

ACCESSORIES AND EQUIPMENT

Electrical drives - Repair Instructions

CENTRAL LOCKING UNIT/UNLOCKING

67 11 510 REMOVING AND INSTALLING/REPLACING SERVODRIVE FOR FRONT LEFT OR RIGHT DOOR LOCKING MECHANISM

NOTE: Servodrive for door locking mechanism is integrated in door lock in front door.

Procedure is described in the information "DOOR LOCK IN FRONT DOOR..." .

67 11 530 REMOVING AND INSTALLING/REPLACING SERVODRIVE FOR REAR LEFT OR RIGHT DOOR LOCKING MECHANISM

This operation is described in:

"REMOVING DOOR LOCK FOR REAR DOOR."

67 11 555 REMOVING AND INSTALLING/REPLACING SERVODRIVE FOR TANK FILLER FLAP

Necessary preliminary tasks:

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

Unfasten plug connection (1) and disconnect.

Slacken screws (2) and feed servodrive for tank filler flap (3) towards rear out of retaining plate.

Remove servodrive for tank filler flap (3) in direction of arrow.

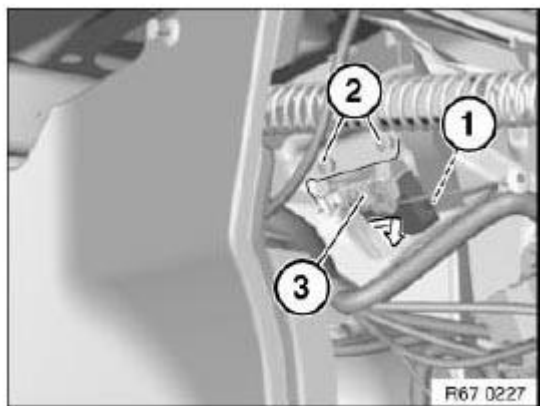


Fig. 1: Removing Servodrive For Tank Filler Flap
Courtesy of BMW OF NORTH AMERICA, INC.

Turn sleeve (1) with a suitable tool (e.g.: pointed pliers) approx. 45° in direction of arrow and pull out of cover housing (2).

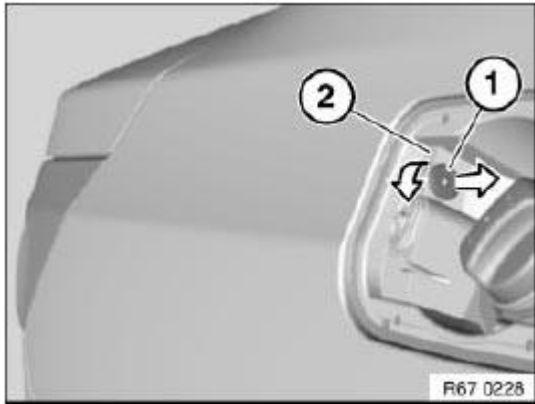


Fig. 2: Turning Sleeve
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Slide sleeve (1) over tank filler flap locking pin (2).

Make sure sleeve (1) is correctly engaged in cover housing (3).

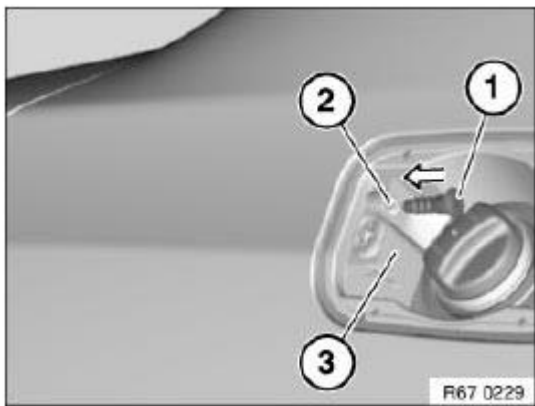


Fig. 3: Identifying Sleeve, Tank Filler Flap Locking Pin And Cover Housing
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Release screws (1).

Unclip tank filler flap Bowden cable (2) in direction of arrow from servodrive for tank filler flap (3).

Remove servodrive for tank filler flap (3) from retaining mount (4).

Installation:

Make sure clamp (5) is installed in correct position.

Carry out adjustment of servodrive for tank filler flap (3) via elongated holes (6). It must be possible to lock or unlock the fuel filler flap completely.

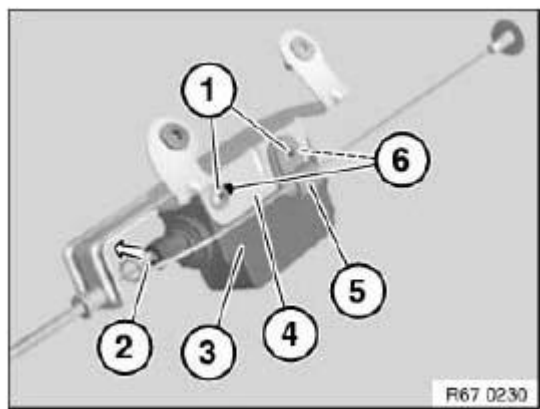


Fig. 4: Unclipping Tank Filler Flap Bowden Cable
Courtesy of BMW OF NORTH AMERICA, INC.

67 11 560 REPLACING SERVODRIVE FOR REAR LID LOCK

This operation is described under:

"Removing **REAR LID LOCK** "

MIRROR ADJUSTMENT

67 13 001 REPLACING DRIVE UNIT FOR ELECTRICALLY OPERATED LEFT OR RIGHT DOOR MIRROR

Necessary preliminary tasks:

- Remove **MIRROR GLASS** for rearview mirror.

Release screws (1).

Remove drive unit for electrically operated door mirror (2) slightly in direction of arrow.

Unfasten plug connection (3) and disconnect.

Remove drive for electrically adjustable door mirror (2).

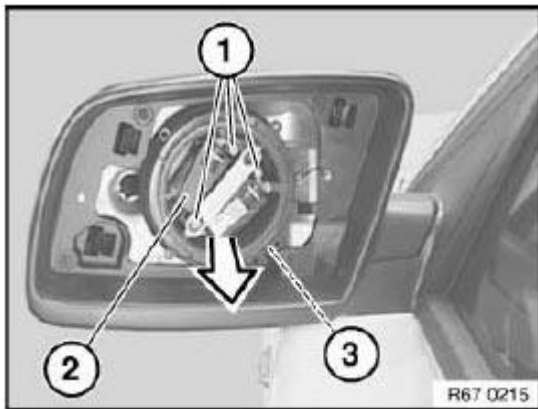


Fig. 5: Removing Drive Unit For Electrically Operated Door Mirror
Courtesy of BMW OF NORTH AMERICA, INC.

Build date from 03/2007:

Release screw (1) and remove drive (2).

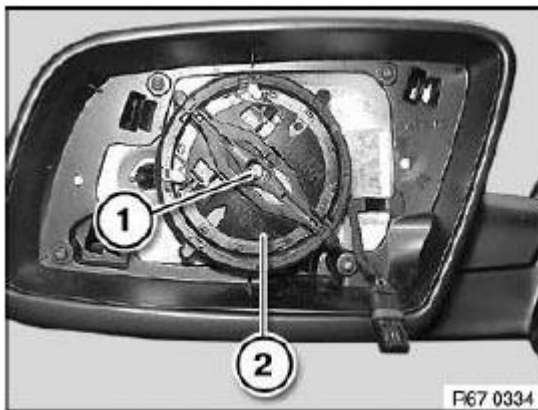


Fig. 6: Identifying Screw And Drive
Courtesy of BMW OF NORTH AMERICA, INC.

SERVO/POSITIONING DRIVES

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.

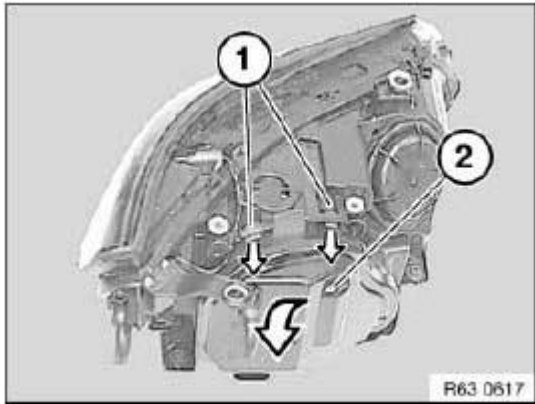


Fig. 7: Unlocking Catches And Removing Cap
Courtesy of BMW OF NORTH AMERICA, INC.

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).

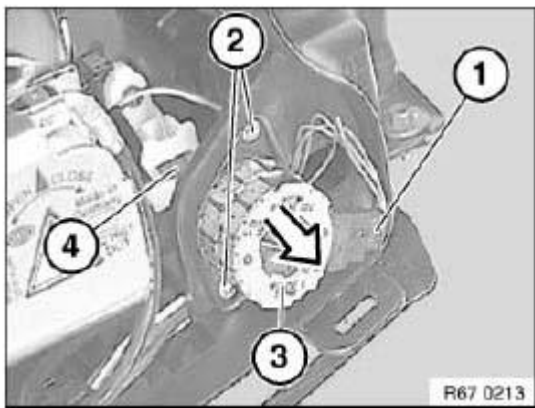


Fig. 8: Feeding Headlight Vertical Aim Adjuster Out Of Mounting
Courtesy of BMW OF NORTH AMERICA, INC.

ADJUST HEADLIGHT .**DRIVE, SEAT ADJUSTMENT****67 31... NOTES ON INITIALIZING ELECTRIC SEAT ACTUATOR DRIVES**

NOTE: Initialization is carried out at the adjusting switch of the relevant seat.

In this process, the end positions of the relevant electric seat servodrive are recorded and stored.

An initialization must be performed:

- After replacing a drive unit for seat adjustment.
- After replacing/programming control unit for seat adjustment.

Operating sequence for initialization:

Move corresponding seat servodrive(s) into both end positions.

67 31 500 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR LONGITUDINAL SEAT ADJUSTMENT

Necessary preliminary tasks:

- Remove **TRIMS FOR TOP RAIL**

Disconnect plug connection (1).

Release expander rivets (2).

Installation:

If necessary, replace faulty expander rivets (2).

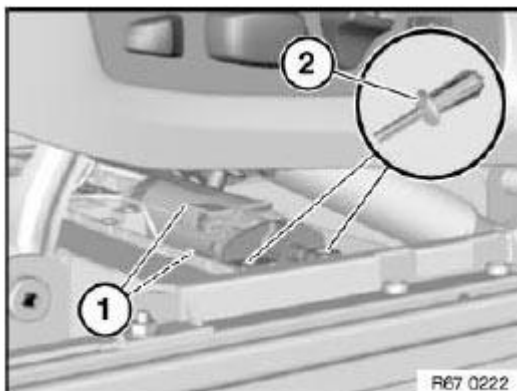


Fig. 9: Identifying Plug Connection And Expander Rivets

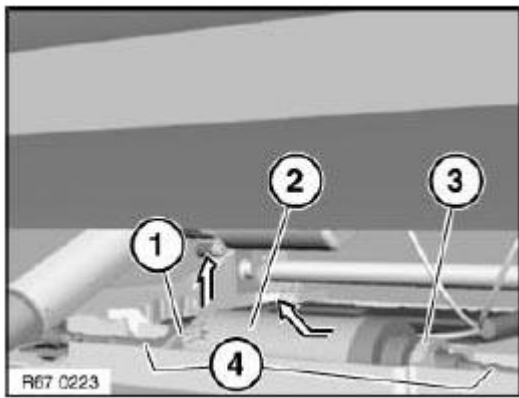
Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: View from rear.**IMPORTANT: Risk of damage!**
Do not kink drive shafts (4).

Lever out guide clip (3).

Raise flange (1) with drive unit for longitudinal seat adjustment (2) slightly and detach from left drive shaft.

Feed out drive unit for longitudinal seat adjustment (2) in direction of arrow and detach from right drive shaft.

**Fig. 10: Feeding Out Drive Unit For Longitudinal Seat Adjustment**

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure guide clips (3) and both drive shafts (4) are correctly seated.

Replacement:**INITIALIZE** drive unit for longitudinal seat adjustment.**67 31 510 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR SEAT TILT ADJUSTMENT***Necessary preliminary tasks:*

- Remove **FRONT SEAT**

NOTE: Front left trim shown removed for purposes of clarity.

Release screws (1).

Tightening torque **52 10 6AZ** .

Fold back seat rail (2) slightly from seat frame (3) in direction of arrow.

IMPORTANT: Risk of damage!

Avoid subjecting electric leads to tensile load.

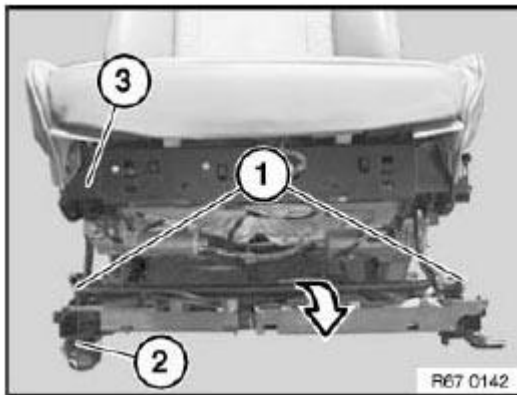


Fig. 11: Folding Back Seat Rail Slightly Of Seat Frame
Courtesy of BMW OF NORTH AMERICA, INC.

WARNING: Risk of injury!

Do not move torsion bar.

Installation:

Make sure plastic bushings (1) are correctly seated in seat rail (2).

Faulty plastic bushings (1) cause noises and must be replaced.

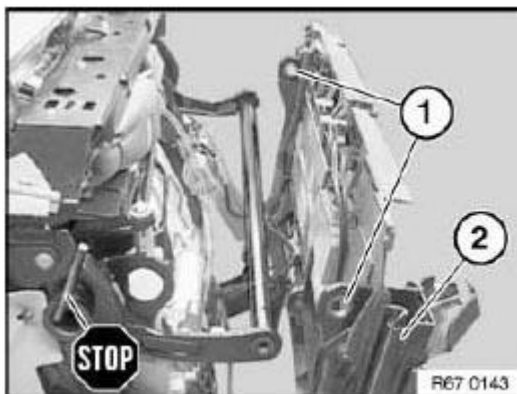


Fig. 12: Identifying Plastic Bushings And Seat Rail

Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1) on drive unit for seat tilt adjustment (2).

NOTE: Relieve load on drive unit for seat tilt adjustment (2).

To do so, insert a suitable slotted screwdriver (3) into receptacle (4), press drive unit for seat tilt adjustment (2) downwards slightly using a lever action and release screw (5).

Tightening torque **67 31 2AZ** .

Then slowly move screwdriver (3) upwards and relieve load on drive unit for seat tilt adjustment (2) completely.

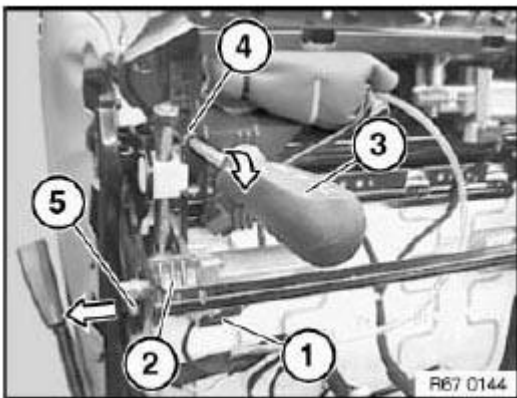


Fig. 13: Inserting Suitable Slotted Screwdriver Into Receptacle
Courtesy of BMW OF NORTH AMERICA, INC.

Tilt drive unit for seat tilt adjustment (1) upwards and feed out from receptacle (2).

If necessary, twist out drive unit for seat tilt adjustment (1) at spindle (3) to such an extent that it can be removed.

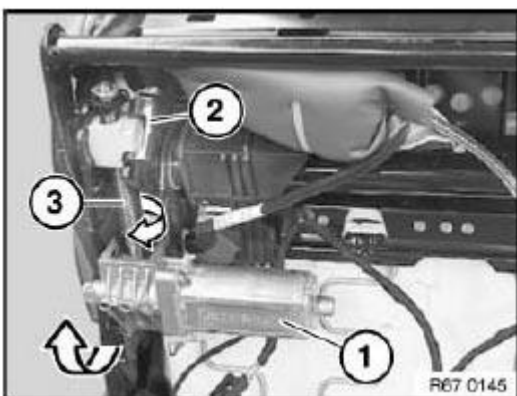


Fig. 14: Twisting Out Drive Unit For Seat Tilt Adjustment Of Spindle
 Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Measure dimension (A) and adjust by turning holder (1) on new drive unit for seat tilt adjustment (2).

INITIALIZE drive unit for seat tilt adjustment.

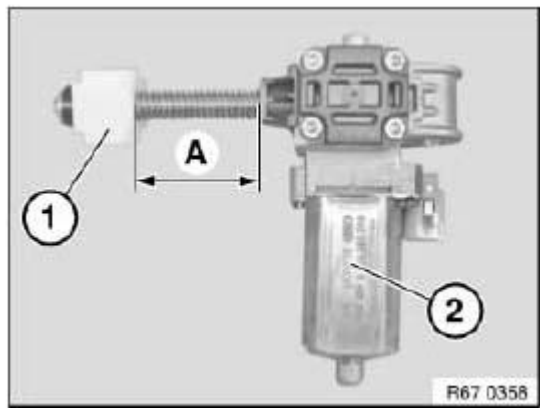


Fig. 15: Identifying Holder And Seat Tilt Adjustment
 Courtesy of BMW OF NORTH AMERICA, INC.

67 31 520 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR SEAT HEIGHT ADJUSTMENT

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 **OUTER COVER ON FRONT SEAT**

Set down front seat sideways on a suitable surface.

Disconnect plug connection (1).

Release screws (2).

Tightening torque **67 31 1AZ** .

Feed out drive unit for seat height adjustment (3) and remove.

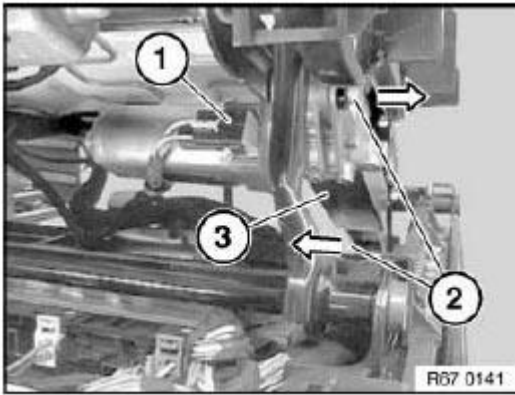


Fig. 16: Identifying Plug Connection, Screws And Seat Height Adjustment
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Fit drive unit for seat height adjustment (1) with plastic clip (2) only.

Make sure plastic clip (2) is correctly seated.

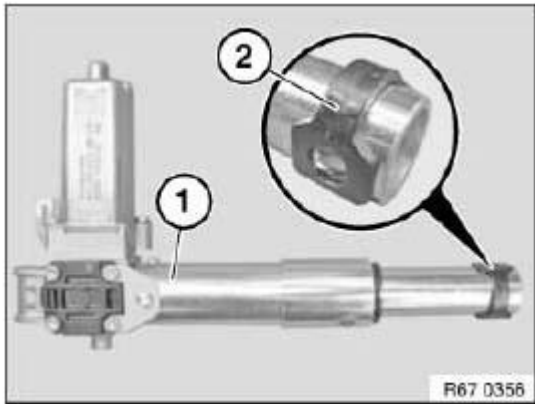


Fig. 17: Identifying Seat Height Adjustment And Plastic Clip
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

INITIALIZE drive unit for seat height adjustment.

67 31 530 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR BACKREST ANGLE ADJUSTMENT

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 rear panel on front seat backrest. See **REMOVING AND INSTALLING / REPLACING REAR PANEL ON LEFT OR RIGHT FRONT SEAT BACKREST (NORMAL / ELECTRIC)** or **52 17 205 REMOVING AND INSTALLING/REPLACING BOTH REAR PANELS ON LEFT OR RIGHT FRONT SEAT BACKREST (COMFORT)**
- Remove covers on front seat. See **REMOVING AND INSTALLING/REPLACING OUTER COVER ON LEFT OR RIGHT FRONT SEAT (BASIC/ELECTRIC)** and **REMOVING AND INSTALLING INNER COVER ON LEFT OR RIGHT FRONT SEAT (NORMAL/ELECTRIC)**

Unhook backrest cover (1) on left and right on backrest frame (2).

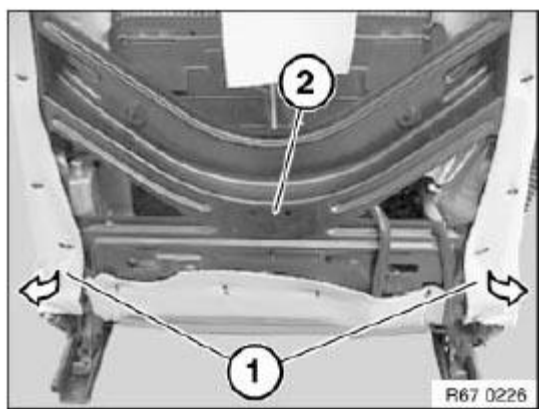


Fig. 18: Unhooking Backrest Cover

Courtesy of BMW OF NORTH AMERICA, INC.

Remove metal retaining ring (1) on left and right in direction of arrow from drive rod (2).

Installation:

Always replace metal retaining ring (1).

Make sure metal retaining ring (1) is correctly seated.

Unscrew bolt (3).

Disconnect plug connection (4).

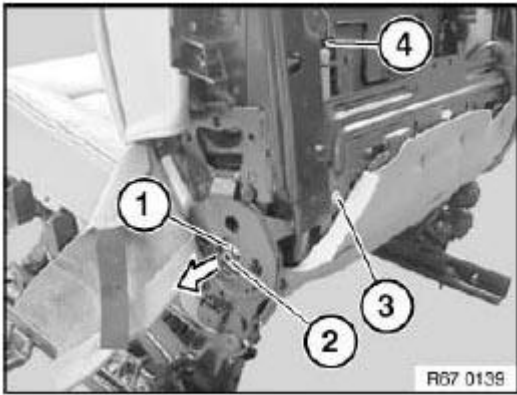


Fig. 19: Removing Metal Retaining Ring

Courtesy of BMW OF NORTH AMERICA, INC.

Pull out drive rod (1) until drive unit for backrest angle adjustment (2) is free.

Installation:

Make sure drive rod (1) is correctly seated in drive unit for backrest angle adjustment (2).

Feed drive unit for backrest angle adjustment (2) out of backrest frame (3) and remove.

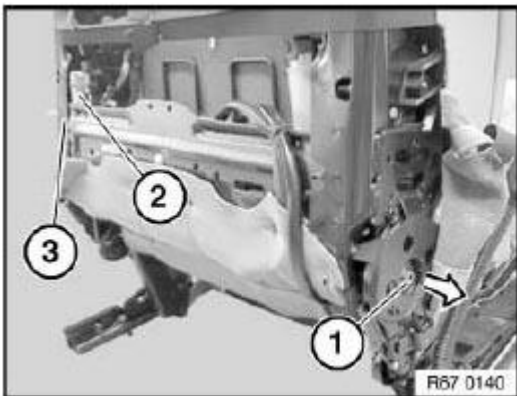


Fig. 20: Pulling Out Drive Rod

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

INITIALIZE drive unit for backrest angle adjustment.

67 31 540 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR HEAD RESTRAINT ADJUSTMENT (COMFORT SEAT)

Necessary preliminary tasks:

- Remove **FRONT SEAT** .
- Remove **BOTH REAR PANELS ON FRONT SEAT BACKREST** .

Pull backrest cover (1) in direction of arrow over metal lugs (2) and detach.

If necessary, detach backrest cover (1) on both sides from backrest frame.

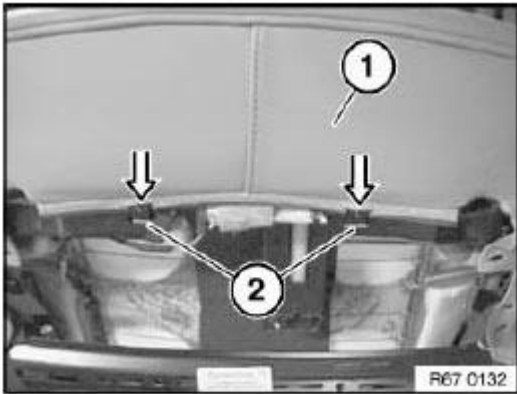


Fig. 21: Pulling Backrest Cover

Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: For purposes of clarity, illustration shows backrest cover removed.

Release screw connections (1) on AKS carrier.

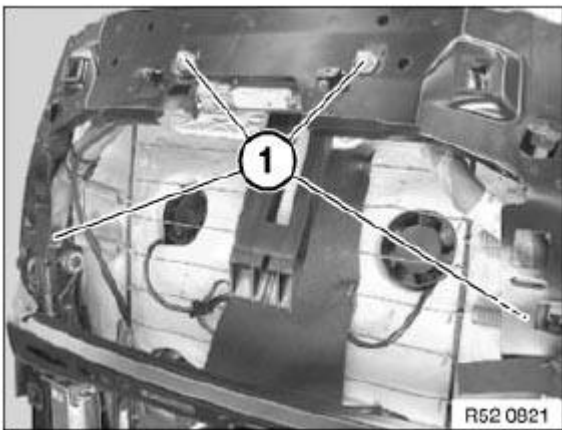
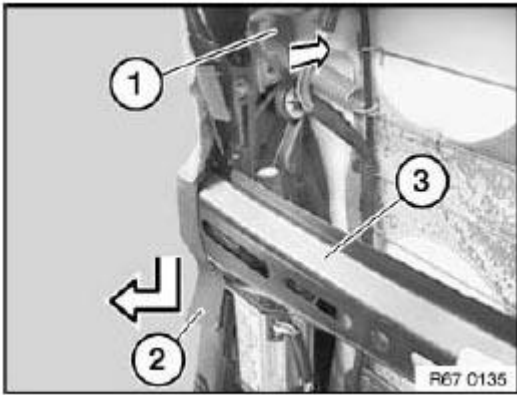


Fig. 22: Identifying Screw Connections On AKS Carrier

Courtesy of BMW OF NORTH AMERICA, INC.

Move AKS carrier (1) in direction of arrow.

Unhook backrest cover (2) on backrest frame (3).

**Fig. 23: Moving AKS Carrier**

Courtesy of BMW OF NORTH AMERICA, INC.

Pull drive shaft (1) in direction of arrow out of drive shaft receptacle (2).

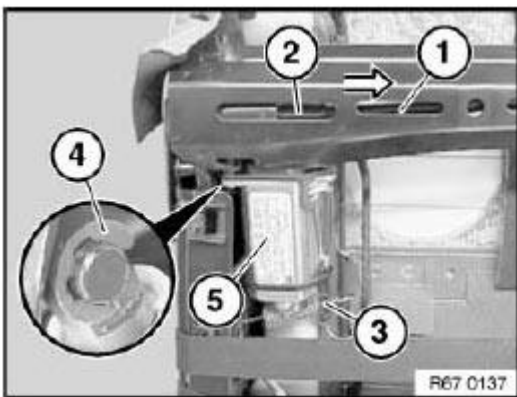
Installation:

Make sure drive shaft (1) is correctly seated in receptacle (2).

Disconnect plug connection (3).

Remove circlip (4).

Feed out drive unit for backrest head adjustment (5) and remove.

**Fig. 24: Pulling Drive Shaft Of Drive Shaft Receptacle**

Courtesy of BMW OF NORTH AMERICA, INC.

Removal and installation only:

Do not turn spindle (1) in order not to change measurement A.

Replacement only:

Adopt measurement A of removed drive unit for backrest head adjustment (2). If necessary, adjust measurement A by turning spindle (1).

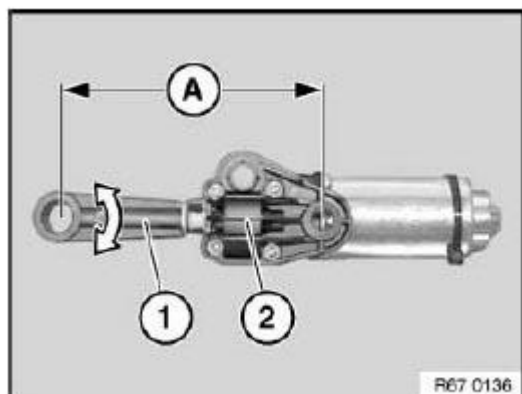


Fig. 25: Identifying Adjust Measurement By Turning Spindle
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

INITIALIZE drive unit for backrest head adjustment.

67 31 560 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR THIGH SUPPORT

This operation is described in:

"REMOVING ADJUSTMENT UNIT FOR THIGH SUPPORT ."

67 31 570 REMOVING AND INSTALLING/REPLACING DRIVE FOR HEAD RESTRAINT HEIGHT ADJUSTMENT ON LEFT OR RIGHT FRONT SEAT

Necessary preliminary tasks:

Version without crash-active head restraint:

- Remove head restraint. See **REMOVING AND INSTALLING OR REPLACING FRONT LEFT OR RIGHT HEAD RESTRAINTS (NORMAL/ELECTRIC)** or **REMOVING AND INSTALLING/REPLACING FRONT LEFT OR RIGHT HEAD RESTRAINT (COMFORT)**
- **REMOVE REAR PANEL ON FRONT SEAT BACKREST .**

Version with crash-active head restraint:

- Remove **CRASH-ACTIVE HEAD RESTRAINT**

Pull backrest cover (1) in direction of arrow over metal lugs (2) and detach.

Detach backrest cover (1) on both sides from backrest frame.

Feed backrest cover (1) out of upper backrest frame.

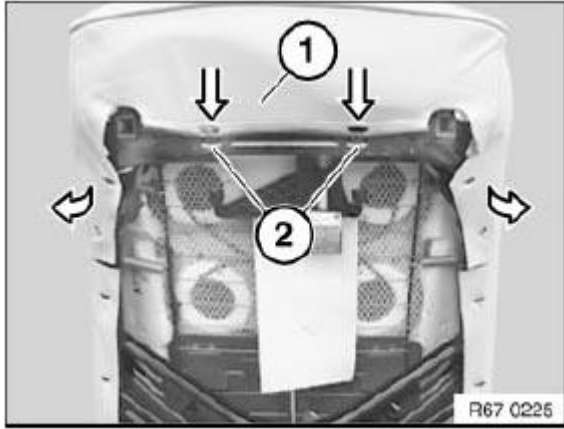


Fig. 26: Pulling Backrest Cover

Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

Release screws (2).

Tightening torque **67 31 3AZ** .

Feed out drive for head restraint height adjustment (3) in direction of arrow and remove.

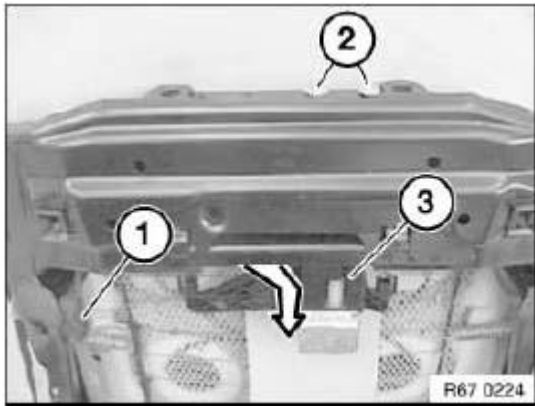


Fig. 27: Feeding Out Drive For Head Restraint Height Adjustment

Courtesy of BMW OF NORTH AMERICA, INC.

67 31 572 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR HEAD RESTRAINT HEIGHT ADJUSTMENT ON LEFT OR RIGHT FRONT SEAT (COMFORT SEAT)

WARNING: NOTE AIRBAG SAFETY INSTRUCTIONS!

Incorrect handling may result in triggering of active head restraint and thereby cause injury.

Necessary preliminary tasks:

- Remove **BOTH REAR PANELS ON FRONT SEAT BACKREST**
- Remove **FRONT HEAD RESTRAINT** .
- **DISCONNECT AND COVER BATTERY NEGATIVE LEAD** .

Pull backrest cover (1) in direction of arrow over metal lugs (2) and detach.

If necessary, detach backrest cover (1) on both sides from backrest frame.

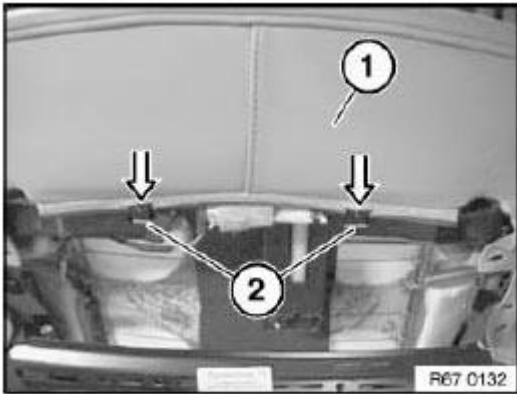


Fig. 28: Pulling Backrest Cover

Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: For purposes of clarity, illustration shows backrest cover removed.

Unfasten plug connection (1) and disconnect.

Release screw connections (2).

Feed out AKS carrier (3) in direction of arrow and secure against falling out.

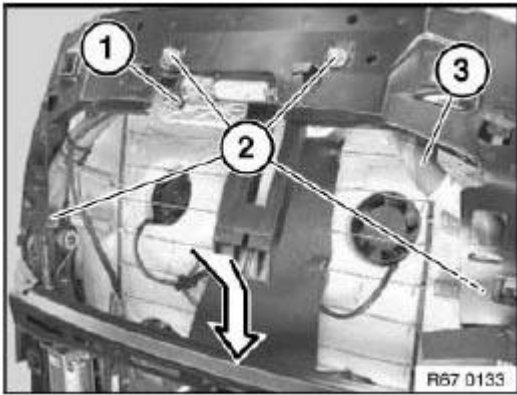


Fig. 29: Feeding Out AKS Carrier

Courtesy of BMW OF NORTH AMERICA, INC.

Cut through cable tie (1).

Disconnect plug connection (2).

Release screws (3).

Feed drive unit for head restraint height adjustment (4) in direction of arrow out of AKS carrier (5) and remove.

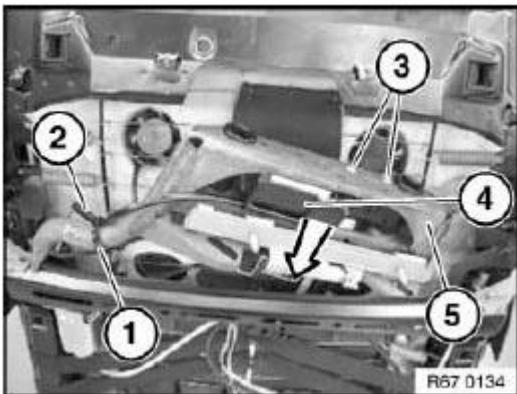


Fig. 30: Feeding Drive Unit For Head Restraint Height Adjustment

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

INITIALIZE drive unit for head restraint height adjustment.

FAN (SEAT)

67 32 600 REPLACING FAN FOR FRONT SEAT SURFACE (COMFORT SEAT)

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

Seat cover must not be separated from padding.

All parts must be replaced completely and released with the diagnosis system in event of defective fan, seat cover, seat heating, OC3 mat or padding.

Necessary preliminary tasks:

- Remove **FRONT SEAT**
- Partially remove **COVER FOR FRONT SEAT**

NOTE: For purposes of clarity, illustration shows seat padding and seat cover removed.

Lift dividing net (1), pull fan for seat surface (2) out of seat padding (3) slightly and disconnect plug connection behind.

Remove fan for seat surface (2).

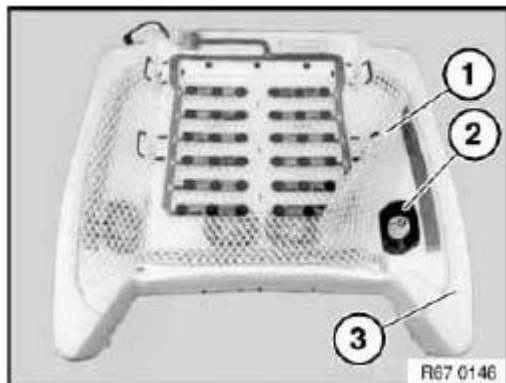


Fig. 31: Identifying Dividing Net, Seat Surface And Seat Padding

Courtesy of BMW OF NORTH AMERICA, INC.

67 32 610 REPLACING FAN FOR BACKREST ON FRONT SEAT (COMFORT SEAT)

Necessary preliminary tasks:

- Remove both rear panels on front seat backrest. See **REMOVING AND INSTALLING/REPLACING BOTH REAR PANELS ON LEFT OR RIGHT FRONT SEAT BACKREST (COMFORT)** or **REMOVING AND INSTALLING/REPLACING BOTH REAR PANELS ON LEFT OR RIGHT FRONT SEAT BACKREST (LONG VERSION)**.

Lay felt (1) slightly to one side and disconnect plug connection (2). If necessary, cut through cable tie.

Installation:

Ensure correct cable routing.

If necessary, raise load-area net in working area.

Feed fan for backrest (3) in direction of arrow out of cushion section and remove.

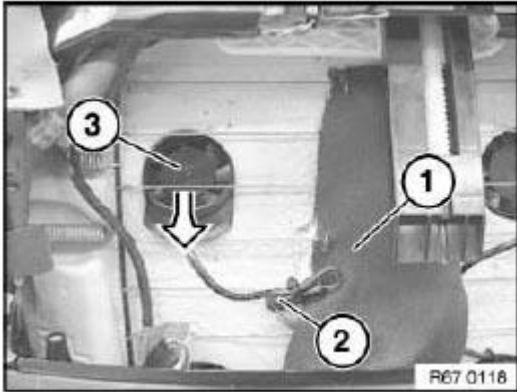


Fig. 32: Feeding Fan For Backrest

Courtesy of BMW OF NORTH AMERICA, INC.

67 32 620 REPLACING FAN FOR THIGH SUPPORT ON FRONT SEAT (COMFORT SEAT)

Necessary preliminary tasks:

- Remove thigh support. See **REMOVING AND INSTALLING/REPLACING LEFT OR RIGHT THIGH SUPPORT** and **REPLACING PADDING FOR FRONT SEAT THIGH SUPPORT**

Unhook seat cover (1) in area (2).

Feed out plug housing (3) through opening in trim (4).

Remove trim (4).

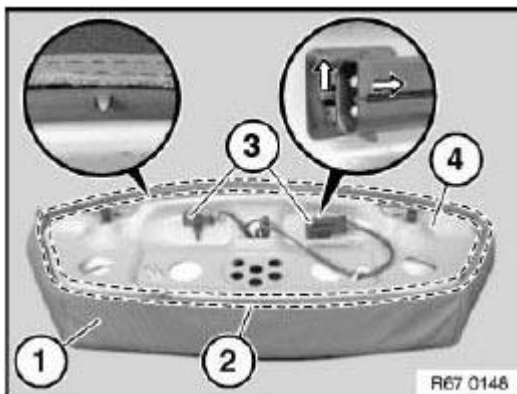


Fig. 33: Identifying Seat Cover Area, Plug Housing And Trim

Courtesy of BMW OF NORTH AMERICA, INC.

Feed fan (1) in direction of arrow out of thigh support cushion section (2) and remove.

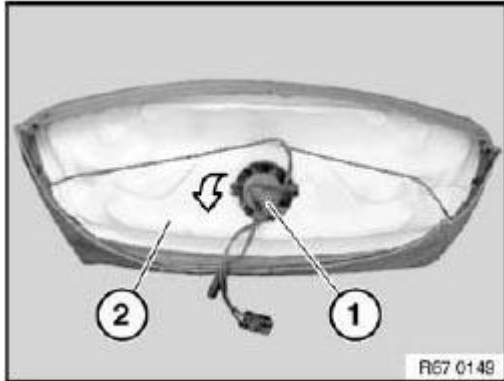


Fig. 34: Feeding Fan Of Thigh Support Cushion Section

Courtesy of BMW OF NORTH AMERICA, INC.

DRIVE, SLIDE-TILT SUNROOF CONVERTIBLE TOP

67 61 005 REMOVING AND INSTALLING/REPLACING DRIVE UNIT WITH GEARING FOR SLIDE/TILT SUNROOF

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

Necessary preliminary tasks:

- Remove FRONT ROOFLINER TRIM

NOTE: Secure drive unit with gearing for slide/tilt sunroof (2) against falling out.

Release screws (1), tightening torque 54 13 1AZ .

Lower drive unit with gearing for slide/tilt sunroof (2).

NOTE: Screws (1) are microencapsulated.

Unlock plug connection (3), disconnect and remove drive unit with gearing for slide/tilt sunroof (2).

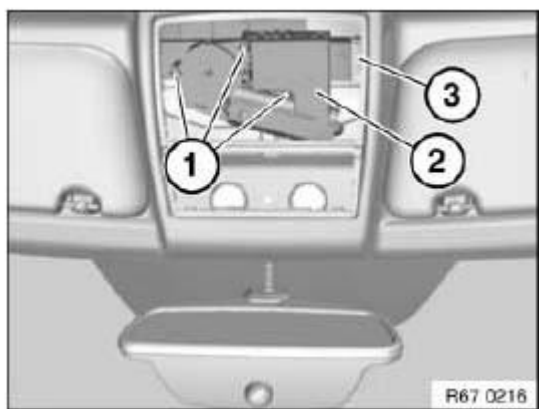


Fig. 35: Identifying Slide/Tilt Sunroof, Screws And Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Insert gear wheel (1) of drive with gear for actuating slide/tilt sunroof (2) in gear teeth.

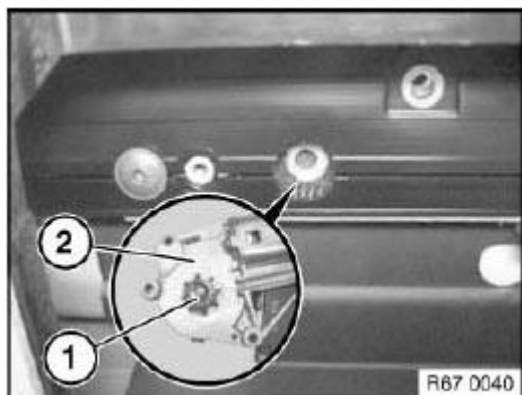


Fig. 36: Identifying Gear Wheel And Slide/Tilt Sunroof
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

- Initialize **SLIDE/TILT SUNROOF**.

Replacement:

Carry out **VEHICLE PROGRAMMING AND CODING**

IMPORTANT: There is a risk of permanent battery discharge if programming/coding is not carried out!

67 61 007 REMOVING AND INSTALLING/REPLACING DRIVE WITH GEAR (REAR) FOR

ACTUATING SLIDE/TILT SUNROOF (REAR) (SPORTS WAGON)

Necessary preliminary tasks:

- Remove **BOTH TRIM PANELS FOR REAR ROOF PILLAR** (C-pillars)
- Remove both trim panels for rear roof pillar (D-pillars). See **REMOVING AND INSTALLING/REPLACING TRIM PANEL FOR REAR LEFT OR RIGHT ROOF PILLAR (D-PILLAR)** or **REMOVING AND INSTALLING/REPLACING TRIM PANEL FOR REAR ROOF PILLAR (D-PILLAR WITH OPTION SA316 FROM 03/2006), LEFT OR RIGHT (AUTOMATIC REAR LID ACTUATION)** .
- Remove **BOTH INTERIOR LIGHTS**
- Remove **BOTH REAR GRAB HANDLES**

NOTE: Remove both rear and if necessary front counter supports for luggage compartment net.

Fold up cover (1).

Release screw (2) and remove counter support for luggage compartment net (3).

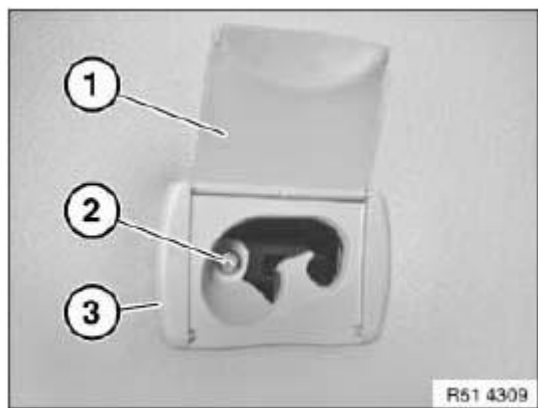


Fig. 37: Identifying Dividing Net Mounts And Back Cover
Courtesy of BMW OF NORTH AMERICA, INC.

Pull off roofliner mocket in work area.

IMPORTANT: Do not under any circumstance kink roofliner (1).

Unclip and lower roofliner (1) in rear area.

Unfasten plug connection (2) and disconnect.

NOTE: Secure drive with gear for actuating slide/tilt sunroof (4) against falling out.

Release screws (3), tightening torque **54 13 1AZ** .

NOTE: **Screws (3) are microencapsulated.**

Remove drive with gear for actuating slide/tilt sunroof (4).

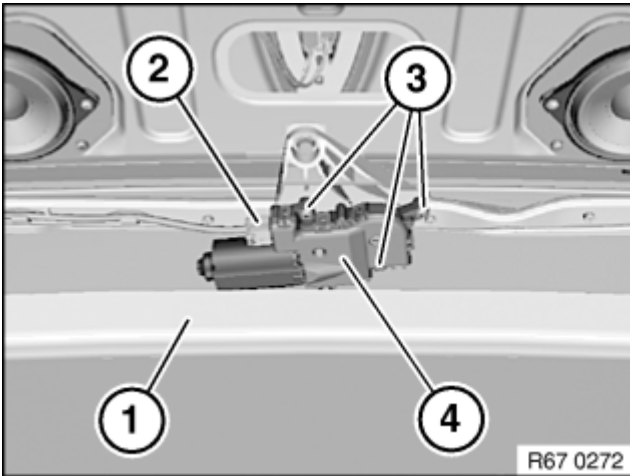


Fig. 38: Identifying Drive With Gear, Plug Connection, And Screws
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Insert gear wheel (1) of drive with gear for actuating slide/tilt sunroof (2) exactly in gear teeth (3).

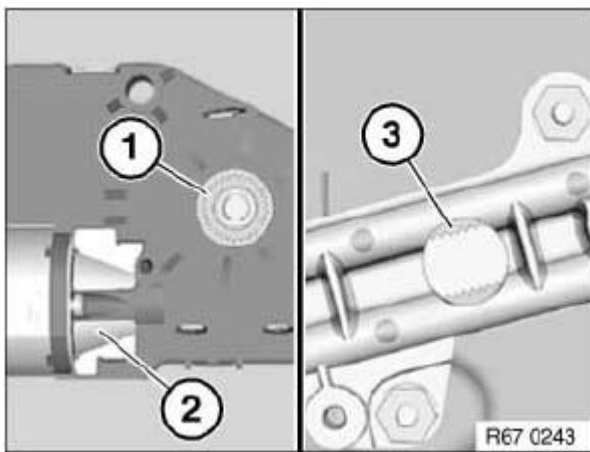


Fig. 39: Identifying Gear Wheel, Sunroof And Gear Teeth
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

- Initialize **SLIDE/TILT SUNROOF** .

DRIVE, POWER WINDOW

67 62... NOTES ON INITIALIZING POWER WINDOW

NOTE: *Initialization is performed on the power window switch of the relevant door.*

Initialization comprises:

- Normalization
- Learning characteristic curve

With normalization, the mechanical end stops of the power window are recorded and stored.

The characteristic curve is learned immediately after normalization.

When the characteristic curve is learned, the mechanical closing forces of the power window are recorded and stored for correct operation of the anti-trapping mechanism.

Initialization, i.e. normalization and learning of characteristic curve, is performed in a continuous operation.

NOTE: **An initialization must be performed:**

- In the event of malfunctions, e.g. no one-touch function, no opening or no comfort function possible.
- After the power window drive or door module has been replaced.
- After work is carried out on the power window mechanism.

WARNING: There is no anti-trapping protection during initialization.

Operating sequence for initialization:

- Move side window into lower end position.
- Press switch into "Open one-touch operation" (second switch position) for approx. 15 to 25 s and hold down.
- Release switch, then immediately press into "Close one touch operation" (second switch stage) and hold down.
- The side window now moves to the lower end position and then back to the upper end position.

Initialization is completed once the side window has returned to the upper end position.

NOTE: **Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).**

67 62 000 REMOVING AND INSTALLING/REPLACING FLAT MOTOR FOR FRONT LEFT OR RIGHT POWER WINDOW

Necessary preliminary tasks:

- Detach **SOUNDPROOFING ON FRONT DOOR** in working area.

Unfasten plug connection (1) and disconnect.

Release screw (2) of locking bar (3).

Remove locking bar (3) in direction of arrow from flat motor for power window unit (5).

Release screws (4).

Carefully press flat motor for power window unit (5) towards rear out of mounting.

If necessary, pull power window unit forwards slightly and feed out flat motor for power window unit (5) and remove.

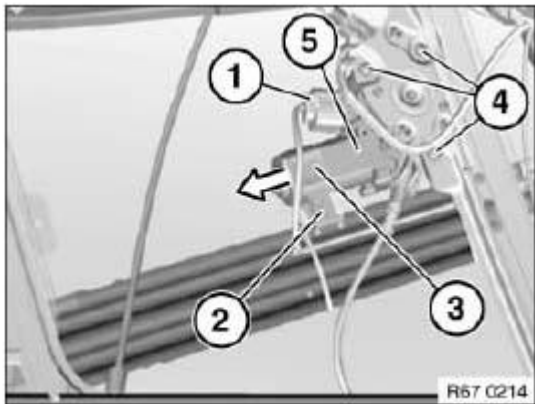


Fig. 40: Removing Locking Bar

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure guides (1) are correctly seated when fitting retaining clip (2).

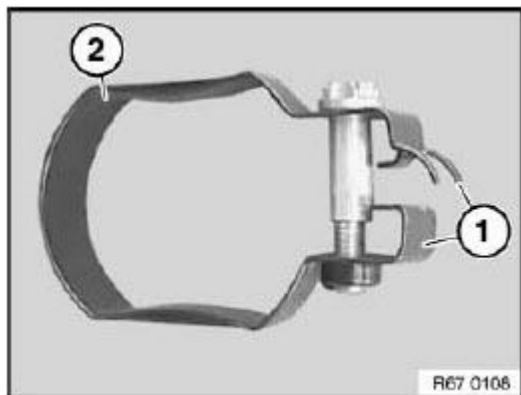


Fig. 41: Identifying Guide And Retaining Clip
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

A normalization must be carried out in order to activate anti-trapping protection.

Operating sequence for normalization:

- Open corresponding window completely.
- Press corresponding power window switch into "Close one-touch operation" (second switch stage).
- Once the upper end position has been reached, hold power window switch down for approx. 500 secs. more.

NOTE: Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).

67 62 020 REMOVING AND INSTALLING/REPLACING FLAT MOTOR FOR REAR LEFT OR RIGHT POWER WINDOW REGULATOR

Necessary preliminary tasks:

- Detach **SOUNDPROOFING ON REAR DOOR** in working area.

Unfasten plug connection (1) and disconnect.

Release screw (2) of locking bar (3).

Remove locking bar (3) in direction of arrow from flat motor for power window unit (5).

Release screws (4).

Carefully press flat motor for power window unit (5) towards rear out of mounting.

If necessary, pull power window unit forwards slightly and feed out flat motor for power window unit (5) and remove.

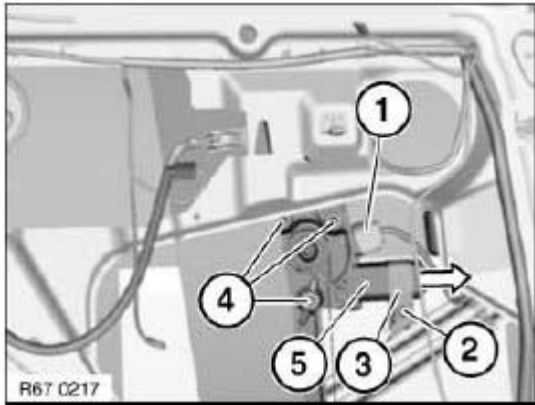


Fig. 42: Removing Locking Bar

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure guides (1) are correctly seated when fitting retaining clip (2).

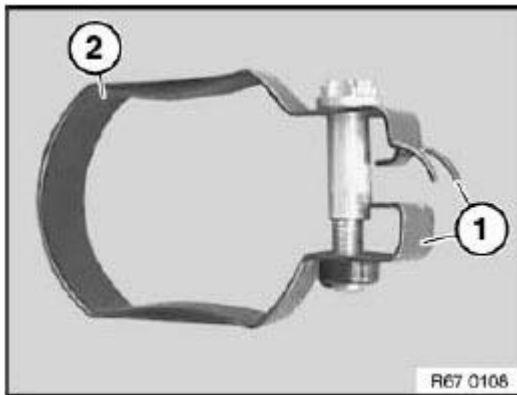


Fig. 43: Identifying Guides And Retaining Clip

Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

INITIALIZE power window.

NOTE: Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).

WIPER MOTOR, ACTUATOR DRIVE

67 63 512 REPLACING WIPER MOTOR

This operation is described under:

Removing complete CONSOLE FOR WINDSHIELD WIPER SYSTEM .

DRIVE, STEERING COLUMN ADJUSTMENT**67 64 010 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR ELECTRIC STEERING COLUMN ADJUSTMENT**

Necessary preliminary tasks:

- Move steering wheel into maximum "lower" and "extended" position
- Remove DRIVER'S SIDE STORAGE COMPARTMENT

Unlock plug connections (1) and (2) of drive unit for electric steering column adjustment (3) and disconnect.

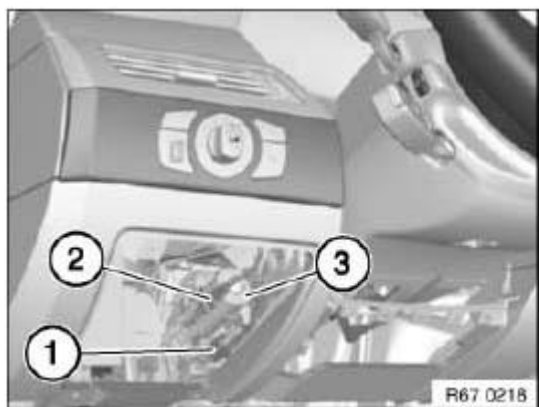


Fig. 44: Identifying Plug Connections And Electric Steering Column Adjustment
Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: For purposes of clarity, illustrations show steering column removed.

Remove screws (1) and (2).

Installation:

Replace screws (1) and (2).

Tightening torque, 32 31 12AZ .

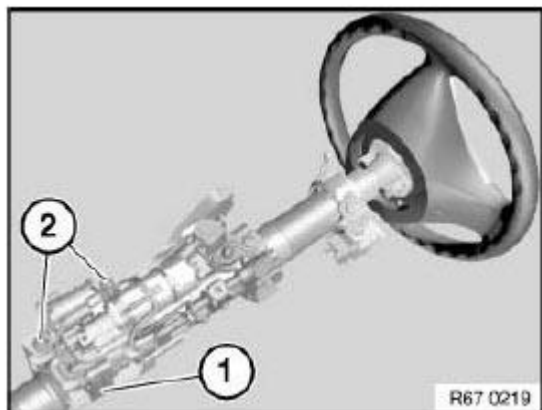


Fig. 45: Identifying Steering Column Screws

Courtesy of BMW OF NORTH AMERICA, INC.

IMPORTANT: Pay attention to drive shafts (1) and (3) when removing and installing drive unit for electric steering column adjustment (4). Do not bend or twist. Drive shafts (1) and (3) must be exactly inserted in associated mountings (2).

Detach drive shafts (1) and (3) from associated mountings (2) and remove drive unit for electric steering column adjustment (4).

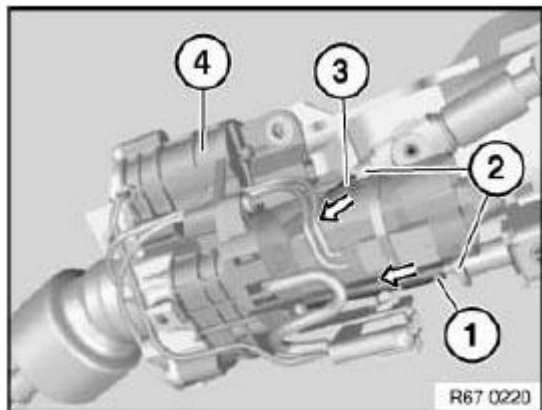


Fig. 46: Identifying Drive Shafts, Electric Steering Column Adjustment And Associated Mountings

Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Longer drive shaft (1) is located in installation position under shorter drive shaft (2).

Drive shafts (1) and (2) must be exactly inserted in associated mountings (4).

If necessary, replace plastic mount (3).

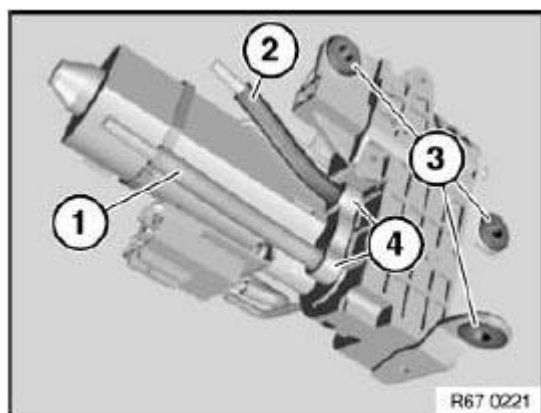


Fig. 47: Identifying Drive Shafts, Associated Mountings And Plastic Mount
Courtesy of BMW OF NORTH AMERICA, INC.

DRIVE, ROLLER SUN BLIND/SUN VISOR

67 65 010 REMOVING AND INSTALLING OR REPLACING DRIVE UNIT FOR ROLLER SUN BLIND

Necessary preliminary tasks:

- Remove **PANEL FOR PARCEL SHELF** .

IMPORTANT: Do not power up the drive unit if it is not completely connected to the roller sun blind.

If the roller sun blind is not completely rolled up, there is spring pressure on the drive linkage.

In this case, maintain the roller sun blind under pretension and carefully lever out the linkage. Now allow the roller sun blind to roll up slowly.

Remove locking clips (1) towards bottom.

Installation:

Replace locking clips (1).

Lever out drive linkage (2) on left and right.

Release screw (3) and remove complete drive linkage (4) towards top.

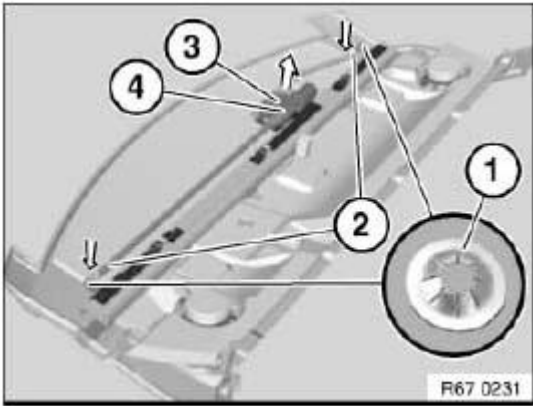


Fig. 48: Releasing Screw And Removing Complete Drive Linkage
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure drive linkage (1) is correctly positioned on drive shaft (2).

Drive linkage (1) can only rest in one single position on the drive shaft (2).

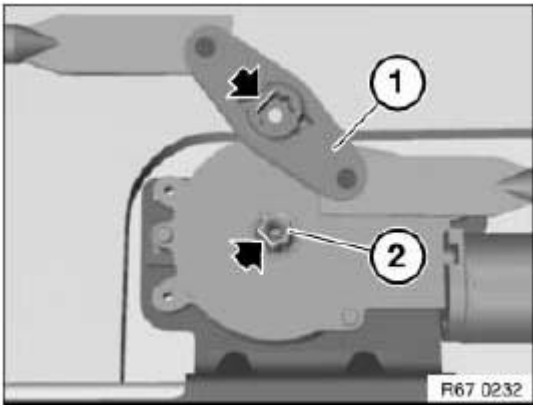


Fig. 49: Identifying Drive Linkage And Drive Shaft
Courtesy of BMW OF NORTH AMERICA, INC.

Unhook electric lead (1) in area (2) and unclip at points (3).

Release screws (4) and remove drive unit for roller sun blind (5) in direction of arrow.

Installation instructions:

Attach screws (4) loosely only. Attach drive linkage and tighten down screws (4).

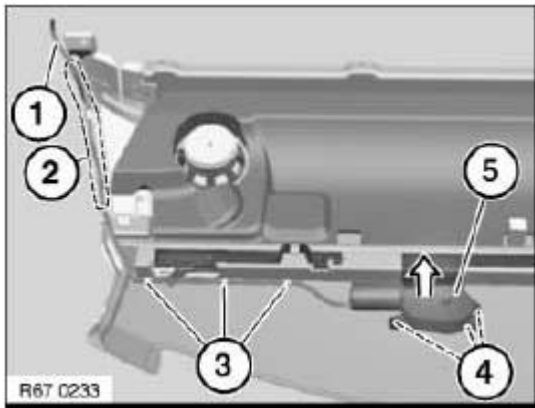


Fig. 50: Releasing Screws And Removing Drive Unit For Roller Sun Blind
Courtesy of BMW OF NORTH AMERICA, INC.

DRIVE, SEAT ADJUSTMENT

67 66 010 REMOVING AND INSTALLING/REPLACING LUMBAR SUPPORT DRIVE MECHANISM ON FRONT SEAT, LEFT OR RIGHT

Necessary preliminary tasks:

- Remove **REAR PANEL ON FRONT SEAT BACKREST** .

Cut through cable tie (1).

Pull drive unit for lumbar support (2) with jacket slightly out of backrest frame (3).

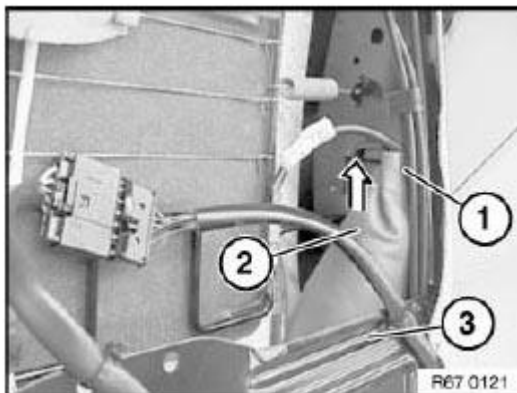


Fig. 51: Identifying Cable Tie, Lumber Support And Backrest Frame
Courtesy of BMW OF NORTH AMERICA, INC.

Cut through cable tie (1) on jacket of drive unit for lumbar support (2).

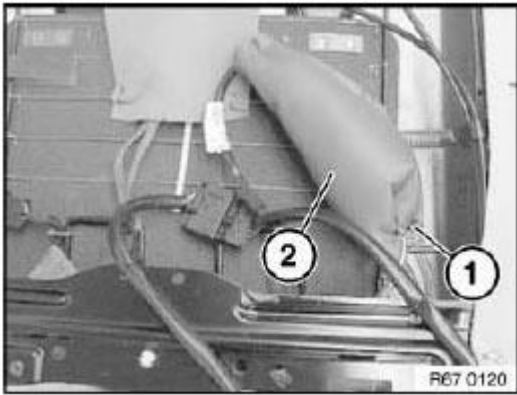


Fig. 52: Identifying Cable Tie And Lumbar Support
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

Detach hose (2).

NOTE: If firmly seated, gently heat hose (2) on drive unit for lumbar support (3).

Installation:

Make sure hose (2) is laid without kinks.

Remove drive unit for lumbar support (3).

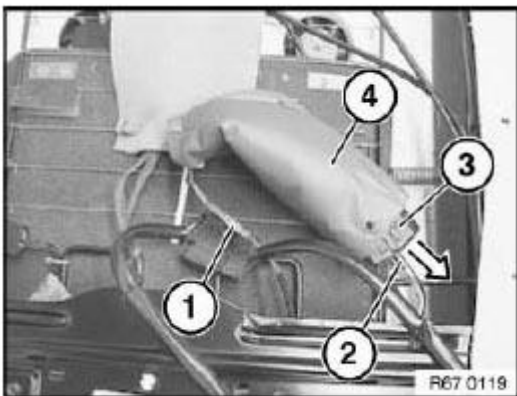


Fig. 53: Removing Drive Unit For Lumbar Support
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

Pull drive unit for lumbar support (3) in direction of arrow out of jacket (4).

67 66 012 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR LUMBAR SUPPORT ON LEFT OR RIGHT FRONT SEAT (COMFORT SEAT)

Necessary preliminary tasks:

- Remove both rear panels on front seat. See **REMOVING AND INSTALLING/REPLACING UPPER REAR PANEL ON LEFT OR RIGHT FRONT SEAT BACKREST (COMFORT)** and **REMOVING AND INSTALLING/REPLACING LOWER REAR PANEL ON LEFT OR RIGHT FRONT SEAT BACKREST (COMFORT)** .

If necessary, unhook backrest cover (1) from backrest.

Cut through cable ties (2).

Unclip wiring harness at point (3) towards front.

Release screw (4) and feed out valve unit (5) towards top.

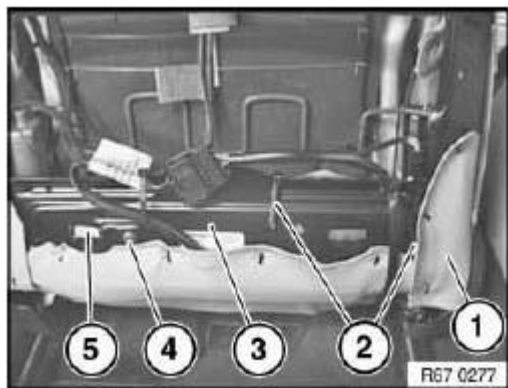


Fig. 54: Identifying Backrest Cover, Cable Ties, Screw And Valve Unit
Courtesy of BMW OF NORTH AMERICA, INC.

Cut through cable tie (1).

Push jacket of drive unit for lumbar support (2) in direction of arrow over drive unit for lumbar support (3).

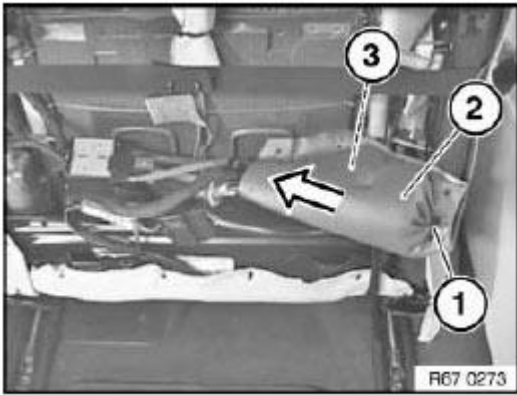


Fig. 55: Pushing Jacket Of Drive Unit For Lumbar Support
Courtesy of BMW OF NORTH AMERICA, INC.

Disconnect plug connection (1).

Detach hose (2).

NOTE: If firmly seated, gently heat hose (2) on drive unit for lumbar support (3).

Installation:

Make sure hose (2) is laid without kinks.

Remove drive unit for lumbar support (3).

Replacement:

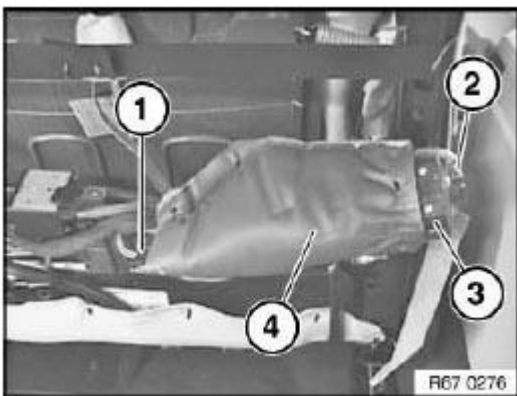


Fig. 56: Identifying Plug Connection, Hose, Lumbar Support And Jacket
Courtesy of BMW OF NORTH AMERICA, INC.

Pull drive unit for lumbar support (3) out of jacket (4).

67 66 013 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR LUMBAR SUPPORT ON LEFT OR RIGHT FRONT SEAT (ACTIVE SEAT)

Cut through cable ties (1).

Set down drive unit for lumbar support (2) with jacket towards bottom.

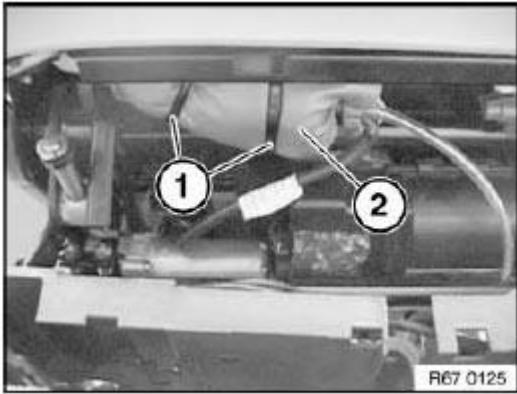


Fig. 57: Identifying Cable Ties And Lumbar Support
Courtesy of BMW OF NORTH AMERICA, INC.

Cut through cable tie (1) on jacket of drive unit for lumbar support (2).

Disconnect plug connection (3).

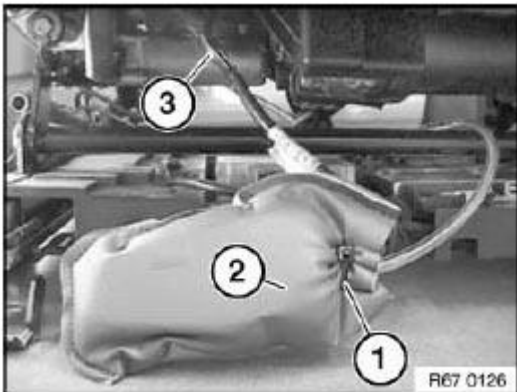


Fig. 58: Identifying Cable Ties, Lumbar Support And Plug Connection
Courtesy of BMW OF NORTH AMERICA, INC.

Detach hose (1) in direction of arrow.

NOTE: If firmly seated, gently heat hose (1) on drive unit for lumbar support (2).

Installation:

Make sure hose (1) is laid without kinks.

Remove drive unit for lumbar support (2).

Replacement:

Pull drive unit for lumbar support (2) out of jacket (3).

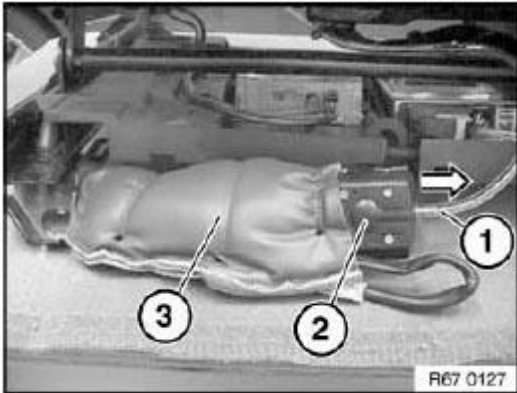


Fig. 59: Detaching Hose

Courtesy of BMW OF NORTH AMERICA, INC.