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VOLVO V70 (08-), XC70 (08-) & S80 (07-)

## WIRING DIAGRAM 2008 SUPPLEMENT



TP 39127202 LATE DESIGN

## 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 introduced up to and including September 2007

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 39127202

TP 39127202 Supplement, can also be found on Electronic Wiring Diagram (EWD) TP 39125002. TP39127202 contains updated information for the 2008 model late design, for other electrical systems see publication TP39115202.

We retain the right to make modifications.

## **Table of Contents 1:2**

Vehicles with SRS (Airbag)/SIPS bag/		Group 23 Fuel system	
IC (Inflatable curtain)		Engine management system, 5 Cyl. Diesel 1:3	43
Explanations	5	Engine management system, 4 Cyl. 1:2	
Abbreviations		Engine management system, 4 Cyl. Flexifuel 1:2	
How to use the wiring diagrams 1:2		Engine management system, 4 Cyl. Diesel 1:2	
Electrical distribution 1:2	8	Engine management system, 6 Cyl. Turbo 1:2	
		Engine management system, 8 Cyl. 1:2	
Fuses		Emission control, 4 Cyl.	
Engine compartment electrical center F1-F7	10	Emission control, 8 Cyl.	
Engine compartment distribution box F9-F24		•	
Engine compartment distribution box F3-F30		Group 26 Cooling system	
Engine compartment distribution box F31-F37		Cooling fan, 4 Cyl	E (
Engine compartment distribution box F38		Cooling fan, 4 Cyl. Diesel	
Engine compartment electrical center F39-F44		Cooling fan, 5 Cyl. Diesel	
Central Electronic Module (CEM) F1 - F11		Cooling fan, 5 Cyl. Turbo & 6 Cyl	
Central Electronic Module (CEM) F13 - F19		Cooling fan, 8 Cyl	
Central Electronic Module (CEM) F20 - F28		Cooling lan, o Cyl	02
Rear electrical center FA1-FA12			
Distribution box in cargo compartment FB1-FB12		Group 27 Engine controls	
Rear electrical center FD1-FD7		Cruise control 4 Cyl	
Battery PF1-PF2		Cruise control 4 Cyl. Diesel	
		Cruise control 5 Cyl. & 6 Cyl	
Deleve		Cruise control 5 Cyl. Diesel	
Relays		Cruise control 8 Cyl	67
Relays in the engine compartment R2			
Relays in the engine compartment R8-R9		Group 32 Alternator and voltage regulate	tor
Relays in the engine compartment R10-R13		Power supply	
Distribution box in cargo compartment RA1-RD1		T Owor Supply	00
Central Electronic Module (CEM)	27	Group 22 Starting system	
		Group 33 Starting system	01
Ground connections		Starting system 4 Cyl	08
Overview			
31/1 - 31/7		Group 35 Lighting	
31/10 - 31/15		Running/parking lights, Tail lights V70	70
31/47 - 31/66		Running/parking lights, Tail lights (Bi-Xenon) V70	
31/67 - 31/83		Fog lights, V70	
31/84 - 31/93		Brake light, V70	
31/94 - 31/XX10		Reversing lights, V70	
31/XX14 - 31/AL	35	Door handle lighting LHD	
		Door handle lighting RHD	76
Control modules			
Overview of locations	36	Group 36 Other electrical equipment	
Overview designations		Direction indicator and Hazard warning flashers	
Data communication high speed CAN		LHD, V70	7
Data communication high speed CAN 4 Cyl		Direction indicator and Hazard warning flashers	, ,
Data communication LIN 1:2		RHD, V70	78
Data communication MOST		High-pressure headlight washer	
		Wiper/washer rear window, V70	
		Parking assistance	
		Keyless vehicle 4 Cyl. 1:2	
		Collision warning with brake servo	
		Alcolock	

## **Table of Contents 2:2**

Group 37 Wiring and fuses, Accessories	Group 87 Climate control system	
Tow hitch cable harness, 4-pin V70 86	Climate control system 4 Cyl. 1:2	
Tow hitch cable harness, 7-pin V70 87		
Tow hitch cable harness, 13-pin V70 88	Connectors 100	
Group 38 Instruments	Branching points112	
Driver information module		
One 00 Other	Cable harness routing in vehicle	
Group 39 Other	Engine harness, 4 Cyl117	
Audio 1:2	Engine harness, 4 Cyl. Diesel117	
Audio Premium 1:3	Engine harness, 8 Cyl118	
Rear seat entertainment	Harness engine compartment118	
	Harness ceiling119	
<b>Group 43 Transmission</b>	Harnesses rear axle119	
Differential Electronic Module (DEM)		
,	Component illustrations120	
Group 55 Parking brake		
Electronic parking brake	Index124	
	List of components 1:4125	

## Explanations Abbreviations

Groups		Other	
Group 23	= Fuel system	ACC	= Adaptive Cruise Control
Group 26	= Cooling system	AUTO	= Automatic transmission
Group 27	= Engine controls	BLIS	= Blind spot information system
Group 32	= Alternator and voltage regulator	CAN	= CAN communication
Group 33	= Starting system	DPY	= Display
Group 35	= Lighting	ECC	= Electronic climate control system
Group 36	= Additional electrical equipment	ETA	= Engine throttle body
Group 37	= Wiring and fuses	GDL	= Gas discharge lamp
Group 38	= Instruments	HISPEED	= High speed data bus

Group 55 = Parking brake Group 87 = Climate control system

= Transmission

= Other

#### Ignition switch symbols

Group 39

Group 43

X = Accessories (audio position)
 S = Powered upon insertion of key
 15 = Contact remains connected during start
 15I = Contact is broken while starting
 30 = Constant power from the battery
 50 = Start

#### Countries/Markets

Α = Austria **AUS** = Australia В = Belgium CDN = Canada = Switzerland CH D = Germany DK = Denmark Ε = Spain

EU/OS = Markets outside USA and Canada

FIN = Finland GB = Great Britain = Israel **ISR** = Japan J **KOR** = Korea = Norway Ν NL= Netherlands S = Sweden

USA = United States of America

WEU = Western Europe

MAN = Manual transmission
MEMORY = Memory driver's seat
MIDSPEED = Midspeed data bus
MMS = Mass Movement Sensor
PETROL = Gasoline

= Infrared sensor

= Left-hand side

= Left-hand drive

= LIN communication

RH = Right-hand side
RHD = Right-hand drive
SCR = Screened
SRS = Airbag

SRS = Airbag T = Turbocharged engine

W/O = Without

2WD = Two-wheel drive 4CYL, I4 = 4-cylinder engine 5CYL, I5 = 5-cylinder engine 6CYL, I6 = 6-cylinder engine 8CYL, V8 = 8-cylinder engine

= Black

#### Colors BK. SB

IR

LIN

LH

LHD

= Brown ΒN BU, BL = Blue = Green GN GY, GR = Gray = Light Green LGN NL = Natural OG, OR = Orange PK, P = Pink = Red RD, R VT, VO = Violet WH, W = White YE, Y = Yellow

#### 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".

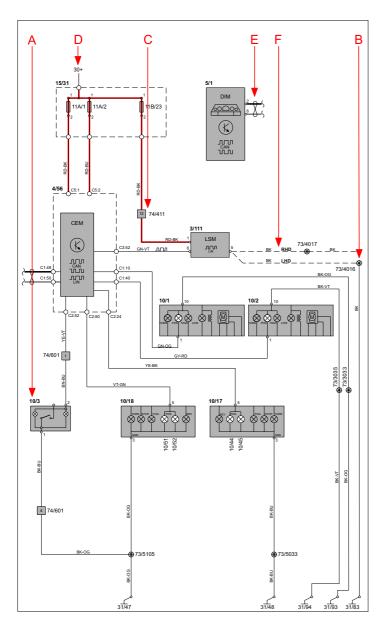
#### F. Abbreviations

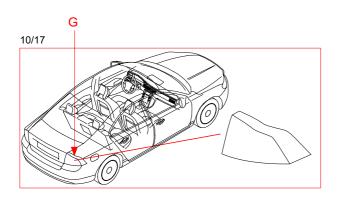
A number of different abbreviations are used in the manual. These are explained in the section "Abbreviations".

#### **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  $\otimes$ = Twisted cable = Electrical connection = Variant = CAN communication = CAN high data signal (CAN H) = CAN low data signal (CAN L) = LIN communication = LIN communication TIN = DIN cable, coaxial cable, etc. = Data communication ς = CAN communication = MOST communication = MOST communication 本多本

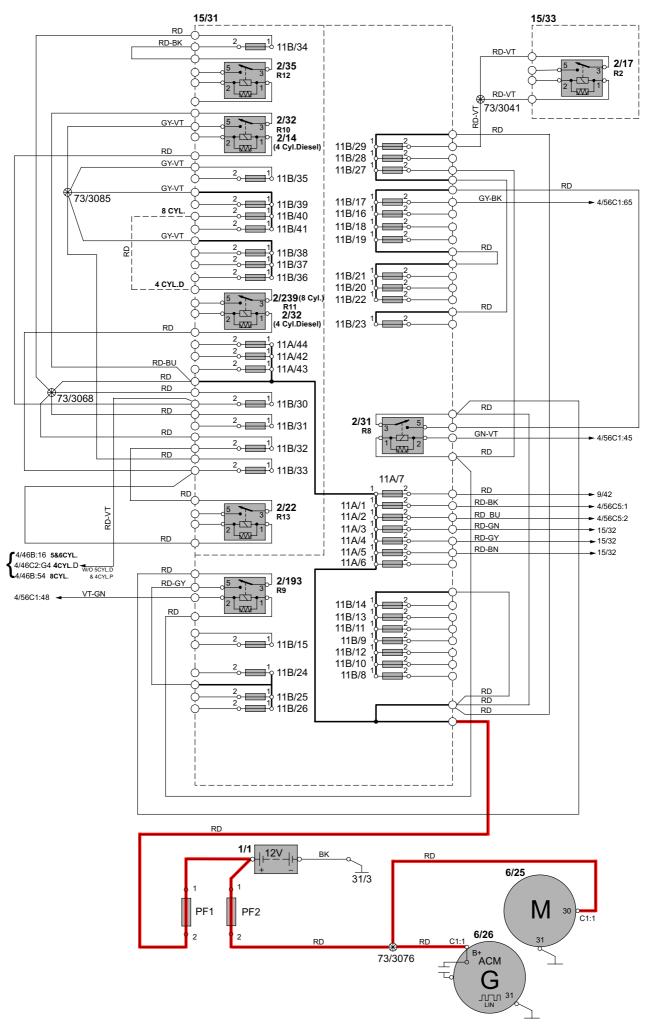
= Connector between cable harnesses

= Further connection to...

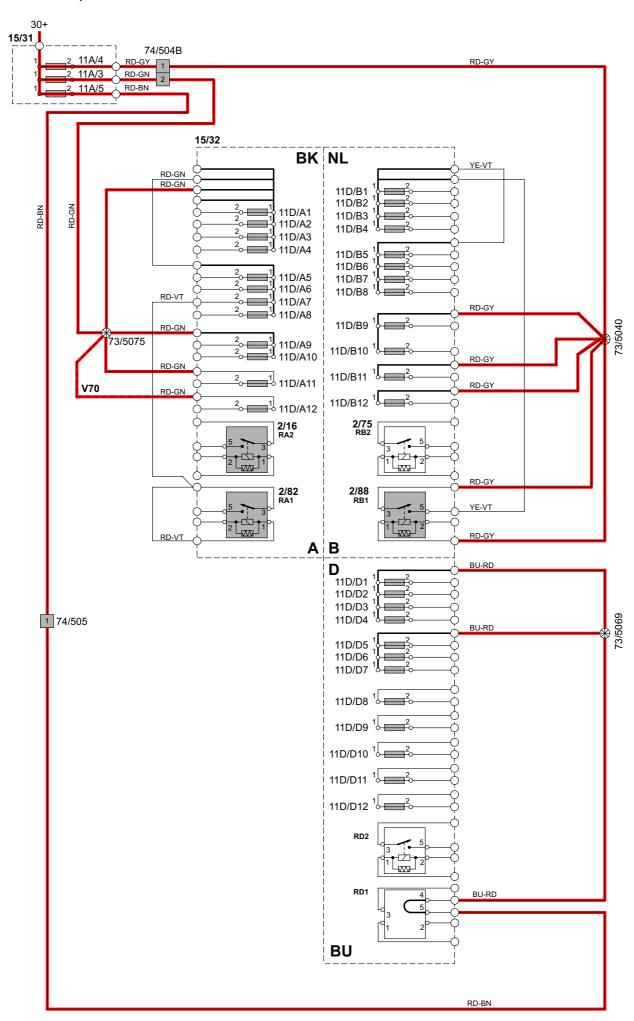
= Connector connected in component

= Connection with distribution box

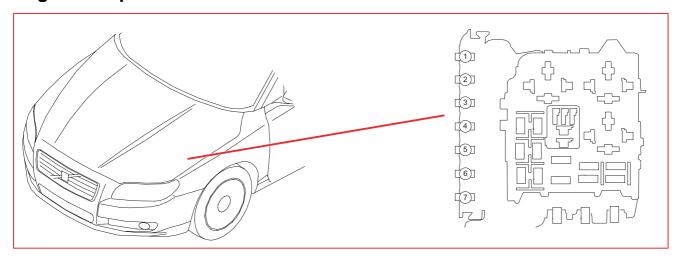
# Electrical distribution 1:2 Overview, Electrical center and Cold zone in engine compartment



## Electrical distribution 2:2 Overview, rear electrical center



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### 15/31 Engine compartment electrical center

No.	No.	Fuse function		via	Α
F1	11A/1		Main fuse for fuses in CEM	4/56	50
F2	11A/2		Main fuse for fuses in CEM	4/56	50
F3	11A/3	11D/A1-11D/A12	Fuses in cargo compartment 15/32	-	60
F4	11A/4	11D/B1-11D/B12	Fuses in cargo compartment 15/32	-	60
F5	11A/5	11D/D1-11D/D7	Fuses in cargo compartment 15/32	-	50
F7	11A/7	9/42	PTC-element	-	100
continues					