

Antenna systems

General information

Antenna systems can consist of the following:

Radio or Radio - Navigation head unit

Antenna or antennas integrated in rear window (system dependent)

Optional: satellite radio with roof antenna

FM frequency filters (Ground and Plus)

Vehicles with "Sound System" use a single antenna integrated into the rear window.

Vehicles with "Premium Sound System" and "Radio - Navigation System" use a diversity antenna system integrated into the rear window. Diversity function serves to improve and optimize the reception quality in the vehicle.

The strength and quality of the signals received by the two diversity system antennas is continuously monitored and evaluated by the radio unit. The evaluation data processed by the radio causes active selection of either system antenna that provides the best reception under the existing conditions (diversity function). The continuous, active switching between system antennas is not audible.

Note:

In the event that devices (such as additional antennas) that use a magnetic mounting fixture are attached to the roof, the residual magnetization of the roof sheet metal will adversely affect the operation of the roof antenna and compass module. Before proceeding with any diagnosis of the roof antenna or compass module, ask customer if such a device is/was used.

Before troubleshooting or servicing, technicians must be familiar with the functions and operation specifics of the standard or optional radio system. Always read the owners manual and review applicable system functions.

Note:

Additional information:

⇒ *Owners Manual*

⇒ *Self Study Program - Course Number 89103 "The 2005 new Jetta New Model Introduction"*

⇒ *Self Study Program - Course Number 873403 "The 2005 new Jetta - Electrical System"*

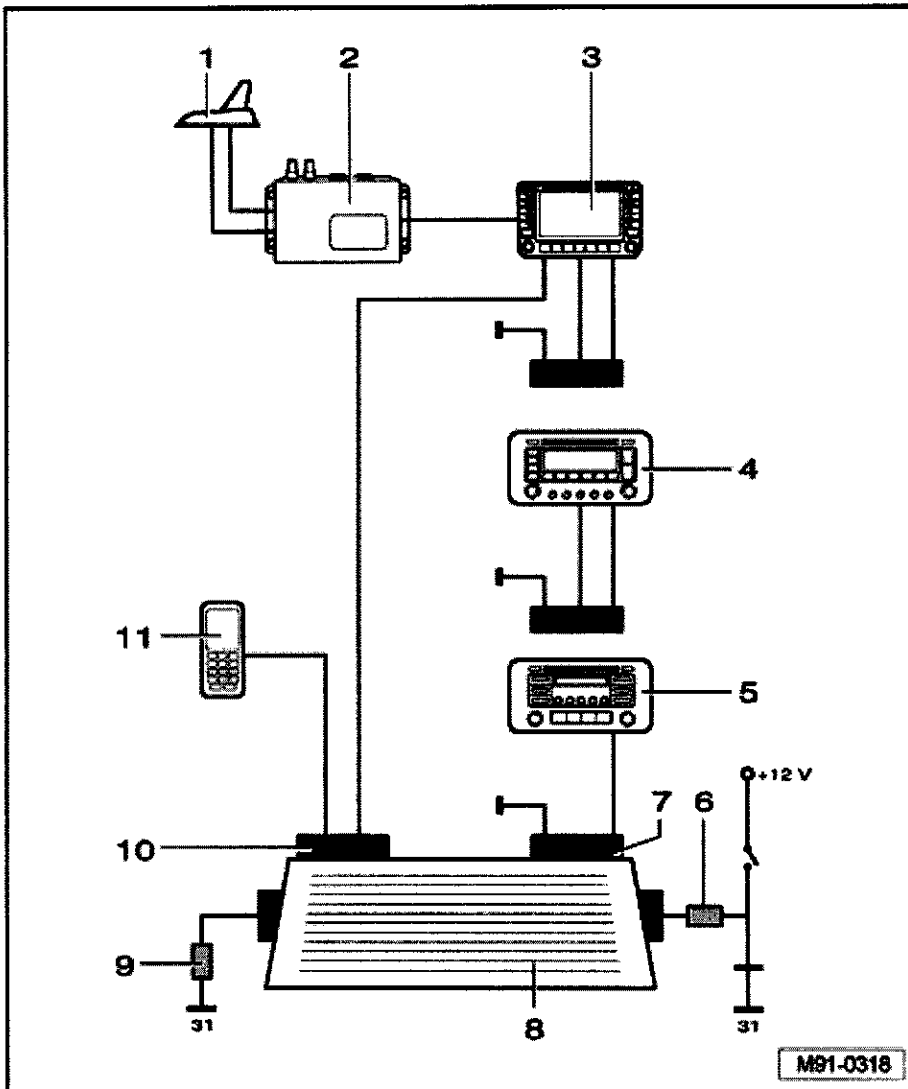
⇒ *Wiring Diagrams Component Locations*

Warning!

When disconnecting and reconnecting battery terminals, observe all applicable Notes and torque specifications, as well as instructions on performing OBD program and electrical system function checks as specified in

⇒ ***Repair Manual, Electrical Equipment, Repair Group 27, Battery, disconnecting and reconnecting***

Antenna systems, layout



1. Satellite Tuner Antenna R172

- Used on "Premium Sound System" with optional satellite radio and "Radio - Navigation System" .
- Installed on roof
- Removing and installing ⇒ 91-8, Satellite Tuner Antenna R172, removing and installing

2. Satellite Radio R146

- Optional with "Premium Sound System"
- Standard with "Radio - Navigation"

System" (information at time of publication)

- Additional information, ⇒ 91-4, Satellite Radio R146 , removing and installing

3. Radio/Navigation Display Control Module J503

- Additional information, ⇒ 91-3, Radio - Navigation System

4. Radio R

- Radio head unit "Premium Sound System"
- Additional information, ⇒ 91-2, Radio system - Premium Sound System

5. Radio R

- Radio head unit "Sound System" ,
- Additional information, ⇒ 91-1, Radio system - Sound System

6. FM Frequency Filter (in positive wire) R179

- Installed in wiring harness
- Function: Prevent antenna signals short to Ground (GND)

7. Right Antenna Module R109 , AM and FM antenna

- Removing and installing ⇒ 91-8, Antenna Modules R108 R109, removing and installing

8. Rear window with Antenna R11 and Radio Antenna 2 R93 and Navigation System Antenna R50

9. FM Frequency Filter (in negative wire) R178

- Installed in wiring harness
- Function: Prevents antenna signals short to Ground (GND)

10. Left Antenna Module R108 , navigation (GPS)

- optional, depending on equipment
- Removing and installing ⇒ 91-8, Antenna Modules R108 R109, removing and installing

11. Mobile telephone

- Not applicable to USA/CDN (information at time of publication)

Antenna Modules R108 R109, removing and installing

Removing:

Warning!

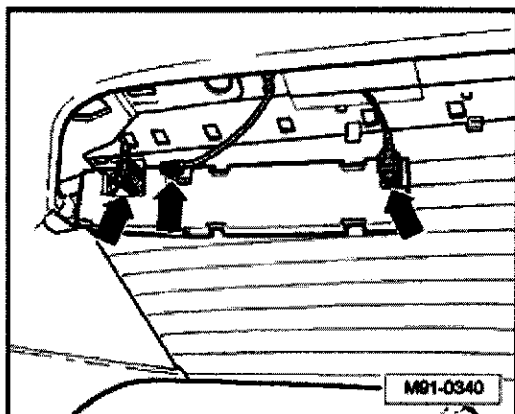
Before beginning repairs on electrical system

Switch off all electrical consumers.

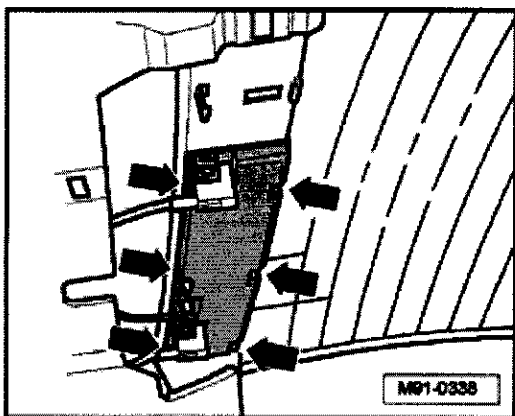
Switch ignition off and remove ignition key.

- Lower molded headliner at rear so that antenna modules are accessible,

⇒ Repair Manual, Body Interior, Repair Group 70, Trim/insulation; roof trim; removing and installing molded headliner



- Disengage electrical connection locks - **arrows** - and disconnect.

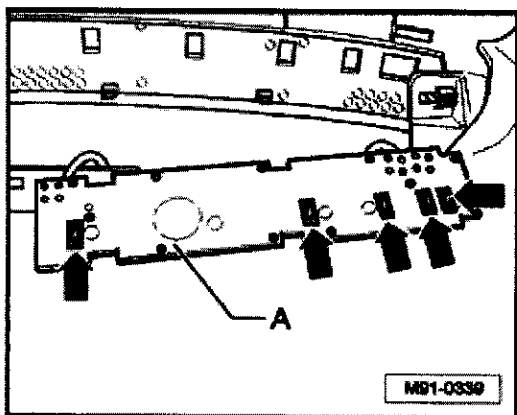


- Release retaining clips - **arrows** - on both sides.

- Carefully remove antenna module.

Installing:

Note:



*Terminals on antenna module - **arrows** - must not be bent and must be metallically clean so that reception problems*

do not result.

Remaining installation in reverse order of removal.

Satellite Tuner Antenna R172 , removing and installing

Removing

Warning!

Before beginning repairs on electrical system

Switch off all electrical consumers.

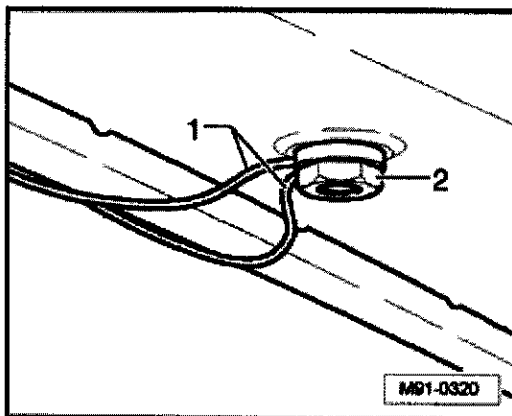
Switch ignition off and remove ignition key.

- Remove roof end strip and both C-pillar trim,

⇒ Repair Manual, Body Interior, Repair Group 70, Trim/insulation: roof trim

- Unscrew both rear grab handles under roof.

- Carefully lower molded headliner slightly in rear area.



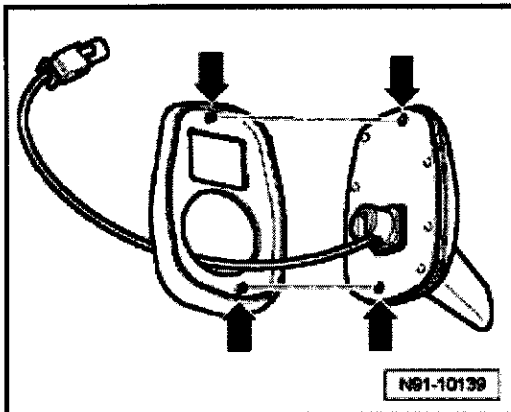
- Remove nut - 2 - .

- Disconnect electrical connections in antenna cables/wires and remove roof antenna.

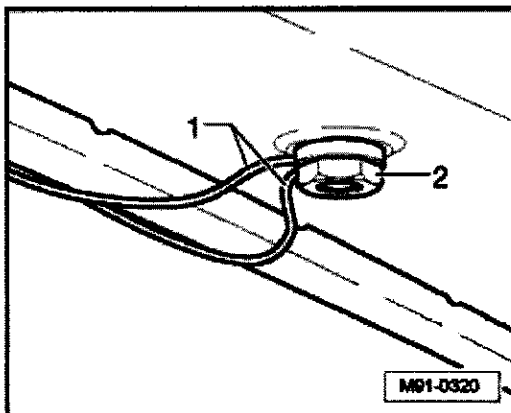
Installing

Install in reverse order of removal, noting the following:

Note:



When installing roof antenna, ensure seal is seated properly. Both guide tabs of seal must align with holes - **arrows** - in antenna base.



When inserting roof antenna, make sure antenna wires - **1** - are routed correctly through the wire pass-through in mounting nut - **2** - .

Antenna cables and connectors, replacing

Detailed instructions for antenna cable/connector replacement

⇒ Repair Manual, Electrical Equipment, Repair Group 97, Antenna cables and connectors, replacing