



Volvo S40
(2004-2005)



Wiring Diagrams and Electric Model year 2005

VOLVO
for life



VOLVO
WIRING DIAGRAM S40 (04-)/V50

TP 3978202
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.....	8
Relays	
Ignition switch and relays.....	10
Distribution box in engine compartment R1-R14.....	11
Central Electronic Module (CEM) R15-R18.....	12
Relays - soldered.....	13
Fuses	
Engine compartment distribution box F1-F8.....	14
Engine compartment distribution box F9-F18.....	15
Engine compartment distribution box F20-F32.....	16
Engine compartment distribution box F33-FH1	17
Central Electronic Module (CEM) F43-F52.....	18
Central Electronic Module (CEM) F53-F66.....	19
Central Electronic Module (CEM) F68-F86.....	20
Battery, PF1-PF2.....	21
Ground connections	
Overview.....	22
31/3 - 31/10	23
31/11 - 31/66	24
31/67 - 31/84	25
31/88 - 31/114	26
31/115 - Ground connections in chassis.....	27
Control modules	
Overview of locations.....	28
Overview of designations.....	29
Central Electronic Module (CEM) 1:2	30
Data communication Low speed CAN 1:2.....	32
Data communication LIN 1:2	34
Data communication High speed CAN	36
Data communication MOST	37
Start Control Module (SCU).....	38
Accessory Electronic Module (AEM)	39
Group 23 Fuel system	
Engine management system, 4-cyl 1.8l 1:2.....	40
Engine management system, 5-cyl 1:2.....	42
Engine management system, 5-cyl Turbo 1:2	44
Engine management system Diesel 1:2	46
Emission control 4-cyl 1.8l.....	48
Emission control, 5-cyl.....	49
Emission control, 5-cyl Turbo	50
Group 26 Cooling system	
Cooling fan.....	51
Cooling fan Diesel.....	52
Group 27 Engine control	
Cruise control.....	53
Cruise control, Diesel.....	54
Group 32 Alternator and voltage regulator	
Power supply	55
Power supply, Diesel	56
Group 33 Starting system	
Starting system	57
Starting system, Diesel	58
Group 35 Lighting	
High and low beam	59
High and low beam (Bi-Xenon)	60
Manual beam length adjustment.....	61
Automatic head light leveling (Bi-Xenon)	62
Running/Parking lights, Tail lights	63
Running/Parking lights, Tail lights (Bi-Xenon)	64
Fog lights	65
Fog lights LHD, Japan	66
Brake lights	67
Reversing lights	68
Follow-me-home lighting.....	69
Interior lighting 1:2	70
Instrument and control illumination	72
Auxiliary light.....	73
Group 36 Additional electrical equipment	
Rain Sensor	74
Direction indicators and flashing hazard lights	75
Direction indicators and flashing hazard lights (Bi-Xenon)	76
Windshield wiper/washer	77
Headlight washer	78
Wiper/washer, rear window.....	79
Horn	80
Immobilizer/Control module steering column lock (SCL)	81
Keyless Vehicle 1:2	82
Parking assistance, rear	85
Parking assistance, front.....	86
Accessory Electronic Module (AEM).....	87
Group 37 Wiring and fuses	
Diagnostics system	88
12V outlet.....	89
Tow hitch cable harness, 4-pin	90
Towbar cable harness, 7-pin.....	91
Towbar cable harness, 13-pin	92
Group 38 Instruments	
Seat belt reminder	93
Driver information module.....	94
Group 39 Other	
Multimedia & Traffic information	95
Audio 1:2	96
Cellular phone 1:2	98
Subwoofer.....	100
Handsfree	101

Table of Contents 2:2

Group 43 Transmission

Automatic transmission AW55-51.....	102
Shift interlock	103
Transmission M66	104

Group 59 Brake system

Brake control system	105
Brake control system & STC.....	106
Brake control system & DSTC	107

Group 64 Steering

Electronic power steering	108
---------------------------------	-----

Group 83 Doors and openings

Central locking, front doors.....	109
Central locking, rear doors.....	110
Central locking, trunk lid/tailgate.....	111
Child safety lock.....	112
Central locking, fuel filler flap.....	113
Signal receiver, remote-control, central locking.....	114
Power windows, front doors.....	115
Power windows, rear doors	116
Power sunroof.....	117

Group 84 Exterior decorative elements, etc.

Power door mirrors	118
Heated door mirrors.....	119
Heated rear window.....	120

Group 85 Interior equipment

Power driver's seat with memory function, LHD	121
Power driver's seat with memory function, RHD	122
Power driver's seat	123
Power passenger seat.....	124
Heated seats.....	125

Group 87 Climate controls

Climate control system 4-cyl 1.8I 1:2	126
Climate control system 1:2.....	128
Climate control system Diesel 1:2.....	130
Climate control system PTC element	132
Parking heater, auxiliary heater	133
Relay, electric engine heater	134

Group 88 Internal equipment

Auto-dimming rear-view mirror	135
Supplemental Restraint System (SRS) 1:2.....	136

Connectors..... 138

Branching points 160

Cable harnesses' routing in the vehicle

Harness engine, Gasoline 4-cyl	169
Harness engine, Gasoline 5-cyl.....	169
Harness engine, Gasoline 5-cyl, Turbo.....	170
Harness engine, Diesel.....	170
Harness engine compartment, 4-cyl	171
Harness engine compartment, 5-cyl & Turbo	171
Harness engine compartment, Diesel.....	172
Harness Dashboard	172
Harness Infotainment.....	173
Harness Floor S40	174
Harness Floor V50	175
Harness Ceiling S40	176
Harness Ceiling V50	176
Harness Tunnel	177
Harness Driver door	178
Harness Passenger door	178
Harness Rear door, right.....	179
Harness Rear door, left.....	179
Harness Trunk, S40	180
Harness Tailgate, V50	180

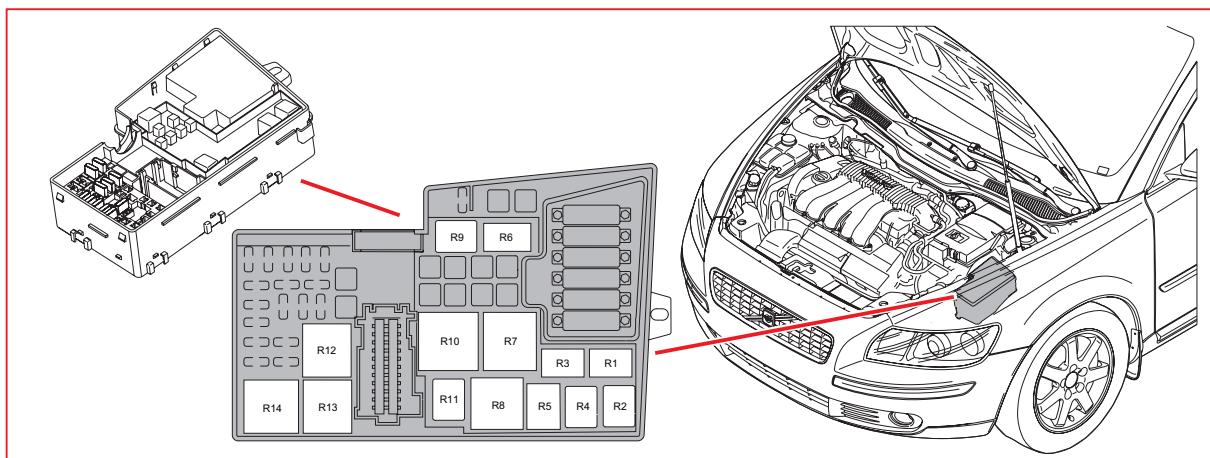
Component illustrations 181

Index 224

List of components 1:4

Relays

Distribution box in engine compartment R1-R14

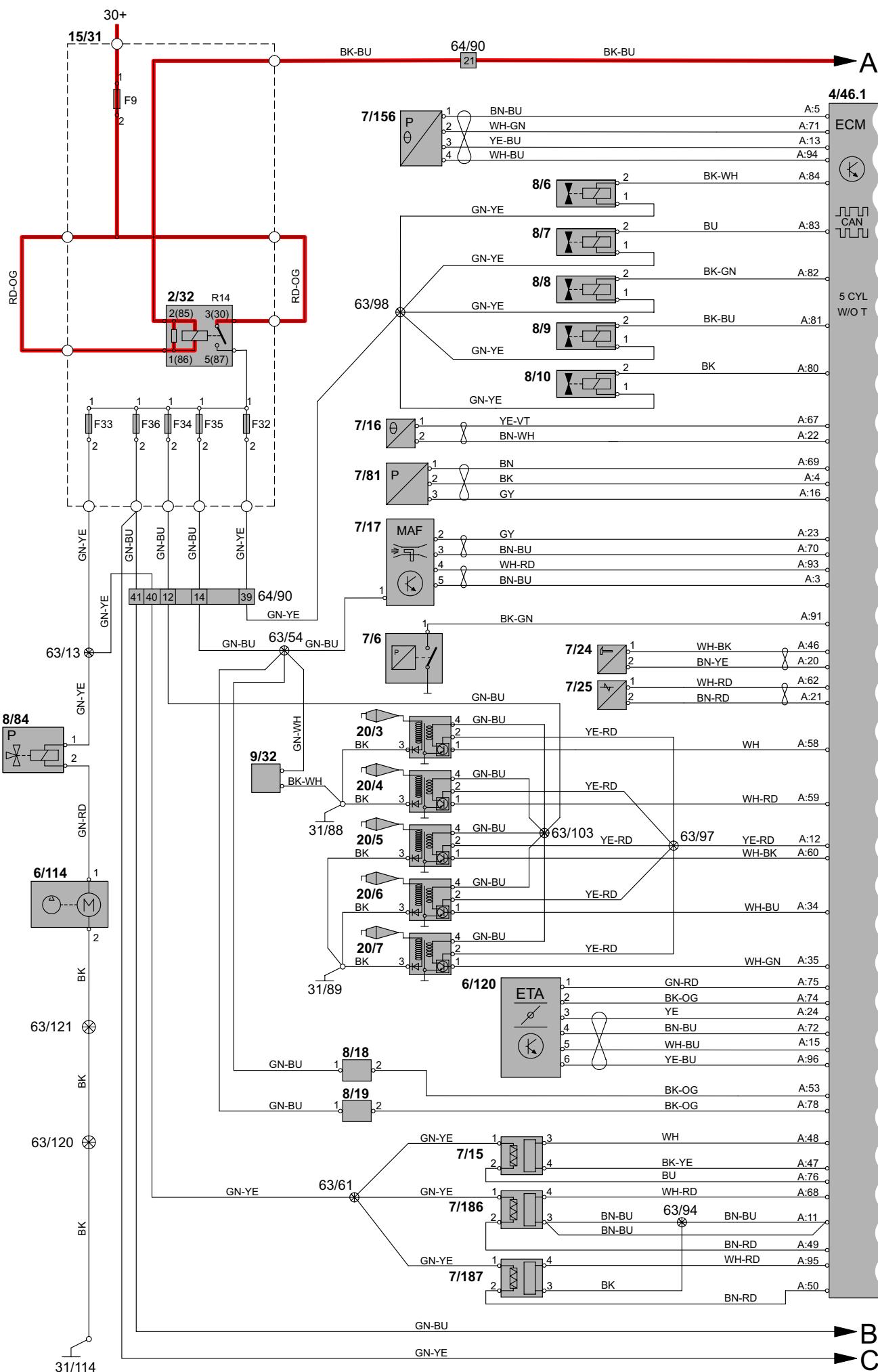


15/31 Engine compartment distribution box

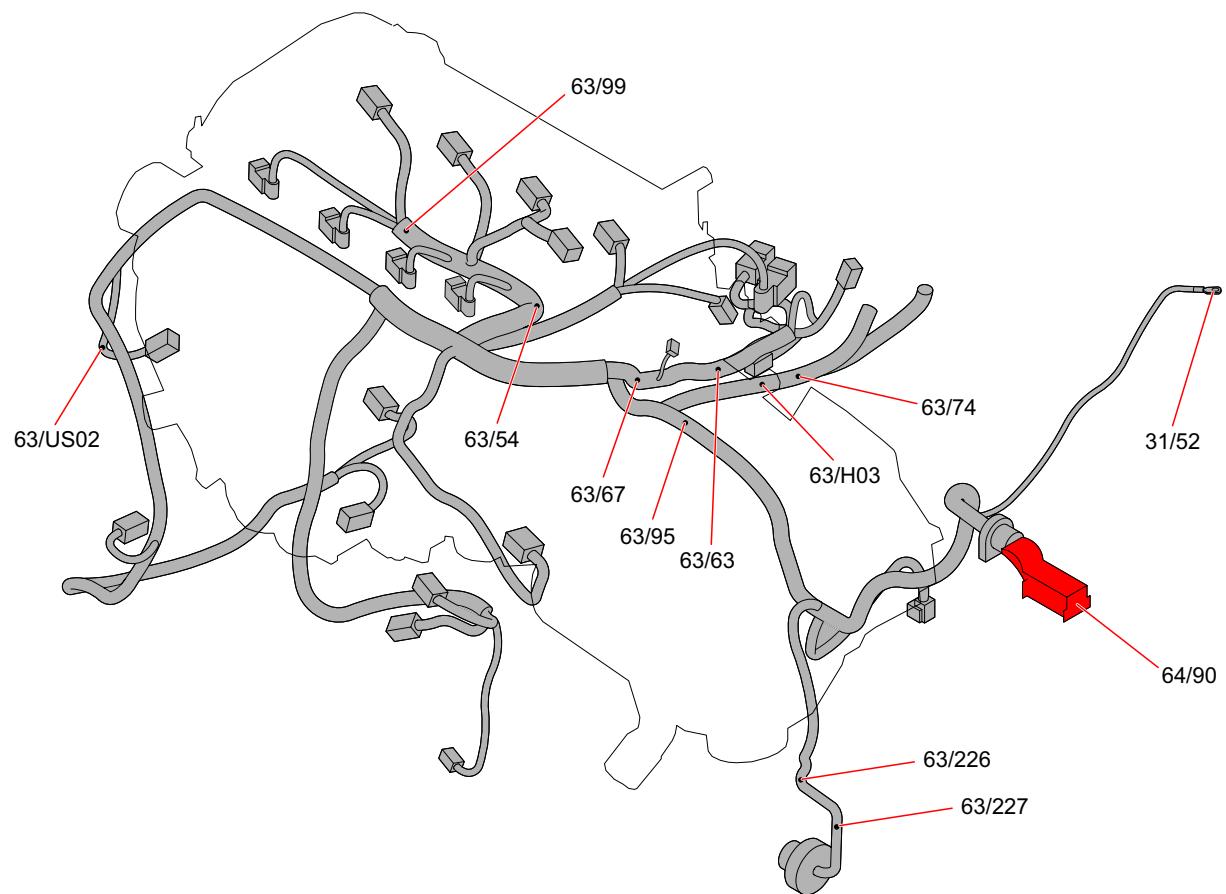
Pos	Relay function
R1	2/165 Relay immobilizer
R2	2/17 Relay, horn
R4	2/34 Relay, front fog lights
R5	2/142 Relay, pre-heater, fuel filter
R8	2/159.2 Relay, infotainment, extra
R9	2/182 Relay, headlight washer motor
R10	2/82 Relay, heated rear window
R11	2/22 Relay, climate control system
R13	2/35 Relay, starter motor
R14	2/32 Main relay, engine management system

Group 23 Fuel system

Engine management system, 5-cyl 1:2



Cable harnesses' routing in the vehicle
Harness engine, Gasoline 4-cyl



Cable harnesses' routing in the vehicle
Harness engine, Gasoline 5-cyl

