

2007-08 ACCESSORIES AND BODY, CAB**Audio, Navigation And Anti-Theft - Repair Instructions - X5****11 MONO RADIO****65 11 072 REMOVING AND INSTALLING/REPLACING CD CHANGER**

Operation is identical to:

Removing and installing/replacing DVD changer . See 65 11 075 REMOVING AND INSTALLING/REPLACING DVD CHANGER.

65 11 075 REMOVING AND INSTALLING/REPLACING DVD CHANGER

NOTE: Follow instructions for handling optical fibers. See 61 00... NOTES ON HANDLING OPTICAL FIBERS .

Open glovebox.

Release trim (1) at clips (2).

Installation:

Replace damaged clips (2):

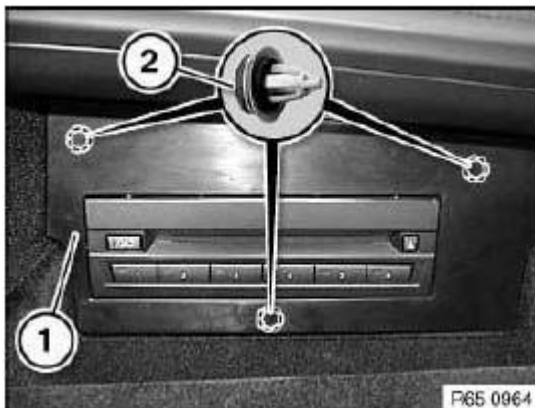


Fig. 1: Identifying Clips

Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1).

Pull out DVD changer (2) and disconnect associated plug connection.

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5** .

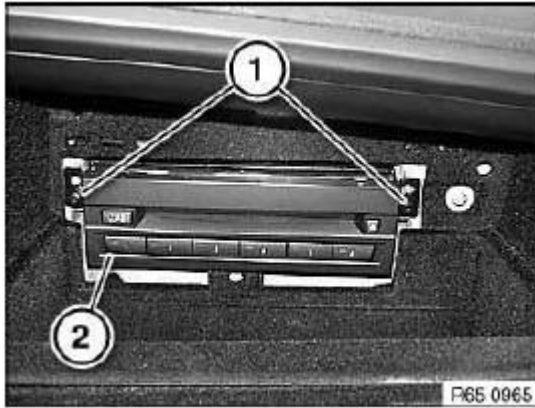


Fig. 2: Identifying DVD Changer With Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release screws (1) on both sides and remove bracket (2).

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5**.

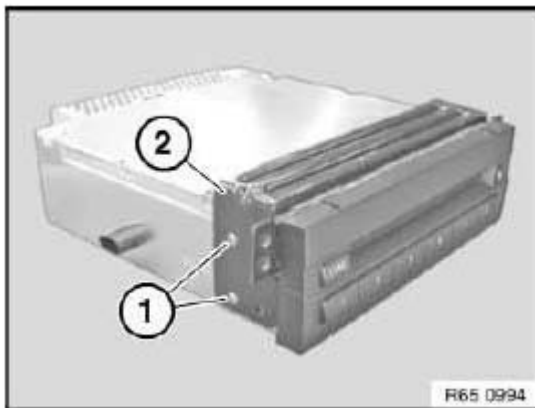


Fig. 3: Identifying DVD Changer Bracket With Screws
Courtesy of BMW OF NORTH AMERICA, INC.

65 12 265 REMOVING AND INSTALLING/REPLACING DVD PLAYER IN REAR CONSOLE

Necessary preliminary tasks:

- Remove rear center console trim . See **51 16 163 REMOVING AND INSTALLING/REPLACING REAR CENTRE CONSOLE TRIM** .

Release screws (1) on both sides.

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5**.

Lift out mounting (2) on both sides over catch (3) and feed out DVD player (4).

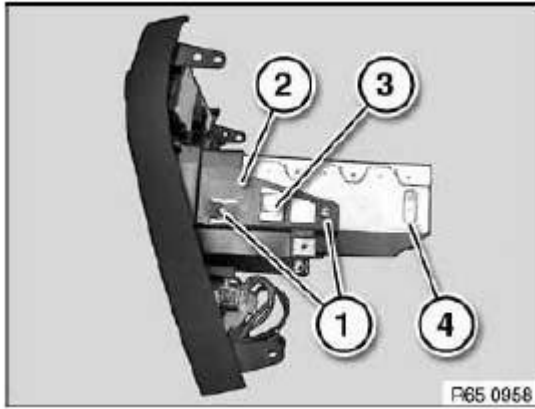


Fig. 4: Identifying DVD Player Bracket
Courtesy of BMW OF NORTH AMERICA, INC.

12 STEREO RADIO, AMPLIFIER

65 12 050 REMOVING AND INSTALLING/REPLACING LEFT OR RIGHT CENTRAL BASS SPEAKER

Necessary preliminary tasks:

- Remove front seat
- Lay floor carpet in working area to one side

Release screws (1) and remove trim (2).

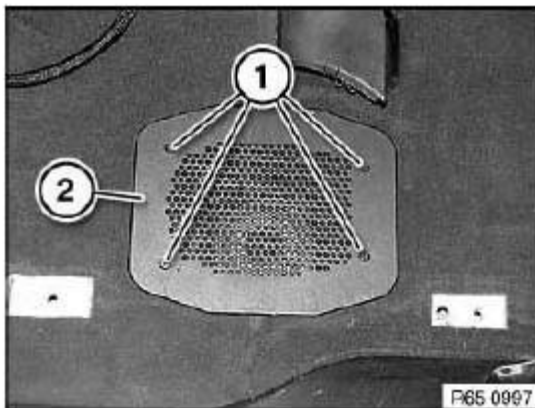


Fig. 5: Identifying Trim With Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

Release screws (2) and feed out central bass speaker.

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5**.

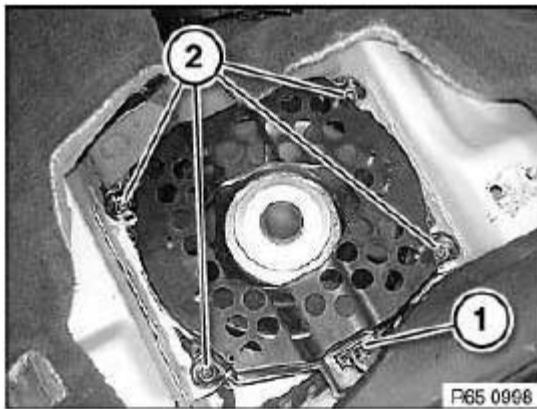


Fig. 6: Identifying Speaker Screws

Courtesy of BMW OF NORTH AMERICA, INC.

65 12 071 REMOVING AND INSTALLING/REPLACING AMPLIFIER (HI-FI SYSTEM)

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection). See **61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE)**.

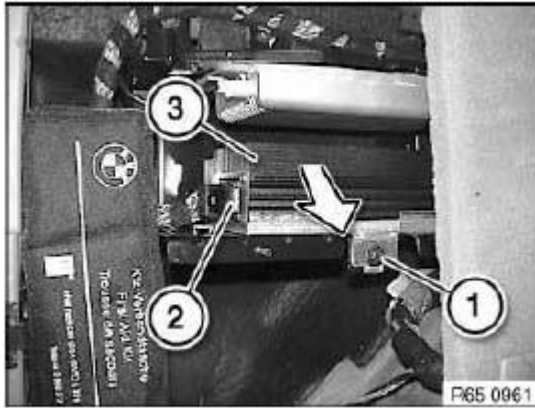
NOTE: Comply with notes and instructions on handling optical waveguides. See **61 00 ... NOTES ON HANDLING OPTICAL FIBERS**.

Necessary preliminary tasks:

- Disconnect battery negative lead . See **12 00... INSTRUCTIONS FOR DISCONNECTING AND CONNECTING BATTERY** .
- Remove flap in luggage compartment panel on left . See **51 47 172 REMOVING AND INSTALLING/REPLACING FLAP IN LUGGAGE COMPARTMENT TRIM, LEFT OR RIGHT** .

Release screw (1).

Disconnect plug connection (2) and slide amplifier (3) in direction of arrow out of mounting.

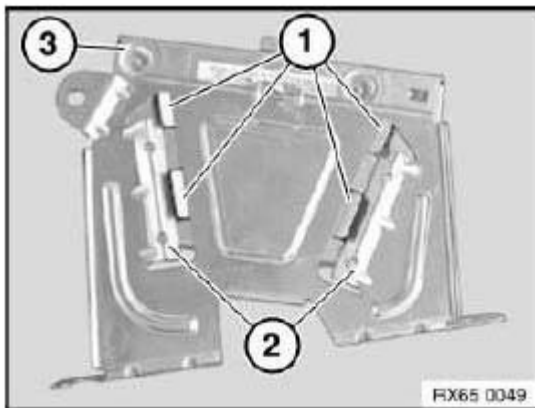
**Fig. 7: Sliding Amplifier**

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Lugs (1) must be correctly slid into guide (2).

Check that amplifier (3) is securely seated.

**Fig. 8: Identifying Amplifier And Lugs With Guide**

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out programming/coding. See VEHICLE PROGRAMMING AND CODING .

65 12 072 REMOVING AND INSTALLING/REPLACING AMPLIFIER (TOP HIFI SYSTEM)

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection). See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE) .

NOTE: Comply with notes and instructions on handling optical waveguides. See 61 00 ... NOTES ON HANDLING OPTICAL FIBERS .

Necessary preliminary tasks:

- Disconnect battery negative lead . See 12 00... INSTRUCTIONS FOR DISCONNECTING AND CONNECTING BATTERY .
- Remove flap in luggage compartment panel on left . See 51 47 172 REMOVING AND INSTALLING/REPLACING FLAP IN LUGGAGE COMPARTMENT TRIM, LEFT OR RIGHT .

Disconnect plug connection (1).

Release screw (2) and slide amplifier (3) in direction of arrow out of mounting.

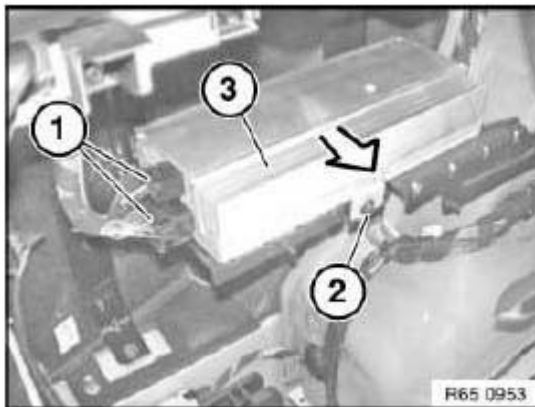


Fig. 9: Sliding Amplifier

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Lugs (1) must be correctly slid into guide (2).

Check that amplifier (3) is securely seated.

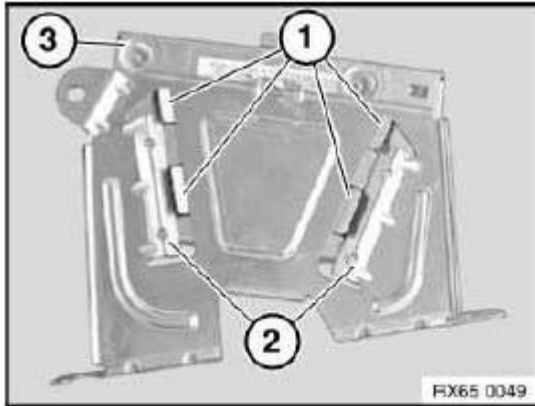


Fig. 10: Identifying Amplifier And Lugs With Guide
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out programming/coding. See VEHICLE PROGRAMMING AND CODING .

65 12 265 REMOVING AND INSTALLING/REPLACING DVD PLAYER IN REAR CONSOLE

Necessary preliminary tasks:

- Remove rear center console trim . See 51 16 163 REMOVING AND INSTALLING/REPLACING REAR CENTRE CONSOLE TRIM .

Release screws (1) on both sides.

Tightening torque. See AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5 .

Lift out mounting (2) on both sides over catch (3) and feed out DVD player (4).

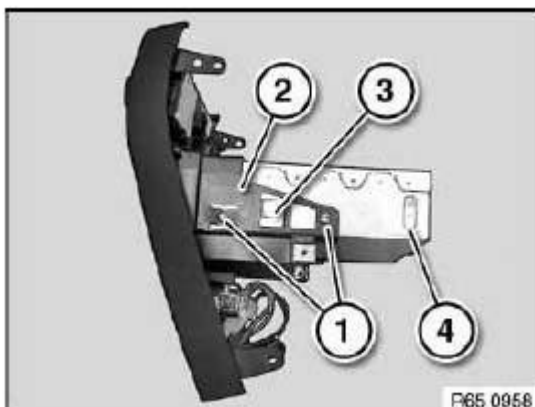


Fig. 11: Identifying DVD Player Bracket
Courtesy of BMW OF NORTH AMERICA, INC.

13 SPEAKER AND COVER

65 13 050 REMOVING AND INSTALLING/REPLACING SPEAKER (TWEETER, FRONT DOOR)

Necessary preliminary tasks:

- Remove front door trim . See **51 41 000 REMOVING AND INSTALLING LEFT OR RIGHT FRONT DOOR TRIM PANEL** .
- Detach cover on door window frame in front area.

NOTE: For purposes of clarity, illustration shows cover removed on door window frame.

Remove foam wedge (1) from cover on door window frame (2).

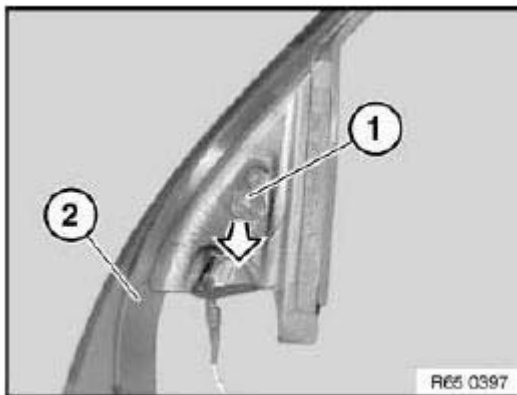


Fig. 12: Removing Foam Wedge From Cover
Courtesy of BMW OF NORTH AMERICA, INC.

Unlock catches (1) and remove speaker (2) from cover on door window frame (3).

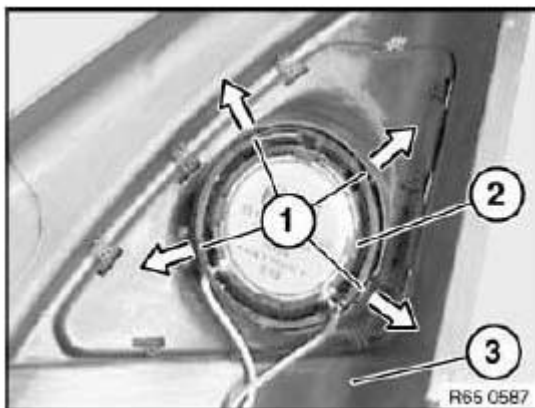


Fig. 13: Removing Speaker From Cover On Door
Courtesy of BMW OF NORTH AMERICA, INC.

65 13 065 REMOVING AND INSTALLING/REPLACING FRONT SPEAKER CARRIER (INSTRUMENT PANEL)

Special tools required:

- 00 9 317

Unclip trim (1) with special tool 00 9 317 from catches.

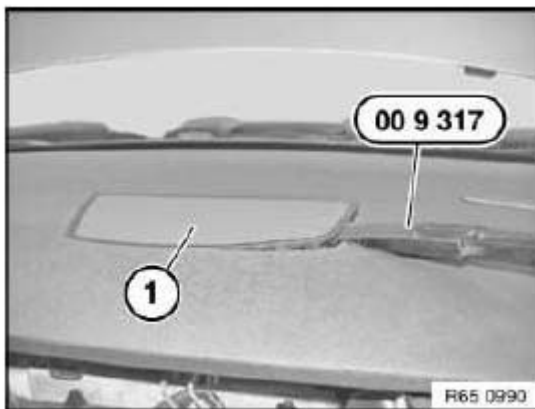


Fig. 14: Identifying Special Tool (00 9 317) On Trim
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

Remove speaker carrier and disconnect associated plug connection.

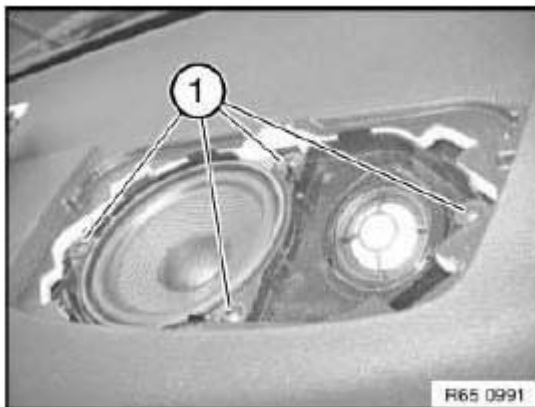


Fig. 15: Identifying Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Retaining lugs (1) must not be damaged

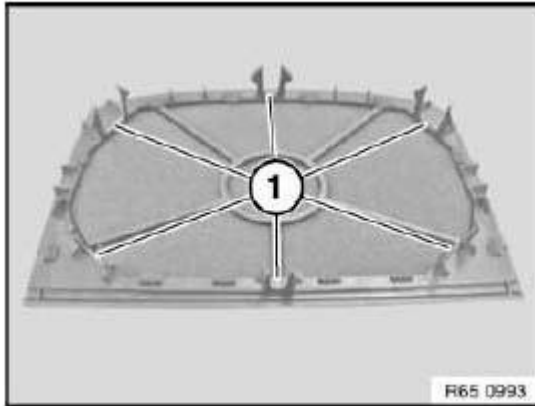


Fig. 16: Identifying Retaining Lugs

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Disconnect plug connection (1) and feed out speaker (2).

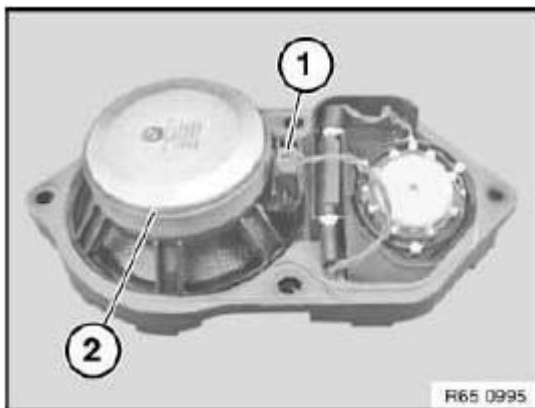


Fig. 17: Identifying Plug Connection And Speaker

Courtesy of BMW OF NORTH AMERICA, INC.

65 13 070 REMOVING AND INSTALLING/REPLACING SPEAKER (MID-RANGE SPEAKER IN DOOR TRIM PANEL AT FRONT)

Necessary preliminary tasks:

- Remove front door trim . See **51 41 000 REMOVING AND INSTALLING LEFT OR RIGHT FRONT DOOR TRIM PANEL** .

Release screws (1) and mid-range speaker.

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5** .

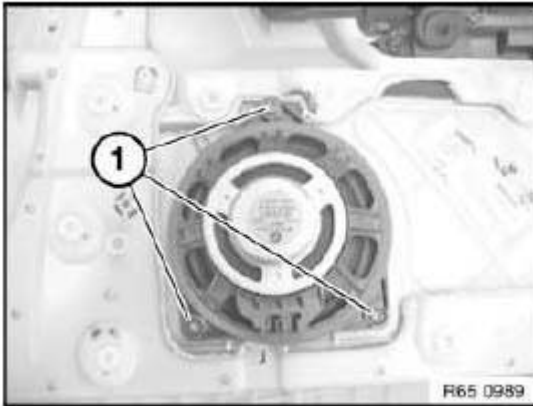


Fig. 18: Identifying Speaker Screws

Courtesy of BMW OF NORTH AMERICA, INC.

65 13 080 REMOVING AND INSTALLING/REPLACING REAR TWEETER (IN DOOR TRIM PANEL)

Necessary preliminary tasks:

- Remove rear door trim panel . See **51 42 ... REMOVING AND INSTALLING/REPLACING SPEAKER TRIM (TWEETER) ON REAR LEFT OR RIGHT DOOR TRIM PANEL** .

Unclip speaker (1) from retaining lugs (2) and remove.

Disconnect associated plug connection.

Installation:

Retaining lugs (2) must not be damaged

Make sure speaker (1) is securely seated.

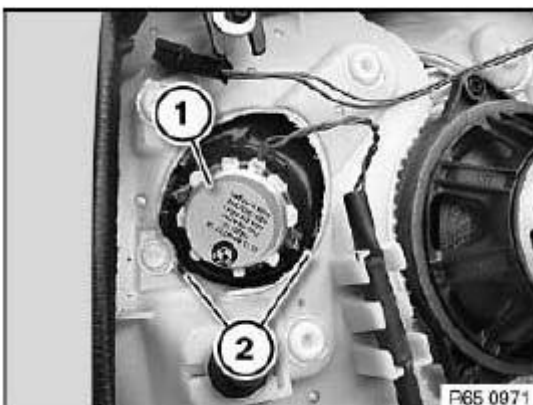


Fig. 19: Identifying Speaker And Retaining Lugs

Courtesy of BMW OF NORTH AMERICA, INC.

65 13 090 REMOVING AND INSTALLING/REPLACING SPEAKER (MID-RANGE SPEAKER, DOOR AT REAR)

Necessary preliminary tasks:

- Remove rear door trim . See **51 42 000 REMOVING AND INSTALLING LEFT OR RIGHT REAR DOOR TRIM PANEL** .

Disconnect plug connection (1) and release screws (2).

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5** .

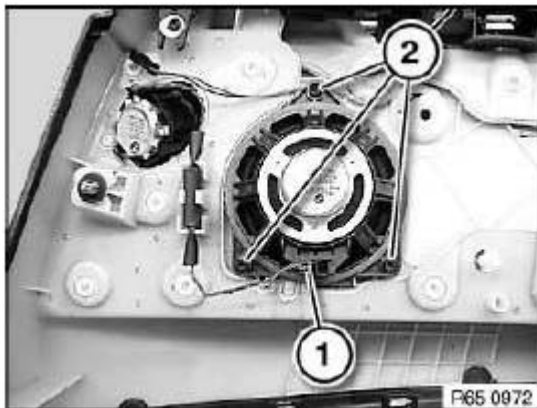


Fig. 20: Identifying Speaker And Screws

Courtesy of BMW OF NORTH AMERICA, INC.

65 13 110 REMOVING AND INSTALLING/REPLACING SPEAKER (MID-RANGE SPEAKER IN D-PILLAR)

Necessary preliminary tasks:

- Remove rear speaker carrier . See **65 13 160 REMOVING AND INSTALLING/REPLACING SPEAKER CARRIER (D-PILLAR)**.

Disconnect plug connection (1).

Release screws (2) and remove speaker (3).

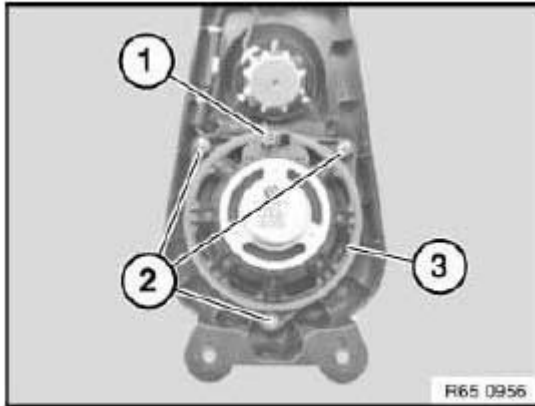


Fig. 21: Identifying Speaker And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

65 13 160 REMOVING AND INSTALLING/REPLACING SPEAKER CARRIER (D-PILLAR)

Necessary preliminary tasks:

- Remove panel for roof pillar at rear . See **51 43 259 REMOVING AND INSTALLING/REPLACING TRIM FOR REAR ROOF PILLAR (D-PILLAR), LEFT OR RIGHT** .

Release screw (1).

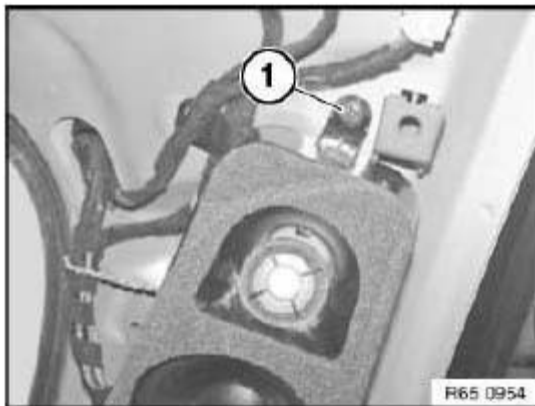


Fig. 22: Identifying Screw
Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1).

Remove speaker carrier (2) and disconnect associated plug connection.

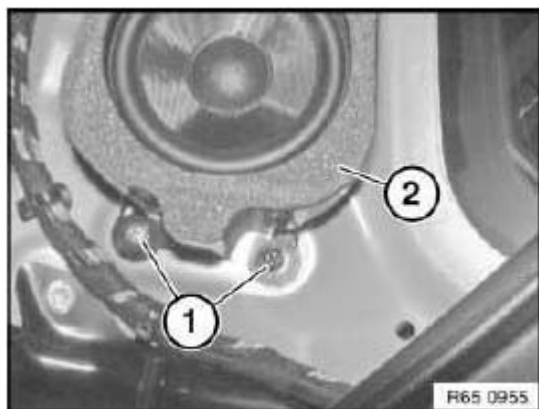


Fig. 23: Identifying Speaker Carrier

Courtesy of BMW OF NORTH AMERICA, INC.

20 AERIAL-ANTENNA

65 20 030 REMOVING AND INSTALLING/REPLACING EMPTY HOUSING FOR ROOF-MOUNTED AERIAL/ANTENNA

Special tools required:

- 65 2 010

WARNING: Danger of injury!

Special tool has sharp edges!

Adapt working height to vehicle height with non-tilting and non-slip platform.

Handle special tool correctly and make sure it is positioned without tilting or slipping on the vehicle.

Risk of damage!

In order to prevent dents in the roof, do not exert any pressure on the roof.

IMPORTANT: Note to customer:

In order to guarantee a permanent connection and adhesive curing:

After bonding the empty housing for the roof-mounted antenna, wait 24 hours before driving the vehicle through a car wash.

NOTE: Clean roof.

Mask roof (2) around empty housing for roof-mounted antenna (3) with yellow plastic adhesive tape (1). To do so, slide plastic adhesive tape under empty housing (3) slightly.

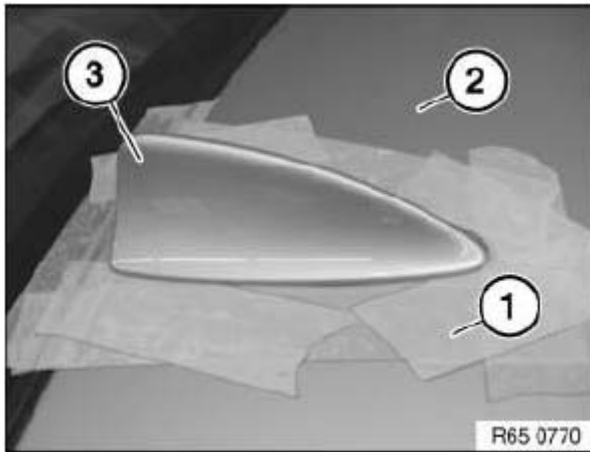


Fig. 24: Sliding Plastic Adhesive Tape Under Empty Housing
Courtesy of BMW OF NORTH AMERICA, INC.

IMPORTANT: Risk of damage!

Make sure your arms do not cross over (1) when holding special tool 65 2 010.

Pull handle must always be ahead of the guiding hand (2).

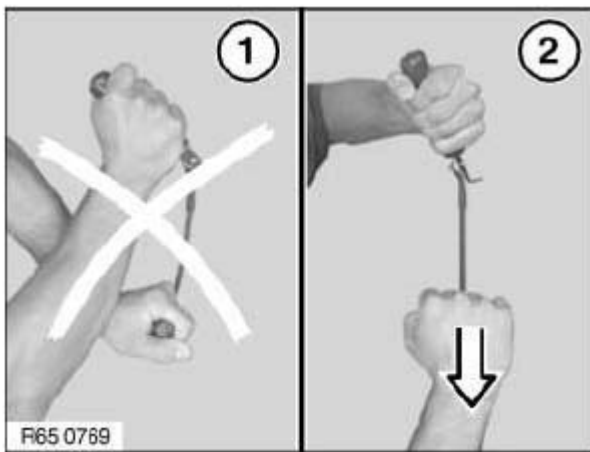


Fig. 25: Pulling Handle
Courtesy of BMW OF NORTH AMERICA, INC.

Cut through adhesive bead all round with special tool 65 2 010.

Pull on handle (1) and align blade on handle (2).

NOTE: Use sharp blades only. Replace blade if necessary.

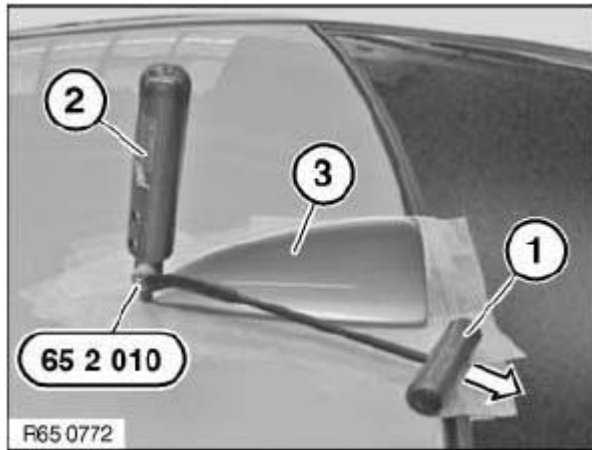


Fig. 26: Pulling On Handle And Aligning Blade On Handle
Courtesy of BMW OF NORTH AMERICA, INC.

Installation

Empty housing for roof-mounted antenna is secured with window glass adhesive. All preparatory operations correspond to the Window cementing instructions.

NOTE: Replace empty housing for roof-mounted antenna is centering pins (1) on empty housing are damaged.
Bonding surface (2) must be clean and free from grease.

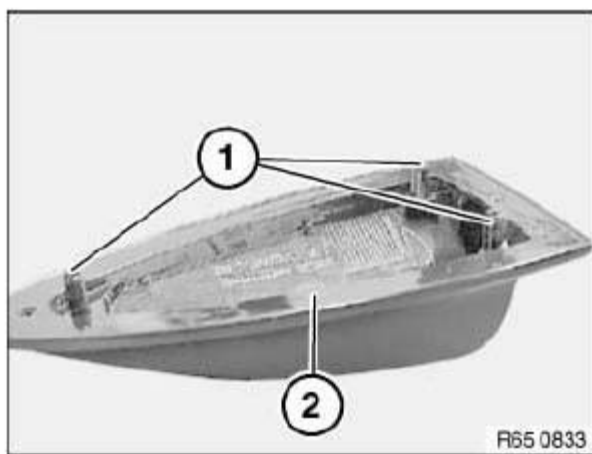


Fig. 27: Identifying Centering Pins On Empty Housing
Courtesy of BMW OF NORTH AMERICA, INC.

Position two spacers (1) on cleaned empty housing.

- A. 10 mm
- B. 14 mm

Position spacer (2) centrally and flush with shoulder of adhesive flange.

IMPORTANT: Use spacers without fail!

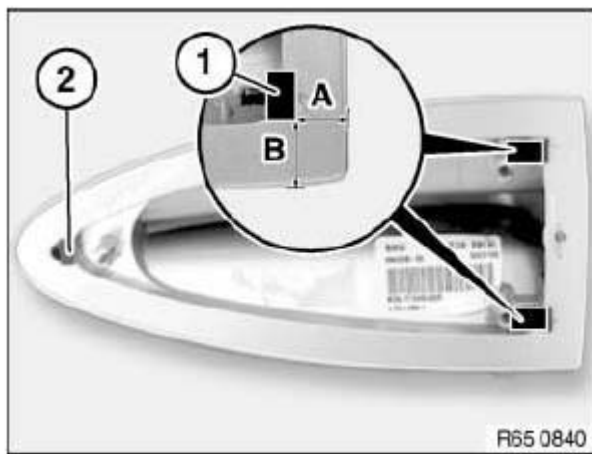


Fig. 28: Identifying Spacer Position

Courtesy of BMW OF NORTH AMERICA, INC.

Apply trace of adhesive bead all round outer contour as follows.

Distance between adhesive bead and edge of aerial/antenna cover:

- A. $6.5 \text{ mm} \pm 1 \text{ mm}$

Start and end of bead trace must have an overlap length of max. 10 mm.

IMPORTANT: To prevent the adhesive from escaping, the adhesive bead diameter must not exceed max. 1.5 mm to 2.5 mm.

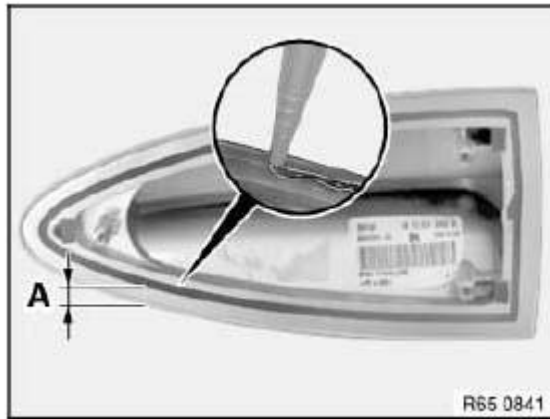


Fig. 29: Identifying Area Applying Trace Of Adhesive Bead
Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: Attach the empty housing coated with adhesive by hand. To spread the adhesive better, move the housing back and forth horizontally slightly when pressing down.
Secure empty housing if necessary with adhesive tape and press down uniformly.
After bonding, leave vehicle to stand for at least 3 hours at room temperature.

65 20 035 REMOVING AND INSTALLING/REPLACING ROOF-MOUNTED AERIAL/ANTENNA

Necessary preliminary tasks:

- Detach empty housing for roof-mounted aerial/antenna

Release screw (1) and feed out roof aerial/antenna (2) towards top.

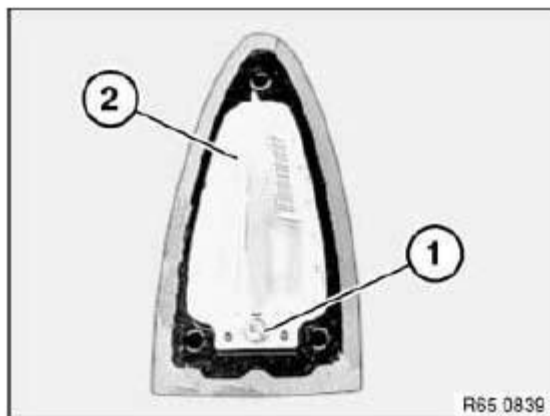


Fig. 30: Identifying Roof Aerial/Antenna
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connections (1) and remove aerial/antenna (2).

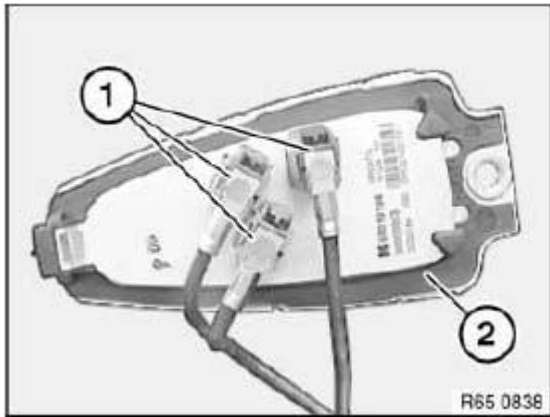


Fig. 31: Identifying Plug Connections And Aerial/Antenna
Courtesy of BMW OF NORTH AMERICA, INC.

65 20 090 REMOVING AND INSTALLING/REPLACING ANTENNA AMPLIFIER (DIVERSITY)

Necessary preliminary tasks:

- Remove rear window frame panel . See **51 49 017 REMOVING AND INSTALLING/REPLACING TRIM PANEL FOR REAR WINDOW FRAME ON (INSIDE) LEFT OR RIGHT .**

Release screws (1).

Disconnect plug connections (2) and remove antenna amplifier.

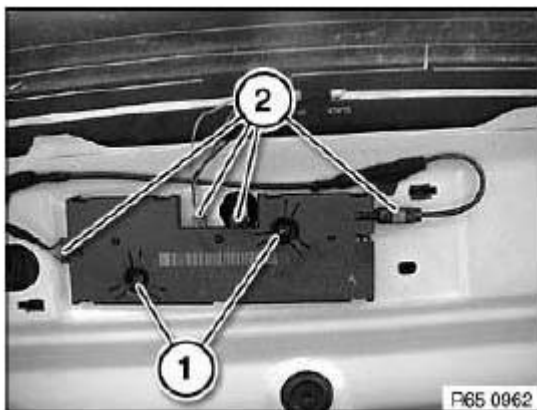


Fig. 32: Identifying Antenna Amplifier Plug Connections
Courtesy of BMW OF NORTH AMERICA, INC.

65 20 150 REMOVING AND INSTALLING/REPLACING BACK - UP AERIAL/ANTENNA

Necessary preliminary tasks:

- Remove left luggage compartment trim panel . See **51 47 151 REMOVING AND INSTALLING/REPLACING LEFT LUGGAGE COMPARTMENT WHEEL ARCH TRIM** or **51 47 151 REMOVING AND INSTALLING/REPLACING LEFT LUGGAGE COMPARTMENT WHEEL ARCH TRIM (WITH 3RD SEAT ROW)** .

Release screws (1).

Remove back-up antenna (2) and disconnect associated plug connection.

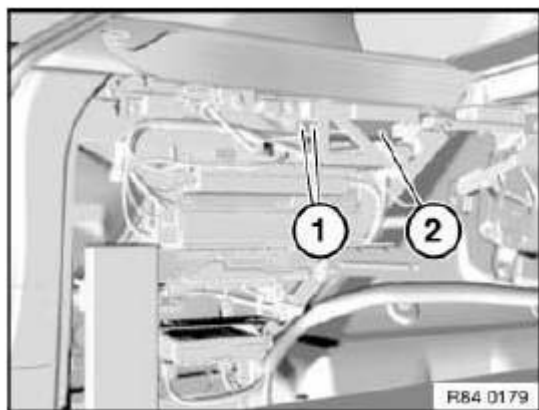


Fig. 33: Identifying Back-Up Antenna

Courtesy of BMW OF NORTH AMERICA, INC.

24 REAR WINDOW AERIAL-ANTENNA

65 24 020 REMOVING AND INSTALLING/REPLACING BLOCKING CIRCUIT (D-PILLAR)

Necessary preliminary tasks:

- Remove rear grab handles . See **51 16 450 REMOVING AND INSTALLING/REPLACING REAR LEFT/RIGHT GRAB HANDLE** .
- Remove both rest side sections on rear seat . See **52 26 008 REMOVING AND INSTALLING/REPLACING LEFT/RIGHT SIDES OF BACKREST ON REAR SEAT BACKREST (THROUGH-LOADING)** .
- Remove C-pillar trim panel on left and right. See **51 43 251 REMOVING AND INSTALLING/REPLACING TRIM PANEL FOR LEFT OR RIGHT REAR ROOF PILLAR (C - PILLAR)** .
- Remove panel for roof pillar at rear . See **51 43 259 REMOVING AND INSTALLING/REPLACING TRIM FOR REAR ROOF PILLAR (D-PILLAR), LEFT OR RIGHT** .
- Detach roofliner mocket in working area
- Partially detach roofliner in working area

Disconnect plug connection (1).

Unfasten screw (2) and remove blocking circuit.

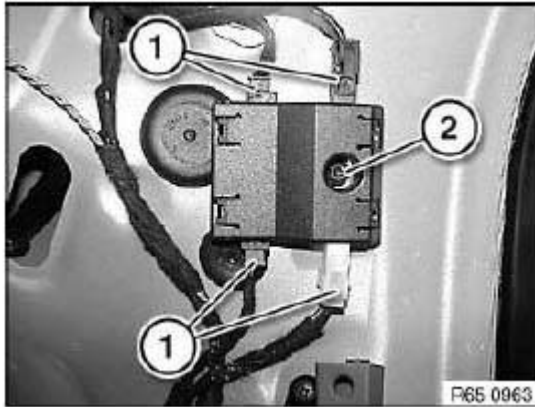


Fig. 34: Identifying Blocking Circuit Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

50 VIDEO AND TV EQUIPMENT

65 50 050 REPLACING TRIM FOR CENTRAL INFORMATION DISPLAY (CID)

Necessary preliminary tasks:

- Remove Central Information Display . See **65 50 057 REMOVING AND INSTALLING REPLACING CENTRAL INFORMATION DISPLAY (CID)**.

Carefully release catches (1).

Installation:

Catches (1) must not be damaged.

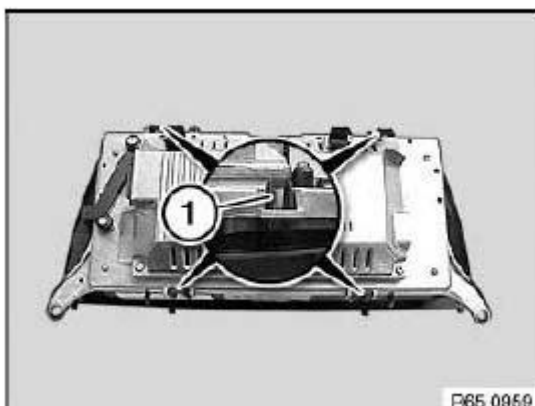


Fig. 35: Identifying Catches
Courtesy of BMW OF NORTH AMERICA, INC.

Carefully raise trim (2).

Disconnect plug connection (1) and remove trim (2) from CID.

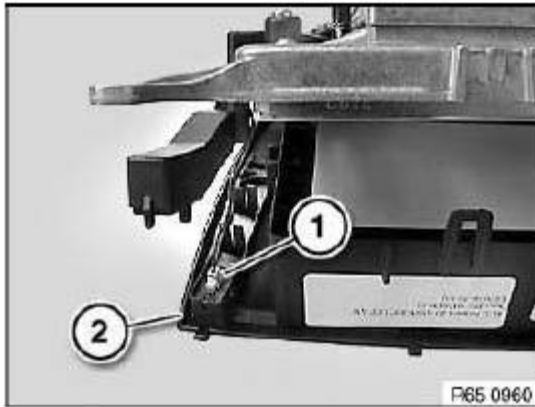


Fig. 36: Identifying Plug Connection With Raise Trim
Courtesy of BMW OF NORTH AMERICA, INC.

65 50 057 REMOVING AND INSTALLING REPLACING CENTRAL INFORMATION DISPLAY (CID)

Necessary preliminary tasks:

- Remove center fresh air grille . See **64 22 164 REMOVING AND INSTALLING/REPLACING MIDDLE FRESH-AIR GRILLE** .

Release screws (1) and feed out CID (2) towards bottom.

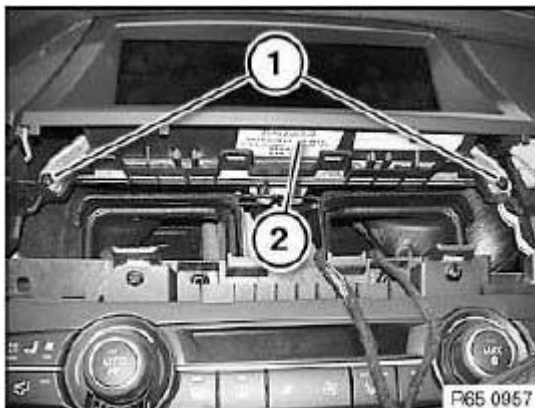


Fig. 37: Identifying Central Information Display
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connections (1) and unclip cable from holders (2).

Remove CID (3).

Installation:

Holders (2) must not be damaged!

Make sure cable is correctly routed through holders (2).

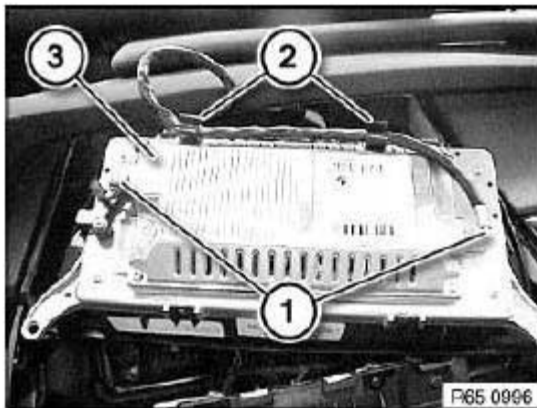


Fig. 38: Identifying Speaker Screws

Courtesy of BMW OF NORTH AMERICA, INC.

65 50 121 REMOVING AND INSTALLING REAR CABIN MONITOR (COMPLETE)

Necessary preliminary tasks:

- Remove fresh-air grille in rear cabin . See **64 22 191 REMOVING AND INSTALLING/REPLACING REAR CABIN FRESH-AIR GRILLE** .
- Remove trim from rear cabin monitor base at front . See **65 50 150 REMOVING AND INSTALLING/REPLACING TRIM FOR REAR CABIN MONITOR BASE AT FRONT**.

Release screws (1) and remove rear cabin monitor with holder (2).

Disconnect associated plug connections and feed out leads.

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5** .

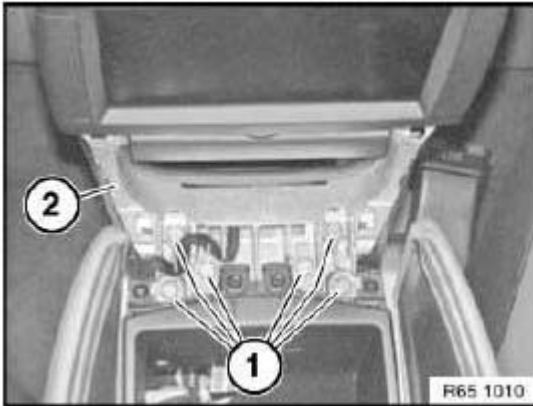


Fig. 39: Identifying Rear Cabin Monitor With Holder
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure leads are correctly routed on both sides.

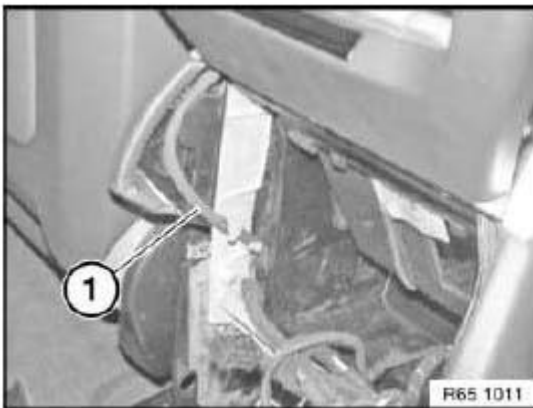


Fig. 40: Identifying Monitor Leads
Courtesy of BMW OF NORTH AMERICA, INC.

65 50 150 REMOVING AND INSTALLING/REPLACING TRIM FOR REAR CABIN MONITOR BASE AT FRONT

Special tools required:

- 00 9 340

Using special tool 00 9 340 , unclip trim (1) on both sides.

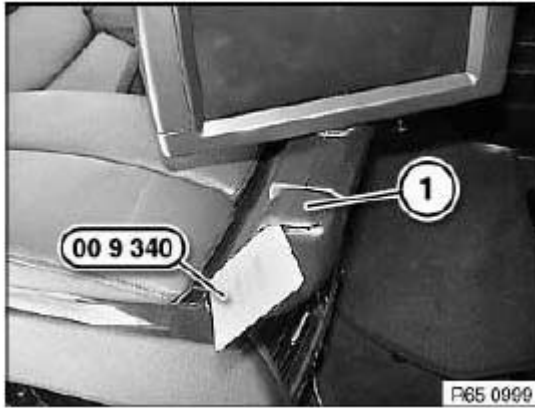


Fig. 41: Identifying Special Tool (00 9 340)

Courtesy of BMW OF NORTH AMERICA, INC.

Open armrest (1).

Unclip trim (2) with special tool 00 9 340 and feed out.

Replacement:

Trims may only be replaced in pairs so as to avoid differences in color.



Fig. 42: Identifying Special Tool (00 9 340)

Courtesy of BMW OF NORTH AMERICA, INC.

65 50 155 REMOVING AND INSTALLING/REPLACING TRIM FOR REAR CABIN MONITOR BASE AT REAR

Special tools required:

- 00 9 340

Using special tool 00 9 340 , unclip trim (1) on both sides.

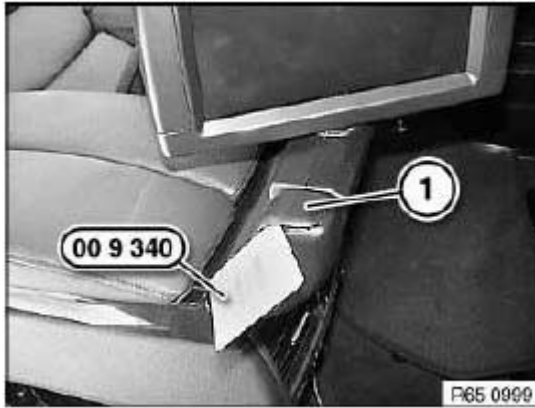


Fig. 43: Identifying Special Tool (00 9 340)

Courtesy of BMW OF NORTH AMERICA, INC.

Unclip trim (1) with special tool 00 9 340 and remove.

Replacement:

Trims may only be replaced in pairs so as to avoid differences in color.



Fig. 44: Identifying Special Tool (00 9 340)

Courtesy of BMW OF NORTH AMERICA, INC.

65 50 160 REMOVING AND INSTALLING/REPLACING TRIM FOR REAR CABIN MONITOR DISPLAY AT FRONT

Special tools required:

- 00 9 340

Unclip trims (1) on both sides with special tool 00 9 340.

Installation:

Make sure trim (1) is securely seated in rear cabin monitor trim at front.



Fig. 45: Identifying Special Tool (00 9 340) On Trims
Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1).

Tightening torque. See [AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5](#).



Fig. 46: Identifying Trims Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Unclip trim (1) with special tool 00 9 340 and remove.



Fig. 47: Identifying Special Tool (00 9 340) On Trim
 Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1).

Carefully remove trim (2) and disconnect plug connection (3).

Installation:

Make sure ribbon cable is securely seated.

Replacement:

Trims may only be replaced in pairs so as to avoid differences in color.

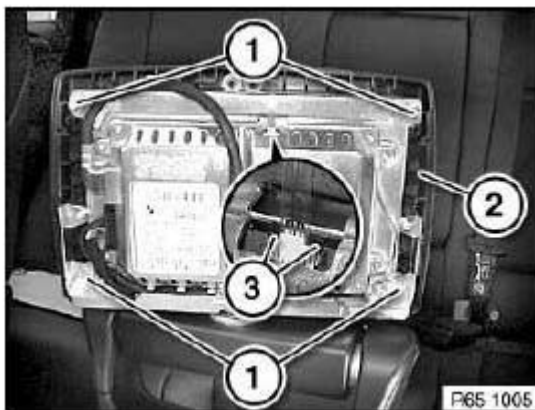


Fig. 48: Identifying Plug Connection
 Courtesy of BMW OF NORTH AMERICA, INC.

**65 50 165 REMOVING AND INSTALLING/REPLACING TRIM FOR REAR CABIN MONITOR
 DISPLAY AT REAR**

- 00 9 340

Unclip trims (1) with special tool 00 9 340 from rear cabin monitor.

Installation:

Make sure trims (1) are securely seated in rear cabin monitor trim at front.



Fig. 49: Identifying Special Tool (00 9 340) On Trims
Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1).

Tightening torque. See AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5.

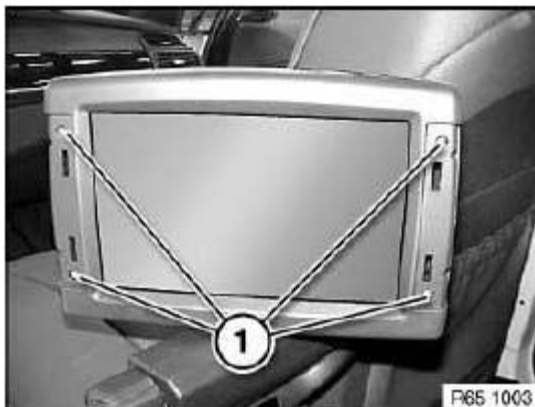


Fig. 50: Identifying Trims Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Unclip trim (1) with special tool 00 9 340 and remove.

Replacement:

Trims may only be replaced in pairs so as to avoid differences in color.



Fig. 51: Identifying Special Tool (00 9 340) On Trim
Courtesy of BMW OF NORTH AMERICA, INC.

65 50 570 REPLACING REAR CABIN MONITOR DISPLAY

Necessary preliminary tasks:

- Remove trim for rear cabin monitor display at rear. See **65 50 160 REMOVING AND INSTALLING/REPLACING TRIM FOR REAR CABIN MONITOR DISPLAY AT FRONT.**

Disconnect plug connection (1).

Release screws (2).

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5 .**

Release screw (3) and remove display (4) towards top.

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5 .**

Installation:

Remove protective film from replacement display.

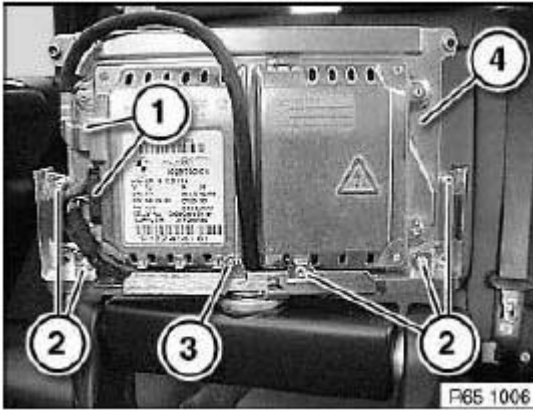


Fig. 52: Identifying Rear Cabin Monitor Display
Courtesy of BMW OF NORTH AMERICA, INC.

77 AIRBAG TRIGGER DEVICE

65 77 ... NOTES ON SCRAPPING BMW VEHICLES WITH GAS GENERATORS (CENTRAL AIRBAG CONTROL UNIT, AIRBAG SYSTEM)

The gas generator is a pyrotechnic component of:

- Airbag module
 - Driver's/passenger airbag
 - Side airbags
 - Head airbag
 - Knee airbag
- Belt pretensioner
- Belt buckle tensioner
- Safety battery terminal

1 Series: E81, E87

3 Series: E46, E90, E91, E92, E93

5 Series: E60, E61 from build date 09/2005

6 Series: E63, E64 from build date 09/2005

X3: E83

X5: E53, E70

Z4: E85, E86

Gas generators that have not fired constitute a hazard (also to the environment)!

In accordance with accident prevention regulations and specific national regulations, gas generators must be rendered unusable before they are scrapped. This is necessary because pyrotechnical objects can cause injury if improperly activated (e.g. scrapping with flame cutters).

With above-mentioned vehicles which are scheduled for scrapping, it is always essential prior to draining and further stripping work to ensure that all the gas generators **in the vehicle** are fired. The fired gas generators can then be scrapped together with the vehicle.

Triggering failure

If correct triggering is not possible, the relevant components must (while observing the safety regulations for handling airbag system components) be removed and disposed of by special disposal companies!

If a triggering operation has failed:

- Disconnect the triggering device from the battery and
- only approach the vehicle after a few minutes have elapsed

The components of an airbag system must always be disposed of. Such components must not be sold on as used parts.

Triggering

Triggering of the gas generators may only be carried out by expert personnel and under the supervision of a responsible person. Other standard accident prevention regulations (safety goggles, ear defenders etc.) must also be observed.

The gas generators must be fired from the outside in the vehicle scheduled for scrapping with the doors closed but with the tailgate, door windows and sunroof open. To fire the gas generators, use the BMW-developed triggering device with the corresponding cables.

WARNING: Once gas generators have been fired, observe a ventilation period of 10 minutes with the doors opened. Only then is it permitted to continue work inside the vehicle.

Wear protective goggles and protective gloves when handling a fired gas generator!

The burning of solid fuel will heat up airbag unit - danger of burning hands!

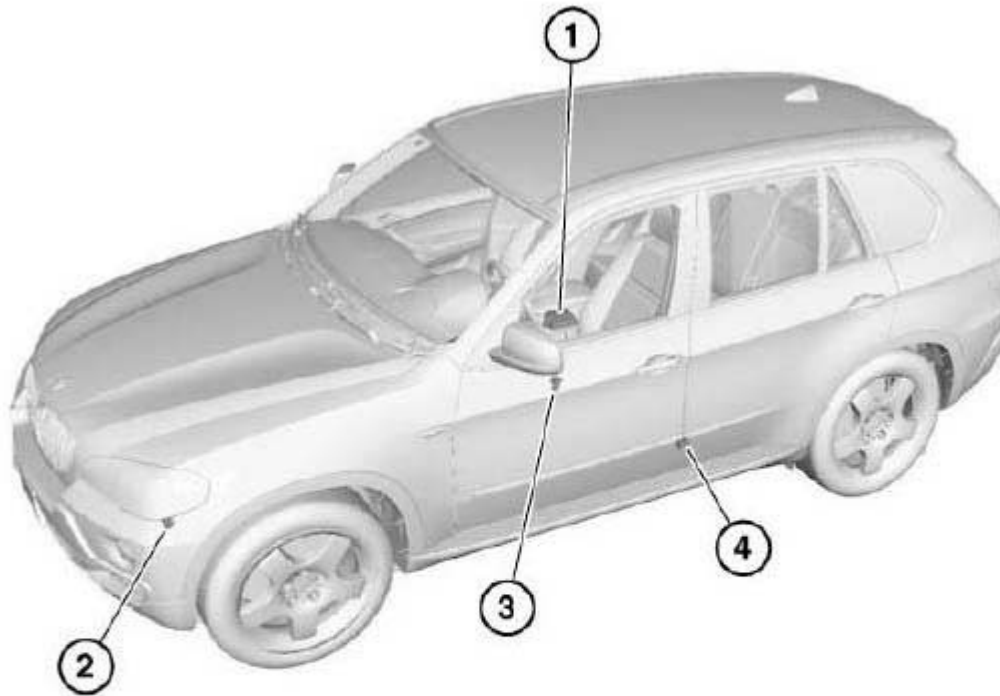
Wash skin with water after contact with fired gas generators!

1. **Vehicles with central airbag control unit (all airbags, seat belt pretensioners, safety battery terminal)**

1.1 Expose airbag control unit. See 65-77 016 REMOVING AND INSTALLING/REPLACING AIRBAG CONTROL UNIT.

1.2 Connect "Airbagmaster". For subsequent procedure, refer to SEDA operating instructions.

65 77 ... OVERVIEW OF SENSORS FOR AIRBAG SYSTEM



R65 1028

1. Airbag control unit (under centre console)
2. Acceleration sensors front (left/right)
3. Sensor front door (left/right)
4. Sensor B-pillar (left/right)

Fig. 53: Location Of Airbag System

Courtesy of BMW OF NORTH AMERICA, INC.

65 77 016 REMOVING AND INSTALLING/REPLACING AIRBAG CONTROL UNIT

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection). See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE) .

WARNING: Note airbag safety instructions!

Necessary preliminary tasks:

- Disconnect battery negative lead and cover . See **12 00... INSTRUCTIONS FOR DISCONNECTING AND CONNECTING BATTERY** .
- Remove complete center console . See **51 16 165 REMOVING AND INSTALLING COMPLETE CENTRE CONSOLE** .
- Remove rear cabin ventilation duct

Unscrew nuts (1).

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5** .

Disconnect plug connections (2).

Installation:

Make sure ground cable (2) is correctly laid.

If necessary, replace damaged cable shoe on ground cable (2).

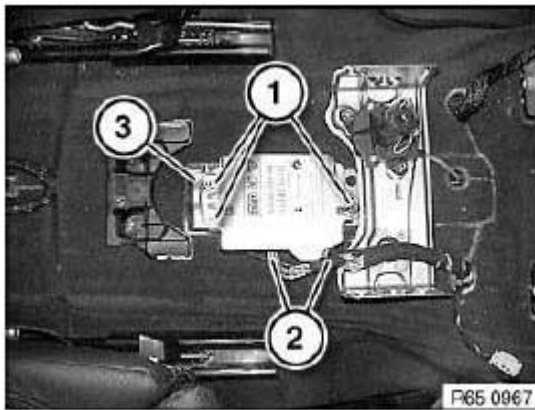


Fig. 54: Identifying Airbag Control Unit Plug Connections And Nuts
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out programming/coding. See **VEHICLE PROGRAMMING AND CODING** .

65 77 055 REMOVING AND INSTALLING/REPLACING EMERGENCY POWER SIREN WITH TILT SENSOR

Necessary preliminary tasks:

- Remove front left wheel arch trim . See **51 74 035 REMOVING AND INSTALLING/REPLACING FRONT LEFT OR RIGHT WHEEL ARCH COVER (REAR SECTION)** .

Release screws (1) and remove cover (2).

Installation:

Make sure rubber grommet (3) is correctly seated.

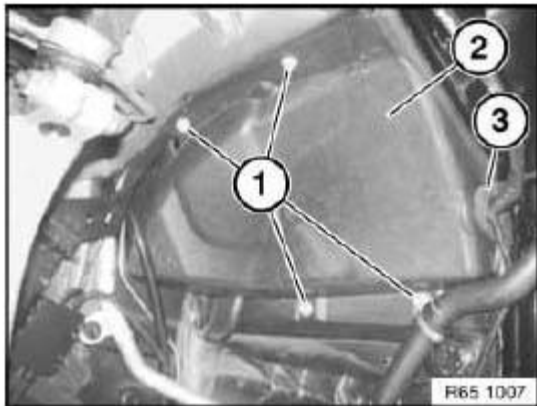


Fig. 55: Identifying Cover Screws

Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1).

Remove housing (2) and disconnect associated plug connection.

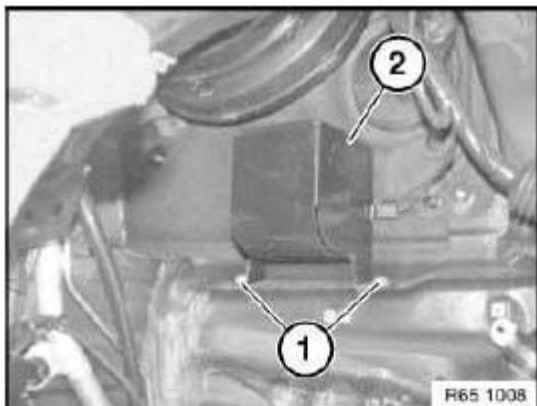


Fig. 56: Identifying Plug Connection

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release nut (1) and remove emergency power siren with tilt sensor (2).

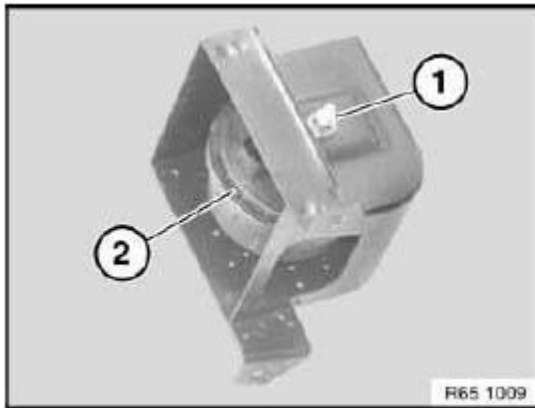


Fig. 57: Identifying Emergency Power Siren With Tilt Sensor
Courtesy of BMW OF NORTH AMERICA, INC.

IMPORTANT: Risk of damage!

Guides (1) of emergency power siren (2) must be correctly seated in area (3) of holder (4)!

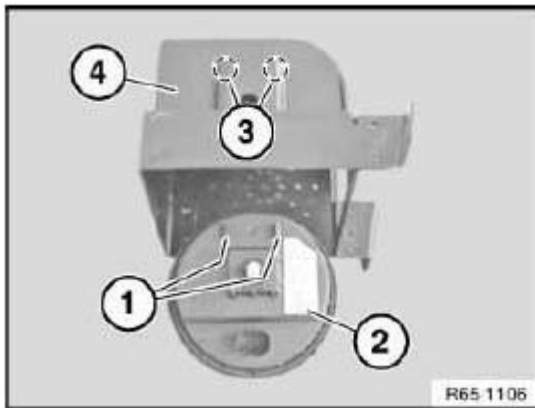


Fig. 58: Identifying Emergency Power Siren
Courtesy of BMW OF NORTH AMERICA, INC.

65 77 532 REMOVING AND INSTALLING/REPLACING FRONT LEFT SENSOR

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection). See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE) .

Necessary preliminary tasks:

- Remove radiator air duct . See 51 71 099 REMOVING AND INSTALLING/REPLACING RADIATOR AIR GUIDE .

Release screws (1).

Remove sensor (2) and disconnect associated plug connection.

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5**.

Installation:

Replace screws (1).

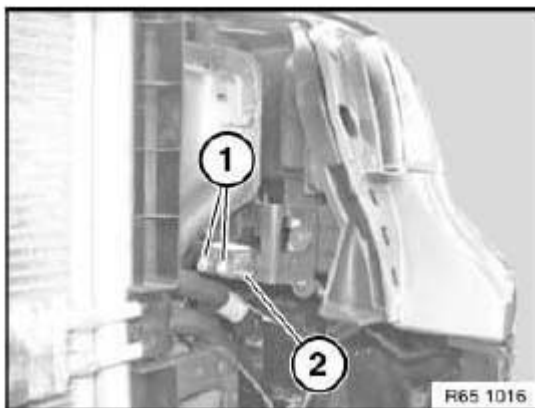


Fig. 59: Identifying Sensor

Courtesy of BMW OF NORTH AMERICA, INC.

IMPORTANT: During fitting, the inscription (1) must be legible from the front.

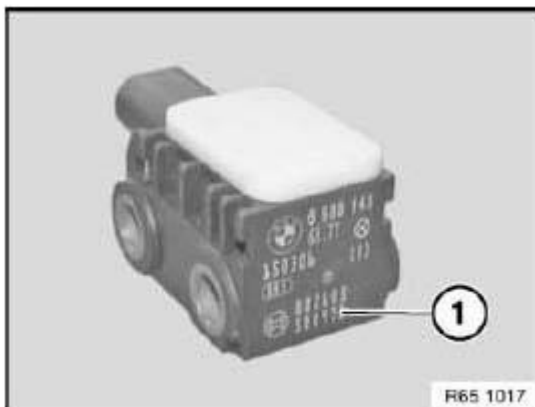


Fig. 60: Fitting Inscription

Courtesy of BMW OF NORTH AMERICA, INC.

65 77 534 REMOVING AND INSTALLING/REPLACING FRONT RIGHT SENSOR

Operation is identical to: See **65 77 532 REMOVING AND INSTALLING/REPLACING FRONT LEFT SENSOR**.

65 77 720 REMOVING AND INSTALLING (REPLACING) LEFT B-PILLAR SENSOR

WARNING: Note airbag safety instructions!
Incorrect handling can activate airbag and cause injury.

Necessary preliminary tasks:

- Disconnect battery negative lead and cover . See **12 00... INSTRUCTIONS FOR DISCONNECTING AND CONNECTING BATTERY** .
- Remove front entrance cover strip . See **51 47 000 REMOVING AND INSTALLING/REPLACING FRONT (INSIDE) LEFT OR RIGHT ENTRANCE COVER STRIP** .
- Remove seat belt retractor with holder

Version with rear cabin air conditioning:

- Remove front seat . See **52 14 000 REMOVING AND INSTALLING LEFT OR RIGHT FRONT SEAT** .
- Remove rear cabin ventilation duct from B-pillar
- Partially detach carpet in area of B-pillar
- If necessary, remove rear cabin ventilation duct under carpet

Release screws (1), feed out sensor and disconnect associated plug connection.

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5** .

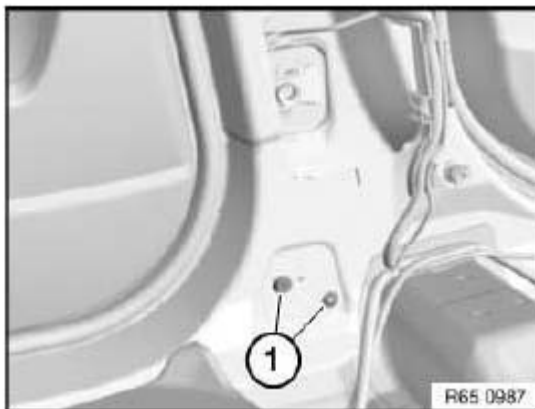


Fig. 61: Identifying B-Pillar Sensor Screw
 Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Establish correct positioning of B-pillar sensor (1) by means of guide pin (2) and screw (3).

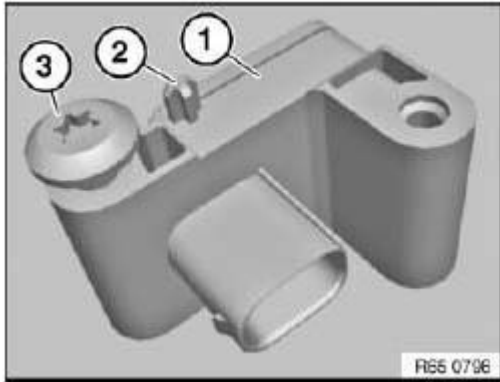


Fig. 62: Identifying B-Pillar Sensor And Guide Pin With Screw
Courtesy of BMW OF NORTH AMERICA, INC.

65 77 740 REMOVING AND INSTALLING (REPLACING) LEFT FRONT DOOR SENSOR

WARNING: Note airbag safety instructions!
Incorrect handling can activate airbag and cause injury.

Necessary preliminary tasks:

- Partially detach sound insulation . See **51 48 060 REMOVING AND INSTALLING/REPLACING SOUND INSULATION IN LEFT OR RIGHT FRONT DOOR** .

Release screw (1).

Tightening torque. See **AUDIO, NAVIGATION AND ANTI-THEFT - TIGHTENING TORQUES - X5** .

Remove sensor with pin (2) from door panel fit (3) towards rear and disconnect associated plug connection.

Installation:

Make sure fit (2) is correctly seated.

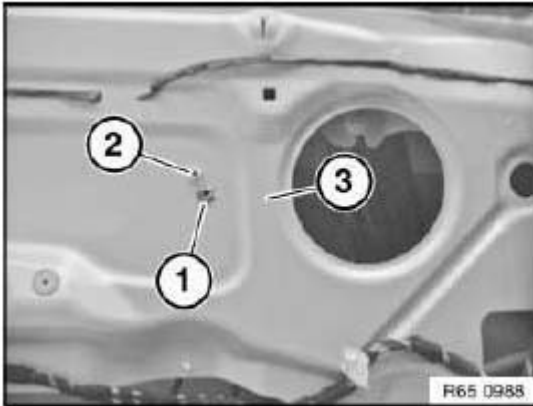


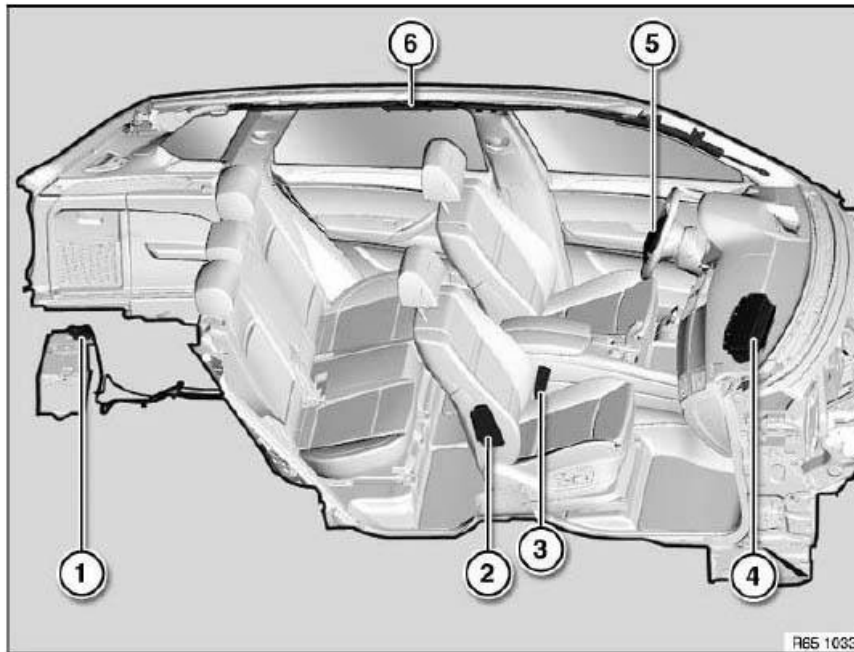
Fig. 63: Identifying Sensor With Pin From Door Panel

Courtesy of BMW OF NORTH AMERICA, INC.

65 77 745 REMOVING AND INSTALLING/REPLACING RIGHT FRONT DOOR SENSOR

This operation is described in **65 77 740 REMOVING AND INSTALLING (REPLACING) LEFT FRONT DOOR SENSOR**.

72 12 ... OVERVIEW OF AIRBAG MODULES, AIRBAG CONTROL UNIT, BELT TENSIONERS



- | | | |
|---|--|---|
| 1 | <u>Safety battery terminal (*)</u> | 4 |
| 2 | <u>Side airbag, front seat, left/right (*)</u> | 5 |
| 3 | <u>Belt tensioner, front left/right (*)</u> | 6 |

(*) Components contain pyrotechnical devices

- | |
|---|
| <u>Airbag unit, passenger side (*)</u> |
| <u>Airbag module, driver's side (*)</u> |
| <u>Head airbag, left/right (*)</u> |

Fig. 64: Location Of Airbag Modules
Courtesy of BMW OF NORTH AMERICA, INC.

81 ON-BOARD COMPUTER

65 81 060 REMOVING AND INSTALLING/REPLACING OUTSIDE TEMPERATURE SENSOR

Necessary preliminary tasks:

- Remove front bumper trim . See **51 11 156 REMOVING AND INSTALLING FRONT BUMPER TRIM** .

Disconnect plug connection (1).

Press out outside temperature sensor (2) in direction of arrow and remove.

Installation:

Outside temperature sensor must audibly snap into place.

Check for secure seating after fitting.

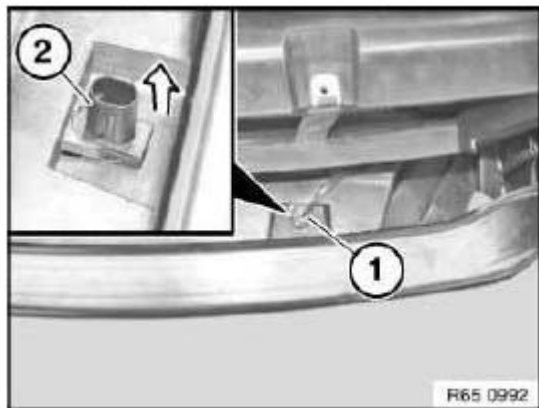


Fig. 65: Removing Temperature Sensor

Courtesy of BMW OF NORTH AMERICA, INC.

83 CAR COMMUNICATION COMPUTER

65 83 010 REMOVING AND INSTALLING/REPLACING CAR COMMUNICATION COMPUTER

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection). See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE) .

NOTE: Comply with notes and instructions on handling optical waveguides. See 61 00 ... NOTES ON HANDLING OPTICAL FIBERS .

Necessary preliminary tasks:

- Disconnect battery negative lead . See 12 00... INSTRUCTIONS FOR DISCONNECTING AND CONNECTING BATTERY .
- Remove middle trim for instrument panel . See 51 45 310 REMOVING AND INSTALLING (REPLACING) CENTER TRIM FOR INSTRUMENT PANEL .

Release screws (1).

Pull back Car Communication Computer (2) slightly.

Unlock associated plug connections and disconnect.

Remove Car Communication Computer (2).

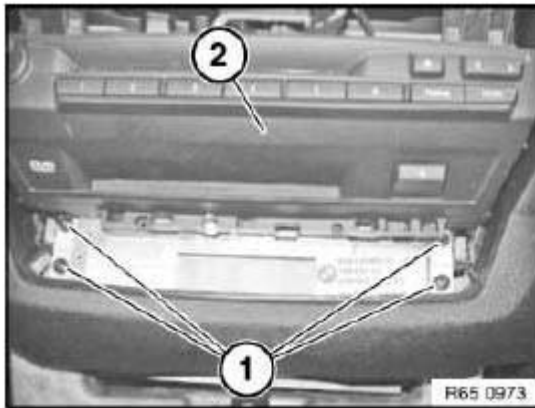


Fig. 66: Identifying Car Communication Computer
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out programming/coding. See VEHICLE PROGRAMMING AND CODING .

65 83 550 REMOVING AND INSTALLING/REPLACING FAN FOR CAR COMMUNICATION COMPUTER

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection). See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE) .

Necessary preliminary tasks:

- Remove Car Communication Computer . See 65 83 010 REMOVING AND INSTALLING/REPLACING CAR COMMUNICATION COMPUTER.

Raise retaining hook (1) and turn fan for Car Communication Computer (2) in direction of arrow.

Remove fan for Car Communication Computer (2) from Car

Communication Computer (3).

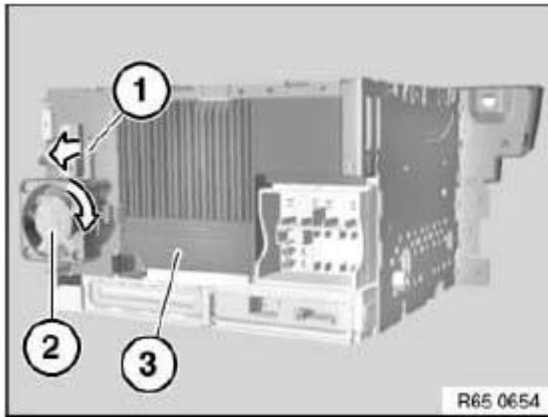


Fig. 67: Turning Fan For Car Communication Computer
Courtesy of BMW OF NORTH AMERICA, INC.

65 83 560 REMOVING AND INSTALLING/REPLACING FRONT TRIM FOR CAR COMMUNICATION COMPUTER

Special tools required:

- 12 7 192

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection)! See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE) .
Risk of damage!
Place Car Communication Computer on special tool 12 7 192 (antistatic mat) and earth/ground.

Necessary preliminary tasks:

- Remove Car Communication Computer . See 65 83 010 REMOVING AND INSTALLING/REPLACING CAR COMMUNICATION COMPUTER.

Unlock retainer (1) and carefully raise front trim (2).

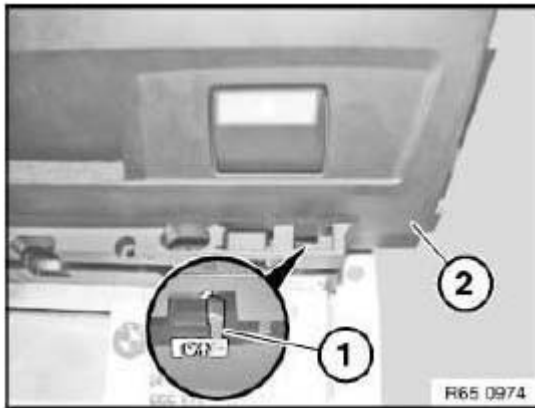


Fig. 68: Identifying Unlock Retainer

Courtesy of BMW OF NORTH AMERICA, INC.

If necessary, unclip retaining lugs (2) and carefully remove front trim (1).

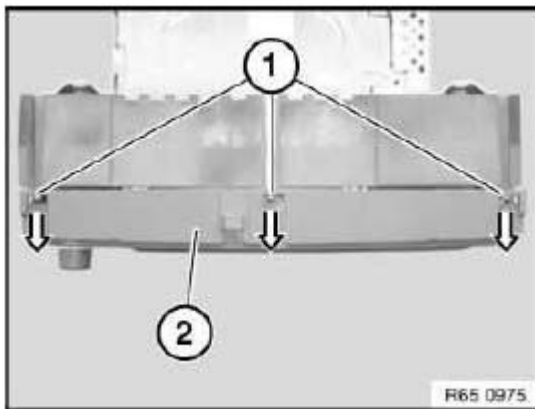


Fig. 69: Identifying Unclip Retaining Lugs

Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: "LIF" stands for Low Insertion Force.

Open catch of LIF plug (1) in direction of arrow and feed out LIF cable (2).

Remove front trim (3).

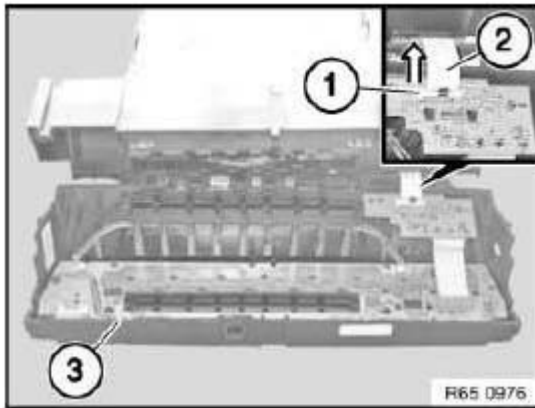


Fig. 70: Identifying LIF Plug

Courtesy of BMW OF NORTH AMERICA, INC.

65 83 565 REMOVING AND INSTALLING/REPLACING FRONT TRIM FOR CAR COMMUNICATION COMPUTER (HOLDER)

Special tools required:

- 12 7 192

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection)! See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE) .

Risk of damage!

Place Car Communication Computer on special tool 12 7 192 (antistatic mat) and earth/ground.

Necessary preliminary tasks:

- Remove front trim for Car Communication Computer . See 65 83 560 REMOVING AND INSTALLING/REPLACING FRONT TRIM FOR CAR COMMUNICATION COMPUTER.

Release screws (1) and remove holder (2).

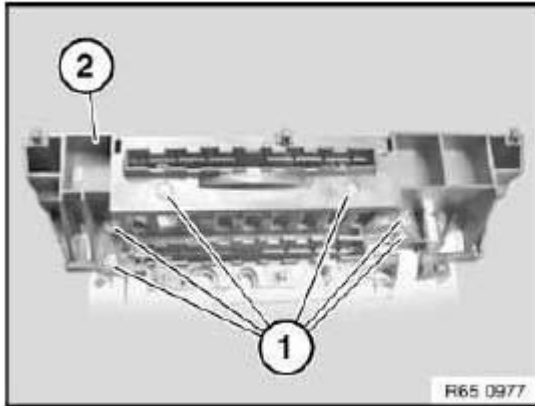


Fig. 71: Identifying Holder And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Retaining pin (1) must be adapted to fit in guide hole (2).

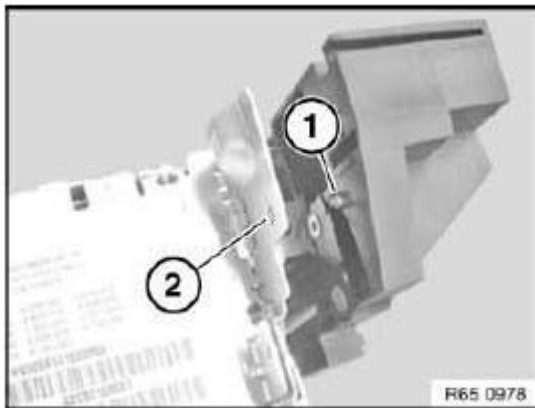


Fig. 72: Identifying Retaining Pin And Guide Hole
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Guide tabs (1) must be correctly inserted in front trim holder.

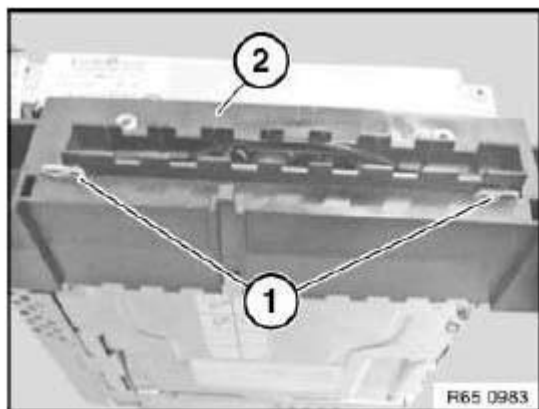


Fig. 73: Identifying Guide Tabs

Courtesy of BMW OF NORTH AMERICA, INC.

65 83 570 REMOVING AND INSTALLING/REPLACING CD DRIVE FOR CAR COMMUNICATION COMPUTER

Special tools required:

- 12 7 192

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection)! See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE) .

Risk of damage!

Place Car Communication Computer on special tool 12 7 192 (antistatic mat) and earth/ground.

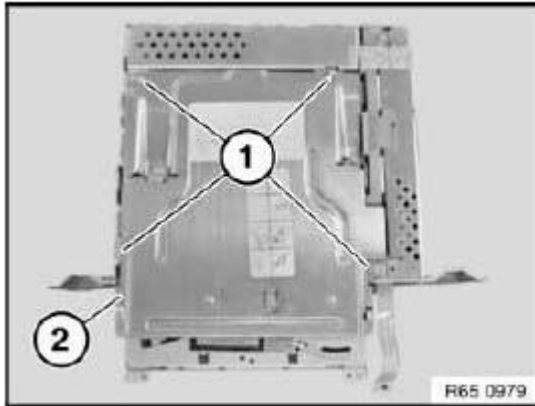
Necessary preliminary tasks:

- Remove front trim holder for Car Communication Computer . See 65 83 560 REMOVING AND INSTALLING/REPLACING FRONT TRIM FOR CAR COMMUNICATION COMPUTER.

Release screws (1), remove CD drive and place to one side.

Installation:

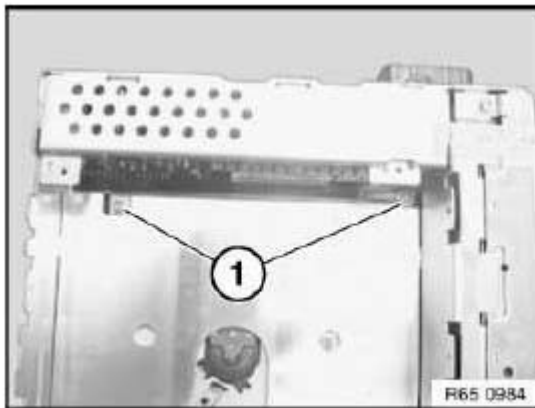
Ensure correct routing of cables.

**Fig. 74: Identifying CD Drive**

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release screws (1) and remove cover (2) from CD drive.

**Fig. 75: Identifying Cover From CD Drive**

Courtesy of BMW OF NORTH AMERICA, INC.

Cut through warranty seal (1) at marked point.

Release screw (2).

Lift side cover out of mounting (3) and carefully place to one side.

Installation:

Replace warranty seal with supplied seal.

Warranty will be invalidated if seal is damaged! 146 of 3160

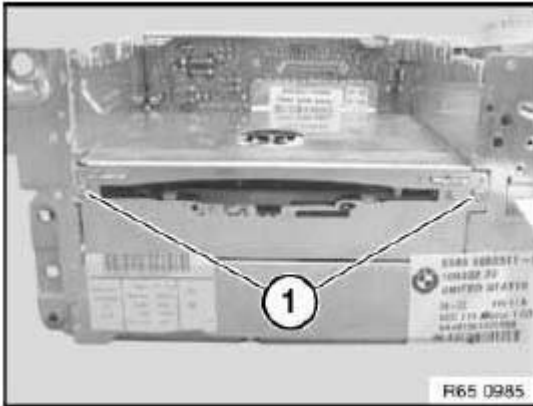


Fig. 76: Identifying Warranty Seal And Side Cover
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1) and remove CD drive.

Installation:

Ensure correct routing of cables.

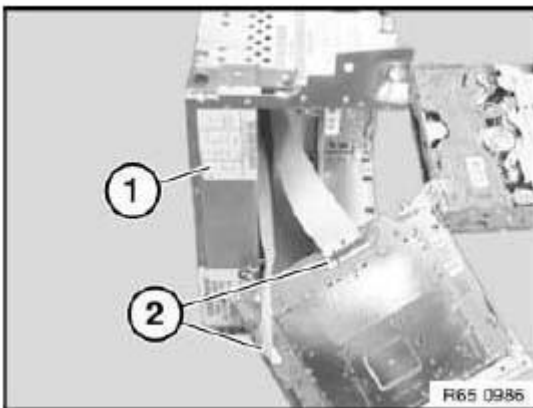


Fig. 77: Identifying Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

65 83 580 REMOVING AND INSTALLING/REPLACING DVD DRIVE FOR CAR COMMUNICATION COMPUTER (CCC)

Special tools required:

- 12 7 192

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection)! See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE).

Risk of damage!

Place Car Communication Computer on special tool 12 7 192 (antistatic mat) and earth/ground.

Necessary preliminary tasks:

- Partially remove CD drive for CCC . See **65 83 570 REMOVING AND INSTALLING/REPLACING CD DRIVE FOR CAR COMMUNICATION COMPUTER.**

Release screws (1) and remove cover (2) with CD drive.

Installation:

Make sure cables are correctly laid.

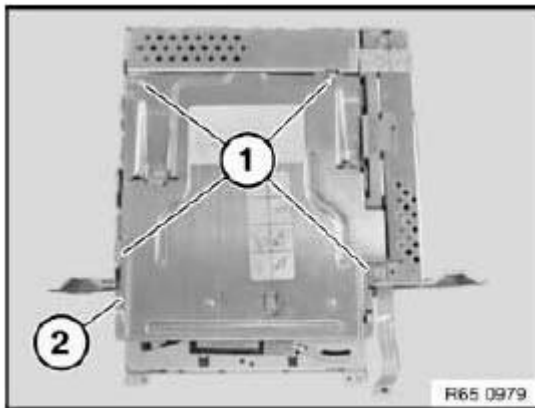


Fig. 78: Identifying CD Drive

Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1).

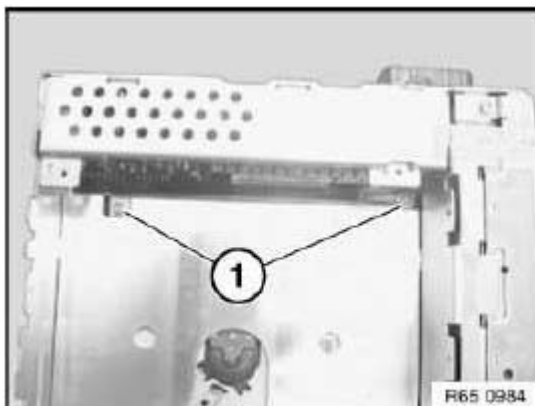


Fig. 79: Identifying CD Drive Screws

Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1).

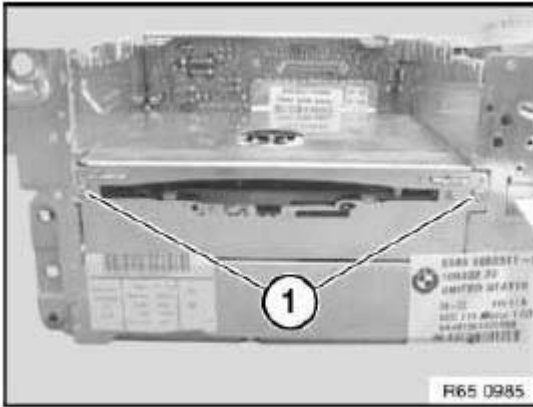


Fig. 80: Identifying CD Drive Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Place Car Communication Computer (2) to one side.

Feed out DVD drive and disconnect plug connections (2).

Installation:

Make sure cables are correctly laid.

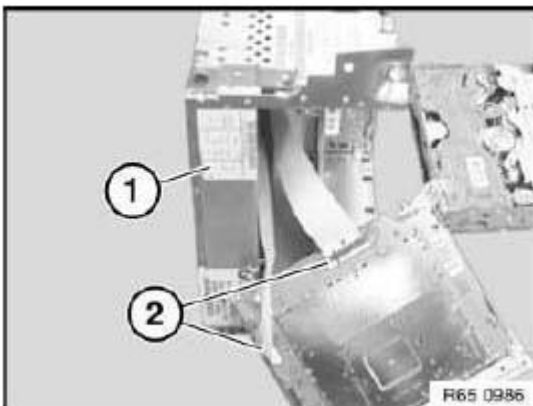


Fig. 81: Placing Car Communication Computer
Courtesy of BMW OF NORTH AMERICA, INC.

65 83 590 REMOVING AND INSTALLING/REPLACING GYRO SENSOR DRIVE FOR CAR COMMUNICATION COMPUTER

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection). See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE).

Necessary preliminary tasks:

- Remove Car Communication Computer . See **65 83 010 REMOVING AND INSTALLING/REPLACING CAR COMMUNICATION COMPUTER.**

If necessary, cut through warranty seal.

Release bolts (1).

Remove floor pan (2) towards bottom and set down.

IMPORTANT: Contact spring strip (3) on floor pan (2) must not be bent: otherwise risk of short-circuiting!
When reinstalling floor pan (2), make sure individual springs of contact spring strip (3) are correctly seated.

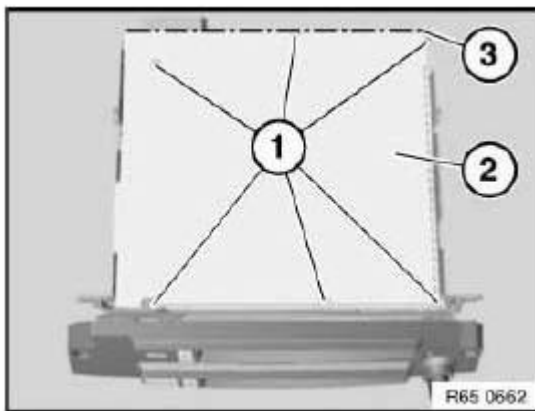


Fig. 82: Identifying Floor Pan And Spring Strip
Courtesy of BMW OF NORTH AMERICA, INC.

Release bolt (1).

Detach gyro sensor for Car Communication Computer (2) in direction of arrow from plug-in contact (3).

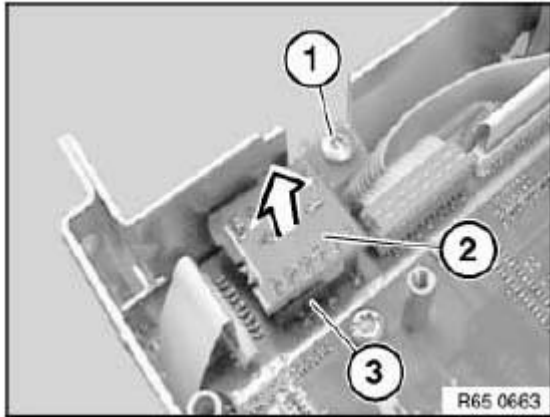


Fig. 83: Detaching Gyro Sensor For Car Communication Computer
Courtesy of BMW OF NORTH AMERICA, INC.

65 83 600 REPLACING HIP MODULE FOR CAR COMMUNICATION COMPUTER

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection). See 61 35... NOTES ON ESD PROTECTION (ELECTRO STATIC DISCHARGE) .

Necessary preliminary tasks:

- Remove Car Communication Computer . See 65 83 010 REMOVING AND INSTALLING/REPLACING CAR COMMUNICATION COMPUTER.

Release screws (1).

Remove cover (2) towards top.

IMPORTANT: Contact spring strip (3) on floor pan (2) must not be bent: otherwise risk of short-circuiting!
When reinstalling floor pan (2), make sure individual springs of contact spring strip (3) are correctly seated.

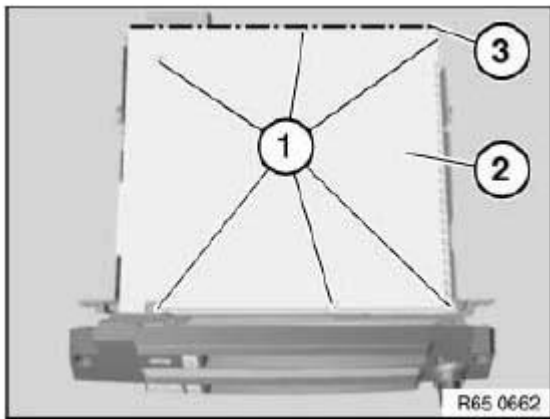


Fig. 84: Identifying Spring Strip And Floor Pan
Courtesy of BMW OF NORTH AMERICA, INC.

Press catches (1) and feed out HIP module (2) in direction of arrow.

Installation:

Make sure front guides (3) of HIP module (2) are correctly seated.

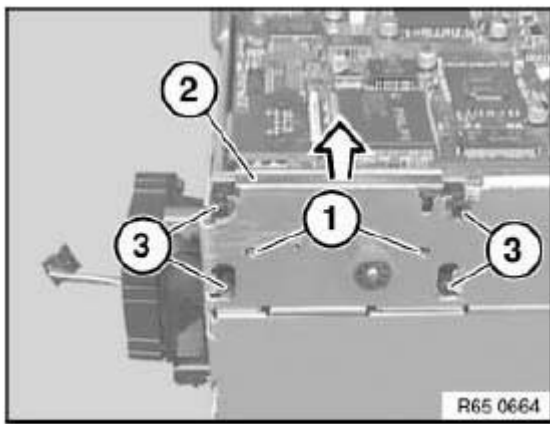


Fig. 85: Pulling HIP Module
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1) in direction of arrow and remove HIP module (2).

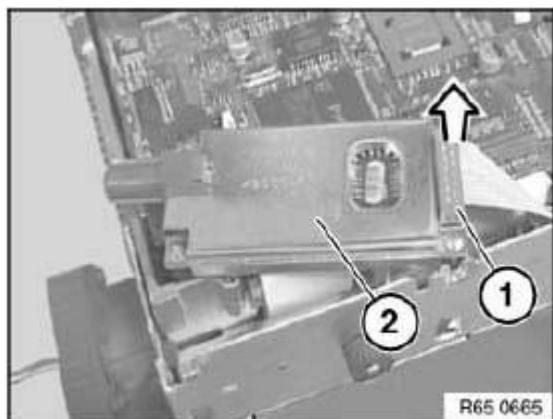


Fig. 86: Disconnecting Plug Connection
 Courtesy of BMW OF NORTH AMERICA, INC.

After installation:

- Cars with out-of-date software status at time of repair:

After replacing the HIP module, program the Car Communication Computer. Then take the car for an initialization drive.

- Cars with current software status at time of repair:

After replacing the HIP module, take the car for an initialization drive.

Initialization drive:

Drive for 15-20 minutes at 50 km/h and with good GPS reception until correct vehicle position is achieved in the navigation display.

NOTE: During this time, the position pointer of the navigation system can be motionless or move across country.

90 NAVIGATION SYSTEMS

65 90 ... NOTES ON HANDLING NAVIGATION COMPUTERS

All model series:

CAUTION: Risk of damage!

The navigation computer must not be disconnected from the power supply while the LED on the computer remains lit (the LED goes out after approx. 1 minute).

NOTE: To ensure full operation of all the communications components, it is necessary in new cars to insert a Road Map CD in the navigation computer. This is absolutely essential as certain functions are disabled for distribution channels. These functions will only be available again after a Road Map CD has been inserted. The mode preset at the factory is automatically reset when this CD is inserted.

Software installation:

The navigation software must be loaded with terminal 15 activated and the navigation system ready for operation.

Make sure there is a stable power supply. If necessary, connect a battery charger to the vehicle.

The charging operation must not be interrupted (terminal 15 remains activated).

When replacing navigation computer:

From E65/66:

- Carry out coding of navigation computer with aid of Diagnosis and Information System via "CIP".

To E65/66:

- Carry out coding of navigation computer with aid of Diagnosis and Information System in path "1 Recoding".

E46 (with radio navigation) only:

When replacing navigation computer:

- Connect Diagnosis and Information System to vehicle.
- Switch on ignition.
- Select Coding/Programming.
- Select path "3 Coding ZCS".
- Select vehicle.
- Select path "4 Retrofitting".
- Select menu item "3 Instrument cluster".
- Select menu item "2 Language".
- Select the desired languages following the user prompting.
- Start coding of the instrument cluster.
- After the prompt from the Diagnosis and Information System "Now follow the instructions on the on-board monitor", insert the operating software CD.

- The following note appears from DIS CD 25 software (and higher):

"With radio navigation insert the operating software CD in the computer and wait until it is ejected. Then follow the instructions on the display. This procedure takes several minutes".

NOTE: **The ignition must not be turned off and then on again during this procedure.
The software is loaded when the operating software CD is ejected.**

- Carry out coding of navigation computer with aid of Diagnosis and Information System in path "1 Recoding".

If the software is updated at a later stage, the last step is omitted if the navigation computer is already configured for a navigation system (radio navigation or navigation system).