Full download: http://manualplace.com/download/volvo-s40-2003-engine-16/

WIRING DIAGRAM

Section 3 (39) S40/V40 2003

TP 3965202

Groups

WEU

= Western Europe

Other Group 23 = Fuel system Group 26 = Cooling system ABS = Anti-lock Brake System Group 27 = Engine controls A/C = Air conditioning Group 32 = Generator and voltage regulator AUTO = Automatic transmission Group 33 = Starting system D = Driver Group 35 = Lighting **ECC** = Electronic climate control system Group 36 = Additional electrical equipment EMS 2000 = EMS 2000 Engine management system Group 37 = Wiring and fuses FL = Front left Group 38 = Instruments FR = Front right Group 39 = Other HL= High level of equipment Group 43 = Transmission L = Left Group 52 = Vacuum hydraulic brake system LHD = Left-hand drive Group 59 = Brake system = Standard level of equipment LL Group 83 = Doors and openings LPG = Liquified petroleum gas Group 84 = Exterior decorative elements etc. = Manual transmission MAN Group 85 = Interior equipment **MELCO** = Melco engine management system Group 87 = Climate controls = Passenger Group 88 = Internal equipment PETROL = Gasoline R = Right **REC** = Receiver Countries/Markets RHD = Right-hand drive RL = Rear left = Austria RR = Rear right **AUS** SRS = Australia = Airbag В = Belgium **TRANS** = Transmitter CDN = Canada **TURBO** = Turbo engine = Switzerland CH **XENON** = Xenon lamps D = Germany DK = Denmark **Colors** F = Spain EU/OS = Markets outside USA and Canada BL = Blue FIN = Finland = Brown ΒN GB = Great Britain GN = Green **ISR** = Israel GR = Gray = Japan OR = Orange KOR = Korea Ρ = Pink Ν = Norway R = Red NL= Netherlands = Black SB S = Sweden VO = Violet USA = United States of America

W

Υ

= White

= Yellow

How to use the wiring diagrams

The descriptions below apply in general to all wiring diagram manuals, although not all sections are necessarily contained in this manual.

A. Component designation

Every component has a component designation that consists of two parts.

The first part is a type number that describes the type of component in question, for example 3/xx.

The second part of the designation is a serial number, for example, x/2.

Combined these give a component designation, for example, 3/2.

At the end of the manual is a list of components, where, with the help of the component designation, you can read off the name of the component, for example, 3/2 =light switch.

List of type numbers

The list shows which type of component that respective type numbers refer to, for example, 3/x = switch, 6/x = electric motor, etc.

1	Battery
2	Relay
3	Switch

4 Control module

5 Combined instrument panel

6 Electric motor 7 Sensor 8 Actuator

9 Heating element

10 Light11 Fuse

15 Distribution rail

16 Audio

17 Service/diagnostics

18 Contact reel

19 Meter

20 Ignition component/shunt31 Ground connection

43 Junction point44 Connector

B. Junction points

The wiring diagrams contain numbered junction points, e.g. 43/352.

This manual contains a section with a list of junction points. This list shows all the components which are connected to each junction point.

The location of the junction points is shown in the "Cable harness routing in vehicle" section.

C. Connectors

Connectors provide a bridge between two cables harnesses and are described in the "Connectors" section.

D: Electrical distribution

Operation of the fuses and relays is shown in the "Electrical distribution" section.

E. Data communication

Today's cars are equipped with a CAN network, which transmits information. Connections to this network are shown in their entirety on the respective wiring diagrams. Complete information on CAN communication is can be found in the section titled "Data communication".

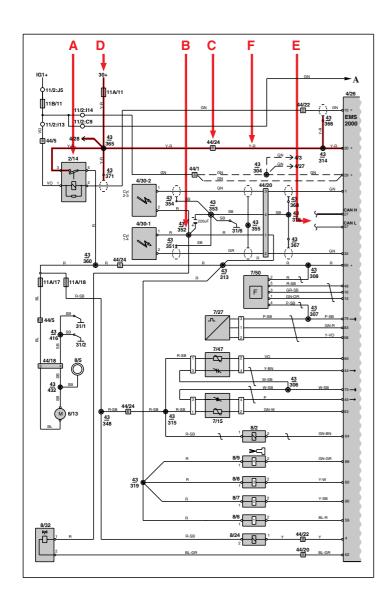
F. Abbreviations

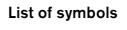
A number of different abbreviations are used in the manual. These are explained in the section "Abbreviations".

G. Component location

There is a section at the end of the manual in which the appearance and location of components is described in numerical order.

How to use the wiring diagram





= System voltage

= Ground connection via wiring

= Ground connection on component/chassis

= Screened wire

= Junction point

= Twisted cable

= Electrical connection

---- = Variant

= CAN communication

= CAN high speed data signal (CAN H)

= CAN low speed data signal

_____ = Serial communication

= DIN cable, coaxial cable, etc.

= Data communication

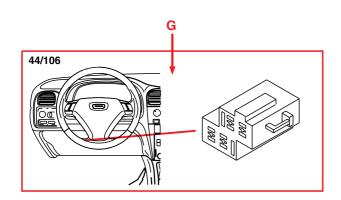
CAN = CAN communication

○ = Connection with fuse box

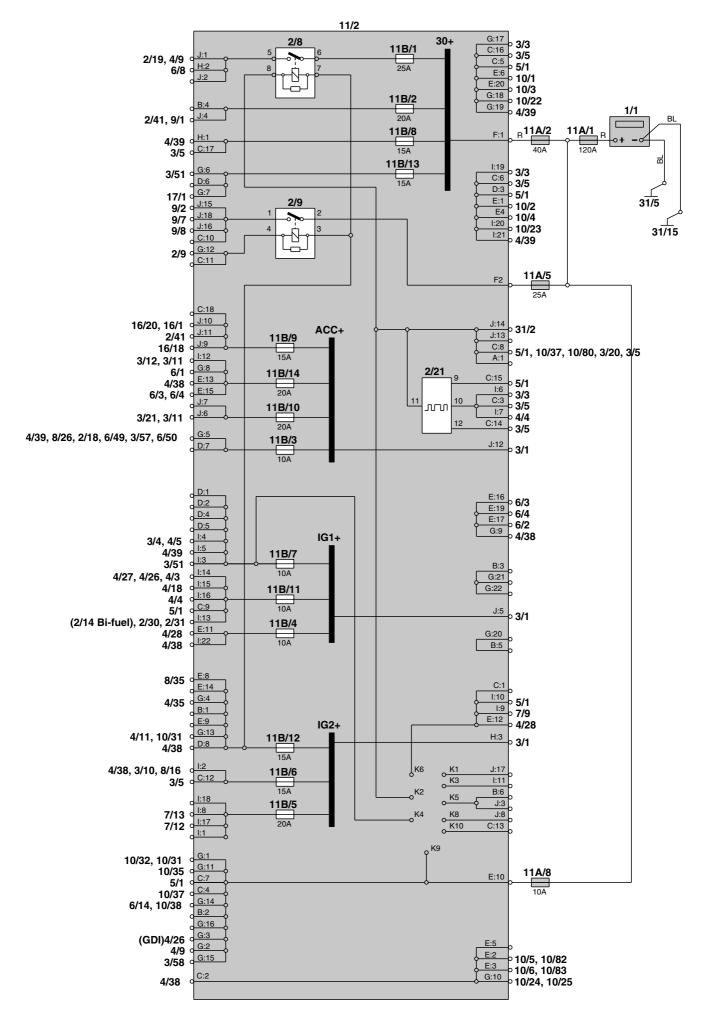
= Further connection to...

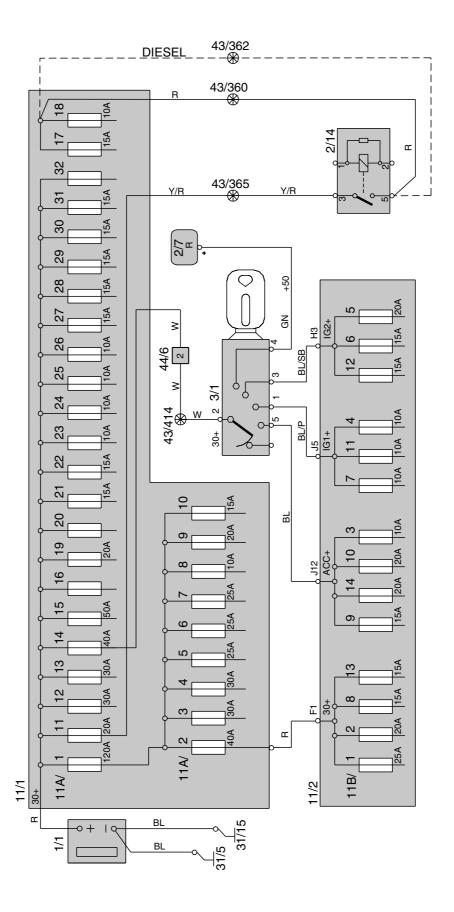
= Connector between cable harnesses

= Connector connected to component

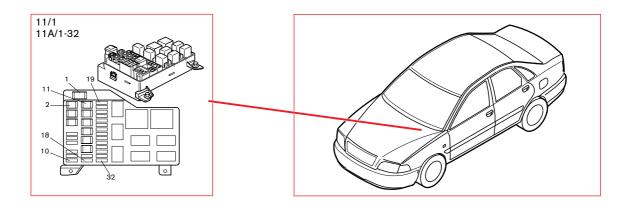


Electrical distribution Overview



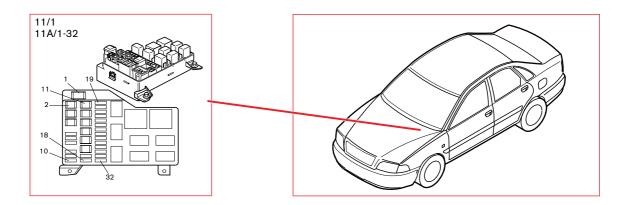


Fuses Engine compartment 11A/1-8



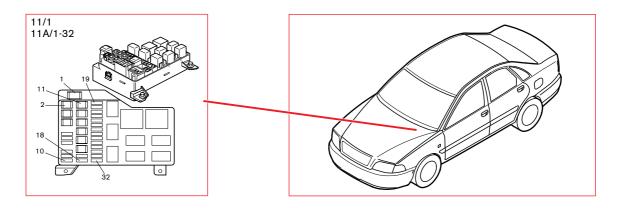
No.	Fuse fu	nction	via	Α
1	11A/2-10	Fuses in the engine compartment		120
	9/9	Glow plug	2/36	
	6/7	Generator		
2	11B/1-2	Fuses in the passenger compartment		40
	11B/8	Fuses in the passenger compartment		
	11B/13	Fuses in the passenger compartment		
5	9/2	Heated rear window	2/9	25
	9/7	Heated door mirror, driver's door	2/9	
	9/8	Heated door mirror, passenger door	2/9	
	3/33	Control module, power windows/door mirrors, driver's door	2/9	
6	8/25	Power driver's seat		25
7	8/26	Power passenger seat		25
8	5/1	Combined instrument panel		10
	4/26	Engine management system, Melco 2		
	8/35	Alarm siren		
	4/35	Control module, key-inserted warning/seat belt reminder	3/58	
	4/39	Control module for locks and alarm, VGLA	3/58	
	10/35	Courtesy lighting		
	10/37	Glove compartment lighting		
	10/31	Ceiling light for HL with reading lights		
	10/33	Reading lights, rear		
	10/36	Lighting, vanity mirror, passenger side		
	10/47	Lighting, vanity mirror, driver's side		
	4/9	Climate Control Module (CCM)		
	10/32	Ceiling light for LL		
	10/38	Cargo compartment lighting		
	6/14	Power antenna		
		continues		

Fuses Engine compartment 11A/9-11



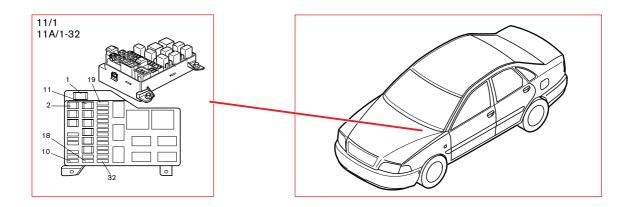
No.	Fuse f	unction	via	Α
9	4/40	Receiver, VGLA		20
	4/39	Control module for locks and alarm, VGLA		
	4/41	Control module, ultrasonic glass breakage sensor		
	6/34	Rear left child safety lock	4/39	
	6/35	Rear right child safety lock	4/39	
	6/36	Central locking with deadlock on driver's door	4/39	
	6/37	Central locking with deadlock on passenger door	4/39	
	6/38	Central locking with deadlocks, rear driver's side	4/39	
	6/39	Central locking with deadlocks, rear passenger side	4/39	
	6/28	Central locking, driver's door	4/39	
	6/29	Central locking, passenger door	4/39	
	6/30	Central locking, rear driver's side door	4/39	
	6/31	Central locking, rear passenger side	4/39	
	6/32	Central locking, trunk lid/tailgate	4/39	
	6/55	Lock motor, fuel filler flap	4/39	
10	16/1	Radio		15
11	11A/17	-18 Fuses in the engine compartment	2/14	20
	4/18	Control module, electronic immobilizer		
	4/26	Engine management system		
	2/14	Main relay engine management system, Melco 2, Diesel		
	7/50	Mass airflow sensor MAF		
	4/30	Ignition coils		
	8/6-9	Injectors		
	8/32	CVVT valve		
	4/33	Control module, fuel system Melco 2	2/30	
	7/64	IGF sensor, Melco 2	2/30	
	4/50	Control module, fuel throttle relay, Melco 2	2/32	
	6/56	Engine, fuel throttle body	4/50	
	2/11	Relay, electric cooling fan, speed 1, Diesel	2/14	
	2/28	Relay, electric cooling fan, speed 2, Diesel	2/14	
	7/27	Camshaft position sensor	2/14	
	7/56	Crankshaft position sensor		
	8/38	Regulator, fuel line pressure, Diesel	2/14	
	8/23	Turbocharger control valve, Diesel	2/14	
		continues		

Fuses Engine compartment 11A/12-17



No.	Fuse fu	nction	via	Α
12	3/34	Switch unit, passenger door power window	2/18	30
	6/18	Motor, power window, passenger door	2/18, 3/34	
	3/33	Control module, power windows/door mirrors, driver's door		
	6/17	Motor, power window, driver's door	3/33	
	6/19	Motor, rear left power window	3/33	
	6/20	Motor, rear right power window	3/33	
	6/21	Power door mirror, driver's side	3/33	
13	2/11	Relay, electric cooling fan, speed 1		30
	6/9	Motor, electric cooling fan	2/11	
	6/26	Motor, two-speed cooling fan	2/28	
	2/28	Relay, electric cooling fan, speed 2		
14	2/7	Starter motor relay	3/1	40
	6/6	Starter motor	2/7	
	3/1	Ignition switch		
	11B3-7	Fuses in the passenger compartment	3/1	
	11B/9-12	! Fuses in the passenger compartment	3/1	
	11B/14	Fuses in the passenger compartment	3/1	
15	4/28	ABS control module		50
17	6/13	Fuel pump		15
	2/31	Fuel pump relay, Bifuel		
	9/10	Fuel preheater, Diesel		
		continues		

Engine compartment 11A/18-23



No.	Fuse fu	nction	via	Α
18	8/24	EVAP valve		10
	7/47	Heated oxygen sensor, rear		
	7/60	Sensor, air pressure/temperature/flow, Melco 2		
	9/12	Crankcase breather, Turbo, Diesel		
	8/13	EGR valve, Diesel		
	7/15	Heated oxygen sensor, front		
	8/2	Idling valve		
	8/23	Turbocharger control valve		
	7/78	Leakage diagnostic pump (LDP), Turbo USA		
	7/85	Heated oxygen sensor LPG		
	2/34	Relay, vacuum pump, automatic transmission	7/67	
	7/50	Mass airflow sensor MAF, Diesel		
	8/36	Engine stopping damper valve, Diesel		
	7/67	Pressure monitor, vacuum pump, automatic transmission		
	6/51	EGR stepper motor, Melco 2		
	4/26	Engine management system, Diesel	2/10	
19	10/13	Front left fog light	4/38	20
	10/14	Front right fog light	4/38	
	10/73	Indicator light, front fog lights	4/38	
	10/74	Indicator light, rear fog lights	4/38	
	10/30	Rear fog light	4/38	
20	16/20:11	Audio amplifier		20
21	10/7	Left-hand low beam	4/38	15
	10/86	Left-hand headlight, Xenon	4/38	1
22	10/8	Right-hand low beam	4/38	15
	10/87	Right-hand headlight, Xenon	4/38	1
23	10/24	RL parking light	4/38	10
	10/25	RR parking light	4/38	
	10/5	FL parking light	4/68	
	10/6	FR parking light	4/68	
		continues		