



**Installation Instructions**

Date: April 2007  
Order No.: P-I-82.60/466  
Supersedes:  
Group: 82

**SUBJECT: MODEL 211.026/056/070/076/083/087 (Up to chassis end number A775856 or Up to chassis end number X186330 or With option code 413 [Panoramic Sunroof])  
MODEL YEAR 2006  
SATELLITE RADIO INSTALLATION**

*We are interested in your comments and suggestions—please email them to:*  
[StarTekInfo@MBUSA.com](mailto:StarTekInfo@MBUSA.com)

**⚠ WARNING**

**Do not disconnect the negative battery cable. Extensive reprogramming requirements are otherwise necessary. Wiring harnesses are therefore electrically active.  
Severe vehicle damage, personal injury, or death from electrical shock could result.  
Exercise extreme caution while executing these installation instructions. Keep the ignition and radio powered OFF through the final test.**

**Notes on MOST optical fibers**

- Optical fibers damage easily—handle optical fibers with care to prevent cuts, nicks, abrasions, and crushing.
- Optical fiber “ring configurations” must form a closed loop to function (i.e. couple the input of a component with the output of the preceding component).
- Identify MOST optical fibers by their orange, semi-rigid insulation.
- Electromagnetic interference (EMI) from bundled vehicle electrical harnesses does not affect optical fibers.

**NOTICE!**

**Incorrect installation of connectors can result in damaged, bent pins.  
Damaged, bent pins will result in component malfunction or failure.  
Inspect connectors before and after installation.**

This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Records.

## A. Installation preparation

1. Read these installation instructions in their entirety before proceeding.
2. Unpack and compare the installation kit contents against the list under Parts Information—Section K., page 12.
3. Remove the trunk lid trim.
  - See *WIS* document AR68.30-P-8150T, “Remove/install trunk lid trim”
4. Remove the right side trim panel in the trunk.
  - See *WIS* document AR68.30-P-4800T, “Remove/install side trim panel in trunk” MODEL 211.0 except CODE (287a) Through-loading feature
  - See *WIS* document AR68.30-P-4800TA, “Remove/install side trim panel in trunk” MODEL 211.0 with CODE (287a) Through-loading feature
5. Cover the trunk floor to catch debris from drilling.

## B. Drilling the hole in the trunk lid for the 2<sup>nd</sup> Generation SDARS antenna

1. Measure and mark (Arrow, Figure 1) the trunk lid underside at the center of the recessed hole in the reinforcement panel.
2. Apply masking tape covering an area approximately 8 in. x 8 in. on the trunk lid exterior where the antenna will mount.
3. From the trunk lid underside, drill a 3 mm diameter pilot hole at the measured mark in the recessed hole in the trunk reinforcement panel.

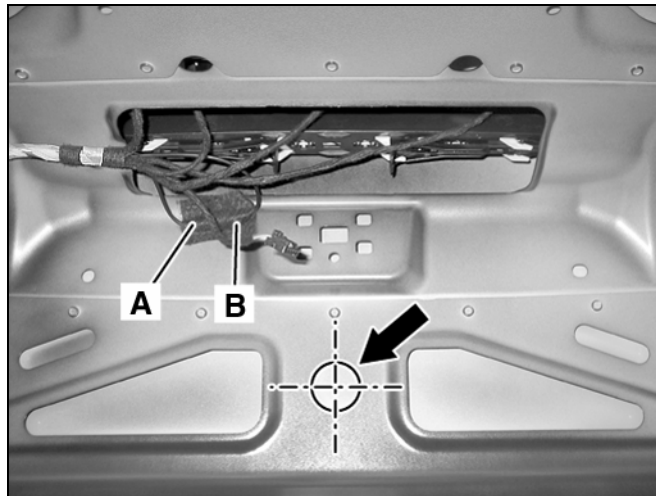


Figure 1

P82.60-4399-01



### CAUTION

Drilling metal can cause airborne metal debris.

Airborne metal debris can cause serious injury to the eyes.

Use protective eyewear.

### NOTICE!

Improper or careless drilling can damage metal surfaces.

Paint or body damage to the trunk lid can result.

Exercise care and accuracy when drilling.

4. Drill the 3 mm pilot hole to an enlarged 6 mm diameter pilot hole.
5. Drill the 6 mm pilot hole to a 14 mm diameter hole using a UniBit®.

### NOTICE!

Using a hole saw is not suitable for drilling the hole in the trunk lid.

Using a hole saw will damage the trunk lid.

Do not use a hole saw to drill the trunk lid.

6. Remove the burrs around the hole edge and carefully clean away the metal debris from the trunk lid.
7. Remove the tape from the trunk lid and the cover with debris from the trunk floor.
8. Thoroughly coat the 14 mm diameter hole edge with primer and follow the approved manufacturer's recommended drying time.

### C. Installing the 2<sup>nd</sup> Generation SDARS antenna

1. Loosen the T25 Torx screw (A, Figure 2) in the antenna sleeve.
2. Feed the antenna lead (B, Figure 2), from the top side of the trunk lid, through the 14 mm hole.
3. Carefully insert the SDARS antenna sleeve into the 14mm hole until it audibly engages.

**NOTICE!**

**Applying force to body panels can result in damage.**

**Excessive force will dent the trunk lid.**

**Do not use excessive force when inserting antenna sleeve into the 14 mm hole.**

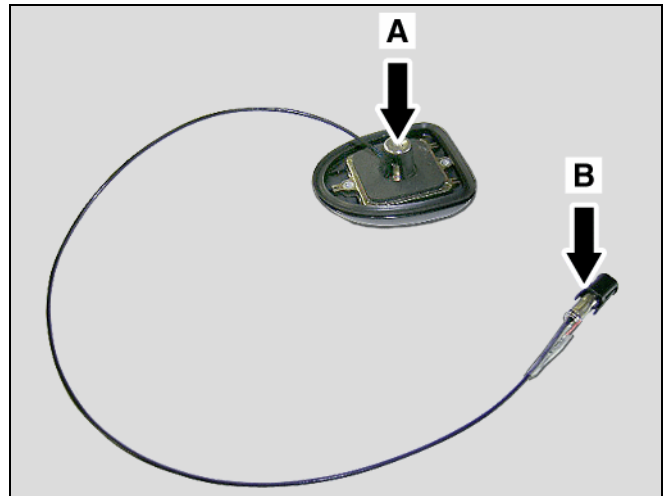


Figure 2

P82.60-5029-71

4. Align the SDARS antenna straight with the vertical end (A, Figure 3) facing the vehicle front and the beveled end (B, Figure 3) the vehicle rear.
5. Apply light downward pressure to the SDARS antenna so the gasket fully seats flush against the trunk lid.

**NOTICE!**

**Applying force to body panels can result in damage.**

**Excessive force will dent the trunk lid.**

**Do not use excessive force when seating the antenna gasket to the trunk lid.**

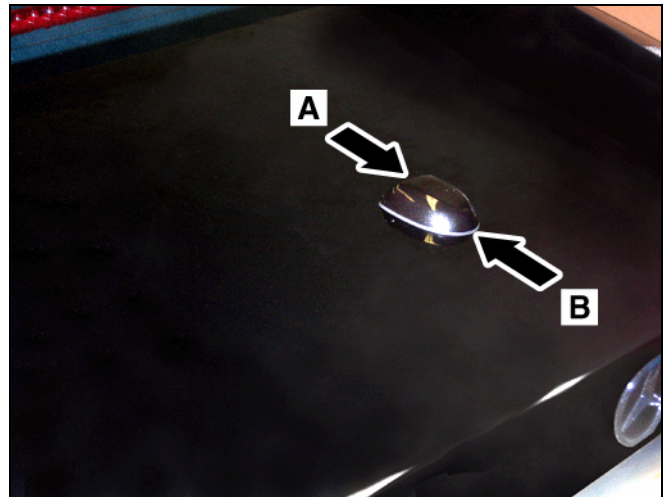


Figure 3

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6. Tighten, but do not over tighten, the T25 Torx screw (A, Figure 2) in the SDARS antenna sleeve while holding the antenna from above to prevent it from turning.
7. Peel back the felt tape (Figure 4) from the trunk lid underside to expose the preinstalled antenna leads.

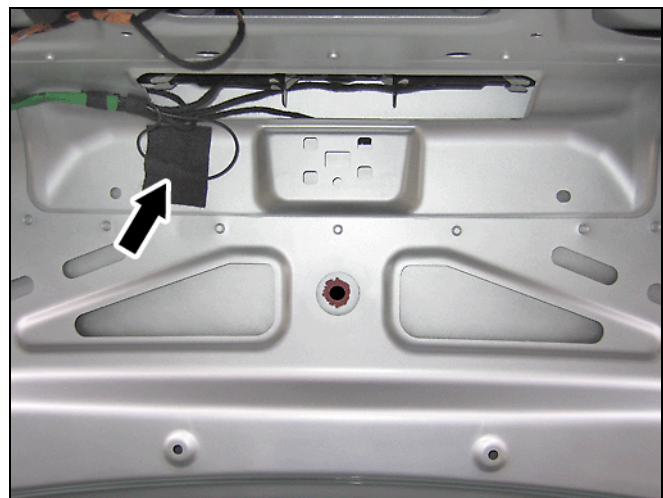


Figure 4

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8. Connect the SDARS antenna lead (A, Figure 5) to the preinstalled antenna male lead (B, Figure 5).

**Note:** Make sure the connector locks into the plastic connector lock.

**Note:** There is no use for the preinstalled antenna female lead (C, Figure 5) with the 2<sup>nd</sup> Generation antenna.

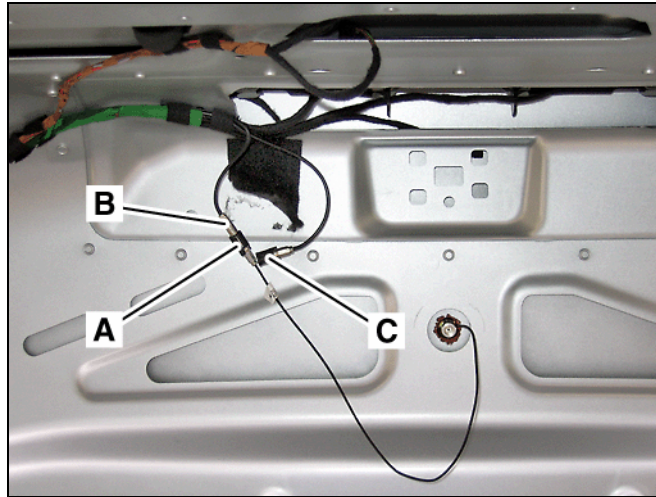


Figure 5

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9. Secure the coupled antenna leads, unused antenna connector, and loose cabling to the trunk lid underside with felt tape (Figure 6).

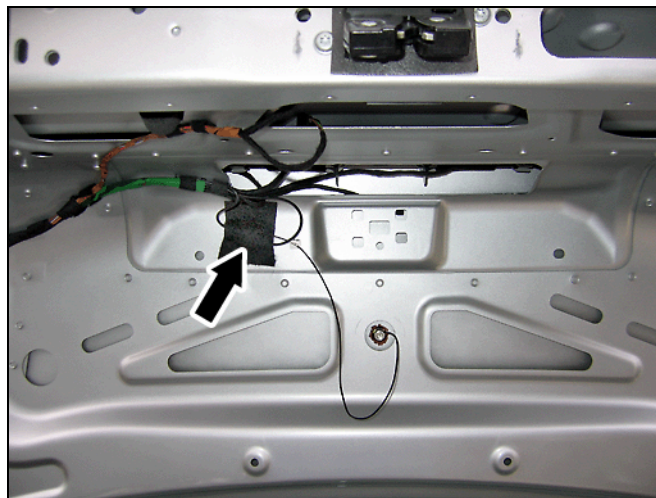


Figure 6

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#### D. Mounting the SDARS control module to the bracket

1. Mount the SDARS control module (N87/5, Figure 7) to the bracket (5, Figure 7) with the three kit-included M5 hex nuts (Arrows, Figure 7).

**Note:** Position the SDARS control module so the connector jacks face the longest arm of the bracket (Figure 7).

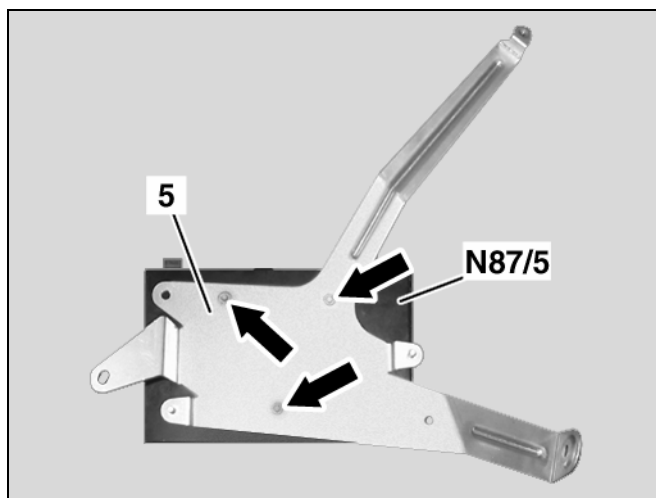


Figure 7

P82.60-4376-01



2. On Model 211.076 (E55 AMG), insert the anchor of the wire tie (Arrow, Figure 8) into the predrilled hole in the SDARS control module bracket (A, Figure 8).
3. Place felt tape (B, Figure 8) over the bottom side of the bracket assembly.
4. Proceed to **Section E** if the vehicle is equipped with level control; proceed to **Section F** otherwise.

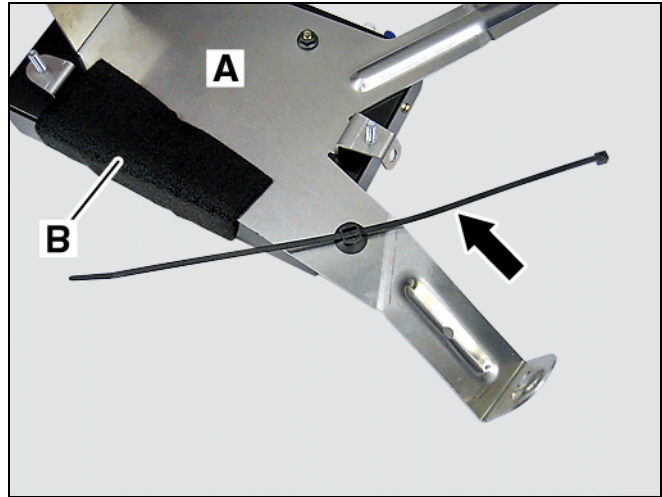


Figure 8

P82.60-4623-71

### E. Installing the SDARS control module bracket assembly (with vehicle level control)

1. Remove the air reservoir bracket assembly by removing the four bolts (Arrows, Figure 9) securing the bracket.
2. Without disconnecting the air line (A, Figure 9), set aside the air reservoir bracket assembly to allow access to the exposed right side of the trunk.

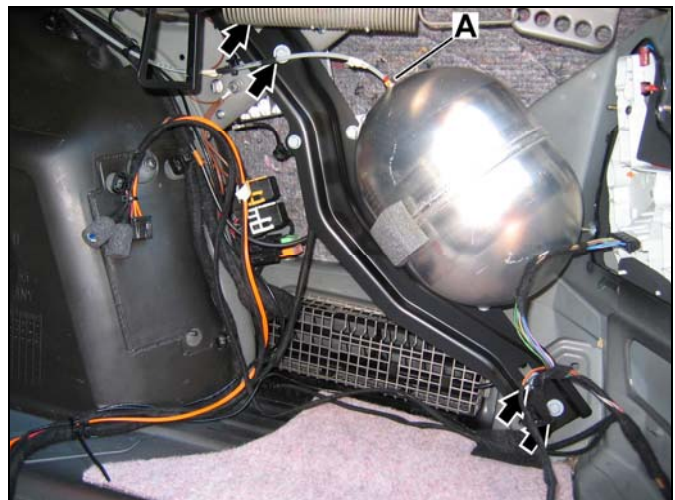


Figure 9

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3. Find, taped to the vehicle harness in the exposed right side of the trunk, the:
  - SDARS power supply/MOST connector (A, Figure 10)
  - SDARS antenna leads (B, Figure 10)
4. Fold back the foam sleeves (B, Figure 10) covering the antenna connectors.
5. Remove the wire tie anchor from the lower mounting stud (C, Figure 10) by unscrewing it.
6. Remove the nut (D, Figure 10) and ground cable (E, Figure 10) from the upper mounting stud.

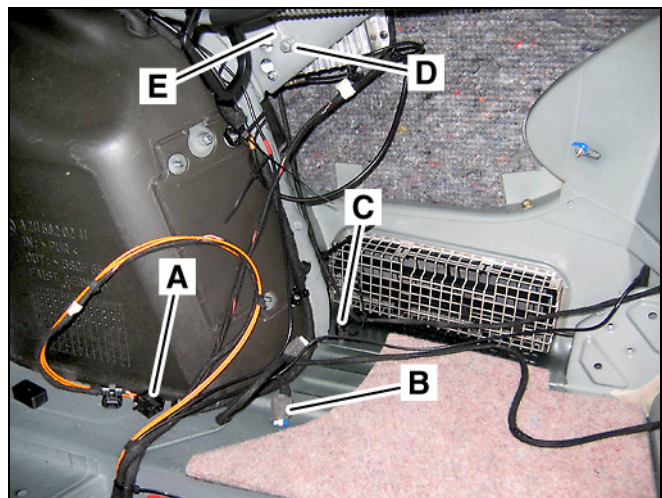
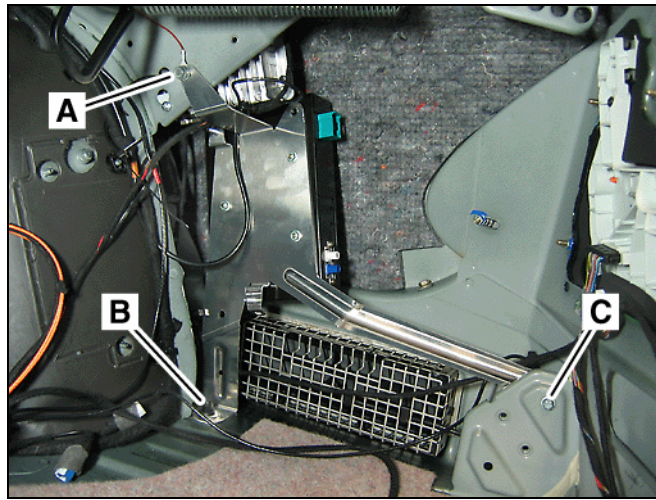


Figure 10

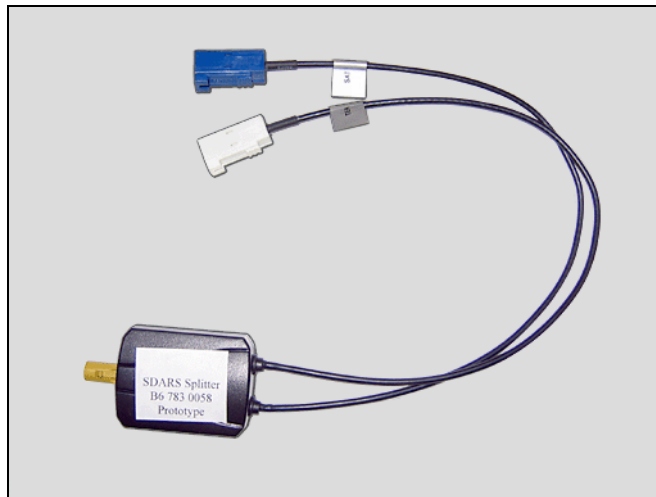
P82.60-5438-71

7. Install the SDARS control module bracket assembly:
  - a. Use the previously removed nut (A, Figure 11) to fasten the ground cable and upper arm of the SDARS control module bracket to the upper mounting stud.
  - b. Use the kit-included plastic nut (B, Figure 11) to fasten the lower arm of the SDARS control module bracket to the lower mounting stud.
  - c. Use the kit-included Torx bolt (C, Figure 11) to fasten the rear arm of the SDARS control module bracket to the body reinforcement rib.
  
8. Identify the SDARS splitter (Figure 12) in the kit.



**Figure 11**

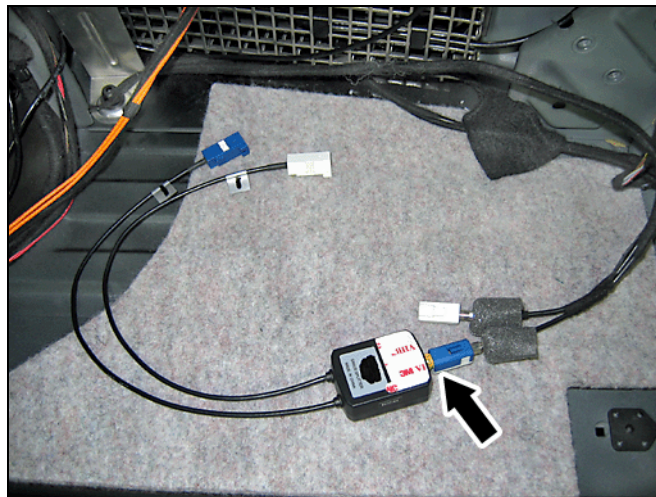
P82.60-5439-71



**Figure 12**

P82.60-5048-71

9. Connect the blue antenna connector from the preinstalled antenna leads on the exposed right side of the trunk to the jack of the SDARS splitter (Figure 13).



**Figure 13**

P82.60-5049-71



10. Peel off the protective backing from the adhesive side of the SDARS splitter and affix it to the face of the bracket for the SDARS control module (Arrows, Figure 14).
11. Connect the SDARS antenna splitter leads to the like-color jacks on the SDARS control module (A, Figure 14).
12. Connect the SDARS power supply/MOST connector (B, Figure 14) to the SDARS control module.
13. Secure loose power supply, MOST, and antenna cabling with wire ties to prevent chafing against sharp edges.

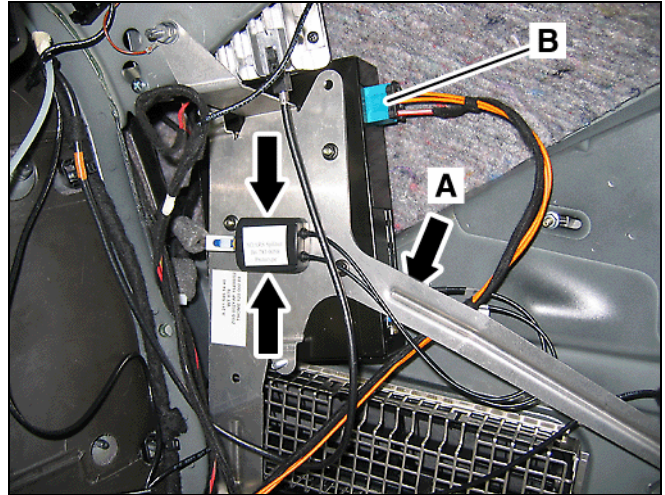


Figure 14

P82.60-5440-71

14. On Model 211.076 (E55 AMG):
  - Secure the wiring harness (A, Figure 15) for the fuel pump relay with the anchored wire tie (Arrow, Figure 15) attached to the SDARS control module bracket.

**Note:** Make sure the wiring harness for the fuel pump relay clears the bracket edges.

15. Reinstall the air reservoir bracket assembly using the four previously removed bolts.

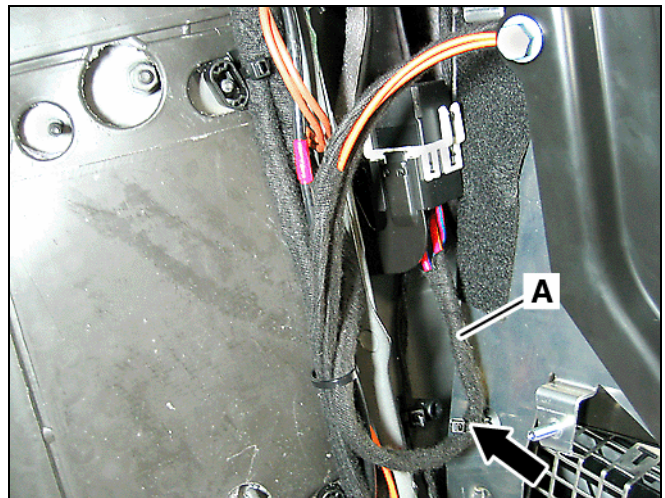


Figure 15

P82.60-4624-71

#### F. Installing the SDARS control module bracket assembly (without vehicle level control)

1. Find, taped to the vehicle harness in the exposed right side of the trunk, the:
  - SDARS power supply/MOST connector (A, Figure 16)
  - SDARS antenna leads (B, Figure 16)
2. Fold back the foam sleeves (B, Figure 16) covering the antenna connectors.
3. Remove the wire tie anchor from the lower mounting stud (C, Figure 16) by unscrewing it.
4. Remove the nut (D, Figure 16) and ground cable (E, Figure 16) from the upper mounting stud.

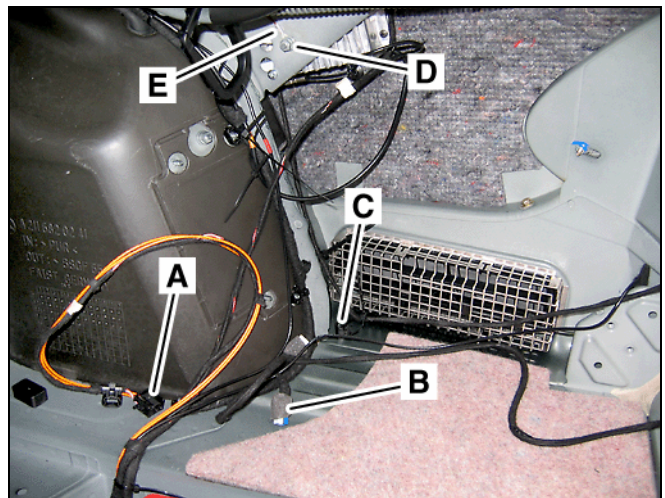
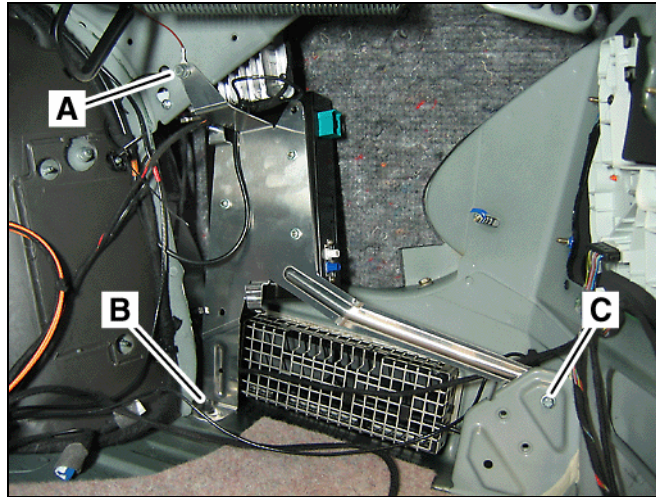


Figure 16

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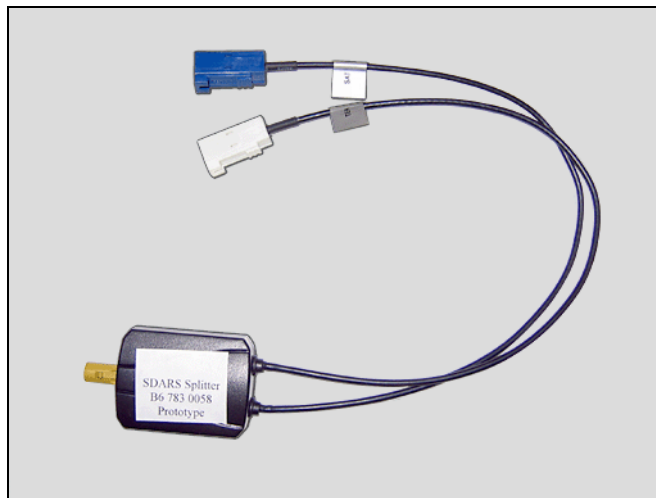
5. Install the SDARS control module bracket assembly:
  - a. Use the previously removed nut (A, Figure 17) to fasten the ground cable and upper arm of the SDARS control module bracket to the upper mounting stud.
  - b. Use the kit-included plastic nut (B, Figure 17) to fasten the lower arm of the SDARS control module bracket to the lower mounting stud.
  - c. Use the kit-included Torx bolt (C, Figure 17) to fasten the rear arm of the SDARS control module bracket to the body reinforcement rib.



**Figure 17**

P82.60-5439-71

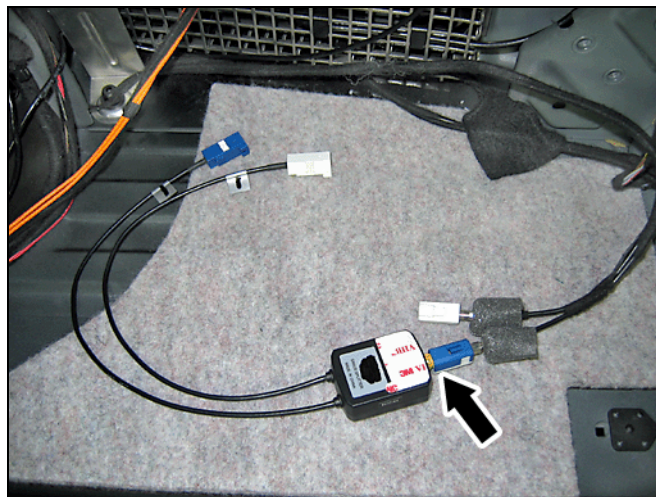
6. Identify the SDARS splitter (Figure 18) in the kit.



**Figure 18**

P82.60-5048-71

7. Connect the blue antenna connector from the preinstalled antenna leads on the exposed right side of the trunk to the jack of the SDARS splitter (Figure 19).



**Figure 19**

P82.60-5049-71



8. Peel off the protective backing from the adhesive side of the SDARS splitter and affix it to the face of the bracket for the SDARS control module (Arrows, Figure 20).
9. Connect the SDARS antenna splitter leads to the like-color jacks on the SDARS control module (A, Figure 20).
10. Connect the SDARS power supply/MOST connector (B, Figure 20) to the SDARS control module.
11. Secure loose power supply, MOST, and antenna cabling with wire ties to prevent chafing against sharp edges.

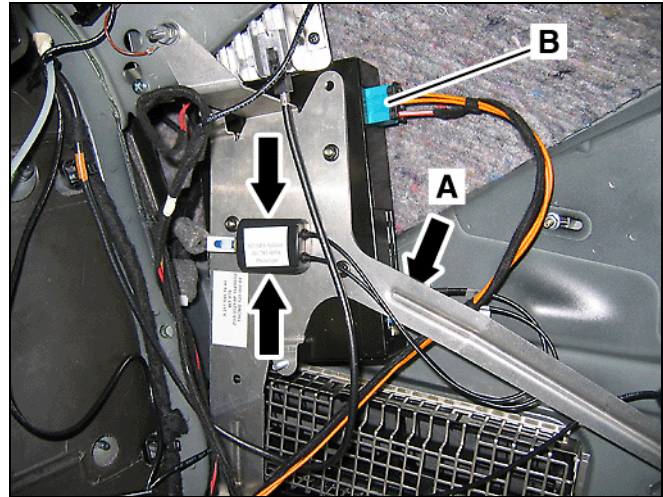


Figure 20

P82.60-5440-71

12. On Model 211.076 (E55 AMG):
  - Secure the wiring harness (A, Figure 21) for the fuel pump relay with the anchored wire tie (Arrow, Figure 21) attached to the SDARS control module bracket.

**Note:** Make sure the wiring harness for the fuel pump relay clears the bracket edges.

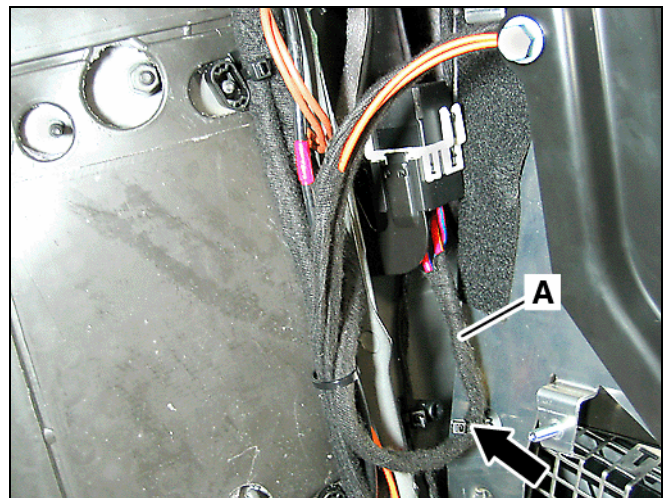


Figure 21

P82.60-4624-71

## G. Configuring the MOST optical fiber ring

### NOTICE!

**Improper handling of optical fibers can damage the fibers.**

**Damaged optical fibers can cause component malfunction.**

**Handle optical fibers with care to prevent cuts, nicks, abrasions, and crushing.**

1. In the electronics compartment exposed by the removed carrier plate cover, find the MOST optical fiber couplings (Arrow, Figure 22).
2. Configure the MOST optical fiber ring according to Figure 23.

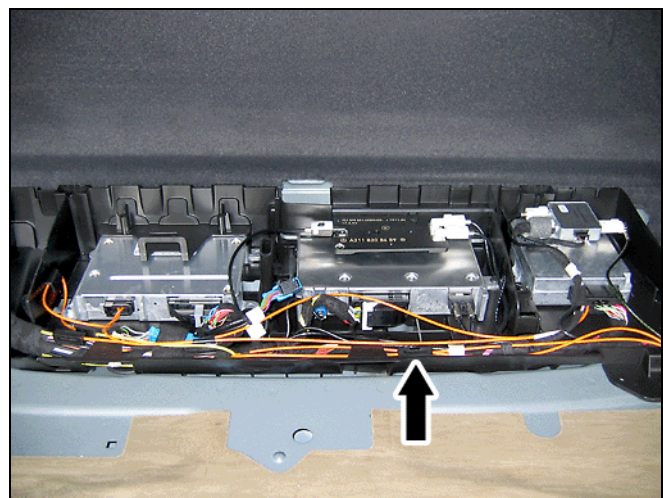


Figure 22

P82.60-5441-71

## H. Version coding

1. Connect Star Diagnosis to the vehicle.
2. Set the MOST ring configuration to match Figure 23 via path:  
**Control units > Information and communication > Audio, video, navigation, and telematics > AGW > Retrofitting of MOST components or iPod> Retrofitting of MOST components > Select “F2” to restart ring > Select “F2” to view actual configuration of ring > Select “F2” to proceed > Select “YES” to write the configuration > Select “F2” to erase fault memory**

**Note:** The MOST ring configuration in Figure 23 is an example of a configuration including all possible components. Some installations will not include all the components shown in the example. If a component is not present, connect the preceding component to the component following the one not present.

### **NOTICE!**

**Match the MOST ring configuration to Figure 23.**

**Failure to have the configuration match Figure 23 will result in erroneous system operation and/or intermittent malfunctioning of some or all components in the ring.**

**Do not alter the configuration in Figure 23 to match the vehicle configuration.**

3. Check the DTC memory of all installed components and the head unit. Investigate and identify any present DTCs. Once identified, correct the source of the DTCs and clear the DTC memory.

**Note:** Powering up the newly installed system prior to version coding will set errors in the MOST ring configuration. Ignore these errors during the initial DTC check. If the DTCs return in the next step, a configuration error is present. Locate and correct the error.

4. Confirm no new DTCs are present in the MOST system group.

## I. MOST ring configuration

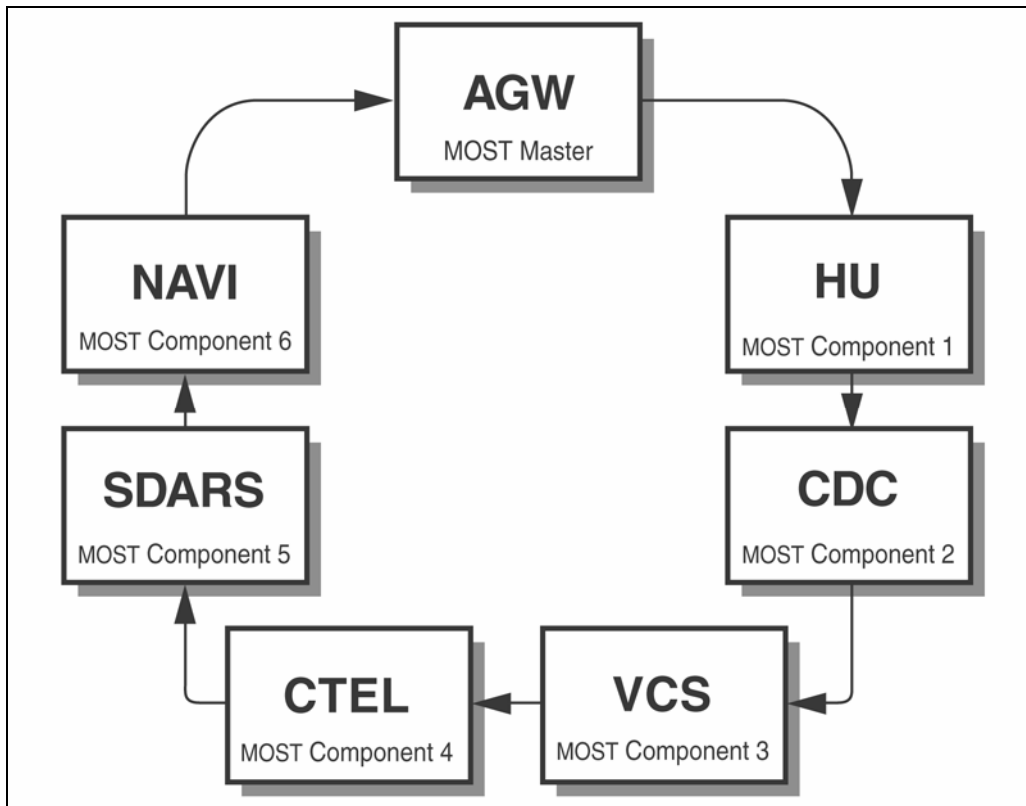


Figure 23

P82.60-5442-11

## J. Final assembly and function testing

1. Verify proper satellite radio operation per the following checklist.
  - ✓ Audio is functional (radio and CD changer)
  - ✓ Satellite radio display is present on the head unit
  - ✓ SIRIUS preview message is heard when "Satellite Function" is selected on the head unit. (The vehicle must be in a geographic area that allows reception.)
2. Reinstall the right side trim panel in the trunk.
  - See *WIS* document AR68.30-P-4800T, "Remove/install side trim panel in trunk" MODEL 211.0 except CODE (287a) Through-loading feature
  - See *WIS* document AR68.30-P-4800TA, "Remove/install side trim panel in trunk" MODEL 211.0 with CODE (287a) Through-loading feature
3. Reinstall the trunk lid trim.
  - See *WIS* document AR68.30-P-8150T, "Remove/install trunk lid trim"



## K. Parts Information

Qty.	Part Name	Part Number/Exchange
1	<b>Installation kit, SDARS (E-Class sedan)</b>	<b>B6 783 0069</b>
	<b>Kit contents:</b>	
1	Bracket, SDARS	B6 783 0017
1	Nut, plastic	A 003 990 02 51
1	Wire tie, anchored	A 005 997 62 90
1	Edge guard, wiring harness	A 211 546 00 78
1	Screw, M6	N 910143 006000
3	Nut, M5 x 8	N 913023 005002
	<b>Separate order:</b>	
1	Trunk panel, right side	Determine specific trim via EPC
1	Felt, 70 mm x 100 mm	A 000 983 89 10
1	Primer	A 000 986 06 50
	<b>Separate order:</b>	
1	Control module, SDARS	B6 783 0085
1	Splitter, SDARS	B6 783 0058
1	Antenna, Black (040)	B6 783 0080
	<b><u>Or</u></b>	
1	Antenna, Pewter (723)	B6 783 0081
	<b><u>Or</u></b>	
1	Antenna, Iridium Silver (775)	B6 783 0082
	<b><u>Or</u></b>	
1	Antenna, Alabaster White (960)	B6 783 0083
	<b><u>Or</u></b>	
1	Antenna, primer*	B6 783 0084

\*Follow the manufacturer recommended painting procedure.

**Note:** This installation, and any subsequent related installation and/or workmanship issues, cannot be claimed under warranty.