

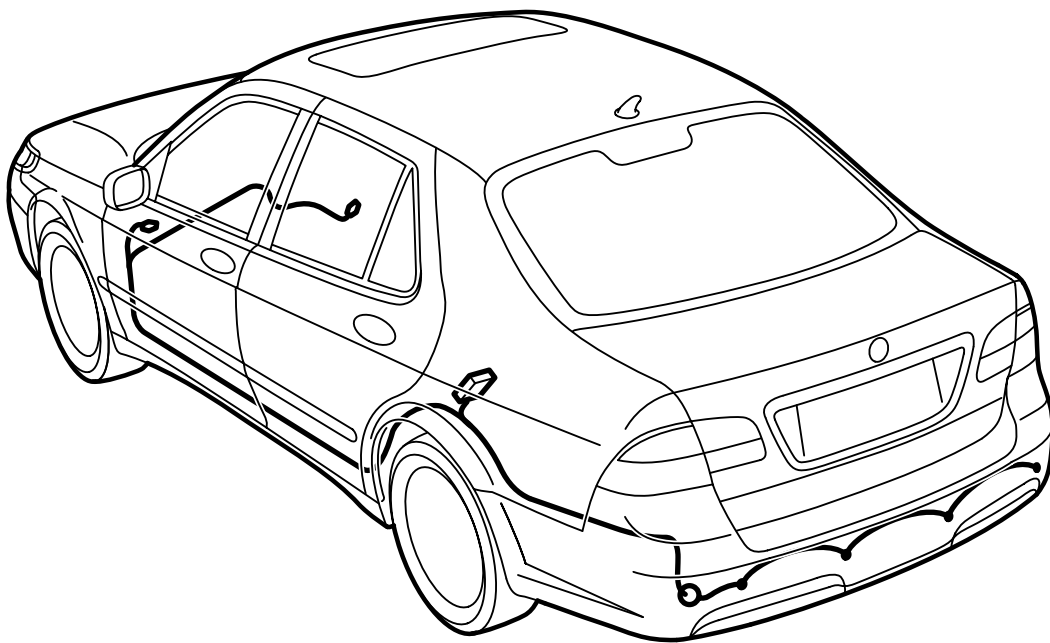


**MONTERINGSANVISNING · INSTALLATION INSTRUCTIONS
MONTAGEANLEITUNG · INSTRUCTIONS DE MONTAGE**

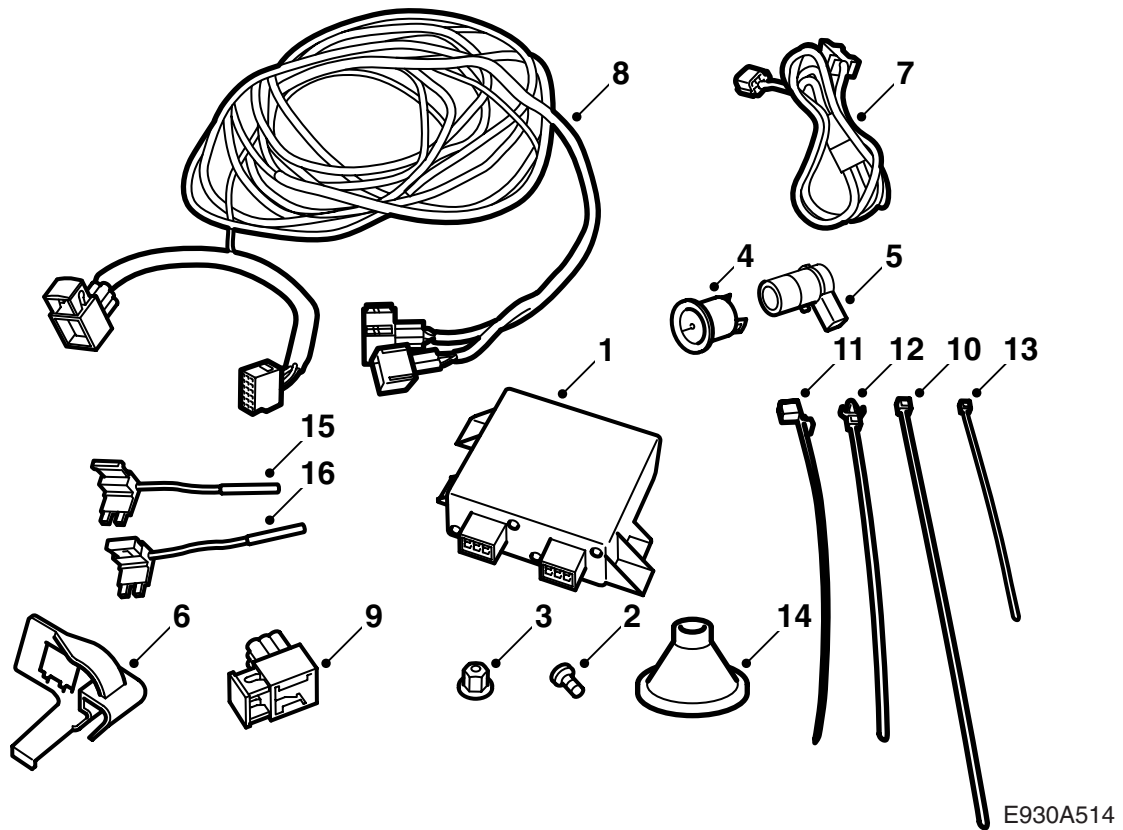
Saab 9-5

Parking assistance (SPA)

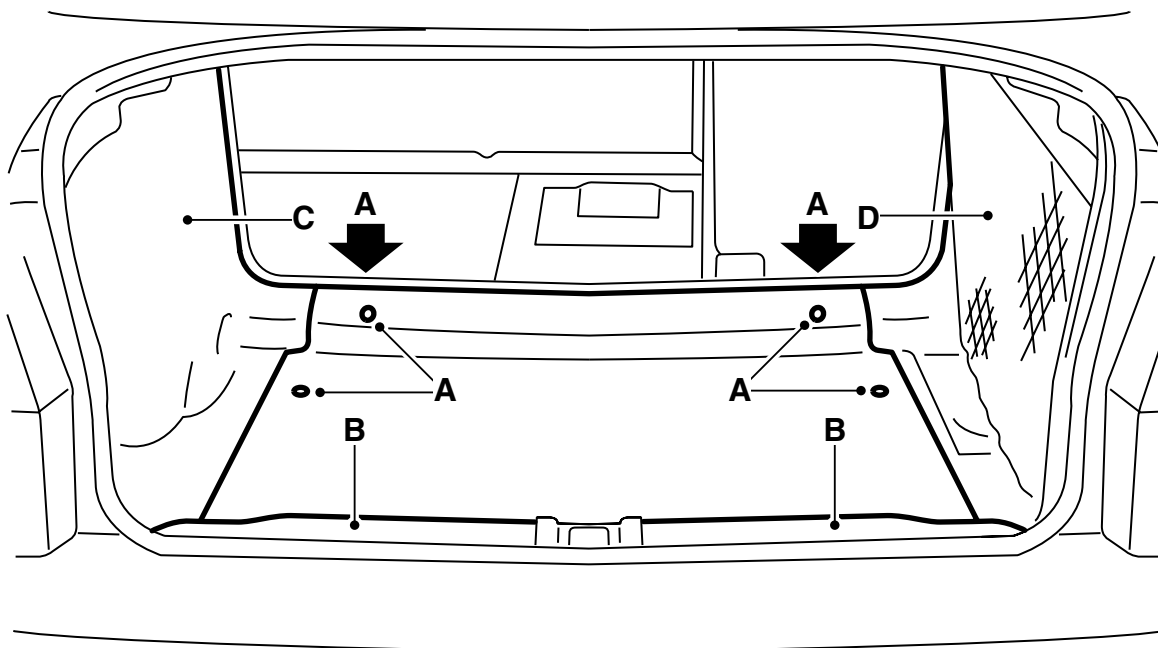
Accessories Part No.	Group	Date	Instruction Part No.	Replaces
32 026 005	9:89-33	Jan 07	32 026 006	



E930A513



- 1 Electronic unit
- 2 Screw (x2)
- 3 Plastic nut (x2)
- 4 Holder (x4)
- 5 Distance sensor/sensor (x4)
- 6 Connector bracket
- 7 Wiring harness, distance sensor/sensor
- 8 Adapter harness
- 9 Connector
- 10 Cable tie (x20)
- 11 Cable tie (x2)
- 12 Cable tie
- 13 Cable tie, rubber grommet
- 14 Rubber grommet
- 15 Fuse holder with 7.5 A fuse
- 16 Fuse holder with 10 A fuse



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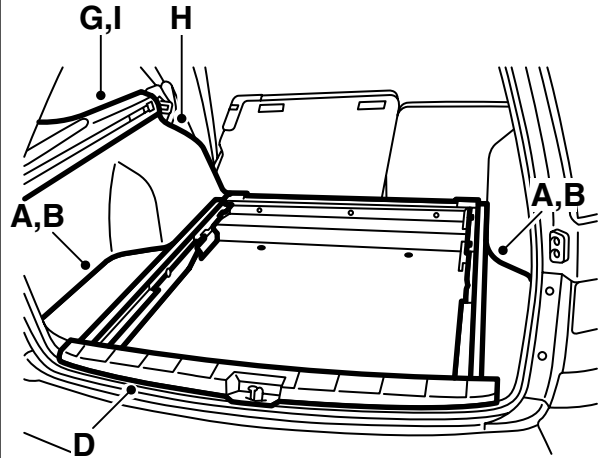
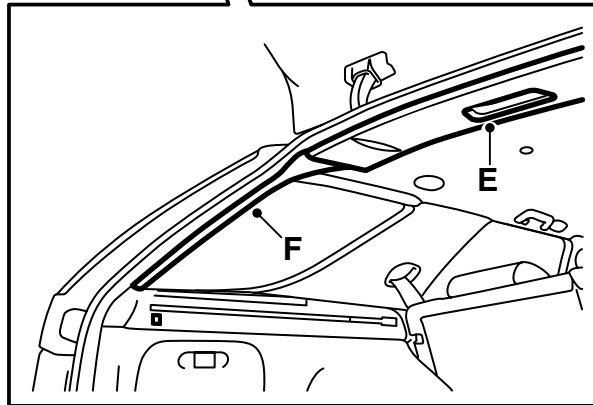
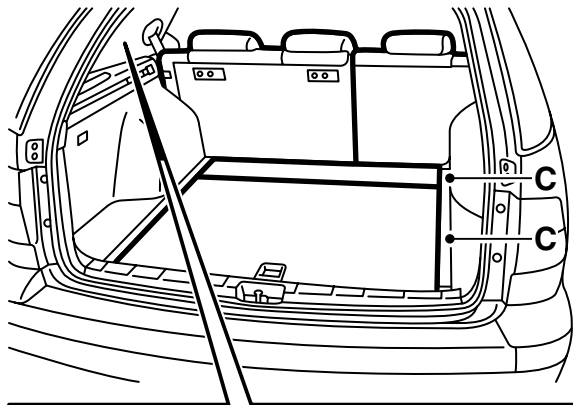
Before starting work the visible sections of the distance sensors and holders must be painted in the same colour as the bumper shell.

Important

The layer of paint must not be thicker than 90μ to avoid affecting system functionality.

1 4D - Prepare the luggage compartment:

- Fold forward the rear seat seat cushions and lower the rear seat backrests.
- Open the boot lid and remove the luggage compartment floor (A).
- Remove the scuff plate (B).
- Remove the left-hand side trim (C) in the luggage compartment and the insulation pads (x2) in the rear edge of the body.
- Loosen and move aside the right-hand side trim (D) in the luggage compartment and remove the insulation pads (x2) in the rear edge of the body.



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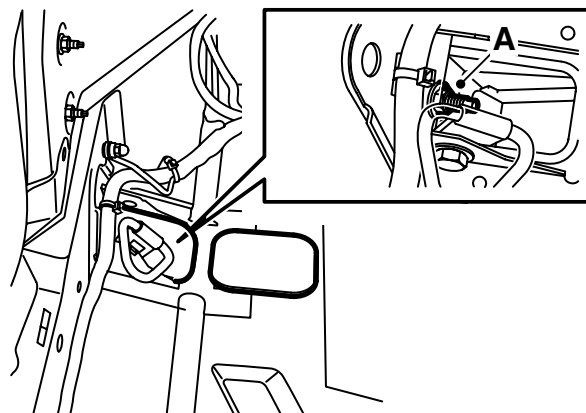
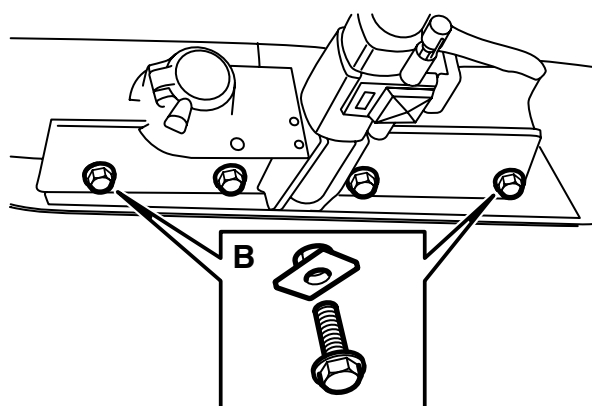
2 5D - Prepare the luggage compartment:

- Fold forward the left-hand section of the rear seat seat cushion and the left-hand section of the rear seat backrest. Remove the cover between the left-hand rear door and the backrest.
- Lift out the cargo guard.
- Lift away the covers (A) over the storage compartments and lift out the storage boxes (B).
- Remove the insulation pads from the rear edge of the body.
- Remove the luggage compartment floor (C).
- Remove the scuff plate (D), 2 covers, screws and clips.

The following points apply to the left-hand side:

- Detach the rear roof cover (E) at the edge to obtain access to the D-pillar trim (F).
- Remove the D-pillar trim, secured with clips.
- Remove the parcel shelf support (G), 1 cover and 3 screws.
- Remove the side bolster (H) by first pulling its top edge so that the lock tongue releases. Then unhook the lower edge.
- Remove the screws in the top edge of the side trim (I).

- Fold out the side trim and unplug the connector to the CD changer if the car was equipped with one. Lift out the side trim.



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- 3 Remove the nuts (A) that hold the bumper. The lower studs only have nuts if the car is equipped with towbar.

Important

Work carefully during removal so that paint damage is avoided.

- 4 **Cars with towbar:** Remove the nuts for both reinforcements.
- 5 Raise the car.
- 6 Remove the bumper bolts at the wheel housings.
- 7 **Cars with towbar:** Unplug the connector for the towbar wiring harness and remove the four bolts holding the towbar to the body.

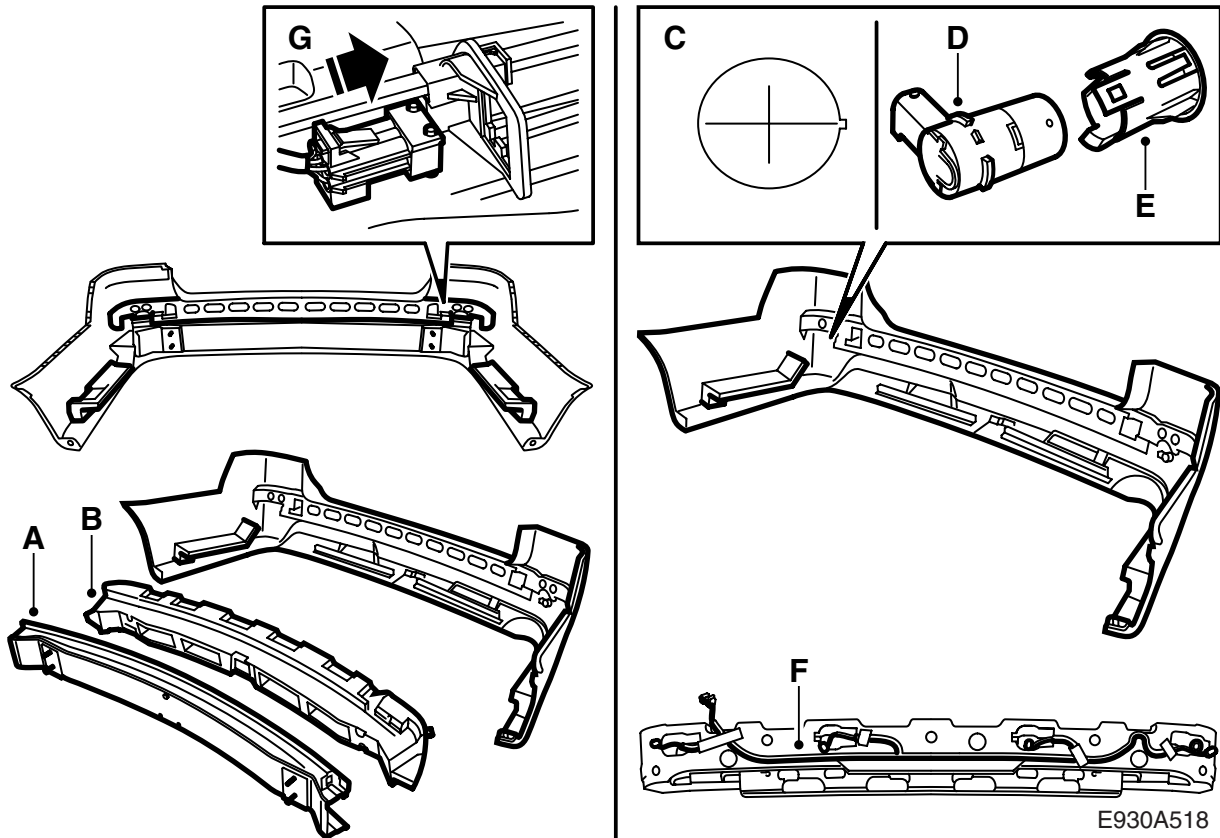
Important

The outer bolts (B) are fitted in loose nut plates.

- 8 Lower the car.
- 9 With help from an assistant, pull the bumper out from the clips. Lift the bumper out backwards.

Important

Place the bumper on a soft, clean surface.



- 10 **5D**: Remove the moulding (4 screws) from the bumper shell.
- 11 Remove the bumper rail (A) from the protective shell by detaching the retaining clips.
- 12 Remove the cellular block (B) from the bumper shell (wedged into the protective shell's mounting wedges).
- 13 Drill 4 x 31 mm holes (C) in the pre-punched markings in the bumper shell.
- 14 File out the guide groove 1 x 1 mm (C). The guide groove must be on the side of the hole facing the left-hand side of the bumper shell.

Important

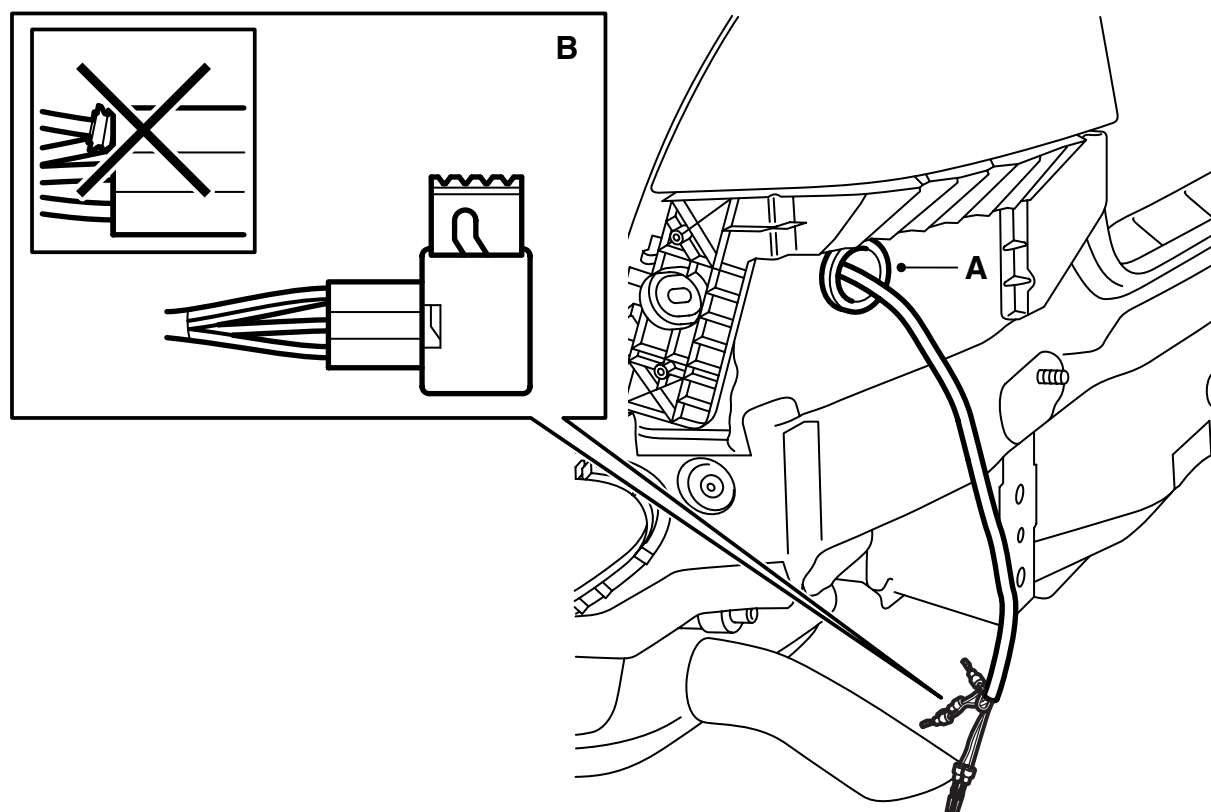
Do not file too far! The cover would then not be over the guide.

- 15 Fit the distance sensors (D) in the holders (E) and then in the bumper shell.
- 16 Pre-route the wiring harness in the centre foam section (F). The connector comes out on the left-hand side. Connect the wiring harness to the sensors.

- 17 Fit the connector holder to the left-hand side of the bumper rail and fit the connector into the holder (G).
- 18 Fit the cellular block (B) with wiring harness in the bumper shell.
- 19 Guide the bumper rail (A) in toward the bumper shell's guide pin. Fit the bumper rail with any reinforcements to the bumper shell.
- 20 Fit the remaining cellular blocks.
- 21 **5D**: Fit the moulding (4 screws) to the bumper shell.

WARNING

Check that the wiring harness is not trapped. Incorrect fitting could damage the wiring harness and cause a short-circuit/fire.



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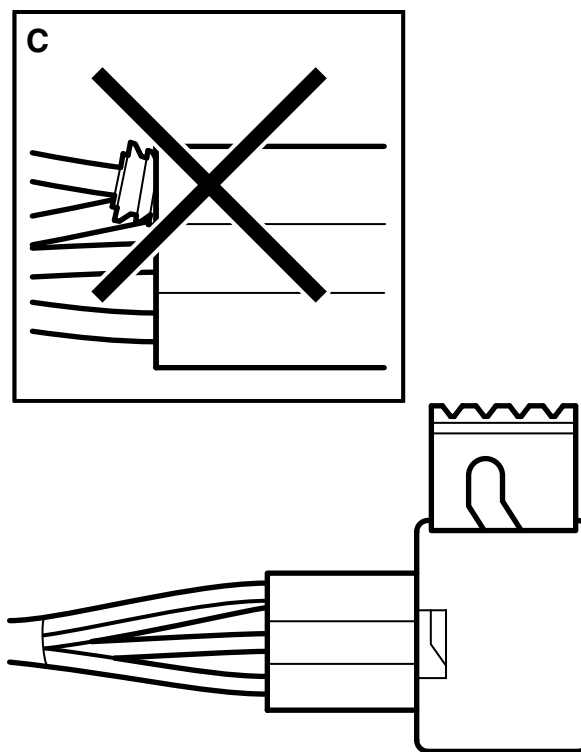
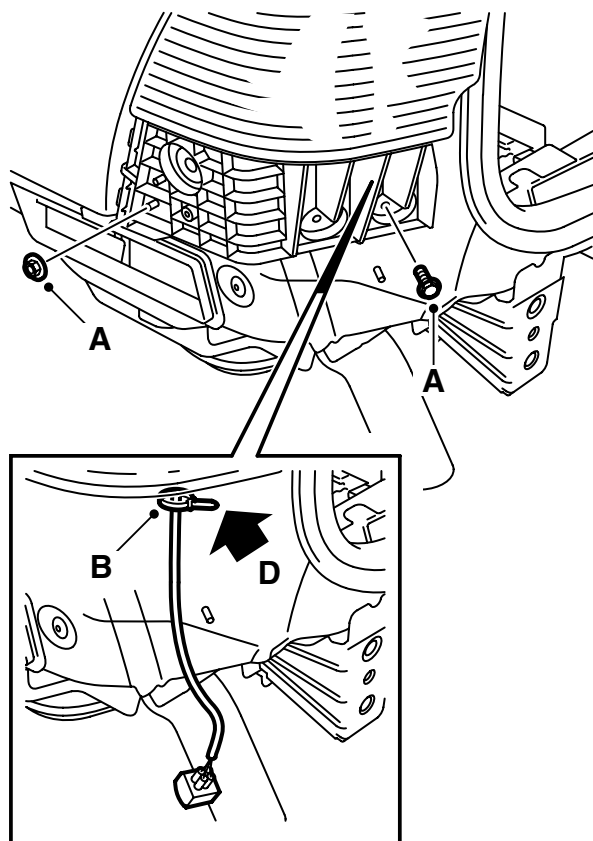
22 **4D** - Fit the rubber grommet and plug in the connector:

- Fit the rubber grommet (A) on the parking assistance system's wiring harness with the funnel-shaped end directed in towards the car. The grommet should be located 370 mm from the end of the taping at the cable terminals.
- Secure the rubber grommet to the wiring harness using a cable tie.
- Remove the rubber plug below the left-hand tail lamp.
- Guide the wiring harness out through the hole and fit the kit's rubber grommet.
- Insert the cable terminals in the connector (B) as follows:
 - 1 Black (BK)
 - 2 Brown (BN)
 - 3 Yellow (YE)
 - 4 Blue (BU)
 - 5 Orange (OG)
 - 6 Grey (GY)

Important

Check that the cable terminals lock firmly and that the whole of the seal is in contact against the connector.

Be careful so that the seals are not damaged.



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23 **5D** - Route the wiring harness out and plug in the connector:

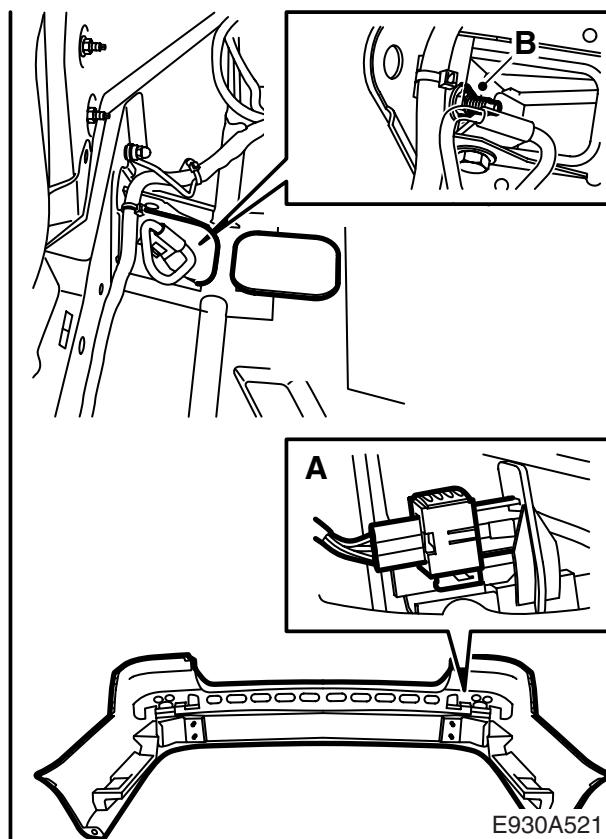
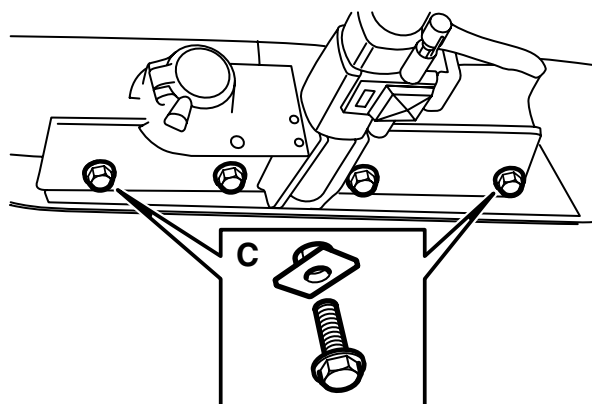
- Remove the left-hand mounting bracket (A) for the bumper under the left-hand tail lamp.
- Remove the cable tie (D) and tape from the rubber grommet below the left-hand tail lamp.
- Pull the wiring harness out through the rubber grommet until the grommet is 370 mm from the end of the cable terminal taping.
- Insert the cable terminals (C) as follows:
 - 1 Black (BK)
 - 2 Brown (BN)
 - 3 Yellow (YE)
 - 4 Blue (BU)
 - 5 Orange (OG)
 - 6 Grey (GY)

Important

Check that the cable terminals lock firmly and that the whole of the seal is in contact against the connector.

Be careful so that the seals are not damaged.

- Affix tape and fit a new cable tie (B) on the rubber grommet.
- Fit the left-hand mounting bracket (A) for the bumper shell under the left-hand tail lamp. The wiring harness must be routed inside the bracket (D).



24 Fit in the bumper and plug in the connector (A).

Important

Work carefully during fitting so that paint damage is avoided.

25 Fit the bumper (B).

Tightening torque 40 Nm (30 lbf ft)

26 **Cars with towbar:** Screw in the reinforcements to the car.

Tightening torque 40 Nm (30 lbf ft)

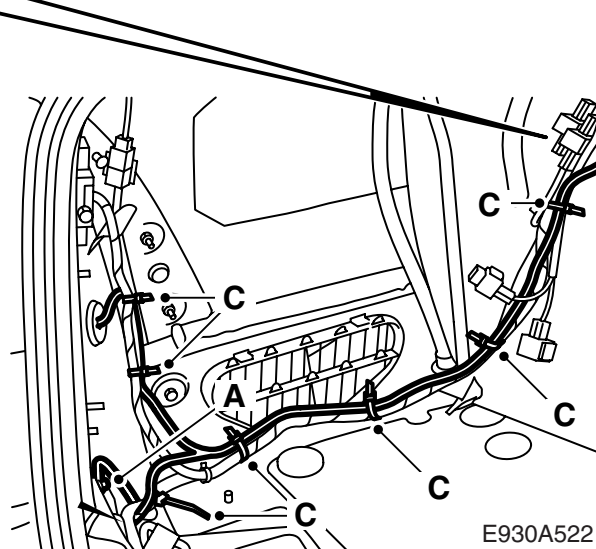
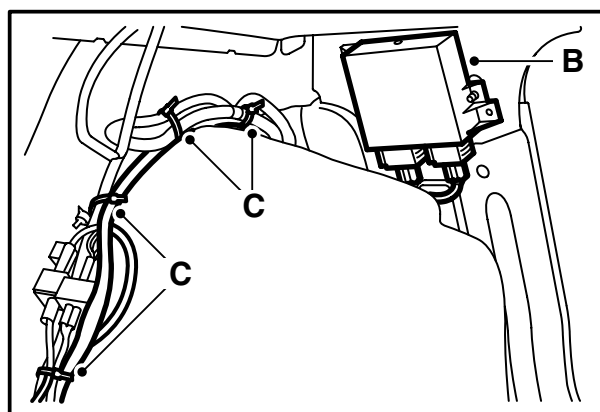
27 Raise the car.

28 Fit the bumper bolts at the wheel housings.

29 **Cars with towbar:** Plug in the connector for the towbar wiring harness.

30 **Cars with towing bracket:** Fit the bolts (C) and nut plates holding the towing bracket to the body.

Tightening torque 40 Nm (30 lbf ft)



31 **4D** - Fit the control module and secure the wiring harness:

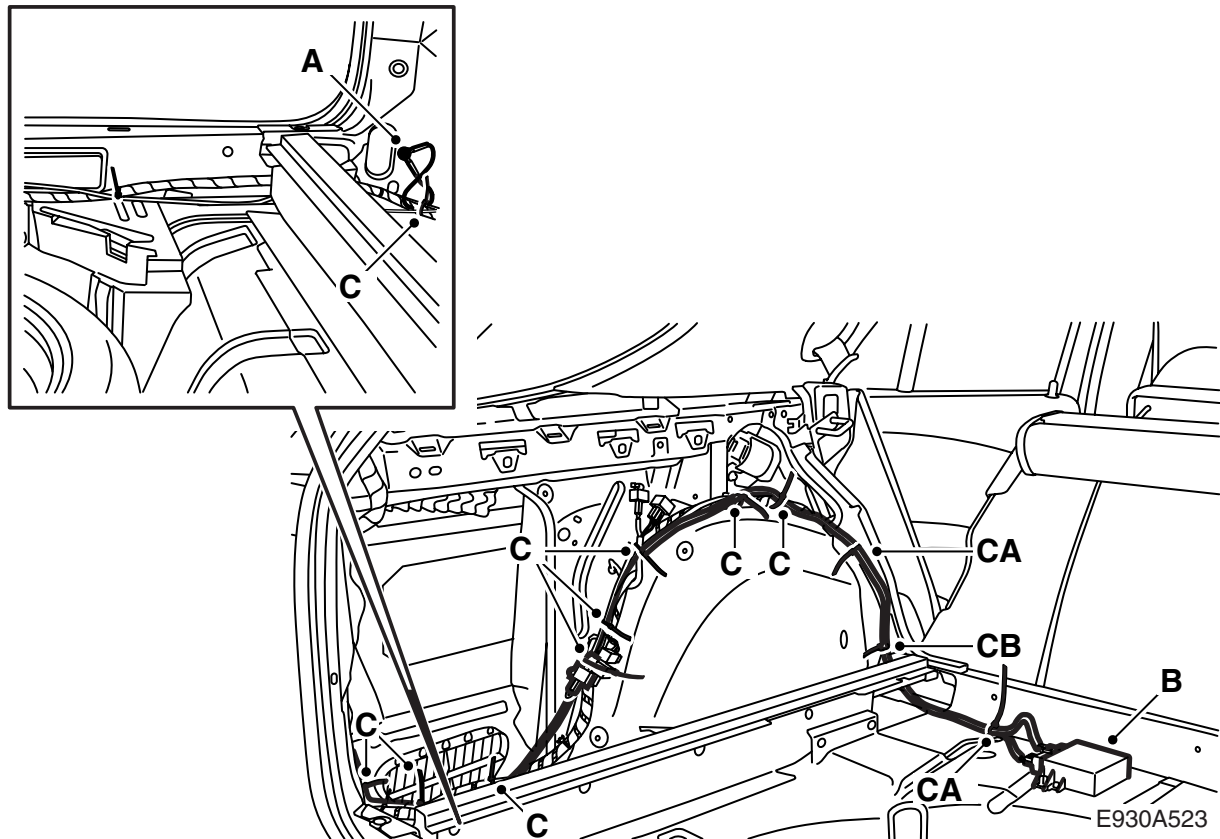
- Attach the ground cable to the grounding point (A) in the luggage compartment below the left-hand tail lamp.
- Route the wiring harness along the left-hand wheel housing.
- Insert the screws in the control module holes, connect the wiring harness to the control module (B), and fit the control module with connectors facing down onto the plate behind the rear seat backrest. Tighten the screws.
- Secure the wiring harness the whole way using cable ties (C).

⚠ WARNING

Check that the wiring harness is not trapped. Incorrect fitting could damage the wiring harness and cause a short-circuit/fire.

Important

Secure the wiring harness so that there is no risk of chafing and rattling.



32 **5D** - Fit the control module and secure the wiring harness:

- Attach the ground cable to the grounding point (A) in the luggage compartment below the left-hand tail lamp.
- Route the wiring harness along the left-hand wheel housing. The wiring harness must be routed to the right at the seatbelt and then follow the wheel housing.
- Connect the wiring harness to the control module (B) and mount the control module on the floor. Tighten the plastic nuts.
- Secure the wiring harness the whole way using cable ties (C, CA and CB).

CA - Cable tie for mounting weld screw.

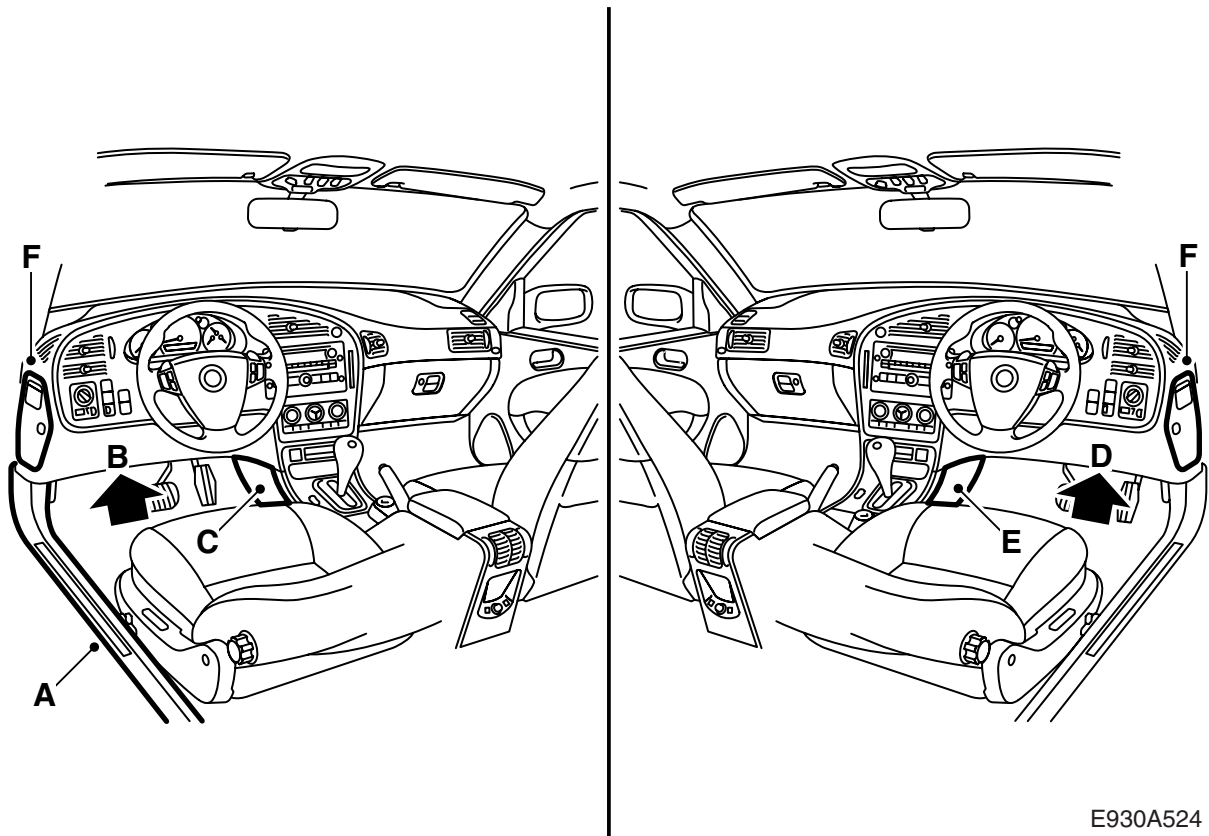
CB - Cable tie with clip for mounting in holes.

⚠ WARNING

Check that the wiring harness is not trapped. Incorrect fitting could damage the wiring harness and cause a short-circuit/fire.

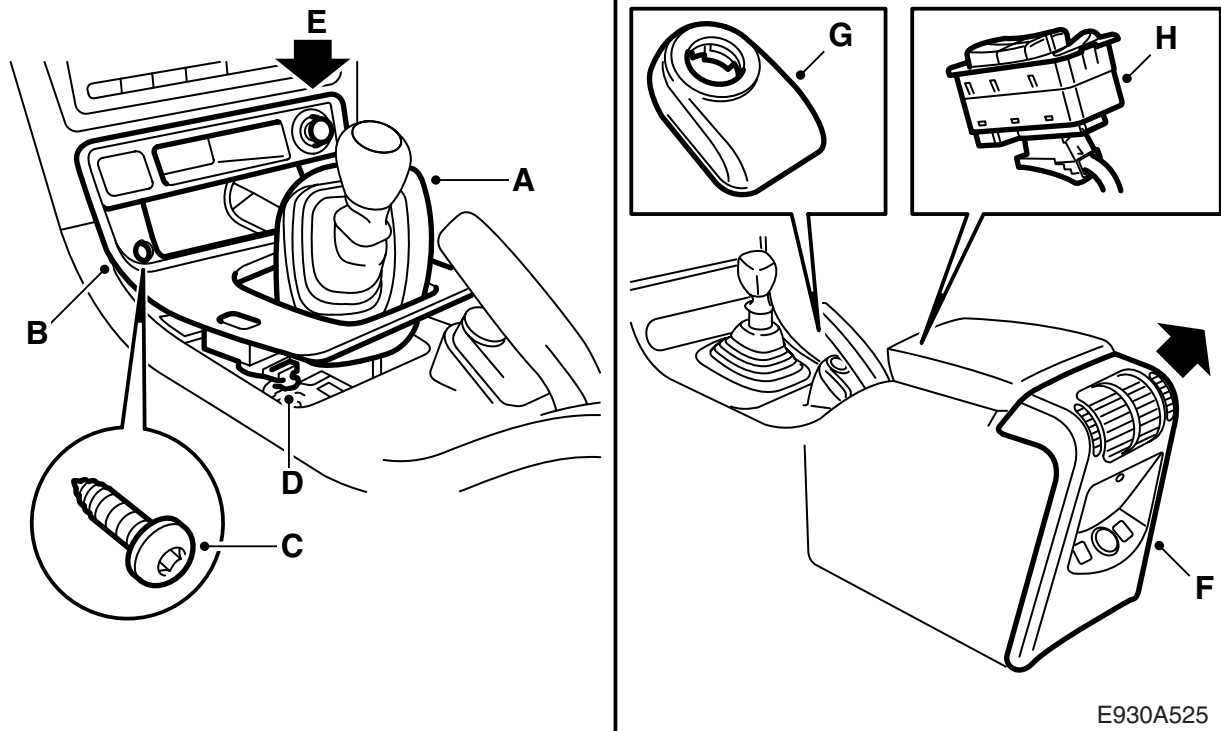
Important

Secure the wiring harness so that there is no risk of chafing and rattling.



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- 33 Remove the scuff plates at the left-hand rear door and front door (A).
- 34 Undo the screws for the lower panel section (B) on the left-hand side and fold down.
- 35 Remove the centre console side trim (C) on the left-hand side.
- 36 **RHD:** Remove the panel lower section (D) and the centre console side trim (E) on the driver's side.
- 37 Remove the cover (F) for the fuse box.



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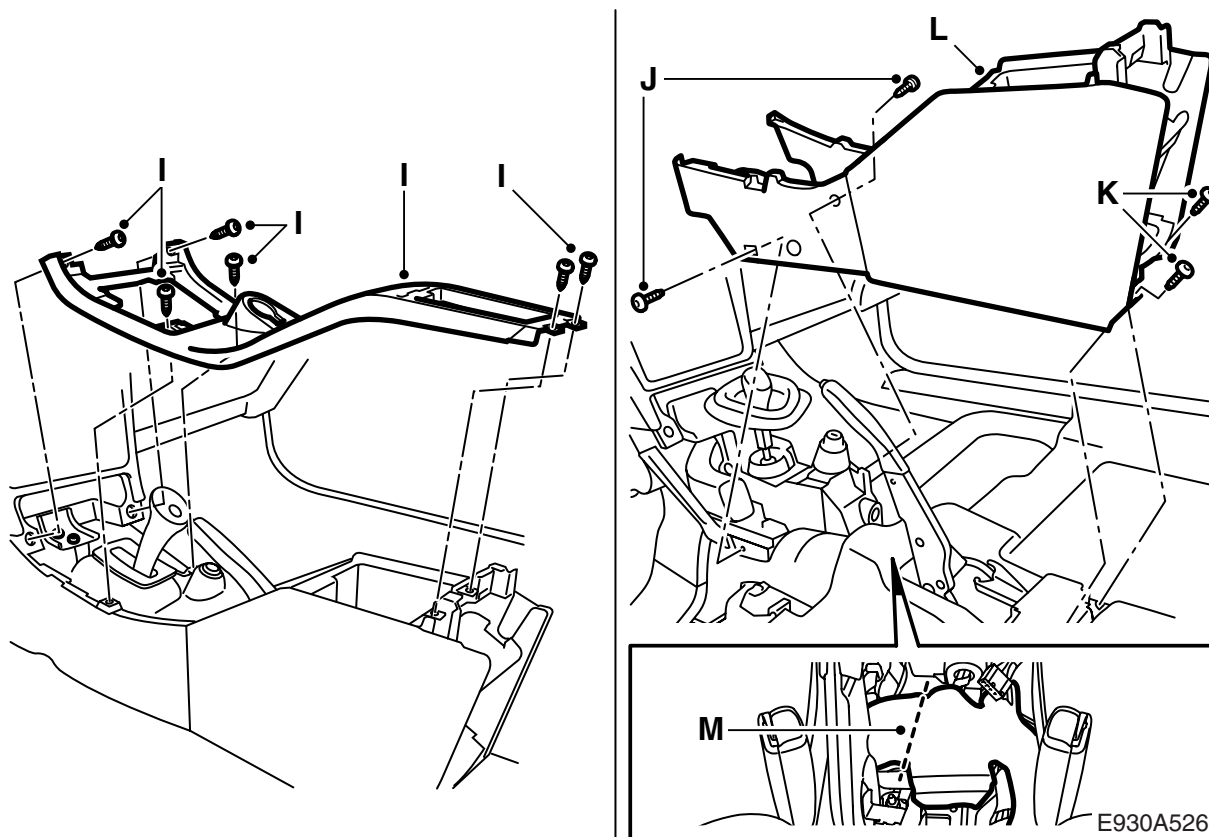
38 Remove the centre console:

- **Manual transmission:** Lift up the gear lever gaiter (A).
- **Manual transmission:** Lift up the gear lever gaiter (A).
- Remove the storage compartment/ashtray (B).
- Remove the gear lever cover (C).
- Unplug the connector (D) for the central locking switch.
- Lift up the gear lever cover and unplug the connectors (E) for the seat heating, seat ventilation and cigarette lighter switches.

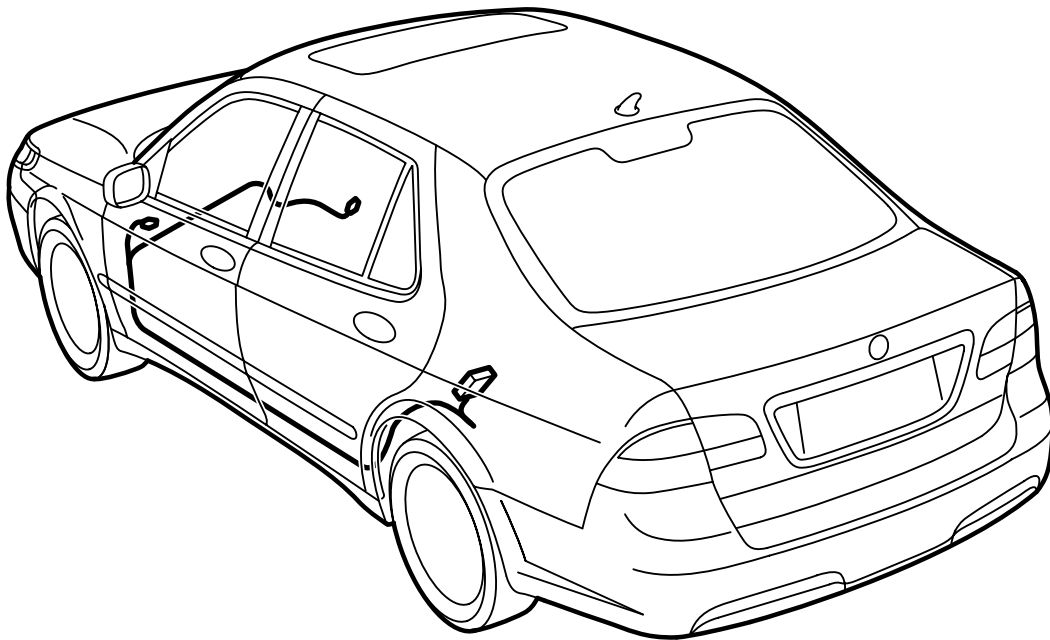
Important

Mark up the connectors so that they are not fitted incorrectly.

- Remove the rear section of the centre console by removing the screw on the top (F). Then lift straight up and unplug the connector.
- Select reverse gear (manual) or P position (automatic) and remove the key.
- Turn and lift up the theft protection antenna unit (G) (bayonet fitting) from the ignition switch and unplug the connector.
Insert the key and select neutral position.
- Detach the switch (H) for the power windows and unplug the connectors.



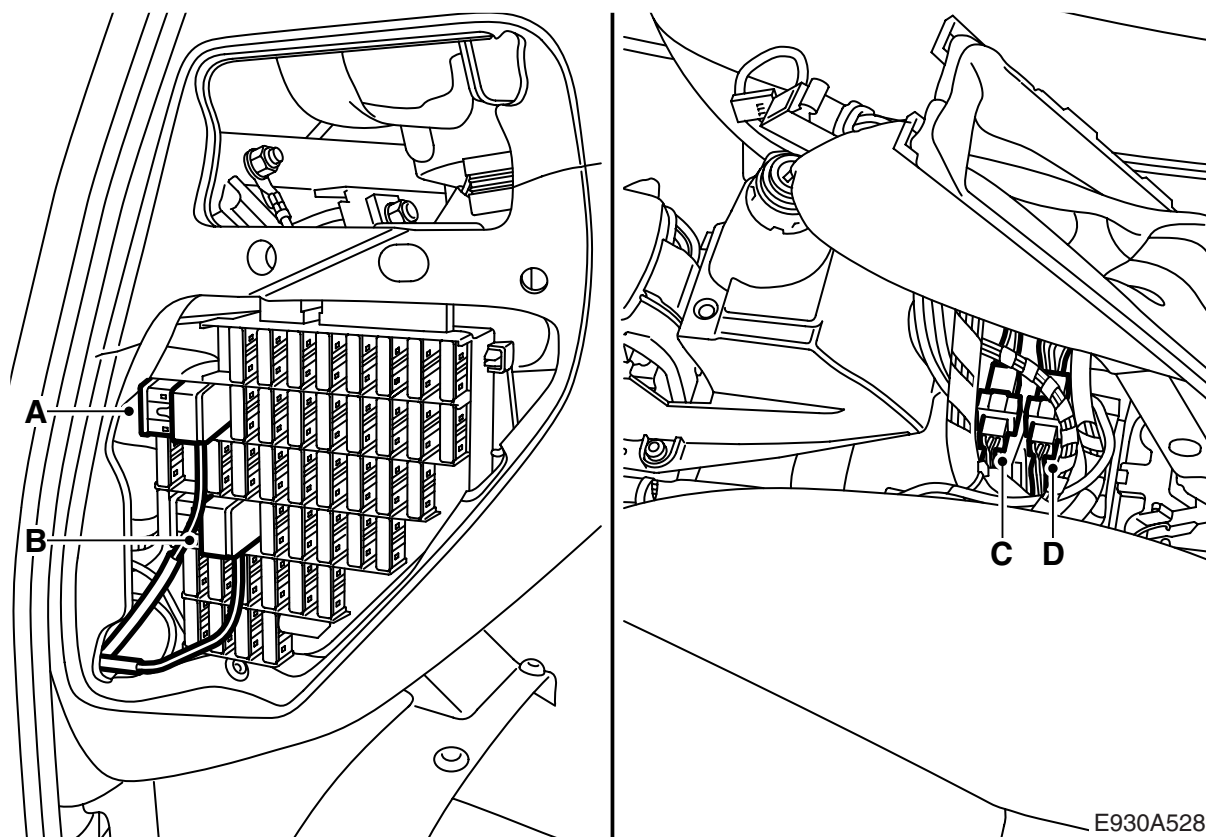
- Remove the screws (I) holding in the centre console upper section and lift it away.
- Fold aside the front carpets and undo the front screws (J).
- Undo the rear screws (K).
- Lift up and remove the centre console (L).
- Cut apart the carpet (M).



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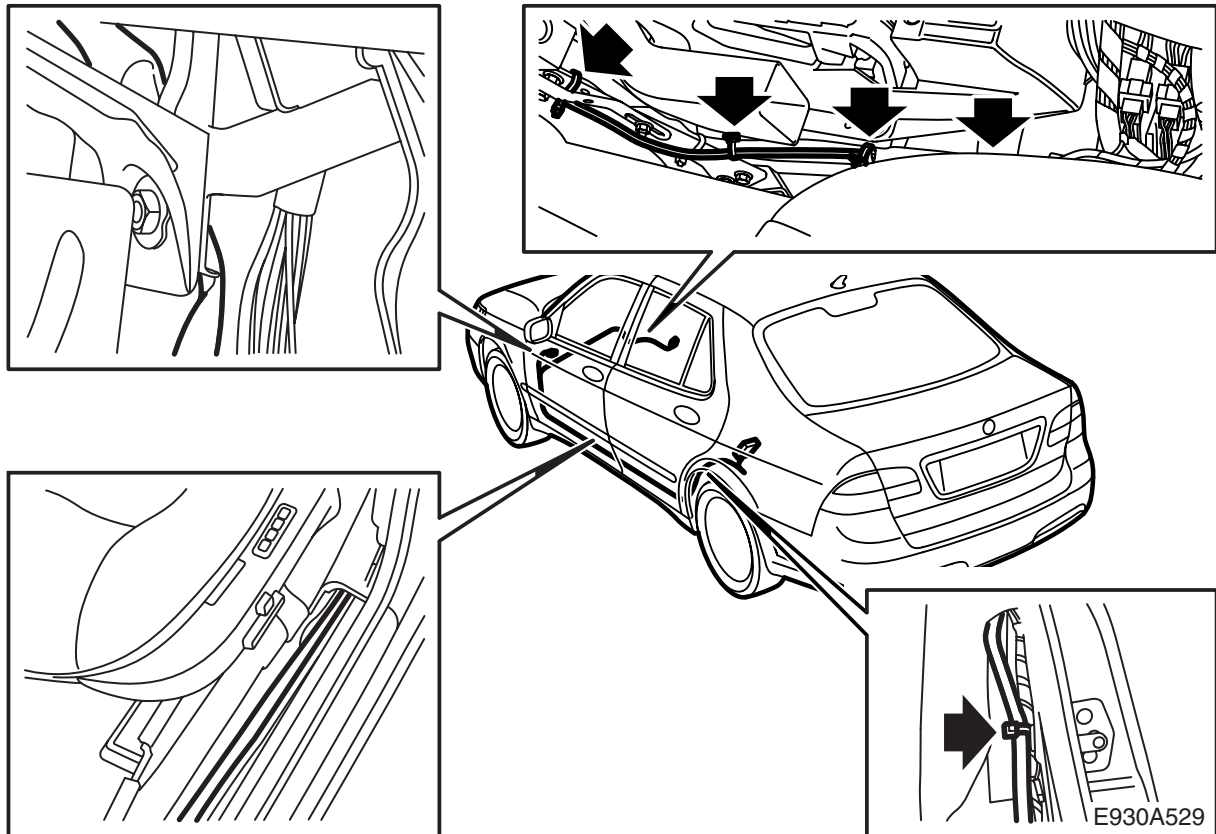
39 Route the wiring harness:

- Route the wiring harness along the car's wiring harness (it must be inserted into the wiring harness channel along the sills). The wiring harness must pass under the foam block and air duct by the left-hand B-pillar.
- Route the wiring harness further along the sill and up along the A-pillar.
- **LHD:** Route the thin section of the wiring harness (RD and VT cables) up to the fuse box and the thicker section under the instrument panel, along the left-hand side of the instrument panel, under the carpet and on to the centre console.
- **RHD:** Route the wiring harness under the glove box. Route the thicker section of the wiring harness along the left-hand side of the instrument panel, under the carpet and on to the centre console. Route the thin section of the wiring harness (RD and VT cables) on under the dashboard and up to the fuse box.



40 Connect the wiring harness to the car:

- Cut off the thin section of the adapter harness (red (RD) and violet (VT) cables) to a moderate length for connection to the fuse box (A, B).
- Crimp the fuse holders to the adapter harness:
 - Red (RD) cable to fuse holder with 10 A fuse.
 - Violet (VT) cable to fuse holder with 7.5 A fuse.
- Connect the adapter harness to the fuse box:
 - Remove the fuse from pos 8 in the fuse box.
 - Connect the fuse holder with 10 A fuse to pos 8 in the fuse box (A).
 - Fit the fuse just removed into the fuse holder (A).
 - Remove the fuse from pos 26 in the fuse box.
 - Connect the fuse holder with the 7.5 A fuse to pos 26 in the fuse box (B).
 - Fit the fuse just removed into the fuse holder (B).
- Unplug and separate the front connector (C), located between the seats, and connect the adapter harness between the separated connector (C).
- Position the connectors (C, D).



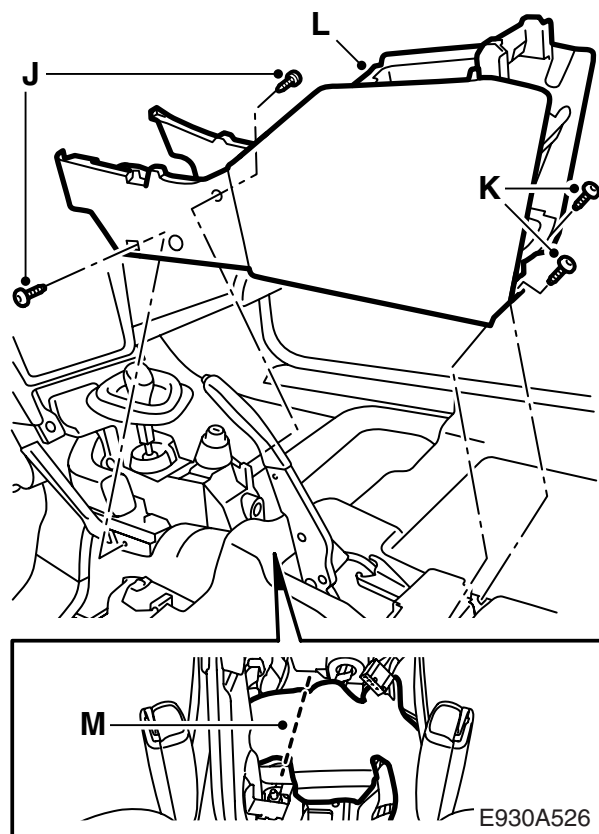
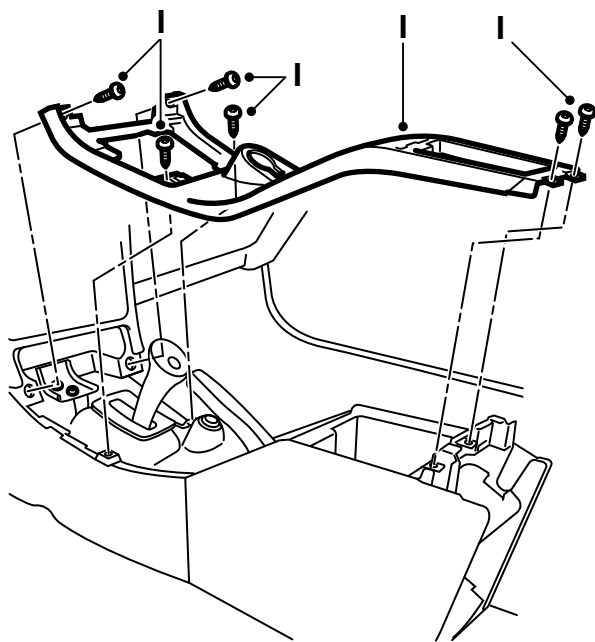
- 41 Secure the wiring harness at suitable locations so that it will not become trapped or damaged.

⚠ WARNING

Check that the wiring harness is not trapped. Incorrect fitting could damage the wiring harness and cause a short-circuit/fire.

Important

Secure the wiring harness so that there is no risk of chafing and rattling.



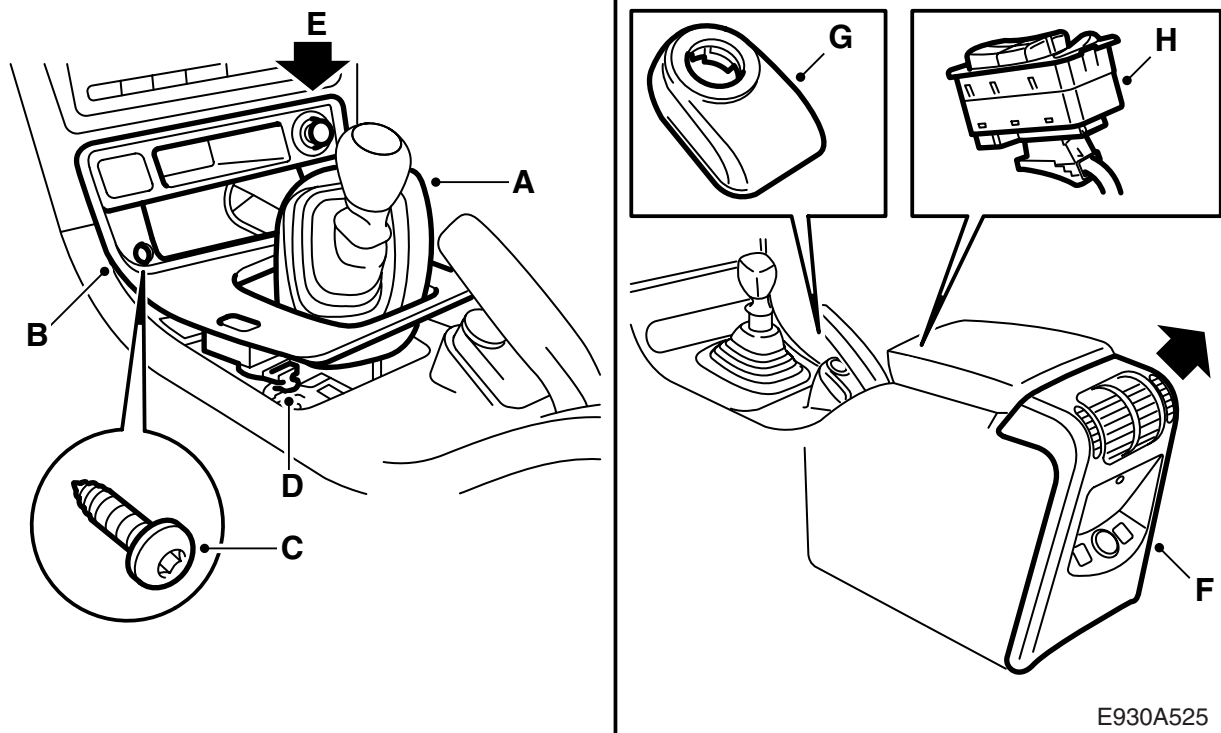
42 Fit the centre console:

- Fold in the carpet (M).
- Fit the centre console (L).

Important

Make sure that no cables or connectors are trapped.

- Fit the screws (J, K). Start at left-hand front which is the guide.
- Fold up the carpets.
- Lift back the upper section of the centre consoles. At the same time, carefully route the cables into place.
- Fit the screws (I) holding the upper section of the centre console.



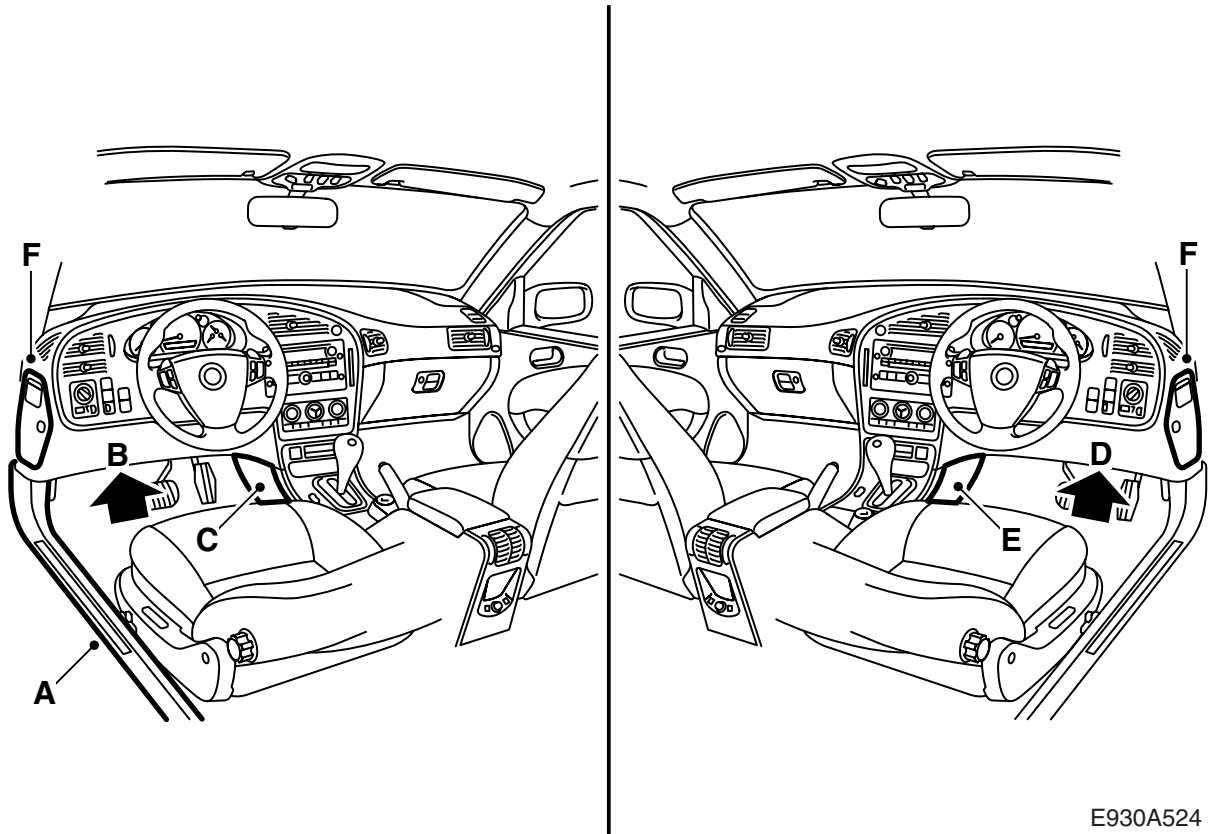
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- Plug in the connectors and fit the switch (H).
- Plug the connectors into the rear section of the centre console and fit the rear section. Fit the upper screw (F).
- Plug in connector (D) for the central locking switch.
- Plug in the connectors (E) for the switches for seat heating, seat ventilation and cigarette lighter.

Important

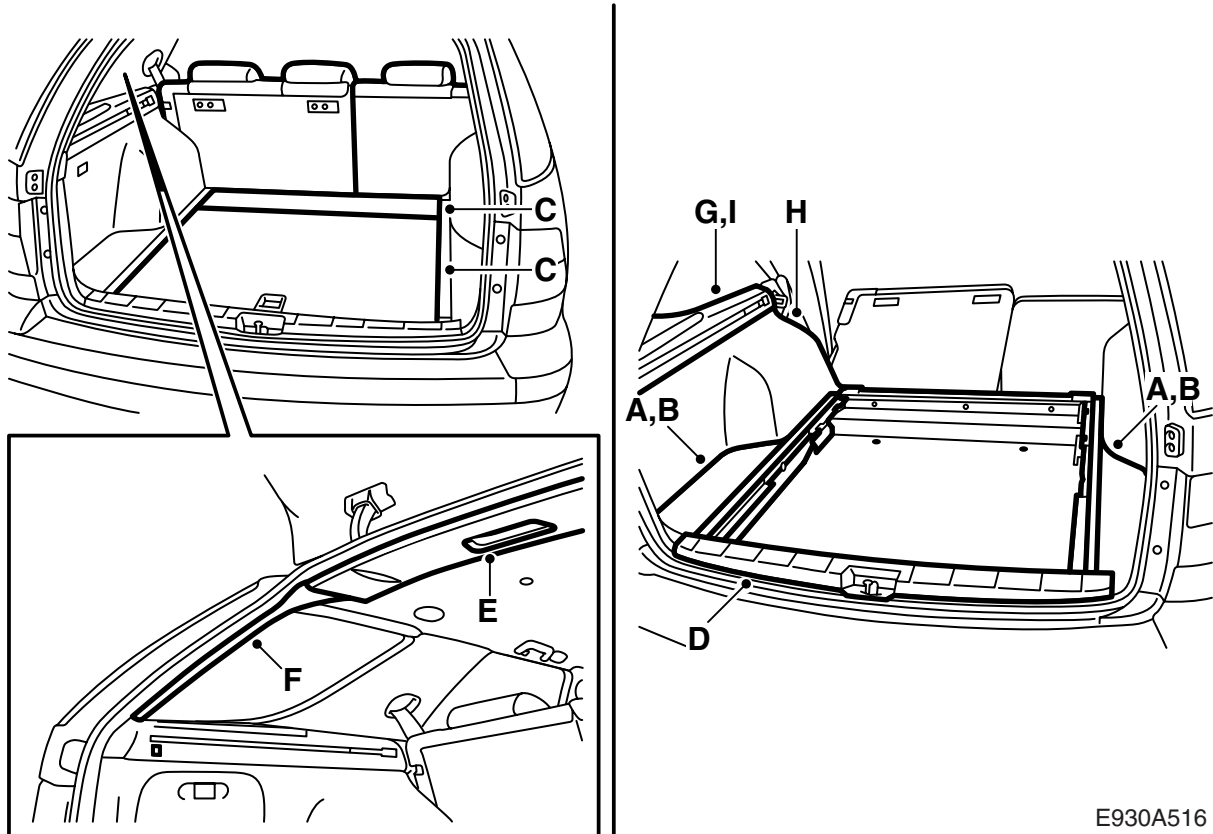
Be careful to connect the right connectors to the right switches.

- Fit the gear lever cover (C), 2 clips in the rear edge and 2 screws in the front edge.
- Fit the storage compartment/ashtray (B).
- **Manual transmission:** Fit the gear lever gaiter (A).
Automatic transmission: Fit the surround around the gear lever housing.
- Plug in the connector and fit the theft protection antenna unit (G).



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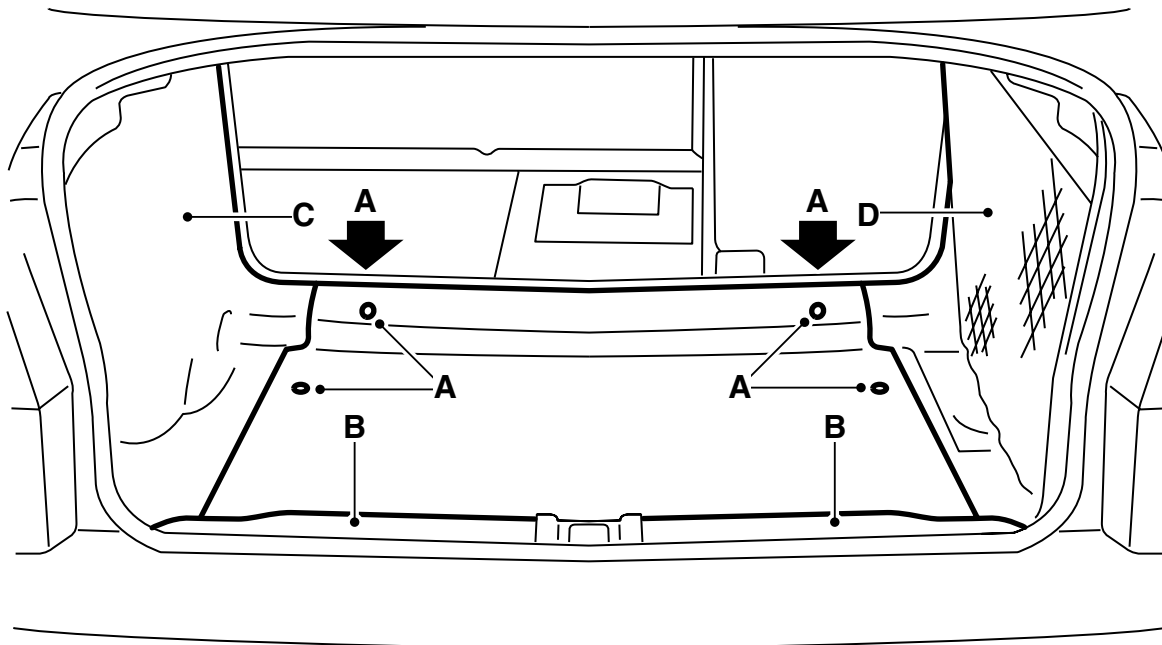
- 43 Fit the cover (F) for the fuse box.
- 44 **RHD:** Fit the panel lower section (D) and the centre console side trim (E) on the driver's side.
- 45 Fit the centre console side trim (C) on the left-hand side.
- 46 Fit the panel lower section (B) onto the left-hand side.
- 47 Fit the scuff plates at the left-hand rear door and front door (A).



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48 **5D** - Fit the luggage compartment's interior fittings:

- Align the side trim (H) and plug in the connector for the CD changer if the car was equipped with one. Tighten the screws in the top edge of the side trim (I).
- Fit the parcel shelf support (G), 1 cover and 3 screws, and the D-pillar trim.
- Connect the ceiling lighting and press the rear ceiling cover (E) into place.
- Fit new insulation pads in the rear edge of the body.
- Fit the storage compartments (B) and the outer sections of the luggage compartment (A).
- Fit the scuff plate (D).
- Fit the luggage compartment floor (C).
- Lift in the cargo guard.
- Fit the cover between the left-hand rear door and the backrest. Fold the rear seat backrest and seat cushions back into place.



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49 **4D** - Fit the luggage compartment's interior fittings:

- Fit new insulation pads in the rear edge of the body.
- Fit the left and right-hand side trims (C, D).
- Fit the scuff plate (B).
- Fit the luggage compartment floor (A) and close the boot lid.
- Fold the rear seat seat cushions and rear seat backrests back into place.

50 With the ignition key in the ON position and reverse gear engaged, check that the system warns against objects in the rear by using tones. The first tone is given when an object is at a distance of about 1.8 metres. The signal then has a frequency of 2 tones per second, but the number of tones per second increases the closer the object becomes to the vehicle and changes as follows:

- 1.8 - 1.3 m: 2 tones/second
- 1.3 - 0.9 m: 3 tones/second
- 0.9 - 0.3 m: from 5 to 12 tones/second in close stages
- 0.3 m: continuous tone.