



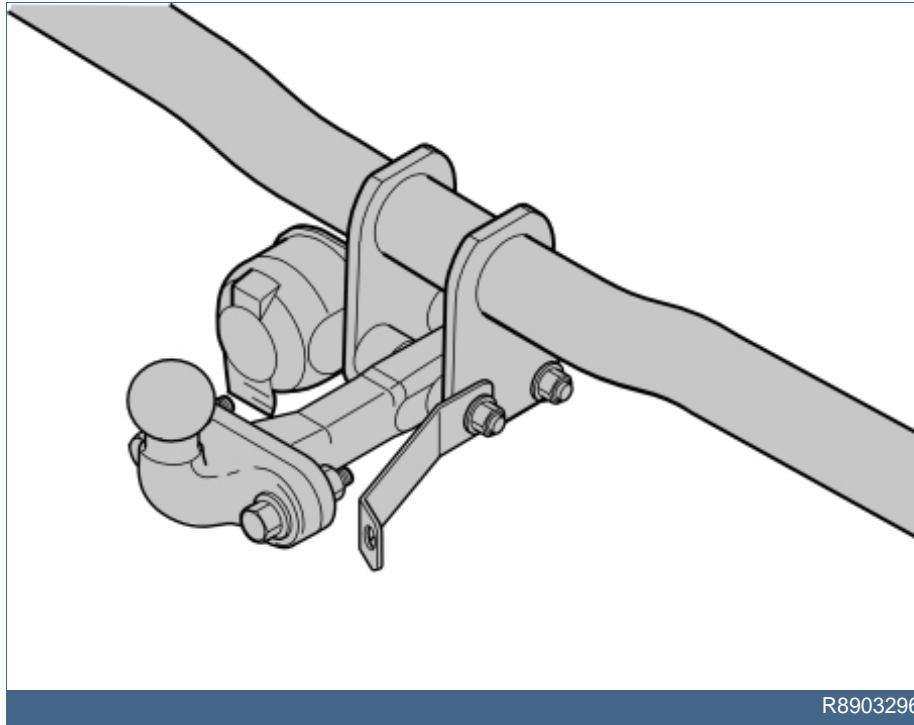
XC90

Section	Group	Weight(Kg/Pounds)	Year	Month
8	89		2004	04

XC90 2003, XC90 2003, XC90 2004, XC90 2004, XC90 2005, XC90 2005

Replaces issue: 2003 05

UK/France



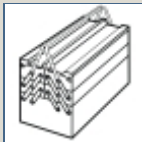
R8903296

Installation instructions, accessories - Tow hitch, flange

Volvo Car Corporation Göteborg, Sweden



Required tools

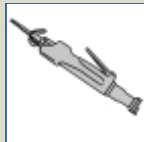


A0000162



Nm
lbf.ft

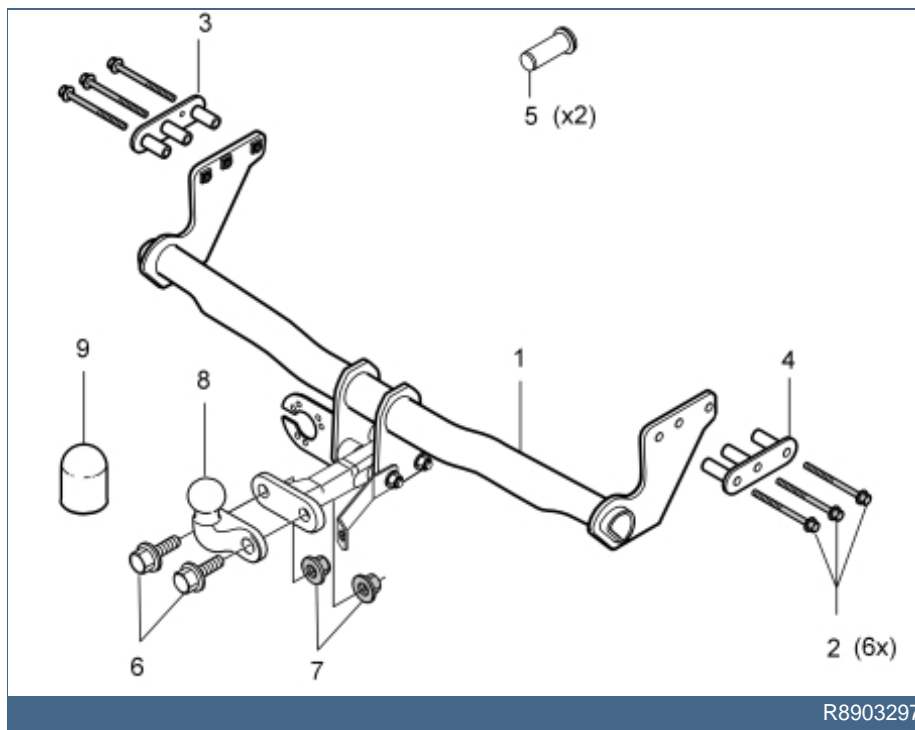
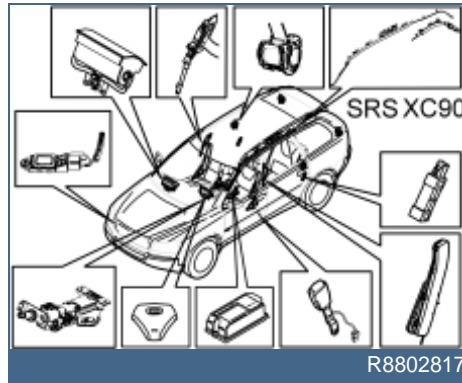
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A0000165



A0000235



Installation instructions, accessories - Tow hitch, flange

Volvo Car Corporation Göteborg, Sweden



Part no:	Kit no:	Supplier no:	Model	EU approval no:	D-value	Vert. load Kg (lbs)
8698859	8698858	60-146000	C	E11*94/20*4185*00	12.2 kN	90 kg

Large empty rectangular area for additional information or notes.

IMG-223900

Any comments on this publication? Please contact your nearest retailer. Thank You!

Publ.no:	Issue:	Kit no:
Comments:.....		
.....		
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From:	
Address:	
Telephone:	
Telefax:	

IMG-213320



INTRODUCTION

- **NOTE! Read through the entire text before carrying out any 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.

Cars equipped with SRS/SIPS (Airbag)

Warning!

Extra care must be taken when working on cars equipped with SRS/SIPS air bags. This is important to prevent:

1. Personal injury
2. Damage to or malfunction of the SRS/SIPS system.

Work on the SRS/SIPS systems or related components must always be carried out by an authorised Volvo workshop.

Is the car equipped with SRS (supplemental restraint system)?

Cars equipped with a driver's airbag have the letters "SRS" imprinted on the centre panel of the steering wheel. Cars equipped with driver's and passenger airbags are marked with "SRS" on both the steering wheel centre panel and also on the dashboard close to the airbag.

If the car is equipped with SIPS (side impact protection system) a "SIPS" decal is marked on both the front seats.

Cars equipped with inflatable curtains have the marking "SRS" on one of the panels along the posts on the inside of the car.

Cars equipped with SRS (supplemental restraint system) also have a "SRS" decal on the front windscreen.

Do not damage the SRS wiring!

Do not trap, fray, pierce or damage the SRS wiring. SRS wiring has orange casing and/or is plaited.

Steering and front suspension

The contact reel in the SRS system can easily be damaged when working on the steering wheel, steering shaft or steering gear. Refer to the SRS (supplemental restraint system) Service Manual or service instructions in VIDA for information on carrying out such work. This is to prevent damage.

SRS warning lamp

If the SRS warning lamp lights after repairs have been carried out, take the car to an authorised Volvo workshop.

SRS collision sensor control module

S60 / V70 (00-) / S80 / XC90

The collision sensor control module is located on the transmission tunnel



in the centre console, in front of the parking brake.

WARNING!

The air bag inflation areas must not be obstructed. Never place any objects, such as upholstery or accessories, within these areas. The panels must be able to deploy in the correct manner at the right time otherwise there is a risk of personal injury in the event of a collision.

WARNING!

The ignition must be in position "0" and the key removed from the ignition if any connector in the SRS system is to be disassembled. Then wait at least one minute. Then disconnect the battery negative lead before disassembling any of the connectors. When work is completed the ignition key must be turned to position "II" before reconnecting the battery negative lead.

Tow hitch, flange

Note!

Kit contents:

Cross member

Screw M12x110 (x6)

Spacer washer, left-hand

Spacer washer, right-hand

Mounting pin (x2)

Screw M16x50 (x2)

Nut M16 (x2)

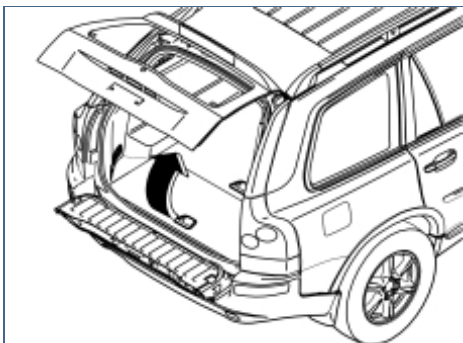
Towing ball

Protective cover for the towing ball.

Type approval of the tow hitch is in the table on page 2.



1A



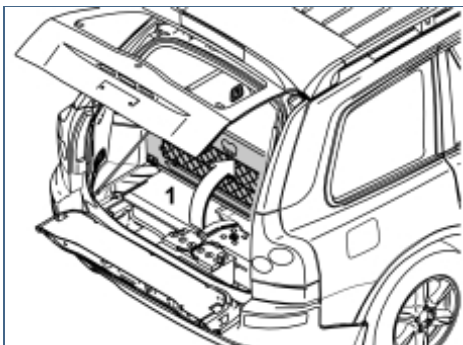
R8902557

Illustration A

Applies to cars with two rows of seats

- Fold up the centre rear floor hatch (1) slightly
- Remove it by pulling it off the mountings at the front edge
- Remove the storage box underneath and lift it out. If the floor hatch has a carrier bag holder on the underneath, it is secured by a strap on each of the shorter sides of the storage box. The straps must be undone.

1B



R8903031

Illustration B

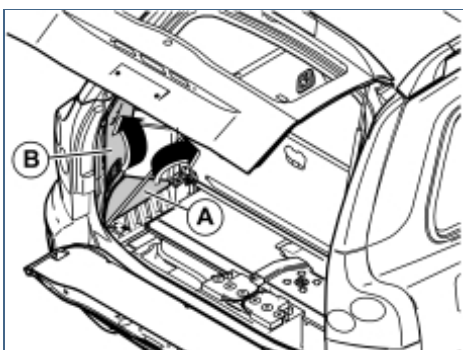
Applies to cars with three rows of seats and the integrated carrier bag holder on the underside of the centre floor hatch

- Fold up the centre rear floor hatch (1)
- Release the two straps on the panel underneath. Lift up the panel at the rear edge. Fold back the floor hatch towards the panel. Lift out the floor hatch and panel.

Applies to cars with three rows of seats without integrated carrier bag holders

- Lift up the centre rear floor hatch (1) at the rear edge and lift it out.

1C



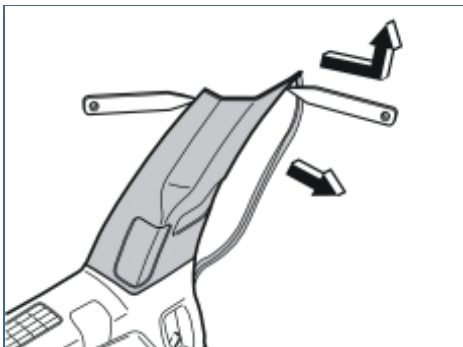
R8903030

Illustration C

Applies to all models

- Remove the side floor hatches (A) and the folding side panels (B) on the right and left-hand sides in the cargo compartment.

2

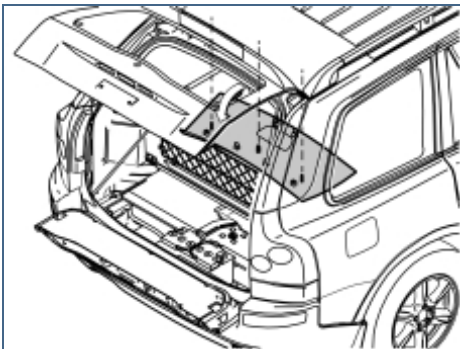


R3903738

- Pull off the rubber strip at the rear edge of the door opening to the left-hand rear door opposite the left C-post panel
- Carefully pry off the left-hand C-post panel at the sides in the top edge using a plastic weatherstrip tool. Pull off until the three clips on the inside release. Do not damage the headlining or the panel
- Remove the panel by pulling upwards slightly and unhooking it from the side panel
- Repeat the operation on the right-hand side.



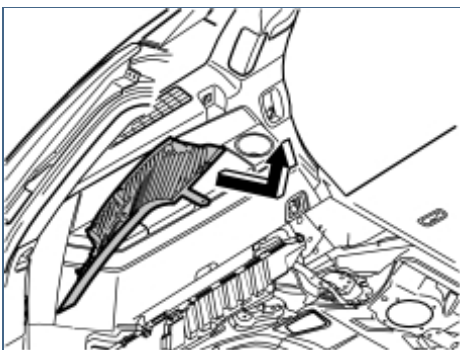
3



R8504084

- Remove the cover and the screws underneath for the rear headlining
- Carefully pry off the panel at the rear edge. Use a plastic weatherstrip tool
- Pull the rear edge of the panel downwards until all clips on the inside have released
- If the car has lighting in the panel, disconnect the connector
- Pull the panel backwards to release it.

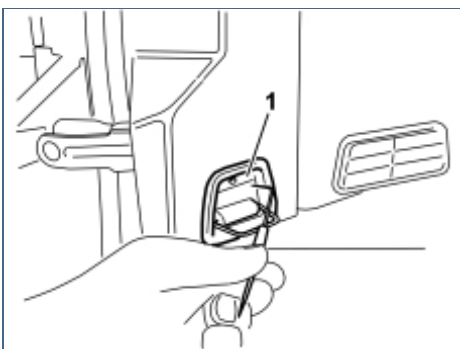
4



R8504123

- Pull off the left-hand D-post panel starting at the top edge. Then pull downwards until the three clips on the inside have released. Do not damage the panel
- Remove the panel by pulling upwards slightly and unhooking it from the side panel
- Disconnect the connector if the car has a loudspeaker in the D-post
- Repeat the operation on the right-hand side.

5A



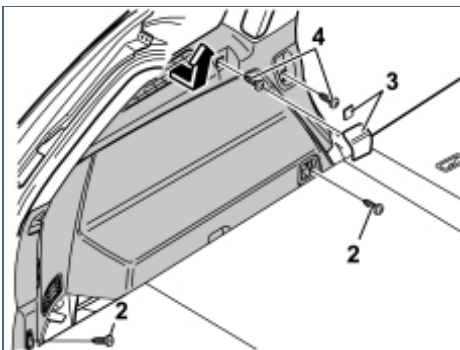
R8504313

Illustration A shows the removal of the cover for the load securing eyelets

Applies to all models

- Fold out the load securing eyelet
- Insert a scribe with an angled tip into the hole in the top of the cover
- Turn the scribe so that the angled tip engages in the reverse of the cover (1). Pull the cover off
- Repeat the operation on the right-hand side.

5B



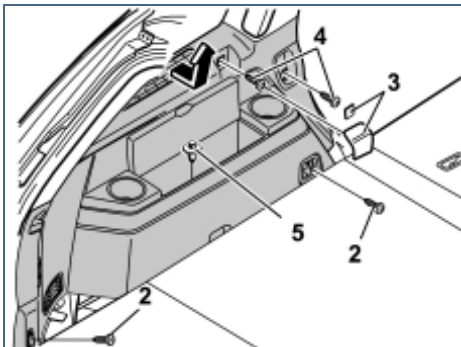
R8504315

Illustration B applies to cars with two rows of seats
Illustration C applies to cars with three rows of seats

- Fold up the seats in the third row (applies to cars with three rows of seats)
- Remove the screws (2) for the load securing eyelets in the left-hand side panel
- Remove the covers (3) over the front mountings for the left-hand side panel. Pry the covers off. Use a plastic weatherstrip tool or a small screwdriver
- Remove the screws (4)



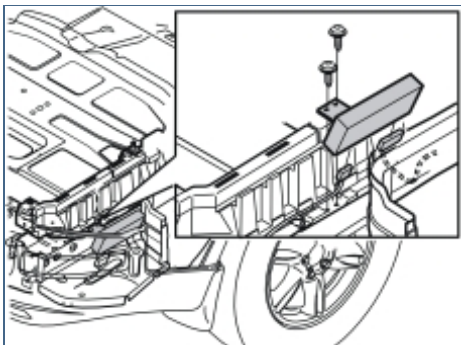
5C



R8504316

- Remove the clip (5) at the bottom of the storage compartment in the panel (Applies to cars with three rows of seats)
- Pull up the panel slightly at the top edge so that the clips on the inside release. Remove the panel by pulling it straight upwards.

6

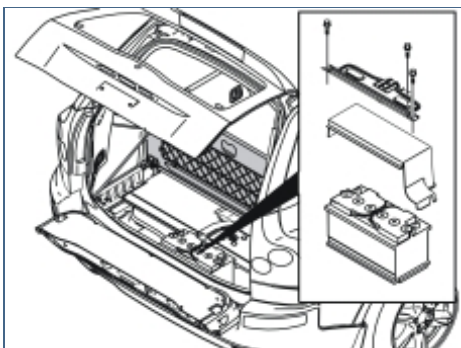


R3702881

Applies to cars with accessory electronic modules (AEM)

- Remove the bracket with the accessory electronic module. If necessary disconnect the connectors.

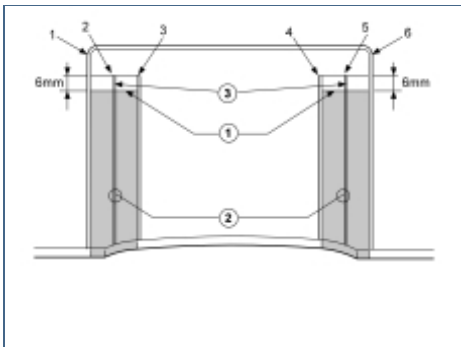
7



R3100130

- Remove the three screws in the battery holder. Lift the battery holder out
- Remove the battery cover
- Lower and remove the spare wheel.

8A



R8601012

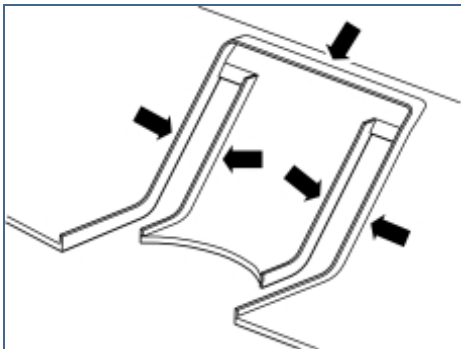
Illustration A

From underneath the car

1. Measure and draw a horizontal line 6 mm below the top of the ribs as illustrated
2. Cut along the inside of ribs 1 and 3 (the sides which face rib 2) up to the line drawn 6 mm below the top edge of the ribs. Do the same between ribs 6 and 4. Remove the shaded areas by cutting between the cuts along the horizontal line so that two parallel slits are made in the bumper cover
3. Cut away the remaining pieces of ribs 2 and 5 parallel to the bumper cover.



8B



R8601286

- Use a file to smooth off the edges of the cut outs.

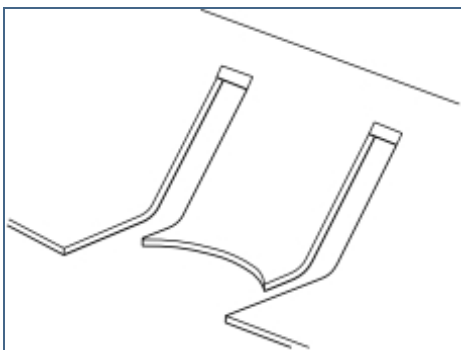
Illustration B

- Cut away all the upright ribs.

Illustration C

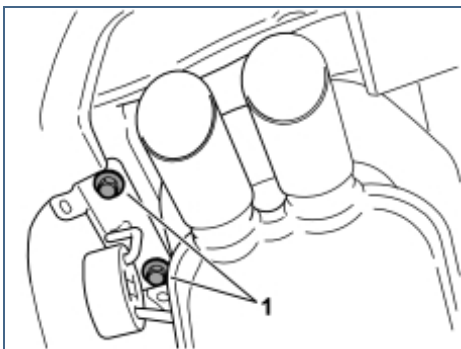
- The end result must be as illustrated.

8C



R8601287

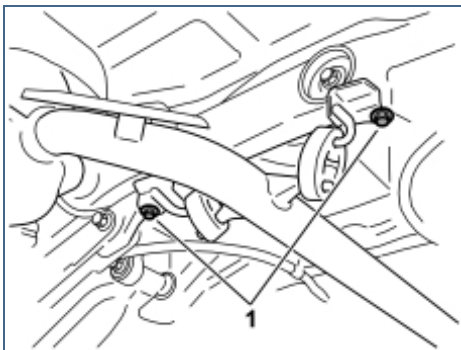
9



R8902814

- Remove the rear mounting for the silencer with the bracket from the underneath of the left-hand rear side member by removing the screws (1). Remove the silencer to gain access when installing the tow hitch.

10

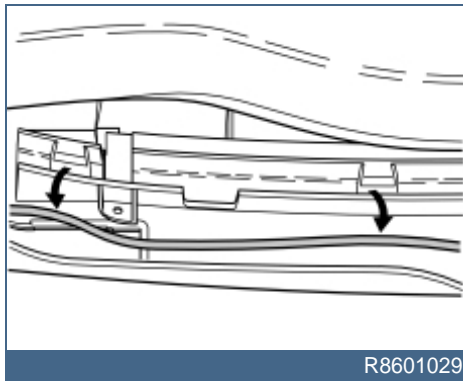


R8902815

- Remove the front mounting for the rear silencer at the rear sub-frame by removing the screws (1)
- Carefully bend the heat deflector plate at the side member to one side, to gain more work space
- Remove the protective flaps covering the mounting holes on the inside of the side members (one on each side)
- Remove any sealant from the surface where the tow hitch member will be mounted.



11A



R8601029

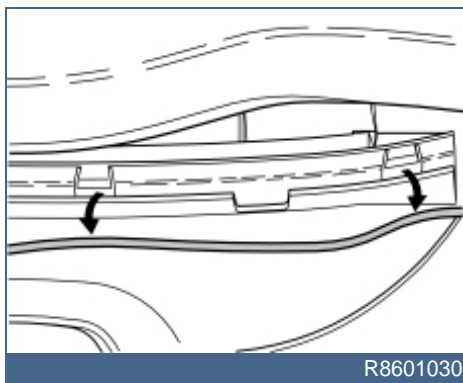
Applies to cars equipped with a reversing warning system

Illustration A shows the right-hand side of the bumper

Illustration B shows the left-hand side of the bumper

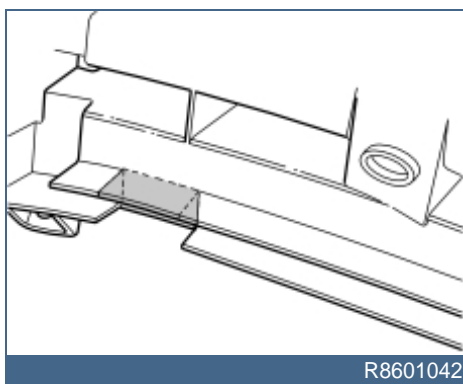
- Disconnect the cable for the reverse warning sensor from its clips in the rear section of the bumper.

11B



R8601030

12



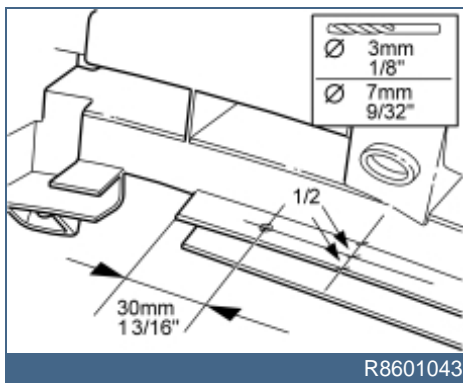
R8601042

Applies to all models

Right-hand side:

- Cut out the rear section at the existing cut out as marked in the illustration.

13



R8601043

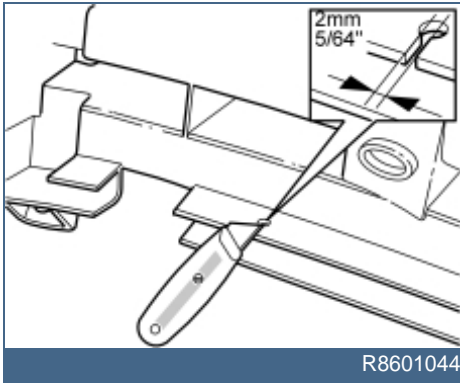
Applies to cars with reversing warning systems

Right-hand side:

- Measure up to drill the cable lead-in in the upper of the rear section plates as illustrated
- Pre-drill using a **3 mm (1/8")** diameter drill bit. Then drill out the hole to a diameter of **8 mm (5/16")**. Use an angle drill and short drill bits.

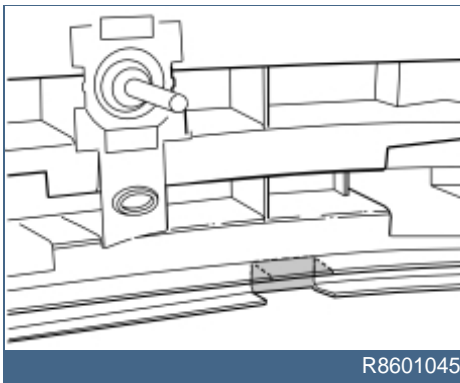


14



- Cut a 2 mm (5/64") wide groove through the plate leading in to the hole.

15

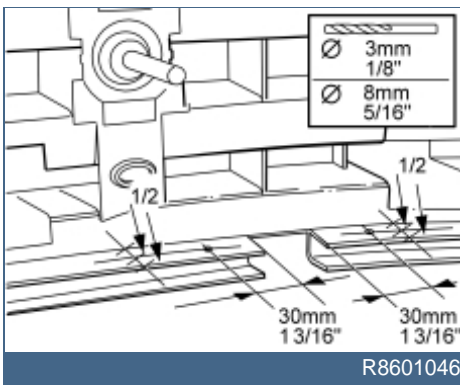


Applies to all models

Left-hand side:

- Cut out the rear section at the existing cut out as marked in the illustration.

16

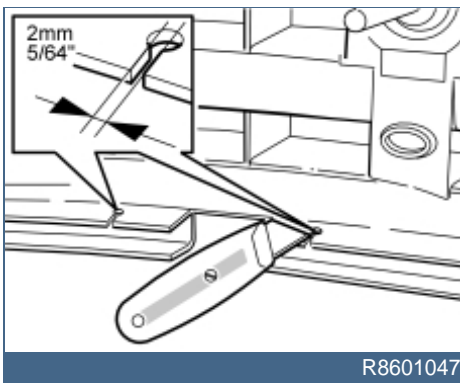


Applies to cars with reversing warning systems

Left-hand side:

- Measure up to drill the cable lead-in on the left and right-hand sides of the cut-out in the upper of the rear section plates as illustrated
- Pre-drill using a 3 mm (1/8") diameter drill bit. Then drill out the holes to a diameter of 8 mm (5/16"). Use an angle drill and short drill bits.

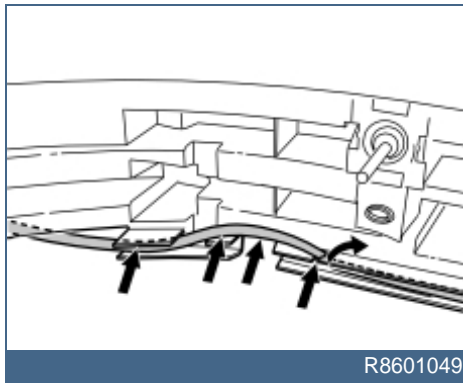
17



- Cut a 2 mm (5/64") wide groove through the plate leading in to the holes on both sides of the cut-out.



18

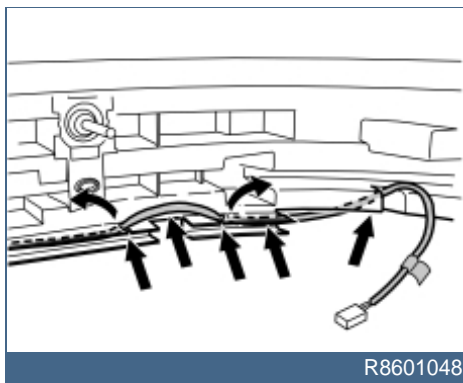


R8601049

Right-hand side:

- Press up the tab on the plate. Insert the cable in the previously drilled hole. The cable must be positioned as illustrated.

19

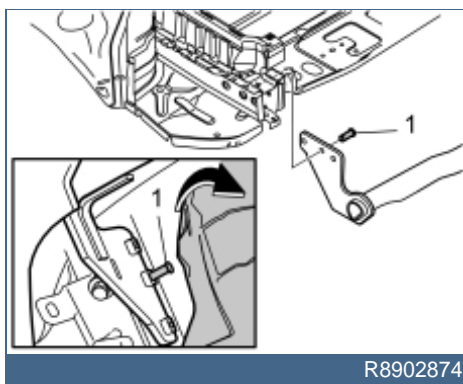


R8601048

Left-hand side:

- Press up the tabs on the plate and inset the cable in the holes drilled earlier. The cable must be positioned as illustrated.

20A



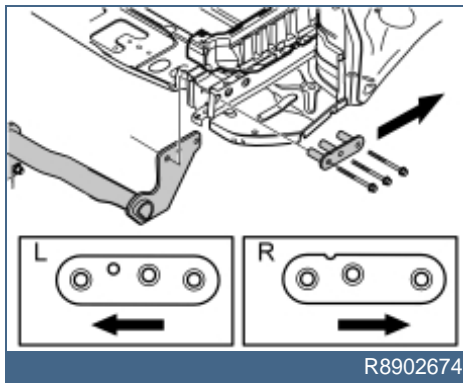
R8902874

It is recommended that two people carry out this procedure.

Illustration A

- Take the two mounting pins (1) from the kit
- With one person at each end, lift and position the tow hitch on the inside between the two side members, in between the holes. Start by angling up the face of the left-hand side above the tail pipe on the silencer and up between the heat deflector plate and the side member. Then angle the right-hand side face up to the side member

20B



R8902674

- Press the mounting pins (1) into the centre hole in the side members while holding the tow bar member in position so that the bar can hang freely without falling off
- Carefully lower the car.

Illustration B

- Fold down the lower tailgate.

From the inside of the cargo compartment:

- Remove the protective flaps covering the mounting holes on the outside of the side members (one on each side)
- Remove any sealant from the surfaces where the spacer washers will be positioned



- Insert the spacer sleeves using only the front and rear screws on the outside of the two side members.

Note!

Do not press out the mounting pins so that the tow bar detaches.

- Screw the front and rear screws in fully but do not tighten them
- Insert the centre screws so that the mounting pins are pressed out. Screw the screws in fully but do not tighten them
- Hold the bar in the horizontal position. Tighten the screws.

Note!

Rustproofing agent must be applied under the car before the screws are tightened. Apply the rustproofing agent to the side members all around the ends where any sealant was scraped off.

- Tighten all screws from inside the car. Tighten to **120 Nm (86 lbf.ft.)** in the following order:
 1. The rear screws
 2. The front screws
 3. The centre screws

Note!

Wait five minutes so that the joint settles. Then re-check the torque.

- Raise the car again.

21

From underneath the car

- Carefully bend the heat deflector plate back so it does not touch the silencer
- Reinstall the front mounting for the rear silencer. Tighten the screws. Tighten to **24 Nm (18 lbf.ft.)**
- Reinstall the rear mounting for the rear silencer. Tighten the screws. Tighten to **48 Nm (35 lbf.ft.)**.

22

- Install the cable harness connector for the tow hitch according to point 1D in the installation instructions for the appropriate cable harness.

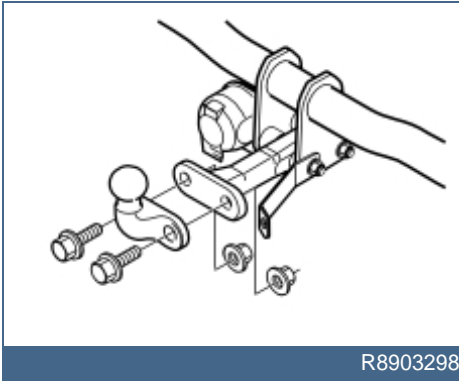
23

- Install the cable harness according to point 3 onwards in the Installation instructions for the appropriate cable harness.

**Note!**

Ensure that the cable harness does not rub against the lower edge of the bumper and is not pressed back.

24



- Reinstall the cover and holder for the battery
- Reinstall the spare wheel.

Applies to cars with accessory electronic modules (AEM)

- Reinstall the bracket with the accessory electronic module (AEM). Connect the connectors if disconnected.

Applies to all models

- Reinstall the panels, storage boxes and floor hatches
- Tighten the screws in the load securing eyelets. Tighten to **24 Nm (18 lbf.ft.)**
- Install the towing ball on the tow bar using the screws and nuts from the kit. The nuts must be on the inside
- Tighten the towing ball. Tighten to **195 Nm (144 lbf.ft.)**.

Caution!

The nuts for the towing ball may only be used once. Use new nuts if the towing ball has been removed.