

ACCESSORIES AND EQUIPMENT

Lights - Repair Instructions

HEADLIGHT ADJUSTMENT

63 10... TEST REQUIREMENTS FOR HEADLIGHT VERTICAL AIM ADJUSTMENT

IMPORTANT: Do not perform headlight adjustment immediately after lowering the vehicle on the vehicle hoist. In this case, move the vehicle for approx. 15 m on its own wheels before adjustment.

IMPORTANT: Refer to the operating instructions for the headlight adjustment device!

- Park vehicle on flat and even surface.
- Replace faulty glass and mirrors and blackened light bulbs.
- Correct adjustment of headlights in relation to engine compartment lid (gap dimensions).
- Check tire pressure and correct if necessary.
- Only halogen headlight, fog light and headlight for Dynamic Light Spot:
 - Apply load equivalent to one person on driver's seat (approx. 75 kg).
 - Vehicle with full fuel tank or appropriate additional weight in luggage compartment.
- Switch the ignition on.
- Manual headlight beam throw adjustment: Move handwheel to neutral position (1).
- Light switch must be in "low beam/driving light" position (3).
- Do not carry out the headlight adjustment in the "automatic driving lights control" light switch position (2).
- Version with Xenon or LED (automatic headlight beam throw adjustment): Wait 80 s after switching on lights. During this time, do not move the vehicle and avoid vibrations.

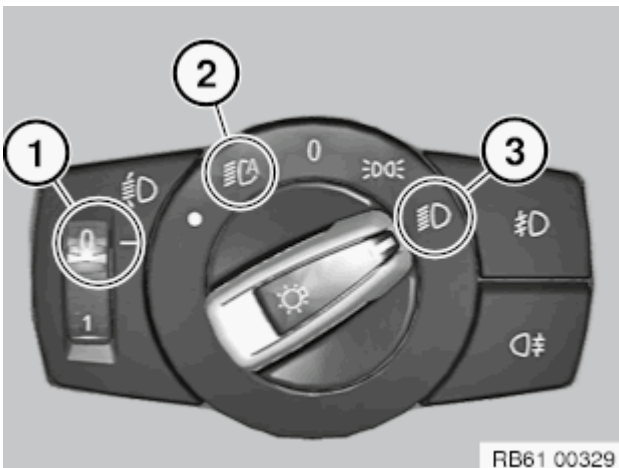


Fig. 1: Identifying Light Switch

Courtesy of BMW OF NORTH AMERICA, INC.

IMPORTANT: Do not move the vehicle and steering wheel during the measuring and adjustment procedures!

IMPORTANT: A correct measurement/adjustment requires exact positioning of the headlight adjustment device (1)!
Headlight adjustment device (1) must stand vertically to the vehicle longitudinal axis!
This applies to all headlights!

Position headlight adjustment device (1) centrally in front of vehicle (2) at distance (A) = **10 cm** .

Align headlight adjustment device (1) by laser beam (3). Laser beam (3) must hit two suitable points, e.g. marked by arrows.

IMPORTANT: Points must be vehicle proof! Trim panels are not suitable!

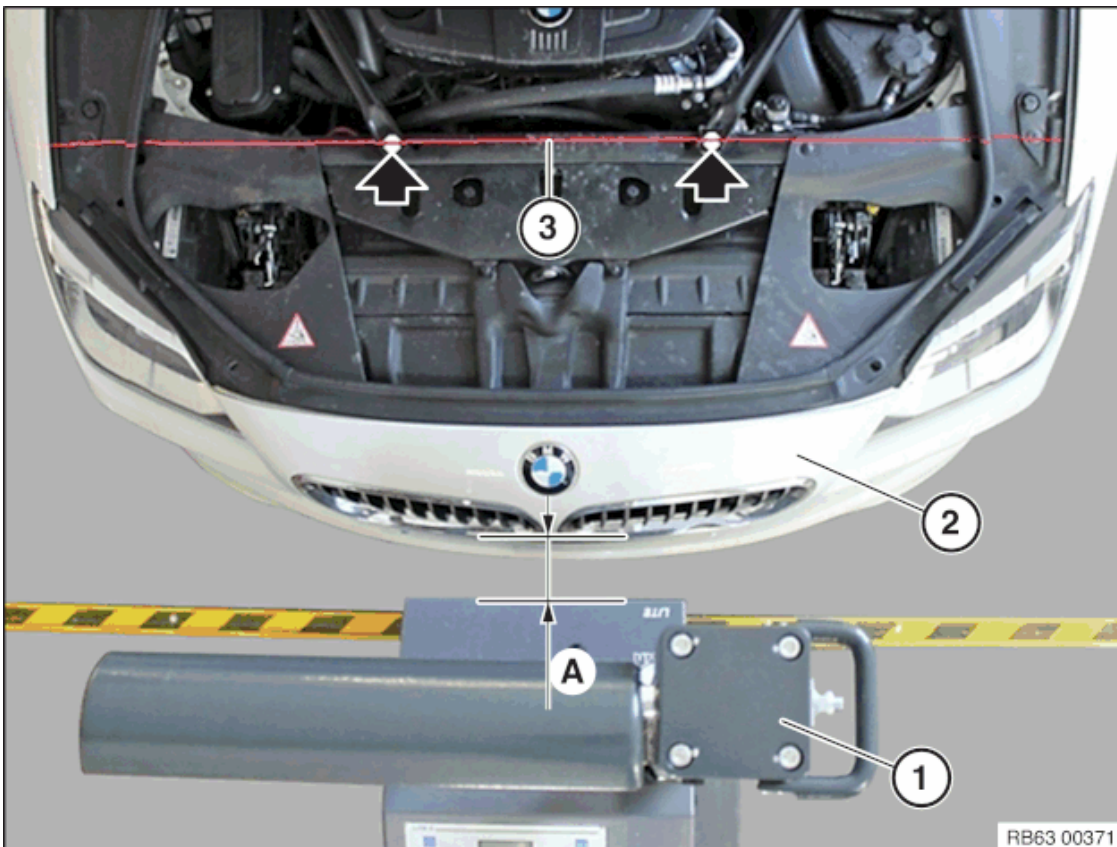


Fig. 2: Positioning Headlight Adjustment Device
Courtesy of BMW OF NORTH AMERICA, INC.

If the headlight adjustment device (1) does not have a laser beam (1), complete the alignment analogous with

the line in the mirror.

The center of the collecting lens (1) must match the center of headlight (2) horizontally.

Corrections are made by raising or lowering the headlight adjustment device.

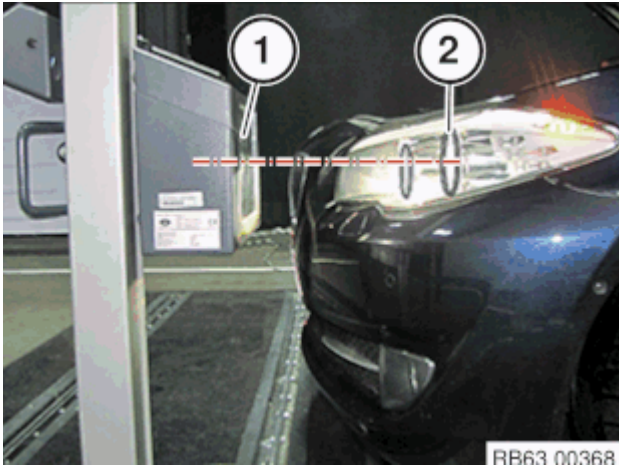


Fig. 3: Center Of Collecting Lens (1) Must Match Centre Of Headlight
Courtesy of BMW OF NORTH AMERICA, INC.

When positioned correctly, the light/dark boundary of the headlight (marked with arrow) must hit the collecting lens of the adjusting device in the center:

1. The headlight adjusting device is too low.
2. The headlight adjusting device is positioned correctly.
3. The headlight adjusting device is too high.

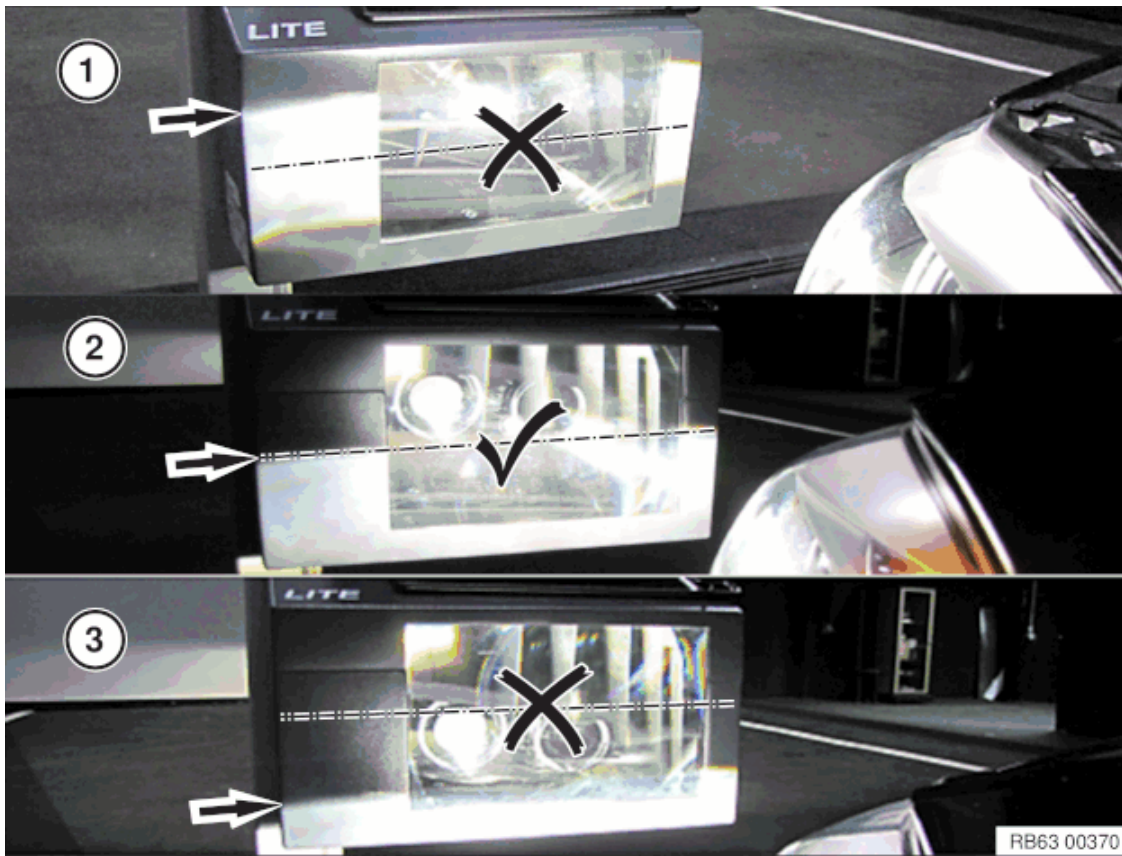


Fig. 4: Light/Dark Boundary Of Headlight (Marked With Arrow) Must Hit Collecting Lens
 Courtesy of BMW OF NORTH AMERICA, INC.

The center of the collecting lens (1) must match the center of headlight (2) vertically. Corrections are made by sliding the side of the headlight adjusting device to the left or right.

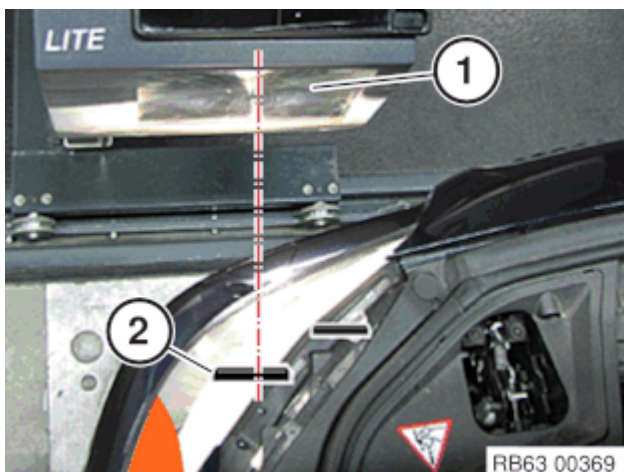


Fig. 5: Center Of Collecting Lens (1) Must Match Center Of Headlight Vertically
 Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: The figure shows an example for the transparent screen of halogen headlights.

See **Transparent screens of different headlight types (halogen, xenon, LED).**

Set marker line {M} on aimer to {e}. Scale graduations on the headlight adjustment device are equal to a gradient in cm at a distance of 10 meters.

Light/dark boundary of headlights in the headlight adjustment device:

{e} Setting dimension, headlights:

- Value is indicated on the headlight housing and on vehicles with production date up to 2011 on the type plate in %.

(e.g.: **1.0 %** = -10 cm/10 m = - **1.0 %** on the headlight adjusting device)

- Value **1.1 %** (adjustment value - **1.1 %**)

Setting dimension, fog lights:

- Value **2.0 %** = -20 cm/10 m = - **2.0 %** on the headlight adjusting device applies to all BMW Group vehicles.

{H} Height of center of headlight above parking surface.

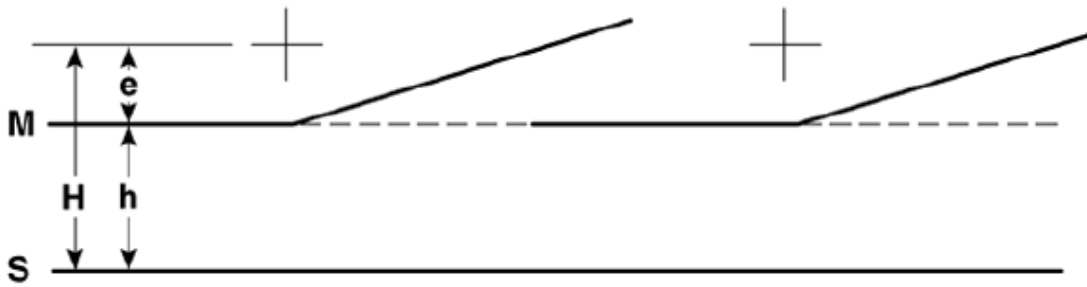
{h} {H} - {e} = height of marking line above parking surface

+ Central mark = center point of high-beam headlight.

{M} Marker line of the headlight adjustment device

{S} Standing surface of the vehicle and headlight adjustment device

NOTE: **Adjustment dimension {e} is only valid for EUR. Observe differing national regulations.**



30 63 067

Fig. 6: Headlight Vertical Aiming Screen
 Courtesy of BMW OF NORTH AMERICA, INC.

63 10 004 ADJUSTING HEADLIGHTS

NOTE: Comply with TEST PRECONDITIONS FOR HEADLIGHT ADJUSTMENT.

Adjust headlights at adjusting screws (1) and (2).

A definite allocation of adjusting screws is not possible.

1. Adjustment screw primarily for vertical adjustment
2. Adjustment screw primarily for lateral adjustment

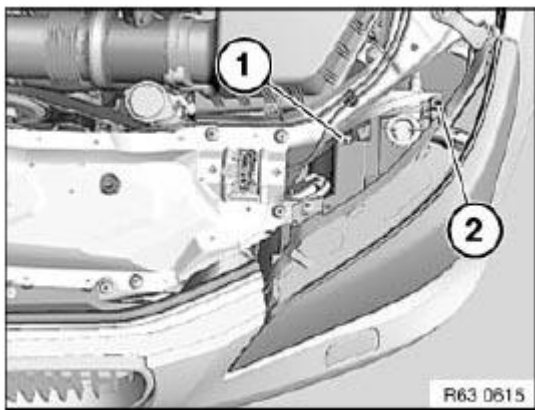


Fig. 7: Identifying Adjusting Screws
 Courtesy of BMW OF NORTH AMERICA, INC.

63 10 014 ADJUSTING FOG LAMPS LIGHTS - REPAIR - E92/E93

Comply with **TEST PRECONDITIONS FOR HEADLIGHT ADJUSTMENT**.

With standard front bumper trim:

Adjust fog lamp (1) at adjusting screw (2).

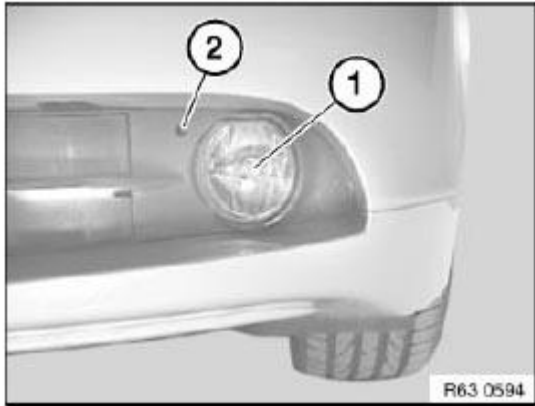


Fig. 8: Identifying Fog Lamp And Adjusting Screw (Bumper Trim)
Courtesy of BMW OF NORTH AMERICA, INC.

With M aerodynamic kit:

Adjust fog lamp (1) at adjusting screw (2).

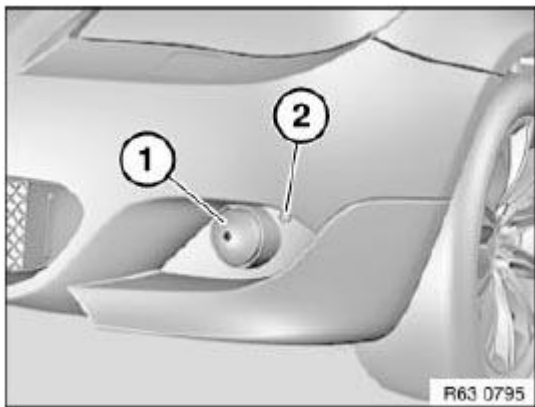


Fig. 9: Identifying Fog Lamp And Adjusting Screw (M Aerodynamic Kit)
Courtesy of BMW OF NORTH AMERICA, INC.

TRANSPARENT SCREENS OF DIFFERENT HEADLIGHT TYPES (HALOGEN, XENON, LED)

The following equipment-specific and model-specific headlight types are used in BMW Group vehicles:

- Halogen headlights
- Xenon headlights
- LED headlight

Every headlight type has its specific transparent screen. In spite of these differences, all headlight types meet statutory specifications. The images below show transparent screens from the left headlight in the low-beam headlight switch position projected onto a wall (no automatic setting!). The transparent screens from the right headlight are the same. The transparent screens correspond with those in an accumulator box of a headlight adjusting device.

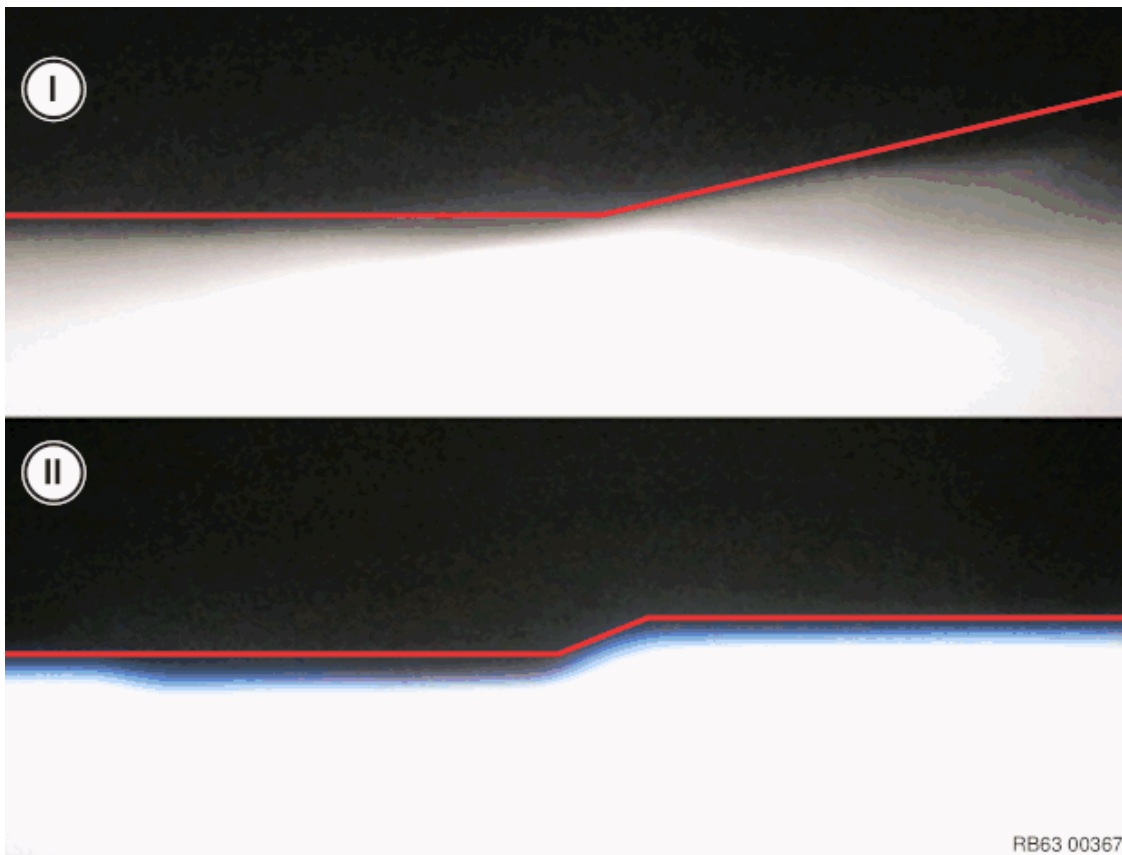


Fig. 10: Type I And Type II Transparent Screens
Courtesy of BMW OF NORTH AMERICA, INC.

IMPORTANT: For headlight adjustments with electronic headlight adjustment devices, e.g. MAHA Lite 3, it is absolutely required to determine the type of transparent screen!

Type I: Transparent screen indicates a continuous rise of the light/dark boundary on the right side.

Type II: Transparent screen indicates a brief rise of the light/dark boundary on the right side.

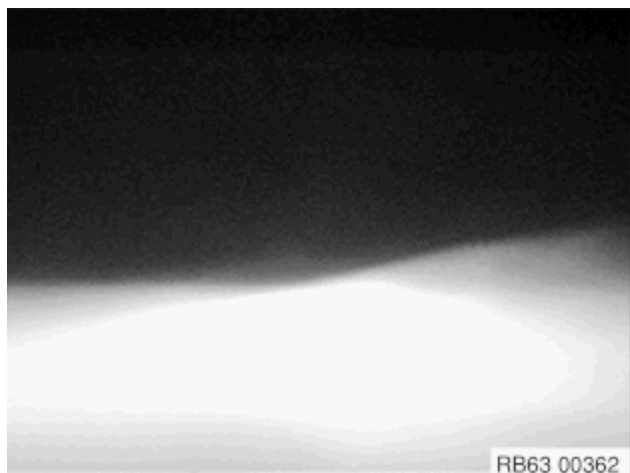


Fig. 11: Identifying Halogen Headlight Type I
Courtesy of BMW OF NORTH AMERICA, INC.

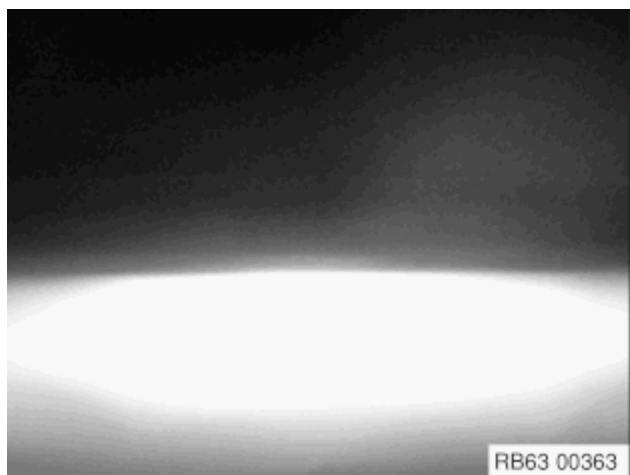


Fig. 12: Identifying Halogen Headlight US Version R60 Only
Courtesy of BMW OF NORTH AMERICA, INC.



Fig. 13: Identifying Xenon Headlights Type II

Courtesy of BMW OF NORTH AMERICA, INC.

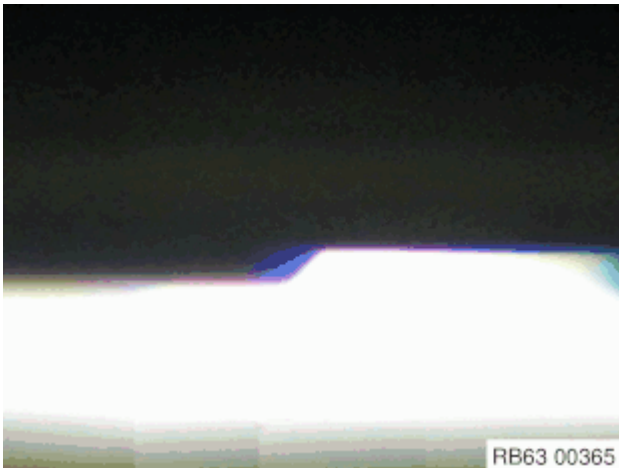


Fig. 14: Identifying LED Headlight F01, F02, F03 Type II
Courtesy of BMW OF NORTH AMERICA, INC.

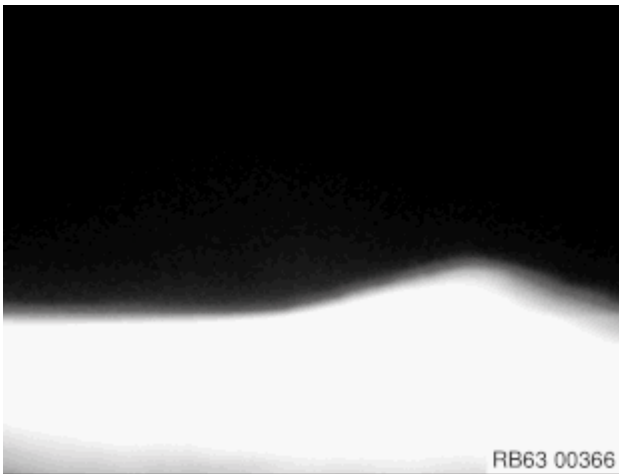


Fig. 15: Identifying LED Headlight F06, F12, F13, E71 Type I
Courtesy of BMW OF NORTH AMERICA, INC.

HEADLIGHTS

63 12... HEADLIGHT FOGGING FAULT PATTERN

NOTE: Certain weather conditions can lead to fogging on the inside of the headlight lens.

This is not necessarily a fault that requires replacement of the headlight.

(A): Permissible fogging. Headlight does not need to be replaced.

(B): Impermissible fogging. Replace the headlight.



Fig. 16: Identifying Permissible And Impermissible Fogging
 Courtesy of BMW OF NORTH AMERICA, INC.

63 11... INSTALLING HEADLIGHT REPAIR KIT

Necessary preliminary tasks:

- Remove headlight. See [XENON HEADLIGHT](#) or [ADAPTIVE HEADLIGHT](#).

NOTE: **Damaged holder (1) can be replaced with the repair kit.**

Replacement of headlight is not required !

A: Remove the damaged holder (1) as shown.

B: Fit holder from repair kit (3) as illustrated and tighten screws (2).

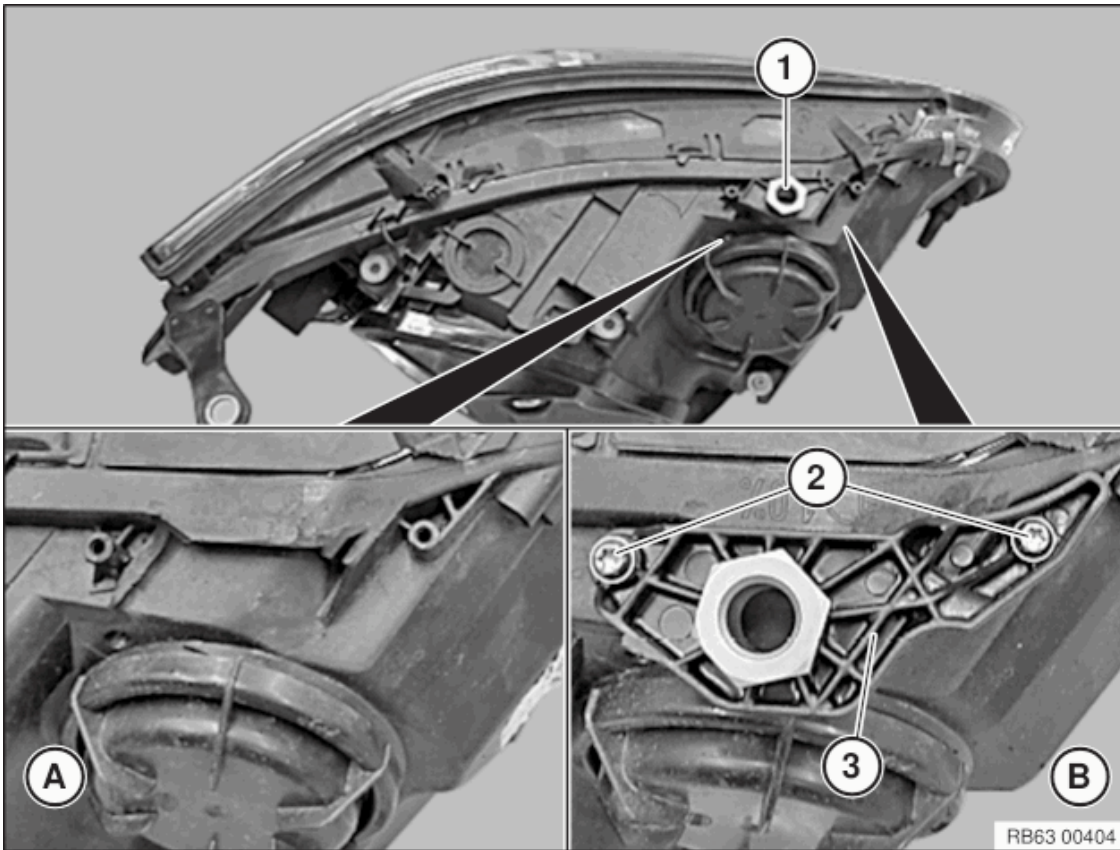


Fig. 17: Identifying Repair Kit, Screws, And Holder
Courtesy of BMW OF NORTH AMERICA, INC.

After installation:

- Adjust **HEADLIGHTS**.

63 12 001 REMOVING AND INSTALLING/REPLACING LEFT HEADLIGHT

NOTE: This operation is described in removing and installing/replacing **LEFT HEADLIGHT (XENON HEADLIGHT)**.

63 12 002 REMOVING AND INSTALLING/REPLACING RIGHT HEADLIGHT

Operation is described in:

Removing and installing/replacing **LEFT HEADLIGHT (XENON HEADLIGHT)**

63 12 010 REMOVING AND INSTALLING/REPLACING LEFT HEADLIGHT (XENON HEADLIGHT)

WARNING: Follow instructions for **HANDLING LIGHT BULBS (EXTERIOR LIGHTS)**.

Unclip strip (1) in direction of arrow.

Release screws (2) underneath.

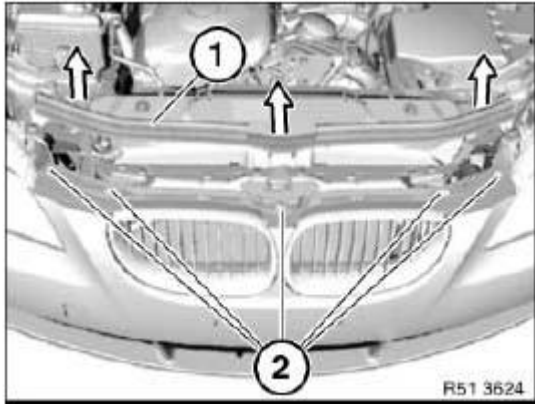


Fig. 18: Identifying Strip And Screws

Courtesy of BMW OF NORTH AMERICA, INC.

Turn cap (1) approx. 30° counterclockwise and remove from headlight (2).

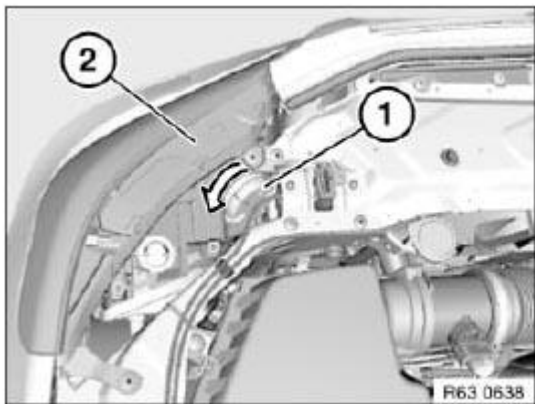


Fig. 19: Removing Headlight

Courtesy of BMW OF NORTH AMERICA, INC.

Slacken screws (1)

Unfasten screws (2).

Installation:

- Observe **GAP DIMENSIONS**
- Adjust **HEADLIGHTS**

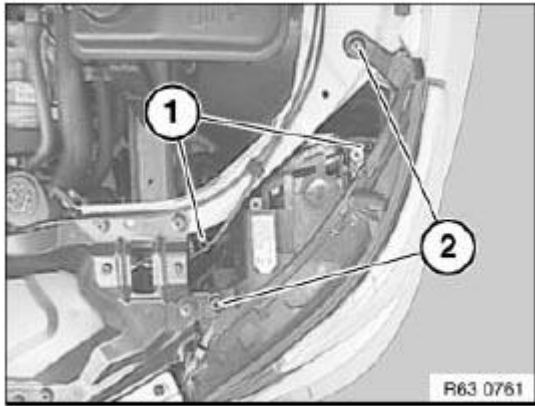


Fig. 20: Identifying Slacken Screws And Unfasten Screws
 Courtesy of BMW OF NORTH AMERICA, INC.

Pull bumper panel (1) forwards slightly and feed out headlight (2) in direction of arrow.

Installation:

Make sure headlight (2) is correctly seated in lower holder.

Unlock and disconnect associated plug connections (3).

Remove headlight (2).

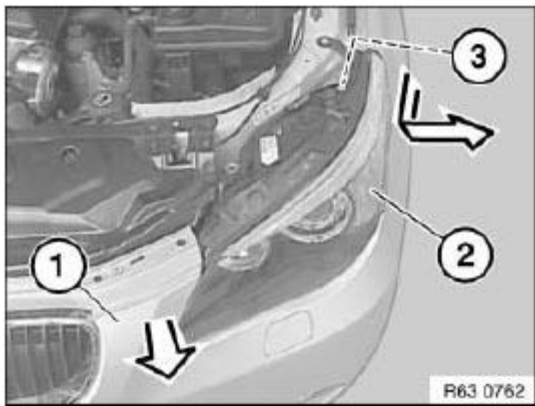


Fig. 21: Disconnecting Associated Plug Connections
 Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

- Unclip headlight holder (1) and remove.
- Remove **IGNITION UNIT AND BULB FOR XENON HEADLIGHT (2)**
- Remove **CONTROL UNIT FOR XENON HEADLIGHT (3)**

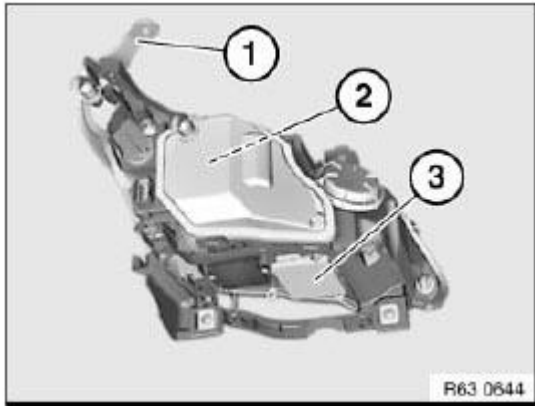


Fig. 22: Identifying Headlight Holder And Ignition Unit
 Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Retaining lugs (1) on headlight holder (2) must not be damaged.

Make sure headlight holder (2) is correctly engaged on headlight.

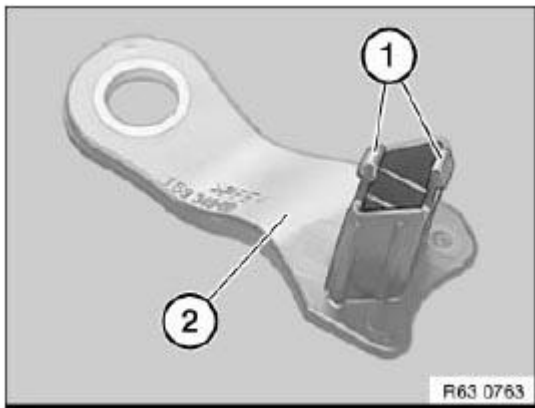


Fig. 23: Identifying Lugs And Headlight Holder
 Courtesy of BMW OF NORTH AMERICA, INC.

63 12 012 REMOVING AND INSTALLING RIGHT HEADLIGHT (XENON HEADLIGHT)

Operation is described in:

Removing and installing **LEFT HEADLIGHT (XENON HEADLIGHT)**

63 12 015 REMOVING AND INSTALLING LEFT HEADLIGHT (ADAPTIVE HEADLIGHT)

Operation is described in:

Removing and installing LEFT HEADLIGHT (XENON HEADLIGHT)

63 12 016 REPLACING LEFT HEADLIGHT (ADAPTIVE HEADLIGHT)

WARNING: Version with xenon headlights: Danger to life due to high voltage! Therefore, before removing, disconnect all components from the power supply (lighting system and ignition off). Work on the entire xenon lighting system (control unit, ignition unit with bulb) may only be carried out by specialist personnel. Follow instructions for handling light bulbs (EXTERIOR LIGHTS).

Necessary preliminary tasks:

- Remove LEFT HEADLIGHT
- Remove CONTROL UNIT FOR XENON HEADLIGHTS
- Remove DRIVE/ELECTRONICS BOX FOR ADAPTIVE HEADLIGHT
- REMOVE BULB/IGNITION UNIT FOR XENON HEADLIGHT
- If necessary, remove bulbs. See REPLACING HALOGEN BULB FOR HIGH-BEAM HEADLIGHT ON LEFT, REPLACING BULB FOR SIDE MARKER LAMP, FRONT LEFT, REPLACING BULB FOR FRONT LEFT SIDE LIGHTS (XENON HEADLIGHT) (FROM 03/2007), REPLACING BULB FOR FRONT LEFT (OR RIGHT) TURNING LIGHT, or REPLACING BULB FOR TURN INDICATOR, FRONT LEFT.

63 12 017 REMOVING AND INSTALLING/REPLACING RIGHT HEADLIGHT (ADAPTIVE HEADLIGHT)

Operation is described in:

Removing and installing LEFT HEADLIGHT (XENON HEADLIGHT).

63 12 860 REPLACING CONTROL UNIT FOR LEFT XENON HEADLIGHT

WARNING: Version with xenon headlights: Danger to life due to high voltage! Therefore disconnect all components from voltage supply before removal. Work on the entire xenon lighting system (ignition unit, control unit and lamp) may only be carried out by specialist personnel.

Necessary preliminary tasks:

- Remove LEFT HEADLIGHT

Build date up to 03/07:

Release screws (1).

Remove control unit for xenon headlight (2) from headlight (3).

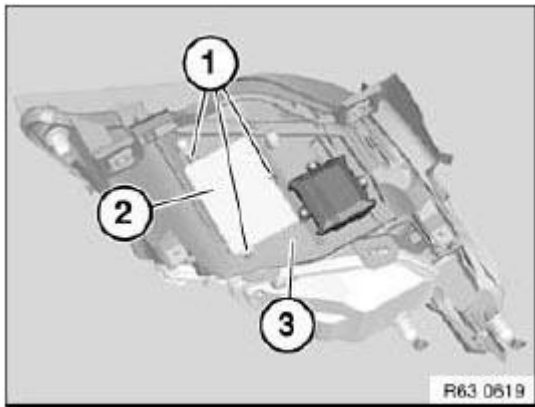


Fig. 24: Identifying Control Unit, Headlight And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Build date from 03/07:

Release screws (1).

Remove control unit for xenon headlight (2) from headlight (3).

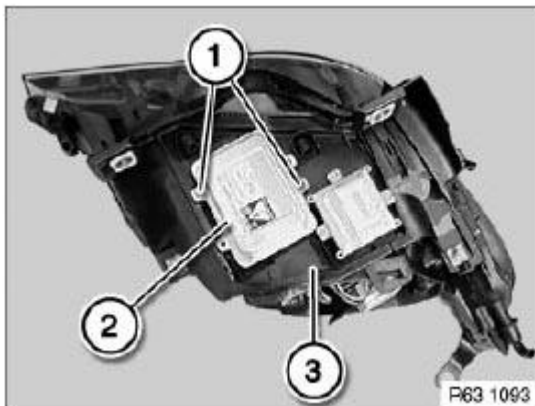


Fig. 25: Identifying Control Unit, Headlight And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

When installing control unit for xenon headlight (1), make sure sealing sleeve (2) is correctly seated.

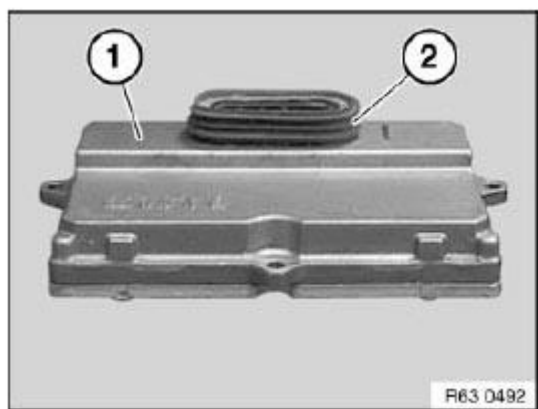


Fig. 26: Identifying Control Unit And Sealing Sleeve
Courtesy of BMW OF NORTH AMERICA, INC.

63 12 861 REPLACING CONTROL UNIT FOR RIGHT XENON HEADLIGHT

Operation is described in:

Replacing **CONTROL UNIT FOR LEFT XENON HEADLIGHT**

63 12 870 REPLACING IGNITION UNIT FOR LEFT XENON HEADLIGHT

WARNING: Version with xenon headlights: Danger to life due to high voltage!
Therefore disconnect all components from voltage supply before removal.
Work on the entire xenon lighting system (ignition unit, control unit and lamp) may only be carried out by specialist personnel.

Slacken screws (1)

Release screws (2).

Pull out headlight (3) slightly in direction of arrow.

Installation:

Make sure headlight (3) is correctly seated in lower holder.

- Adjust **GAP DIMENSIONS**
- Adjust **HEADLIGHTS**

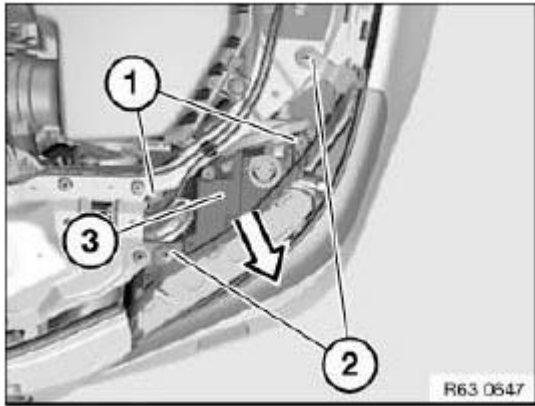


Fig. 27: Identifying Headlight And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: Headlight shown removed for purposes of clarity.

Unlock catches (1) and remove cap (2) in direction of arrow.

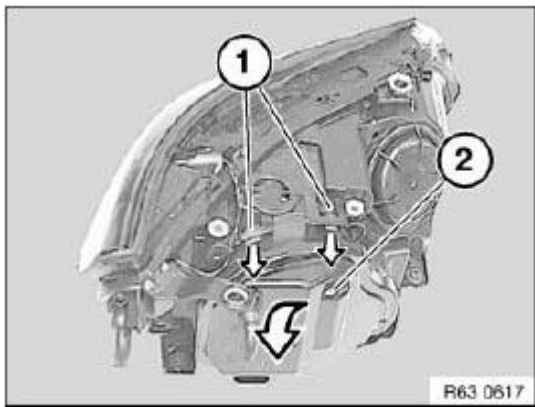


Fig. 28: Removing Cap
Courtesy of BMW OF NORTH AMERICA, INC.

Build date up to 02/05:

Turn ignition unit for xenon headlight (1) approx. 30° counterclockwise and detach.

Plug connection (2) is automatically released by turning ignition unit for xenon headlight (2).

Lay plug connection (2) to one side.

Installation:

Make sure ignition unit is correctly engaged.

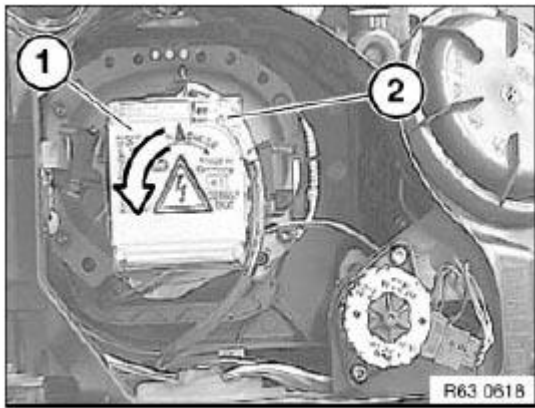


Fig. 29: Turning Ignition Unit For Xenon Headlight
Courtesy of BMW OF NORTH AMERICA, INC.

Build date from 02/05:

Disconnect plug connection (1).

Turn ignition unit for xenon headlight (2) approx. 30° counterclockwise and detach.

Replacement:

Remove xenon headlight bulb holder.

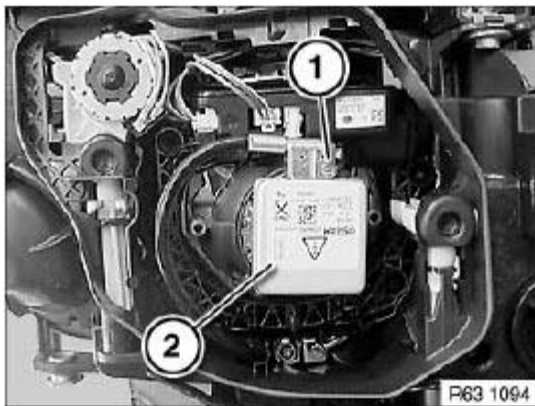


Fig. 30: Identifying Ignition Unit And Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

63 12 871 REPLACING RIGHT IGNITION UNIT FOR RIGHT XENON HEADLIGHT

Operation is described in:

Replacing **IGNITION UNIT FOR LEFT XENON HEADLIGHT**

63 12 895 REPLACING DRIVE FOR LEFT ADAPTIVE HEADLIGHT

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

WARNING: Version with xenon headlights: Danger to life due to high voltage! Therefore disconnect all components from voltage supply before removal. Work on the entire xenon lighting system (ignition unit, control unit and lamp) may only be carried out by specialist personnel.

Necessary preliminary tasks:

- Remove LEFT HEADLIGHT

Release screws (1).

Remove drive for adaptive headlight (2) from headlight (3).

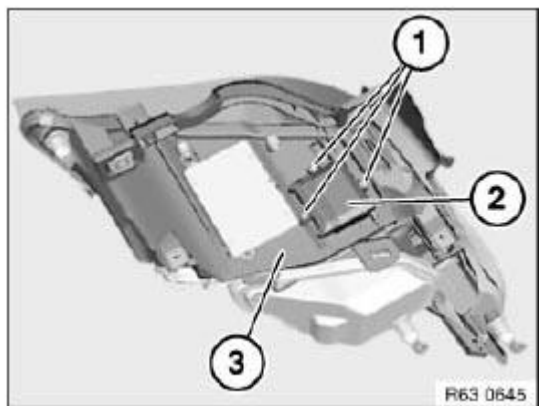


Fig. 31: Identifying Adaptive Headlight, Headlight And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Fit drive for adaptive headlight (1) exactly on headlight.

Make sure pin housing (2) is correctly seated in plug housing (3).

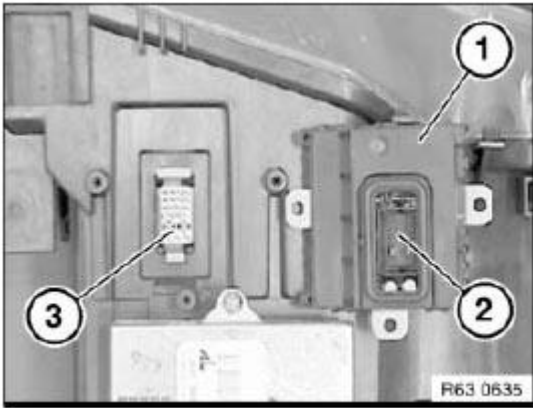


Fig. 32: Identifying Adaptive Headlight, Pin Housing And Plug Housing
Courtesy of BMW OF NORTH AMERICA, INC.

Carry out **CODING/PROGRAMMING** .

63 12 896 REPLACING DRIVE/ELECTRONICS BOX FOR RIGHT ADAPTIVE HEADLIGHT

Operation is described in:

Replacing **DRIVE/ELECTRONICS BOX FOR LEFT ADAPTIVE HEADLIGHT**

63 12 950 REPLACING A LOWER HOLDER FOR HEADLIGHT MOUNTING

Necessary preliminary tasks:

- Remove **HEADLIGHT**

Release screws (1).

Remove holder (2) from front panel (3).

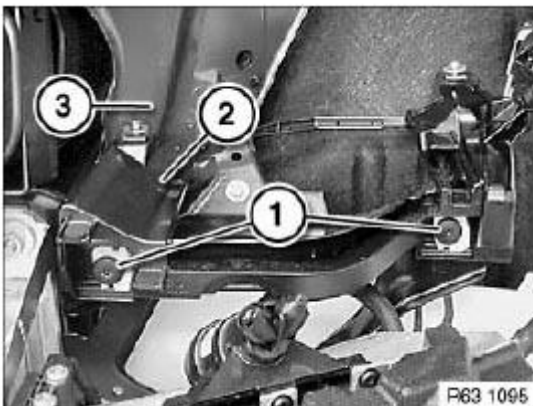


Fig. 33: Identifying Lower Holder, Panel And Screws

Courtesy of BMW OF NORTH AMERICA, INC.

67 16 011 REMOVING AND INSTALLING/REPLACING LEFT HEADLIGHT VERTICAL AIM ADJUSTER (XENON HEADLIGHT)

WARNING: Xenon headlights: Danger to life due to high voltage! Therefore disconnect xenon headlights from the power supply. Work on the entire xenon lighting system (ignition unit, control unit and lamp) may only be carried out by specialist personnel.

Necessary preliminary tasks:

- Remove LEFT HEADLIGHT

Unlock catches (1) and remove cap (2) in direction of arrow.

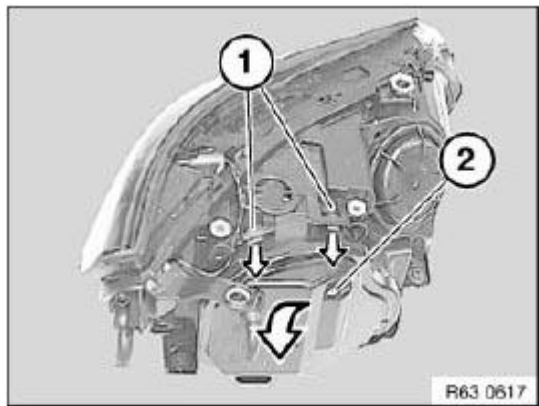


Fig. 34: Removing Cap

Courtesy of BMW OF NORTH AMERICA, INC.

Unfasten plug connection (1) and disconnect.

Loosen screws (2).

Feed headlight vertical aim adjuster (3) out of mounting (4) and remove.

Installation:

Headlight vertical aim adjuster (3) must be correctly seated in mounting (4).

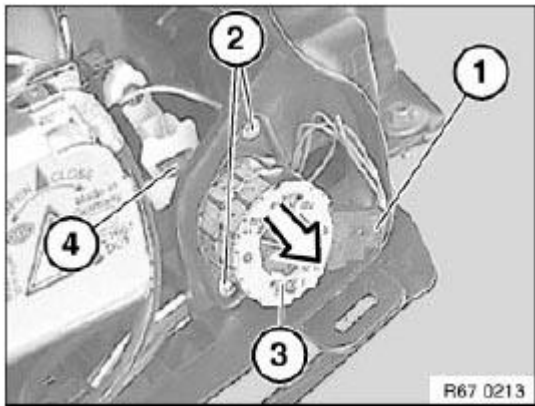


Fig. 35: Identifying Headlight Vertical Aim Adjuster, Plug Connection And Screws
 Courtesy of BMW OF NORTH AMERICA, INC.

Adjust **HEADLIGHTS**

TURN SIGNAL INDICATOR LIGHTS

63 13 200 REMOVING AND INSTALLING/REPLACING FRONT LEFT OR RIGHT AUXILIARY TURN SIGNAL LAMP

Slide from auxiliary turn signal lamp (1) towards rear and fold in direction of arrow out of front side wall (2).

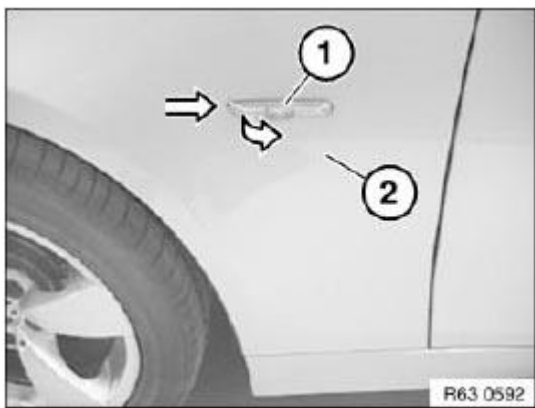


Fig. 36: Turning Signal Lamp
 Courtesy of BMW OF NORTH AMERICA, INC.

Unfasten plug connection (1) and disconnect.

Remove front auxiliary turn signal lamp (2).

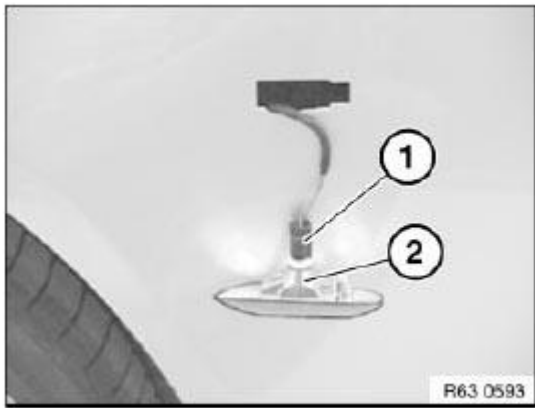


Fig. 37: Identifying Signal Lamp And Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

WARNING: Follow instructions for HANDLING LIGHT BULBS (EXTERIOR LIGHTS).

Replacement:

If necessary, convert bulb.

CLEARANCE AND SIDE MARKER LIGHTS

63 14 120 REMOVING AND INSTALLING/REPLACING REAR REFLECTOR

Special tools required:

- **64 1 020**

NOTE: Illustrations depict removal of the rear left reflector. The rear right reflector is removed in the same way as the rear left reflector.

Unclip reflector (1) with special tool **64 1 020** on right side.

Remove reflector (1) towards rear from rear bumper trim (2).

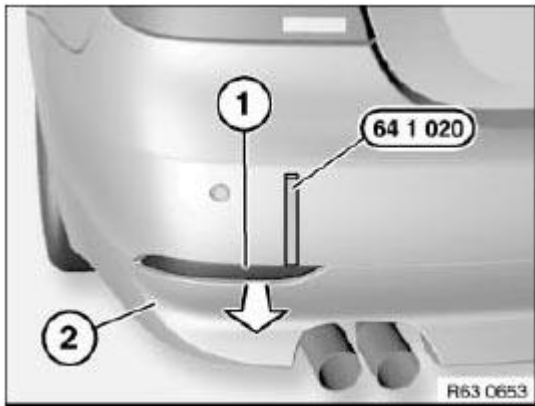


Fig. 38: Identifying Special Tool (64 1 020) And Reflector
Courtesy of BMW OF NORTH AMERICA, INC.

FOG LIGHTS, AUXILIARY LIGHTS

63 17 060 REMOVING AND INSTALLING (REPLACING) LEFT OR RIGHT FRONT FOG LAMP

Necessary preliminary tasks:

- Remove **FRONT UNDERBODY PROTECTION**

Release screws (1).

Remove fog lamp wheel arch cover (2).

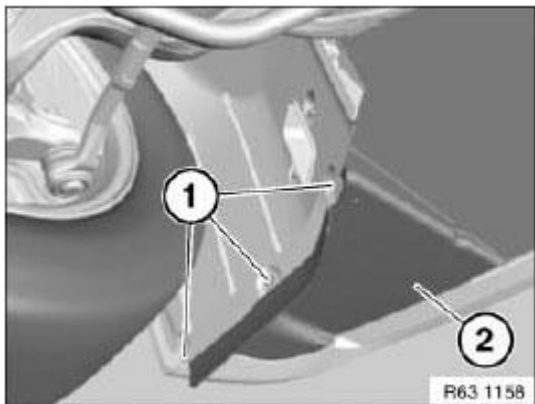


Fig. 39: Identifying Fog Lamp Wheel Arch Cover With Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Build date up to 03/2007:

Disconnect plug connection (1).

Release screws (2). Tightening torque **63 17 1AZ** .

Feed fog lamp (3) in direction of arrow out of mounting (4) and remove.

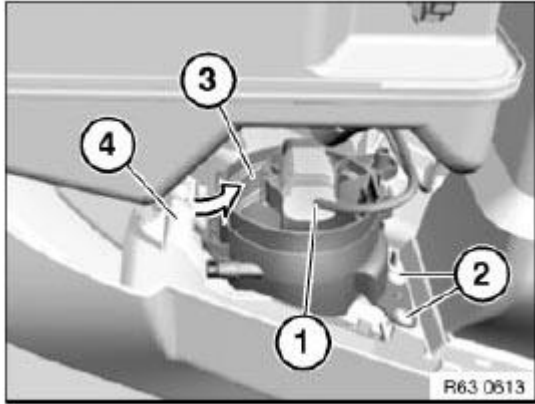


Fig. 40: Turning Fog Lamp

Courtesy of BMW OF NORTH AMERICA, INC.

Build date after 03/2007:

Disconnect plug connection (1).

Release screws (2) and remove front fog lamp. Tightening torque **63 17 1AZ** .

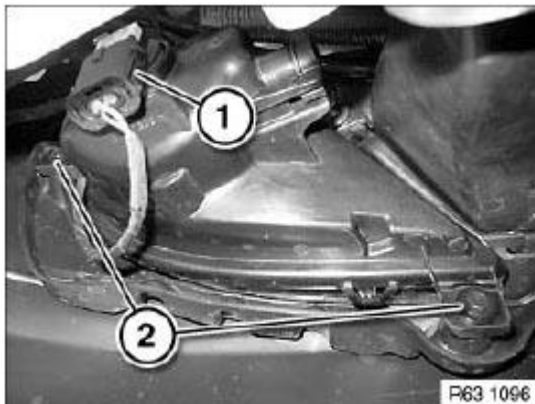


Fig. 41: Identifying Plug Connection And Screws

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

If necessary, remove **BULB**.

ADJUST FRONT FOG LAMPS.

63 17 060 REMOVING AND INSTALLING/REPLACING LEFT OR RIGHT FRONT FOG LAMP (M AERODYNAMIC KIT)

Necessary preliminary tasks:

- Remove **FRONT UNDERBODY PROTECTION**

Release screws (1).

Remove fog lamp wheel arch cover (2).

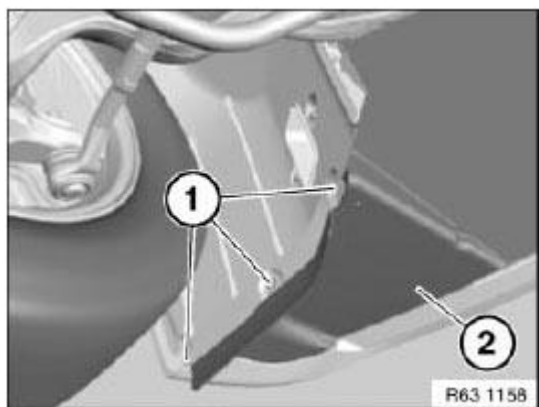


Fig. 42: Identifying Fog Lamp Wheel Arch Cover With Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

Release screws (2). Tightening torque **63 17 1AZ** .

Feed fog lamp (3) in direction of arrow out of mounting (4) and remove.

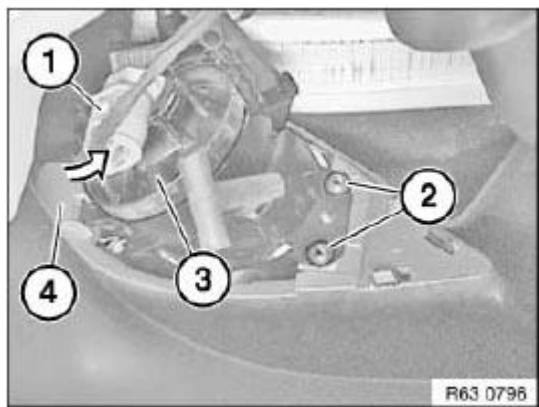


Fig. 43: Identifying Plug Connection, Fog Lamp, Mounting And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

If necessary, remove **BULB**.

ADJUST FRONT FOG LAMPS.

REAR LIGHT CLUSTER

63 21 055 REPLACING A SOCKET HOUSING FOR LEFT OR RIGHT REAR LIGHT

Necessary preliminary tasks:

- Remove luggage compartment trim on side panel. See **REMOVING AND INSTALLING/REPLACING TRUNK TRIM PANEL ON LEFT SIDE PANEL** or **REMOVING AND INSTALLING/REPLACING TRUNK TRIM PANEL ON RIGHT SIDE PANEL**

WARNING: Follow instructions for **HANDLING LIGHT BULBS (EXTERIOR LIGHTS)**.

Build date up to 03/07:

Unfasten plug connection (1) and disconnect.

Unlock locking clip (2) in direction of arrow and remove socket housing for rear light (3) from rear light (4).

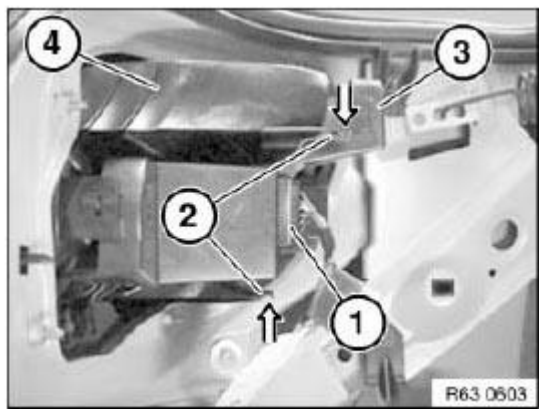


Fig. 44: Identifying Socket Housing, Locking Clip And Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

Build date after 03/07:

Disconnect plug connection (1).

Turn lock (2) in counterclockwise direction.

Remove socket housing for rear light (3) from rear light (4).

Replacement:

Remounting the **BULBS**.

Installation note:

For vehicle versions as of 03/07, the previous socket housing is replaced by the socket housing with additional ground cable in case of damage (erosion, charring) see the next operations!

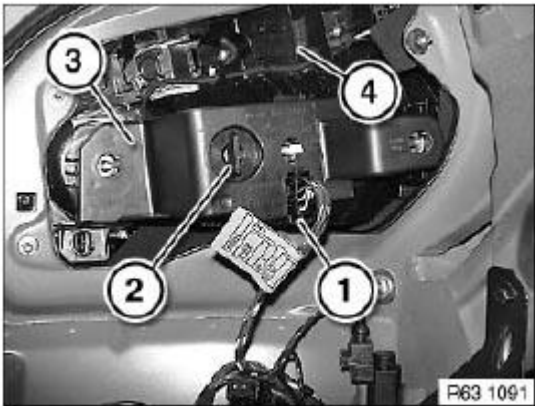


Fig. 45: Identifying Socket Housing, Lock And Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

Build date after 03/07:

Check the socket on the socket housing (1) and socket housing (2) for damage (erosion, charring).

Replace the damaged socket housing (1) with new part (part number 7 361 881 or 7 361 882).

Replace the damaged socket housing (2) and tab connector contact with new part (part number 7 505 477 and part number 7 502 933).

Note the pin assignment and unpin the tab connector contact from the socket housing (2) with special tool 61 0 321 (release tool).

See notes for **OPENING PLUG HOUSINGS AND REMOVING CONTACTS OF DIFFERENT PLUG SYSTEMS**.

Replace the discolored tab connector contacts (see Electronic Parts Catalogue) and pin in the new socket housing (2) according to the noted pin assignment.

See **CRIMPING OF STOP** and special tool for the wiring harness repair.

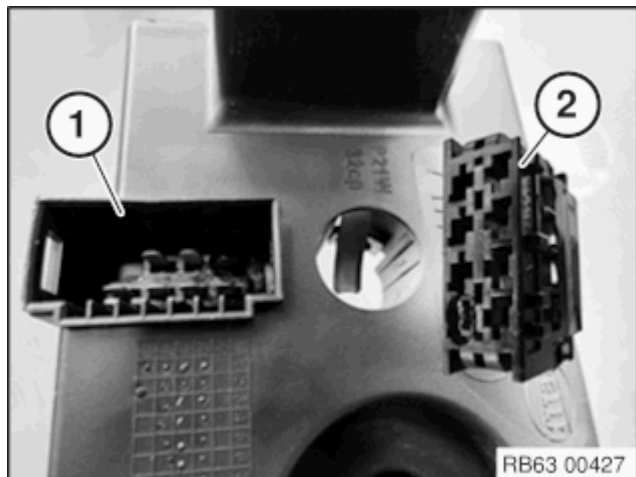


Fig. 46: Identifying Socket Housings
Courtesy of BMW OF NORTH AMERICA, INC.

Build date after 03/07:

Close plug connection on socket housing.

On left rear light:

Route the additional ground cable (1) along the present rear light wiring harness (2) and secure it with insulating tape.

On right rear light:

Route the additional ground cable (1) along the present rear light wiring harness (2) and secure it with insulating tape. Also secure the rear light wiring harness (2) to the main wiring harness with cable straps.

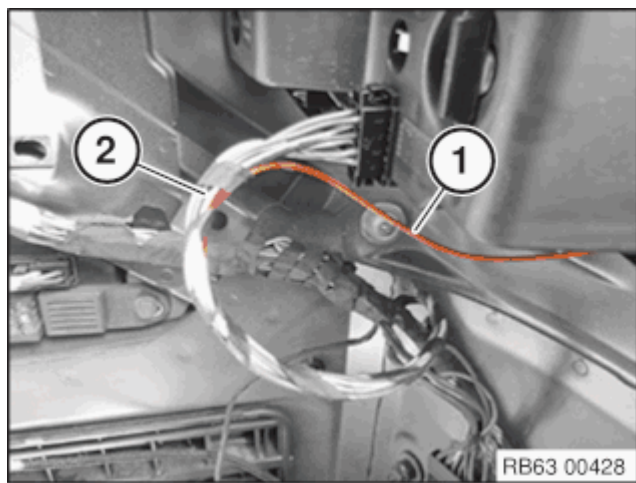


Fig. 47: Routing Additional Ground Cable Along Present Rear Light Wiring Harness
Courtesy of BMW OF NORTH AMERICA, INC.

Build date after 03/07:

Insert the additional ground cable (1) on a free pin in the comb connector (2).

Installation note:

Ensure correct locking of additional ground cable (1) in the comb connector (2).

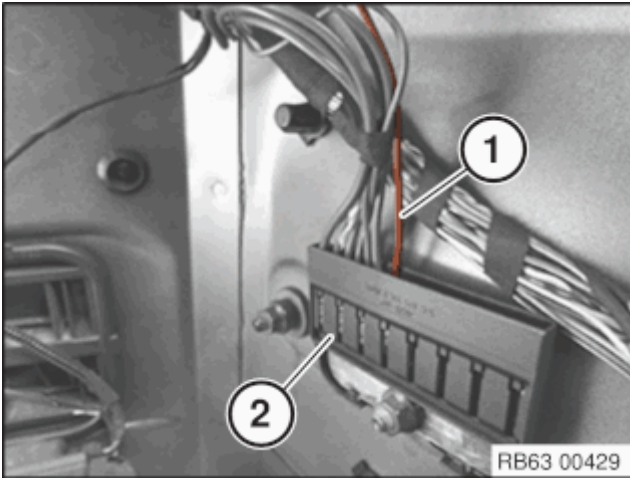


Fig. 48: Inserting Additional Ground Cable In Free Pin Of Comb Connector
Courtesy of BMW OF NORTH AMERICA, INC.

63 21 101 REPLACING SEALING FRAME FOR LEFT OR RIGHT REAR LIGHT

Necessary preliminary tasks:

- Remove **REAR LIGHT**.

Detach sealing frame for rear light (1) from rear light (2).

Installation:

Sealing frame for rear light (1) is centered via openings for threaded pins (3).

Make sure sealing frame for rear light (1) is correctly bonded all round on rear light (2).

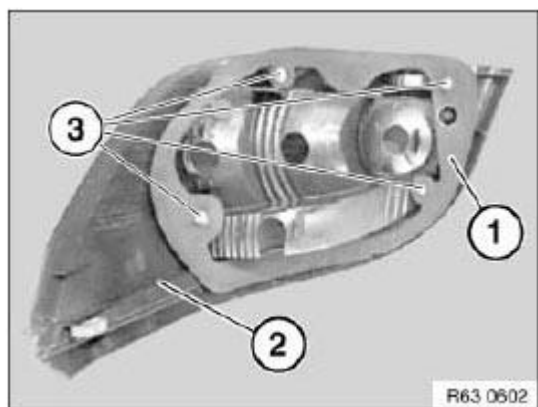


Fig. 49: Identifying Sealing Frame And Threaded Pins

Courtesy of BMW OF NORTH AMERICA, INC.

63 21 180 REMOVING AND INSTALLING/REPLACING LEFT OR RIGHT REAR LIGHT

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

Necessary preliminary tasks:

- Remove luggage compartment trim on left side panel. See REMOVING AND INSTALLING/REPLACING TRUNK TRIM PANEL ON LEFT SIDE PANEL or REMOVING AND INSTALLING/REPLACING TRUNK TRIM PANEL ON RIGHT SIDE PANEL

Disconnect plug connection (1).

Release nuts (2) and remove rear light (3) towards outside.

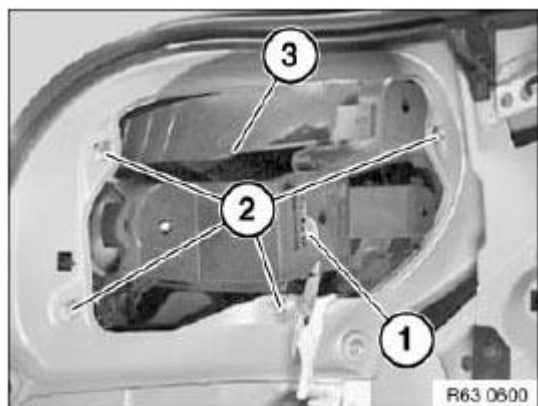


Fig. 50: Identifying Plug Connection, Rear Light And Nut

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Observe tightening sequence for 4 retaining nuts.

Tightening torque **63 21 1AZ** .

NOTE: Gap dimension to body side panel is established by means of retaining nut (4).

Avoid twisting rear light when screwing down.

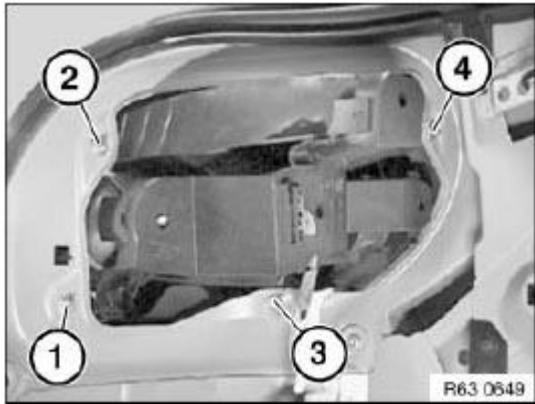


Fig. 51: Identifying Retaining Nut

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure rear light seal (1) is correctly seated, replace if necessary.

Buffer stop (3) of rear light (2) must be fitted.

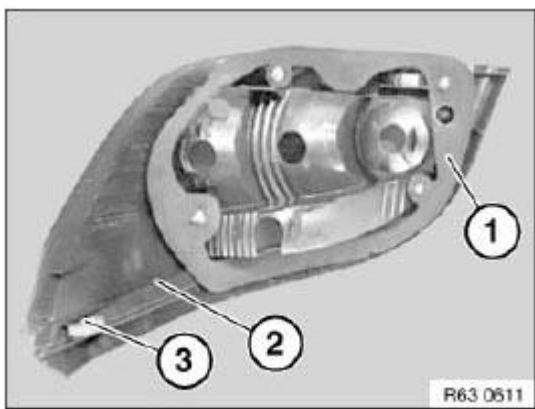


Fig. 52: Identifying Rear Light Seal And Buffer Stop

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

- If necessary, replace **SOCKET HOUSING FOR REAR LIGHT**

BRAKE LIGHTS

63 25 000 REMOVING AND INSTALLING/REPLACING AUXILIARY BRAKE LIGHT

Unclip cover for auxiliary brake light (1) at points (2) and feed out sideways in direction of arrow.

Remove cover for auxiliary brake light (1) from molded roofliner (3).

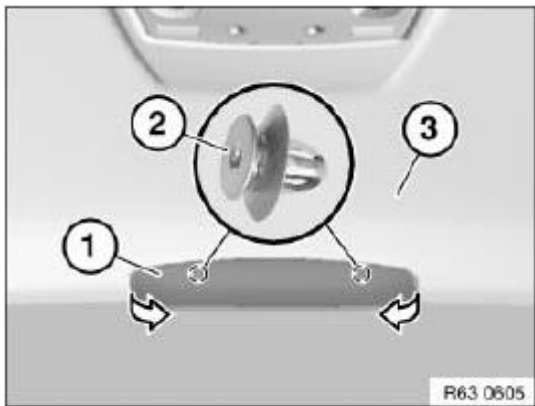


Fig. 53: Removing Cover For Auxiliary Brake Light
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Clips (1) and locators (2) must not be damaged.

Make sure cover for auxiliary brake light (3) is correctly seated.

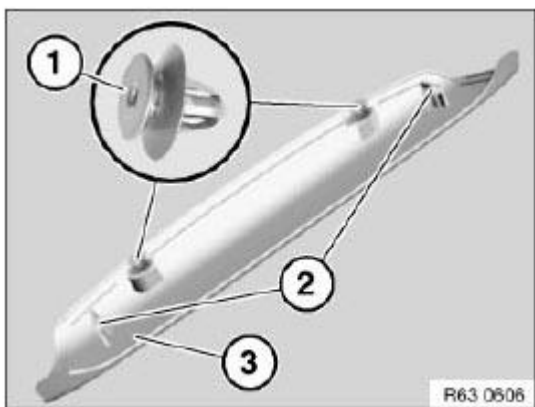


Fig. 54: Identifying Auxiliary Brake Light, Clips And Locators
Courtesy of BMW OF NORTH AMERICA, INC.

Unfasten plug connection (1) and disconnect.

If necessary, unclip plug connections (2) on auxiliary brake light (4).

Unlock slide (3) on both sides and remove auxiliary brake light (4) in direction of arrow from rear window (5).

Installation:

Make sure auxiliary brake light (4) is correctly positioned in rear window (5).

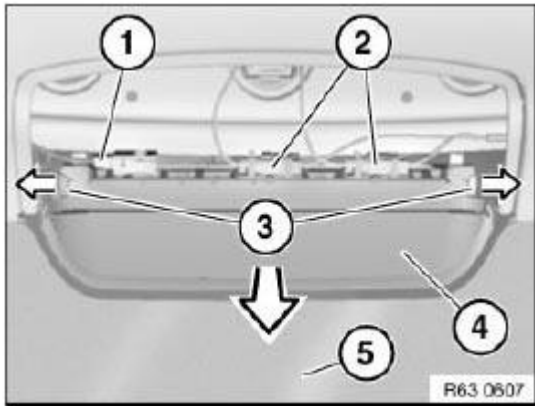


Fig. 55: Identifying Plug Connection, Auxiliary Brake Light And Rear Window
Courtesy of BMW OF NORTH AMERICA, INC.

LICENCE PLATE LIGHTS

63 26 000 REMOVING AND INSTALLING/REPLACING LEFT OR RIGHT LICENSE PLATE LIGHT

Special tools required:

- **64 1 020**

Slide license plate light (1) in direction of arrow slightly and lever out with special tool **64 1 020** .

Unlock plug connection underneath and disconnect.

Remove license plate light (1).

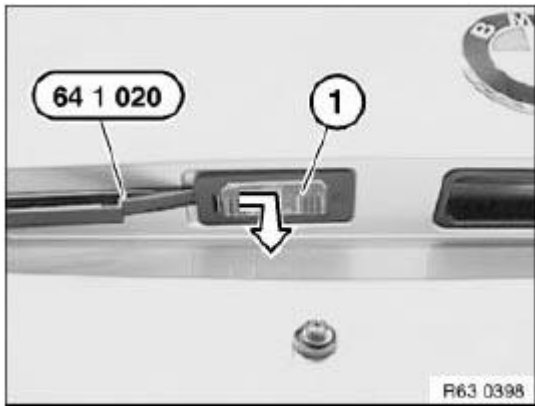


Fig. 56: Identifying Special Tool (64 1 020) And License Plate Light
Courtesy of BMW OF NORTH AMERICA, INC.

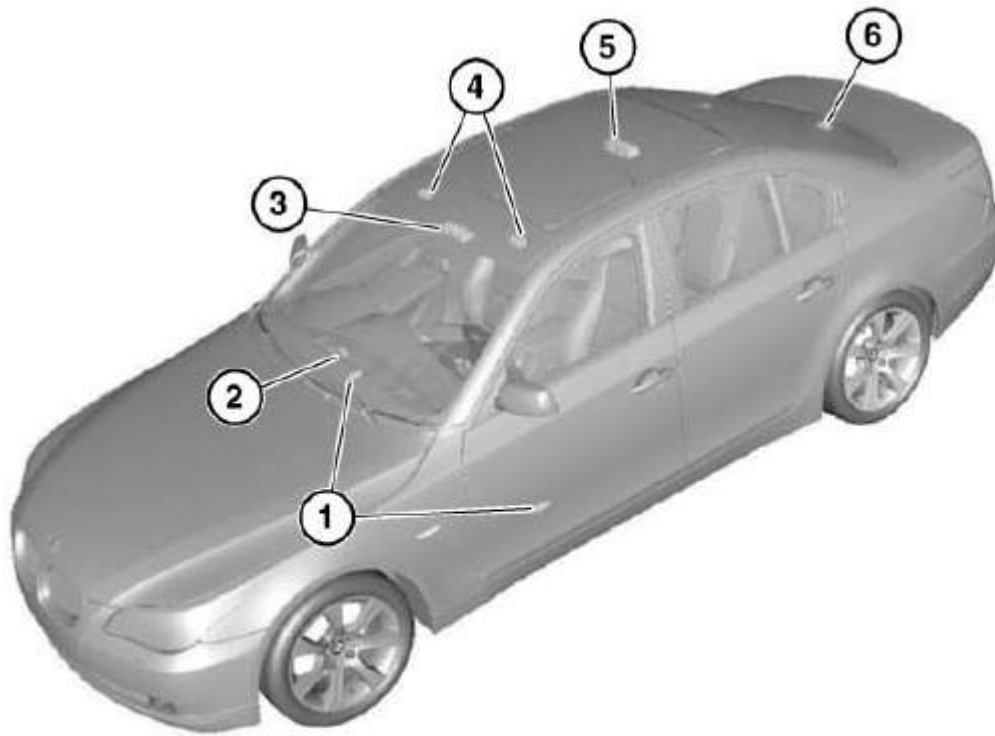
WARNING: Follow instructions for HANDLING LIGHT BULBS (EXTERIOR LIGHTS).

Replacement:

If necessary, remove bulb.

INTERIOR LIGHTS

63 31.. OVERVIEW OF INTERIOR LIGHTS



F63 1534

1 Footwell light under instrument panel2 Glovebox light3 Front ceiling light4 Mirror lights5 Rear ceiling light6 Luggage compartment light**Fig. 57: Overview Of Interior Lights**

Courtesy of BMW OF NORTH AMERICA, INC.

63 31 000 REMOVING AND INSTALLING/REPLACING COMPLETE CEILING LIGHT (FRONT)**Special tools required:**

- **00 9 317**

IMPORTANT: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Replacement:

If necessary, convert bulbs.

Lever out ceiling light (1) with special tool **00 9 317** as illustrated.

Disconnect plug connection underneath and remove ceiling light (1).

Replacement:

Note **TYPE OF BULB** .

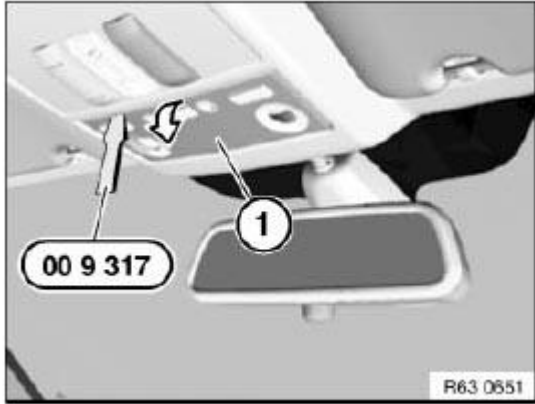


Fig. 58: Identifying Ceiling Light With Special Tool (00 9 317)

Courtesy of BMW OF NORTH AMERICA, INC.

63 31 003 REMOVING AND INSTALLING/REPLACING COMPLETE CEILING LIGHT (REAR)

Special tools required:

- **00 9 317**

IMPORTANT: Follow instructions for **HANDLING LIGHT BULBS (INTERIOR LIGHTS)**.

Replacement:

If necessary, convert bulbs.

Lever out ceiling light (1) with special tool **00 9 317** as illustrated.

Disconnect plug connection underneath and remove ceiling light (1).

Replacement:

Note **TYPE OF BULB** .

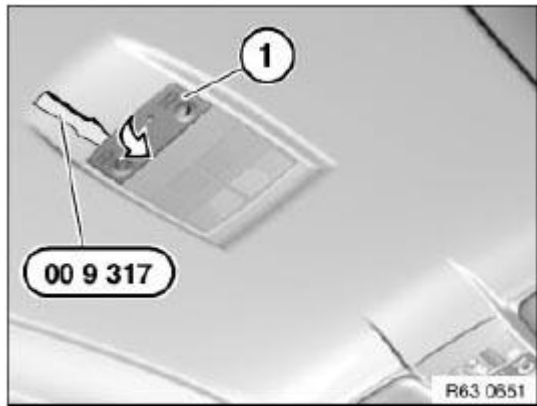


Fig. 59: Identifying Ceiling Light With Special Tool (00 9 317)

Courtesy of BMW OF NORTH AMERICA, INC.

63 31 015 REMOVING AND INSTALLING/REPLACING LEFT OR RIGHT INTERIOR LIGHT (VERSION WITH PANORAMA GLASS SUNROOF) (SPORTS WAGON)

Special tools required:

- 00 9 341

IMPORTANT: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Lever interior light (1) with special tool 00 9 341 in direction of arrow out of molded roofliner (2).

Disconnect associated plug connection and remove interior light (1).

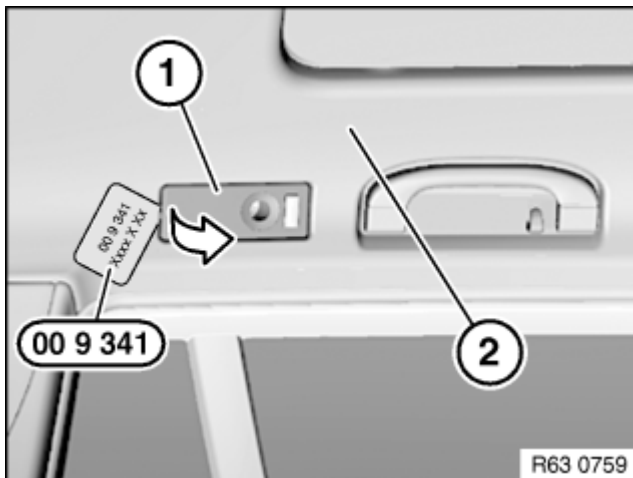


Fig. 60: Using Special Tool (00 9 341) To Lever Out Interior Light

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

- If necessary, convert bulbs.
- Note **BULB TYPE** .

63 31 020 REMOVING AND INSTALLING/REPLACING FOOTWELL LIGHT

Special tools required:

- **64 1 020**

IMPORTANT: Follow instructions for **HANDLING LIGHT BULBS (INTERIOR LIGHTS)**.

Replacement:

If necessary, remove bulb.

In footwell:

Lever out footwell light (1) with special tool **64 1 020** as illustrated.

Disconnect associated plug connection and remove footwell light (1).

Replacement:

Note **TYPE OF BULB** .

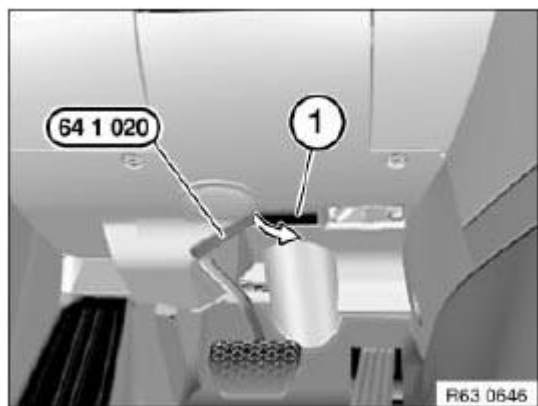


Fig. 61: Identifying Footwell Light With Special Tool (64 1 020)
Courtesy of BMW OF NORTH AMERICA, INC.

On underside of door:

Lever out footwell light (1) with special tool **64 1 020** as illustrated.

Disconnect associated plug connection and remove footwell light (1).

Replacement:

Note **TYPE OF BULB** .

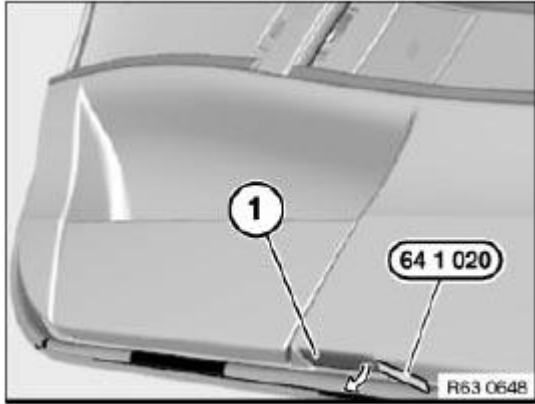


Fig. 62: Identifying Footwell Light With Special Tool (64 1 020)
Courtesy of BMW OF NORTH AMERICA, INC.

63 31 050 REMOVING AND INSTALLING/REPLACING MIRROR LIGHT

IMPORTANT: Follow instructions for **HANDLING LIGHT BULBS (INTERIOR LIGHTS)**.

Replacement:

If necessary, convert bulb.

Lever front mirror light (1) in direction of arrow.

Disconnect plug connection underneath and remove mirror plate light (1).

Replacement:

Note **TYPE OF BULB** .

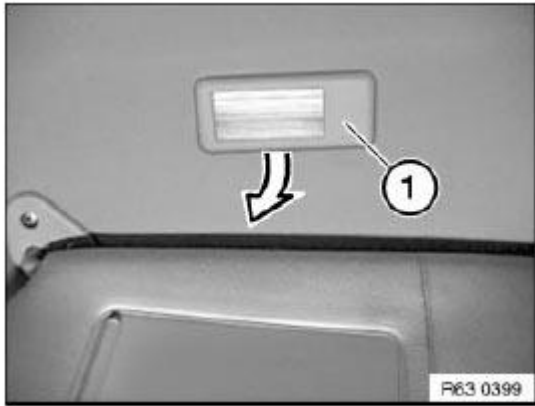


Fig. 63: Removing Front Mirror Light

Courtesy of BMW OF NORTH AMERICA, INC.

63 31 080 REMOVING AND INSTALLING/REPLACING LUGGAGE COMPARTMENT LIGHT

Special tools required:

- **64 1 020**

IMPORTANT: Follow instructions for **HANDLING LIGHT BULBS (INTERIOR LIGHTS)**.

Replacement:

If necessary, convert bulb.

Under rear parcel shelf:

Lever out luggage compartment light (1) with special tool **64 1 020** as illustrated.

Disconnect associated plug connection and remove luggage compartment light (1).

Replacement:

Note **TYPE OF BULB** .

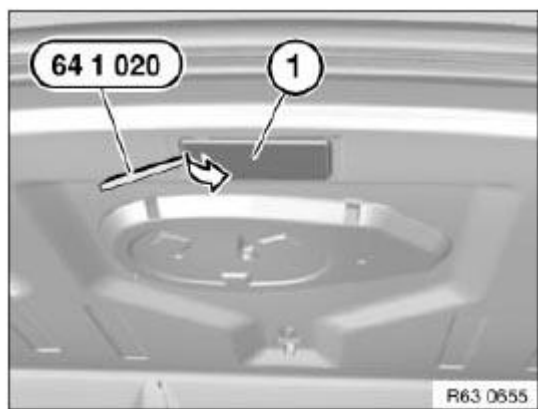


Fig. 64: Identifying Special Tool (64 1 020) And Luggage Compartment Light (Under Rear Parcel Shelf)
Courtesy of BMW OF NORTH AMERICA, INC.

In rear lid:

Lever out luggage compartment light (1) with special tool **64 1 020** as illustrated.

Disconnect associated plug connection and remove luggage compartment light (1).

Replacement:

Note **TYPE OF BULB** .

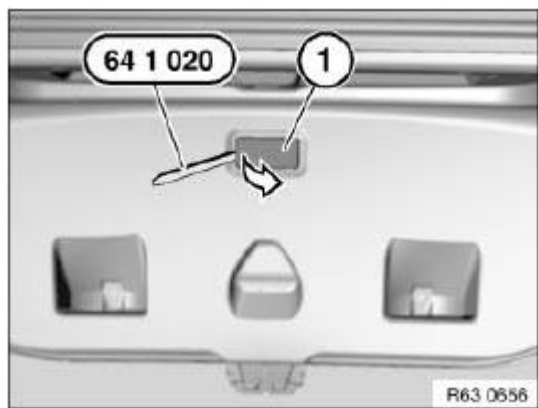


Fig. 65: Identifying Special Tool (64 1 020) And Luggage Compartment Light (Rear Lid)
Courtesy of BMW OF NORTH AMERICA, INC.

63 31 150 REMOVING AND INSTALLING/REPLACING GLOVEBOX LIGHT

Special tools required:

- **64 1 020**

IMPORTANT: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Replacement:

Note TYPE OF BULB .

Lever glovebox light (1) with special tool **64 1 020** as pictured out of glovebox housing (2).

Disconnect associated plug connection and remove glovebox light (1).

Replacement:

Note TYPE OF BULB .

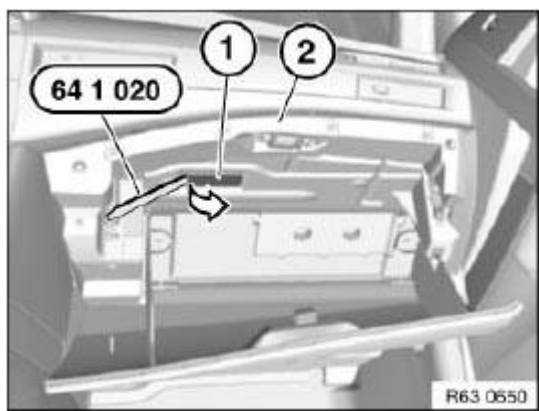


Fig. 66: Identifying Special Tool (64 1 020) With Glovebox Light And Glovebox Housing
Courtesy of BMW OF NORTH AMERICA, INC.

63 31 160 REMOVING AND INSTALLING/REPLACING DOOR MIRROR LIGHT

Necessary preliminary tasks:

- Remove RETAINING RING ON DOOR MIRROR

Unclip door mirror light (1) in direction of arrow from retaining ring on door mirror (2) and remove.

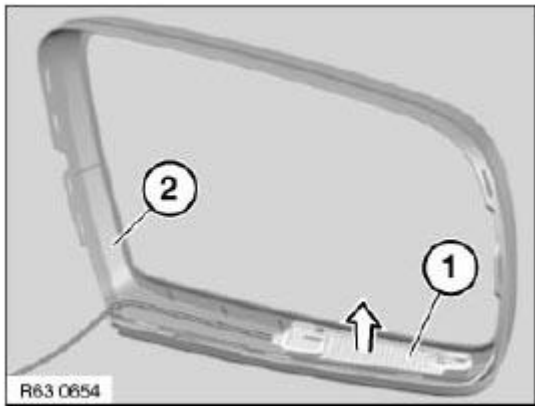


Fig. 67: Identifying Door Mirror Light And Door Mirror
Courtesy of BMW OF NORTH AMERICA, INC.

63 31 180 REPLACING LED FOR FRONT DOOR TRIM PANEL LIGHT

Necessary preliminary tasks:

- Remove **FRONT DOOR TRIM PANEL**

Remove sheathing from wiring harness (1).

Disconnect cables.

Connect both cables with **BUTT CONNECTOR** .

Insulate wiring harness with insulating tape.

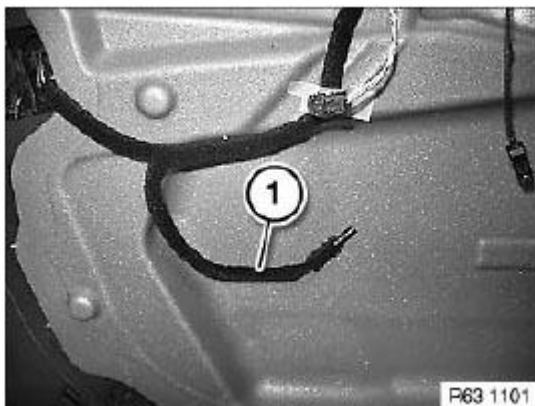


Fig. 68: Identifying Front Door Trim Panel Light Wiring Harness
Courtesy of BMW OF NORTH AMERICA, INC.

63 31 182 REPLACING LED FOR FRONT INSIDE DOOR OPENER

Necessary preliminary tasks:

- Remove **FRONT DOOR TRIM PANEL**

Remove sheathing from wiring harness (1).

Disconnect cables.

Connect both cables with **BUTT CONNECTOR** .

Insulate wiring harness with insulating tape.

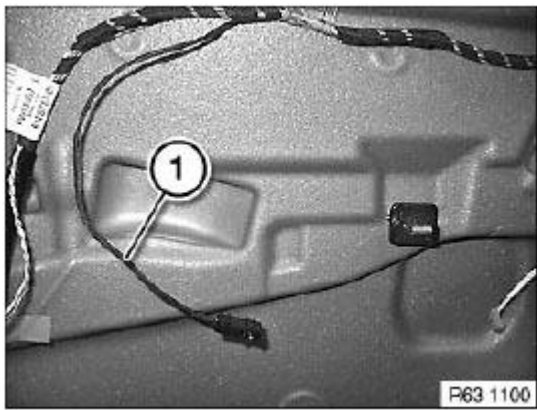


Fig. 69: Identifying Front Inside Door Opener Wiring Harness
Courtesy of BMW OF NORTH AMERICA, INC.

63 31 191 REPLACING LED FOR REAR DOOR TRIM PANEL LIGHT

Necessary preliminary tasks:

- Remove **REAR DOOR TRIM PANEL**

Remove sheathing from wiring harness (1).

Disconnect cables.

Connect both cables with **BUTT CONNECTOR** .

Insulate wiring harness with insulating tape.

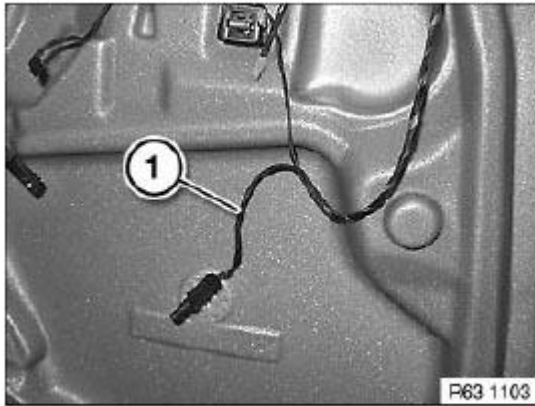


Fig. 70: Identifying Rear Door Trim Panel Light Wiring Harness
Courtesy of BMW OF NORTH AMERICA, INC.

63 31 193 REPLACING LED FOR REAR INSIDE DOOR OPENER

Necessary preliminary tasks:

- Remove **REAR DOOR TRIM PANEL**

Remove sheathing from wiring harness (1).

Disconnect cables.

Connect both cables with **BUTT CONNECTOR**.

Insulate wiring harness with insulating tape.

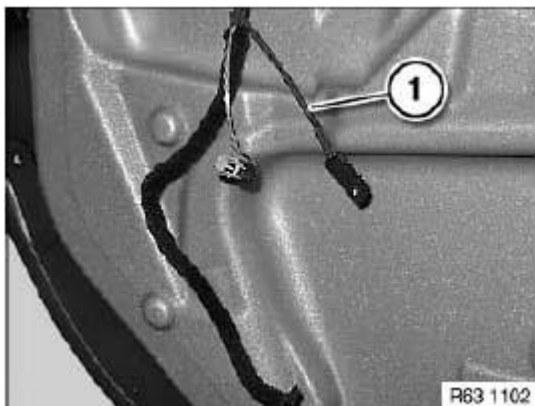


Fig. 71: Identifying Rear Inside Door Opener Wiring Harness
Courtesy of BMW OF NORTH AMERICA, INC.

63 31 210 REMOVING AND INSTALLING/REPLACING REAR READING LIGHT

Special tools required:

- **00 9 340**

WARNING: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Lever out reading light (1) with special tool **00 9 340** as illustrated.

Disconnect plug connection underneath and remove reading light (1).

Replacement:

If necessary, modify **BULBS**.

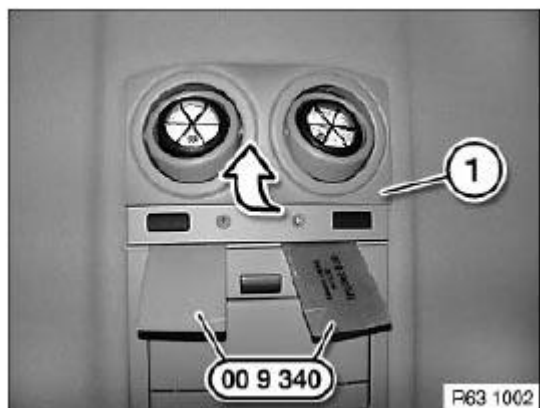


Fig. 72: Identifying Reading Light With Special Tool (00 9 340)

Courtesy of BMW OF NORTH AMERICA, INC.

LIGHT BULBS

63 99... INSTRUCTIONS FOR HANDLING LIGHT BULBS (EXTERIOR LIGHTS)

WARNING: Xenon headlights: Danger to life due to high voltage!
Work on the entire xenon lighting system (ignition unit, control unit and lamp) may only be carried out by specialist personnel.

WARNING: Halogen lamps are under pressure:
To avoid injury, wear protective goggles and gloves.

IMPORTANT: To prevent short-circuiting, disconnect light bulbs from voltage supply prior to replacement.

Do not touch the glass bulbs in new lights bulbs as even the slightest contamination will burn in and reduce bulb service life.

Only touch light bulbs with clean gloves or a clean cloth.

Do not expose light bulbs to mechanical vibrations.

Use only recommended light bulbs.

Follow the light bulb manufacturer's instructions without fail.

63 99... INSTRUCTIONS FOR REPLACING LIGHT BULBS (INTERIOR LIGHTS)

CAUTION: To prevent short-circuiting, disconnect light bulbs from voltage supply prior to replacement.

Do not touch the glass bulbs in new lights bulbs as even the slightest contamination will burn in and reduce bulb service life.

Only touch light bulbs with clean gloves or a clean cloth.

Do not expose light bulbs to mechanical vibrations.

Use only recommended light bulbs.

Follow the light bulb manufacturer's instructions without fail.

63 99... NOTES FOR REPLACING THE PROTECTIVE CAP OF THE HEADLIGHT

IMPORTANT: Risk of damage!

Damaged seals on the protective caps will lead to moisture penetration into the headlight.

This will in turn cause porous cable insulations and malfunctioning of the headlight.

When working on the headlight system, check the protective cap seals.

Replace the protective cap in the event of damage!

Example: screwed protective cap

Seal (1) on protective cap (2).

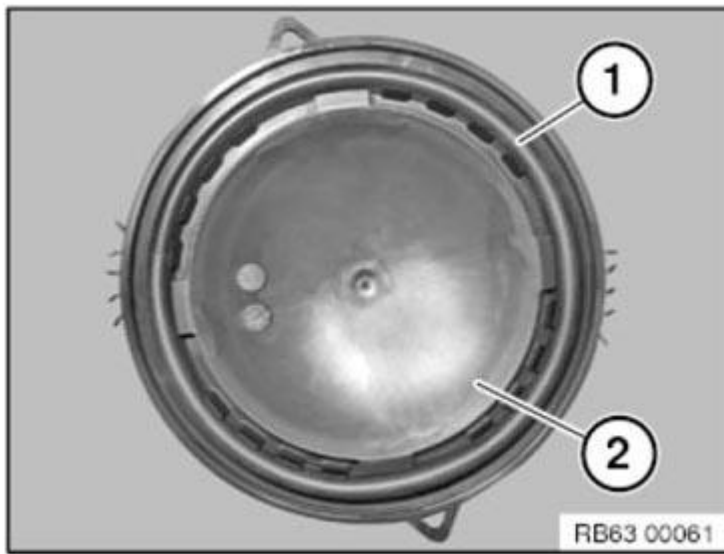


Fig. 73: Identifying Seal On Protective Cap (Screwed Protective Cap)
 Courtesy of BMW OF NORTH AMERICA, INC.

Example: latchable protective cap

Seal (1) on protective cap (2).

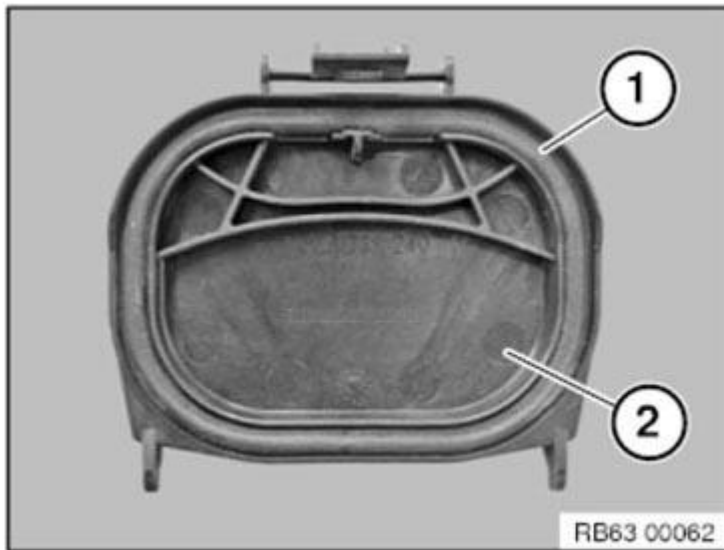


Fig. 74: Identifying Seal On Protective Cap (Latchable Protective Cap)
 Courtesy of BMW OF NORTH AMERICA, INC.

63 99... REPLACING BULB FOR REAR MAKE-UP MIRROR

WARNING: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Necessary preliminary tasks:

- Remove **MAKE-UP MIRROR**

Unclip holders (2) from housing section (4).

Lever retainer (1) out of cover (3).

Carefully remove cover (3) towards top.

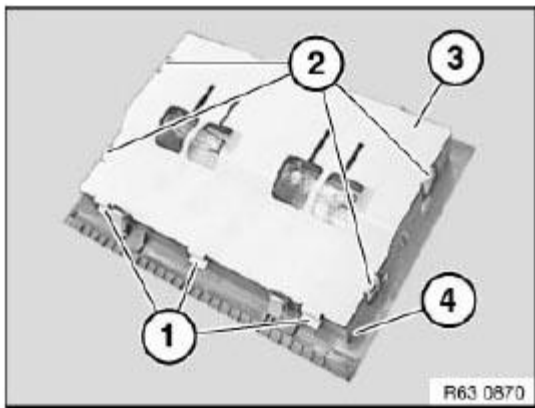


Fig. 75: Identifying Holders, Housing Section And Cover Retainer
Courtesy of BMW OF NORTH AMERICA, INC.

Lever out bulb (2) underneath.

IMPORTANT: Make sure ejector (1) is correctly seated.

Installation:

Note **BULB TYPE** .

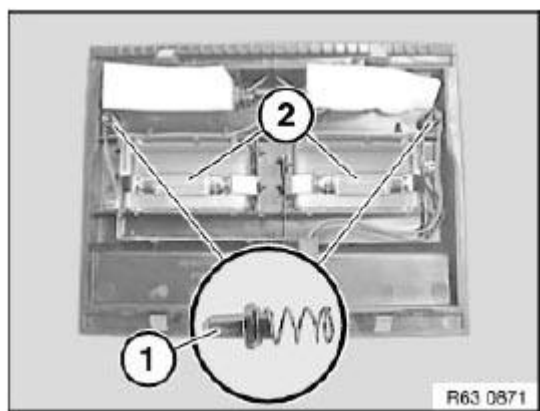


Fig. 76: Identifying Ejector And Bulb

Courtesy of BMW OF NORTH AMERICA, INC.

63 99... REPLACING DOOR HANDLE FIBRE OPTIC CABLE (LONG VERSION OR FROM 03/2007)

WARNING: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Necessary preliminary tasks:

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

Unclip fibre optic cable (1) from door trim panel (2).

Installation:

Make sure fibre optic cable (1) is correctly seated in catch (3) of door trim panel (2).

Retaining lugs (2) of door trim panel must not be damaged.

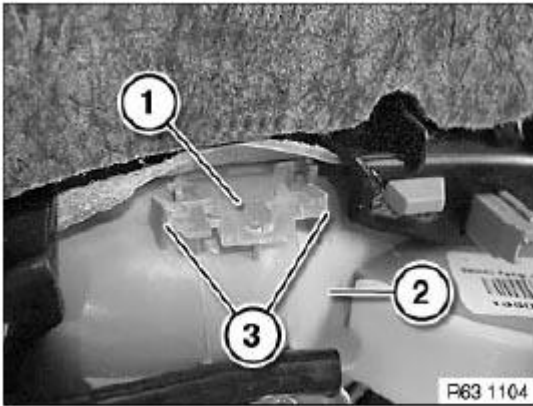


Fig. 77: Identifying Fibre Optic Cable, Door Trim Panel And Retaining Lugs
Courtesy of BMW OF NORTH AMERICA, INC.

63 99... REPLACING FIBRE OPTIC CABLE IN DOOR TRIM PANEL (LONG VERSION OR FROM 03/2007)

WARNING: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Necessary preliminary tasks:

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

Detach spring washer (1) from fibre optic cable (2).

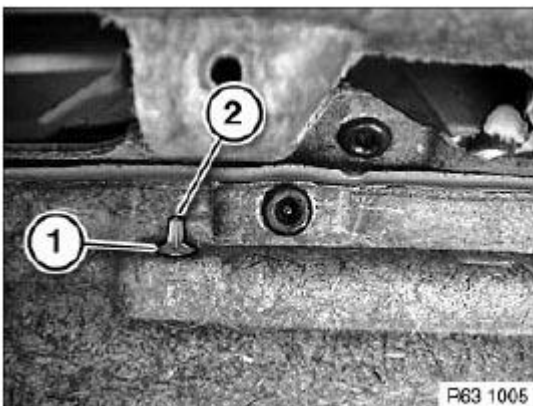


Fig. 78: Identifying Spring Washer And Fibre Optic Cable
Courtesy of BMW OF NORTH AMERICA, INC.

Remove fibre optic cable (1) in direction of arrow.



Fig. 79: Removing Fibre Optic Cable

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 002 REPLACING HALOGEN BULB FOR HIGH-BEAM HEADLIGHT ON LEFT

WARNING: Follow instructions for HANDLING LIGHT BULBS (EXTERIOR LIGHTS).

Turn cap (1) approx. 30° counterclockwise and remove from headlight (2).

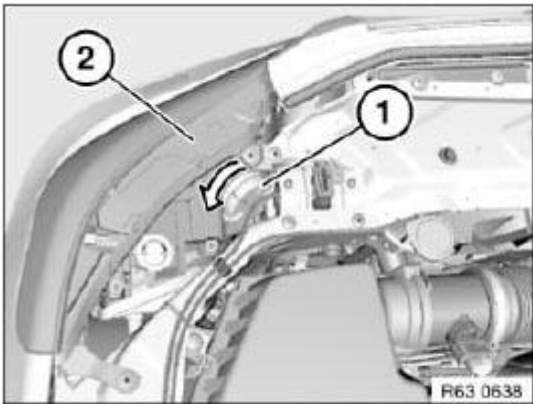


Fig. 80: Turning Headlight Cap

Courtesy of BMW OF NORTH AMERICA, INC.

Turn bulb holder (1) counterclockwise and feed together with bulb out of headlight (2).

Installation:

Make sure retaining tabs (3) are correctly seated.

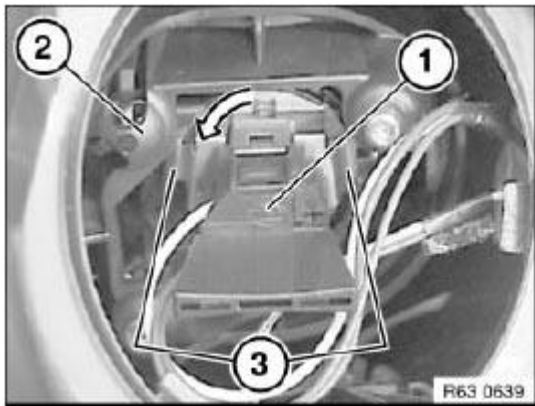


Fig. 81: Turning Bulb Holder

Courtesy of BMW OF NORTH AMERICA, INC.

Pull bulb (1) out of bulb holder (2).

Installation:

Make sure bulb (1) is exactly seated in bulb holder (2).

Note type of bulb. See **HEADLIGHTS** .

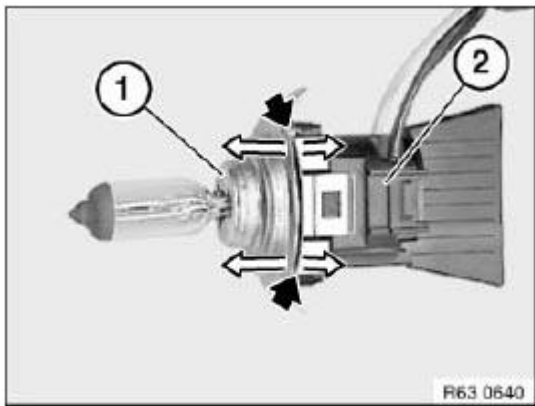


Fig. 82: Pulling Bulb Out Of Bulb Holder

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 003 REPLACING HALOGEN BULB FOR HIGH-BEAM HEADLIGHT ON RIGHT

Operation is described in:

Replacing **HALOGEN BULB FOR HIGH-BEAM HEADLIGHT ON LEFT**

63 99 072 REPLACING HALOGEN BULB FOR HEADLIGHT ON LEFT

WARNING: Follow instructions for HANDLING LIGHT BULBS (EXTERIOR LIGHTS).

Build date up to 03/07:

Turn protective cap (1) approx. 30° in direction of arrow and remove from headlight.

Installation:

Make sure cover (1) is correctly seated on headlight.

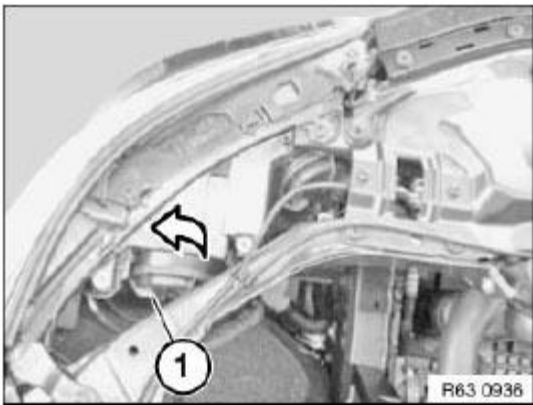


Fig. 83: Turning Protective Cap

Courtesy of BMW OF NORTH AMERICA, INC.

Build date from 03/07:

Unclip cover cap (1) and remove towards rear.

Installation:

Make sure cover (1) is correctly seated on headlight (2).

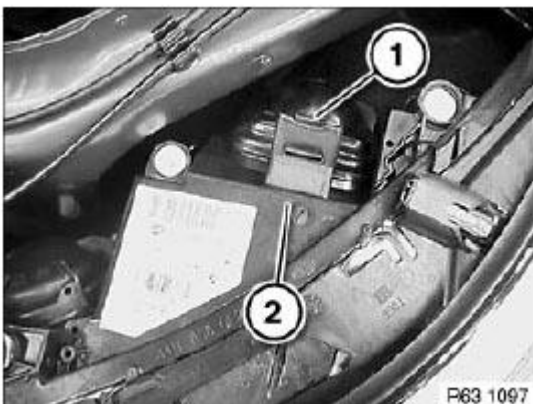


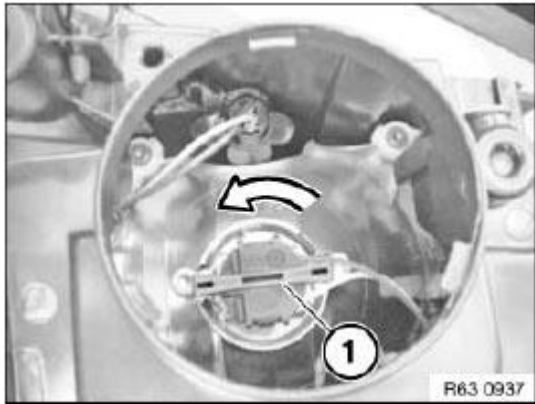
Fig. 84: Identifying Cover And Cover Cap

Courtesy of BMW OF NORTH AMERICA, INC.

Turn bulb holder (1) in direction of arrow and feed together with bulb out of headlight.

Installation:

Make sure bulb holder (1) is correctly seated in headlight.

**Fig. 85: Turning Bulb Holder**

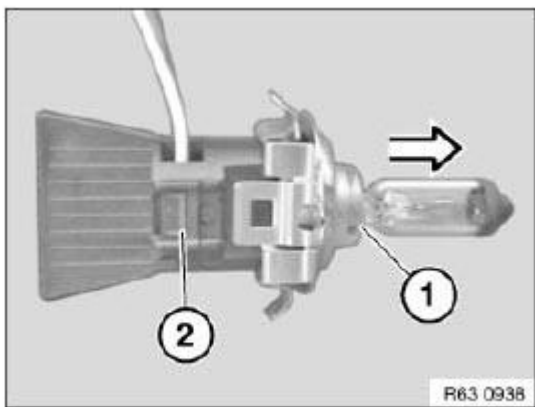
Courtesy of BMW OF NORTH AMERICA, INC.

Pull bulb (1) out of bulb holder (2) in direction of arrow.

Installation:

Make sure bulb (1) is exactly seated in bulb holder (2).

Note type of bulb. See **HEADLIGHTS**

**Fig. 86: Pulling Bulb Out Of Bulb Holder**

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 073 REPLACING HALOGEN BULB FOR HEADLIGHT ON RIGHT

Operation is described in:

Replacing **HALOGEN BULB FOR HEADLIGHT ON LEFT**

63 99 076 REPLACING BULB FOR LEFT XENON HEADLIGHT

WARNING: Follow instructions for **HANDLING LIGHT BULBS (EXTERIOR LIGHTS)**.

Necessary preliminary tasks:

- Removing **IGNITION UNIT FOR LEFT XENON HEADLIGHT**

Unlock retaining ring (1).

Installation:

Retaining ring (1) must be located under holder (2).

Remove bulb for xenon headlight (3).

Installation:

Insert bulb for xenon headlight (3) exactly into locators (4).

Note bulb type. See **HEADLIGHTS**

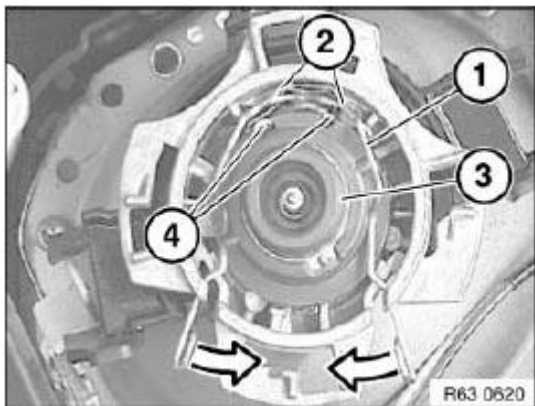


Fig. 87: Identifying Xenon Headlight, Retaining Ring And Holder
Courtesy of BMW OF NORTH AMERICA, INC.

63 99 077 REPLACING BULB FOR RIGHT XENON HEADLIGHT

Operation is described in:

Replacing **BULB FOR LEFT XENON HEADLIGHT**

63 99 132 REPLACING BULB FOR SIDE MARKER LAMP, FRONT LEFT

WARNING: Follow instructions for **HANDLING LIGHT BULBS (EXTERIOR LIGHTS)**.

Necessary preliminary tasks:

- Remove **HALOGEN LAMP FOR HIGH-BEAM HEADLIGHT**

Turn holder with bulb for side marker lamp (1) approx. 30° counterclockwise.

Feed holder with bulb for side marker lamp (1) out of aperture for headlight (2).

Unlock associated plug connection and disconnect.

Installation:

Holder with bulb for side marker lamp (1) must be correctly seated in mounting.

Note type of bulb. See **HEADLIGHTS** .

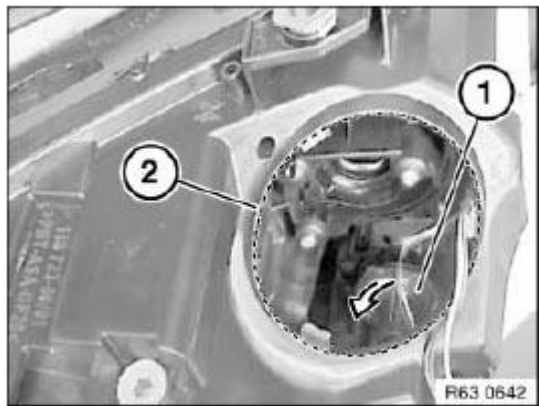


Fig. 88: Turning Holder With Bulb For Side Marker Lamp
Courtesy of BMW OF NORTH AMERICA, INC.

63 99 133 REPLACING BULB FOR SIDE MARKER LAMP, FRONT RIGHT

Operation is described in:

Replacing **BULB FOR SIDE MARKER LAMP, FRONT LEFT**

63 99 155 REPLACING BULB FOR FRONT LEFT SIDE LIGHTS (XENON HEADLIGHT) (FROM 03/2007)

WARNING: Follow instructions for HANDLING LIGHT BULBS (EXTERIOR LIGHTS).

Turn cover cap (1) in counterclockwise direction and remove from headlight (2).

Installation:

Make sure cover cap (1) is correctly seated on headlight (2).

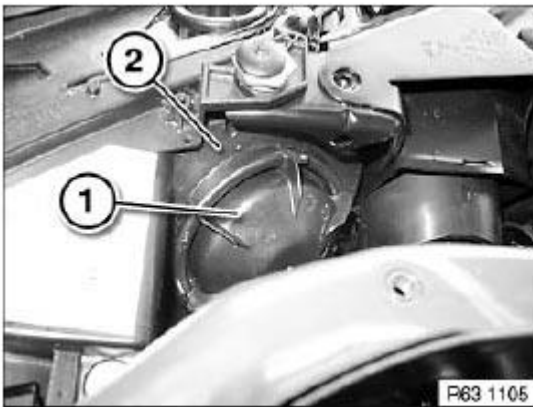


Fig. 89: Identifying Headlight And Cover Cap
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

Twist bulb (2) in counterclockwise direction out of bulb holder (3).

Installation:

Note type of bulb. See HEADLIGHTS .

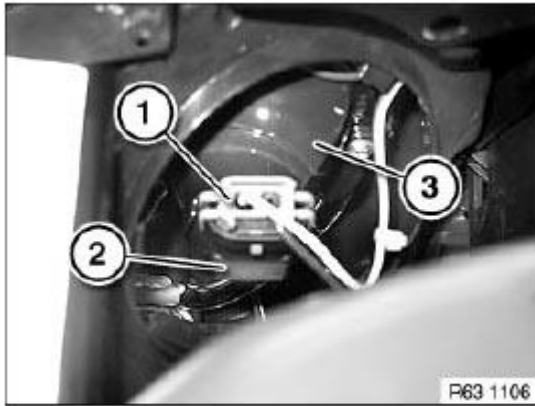


Fig. 90: Identifying Bulb, Plug Connection And Bulb Holder
Courtesy of BMW OF NORTH AMERICA, INC.

63 99 156 REPLACING BULB FOR FRONT RIGHT SIDE LIGHT (XENON HEADLIGHT) (FROM 03/2007)

Operation is described in:

Replacing **BULB FOR FRONT LEFT SIDE LIGHTS.**

63 99 160 REPLACING BULB FOR FRONT LEFT (OR RIGHT) TURNING LIGHTS

WARNING: Follow instructions for **HANDLING LIGHT BULBS (EXTERIOR LIGHTS).**

Turn cover (1) in counterclockwise direction and remove from headlight (2).

Installation:

Make sure cover (1) is correctly seated on headlight (2).

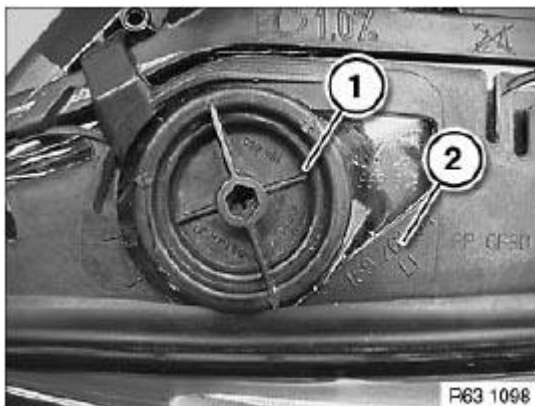


Fig. 91: Identifying Headlight And Cover

Courtesy of BMW OF NORTH AMERICA, INC.

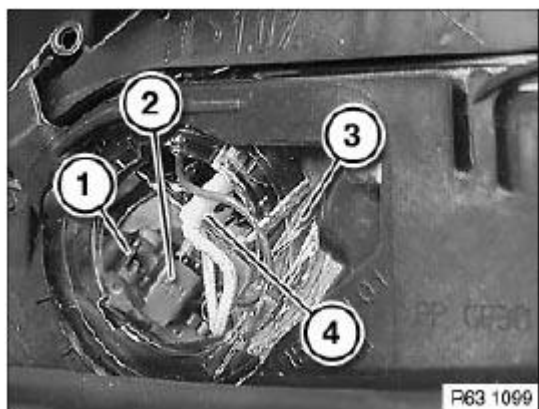
Release retaining clip (1) and feed bulb (2) out of headlight (3).

Disconnect plug connection (4).

Installation:

Make sure bulb (2) is correctly seated in headlight (3).

Note type of bulb. See **HEADLIGHTS** .

**Fig. 92: Identifying Retaining Clip, Feed Bulb, Headlight And Plug Connection**

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 201 REPLACING HALOGEN BULB FOR LEFT OR RIGHT FRONT FOG LAMP

WARNING: Follow instructions for **HANDLING LIGHT BULBS (EXTERIOR LIGHTS)**.

Necessary preliminary tasks:

- Remove **FRONT UNDERBODY PROTECTION**

NOTE: Operation is shown on the E60 (build date up to 03/2007). There may be differences in detail in the case of other vehicle models.

Release screws (1).

Remove fog lamp wheel arch cover (2).

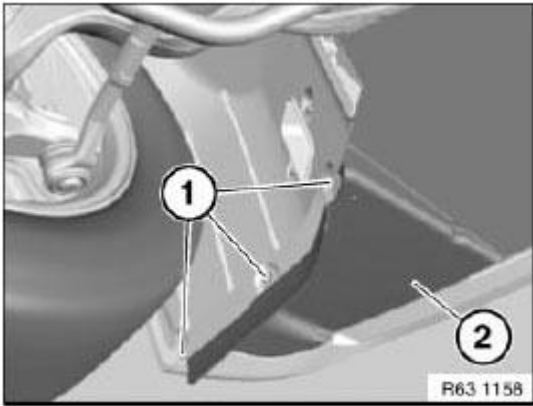


Fig. 93: Identifying Fog Lamp Wheel Arch Cover With Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

Turn halogen bulb for fog lamp (2) in direction of arrow and remove from fog lamp.

Installation:

Note type of bulb. See **FOG LIGHTS, AUXILIARY LIGHTS** .

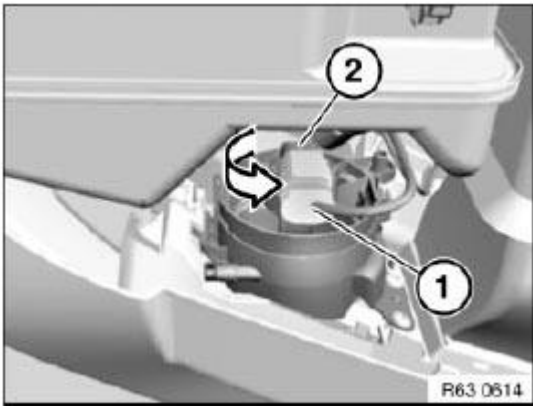


Fig. 94: Turning Halogen Bulb For Fog Lamp
Courtesy of BMW OF NORTH AMERICA, INC.

63 99 273 REPLACING BULB FOR TURN INDICATOR, FRONT LEFT

WARNING: Follow instructions for **HANDLING LIGHT BULBS (EXTERIOR LIGHTS)**.

Turn bulb holder (1) approx. 30° counterclockwise.

Feed bulb holder (1) out of headlight (2).

Remove bulb from bulb holder (1).

Installation:

Note type of bulb. See **HEADLIGHTS** .

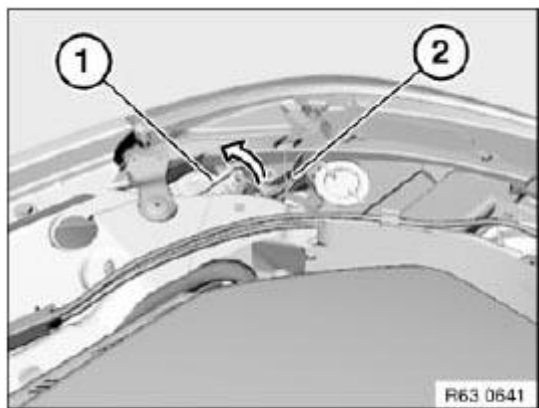


Fig. 95: Turning Bulb Holder

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 275 REPLACING BULB FOR TURN INDICATOR, FRONT RIGHT

Operation is described in:

Replacing **BULB FOR TURN INDICATOR, FRONT LEFT**

63 99 295 REPLACING BULB FOR AUXILIARY TURN SIGNAL LIGHT, FRONT LEFT OR RIGHT

WARNING: Follow instructions for **HANDLING LIGHT BULBS (EXTERIOR LIGHTS)**.

Necessary preliminary tasks:

- Remove **FRONT AUXILIARY TURN SIGNAL LIGHT**

Turn bulb holder (1) approx. 45° and remove from front auxiliary turn signal light (2).

Pull bulb out of holder (1).

Installation:

Note **TYPE OF BULB** .

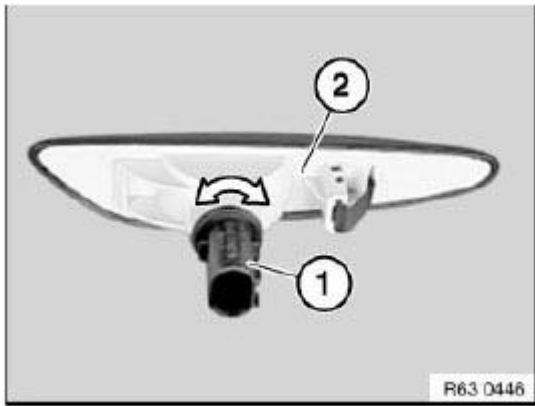


Fig. 96: Turning Bulb Holder

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 315 REPLACING BULB(S) FOR LEFT OR RIGHT REAR LIGHT (SALOON)

WARNING: Follow instructions for HANDLING LIGHT BULBS (EXTERIOR LIGHTS).

Necessary preliminary tasks:

- Remove SOCKET HOUSING FOR REAR LIGHT

Build date up to 03/07:

Turn faulty bulb(s) and pull out of socket housing for rear light (6).

Pull faulty reversing light bulb (1) out of socket housing for rear light (6).

NOTE:

1. Bulb, reversing light
2. Bulb, rear light/rear fog light
3. Bulb, rear light

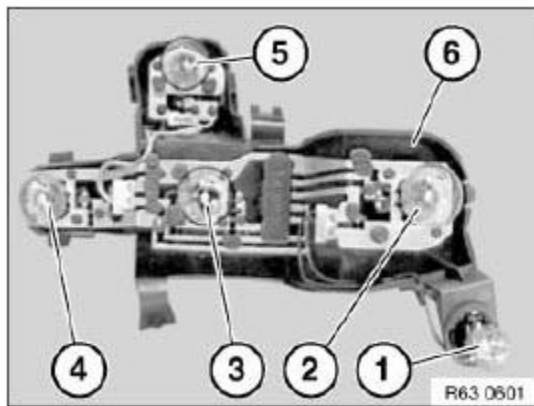


Fig. 97: Identifying Reversing Light, Rear Light/Rear Fog Light And Rear Light/Brake Light

Courtesy of BMW OF NORTH AMERICA, INC.

- 4. Bulb, rear light/brake light
- 5. Bulb, turn signal light

Build date up to 03/07:

Turn faulty bulb(s) and pull out of socket housing for rear light (5).

Pull faulty reversing light bulb (1) out of socket housing for rear light (5).

NOTE:

- 1. Bulb, reversing light
- 2. Bulb, rear light/rear fog light
- 3. Bulb, brake light
- 4. Bulb, brake light

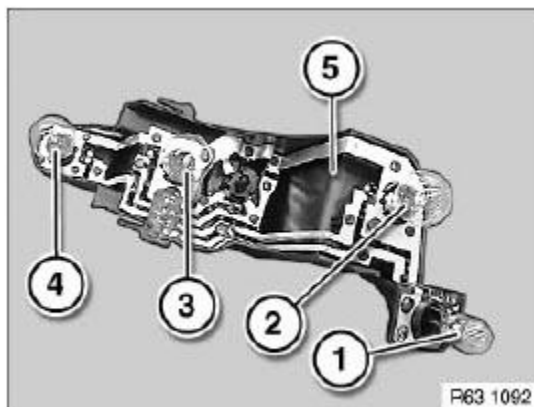


Fig. 98: Identifying Reversing Light, Rear Light/Rear Fog Light And Brake Light

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Note type of bulb. See **REAR LIGHT CLUSTER** .

63 99 401 REPLACING BULB FOR LEFT OR RIGHT LICENSE PLATE LIGHT

WARNING: Follow instructions for **HANDLING LIGHT BULBS (EXTERIOR LIGHTS)**.

Necessary preliminary tasks:

- Remove **LICENSE PLATE LIGHT**

Spread bow contacts (1) and remove festoon bulb (2).

Installation:

Note **TYPE OF BULB** .

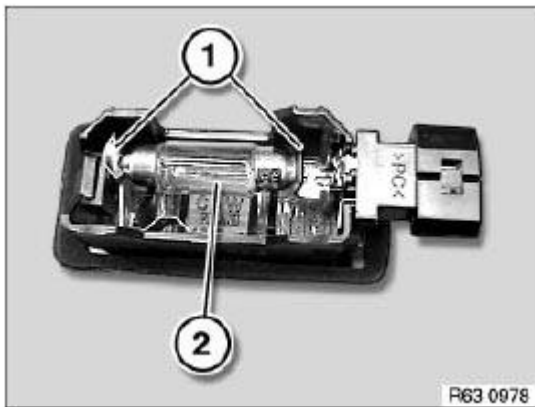


Fig. 99: Identifying Festoon Bulb

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 431 REPLACING BULB FOR FRONT CEILING LIGHT

WARNING: Follow instructions for **HANDLING LIGHT BULBS (INTERIOR LIGHTS)**.

Necessary preliminary tasks:

- Remove **FRONT CEILING LIGHT**

Turn bulb in direction of arrow and remove.

Installation:

Note **BULB TYPE** .

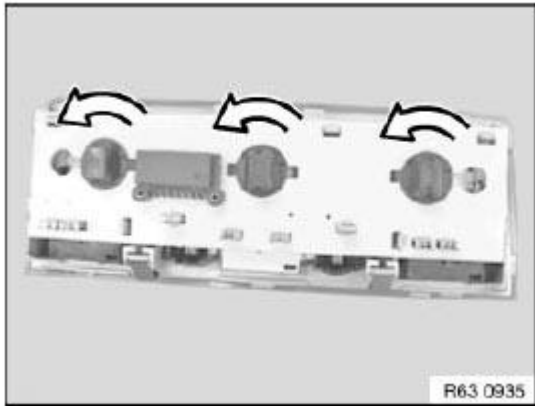


Fig. 100: Turning Bulb

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 432 REPLACING BULB FOR REAR CEILING LIGHT

WARNING: Follow instructions for **HANDLING LIGHT BULBS (INTERIOR LIGHTS)**.

Necessary preliminary tasks:

- Remove **REAR CEILING LIGHT**

Turn bulb in direction of arrow and remove.

Installation:

Note **BULB TYPE** .

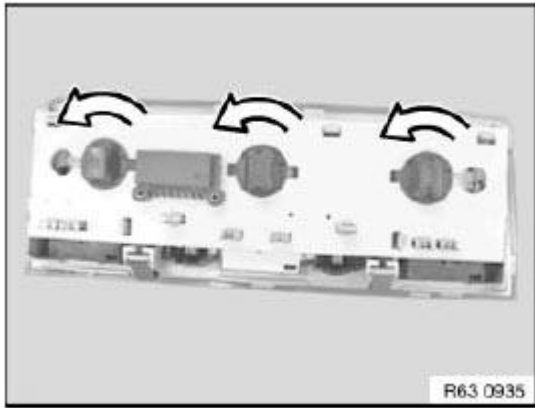


Fig. 101: Turning Bulb

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 433 REPLACING BULB FOR REAR READING LIGHT

WARNING: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Necessary preliminary tasks:

- Remove REAR READING LIGHT

Unlock retaining spring (1) and remove reflector (2).

Installation:

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

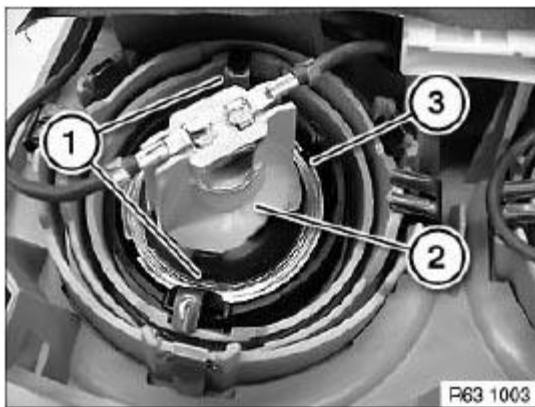


Fig. 102: Identifying Retaining Spring And Reflector With Guide

Courtesy of BMW OF NORTH AMERICA, INC.

Pull bulb (1) in direction of arrow out of reflector (2).

Installation:

Note **BULB TYPE** .

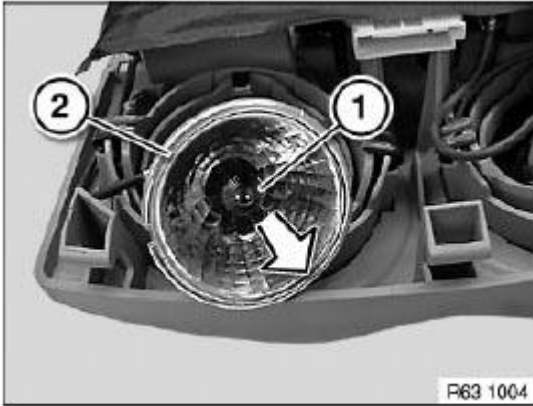


Fig. 103: Pulling Bulb

Courtesy of BMW OF NORTH AMERICA, INC.

63 99 437 REPLACING BULB FOR FOOTWELL LIGHT (UNDERSIDE OF DOOR)

WARNING: Follow instructions for **HANDLING LIGHT BULBS (INTERIOR LIGHTS)**.

Necessary preliminary tasks:

- Remove **FOOTWELL LIGHT**

Version A:

Pull bulb (1) in direction of arrow from bulb holder.

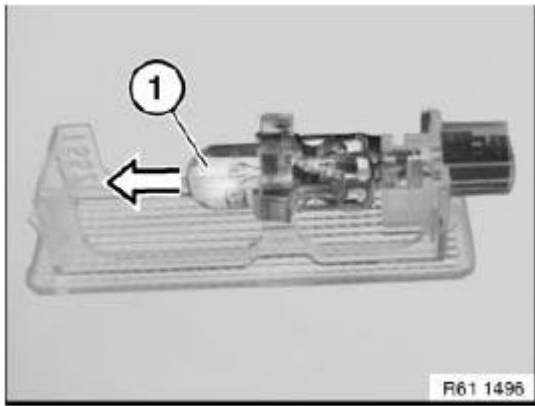


Fig. 104: Pulling Bulb From Bulb Holder
Courtesy of BMW OF NORTH AMERICA, INC.

Version B:

Turn bulb holder (1) in direction of arrow and pull out of footwell light (2).

Installation:

Make sure bulb holder (1) is correctly engaged on footwell light (2).

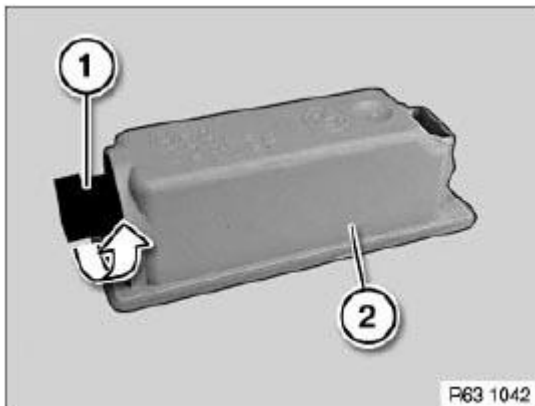


Fig. 105: Turning Bulb Holder
Courtesy of BMW OF NORTH AMERICA, INC.

Remove bulb (1) from bulb holder (2) in direction of arrow.

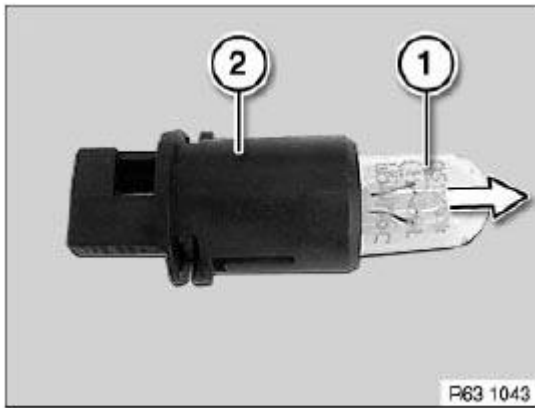


Fig. 106: Pulling Bulb From Bulb Holder
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Note **TYPE OF BULB** .

63 99 437 REPLACING LIGHT BULB FOR FOOTWELL LIGHT

WARNING: Follow instructions for **HANDLING LIGHT BULBS (INTERIOR LIGHTS)**.

Necessary preliminary tasks:

- Remove **FOOTWELL LIGHT**

Move lens cover (1) in direction of arrow and remove.

Remove festoon (2) underneath.

Installation:

Note **BULB TYPE** .

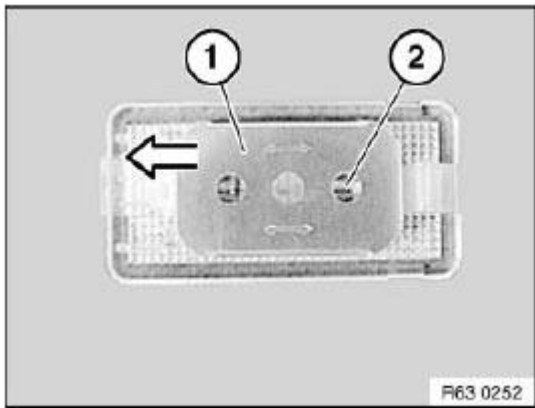


Fig. 107: Identifying Lens Cover And Festoon
Courtesy of BMW OF NORTH AMERICA, INC.

63 99 445 REPLACING BULB(S) FOR MIRROR LIGHT

WARNING: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Necessary preliminary tasks:

- Remove MIRROR LIGHT

Expand bow contacts (1) and remove bulb for mirror light.

Installation:

Note TYPE OF BULB .

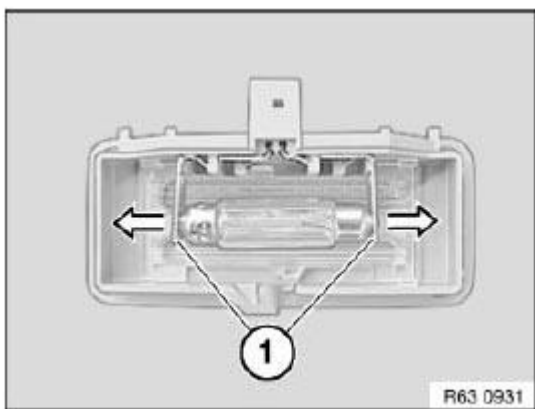


Fig. 108: Expanding Bow Contacts
Courtesy of BMW OF NORTH AMERICA, INC.

63 99 452 REPLACING LIGHT BULB FOR LUGGAGE COMPARTMENT LIGHTING

WARNING: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Necessary preliminary tasks:

- Remove **LUGGAGE COMPARTMENT LIGHT**

Move lens cover (1) in direction of arrow and remove.

Remove festoon (2) underneath.

Installation:

Note **BULB TYPE** .

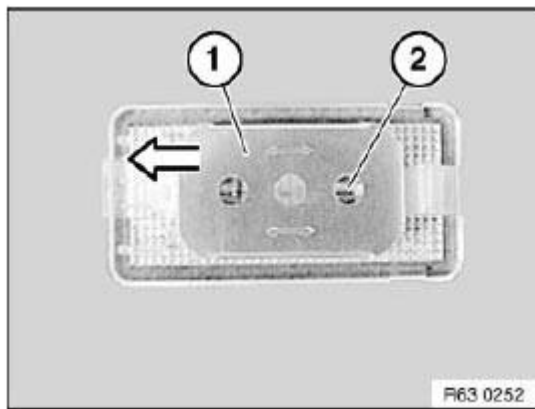


Fig. 109: Identifying Lens Cover And Festoon
Courtesy of BMW OF NORTH AMERICA, INC.

63 99 461 REPLACING BULB FOR GLOVEBOX LIGHT

WARNING: Follow instructions for HANDLING LIGHT BULBS (INTERIOR LIGHTS).

Necessary preliminary tasks:

- Remove **GLOVEBOX LIGHT**

Move lens cover (1) in direction of arrow and remove.

Remove festoon (2) underneath.

Installation:

Note **BULB TYPE** .

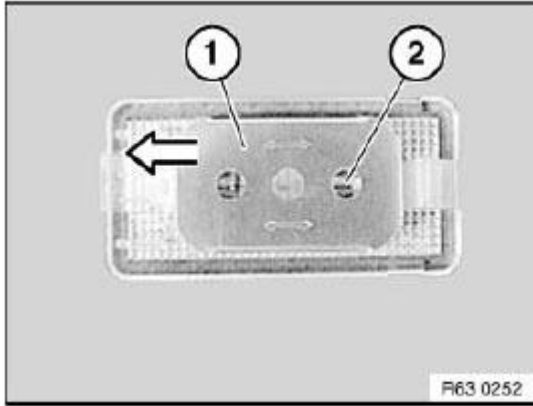


Fig. 110: Identifying Lens Cover And Festoon
Courtesy of BMW OF NORTH AMERICA, INC.

63 99 495 REPLACING LED FOR LEFT OR RIGHT DOOR HANDLE/DOOR COMPARTMENT LIGHT (UP TO 03/2007)

WARNING: Follow instructions for **HANDLING LIGHT BULBS (INTERIOR LIGHTS)**.

For door compartment light:

Lever out cap for door compartment light.

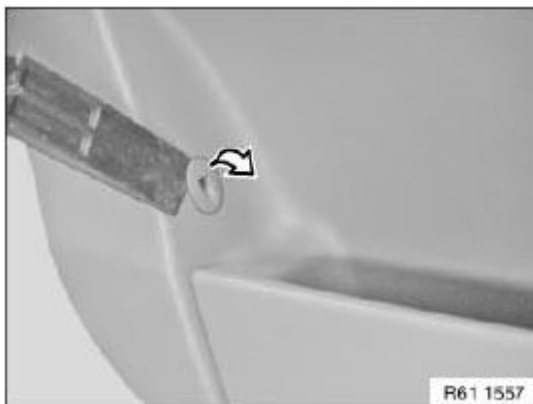


Fig. 111: Removing Door Compartment Light Cap
Courtesy of BMW OF NORTH AMERICA, INC.

Unlock LED in direction of arrow and detach cap.

Remove sheathing from wiring harness.

Disconnect cables.

Connect cables of new wiring harness with butt connectors and heat-shrink sleeves.

Insulate wiring harness with insulating tape.

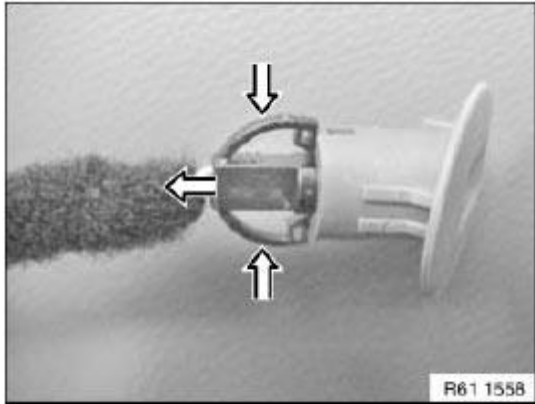


Fig. 112: Removing Sheathing From Wiring Harness
Courtesy of BMW OF NORTH AMERICA, INC.

For door handle light:

Lever out cap for door compartment light.



Fig. 113: Removing Door Handle Light Cap
Courtesy of BMW OF NORTH AMERICA, INC.

Unlock LED in direction of arrow and detach cap.

Remove sheathing from wiring harness.

Disconnect cables.

Connect cables of new wiring harness with butt connectors and heat-shrink sleeves.

Insulate wiring harness with insulating tape.

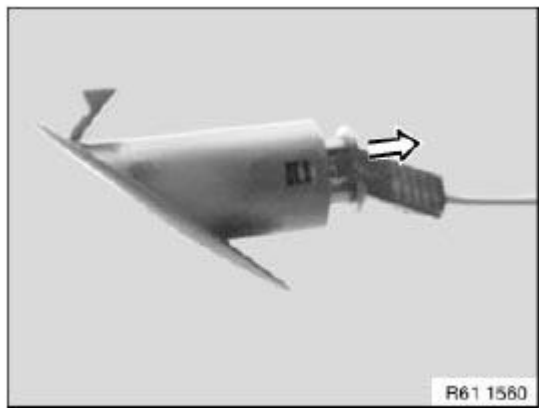


Fig. 114: Removing Sheathing From Wiring Harness
Courtesy of BMW OF NORTH AMERICA, INC.