

Service Manual Cars

Section 3 (39) Wiring diagram S80 Executive 2001

TP 3954201

VOLVO

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 authorised 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 seatbelt 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-pillar, the B and C-pillars, and the C and D-pillars.

Test terminal

Data link connector in the passenger compartment.

Modifications introduced up to April 2000

Any vehicle modifications made after this date are not included in this manual. Refer to the Service Bulletins as necessary.

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.

Contents

This manual covers the functions that are specific to the S80 Executive 2001.
The Service Manual "Wiring diagram S80/V70 2001", can be used for the
other parts of the electrical system.

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Abbreviations

A number of abbreviations are used in this manual. They are explained below.

Colours

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

Ignition switch designations

X	= Accessory (radio position)
S	= Energized when "key inserted"
15	= Contact remains closed during starting
15l	= Contact broken during starting
30	= Constant supply from battery
50	= Start

Other

LHD	= Left-hand drive
RHD	= Right-hand drive

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Volvo retains the right to make amendments

How to use the wiring diagram

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/x.

The second part of the designation is a serial number, e.g. x/2.

Together, these form a component designation, e.g. 3/x.

There is a component list at the back of the manual. Using the component designation, you can find the corresponding description of the component e.g. 3/2 = light switch.

List of type numbers

The list contains the type numbers and corresponding component types, e.g. 3/x = switch, 6/x = electric motor, etc.

1	Battery
2	Relay
3	Switch
4	Control unit
5	Combination instrument
6	Electric motor
7	Sensor
8	Actuator
9	Heating element
10	Lamp
11	Fuse
15	Distribution rail
16	Audio
17	Service/diagnosis
18	Contact reel
19	Meter
20	Ignition component/shunt
26	Transformer
31	Ground connection
53	Junction point
54	Connector

B. Junction points

The wiring diagrams contain numbered junction points, e.g. 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 cables harnesses and are described in the "Connectors" section.

D. Electrical distribution

The function of fuses and relays is described in full in the "Electrical distribution" section.

E. Data communication

Today's cars contain CAN networks for data transfer. Network connections are shown in full on the wiring diagram in question. The "Data communication" section contains in-depth information about CAN communication.

F. Abbreviations

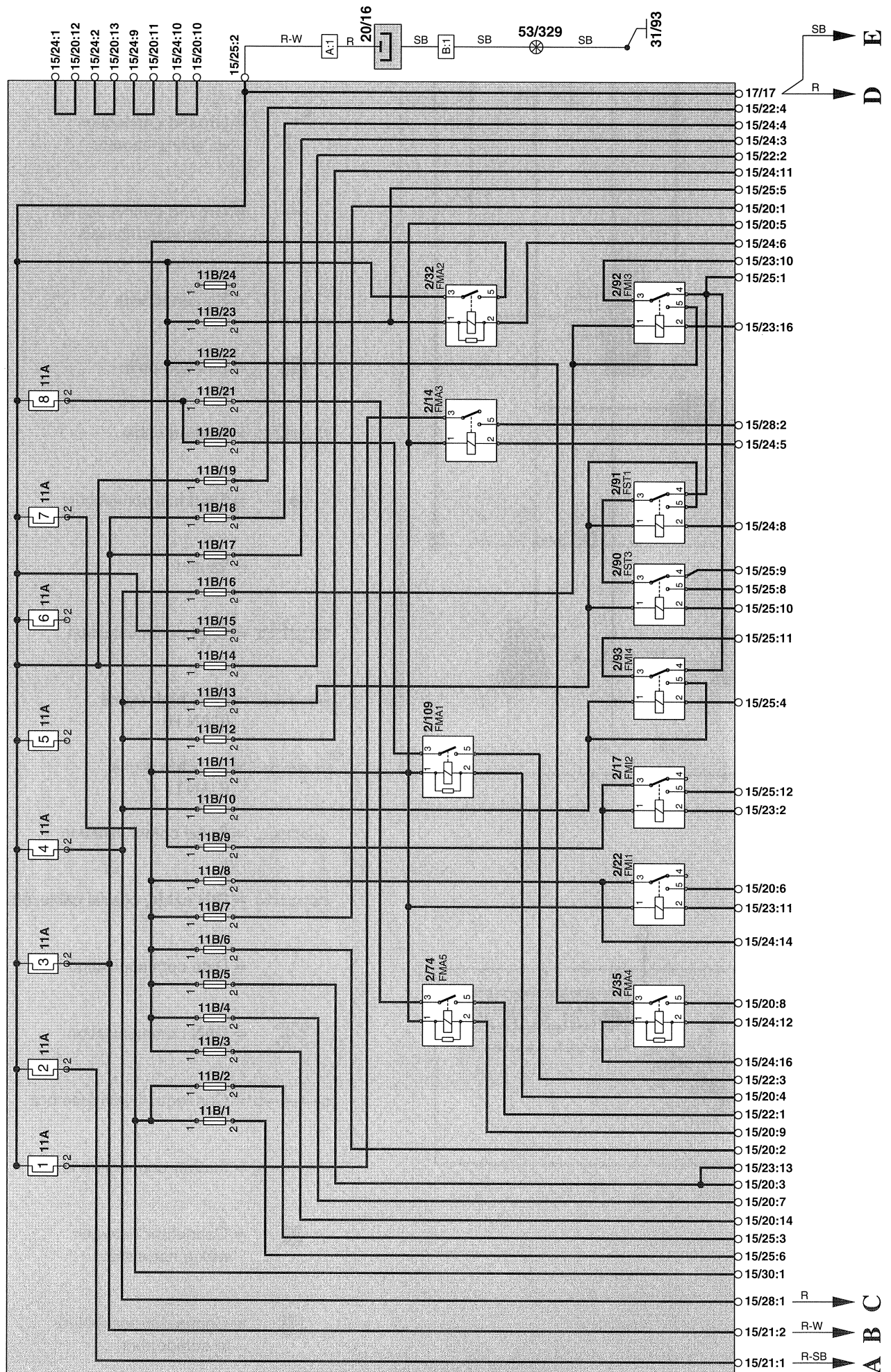
A number of different abbreviations are used in this manual.

These are explained in the "Abbreviations" section.

G. Component location

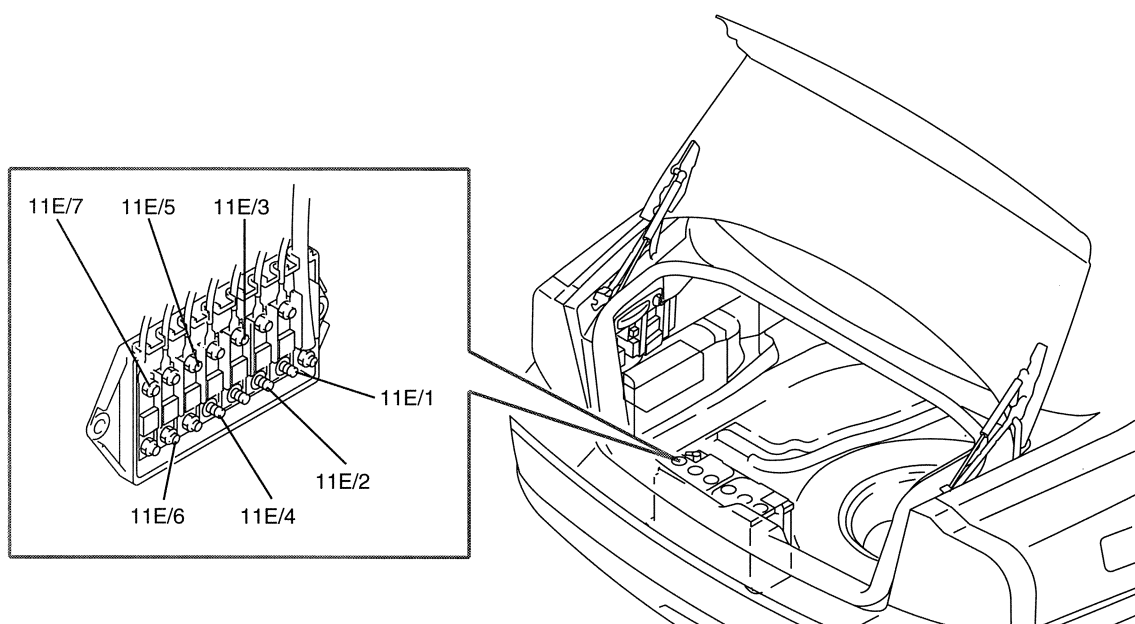
There is a section at the end of the manual in which the appearance and location of components is described in numerical order.

Electrical distribution Overview



Electrical distribution

Fuses, cargo compartment

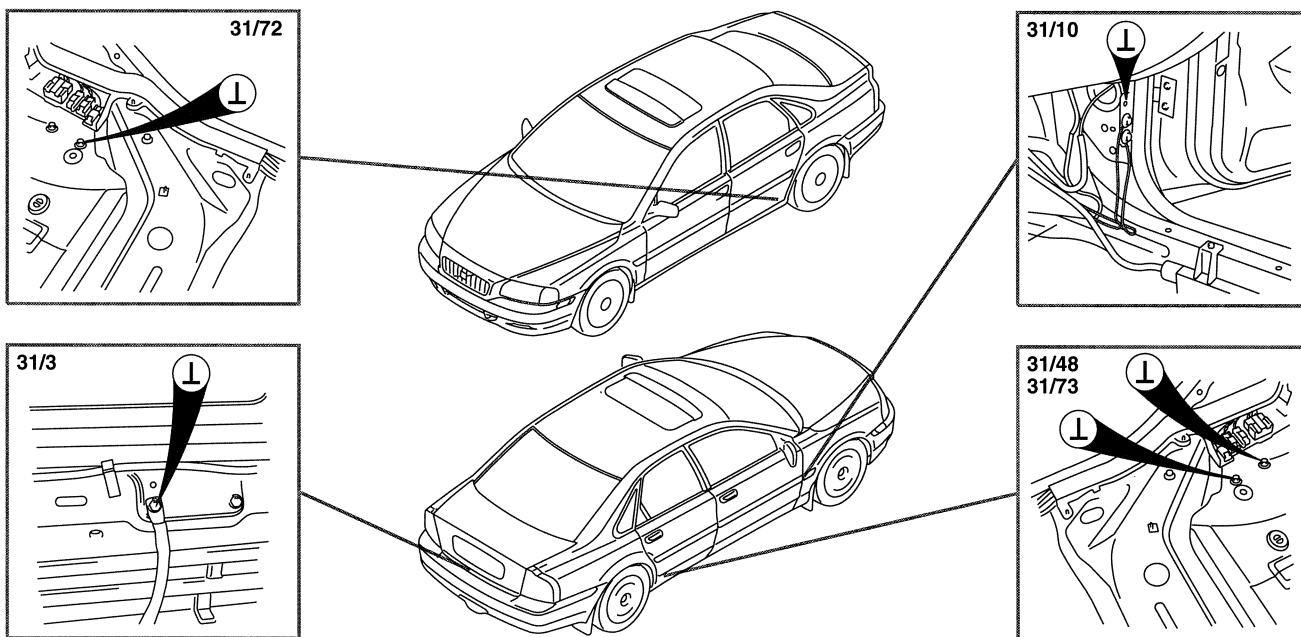


11E Main fuse, battery

No.	Fuse function	A
1	Feed, 15l relay, rear	40
2	Fuses 11D/12-15 Fuses 11F/1-5	40
3	Heated rear window	40
4	-	
5	Fuses for 11D/6-10	40
6	-	
7	Fuses for 11D/1-5	40

Electrical distribution

Ground connection



31/3
Battery 1/1

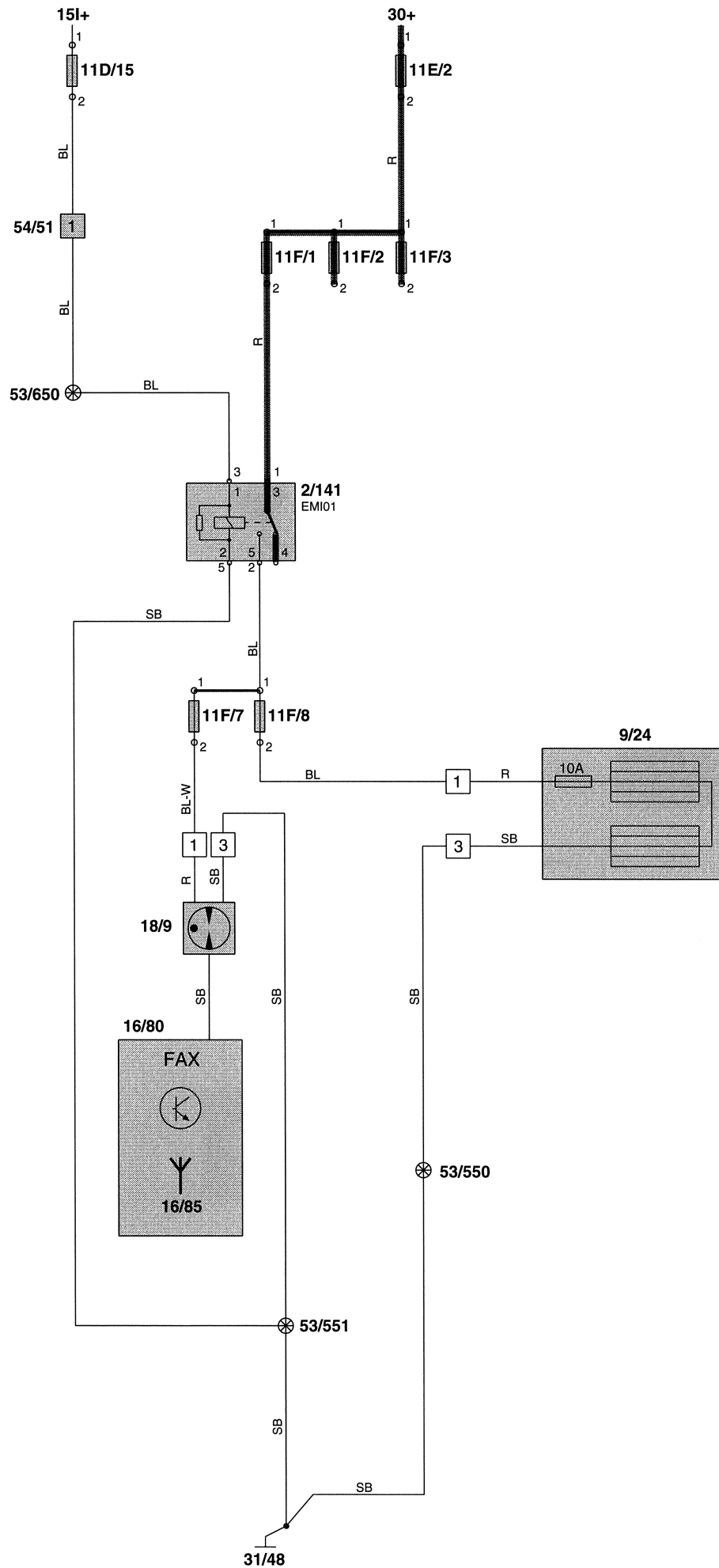
31/10
Control unit, ventilation fan 4/31A:4 LHD
Central Electronic Module (CEM) 4/56E:1 RHD
Junction point 53/406
-entry lighting, RH front 10/126:4
-cigarette lighter/12V socket, front 9/1:2
-cigarette lighter/12V socket, rear 9/25:3
-lighting, glove compartment 10/29:2 LHD

31/48
Junction point 53/550
-connector 54/64:4
-seat heating, LH rear 9/14:1
-seat heating, RH rear 9/15:1
-cooler box, rear seat 9/24:3
Junction point 53/551
-relay, 15l feed, rear seat 2/141:5
-switch, LH electrically heated rear seat 3/64:5
-switch, RH electrically heated rear seat 3/69:5
-relay, electrically heated rear seats 2/43:5
-switch, rear sun blind 3/104:2
-switch, TV/DVD 3/194:5
-switch, day/night brightness, TV 3/195:5
-overcurrent protection, fax 18/9:3

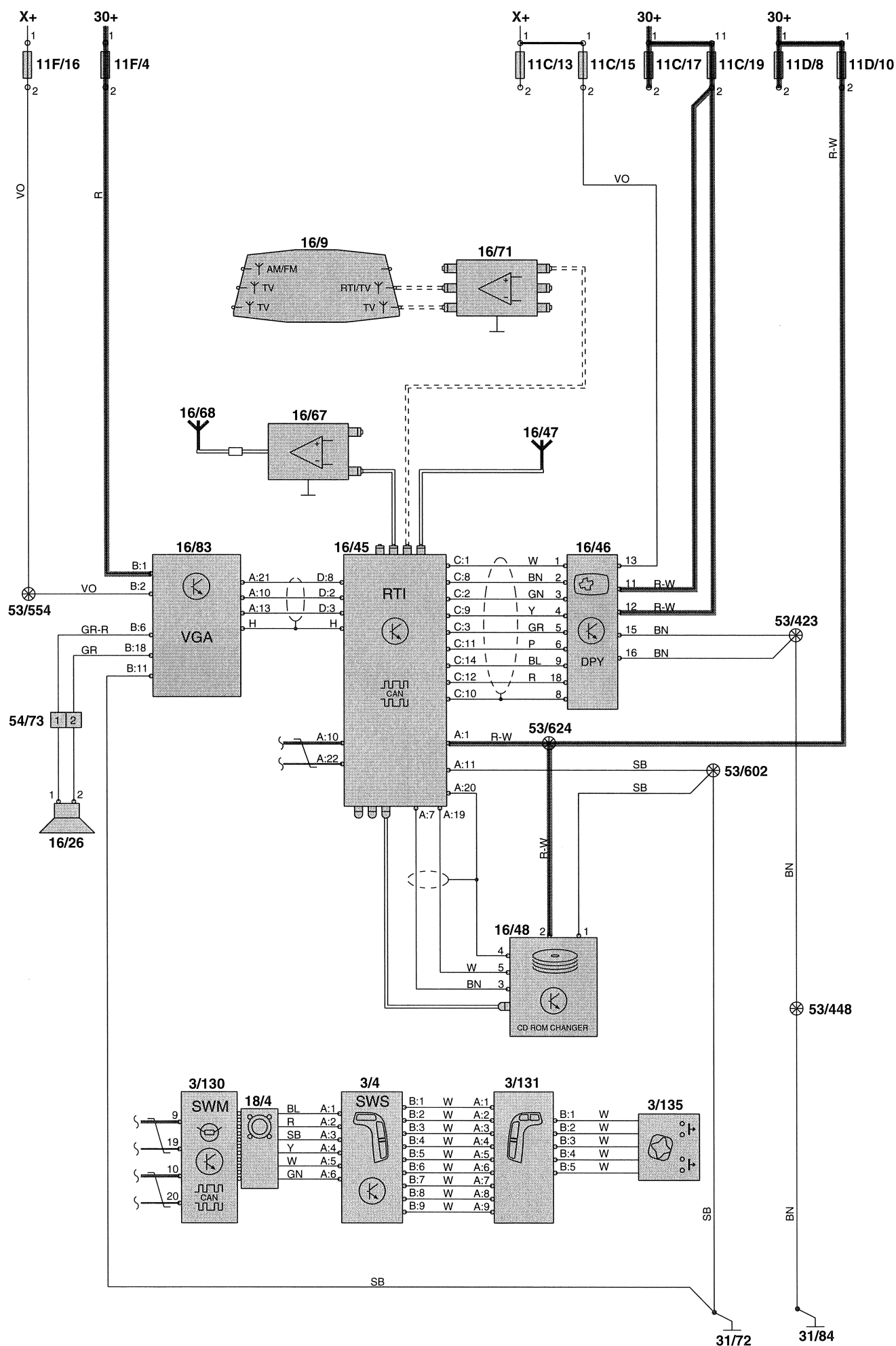
31/72
Voice Guide Assistance (VGA) 16/83B:11
Junction point 53/601 RTI
-lighting, cargo compartment, LH 10/127:4 S80
-solenoid, LH rear head restraint 8/59:4 S80
-Rear Electronic Module (REM) 4/58E:1
-lamp housing, LH tail light 10/18A:4 and 10/18B:1 S80
-lamp housing, LH tail light 10/18A:6 and 10/18B:4 V70
-connector 54/50:6
-connector 54/50:7
-connector 54/50:10
-Inclination Sensor Module (ISM) 7/100:5 without RTI
Junction point 53/602 RTI
-Inclination Sensor Module (ISM) 7/100:5 RTI
-pager alarm 4/79:4 Israel
-RTI control unit 16/45A:11
-CD-ROM player 16/48:1 RTI
-CD changer 16/15:1 S80
-relay, pager alarm 2/136:1 Israel
-relay, pager alarm 2/137:1 Israel

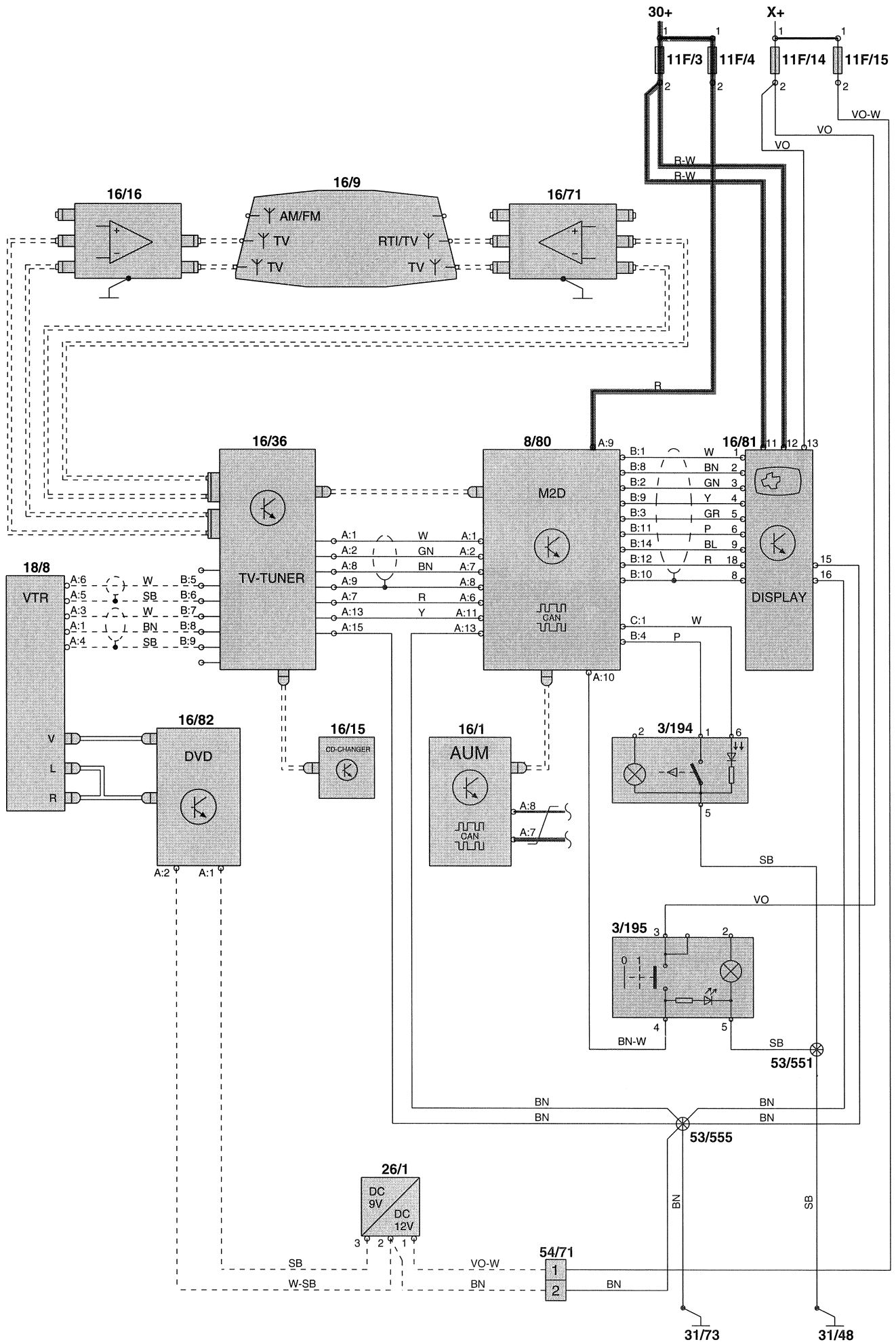
31/73
Junction point 53/555
-TV display, rear 16/81:15
-TV display, rear 16/81:16
-TV receiver 16/36A:15
-Melbus unit, TV display 8/80A:13
Connector 54/71:2
Junction point 53/604
-solenoid, RH rear head restraint 8/60:4 S80
-lamp housing, RH tail light 10/17A:4 and 10/17B:1 S80
-lamp housing, RH tail light 10/17A:6 and 10/17B:4 S70
-lighting, cargo compartment, RH 10/128:4 S80
-12V socket, cargo compartment 17/19:2
Connector 54/51:7

Cooler box, rear seat Fax

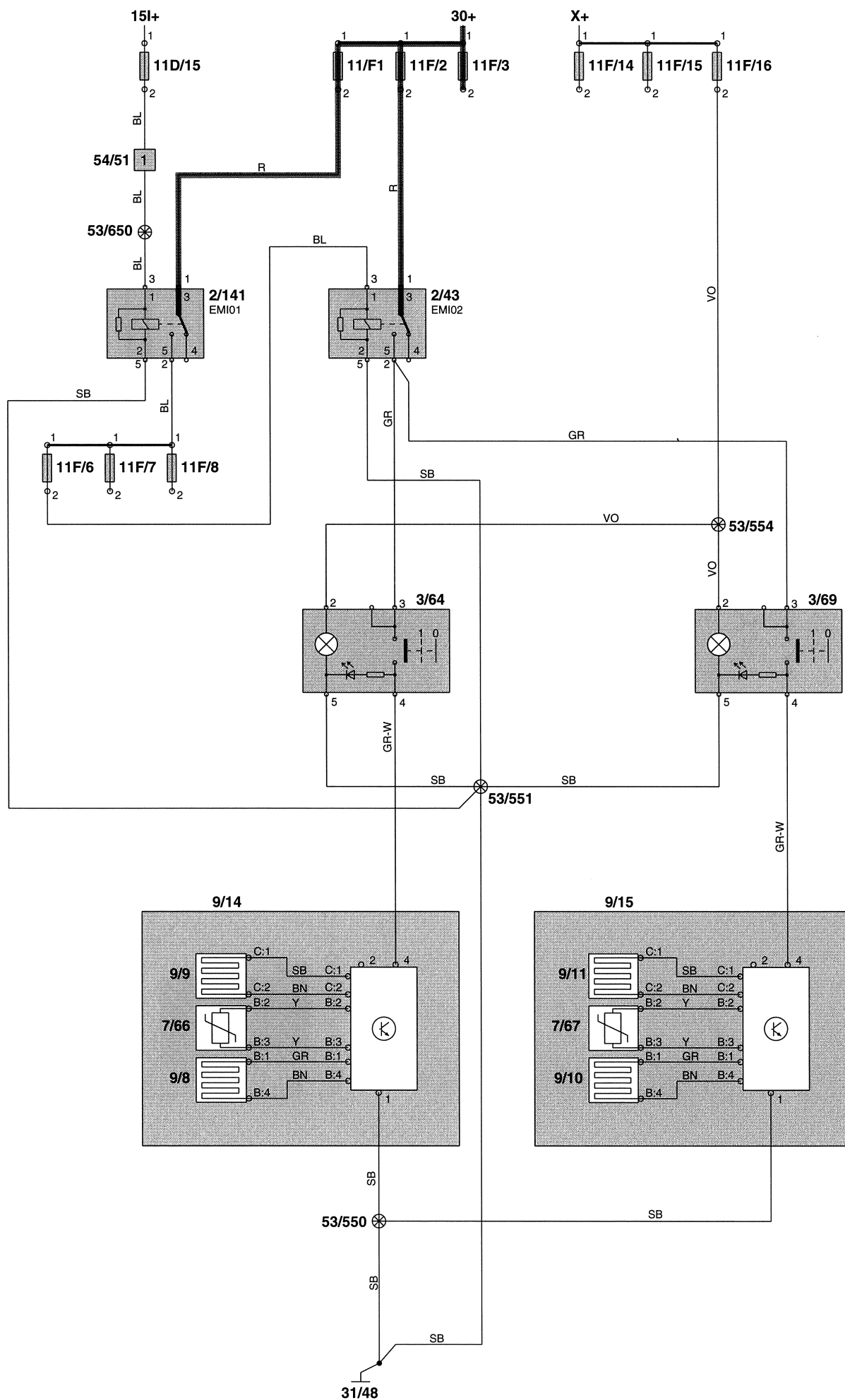


Road Traffic Information (RTI) with voice guide

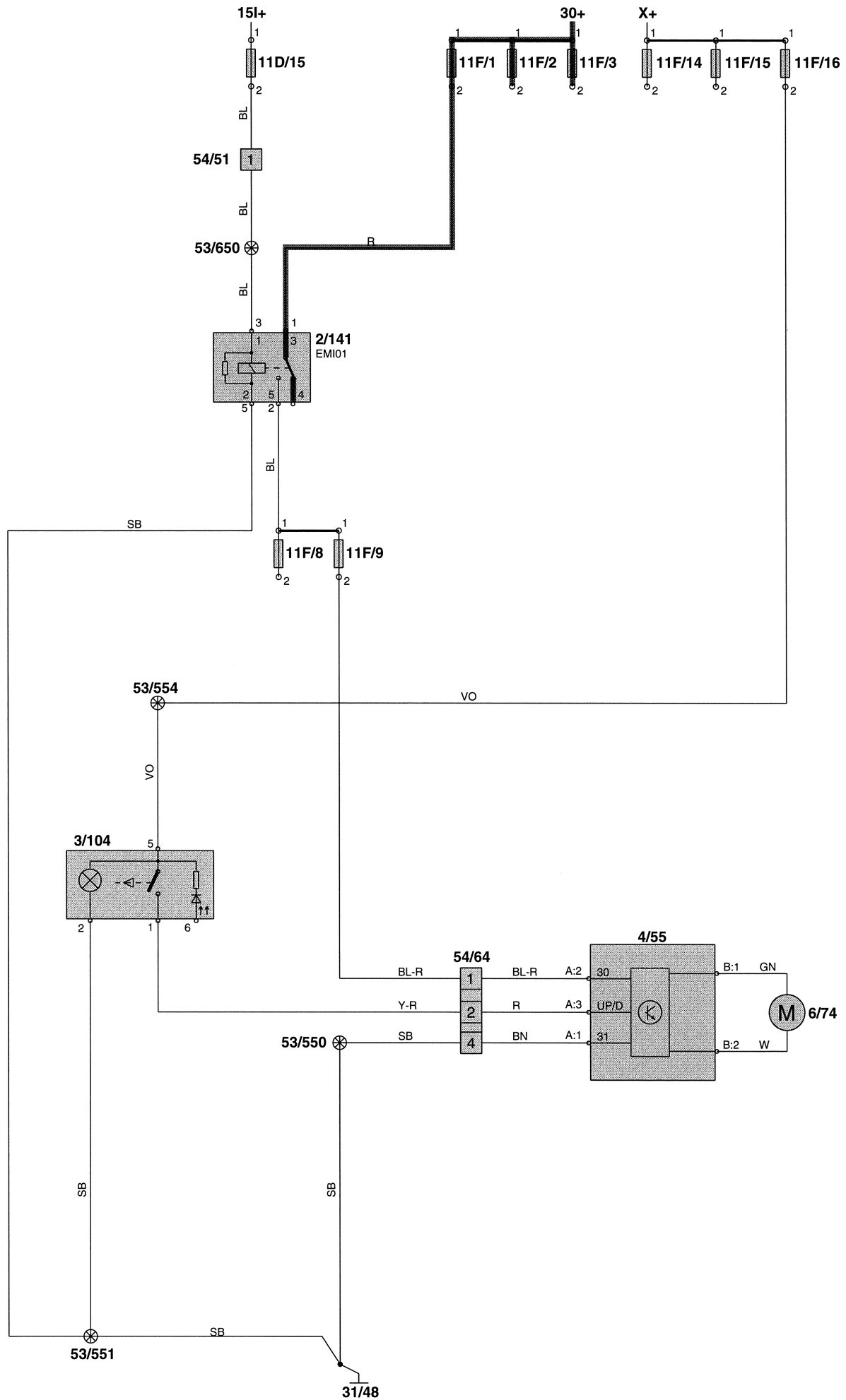




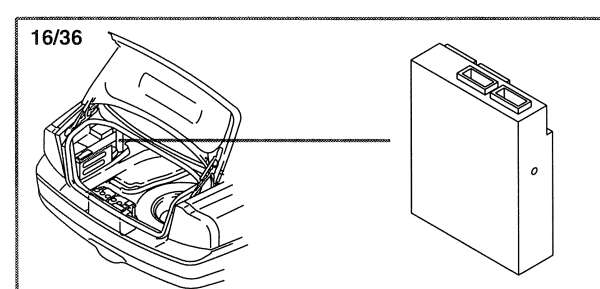
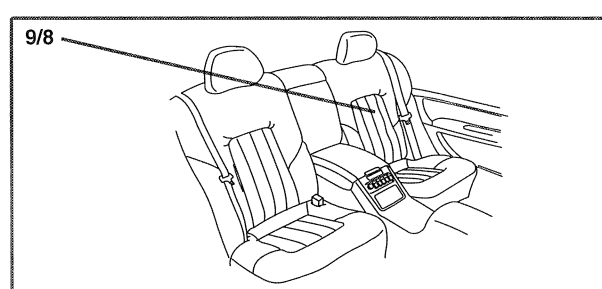
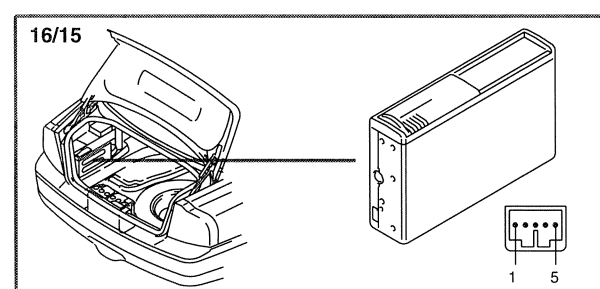
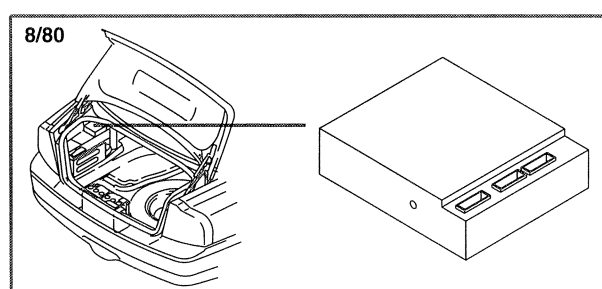
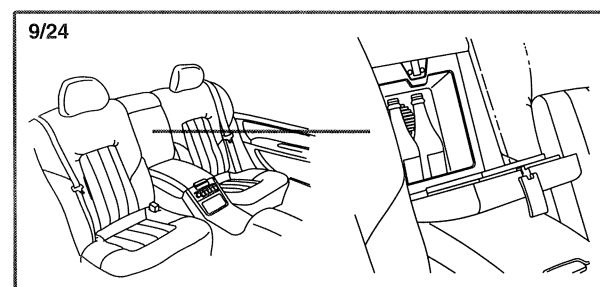
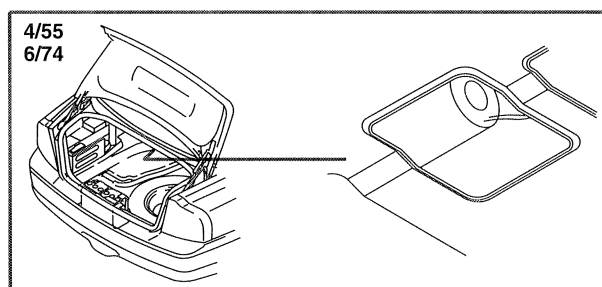
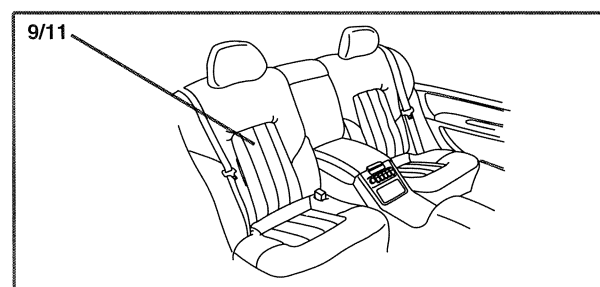
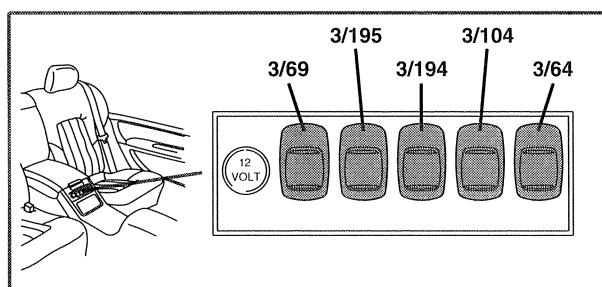
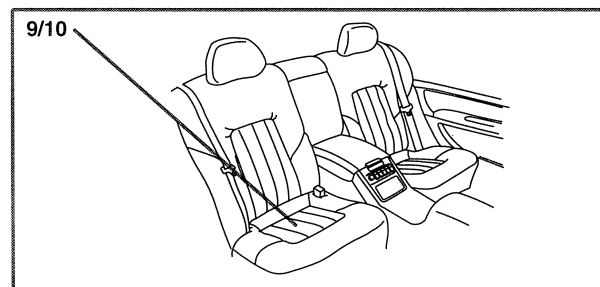
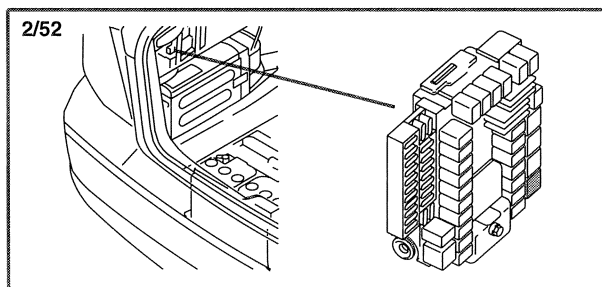
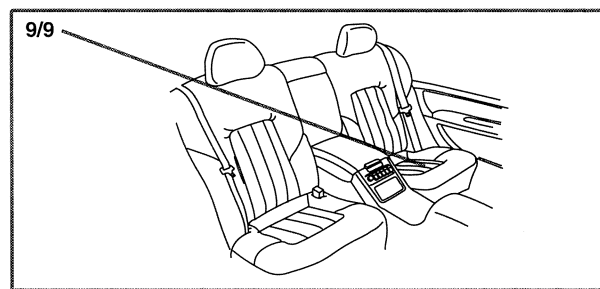
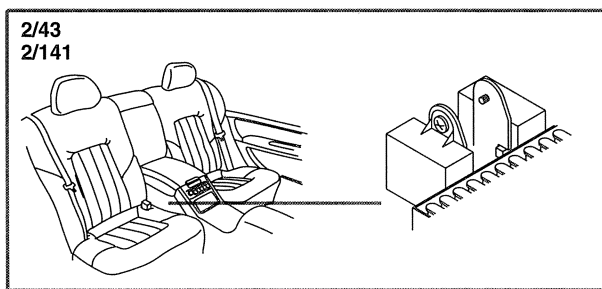
Electrically heated rear seats



Electrically operated sun blind



Component location

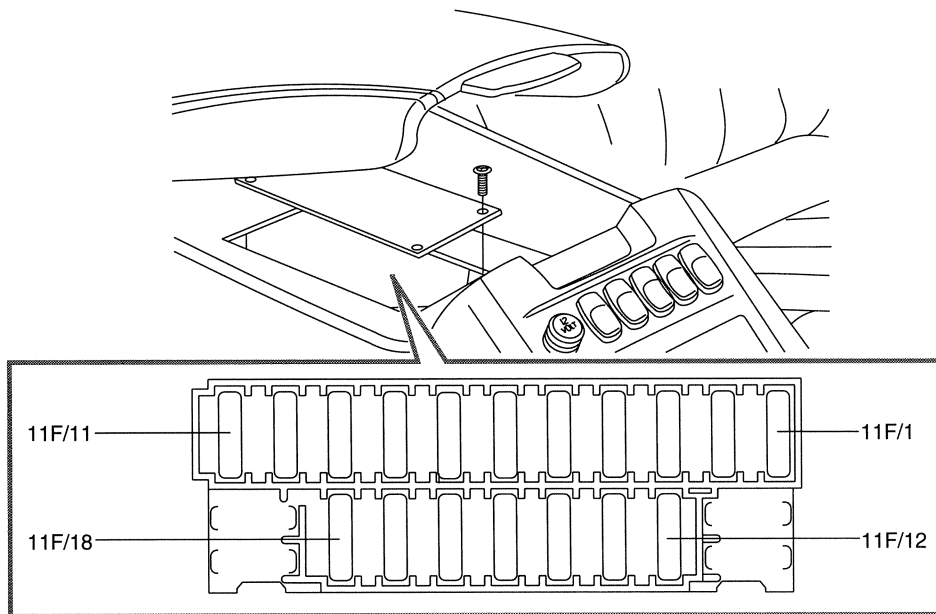


16/1	Radio	54/24	Connector, 13-pin
16/9	Window antenna		Passenger compartment cable harness - LH front seat belt lock cable harness
16/15	CD changer		
16/16	Amplifier, LH window antenna 1	54/25	Connector, 13-pin
16/26	Loudspeaker, instrument panel		Passenger compartment cable harness - RH front seat belt lock cable harness
16/36	TV receiver		
16/45	RTI system control module	54/3L	Multi-connector
16/46	RTI Display		Passenger compartment cable harness - engine compartment cable harness
16/47	GPS antenna RTI		
16/48	RTI CD-ROM player	54/3R	Multi-connector
16/67	Window antenna, LH rear		Passenger compartment cable harness - engine compartment cable harness
16/68	Antenna, bumper		
16/71	Amplifier, RH window antenna 1	54/33	Connector, 3-pin
16/80	Fax/phone connection		Passenger compartment cable harness - rear cigarette lighter
16/81	TV display, rear		
16/82	DVD player, rear	54/36	Connector, 3-pin
16/83	Horn 2		Passenger compartment cable harness - rear centre console
16/85	Fax antenna		
17/17	Jump start connection	54/51	Connector, 13-pin
17/19	12V socket, cargo compartment		Cargo compartment cable harness - towing bracket
17/21	12V socket, rear seat	54/64	Connector, 4-pin
			Executive cable harness - sun blind cable harness
18/4	Contact reel	54/71	Connector, 2-pin
18/8	VTR adapter, DVD/TV tuner		Executive rear seat cable harness - transformer cable harness
18/9	Overcurrent protection, fax	54/73	Connector, 2-pin
			Executive cable harness - VGA loudspeaker cable harness
20/16	Capacitor		
20/27	Shunt, dipped beam CEM	54/81	Connector, 13-pin
			Cargo compartment cable harness - 12 V socket/ accessory cable harness
26/1	Transformer, 12/9 V		
31/1-93	Ground connection		
53/301-650	Junction points		

List of components

1/1	Battery	6/25	Starter motor
2/14	Relay, glow plug unit	6/26	Generator
2/17	Horn relay	6/74	Motor, sun blind
2/22	AC relay	7/66	Thermostat, LH electrically heated rear seat
2/30	X feed overload relay	7/67	Thermostat, RH electrically heated rear seat
2/31	15-feed overload relay		
2/32	Engine control system main relay	8/60	Head restraint solenoid, RH rear
2/35	Starter motor relay	8/80	Melbus unit, TV display
2/43	Relay, electrically heated rear seats		
2/52	Rear 15I feed relay	9/1	Cigarette lighter/12V socket, front
2/61	Parking light relay	9/2	Heated rear window
2/63	Main beam relay	9/8	Heating element, LH rear seat cushion
2/74	Relay, coolant heater 1	9/9	Heating element, LH rear seat backrest
2/90	Relay, windscreen wiper, low/high speed	9/10	Heating element, RH rear seat cushion
2/91	Relay, intermittent windscreen wiper	9/11	Heating element, RH rear seat backrest
2/92	Relay, windscreen washer motor	9/14	Seat heating, LH rear
2/93	Relay, rear window washer motor	9/15	Seat heating, RH rear
2/109	Relay, coolant heater 2	9/24	Cooler box, rear seat
2/141	Rear 15I feed relay	9/37	Cigarette lighter/12V socket, rear Executive
3/1	Ignition switch	10/72	Lighting, front ashtray
3/4	Control module, SWS cruise control		
3/64	Switch, LH electrically heated rear seat	11A/no.	Main fuses, engine compartment fuse box
3/69	Switch, RH electrically heated rear seat	11B/no.	Fuses, engine compartment fuse box
3/104	Switch, rear sun blind	11C/no.	Fuses, passenger compartment fuse box
3/130	Control unit, Steering Wheel Module (SWM)	11D/no.	Fuses, cargo compartment fuse box
3/131	Switch, audio/mobile phone	11E/no.	Main fuses, battery
3/135	Switch, Road Traffic Information (RTI)	11F/no.	Fuses, rear seat fuse box
3/194	Switch, TV/DVD		
3/195	Switch, day/night brightness, TV	15/10-30	Connections
4/9	Control unit, Supplementary Restraint System (SRS)		
4/31	Control unit, ventilation fan		
4/46	Engine control system		
4/55	Control unit, sun blind		
4/56	Central Electronic Module, CEM -**		

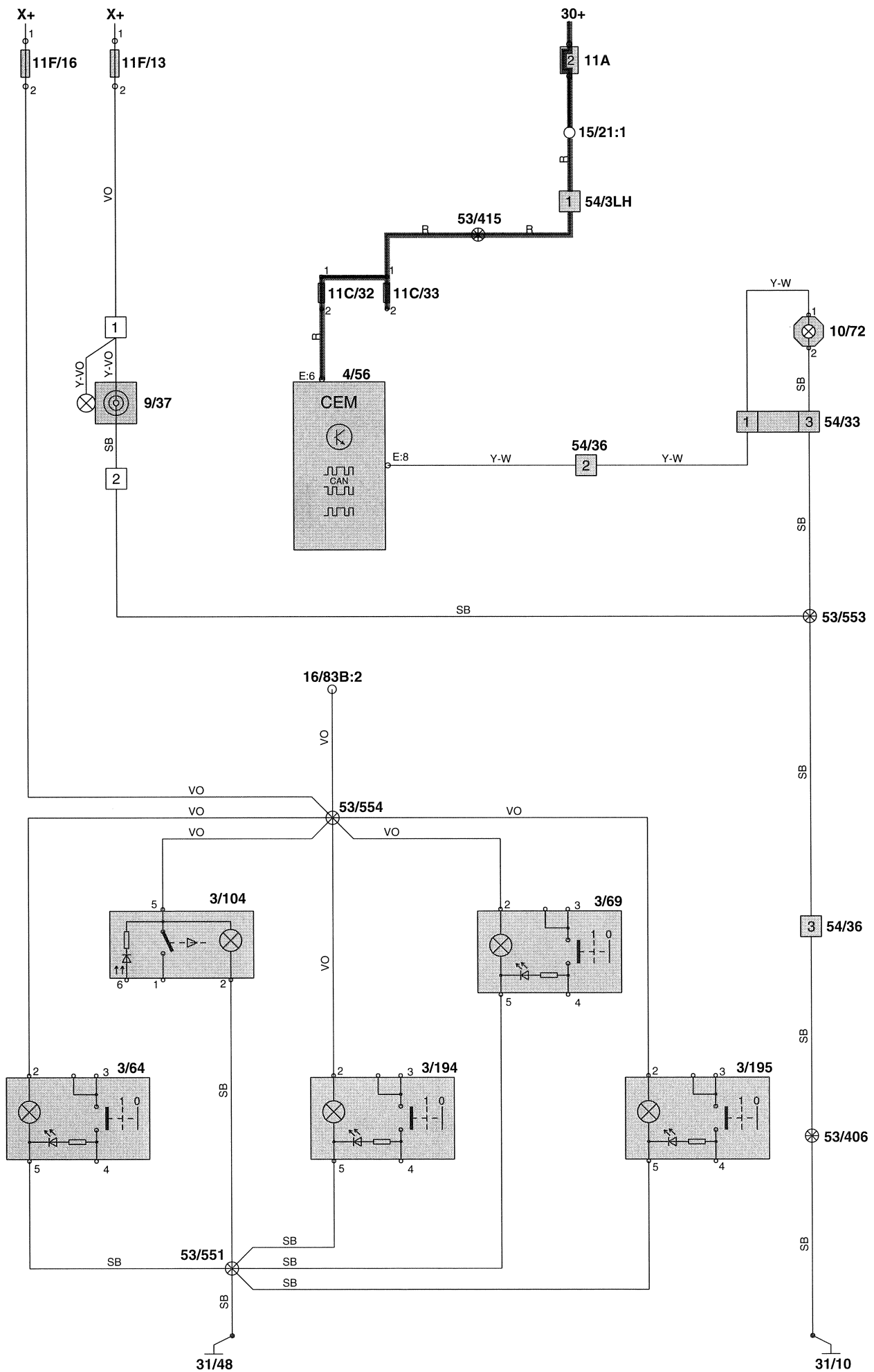
Electrical distribution Fuses, rear seat



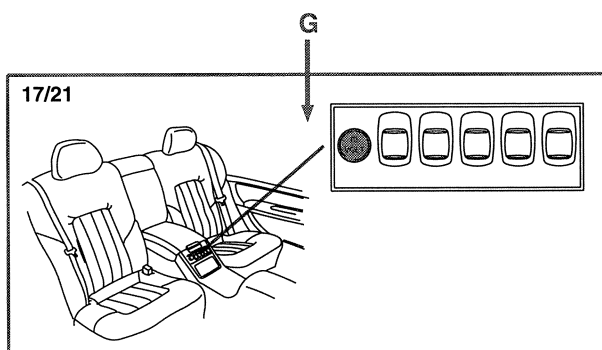
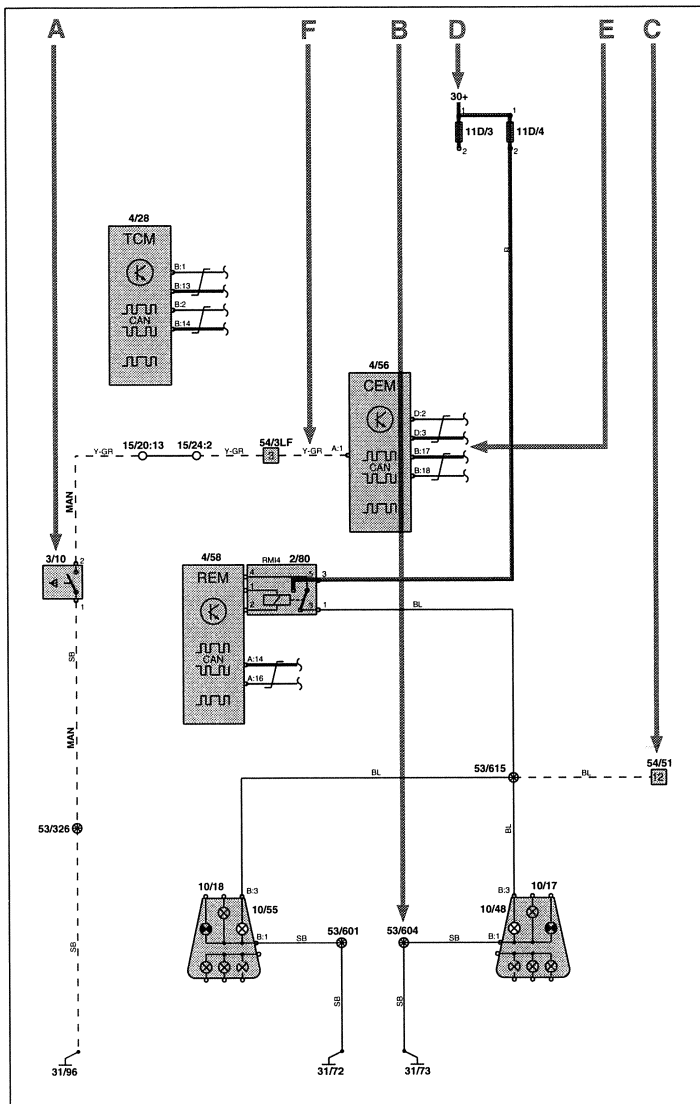
11F Fuses, rear seat console

No.	Fuse function	A
1	Feed, 15l relay, rear	25
2	Electrically heated rear seat	25
3	TV display, rear seat	10
4	Melbus unit Voice Guide Assistance (VGA)	10
5	-	
6	Electrically heated rear seat (control voltage)	5
7	Fax	5
8	Cooler box, rear seat	10
9	Electrically operated sun blind	10
10	-	
11	-	
12	12V socket, cargo compartment	10
13	Cigarette lighter, rear seat	10
14	TV display, rear seat Switch, day/night brightness, TV	5
15	Transformer 12/9 V, DVD player	5
16	Instrument and control lighting, rear seat Voice Guide Assistance (VGA)	5
17	-	
18	-	

Instrument and control lighting



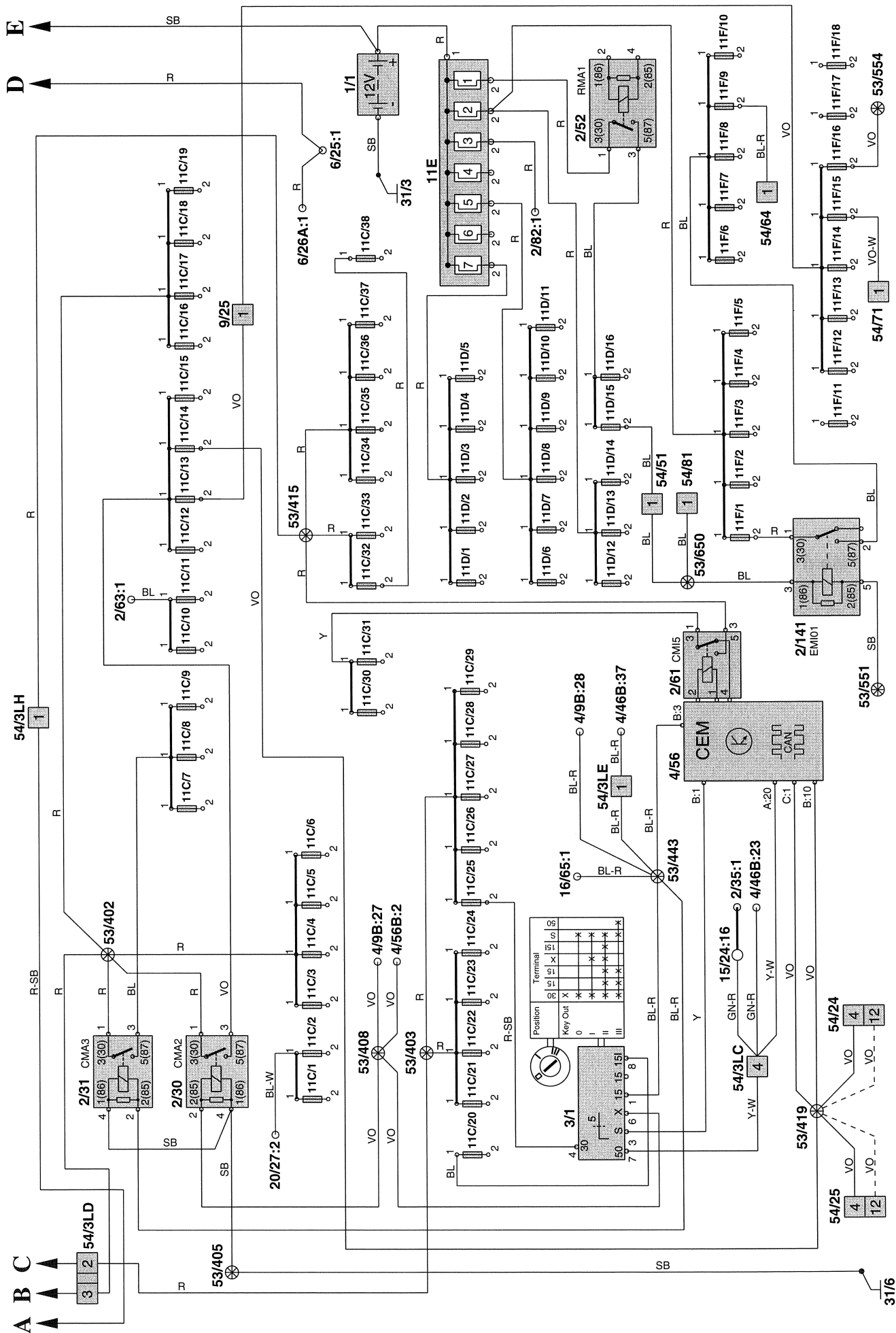
How to use the wiring diagram



List of symbols

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

Electrical distribution Overview



Cigarette lighter

