



Volvo V50
(2007-2008)



Wiring Diagrams and Electric Model Year 2008

VOLVO C30, S40, V50 & C70

WIRING DIAGRAM 2008



TP 39114202

Table of Contents 1:3

Vehicles with SRS (Airbag)/SIPS bag/ IC (Inflatable Curtain).....	2
Abbreviations	7
How to use the wiring diagrams 1:2.....	8
Electrical distribution 1:2.....	10

Fuses

Engine compartment distribution box F1-F10.....	12
Engine compartment distribution box F11-F18.....	13
Engine compartment distribution box F20-F31.....	14
Engine compartment distribution box F32-F34.....	15
Engine compartment distribution box F35-FH1	16
Central Electronic Module (CEM) F43-F48.....	17
Central Electronic Module (CEM) F49-F61.....	18
Central Electronic Module (CEM) F62-F69.....	19
Central Electronic Module (CEM) F73-F85.....	20
Central Electronic Module (CEM) F86	21
Battery PF1-PF2	22
Fuses in holder	23

Relays

Ignition switch and relays.....	24
Engine compartment distribution box R2-R14	25
Central Electronic Module (CEM) R15-R18.....	26
Central Electronic Module (CEM) R1 - R11B	27
Other relays	28

Ground connections

Overview	29
31/3 - 31/10 cont.....	30
31/10 - 31/12	31
31/52 - 31/66	32
31/67 - 31/88	33
31/89 - 31/115	34
31/116 - Ground connections in chassis.....	35

Control modules

Overview of locations.....	36
Overview of designations.....	37
Central Electronic Module (CEM) 1:2	38
Data communication Low speed CAN 1:2	40
Data communication, High speed CAN	42
Data communication MOST	43
Data communication, LIN 1:2	44
Start Control Module (SCU)	46
Accessory Electronic Module (AEM)	47

Group 23 Fuel system

Engine management system 4-cyl. 1.6l 1:2.....	48
---	----

Engine management system, 4-cyl. 1.8l & 2.0l 1:2.....	50
Engine management system, 5-cyl. 1:2.....	52
Engine management system, 5-cyl. Turbo 1:2	54
Engine management system Diesel 4-cyl. 1.6l 1:2	56
Engine management system Diesel, 4-cyl. 2.0l 1:2	58
Engine management system Diesel, 5-cyl. 2.4l 1:3	60
Emission control 4-cyl 1.6l	63
Emission control 4-cyl 1.8l & 2.0l	64
Emission control 5-cyl	65
Emission control, 5-cyl Turbo.....	66

Group 26 Cooling system

Cooling fan.....	67
------------------	----

Group 27 Engine controls

Cruise control, 4-cyl	68
Cruise control, 5-cyl	69

Group 32 Alternator and voltage regulator

Power supply, 4-cyl.....	70
Power supply, 5-cyl.....	71

Group 33 Starting system

Starting system 4-cyl.....	72
Starting system 5-cyl.....	73

Group 35 Lighting

High and low beam	74
Active headlight, Bi-Xenon S40/V50	75
Bi-Xenon C30/C70	76
Running/Parking lights, Tail lights, S40/V50	77
Running/Parking lights, Tail lights (Bi-Xenon) S40/V50	78
Running/Parking lights, Tail lights C30/C70	79
Running/Parking lights, Tail lights (Bi-Xenon) C30/C70	80
Brake lights S40/V50	81
Brake lights C30/C70	82
Reversing lights S40/V50.....	83
Reversing lights C30/C70	84
Fog lights S40/V50	85
Fog lights C30/C70	86
Fog lights LHD Japan S40/V50.....	87
Fog lights LHD Japan C30/C70	88
Follow-me-home lighting	89
Interior lighting C30/S40/V50 1:2.....	90
Interior lighting C70 1:2.....	92
Instrument and control illumination	94
Auxiliary lights	95

Table of Contents 2:3

Group 36 Additional electrical equipment

Direction indicators and hazard warning flashers S40/V50	96
Direction indicators and hazard warning flashers (Bi-Xenon) S40/V50	97
Direction indicators and hazard warning flashers C30/C70	98
Direction indicators and hazard warning flashers (Bi-Xenon) C30/C70	99
Windshield wiper/washer	100
Headlight washer	101
Rear window wiper/washer C30/V50	102
Rain sensor	103
Keyless vehicle C30/S40/V50 1:2	104
Keyless vehicle C70 1:2	106
Rear parking assistance	108
Front parking assistance	109
Immobilizer/Steering column lock module (SCL)	110
Horn	111
Anti-theft alarm C30	112
Anti-theft alarm S40/V50	113
Anti-theft alarm C70	114
Alcolock	115
Accessory Electronic Module (AEM)	116

Group 37 Wiring and fuses

12V outlet C30/S40/V50	117
12V outlet C70	118
Diagnostics system	119
Tow hitch cable harness, 4-pin S40/V50	120
Tow hitch cable harness, 4-pin C30/C70	121
Tow hitch cable harness, 7-pin S40/V50	122
Tow hitch cable harness, 7-pin C30/C70	123
Tow hitch cable harness, 13-pin S40/V50/C70	124
Tow hitch cable harness, 13-pin C30	125
USB unit (AUU)	126

Group 38 Instruments

Driver information module	127
Seat belt reminder S40/V50	128
Seat belt reminder C30/C70	129

Group 39 Other

Audio C30/S40/V50	130
Audio C70	131
Audio High Performance/Premium Sound C30/S40/V50 1:2	132
Audio High Performance/Premium Sound C70 1:2 ...	134

Cellular phone 1:2	136
Multimedia & Traffic information	138
Satellite radio	139
Handsfree Universal, Audio	140
Handsfree Universal, Audio High Performance/ Premium Sound	141
Handsfree Max with Adapter	142
Handsfree Max	143
Subwoofer	144
Navigation system, portable	145

Group 43 Transmission

Automatic transmission AW55-51	146
Transmission M66	147
Differential Electronic Module (DEM), S40/V50	148

Group 59 Brake system

Brake control system & STC	149
Brake control system & DSTC	150

Group 64 Steering

Electronic power steering	151
---------------------------------	-----

Group 83 Doors and openings

Central locking, front doors C30/S40/V50	152
Central locking, rear doors S40/V50	153
Central locking system C70	154
Central locking, trunk lid/tailgate C30	155
Central locking, trunk lid/tailgate S40/V50	156
Central locking, trunk lid/tailgate C70	157
Central locking, storage compartment C70	158
Child safety lock S40/V50	159
Central locking, fuel filler flap	160
Signal receiver, central locking C30/S40/V50	161
Signal receiver, central locking C70	162
Power windows, front doors C30/S40/V50	163
Power windows, front doors C70	164
Power windows, rear doors S40/V50	165
Power sunroof C30/S40/V50	166
Power roof C70	167

Group 84 Exterior decorative elements, etc.

Power door mirrors C30/S40/V50	168
Power door mirrors C70	169
Heated door mirrors	170
Heated rear window	171
Blind Spot Information System	172

Table of Contents 3:3

Group 85 Interior equipment

Power driver's seat with memory function, LHD S40/V50	173
Power driver's seat with memory function, RHD S40/V50	174
Power driver's seat with memory function, LHD C30/C70	175
Power driver's seat with memory function, RHD C30/C70	176
Power passenger seat with memory function, LHD C30/C70	177
Power passenger seat with memory function, RHD C30/C70	178
Power driver's seat LHD S40/V50	179
Power driver's seat RHD S40/V50	180
Power passenger seat LHD S40/V50	181
Power passenger seat RHD S40/V50	182
Heated seats	183

Group 87 Climate control system

Climate control system 4-cyl, Gasoline 1:2	184
Climate control system Diesel 1.6l & 2.0l 1:2	186
Climate control system, 5-cyl. 1:2	188
Climate control system PTC element	190
Parking heater, auxiliary heater	191
Relay, electric engine heater	192
Electric engine heater Flexifuel	193

Group 88 Internal equipment

Supplemental Restraint System (SRS) C30/S40/V50 1:2	194
Supplemental Restraint System (SRS) C70 1:2	196
Auto-dimming rearview mirror	198

Connectors 199

Branching points 241

Cable harness routing in vehicle

Engine harness, gasoline 4-cyl 1.6	252
Engine harness, gasoline 4-cyl 1.8	252
Engine harness, gasoline 5-cyl	253
Engine harness, Gasoline 5-cyl Turbo	253

Engine harness, Diesel 1.6l	254
Engine harness, Diesel 2.0l	254
Engine harness, Diesel 2.4l	255
Engine compartment harness, 4-cyl.	256
Engine compartment harness, 5-cyl.	256
Dashboard harness, LHD	257
Dashboard harness, RHD	257
Floor harness, C30 LHD	258
Floor harness, C30 RHD	259
Floor harness, S40 LHD	260
Floor harness, S40 RHD	261
Floor harness, V50 LHD	262
Floor harness, V50 RHD	263
Floor harness, C70 LHD	264
Floor harness, C70 RHD	265
Roof harness, C30	266
Roof harness, S40	266
Roof harness, V50	267
Roof harness, C70	267
Tunnel harness, C30/S40/V50	268
Tunnel harness, C70	268
Driver's door harness, C30	269
Passenger door harness, C30	269
Driver's door harness, S40/V50	270
Passenger door harness, S40/V50	270
Driver's door harness, C70	271
Passenger door harness addition, C70	271
Passenger door harness, C70	272
Passenger door harness addition, C70	272
Rear right door harness, S40/V50	273
Left rear door harness, S40/V50	273
Rear side panel harness, left C70	274
Harness, rear side panel, right C70	274
Trunk lid/tailgate harness, C30	275
Trunk lid/tailgate harness, S40	275
Trunk lid/tailgate harness, V50	276
Trunk lid/tailgate harness, C70	276

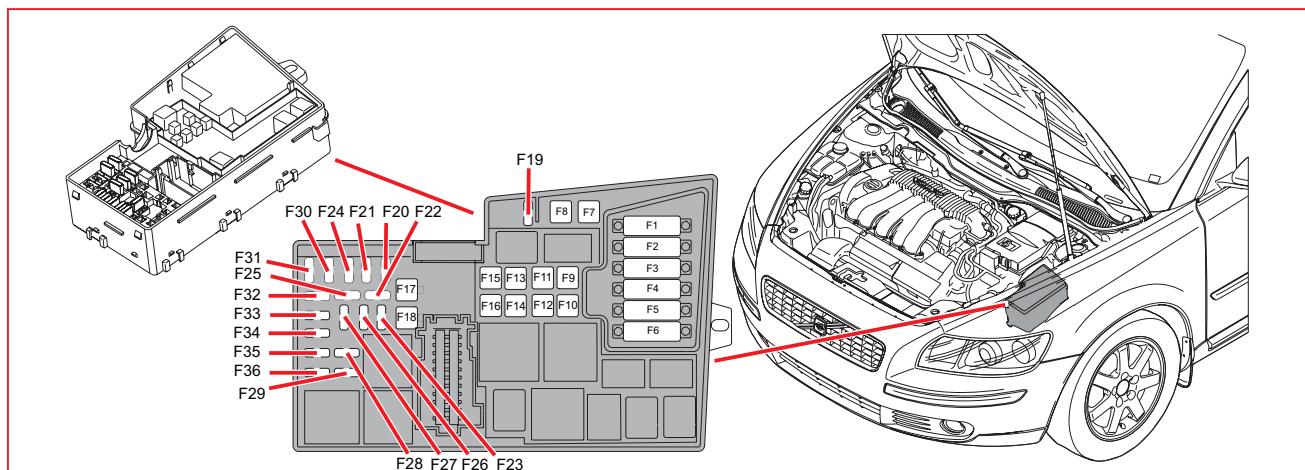
Component illustrations 277

Index 1:2 333

List of components 1:6 335

Fuses

Engine compartment distribution box F20-F31

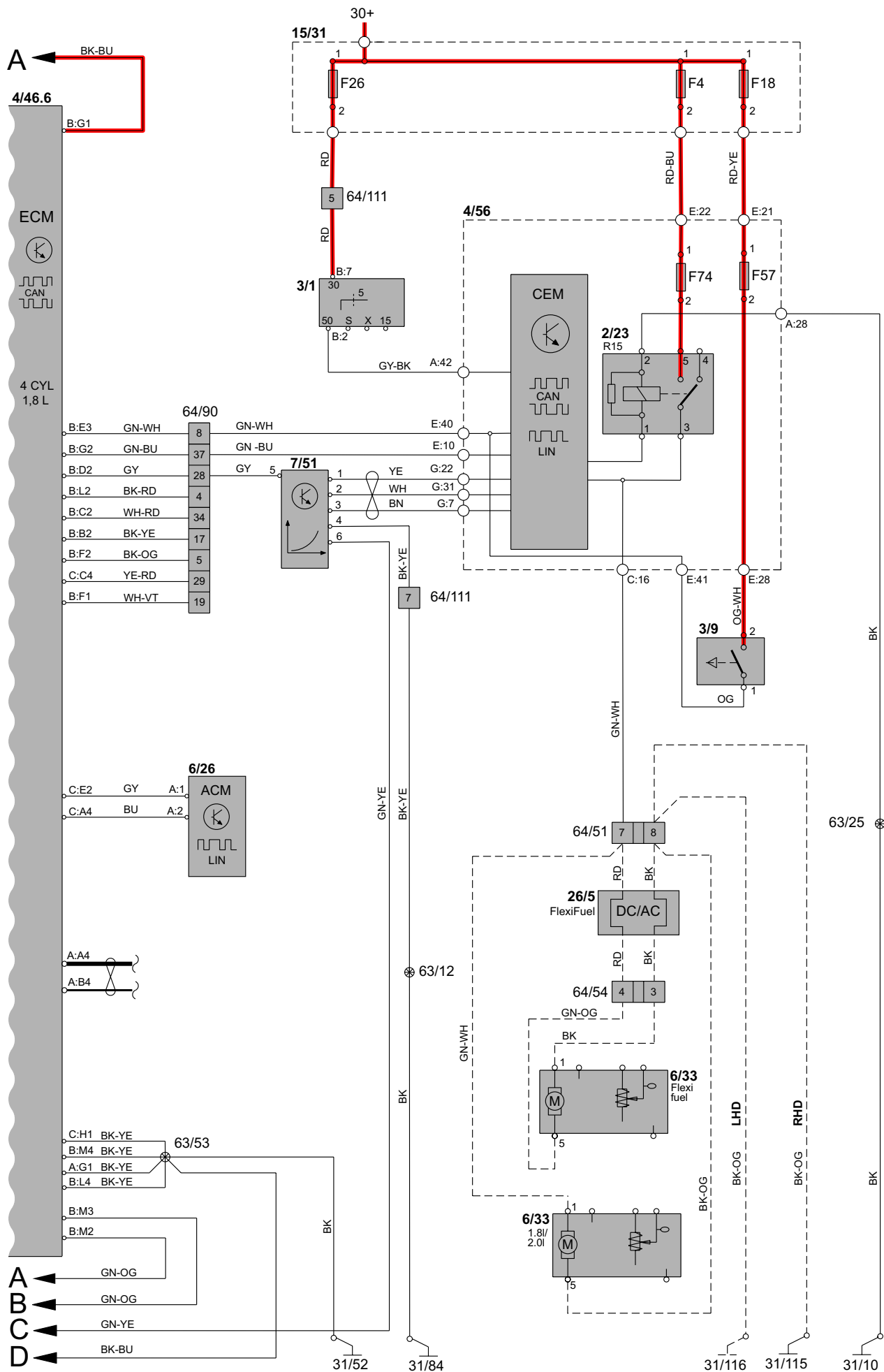


15/31 Engine compartment distribution box

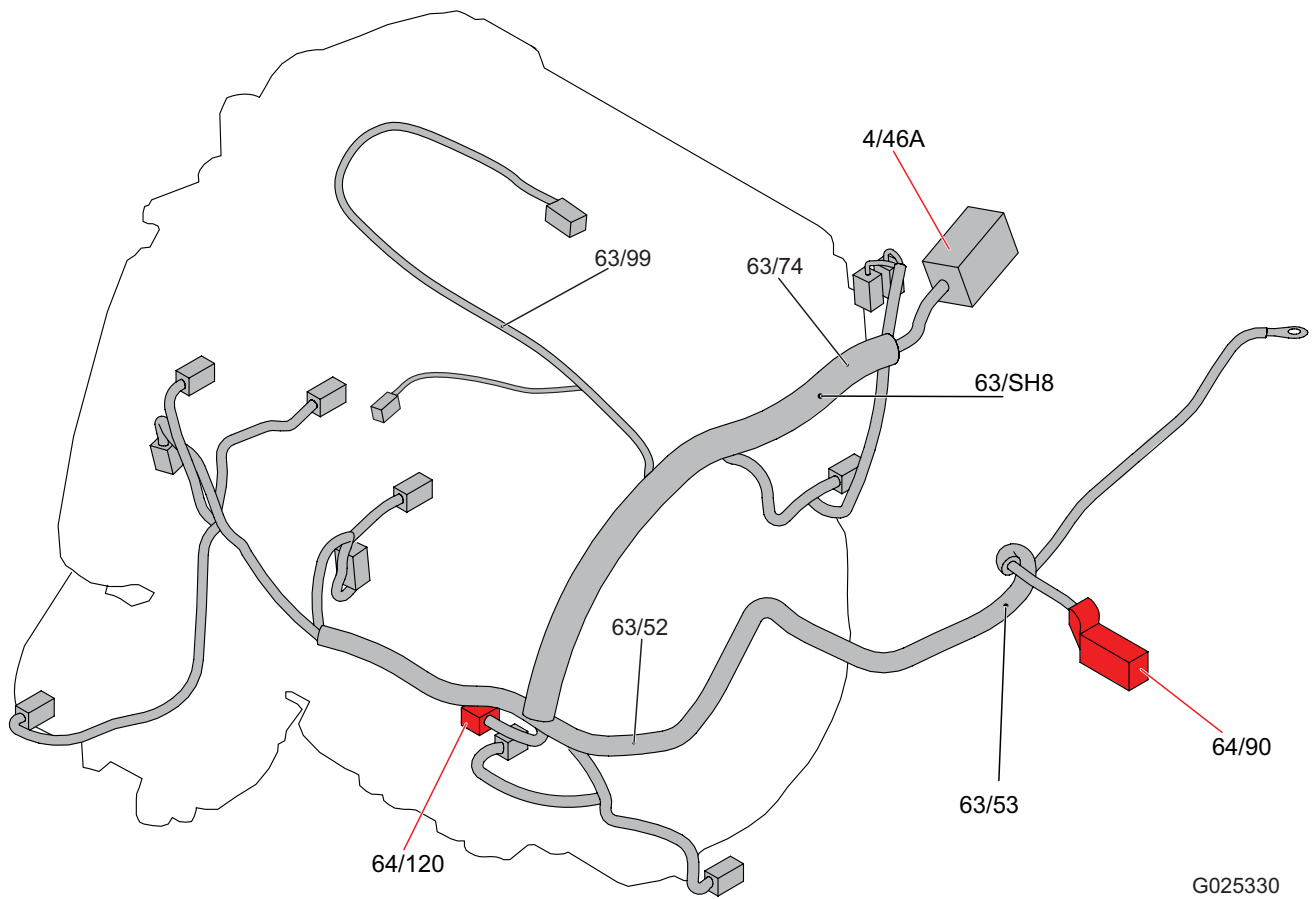
No.	Fuse function	via	A
F20	2/17 Relay, horn 16/10 Horn 1 16/11 Horn 2	- 2/17 2/17	15
F21	4/7 Combustion Preheater Module (CPM)	-	20
F22	16/79 Subwoofer Module (SUB)	-	25
F23	4/28 Transmission Control Module (TCM) 4/46 Engine Control Module (ECM), 5-cyl.	- -	10
F24	9/32 PTC-resistor, crankcase ventilation, 5-cyl. Diesel 9/38 Heated fuel filter, 5-cyl. Diesel	2/142 2/142	20
F26	2/35 Relay, starter motor 3/1 Start Control Module (SCU) 4/56 Central Electronic Module (CEM) 11K/1 Fuse in holder 11K/2 Fuse in holder F44 Fuse in the Central Electronic Module (CEM) F51-F54 Fuses in the Central Electronic Module (CEM) F73 Fuse in the Central Electronic Module (CEM)	3/1 - 3/1 3/1 - 3/1 3/1 3/1	15
F27	8/3 Electromagnetic clutch, climate control system	2/22	10
F29	2/34 Relay, front fog lights 10/5 Fog light, front left 10/6 Fog light, front right	- 2/34 2/34	15
F30	4/46 Engine Control Module (ECM), 2.0l Diesel, 1.6l Gasoline	-	3
F31	6/26 Alternator, 4-cyl.	-	10
continues			

Group 23 Fuel system

Engine management system, 4-cyl. 1.8l & 2.0l 2:2



Cable harness routing in vehicle Engine harness, gasoline 4-cyl 1.6



Cable harness routing in vehicle Engine harness, gasoline 4-cyl 1.8

