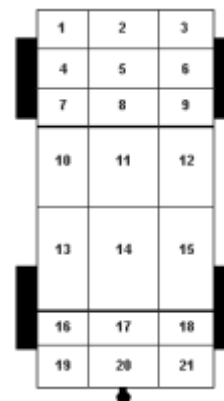
Best Wiring Location	Route to Battery	Fusebox Location
21		12

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: Flashers will reset if you disconnect plug

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow/orange	Yellow	19
Fog Light	White	Grey	21 (19)
RH Flasher	Blue	Yellow	21
RH Side Light	Brown	Green	21
Brake Light	Red		21 (19)
LH Side Light	Yellow	Green	19
Reverse	White		19



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

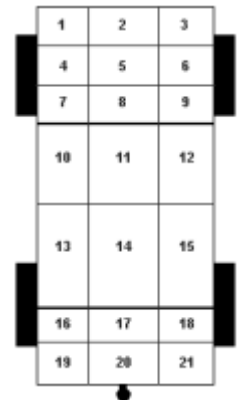
Best Wiring Location	Route to Battery	Fusebox Location
19		9 End of dash

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Boot trim is fragile

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		19
Fog Light	White/blue		18
RH Flasher	Green/black		19
RH Side Light	Red/blue		19
Brake Light	Dark blue		19
LH Side Light	Red/blue		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 12 Add Fuse:	Colour: Location: 12 Add Fuse:

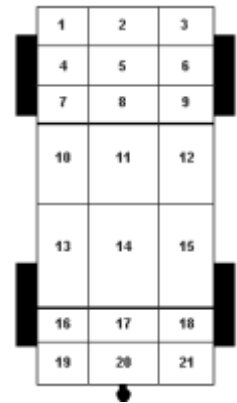
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Straightforward

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Red		19
RH Flasher	Dark blue		19
RH Side Light	Brown/white		19
Brake Light	Green		19
LH Side Light	Dark pink		19
Reverse	Light green	White	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor			
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 12 Add Fuse:	Colour: Location: 12 Add Fuse:

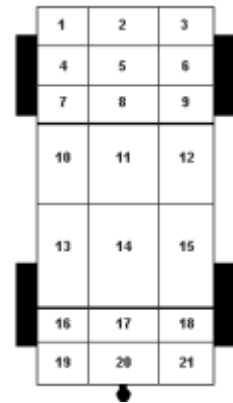
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Post 2007, use bypass indicators

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/red		19
Fog Light	Red		19
RH Flasher	Dark blue		19
RH Side Light	Brown/white	Brown/orange	19
Brake Light	Green		19
LH Side Light	Dark pink	Brown/orange	19
Reverse	Light green		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

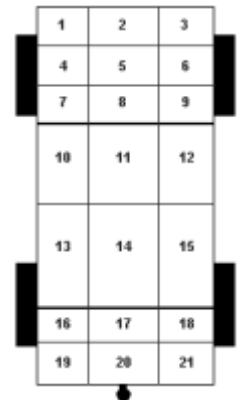
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Post 2007, use bypass indicators

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey		
Fog Light	Orange		
RH Flasher	White/red		
RH Side Light	Pink		
Brake Light	Grey		
LH Side Light	Red/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

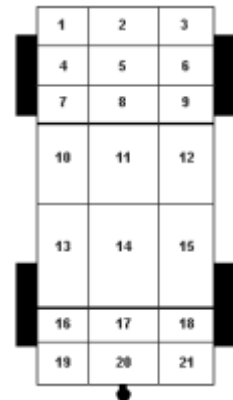
Best Wiring Location	Route to Battery	Fusebox Location
18, 21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wire colours below: 1st colour in loom; 2nd at lamp

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow	Green/white	
Fog Light	Brown/green	Green/red	
RH Flasher	Green/white	Green/white	
RH Side Light	Blue/black	White/red	
Brake Light	Red/black	Green	
LH Side Light	Red/green	White/red	
Reverse		Green/red	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet in boot floor		None	
-----------------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

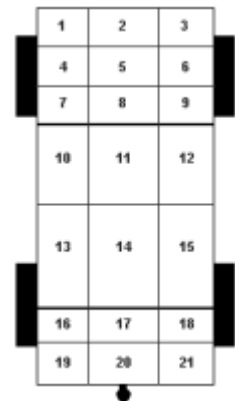
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring access under L/H wheel arch: large grommet accessible inside by removing rear floor trim and loosening side trim on left. Remove foam pads in arch. Take care refitting the lights which unscrew than slide sideways to the outside.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Red/green	Blue	
RH Flasher	Green		
RH Side Light	Red/black		
Brake Light	White		
LH Side Light	Red/black		
Reverse	Blue	Red	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet in floor			
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

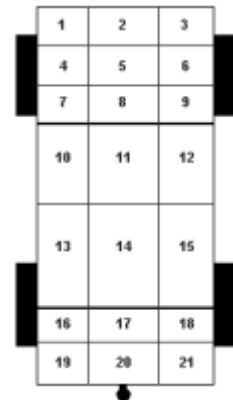
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Post 2007, use bypass indicators

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue	Thin	
Fog Light	Blue	Thicker wire	
RH Flasher	Blue	Thin	
RH Side Light	Pink		
Brake Light	White		
LH Side Light	Pink		
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

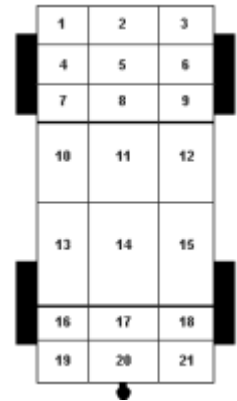
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Green/red	Green/brown	
RH Flasher	Green/white		
RH Side Light	Pink	Red/blue	
Brake Light	Red/black		
LH Side Light	Pink		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet rear floor	2m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

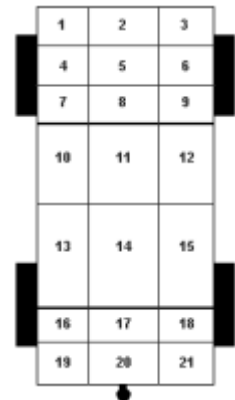
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow	Red	
Fog Light	White		Multiblock
RH Flasher	Yellow	Orange	Multiblock
RH Side Light	Green	Red	Multiblock
Brake Light	Red	White	Multiblock
LH Side Light	Green	Red	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 drain plugs	2m	TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse: Slot 23, 15amp	Colour: Location: Add Fuse:

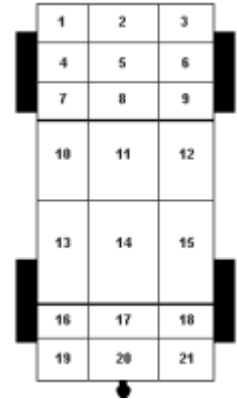
Best Wiring Location	Route to Battery	Fusebox Location
21	Bulkhead R/H	12 & 14

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Red		19
Fog Light	White		21
RH Flasher	Orange		21
RH Side Light	Red		21
Brake Light	White		21
LH Side Light	Red		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

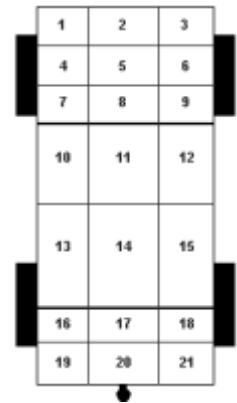
Best Wiring Location	Route to Battery	Fusebox Location
19	Grommet at 9	9

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Grommet at 9 held by 2 nuts

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		19
Fog Light	Green		19 below lamp
RH Flasher	Pink		19
RH Side Light	Yellow/red		19
Brake Light	Green		19
LH Side Light	Green/orange		19
Reverse	Red		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

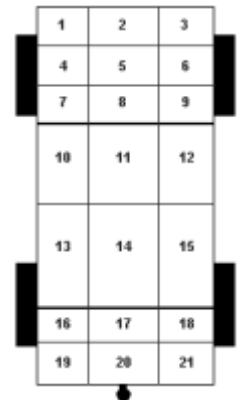
Best Wiring Location	Route to Battery	Fusebox Location
16, 19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Thick red wire found under dash.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Red/blue	2004 Yellow	
Fog Light	Red/green	2004 Orange/white	19-20
RH Flasher	Red/white	2004 Yellow	
RH Side Light		2004 Green	
Brake Light	Blue	2004 Red	
LH Side Light	Blue/yellow	2004 Green	
Reverse		2004 White	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

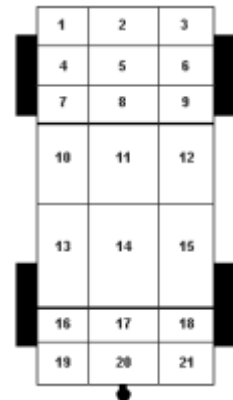
Best Wiring Location	Route to Battery	Fusebox Location
16, 19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Post 2007, use bypass indicators

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Orange/white		
RH Flasher	Yellow		
RH Side Light	Green		
Brake Light	Red		
LH Side Light	Green	Slightly thicker	
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19	3m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

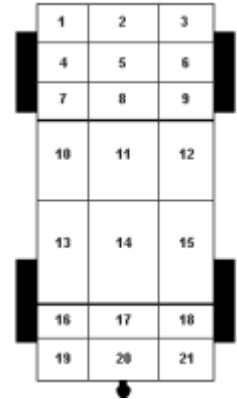
Best Wiring Location	Route to Battery	Fusebox Location
13 under kick plate		12

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White	Test- more than one	13 under kick plate
Fog Light	Green	Test- more than one	13 under kick plate
RH Flasher	White	Test- more than one	13 under kick plate
RH Side Light	White	Test- more than one	13 under kick plate
Brake Light	Green/black	Test- more than one	13 under kick plate
LH Side Light	Green	Test- more than one	13 under kick plate
Reverse	Red	Thin	13 under kick plate



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Landrover Defender 4WD 1999 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			21 Lamp

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

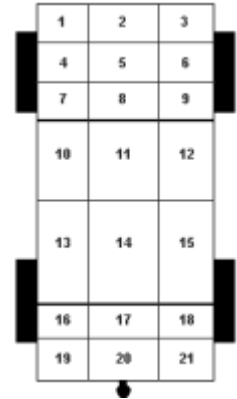
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red and Yellow (2)	Two; use either.	21
RH Flasher	Green/white		
RH Side Light	Orange/red		
Brake Light	Green/purple		
LH Side Light	Black/red		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Landrover Discovery 4WD 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			21 Lamp

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Trailer plug Add Fuse:	Colour: Colour Location: Add Fuse:

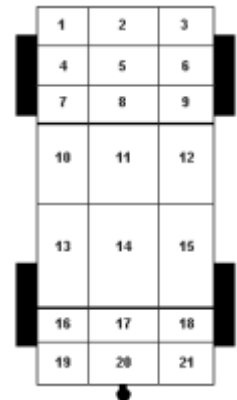
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Straightforward

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red and Yellow (2)	Two; use either.	
RH Flasher	Green/white		
RH Side Light	Orange/red		
Brake Light	Green/purple		
LH Side Light	Black/red		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			19

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Location: Add Fuse:

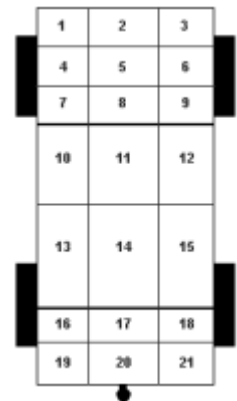
Best Wiring Location	Route to Battery	Fusebox Location
19 Behind panel		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Find 2 towing sockets behind n/s rear panel , 1x4 way , 1x6 way. On the 4 way find left & right flashers and perm power feed. On the 6 way find Tail/rev & fog and relay wires for ign controlled feed . No need for warning tell-tale as dashboard has a warning symbol.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Red/yellow		
RH Flasher	Green		
RH Side Light	Brown		
Brake Light	Green/purple		
LH Side Light	Brown		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Landrover Discovery98/Range Rover 94- 4WD Nov -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 Lamp

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

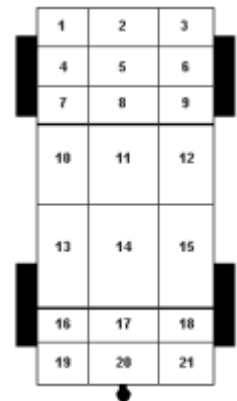
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
12S wiring: Late model with computer controlled voltage: for 12S use a classic combi and find an ignition-switched trigger at the rear O/S corner, feed to rear door: Two-tone green wire.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red/yellow		
RH Flasher	Green/yellow		
RH Side Light	Red/black		
Brake Light	Green/purple		
LH Side Light	Red/white		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet rear floor	2m	None	TF2100T/TF2005T/TF115FL
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 Not on 2004+

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

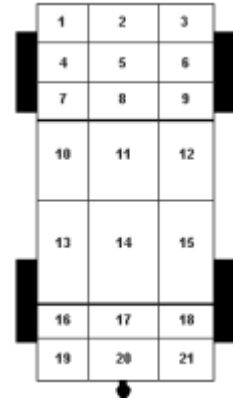
Best Wiring Location	Route to Battery	Fusebox Location
21	Grommet RH bulkhead	6 ; 2004+ dash 12

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		21
Fog Light	Red/yellow		21
RH Flasher	Green/white		21
RH Side Light	Red/black	Orange/white	21
Brake Light	Green/purple		21
LH Side Light	Red/orange		21
Reverse	Green/brown		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Landrover Freelander II 4WD 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	TF2302 SmartCAN
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse: F9, 15 amps	Colour: Location: Add Fuse:

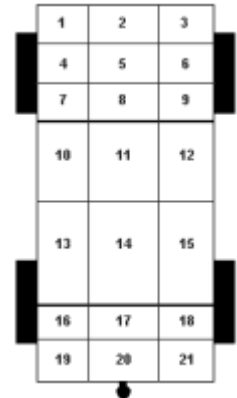
Best Wiring Location	Route to Battery	Fusebox Location
21		Boot LHS 16/19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fuse slot FA11 makes blue wire live
CANbus kit facilitates dealer reprogramme for enhanced features

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/orange		19
Fog Light	Green/brown		19
RH Flasher	Green/orange		19
RH Side Light	White/orange	Grey/Brown	19
Brake Light	Purple/brown		19
LH Side Light	Green/purple	Orange/white	19
Reverse	Green/white		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Landrover Range Rover 4WD 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet rear floor	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

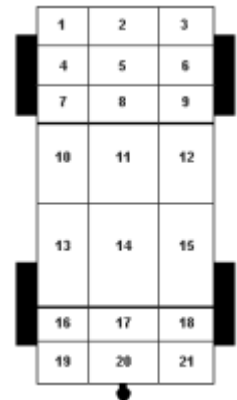
Best Wiring Location	Route to Battery	Fusebox Location
21		Boot RHS 18/21

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Suspension: Inhibitor switch on front centre console locks suspension to "Normal". Details in handbook.
Fault condition: Trailer brake lights may flash if you connect bypass red (brake) signal wire to towing plug. Connect to high-level brake light

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		Trailer plug
Fog Light	Yellow/black		21
RH Flasher	Blue/brown		Trailer plug
RH Side Light	Grey/white		Trailer plug
Brake Light	Black/blue		Trailer plug
LH Side Light	grey/violet		Trailer plug
Reverse	White/yellow		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Landrover Range Rover 4WD 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet rear floor	2m	TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

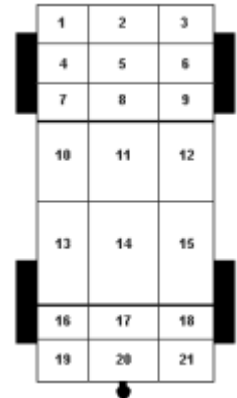
Best Wiring Location	Route to Battery	Fusebox Location
21		Boot RHS 18/21

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Suspension: Inhibitor switch on front centre console locks suspension to "Normal". Details in handbook.
Wiring: Fog & side lights share the same wire. Connect ONLY the fog signal wire from the TF2217LOGIC or TF2218 Smart7 bypass to this wire. Relay will switch both side and fog outputs correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green		Trailer plug
Fog Light	Yellow/black		21
RH Flasher	Blue/brown		Trailer plug
RH Side Light		Do not connect	
Brake Light	Black/blue		Trailer plug
LH Side Light		Do not connect	
Reverse	White/yellow		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Landrover Range Rover 94- 4WD Nov 1994 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 Lamp

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

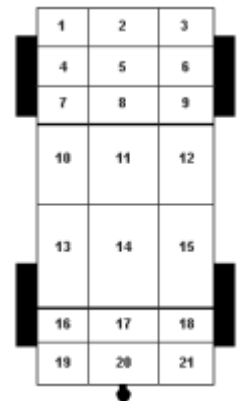
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
12S wiring: Late model with computer controlled voltage: for 12S use a classic combi and find an ignition-switched trigger at the rear O/S corner, feed to rear door: Two-tone green wire.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red/yellow		
RH Flasher	Green/yellow		
RH Side Light	Red/black		
Brake Light	Green/purple		
LH Side Light	Red/white		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Landrover Range Rover Sport 4WD 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			19

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Location: Add Fuse:

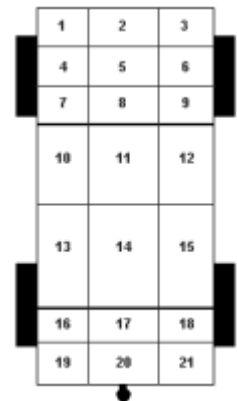
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Find 2 towing sockets behind n/s rear panel , 1x4 way , 1x6 way. On the 4 way find left & right flashers and perm power feed. On the 6 way find Tail/rev & fog and relay wires for ign controlled feed . No need for warning tell-tale as dashboard has a warning symbol.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Red/yellow		
RH Flasher	Green		
RH Side Light	Brown		
Brake Light	Green/purple		
LH Side Light	Brown		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 [http:// www.webxel.com](http://www.webxel.com)

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m		
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

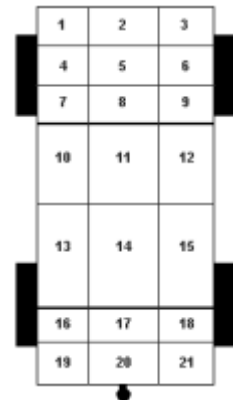
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Colours on main loom shown. Cluster colours in alternatives column

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue	Yellow	19
Fog Light	Green/white	Blue	19
RH Flasher	Blue/white	Yellow	21
RH Side Light	Brown/white	Green	21
Brake Light	Yellow	Red	19
LH Side Light	Purple	Green	19
Reverse	Green/white	White	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19		3-way: Stop & L/R tails	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

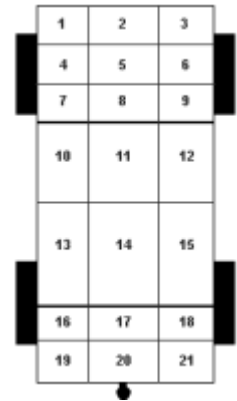
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Green/orange		
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green		
Reverse	Yellow/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
--	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

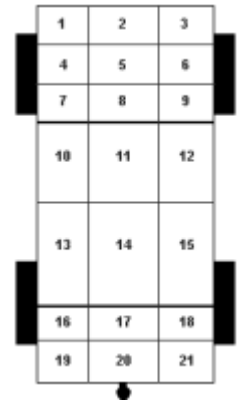
Best Wiring Location	Route to Battery	Fusebox Location
19		Boot LHS 16/19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/green		
Fog Light	Red		
RH Flasher	Green/yellow		
RH Side Light	Purple		
Brake Light	Red		
LH Side Light	Black/green		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

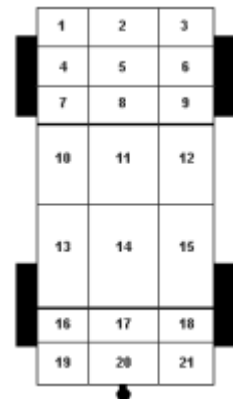
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wires in this car, including wires under the rear bumper, are ultra-sensitive. If you even prick them to test for a live, you must tape them up afterwards or you may get fault signals on the airbag warning.
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Black/silver		21
RH Flasher	Green/yellow		
RH Side Light	Green		21
Brake Light	Blue		
LH Side Light			
Reverse	White/silver		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

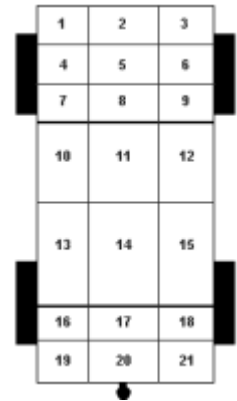
Best Wiring Location	Route to Battery	Fusebox Location
19	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		19
Fog Light	Pink		19
RH Flasher	Green		19
RH Side Light	Green		19
Brake Light	Green		19
LH Side Light	Green		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Leyland/LDV Convoy 300/400 Van 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

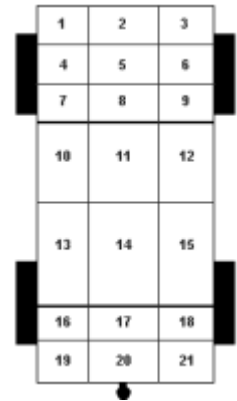
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Blue/yellow		
RH Flasher	Green/white		
RH Side Light	Red/orange		
Brake Light	Green/purple		
LH Side Light	Red		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Leyland/LDV Convoy 300/400 Van 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

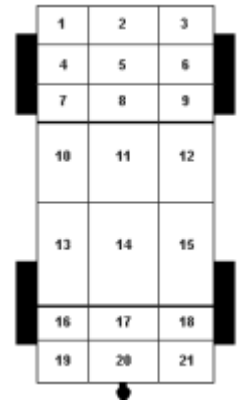
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Blue/yellow		
RH Flasher	Green/white		
RH Side Light	Red/orange		
Brake Light	Green/purple		
LH Side Light	Red		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

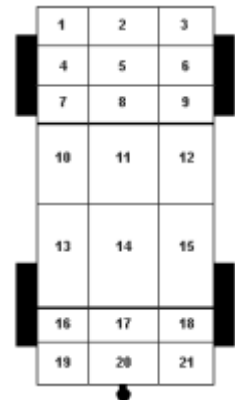
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fog & rev in white multiplug high up at 19

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue	Green/black	19
Fog Light	Green/yellow	Blue/yellow	See note
RH Flasher	Blue/red	Green/white	21
RH Side Light	Orange	Red/yellow	21
Brake Light	Green/black	Red/white?	19
LH Side Light	Orange/white	Red/yellow	19
Reverse		Black/yellow	See note



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 Grommets rear panel		None	
---------------------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

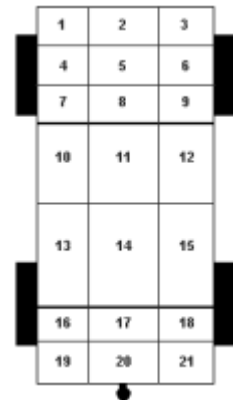
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Remove rear n/s kickplate to find fog and reverse
Fog & Reverse : Wire at lamps to avoid AIRBAG WIRES (Also black)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Black or red	See Note above	
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Red/green		
LH Side Light	Orange/white		
Reverse	Black or green/black	See Note above	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

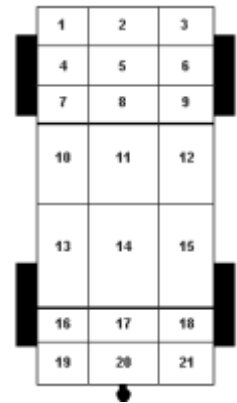
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fog: single grey wire leading up to tailgate

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey		19
Fog Light	Light grey		16
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Purple		
LH Side Light	Orange/white		
Reverse	Black or green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet in rear panel		None	
-----------------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

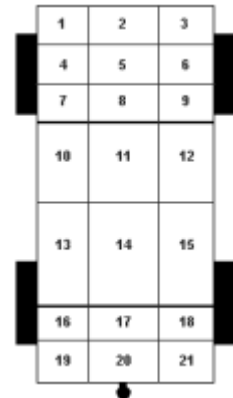
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Red		16
RH Flasher	Blue/red		21
RH Side Light	Orange/black		21
Brake Light	Red		
LH Side Light	Orange/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mazda 323 Hatchback 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
--	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

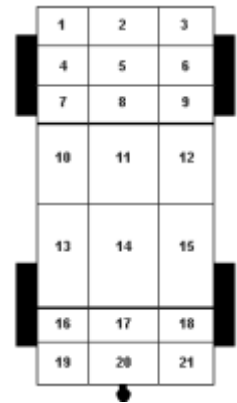
Best Wiring Location	Route to Battery	Fusebox Location
16, 19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bypass: car handbook says: "Do not connect direct to loom". TF2218/7LOGIC recommended

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Blue/yellow		
RH Flasher	Green/white		
RH Side Light	Light green/black		
Brake Light	Green/yellow		
LH Side Light	Light green/black		
Reverse	Red/yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Fog-light grommet			
----------------------	--	--	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

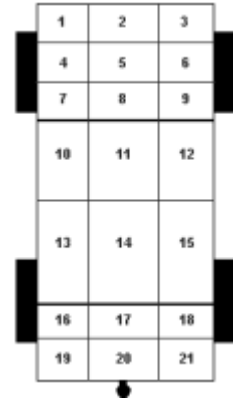
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		19
Fog Light	Blue/yellow		19 behind side panel
RH Flasher	Green/blue		21
RH Side Light	Green/white		21
Brake Light	Green		21
LH Side Light	Green/white		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Bungs L/R of centre		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

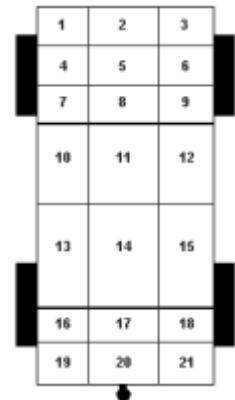
Best Wiring Location	Route to Battery	Fusebox Location
19		Footwell LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: Fog connection. Avoid wires in boot because of air bags. Connect at n/s rear door, wheel arch, under kick panel.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/tan		
Fog Light	Blue/yellow	Black	See note
RH Flasher	Green/white		
RH Side Light	Green/black		
Brake Light	Green/lime	Green/yellow	
LH Side Light	Light green/black		
Reverse	Red/yellow	Black	13



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

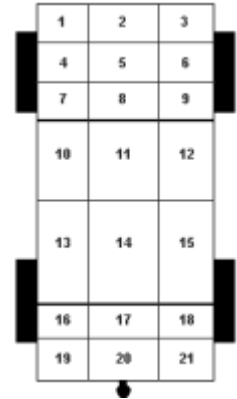
Best Wiring Location	Route to Battery	Fusebox Location
19		10

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/orange		
Fog Light	Blue/yellow		
RH Flasher	Green/white		
RH Side Light	Green/black		
Brake Light	Green/yellow		
LH Side Light	Green/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

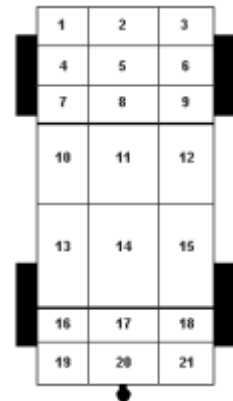
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: Bypass the side and brake lamp to protect against possible burn-out of the bulb-failure unit in the event of faults in the trailer lighting. Note: customer who does many Mazdas always connects by the Mazda plug: never had a problem.
Fog/reverse: Latest models, fog & reverse wires in roof trim. Find lead by fuse box. Wires in 4 core from multi plug there. Fog wire blue/yellow; Rev red/yellow.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light	Blue		18
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mazda B2500 Pickup June 1999 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
12 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

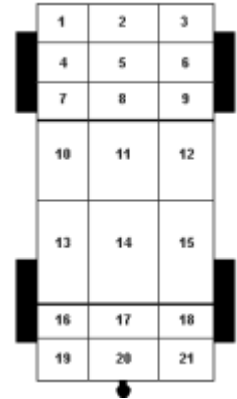
Best Wiring Location	Route to Battery	Fusebox Location
Footwell 12	Grommet @ 12	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red/blue		
RH Flasher	Green/white		
RH Side Light			
Brake Light	White/green		
LH Side Light	Red/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21		TF1152 or TF1155	
-------	--	------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

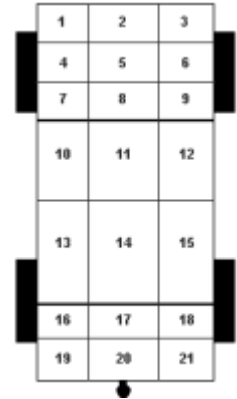
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Red/yellow		21
RH Flasher	Blue/red		21
RH Side Light	Red/orange		21
Brake Light	Red		21
LH Side Light	Red/white		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

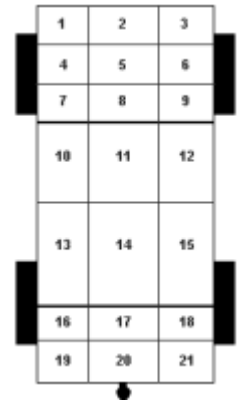
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red/yellow		
RH Flasher	Green/white		
RH Side Light	Red/black		
Brake Light	Green		
LH Side Light	Red/black		
Reverse	White/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet	3m cable along n/s chassis: enter via large grommet under passenger seat. Wire	None	TF115FL
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>	Older models may have a manual switch in the boot	Older models may have a manual switch in the boot	19

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 1 Add Fuse: N/A	Colour: Colour Location: 11 Add Fuse: N/A

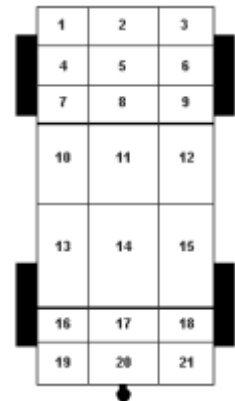
Best Wiring Location	Route to Battery	Fusebox Location
	Under seat: 10	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Test with test board to apply realistic loads

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 behind cluster		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

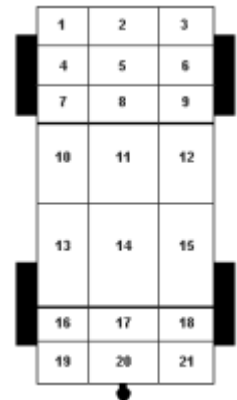
Best Wiring Location	Route to Battery	Fusebox Location
21	See note below	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wire to harness rather than clusters. Feed cable through car with harness
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Blue/yellow		
RH Flasher	Green/white		
RH Side Light	Green/black		
Brake Light	Green/yellow		
LH Side Light	Green/black		
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

16 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

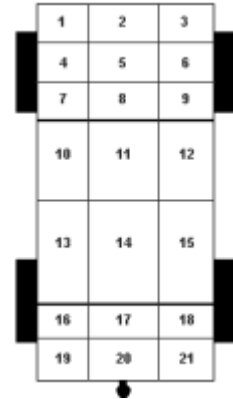
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp	Under bonnet	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Purple		
Fog Light	Purple		
RH Flasher	Purple		
RH Side Light	Purple		
Brake Light	Purple		
LH Side Light	Purple		
Reverse	Purple		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Lamp

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

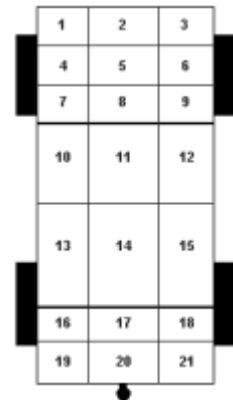
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Negative reverse: use TF1011 to earth switch it. (See Practical Guide)
Warning: Take lights out carefully and evenly to avoid damage to trim and surrounds

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/white	Pin 2	
Fog Light	Green/yellow		
RH Flasher	Brown		
RH Side Light	White/blue		
Brake Light	Green		
LH Side Light	Brown	Brown/white	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes A Class (W168) Saloon 1997 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

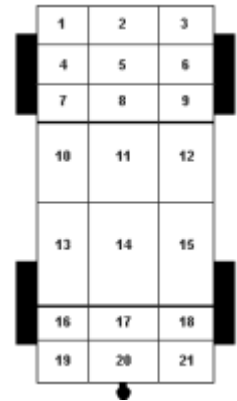
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/blue		19
Fog Light	Grey/green		19
RH Flasher	Black/green		19
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Mercedes A Class Saloon 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Battery Location: 12 Add Fuse:	Colour: Location: Add Fuse:

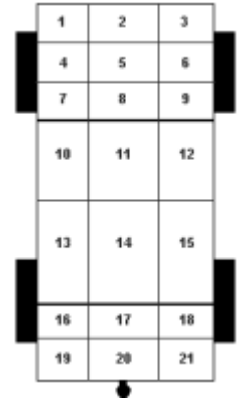
Best Wiring Location	Route to Battery	Fusebox Location
21	Under seat: 12	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/pink		
Fog Light	Grey/green		
RH Flasher	Black/blue		
RH Side Light	Grey/red		
Brake Light	Black/red	Black/yellow	
LH Side Light	Grey/black		
Reverse	Grey/brown	Grey/yellow	



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes ATGO 7.5 tonne 2WD/4WD 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Fusebox (near)

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

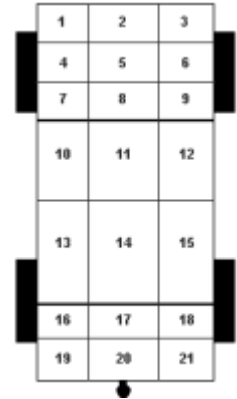
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

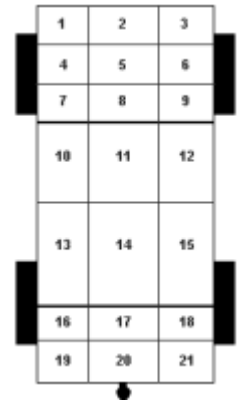
Best Wiring Location	Route to Battery	Fusebox Location
	Footwell RH	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/blue	Black/purple	
Fog Light	Black/purple	Green/grey	
RH Flasher	Black/blue		
RH Side Light	Red/grey		
Brake Light	Black/yellow		
LH Side Light	Black/grey		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes C 200 (W203 Series) Coupe 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

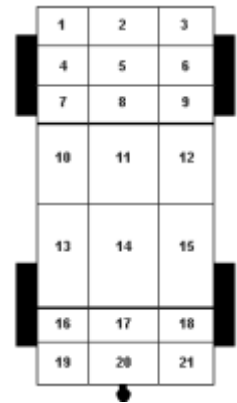
Best Wiring Location	Route to Battery	Fusebox Location
19	19	19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
WARNING : Do NOT take power from the fusebox in the boot as this is an extension of the dashboard computer system.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Green/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse	Grey/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Mercedes C Class (270) Cdi Estate 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

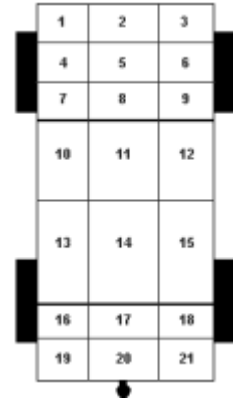
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		Boot LHS 16/19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Green/white		
RH Flasher	Black/white		21
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse	Grey/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes C Class Estate -2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Location: Add Fuse:

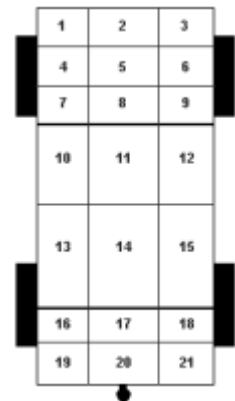
Best Wiring Location	Route to Battery	Fusebox Location
19	19	19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Modulated supply: fog & brake lights are used as side lights and receive a pulsed signal when sidelights are on. Brake relay chatters unless you use a TF2217LOGIC or a TF2218

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Green/white		19
RH Flasher	Black/green		19
RH Side Light	Grey/red		19
Brake Light	Red/black		19
LH Side Light	Grey/black		19
Reverse	Grey/blue		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		TF2218/7SMARTLOGIC	TF2302 SmartCAN
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

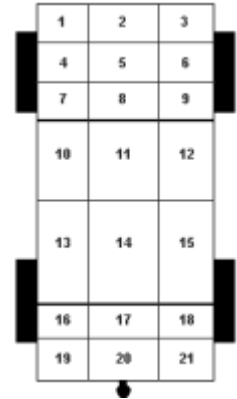
Best Wiring Location	Route to Battery	Fusebox Location
21		21

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		21
Fog Light	Green/white		21
RH Flasher	Black/green		21
RH Side Light	Black/brown		21
Brake Light	Black/yellow		21
LH Side Light	Black/blue		21
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

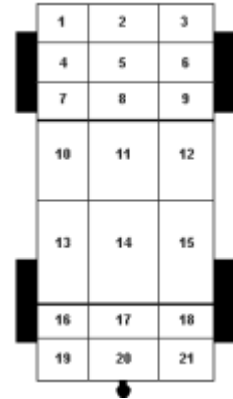
Best Wiring Location	Route to Battery	Fusebox Location
19	Footwell R/H (12)	Under bonnet

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Green/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/yellow		
LH Side Light	Grey/black		
Reverse	White/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes C Class(C208) Coupe 1997 - May 2002

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet under tools		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

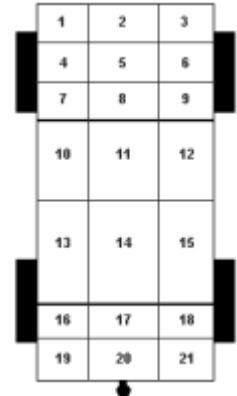
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Modulated supply: pulse on the brake light circuit requires a TF2217LOGIC or TF2218 Smart7 Bypass
Fuse legend: Fuses not colour coded: data sheet is folded up in thin plate in slot inside driver's door. Power output fuses are 17,18,19 and 20 in the fusebox in nearside boot (5)
Wiring: CLK soft top: Find loom on RHS into boot door

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/green		
Fog Light	Green/white		
RH Flasher	Black/white		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse	Grey/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Mercedes C Class(W203) Saloon Oct 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet under tools		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

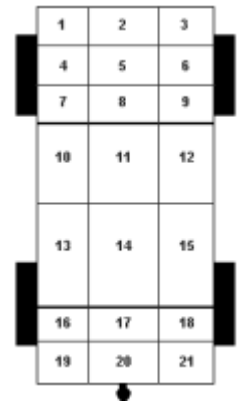
Best Wiring Location	Route to Battery	Fusebox Location
	Battery: (gasket behind)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Modulated supply: fog & brake lights are used as side lights and receive a pulsed signal when sidelights are on. Brake relay chatters unless you use a TF2217LOGIC or a TF2218
Fog cut-out: Don't fit. If you do, the car will operate a brake light to compensate.
Fuse legend: Fuses not colour coded: data sheet is folded up in thin plate in slot inside driver's door. Power output fuses are 17,18,19 and 20 in the fusebox in nearside boot (5)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/green	Black/white	
Fog Light	Green/white	Yellow/grey CLK softtop	
RH Flasher	Black/white	Black/green	
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse	Grey/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

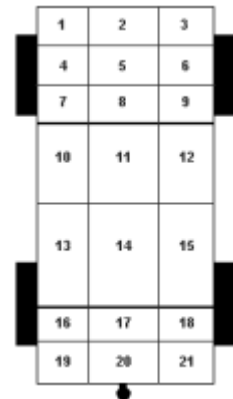
Best Wiring Location	Route to Battery	Fusebox Location
19 Below Lamp in main loom	Boot RHS 18/21	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Data below refers to bypass fitting only. For SmartCAN fitting, see SmartCAN Data
Wiring: Fog and reverse in tailgate. Remove whole panel to access. Not a quick job. Use TF2302 SmartCAN by preference
Wiring. Take the brake light signal from the high-level brakelight and the side light signal from the number plate light (TF2218/7LOGIC or TF2218)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Blue/green	Grey/white	Tailgate
RH Flasher	Black/green		
RH Side Light	Black/red	Do not connect	
Brake Light	Black/red	Green/yellow 21 pillar?	Wire LH only
LH Side Light	Black/red	Do not connect	
Reverse		See Note above	Tailgate



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes E Class W212 Saloon etc 2010 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Red Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

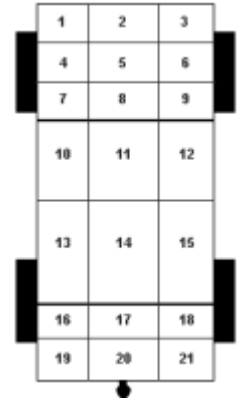
Best Wiring Location	Route to Battery	Fusebox Location
21		21

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		21
Fog Light	Blue/white		21 hinge gaiter
RH Flasher	Black/green		21 loom
RH Side Light		Do not connect	
Brake Light	Red/grey	Grey/red	21 loom
LH Side Light		Do not connect	
Reverse	Blue/green		21 hinge gaiter



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Mercedes E Class(E240) Saloon 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

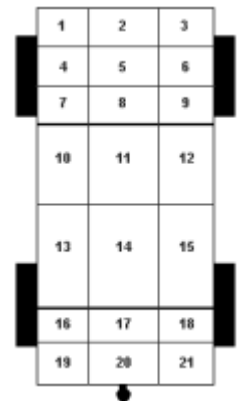
Best Wiring Location	Route to Battery	Fusebox Location
	Boot RHS 18/21	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Data below refers to bypass fitting only. For SmartCAN fitting, see SmartCAN Data
Modulated supply: RH tail is also fog. Wire relay side light circuit to Lh side only (grey/black). Wire the fog light circuit to the RH side (grey/red)
Fault condition: (a) Low battery shut down: recharge battery. (b) Short delays in power return(c) "Consumer Malfunction". Switch ign. off and on to reset
Fault condition (apparent) In-car computer may be set to bring lights on automatically when dark.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue	Black/white	
Fog Light	Grey/red	Grey/green	
RH Flasher	Blue/black		
RH Side Light	Grey/red	Do not connect	
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse	Grey/yellow		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Mercedes E Class(S211) Estate 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

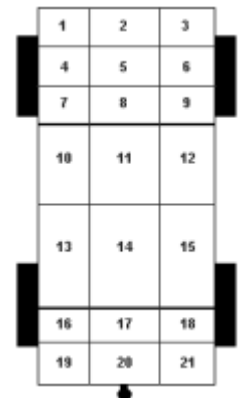
Best Wiring Location	Route to Battery	Fusebox Location
19 Below Lamp in main loom	Boot RHS 18/21	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Data below refers to bypass fitting only. For SmartCAN fitting, see SmartCAN Data
Fog/sidelights: Connecting in tailgate difficult. Wire to switches. Access under fuse box cover/panel by steering wheel. [Side grey/blue; fog black/green] UPDATE (4/04)Sidelight wires (Black/red) can be used in main loom by rear N/S lamp.(Two reports)
Fault condition: To clear malfunctions on dash,remove ignition key for 30 seconds,then replace and switch on ignition.
Reverse :Wire in o/s tailgate by gas strut. (This can take some time, but is the only reported location) 18

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Blue/green	Grey/white	9/18
RH Flasher	Black/green		
RH Side Light	Black/red		19 lamp
Brake Light	Green/yellow		19 Main loom
LH Side Light	Black/red		19 lamp
Reverse		See Note above	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Mercedes E Class(W210) Estate 1996 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet rear floor		TF2218/7SMARTLOGIC	
-----------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

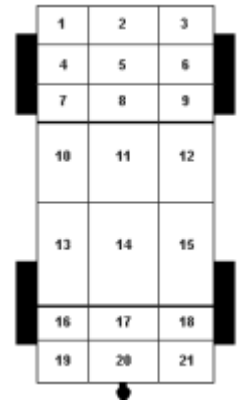
Best Wiring Location	Route to Battery	Fusebox Location
	16	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Green/grey		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse	Grey/yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Mercedes M Class(W163) 4WD 1998 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19, exit vent

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

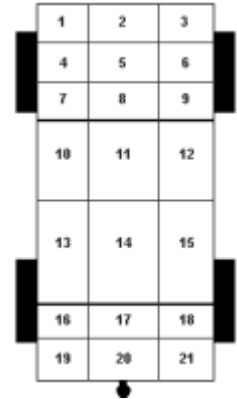
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes M Class(W163) 4WD 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19, exit vent

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Trailer plug Add Fuse: Slot 18 (25amp)	Colour: Location: Add Fuse:

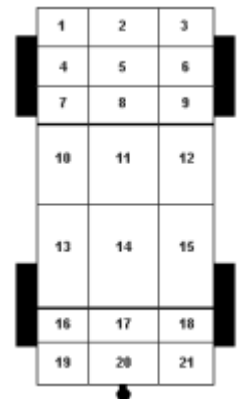
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
The Metc OE wiring kit has a microswitch in the socket which connects an earth to the white wire when a trailer is plugged in.
Fault condition: There is a white wire which, if earthed, causes an indicator fault to show. Must be part of the Merc OE system. See note above

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green	Z53-4 1606	
Fog Light	Blue	1615	
RH Flasher	Pink		
RH Side Light	Blue	1504	
Brake Light	Orange	1602	
LH Side Light	Green	1602 XS2	
Reverse	Grey		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes M Class(W163) 4WD 2006 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>	Fit detachable towball to avoid reversing sensors.		

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Fusebox Add Fuse:	Colour: Location: Add Fuse:

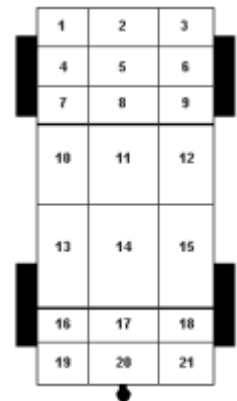
Best Wiring Location	Route to Battery	Fusebox Location
21	Boot	Boot RHS 18/21

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Fog & side lights share the same wire. Connect ONLY the fog signal wire from the TF2217LOGIC or TF2218 Smart7 bypass to this wire. Relay will switch both side and fog outputs correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black		19 lamp
Fog Light	Grey/blue		21
RH Flasher	Green/black		21
RH Side Light	-	Do not connect	
Brake Light	Black/purple		21
LH Side Light	-	Do not connect	
Reverse	White/black		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Fusebox Add Fuse:	Colour: Location: Add Fuse:

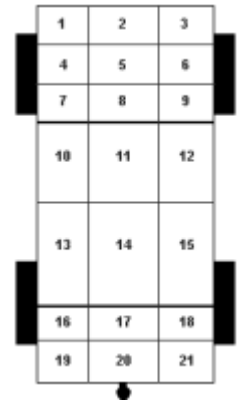
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Purple		
RH Flasher	Black/green		
RH Side Light	Grey/black		
Brake Light	Black/red		
LH Side Light	Grey/red		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

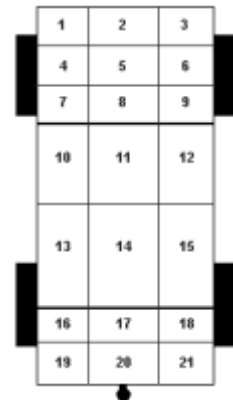
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Check before starting to see if the car you are fitting has bulb-failure monitoring.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		Some fitters use 7-way TF2217LOGIC/2218	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

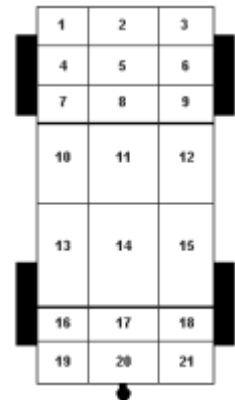
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Update :2003- same
Fault condition: To reset when low battery has given fault codes, start car, turn wheel both ways full lock, switch off and on.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/green		
RH Flasher	Black/green		
RH Side Light	Green/red		
Brake Light	Black/red		
LH Side Light	Green/pink		
Reverse	Green/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes Sprinter Chassis Cab 1995 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2100M special	Not TF2100M from 2001
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

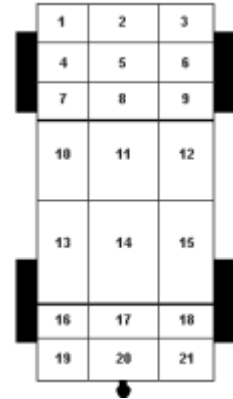
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Mercedes Sprinter Van 1995 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2100M special	TF2100T
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

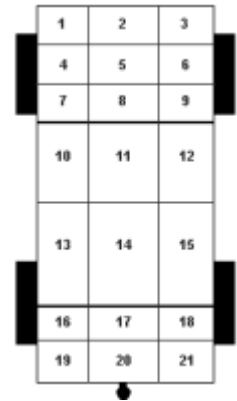
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
--	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

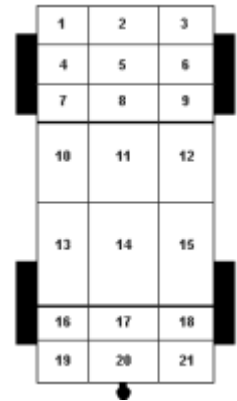
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Yellow/black		
RH Flasher	Green/black		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
--	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 12 White block under seat Add Fuse:	Colour: Location: Add Fuse:

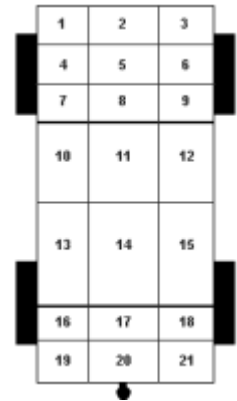
Best Wiring Location	Route to Battery	Fusebox Location
19: in pillar		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/brown		
RH Flasher	Green/black		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Yellow Location: Add Fuse:

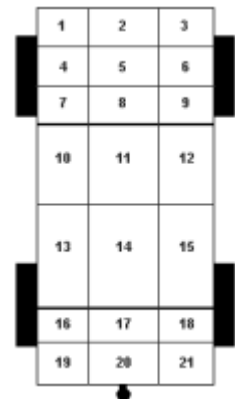
Best Wiring Location	Route to Battery	Fusebox Location
	Under seat: 10	Under seat: 10

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Vito 2003: Fit full bypass (TF2217LOGIC) or indicators flash quickly twice when car senses trailer flasher, then return to normal. Rear fog and side lights cut out when car senses trailer lamp; front stays on. Trailer lights also go out.
V Class car has a 21-pin bulb-failure relay under the dash that may burn out if not protected. We strongly recommend a full bypass set.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Yellow/black		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Purple/black		
LH Side Light	Grey/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mercedes Vito Viano Van 1996 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

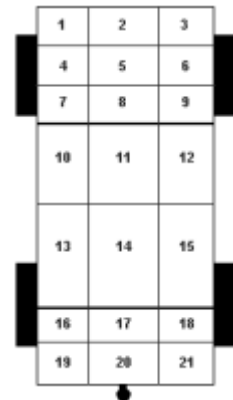
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/green		
RH Flasher	Black/green		
RH Side Light	Grey/black		
Brake Light	Purple/black		19
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 Grommet		TF2218/7SMARTLOGIC	
---------------	--	--------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

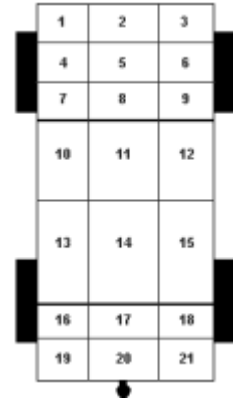
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/green		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse	White/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

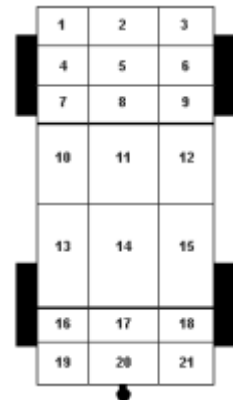
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wire inside rear lamps.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/white		
Fog Light	Red/white		
RH Flasher	Yellow/white		
RH Side Light	Yellow/red		
Brake Light	Red/yellow		
LH Side Light	Yellow/black		
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Carisma All Oct 1995 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

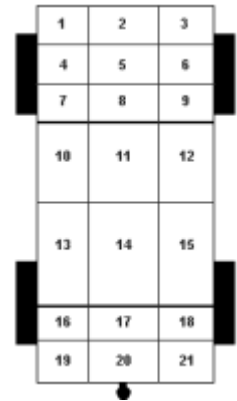
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red		13
RH Flasher	Green/red		
RH Side Light	Green/orange		
Brake Light	Green		
LH Side Light	Green/white		
Reverse	Red/blue		13



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

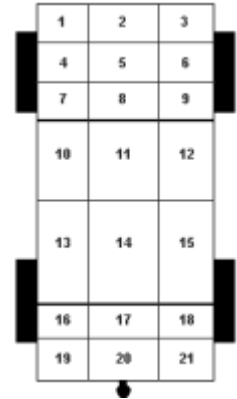
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Red		
RH Flasher	Green/red		
RH Side Light	Green/orange		
Brake Light	Green/silver dots		
LH Side Light	Green/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Delicia (import) All -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light			
RH Flasher	Green/yellow		
RH Side Light	Green/white		
Brake Light	Green		
LH Side Light	Green/white		
Reverse	Red/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Galant Estate Spring 1997 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Drill		None	
-------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

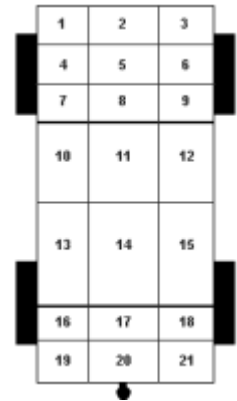
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Blue		
RH Flasher	Green/yellow		
RH Side Light	Green/white		
Brake Light	Green		
LH Side Light	Green/orange		
Reverse	Red/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Grandis MPV 2004 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

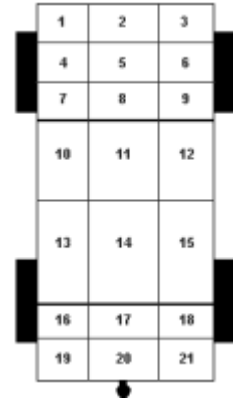
Best Wiring Location	Route to Battery	Fusebox Location
19/21	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow	Green/brown	19
Fog Light	Red/blue	Red/black	21
RH Flasher	Green/red	Green	21
RH Side Light	Green/white	Red/blue	21
Brake Light	Blue/pink	Blue/pink	21
LH Side Light	Green/brown	Red	19
Reverse	Red/green	Red/blue	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
13/14/15 Grommet under seat	4.5m	None	TF2100T/TF2005T/TF115FL
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Blue Location: Add Fuse:

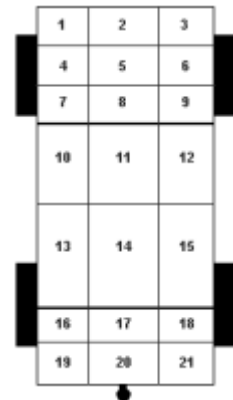
Best Wiring Location	Route to Battery	Fusebox Location
Multiplug, 12 under seat	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Reseal access grommet carefully.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Red/silver		
RH Flasher	Green/lime		
RH Side Light	Green/red		
Brake Light	Green		
LH Side Light	Green/white		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi L200 Pickup Late 1996 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
13/14/15 Grommet under seat	4.5m	None	TF2100T/TF2005T/TF115FL
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Blue Location: Stalk Add Fuse:

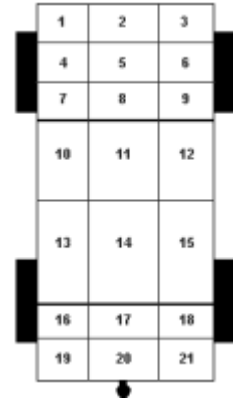
Best Wiring Location	Route to Battery	Fusebox Location
Multiplug RH rear seat	Grommet in bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Red		
RH Flasher	Green/yellow		
RH Side Light	Green/white		
Brake Light	Green		
LH Side Light	Green/red		
Reverse	Red/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Outlander All 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet, foglight		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

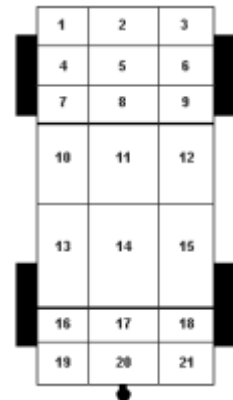
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bypass: As indicated above, to avoid overload, malfunction or CPU damage

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Green/white		Grommet
RH Flasher	Green/white		21
RH Side Light	Green/red		
Brake Light	Blue/pink		
LH Side Light	Green/orange		
Reverse	Red/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF110R/TF1152
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

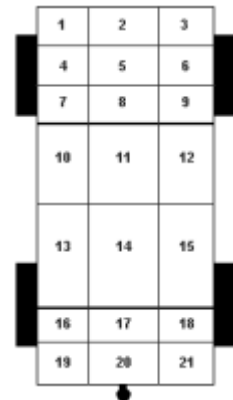
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fog bypass/cut out recommended to avoid overload . Fitting otherwise basic.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow	Green/blue	
Fog Light	Red/white	Red	
RH Flasher	Green/red	Green/yellow	
RH Side Light	Green/orange	Green/red	
Brake Light	Blue/orange	Green	
LH Side Light	Green/white	Red/green	
Reverse	Red/green	Red	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Shogun Challenger 4WD May 1999 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Drill into jack comp (rear seat)		None	
----------------------------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

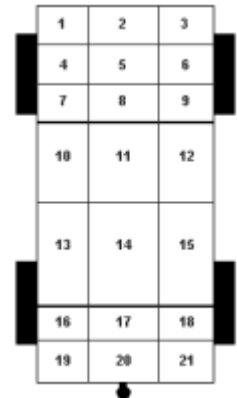
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Red	Jack compartment	
RH Flasher	Green/yellow	Jack compartment	
RH Side Light	Green/red	Jack compartment	
Brake Light	Green		
LH Side Light	Green/white		
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Shogun Pinin 4WD 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

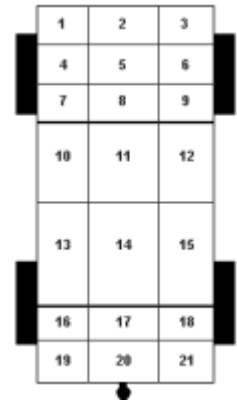
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Red/white		
RH Flasher	Green/red		
RH Side Light	Green/white		
Brake Light	Green		
LH Side Light	Green/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Shogun Pinin Junior 4WD 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		Some fitters use 7-way TF2217LOGIC/2218	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

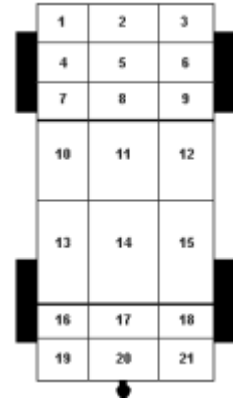
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Red/white		21
RH Flasher	Green/red		
RH Side Light	Green/white		
Brake Light	Green		
LH Side Light	Green/orange		
Reverse	Red/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Shogun Sport Warrior 4WD May 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

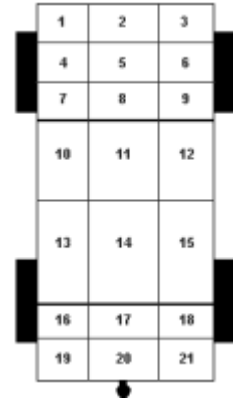
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Red		
RH Flasher	Green/yellow		
RH Side Light	Green/red		
Brake Light	Green		
LH Side Light	Green/white		
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Shogun SWB Van body 4WD 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	3.5m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

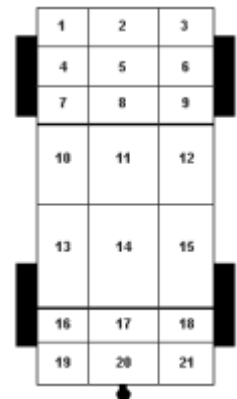
Best Wiring Location	Route to Battery	Fusebox Location
	Under chassis	Under bonnet RH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Remove N/S cluster and thread a length of 7-core (patiently) through grommet under near side and cable hole to cluster This will give you the foglight connection and extension wires for the audible monitor. Connect other leads under the chassis
Wiring: Seal all external connections well

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red/white		
RH Flasher	Green/blue		
RH Side Light	Green/white		
Brake Light	Blue/orange		
LH Side Light	Green/orange		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Shogun/ Pajero SWB 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet by fuel tank	3.5m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Dashboard 10 Add Fuse:	Colour: Location: Add Fuse:

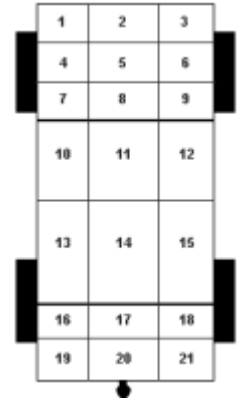
Best Wiring Location	Route to Battery	Fusebox Location
15 Loom under floor before rear seat	Grommet @ 12	Under bonnet RH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		13
Fog Light	Red/white		2 Under door trim pane
RH Flasher	Green/red		15
RH Side Light	Green/orange	Green/white	15
Brake Light	Blue/orange	Blue/red	15
LH Side Light	Green/white		15
Reverse	Red/green		15



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Shogun/Pajero LWB 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet by fuel tank	3.5m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

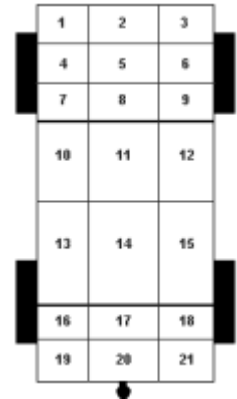
Best Wiring Location	Route to Battery	Fusebox Location
See note below	Grommet @ 12	Under bonnet RH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: cover plate with 4 screws under rear seat. Loom to rear lights under this. Fog and reverse in loom R/S by cover plate or under R/S rear door kick plate.(Also all wires possibly found under RH passenger foot plate inside door: just levers up.)
Power: 12volt feed behind small rectangular cover on O/S dash. <input type="checkbox"/> Pajero has large grommet N/S under bonnet to go to battery.Rear trim hard to remove
Access: Hole under carpet by loom cover, covered in silver tape. Use to bring power feed, fog and reverse into box.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Red/white		15 under kick plate
RH Flasher	Green/red		
RH Side Light	Green/orange		
Brake Light	Blue/orange		
LH Side Light	Green/white		
Reverse	Red/green		15 under kick plate



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Mitsubishi Single Cab Pickup 2008 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	4.5m		
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

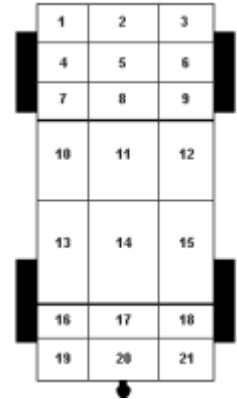
Best Wiring Location	Route to Battery	Fusebox Location
10 Under seat		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		10
Fog Light	Red/white		10
RH Flasher	Green/red		10
RH Side Light	Green/white		10
Brake Light	Blue/orange		10
LH Side Light	Green/orange		10
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Mitsubishi Space Wagon MPV Nov 1998 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

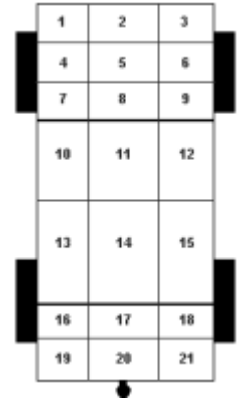
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Red/white		
RH Flasher	Green/red		
RH Side Light	Green/white		
Brake Light	Blue/pink		
LH Side Light	Not recorded		
Reverse	Red/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Drill		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

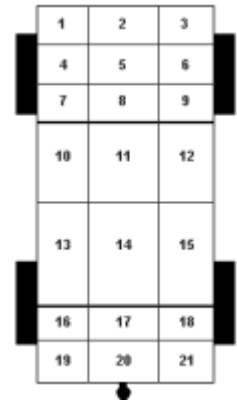
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red	Light green	
Fog Light	Red		
RH Flasher	Green/red		
RH Side Light	Green/white		
Brake Light	Green		
LH Side Light	Green/tan		
Reverse	White/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

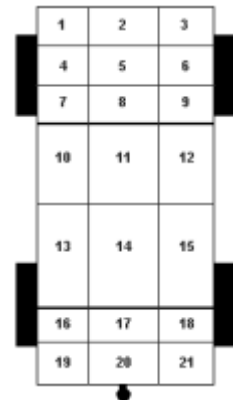
Best Wiring Location	Route to Battery	Fusebox Location
		Dash/footwell R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black	2004 Green	
Fog Light	Orange/black	2004 Red/black	
RH Flasher	Green/yellow	2004 Green	
RH Side Light	Red/blue	2004 Green/white	
Brake Light	Red/green	2004 Green/yellow	
LH Side Light	Red/blue	2004 Green/white	
Reverse	Green/white	2004 Red/black	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Nissan Cabstar E Pickup 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF2005T
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

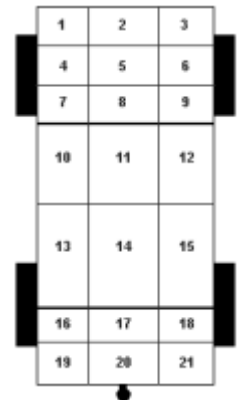
Best Wiring Location	Route to Battery	Fusebox Location
19 under chassis		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Front monitor: Connect TF2005T behind fusebox

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Red/gold		
RH Flasher	Green/black		
RH Side Light	Yellow/white		
Brake Light	Green/yellow		
LH Side Light	Yellow/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Drill in wheel well		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

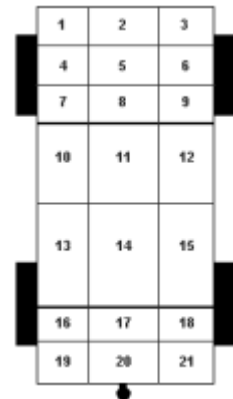
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
05 model: grommet behind bumper RHS Possibly a built-in buzzer
Wiring: Bring opposite flasher and tail light leads across to connection point
Warning: possible airbag wire on RHS to bumper, with number plate lamp wire.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink		19
Fog Light	Red		21
RH Flasher	Red		21
RH Side Light	Purple		21
Brake Light	Yellow		21
LH Side Light	Grey		19
Reverse	Red		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19			
----	--	--	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

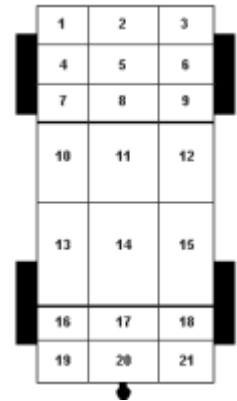
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Green/white		
RH Flasher	Green/yellow		
RH Side Light	Red/blue	Red/purple	
Brake Light	Red/green		
LH Side Light	Red/blue	Red/purple	
Reverse	Blue	Green/yellow	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

--	--	--	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

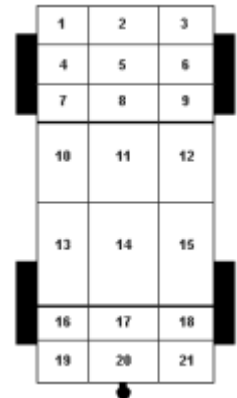
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	White		
RH Flasher	Green		
RH Side Light	Purple		
Brake Light	Dark blue		
LH Side Light	Grey		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Nissan Navara Pickup Aug 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

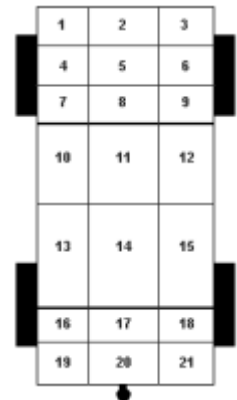
Best Wiring Location	Route to Battery	Fusebox Location
19 under chassis		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Trailer flasher on dash , no need for buzzer

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	White		
RH Flasher	Green		
RH Side Light	Grey		
Brake Light	Yellow		
LH Side Light	Grey		
Reverse	Blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Nissan Navara Pickup Summer 1998 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

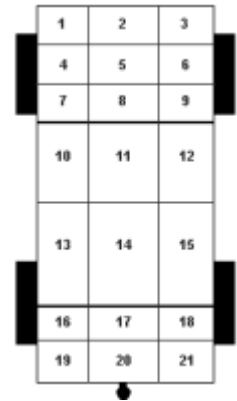
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/red		
Fog Light	Green/red		
RH Flasher	White/green		
RH Side Light	Red/blue		
Brake Light	Green/yellow		
LH Side Light	Red/blue		
Reverse	Red/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Nissan Navara Pickup Summer 1998 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

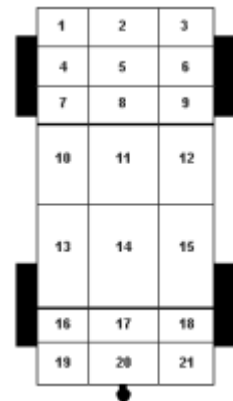
Best Wiring Location	Route to Battery	Fusebox Location
Multiblock by spare		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: For indicators, run wire forward with loom under vehicle to grommet under driver's seat. Connections can be made under driver's seat. Flasher unit is behind O/S centre console.
Important Note: The flat bed body is not earthed to the chassis. Find your earth on the chassis.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/red		
Fog Light	Green/red		
RH Flasher	White/green		
RH Side Light	Red/blue		
Brake Light	Green/yellow		
LH Side Light	Red/blue		
Reverse	Red/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet: number plate light	2m		
-----------------------------	----	--	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Orange Location: 21 Add Fuse:

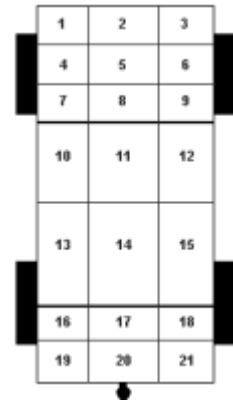
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Purple		19
Fog Light	Red	1 of 4	21
RH Flasher	White	1 of 6	21
RH Side Light	Purple	1 of 2	21
Brake Light	Red	1 of 2	21
LH Side Light	Green		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

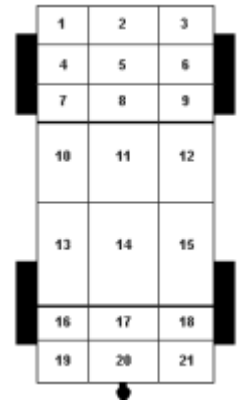
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		19
Fog Light	Red/blue		19 or 21
RH Flasher	Green		21
RH Side Light	Green/white		21
Brake Light	Green/yellow		19 or 21
LH Side Light	Green/white		19
Reverse	Red/blue		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

	3m cable along n/s chassis: enter via large grommet under passenger seat. Wire	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

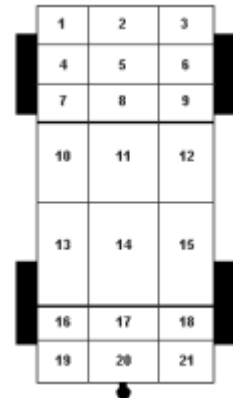
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/brown		
Fog Light	Red/black		21
RH Flasher	Green/yellow		
RH Side Light	Blue/black		
Brake Light	Green/white		
LH Side Light	Blue/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 (21 in Estate) Grommet in floor			
------------------------------------	--	--	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug 19
---	------------------	----------------------	-------------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

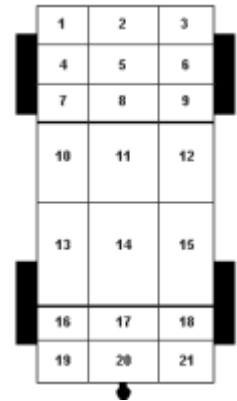
Best Wiring Location	Route to Battery	Fusebox Location
19	Under chassis	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey		
Fog Light	Grey		
RH Flasher	White		
RH Side Light	Blue		
Brake Light	Purple		
LH Side Light	Blue		
Reverse	Beige		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Nissan Primera All Late 1999 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		None	
------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

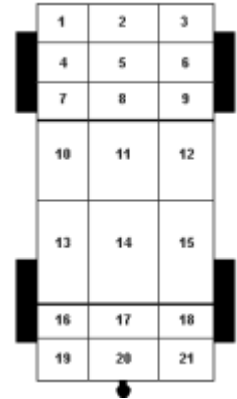
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp	Grommet under fuel filter	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black	Thin	19
Fog Light	Red/green	Thicker wire	21
RH Flasher	Green/yellow		21
RH Side Light	Red/blue		21
Brake Light	Red/green	Thin	19
LH Side Light	Red/blue		19
Reverse	Green/white		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

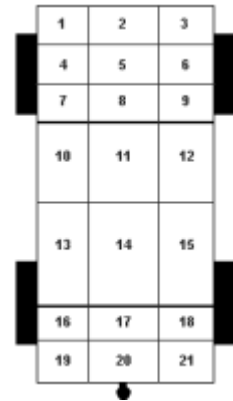
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown		
Fog Light	Yellow		
RH Flasher	Green		
RH Side Light	Red/blue		
Brake Light	Red/white		
LH Side Light	Red/blue		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

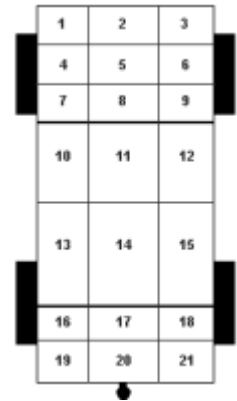
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet @ 12	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red/black	Red/blue/silver	
RH Flasher	Green/yellow		
RH Side Light	Red/blue		
Brake Light	Green/yellow		High level
LH Side Light	Red/blue		
Reverse	Orange	Orange/silver	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Nissan Terrano II 4WD 1998 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			No

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

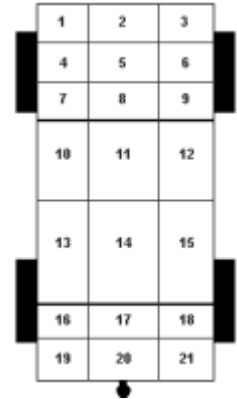
Best Wiring Location	Route to Battery	Fusebox Location
16,19 by jack	Grommet @ 12	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Orange		
RH Flasher	Green/yellow		
RH Side Light	Red/blue		
Brake Light	Green/yellow		High level
LH Side Light	Red/blue		
Reverse	Red/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19		None	
----	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

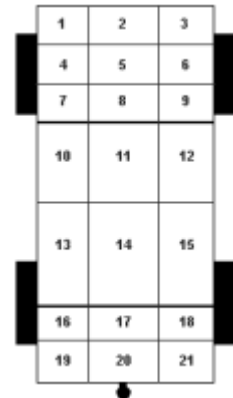
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black	Green	
Fog Light	Red/black		
RH Flasher	Green/yellow	Green	
RH Side Light	Red/blue	Green/white	
Brake Light	Red/green	Green/lime	
LH Side Light	Red/blue	Green/white	
Reverse	Green/white	Blue/red	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Fog light		Some fitters use 7-way TF2217LOGIC/2218	
-----------	--	--	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

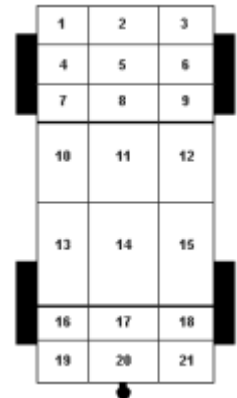
Best Wiring Location	Route to Battery	Fusebox Location
21	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Blue/pink		
RH Flasher	Green/yellow		
RH Side Light	Red/blue		
Brake Light	Pink		
LH Side Light	Red/blue		
Reverse	Blue/white	2004 Yellow/green	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19	2m	TF1152 or TF1155	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			16/19 above jack

Find Constant Live	Find Ignition-Switched Live
Colour: Brown Location: 12 Add Fuse:	Colour: Location: Add Fuse:

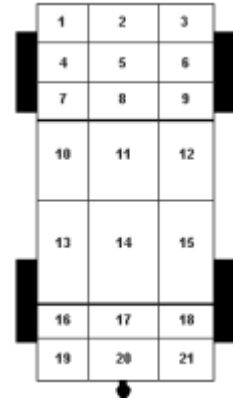
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown		Multiblock
Fog Light	Orange		Multiblock
RH Flasher	Grey		Multiblock
RH Side Light	Red		Multiblock
Brake Light	Yellow		Multiblock
LH Side Light	Red		Multiblock
Reverse	Green		Multiblock



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Peugeot 1007 Saloon 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

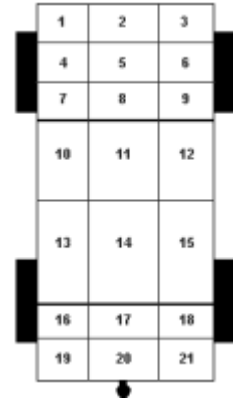
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		Under dash 10

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		
Fog Light	Red		
RH Flasher	Green		
RH Side Light	Red		
Brake Light	Purple		
LH Side Light	Light blue		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Peugeot 106 Hatchback 1998 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

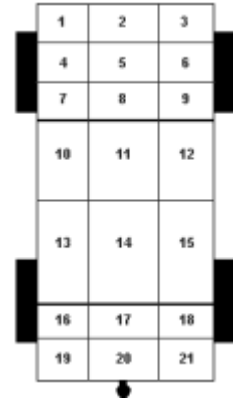
Best Wiring Location	Route to Battery	Fusebox Location
		Glove box (grommet behind)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Red	Pin 5	
Fog Light	Red	Pin 6	
RH Flasher	Green	Pin 3	
RH Side Light	White	Pin 5	
Brake Light	Beige	Pin 4	
LH Side Light	Yellow	Pin 3	
Reverse	Pink	Pin 6	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		See note below	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Black Location: 19 Add Fuse: 15	Colour: Black Location: 19 lamp Add Fuse:

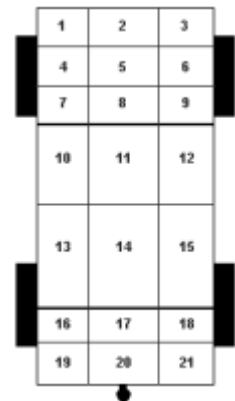
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Modulated supply: Oct 2001: totally multiplexed. Identify by extra internal central locking switch on dash. On some versions at least, the headlights, rear fog, indicators (not hazards) and radio may not operate unless the engine is running.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		
Fog Light	Light blue		
RH Flasher	Mustard	Red	
RH Side Light	Red	White	
Brake Light	Pink		
LH Side Light	Yellow		
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Peugeot 207 SW Hatchback 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Black Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

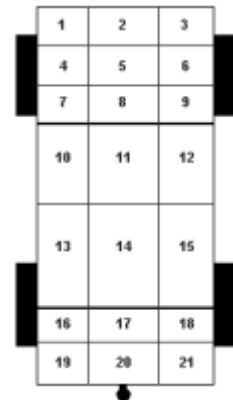
Best Wiring Location	Route to Battery	Fusebox Location
19 (21)		Glove box

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
1.5 hrs

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Lilac		21
RH Flasher	Red	Yellow	21
RH Side Light	Blue		21
Brake Light	White	Brown	21
LH Side Light	Light green	Green	19 lamp
Reverse	Green	White	21



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Fog-light grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse: Yes	Colour: Location: Add Fuse:

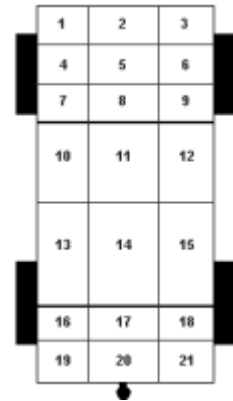
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Light yellow		
RH Flasher	Red		
RH Side Light	Red		
Brake Light	Brown		
LH Side Light	Yellow		
Reverse	Purple		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

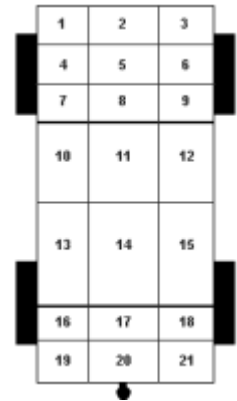
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Light yellow		
RH Flasher	Red		
RH Side Light	Red		
Brake Light	Brown		
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		TF2218/7SMARTLOGIC	
------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Blue Location: 19 by interior lamp Add Fuse: Slot 10, 15amp	Colour: Location: Add Fuse:

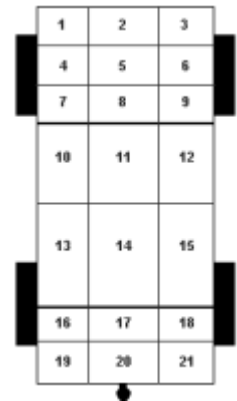
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
RH tail fuse 12, 10amp protects other vital circuits bypass this circuit. Other fuses: Fog 1 15amp; Brake 5 15amp; LH tail 22 10amp.
7-core entry: Station Wagon, through grommet under bumper. 2003HB: through number plate light grommet.
Reverse sensor on estate does not see towball or bike plate

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown	Pink	
Fog Light	Grey	Brown	
RH Flasher	Red	Blue	
RH Side Light	Grey	Purple	
Brake Light	Blue	Green	
LH Side Light	Blue	White	
Reverse	Yellow	Lilac	



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Peugeot 307 Hatchback Oct 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		Sidelight only? TF1013	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

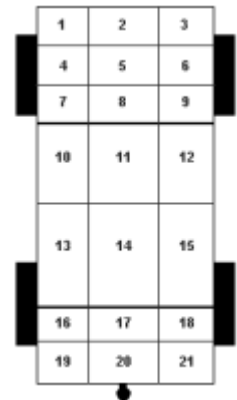
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: avoid unplugging lights
Power supply: red wire at 19; has to be connected in fusebox.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown		
Fog Light	Mustard		
RH Flasher	Red		
RH Side Light	Green		
Brake Light	Purple		
LH Side Light	Mustard		
Reverse	Blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor			
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Red Location: 19 Add Fuse: Connect red into fusebox	Colour: Location: Add Fuse:

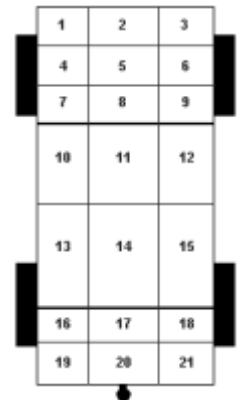
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Connect heavy red into fusebox to bring power to 19

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown	1 of 2	19
Fog Light	Cream or Pink		19
RH Flasher	Red		19
RH Side Light	Green		19
Brake Light	Purple		19
LH Side Light	Cream		19
Reverse	Brown	1 of 2	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Mfr. Grommet		3-way: Side lights only	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: behind rear panel Add Fuse:	Colour: Location: Add Fuse:

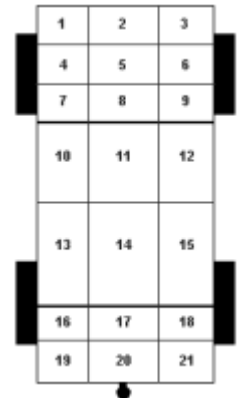
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink		
Fog Light	Brown		
RH Flasher	Blue		
RH Side Light	Lilac	Bypass	
Brake Light	Blue		
LH Side Light	White	Bypass	
Reverse	Brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Beige Location: 19 Add Fuse: See note below	Colour: Location: Add Fuse:

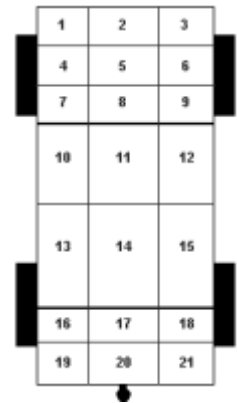
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Note - Add fuse: Connect white wire in fusebox. This makes the beige wire at 19 live.yellow

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		19
Fog Light	Yellow		21
RH Flasher	Blue		21
RH Side Light	Green		21
Brake Light	Blue	Red 21	19
LH Side Light	Purple		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			18

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

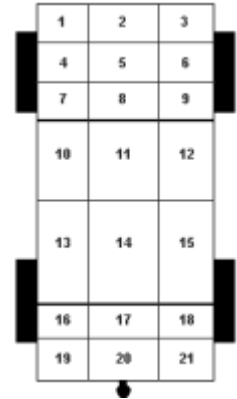
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/silver dots		18
Fog Light	Turquoise		21
RH Flasher	White/silver		18
RH Side Light	Brown		18
Brake Light	Red		18
LH Side Light	Brown		18
Reverse	White/silver		18



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Peugeot 406 Estate 1999 -2004

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 lamp Add Fuse: Slot 15, 20 amp	Colour: Location: Add Fuse:

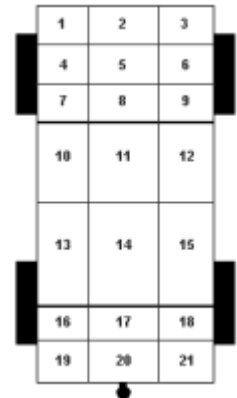
Best Wiring Location	Route to Battery	Fusebox Location
19		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink		
Fog Light	Pink		16, 19
RH Flasher	White		
RH Side Light	Green		
Brake Light	Purple		
LH Side Light	Yellow		
Reverse	Red		16, 19



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Drill		See note below	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 lamp Add Fuse: Slot 15, 20 amp	Colour: Location: Add Fuse:

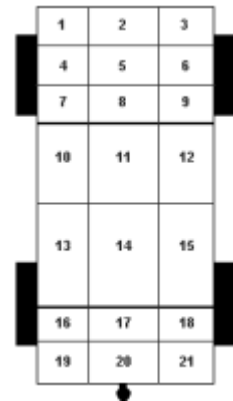
Best Wiring Location	Route to Battery	Fusebox Location
19	Grommet LH bulkhead	Steering column (under)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Multiplexed from October 2001: Identify by new stalk on dash and loom all down LHS.
Flashers: may auto monitor. Check for audible tone, digital text check on dash, altered flash rate if test board removed when flashing, etc
Bypass: 2001 - Fit TF2217LOGIC

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink		
Fog Light	White	Red	
RH Flasher	Beige	Yellow	
RH Side Light	Green	Pink	
Brake Light	Green	Purple	19 lamp
LH Side Light	Yellow		
Reverse	Green	White	19 lamp



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet, wheel well		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Blue Location: Fusebox Add Fuse: EC2	Colour: Location: Add Fuse:

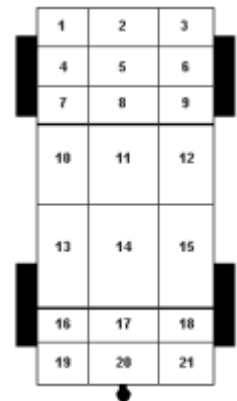
Best Wiring Location	Route to Battery	Fusebox Location
19		Boot LHS 16/19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: If you disconnect the rear clusters, the indicators will fail to work when you connect again. Power down, lock car and leave for 10 minutes - car will reset.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Grey	2005 Est: Red	: 16 way plug in top of fi
RH Flasher	White		
RH Side Light	Brown		21
Brake Light	White		
LH Side Light	Orange	Brown	
Reverse	Yellow	Grey	21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 lamp Add Fuse: Slot 21, 15amp	Colour: Location: Add Fuse:

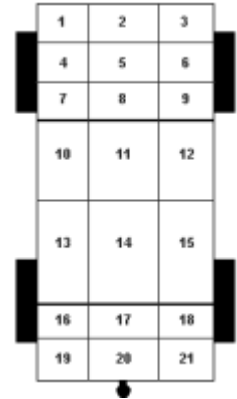
Best Wiring Location	Route to Battery	Fusebox Location
19/21		Steering column (under)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Red		19 hinge grommet
RH Flasher	Pink		
RH Side Light	Beige		
Brake Light	Pink		
LH Side Light	White		
Reverse	Grey		19 hinge grommet



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet rear floor		See note below	
-----------------------	--	----------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse: Slot 8	Colour: Location: Add Fuse:

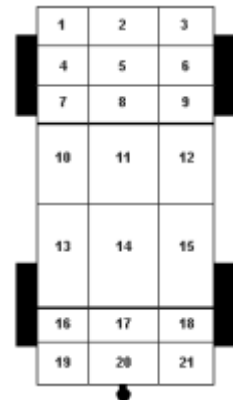
Best Wiring Location	Route to Battery	Fusebox Location
	Footwell RH	Under bonnet

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Update 2003- Wire TF2217

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Grey		
RH Flasher	White		
RH Side Light	Green		
Brake Light	Pink		
LH Side Light	Pink		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 Remove air vents		TF2218/7SMARTLOGIC	
------------------------	--	--------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

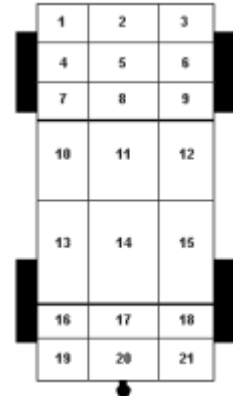
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown		
Fog Light	White		
RH Flasher	Blue		
RH Side Light	Yellow		
Brake Light	White		
LH Side Light	White		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

--	--	--	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

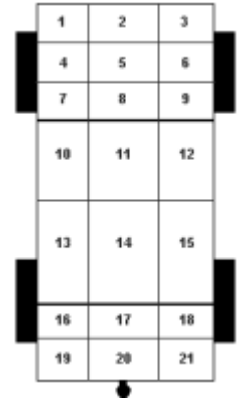
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		19
Fog Light	Brown/grey		19
RH Flasher	Blue/black		21
RH Side Light	Yellow		21
Brake Light	Green/white		19
LH Side Light	Yellow		19
Reverse	Grey/green		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Foil-covered holes	2m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

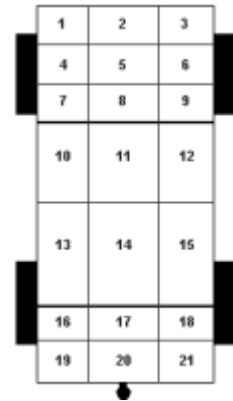
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/black		
Fog Light	Grey	Grey/yellow	
RH Flasher	Blue		
RH Side Light	Yellow/black		
Brake Light	Red/black		
LH Side Light	Yellow		
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	3.5m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

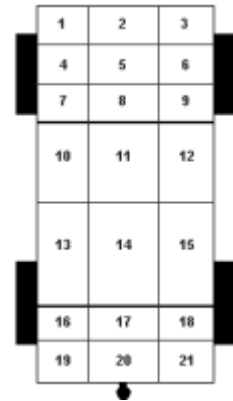
Best Wiring Location	Route to Battery	Fusebox Location
	Footwell, L/H (grommet)	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Brown		
RH Flasher	Pink		
RH Side Light	Yellow		
Brake Light	Green/black		
LH Side Light	Yellow		
Reverse	White/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Drill		None	
-------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 lamp Add Fuse:	Colour: Location: Add Fuse:

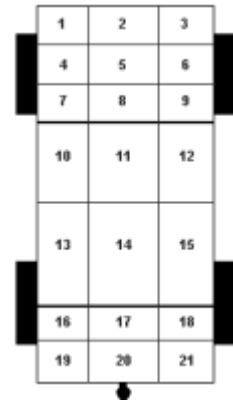
Best Wiring Location	Route to Battery	Fusebox Location
		Under bonnet LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Beige		
Fog Light	Orange		
RH Flasher	Yellow		
RH Side Light	Yellow		
Brake Light	Orange		
LH Side Light	Yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	3m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

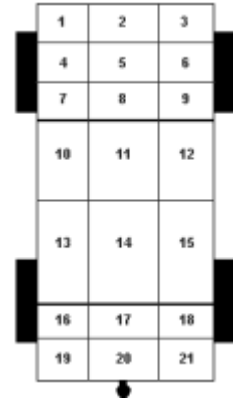
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp	Through roof with loom, to fusebox	Footwell R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Red		
RH Flasher	White		
RH Side Light	Green		
Brake Light	Yellow		
LH Side Light	Brown		19
Reverse	Brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Stalk Add Fuse:	Colour: Location: Add Fuse:

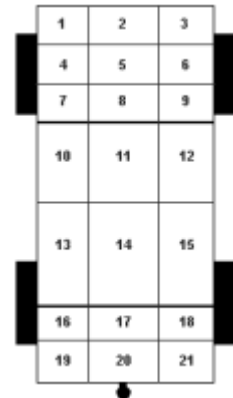
Best Wiring Location	Route to Battery	Fusebox Location
21 small plug		Steering column (under)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Beige	2004 Yellow	
Fog Light	Orange		
RH Flasher	Yellow		
RH Side Light	White		
Brake Light	Tan		
LH Side Light	Yellow	2004 purple	
Reverse	Purple		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

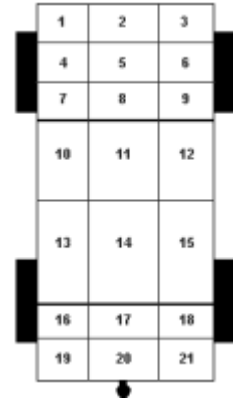
Best Wiring Location	Route to Battery	Fusebox Location
19/21	Under chassis	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink		
Fog Light	Green		
RH Flasher	Purple		
RH Side Light	Beige		
Brake Light	White		19
LH Side Light	Grey		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 behind cluster		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

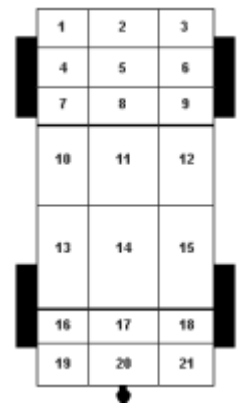
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Porsche will only supply OEM wiring kit with OEM towbar
Replace lamp clusters before testing

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/black	Black/white	
Fog Light	Grey/white		
RH Flasher	Grey/black	Green/white	
RH Side Light	Grey		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Proton Jumbuck Pickup Pickup 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Next to spare wheel

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox (under dash) Add Fuse:	Colour: Location: Add Fuse:

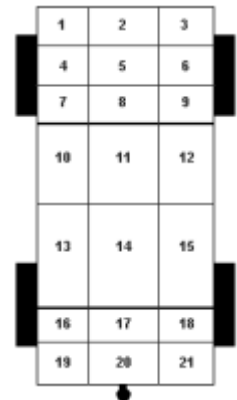
Best Wiring Location	Route to Battery	Fusebox Location
		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: All wires except fog found in 7 pin multiplug by spare wheel. (Black wire in plug is earth)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Red/white		21
RH Flasher	Green/red		
RH Side Light	Green/orange		
Brake Light	Green		
LH Side Light	Green/yellow		
Reverse	Red/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

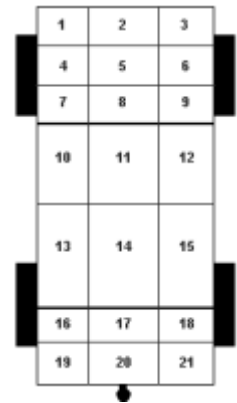
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Indicator on right

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			Hinge grommet
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Proton Wira Hatchback 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: 21 Add Fuse:

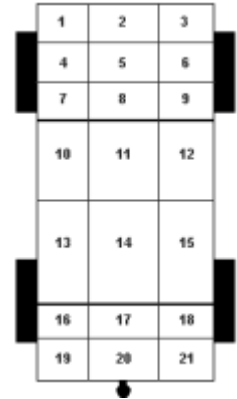
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red		Hinge grommet
RH Flasher	Green/red		
RH Side Light	Green/white		
Brake Light	Green		
LH Side Light	Green/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

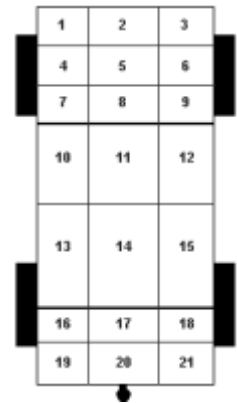
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
As Espace

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Mauve		
Fog Light	Orange		
RH Flasher	Orange		
RH Side Light	Blue		
Brake Light	Fawn		
LH Side Light	Blue		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	N/A	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

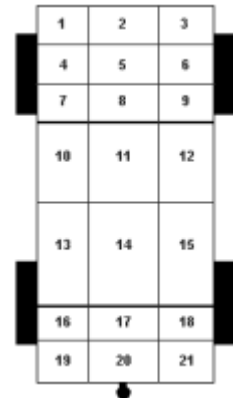
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink/black		
Fog Light	Cream/black		
RH Flasher	Brown/black		
RH Side Light	Light grey/black		21
Brake Light	Grey/black		21
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

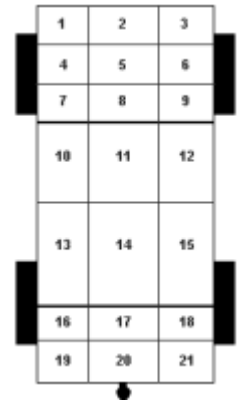
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Mauve	2005 Mauve/black	
Fog Light	Tan	2005 Tan/black	
RH Flasher	Orange	2005 Brown/black in m'block	
RH Side Light	Blue	2005 Blue/black	
Brake Light	Orange	2005 Grey/black	
LH Side Light	Light blue	2005 Blue	
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Renault Espace and Grand Espace MPV 1998 -2001

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Fog light		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

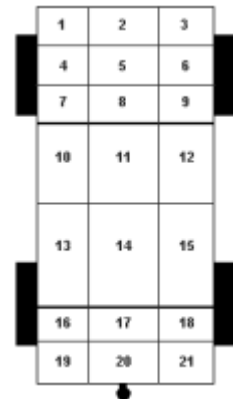
Best Wiring Location	Route to Battery	Fusebox Location
		Footwell LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fog: Check whether there is a multiplug on the N/S front wing under a protective plate. If there is, it has the trailer wiring including a switched fog feed. <input type="checkbox"/> Fog cut out: on pre 2001 models, ask for special kit.
Fog: Otherwise: Access to loom - foglight signal feed. Lift metal frame round fusebox find multiplug. Find beige/slate wire/or orange wire (Not always present?) 4th fuse up in RH row activates fog feed
Flashers: may auto monitor. Check for audible tone, digital text check on dash, altered flash rate if test board removed when flashing, etc

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Cream		
RH Flasher	Pink		
RH Side Light	Blue		
Brake Light	White		
LH Side Light	Blue		
Reverse	Pink		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

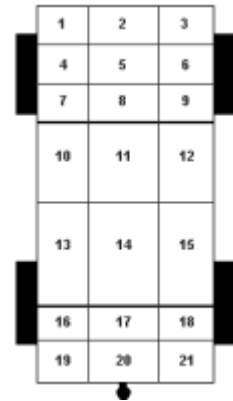
Best Wiring Location	Route to Battery	Fusebox Location
	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Pink		
Fog Light	Mauve		
RH Flasher	Brown		
RH Side Light	Green		
Brake Light	Orange		
LH Side Light	Blue		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21	6.5m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

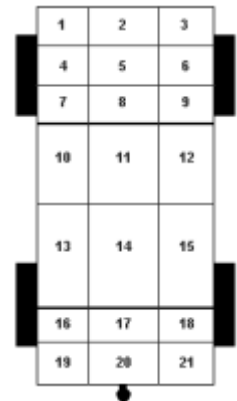
Best Wiring Location	Route to Battery	Fusebox Location
		Under bonnet LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Under the bonnet in a fuse box on N/S wing there is a grey 8-way trailer connector. You can wire direct to this with a 6.2 metre 7 core. BUT CHECK IT'S LIVE BEFORE WIRING TO IT.
Foglight: Fusebox under floor at 10, find slot marked foglight and insert fuse: this activates the trailer fog wire.(10 amp: 3 across x 4 up - or 1 above or below) .

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green	2003 pink at lamp	
Fog Light	Purple	2003 pink at lamp	
RH Flasher	Orange	2003 green at lamp	
RH Side Light	Blue	2003 fawn at lamp	
Brake Light	Beige	2003 white at lamp	
LH Side Light	Blue	2003 purple at lamp	
Reverse	Grey		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Renault Grand Modus MPV 2010 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21		TF2218/7SMARTLOGIC	
----	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Red Location: 7 Add Fuse:	Colour: Location: Add Fuse:

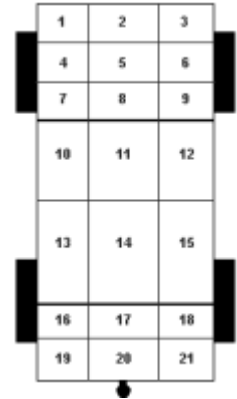
Best Wiring Location	Route to Battery	Fusebox Location
21	9, 16, 13, 10, 7	7

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Mauve		19
Fog Light	White		21
RH Flasher	Brown		21
RH Side Light	Blue		21
Brake Light	Green		21
LH Side Light	Blue		19
Reverse	Grey		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 behind cluster		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

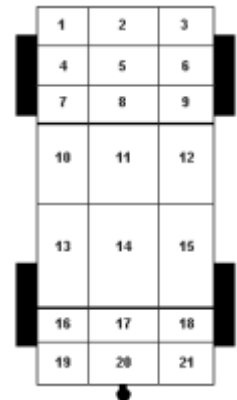
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Beige		
Fog Light	Mauve		
RH Flasher	Green		
RH Side Light	Blue/grey		
Brake Light	White		
LH Side Light	Blue/grey		
Reverse	Pink		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Renault Koleos All Road 2009 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 (21 in Estate) Grommet in floor		None	
------------------------------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

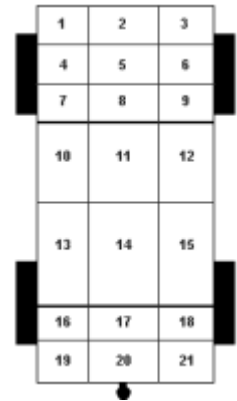
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange		19
Fog Light	Grey		19
RH Flasher	Grey		19
RH Side Light	White		19
Brake Light	Green		19
LH Side Light	White		19
Reverse	Yellow/red		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Renault Laguna All 1994 -2001

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

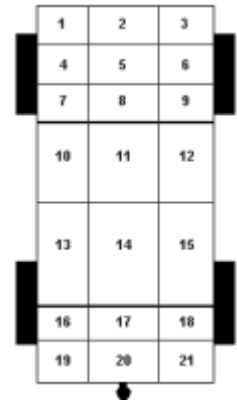
Best Wiring Location	Route to Battery	Fusebox Location
19		Steering column (under)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/purple		
Fog Light	Beige/grey		19
RH Flasher	Beige/grey		
RH Side Light	Blue/grey		
Brake Light	Grey/white		
LH Side Light	Blue/grey		
Reverse			19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 (21 in Estate) Grommet in floor		None	
------------------------------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse: Slot 24	Colour: Yellow Location: 19 Add Fuse:

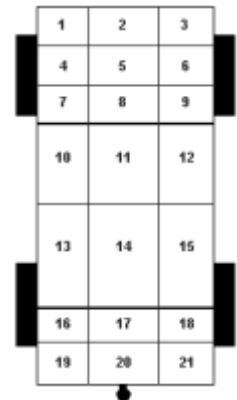
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fog/reverse lamp leads in plug at the top of suspension leg behind the LH side trim.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		19
Fog Light	Brown/green		See note
RH Flasher	Pink		21
RH Side Light	Light blue	Green	
Brake Light	Green		19
LH Side Light	Light blue		
Reverse	Brown	Green	See note



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Renault Laguna Hatchback 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse: Slot 24	Colour: Yellow Location: 19 Add Fuse:

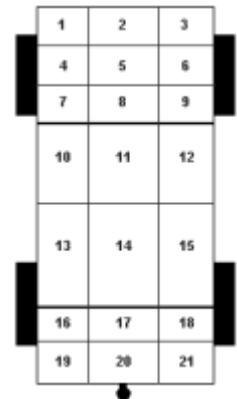
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: BEWARE OF BROWN AND BLUE SPIRALLED WIRES: AIR BAG
Fog/reverse lamp leads in plug at the top of suspension leg behind the LH side trim.
Power supply: If O/E alarm fitted, don't use power take off socket at 19. 2004 Update- Orange/white 44's cable found taped up under glove compartment.If it's not live find other end of wire under fuse box taped up.Run this end to battery and fuse.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Black	Green/blue marker	16
RH Flasher	Pink		
RH Side Light	Pink		
Brake Light	Pink		
LH Side Light	Black	Brown	
Reverse	Green		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 Add Fuse:	Colour: Location: Add Fuse:

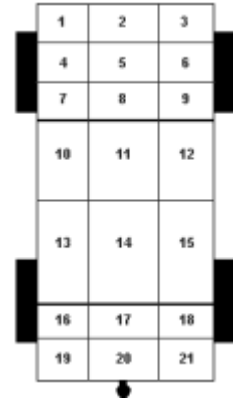
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown		19
Fog Light	White		21
RH Flasher	Brown		21
RH Side Light	Blue		21
Brake Light	Green		19
LH Side Light	Light blue		19
Reverse	Green		16



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 below lamp cluster		None	
-----------------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 12 Add Fuse:	Colour: Pale beige Location: 19 Add Fuse: Slot 24

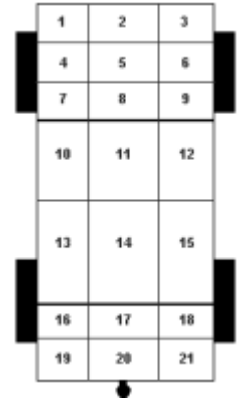
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Brown/green		
RH Flasher	Pink		
RH Side Light	Green		
Brake Light	Green	Pink	
LH Side Light	Light blue	Brown	
Reverse	Pink		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet		None	TF2100T/TF2005T/TF115FL
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

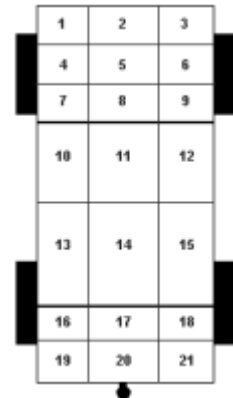
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow or Grey/tan at plug	2004 Green/red (19)	
Fog Light	Tan	2004 Orange/red (21)	
RH Flasher	Green pin 6	2004 White/red (21)	
RH Side Light	Blue pin 2	2004 Blue/red (21)	
Brake Light	Grey pin 1	2004 Cream (21)	
LH Side Light	Green pin 2 (19)	2004 Blue/red (19)	
Reverse	Grey/white pin 5	Pin 5	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet: number plate light		TF2218/7SMARTLOGIC	TF1011 brake lights
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange		
Fog Light	Purple		
RH Flasher	Fawn		
RH Side Light	Blue		
Brake Light	Orange		
LH Side Light	Blue		
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Renault Megane Coupe, Hatchback 1996 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
See note below		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

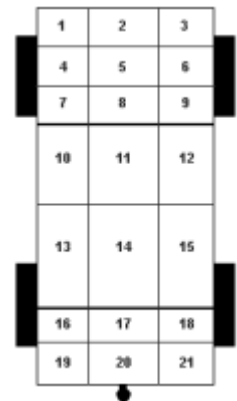
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Access: Remove 3 plastic panels at rear, one each side of lights and one in the centre. <input type="checkbox"/> 7-core access: vent behind centre panel to RHS. Feed 2-core through back panel (remove blocking foam) to LH side light and indicator connection. Coupe: via wheel well?

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange		
Fog Light	Purple		
RH Flasher	Beige		
RH Side Light	Blue		
Brake Light	Brown		
LH Side Light	Blue		
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21	2m	Fog (Only has low fuse)	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 16 Add Fuse:	Colour: Location: Add Fuse:

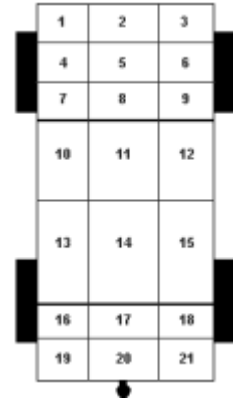
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp	Along chassis - protect with convoluted tubing	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange		19
Fog Light	Purple		21
RH Flasher	Mustard		21
RH Side Light	Blue		21
Brake Light	Brown		21
LH Side Light	Blue/grey		21
Reverse	White		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Renault Megane Saloon etc 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

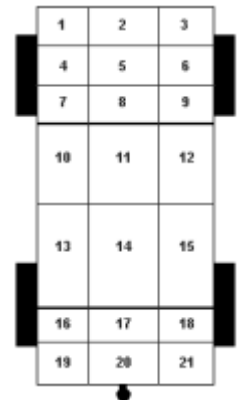
Best Wiring Location	Route to Battery	Fusebox Location
		Glove box (grommet behind)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: 2003 model automatically turns its lights on in dark area when ignition is on.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		19
Fog Light	White		21
RH Flasher	White		21
RH Side Light	Blue/red		21
Brake Light	Orange/red		21
LH Side Light	Blue		19
Reverse	White		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Renault Megane Scenic 1997 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		Fog (Only has low fuse)	Indicators possibly
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

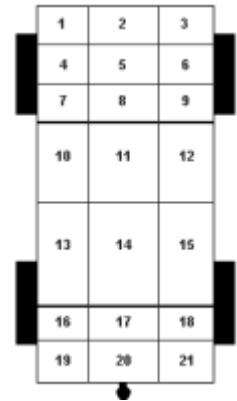
Best Wiring Location	Route to Battery	Fusebox Location
	Dash, L/H (10)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange		
Fog Light	Purple		19
RH Flasher	Mustard	Cream	
RH Side Light	Blue		
Brake Light	Brown		19
LH Side Light	Blue/grey		19
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Renault Megane Scenic MPV 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

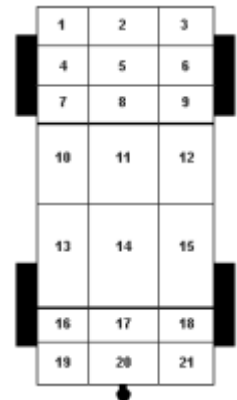
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange	2004 Blue	
Fog Light	Purple		
RH Flasher	Fawn		
RH Side Light	Blue		
Brake Light	Orange		
LH Side Light	Blue	2004 Orange	
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Renault Megane Sport Tourer All 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

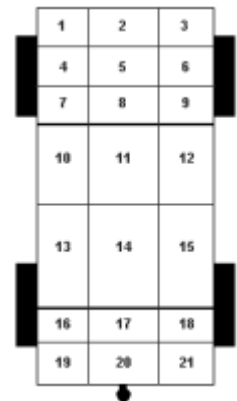
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
To remove bumper : 3 tip screws each side , 4 underneath , 2 each side behind lamps . 3 screws hold lamps in each side.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange		
Fog Light	Purple		
RH Flasher	Beige		
RH Side Light	Blue		
Brake Light	Brown		
LH Side Light	Blue		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
-	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

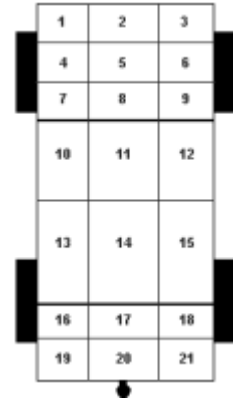
Best Wiring Location	Route to Battery	Fusebox Location
	Along chassis RHS under drivers seat	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Mauve		
Fog Light	White		
RH Flasher	Brown		
RH Side Light	Blue		
Brake Light	Green		
LH Side Light	Blue		
Reverse	Grey		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19		None	
----	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: 19 Add Fuse:

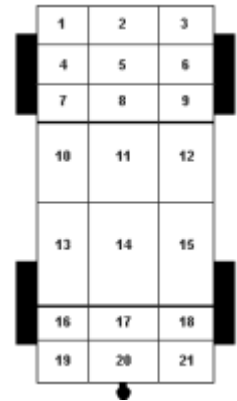
Best Wiring Location	Route to Battery	Fusebox Location
19, roof trim		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Beige		
Fog Light	Purple		19
RH Flasher	Beige		
RH Side Light	Blue		
Brake Light	Purple		
LH Side Light	Blue		
Reverse	Purple		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Renault Vel Satis Hatchback 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

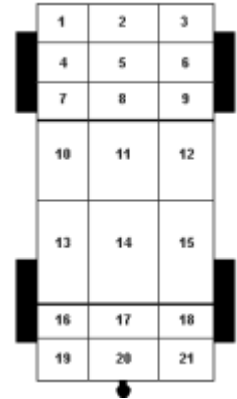
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Brown		19 Roof lining
RH Flasher	Green		
RH Side Light	Pink		
Brake Light	Pink		
LH Side Light	Pink		
Reverse	Pink		19 Roof lining



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Rover 200 Hatchback 1996 -1999

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

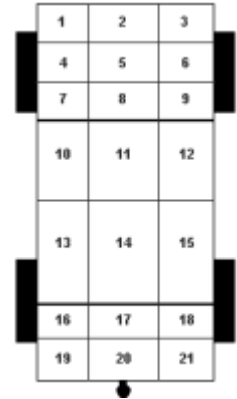
Best Wiring Location	Route to Battery	Fusebox Location
19 Below Lamp in main loom		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Blue/yellow		
RH Flasher	Green/white		
RH Side Light	Red/orange		
Brake Light	Green/purple		
LH Side Light	Red/black		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Rover 200 Hatchback Oct 1989 -1995

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		Brake circuit	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

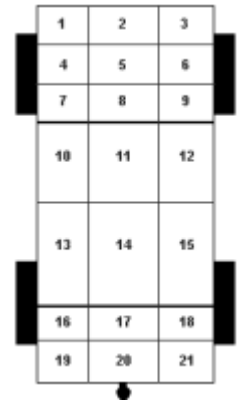
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Rover 25 Saloon Late 1999 -2004

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

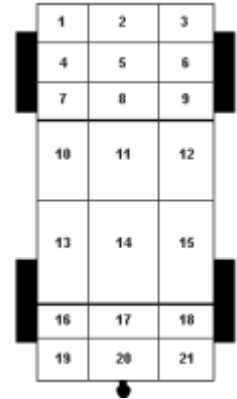
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Red/green		
Fog Light	Blue/yellow		
RH Flasher	Green/white		
RH Side Light	Red		
Brake Light	Green/purple		
LH Side Light	Red/black		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 at lamp (not all)

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

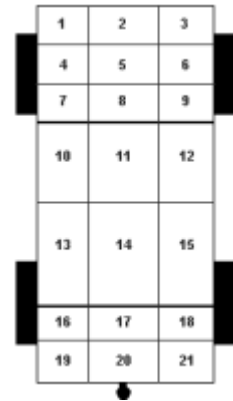
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Blue/yellow	Red/yellow	
RH Flasher	Green/white		
RH Side Light	Red/orange	Red/white?	
Brake Light	Green/purple		
LH Side Light	Red/orange	Red/black	
Reverse	Green/orange	Green/brown	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Rover 400 Saloon 1996 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

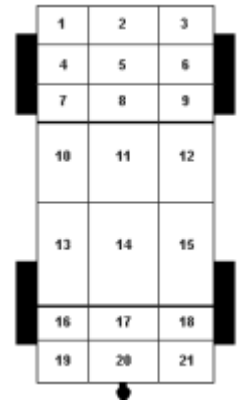
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Red/yellow		
RH Flasher	Green/yellow		21
RH Side Light	Red/black		21
Brake Light	Green/white		19,22
LH Side Light	Red/blue		
Reverse	Green/black		19,22



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

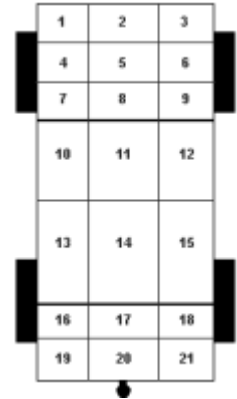
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Red/yellow		
RH Flasher	Green/yellow		
RH Side Light	Red/black		
Brake Light	Green/white		19,22
LH Side Light	Red/blue		
Reverse	Green/black		19,22



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Rover 600 Saloon 1993 -1999

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

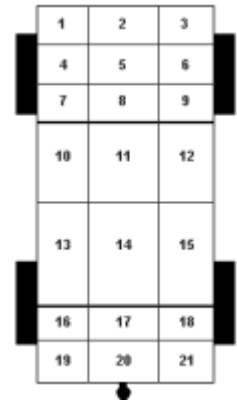
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/blue		
Fog Light	Red/green		
RH Flasher	Green/yellow		
RH Side Light	Red/black		
Brake Light	Green/white		
LH Side Light	Red/black		
Reverse	Green/purple		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 10 Add Fuse:	Colour: Green/red Location: 18 Add Fuse:

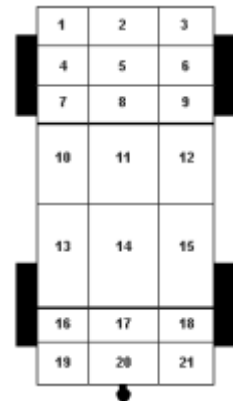
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: If you disconnect all the rear lights by unplugging the multiplug during fitting, the car will show a bulb failure condition until all lights have been restored and shown to be working. Switch them ALL on and off before testing.
Reverse sensors: Find black box in boot (RHS) marked "Reversing Sensor". Heaviest wire (green/red) feeds sounder. Insert TFR1 on this wire to cut out when towing . (White block connects wires from sensor.)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/pink		
Fog Light	Blue/white		21
RH Flasher	Green/grey		
RH Side Light	Red/blue		
Brake Light	Green/blue		
LH Side Light	Red/brown		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
See note below		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

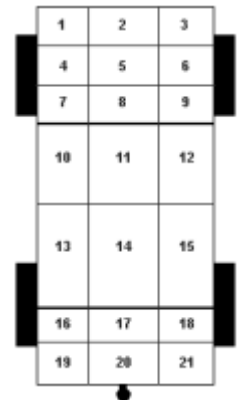
Best Wiring Location	Route to Battery	Fusebox Location
Rear seat & corner cushions		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
7-core entry: Grommet hole covered by tape, bottom corner below light, leads to large cavity inside, behind trim.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/pink		
Fog Light	Blue/white		
RH Flasher	Green/grey		
RH Side Light	Red/blue		
Brake Light	Green/blue		
LH Side Light	Red/blue		
Reverse	Green/brown		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Rover 800/820 Fastback 1988 -1989

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		Fog (TFC1 or TF1011)	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

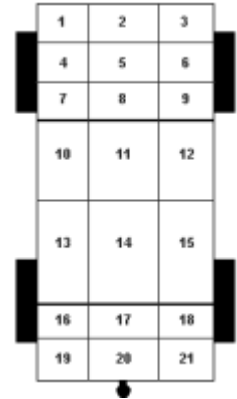
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Blue/yellow		Boot lid LHS
RH Flasher	Green/white		
RH Side Light	Red/orange		
Brake Light	Green/purple		
LH Side Light	Red/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

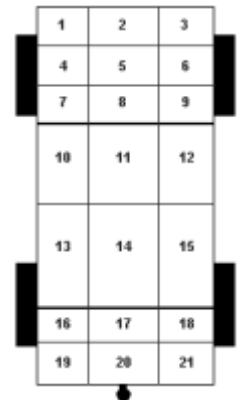
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
See Rover equivalent

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

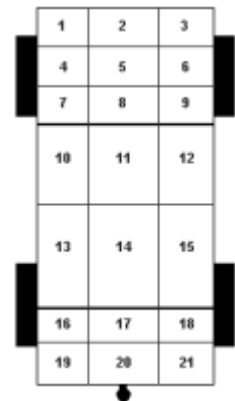
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		
Fog Light	Yellow/green		
RH Flasher	Blue/purple		
RH Side Light		Do not connect	
Brake Light	Mauve		
LH Side Light		Do not connect	
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 Grommet		3-way: Stop & L/R tails	
---------------	--	-------------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

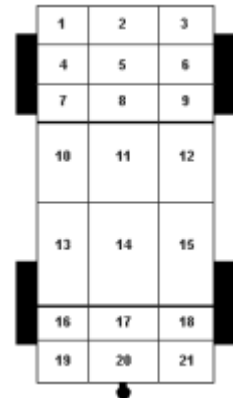
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/black		
Fog Light	Blue/brown	Reddish brown	19
RH Flasher	Green/black		
RH Side Light	Brown/green		
Brake Light	Blue/orange		
LH Side Light	Yellow/green		
Reverse	White		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

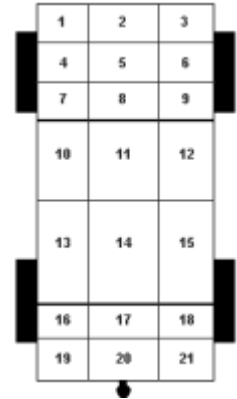
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		
Fog Light	Blue/red		
RH Flasher	Red/white		
RH Side Light	Green		
Brake Light	White		
LH Side Light	Blue		
Reverse	Grey		19 pillar



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet left of centre		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Trailer plug Add Fuse:	Colour: Location: Add Fuse:

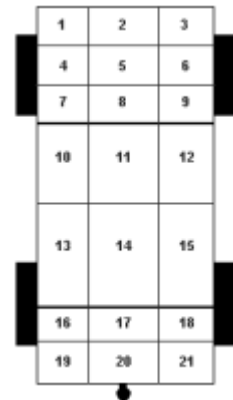
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
If brake light latches on when TF2218 is used, use grey for brakes and red for reverse; or use a TF2217X
Fault condition: don't use the N/S side light wire because in reverse a signal down the N/S circuit brings the trailer side lights on.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Brown		
Fog Light	Blue		
RH Flasher	Brown/yellow		
RH Side Light	Blue/yellow		
Brake Light	Purple		
LH Side Light	Blue		
Reverse	Green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

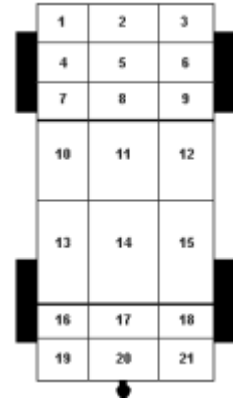
Best Wiring Location	Route to Battery	Fusebox Location
19		19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		
Fog Light	Yellow/green		
RH Flasher	Blue/purple		19
RH Side Light	Pink		
Brake Light	Brown/yellow		
LH Side Light	White		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse: Slot 6A - 5amp	Colour: Location: Add Fuse:

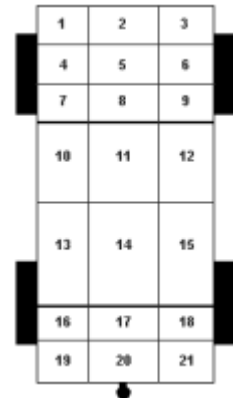
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/black		
Fog Light	Blue/brown		
RH Flasher	Green/black		
RH Side Light	Blue/white		
Brake Light	Purple/white		
LH Side Light	Green/white		
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug Spare wheel pan or back panel

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 20 multiblock Add Fuse: A 30 amp	Colour: Purple Location: 20 multiblock Add Fuse:

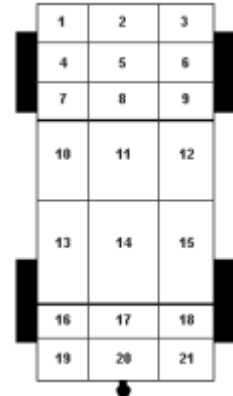
Best Wiring Location	Route to Battery	Fusebox Location
		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow/white		
Fog Light	White/red		
RH Flasher	Yellow/grey		
RH Side Light	Green		
Brake Light	Green/grey		
LH Side Light	Blue		
Reverse	Green		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Spare wheel pan or back panel

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Multiblock Add Fuse: A 30 amp	Colour: Location: Add Fuse:

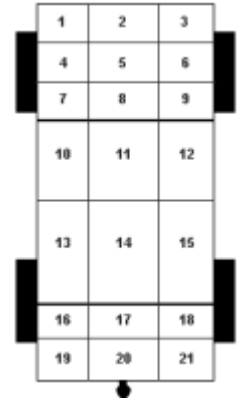
Best Wiring Location	Route to Battery	Fusebox Location
		12 Side panel

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow/white		
Fog Light	White/red		
RH Flasher	Yellow/grey		
RH Side Light	Green		
Brake Light	Green/grey		
LH Side Light	Blue		
Reverse	Green		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Saab 9-5 Self-levelling suspension All 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

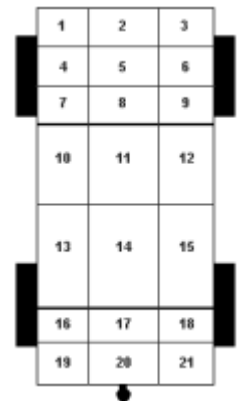
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
No extra data on this car except that it appears to require a Smart bypass See other Saab 9-5 sheet

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

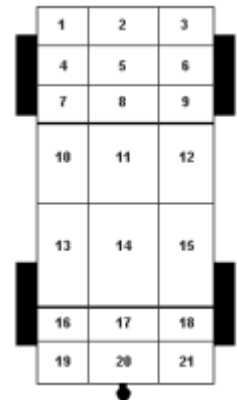
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bypass: digital check gives text bulb-failure warning on dash display: Use TF2218/7LOGIC
Power supply : if you use the rear lighter socket supply, make sure it stays on)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Grey/white		21 above jack
RH Flasher	Black/green		21 above jack
RH Side Light	Grey/red		21 above jack
Brake Light	Black/red		21 above jack
LH Side Light	Grey/white		19
Reverse	Black/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Fog-light grommet		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 9 Fusebox Add Fuse:	Colour: Location: Add Fuse:

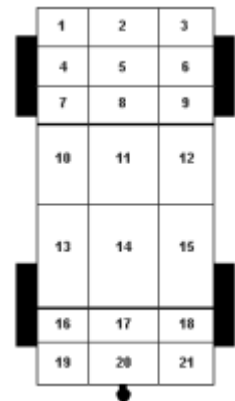
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Black/blue	Grey/white	19
RH Flasher	Black/green		
RH Side Light		Do not connect	
Brake Light	Red/black		
LH Side Light		Do not connect	
Reverse	Black	Grey/white	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

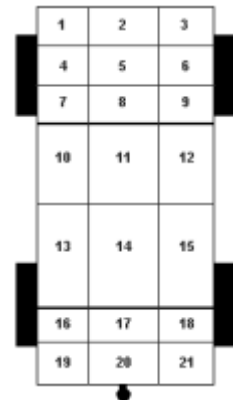
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Green/white		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet	12S: use 2m	None	
------------	-------------	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

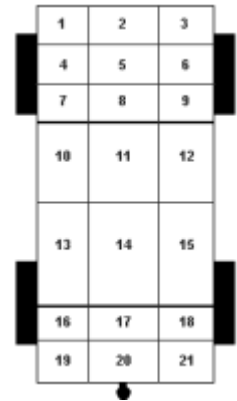
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Green/blue		16 or 18
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse	Red/black		16 or 18



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC (see note below)	TF2302 SmartCAN
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

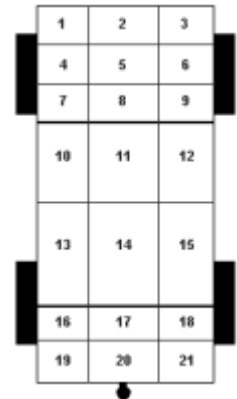
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Both fog and brake are dual function and fog makes relay chatter so: Use relay reverse for fog and relay fog for reverse OR use a single bypass for the brakes and pick up the sidelights from the number plate lamp

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Seat Ibiza Hatchback Mid 1996 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet: number plate light		None	
-----------------------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

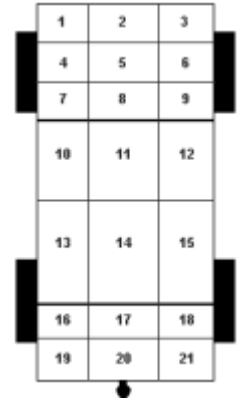
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey		19 lamp
RH Flasher	Green/black		
RH Side Light	Red/grey		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Seat Ibiza Hatchback Mid 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		? 7-way	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

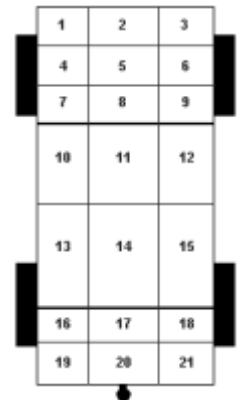
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp	Glove box (grommet behind)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Green/black		
RH Side Light	Red/grey		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 lamp Add Fuse: Slot 35	Colour: Location: Add Fuse:

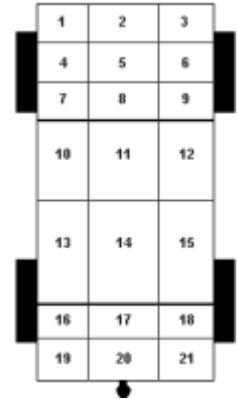
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery or Fusebox Add Fuse:	Colour: Location: Add Fuse:

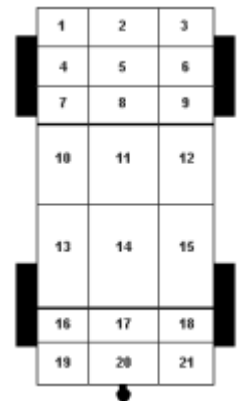
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share the same wire ((Red/black) Connect ONLY the brake signal wire from the TF2218/7Sart Logic to this wire. Relay will switch both side and brake outputs correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black/blue		19 Roof lining
RH Flasher	Black/green		
RH Side Light		Do not connect	
Brake Light	Red/black		
LH Side Light		Do not connect	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

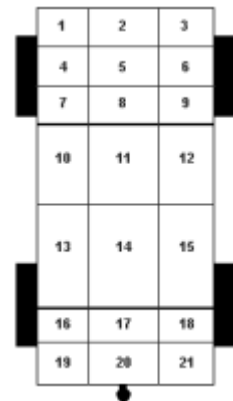
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share the same wire ((Red/black) Connect ONLY the brake signal wire from the TF2218/7Sart Logic to this wire. Relay will switch both side and brake outputs correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Grey/white		19
RH Flasher	Green/black		19
RH Side Light		Do not connect	
Brake Light	Red/black		19
LH Side Light		Do not connect	
Reverse	Blue/black		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Seat Toledo All Spring 1999 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19		None	
----	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 20 Add Fuse: Slot 35	Colour: Location: Add Fuse:

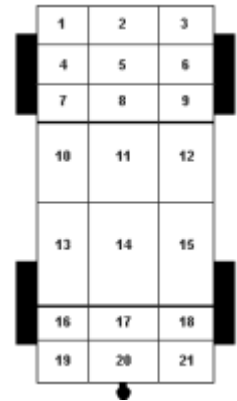
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		19 high up
RH Flasher	Green/black		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	White/black		
Reverse	Blue/red		19 high up



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

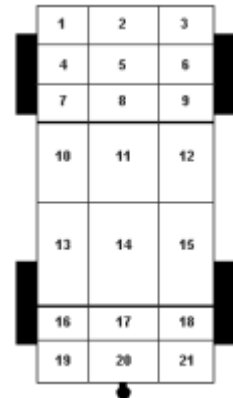
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Black/grey		
Reverse	Black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

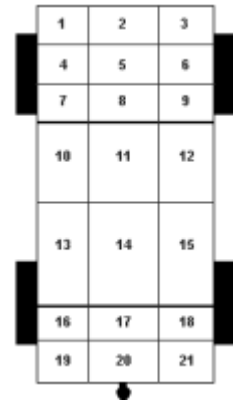
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Black/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 12 Add Fuse:	Colour: Location: Add Fuse:

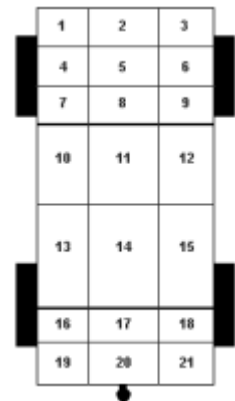
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share the same wire ((Red/black) Connect ONLY the brake signal wire from the TF2218/7Sart Logic to this wire. Relay will switch both side and brake outputs correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black		
Fog Light	Black/red		
RH Flasher	Black/green		
RH Side Light		Do not connect	
Brake Light	Black/blue		
LH Side Light		Do not connect	
Reverse	Grey/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Skoda Octavia Estate 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet: number plate light	2m	TF2218/7SMARTLOGIC	
-----------------------------	----	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 Add Fuse: Slot 6, 20amp	Colour: Location: Add Fuse:

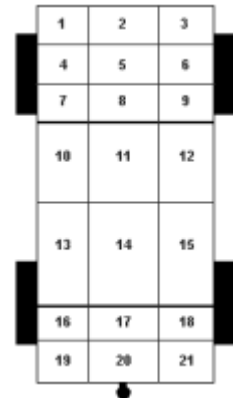
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Blue/yellow		19
RH Flasher	Green/blue		19
RH Side Light	Grey/yellow		19
Brake Light	White/black		19
LH Side Light	Grey/purple		19
Reverse	Black/blue		19



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Mfr. Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Location: Add Fuse:

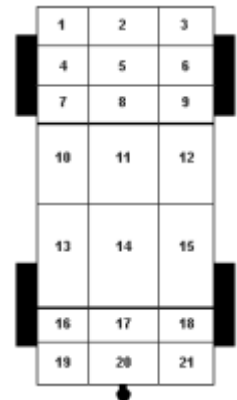
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Power bus bar under dash, RHS

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse	Black/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Skoda Octavia Hatchback July 2004 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet in rear panel		TF2218/7SMARTLOGIC	
-----------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

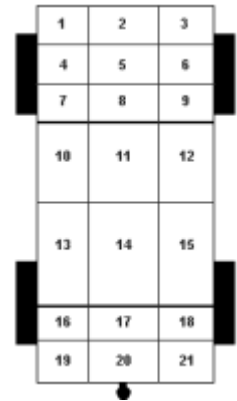
Best Wiring Location	Route to Battery	Fusebox Location
19 Behind panel		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Blue/yellow		
RH Flasher	Green/blue		
RH Side Light	Grey/yellow		
Brake Light	White/black		
LH Side Light	Grey/mauve		
Reverse	Black/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Skoda Octavia Hatchback Sept 2003 -2004

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Mfr. Grommet		Top models-TF2218/7SMARTLOGIC	
--------------	--	-------------------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

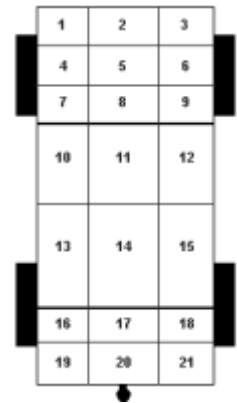
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Power bus bar under dash, RHS

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Pink	Red/black	
LH Side Light	Grey/black		
Reverse	Black/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Skoda Roomster MPV 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet: number plate light		TF2218/7SMARTLOGIC	
-----------------------------	--	--------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Location: Add Fuse:

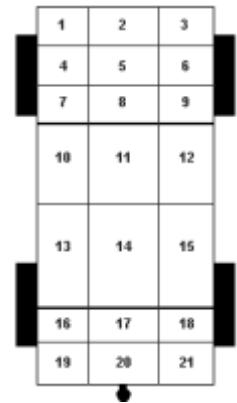
Best Wiring Location	Route to Battery	Fusebox Location
19 (21)		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Quick to wire

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	White/grey		21
RH Flasher	Black/green		21
RH Side Light	Grey/red		21
Brake Light	Black/red		19
LH Side Light	Grey/black		19
Reverse	Black/blue		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 Grommet		TF2218/7SMARTLOGIC	
---------------	--	--------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

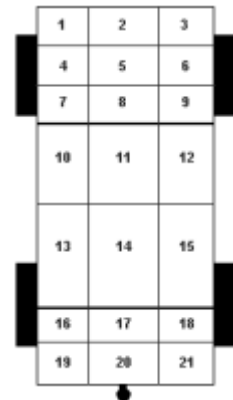
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Power bus bar under dash, RHS

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/green		
LH Side Light	Grey/black		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

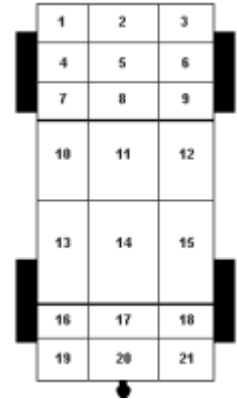
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		21
Fog Light	Grey/white		21
RH Flasher	Black/green		21
RH Side Light	Grey/red		21
Brake Light	Black/red		21
LH Side Light	Grey/black		21
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

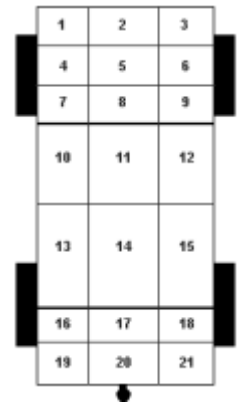
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Like a Fiat

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Ssangyong Kyron All 2006 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

18 Wheel arch			
---------------	--	--	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

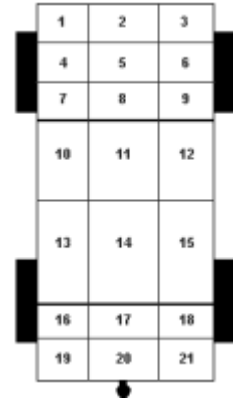
Best Wiring Location	Route to Battery	Fusebox Location
19 and high up	Glove box (grommet behind)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow/black		19
Fog Light	Brown		21
RH Flasher	Blue/yellow		21
RH Side Light	White/green		21
Brake Light	Yellow		19
LH Side Light			19
Reverse	Red/black		19 high up



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Ssangyong Musso 4WD 1995 -1999

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			21 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

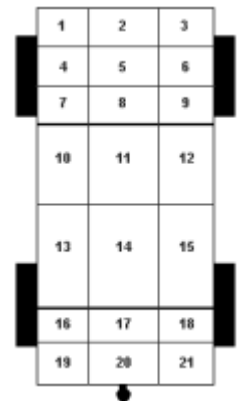
Best Wiring Location	Route to Battery	Fusebox Location
		Footwell RH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fog and reverse in tailgate: pull back NS rear boot trim, prise out grommet above NS tailgate strut to access wires. O/S wires under O/S door step trim.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White		
Fog Light	Red		
RH Flasher	Yellow		
RH Side Light	Green/white		
Brake Light	Green/yellow		
LH Side Light	Green/white		
Reverse	Red/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Ssangyong Rexton All 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			18/21 under car

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

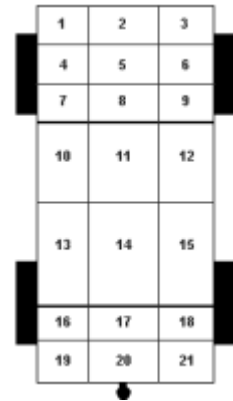
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow/blue		
Fog Light	Brown		
RH Flasher	Blue/yellow		
RH Side Light	White/green		
Brake Light	Yellow		21
LH Side Light	Yellow/black		
Reverse	Red/green		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
18 Wheel arch			
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

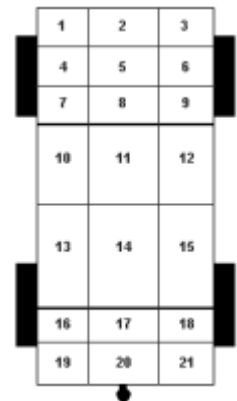
Best Wiring Location	Route to Battery	Fusebox Location
16 Behind side panel		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: See blue plug below window at 21 on estate
Fault condition: If you disconnect the rear clusters, the indicators will fail to work when you connect again. Power down, lock car and leave for 10 minutes - car will reset.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		19
Fog Light	Light green		16, 19
RH Flasher	Blue/yellow		21
RH Side Light	White/green		21
Brake Light	Yellow		21
LH Side Light	Red/brown		19
Reverse	Red/blue		16, 19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Subaru Forester AWD Estate 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Spare wheel or 21 Lamp

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

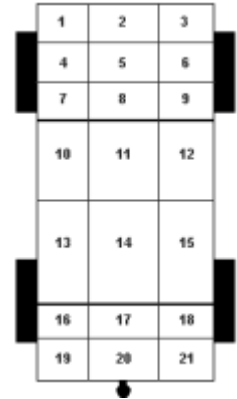
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet by wiper motor	Under bonnet & 12 dash

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/green		
Fog Light	Blue/yellow	Green/black	
RH Flasher	Green/black	Green/white	
RH Side Light	Red/yellow		
Brake Light	White/black		
LH Side Light	Red/yellow		
Reverse		Brown/yellow	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

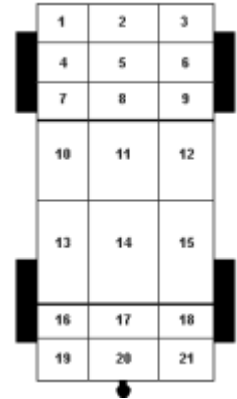
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Blue/white		
RH Flasher	Black/green		
RH Side Light	White/red		
Brake Light	White/black		
LH Side Light	White/red		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

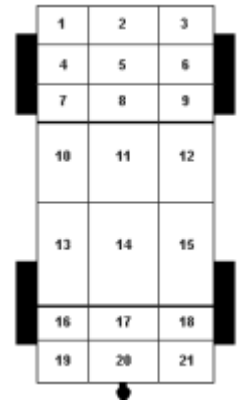
Best Wiring Location	Route to Battery	Fusebox Location
Multiplug light access cover	Grommet, clutch cable	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/green		
Fog Light	Red/blue		
RH Flasher	Light green/black		
RH Side Light	Black/blue		
Brake Light	White/black		
LH Side Light	Black/blue		
Reverse	Brown/yellow		15



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet, wheel well		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 side panel

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

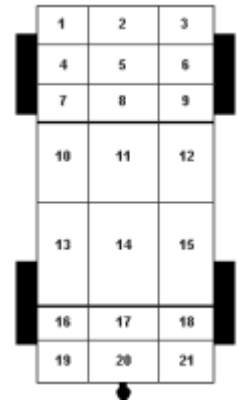
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/silver hoops		19
Fog Light	Red/silver hoops		21
RH Flasher	Red/green		21
RH Side Light	Blue/black		21
Brake Light	Brown/silver hoops		21
LH Side Light	Blue/black		19
Reverse	Brown/yellow		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Behind jack

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

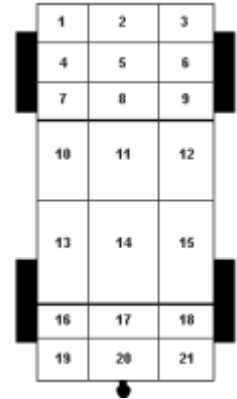
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light green		
Fog Light	Blue/yellow		
RH Flasher	Red/white		
RH Side Light	Red		
Brake Light	White/black	Black trace only	
LH Side Light	Red		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Subaru Legacy Outback - 2000 -2001

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Lamp

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

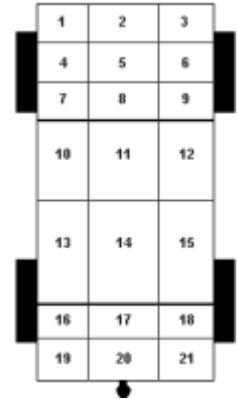
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Blue/purple		
RH Flasher	Blue		
RH Side Light	Green		
Brake Light	Red		
LH Side Light	Green		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
-			
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

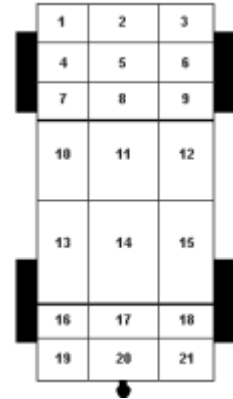
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		21
Fog Light	Black/green		21
RH Flasher	Blue/yellow		21
RH Side Light	Red/yellow		21
Brake Light	Green/white		21
LH Side Light	Red/yellow		21
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

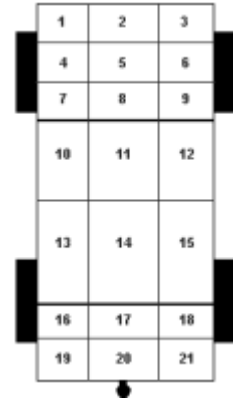
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Green/blue		
RH Flasher	Green		
RH Side Light	Red/yellow		
Brake Light	Green/white		
LH Side Light	Red/yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

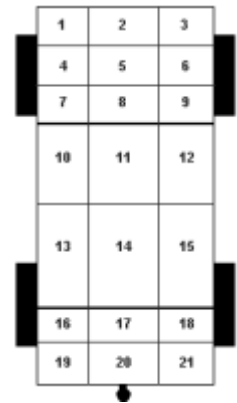
Best Wiring Location	Route to Battery	Fusebox Location
16,19 by jack		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
2006: wire at 21 Remove light carefully and evenly. Pull out rearwards

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red	2006 Green	19
Fog Light	Green/blue		21
RH Flasher	Green/yellow	2006 Green	21
RH Side Light	Red/yellow		21
Brake Light	Green/white		21
LH Side Light	Red/yellow		19
Reverse	Red		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommets rear panel		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

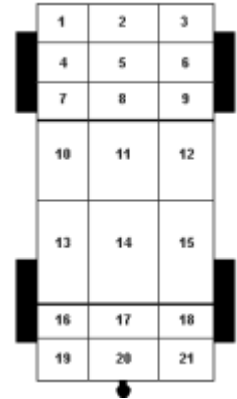
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Blue	Yellow	19,22
RH Flasher	Blue/yellow		
RH Side Light	Red/yellow		
Brake Light	Green/white		
LH Side Light	Red/yellow		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

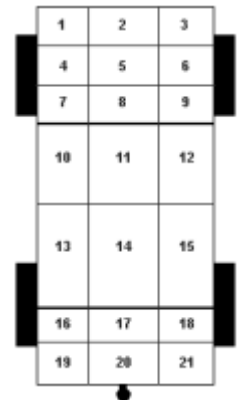
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Remove bumper before fitting

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Red/green		
Fog Light	Green		
RH Flasher	Green/yellow		
RH Side Light	Red/yellow		
Brake Light	Green/white		
LH Side Light	Red/yellow		
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Green/orange Location: Fusebox Add Fuse:

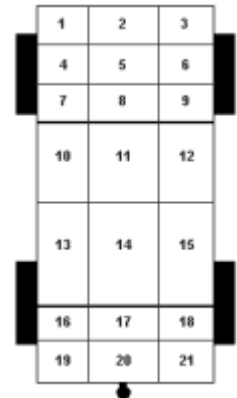
Best Wiring Location	Route to Battery	Fusebox Location
		Footwell RH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/yellow		
Fog Light	Red		
RH Flasher	Green/yellow	Blue/yellow	
RH Side Light	White/black	Red/yellow	
Brake Light	Blue/yellow	Green/white	
LH Side Light	White/black	Red/yellow	
Reverse	Brown/yellow		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Suzuki Samurai SWB 1991 -1996

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

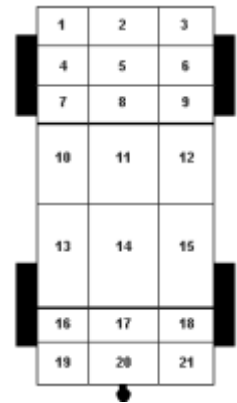
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Negative fog: use TF1011 to earth switch it. (See Practical Guide)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Suzuki Super Carry Van 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

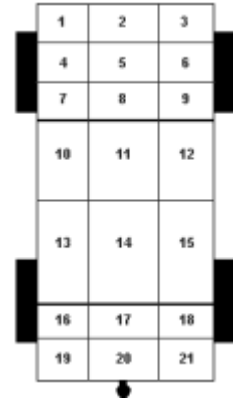
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Green/blue		
RH Flasher	Green/yellow		
RH Side Light	Red/gold		
Brake Light	Green/white		
LH Side Light	Red/gold		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Yellow/blue Location: 19 lamp Add Fuse:

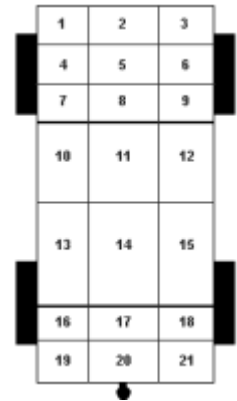
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Green/blue		
RH Flasher	Green/yellow		
RH Side Light	Red/green	Red/yellow	
Brake Light	Green/white		
LH Side Light	Red/blue		
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Suzuki Waggon RT 2WD/4WD 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
20 Grommet left of centre		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 10 Add Fuse:	Colour: Location: Add Fuse:

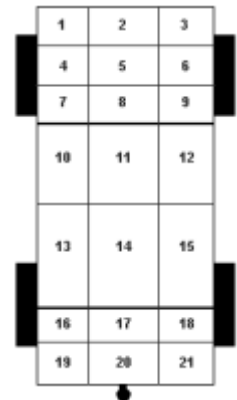
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: Don't leave the key in or the vehicle will immobilize after a short time - dealer reset required

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red		
Fog Light	Brown/yellow		
RH Flasher	Green/yellow		
RH Side Light	Red/black	Orange/yellow	
Brake Light	Green/white		
LH Side Light	Black/blue	Orange/yellow	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
See note below		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

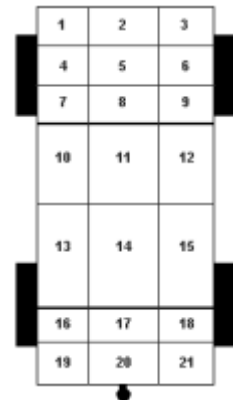
Best Wiring Location	Route to Battery	Fusebox Location
15 amp, slot 10	See note below	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: all wiring below chassis in ribbed plastic cover. Connect behind upper lights, away from water, etc.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Pink/black		
RH Flasher	Green		
RH Side Light	White		
Brake Light	Pink		
LH Side Light	Grey		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF2100T
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Behind rear cross member

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

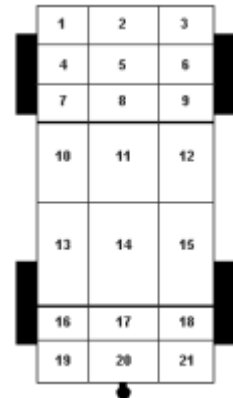
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Pink/black		
RH Flasher	Green		
RH Side Light	White		
Brake Light	Pink		
LH Side Light	Grey		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21		None	
----	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

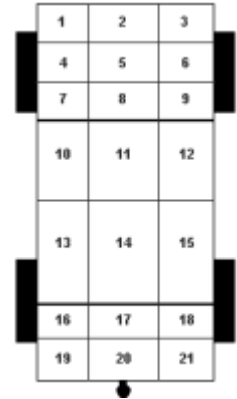
Best Wiring Location	Route to Battery	Fusebox Location
18, 21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red/yellow		18
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green		
Reverse	Red/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Toyota Auris All Spring 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommets in floor	2m		
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

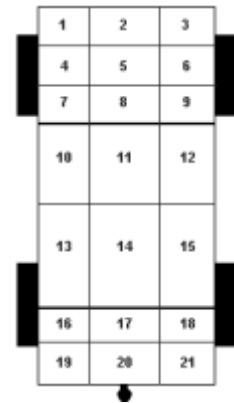
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Use red Scotchlocks or supersplice buzzer (TF1155) to match thin cables.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		19
Fog Light	Light blue		21
RH Flasher	Light blue		21
RH Side Light	Grey	Green	21
Brake Light	Dark blue		21
LH Side Light	Green		19
Reverse	Red		21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

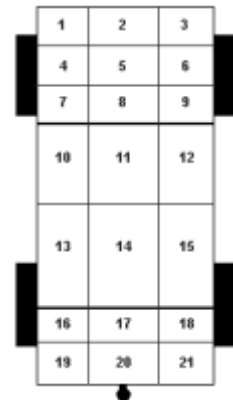
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wire battery side of multiplug to lights

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow	Thick	
Fog Light	Blue		19 8-way block, high
RH Flasher	Blue	Thick	
RH Side Light	Green		
Brake Light	Blue		
LH Side Light			
Reverse	Red		19 13-way block, high



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

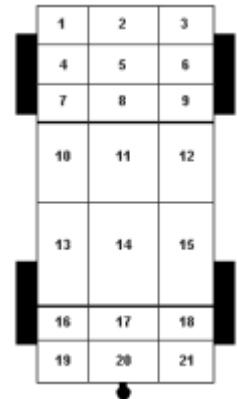
Best Wiring Location	Route to Battery	Fusebox Location
		10

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
ESTATE: Connect on feed side of plug to rear lights Thin purple is electric brake

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Grey		19
RH Flasher	Green		21
RH Side Light	Yellow		21
Brake Light	Orange		19
LH Side Light	Yellow		19
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Toyota Avensis Estate Spring 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

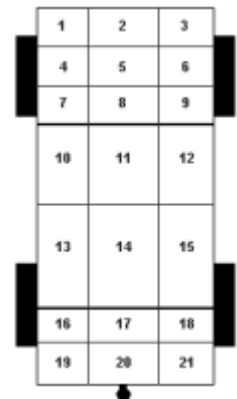
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp	Glove box (grommet behind)	Under bonnet

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
2006 All wires may be at 19 at the light cluster
Wiring: N/s flasher and reverse found under n/s door kick plate. O/s wires found running across spare wheel well. This is to save time removing side and rear panels.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/white		
Fog Light	Red/white		
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light			
Reverse	Red/black		13



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Stalk Add Fuse:	Colour: Location: Add Fuse:

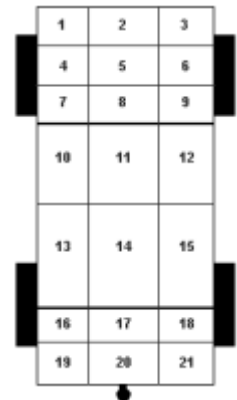
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black	Green/white	
Fog Light	Red/yellow	Verso: Blue/red 13 kick plate	
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green		
Reverse	Red/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Glove box (rear) Add Fuse:	Colour: Location: Add Fuse:

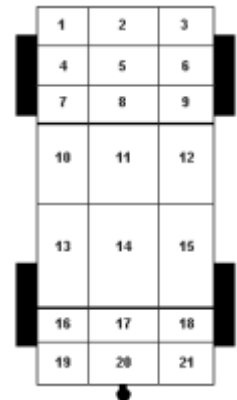
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
See alternative colour for brake, Hatch 2005

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/white		
Fog Light	Red/white	Blue/red 13 door plate	19 high up
RH Flasher	Green/yellow		
RH Side Light	Green		19 high up
Brake Light	Green/white	Green/white - silver dots	
LH Side Light	Green		19 high up
Reverse	Red/black		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19/21 Grommet	2m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

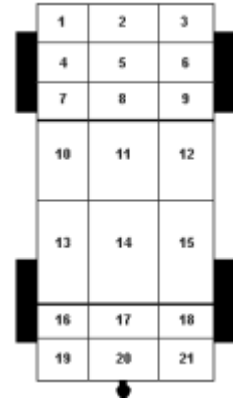
Best Wiring Location	Route to Battery	Fusebox Location
21	Grommet LH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red/silver		21
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green		
Reverse	Red/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Toyota Corolla Verso MPV May 2004 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

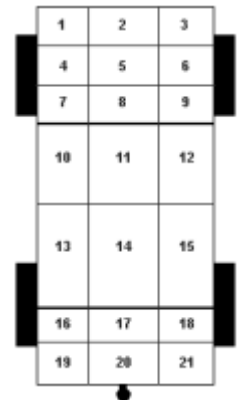
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: There is a plug in the main loom n/s that has 2 earth wires & Brake & side light wires. N/s trim panel should be loosened to gain access.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Red		
RH Flasher	Green		
RH Side Light	Grey/red spots		19 Plug
Brake Light	Blue/silver hoops		
LH Side Light	Grey		19 Plug
Reverse	Pink/silver hoops		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Toyota Hi Ace Powervan Late 1995 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Drill		None	
-------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

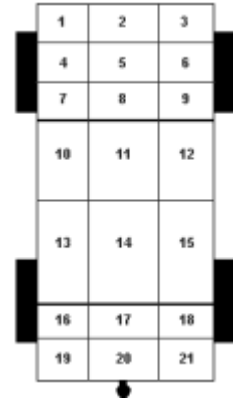
Best Wiring Location	Route to Battery	Fusebox Location
19/21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red/gold		21
RH Flasher	Green/yellow		
RH Side Light	Green/red		
Brake Light	Green/white		
LH Side Light	Green/red		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Toyota Hi Lux TY129 Pickup 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF2100T/TF2005T/TF115FL
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

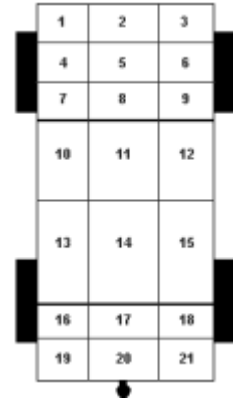
Best Wiring Location	Route to Battery	Fusebox Location
21 Under chassis		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Yellow/green		
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green		
Reverse	White		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Toyota Hilux 2/ Vigo Pickup 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	4.5m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

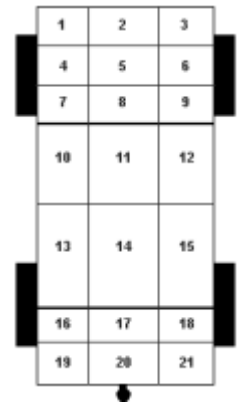
Best Wiring Location	Route to Battery	Fusebox Location
10 Under seat		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Toyota recommend bypass

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Pink		
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green		
Reverse	Red/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Toyota Hi-Lux Double-cab Pickup 1998 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet, 12 under seat		3-way: Stop & L/R tails	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

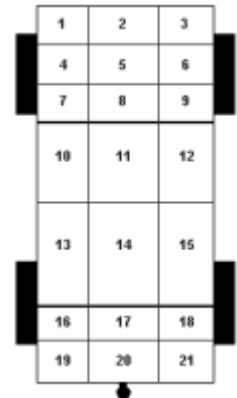
Best Wiring Location	Route to Battery	Fusebox Location
Multiplug, 12 under seat		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Yellow/green		
RH Flasher	Green/yellow		
RH Side Light	Green	Common L/R	
Brake Light	Green/white		
LH Side Light	Green	Common L/R	
Reverse	White	Thin	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Toyota Hi-Lux Vanette 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF2100T
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

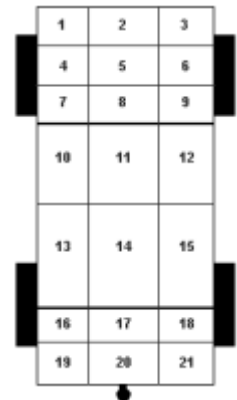
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Flasher relay on back of fuse board

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Yellow/green		
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green		
Reverse	White	Thick	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Toyota Landcruiser All 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet in floor		None	
---------------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Multiblock low by jack Add Fuse: 15	Colour: Location: Add Fuse:

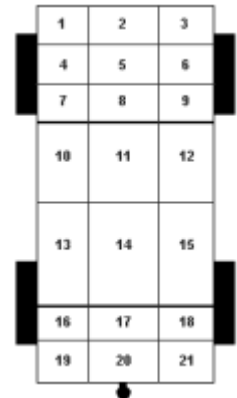
Best Wiring Location	Route to Battery	Fusebox Location
19 Multiblock		Under bonnet

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black	2003 fawn at lamp	
Fog Light	Red/yellow	2003 white/blue	19
RH Flasher	Green/yellow	2003 Blue/yellow	
RH Side Light	Green		
Brake Light	Green/white	2003 Green/white	
LH Side Light	Green		
Reverse	Red/black		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet in floor	2m		
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug 19 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Multiblock low by jack Add Fuse: 20	Colour: Location: Add Fuse:

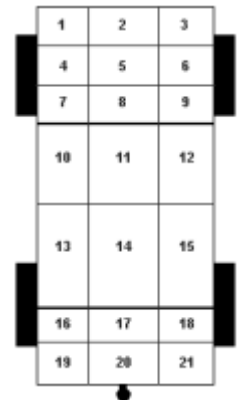
Best Wiring Location	Route to Battery	Fusebox Location Under bonnet

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Slot by Radio 2 is for constant live

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/black		19
Fog Light	Red/yellow		19
RH Flasher	Green/yellow		19
RH Side Light	Green		19
Brake Light	Green/white		19
LH Side Light	Green		19
Reverse	Red/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Toyota Landcruiser VX/Amazon May 1998 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF1152
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

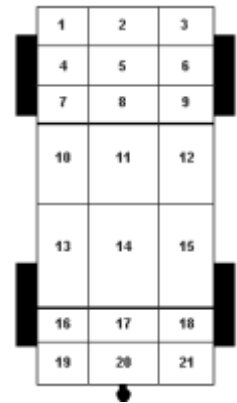
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: If immobilizer will not reset and car will turn over but not start, disconnect both battery negs for 2 minutes and try again.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/green		
Fog Light	Red/yellow		
RH Flasher	Green/yellow		
RH Side Light	Green	Common L/R	
Brake Light	Green/white		
LH Side Light	Green	Common L/R	
Reverse	Red/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Toyota Lucida All 1998 -1999

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

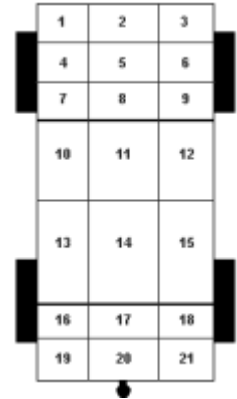
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light			
RH Flasher	Green/yellow		
RH Side Light			
Brake Light	Green/black	Thick	
LH Side Light	Green/black	Thin	
Reverse	Red/black		Loom to roof



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Mfr. Grommet		None	
--------------	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

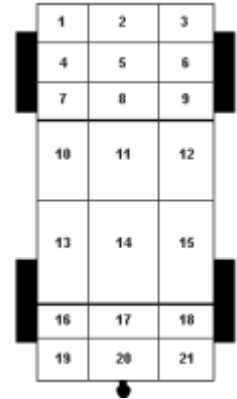
Best Wiring Location	Route to Battery	Fusebox Location
	Footwell, L/H (grommet)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red		15 under kick plate
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		21
LH Side Light	Green		
Reverse	Red/black		15 under kick plate



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19	12S: use 2m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

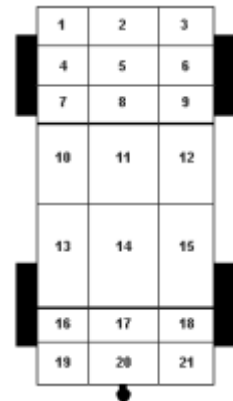
Best Wiring Location	Route to Battery	Fusebox Location
	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Fog & reverse wires are in the loom that runs over the roof lining. Remove 3 lining clips, unclip loom (just long enough to get fingers in to connect wires). Lead wires across roof lining and down LH rear pillar to the lamp cluster.
Wiring: Earlier Previa: best access is the interior lamp above the LH sliding door. This is also a tight loom clipped to the roof. Feed the wires back through the side lining using a pull through (welding wire).

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red		19 Roof lining
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green/yellow		
Reverse	Red/black		19 Roof lining



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19	12S: use 2m	None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 lamp Add Fuse:	Colour: Location: Add Fuse:

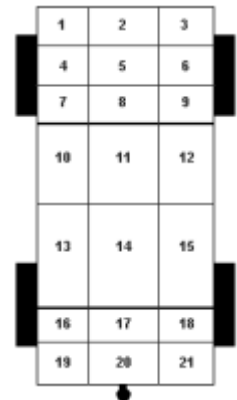
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red/blue		19 hinge grommet
RH Flasher	Green/white		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Toyota RAV 4 4WD 1994 - Summer 2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

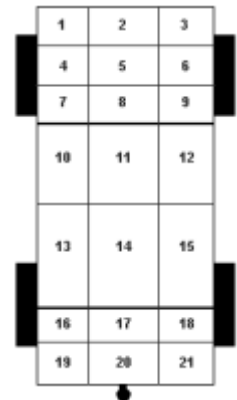
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: 3 plugs above speaker: bottom one has RH lights ; middle has fog (orange). LH flashers near door kick panel where loom splits.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light	Red		
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white		
LH Side Light	Green/red		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet rear floor		None	
-----------------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Black/white Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

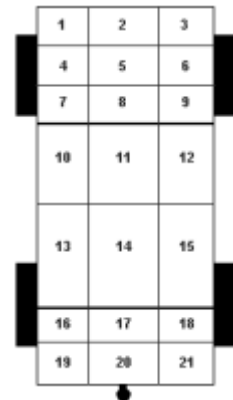
Best Wiring Location	Route to Battery	Fusebox Location
18, 21		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black	Green/yellow	
Fog Light	Red/black		
RH Flasher	Green/yellow		
RH Side Light	Green		
Brake Light	Green/white	Green/red	
LH Side Light	Green/red		
Reverse	Blue/red	Yellow/red	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

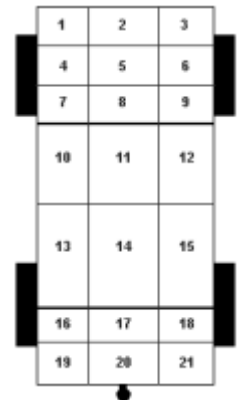
Best Wiring Location	Route to Battery	Fusebox Location
19 (21)	Glove box (grommet behind)	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
LED rear lights: bypass essential

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		
Fog Light	Blue		B9
RH Flasher	Blue	1 of 2	21
RH Side Light	Green		21
Brake Light	Blue		19
LH Side Light	Green		19
Reverse	Red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

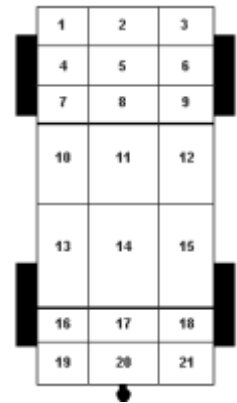
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		
Fog Light			
RH Flasher	Green/yellow		
RH Side Light	Green	brown rings	
Brake Light	Green/white		
LH Side Light	Green	Silver rings	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

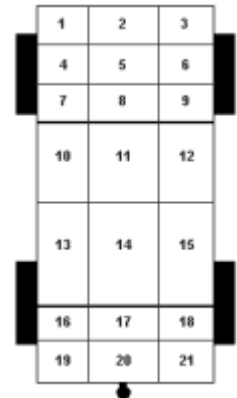
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black		21
Fog Light			
RH Flasher	Green/yellow		19
RH Side Light			
Brake Light	Green/white		19
LH Side Light	Green		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

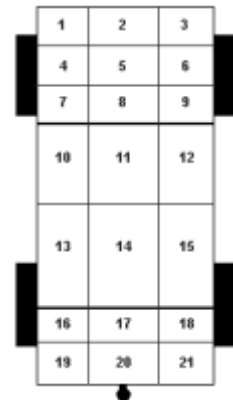
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		Glove box

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fusebox: 2nd box under bonnet, 4, behind air filter

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

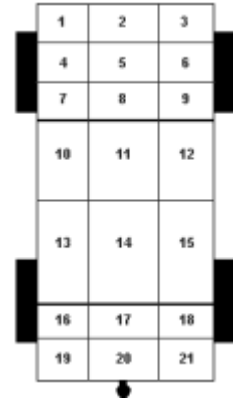
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black	Light green	
Fog Light	Red/black	Blue	
RH Flasher	Green/yellow	Yellow	
RH Side Light	Green	Grey	
Brake Light	Green/white	Light brown	
LH Side Light	Green		
Reverse	Red/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

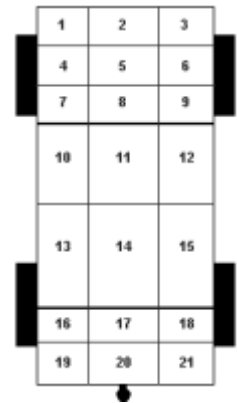
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Alt.col list below, is for 2008 model

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/red	Green/yellow	19
Fog Light	Brown/yellow	Red/blue	21
RH Flasher	Green/yellow	Blue/yellow	21
RH Side Light	Red/black	Red/yellow	21
Brake Light	Green/white	Green/white	21
LH Side Light	Red/yellow	Red/yellow	21
Reverse		Red	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox B+ contact Add Fuse:	Colour: Location: Add Fuse:

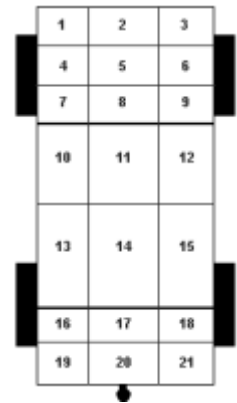
Best Wiring Location	Route to Battery	Fusebox Location
		Under bonnet LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Alternative colours are at lamp cluster

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Yellow		19
Fog Light	Orange	Brown	21
RH Flasher	Dark green	Yellow	21
RH Side Light	Grey	Blue	21
Brake Light	White	Red	21
LH Side Light	Brown	Blue	21
Reverse	Light green	Yellow	21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Astra All 1998 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet (pre 01: drill)		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			19 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

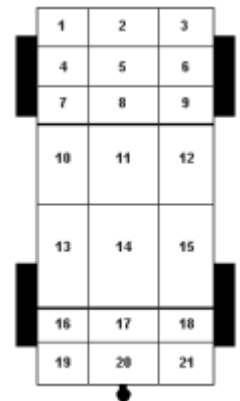
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Towing plug behind compartment door in LH of boot. Reverse is separate, taped to block. Wire loop on top is fog circuit: Put FCO relay in this line if you require fog cut out. <input type="checkbox"/> Fusebox OS behind pull-down tray. Try fuse position 33 for caravan supply

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black/blue		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/yellow		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet: number plate light		Ryder K VX001 kit	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

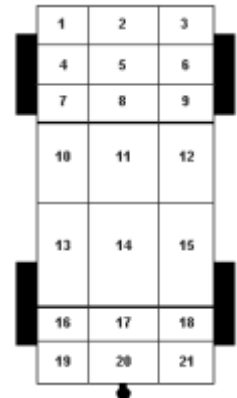
Best Wiring Location	Route to Battery	Fusebox Location
16, 19	Glove box (grommet behind)	Boot LHS 16/19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Best option is our plug-in kit K VX001. This activates automatic TSP NOTE that some base models do not have socket for plug-in kit. Details below are for fitting TF2217LOGIC
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.
Trailer Stability Programme: To activate, fit Kit K VX001

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Blue/black		
RH Flasher	Green/black		
RH Side Light	Black/yellow	Do not connect	
Brake Light	Black/yellow		
LH Side Light	Black/yellow	Do not connect	
Reverse	White/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Astra Hatchback 2010 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

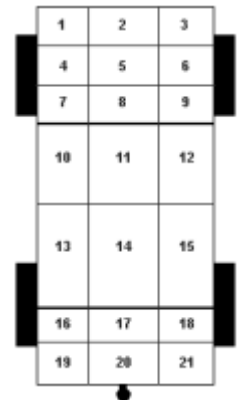
Best Wiring Location	Route to Battery	Fusebox Location
18, 21		Boot LHS 16/19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Brake lights and side lights are separate

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		19
Fog Light	Yellow/grey		19 pillar
RH Flasher	Blue/purple		21
RH Side Light	Purple/grey		19
Brake Light	Green/white		19
LH Side Light	Purple/grey		19
Reverse	Grey/green		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Astra Van 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Drill 19		None	
----------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

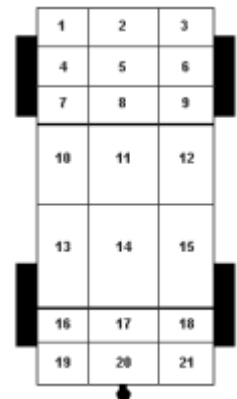
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Flashers: may auto monitor. Check for audible tone, digital text check on dash, altered flash rate if test board removed when flashing, etc
Towing plug behind compartment door in LH of boot. Reverse is separate, taped to block. Wire loop on top is fog circuit: Put FCO relay in this line if you require fog cut out. □ Fusebox OS behind pull-down tray. Try fuse position 33 for caravan supply

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black/blue		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/yellow		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Astramax Van Sept 1985 -1993

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

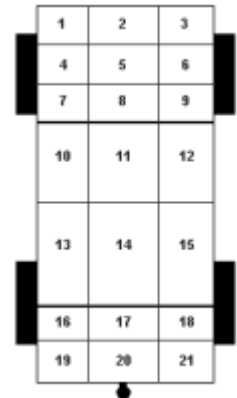
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

	2m	None	
--	----	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

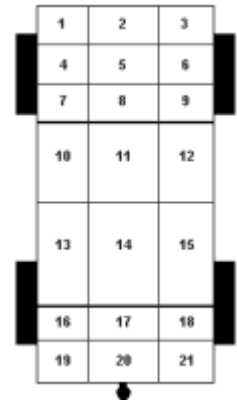
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black/blue		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/yellow		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse: Slot 33?	Colour: Location: Add Fuse:

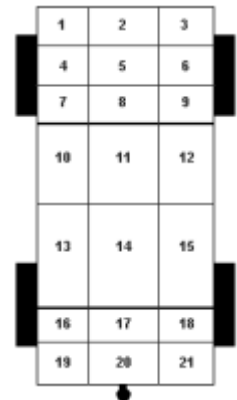
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black/blue		19
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/yellow		
LH Side Light	Grey/black		
Reverse	White/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Corsa All 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet rear floor		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Black Location: 21 Add Fuse:

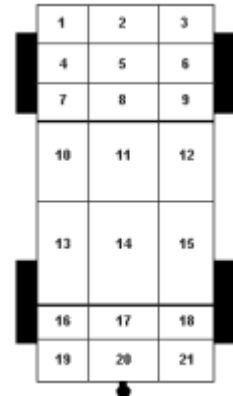
Best Wiring Location	Route to Battery	Fusebox Location
21	Down LHS	19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault warning: Do not switch ignition on unless light clusters are connected. Second fusebox behind glove box.
Wiring. Take the brake light signal from the high-level brakelight and the side light signal from the number plate light (TF2218/7LOGIC or TF2218)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		19
Fog Light	Blue/grey		21
RH Flasher	Blue/purple		21
RH Side Light	Green/grey	Number plate light	19 loom below lamp
Brake Light	Brown/yellow	To high level brake light	19 loom above lamp
LH Side Light	Grey/purple	Number plate light	19 loom below lamp
Reverse	Blue/purple		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Vauxhall/Opel Frontera 4WD 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			See note below

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

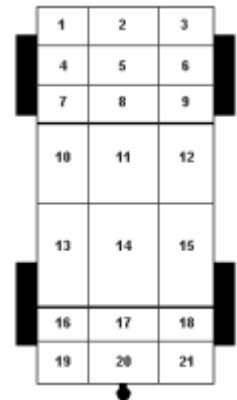
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Towing plug: SWB: Wiring plug on right behind panel. LWB: Wiring plug on left behind panel. <input type="checkbox"/> 2003: both in Jack comp
Flasher monitor: dash lamp works automatically if you use a Midwife (TF2001) or a Clone (TF2100) with the fourth pin inserted

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/black	Green/orange	
Fog Light	Red/green	Green/black	
RH Flasher	Green/white	Pink	
RH Side Light	Green/blue	Green/red	
Brake Light	Red	Green/yellow	
LH Side Light	Green/red	Orange	
Reverse		Red/yellow	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Insignia Sedan/Hatchback 2009 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
18 Wheel arch	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

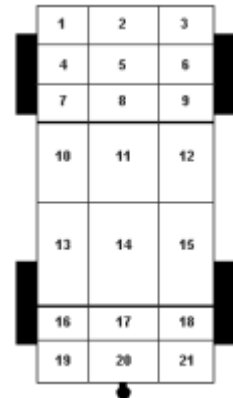
Best Wiring Location	Route to Battery	Fusebox Location
	Battery: (gasket behind)	Dash, L/H (10)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		
Fog Light	Brown/blue		
RH Flasher	Blue		
RH Side Light	Red/grey		
Brake Light	Yellow		
LH Side Light	Purple/silver		
Reverse	Green/white		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Vauxhall/Opel Insignia Sports/Tourer 2009 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor	2m	TF2218/7SMARTLOGIC	TF120AVX or TF1313VX plug-in: but see note!
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

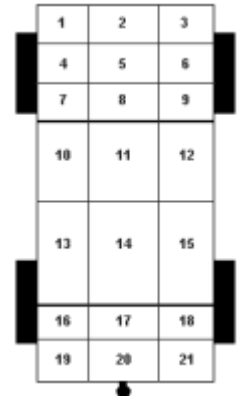
Best Wiring Location	Route to Battery	Fusebox Location
19/21 in pillars	Battery: (gasket behind)	Dash, L/H (10)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Tailgate lights go out when hatchback is opened and lights on the pillars take over. Wire to both sets using a diode bridge, TF2601.
VX: Fitting TF120AVX/TF1313VX Towing type module already fitted. Modules marked "AD" or "AH" are OK. Use TF120AVX or TF1313VX and dealer recode Module marked "AE" has to be replaced with "AH" or use Ryder TF2301GM

**Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data**

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		19
Fog Light	Yellow/grey		21
RH Flasher	Blue/red		21 mid height
RH Side Light			
Brake Light	Yellow		19
LH Side Light	Purple/silver		19
Reverse	Green/white		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Dimple on back panel		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

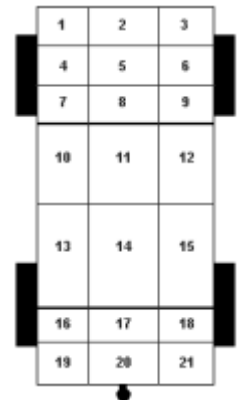
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Blue/black		
RH Flasher	Green/black		
RH Side Light	Grey/red		
Brake Light	Yellow/black		
LH Side Light	Green/black		19
Reverse	White/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Monterey 4WD 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	TF2100T
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Behind rear cross member

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

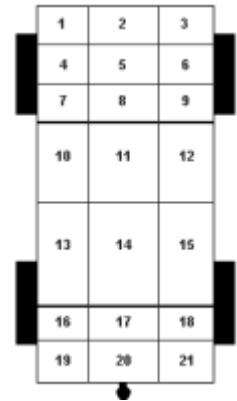
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	2m	None	TF2100T/TF2005T/TF115FL
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			See note below

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

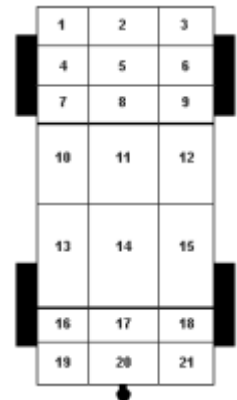
Best Wiring Location	Route to Battery	Fusebox Location
19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Towing plug each side in tail door pillar behind bottom large plastic grommet.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green	2006 Green/red	
Fog Light	Brown	2006 Red/orange	21
RH Flasher	Purple	White/red	
RH Side Light	Blue	Blue/red	
Brake Light	White	Grey	21
LH Side Light	Blue	Blue/red	
Reverse	Purple		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Boot: multiblock Add Fuse: Slot 16	Colour: Location: Add Fuse:

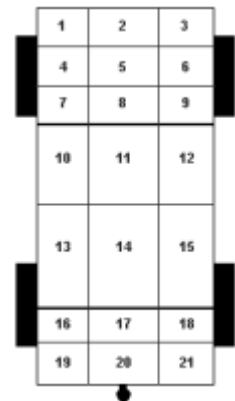
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Fault condition: If there are problems with TF1170 (smart combi) because of air conditioning there is a power feed and ignition switched feed under the near side back seat to run TF116 (ignition-switched) combi.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black/blue		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/yellow		
LH Side Light	Green/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 under car (exposed)

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

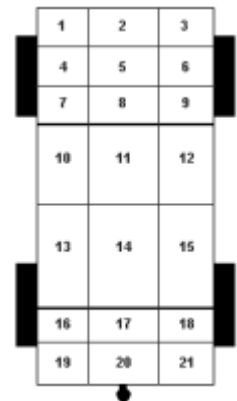
Best Wiring Location	Route to Battery	Fusebox Location
19	Grommet LH bulkhead	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
7-core access via large grommet with existing loom. If a shock-absorber pressure pump is fitted, it covers this grommet but it is easy to remove (1 bolt & 2 nuts).

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light blue		
Fog Light	Red	1 of 2	
RH Flasher	Dark blue		
RH Side Light	Black	White	
Brake Light	White		
LH Side Light	Black	Blue	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Vectra All 1999 -2001

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		See note below	
------------	--	----------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse: Slot 16	Colour: Location: Add Fuse:

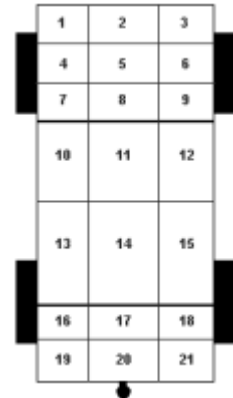
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Flashers: may auto monitor. Check for audible tone, digital text check on dash, altered flash rate if test board removed when flashing, etc
Bypass: On some cars brake and reverse share a fuse. When a caravan with reversing lamps reverses and brakes, the fuse will blow. Fit a bypass relay on the brake circuit.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black/blue		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/yellow		
LH Side Light	Grey/black		
Reverse	White/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Vauxhall/Opel Vectra and Signum All 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 16 multiblock Add Fuse: Slot 13	Colour: Location: Add Fuse:

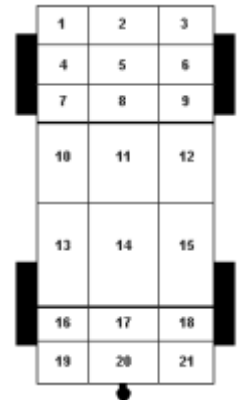
Best Wiring Location	Route to Battery	Fusebox Location
		16

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Brakes alternative: Wire to high level brake light: white (blue) insert in block in fusebox @ 16. One of four or 5 black wires. Test for correct wire to high level brakelight Connect side light signal wires as shown below.
Fault condition: If you find a delay on the trailer brake lights, go to the battery for power
WARNING: Under NO circumstances use any of the red feed wires to th controller in the rear of the car. They are lead wires to the computer control system.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black/blue		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/yellow	See Note above	
LH Side Light	Grey/black		
Reverse	White/black		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

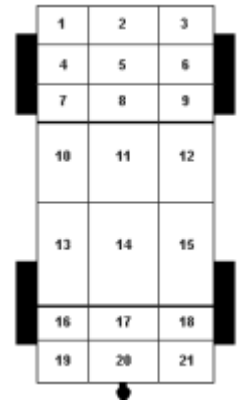
Best Wiring Location	Route to Battery	Fusebox Location
16, 19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
White multiplug for Fog & rev (Top left & right slots) found in grey area of fuse box,
Wiring: Brake & side lights share the same wire. Connect ONLY the brake signal wire from the TF2218/7 SmartLogic bypass to this wire. Relay will switch both side and brake outputs correctly.
WARNING: Under NO circumstances use any of the red feed wires to th controller in the rear of the car. They are lead wires to the computer control system.
Brakes alternative: Wire to high level brake light: white (blue) insert in block in fusebox @ 16. One of four or 5 black wires. Test for correct wire to high level brakelight Connect side light signal wires as shown below.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black		See note
RH Flasher	Green/black		
RH Side Light	Black/yellow	Loom: grey/red	
Brake Light	Black/yellow	Multiblock: black/grey	
LH Side Light	Black/yellow	Loom: grey/black	
Reverse	Black		See note



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Vivaro All 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Fog-light grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

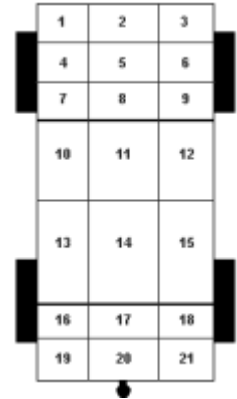
Best Wiring Location	Route to Battery	Fusebox Location
19 cover, top of pillar		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Orange	Pink	
Fog Light	Violet	1 of 4	
RH Flasher	Cream		
RH Side Light	Blue	1 of 2	
Brake Light	Violet	1 of 4	
LH Side Light	Blue	1 of 2	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Vauxhall/Opel Zafira MPV 1999 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		Brake circuit	Fog (Only has low fuse)
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			21

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Trailer plug Add Fuse: Slot 16 or 33	Colour: Location: Add Fuse:

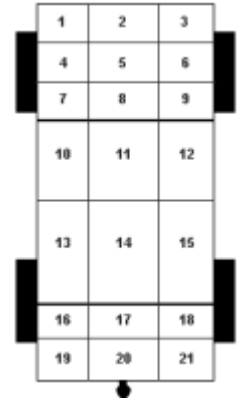
Best Wiring Location	Route to Battery	Fusebox Location
	Grommet RH bulkhead	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Black/blue	Bypass	
RH Flasher	Green/black		
RH Side Light	Red/grey		
Brake Light	Black/yellow	Bypass	
LH Side Light	Grey/black		
Reverse	White/black		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

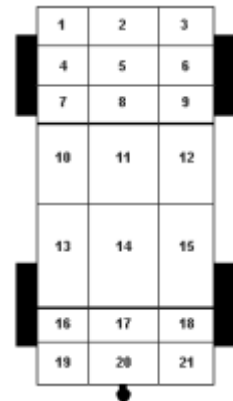
Best Wiring Location	Route to Battery	Fusebox Location
		Boot LHS 16/19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.
Brakes alternative: Wire to high level brake light: Black/yellow wire in connector block above fusebox at 16. Connect side light signal wires to number plate light lead, grey/green, same connector.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/white		
Fog Light	Blue/black		
RH Flasher	Green/black		
RH Side Light	Grey/green	See Note above	16 multiblock
Brake Light	Black/yellow	See Note above	16 multiblock
LH Side Light	Grey/green	See Note above	16 multiblock
Reverse	White/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Volkswagen Beetle All 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		None	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 13 behind seat Add Fuse:	Colour: Location: Add Fuse:

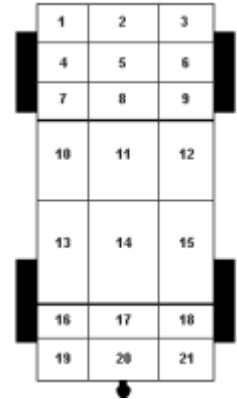
Best Wiring Location	Route to Battery	Fusebox Location
19/20 behind plastic trim		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/orange		
LH Side Light	Grey/black		
Reverse	Black/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Volkswagen Bora Saloon Late 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

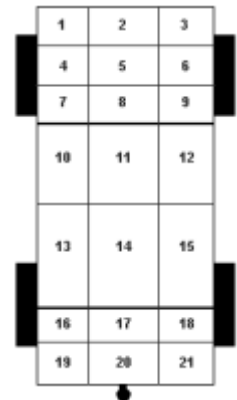
Best Wiring Location	Route to Battery	Fusebox Location
16, 19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Bumper removed with 11 Torx fixings including 3 in each wheel arch. Remove light clusters to access 1 fixing each side

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		16, 19
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19/21 drain plugs		None	
-------------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

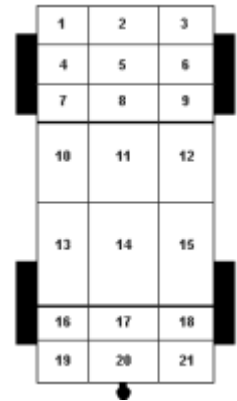
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse	Black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 Grommet		4-way: All but flashers	
------------	--	-------------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

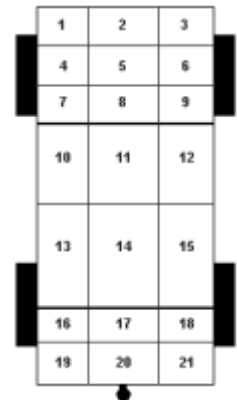
Best Wiring Location	Route to Battery	Fusebox Location
21	Along chassis - protect with convoluted tubing	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse	Black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Volkswagen Caravelle Vanette 2002 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 Add Fuse:	Colour: Location: Add Fuse:

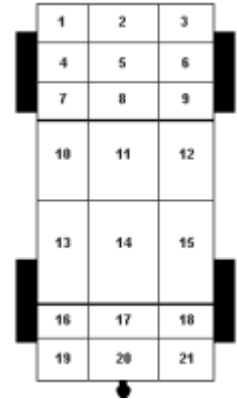
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Black/grey		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Volkswagen Crafter Van -2007

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 (21 in Estate) Grommet in floor	3m	TF2218/7SMARTLOGIC	
------------------------------------	----	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

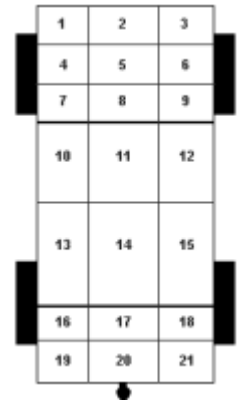
Best Wiring Location	Route to Battery	Fusebox Location
19 and high up		Under seat: 12

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/black		
Fog Light	Grey/brown		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Volkswagen Eos Coupe Late 2007 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
Grommet: number plate light		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox, rear Add Fuse:	Colour: Location: Add Fuse:

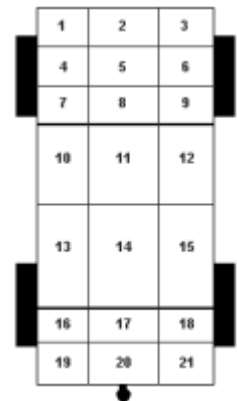
Best Wiring Location	Route to Battery	Fusebox Location
19		12

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share the same wire ((Red/black) Connect ONLY the brake signal wire from the TF2218/7Sart Logic to this wire. Relay will switch both side and brake outputs correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light		Do not connect	
Brake Light	Black/red		
LH Side Light		Do not connect	
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

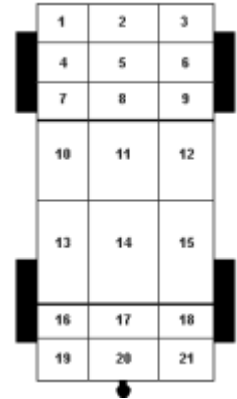
Best Wiring Location	Route to Battery	Fusebox Location
21 behind pocket		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	White/grey		21
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Black/grey		
Reverse	Black/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 under shelf: beware washer pipe Add Fuse:	Colour: Location: Add Fuse:

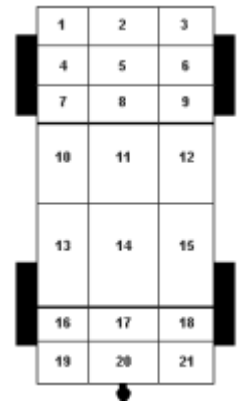
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: side light wires - 2 on either side. One either side carries brake signal (see colours below). TF2218/7(S/P) essential.
Replace lamp clusters before testing

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	White	Grey/white	Loom to tailgate LHS
RH Flasher	Black/green		
RH Side Light	Grey/yellow		
Brake Light	Black/purple	Black/red: loom to tailgate	
LH Side Light	Grey/black		
Reverse	Black/blue		Loom to tailgate LHS



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Volkswagen Golf V Plus MPV Autumn 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

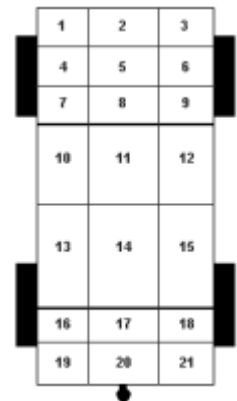
Best Wiring Location	Route to Battery	Fusebox Location
21	Grommet LH bulkhead	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
To access grommet in the bulkhead n/s drop trim in footwell. To fit TF2217 use high level brake & number plate light .

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	White	Grey/white	16 Tailgate
RH Flasher	Black/green		
RH Side Light	Grey/yellow	Grey/red	
Brake Light	Black/purple		
LH Side Light	Grey/black		
Reverse	Black/blue		16 Tailgate



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Volkswagen LT Van 1996 -2000

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2100M special	Not TF2100M from 2001
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

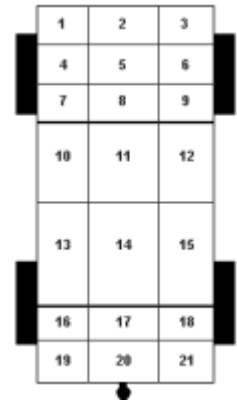
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 below lamp cluster		1-way: reverse	
-----------------------	--	----------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Steering column (under) Add Fuse:	Colour: Location: Add Fuse:

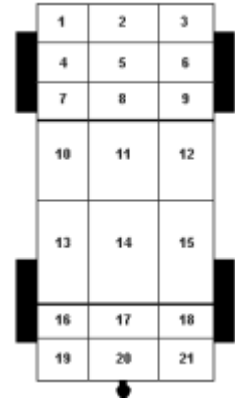
Best Wiring Location	Route to Battery	Fusebox Location
19		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: Use single bypass on reverse to protect fuse
Power bus bar under the dash: remove the bolt-on section of the dash to access: unclip fusebox cover, + 3 screws and unclip top on both sides of st.wheel.Estate has live point at the cig/power point at 21. Red. To access pull down trim cover.
Wiring: connect using spare slots in cluster connectors

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Volkswagen Passat All 2004 -2005

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 below lamp cluster		TF2218/7SMARTLOGIC	
-----------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Black Location: 23 Add Fuse:	Colour: Location: Add Fuse:

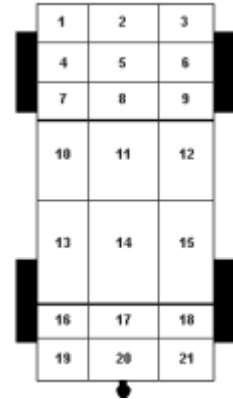
Best Wiring Location	Route to Battery	Fusebox Location
21		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Grey/black		19
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Volkswagen Passat Saloon etc Late 2005 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2302 SmartCAN	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

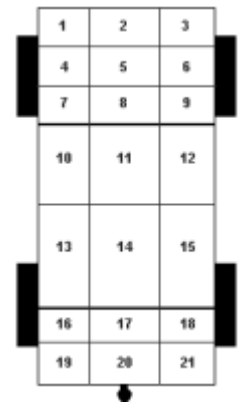
Best Wiring Location	Route to Battery	Fusebox Location
21	Power tab on back of fuse board	Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
This car has trailer stability programme. Best option is to fit our TF2302 SmartCAN. Fusebox at 9 is protected by large fuses on vertical bulkhead in front of fusebox under bonnet at 4.
Data below refers to bypass fitting only. For SmartCAN fitting, see SmartCAN Data
Wiring: See blue plug below window at 21 on estate
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black		19
Fog Light	Black/red	Pink/blue on estate	19 hinge (21 estate)
RH Flasher	Black/green		21
RH Side Light		Do not connect	See note
Brake Light	Black/blue		
LH Side Light		Do not connect	See note
Reverse	Grey/white		19 hinge gaiter



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

Car Data Sheet

Volkswagen Polo Hatchback Spring 2001 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		None	
--	--	------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

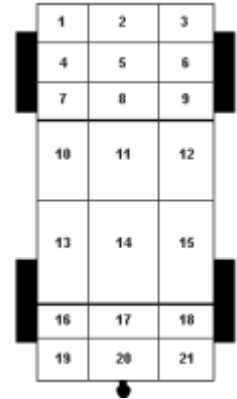
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Volkswagen Sharan MPV 1995 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

20 Grommet		? 7-way	
------------	--	---------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Rear lighter socket Add Fuse:	Colour: Location: Add Fuse:

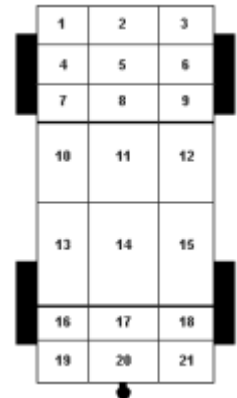
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white	1 of 2	
Fog Light	Grey/white		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/white	1 of 2	
LH Side Light	Grey/white		
Reverse	Blue/red		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Volkswagen T5 Chassis Cab 2003 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
	4m if going to cab	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Battery Add Fuse:	Colour: Location: Add Fuse:

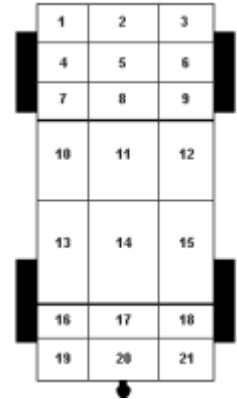
Best Wiring Location	Route to Battery	Fusebox Location
10 Under seat		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/green		
RH Flasher	Black/green		
RH Side Light	Grey/red		
Brake Light	Black/red		
LH Side Light	Grey/black		
Reverse	Black/blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

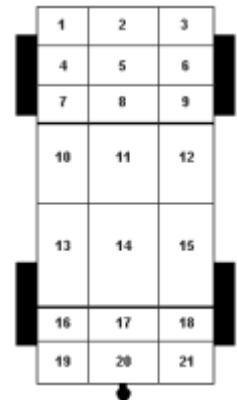
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wire to O/S rear BEFORE refitting bumper. Fit relay below light cluster behind moulded panel above bumper.
Bypass: indicators digitally controlled. No fuses for indicators or brakes. Bypass these (TF1013) or all (TF2218/7LOGIC)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	Grey/green		
RH Flasher	Green/black		
RH Side Light	Red/grey		
Brake Light	Red/black		
LH Side Light	Grey/white		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
18 Wheel arch	2m	TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

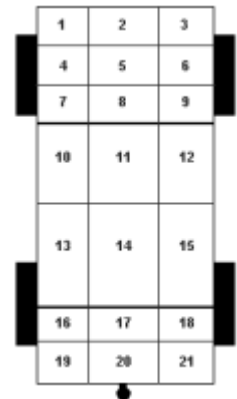
Best Wiring Location	Route to Battery	Fusebox Location
19/21	Grommet above brake pedal	12

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Brake & side lights share the same wire ((Red/black) Connect ONLY the brake signal wire from the TF2218/7Sart Logic to this wire. Relay will switch both side and brake outputs correctly.
Fog light connection at 16/19 on pillar
Bumper: Disconnect plugs for rev sensor and rev light before removing bumper

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Grey/green		16-17 under headlining
RH Flasher	Black/green		21
RH Side Light		Do not connect	
Brake Light	Black/pink	Black/purple	21
LH Side Light	Black/yellow	Do not connect	19
Reverse	Black/blue	Grey/white	21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 grommet behind air vent		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Boot Add Fuse:	Colour: Location: Add Fuse:

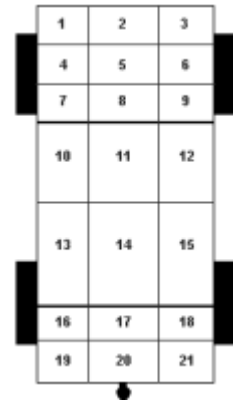
Best Wiring Location	Route to Battery	Fusebox Location
19, 21 Lamps		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
4 hrs. Rear seats and side panels at 13, 16 and 19 to be removed, Wires 300mm from floor. Look in fusebox for live take-off.
Wiring: Brake & side lights share one wire. Connect red wire only from relay to run both circuits. Do not connect thin brown or black. All lamps will work correctly.
Replace lamp clusters before testing

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		
Fog Light	White/yellow		
RH Flasher	Black/green	1 of 2	
RH Side Light	Black/white	Grey/red	
Brake Light	Red/black		See note
LH Side Light	Grey/black		
Reverse	Black/green	1 of 2	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 18 Add Fuse:	Colour: Location: Add Fuse:

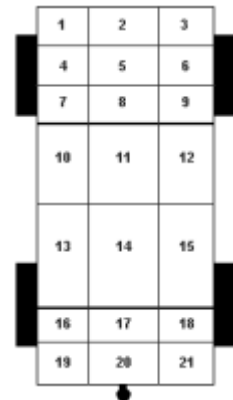
Best Wiring Location	Route to Battery	Fusebox Location
21	Under seat: 10	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Warning: Take lights out carefully and evenly to avoid damage to trim and surrounds

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Black/white		19
Fog Light	Grey/white		21
RH Flasher	Black/green		
RH Side Light	Grey		
Brake Light	Grey/brown		
LH Side Light	Grey		
Reverse	Brown/blue	Blue/black?	21



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Volkswagen Transporter T4 Van -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

21 grommet behind air vent		None	
----------------------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

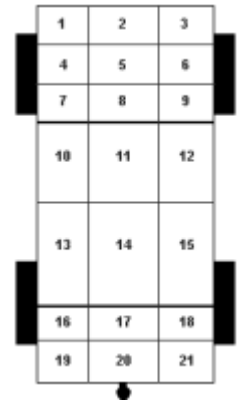
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	White/black		
Fog Light	Grey	Blue	
RH Flasher	Green/black		
RH Side Light	Grey/red		
Brake Light	Red/black		
LH Side Light	Black/grey		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour:	Colour:
Location:	Location:
Add Fuse:	Add Fuse:

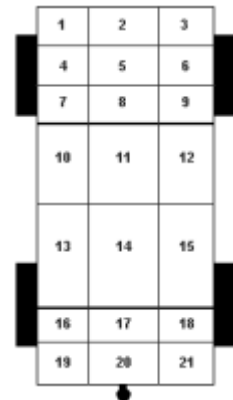
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Volvo download creates a fog cut out function for towing.

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

Car Data Sheet

Volvo 850 Saloon etc All 2000 -

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			19 Multiblock

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse: Slot 16	Colour: Location: Add Fuse:

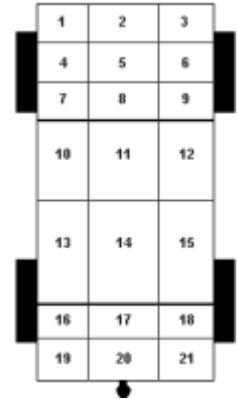
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher			
Fog Light			
RH Flasher			
RH Side Light			
Brake Light			
LH Side Light			
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

WebXeL Data Solutions 2001 <http://www.webxel.com>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse: Slot 14, 40 amps	Colour: Location: Add Fuse:

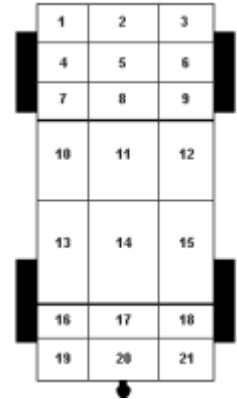
Best Wiring Location	Route to Battery	Fusebox Location
		Under bonnet LH

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		19
Fog Light	Green/yellow		21
RH Flasher	Blue/red		21
RH Side Light	Orange		21
Brake Light	Orange/black		21
LH Side Light	Orange/white		19
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			21 one black, one yellow

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Yellow plug Add Fuse: Slot 16	Colour: Blue/yellow Location: Yellow plug Add Fuse:

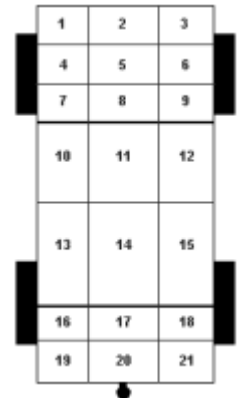
Best Wiring Location	Route to Battery	Fusebox Location
		Under bonnet

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Purple/white		Yellow plug
RH Flasher	Blue/green		
RH Side Light	Grey		
Brake Light	Yellow		
LH Side Light	White		
Reverse	Blue		Yellow plug



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

19 Grommet		3-way: Stop & L/R tails	
------------	--	-------------------------	--

Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
---	------------------	----------------------	-------------------

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse: Slot 16	Colour: Yellow/red Location: 19 Add Fuse:

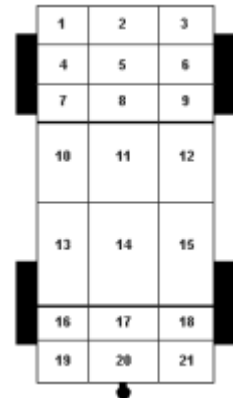
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/yellow		
Fog Light	Blue		Multiblock
RH Flasher	Yellow/brown		
RH Side Light	Grey		
Brake Light	Green/red	Brown/black in m'block	
LH Side Light	Grey		
Reverse	Purple/white	Brown/orange in m'block	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor <input type="checkbox"/>	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse:	Colour: Location: Add Fuse:

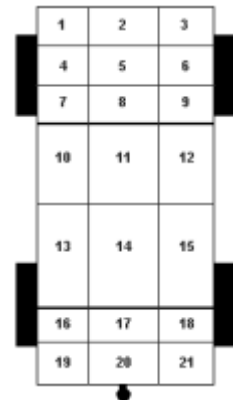
Best Wiring Location	Route to Battery	Fusebox Location
21 lamp		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Bring opposite flasher and tail light leads across to connection point

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light blue		
Fog Light	Green/yellow		
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Orange/black		
LH Side Light	Orange		
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Grommet		None	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

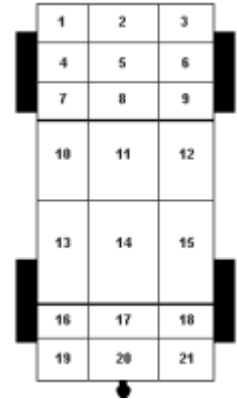
Best Wiring Location	Route to Battery	Fusebox Location
16 Behind side panel		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Light blue		
Fog Light	Green/yellow		
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Orange/black		
LH Side Light	Orange		
Reverse	Green/black		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet in boot floor		See note below	
-----------------------	--	----------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse: Slot 9, 15amps	Colour: Blue Location: Fusebox Add Fuse: Slot 15, 20 amp

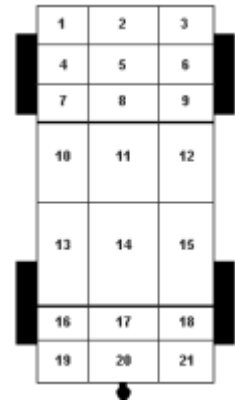
Best Wiring Location	Route to Battery	Fusebox Location
19	Boot	Boot LHS 16/19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Pink	Bypass	
RH Flasher	Green/white		
RH Side Light	Grey		
Brake Light	Yellow		
LH Side Light	White		
Reverse	Blue		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet in boot floor		See note below	
-----------------------	--	----------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Fusebox

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse: Slot 15, 15amp	Colour: Location: Add Fuse:

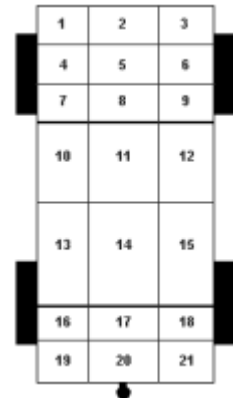
Best Wiring Location	Route to Battery	Fusebox Location
		Boot

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Purple/white		
RH Flasher	Blue/green		
RH Side Light	Red/green		
Brake Light	Black/grey		
LH Side Light	Red/white		
Reverse	Blue	Bypass	



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet in boot floor		None	
-----------------------	--	------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Behind rear panel

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Multiblock Add Fuse: Slot 9, 15amps	Colour: Location: Add Fuse:

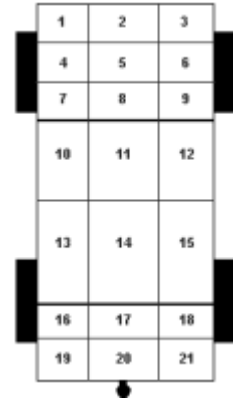
Best Wiring Location	Route to Battery	Fusebox Location
	Boot	Boot LHS 16/19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Pink		19 Main loom
RH Flasher	Green/white		
RH Side Light	White		
Brake Light	Yellow		
LH Side Light	Grey		
Reverse	Blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet in boot floor		TF2218/7SMARTLOGIC	
-----------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			See note below

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Multiblock Add Fuse: Slot 9, 15amps	Colour: Yellow Location: Multiblock Add Fuse:

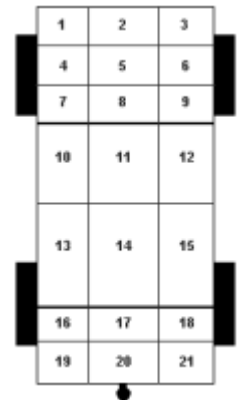
Best Wiring Location	Route to Battery	Fusebox Location
	Boot	

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Towing plug behind rear panel but not on 54 model. On 54 plate find all wires on n/s 19
Manufacturer's towing plugs are reported not to be in vehicles from late 2004, a full bypass is now required.(TF2217LOGIC)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Pink		21 loom
RH Flasher	Green/white		
RH Side Light	Grey		Multiblock
Brake Light	Yellow		
LH Side Light	White	Grey/white	Multiblock
Reverse	Blue		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 Grommet		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 19 Add Fuse:	Colour: Location: Add Fuse:

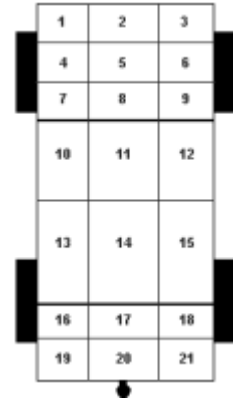
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		Dash, R/H (12)

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue/green	Blue/yellow	19
Fog Light	Blue		16
RH Flasher	Yellow/brown		
RH Side Light			
Brake Light	Brown/black	Green/red	19
LH Side Light	Grey/black	Green/orange	19
Reverse	Green/orange		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: 21 Add Fuse: Slot 77 15 amp	Colour: Location: Add Fuse:

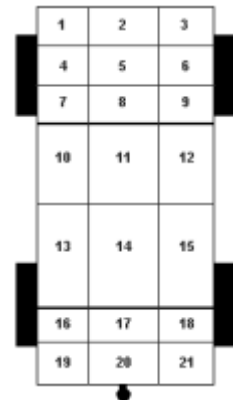
Best Wiring Location	Route to Battery	Fusebox Location
19 Lamp		Dash

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
WARNING: AIR BAG WIRES FOUND IN N/S LOOM (ORANGE/BLACK) SAME AS TOP BRAKE LIGHT WIRE

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Blue		
Fog Light	Green/yellow		
RH Flasher	Blue/red		
RH Side Light	Orange		
Brake Light	Orange/black		
LH Side Light	Orange	See Note above	
Reverse	Green/black		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
--------------------	---------------------	--	-------------------------

Grommet in boot floor		TF2218/7SMARTLOGIC	
-----------------------	--	--------------------	--

Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			Behind rear panel

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Multiblock Add Fuse: Slot 9, 20amps	Colour: Yellow Location: Multiblock Add Fuse: Slot 15, 15amp

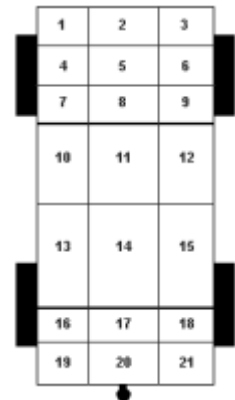
Best Wiring Location	Route to Battery	Fusebox Location
		Boot

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Manufacturer's towing plugs are reported not to be in vehicles from late 2004, a full bypass is now required.(TF2217LOGIC)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
 These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Pink		behind rear panel
RH Flasher	Green/white	Blue/green?	
RH Side Light	Grey/white	2005: Grey	
Brake Light	Yellow/grey	2005: Yellow	
LH Side Light	Red/white	White	
Reverse	Blue		



Ryder Towing Equipment Ltd
 Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

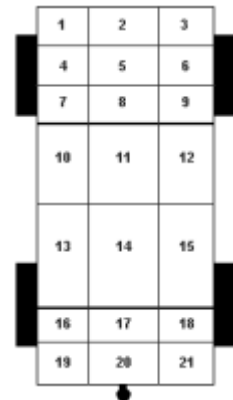
Best Wiring Location	Route to Battery	Fusebox Location
		19 or 21

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Wiring: Lower brake lights stop working when boot is closed. Wire to high level

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/orange		19
Fog Light	Brown/green	Thin	19
RH Flasher	Green/orange		21
RH Side Light	White/orange		21
Brake Light	Grey/brown	Thinner of two	19
LH Side Light	Purple/green		19
Reverse	Green/brown	Thin	19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
19 (21 in Estate) Grommet in floor	2m	TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Fusebox Add Fuse:	Colour: Location: Add Fuse:

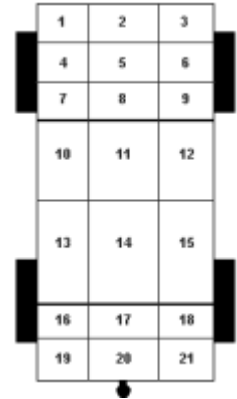
Best Wiring Location	Route to Battery	Fusebox Location
19		19

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green/orange		19
Fog Light	White/blue		21
RH Flasher	Green/orange		21
RH Side Light	Yellow/black		21
Brake Light	Purple/brown	1 of 2	19
LH Side Light	Purple	Thin	19
Reverse	Green/brown		19



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
		TF2218/7SMARTLOGIC	TF2218/7SMARTLOGIC
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

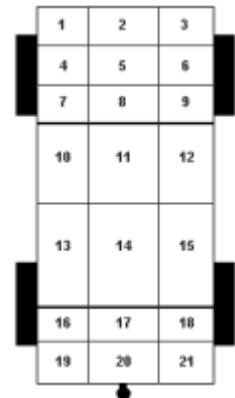
Best Wiring Location	Route to Battery	Fusebox Location

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
High level brake light, reverse and fog are found under the head lining at the top of the LH pillar. Loom is under panel by courtesy light
Wiring: Lower brake lights stop working when boot is closed. Wire to high level

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Grey/orange		
Fog Light			
RH Flasher	Green/orange		
RH Side Light			
Brake Light	Yellow/grey		
LH Side Light	Mauve/green		
Reverse			



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>

7-Core Entry Point	Longer 7 Core Cable	Bypass Recommended If TF2302, see SmartCAN data	Other Relay Recommended
21 Multiblock under car		TF2218/7SMARTLOGIC	
Automatic Trailer Flasher Monitor	Reversing Sensor	Cut Out Switch, etc.	Mfr's Towing Plug
<input checked="" type="checkbox"/>			

Find Constant Live	Find Ignition-Switched Live
Colour: Location: Add Fuse:	Colour: Location: Add Fuse:

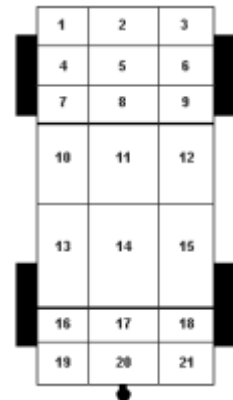
Best Wiring Location	Route to Battery	Fusebox Location
16, 19		

Choose power source carefully. On cars with power management (ID by battery condition in display) do not go to the battery.

Fitting times, etc. Notes
Manufacturer's towing plugs are reported not to be in vehicles from late 2004, a full bypass is now required.(TF2217LOGIC)

Wire positions and connection points etc are given. Use probe to identify correct wire in location.
These notes relate fitting bypass relay. For TF2302 SmartCAN, see SmartCAN Data

Lights	Vehicle Wire Colours	Alternative	Location
LH Flasher	Green		
Fog Light	Pink		
RH Flasher	Green/white		
RH Side Light	White	Grey	
Brake Light	Yellow		
LH Side Light	Grey	Grey/white	
Reverse	Blue		



Ryder Towing Equipment Ltd
Quality, Service, Innovation

Tel: 0161 430 1120 Fax: 0161 430 8140 Web: <http://www.rydertowing.co.uk>