

ACCESSORIES AND EQUIPMENT

Audio, Navigation and Anti-Theft - Repair Instructions

RADIO, CD/DVD CHANGER

65 11... NOTES REGARDING THE ADJUSTMENT OF THE INSTALLATION POSITION ON THE CD CHANGER

NOTE: Both suspension springs must be positioned correctly (horizontal/vertical) to ensure trouble-free function of the CD changer. Correct the setting as needed.

The magazine storage flap must always be closed to prevent preliminary contamination of the CD changer.

To avoid premature contamination of the CD changer, make sure the magazine compartment flap is permanently closed.

NOTE: For purposes of clarity, the following graphics show the CD changer removed.

- NOTE:**
- Observe the following repair instructions if the magazine cannot be removed from the CD changer.
 - Remove CD CHANGER MAGAZINE

Remove holder (1) from CD changer (2).

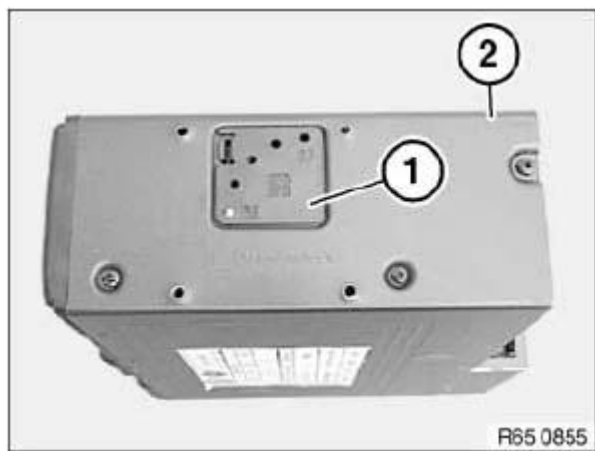


Fig. 1: Identifying Cover Cap And CD Changer
Courtesy of BMW OF NORTH AMERICA, INC.

Move the installation position of the CD changer (2) to the required position by sliding the suspension spring (1) with a suitable tool.

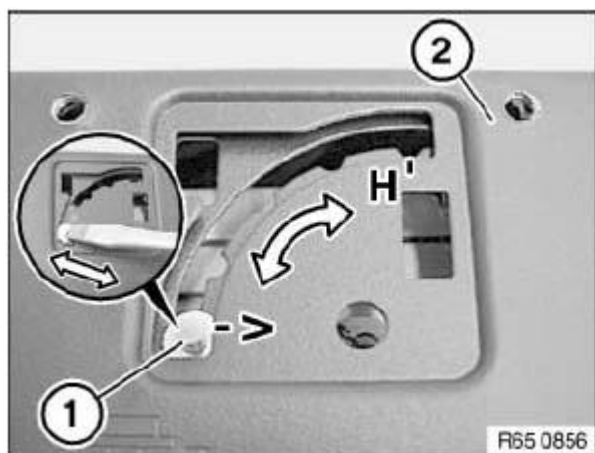


Fig. 2: Sliding Suspension Spring

Courtesy of BMW OF NORTH AMERICA, INC.

65 11... REMOVING AND INSTALLING/REPLACING CD CHANGER MAGAZINE

Special tools required:

- **65 1 170**

NOTE: Carry out the following work steps if the CD changer magazine is not automatically ejected.

Insert special tool **65 1 170** on left under CD changer magazine (1) and carefully remove special tool with CD changer magazine (1) from CD changer (2).

Installation:

Check position of CDs in CD changer magazine.

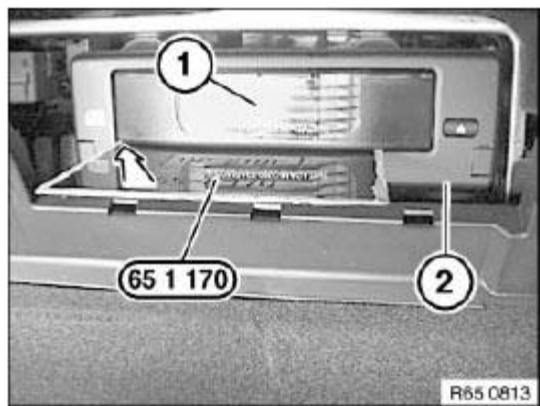


Fig. 3: Inserting Special Tool 65 1 170 In CD Changer Magazine

Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: A modified CD changer magazine is available from 10/2004 which eliminates incorrect loading.

Checking CD changer magazine:

Pull CD slot (1) out of CD changer (2) and check top side at retaining lugs (3) on right/left.

(A): CD changer magazine before 10/04:

No retaining lugs on right/left.

Replace CD changer magazine.

(B): CD changer magazine from 10/04:

Retaining lugs (3) present on right/left.

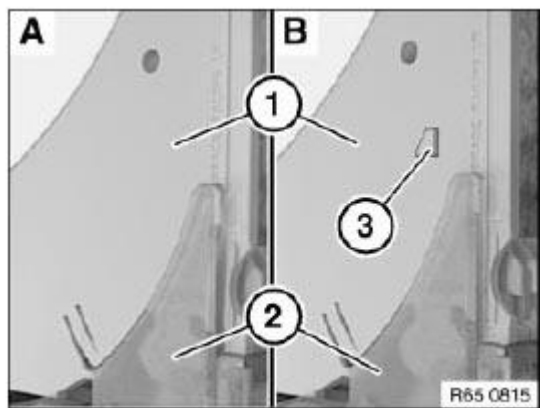


Fig. 4: Identifying CD Slot, CD Changer And Retaining Lugs

Courtesy of BMW OF NORTH AMERICA, INC.

65 11 072 REMOVING AND INSTALLING/REPLACING CD CHANGER

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

Necessary preliminary tasks:

- **E60:** Remove LUGGAGE COMPARTMENT TRIM ON SIDE PANEL ON RIGHT
- **E61:** Remove flap in luggage compartment panel on right
- Disconnect BATTERY NEGATIVE LEAD

NOTE: Comply with notes and instructions on HANDLING OPTICAL WAVEGUIDES .

Open rotary clips (1) and remove.

Remove cover (2) in direction of arrow.

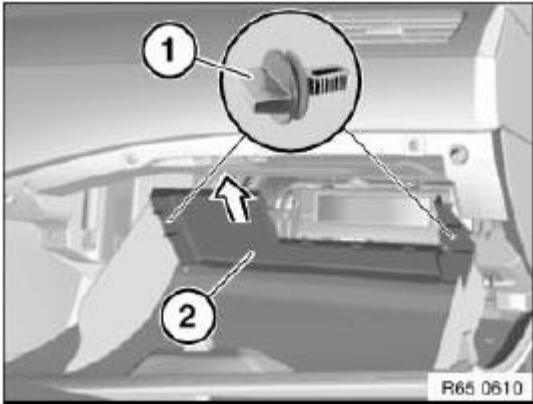


Fig. 5: Removing Cover

Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: Open glovebox.

Fold back covers (1) on CD changer (3).

Release screws (2).

Pull back CD changer (3) slightly.

Unlock and disconnect associated plug connection, remove CD changer (3).

Installation:

Tightening torque **64 11 1AZ** .

Observe tightening torque (risk of damage).

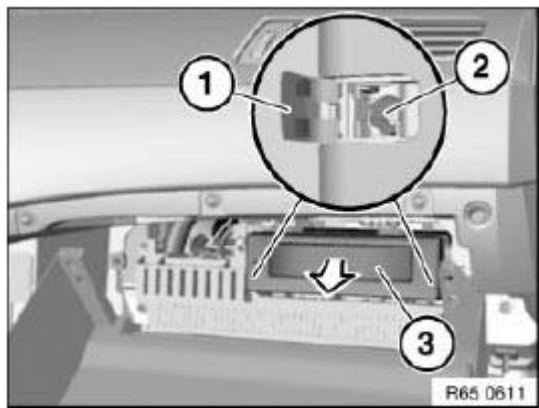


Fig. 6: Pulling Back CD Changer Slightly
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

When pushing CD changer in, lay associated wire harness carefully by hand. For this purpose, in advance:

Remove **BOTTOM RIGHT TRIM PANEL FROM INSTRUMENT PANEL** .

Replacement:

Carry out **PROGRAMMING/CODING** .

65 11 074 REPLACING CD-CHANGER TRIM

IMPORTANT: Read and comply with notes on protection against electrostatic discharge (ESD protection).

Necessary preliminary tasks:

Remove CD changer

Release screw (1) of CD-changer cover (2). Lift off lid (2) and flip upwards in direction of arrow.

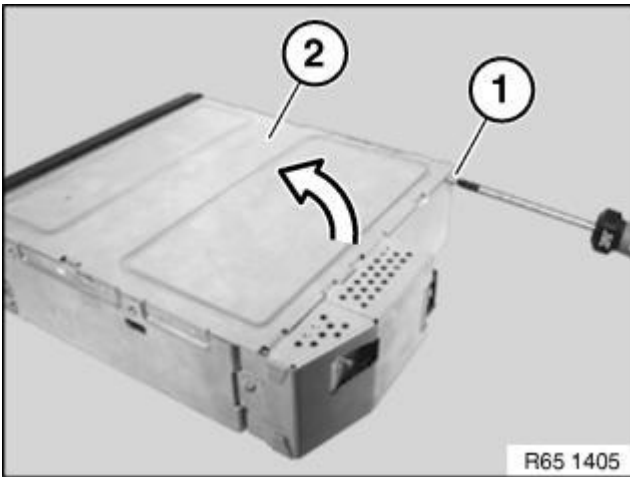


Fig. 7: Release Screw (1) Of CD-Changer Cover
Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1) on the trim (2).

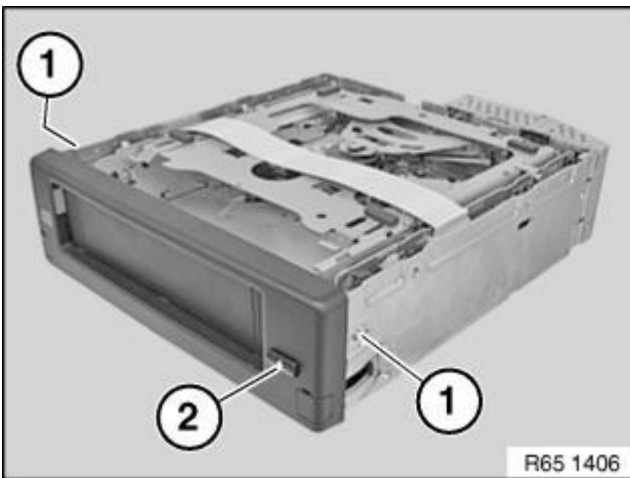


Fig. 8: Release Screws (1) On The Trim (2)
Courtesy of BMW OF NORTH AMERICA, INC.

Bend the side walls of the CD-changer slightly in the direction of the arrow. Pull out trim (1) in direction of arrow.

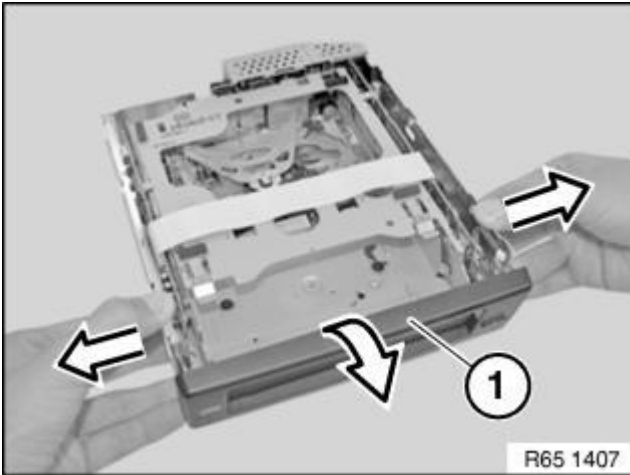


Fig. 9: Pull Out Trim (1) In Direction Of Arrow
Courtesy of BMW OF NORTH AMERICA, INC.

Detach plug (1) from trim (2).

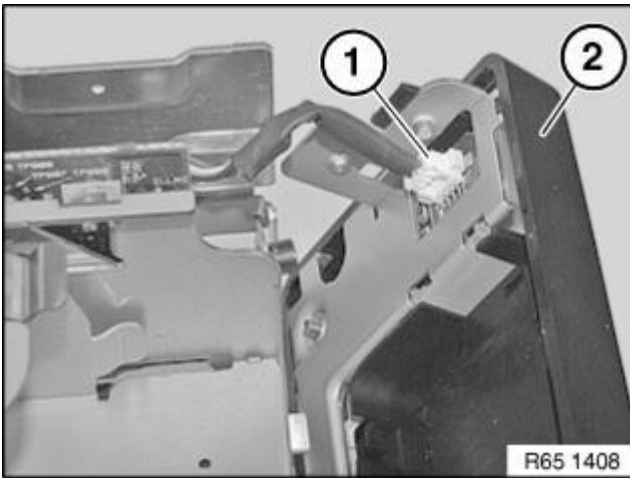


Fig. 10: Detach Plug (1) From Trim (2)
Courtesy of BMW OF NORTH AMERICA, INC.

Remove trim (1) from housing (2). Installation: Position trim (1) on the latch mechanisms of the trim (2).

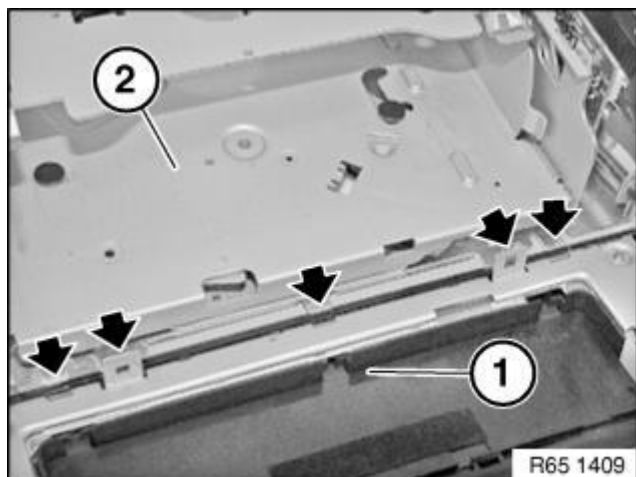


Fig. 11: Remove Trim (1) From Housing (2)
Courtesy of BMW OF NORTH AMERICA, INC.

65 11 075 REMOVING AND INSTALLING/REPLACING DVD CHANGER

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

Necessary preliminary tasks:

- Remove LUGGAGE COMPARTMENT TRIM ON SIDE PANEL ON RIGHT
- Disconnect BATTERY NEGATIVE LEAD
- Remove LUGGAGE COMPARTMENT TRIM ON LEFT SIDE PANEL

NOTE: Comply with notes and instructions on HANDLING OPTICAL WAVEGUIDES .

Release screws (1).

Pull DVD changer (2) out of fixture (3).

Unlock and disconnect associated plug connection, remove CD changer (2).

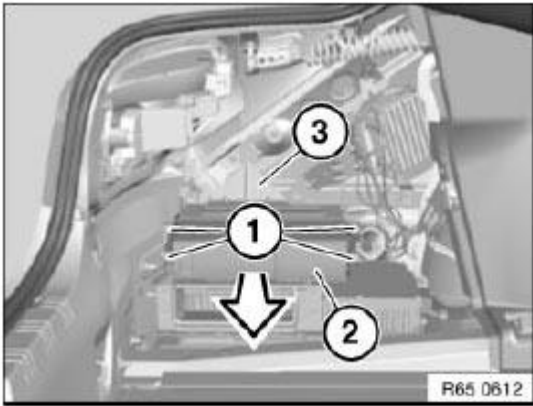


Fig. 12: Removing CD Changer

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release screws (1) and remove both holders (2) from DVD changer (3).

Installation:

If necessary, remove transportation lock.

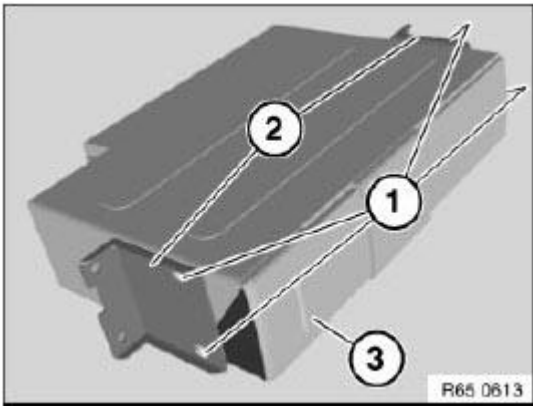


Fig. 13: Identifying Screws, Holders And DVD Changer

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **PROGRAMMING/CODING** .

65 11 220 REMOVING AND INSTALLING SATELLITE RADIO (US VERSION ONLY)

IMPORTANT: Read and comply with notes on **PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION)** .

NOTE: **FOLLOW INSTRUCTIONS FOR HANDLING OPTICAL FIBRES .**

Necessary preliminary tasks:

- Disconnect **NEGATIVE BATTERY CABLE**
- Remove **LUGGAGE COMPARTMENT TRIM** on side panel

Release screws (1).

Remove satellite radio (2) with bracket and disconnect associated plug connection.

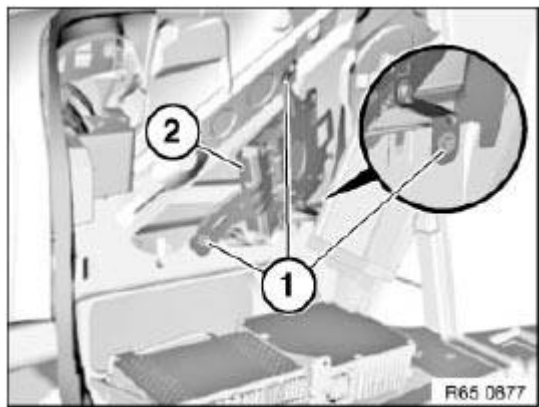


Fig. 14: Identifying Screws And Satellite Radio
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release screws (1) and remove satellite radio (2) from bracket (3).

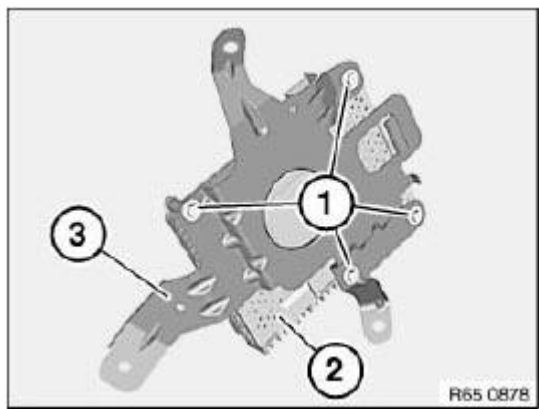


Fig. 15: Identifying Screws, Satellite Radio And Bracket
Courtesy of BMW OF NORTH AMERICA, INC.

When replacing, please observe:

Record ID number (2) of the removed device.

NOTE: The ID number (2) can be found on the label of the housing. Above the barcode the text reads "Sirius ID" (1) and next to it is the company's logo "Sirius Satellite Radio" (3).

Record ID number (2) of the new device.



Fig. 16: Identifying Sirius ID, ID Number And Sirius Satellite Radio
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out vehicle **PROGRAMMING/ENCODING** .

65 11 240 REMOVING AND INSTALLING DIGITAL RADIO (IBOS)

IMPORTANT: Read and comply with notes on **PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION)** .

NOTE: **FOLLOW INSTRUCTIONS FOR HANDLING OPTICAL FIBRES** .

Necessary preliminary tasks:

- Disconnect **NEGATIVE BATTERY CABLE**
- Remove **LUGGAGE COMPARTMENT TRIM** on left side panel

Release screws (1) and remove digital radio (2) from bracket.

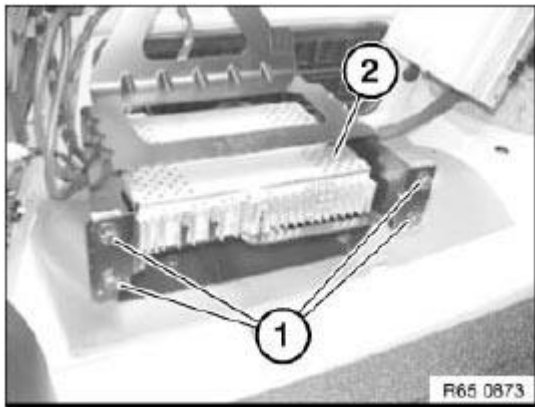


Fig. 17: Identifying Screws And Digital Radio
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

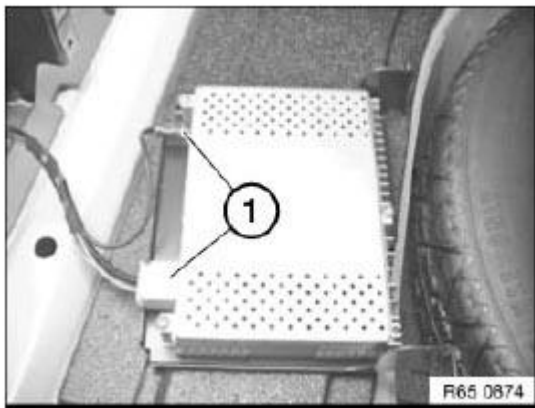


Fig. 18: Identifying Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release screws (1) and remove digital radio (2) from bracket (3).

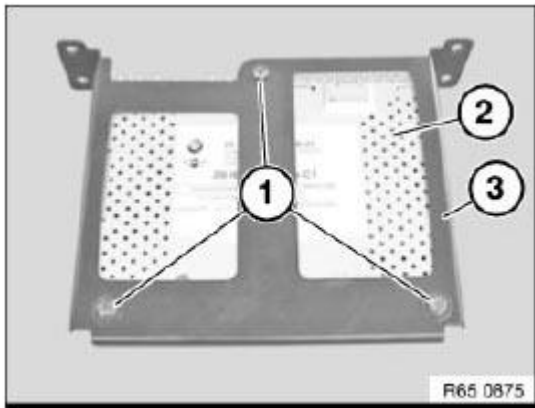


Fig. 19: Identifying Screws, Digital Radio And Bracket
Courtesy of BMW OF NORTH AMERICA, INC.

65 12 230 REMOVING AND INSTALLING DAB TUNER

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

NOTE: FOLLOW INSTRUCTIONS FOR HANDLING OPTICAL FIBRES .

Necessary preliminary tasks:

- Disconnect NEGATIVE BATTERY LEAD
- Remove LUGGAGE COMPARTMENT TRIM on left side panel

Release screws (1).

Disconnect plug connections and remove bracket with DAB tuner (2).

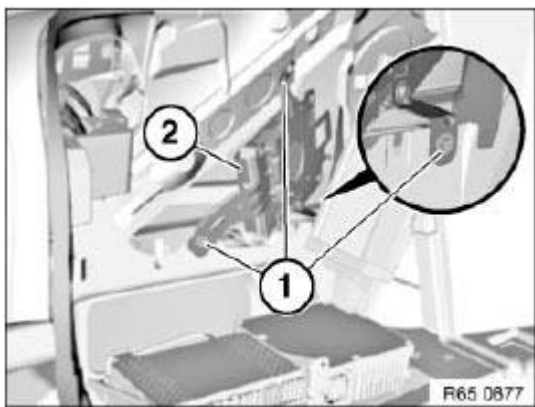


Fig. 20: Identifying Screws And DAB Tuner
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release screws (1) and remove DAB tuner (2) from bracket (3).

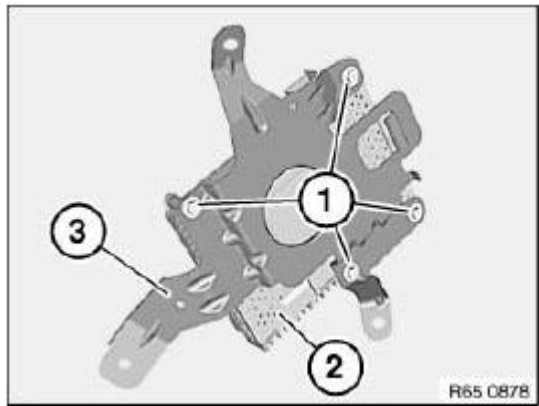


Fig. 21: Identifying Screws, DAB Tuner And Bracket

Courtesy of BMW OF NORTH AMERICA, INC.

STEREO RADIO, AMPLIFIER**65 12 050 REMOVING AND INSTALLING/REPLACING LEFT OR RIGHT CENTRAL BASS SPEAKER (UNDER FRONT SEAT)**

Necessary preliminary tasks:

- Remove front seat. See **REMOVING AND INSTALLING LEFT OR RIGHT FRONT SEAT (NORMAL/ELECTRIC)** or **REMOVING AND INSTALLING LEFT OR RIGHT FRONT SEAT (COMFORT)** .
- Remove **PANEL FOR DOOR PILLAR** .

Release screws (1).

Remove central bass speaker trim (2).

Fold back floor trims (3) in direction of arrow.

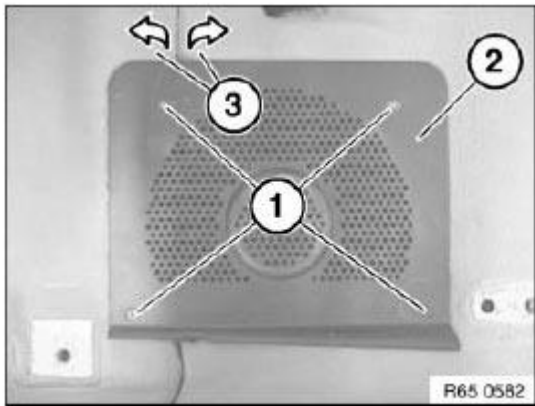


Fig. 22: Folding Back Floor Trims

Courtesy of BMW OF NORTH AMERICA, INC.

Remove clips (1).

Fold back entrance cable cover (2) in direction of arrow.

Unfasten plug connection (3) and disconnect.

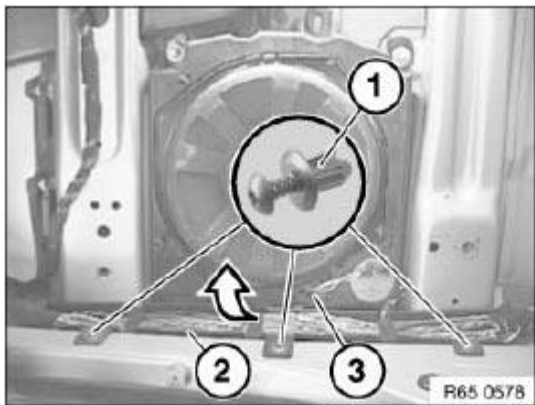


Fig. 23: Folding Back Entrance Cable Cover

Courtesy of BMW OF NORTH AMERICA, INC.

Unscrew nut (1).

Disconnect rear compartment heating duct (2) in direction of arrow.

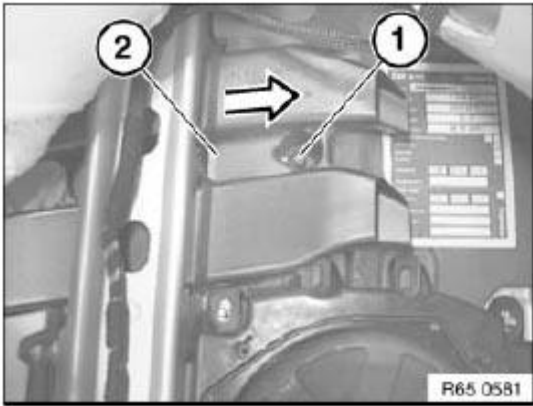


Fig. 24: Disconnecting Rear Compartment Heating Duct
Courtesy of BMW OF NORTH AMERICA, INC.

Release nuts (1) and screws (2).

Feed out central bass speaker (3) in direction of arrow and remove.

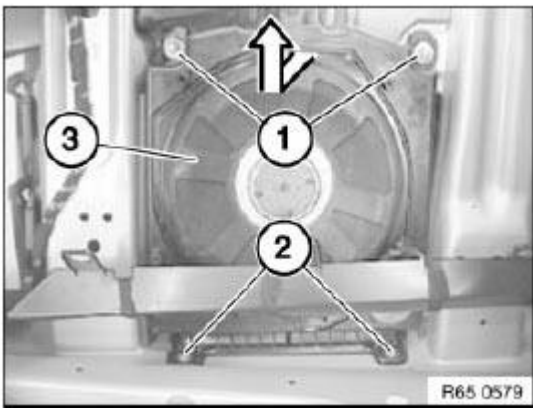


Fig. 25: Feeding Out Central Bass Speaker
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure seal (1) and rubber damper (2) are correctly seated on central bass speaker (3).

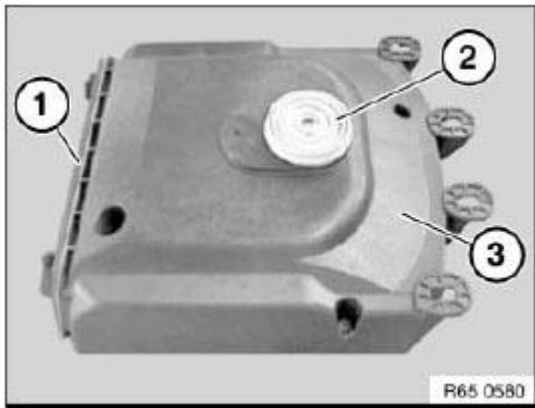


Fig. 26: Identifying Seal, Rubber Damper And Bass Speaker
Courtesy of BMW OF NORTH AMERICA, INC.

65 12 070 REMOVING AND INSTALLING/REPLACING AMPLIFIER

Necessary preliminary tasks:

- Partially remove **LEFT LUGGAGE COMPARTMENT WHEEL ARCH TRIM** .

Unfasten plug connection (1) and disconnect.

Pull out retaining plate (2) in direction of arrow.

Installation:

Make retaining plate (2) is correctly seated.

Remove amplifier (3) from holder (4).

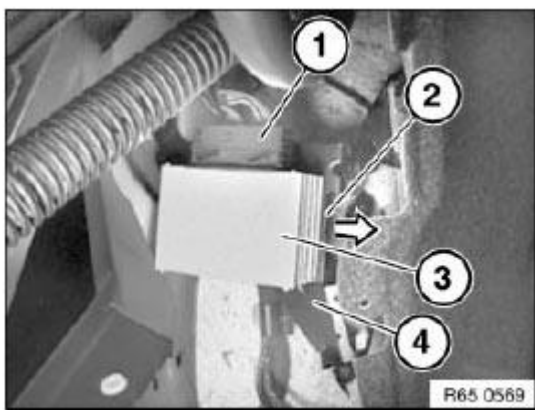


Fig. 27: Pulling Out Retaining Plate
Courtesy of BMW OF NORTH AMERICA, INC.

65 12 072 REMOVING AND INSTALLING (REPLACING) AMPLIFIER (TOP HI-FI SYSTEM)

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

Necessary preliminary tasks:

- Partially remove LUGGAGE COMPARTMENT WHEEL ARCH TRIM ON LEFT

NOTE: Follow instructions for HANDLING OPTICAL FIBRES .

Unlock plug connections (1) and disconnect.

Pull out retaining plates (2) in direction of arrow.

Installation:

Make retaining plates (2) are correctly seated.

Remove amplifier (3) from holder (4).

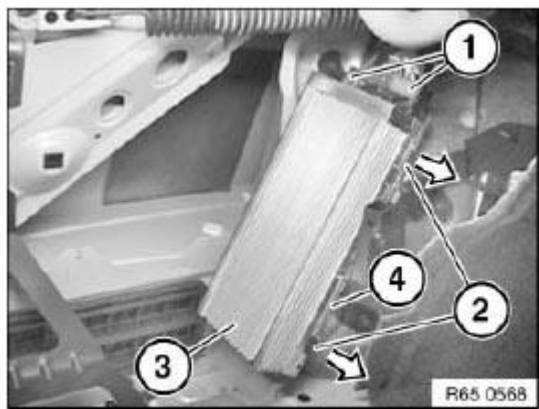


Fig. 28: Pulling Out Retaining Plates

Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: Until 09/2009 a Top HiFi amplifier with a different pin assignment is installed!

Install cable jumper consisting of socket (1) (BMW Parts Service 6901844) and wire jumper (2) in connector (3).

Create wire jumper (2) from wire (cross-section 0.75 mm) and two stops (BMW Parts Department 1393724). Then connect pins 1 and 2 in the socket (1) with wire jumper (2).

NOTE: Connector chamber (4) is not included in current version and remains unused

in new replacement Top HiFi amplifier!

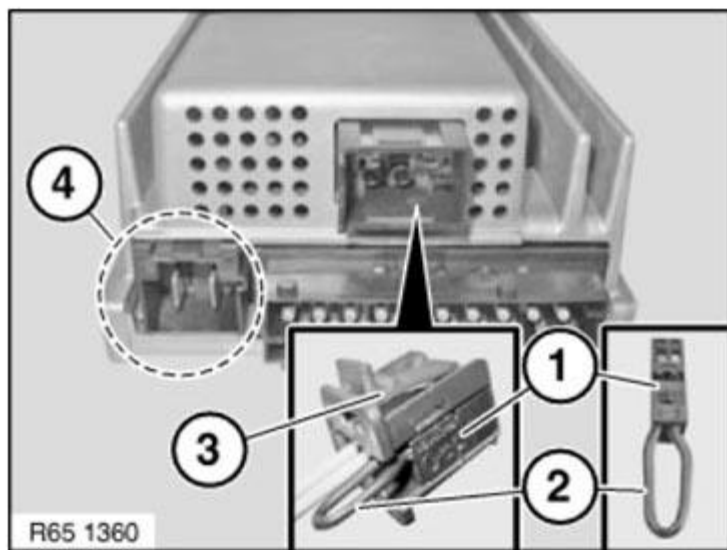


Fig. 29: Identifying Wire Jumper, Socket, Connector, And Connector Chamber
Courtesy of BMW OF NORTH AMERICA, INC.

Carry out **PROGRAMMING/CODING** .

65 12 200 REMOVING AND INSTALLING (REPLACING) AUDIO SYSTEM CONTROLLER

IMPORTANT: Read and comply with notes on **PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION)** .

Comply with notes and instructions on **HANDLING OPTICAL WAVEGUIDES** .

Necessary preliminary tasks:

- Disconnect **NEGATIVE BATTERY LEAD**
- Remove middle trim for instrument panel. See **REMOVING AND INSTALLING (REPLACING) CENTRE INSTRUMENT PANEL TRIM (FROM 03/2007)** , **REMOVING AND INSTALLING (REPLACING) CENTRE INSTRUMENT PANEL TRIM (UP TO 03/2007)** , or **REMOVING AND INSTALLING/REPLACING CENTRE (BOTTOM) INSTRUMENT PANEL TRIM** .

NOTE: Work is shown on the E60 by way of example. There may be differences in detail in the case of other car models.

IMPORTANT: Do not scratch center console trim, cover if necessary.

Release screws (1).

Tightening torque **65 11 6AZ**

Pull back audio system controller (2) slightly.

Disconnect associated plug connections.

Remove audio system controller (2).

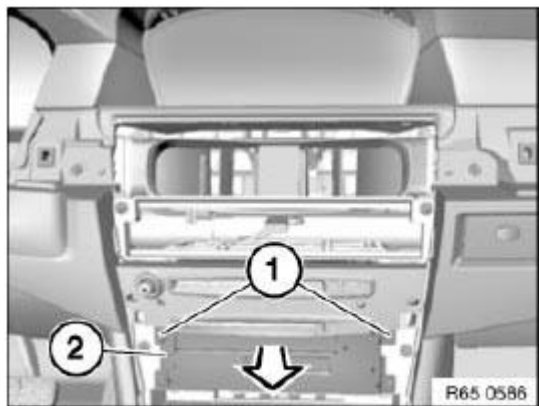


Fig. 30: Pulling Back Audio System Controller Slightly
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **PROGRAMMING/CODING** .

65 12 230 REMOVING AND INSTALLING DAB TUNER

IMPORTANT: Read and comply with notes on **PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION)** .

NOTE: **FOLLOW INSTRUCTIONS FOR HANDLING OPTICAL FIBRES** .

Necessary preliminary tasks:

- Disconnect **NEGATIVE BATTERY LEAD**
- Remove **LUGGAGE COMPARTMENT TRIM** on left side panel

Release screws (1).

Disconnect plug connections and remove bracket with DAB tuner (2).

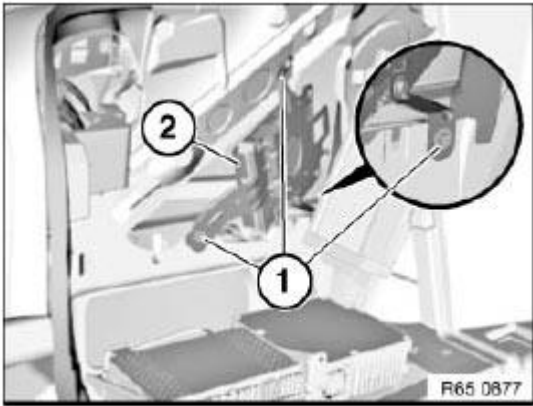


Fig. 31: Identifying Screws And DAB Tuner
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release screws (1) and remove DAB tuner (2) from bracket (3).

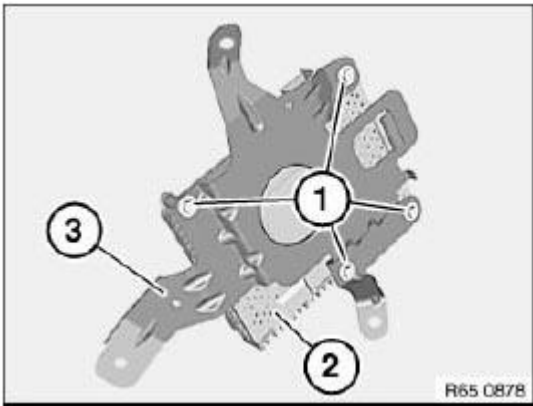


Fig. 32: Identifying Screws, DAB Tuner And Bracket
Courtesy of BMW OF NORTH AMERICA, INC.

65 12 250 REMOVING AND INSTALLING/REPLACING HEADPHONES MODULE

Necessary preliminary tasks:

- Disconnect **NEGATIVE BATTERY LEAD**
- If necessary, remove emergency wheel

Take off cover for control units (1).

Installation:

Make sure cover for control units (1) is correctly seated on locating pins (2).

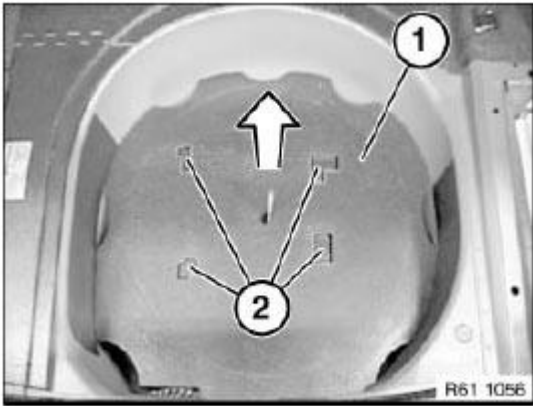


Fig. 33: Identifying Control Units And Pins

Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: Illustrations show removal from the E60.

Unfasten plug connection (1) and disconnect.

Remove headphones module (2) upwards out of mounting for control units (3).

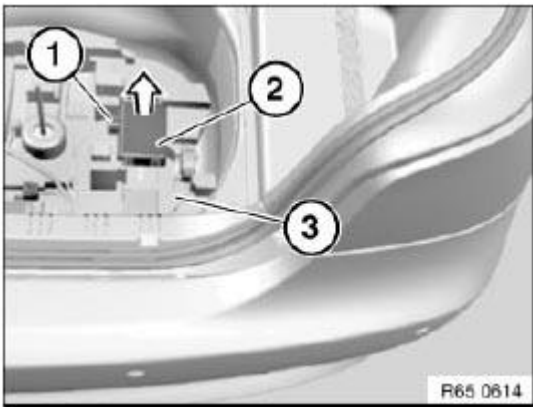


Fig. 34: Removing Headphones Module

Courtesy of BMW OF NORTH AMERICA, INC.

65 12 260 REMOVING AND INSTALLING/REPLACING DVD PLAYER IN REAR CONSOLE (LONG VERSION)

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

Necessary preliminary tasks:

- Remove UPPER REAR CONSOLE TRIM

- Cover, rear console, front

Disconnect plug connection (1).

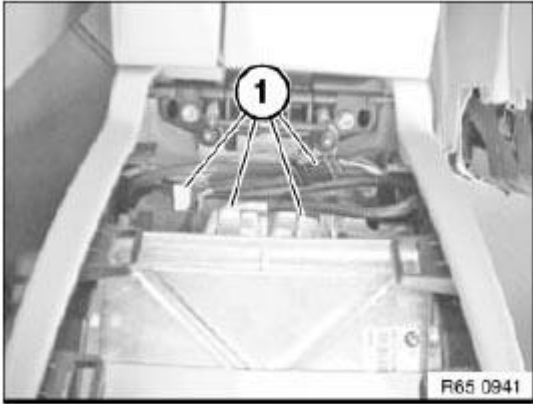


Fig. 35: Identifying Plug Connection

Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1) and remove DVD player (2).

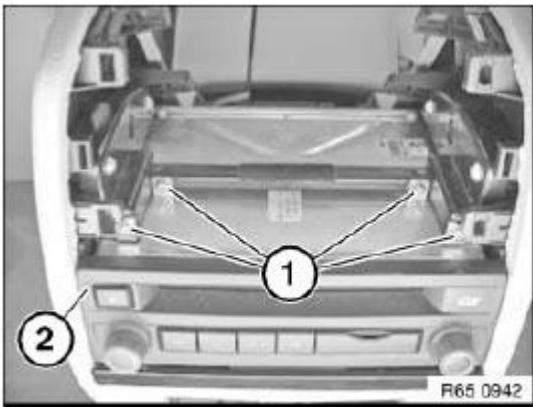


Fig. 36: Identifying Screws And DVD Player

Courtesy of BMW OF NORTH AMERICA, INC.

65 12 350 REMOVING AND INSTALLING/REPLACING FAN (LEFT SIDE PANEL)

Necessary preliminary tasks:

- Remove **LUGGAGE COMPARTMENT TRIM** on left side panel

Disconnect plug connection (1).

Loosen screws (2).

Remove fan (3) in direction of arrow from sleeve (4).

Installation:

Make sure fan (3) is correctly seated on sleeve (4).

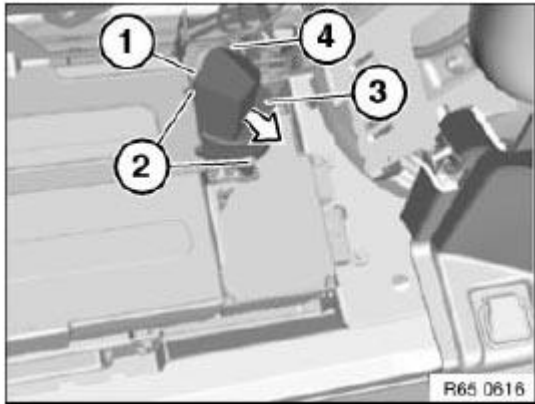


Fig. 37: Removing Fan From Sleeve

Courtesy of BMW OF NORTH AMERICA, INC.

65 12 355 REMOVING AND INSTALLING/REPLACING FAN (LUGGAGE COMPARTMENT RECESS)

Necessary preliminary tasks:

- Remove **LUGGAGE COMPARTMENT FLOOR TRIM PANEL** .
- Remove spare wheel.

Take off cover for control units (1).

Installation:

Make sure cover for control units (1) is correctly seated on locating pins (2).

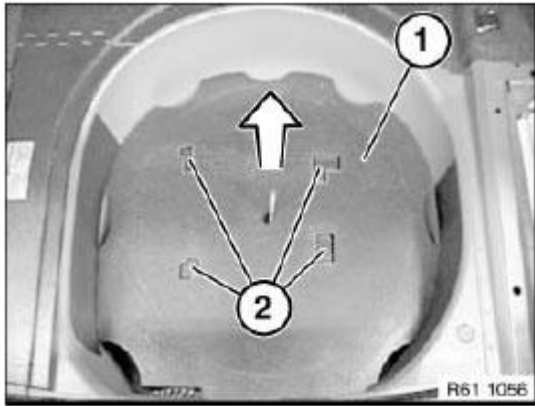


Fig. 38: Identifying Control Units And Pins

Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: Illustrations show removal from the E60.

Disconnect plug connection (1).

Lift fan (2) out of mounting for control units (3).

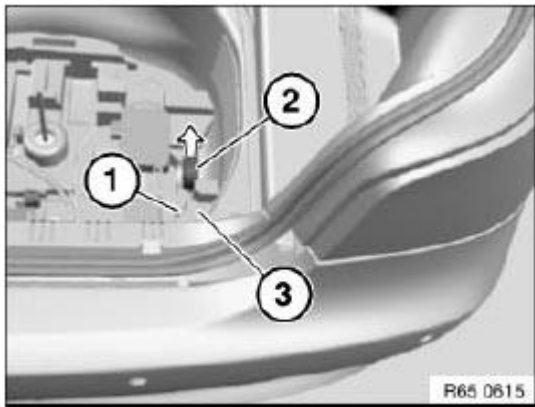


Fig. 39: Identifying Plug Connection, Fan And Control Units

Courtesy of BMW OF NORTH AMERICA, INC.

SPEAKER AND COVER

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

Necessary preliminary tasks:

- 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).

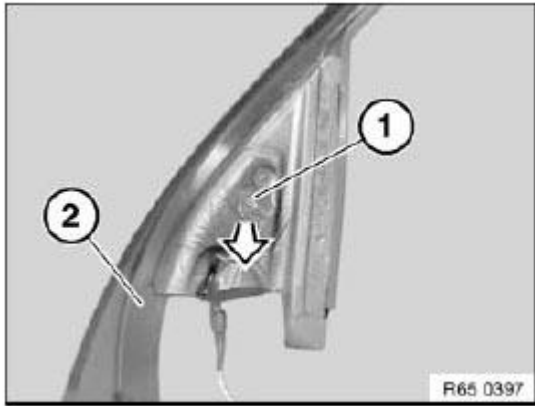


Fig. 40: Removing Foam Wedge

Courtesy of BMW OF NORTH AMERICA, INC.

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

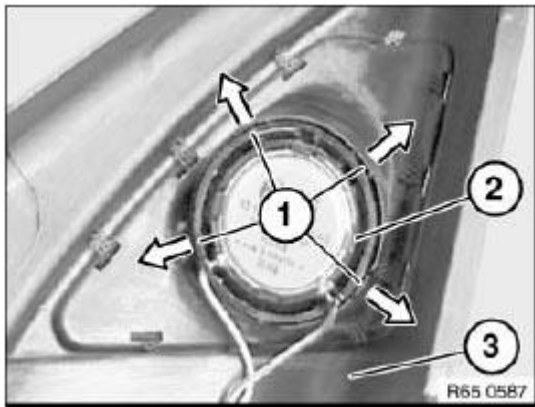


Fig. 41: Unlocking Catches

Courtesy of BMW OF NORTH AMERICA, INC.

65 13 060 REMOVING AND INSTALLING/REPLACING SPEAKER (MID-RANGE SPEAKER, IN INSTRUMENT PANEL)

Necessary preliminary tasks:

- Remove **SPEAKER TRIM**

Release screws (1).

Remove speaker (2).

Disconnect plug connection underneath and remove speaker (2) towards top.

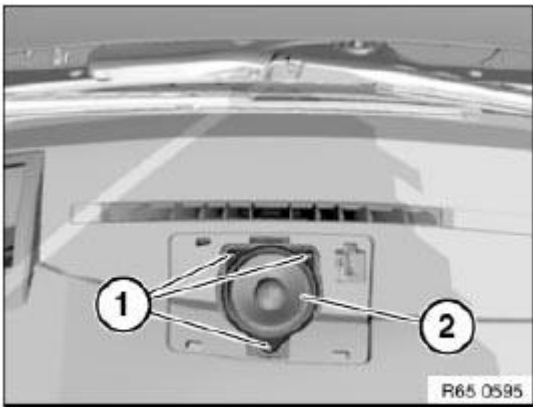


Fig. 42: Identifying Screws And Speaker
Courtesy of BMW OF NORTH AMERICA, INC.

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

Necessary preliminary tasks:

- Remove **FRONT DOOR TRIM PANEL** .

Unscrew nuts (1).

Remove retaining plate (2) in direction of arrow.

Installation:

Retaining plate (2) must be positioned over pin (3).

Remove speaker (4) upwards out of front door trim panel (5).

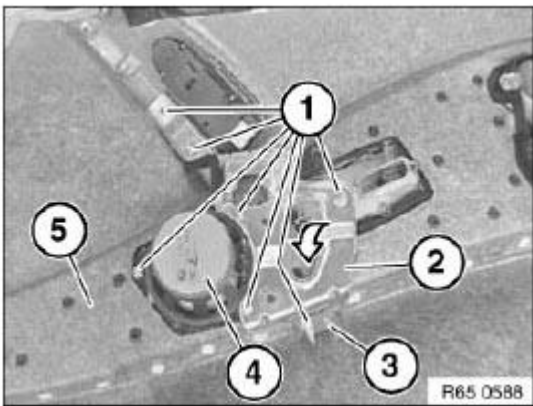


Fig. 43: Removing Retaining Plate

Courtesy of BMW OF NORTH AMERICA, INC.

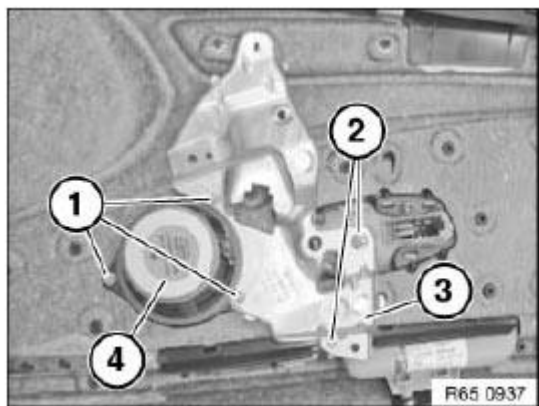
65 13 070 REMOVING AND INSTALLING/REPLACING SPEAKER (MID-RANGE SPEAKER, DOOR AT FRONT) (LONG VERSION)*Necessary preliminary tasks:*

- Remove **FRONT DOOR TRIM**

Unscrew nuts (1).

Release nut (2) and bend retaining plate (3) upwards slightly.

Feed speaker (4) upwards out of door trim panel and retaining plate.

**Fig. 44: Identifying Nuts, Retaining Plate And Speaker**

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 panel. See **REMOVING AND INSTALLING REAR LEFT OR RIGHT DOOR TRIM PANEL (LONG VERSION OR FROM 03/2007)** or **REMOVING AND INSTALLING REAR LEFT OR RIGHT DOOR TRIM PANEL (UP TO 03/2007)** .

Unscrew nuts (1).

Remove retaining plate (2) in direction of arrow.

Installation:

Retaining plate (2) must be positioned over pin (3).

Remove speaker (4) upwards out of rear door trim panel (5).

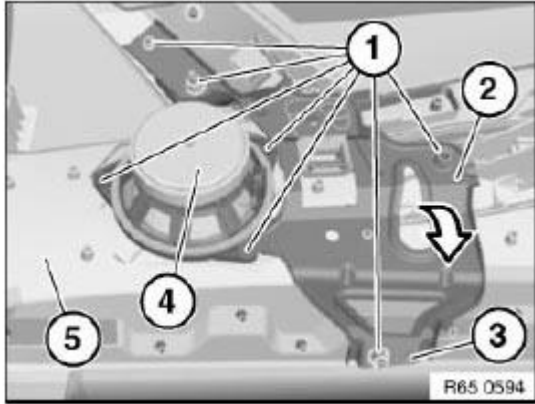


Fig. 45: Removing Retaining Plate

Courtesy of BMW OF NORTH AMERICA, INC.

65 13 188 REMOVING AND INSTALLING/REPLACING REAR MID-RANGE SPEAKER (IN REAR SHELF)

Special tools required:

- **00 9 341**

Lever speaker cover (1) with special tool **00 9 341** out of rear shelf (2).

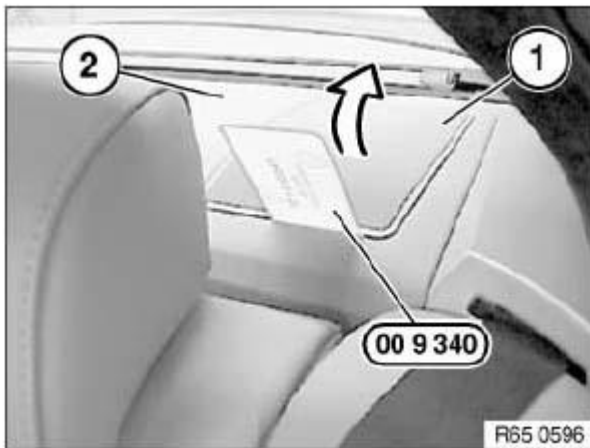


Fig. 46: Removing Speaker Cover With Special Tool 00 9 341 Of Rear Shelf

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Lugs (1) and locks (2) of speaker cover (3) must not be damaged.

Make sure speaker cover (3) is fully engaged.

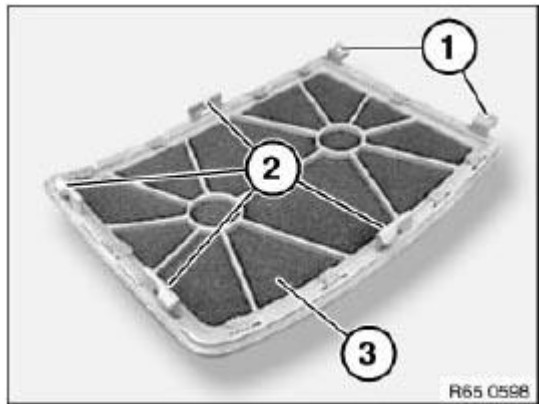


Fig. 47: Identifying Lugs, Locks And Speaker Cover
Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1).

Remove mid-range speaker (2) upwards from rear shelf (3).

Disconnect associated plug connection and remove midrange speaker (2).

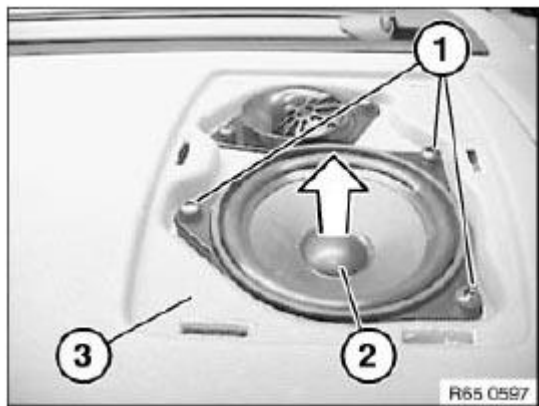


Fig. 48: Removing Mid-Range Speaker
Courtesy of BMW OF NORTH AMERICA, INC.

65 13 195 REMOVING AND INSTALLING/REPLACING REAR TREBLE SPEAKER (IN REAR SHELF)

Necessary preliminary tasks:

- Remove **REAR MID-RANGE SPEAKER**

Disconnect plug connection (1).

Release screws (2).

Remove rear treble speaker (3) from rear shelf (4).

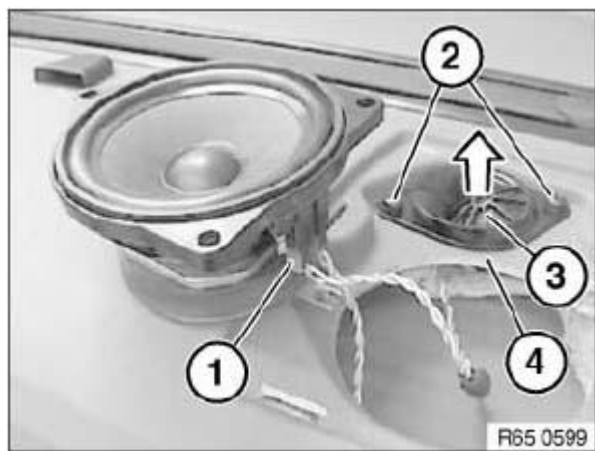


Fig. 49: Removing Rear Treble Speaker
Courtesy of BMW OF NORTH AMERICA, INC.

65 13 400 REMOVING AND INSTALLING/REPLACING LEFT OR RIGHT FREQUENCY GATE

Necessary preliminary tasks:

- Remove front door trim panel. See **REMOVING AND INSTALLING FRONT LEFT OR RIGHT DOOR TRIM PANEL (LONG VERSION OR FROM 03/2007)** or **REMOVING AND INSTALLING FRONT LEFT OR RIGHT DOOR TRIM PANEL (UP TO 03/2007)**

Disconnect plug connection (1).

Release screws (2) and remove frequency gate.

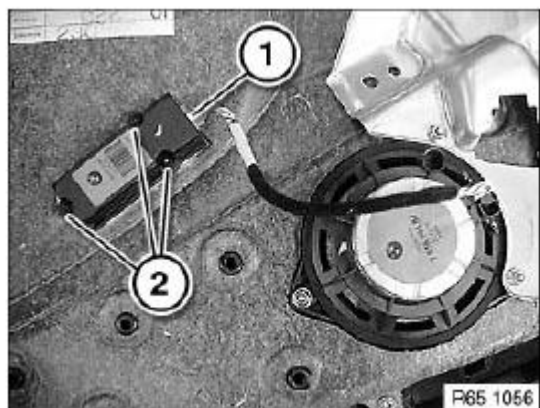


Fig. 50: Identifying Plug Connection And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

AERIAL/ANTENNA

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

Necessary preliminary tasks:

- Remove **REAR RIGHT HEAD RESTRAINT** .
- Remove **PANEL FOR ROOF PILLAR AT REAR LEFT** .
- Remove **AUXILIARY BRAKE LIGHT COVER**
- If necessary, remove rear right **HANDLE**

IMPORTANT: Do not bend molded roofliner.

Unlock and disconnect catches (1) along line.

Disconnect plug connection (3, 4).

Feed out antenna amplifier (2).

Installation:

Make sure molded roofliner and antenna amplifier (2) are correctly engaged.

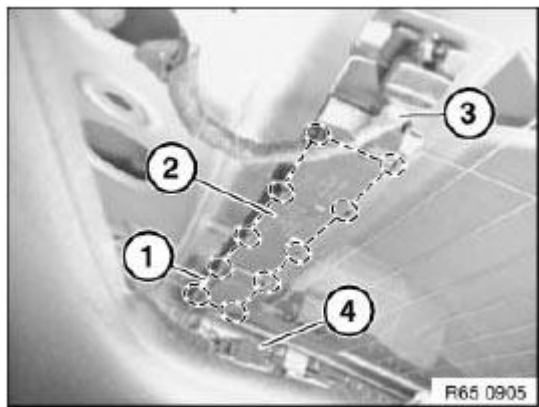


Fig. 51: Identifying Catches, Plug Connection And Antenna Amplifier
Courtesy of BMW OF NORTH AMERICA, INC.

65 20 150 REMOVING AND INSTALLING/REPLACING BACKUP ANTENNA

Necessary preliminary tasks:

- Remove **PANEL FOR PARCEL SHELF** .

Unfasten plug connection (1) and disconnect.

Loosen screws (2).

Remove back-up antenna (3) towards top from parcel shelf (4).

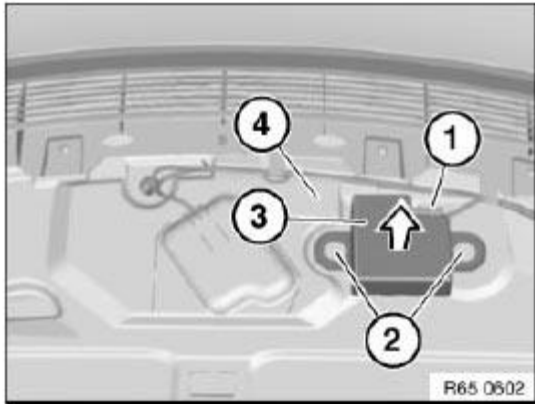


Fig. 52: Removing Back-Up Antenna
Courtesy of BMW OF NORTH AMERICA, INC.

65 20 350 REMOVING AND INSTALLING/REPLACING SUPPRESSION FILTER

Necessary preliminary tasks:

- Remove **PANEL FOR PARCEL SHELF** .

Disconnect plug connections (1).

Release screw (2).

Remove suppression filter (3) from C-pillar (4).

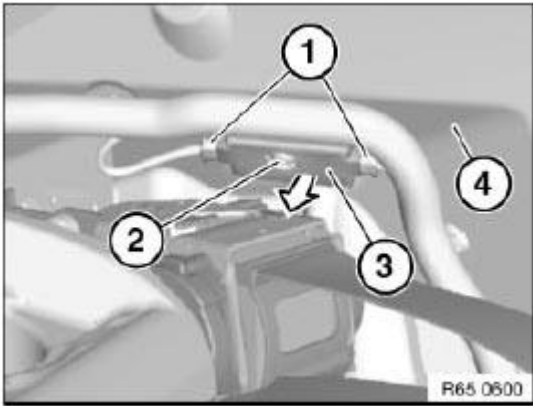


Fig. 53: Removing Suppression Filter
 Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Fit suppression filter (1) so that screw (2) engages thread (3) and locating pin (4) engages bore (5).

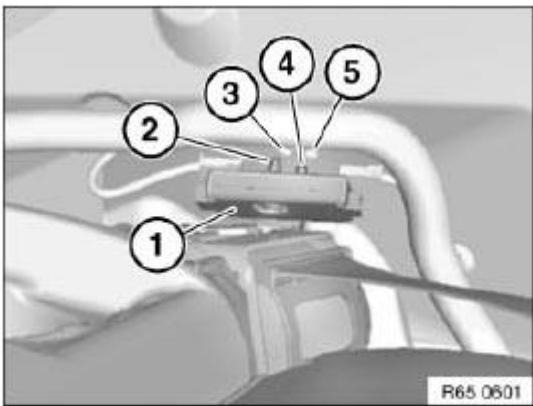


Fig. 54: Identifying Filter, Screw, Thread, Pin And Bore
 Courtesy of BMW OF NORTH AMERICA, INC.

REAR WINDOW AERIAL/ANTENNA

65 24 030 REMOVING AND INSTALLING/REPLACING A TV AMPLIFIER

Necessary preliminary tasks:

- Remove **CAPPING IN LUGGAGE COMPARTMENT ON LEFT OR RIGHT**

NOTE: Illustrations show removal of the TV amplifier on the left side. The TV amplifier on the right side is removed in the same way.

Unlock and disconnect plug connection (1) and antenna wire (2).

Release screw (3).

Remove TV amplifier (4) in direction of arrow.

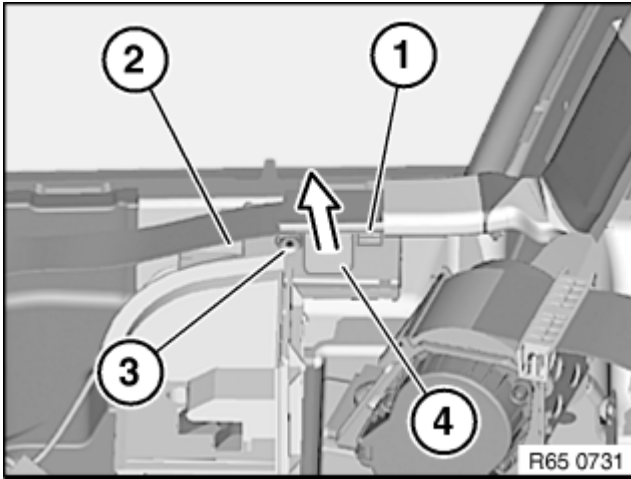


Fig. 55: Identifying Plug Connection, Antenna Wire, And TV Amplifier
Courtesy of BMW OF NORTH AMERICA, INC.

65 24 100 REMOVING AND INSTALLING/REPLACING ANTENNA (AM SENSOR)

Necessary preliminary tasks:

- Remove **REAR SPOILER**

Detach antenna (1) from rear spoiler (2).

Installation:

- Clean adhesive area thoroughly.
- Component and ambient temperatures during bonding at least 18 °C.

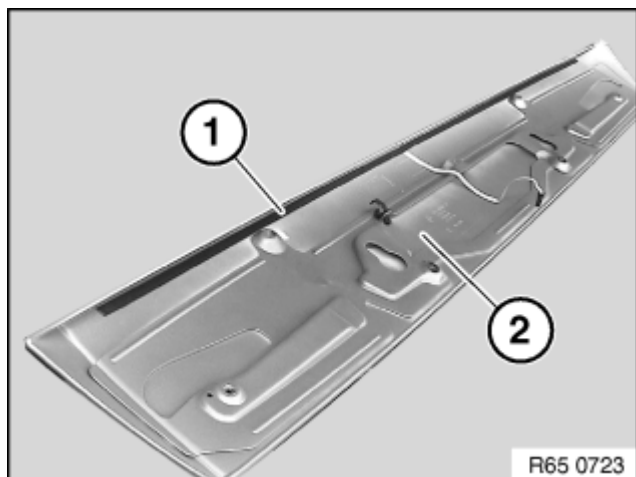


Fig. 56: Locating Antenna On Spoiler

Courtesy of BMW OF NORTH AMERICA, INC.

VIDEO AND TV SETS, CENTRAL INFORMATION DISPLAY (CID)

65 50 011 REMOVING AND INSTALLING (REPLACING) VIDEO MODULE FOR ON-BOARD MONITOR

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

Necessary preliminary tasks:

- Disconnect BATTERY NEGATIVE LEAD
- Remove LUGGAGE COMPARTMENT TRIM ON LEFT SIDE PANEL

NOTE: Follow instructions for HANDLING OPTICAL FIBRES .

Release screws (1).

Remove storage compartment (2) in direction of arrow from holder (3).

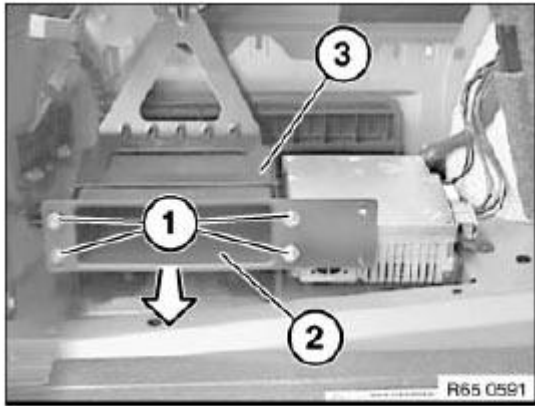


Fig. 57: Removing Storage Compartment
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Do not mix up antenna connectors (1).

Mark antenna plugs (1) and disconnect.

Unfasten plug connection (2) and disconnect.

Release screws (3).

Remove video module for on-board monitor (4) in direction of arrow.

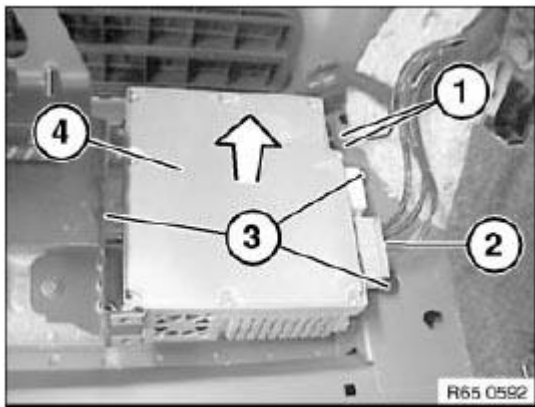


Fig. 58: Removing Video Module For On-Board Monitor
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release screws (1) and remove holder (2) from video module for on-board monitor (3).

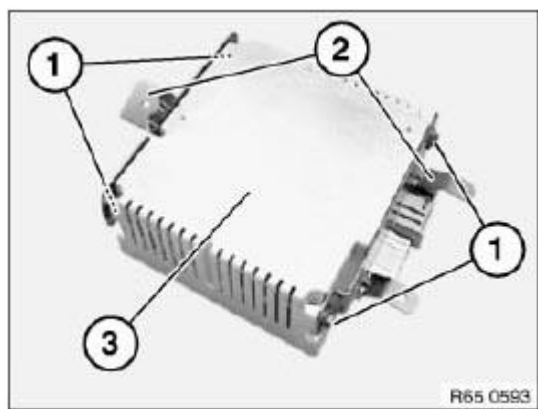


Fig. 59: Identifying Screws, Holder And On-Board Monitor
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **PROGRAMMING/CODING** .

65 50 125 REMOVING AND INSTALLING LEFT OR RIGHT REAR CABIN MONITOR (LONG VERSION)

Necessary preliminary tasks:

- Remove upper rear panel from front seat backrest. See **REMOVING AND INSTALLING/REPLACING MONITOR PANEL HOLDER ON LEFT OR RIGHT FRONT SEAT BACKREST (LONG VERSION)** or **REMOVING AND INSTALLING/REPLACING BOTH REAR PANELS ON LEFT OR RIGHT FRONT SEAT BACKREST (LONG VERSION)** .

Release screws (1) on both side and lift out monitor (2).

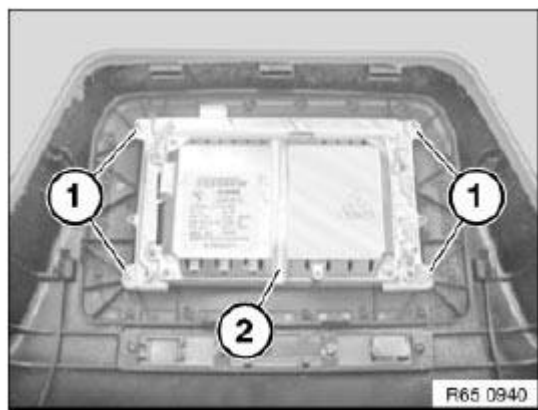


Fig. 60: Identifying Screws And Monitor
Courtesy of BMW OF NORTH AMERICA, INC.

ANTI-THEFT ALARM SYSTEM

65 75 055 REMOVING AND INSTALLING/REPLACING EMERGENCY POWER SIREN WITH TILT SENSOR

Necessary preliminary tasks:

- Remove **REAR BUMPER TRIM CARRIER**

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

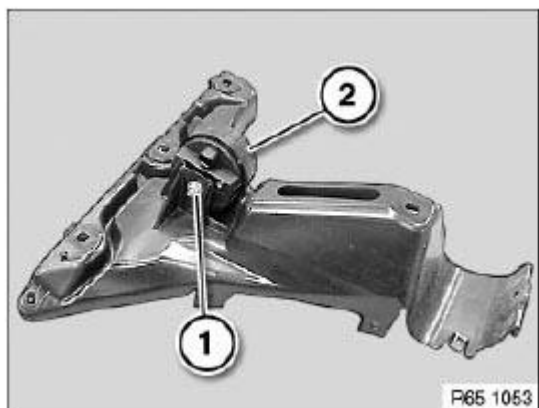


Fig. 61: Identifying Nut And Emergency Power Siren
Courtesy of BMW OF NORTH AMERICA, INC.

65 75 071 REMOVING AND INSTALLING (REPLACING) MODULE FOR PASSENGER COMPARTMENT SENSOR

Special tools required:

- **00 9 340**

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) !

Lever out trim (1) with special tool **00 9 340** and remove.

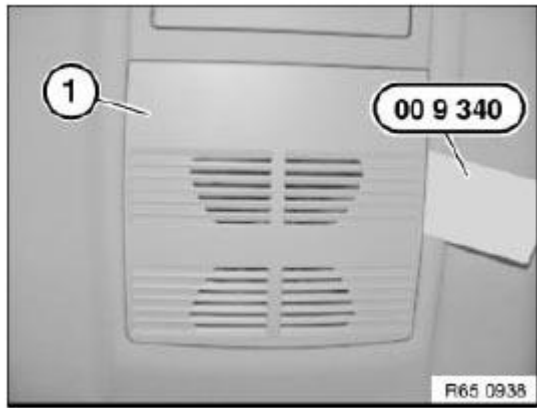


Fig. 62: Removing Trim With Special Tool 00 9 340

Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1) and remove module for passenger compartment sensor with trim.

Replacement:

Open retaining lugs (2) and remove module (3).

Installation:

Arrow (4) printed on module for passenger compartment sensor must be aligned in direction of arrow.

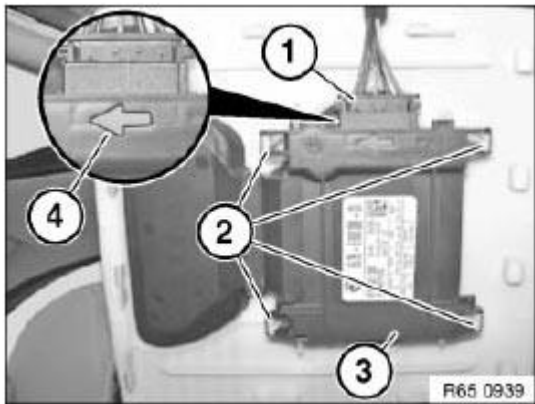


Fig. 63: Identifying Plug Connection, Retaining Lugs And Module

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **PROGRAMMING/CODING** .

AIRBAG TRIGGER UNIT, DIAGNOSTICS

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, E82, E87, E88

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**.

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

65 77... NOTES ON SCRAPPING BMW VEHICLES WITH GAS GENERATORS (VEHICLES WITH GATEWAY MODULE, AIRBAG SYSTEM, UP TO BUILD DATE 09/2005)

The gas generator is a pyrotechnic component of:

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

5 Series: E60, E61

6 Series: E63, E64

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.

Firing failure

If correct firing 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 firing operation has failed:

- Disconnect the firing 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.

Firing

Firing 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 firing 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!

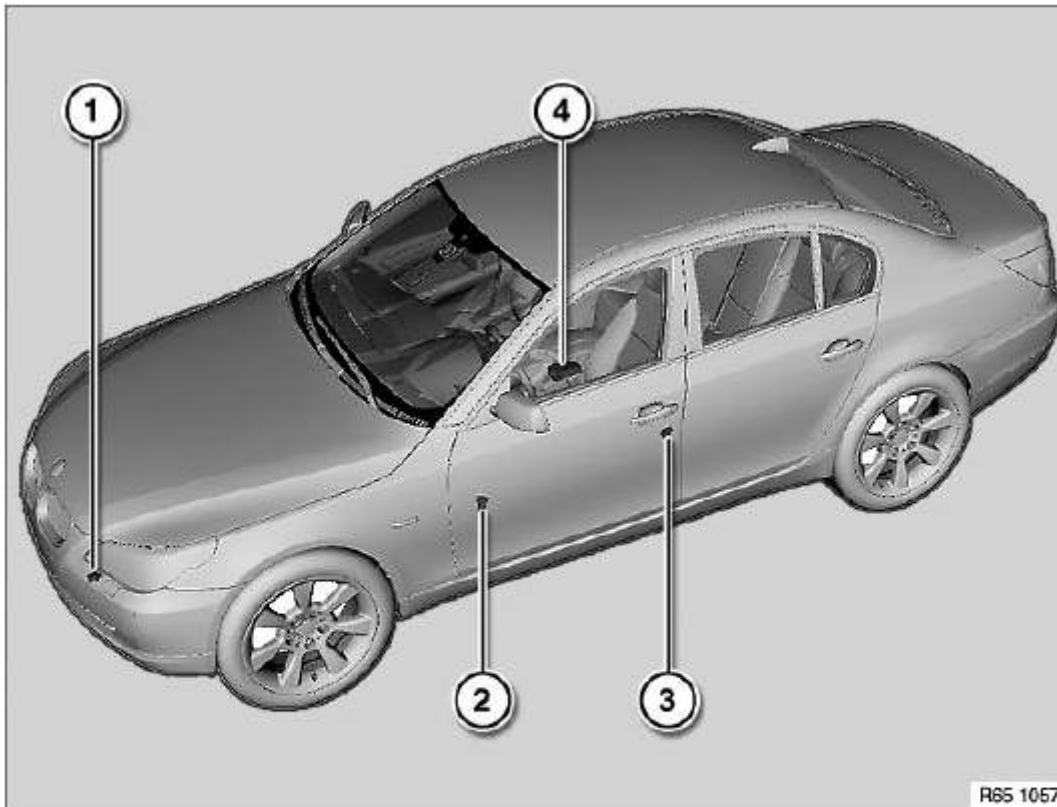
Wash skin with water after contact with fired gas generators!

1. Vehicles with gateway module (all airbags, seat belt tensioners, safety battery terminal)

1.1 Expose **AIRBAG PLUG CONNECTIONS**.

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

65 77... OVERVIEW OF SENSORS FOR AIRBAG SYSTEM (FROM 09/2005)



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

Fig. 64: Overview Of Sensors For Airbag System
Courtesy of BMW OF NORTH AMERICA, INC.

65 77 016 REMOVING AND INSTALLING/REPLACING AIRBAG CONTROL UNIT (BUILD DATE FROM 09/2005)

WARNING: Note AIRBAG SAFETY INSTRUCTIONS !
Incorrect handling can activate airbag and cause injury.

IMPORTANT: Read and comply with notes on protection against electrostatic damage (ESD protection).

Necessary preliminary tasks:

- Disconnect **BATTERY NEGATIVE LEAD**
- Remove **CENTER CONSOLE**

If necessary, remove rear compartment air duct and disconnect associated plug connections.

Disconnect plug connection (1).

Release screws (2) and remove airbag control unit (3).

Tightening torque **65 77 1AZ** .

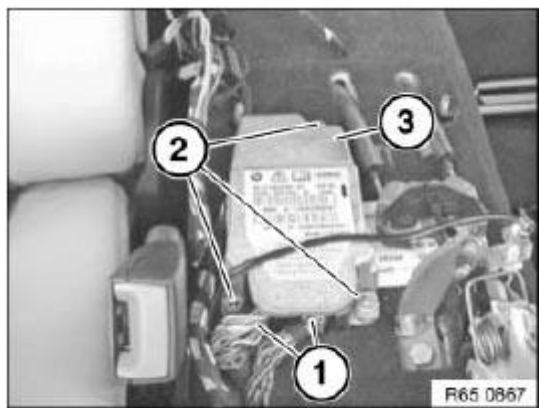


Fig. 65: Identifying Plug Connection, Screws And Airbag Control Unit
Courtesy of BMW OF NORTH AMERICA, INC.

65 77 541 REMOVING AND INSTALLING/REPLACING FRONT LEFT OR RIGHT ACCELERATION SENSOR

NOTE: **Acceleration sensor only fitted in US version!**

Necessary preliminary tasks:

- Remove **FRONT BUMPER TRIM**

Disconnect plug connection (1).

Release screws (2) and remove acceleration sensor (3).

Installation:

Tightening torque **65 77 9AZ** .

Replace screws (2).

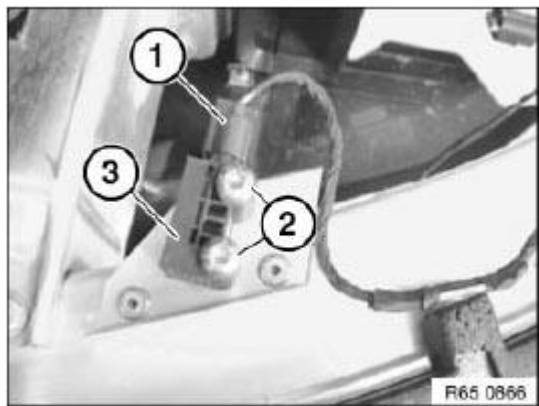


Fig. 66: Identifying Plug Connection, Screws And Acceleration Sensor

Courtesy of BMW OF NORTH AMERICA, INC.

65 77 560 REMOVING AND INSTALLING/REPLACING CONTROL ELECTRONICS FOR PASSENGER SEAT OCCUPANCY DETECTOR

Necessary preliminary tasks:

- Move seat into most upward position.

NOTE: **Seat shown removed for purposes of clarity.**

Unlock plug connections (1) and disconnect.

Unlock catch (2) and remove control electronics for passenger seat occupancy detector (3) in direction of arrow from seat frame (4).

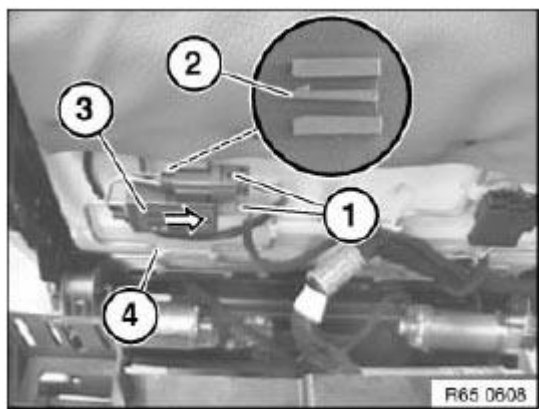


Fig. 67: Removing Control Electronics For Passenger Seat Occupancy Detector

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Retaining hook (1) of control electronics for passenger seat occupancy detector (2) must not be damaged.

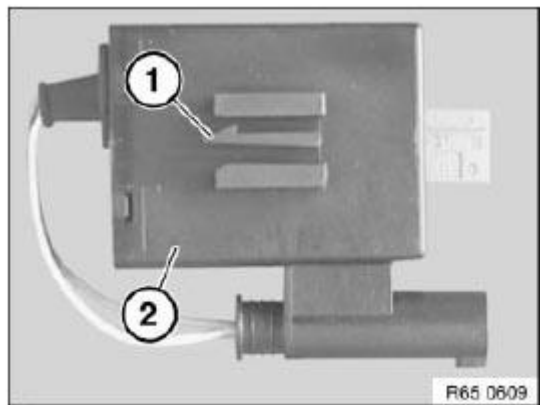


Fig. 68: Identifying Hook And Passenger Seat Occupancy Detector
Courtesy of BMW OF NORTH AMERICA, INC.

65 77 598 REPLACING SENSOR MAT FOR DRIVER'S SEAT OCCUPANCY DETECTOR

Necessary preliminary tasks:

- Remove seat cover for front seat. See **REPLACING SEAT COVER FOR LEFT OR RIGHT FRONT SEAT (NORMAL/SEMI-ELECTRIC)** , **REPLACING SEAT COVER FOR LEFT OR RIGHT FRONT SEAT (NORMAL/ELECTRIC)** , **REMOVING AND INSTALLING/REPLACING SEAT COVER FOR LEFT OR RIGHT FRONT SEAT (SPORT/ELECTRIC)** , or **REMOVING AND INSTALLING/REPLACING SEAT COVER FOR LEFT OR RIGHT FRONT SEAT (COMFORT)** .

NOTE: The comfort seat with air conditioning is shown.

Remove sensor mat for driver's seat occupancy detector (1) from padding (2).

IMPORTANT: To avoid malfunctions, make sure sensor mat (1) is cleanly laid:

- Lay plug-in connection in designated recess.
- Lay sensor mat (1) straight and without kinks (large bending radii).

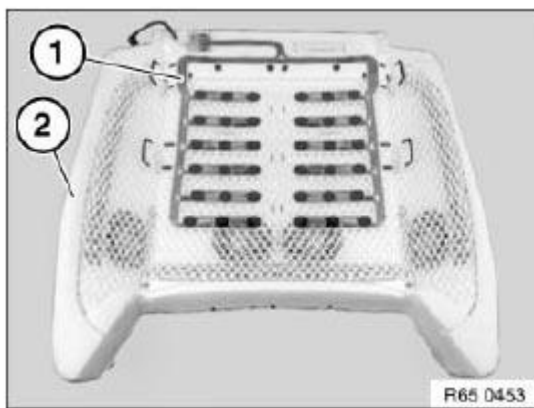


Fig. 69: Identifying Sensor Mat For Driver Seat Occupancy Detector And Padding

Courtesy of BMW OF NORTH AMERICA, INC.

- If necessary, secure sensor mat (1) with adhesive tape provided.

65 77 600 REPLACING SENSOR MAT FOR PASSENGER SEAT OCCUPANCY DETECTOR

WARNING: US/CDN front passenger seat (with OC3 mat) only:

The padding can only be removed in conjunction with the OC3 mat.

If padding is defective, both parts may only be replaced together.

After fitting new padding, enable OC3 mat with BMW diagnosis system.

The operation for removing the padding with/without OC3 mat is described in:

- Replacing seat cover for front seat. See **REPLACING SEAT COVER FOR LEFT OR RIGHT FRONT SEAT (NORMAL/SEMI-ELECTRIC)** , **REPLACING SEAT COVER FOR LEFT OR RIGHT FRONT SEAT (NORMAL/ELECTRIC)** , **REMOVING AND INSTALLING/REPLACING SEAT COVER FOR LEFT OR RIGHT FRONT SEAT (SPORT/ELECTRIC)** , or **REMOVING AND INSTALLING/REPLACING SEAT COVER FOR LEFT OR RIGHT FRONT SEAT (COMFORT)** .

Enabling seat occupancy detector (OC3 mat):

- Connect BMW diagnosis system
- Release seat occupancy detector
- Clear fault memory if necessary

NOTE: The comfort seat with air conditioning is shown.

Remove sensor mat for driver's seat occupancy detector (1) from support (2).

IMPORTANT: To avoid malfunctions, make sure sensor mat (1) is cleanly laid:

- Lay plug-in connection in designated recess.
- Lay sensor mat (1) straight and without kinks (large bending radii).

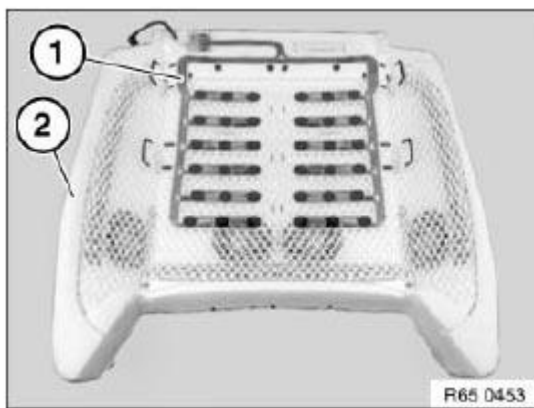


Fig. 70: Identifying Sensor Mat For Driver Seat Occupancy Detector And Support (2)

Courtesy of BMW OF NORTH AMERICA, INC.

- If necessary, secure sensor mat (1) with adhesive tape provided.

This operation is described in:

"Replacing SENSOR MAT FOR DRIVER'S SEAT OCCUPANCY DETECTOR."

65 77 602 REPLACING SENSOR MAT (OC3 MAT) FOR PASSENGER SEAT OCCUPANCY

WARNING: US/CDN front passenger seat (with OC3 mat) only: The OC3 mat can only be removed in conjunction with the padding from the seat cover. If OC3 mat or padding is defective, both parts may only be replaced together. After fitting seat cover, enable OC3 mat with BMW diagnosis system.

The operation for removing the OC3 mat is described in:

52 17 415 REPLACING SUPPORT FOR LEFT OR RIGHT FRONT SEAT (COMFORT)

52 14 415 REPLACING SUPPORT FOR LEFT OR RIGHT FRONT SEAT (NORMAL/ELECTRIC)

52 13 400 REPLACING SEAT COVER FOR LEFT OR RIGHT FRONT SEAT (NORMAL/SEMI-ELECTRIC)

65 77 680 REMOVING AND INSTALLING (REPLACING) AIRBAG CONTROL UNIT WITH GATEWAY MODULE

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

WARNING: NOTE AIRBAG SAFETY INSTRUCTIONS!
Incorrect handling can activate airbag and cause injury.

NOTE: FOLLOW INSTRUCTIONS FOR HANDLING OPTICAL FIBERS .

Necessary preliminary tasks:

- DISCONNECT BATTERY NEGATIVE LEAD and cover
- Remove TRIM FOR INSTRUMENT PANEL at bottom right

Unlock catches (1) in direction of arrow.

Pull airbag control unit with gateway module (2) out of equipment carrier (3) slightly.

Unlock plug connections (4) and disconnect.

Remove airbag control unit with gateway module (2).

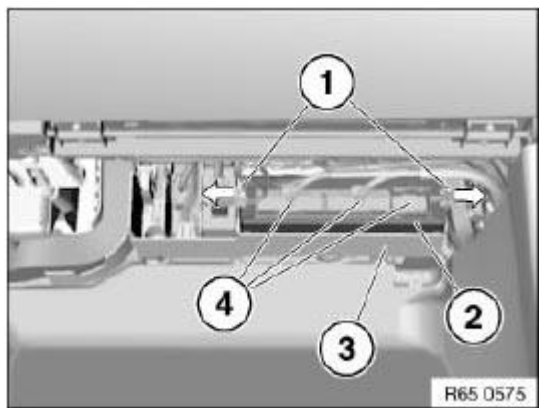


Fig. 71: Removing Airbag Control Unit With Gateway Module
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out PROGRAMMING/CODING .

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

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

WARNING: NOTE AIRBAG SAFETY INSTRUCTIONS!
Incorrect handling can activate airbag and cause injury.

NOTE: Follow instructions for HANDLING OPTICAL FIBERS .

Necessary preliminary tasks:

- DISCONNECT BATTERY NEGATIVE LEAD and cover
- Remove TRIM PANEL FOR DOOR PILLAR (bottom)

Slacken screws (1)

Release screw (2).

Installation:

Tightening torque **65 77 5AZ** .

Raise B-pillar sensor (3) slightly through opening in B-pillar and feed out towards rear.

Unclip cable duct (4) at points (5).

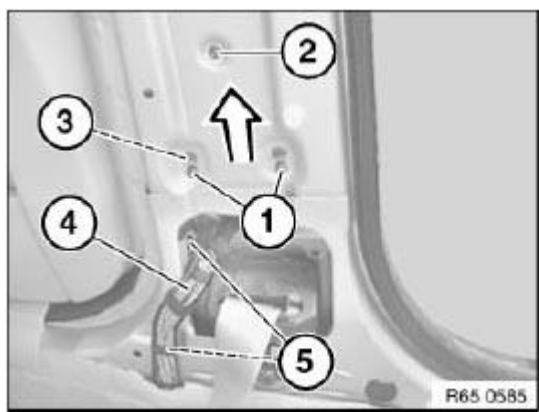


Fig. 72: Identifying Screws, B-Pillar Sensor, Cable Duct And Points
Courtesy of BMW OF NORTH AMERICA, INC.

Unlock plug connections (1) and disconnect.

Feed B-pillar sensor (2) in direction of arrow out of B-pillar (3) and remove.

Installation:

Make sure electrical leads are correctly routed.

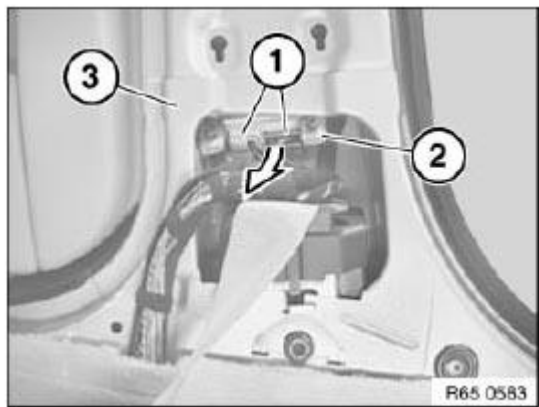


Fig. 73: Feeding B-Pillar Sensor

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure metal nut (1) is correctly positioned on B-pillar sensor (2).

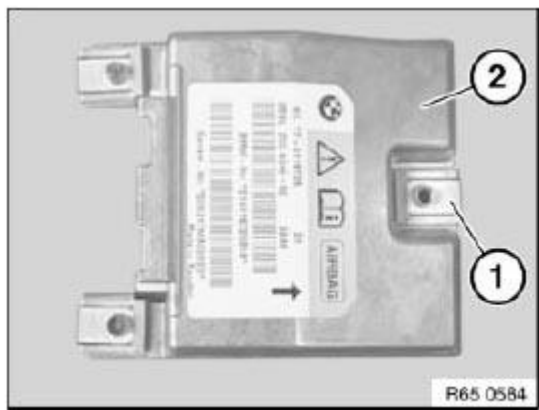


Fig. 74: Identifying Metal Nut And B-Pillar Sensor

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **PROGRAMMING/CODING** .

65 77 720 REMOVING AND INSTALLING/REPLACING LEFT OR RIGHT B-PILLAR SENSOR (FROM 09/2005)

Necessary preliminary tasks:

- Disconnect **BATTERY NEGATIVE LEAD**

- Remove **TRIM PANEL FOR DOOR PILLAR** (bottom)

Release screw (1).

Slacken screw (2) and feed out B-pillar sensor in downward direction.

Tightening torque **65 77 5AZ** .

Installation:

Make sure centering pin (3) is correctly seated.

Replace screws (1 and 2).

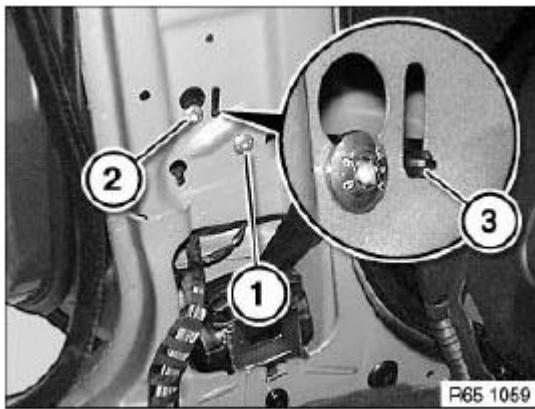


Fig. 75: Identifying Screws And Centering Pin
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1) and remove B-pillar sensor.

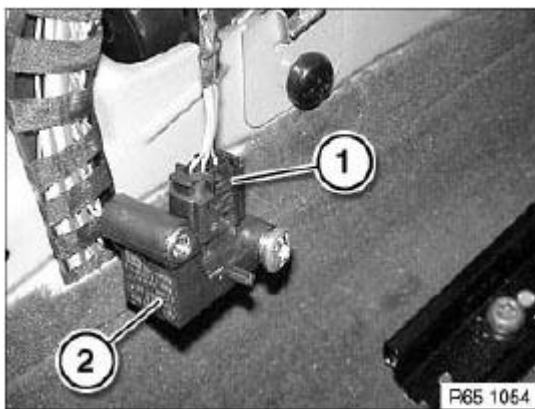


Fig. 76: Identifying Plug Connection And B-Pillar Sensor
Courtesy of BMW OF NORTH AMERICA, INC.

65 77 730 REMOVING AND INSTALLING (REPLACING) VEHICLE CENTER SENSOR

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

WARNING: NOTE AIRBAG SAFETY INSTRUCTIONS!
Incorrect handling can activate airbag and cause injury.

NOTE: Follow instructions for HANDLING OPTICAL FIBERS .

Necessary preliminary tasks:

- DISCONNECT BATTERY NEGATIVE LEAD and cover
- Remove CENTER CONSOLE

NOTE: Middle rear compartment ventilation duct shown removed for purposes of clarity.

Unfasten plug connection (1) and disconnect.

Release screws (2), tightening torque 65 77 6AZ .

Remove vehicle center sensor (3).

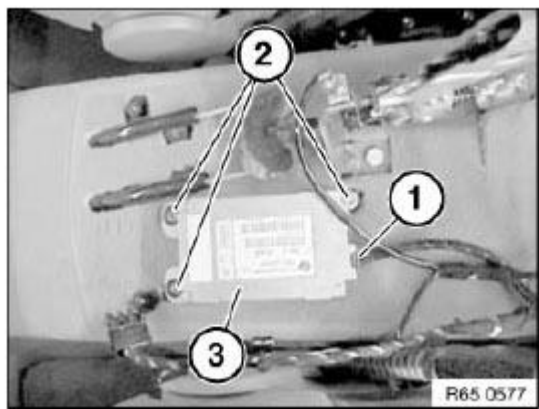


Fig. 77: Identifying Plug Connection, Screws And Vehicle Center Sensor
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out PROGRAMMING/CODING .

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

WARNING: NOTE AIRBAG SAFETY INSTRUCTIONS!**Incorrect handling can activate airbag and cause injury.****IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) !***Necessary preliminary tasks:*

- Remove front door trim. See **REMOVING AND INSTALLING FRONT LEFT OR RIGHT DOOR TRIM PANEL (LONG VERSION OR FROM 03/2007)** or **REMOVING AND INSTALLING FRONT LEFT OR RIGHT DOOR TRIM PANEL (UP TO 03/2007)** .
- Detach **SOUND INSULATION** in work area

Release screw (1) and remove front door sensor (2) from door.

Disconnect plug connection (3).

Installation:

Make sure rubber ring and sensor are securely seated.

Tightening torque **65 77 7AZ** .

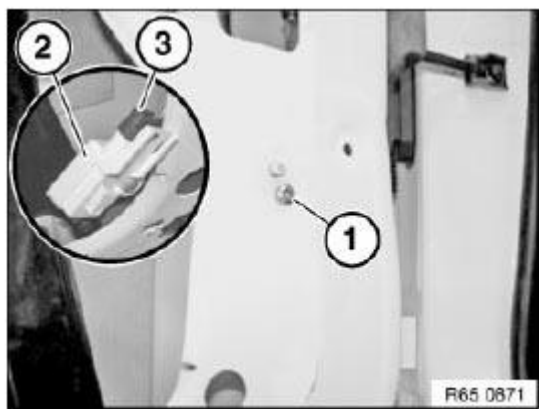
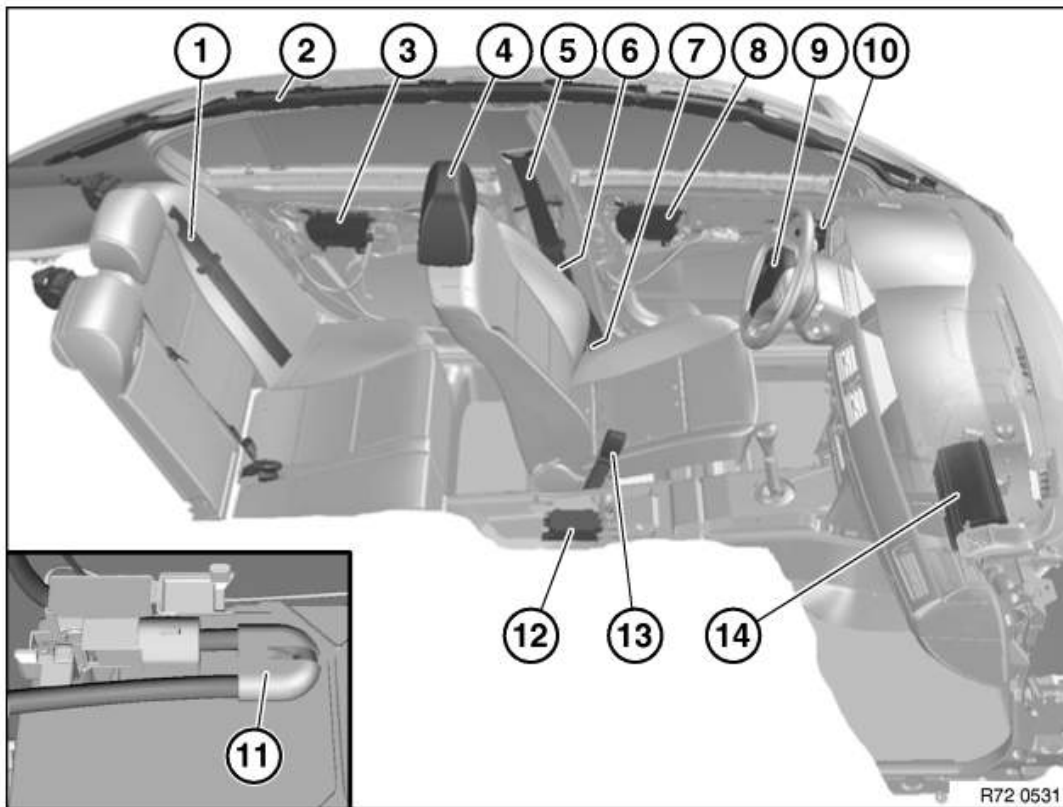


Fig. 78: Identifying Screw, Front Door Sensor And Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

72 12... OVERVIEW OF AIRBAG MODULES, SEAT BELTS AND AIRBAG CONTROL UNITS



- | | |
|---|--|
| 1 Seat belt, rear, complete | 8 Airbag module, door, front left/right |
| 2 Head airbag, left/right | 9 Airbag unit, driver's side |
| 3 Airbag module, door, rear left/right | 10 Door module, driver/front passenger |
| 4 Active head restraint, front left/right | 11 Safety battery terminal |
| 5 Seat belt, front left/right | 12 Satellite, vehicle center |
| 6 Satellite, B-pillar, left/right | 13 Seat belt tensioner, front left/right |
| 7 ECE only: Anchor fitting tensioner, driver's side | 14 Airbag module, front passenger side |

Fig. 79: Overview Of Airbag Modules, Seat Belts And Airbag Control Units

Courtesy of BMW OF NORTH AMERICA, INC.

ON-BOARD COMPUTER

65 81 060 REMOVING AND INSTALLING/REPLACING OUTSIDE TEMPERATURE SENSOR

Necessary preliminary tasks:

- Remove **FRONT BUMPER TRIM**

Disconnect plug connection (1).

Unclip outside temperature sensor (2) in direction of arrow from mounting and remove.

Installation:

Make sure outside temperature sensor (2) is correctly engaged.

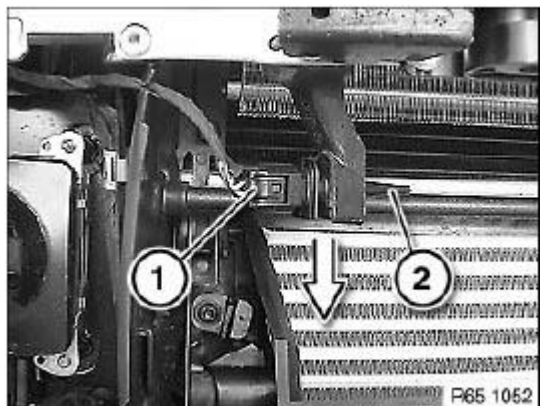


Fig. 80: Unclipping Outside Temperature Sensor
Courtesy of BMW OF NORTH AMERICA, INC.

65 81 060 REMOVING AND INSTALLING/REPLACING OUTSIDE TEMPERATURE SENSOR (UP TO 03/2007)

Necessary preliminary tasks:

- Remove **FRONT UNDERBODY PROTECTION**

Disconnect plug connection (1).

Unclip outside temperature sensor (2) in direction of arrow from mounting and remove.

Installation:

Make sure outside temperature sensor (2) is correctly engaged.

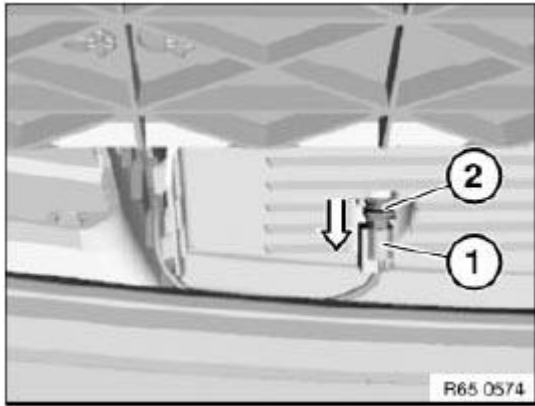


Fig. 81: Unclipping Outside Temperature Sensor
Courtesy of BMW OF NORTH AMERICA, INC.

CENTRAL DISPLAY AND OPERATING UNIT

65 82 050 REMOVING AND INSTALLING (REPLACING) ONBOARD MONITOR

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

IMPORTANT: Proceed with care so as to avoid damaging the onboard monitor and adjoining trims.

Release screws (1).

Fold out on-board monitor (2) in direction of arrow.

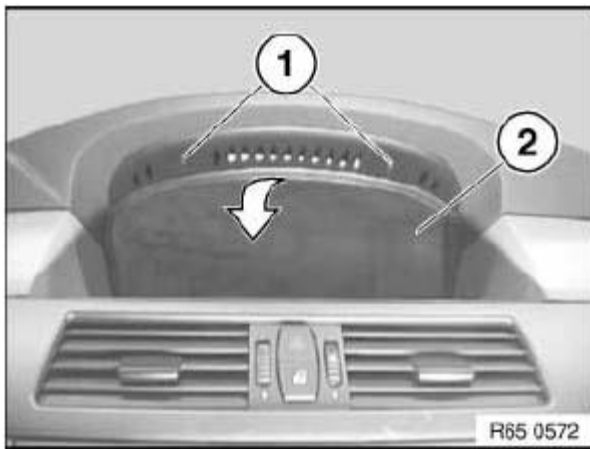


Fig. 82: Folding Out On-Board Monitor
Courtesy of BMW OF NORTH AMERICA, INC.

Unlock plug connections (1) and disconnect.

Installation:

Ensure correct cable routing.

Remove on-board monitor (2).

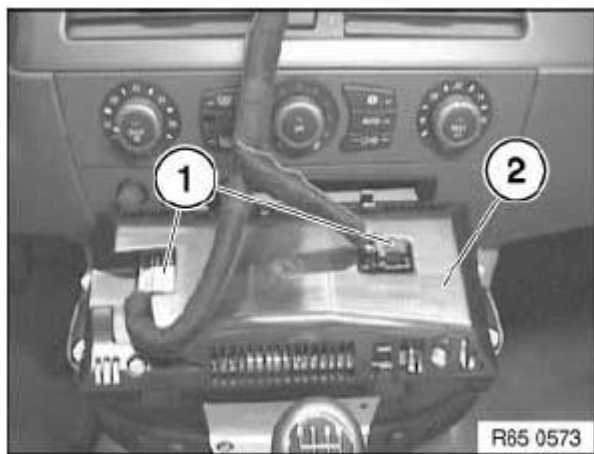


Fig. 83: Identifying Plug Connection And On-Board Monitor
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **PROGRAMMING/CODING** .

65 82 XX1 REPLACING FRONT TRIM PANEL OF CENTRAL INFORMATION DISPLAY (CID), (09/2009-)

NOTE: Front trim panel can only be replaced on versions without glass cover from 09/2009 on.

Necessary preliminary tasks:

- Remove **Central Information Display**.

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

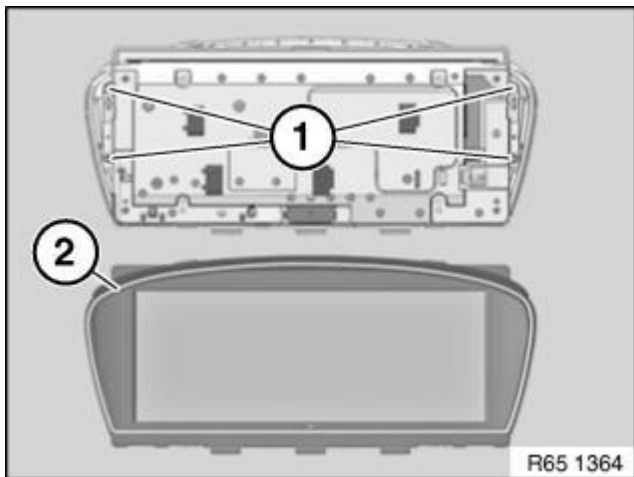


Fig. 84: Release Screws (1) And Remove Front Trim Panel (2)
Courtesy of BMW OF NORTH AMERICA, INC.

CAR COMMUNICATION COMPUTER

65 83... REMOVING AND INSTALLING (REPLACING) CAR INFORMATION COMPUTER (CIC)

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

NOTE: Comply with notes and instructions on HANDLING OPTICAL WAVEGUIDES .

Necessary preliminary tasks:

- Disconnect BATTERY NEGATIVE LEAD
- Remove CENTRAL TRIM FOR INSTRUMENT PANEL

Release screws (1).

Pull CIC (2) forwards a little.

Unlock associated plug connections and disconnect.

Remove CIC (2).

Installation:

Make sure CIC (2) is correctly seated in guide lugs (3).

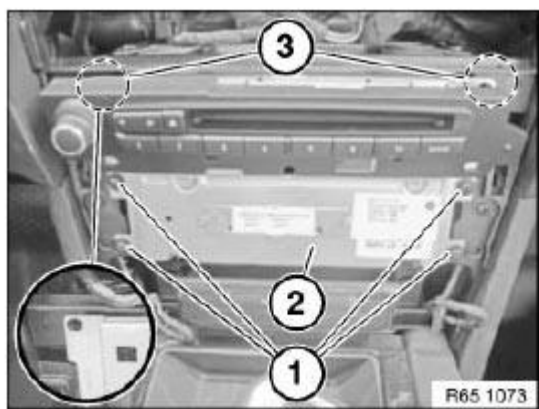


Fig. 85: Identifying Screws, CIC And Guide Lugs
 Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **PROGRAMMING/CODING** .

65 83... REMOVING AND INSTALLING/REPLACING FRONT TRIM FOR CAR INFOTAINMENT

IMPORTANT: Risk of damage! A hard disk is installed in the Car Information Computer (CIC).
 Carry out mechanical work on the CIC and adjacent components with care.
 Avoid subjecting the CIC to shaking/shocks.

IMPORTANT: Read and comply with notes on **PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION)** .

Necessary preliminary tasks:

- Remove middle trim for instrument panel. See **REMOVING AND INSTALLING (REPLACING) CENTRE INSTRUMENT PANEL TRIM (FROM 03/2007)** , **REMOVING AND INSTALLING (REPLACING) CENTRE INSTRUMENT PANEL TRIM (UP TO 03/2007)** , or **REMOVING AND INSTALLING/REPLACING CENTRE (BOTTOM) INSTRUMENT PANEL TRIM** .

Carefully raise catch (1) with a suitable tool in direction of arrow. Feed out front trim for Car Information Computer to right and remove.

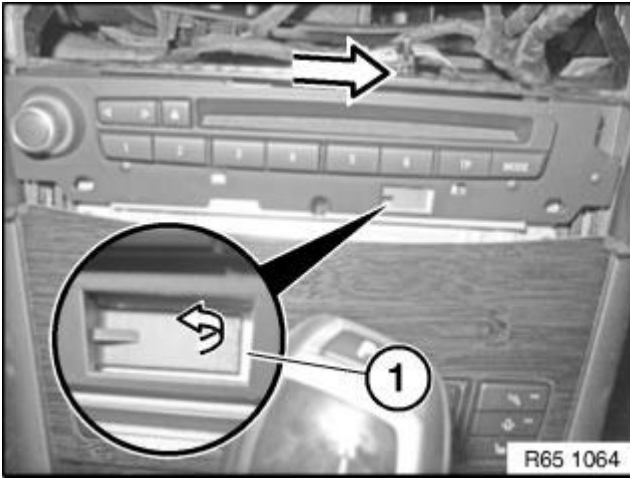


Fig. 86: Carefully Raise Catch (1) With A Suitable Tool In Direction Of Arrow
 Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1). Remove front trim of Car Information Computer. Installation: Make sure guides (2) are correctly seated in designated openings. Replace front trim if guides are damaged.

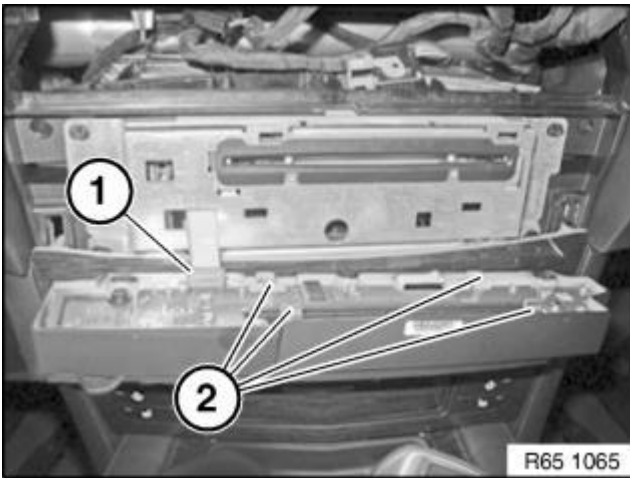


Fig. 87: Disconnect Plug Connection (1)
 Courtesy of BMW OF NORTH AMERICA, INC.

65 83 010 REMOVING AND INSTALLING/REPLACING CAR COMMUNICATION COMPUTER

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

NOTE: Comply with notes and instructions on HANDLING OPTICAL WAVEGUIDES .

Necessary preliminary tasks:

- Disconnect BATTERY NEGATIVE LEAD

- Remove middle trim for instrument panel. See REMOVING AND INSTALLING (REPLACING) CENTRE INSTRUMENT PANEL TRIM (FROM 03/2007) , REMOVING AND INSTALLING (REPLACING) CENTRE INSTRUMENT PANEL TRIM (UP TO 03/2007) , or REMOVING AND INSTALLING/REPLACING CENTRE (BOTTOM) INSTRUMENT PANEL TRIM .

Release screws (1).

IMPORTANT: Do not scratch center console trim, cover if necessary.

Pull back Car Communication Computer (2) slightly.

Unlock associated plug connections and disconnect.

Remove Car Communication Computer (2).

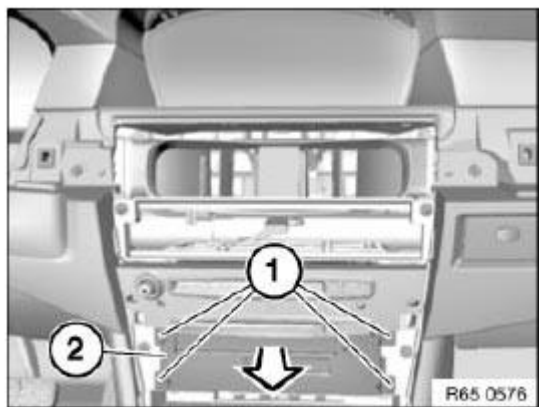


Fig. 88: Pulling Back Car Communication Computer Slightly
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out PROGRAMMING/CODING .

65 83 020 REMOVING AND INSTALLING (REPLACING) CAR INFOTAINMENT COMPUTER (CIC)

IMPORTANT: Risk of damage! A hard disk is installed in the Car Information Computer (CIC). Carry out mechanical work on the CIC and adjacent components with care. Avoid subjecting the CIC to shaking/shocks.

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

NOTE: Comply with notes and instructions on HANDLING OPTICAL WAVEGUIDES .

Necessary preliminary tasks:

- Disconnect **BATTERY NEGATIVE LEAD**
- Remove middle trim for instrument panel. See **REMOVING AND INSTALLING (REPLACING) CENTRE INSTRUMENT PANEL TRIM (FROM 03/2007)** , **REMOVING AND INSTALLING (REPLACING) CENTRE INSTRUMENT PANEL TRIM (UP TO 03/2007)** , or **REMOVING AND INSTALLING/REPLACING CENTRE (BOTTOM) INSTRUMENT PANEL TRIM** .

Release screws (1). Pull CIC (2) forwards a little. Installation: Make sure CIC (2) is correctly seated in guide lugs (3).

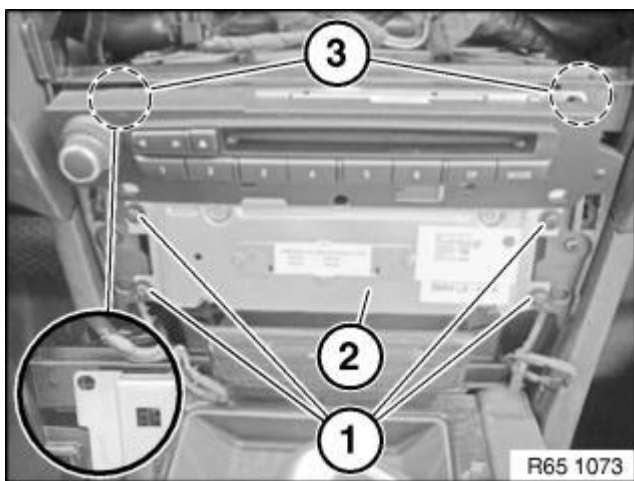


Fig. 89: Release Screws And Pull CIC Forward A Little
Courtesy of BMW OF NORTH AMERICA, INC.

Unlock plug connections (2) and (3) and disconnect. Remove CIC (1).

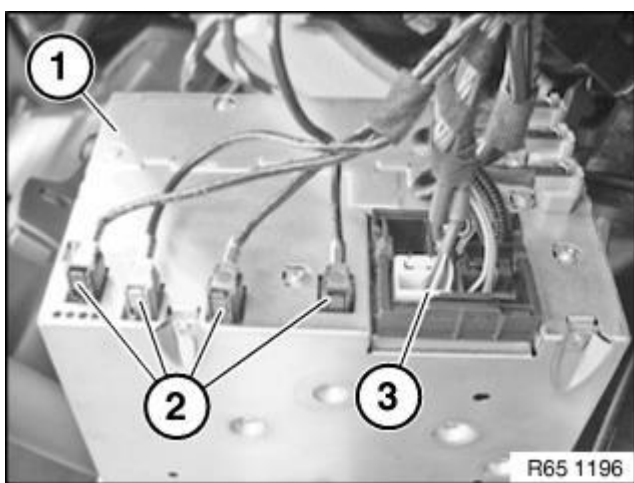


Fig. 90: Unlock Plug Connections And Disconnect
Courtesy of BMW OF NORTH AMERICA, INC.

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) .

Necessary preliminary tasks:

- Remove 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).

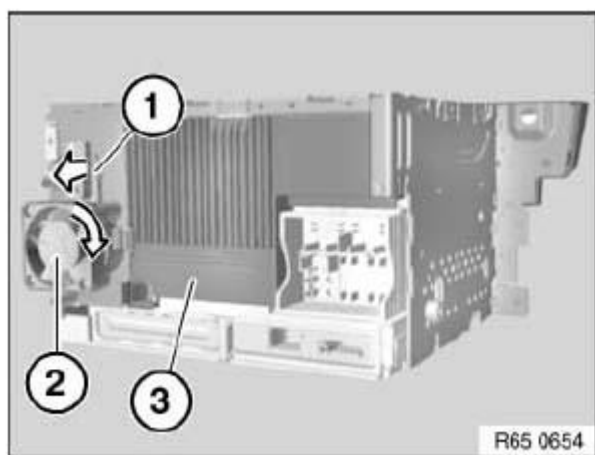


Fig. 91: Raising Retaining Hook And Turning Fan For Car Communication Computer

Courtesy of BMW OF NORTH AMERICA, INC.

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

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

Necessary preliminary tasks:

- Remove CAR COMMUNICATION COMPUTER

Release screws (1).

Fold down front panel for Car Communication Computer (2) and set down.

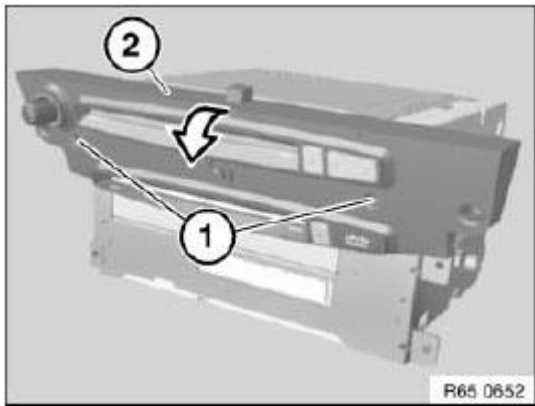


Fig. 92: Folding Down Front Panel For Car Communication Computer
 Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: "LIF" stands for Low Insert Force.

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

Remove front trim for Car Communication Computer (4) from Car Communication Computer (3).

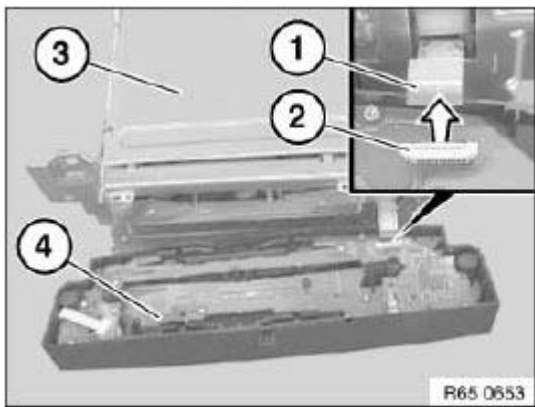


Fig. 93: Opening Catch Of LIF Plug
 Courtesy of BMW OF NORTH AMERICA, INC.

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

Special tools required:

- 64 1 020

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) !

Necessary preliminary tasks:

- Remove **FRONT TRIM FOR CAR COMMUNICATION COMPUTER**

If necessary, cut through warranty seal.

Raise cover (1) with special tool **64 1 020** all round and remove from Car Communication Computer (2).

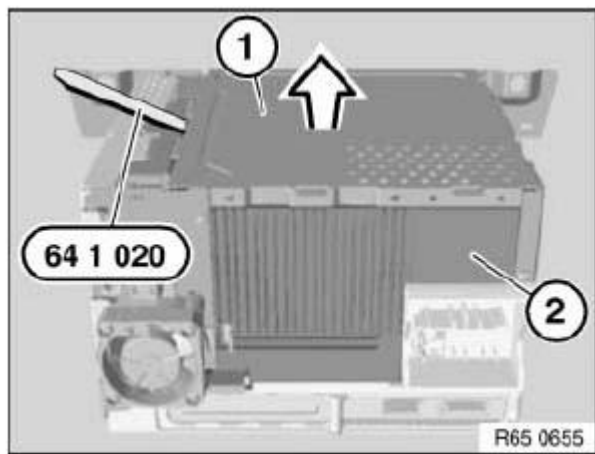


Fig. 94: Raising Cover With Special Tool 64 1 020
Courtesy of BMW OF NORTH AMERICA, INC.

Release bolts (1).

Feed CD drive for Car Communication Computer (2) in direction of arrow out of Car Communication Computer (3) and set down.

Installation:

Ensure correct routing of cables.

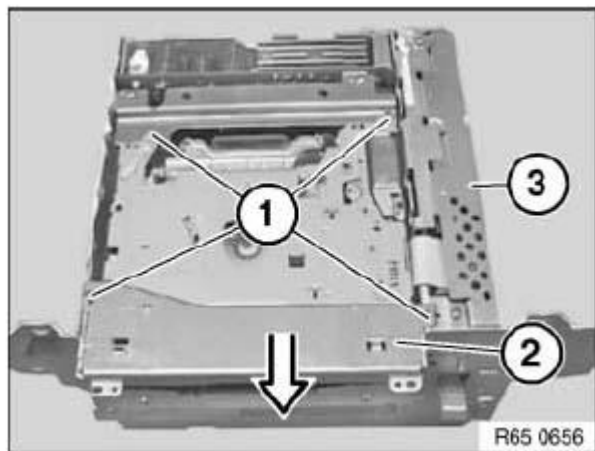


Fig. 95: Feeding CD Drive For Car Communication Computer
Courtesy of BMW OF NORTH AMERICA, INC.

Release bolts (1).

Remove CD drive trim (2) in direction of arrow from CD drive for Car Communication Computer (3).

Installation:

Ensure correct routing of cables.

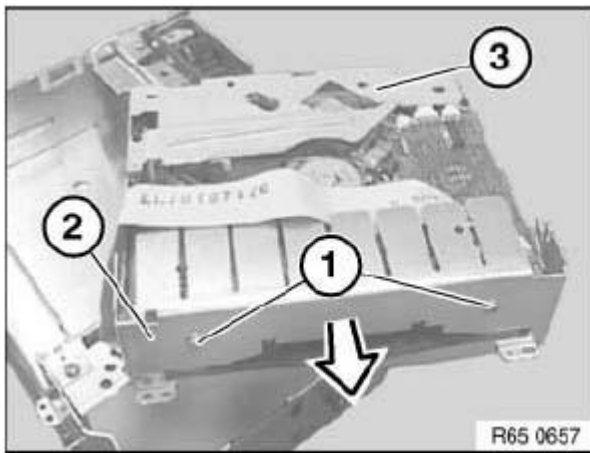


Fig. 96: Removing CD Drive Trim
Courtesy of BMW OF NORTH AMERICA, INC.

Cut through warranty seal (1) at marked point.

Release screw (2).

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

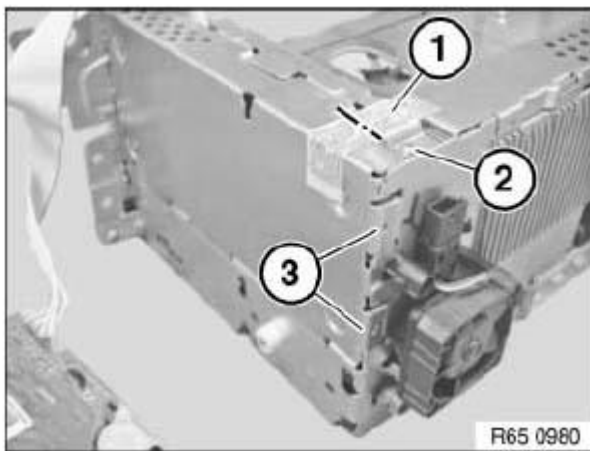


Fig. 97: Identifying Warranty Seal, Screw And Side Cover Out Of Mounting
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1) and remove CD drive.

Installation:

Ensure correct routing of cables.

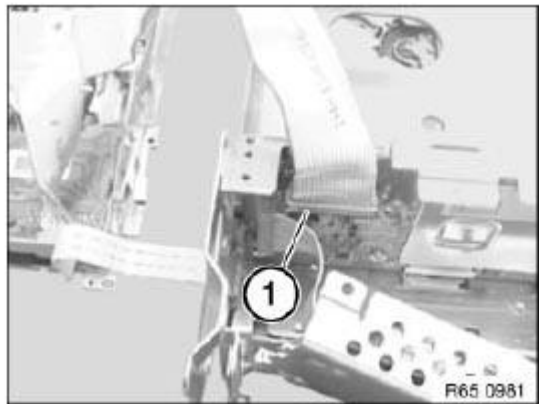


Fig. 98: Identifying Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

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

Special tools required:

- **00 9 450**
- **12 7 192**
- **64 1 020**

IMPORTANT: Read and comply with notes on **PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION)** .

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**

If necessary, cut through warranty seal.

Raise cover (1) with special tool **64 1 020** all round and remove from Car Communication Computer (2).

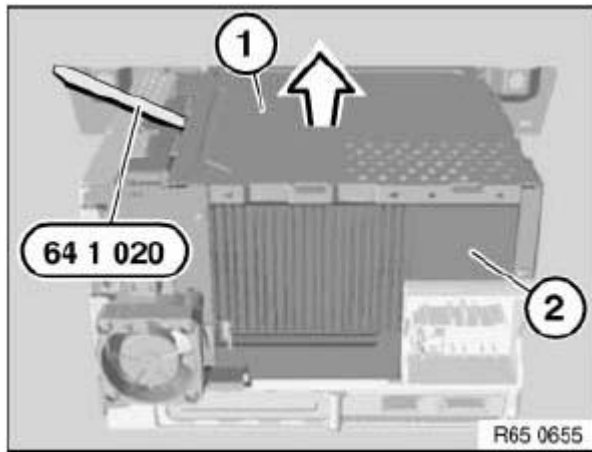


Fig. 99: Raising Cover With Special Tool 64 1 020
Courtesy of BMW OF NORTH AMERICA, INC.

Release bolts (1).

Feed out bridge (2).

Installation:

Use special tool **00 9 450** to tighten down screws.

Tightening torque **65 11 3AZ** .

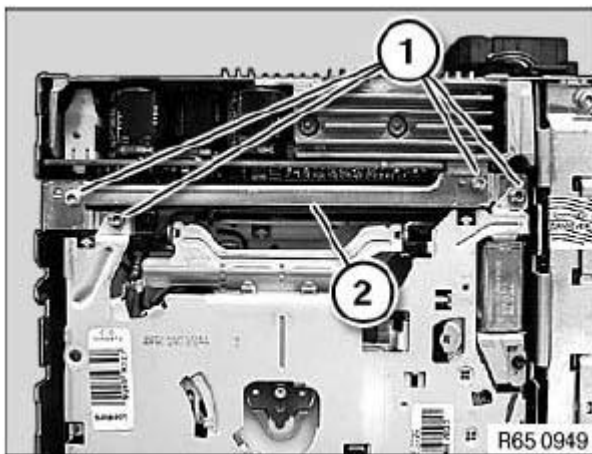


Fig. 100: Identifying Bolts And Bridge
Courtesy of BMW OF NORTH AMERICA, INC.

Cut through stickers at marked points (1).

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

Installation:

Use special tool **00 9 450** to tighten down screws.

Tightening torque **65 11 3AZ** .

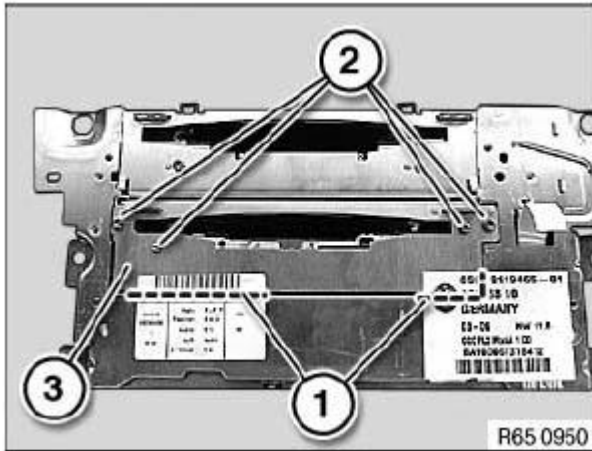


Fig. 101: Identifying Stickers Marked Points, Screws And Trim
Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1) with magnetic screwdriver.

Installation:

Lug (2) of DVD drive must be above lug (3) of Car Communication Computer.

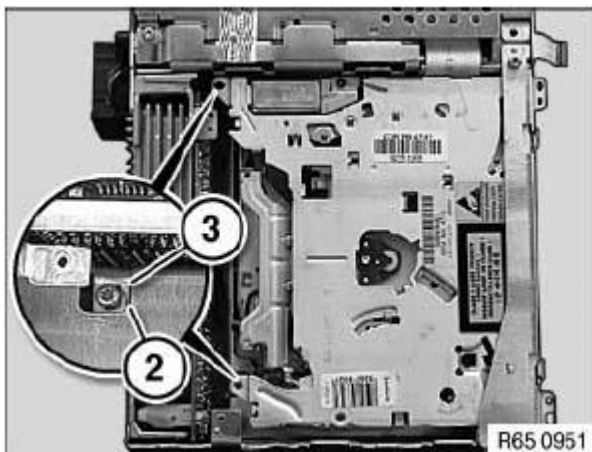


Fig. 102: Identifying Lugs
Courtesy of BMW OF NORTH AMERICA, INC.

Turn Car Communication Computer through 180° and carefully feed out DVD drive.

Carefully disconnect plug connections (1, 2).

Remove DVD drive (3).

Installation:

Ensure correct cable routing.

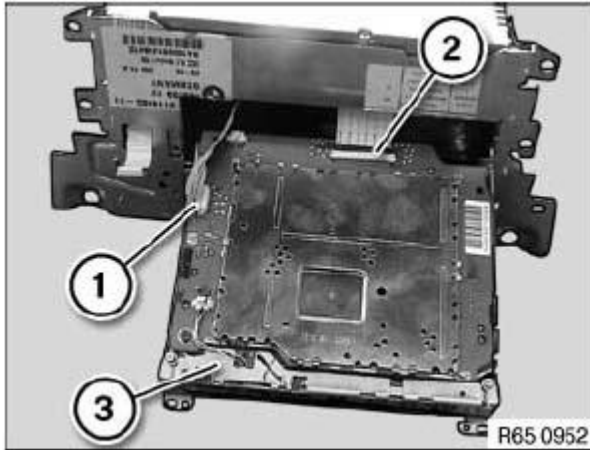


Fig. 103: Identifying Plug Connection And DVD Drive
Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: There are two versions of the plug connection (2) shown in Fig. 103:

Previous version: ribbon cable is connected horizontally (see 1 in Fig. 104)

Current version: ribbon cable is connected vertically (see 2 in Fig. 104)

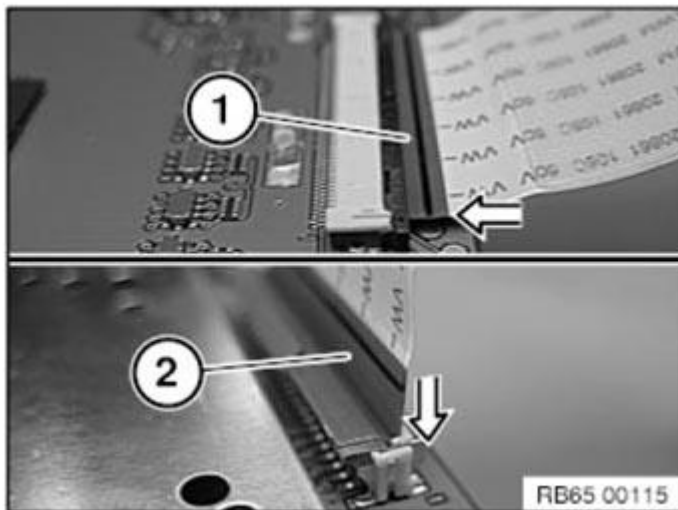


Fig. 104: Identifying Ribbon Cable Connection Horizontally And Vertically
Courtesy of BMW OF NORTH AMERICA, INC.

After installation:

On cars before March 2006 it is essential after replacing the DVD drive to carry out a measures plan or a software update as per SSS/PROGMAN/CIP .

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) .

Necessary preliminary tasks:

- Remove 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.

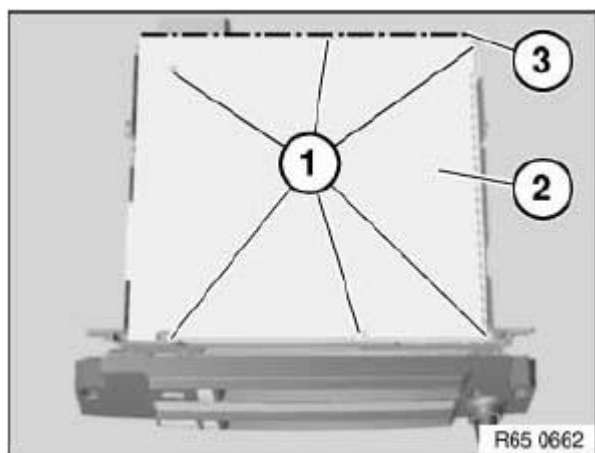


Fig. 105: Identifying Bolts, Floor Pan And Spring Strip
Courtesy of BMW OF NORTH AMERICA, INC.

Release bolt (1).

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

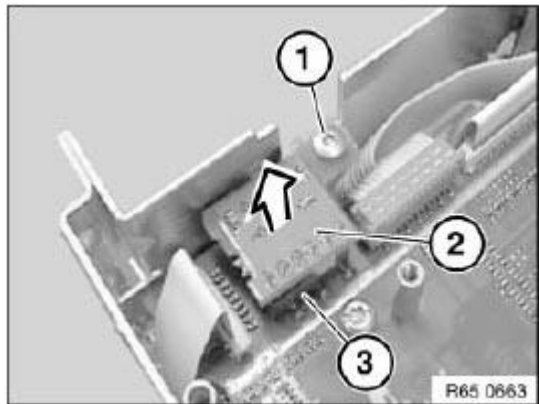


Fig. 106: Detaching Gyro Sensor For Car Communication Computer
Courtesy of BMW OF NORTH AMERICA, INC.

65 83 600 REPLACING HIP MODULE FOR CAR COMMUNICATION COMPUTER

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION) .

Necessary preliminary tasks:

- Remove 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.

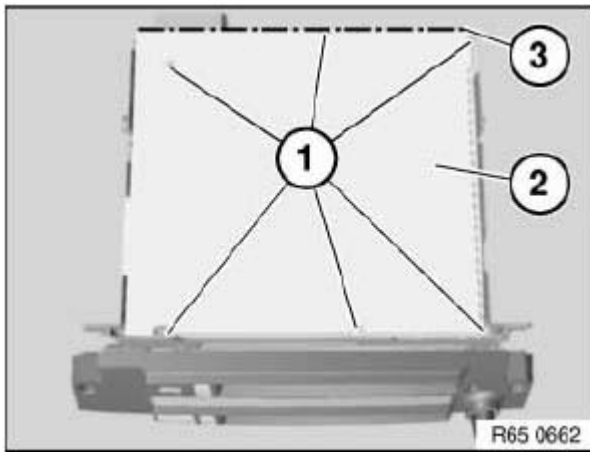


Fig. 107: Identifying Bolts, Floor Pan And Spring Strip
 Courtesy of BMW OF NORTH AMERICA, INC.

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.

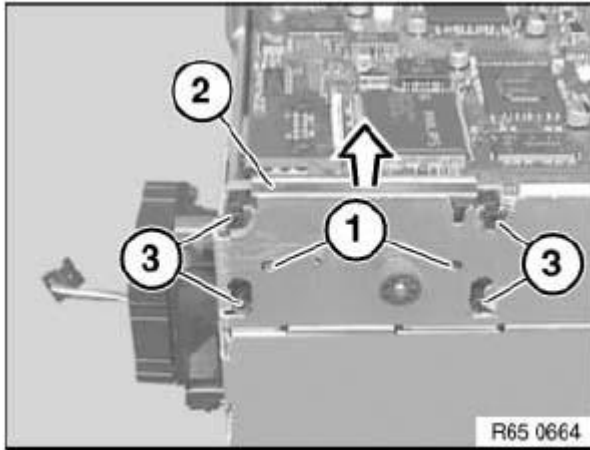


Fig. 108: Pressing Catches And Feeding Out Hip Module
 Courtesy of BMW OF NORTH AMERICA, INC.

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

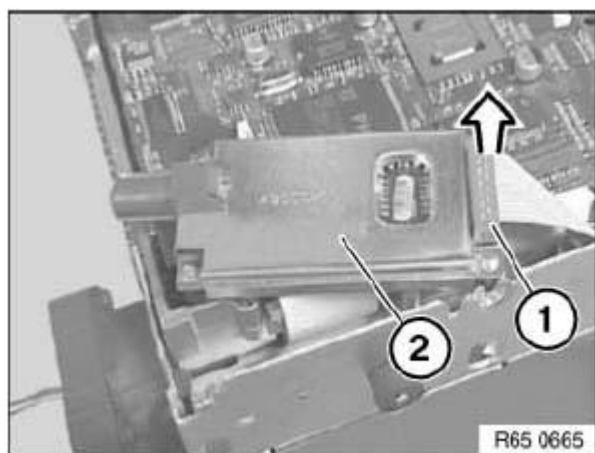


Fig. 109: Disconnecting Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

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.

NAVIGATION SYSTEMS

65 90 511 REMOVING AND INSTALLING/REPLACING NAVIGATION COMPUTER WITH CD/DVD DRIVE (LONG VERSION)

Special tools required:

- 65 5 400

IMPORTANT: Read and comply with notes on PROTECTION AGAINST ELECTROSTATIC

DAMAGE (ESD PROTECTION) !

Necessary preliminary tasks:

- Remove **LEFT LUGGAGE COMPARTMENT TRIM** on side panel

Pull navigation computer (1) with special tool 65 5 400 out of mounting and disconnect associated plug connections.

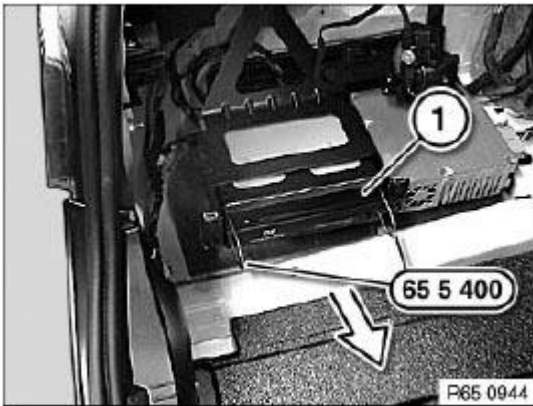


Fig. 110: Pulling Navigation Computer With Special Tool 65 5 400

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **PROGRAMMING/CODING** .

66 54 005 REMOVING AND INSTALLING/REPLACING CONTROL UNIT FOR NIGHT VISION SYSTEM

IMPORTANT: Read and comply with notes on **PROTECTION AGAINST ELECTROSTATIC DAMAGE (ESD PROTECTION)** .

Necessary preliminary tasks:

- Disconnect **BATTERY NEGATIVE LEAD**
- Remove **TRIM FOR INSTRUMENT PANEL ON RIGHT**

Disconnect plug connection (1).

Press tab (2) to side and remove control unit (3) from module carrier.

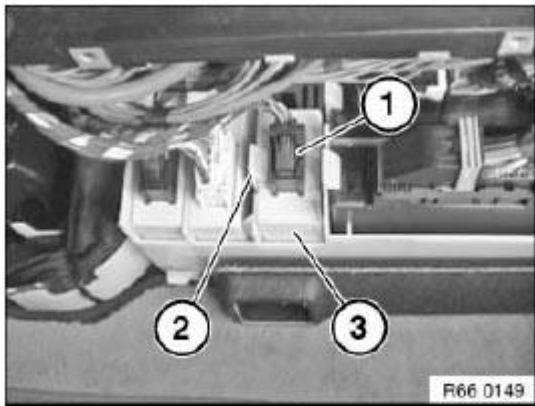


Fig. 111: Identifying Plug Connection, Tab And Control Unit
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **PROGRAMMING/CODING** .

NOTE: New component contains a CD with deblocking code.

CD is requested during coding/programming by the SSS.