

12 90 150 Remove and install/replace control unit box



WARNING

Working on 12 V vehicle electrical system.

Risk of short circuits! Risk of fire!

- Detach battery earth lead from battery.
- For additional batteries: Detach all battery earth leads from additional batteries.



RISK OF DAMAGE

Damage to battery terminal, the safety battery terminal or the intelligent battery sensor (IBS).

Damaged battery terminals can lead to malfunctions or vehicle electrical system faults.

- Pull off battery terminal from battery pole by carefully moving to and fro. Do not pry off using a tool.

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

2 – Removing the acoustic cover



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



RISK OF DAMAGE

Damage to the acoustic cover.

Jerky movements during disassembly and excessive application of force during installation may result in breakage of the acoustic cover.

- Disassemble or mount the acoustic cover carefully.
- Disassemble or mount snap-lock couplings of the ball pivots one after the other.
- Disassemble or mount acoustic cover only at temperatures $>20^{\circ}\text{C}$.
- Use only distilled water as an auxiliary material during installation, no lubricants.



- Release the acoustic cover (1) towards the top from the rubber mounts (marks).

3 – Removing the DME control unit



RISK OF DAMAGE



Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



TECHNICAL INFORMATION

Follow instructions for removing and installing control units.

For additional information see: 12 00 ... Notes on removal and installation of control units



TECHNICAL INFORMATION

In a warranty case, you must always provide a fault memory printout with the defective part, even if the fault memory does not contain an entry.



TECHNICAL INFORMATION

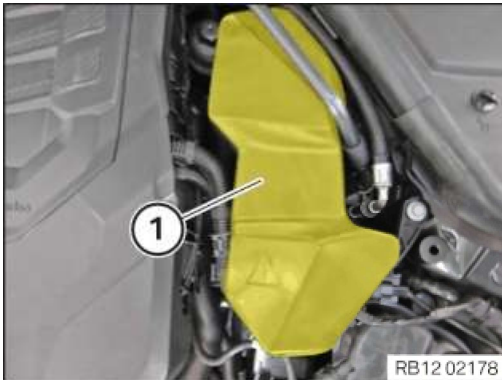
Control unit must be programmed after it is replaced.

For additional information see: 61 00 ... Programming/encoding control unit(s)

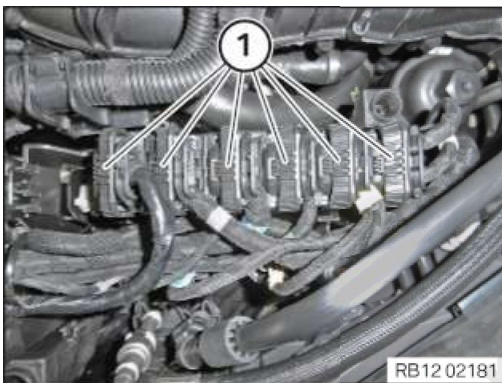


TECHNICAL INFORMATION

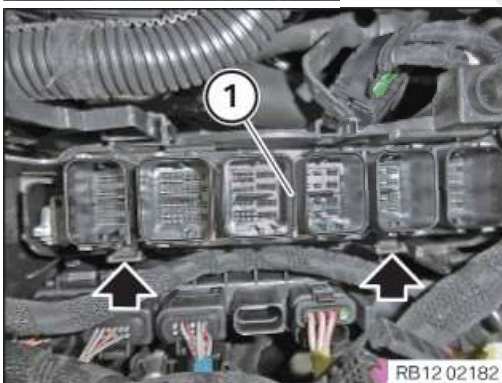
Disconnecting control units may cause fault code entries and functional limitations. Fault code entries must be read out and deleted if necessary.



- Pull the cover (1) towards the top and feed out.



- Unlock and disconnect the plug connection (1).



- Unlock the locks (arrows).
- Guide out and remove DME control unit (1).

4 – Removing integrated supply module (PDM)



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RISK OF DAMAGE



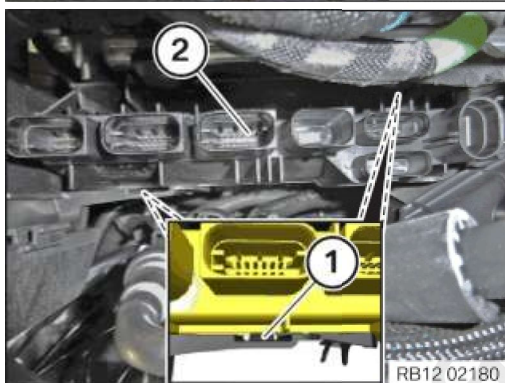
Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
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- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



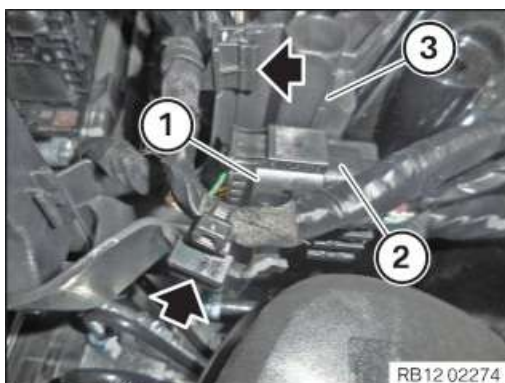
- Unlock and disconnect plug connections (1).



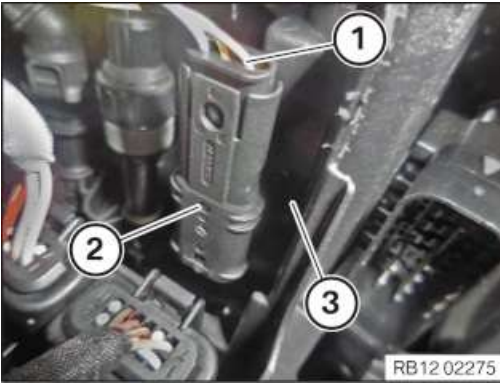
- Unlock the latch mechanisms (1).
- Guide out and remove integrated supply module (PDM) (2) upwards.

MAIN WORK

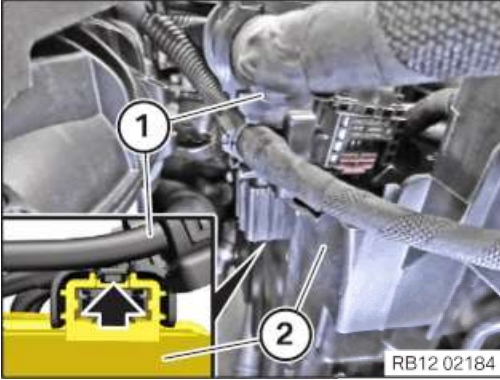
5 – Removing the control unit holder



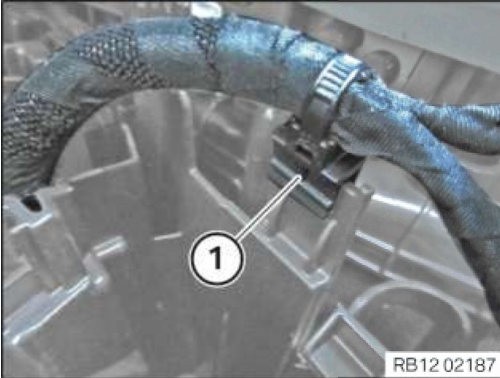
- Unlock plug connection (1) and disconnect.
- Unlock the connector (2) and disconnect from the control unit holder (3).
- Release the clamps (arrows).



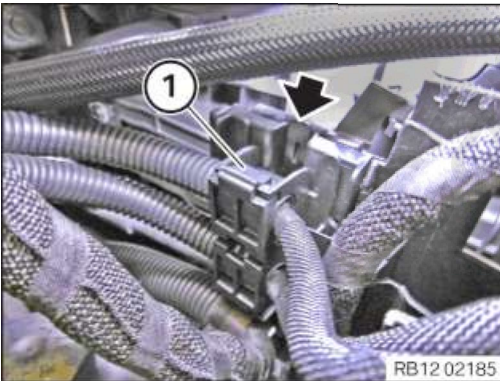
- Unlock plug connection (1) and disconnect.
- Unlock the connector and disconnect from the control unit holder (3).



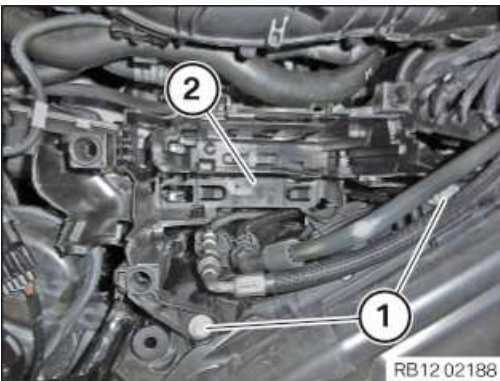
- Unlock the lock (arrow).
- Disconnect the cable holder (1) upwards from the control unit holder (2).



- Loosen clamp (1).

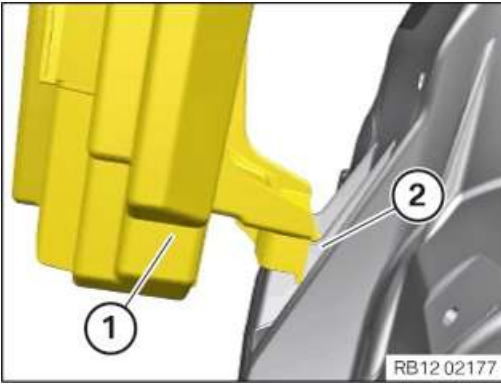


- Unlock the lock (arrow).
- Feed out the cable clip (1) upwards and set it aside.

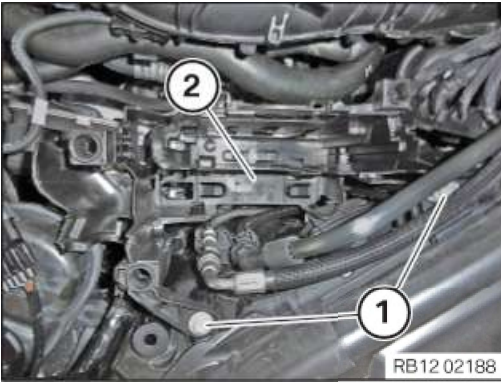


- Loosen screws (1).
- Guide out and remove the control unit holder (2).

6 – Installing the control unit holder



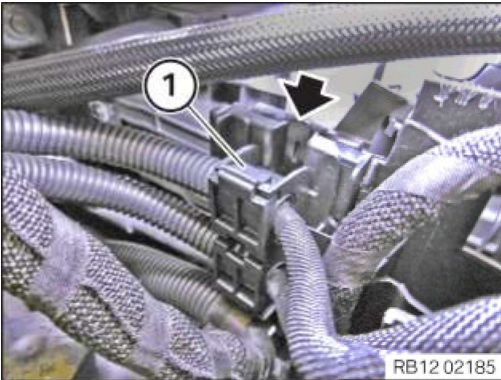
- Make sure the bottom control unit holder (1) is inserted correctly into the fixture (2).



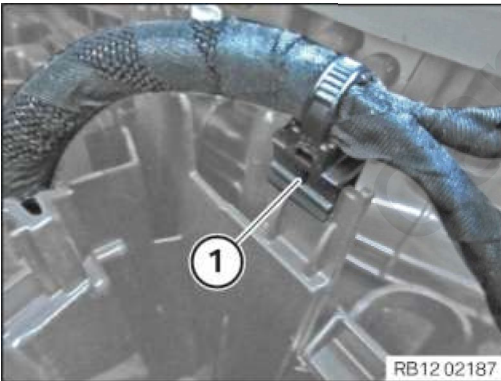
- Guide in and install control unit holder (2).
- Tighten the screws (1).

Control unit holder on spring strut dome

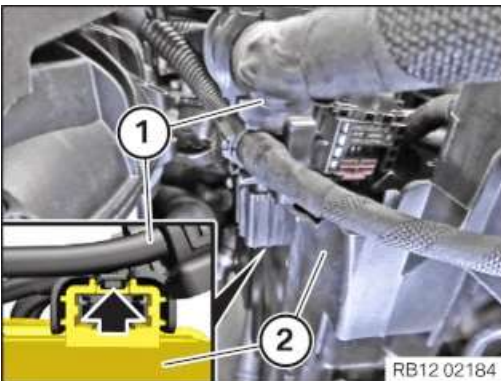
Hexagon screw		Tightening torque	8 Nm
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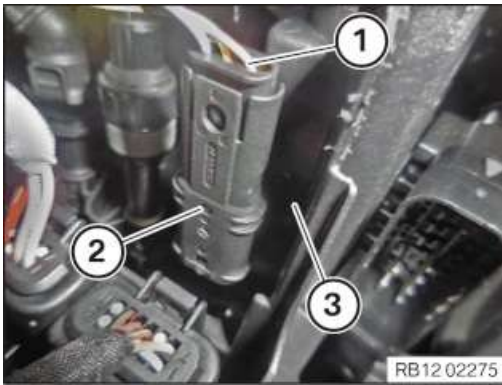
- Feed in and install the cable clip (1).
Lock (arrow) must audibly engage.



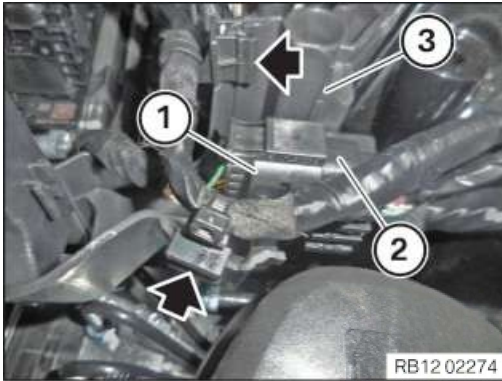
- Secure clamps (1).



- Connect the cable clip (1) with the control unit holder (2) and lock it.
Lock (arrow) must audibly engage.



- Connect connector (2) to the control unit holder (3) and lock it.
The connector (2) must engage audibly.
- Connect connectors (1) and lock.
The connector (1) must engage audibly.



- Connect and lock the connector (2) with the control unit holder (3).
The connector (2) must engage audibly.
- Connect connectors (1) and lock.
The connector (1) must engage audibly.
- Secure the clamps (arrows).

POSTPROCESSES

7 – Installing the integrated supply module (PDM)



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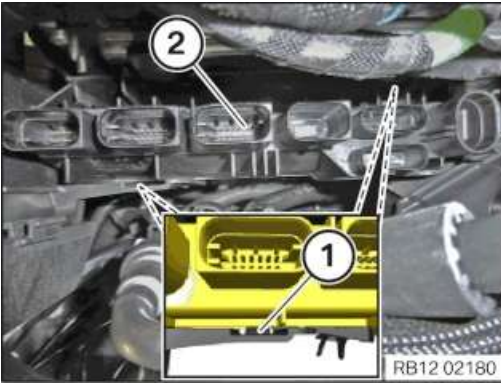
RISK OF DAMAGE



Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

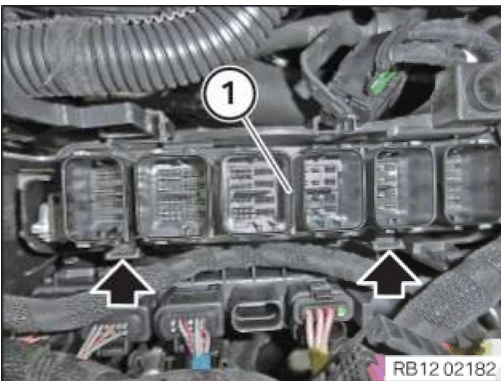


- Insert and install the integrated supply module (PDM) (2).
The latch mechanisms (1) must engage audibly.
- Unlock the latch mechanisms (1).

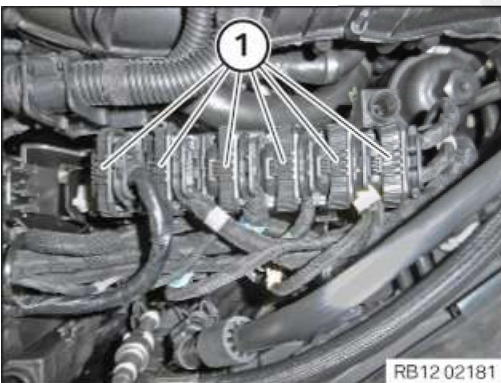


- Connect connectors (1) and lock.
The connectors (1) must engage audibly.

8 – Installing the DME control unit



- Feed in and install DME control unit (1).
The locks (arrows) must engage audibly.



- Connect connectors (1) and lock.
All connectors (1) must engage audibly.



- Insert and install cover (1) into guides.

9 – Install acoustic cover

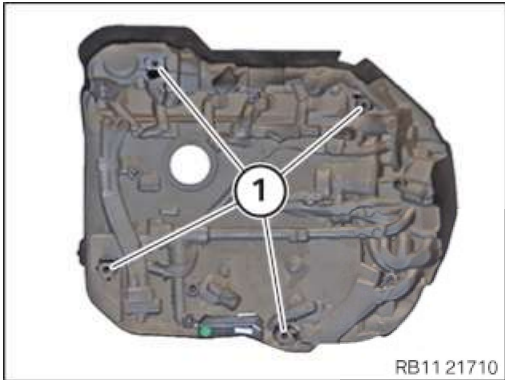


RISK OF DAMAGE

Damage to the acoustic cover.

Jerky movements during disassembly and excessive application of force during installation may result in breakage of the acoustic cover.

- Disassemble or mount the acoustic cover carefully.
- Disassemble or mount snap-lock couplings of the ball pivots one after the other.
- Disassemble or mount acoustic cover only at temperatures $>20\text{ }^{\circ}\text{C}$.
- Use only distilled water as an auxiliary material during installation, no lubricants.



- Check the rubber mount (1) for correct fit in the acoustic cover.



- Install acoustic cover (1) and fix in the rubber mounts (marks).

10 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Control unit holder on spring strut dome

Used in step 6

Hexagon screw	Tightening torque	8 Nm
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Links

General repair instructions	Used in step
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61 00 ... Parking-residing-driving

Vehicles of the G series feature a new type of terminal control:

Functional description of the parking-residing-driving terminal control

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