



Volvo XC90
(2004-2005)



Wiring Diagrams and Electric Model Year 2005

VOLVO
for life



VOLVO
WIRING DIAGRAM V70/V70R/XC70/XC90

TP 3977202
2005

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 V70	8
Electrical distribution 1:2 XC90.....	10

Fuses

Engine compartment 11A/1-8.....	12
Engine compartment 11B/1-6.....	13
Engine compartment 11B/8-23.....	14
Passenger compartment 11C/1-4.....	15
Passenger compartment 11C/5-8.....	16
Passenger compartment 11C/9-14.....	17
Cargo compartment 11E/1-7 & 11F/1-2.....	18
Central Electronic Module (CEM) F1-F16.....	19
Central Electronic Module (CEM) F17-F34.....	20
Rear Electronic Module (REM) F1-F19	21
Rear Electronic Module (REM) F20-F38	22

Relays

Ignition and relays.....	23
Engine compartment FMA2 - FST3	24
Other relays	25

Ground connections

Overview.....	26
31/1 - 31/46	27
31/47 - 31/70	28
31/72 - 31/83	29
31/84 - 31/91	30
31/93 - 31/94	31
31/95 - 31/118	32
31/120	33

Control modules

Overview positions V70	34
Overview designations V70	35
Overview positions XC90.....	36
Overview designations XC90.....	37
Central Electronic Module (CEM) 1:2	38
Rear Electronic Module (REM) 1:2	40
High speed CAN data communication.....	42
Low speed CAN data communication V70	43
Low speed CAN data communication XC90.....	44
LIN data communication 1:2.....	45
Data communication MOST, XC90.....	47

Group 23 Fuel system

Engine management system, 5-cyl 1:2.....	48
Engine management system, 5-cyl Turbo 1:2	50
Engine management system, 6-cyl 1:2.....	52
Engine management system, Bi-fuel 1:2.....	54
Engine management system, Diesel 1:2	56
Emission control, 5-cyl.....	58
Emission control, 5-cyl Turbo & 6-cyl Turbo	59

Group 26 Cooling system

Cooling fan.....	60
------------------	----

Group 27 Engine control

Cruise control	61
----------------------	----

Group 32 Generator and voltage regulator

Power supply	62
--------------------	----

Group 33 Starting system

Starting system	63
-----------------------	----

Group 35 Lighting

High and low beams/Bi-Xenon & Daytime running lights V70	64
High and low beams/Bi-Xenon & Daytime running lights XC90	65
Fog lights	66
Brake lights	67
Reversing lights	68
Home safe lighting	69
Running/parking lights, tail lights & license plate lighting V70	70
Position/parking lights, tail lights & license plate lighting XC90	71
Interior lighting V70.....	72
Interior lighting XC90	73
Beam length adjustment V70.....	74
Beam length adjustment XC90	75
Auxiliary light.....	76

Group 36 Additional electrical equipment

Rain sensor.....	77
Direction indicators and flashing hazard lights V70 ...	78
Direction indicators and hazard warning flashers XC90	79
Wipers/washers, windshield.....	80
Wiper/Washer Headlights V70.....	81
High pressure headlight washer	82
Wiper/washer, rear window.....	83
Horn	84
Electronic immobilizer	85
Anti-theft alarm V70	86
Anti-theft alarm XC90.....	87
Accessory Electronic Module (AEM) 1:2.....	88
Parking assistance.....	90

Group 37 Wiring and fuses

Diagnostics system.....	91
12V outlet.....	92
Cable harness tow hitch, 4-pin.....	93
Tow hitch cable harness, 4/7-pin	94
Tow hitch cable harness, 7-pin	95
Tow hitch cable harness, 13-pin	96

Group 38 Instruments

Seat belt reminder	97
Driver information module.....	98
Driver information module Bi-fuel.....	99

Group 39 Other

Audio V70	100
Audio XC90.....	101
Audio with extra amplifier V70 1:2	102

Table of Contents 2:2

Road Traffic Information (RTI) V70.....	104
Road Traffic Information (RTI) XC90.....	105
Handsfree V70.....	106
Handsfree XC90.....	107
CD-Changer V70.....	108
CD/MD player XC90.....	109
Cellular phone V70.....	110
Subwoofer XC90.....	111
Infotainment XC90.....	112
Rear Seat Entertainment, XC90.....	113
Rear Seat Entertainment, XC90 1:2.....	114

Group 43 Transmission

Automatic transmission AW55-50/51SN/AW50/51	
AWD	116
Automatic transmission, 4T65AWD.....	117
Geartronic.....	118
Shift lock.....	119
Differential Electronic Module (DEM).....	120

Group 59 Brake system

Brake control system	121
----------------------------	-----

Group 64 Steering

Electronic power steering	122
---------------------------------	-----

Group 76 Shock absorbers

Four-C V70.....	123
-----------------	-----

Group 83 Doors and openings

Central locking system V70.....	124
Central locking system XC90.....	125
Power windows.....	126
Power sunroof.....	127

Group 84 Exterior decorative elements etc.

Power door mirrors.....	128
Heated door mirrors.....	129
Heated rear window.....	130

Group 85 Interior equipment

Power driver's seat.....	131
Power passenger seat.....	132
Heated seats	133

Group 87 Climate controls

Climate control system 1:2.....	134
Parking heater, auxiliary heater	136
Relay, electric engine heater	137
Parking heater, remote start	138
Parking heater, Call start	139
Short stop heater	140
Rear climate control system XC90.....	141

Group 88 Internal equipment

Remote garage door opener.....	142
Supplemental Restraint System (SRS) V70	143
Supplemental Restraint System (SRS) XC90	144

Connectors..... 145

Junction points172

Cable harnesses' routing in vehicle

Engine harness Gasoline.....	183
Engine harness Diesel.....	184
Engine compartment harness LHD, V70	185
Engine compartment harness RHD, V70.....	186
Engine compartment harness LHD, XC90.....	187
Engine compartment harness RHD, XC90	188
Passenger compartment harness LHD, V70	189
Passenger compartment harness RHD, V70.....	190
Passenger compartment harness LHD, XC90.....	191
Passenger compartment harness RHD, XC90	192
Cargo compartment harness V70.....	193
Cargo compartment harness XC90	194
Roof harness & Inflatable curtain harness V70.....	195
Tailgate harness V70	195
Roof harness XC90	196
Tailgate harness XC90	196
Harness, doors V70	197
Harness, doors XC90.....	198
Harnesses Bi-Fuel V70.....	199
Rear Seat Entertainment XC90	200

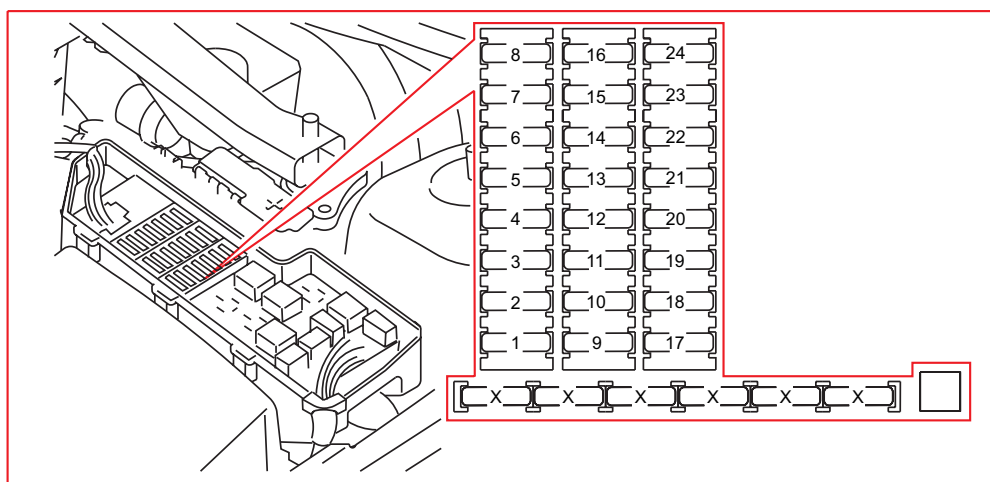
Component illustrations201

Index 274

List of components 1:6276

Fuses

Engine compartment 11B/8-23

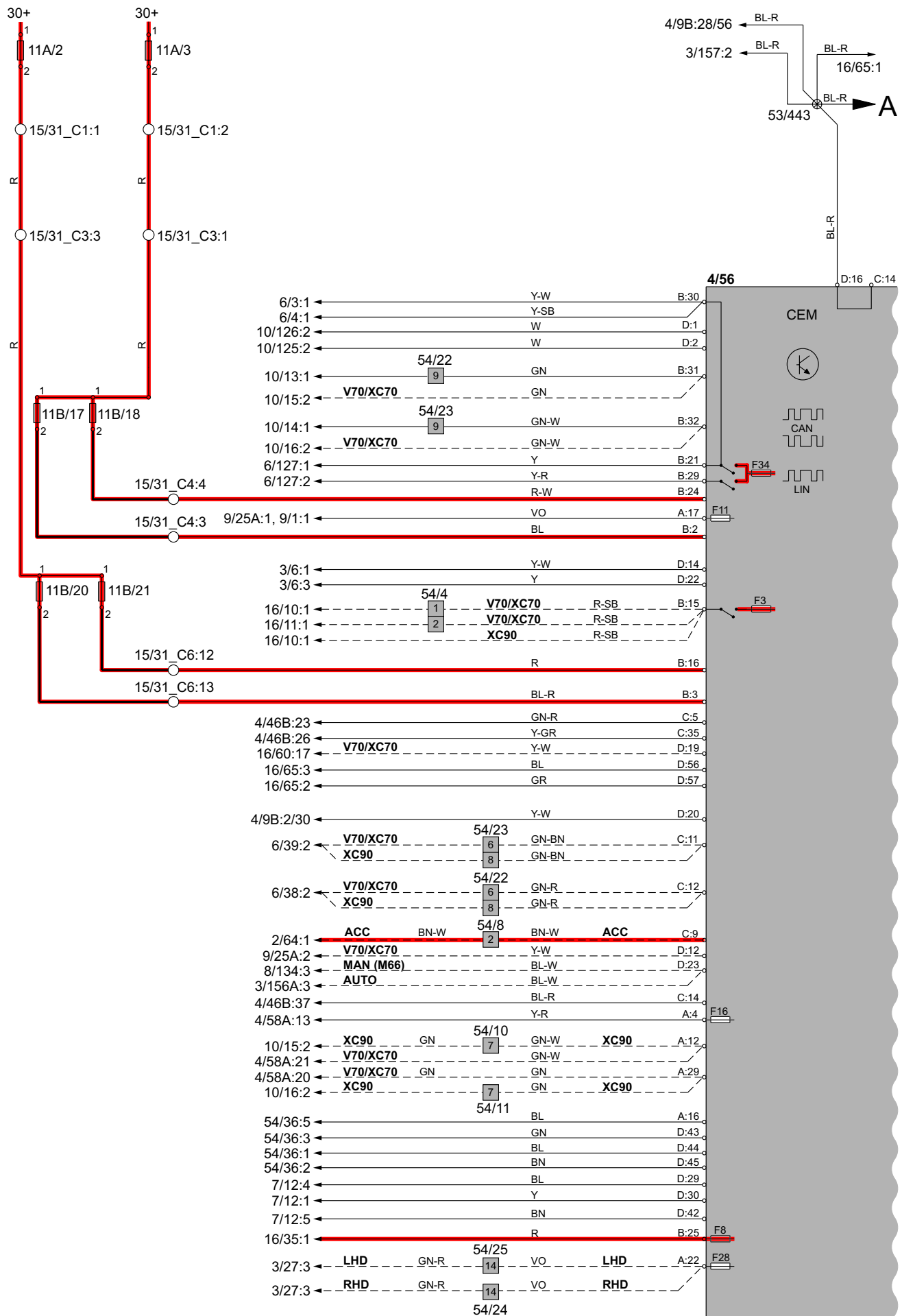


11B Fuses in the engine compartment

No.	Fuse function	via	A
8	6/44 Cooling fan, electrics box, engine compartment 7/51 Accelerator pedal sensor 8/3 Electromagnetic clutch, climate control system	- - 2/22	10
9	2/33 Relay fuel system, Bi-Fuel 8/79 Valve LPG, Bi-Fuel	- 2/33	10
11	2/14 Relay, glow plug unit 2/22 Relay, climate control system 20/3-8 Spark plug and ignition coil	- - -	20
13	2/90 Relay, windshield wiper, low/high speed 2/91 Relay, intermittent windshield wiper 6/1 Windshield wiper motor	- - 2/90, 2/91	25
14	4/16 Brake Control Module (BCM)	-	30
15	2/182 Relay, high pressure headlight washer motor 6/104 High pressure headlight washer motor	- 2/182	35
17	10/1 Left front lamp housing, daytime running lights 10/70 Left-hand low beam	4/56 4/56	20
18	10/11 Front left parking light 10/12 Front right parking light	4/56 4/56	15
19	4/16 Brake Control Module (BCM)	-	30
20	10/2 Right front lamp housing, daytime running lights 10/66 Right-hand low beam	4/56 4/56	20
21	4/83 Fuel pump control module 6/31 Feed pump, ejectors 6/33 Fuel pump	4/56 4/56 4/56	15
22	6/25 Starter motor	2/35	35
23	2/32 Main relay, engine management system 4/46 Engine Control Module (ECM), Gasoline	- -	10

Control modules

Central Electronic Module (CEM) 1:2



Cable harnesses' routing in vehicle

Engine harness Gasoline

