

RENAULT

Technical Note 618A

X65

Sliding sunroof

CLIO II: XBXX

Basic manual: Workshop Repair Manual 338

Sub-section concerned: 52A

Removal - Refitting sunroof opening mechanism, mobile panel, sun visor, opening motor.

This note cancels and replaces Technical Note 389A

Edition 2

77 11 329 482

JULY 2005

Edition Anglaise

"The repair methods given by the manufacturer in this document are based on the technical specifications current when it was prepared.

The methods may be modified as a result of changes introduced by the manufacturer in the production of the various component units and accessories from which his vehicles are constructed."

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Sliding sunroof

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NON-SIDE OPENING ELEMENT MECHANISMS

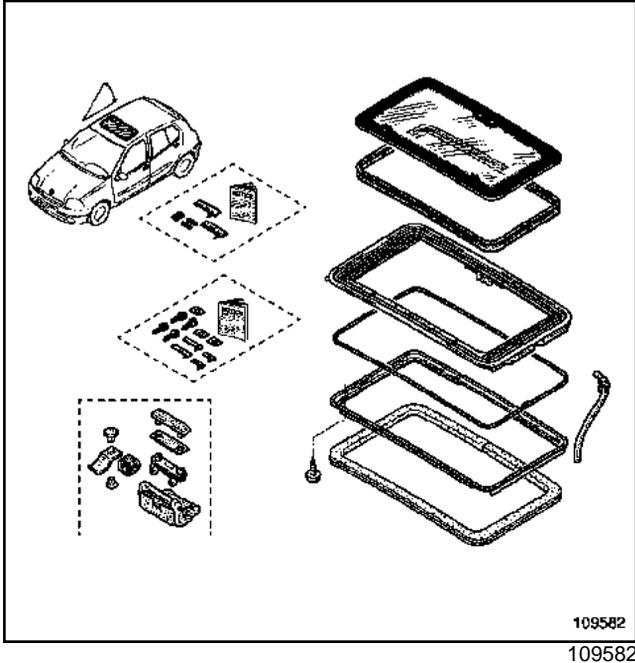
Sunroof operating mechanism: Removal - Refitting

52A

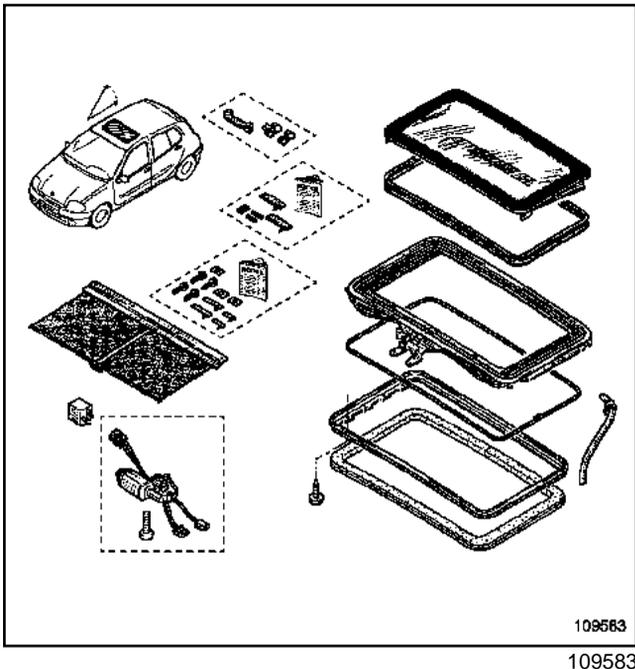
Tightening torques

frame/backing bolts	frame	4 Nm
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Manual version



Electric version



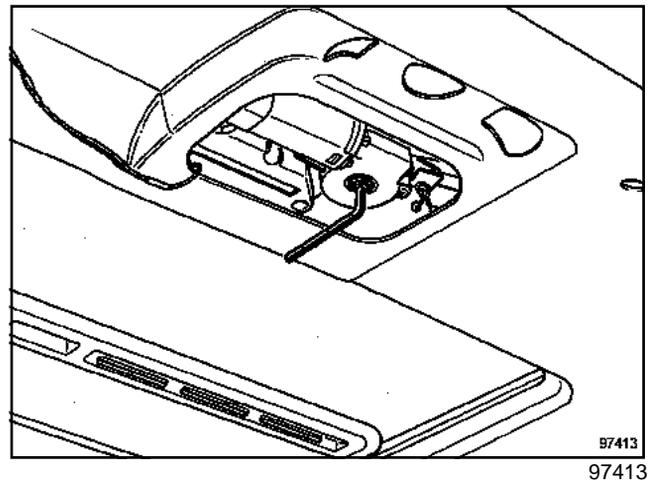
Note:

- The centring kit (part number **82 00 355 725**) **MUST BE USED WHEN REFITTING ALL SUNROOFS, WHETHER MANUAL OR ELECTRIC**
- In the event that noise can be heard from the sunroof when the vehicle is in motion, use the « noise » repair kit part number **82 00 355 724** (see **Technical Note 0833 A**).

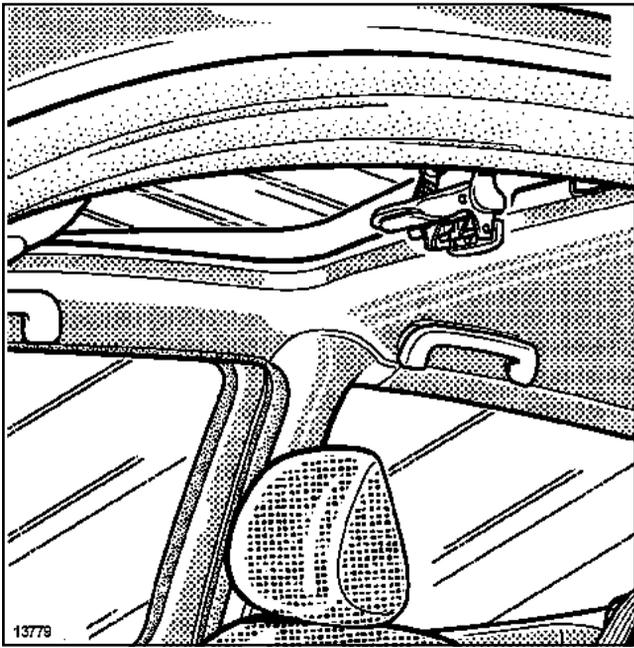
REMOVAL

- Make sure that the sunroof is in the fully closed position before it is removed.

Electric version

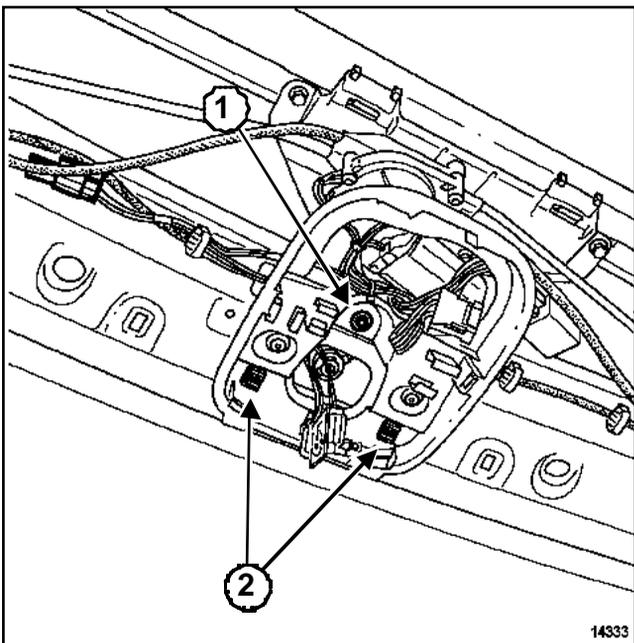


- In the event of an electrical fault, close the sunroof manually using a **4 mm** Allen key.
- First disconnect the relay located next to the sunroof motor.

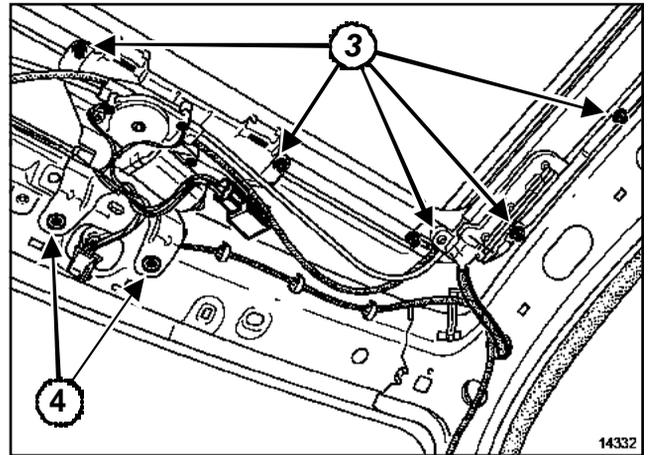


- ❑ Disconnect the battery (see **Battery: Removal - Refitting**).
- ❑ Remove the headlining (see **MR 338, Mechanism and accessories, 52 A, Sunroof operating mechanism**).

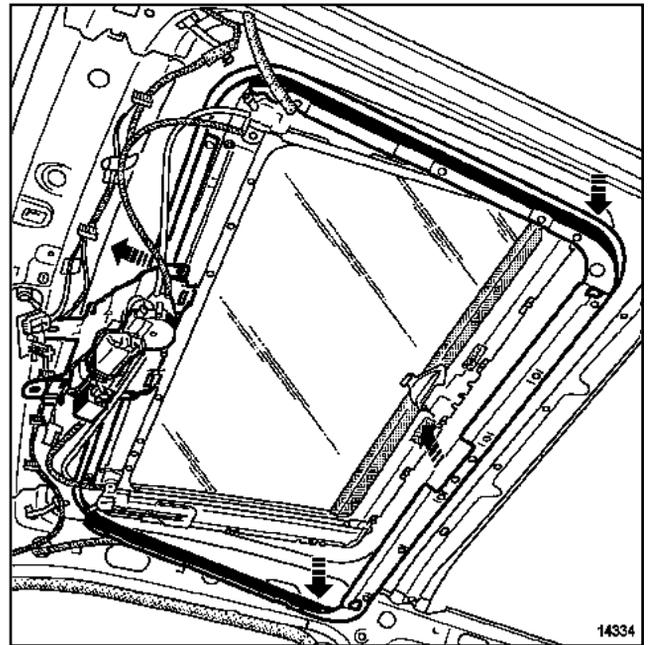
REMOVING THE SUNROOF OPERATING MECHANISM



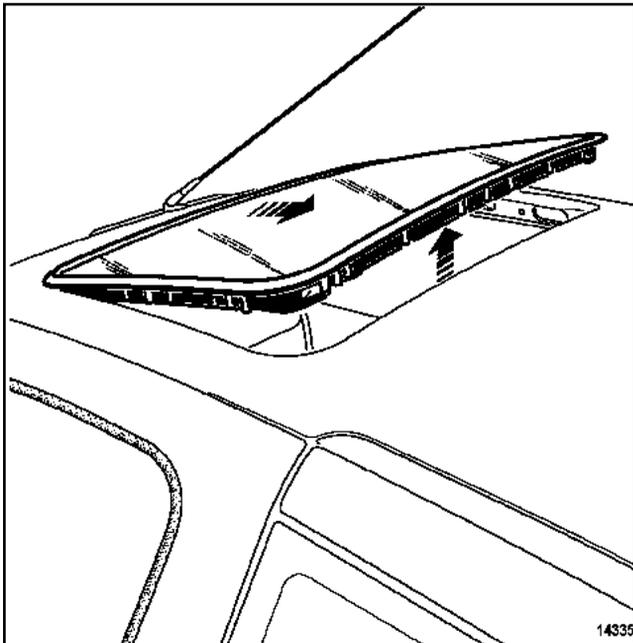
- ❑ Remove support mounting bolt (1) from the roof console.
- ❑ Unclip roof console support (2) from its location.



- ❑ Remove the mounting bolts from the sunroof operating mechanism (3) and the motor support (4).
- ❑ Disconnect the water drainage pipes from the sunroof operating mechanism.
- ❑ Disconnect the electrical supply from the motor.

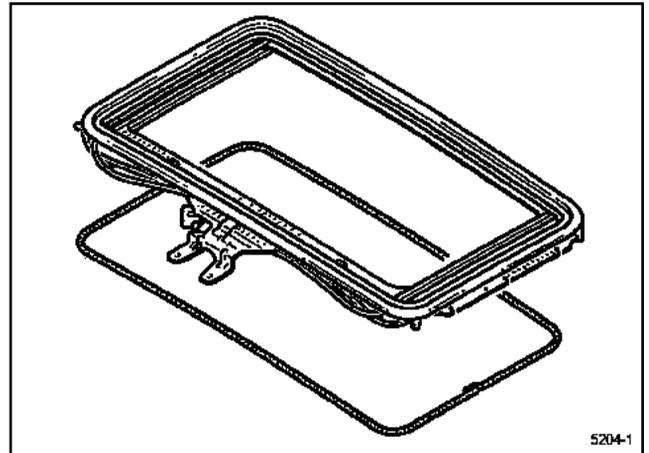


- ❑ Follow the procedure below to remove the sunroof operating mechanism:
 - lift the rear section of the sunroof operating mechanism,
 - remove the backing frame from its location beneath the motor support plate.



- ❑ Lift the rear section of the operating mechanism.
- ❑ Remove the « sunroof operating mechanism - drive motor » assembly.

REFITTING



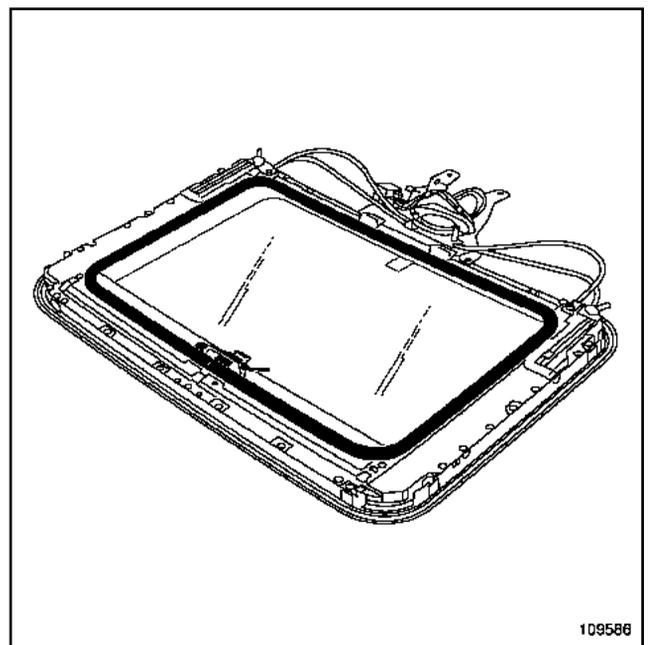
WARNING

Replace the seal between the sunroof operating mechanism and the roof panel with a new one each time the sunroof is removed.

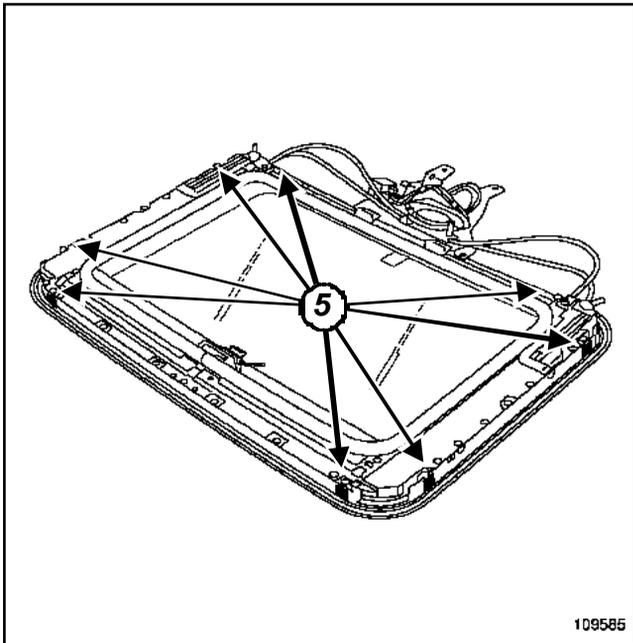
Clean the mating face of the seal where it meets the roof panel using a lint-free cloth soaked in heptane.

When the sunroof is simply removed and refitted, clean the area where the seal meets the roof operating mechanism using a lint-free cloth soaked in heptane.

- ❑ Carry out the following operations before refitting the sunroof operating mechanism to the vehicle.

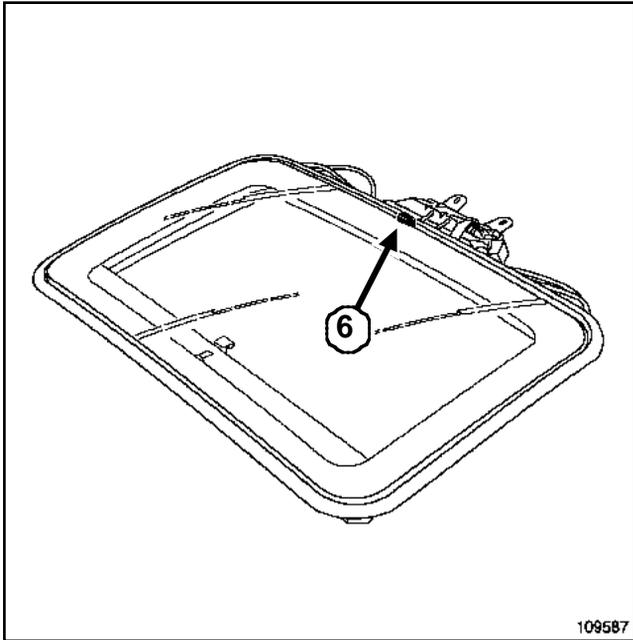


- ❑ Position the internal finishing seal, inserting a thread into the neck and through the length of the seal.



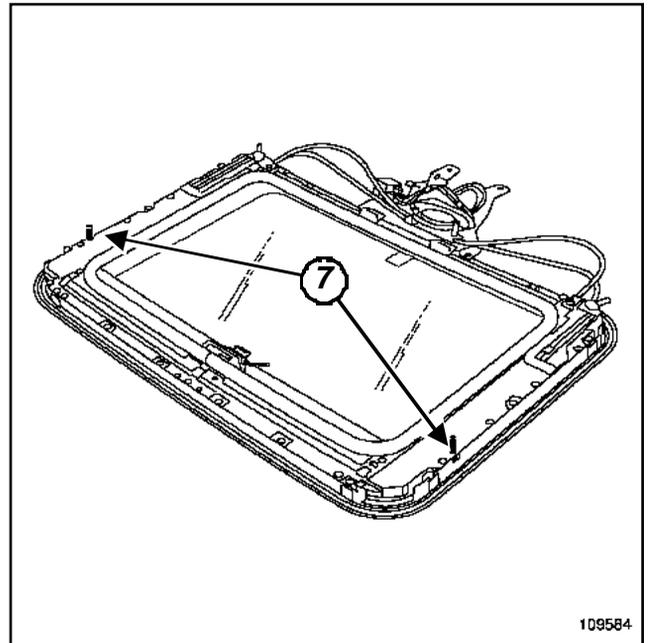
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- ❑ Position the eight adhesive feet (5) from the centring kit on the outer section of the eight frame mounting studs in the four corners of the sunroof operating mechanism.

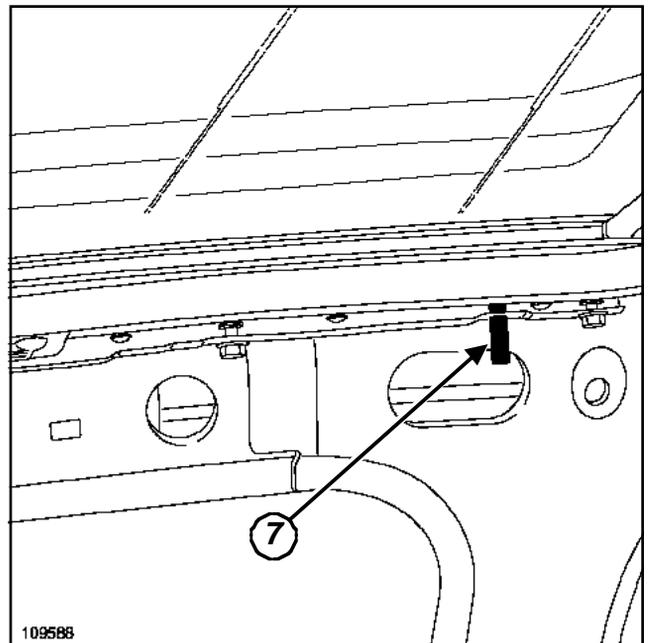


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- ❑ Position wedge (6) from the centring kit, placing it centrally at the front section of the sunroof operating mechanism, between the glass panel and the fixed frame.
- ❑ Hold it in place using adhesive tape.
- ❑ Refit the sunroof operating mechanism to the vehicle.



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- ❑ Fit the backing frame.
- ❑ Pretighten the 16 mounting bolts connecting the frame to the backing frame.
- ❑ Position the two centring pins (7) from the centring kit in the vehicle.
- ❑ Tighten to torque the **frame/backing frame bolts (4 Nm)** in the following order:
 - the bolts at the rear of the frame, beginning in the centre and then tightening alternately a bolt on the left and a bolt on the right, etc.,

- the bolts at the front of the frame, beginning in the centre and then tightening alternately a bolt on the left and a bolt on the right, etc.,
 - the bolts at the sides of the frame, beginning in the centre and then tightening alternately a bolt on the left and a bolt on the right, etc.,
- Remove wedges **(6)** and **(7)**.
 - Proceed in the reverse order to removal.

Note:

In the event of a sunroof being replaced, it may be necessary, depending on the version, to replace the sunroof opening/closing control switch and to modify the supply connector on the sunroof motor wiring harness.

Connect the battery (see **Battery: Removal - Refitting**)

Note:

For information purposes

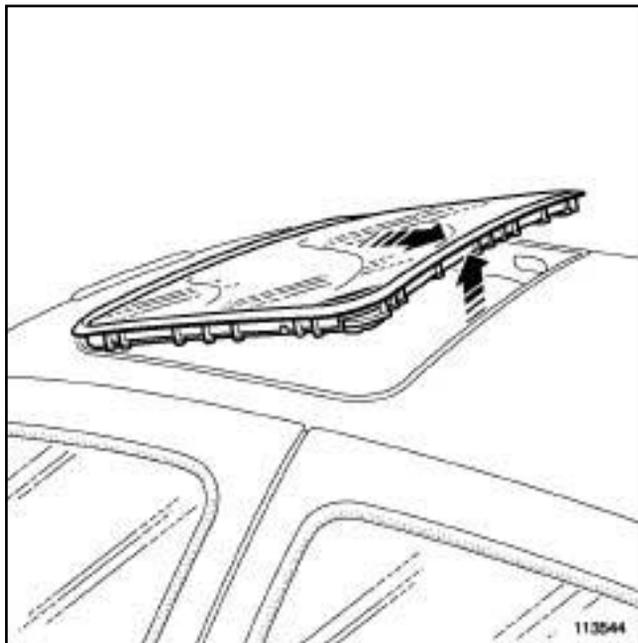
- Manual version:

- the tightening torque of the handle/mobile panel mounting bolts is **2 Nm**,
- the tightening torque of the side guide rail mounting bolts is **3 Nm**.

- Electric version:

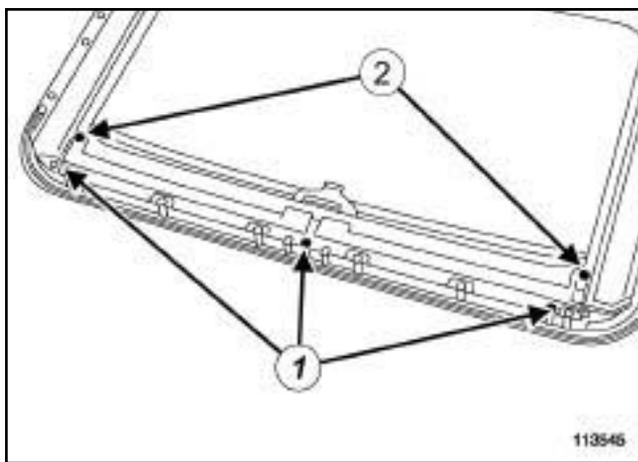
- the tightening torque of the side guide rail mounting bolts is **3 Nm**.
- the tightening torque of the motor mounting bolts is **3 Nm**.

REMOVAL



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- ❑ Remove the sunroof operating mechanism (see 52A, Non-side opening element mechanisms, Sunroof operating mechanism: Removal - Refitting, page 52A-1)



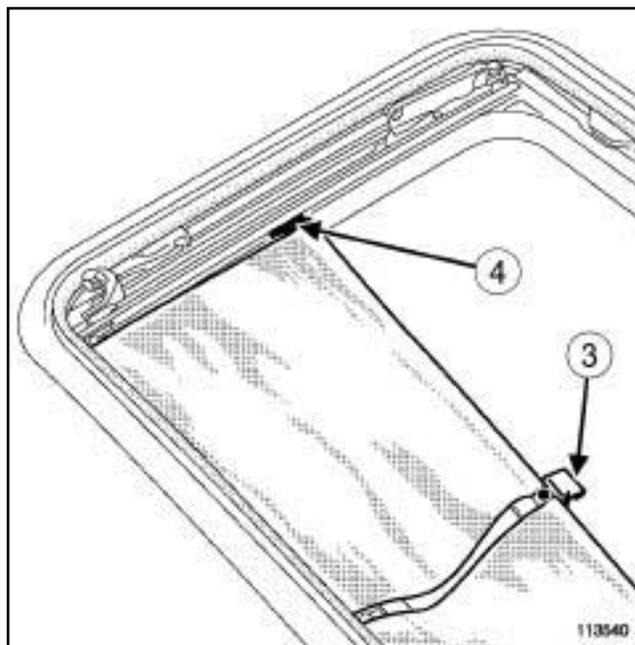
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- ❑ Remove:
 - the bolts (1),
 - the rivets, (2)
 - the sunblind-metal support assembly.

❑

WARNING

Do not separate the sunblind-metal support assembly.



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❑

Note:

Only the handle (3) and the side guide shoes (4) are available separately from the Parts Department. Do not remove the sunroof operating mechanism to change these parts.

- ❑ Detach the guide shoes (4) from the sunroof operating mechanism side rails by pivoting the sunblind.

REFITTING

❑

Note:

The sunblind-metal support mounting rivets are included in the sunblind kit available from the Parts Department.

- ❑ Proceed in the reverse order to removal.

NON-SIDE OPENING ELEMENT MECHANISMS

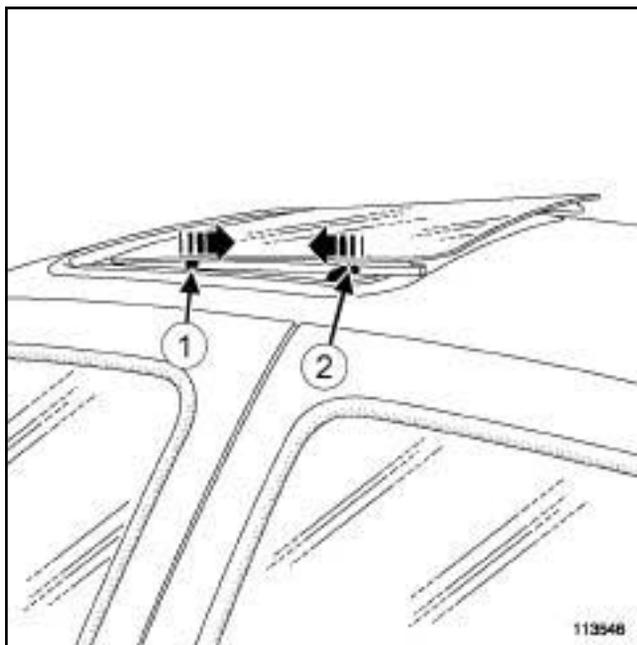
Sunroof moving panel: Removal - Refitting

52A

Tightening torques

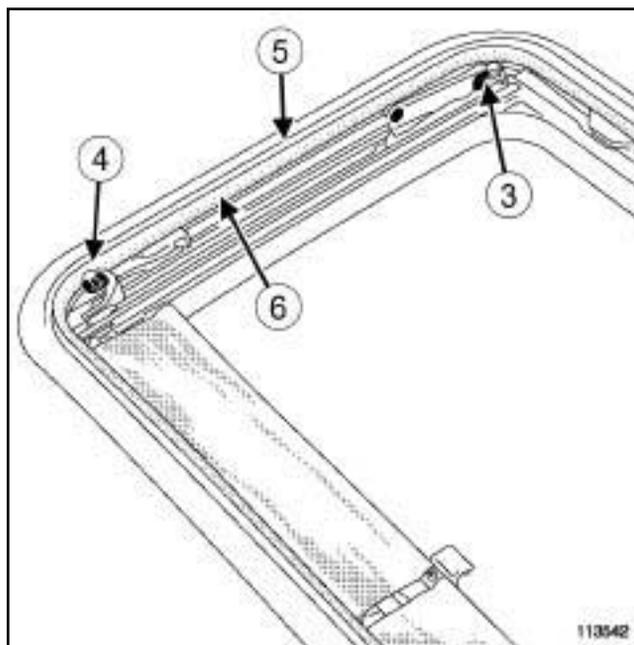
mobile panel bolts	4 Nm
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REMOVAL



- Open the mobile panel in the tilted position corresponding to the motor's zero point (see **52A, Non-side opening element mechanisms, Sunroof opening motor Removal - Refitting**, page 52A-8).
- Remove the **mobile panel bolts (4 Nm)(1)**.
- Detach the front section of the mobile panel from the drive mechanisms **(3)**.
- Pull the mobile panel towards the front of the vehicle to detach the guide shoes **(2)** from the side rails.
- Remove the mobile panel.

REFITTING



- The drive mechanisms comprise:
 - two bolts **(1)** allowing X adjustment.
 - two pins **(3)** for Z positioning.
 - two guide shoes **(4)**
- Position the guide shoes **(4)** as in the illustration above.
- The mobile panel may only be adjusted along the X axes.
- Check that the mobile panel is centred in relation to the edge of the sunroof operating mechanism **(5)** before fully tightening the bolts **(1)**.
- If the mobile panel does not have a correct Z position, check the zero point of the drive mechanisms and the sunroof motor, (see **52A, Non-side opening element mechanisms, Sunroof opening motor Removal - Refitting**, page 52A-8)
- Check the condition of the seal **(6)** and its mating face on the mobile panel; replace it if necessary.
- Fit the new seal along its full length into the sunroof operating mechanism groove.
- Carry out a sealing and operation test.
-

WARNING

In the tilted position, the mobile panel must not be in contact with the front edge of the sunroof operating mechanism.

NON-SIDE OPENING ELEMENT MECHANISMS

Sunroof opening motor Removal - Refitting

52A

Tightening torques

sunroof motor bolts	3 Nm
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□

WARNING

There are several scenarios (motor inoperative) which may necessitate adjustment of the zero point for the mechanisms and the motor.

Sunroof position:

- slightly tilted,
- slid,
- closed.

□

WARNING

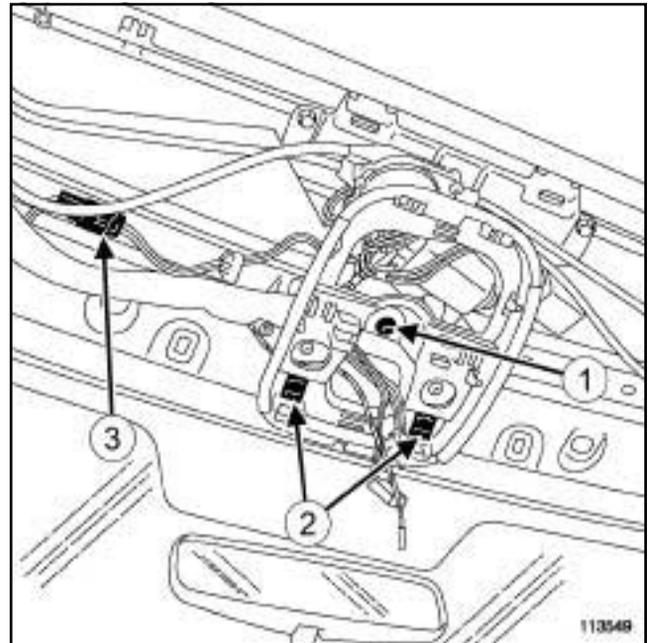
Before any operation, check or adjust the sunroof opening motor zero point corresponding to the mobile panel's tilted position.

Only move the sunroof mechanism using the sunroof opening motor.

- Electric operation: using the sunroof open/close switch.
- Manual operation: using a 4 mm Allen key after disconnecting the motor relay.

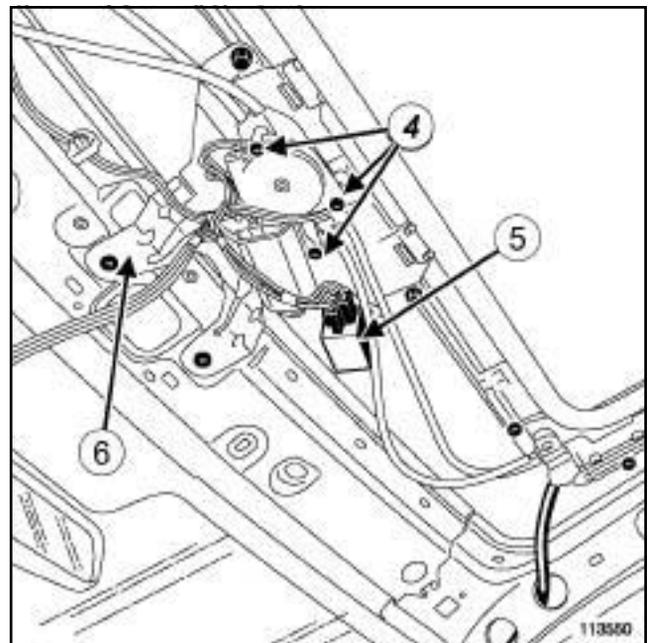
REMOVAL

- Disconnect the battery (see **Battery: Removal - Refitting**)
- Remove the headlining (see **MR 338, Mechanism and accessories, 52 A, Sunroof operating mechanism**).



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- Remove the bolt (1).
- Unclip and remove the console support (2).
- Disconnect the motor supply connector (3).



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- Remove the **sunroof motor bolts (3 Nm)(4)**,
- Disconnect the relay (5),
- Detach the sunroof motor from the metal plate (6),
- Remove the sunroof motor.

REFITTING

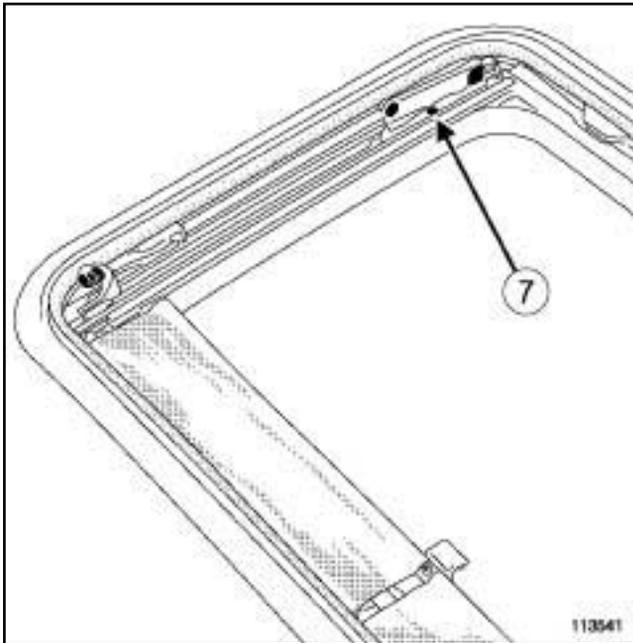
□

WARNING

On each occasion before the sunroof opening motor is refitted, be sure to check the zero point of the drive mechanisms and the motor to ensure that the motor operates correctly throughout its opening/closing cycle.

- Proceed in the reverse order to removal.
- Carry out a function test.

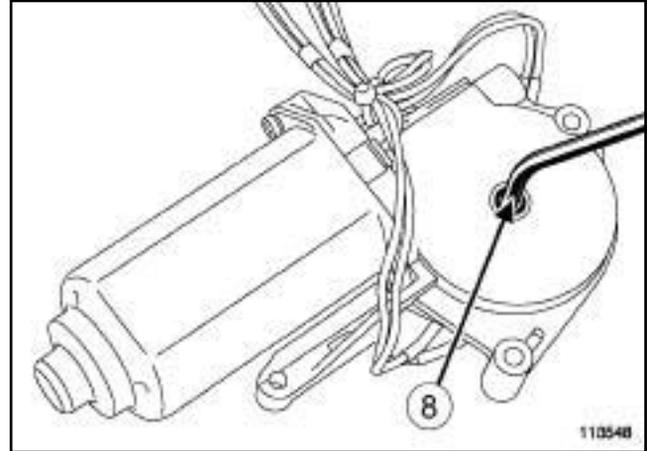
I - CHECKING THE DRIVE MECHANISMS' ZERO POINT.



- Remove the mobile panel, (see 52A, **Non-side opening element mechanisms, Sunroof moving panel: Removal - Refitting**, page 52A-7)
- Visual inspection of zero point:
 - Using a 3 diameter drill bit, check the alignment of the holes (7) on the drive mechanisms with the holes on the sunroof operating mechanism side rails.

II - CHECKING/ADJUSTMENT OF SUNROOF MOTOR ZERO POINT.

1 - Sunroof motor in place on the vehicle.



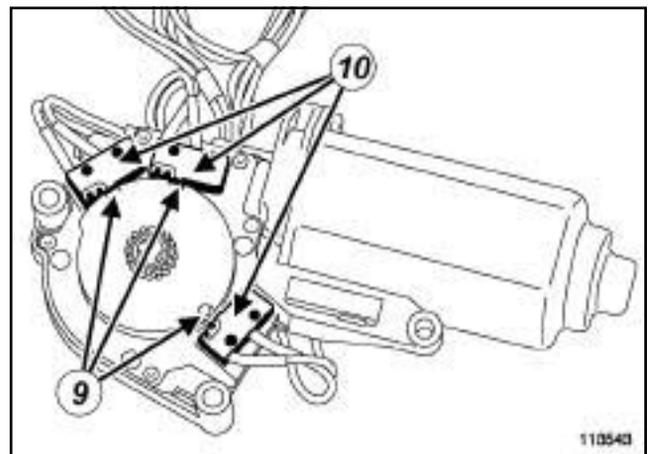
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- Electrically, using the sunroof open/close switch to tilt the mobile panel.
- Manually, using a 4 mm Allen key (8) to tilt the mobile panel after disconnecting the motor relay (5).
-

Note:

It is possible to open or close the mobile panel fully using the Allen key in the event of an electrical fault.

2 - Sunroof motor removed.



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- Using the Allen key (8) position the cam marks (9) opposite the microswitch release levers (10).
- After refitting the motor to the sunroof operating mechanism, perform a complete opening/closing cycle with the mobile panel.