

VOLVO
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VOLVO **WIRING DIAGRAM** S80 PREMIER

TP 3979202

2005

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 recognised by the letters SRS in the centre 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 windscreen and seat compartment. Vehicles with IC can be recognised 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 VADIS.
- Certain components of the aforementioned systems must be grounded while working. Read the appropriate sections in VADIS.
- Do not install any accessories in the areas between the A and B-pillars, the B and C-pillars, and the C and D-pillars.

Test terminal

Data link connector in the passenger compartment.

Changes introduced up to and including June 2004

Any changes made to the vehicles 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.

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List of components

Explanations

Abbreviations

Groups

Group 23	= Fuel system
Group 26	= Cooling system
Group 27	= Engine controls
Group 32	= Alternator and voltage regulator
Group 33	= Starting system
Group 35	= Lighting
Group 36	= Additional electrical equipment
Group 37	= Wiring and fuses
Group 38	= Instruments
Group 39	= Other
Group 43	= Transmission
Group 59	= Brake system
Group 64	= Steering
Group 76	= Shock absorbers
Group 83	= Doors and openings
Group 84	= Exterior decorative elements etc.
Group 85	= Interior equipment
Group 87	= Climate controls
Group 88	= Internal equipment

Ignition switch symbols

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

Countries/Markets

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

Other

AMP	= Amplifier
AUX	= External equipment outlet AUX
AUDIO	= Audio system
CEM	= Central Electronic Module
DVD	= External equipment outlet AUX
IR	= IR transmitter
M2D	= Control module M2D
RAS	= Rear Audio Separation module (RAS)
REM	= Rear Electronic Module
RSE	= Rear Seat Entertainment module (RSE)
TFT	= TV display in head restraint
TV-Tuner	= TV receiver
VGA	= Voice Guide Amplifier module (VGA)

Colours

BL	= Blue
BN	= Brown
GN	= Green
GR	= Grey
LBL	= Light Blue
LGN	= Light Green
OR	= Orange
P	= Pink
R	= Red
SB	= Black
VO	= Violet
W	= White
Y	= Yellow

How to use the wiring diagram 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, 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	Light
11	Fuse
15	Electrical distribution rail/box
16	Audio
17	Service/diagnostics
18	Contact reel
19	Meter
20	Ignition component/shunt
26	Converter
27	Optics
31	Ground connection
53	Junction point
54	Connector

B. Junction points

The wiring diagrams contain numbered junction points, for example 53/352.

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 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 are equipped with CAN & MOST networks that transmit information. Connections to these networks are shown in their entirety on the respective wiring diagram. Complete information on CAN & MOST communication can be found in the section entitled "Control modules".

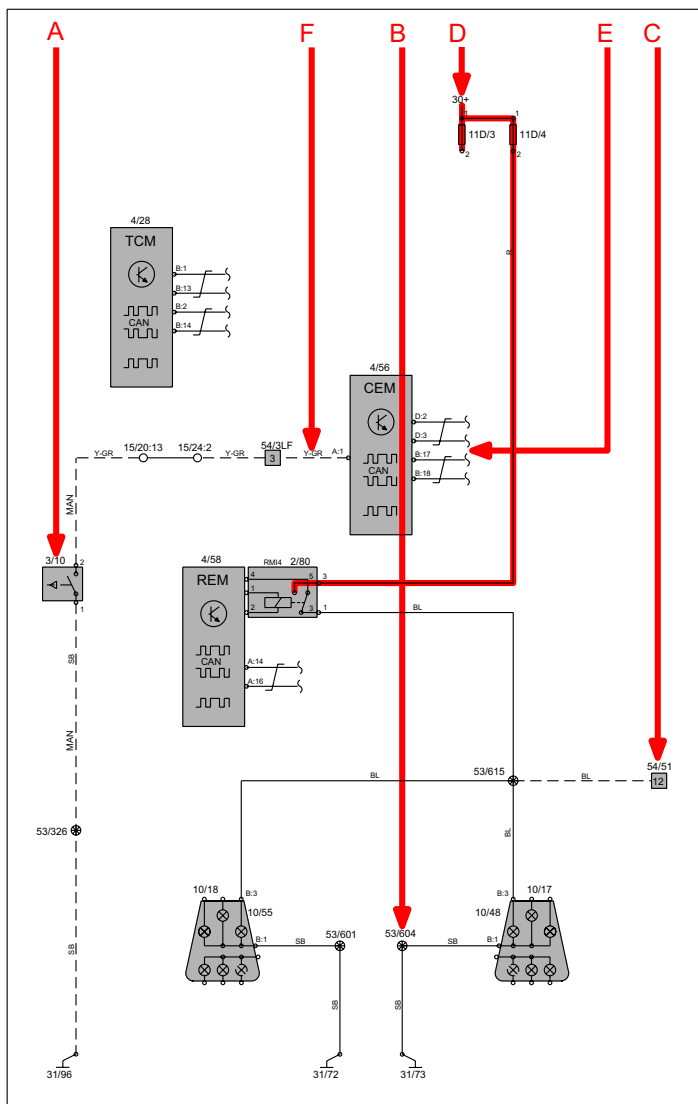
F. Abbreviations

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

G. Component location

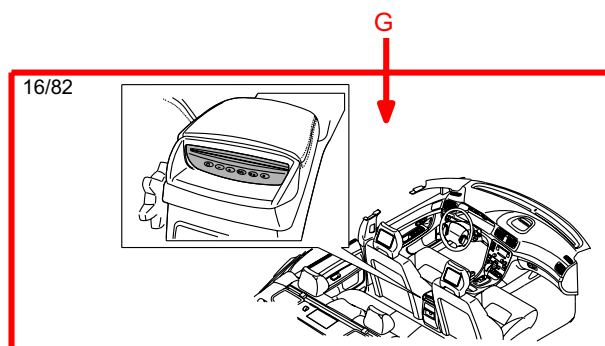
There is a section at the end of the manual in which the appearance and location of components is described in numerical order.

How to use the wiring diagram 2:2

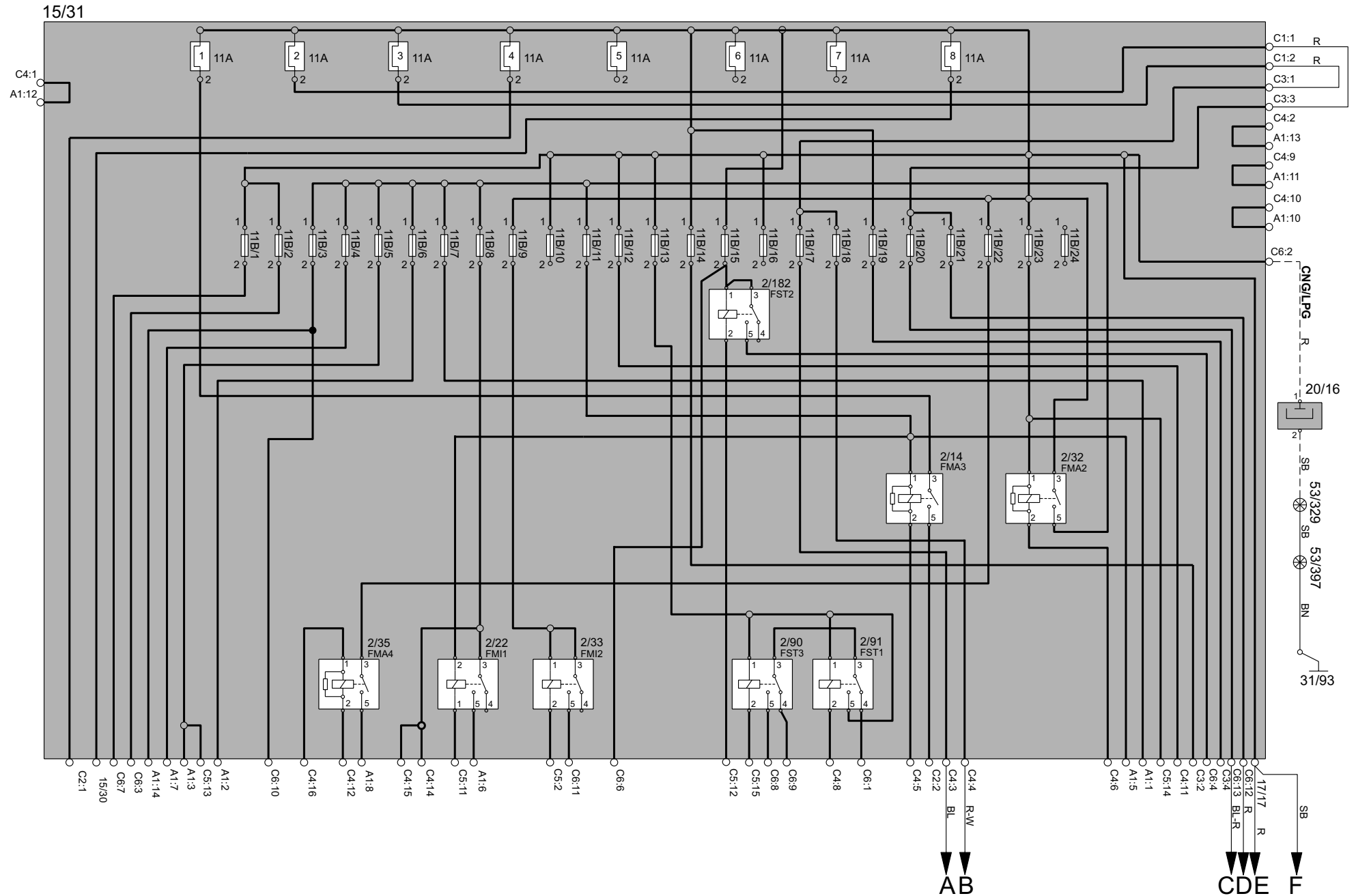


List of symbols

- = System voltage
- = Ground connection via wiring
- = Ground connection on component/chassis
- = Screened wire
- = Junction point
- = Twisted cable
- = Electrical connection
- = Variant
- = CAN communication
- = CAN high data signal (CAN H)
- = CAN low data signal (CAN L)
- = MOST communication
- = LIN communication
- = DIN cable, coaxial cable, etc.
- = Data communication
- = CAN communication
- = Connection with distribution box
- = Further connection to...
- = Connector between wiring harnesses
- = Connector connected to component

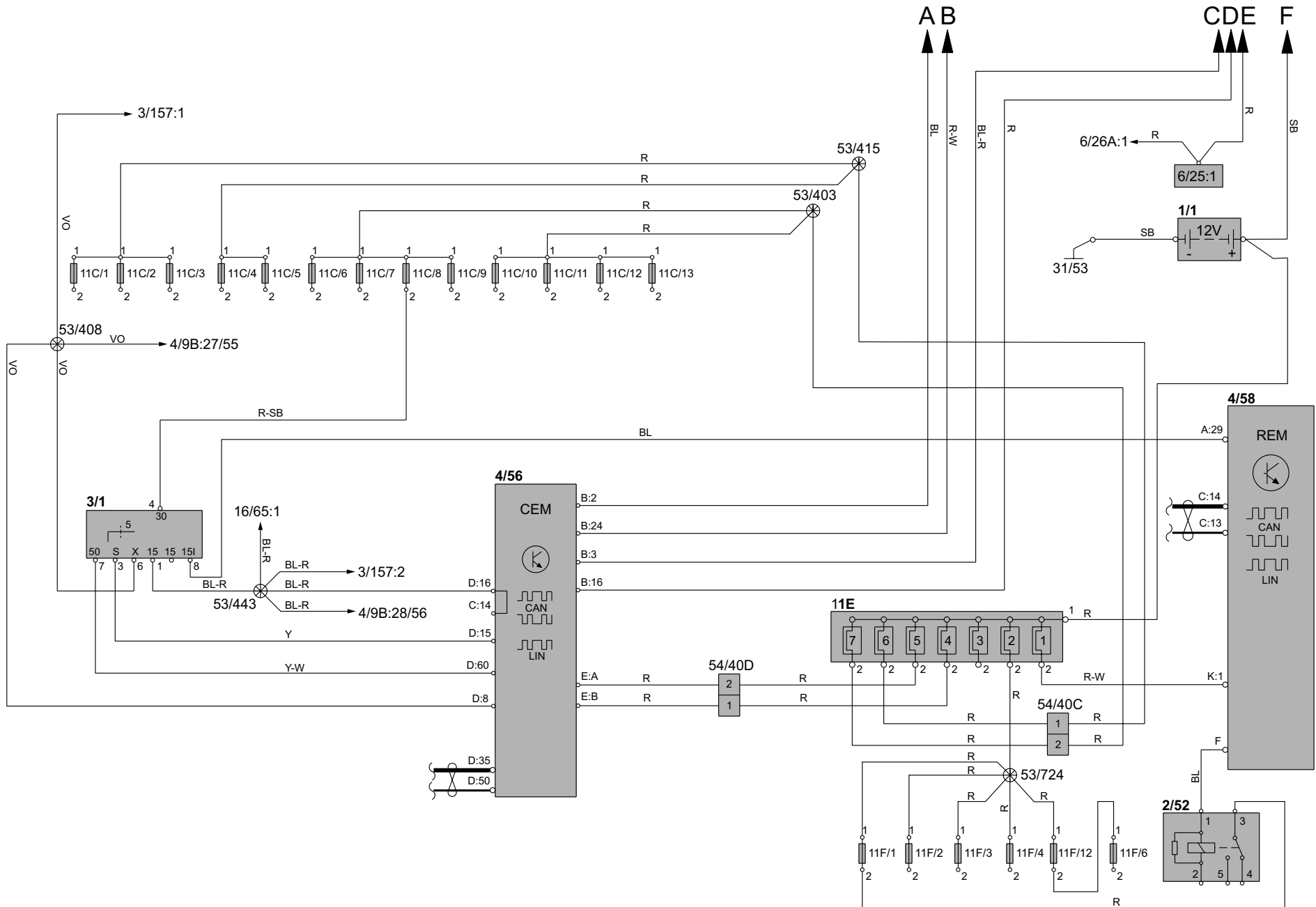


Electrical distribution 1:2 Overview S80 Premier



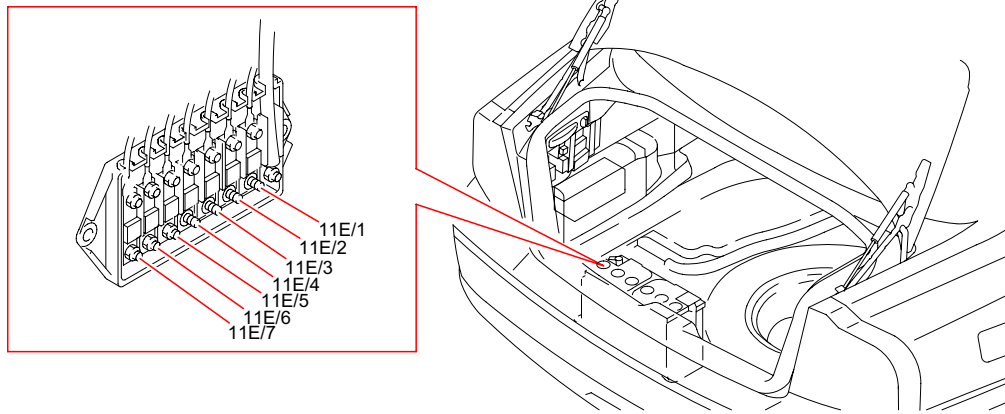
Electrical distribution 2:2

Overview S80 Premier



Fuses

Fuses by the battery

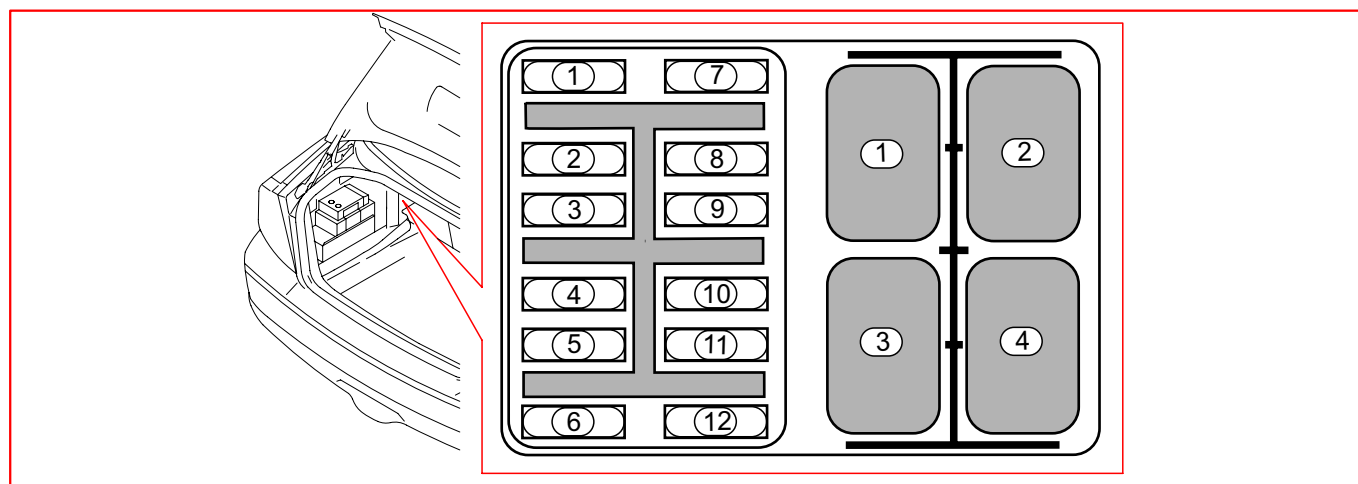


11E Fuses by the battery

No.	Fuse function	via	A
2	16/124 Rear Seat Entertainment module (RSE)	-	40

Fuses

Fuses in auxiliary fuse box

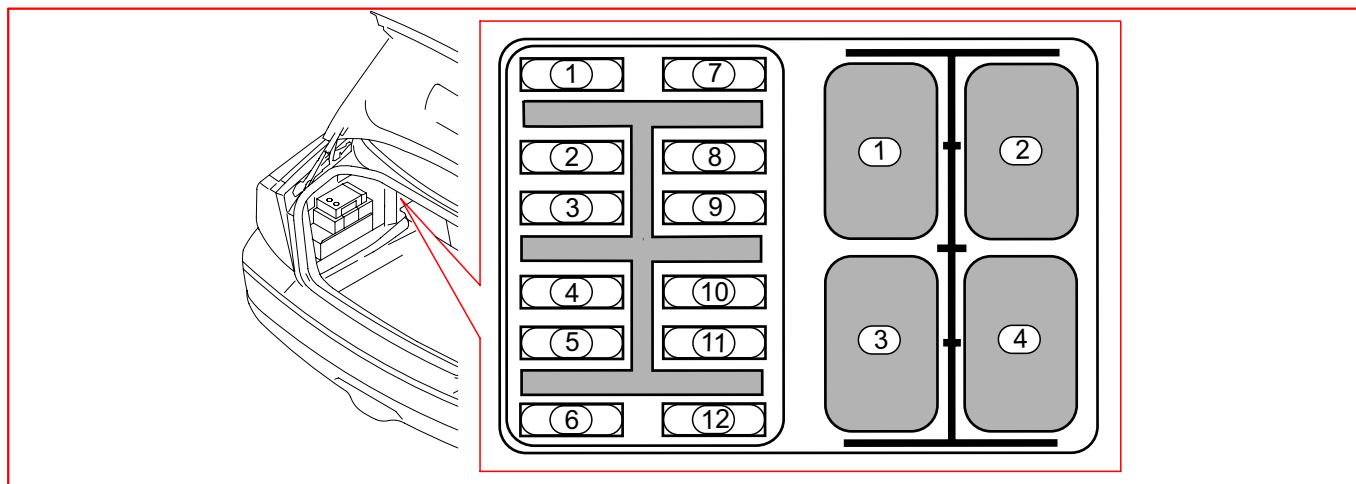


11F Fuses in cargo compartment auxiliary fuse box

No.	Fuse function	via	A
1	2/52 Relay, 15l feed, rear 4/55 Sun blind control module 9/24 Coolbox rear seat	-	20
2	2/30 X feed overload relay 3/104 Sun blind switch 9/14 Electrically heated right-hand rear seat 9/15 Electrically heated left-hand rear seat	-	10
3	2/84 Relay, electrically heated left-hand rear seat 9/14 Electrically heated right-hand rear seat	-	15
4	2/85 Relay, electrically heated right-hand rear seat 9/15 Electrically heated left-hand rear seat	-	15
5	9/24 Coolbox rear seat	-	10
6	16/124 Rear Seat Entertainment module (RSE)	-	5
7	3/64 Electrically heated rear seat switch	-	5
8	3/64 Electrically heated rear seat switch	-	5
9	3/104 Sun blind switch	-	5
10	4/55 Sun blind control module	-	10
11	16/83 Voice Guide Amplifier module (VGA) 16/124 Rear Seat Entertainment module (RSE)	-	5
12	11F/6 Fuses in cargo compartment auxiliary fuse box 8/80 Control module M2D 16/83 Voice Guide Amplifier module (VGA) 16/122 Rear Audio Separation module (RAS)	-	10

Relays

Relays in the cargo compartment



Relays in cargo compartment fuse box

Pos	Relay function	
2F1	2/52	Relay, 15l feed, rear
2F2	2/30	X feed overload relay
2F3	2/84	Relay, electrically heated left-hand rear seat
2F4	2/85	Relay, electrically heated right-hand rear seat

Ground connections

31/10 - 31/93

31/10	A-post, right-hand side
9/37	12V outlet Premier
17/21:2	12V outlet rear seat

31/48	Rear seat support, right-hand side
3/64:5	Electrically heated rear seat switch
3/104:2	Sun blind switch
4/55A:1	Sun blind control module
9/14:1	Sun blind control module
9/15:1	Electrically heated left-hand rear seat
9/24:3	Coolbox rear seat

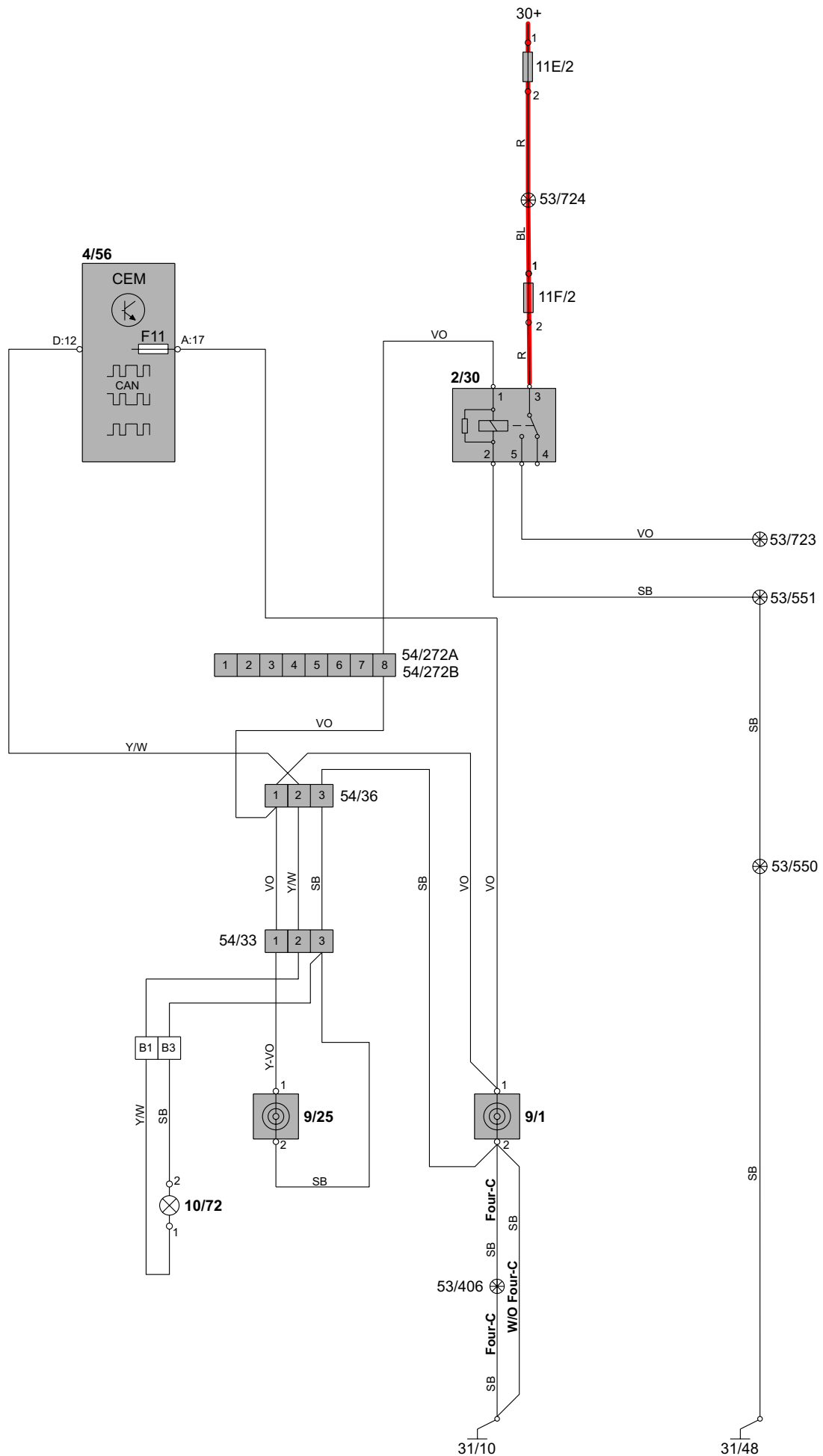
31/53	Firewall
1/1	Battery

31/72	Rear seat support, left-hand side
8/80A	Control module M2D
16/36A	TV receiver
16/83B	Voice Guide Amplifier module (VGA)
16/122	Rear Audio Separation module (RAS)
16/124	Rear Seat Entertainment module (RSE)

31/93	Left MacPherson strut tower
20/16B	Capacitor

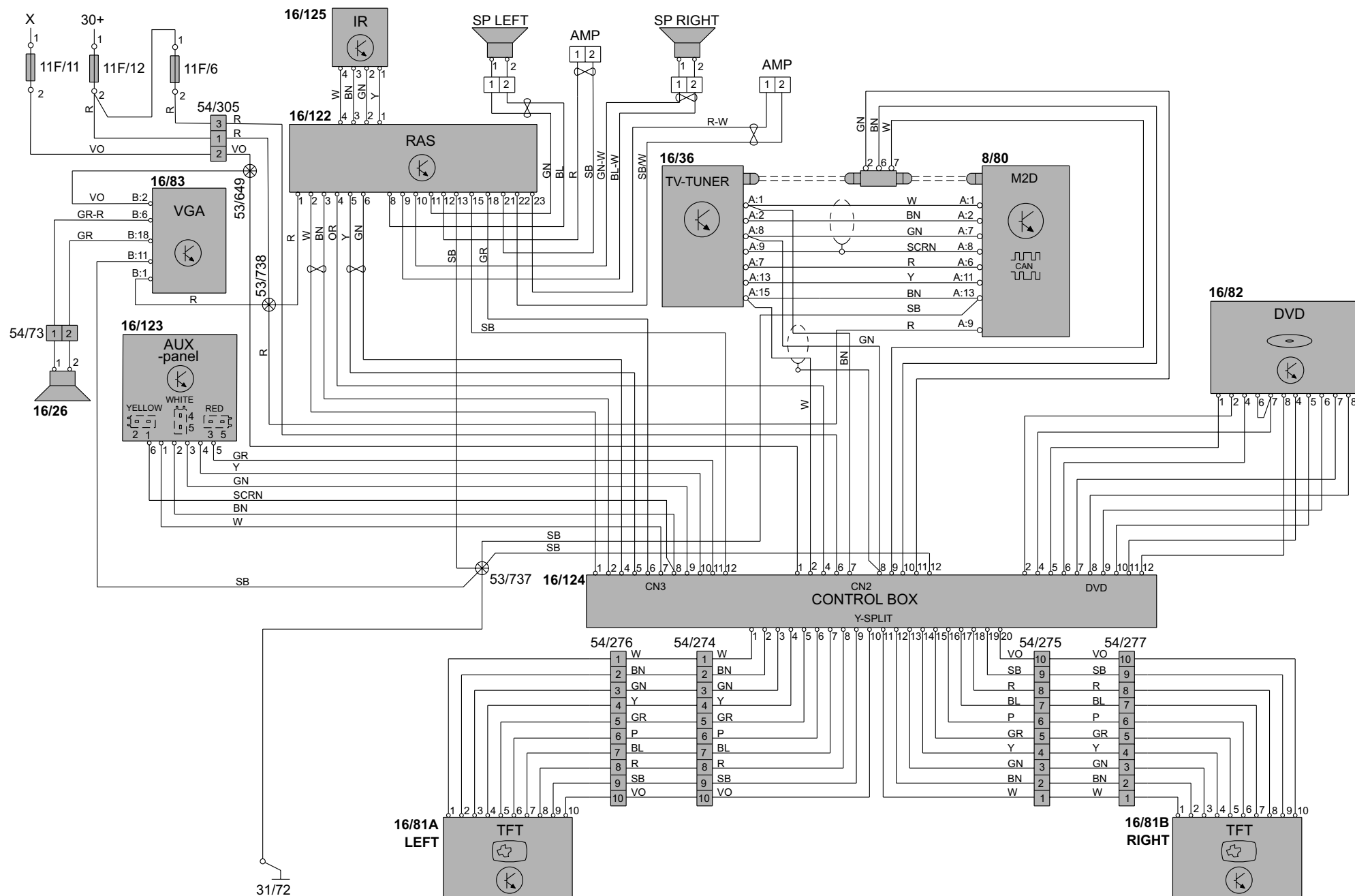
Group 36 Additional electrical equipment

12 V outlet



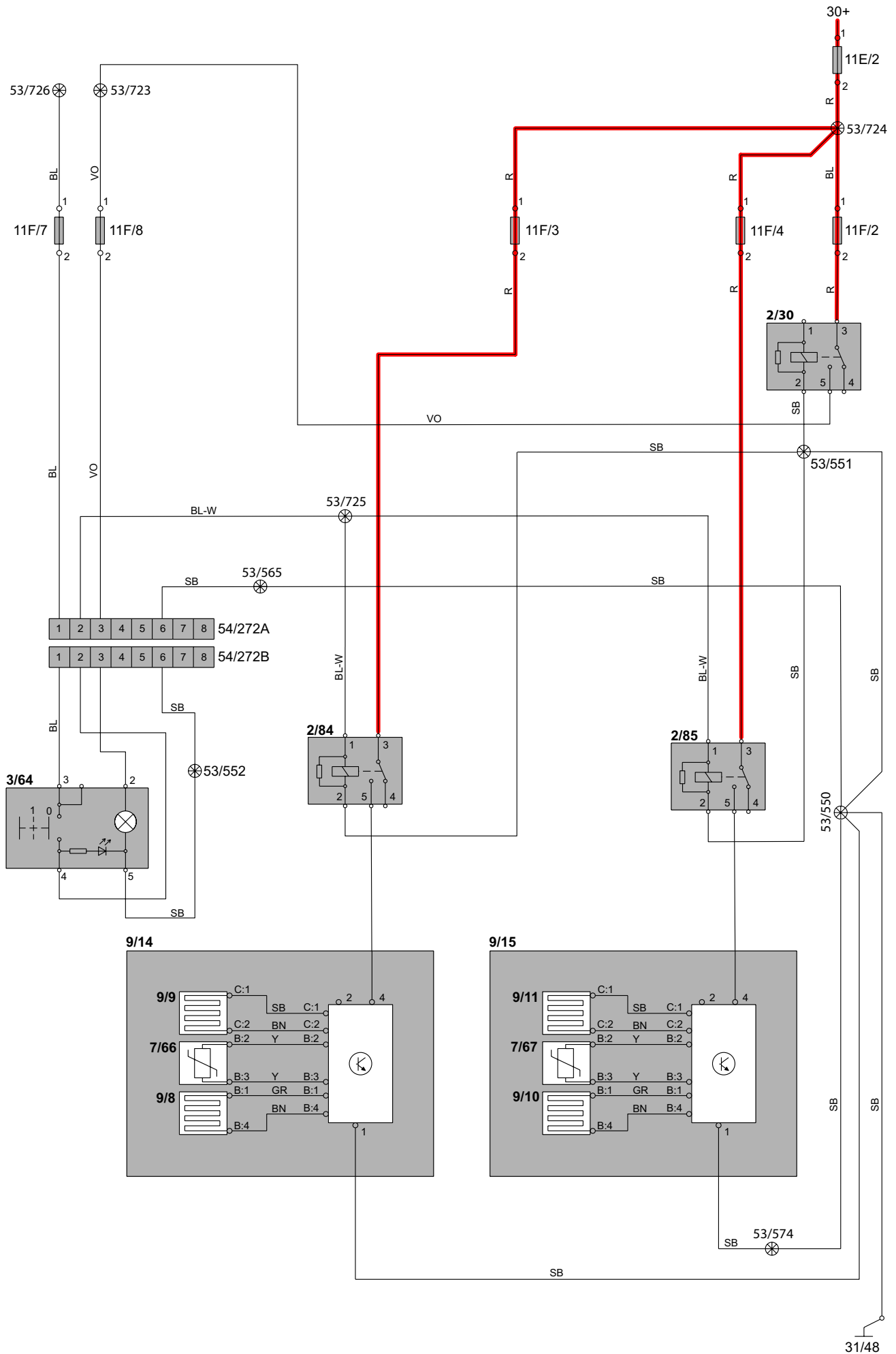
Group 39 Other, Accessories

Rear Seat Entertainment (RSE)



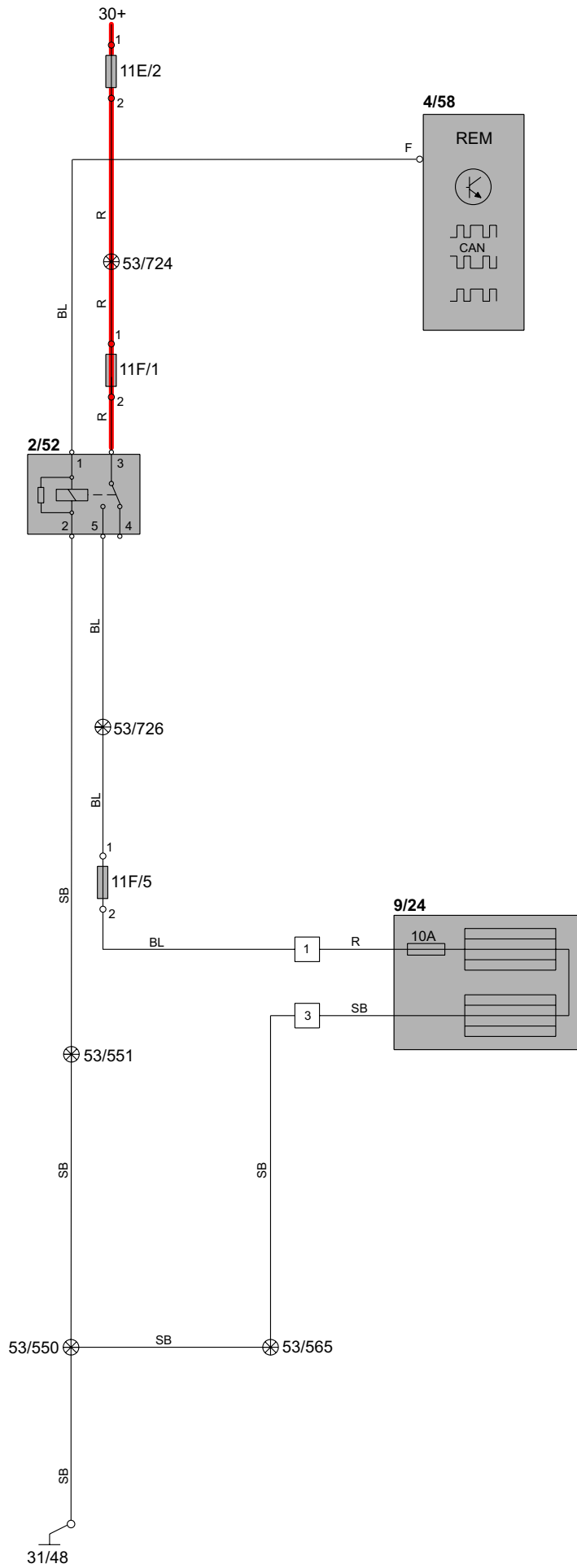
Group 39 Other, Accessories

Electrically heated rear seat

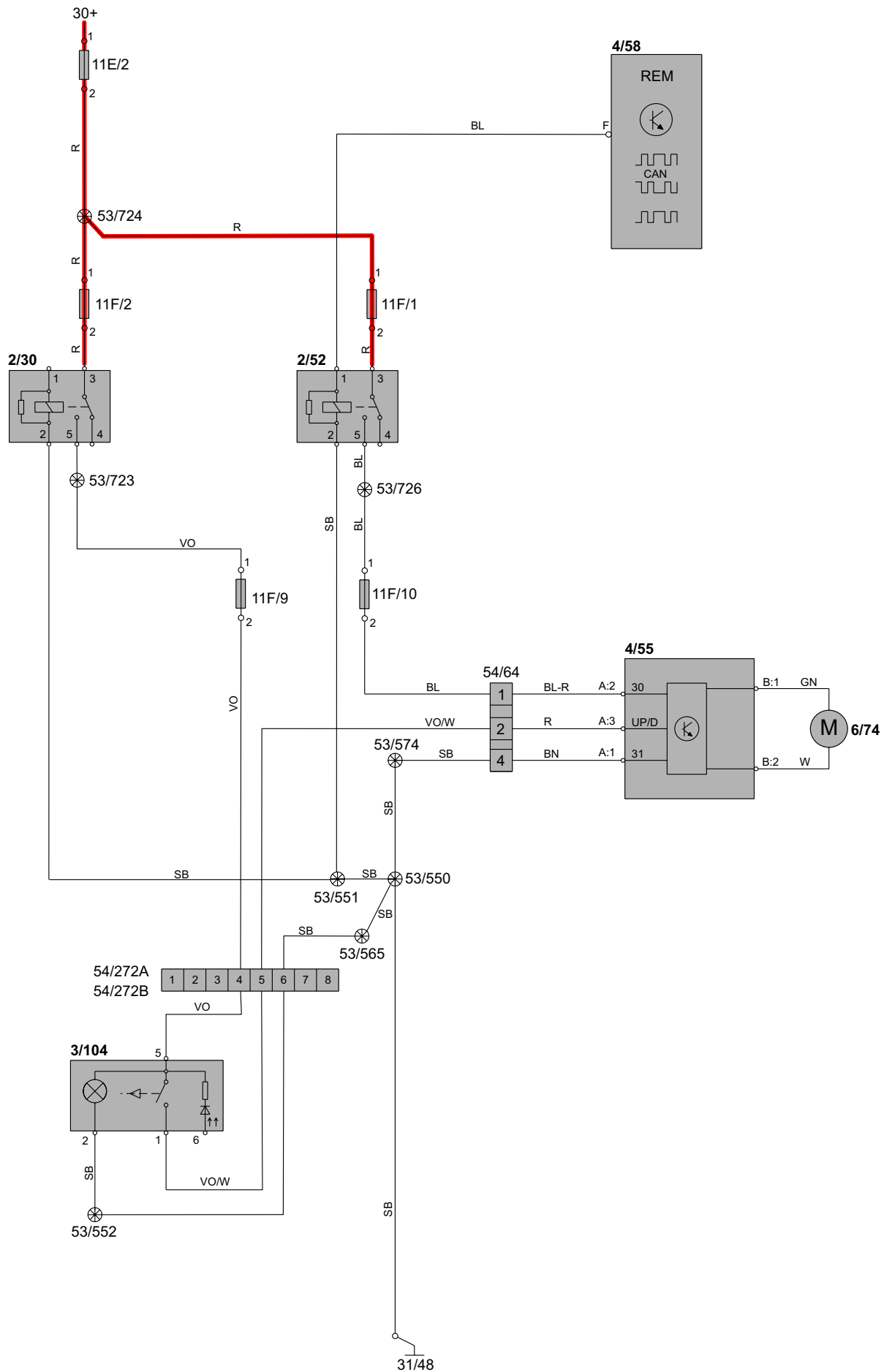


Group 87 Climate control system

Coolbox rear seat



Group 88 Internal equipment
Switch, sun blind



Connectors

54/33 - 54/64

54/33 3 pin grey

No.	Rear Seat Entertainment harness			12V outlet		
1	54/36:1	Connector	VO	9/25:1	Rear 12V socket	VO
2	54/36:2	Connector	Y-W	-		-
3	54/36:3	Connector	SB	9/25:2	Rear 12V socket	SB

54/36 3 pin grey

No.	Rear Seat Entertainment harness			12V outlet		
1	54/33	Connector	Y-VO	54/272A 54/272B	Connector Connector	VO
2	54/33	Connector	Y-W	4/56D:12	Central Electronic Module (CEM)	Y-W
3	54/33	Connector	SB	4/56D:12	Central Electronic Module (CEM)	Y-W

54/64 4 pin grey

No.	Sun blind control module			Rear seat harness		
1	4/55A:2	Sun blind control module	BL-R	11F/10	Fuse	
2	4/55A:3	Sun blind control module	R	54/272A:5	Connector	
3	-		-	-		-
4	4/55A:1	Sun blind control module	BN	2/30:2 2/52:2	X feed overload relay Relay, 15l feed, rear	SB

Connectors

54/73 - 54/272B

54/73
2 pin grey

No.	Rear Seat Entertainment harness			Voice Guide Amplifier module (VGA)		
1	16/26:1	Loudspeaker instrument board centre	GR-R	16/83B:6	Voice Guide Amplifier module (VGA)	GR-R
2	16/26:2	Loudspeaker instrument board centre	GR	16/83B:18	Voice Guide Amplifier module (VGA)	GR

54/272A and 54/272B
8 pin grey

No.	Rear seat harness			Rear seat harness		
1	3/64:3	Electrically heated rear seat switch	BL	11F/7	Fuse	
2	3/64:4	Electrically heated rear seat switch	BL-W	2/84 2/85	Relay, electrically heated left-hand rear seat Relay, electrically heated right-hand rear seat	
3	3/64:2	Electrically heated rear seat switch	VO	11F/8:2	Fuse	
4	3/104:5	Sun blind switch	VO	11F/9:2	Fuse	
5	3/104:1	Sun blind switch	VO-W	54/64:2	Connector	
6	3/64:5	Electrically heated rear seat switch	SB	53/GND5	Junction point	
7	-		-	-		-
8	2/52	Relay, 15l feed, rear	VO	54/36:1	Connector	

Connectors

54/274

54/274

10 pin grey

No.	TV display harness			Rear Seat Entertainment (RSE) harness		
1	54/276	Connector	W	16/124:1	Rear Seat Entertainment module (RSE)	W
2	54/276	Connector	BN	16/124:2	Rear Seat Entertainment module (RSE)	BN
3	54/276	Connector	GN	16/124:3	Rear Seat Entertainment module (RSE)	GN
4	54/276	Connector	Y	16/124:4	Rear Seat Entertainment module (RSE)	Y
5	54/276	Connector	GR	16/124:5	Rear Seat Entertainment module (RSE)	GR
6	54/276	Connector	P	16/124:6	Rear Seat Entertainment module (RSE)	P
7	54/276	Connector	BL	16/124:7	Rear Seat Entertainment module (RSE)	BL
8	54/276	Connector	R	16/124:8	Rear Seat Entertainment module (RSE)	R
9	54/276	Connector	SB	16/124:9	Rear Seat Entertainment module (RSE)	SB
10	54/276	Connector	VO	16/124:10	Rear Seat Entertainment module (RSE)	VO

Connectors

54/275 - 54/276

54/275

10 pin grey

No.	TV display harness			Rear Seat Entertainment (RSE) harness		
1	54/277:1	Connector	W	16/124:11	Rear Seat Entertainment module (RSE)	W
2	54/277:2	Connector	BN	16/124:12	Rear Seat Entertainment module (RSE)	BN
3	54/277:3	Connector	GN	16/124:13	Rear Seat Entertainment module (RSE)	GN
4	54/277:4	Connector	Y	16/124:14	Rear Seat Entertainment module (RSE)	Y
5	54/277:5	Connector	GR	16/124:15	Rear Seat Entertainment module (RSE)	GR
6	54/277:6	Connector	P	16/124:16	Rear Seat Entertainment module (RSE)	P
7	54/277:7	Connector	BL	16/124:17	Rear Seat Entertainment module (RSE)	BL
8	54/277:8	Connector	R	16/124:18	Rear Seat Entertainment module (RSE)	R
9	54/277:9	Connector	SB	16/124:19	Rear Seat Entertainment module (RSE)	SB
10	54/277:10	Connector	VO	16/124:20	Rear Seat Entertainment module (RSE)	VO

54/276

10 pin grey

No.	TV display			TV display harness		
1	16/81A:1	TV display, LH head restraint	W	54/274:1	Connector	W
2	16/81A:2	TV display, LH head restraint	BN	54/274:2	Connector	BN
3	16/81A:3	TV display, LH head restraint	GN	54/274:3	Connector	GN
4	16/81A:4	TV display, LH head restraint	Y	54/274:4	Connector	Y
5	16/81A:5	TV display, LH head restraint	GR	54/274:5	Connector	GR
6	16/81A:6	TV display, LH head restraint	P	54/274:6	Connector	P
7	16/81A:7	TV display, LH head restraint	BL	54/274:7	Connector	BL
8	16/81A:8	TV display, LH head restraint	R	54/274:8	Connector	R
9	16/81A:9	TV display, LH head restraint	SB	54/274:9	Connector	SB
10	16/81A:10	TV display, LH head restraint	VO	54/274:10	Connector	VO

Connectors

54/277 - 54/305

54/277

10 pin grey

No.	TV display			TV display harness		
1	16/81B:1	TV display, RH head restraint	W	54/275:1	Connector	W
2	16/81B:2	TV display, RH head restraint	BN	54/275:2	Connector	BN
3	16/81B:3	TV display, RH head restraint	GN	54/275:3	Connector	GN
4	16/81B:4	TV display, RH head restraint	Y	54/275:4	Connector	Y
5	16/81B:5	TV display, RH head restraint	GR	54/275:5	Connector	GR
6	16/81B:6	TV display, RH head restraint	P	54/275:6	Connector	P
7	16/81B:7	TV display, RH head restraint	BL	54/275:7	Connector	BL
8	16/81B:8	TV display, RH head restraint	R	54/275:8	Connector	R
9	16/81B:9	TV display, RH head restraint	SB	54/275:9	Connector	SB
10	16/81B:10	TV display, RH head restraint	VO	54/275:10	Connector	VO

54/305

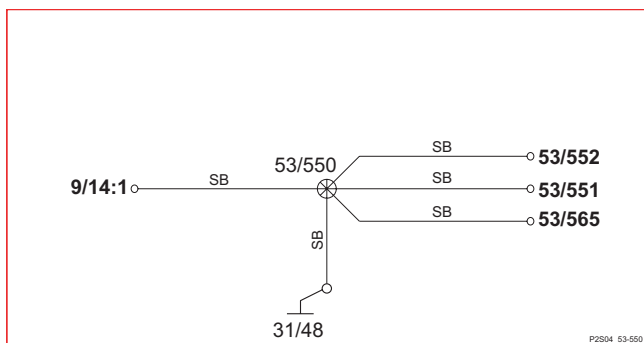
3 pin grey

No.	Fuses in cargo compartment auxiliary fuse box			Rear Seat Entertainment (RSE) harness		
1	11F/12	Fuse	R	53/738	Junction point	R
2	11F/11	Fuse	VO	53/649	Junction point	VO
3	11F/6	Fuse	R	16/124:6	Rear Seat Entertainment module (RSE)	R

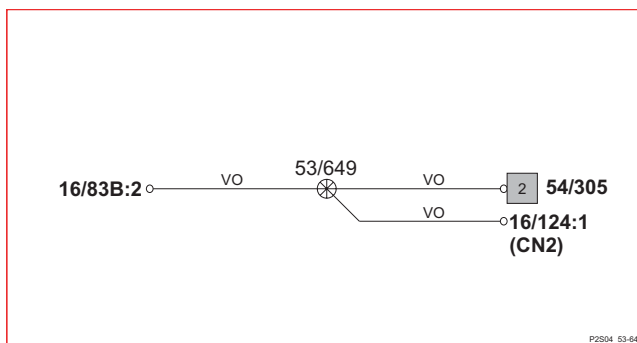
Junction points

53/550 - 53/726

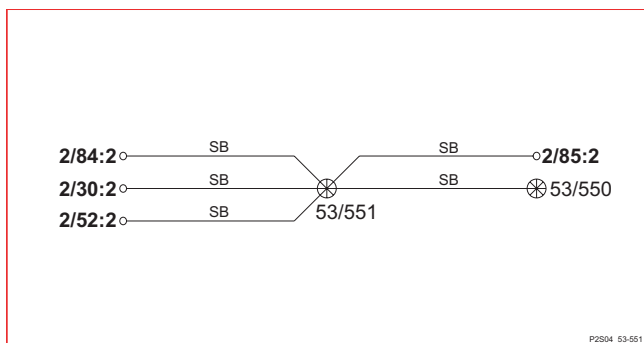
53/550



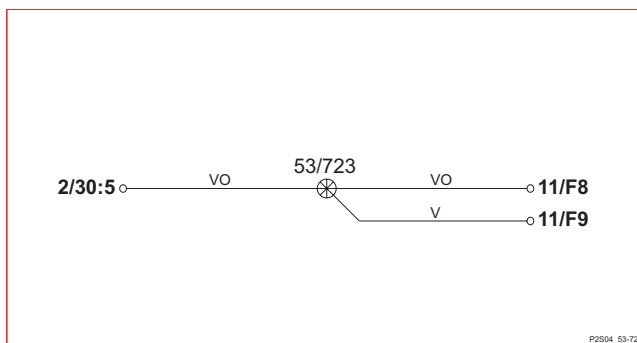
53/649



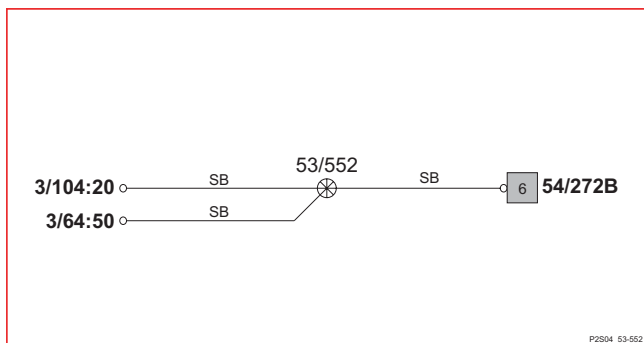
53/551



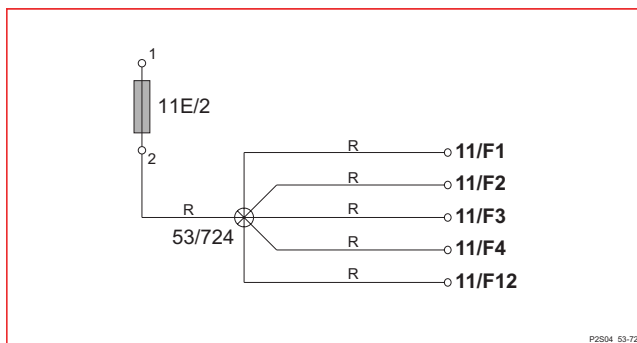
53/723



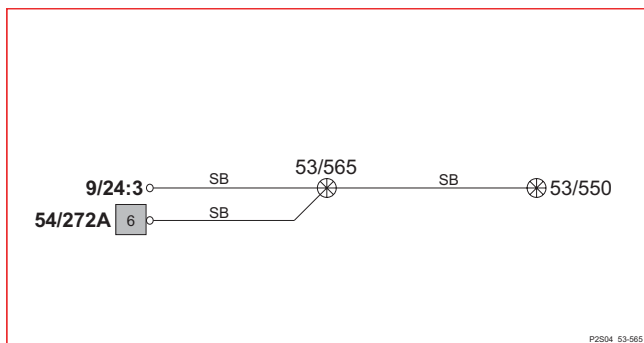
53/552



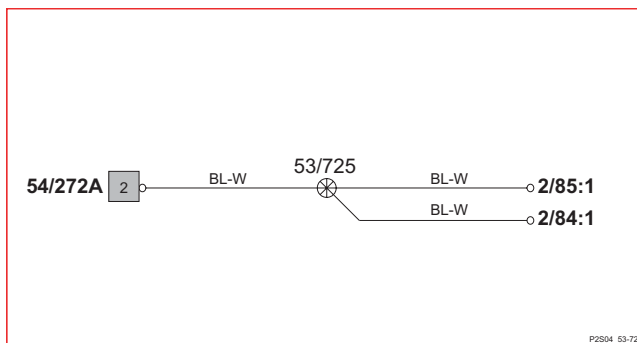
53/724



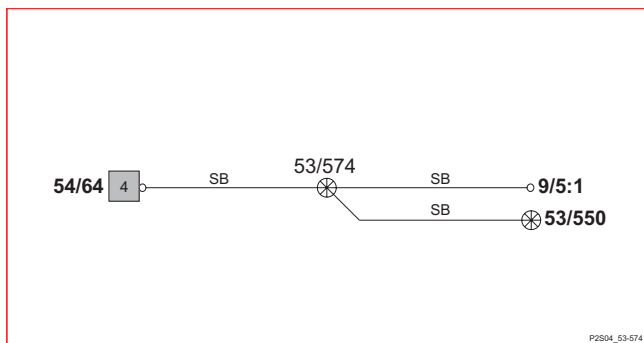
53/565



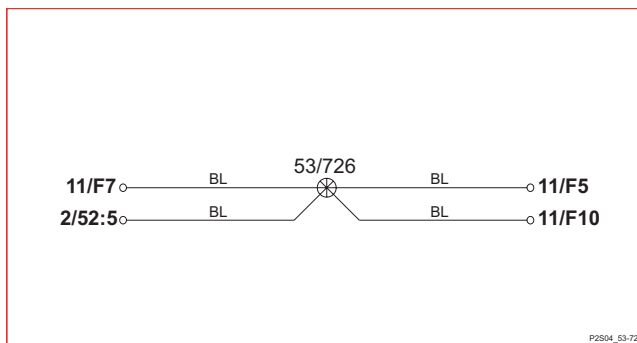
53/725



53/574



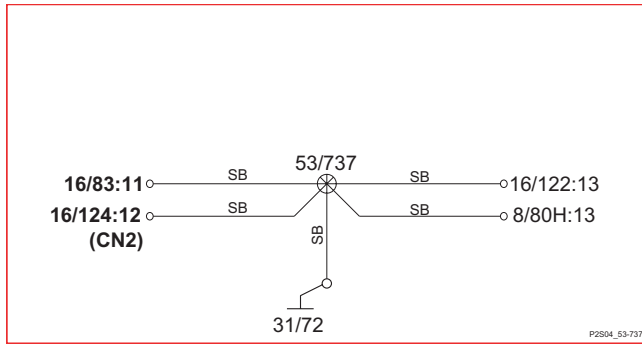
53/726



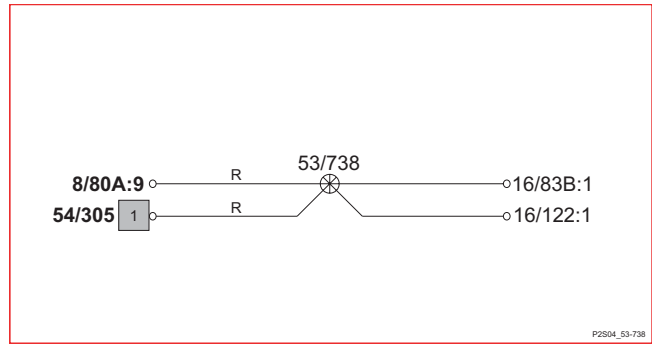
Junction points

53/737 - 53/738

53/737

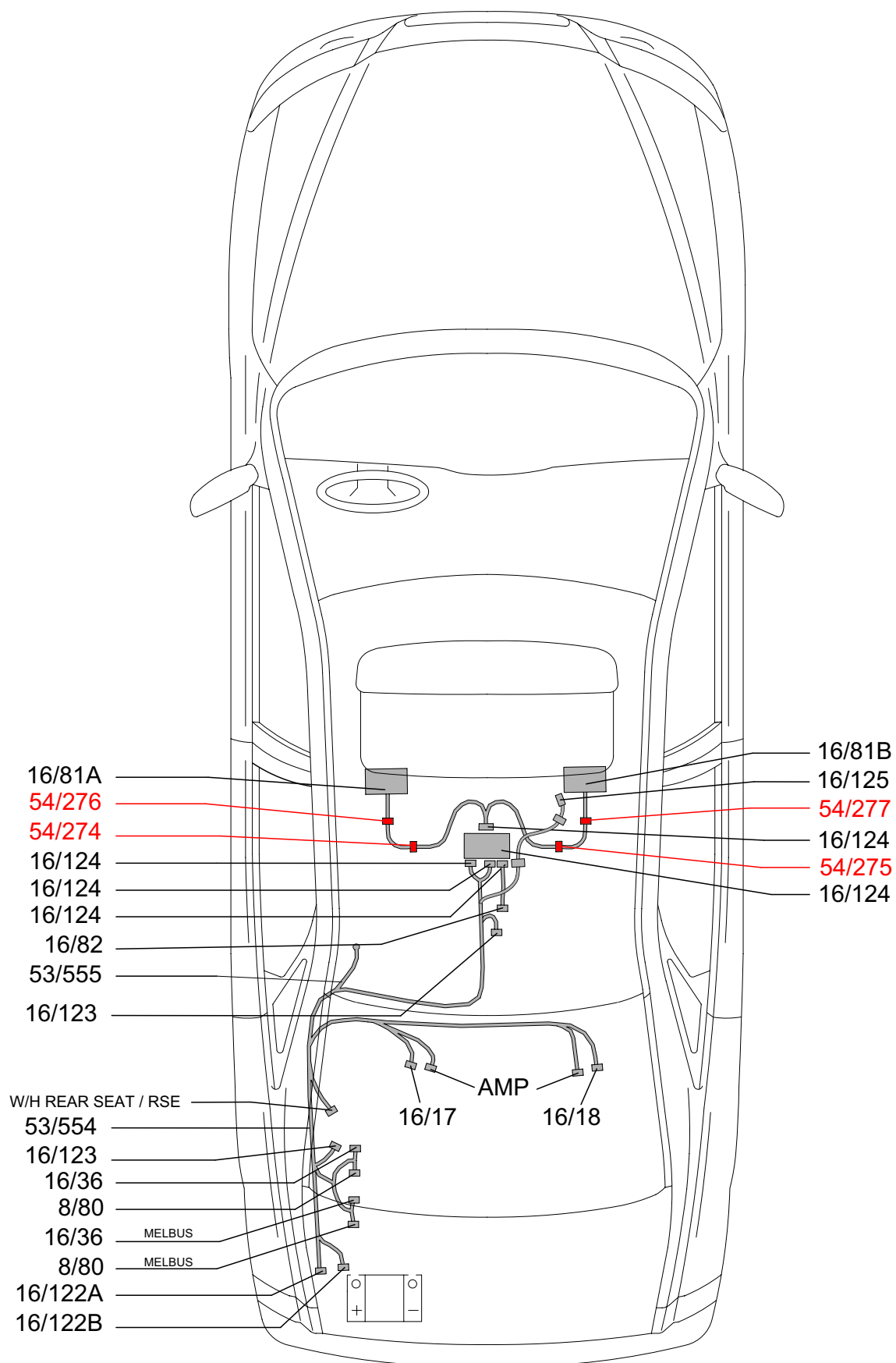


53/738



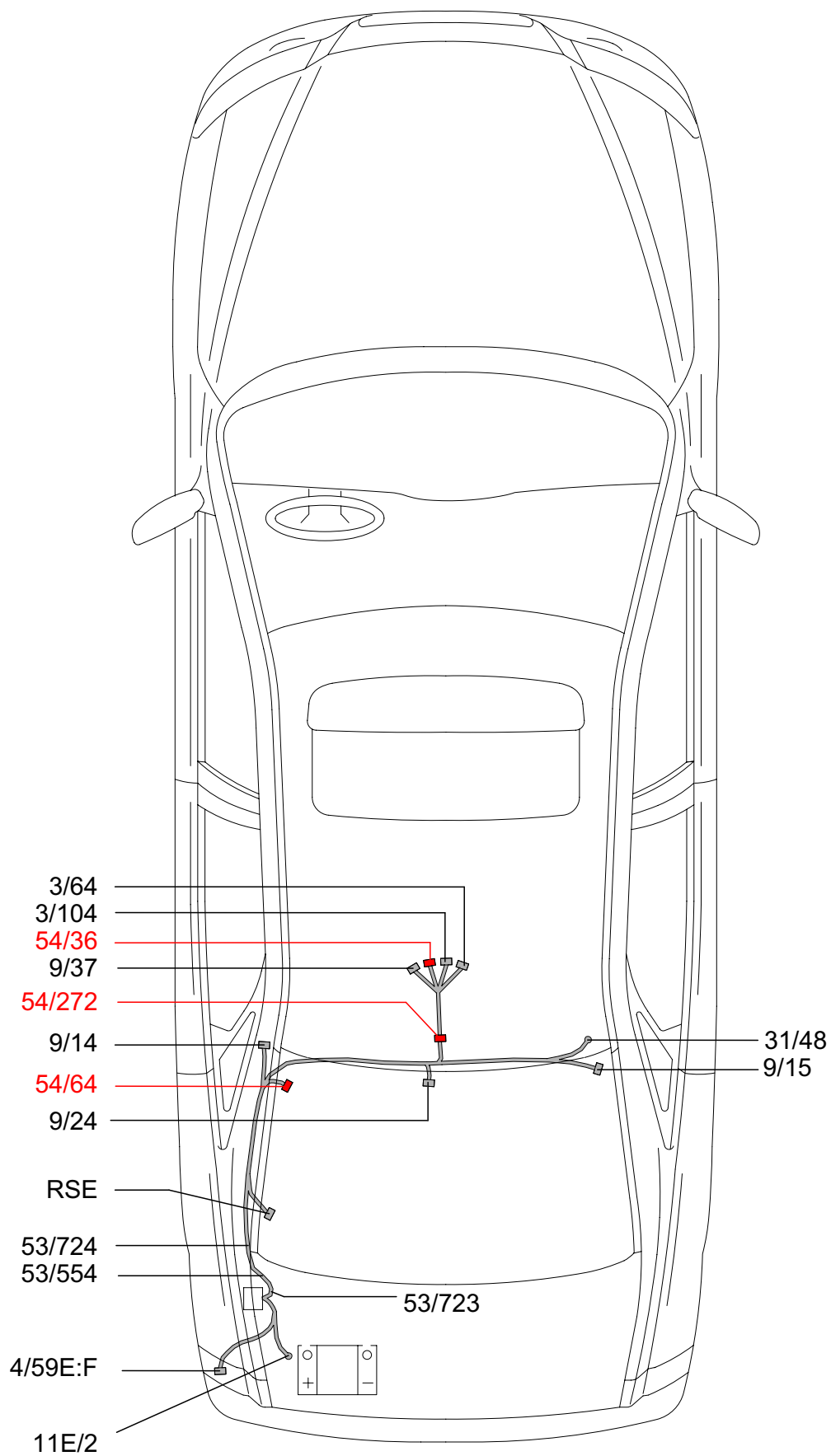
Cable harness routing in vehicle

Rear Seat Entertainment (RSE) harness



Cable harness routing in vehicle

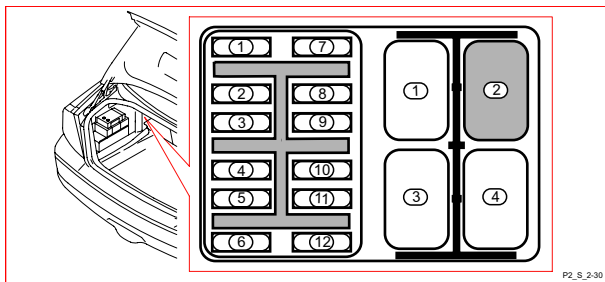
Rear seat harness



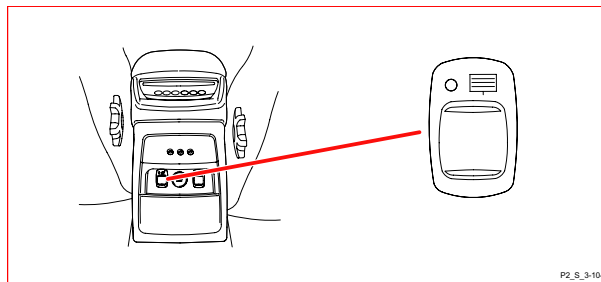
Component illustrations

2/30 - 9/8

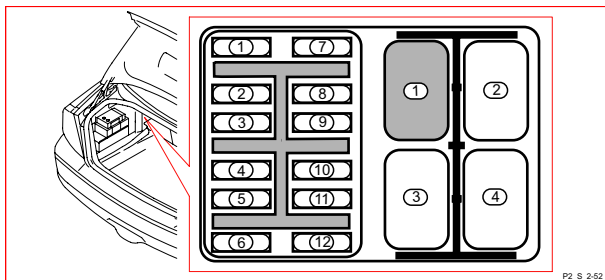
2/30 X feed overload relay



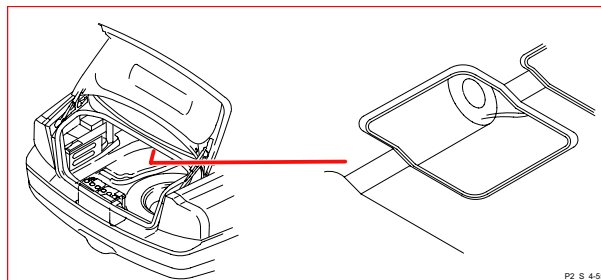
3/104 Sun blind switch



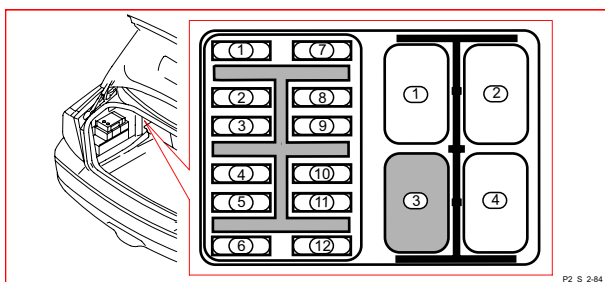
2/52 Relay, 15l feed, rear



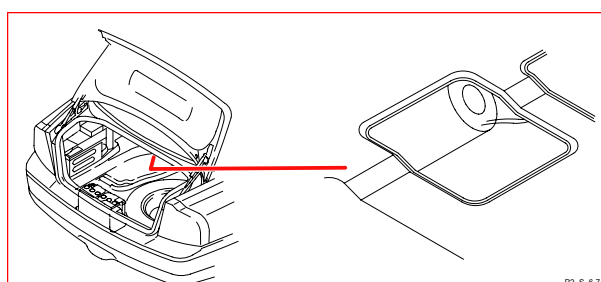
4/55 Sun blind control module



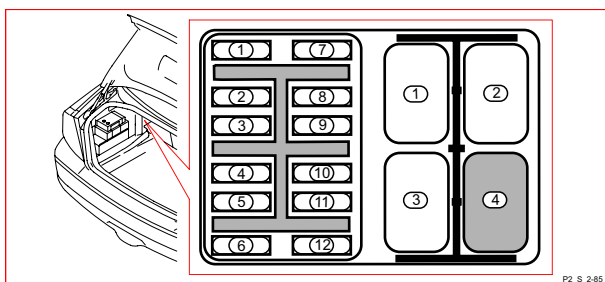
2/84 Relay, electrically heated left-hand rear seat



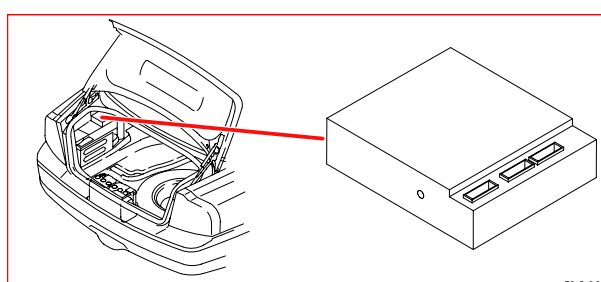
6/74 Window antenna amplifier 2



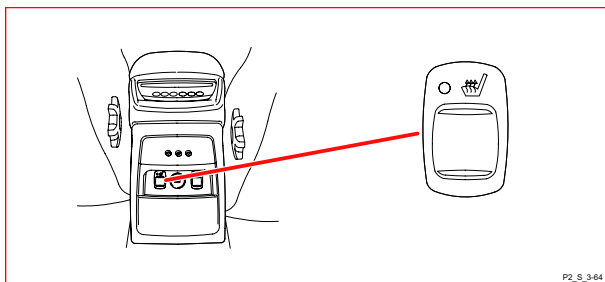
2/85 Relay, electrically heated right-hand rear seat



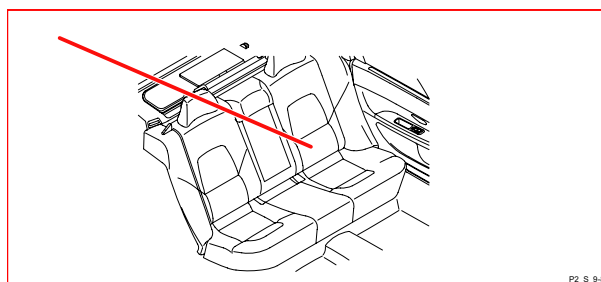
8/80 Control module M2D



3/64 Electrically heated rear seat switch



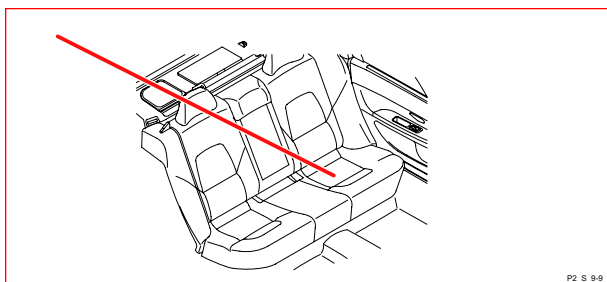
9/8 Seat heating element left-hand rear seat



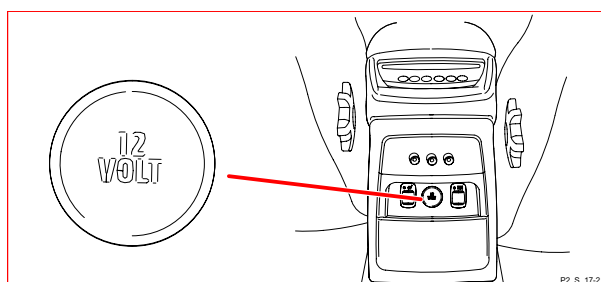
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9/9 - 16/83

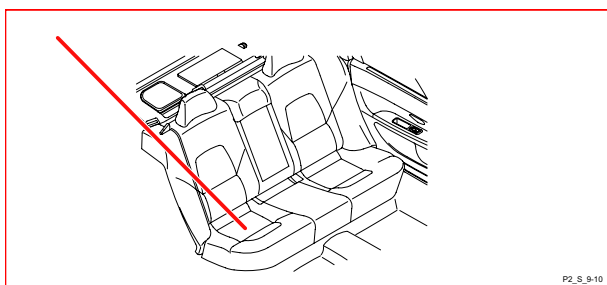
9/9 Back support heating element left-hand rear seat



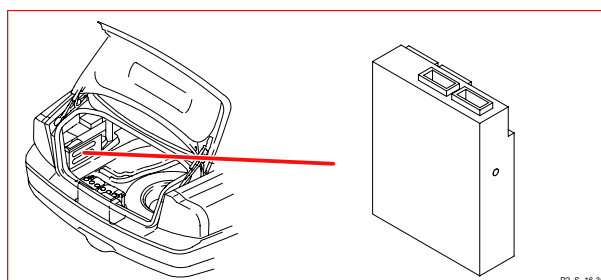
9/25 12V outlet, rear seat



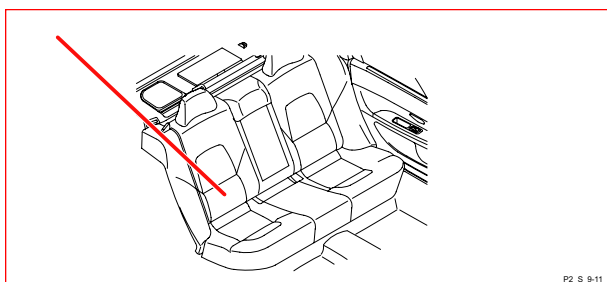
9/10 Seat heating element right-hand rear seat



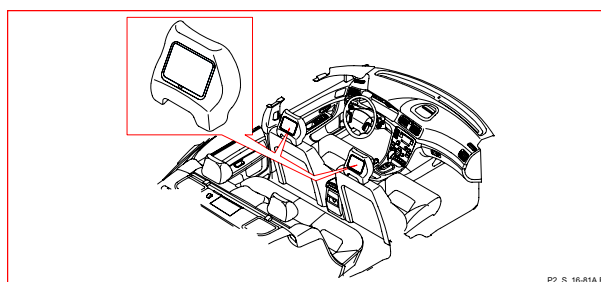
16/36 TV receiver



9/11 Back support heating element right-hand rear seat

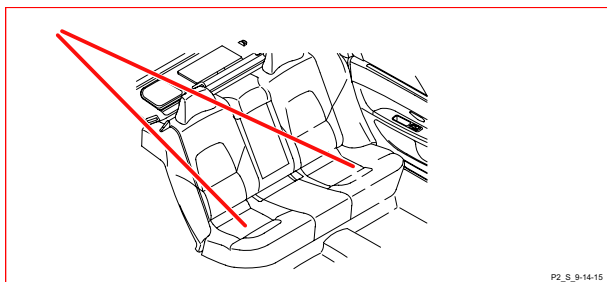


**16/81A TV display, LH head restraint
16/81B TV display, RH head restraint**

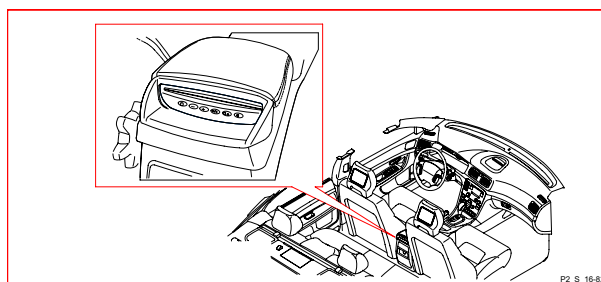


9/14 Electrically heated right-hand rear seat

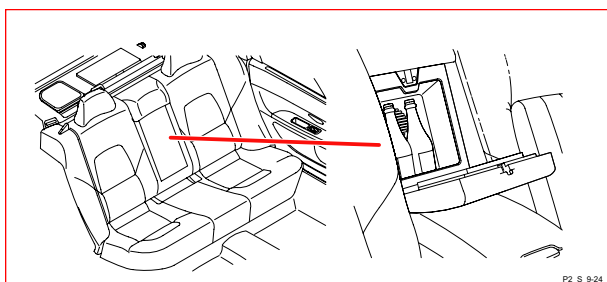
9/15 Electrically heated left-hand rear seat



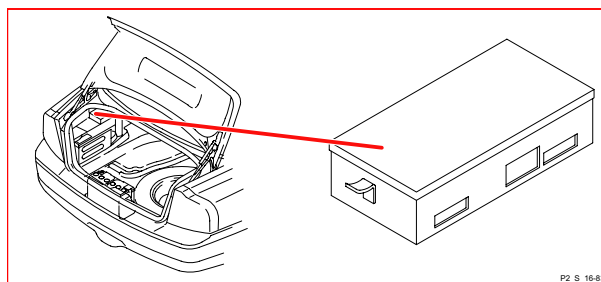
16/82 DVD player rear



9/24 Coolbox rear seat



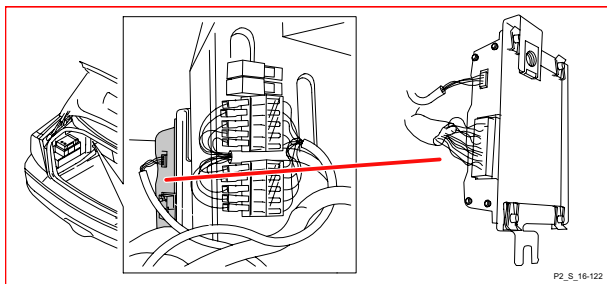
16/83 Voice Guide Amplifier module VGA



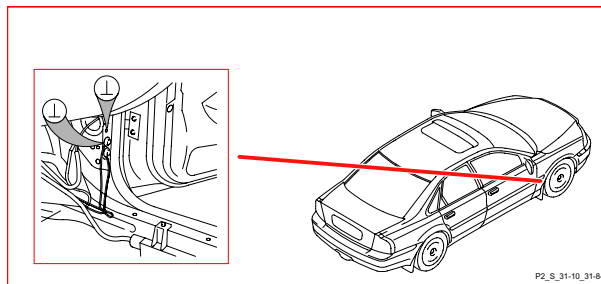
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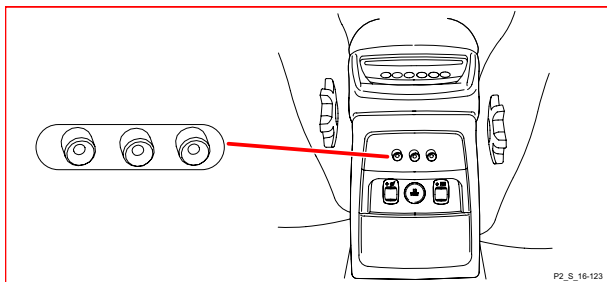
16/122 Rear Audio Separation module (RAS)



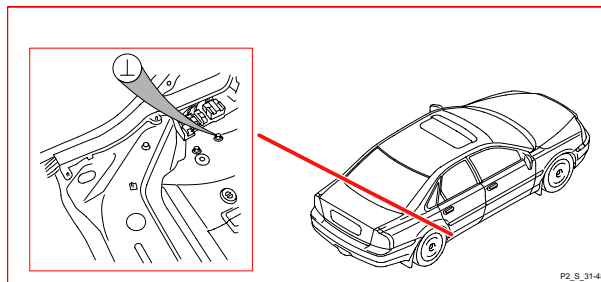
31/10 Ground connection



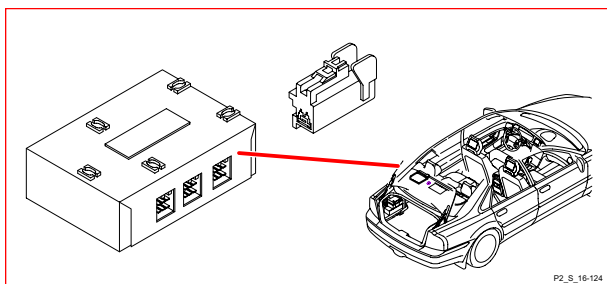
16/123 External equipment outlet AUX



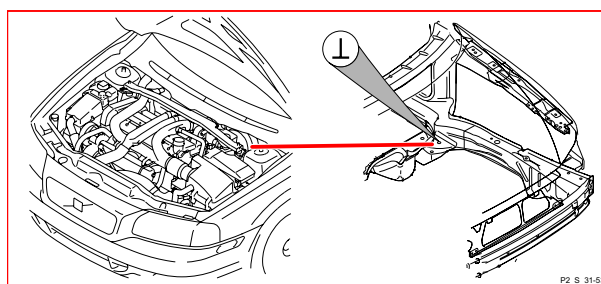
31/48 Ground connection



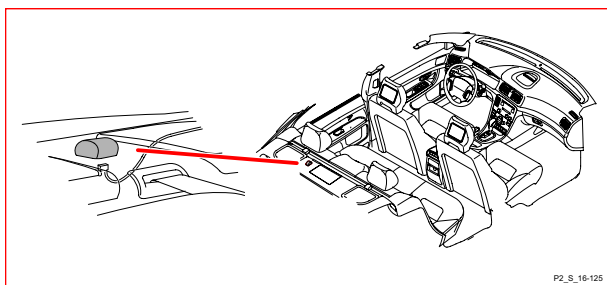
16/124 Rear Seat Entertainment module (RSE)



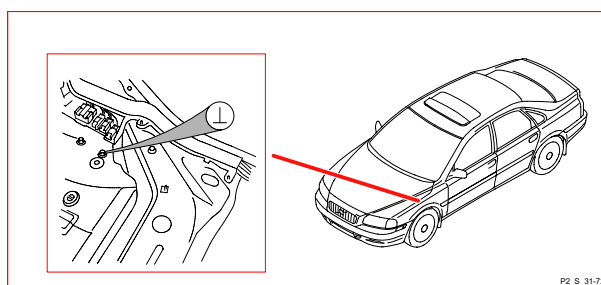
31/53 Ground connection



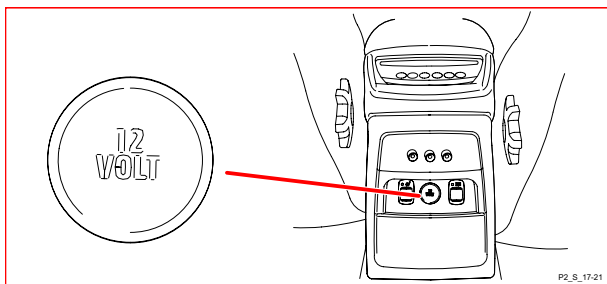
16/125 IR transmitter



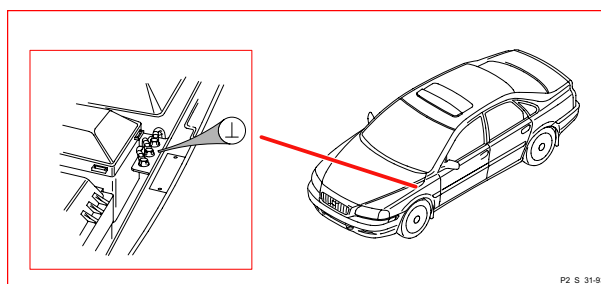
31/72 Ground connection



17/21 12V outlet, rear seat



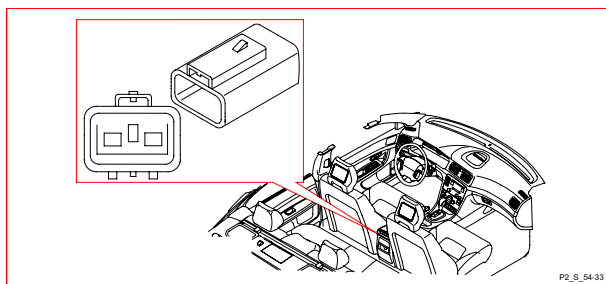
31/93 Ground connection



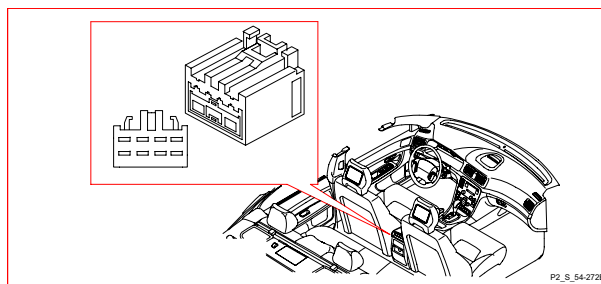
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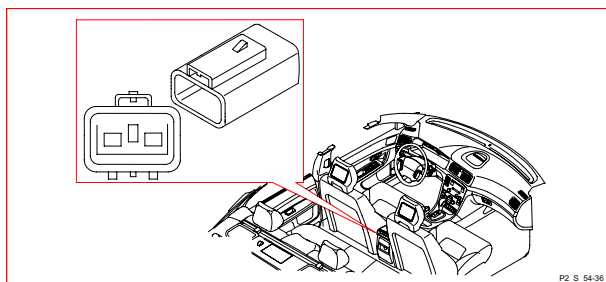
54/33 Connector



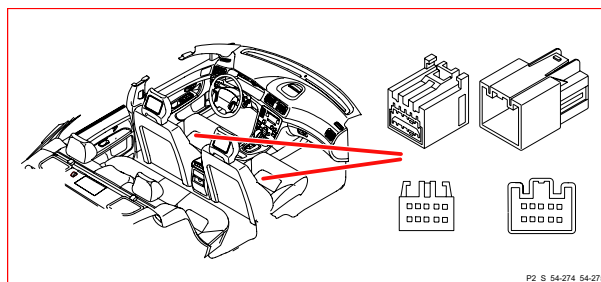
54/272BConnector



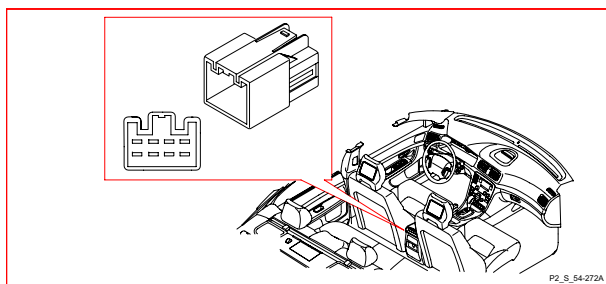
54/36 Connector



**54/274 Connector
54/275 Connector**



54/272AConnector



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