



Volvo V70
(2013-2014)



Wiring Diagrams and Electric Model Year 2014



VOLVO V70 (08-), XC70 (08-) & S80 (07-)

WIRING DIAGRAM 2014



TP 39264202 Structure week 13w20

Table of Contents 1:3

Explanations	6
How to use the wiring diagrams 1:2.....	7

Electrical distribution

Overview without Start/stop function	9
Overview with Start/stop function	10
Overview, Distribution box in engine compartment	11
Overview, Distribution box in passenger compartment	12
Overview, Distribution box in cargo compartment	13

Fuses

Distribution box in engine compartment F1-F7	14
Distribution box in engine compartment F8-F21	15
Distribution box in engine compartment F22-F31	16
Distribution box in engine compartment F32-F37	17
Distribution box in engine compartment F38	18
Distribution box in engine compartment F38-F39	19
Distribution box in engine compartment F39-F44	20
Central electronic module (CEM) F1-F3	21
Central electronic module (CEM) F4-F14	22
Central electronic module (CEM) F15-F24	23
Passenger compartment.....	24
Distribution box in passenger compartment F1-F17	25
Distribution box in passenger compartment F18-F24	26
Distribution box in passenger compartment F25-F30	27
Distribution box in cargo compartment FA1-FA11	28
Distribution box in engine compartment, cold zone F1-MF2	29
Battery PF1-PF2	30

Relays

Relays in the engine compartment	31
Relays in the engine compartment	32
Relays in passenger compartment	33
Relays in cargo compartment	34

Ground connections

Overview	35
31/2 - 31/6	36
31/7 - 31/10	37
31/10 - 31/15	38
31/47 - 31/65	39
31/66 - 31/83	40
31/84 - 31/90	41
31/93 - 31/XX4	42
31/XX10 - 31/AL	43

Control modules

Overview locations	44
Overview designations	45
Central Electronic Module (CEM) 1:3	46
Data communication high speed CAN	49
Data communication high speed CAN, 4-Cyl.	50
Data communication intermediate speed CAN, LHD ..	51
Data communication intermediate speed CAN, RHD ..	52
Data communication MOST	53
Data communication, LIN 1:2	54
Steering Wheel Module (SWM)	56

Group 26 Cooling system

Cooling fan, 4-Cyl. Turbo	57
Cooling fan, 5-Cyl. Turbo	58
Cooling fan, 6-Cyl.	59
Cooling fan, 4-Cyl. Diesel	60
Cooling fan, 5-Cyl. Diesel	61

Group 27 Engine controls

Cruise control 4-Cyl. 1,6l Turbo	62
Cruise control 4-Cyl. 2,0l Turbo	63
Cruise control 4-Cyl. Diesel	64
Cruise control 5-Cyl. & 6-Cyl.	65
Cruise control 5-Cyl. Diesel	66
Start-/Stop function 4-Cyl. 1.6l Turbo	67
Start-/Stop function 4-Cyl. 1.6l Diesel	68
Start-/Stop function 5-Cyl. Diesel	69
Start-/Stop function 5-Cyl. Turbo	70

Group 28 Ignition and control system

Engine management system, 4-Cyl. Diesel 1:3	71
Engine management system, 4-Cyl. Turbo 1.6l 1:2	74
Engine management system, 4-Cyl. Turbo 2.0l 1:2	76
Engine management system, 5-Cyl. Turbo 1:2	78
Engine management system, 5-Cyl. Diesel 1:3	80
Engine management system 6-Cyl. PZEV 1:2	83
Engine management system, 6-Cyl. 1:2	85
Engine management system, 6-Cyl. Turbo 1:2	87
Emission control 4-Cyl. 1.6l Turbo	89
Emission control 4-Cyl. 2.0l Turbo	90
Emission control 5-Cyl. Turbo	91
Emission control 6-Cyl.	92
Emission control 6-Cyl. Turbo	93

Group 32 Alternator and voltage regulator

Power supply 4-Cyl. Turbo	94
Power supply 4-Cyl. & 5-Cyl. with start/stop	95
Power supply 5-Cyl. & 6-Cyl.	96

Table of Contents 2:3

Group 33 Starting system

Starting system 4-Cyl. Turbo	97
Starting system 5- & 6-Cyl.	98
Starting system 4-Cyl. Diesel.....	99
Starting system 5-Cyl. Diesel.....	100

Group 35 Lighting

High and low beam	101
High and low beam (Dual Xenon).....	102
Beam length adjustment, manual	103
Running/Parking light, Tail lights V70	104
Running/Parking light, Tail lights S80	105
Daytime running lights V70 & XC70	106
Daytime running lights S80	107
Brake lights V70.....	108
Brake lights S80.....	109
Reversing lights V70.....	110
Reversing lights S80.....	111
Follow-me-home lighting LHD	112
Follow-me-home lighting RHD	113
Interior lighting, LHD 1:2	114
Interior lighting, RHD 1:2	116
Active headlight	118
Lighting in door sill trims	119
Auxiliary lights.....	120
Lighting mug holder and floor	121

Group 36 Additional electrical equipment

Rain sensor.....	122
Direction indicator and hazard warning flashers LHD V70	123
Direction indicator and hazard warning flashers LHD S80	124
Direction indicator and hazard warning flashers RHD V70.....	125
Direction indicator and hazard warning flashers RHD S80.....	126
Wiper/washer windshield.....	127
High pressure headlight washer	128
Wiper/Washer rear window.....	129
Keyless vehicle 1:2.....	130
Horn	132
Anti-theft alarm	133
Parking assistance.....	134
Collision warning with power brake booster	135
Tire pressure monitoring system (TPMS)	136
Alcohol lock.....	137

Group 37 Wiring and fuses

Diagnostics system	138
Outlet 12 V	139
Outlet 12 V, S80.....	140
Cable harness towbar/tow hitch 4-pin V70	141
Cable harness towbar/tow hitch 4-pin S80	142
Cable harness towbar/tow hitch 7-pin V70	143
Cable harness towbar/tow hitch 7-pin S80	144
Cable harness towbar/tow hitch 13-pin V70	145
Cable harness towbar/tow hitch 13-pin S80	146
Accessory USB unit (AUU)	147

Group 38 Instruments

Seat belt reminder.....	148
Driver information module	149
Analog clock.....	150

Group 39 Other, Accessories

TV	151
Cellular phone 1:2	152
Audio 1:2	154
Audio Premium 1:3	156
DAB Radio	159
Bluetooth Handsfree	160
Rear seat entertainment, V70	161
Satellite radio	163
Parking camera	164
Parking camera wide-angle, front	165
Navigation system, portable.....	166
Sensus Connected Touch.....	167

Group 43 Transmission

Transmission M66.....	168
Automatic transmission MPS6	169
Automatic transmission AWF21	170
Differential Electronic Module (DEM)	171

Group 55 Parking brake

Electric parking brake	172
------------------------------	-----

Group 59 Brake system

Brake control system & DSTC	173
-----------------------------------	-----

Group 64 Steering

Speed dependent power steering	174
--------------------------------------	-----

Table of Contents 3:3

Group 76 Shock absorbers

Four-C	175
--------------	-----

Group 83 Doors and openings

Central locking front doors LHD	176
Central locking front doors RHD	177
Central locking rear doors	178
Central locking trunk lid/tailgate V70	179
Central locking trunk lid/tailgate S80	180
Central locking fuel filler flap	181
Signal receiver central locking	182
Power windows front doors LHD	183
Power windows front doors RHD	184
Power windows rear doors	185
Power sunroof	186

Group 84 Exterior decorative elements, etc.

Power door mirrors LHD	187
Power door mirrors RHD	188
Heated door mirrors LHD	189
Heated door mirrors RHD	190
Blind spot information system LHD	191
Blind spot information system RHD	192
Heated windshield LHD	193
Heated windshield RHD	194
Heated rear window	195

Group 85 Interior equipment

Power driver's seat with memory function, LHD	196
Power driver's seat with memory function, RHD	197
Power passenger seat, LHD	198
Power passenger seat, RHD	199
Heated steering wheel	200
Heated front seats with fans	201
Heated front seats without fans	202
Heated rear seat	203
Massage seats 1:2	204
Massage seats 2:2	205

Group 87 Climate control system

Climate control system, 4-Cyl. Turbo 1:2	206
Climate control system 4-Cyl. Diesel 1:2	208
Climate control system 5- & 6-Cyl. 1:2	210
Climate control system PTC-elements	212
Parking heater, auxiliary heater	213
Parking heater, remote start	214
Refrigeration box rear seat	215

Group 88 Internal equipment

Supplemental restraint system 1:2	216
Power folding headrest	218
Remote control garage opening	219
Rear-view mirror with automatic dimming	220

Connectors 221

Branching points 261

Cable harness routing in vehicle

Engine harness, 4-Cyl. Turbo	282
Engine harness, 5-Cyl. Turbo	282
Engine harness, 6-Cyl.	283
Engine harness, 6-Cyl. Turbo	283
Engine harness, 2.0l Diesel	284
Engine harness, 2.4l Diesel	284
Engine compartment harness LHD	285
Engine compartment harness RHD	286
Dashboard harness, LHD	287
Dashboard harness, RHD	288
Harness Floor, LHD S80	289
Floor harness, RHD S80	290
Floor harness, LHD V70	291
Floor harness, RHD V70	292
Infotainment harness, LHD S80	293
Infotainment harness, RHD S80	294
Infotainment harness, LHD V70	295
Infotainment harness, RHD V70	296
Roof harness, S80	297
Roof harness, V70	297
Center console harness	298
Tunnel harness	298
Front door harness, left	299
Front door harness, right	299
Rear door harness, left	300
Rear door harness, right	300
Trunk lid/tailgate harness, S80	301
Trunk lid/tailgate harness, V70	301
Rear axle harness	302
Executive harnesses	303

Component illustrations 304

Index 1:2 364

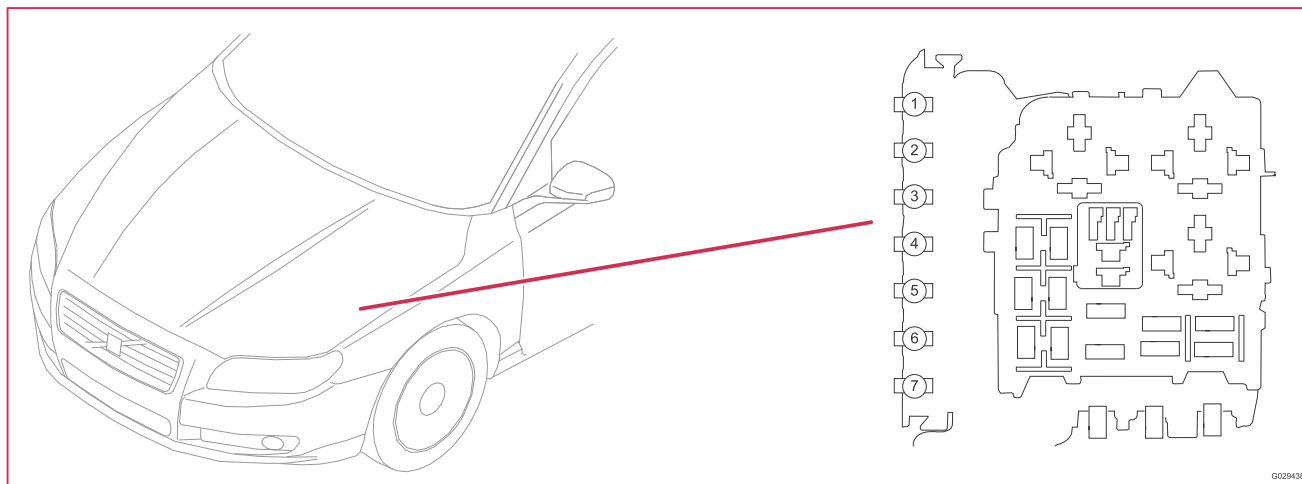
List of components 1:7 366

Overview with Start/Stop function



Fuses

Distribution box in engine compartment F1-F7

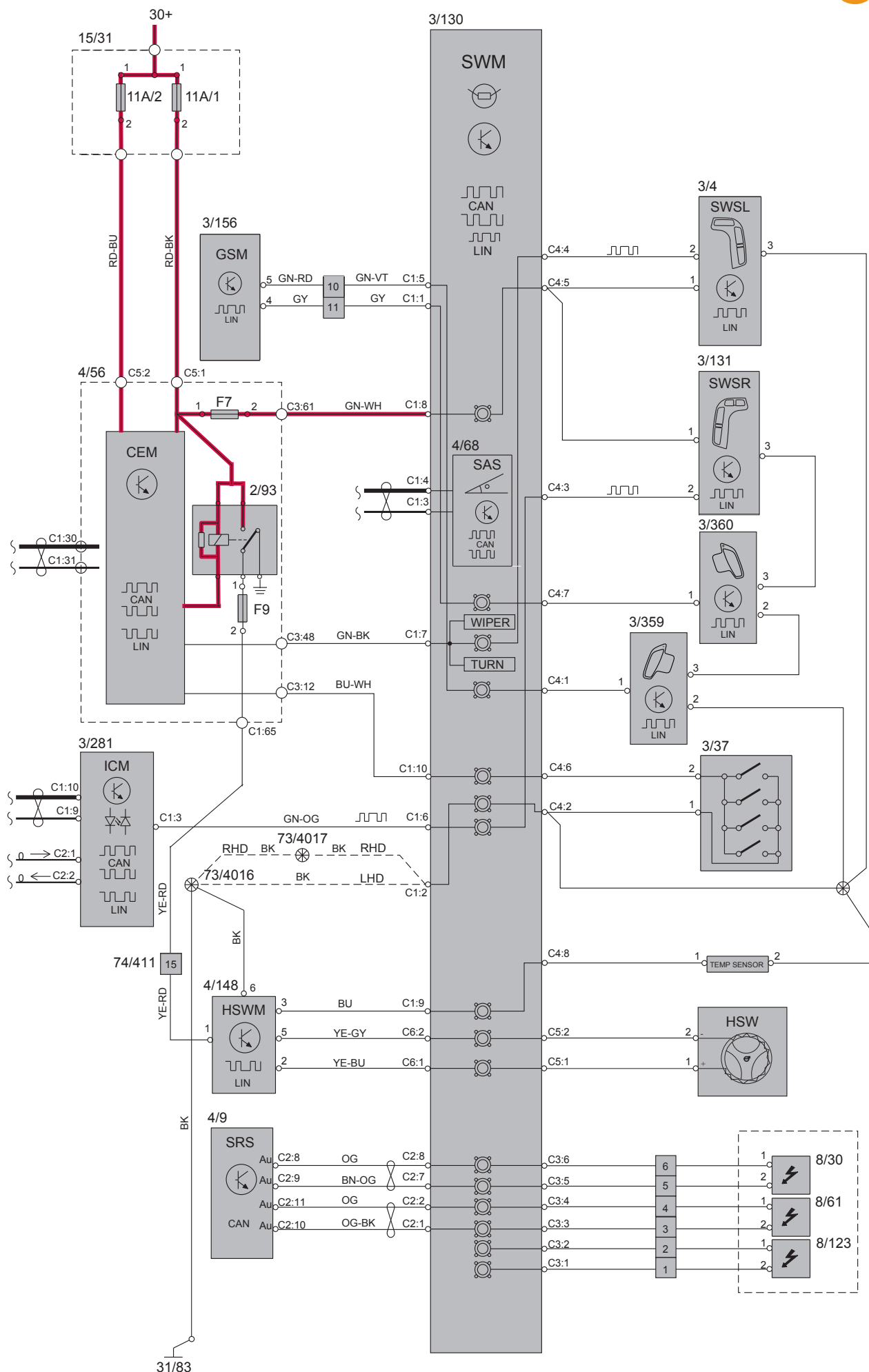


15/31 Distribution box in engine compartment

No.	No.	Fuse function	via	A
F1	11A/1	4/56 Central Electronic Module (CEM) F7 Fuse in the Central Electronic Module (CEM) F9-F11 Fuses in the Central Electronic Module (CEM) F21 Fuse in the Central Electronic Module (CEM) F23 Fuse in the Central Electronic Module (CEM)	- - relay in CEM - -	50
F2	11A/2	4/56 Central Electronic Module (CEM) F3-F6 Fuses in the Central Electronic Module (CEM) F8 Fuse in the Central Electronic Module (CEM) F12-F16 Fuses in the Central Electronic Module (CEM) F22 Fuse in the Central Electronic Module (CEM) F24 Fuse in the Central Electronic Module (CEM)	- relay in CEM relay in CEM - - -	50
F3	11A/3	11D/A1-11D/A11 Fuses in distribution box cargo compartment	-	60
F4	11A/4	2/193 Relay, comfort functions 4/56 Central Electronic Module (CEM) 11C/1-11C/15 Fuses in distribution box passenger compartment 11C/21-11C/22 Fuses in distribution box passenger compartment	- 2/193 - 2/193	60
F5	11A/5	2/88 Relay, 15-feed 4/56 Central Electronic Module (CEM) 11C/23-11C/25 Fuses in distribution box passenger compartment 11C/26-11C/30 Fuses in distribution box passenger compartment	- 2/88 2/88 2/88	60
F7	11A/7	9/42 PTC-element	-	100
continues				

Control modules

Steering Wheel Module (SWM)

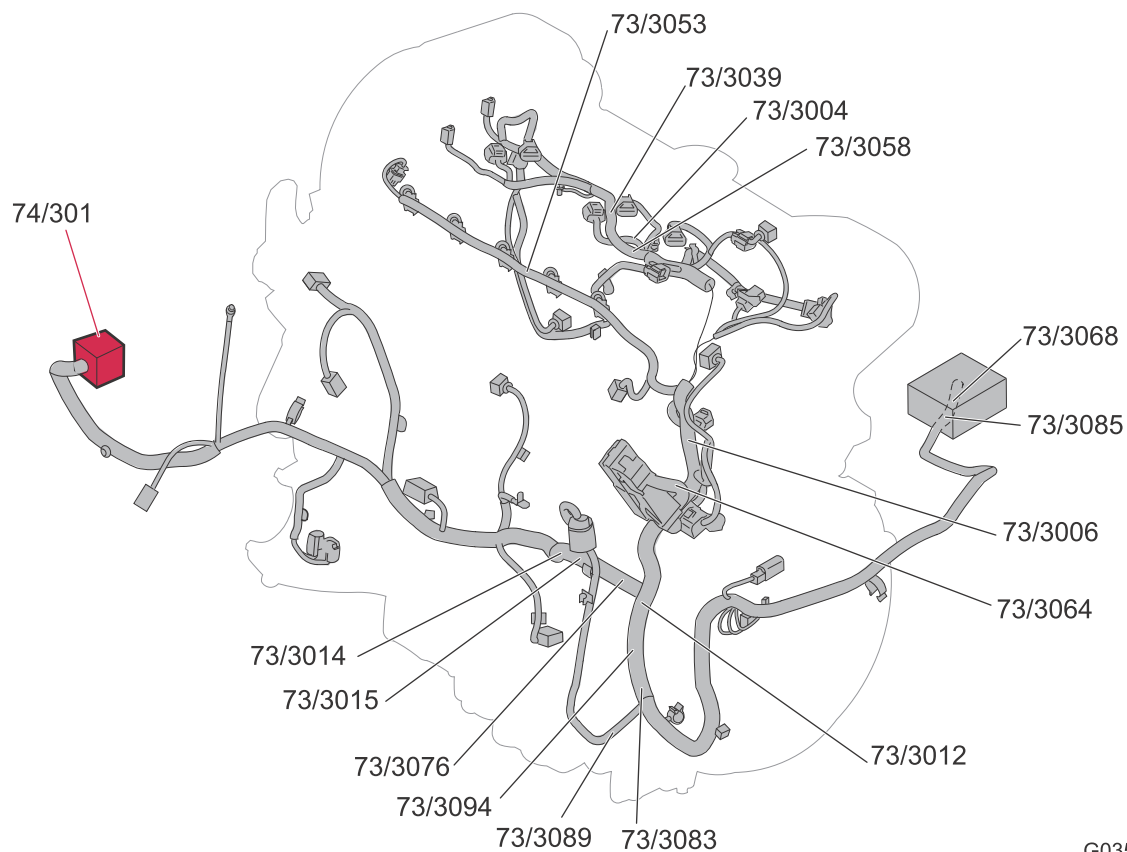


Cable harness routing in vehicle Engine harness, 4-Cyl. Turbo



105127

Cable harness routing in vehicle Engine harness, 5-Cyl. Turbo



G035645