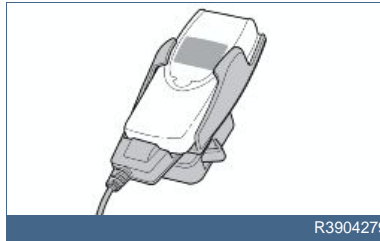


S80 (-06) / XC90

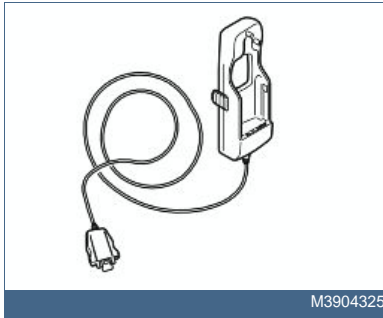
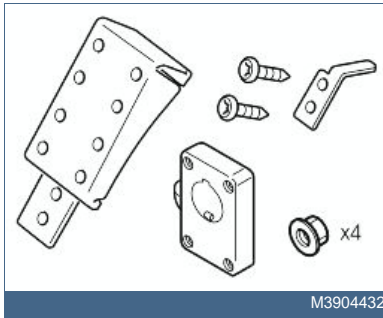
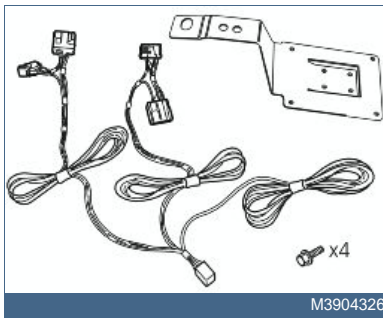
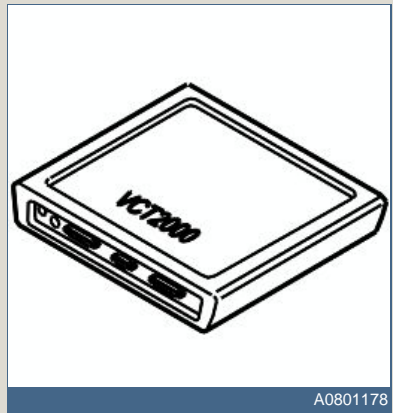
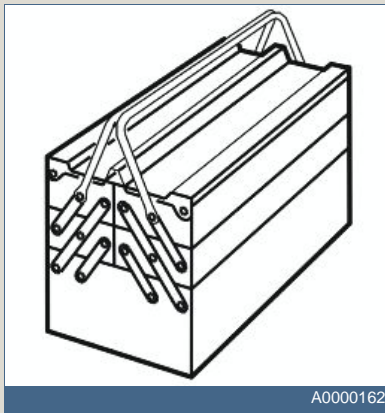
Section	Group	Weight(Kg/Pounds)	Year	Month
3	39		2003	09

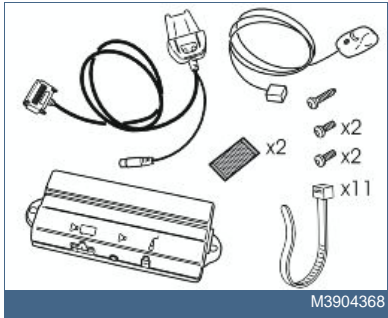
S80 (-06) 1999, S80 (-06) 2000, S80 (-06) 2001, S80 (-06) 2002, S80 (-06) 2003, S80 (-06) 2004, S80 (-06) 2005, S80 (-06) 2006, XC90 2003, XC90 2004, XC90 2005, XC90 2006, XC90 2007, XC90 2008, XC90 2009, XC90 2010

Replaces issue:
2003 06



Required tools





Any comments on this publication? Please contact your nearest dealer. Thank you!

Publication no: MA 8698445, Issue: 2003-09
Comments:.....
From:.....
Address:.....
Telephone no:.....
Telefax:.....

INTRODUCTION

- **NOTE! Read through the whole installation instruction before starting the work.**
- The front page gives the date of this edition and the edition it replaces
- The second page shows the tools needed for the installation and the contents of the installation kit
- The illustrations display the procedure in order of operation. The order of operation is repeated in the text section
- Cut out the text page in order to follow the illustrations and text at the same time.

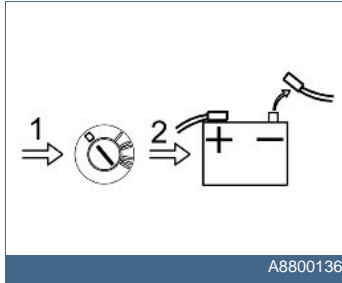
Hands free unit for carphone, Universal

Note!

This accessory is connected to the electrical system of the car. It requires software unique to the car.

Points 30-43 apply to cars with an accessory electronic module (AEM).

1

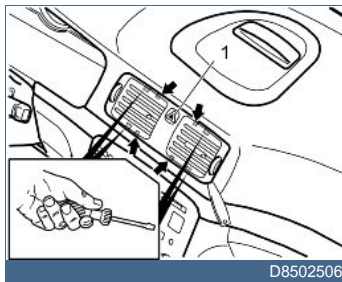
**Preparations**

- Slide back the front seats to the rearmost and uppermost positions
- Turn the ignition key to position 0
- Remove the key from the ignition switch (does not apply to cars with automatic gearboxes)
- Disconnect the battery negative lead.

Note!

Wait at least five minutes before disconnecting the connectors or removing other electrical equipment.

2

**Preparations**

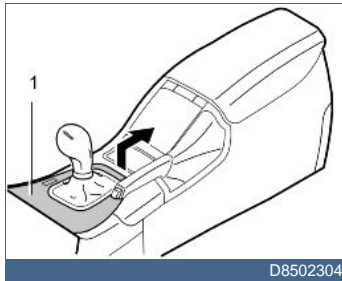
- Press in the clips so that the ventilation grille releases
- Remove the grille. Use a weatherstrip tool
- Remove the connector (1) for the hazard warning signal flasher.

3

**Preparations**

- Remove the trim strip on the dashboard. First carefully pull the trim strip straight outwards, as close to the mounting point (1) as possible.

4

**Preparations**

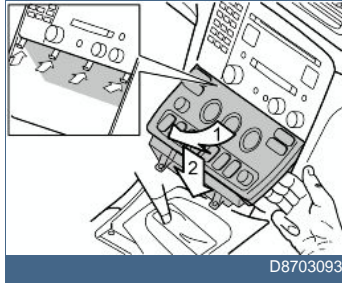
- Detach the panel (1). Detach the gear selector lever boot using a weatherstrip tool.

5

**Preparations**

- Move the gear selector lever to the rearmost position
- Pull the panel with the boot (1) backwards. Turn the panel as illustrated
- Remove the screws (2) from the climate control assembly.

6



D8703093

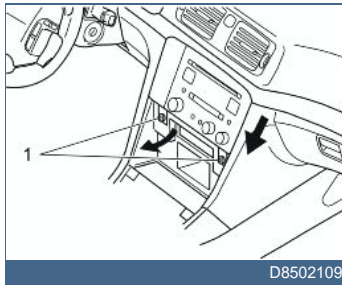
Preparations

- Angle the dashboard environment panel outwards so that it is possible to insert a couple of fingers between the centre console and the side of the dashboard environment panel
- Detach the dashboard environment panel by pulling it downwards while maintaining the same angle. Some force is required because the panel is tightly installed. Disconnect the connectors on the reverse of the dashboard environment panel. Place the dashboard environment panel to one side.

Note!

If any of the outer hooks break off, these must be repaired. The method for this can be found in the Workshop Manual in the section about the dashboard.

7

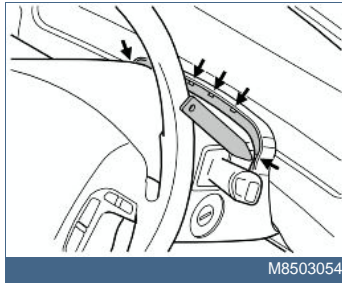


D8502109

Preparations

- Remove the screws (1) from the radio bracket
- Pull the bracket with the radio outwards at the lower edge. Pull the whole unit downwards
- Disconnect the connectors from the radio. Place the radio to one side.

8

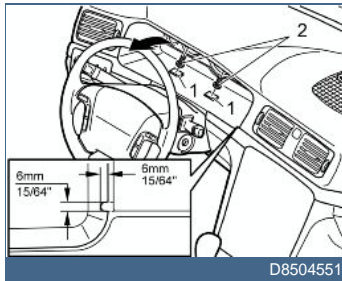


M8503054

Preparations

- Lock the steering wheel in the lowest, rearmost position
- Remove the rubber seal from the upper steering column cover by carefully prying the 5 catches loose using a weatherstrip tool.

9

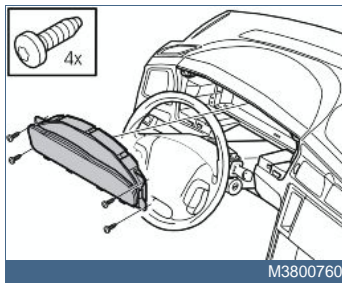


D8504551

Installing and cable routing the handset holder

- Mark out the cable cut-out in the panel as illustrated, 6 mm (15/64")
- Remove the cover (1). Remove the screws (2)
- Angle the upper edge of the panel outwards. Remove the panel
- File the cut out according to the markings.

10

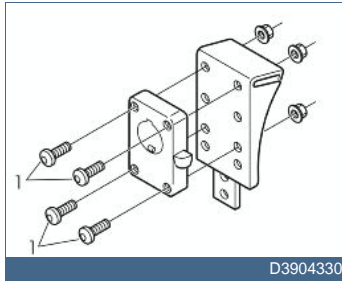


M3800760

Installing and cable routing the handset holder

- Remove the four screws for the combined instrument panel
- Pull out the combined instrument panel. Disconnect the connector on the reverse of the combined instrument panel
- Place the combined instrument panel to one side.

11

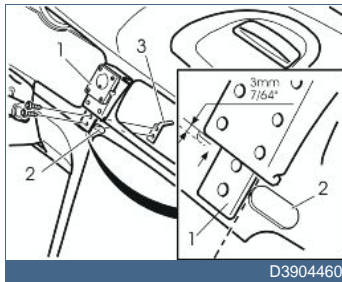


D3904330

Installing and cable routing the handset holder

- Take the bracket and the mounting plate for the carphone holder from the kit
- Assemble the bracket and the mounting plate for the carphone holder. Use the screws and nuts from the kit to assemble them.

12

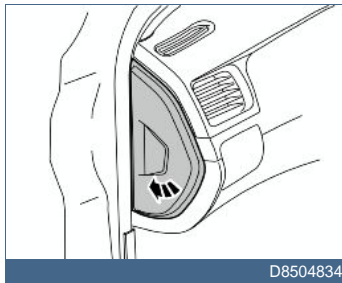


D3904460

Installing and cable routing the handset holder

- Mark out the holes for the carphone holder (1). First align the edge of the holder with the edge of the hole (2). Press the holder upwards by 3 mm (7/64"). Drill a hole using a 5 mm (13/64") diameter drill bit. Use a 20 mm (3/4") diameter drill stop
- Install the holder in the panel. Move the plate (3) through the hole for the vent. Screw the holder and the plate into place. Use the two screws from the kit.

13

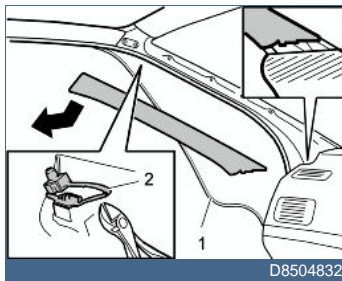


D8504834

Installing and cable routing the handset holder

- Slide the panel on the left-hand end of the dashboard backwards a little. Pull the existing grip. Remove the panel.

14A



D8504832

Installing and cable routing the handset holder

Note!

There are two variants of A-post panel mounting nearest the headlining. See illustrations A or B.

Illustration A

- Detach the door sill moulding (1) at the panel
- Pull the panel straight inwards into the car
- Lift up the panel
- Cut off the safety clip (2).

Note!

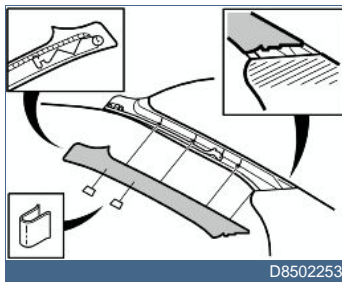
Ensure that the guide lugs on the panel do not scratch the dashboard.

- Turn the safety clip a quarter turn. Remove the safety clip.

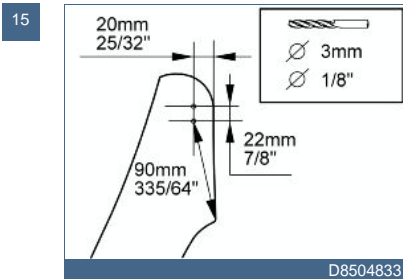
Illustration B

- Detach the door sill moulding at the panel
- Remove the two steel clips
- Pull the panel straight inwards into the car
- Lift up the panel.

14B

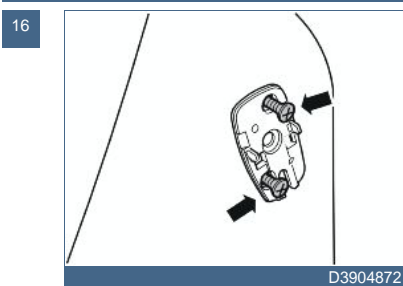


D8502253



Installing and cable routing the handset holder

- Mark out as illustrated. Drill the holes for the mounting plate. Use a 3 mm (1/8") diameter drill bit
- Remove any swarf.



Installing and cable routing the handset holder

- Install the mounting plate on the A-post panel using two screws from the kit.

Caution!

The inflatable curtain (IC) is located inside the A-post panel. It is important to file off the screws securing the mounting plate if necessary, so that they just fit through the panel.

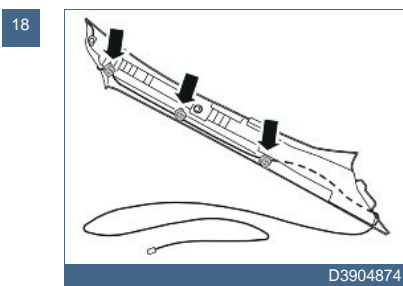
Check how much of the screws protrudes on the reverse. Unscrew the screws. File off the screws to the correct length

Reinstall the screws.



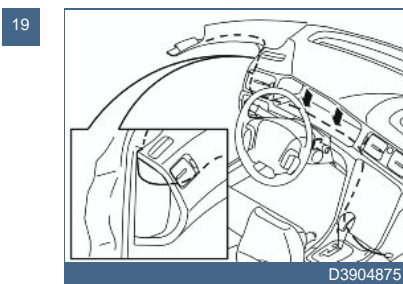
Installing and cable routing the handset holder

- Press the microphone from the kit into place on the mounting plate.



Installing and cable routing the handset holder

- Route the microphone cable on the inside of the A-post panel. Secure the cable using pieces of butyl tape.



Installing and cable routing the handset holder

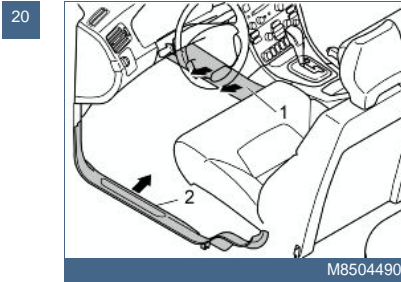
- Install a new safety clip (point 14A). Alternatively ensure that the clips (point 14B) are correctly located. Check that the panel is correctly positioned so that the IC system is not affected.

Note!

It is important to use a new safety clip when installing in accordance with 14A.

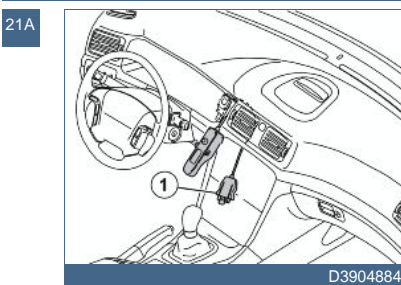
- Press the A-post panel into place
- Route the microphone cable in through the left-hand end of the dashboard, into the space for the combined instrument panel and into the centre console
- Secure the cable where it runs under the combined instrument panel using pieces of butyl tape
- Connect the combined instrument panel. Reinstall the combined instrument panel

- Reinstall the surround for the combined instrument panel. Tighten
- Reinstall the left-hand end panel on the dashboard
- Reinstall the door sill moulding in the door opening.



Installing and cable routing the handset holder

- Remove the side panel (1). First twist the clip at the rear edge of the panel a 1/4 turn. Pull the rear edge of the panel outwards and backwards
- Remove the door trim strip panel (2).



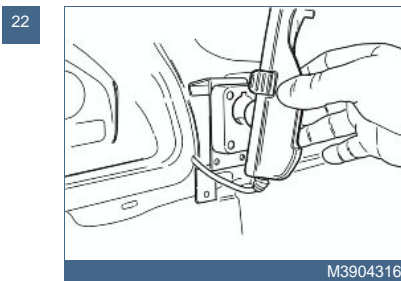
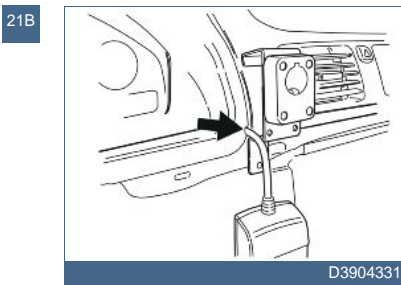
Installing and cable routing the handset holder

Illustration A

- Route the cable from the handset holder (1) through the hole behind the combined instrument panel into the centre console. Continue down along the left-hand air duct and out into the space where the climate control assembly was located.

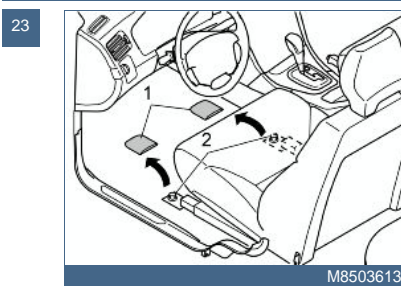
Illustration B

- Reinstall the combined instrument panel. Ensure that the cable for the handset holder is positioned on the right-hand side underneath the combined instrument panel. Ensure that the wiring is not trapped
- Reinstall the panel for the combined instrument panel. Align the cable for the handset cradle in the filed out notch
- Pull any wiring excess into the centre console
- Reinstall the rubber seal in the upper steering column cover
- Reinstall the trim strip on the dashboard.



Installing and cable routing the handset holder

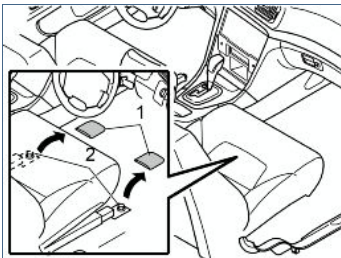
- Press the handset cradle into the mounting plate until a click is heard
- When detaching the handset cradle: press down the lever on the right-hand side of the mounting plate.



Installing and cable routing the handset holder

- Remove both covers (1) from the front mountings on the front driver's seat. Remove the screws (2) from the front mountings. New screws can be found in the kit
- Tip the seat backward slightly to route the wiring under the carpet.

24

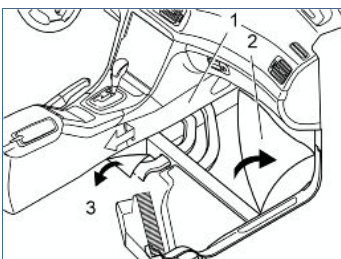


M8504727

Installing and cable routing the handset holder

- **Applies to cars with an amplifier**
- Remove the covers (1) from the front mounting screws for the right-hand seat
- Remove the screws (2) from the seat base
- Tip the seat back.

25

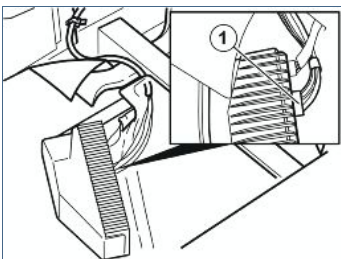


D8504728

Installing and cable routing the handset holder

- **Applies to cars with an amplifier**
- Remove the panel (1) on the right-hand side of the centre console. Turn the clip at the rear edge of the panel through 90°. Pull the rear edge of the panel outward and backward
- Detach the carpet (2) by the front left mounting for the right-hand seat. Pull the carpet forward and to the right
- Fold the rear mat (3) backwards at an angle.

26

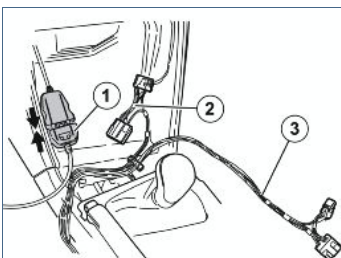


D3703264

Installing and cable routing the handset holder

- **Applies to cars with an amplifier**
- Disconnect the grey connector (1) from the amplifier.

27A



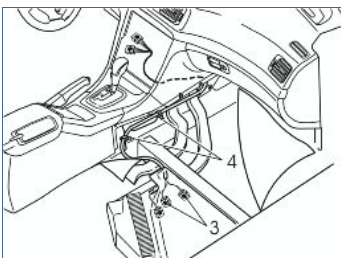
D3904756

Installing and cable routing the handset holder

Applies to cars with an amplifier Illustration A

- Take the black joint cable (from the kit) to the handset holder (1). Connect it to the cable from the handset holder that was routed down earlier
- Take the large cable harness from the kit. Position the green connectors (2) in the space where the radio will be located
- Route the cable with the grey connectors (3) on the right-hand side inside of the centre console at the air ducts, alongside the cable harness for the amplifier and down to the amplifier (Illustration B).

27B

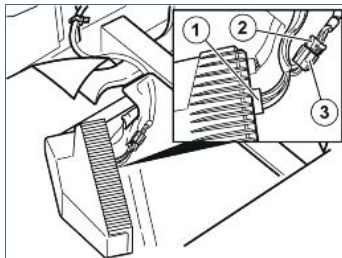


D3703263

Illustration B

- Clamp the wiring at the positions (4). Use tie straps from the kit.

28



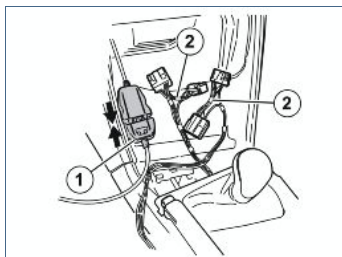
D3703265

Installing and cable routing the handset holder

Applies to cars with an amplifier

- Connect the grey male terminal (1) in the pre-routed cable harness to the amplifier
- Connect the grey connector (2) that was disconnected from the amplifier to the remaining terminal (3) in the pre-routed cable harness.

29



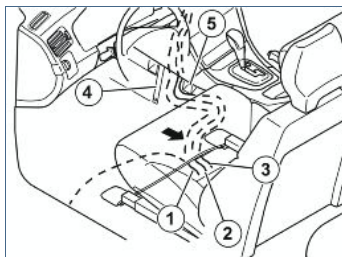
M3904317

Installing and cable routing the handset holder

Applies to cars without an amplifier

- Take the black joint cable (from the kit) to the handset holder (1). Connect it to the cable from the handset holder that was routed down earlier
- Take the large cable harness from the kit. Position the grey and green connectors (2) in the space where the radio will be located.

30



M3703118

Installing and cable routing the handset holder

- Route the following three cable harnesses down:

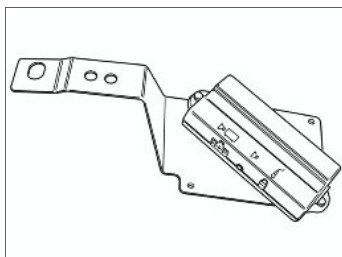
the cable harness with the white connector and a long single cable attached (1)

the thin black cable to the microphone (2)

the thick black cable from the handset holder in the space where the radio will be located (3).

- Route these cable harnesses inside the carpet, between the stay for the centre console (4) and the front air duct (5). Continue backwards, then in front of the front mounting for the driver's seat and out through the carpet joint under the seat.

31

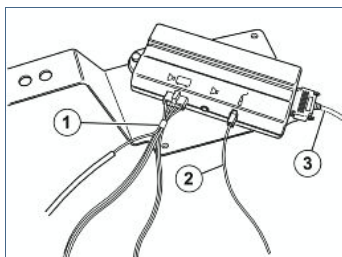


M3904314

Installing and cable routing the handset holder

- Take the bracket, screws and hands free box from the kit
- Tighten the hands free box to the bracket as illustrated.

32



M3904315

Installing and cable routing the handset holder

- Connect the routed cable harnesses to the hands free box:

the cable harness to the radio (1)

the cable to the microphone (2)

the cable to the handset holder (3).

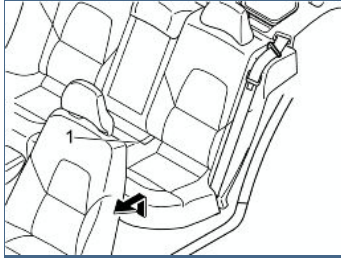
Applies to cars with accessory electronic modules (AEM)

- Route the long cable, secured at the cable harness to the radio, under the carpet on the driver's side and out to the door sill. This will be connected to the accessory electronic module (AEM) later.

Applies to cars without an accessory electronic module (AEM)

- Insulate and hide the long cable that is secured at the cable harness to the radio. It will not be used.

33

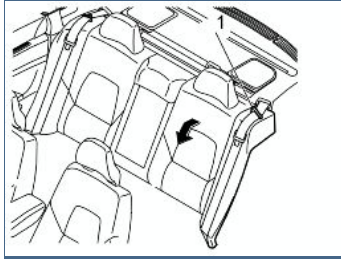


D8503390

Cable routing and connection to the accessory electronic module (AEM)

- Pull the front edge of the seat cushion (1) upwards. Pull the seat cushion forward and lift out.

34

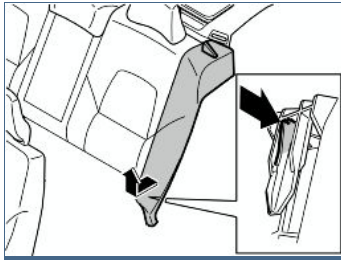


M8503730

Cable routing and connection to the accessory electronic module (AEM)

- Fold the left hand rear backrest forward
- Remove the seat belt from the guide (1).

35

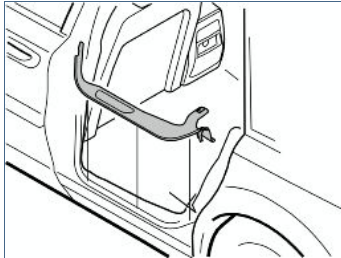


D8502740

Cable routing and connection to the accessory electronic module (AEM)

- Insert your hand down the side of the lower section of the side cushion. Remove the left-hand side cushion
- Release the catches. At the same time lift the side cushion
- Place the cushion to one side
- Repeat the operation on the other side.

36

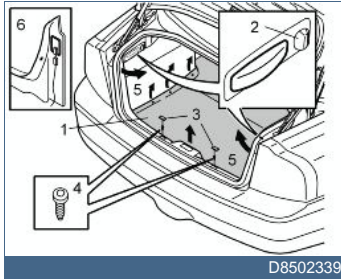


M8502823

Cable routing and connection to the accessory electronic module (AEM)

- Remove the sill moulding from the left-hand rear door.

37

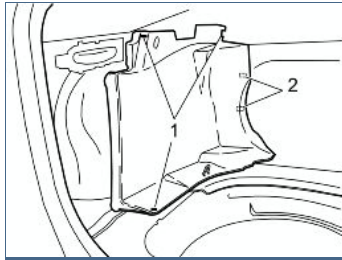


D8502339

Cable routing and connection to the accessory electronic module (AEM)

- Remove the cargo compartment carpet (1)
- Turn the clips (2) on the left and right-hand side panels
- Remove the two clips and the plastic nut at the lower edge of the panels
- Remove the panels
- Remove the two covers (3). Slacken off the two screws (4). Grasp the outer edges of the panel (5). Pull the panel inwards towards the centre so that the clips release from the sides. Disconnect the connectors (6) for the cargo compartment lamps
- Remove the panel by pulling it straight upwards so that the clips release from the rear crossmember.

38

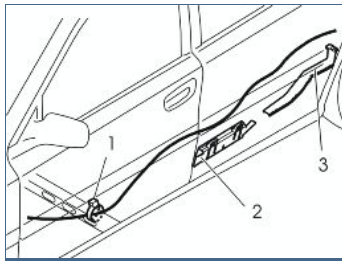


D8503734

Cable routing and connection to the accessory electronic module (AEM)

- Remove the clips (1) from the left front side panel in the cargo compartment
- Remove the clips (2) from the front edge of the side panel
- Remove the panel.

39

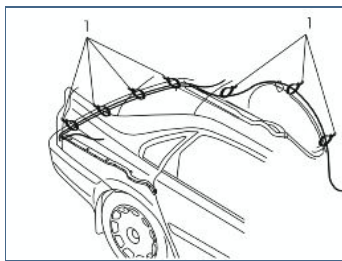


M3702551

Cable routing and connection to the accessory electronic module (AEM)

- Route the long cable (previously routed with the cable harness from the radio) under the carpet. Continue out to the left-hand side of the car
- Clamp the cable at the existing cable at the left-hand side of the cross member. Use a tie strap (1) from the kit
- Route the cable inside the carpet and under the cable ducts (2) and (3) along the left-hand side of the car towards the cargo compartment. Ensure that the cable is securely pressed down between the sills and carpets
- Route the cable under the existing wiring and the connectors by the cable duct (3).

40

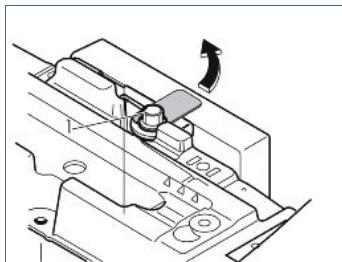


M3702555

Cable routing and connection to the accessory electronic module (AEM)

- Route the cable along the left-hand rear wheel arch to the rear cross member
- Continue to route the cable along the rear crossmember over the rear edge on the right-hand rear wheel well
- Secure the cable along the existing cable harnesses. Use the tie straps (1) (from the kit).

41

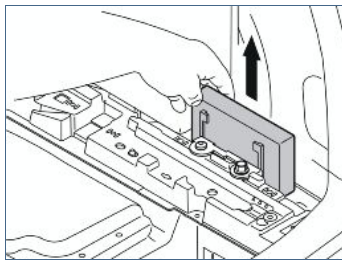


M3702544

Cable routing and connection to the accessory electronic module (AEM)

- Slacken off the screw (1) and the nut (1) a few turns in the lock facing for the rear accessory electronic module (AEM) for the right rear wheel well
- Pull the lock facing out to the right. Remove the lock facing.

42

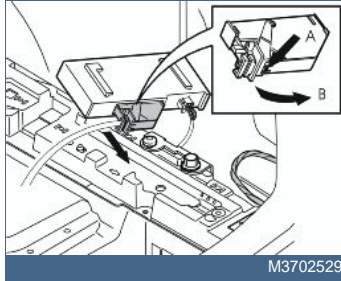


M3702528

Cable routing and connection to the accessory electronic module (AEM)

- Lift the accessory electronic module (AEM) out of the bracket.

43

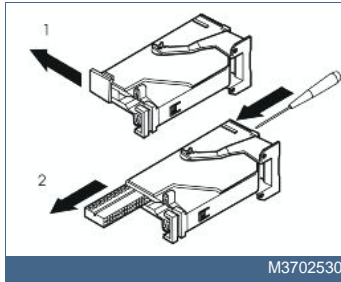


M3702529

Cable routing and connection to the accessory electronic module (AEM)

- Disconnect the large connector from the accessory electronic module (AEM). First press in catch A. Pull back locking handle B in the direction of the arrow until a click is heard. Disconnect the connector
- Remove the connector from the accessory electronic module (AEM).

44

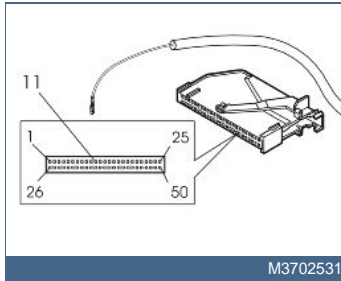


M3702530

Cable routing and connection to the accessory electronic module (AEM)

- Remove the black catch holding the black switch in place in the connector by pulling in the direction of the arrow
- Remove the black switch by inserting a pointed object in the hole on the other end. Press the switch out.

45



M3702531

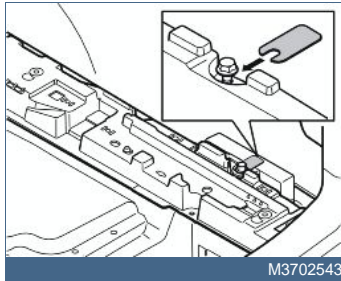
Cable routing and connection to the accessory electronic module (AEM)

- Connect the pre routed cable to terminal 11 of the accessory electronic module (AEM) connector.

Note!

Number markings can be found on the top and bottom of the black switch. The markings are very small. Ensure accuracy when installing the cable.

46

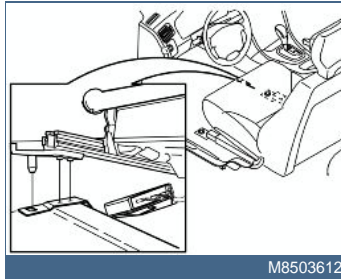


M3702543

Cable routing and connection to the accessory electronic module (AEM)

- Reinstall the black switch in the connector. Lock into place using the catch
- Press the connector into the accessory electronic module (AEM). Secure using the black arm
- Reinstall the accessory electronic module (AEM). Secure any excess wiring
- Reinstall the lock facing above the accessory electronic module (AEM). Tighten the screw and the nut. Tighten to **10 Nm (8 lbf. ft.)**.

47



M8503612

Installing the hands free box

Install the aerial according to the separate Installation Instructions.

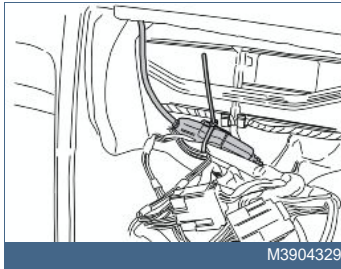
- Tip the driver's seat back slightly
- Position the hands free box and the bracket with the mounting over the screw hole in the right front mounting for the driver's seat
- Fold the seat down towards the mountings. Check that the hands free box bracket is positioned under the seat rail
- Route all excess cable in under the carpet.

Note!

Ensure that the none of the wiring is trapped.

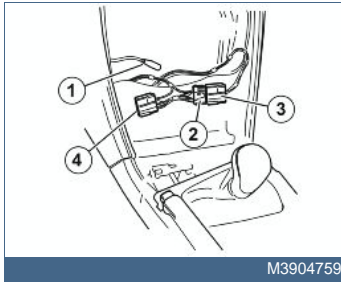
- Tighten the front edge of the seat using the two new screws. Tighten to **40 Nm (30 lbf. ft.)**
- Reinstall the covers for the screws.

48

**Finishing work**

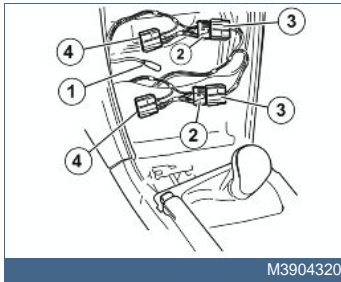
- Take a tie strap from the kit. Clamp the connectors to the handset holder at the larger cable harness to the radio. Ensure that the connectors are properly secured and do not rattle.

49

**Finishing work****Applies to cars with an amplifier**

- Connect the switch from the handset holder extension cable (1) to the car aerial. The aerial is installed according to a separate Installation Instruction
- Connect the connector (2) for the new large cable harness to the connector (3) that was disconnected from the radio
- Connect the connector (4) to the radio
- Connect any other connectors removed from the radio
- Reinstall the radio.

50

**Finishing work****Applies to cars without an amplifier**

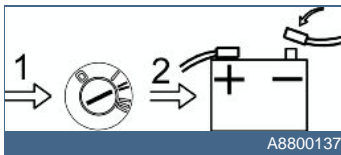
- Connect the switch from the handset holder extension cable (1) to the car aerial. The aerial is installed according to a separate Installation Instruction
- Connect the new, large cable harness connectors (2) to the corresponding connectors removed from the radio (3)
- Connect the connectors (4) to the radio
- Connect any other connectors removed from the radio. Reinstall the radio.

51

Finishing work**Reinstall:**

- the side panels at the centre console
- the ventilation grille
- the dashboard environmental panel
- the panel around the gear selector lever
- the panels for the door sills.
- Take two new screws from the kit. Tighten the right seat. Tighten to **40 Nm (30 lbf. ft.)**
- Reinstall the covers for the screws.

52

**Finishing work**

- Turn the ignition key to position II
- Connect the battery negative lead.

53

Finishing work**Reinstall:**

- the panels in the cargo compartment
- the side cushion

- the backrest
- the seat cushion.

54

Finishing work

- Program the software according to the service information in VIDA.
-