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VOLVO S80L

# WIRING DIAGRAM 2009 SUPPLEMENT

TP 39145202

# Vehicles with SRS (Airbag)/SIPS bag/IC (Inflatable curtain)

#### Warning!

Extra caution must be exercised when working on vehicles equipped with SRS/SIPS bag/ IC in order to avoid:

- 1. Personal injuries when performing repair work.
- 2. Damage or malfunction of the SRS/SIPS bag/IC system.

Work involving the SRS/SIPS bag/IC systems or other components in the vehicle that may affect the SRS/SIPS bag/IC systems must always be performed by an authorized Volvo workshop.

In case of doubt, consult the SRS and SIPS bag/IC service manual.

#### Is the vehicle equipped with SRS/SIPS bag/IC?

Vehicles with SRS are most easily recognized by the letters SRS in the center of the steering wheel. If the vehicle also has a passenger side airbag, the letters SRS are stamped on the dashboard above the glove compartment. SRS vehicles from 1993 and onward also have explosive seat belt tensioners. SIPS bags are only installed on SRS vehicles from 1995 and onward. SIPS bag decals are located on the windshield and seat compartment. Vehicles with IC can be recognized by the letters IC on the C/D panel (4 door) or the B panel (5 door).

#### **General recommendations**

- Be especially careful when working on or around SRS, SIPS, and IC components.
- Make sure that no wires are pinched, frayed, or pierced.
- · Never fit accessories by the sensors.
- Where applicable, work on the steering wheel, steering shaft, or steering gear must be done in accordance with the methods in the SRS section of VIDA.
- Certain components of the aforementioned systems must be grounded while working. Read the appropriate sections in VIDA.
- Install no accessories in the areas between the A and B-posts, the B and C-posts, and the C and D-posts.

#### **Test terminal**

Fuse in cargo compartment auxiliary fuse box

#### Changes implemented up to and including May 2008

Any changes made to the vehicle after this date are not included in the manual. If necessary, refer to service bulletins.

Volvo models are sold in versions adapted for different markets. These adaptations depend on factors such as legal requirements, taxation, and market demands.

This manual may therefore include illustrations and text that do not apply to the vehicles in your country.

#### Order number TP 39145202

Can be ordered from Technical Information Shop (TIS) at www.volvocarstechinfo.ford.com/vss We retain the right to make modifications.

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# **Explanations Abbreviations**

Groups		Other	
Group 23	= Fuel system	ACC	= Adaptive Cruise Control
Group 26	= Cooling system	Ag	= Silver plated
Group 27	= Engine controls	Au	= Gold plated
Group 32	= Alternator and voltage regulator	AUTO	= Automatic transmission
Group 33	= Starting system	BLIS	= Blind spot information system
Group 35	= Lighting	CAN	= CAN communication
Group 36	= Additional electrical equipment	DPY	= Display
Group 37	= Wiring and fuses	ECC	= Electronic climate control system
Group 38	= Instruments	ETA	= Engine throttle body
Group 39	= Other	EXC	= Exclusive
Group 43	= Transmission	GDL	= Gas discharge lamp
Group 59	= Brake system	HISPEED	= High speed data bus
Group 64	= Steering	IR	= Infrared sensor
Group 83	= Doors and openings	LIN	= LIN communication
Group 84	= Exterior decorative elements, etc.	LH	= Left-hand side
Group 85	= Interior equipment	LHD	= Left-hand drive
Group 87	= Climate control system	MAN	= Manual transmission
Group 88	= Internal equipment	MEMORY	= Memory driver's seat
			= Midspeed data bus
Ignition sw	vitch symbols	MMS	= Mass Movement Sensor
X	= Accessories (audio position)	PETROL	= Gasoline
S	= Powered upon insertion of key	RH	= Right-hand side
15	= Contact remains connected during	RHD	= Right-hand drive
	start	SCR	= Screened
15I	= Contact is broken while starting	SRS	= Airbag
30	= Constant power from the battery	T	= Turbocharged engine
50	= Start	W/O	= Without
		2WD	= Two-wheel drive
Countries/	Markets	4CYL, I4	= 4-cylinder engine
Α	= Austria	5CYL, I5	= 5-cylinder engine
AUS	= Australia	6CYL, I6	= 6-cylinder engine
В	= Belgium	8CYL, V8	= 8-cylinder engine
CDN	- Canada		

A = Austria
AUS = Australia
B = Belgium
CDN = Canada
CH = Switzerland
D = Germany
DK = Denmark
E = Spain

EU/OS = Markets outside USA and Canada FIN = Finland

GB = Great Britain
ISR = Israel
J = Japan
KOR = Korea
N = Norway
NL = Netherlands
S = Sweden

USA = United States of America

WEU = Western Europe

#### Colors

BK, SB = Black BN = Brown BU, BL = Blue GN = Green GY, GR = Gray LGN = Light Green = Natural NLOG, OR = Orange PK, P = Pink RD, R = Red VT, VO = Violet WH, W = White = Yellow YE, Y

### How to use the wiring diagrams 1:2

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, e.g. x/2.

Together, this constitutes a component designation, e.g. 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 Driver information module
- 6 Electric motor
- 7 Sensor
- 8 Actuator
- 9 Heating element
- 10 Light
- 11 Fuse
- 15 Electrical distribution rail/box
- 16 Audio
- 17 Service/diagnostics
- 18 Contact reel
- 19 Meter
- 20 Ignition component/shunt
- 27 Optics
- 31 Ground connection
- 73 Branching point
- 74 Connector

#### **B.** Branching points

The wiring diagrams contain numbered branching points, for example 73/5035.

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

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

#### C. Connectors

Connectors provide a bridge between two cable 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 contain CAN, LIN and MOST networks that transfer information. Connections to these networks are not shown in their entirety in the respective wiring diagram. Complete information on CAN, LIN and MOST communication is found in the section "Control modules".

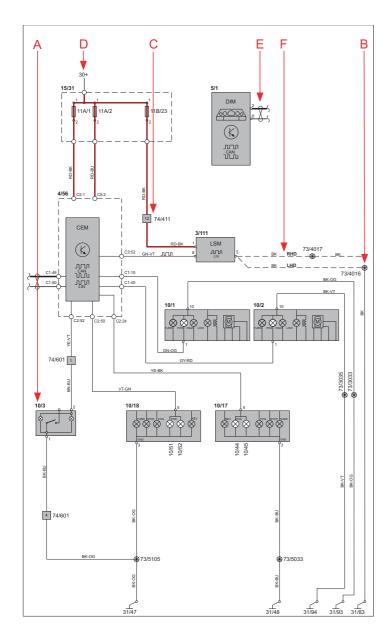
#### F. Abbreviations

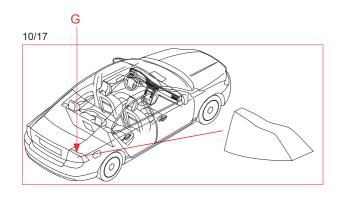
A number of different abbreviations are used in the manual. These are explained in the section "Abbreviations".

#### **G.** Component location

The end of the manual contains a section that describes component appearance and location in numerical order.

### How to use the wiring diagrams 2:2





#### List of symbols

= System voltage

= Ground connection via wiring

= Ground connection in component/chassis

= Screened wire

= Junction point

\_\_\_ = Electrical connection

---- = Variant

= CAN communication

= CAN high data signal (CAN H)

= CAN low data signal (CAN L)

\_\_\_\_ = LIN communication

= LIN communication

\_\_\_\_\_ = DIN cable, coaxial cable, etc.

= Data communication

= CAN communication

\_\_\_\_ = MOST communication

# ≥ MOST communication

= Connection with distribution box

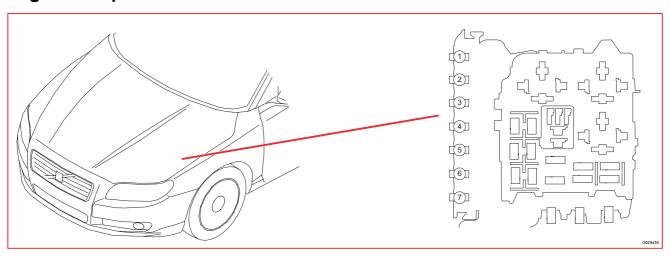
= Further connection to...

= Connector between cable harnesses

= Connector connected in component

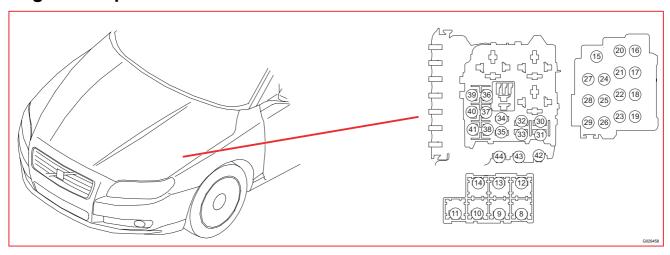
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# Fuses Engine compartment electrical center F1-F18



### 15/31 Distribution box in engine compartment

No.	No.	Fuse function	via	Α	
F1	11A/1	Main fuse for fuses in CEM	-	50	
F2	11A/2	Main fuse for fuses in CEM	-	50	
F3	11A/3	11D/A1-11D/A12 Fuses in cargo compartment fuse box	-	60	
F4	11A/4	2/88 Relay, 15-feed rear 11D/B1-11D/B8 Fuses in cargo compartment fuse box 11D/B9-11D/B12 Fuses in cargo compartment fuse box	- 2/88 -	60	
F5	11A/5	11D/D1-11D/D7 Fuses in cargo compartment fuse box	-	50	
F9	11B/9	6/1 Wiper Motor Module (WMM)	-	30	
F11	11B/11	4/31 Passenger compartment fan control module 6/28 Motor, passenger compartment fan		40	
F13	11B/13	4/16 Brake Control Module (BCM), pump	-	40	
F14	11B/14	4/16 Brake Control Module (BCM), valves	-	20	
F16	11B/16	4/118 Headlamp Control Module (HCM) - 10			
F17	11B/17	F2-F4 Fuses in the Central Electronic Module (CEM)	-	20	
F18	11B/18	4/80 Forward Sensing Module (FSM) 7/203 Forward-aimed radar (FLR)		5	
continues					



### 15/31 Distribution box in engine compartment

No.	No.	Fuse f	Fuse function		Α	
F20	11B/20	4/28	Transmission Control Module (TCM)	-	10	
		4/46	Engine Control Module (ECM)	-		
		4/9	Supplemental Restraint System Module (SRS)	-		
				-		
F22	11B/22	6/114	Vacuum pump, 5-Cyl. Turbo	2/133	20	
F23	11B/23	3/111	Light Switch Module (LSM)	-	5	
F24	11B/24	6/104	High pressure headlight washer motor	-	15	
F25	11B/25	9/1	Front 12V outlet	-	15	
		9/25	Rear 12V outlet	-		
		16/45	Portable navigation system	-		
		16/109	DVD player/control module	-		
F26	11B/26	3/117	Switch unit, ceiling light	-	5	
		4/33	Sunroof control module	-		
		6/48	Damper Motor Module (DMM), recirculation	-		
		6/95	Damper Motor Module (DMM), temperature, left side	-		
		6/96	Damper Motor Module (DMM), temperature, right side	-		
		6/102	Damper Motor Module (DMM), defroster	-		
		6/103	Damper Motor Module (DMM), floor/ventilation	-		
		7/159	Air Quality Sensor (AQS)	-		
F27	11B/27	2/31	Relay, 15-feed	-	5	
		2/193	Relay, comfort functions	-		
continues						