



Volvo S80 Typ TS
(GEE5-2006)



Wiring Diagrams and Electric Model Year GEE6/

VOLVO
for life

VOLVO
WIRING DIAGRAM S60/S60R/S80

TP 3988202
2006

Table of Contents 1:2

Vehicles with SRS (Airbag)/SIPS bag/ IC (Inflatable curtain)	2
Abbreviations	5
How to use the wiring diagrams 1:2.....	6
Electrical distribution 1:2.....	8
Fuses	
Engine compartment 11A/1-5	10
Engine compartment 11B/1-12.....	11
Engine compartment 11B/13-15.....	12
Engine compartment 11B/16-20	13
Passenger compartment 11C/1-6.....	14
Passenger compartment 11C/7-13.....	15
Battery 11E/1-7.....	16
Central Electronic Module (CEM) F1-F15.....	17
Central Electronic Module (CEM) F16-F34.....	18
Rear Electronic Module (REM) F1-F13	19
Rear Electronic Module (REM) F17-F38	20
Relays	
Ignition switch and relays.....	21
Engine compartment FMA1 - FST3	22
Other relays	23
Ground connections	
Overview.....	24
31/1 - 31/44	25
31/46 - 31/67	26
31/70 - 31/73	27
31/83 - 31/88	28
31/89 - 31/93	29
31/94 - 31/102	30
31/120	31
Control modules	
Overview of locations.....	32
Overview of designations.....	33
Central Electronic Module (CEM) 1:2	34
Rear Electronic Module (REM) 1:2.....	36
Data communication low speed CAN 1:2	38
LIN data communication 1:2.....	40
Group 23 Fuel system	
Engine management system, 5-cyl 1:2.....	42
Engine management system, 5-cyl Turbo 1:2	44
Engine management system, 6-cyl 1:2.....	46
Engine management system, Bi-Fuel 1:2.....	48
Engine management system, Diesel 1:2	50
Engine management system, Diesel, I5D 1:3.....	52
Emission control, 5-cyl.....	55
Emission control, 5-cyl Turbo & 6-cyl	56
Group 26 Cooling system	
Cooling fan.....	57
Cooling fan I5D	58
Group 27 Engine control	
Cruise control.....	59
Cruise control, I5D	60
Group 32 Generator and voltage regulator	
Power supply	61
Group 33 Starting system	
Starting system	62
Group 35 Lighting	
High and low beam (Bi-Xenon) & daytime running lights S60	63
High and low beam (Bi-Xenon) & daytime running lights S80	64
High and low beam S80.....	65
Fog lights	66
Brake lights	67
Reversing lights	68
Running/parking lights, tail lights & license plate lighting S60	69
Running/parking lights, tail lights & license plate lighting S80	70
Home safe lighting	71
Interior lighting	72
Beam length adjustment	73
Auxiliary lights	74
Group 36 Additional electrical equipment	
Rain sensor.....	75
Direction indicator and hazard warning flashers	76
Wiper/washer, windshield	77
Wiper/washer, headlights	78
High pressure headlight washer	79
Horn	80
Electronic immobilizer	81
Anti-theft alarm	82
Parking assistance	83
Accessory Electronic Module (AEM) 1:2	84
Group 37 Wiring and fuses	
Diagnostics system	86
12V outlet	87
12V outlet, cargo compartment	88
Towbar cable harness, 4-pin	89
Towbar cable harness, 7-pin	90
Towbar cable harness, 13-pin	91

Table of Contents 2:2

Group 38 Instruments

Seat belt reminder	92
Driver information module.....	93
Driver information module, I5D.....	94
Driver information module Bi-Fuel	95

Group 39 Other

Audio with auxiliary amplifier 1:2	96
Audio	98
Cellular phone.....	99
Road Traffic Information module (RTI)	100
Road Traffic Information (RTI) & CD changer	101
Turn-by-turn navigation system	102
Handsfree	103
Handsfree MAX	104
CD changer.....	105
MP3 player.....	106
Satellite radio.....	107
Audio adapter cable harness	108

Group 43 Transmission

Automatic transmission AW55-51SN/AW51 AWD	109
Automatic transmission 4T65EV.....	110
Automatic transmission TF-80SC AWD.....	111
Automatic transmission TF-80SC/TF-80SC AWD, I5D	112
Geartronic.....	113
Shift lock	114
Differential Electronic Module (DEM).....	115

Group 59 Brake system

Brake Control Module	116
----------------------------	-----

Group 64 Steering

Electronic power steering	117
---------------------------------	-----

Group 76 Shock absorbers

Four-C	118
--------------	-----

Group 83 Doors and openings

Central locking.....	119
Power windows.....	120
Power sunroof.....	121

Group 84 Exterior decorative elements etc.

Power door mirrors	122
Heated door mirrors.....	123

Heated rear window	124
Power door mirrors with camera function	125

Group 85 Interior equipment

Power driver's seat	126
Power passenger seat	127
Heated seats.....	128

Group 87 Climate control system

Relay, electric engine heater	129
Climate control system 1:2.....	130
Climate control system I5D 1:2	132
Parking heater, auxiliary heater	134
Parking heater, remote start	135
Parking heater, Call start	136
Short stop heater	137

Group 88 Internal equipment

Supplemental Restraint System (SRS).....	138
Electrically adjustable head restraint	139
Remote garage door opener.....	140

Connectors..... 141

Branching points161

Cable harness routing in vehicle

Engine harness, Gasoline.....	171
Engine harness, I5D	172
Engine harness, Diesel.....	173
Engine compartment harness, LHD	174
Engine compartment harness, RHD	175
Passenger compartment harness, LHD.....	176
Passenger compartment harness, RHD	177
Cargo compartment harness	178
Roof harness	179
Trunk lid/tailgate harness.....	180
Door harness	181
Bi-Fuel harness.....	182

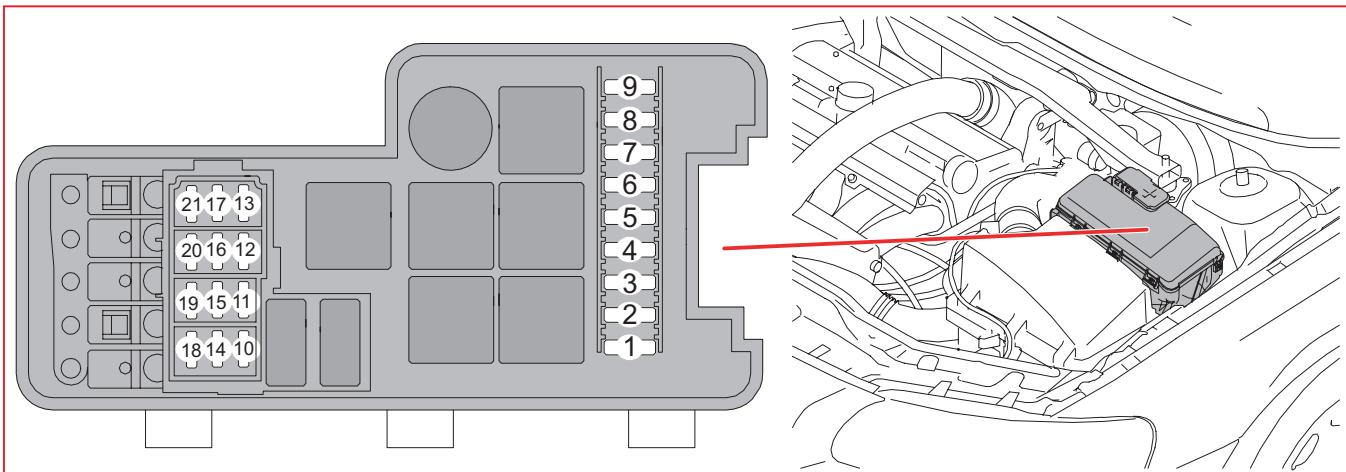
Component illustrations183

Index 1:2234

List of components 1:6236

Fuses

Engine compartment 11B/13-15



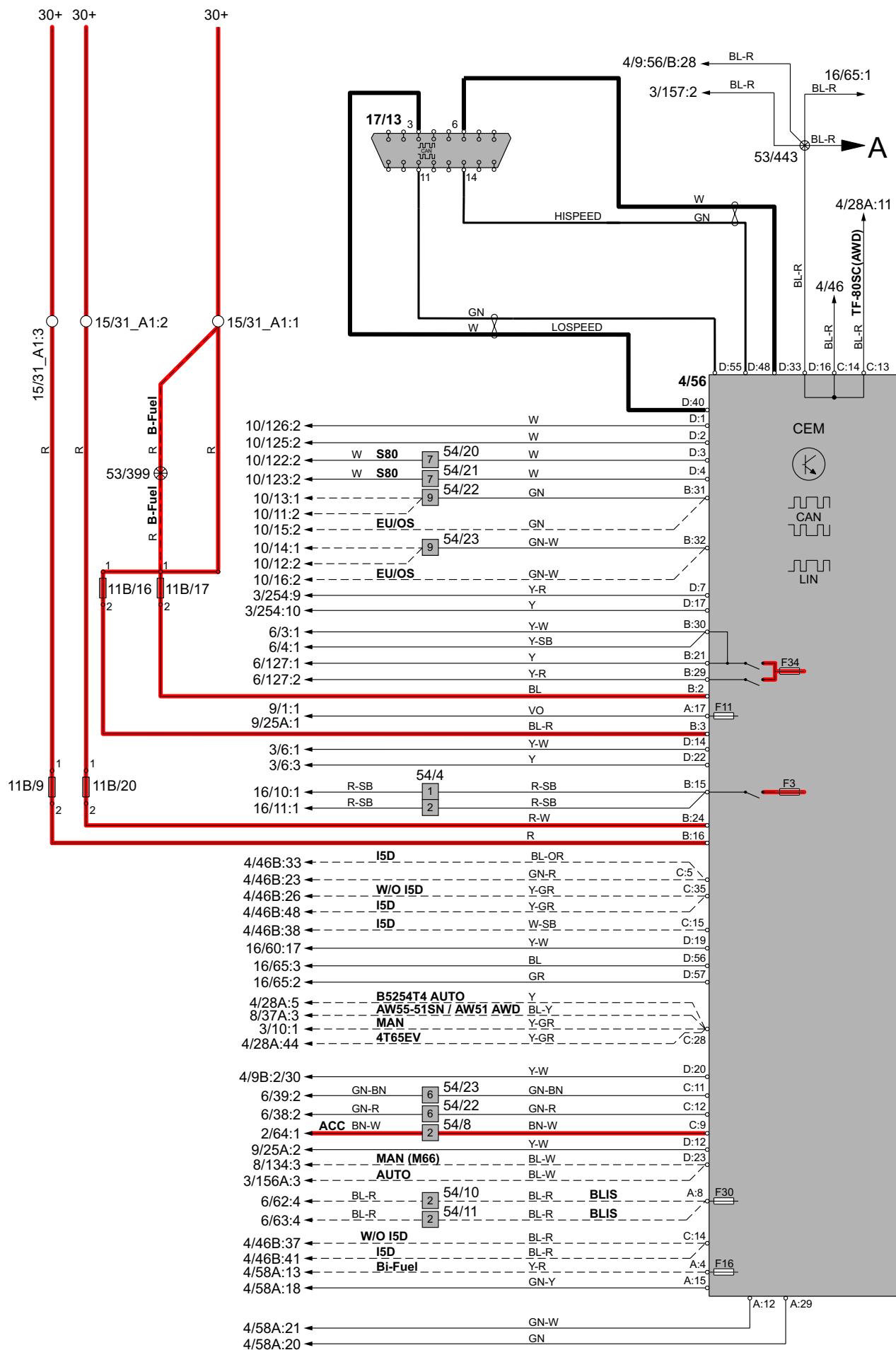
11B Fuses in the engine compartment

No.	Fuse function	via	A
13	4/46 Engine Control Module (ECM), 5-cyl. not turbo	-	10
	4/50 Electronic Throttle Module (ETM), Bi-Fuel	-	
	6/120 Throttle body motor, 5-cyl. no turbo	4/46	
	4/46 Engine Control Module (ECM), I5D	-	15
	6/118 Regulator motor, swirl throttle, I5D	4/46	
	6/120 Throttle body motor, I5D	4/46	
14	8/98 Control valve, fuel pressure, I5D	4/46	
	8/111 High-pressure solenoid valve, I5D	4/46	
	7//15 Heated oxygen sensor, I5D	-	10
	4/46 Engine Control Module (ECM), Bi-Fuel	-	20
	7//15 Heated oxygen sensor, front	-	
15	7/82 Heated oxygen sensor, diagnosis 1	-	
	7/103 Heated oxygen sensor 3	-	
	7/104 Heated oxygen sensor 4	-	
	6/67 Pump, fuel leakage control	-	10
	6/105 Fuel distributor gas, Bi-Fuel	-	
	8/17 EGR valve, Diesel not I5D	-	
	8/18 EVAP valve	-	
	8/19 Solenoid, variable valve timing intake	-	
	8/28 Turbo control valve	-	
	8/64 Solenoid valve, engine pad, Diesel not I5D	-	
4/109	8/75 Valve, fuel cut-off DFCO	-	
	8/81 Solenoid, variable valve timing exhaust	-	
	8/82 Solenoid, variable turbo geometry, Diesel not I5D	-	
	9/32 PTC resistor - air preheating	-	
	Glow plug control module (GCU), I5D	-	15
	6/143 Regulator motor, turbo, I5D	-	
	8/64 Solenoid valve, engine pad, I5D	-	
8/113	8/113 Bypass valve, EGR cooling, I5D	-	
	EGR valve, I5D	-	

continues

Control modules

Central Electronic Module (CEM) 1:2



Cable harness routing in vehicle

Engine harness, Gasoline

