

ACCESSORIES AND BODY, CAB

Communication Systems - Repair Instructions - X6

CELLULAR TELEPHONE

84 10 050 REMOVING AND INSTALLING (REPLACING) USB HUB

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 **gear selector switch carrier** . See 61 31 342 REMOVING AND INSTALLING/REPLACING GEAR SELECTOR SWITCH .

Unlock catch (1) and guide USB hub (2) in direction of arrow out of holder (3).

Disconnect plug connection (4).

Installation:

Make sure USB hub (2) is correctly seated in holder (3).

Make sure wiring harness is correctly laid.

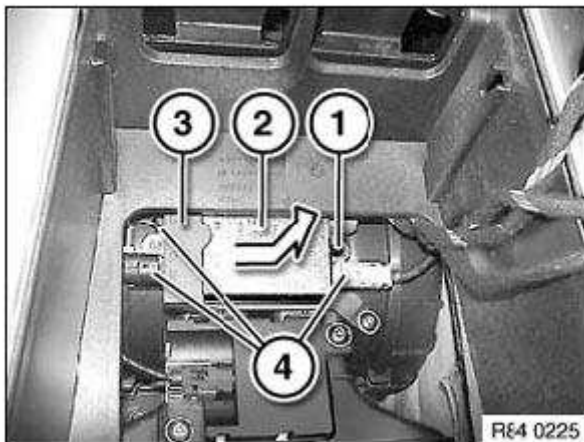


Fig. 1: Unlocking Catch And Guide USB Hub
Courtesy of BMW OF NORTH AMERICA, INC.

TRANSCIVER, HANDSETS

84 11 519 REMOVING AND INSTALLING OR REPLACING EJECT BOX

Special tools required:

- 00 9 340

See **GENERAL ELECTRICAL SYSTEM - SPECIAL TOOLS** .

Necessary preliminary tasks:

- Remove **side carpet on storage compartment** (center console) on right. See **51 16 ... REMOVING AND INSTALLING/REPLACING SIDE CARPET ON STORAGE COMPARTMENT (CENTRE CONSOLE)** .

Open storage compartment (center console) and swing top section of eject box mounting (2) upwards.

Release screws (1).

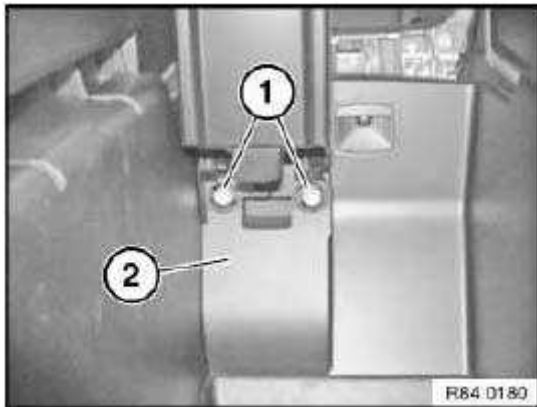


Fig. 2: Identifying Eject Box Mounting And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Expose plug connections (1) and disconnect.

Expand retaining clips (2) and remove wiring harness (3).

Lift out eject box mounting, feeding wiring harness (3) in direction of arrow out of center console (4).

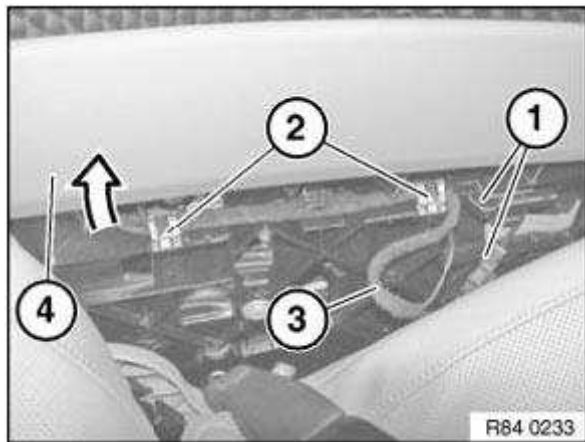


Fig. 3: Feeding Wiring Harness Out Of Centre Console
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Remove rubber buffers (1) and release screws underneath.

Release screws (2).

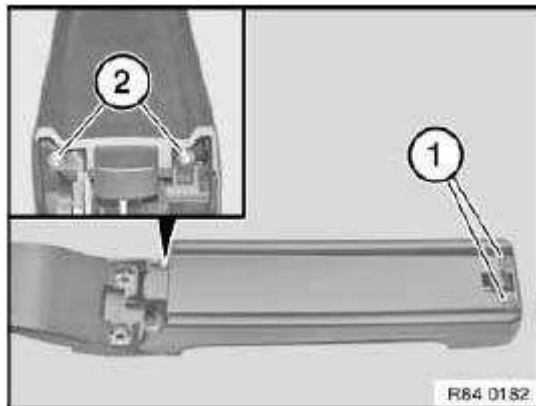


Fig. 4: Identifying Rubber Buffers And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Position retaining plate (1) vertically.

Slide lower section (2) with a suitable tool in direction of arrow and remove from upper section (3).

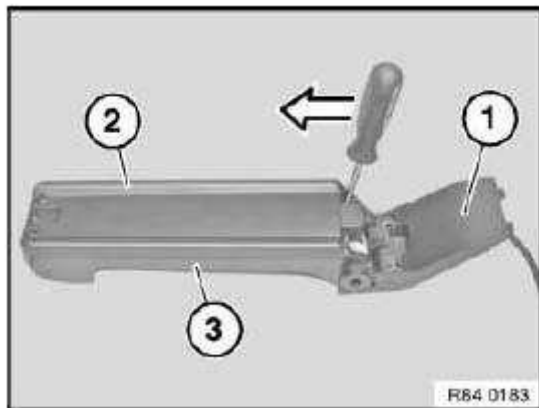


Fig. 5: Sliding Lower Section Using Suitable Tool
Courtesy of BMW OF NORTH AMERICA, INC.

Release screw (1) and remove adapter sleeve (2) in direction of arrow.

Feed out wiring harness (3).

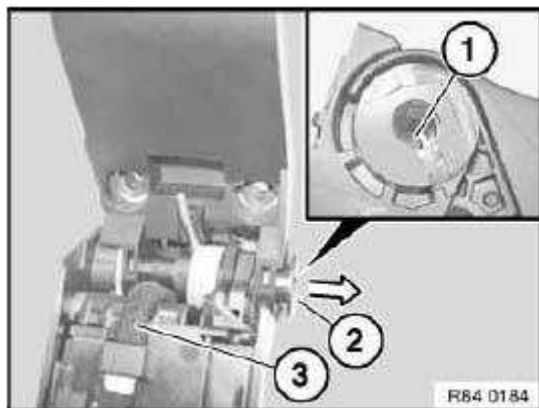


Fig. 6: Removing Adapter Sleeve
Courtesy of BMW OF NORTH AMERICA, INC.

Lever eject box (1) with special tool **00 9 340** sideways out of eject box mounting.

Feed associated wiring harness out of eject box mounting and remove eject box (1).

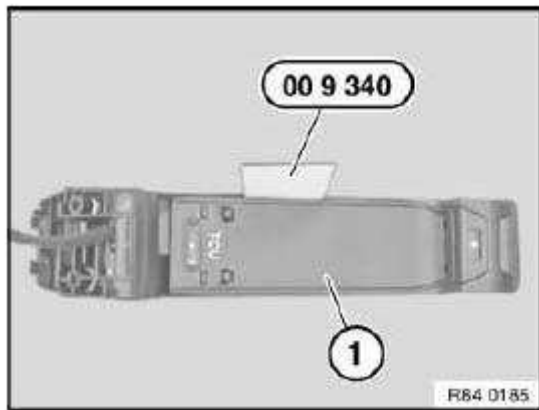


Fig. 7: Identifying Eject Box And Special Tool 00 9 340
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure wiring harness (1) is laid correctly.

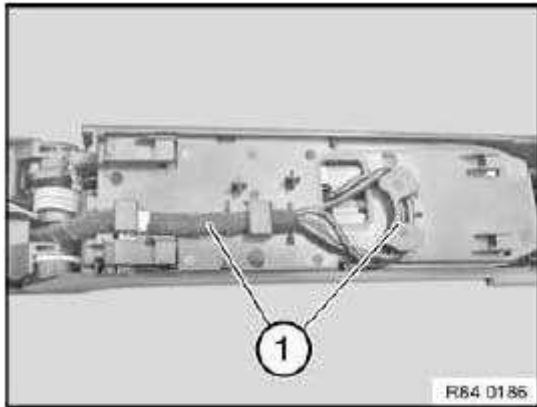


Fig. 8: Identifying Wiring Harness
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Spring (1) must be inserted exactly in guide (2) of eject box upper section mounting (3).

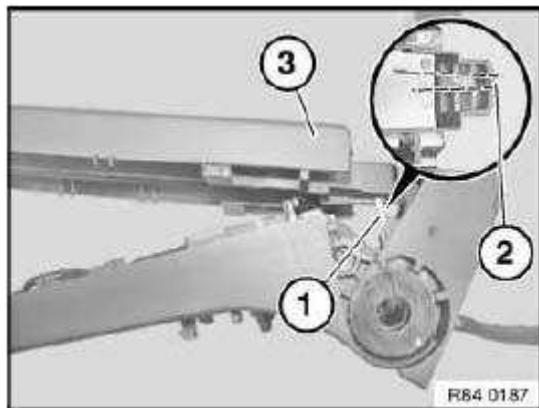


Fig. 9: Identifying Spring, Guide And Upper Section Mounting
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Retaining lugs (1) must be positioned in associated guides (2).

Make sure release mechanism (3) is correctly seated.

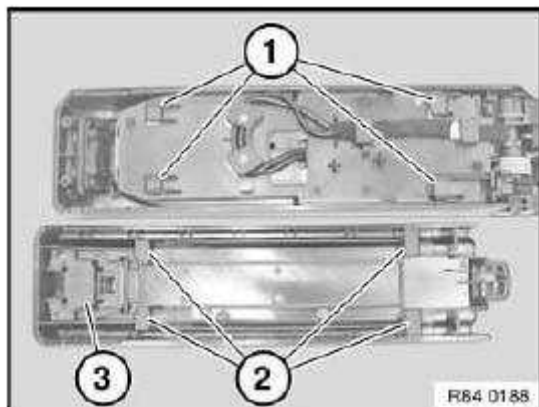


Fig. 10: Identifying Retaining Lugs, Guides And Release Mechanism
Courtesy of BMW OF NORTH AMERICA, INC.

84 11 555 REMOVING AND INSTALLING/REPLACING HANDSFREE MICROPHONE

IMPORTANT: Disconnecting the plug connection for the hands-free microphone or emergency SOS call button results in fault memory entries in the telephone control unit (limitation in the emergency SOS call system).
After fitting, read out fault memory and if necessary delete entries.

Necessary preliminary tasks:

- Remove **roof switch cluster** . See **61 31 043 REMOVING AND INSTALLING OR REPLACING**

ROOF SWITCH CLUSTER .

Lever hands-free microphone (1) with a suitable tool out of mounting.

Installation:

Direction arrow (2) must point in direction of travel.

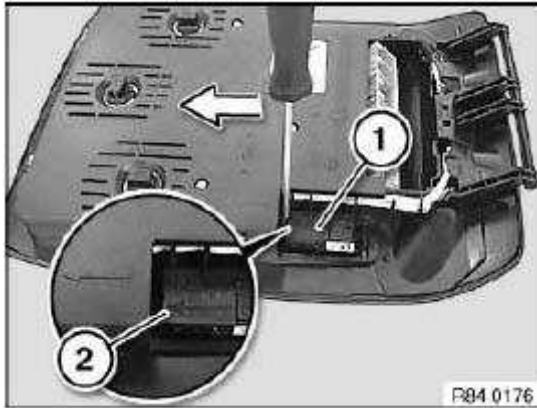


Fig. 11: Levering Hands-Free Microphone
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Retaining lugs (1) must not be damaged.

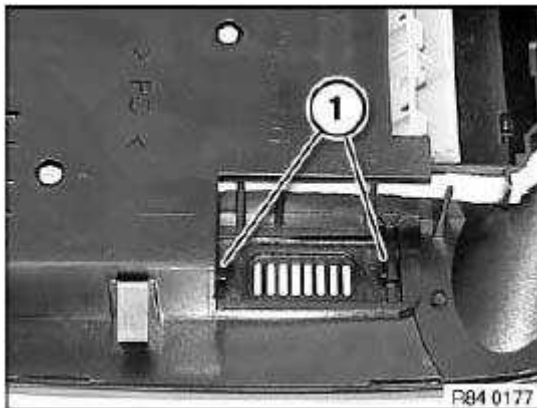


Fig. 12: Identifying Retaining Lugs
Courtesy of BMW OF NORTH AMERICA, INC.

**84 11 660 REMOVING AND INSTALLING/REPLACING TELEMATICS CONTROL UNIT (TCU)
(OPTION SA633/SA639)**

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 61 20 900 DISCONNECTING AND CONNECTING BATTERY NEGATIVE LEAD .
- Remove **luggage compartment wheel arch trim on left** . See 51 47 151 REMOVING AND INSTALLING/REPLACING LEFT LUGGAGE COMPARTMENT WHEEL ARCH TRIM .

Disconnect plug connection (1).

Release all nuts.

Remove telematics control unit (2) from holder for telematics control unit (3).

Installation:

Make sure wiring harnesses are correctly routed.

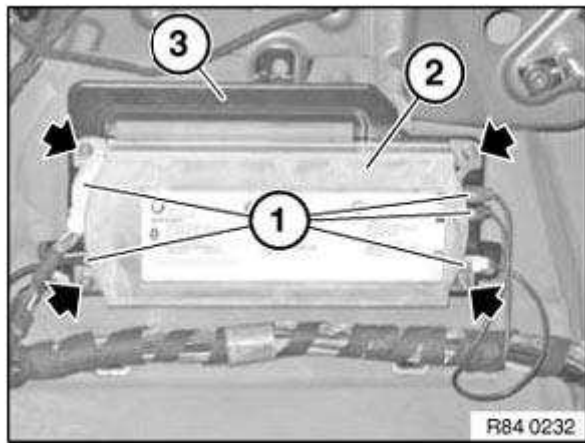


Fig. 13: Identifying Plug Connection And Telematics Control Unit
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

- Carry out **vehicle programming/coding**
- Via Diagnosis and Information System (DIS):
 - Service functions

- Start subsequent assessment

HANDHELD COMPUTER

84 21 535 REMOVING AND INSTALLING/REPLACING HANDSFREE CHARGING ELECTRONICS

Operation is described in:

Removing and installing telematic control unit

Replacement:

- Carry out **vehicle programming/coding**
- If necessary, log mobile phone on to vehicle

84 21 541 REMOVING AND INSTALLING (REPLACING) HANDS-FREE CHARGING ELECTRONICS (HIGH)

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:

- Remove **complete rear console** . See 51 16 270 REMOVING AND INSTALLING COMPLETE REAR SECTION OF REAR CONSOLE .

Release nuts (1) and remove rear console holder (2).

Release screw (3) and raise hands-free charging electronics holder (4) in direction of arrow.

Installation:

Make sure centering pin (5) is correctly seated in associated hold of hands-free charging electronics holder (4).

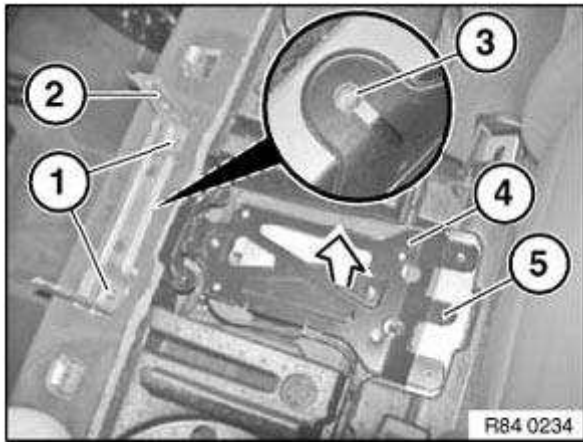


Fig. 14: Raising Hands-Free Charging Electronics Holder
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

Release all nuts.

Remove hands-free charging electronics (2) from hands-free charging electronics holder (3).

Installation:

Make sure wiring harness (4) is laid correctly.

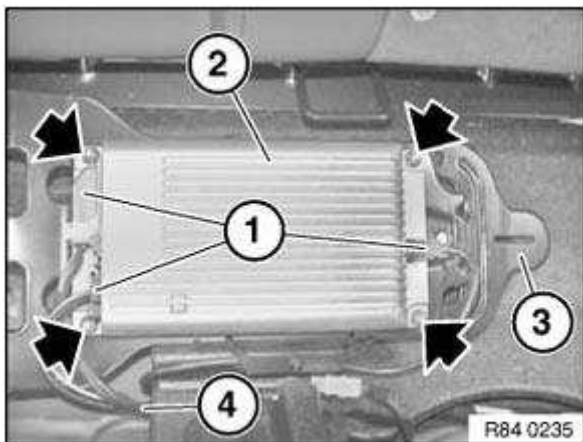


Fig. 15: Identifying Plug Connection, Hands-Free Charging Electronics And Hands-Free Charging Electronics Holder
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Carry out **vehicle programming/coding** .

If necessary, log mobile phone on to vehicle.

HANDS-FREE SYSTEM, MICROPHONE

84 31 020 REMOVING AND INSTALLING/REPLACING HANDSFREE SYSTEM SPEAKER

Necessary preliminary tasks:

- Remove **trim for pedal assembly** . See **51 45 185 REMOVING AND INSTALLING/REPLACING PANEL FOR PEDALS** .

Disconnect plug connection (1).

If necessary, release cable tie from catches (2).

Unlock catches (2) and remove speaker (3) from mounting.

Installation:

Catches (2) must not be damaged.

Guide lugs of mounting must be seated in grooves of speaker (3).

Speaker (3) must snap audibly into place in mounting.

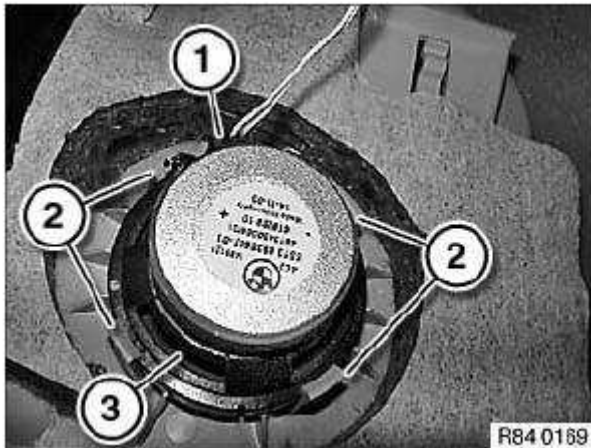


Fig. 16: Identifying Plug Connection, Catches And Speaker
Courtesy of BMW OF NORTH AMERICA, INC.

ANTENNA

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

Special tools required:

- 65 2 010

See .

WARNING: Risk 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.

Special tool 65 2 010 is only permitted in conjunction with a suitable stepladder.

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 aerial, wait 24 hours before driving the vehicle through a car wash.

NOTE: Clean roof.

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

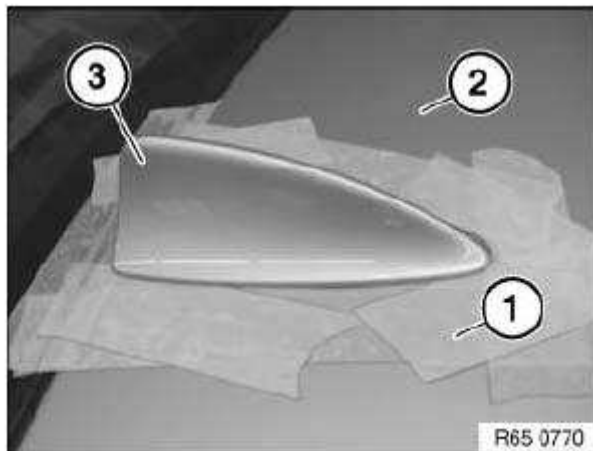


Fig. 17: Identifying Roof, Yellow Plastic Adhesive Tape And Roof-Mounted Aerial
Courtesy of BMW OF NORTH AMERICA, INC.

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).

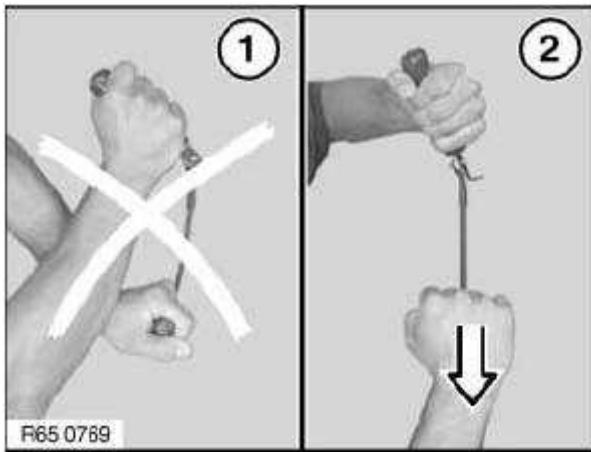


Fig. 18: Handling Special Tool (65 2 010) Correctly
Courtesy of BMW OF NORTH AMERICA, INC.

IMPORTANT: Risk of damage!

To avoid damaging the paintwork on the roof and empty housing (3), do not fit special tool 65 2 010 askew.

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.

Remove empty housing (3).

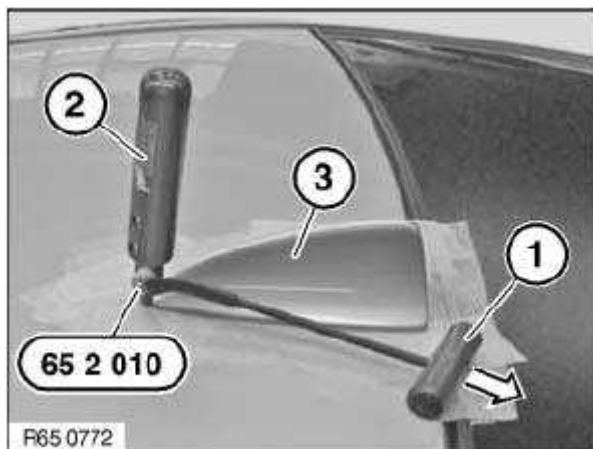


Fig. 19: Pulling Handle

Courtesy of BMW OF NORTH AMERICA, INC.

Installation

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

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

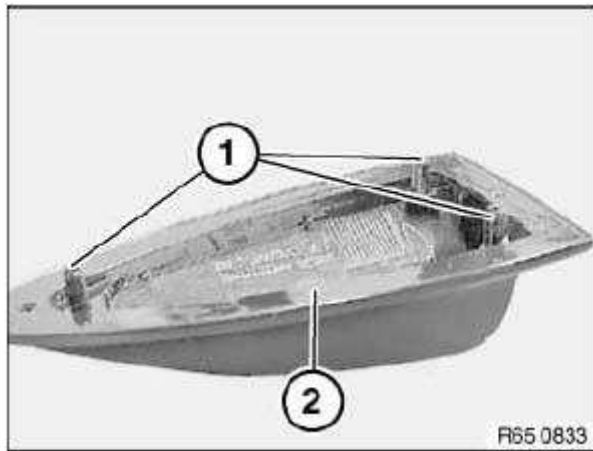


Fig. 20: Identifying Centering Pins And Bonding Surface
Courtesy of BMW OF NORTH AMERICA, INC.

Position two spacers (1) on cleaned empty housing.

Dimensions:

- A. 10 mm
- B. 14 mm

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

IMPORTANT: Use spacers without fail!

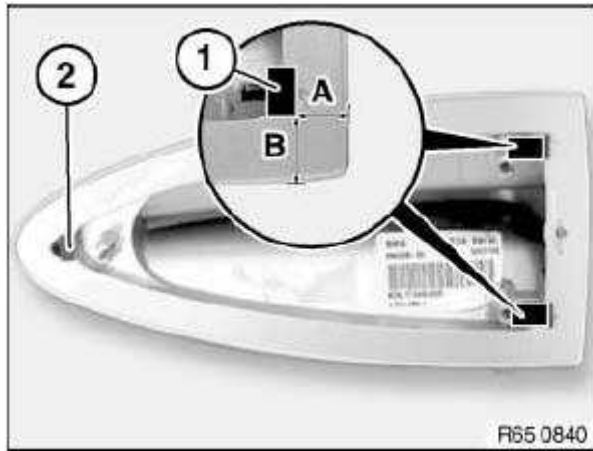


Fig. 21: Identifying Spacers With Dimensions
 Courtesy of BMW OF NORTH AMERICA, INC.

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

Distance between adhesive bead and edge of aerial 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.

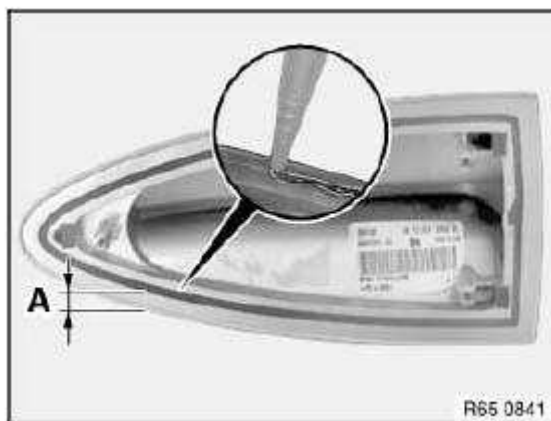


Fig. 22: Identifying Distance Between Adhesive Bead And Edge Of Aerial Cover
 Courtesy of BMW OF NORTH AMERICA, INC.

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.

84 50 060 REMOVING AND INSTALLING/REPLACING BLUETOOTH AERIAL

Necessary preliminary tasks:

- Remove **gear selector switch carrier** . See 61 31 342 REMOVING AND INSTALLING/REPLACING GEAR SELECTOR SWITCH .

Disconnect plug connection (1).

Release screws (2).

Remove Bluetooth aerial (3) from air duct (4).

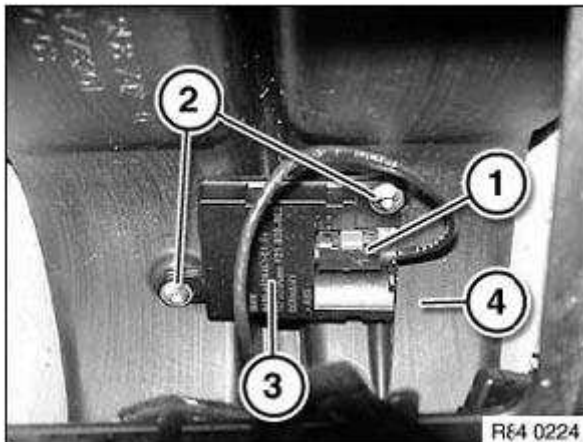


Fig. 23: Identifying Plug Connection, Screws, Bluetooth Aerial And Air Duct
Courtesy of BMW OF NORTH AMERICA, INC.