



VOLVO S40 (04-), V50 2012 & C30, C70 (06-) 2013

WIRING DIAGRAM 2012/2013



TP 39250202

Table of Contents 1:3

Vehicles with SRS (Airbag)/SIPS bag/IC (Inflatable curtain).....	2
Electrical distribution 1:2.....	9

Fuses

Distribution box in engine compartment F1-F10.....	11
Distribution box in engine compartment F11-F20.....	12
Distribution box in engine compartment F21-F31.....	13
Distribution box in engine compartment F32-F34.....	14
Distribution box in engine compartment F35-FH1.....	15
Main fuse box battery.....	16
Fuse holder midi.....	17
Central Electronic Module (CEM) F43-F48.....	18
Central Electronic Module (CEM) F49-F61.....	19
Central Electronic Module (CEM) F62-F69.....	20
Central Electronic Module (CEM) F73-F85.....	21
Central Electronic Module (CEM) F86.....	22
Battery PF1-PF2.....	23

Relays

Ignition switch and relays.....	24
Distribution box in engine compartment R1-R14.....	25
Engine compartment.....	26
Central electronic module (CEM) R15-R18.....	27
Central electronic module (CEM) R1-R11B.....	28
Other relays.....	29

Ground connections

Overview.....	30
31/3 - 31/10 cont.....	31
31/10 - 31/12.....	32
31/66 - 31/67.....	33
31/80 - 31/107.....	34
31/110 - 31/115.....	35
31/116 - 31/132.....	36
Grounded to chassis.....	37

Control modules

Overview locations.....	38
Overview designations.....	39
Central electronic module (CEM) 1:2.....	40
Data communication, Low speed CAN 1:2.....	42
Data communication high speed CAN.....	44
Data communication MOST.....	45
Data communication, LIN 1:2.....	46
Ignition switch (SCU).....	48
Accessory electronic module (AEM).....	49

Group 26 Cooling system

Cooling fan.....	50
------------------	----

Group 27 Engine controls

Cruise control 4-Cyl.	51
Cruise control 5-Cyl.	52
Start/stop function.....	53

Group 28 Ignition system/control system

Engine management system, 4-Cyl. 1.6l 1:2.....	54
Engine management system, 4-Cyl. 2.0l 1:2.....	56
Engine management system, 5-Cyl. Turbo 1:2.....	58
Engine management system Diesel, 4-Cyl. 1.6l D4162T 1:2.....	60
Engine management system Diesel, 5-Cyl. 2.0l 1:3....	62
Emission control 4-Cyl. 1.6l.....	65
Emission control 4-Cyl. 2.0l.....	66
Emission control 5-Cyl.....	67

Group 32 Alternator and voltage regulator

Power supply 4-Cyl.....	68
Power supply 5-Cyl.....	69

Group 33 Starting system

Starting system 4-Cyl.....	70
Starting system 5-Cyl.....	71

Group 35 Lighting

High and low beam.....	72
Active headlight, (Dual Xenon).....	73
Running/Parking light, Tail lights S40/V50.....	74
Running/Parking light, Tail lights (Dual Xenon) S40/V50.....	75
Running/Parking lights, Tail lights C30/C70.....	76
Running/Parking lights, Tail lights (Dual Xenon) C30/C70.....	77
Brake lights S40/V50.....	78
Brake lights C30/C70.....	79
Reversing lights S40/V50.....	80
Reversing lights C30/C70.....	81
Fog lights S40/V50.....	82
Fog lights C30/C70.....	83
Fog lights RHD Japan S40/V50.....	84
Fog lights RHD Japan C30/C70.....	85
Interior lighting C30/S40/V50 1:2.....	86
Interior lighting C70 1:2.....	88
Follow-me-home lighting.....	90
Instrument and control illumination.....	91
Auxiliary lights.....	92

Table of Contents 2:3

Group 36 Additional electrical equipment

Direction indicator and Hazard warning flashers S40/V50	93
Direction indicator and Hazard warning flashers (Dual Xenon) S40/V50	94
Direction indicator and Hazard warning flashers C30/C70	95
Direction indicator and Hazard warning flashers (Dual Xenon) C30/C70	96
Wiper/washer windshield	97
Washer headlights	98
Wiper/washer rear window C30/V50	99
Rain sensor	100
Parking assistance	101
Keyless vehicle C30/S40/V50 1:2	102
Keyless vehicle C70 1:2	104
Immobilizer/Steering column lock (SCL)	106
Horn	107
Anti-theft alarm C30	108
Anti-theft alarm S40/V50	109
Anti-theft alarm C70	110
Alcohol lock	111
Accessory Electronic Module (AEM) C30	112
Accessory Electronic Module (AEM), S40/V50/C70	113

Group 37 Wiring and fuses

12V outlet C30/S40/V50	114
12V outlet, C70	115
Diagnostics system	116
Cable harness towbar/tow hitch 4-pin S40/V50	117
Cable harness towbar/tow hitch 4-pin C30	118
Cable harness towbar/tow hitch 7-pin S40/V50	119
Cable harness towbar/tow hitch 7-pin C30/C70	120
Cable harness towbar/tow hitch 13-pin S40/V50/C70	121
Cable harness towbar/tow hitch 13-pin C30	122
Accessory USB unit (AUU)	123

Group 38 Instruments

Driver information module	124
Seat belt reminder C30/S40/V50	125
Seat belt reminder C70	126

Group 39 Other

Audio C30/S40/V50	127
Alternative connection audio S40/V50	128
Audio C70	129
Audio High Performance/Premium Sound C30/S40/V50 1:2	130

Audio High Performance/Premium Sound C70 1:2 ...	132
Cellular phone 1:2	134
Multimedia & Traffic information	136
Satellite radio	137
Subwoofer C70	138
Navigation system, portable	139
Bluetooth	140
Bluetooth Handsfree, internal amplifier	141
Bluetooth Handsfree, external amplifier	142
Bluetooth Handsfree & AUU, internal amplifier	143
Bluetooth Handsfree & AUU, external amplifier	144
Bluetooth Handsfree with AEM, internal amplifier, LHD	145
Bluetooth Handsfree with AEM, internal amplifier, RHD	146
Bluetooth Handsfree with AEM, external amplifier, LHD	147
Bluetooth Handsfree with AEM, external amplifier, RHD	148

Group 43 Transmission

Automatic transmission AW55-51	149
Automatic transmission AWF21	150
Transmission M66	151
Automatic transmission MPS6	152

Group 59 Brake system

Brake control system & STC	153
Brake control system & DSTC	154

Group 64 Steering

Speed dependent power steering	155
--------------------------------------	-----

Group 83 Doors and openings

Central locking front doors C30/S40/V50	156
Central locking rear doors S40/V50	157
Central locking C70	158
Central locking trunk lid/tailgate C30	159
Central locking trunk lid/tailgate S40/V50	160
Central locking trunk lid/tailgate C70	161
Central locking storage compartment C70	162
Child safety lock S40/V50	163
Central locking fuel filler flap	164
Signal receiver central locking C30/S40/V50	165
Signal receiver central locking C70	166
Power windows front doors C30/S40/V50	167
Power windows C70	168
Power windows rear doors S40/V50	169
Power sunroof C30/S40/V50	170
Power roof C70	171

Table of Contents 3:3

Group 84 Exterior decorative elements, etc.

Power door mirrors C30/S40/V50.....	172
Power door mirrors C70.....	173
Heated door mirrors.....	174
Heated rear window.....	175
Blind spot information system.....	176

Group 85 Interior equipment

Power driver's seat with memory function LHD S40/V50.....	177
Power driver's seat with memory function RHD S40/V50.....	178
Power driver's seat with memory function LHD C30/C70.....	179
Power driver's seat with memory function, RHD C30/C70.....	180
Power driver's seat LHD.....	181
Power driver's seat RHD.....	182
Power passenger seat LHD S40/V50.....	183
Power passenger seat RHD S40/V50.....	184
Heated seats.....	185

Group 87 Climate control system

Climate control system, 4-Cyl. Gasoline 1:2.....	186
Climate control system, Diesel 1.6l 1:2.....	188
Climate control system, 5-Cyl. 1:2.....	190
Climate control system PTC-elements.....	192
Parking heater, auxiliary heater.....	193
Relay, electric engine heater.....	194
Electric engine heater Flexifuel.....	195

Group 88 Internal equipment

Supplemental restraint system C30/S40/V50 1:2.....	196
Supplemental restraint system C70 1:2.....	198
Rear-view mirror with automatic dimming.....	200
Remote control garage opening.....	201

Connectors 202

Branching points240

Cable harness routing in vehicle

Engine harness, gasoline 4-Cyl.1.6l.....	252
--	-----

Engine harness, gasoline 4-Cyl.2.0l.....	252
Engine harness, gasoline 5-Cyl. Turbo.....	253
Engine harness, Diesel 1.6l.....	253
Harness engine, Diesel 2.0l.....	254
Engine compartment harness, 4-Cyl.....	255
Engine compartment harness, 5-Cyl.....	255
Harness dashboard, LHD.....	256
Harness Dashboard, RHD.....	256
Floor harness, C30 LHD.....	257
Floor harness, C30 RHD.....	258
Floor harness, S40 LHD.....	259
Floor harness, S40 RHD.....	260
Floor harness, V50 LHD.....	261
Floor harness, V50 RHD.....	262
Floor harness, C70 LHD.....	263
Floor harness, C70 RHD.....	264
Roof harness, C30.....	265
Roof harness, S40.....	265
Roof harness, V50.....	266
Roof harness, C70.....	266
Tunnel harness, C30/S40/V50.....	267
Tunnel harness, C70.....	267
Driver's door harness, C30.....	268
Passenger door harness, C30.....	268
Driver's door harness, S40/V50.....	269
Passenger door harness, S40/V50.....	269
Driver's door harness, C70.....	270
Driver's door harness supplement, C70.....	270
Passenger door harness, C70.....	271
Passenger door harness supplement, C70.....	271
Harness rear door, right S40/V50.....	272
Harness rear door, left S40/V50.....	272
Rear side panel harness, left C70.....	273
Rear side panel harness, right C70.....	273
Trunk lid/tailgate harness, C30.....	274
Trunk lid/tailgate harness, S40.....	274
Trunk lid/tailgate harness, V50.....	275
Trunk lid/tailgate harness, C70.....	275

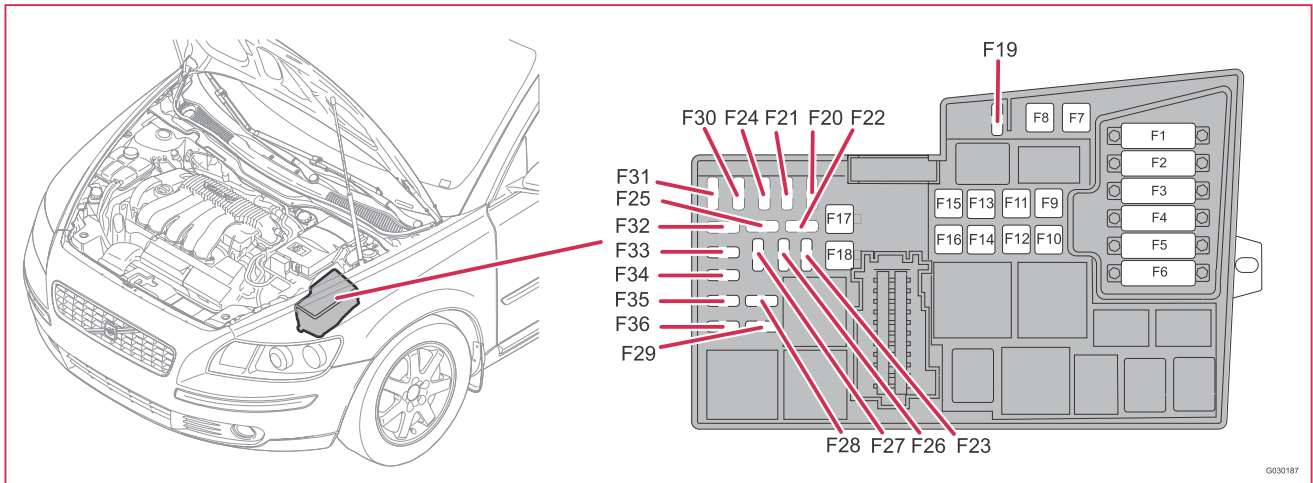
Component illustrations276

Index 1:2331

List of components 1:7333

Fuses

Distribution box in engine compartment F32-F34

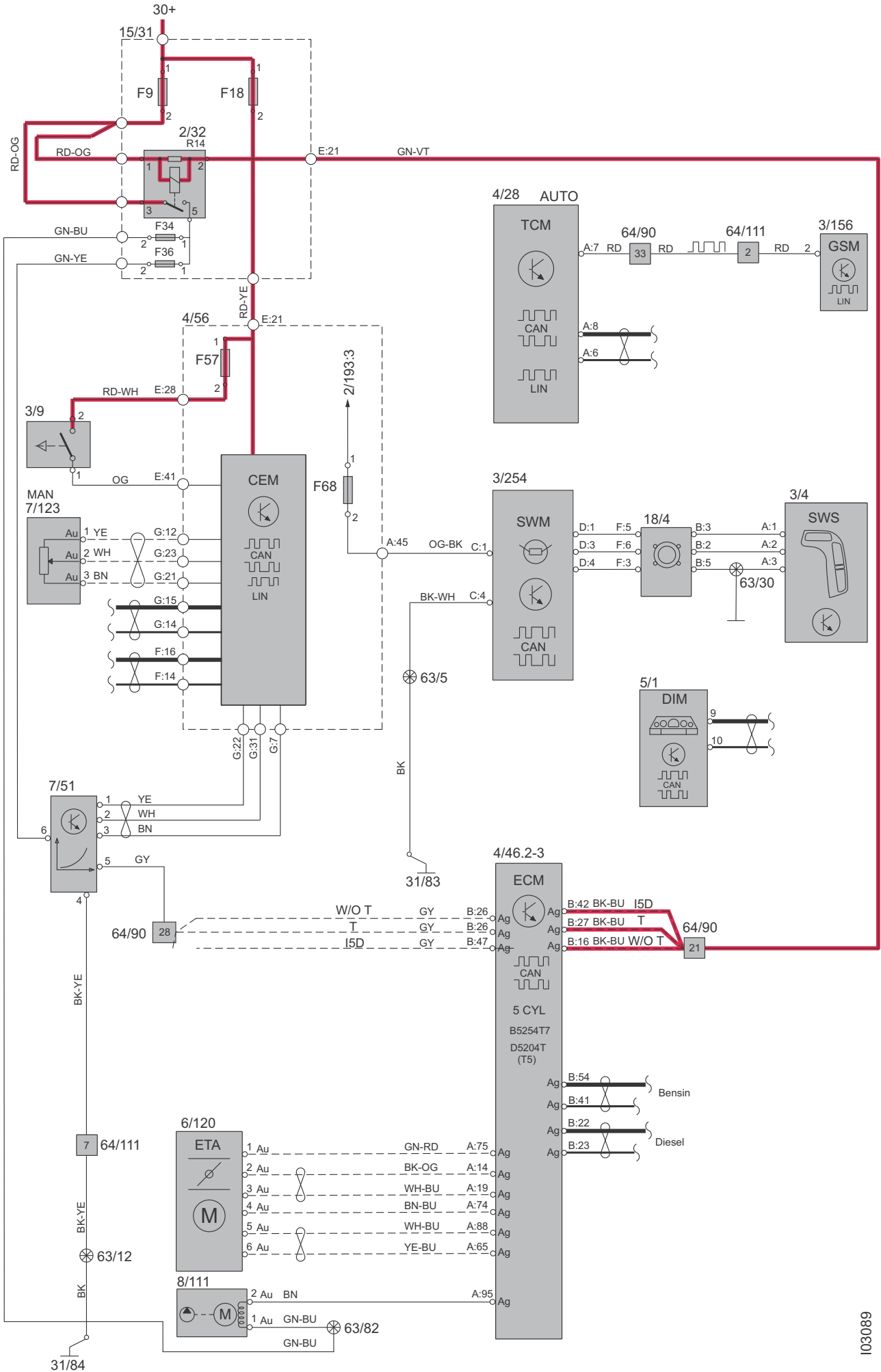


15/31 Distribution box in engine compartment

No.	Fuse function	via	A
F32	2/14 Relay, glow plug system 6/143 Regulator motor, Turbo 7/15 Front heated oxygen sensor, 4-Cyl. 7/17 Mass air flow sensor (MAF), 5-Cyl. Diesel 7/82 Rear heated oxygen sensor, 4-Cyl. 8/6-8/10 Injection valves, 5-Cyl. 8/11 Control valve fuel flow	- - - - - -	10
F33	2/133 Relay vacuum pump 4/46 Engine Control Module (ECM), 5-Cyl. Diesel 6/114 Vacuum pump, 5-Cyl. 7/15 Front heated oxygen sensor, 5-Cyl. 7/82 Rear heated oxygen sensor, 5-Cyl. Turbo 8/84 Switch, vacuum pump 9/38 Heated fuel filter, 4-Cyl. Diesel	- - 2/133 - - - -	20
F34	2/35 Relay starter motor, 1.6l Diesel 2/242 Battery relay, 1.6l Diesel 2/243 Secondary battery relay, 1.6l Diesel 2/239 Relay coolant pump, 1.6l Diesel 4/46 Engine control module (ECM), 1.6l Diesel 4/109 Glow plug control module (GCU), 5-Cyl. 7/15 Front heated oxygen sensor 4-Cyl. 8/6-8/9 Injection valves, 1.6l. 8/111 Fuel flow control valve, 1.6l Diesel 8/119 Pressure monitor, climate control system, 5-Cyl. 8/120 EGR valve, 5-Cyl. Diesel 8/133 Control valve fuel pressure 20/3 -20/7 Spark plug and ignition coil 20/17 Transformer, ignition coils, 1.6l.	2/247 - - - 2/247 - - - - - - - -	10
continues			

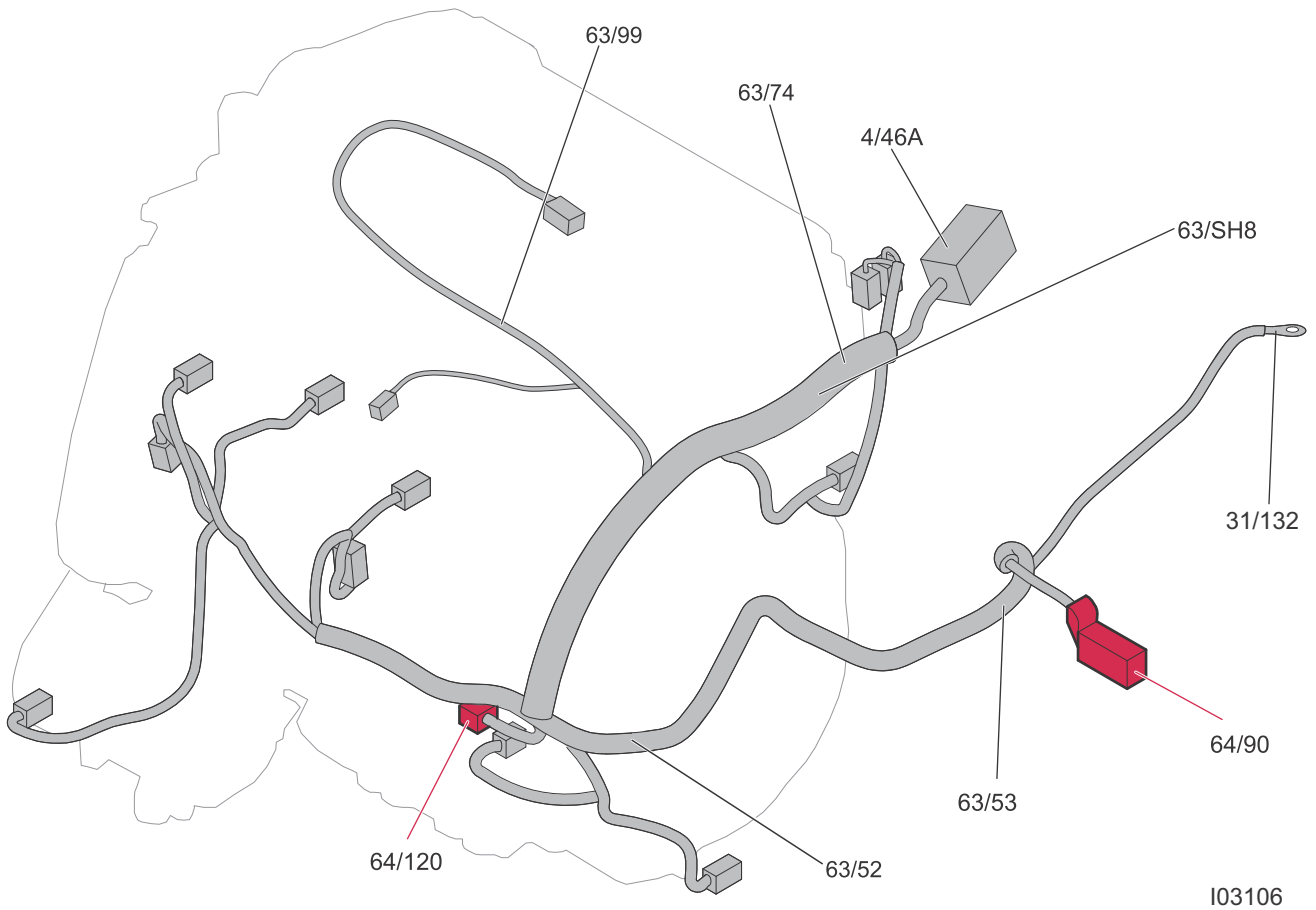
Group 27 Engine controls

Cruise control 5-Cyl.



103089

Cable harness routing in vehicle
Engine harness, gasoline 4-Cyl.1.6l



Cable harness routing in vehicle
Engine harness, gasoline 4-Cyl.2.0l

