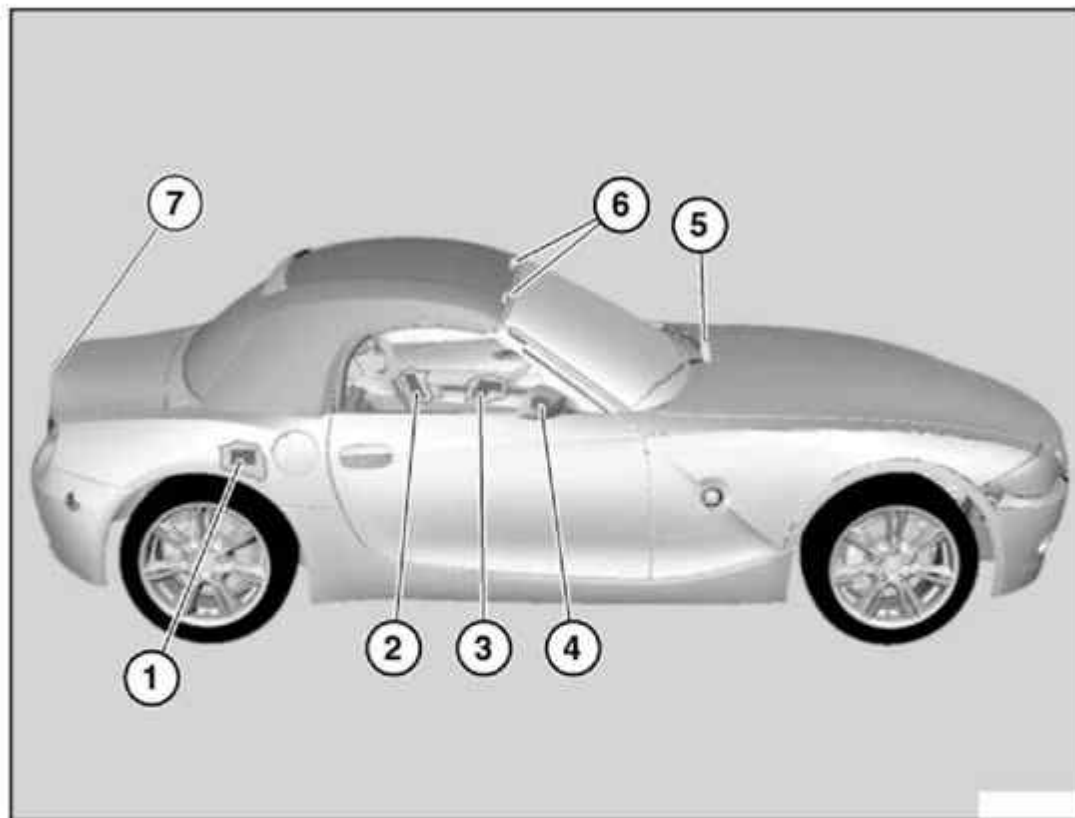


ACCESSORIES & EQUIPMENT

Electrical Drive Units - Repair Instructions - Z4

CENTRAL LOCKING UNIT

67 11... OVERVIEW OF SERVODRIVES



- | | | | |
|---|---|---|---------------------------------|
| 1 | Servodrive for fuel filler flap | 5 | Wiper motor |
| 2 | Servodrive for door locking | 6 | Drive for convertible top catch |
| 3 | Flat motor for window lift | 7 | Servodrive for rear lid lock |
| 4 | Drive for electrically adjustable door mirror | | |

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Fig. 1: Identifying Overview Of Servodrives
 Courtesy of BMW OF NORTH AMERICA, INC.

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.

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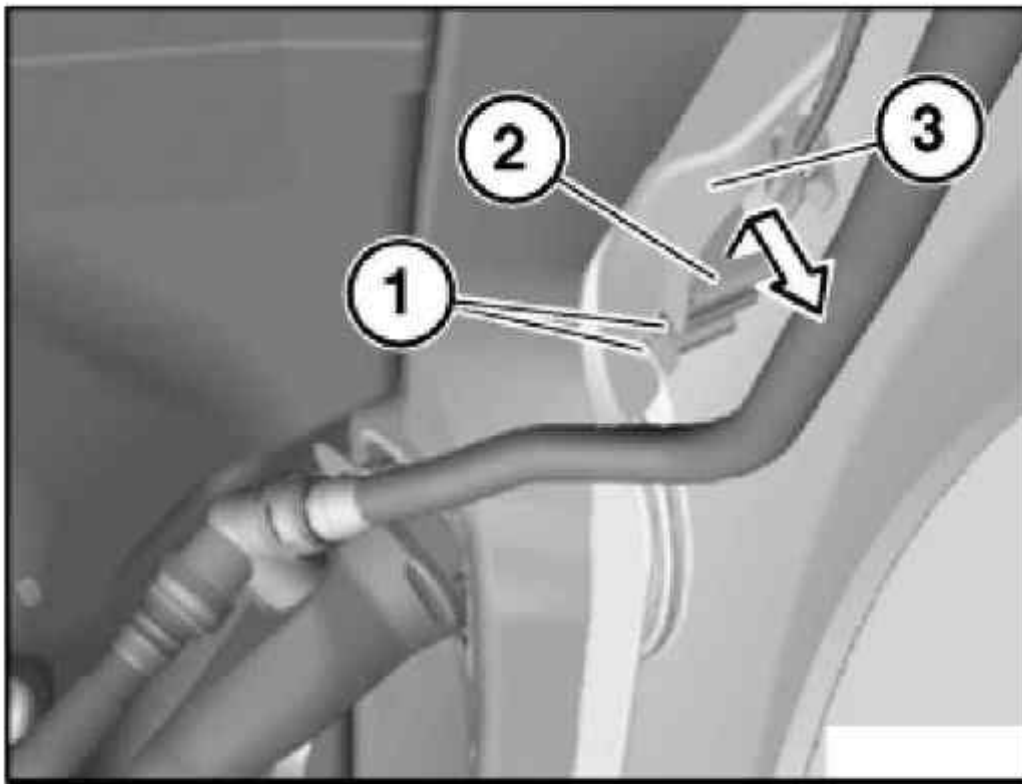
Procedure is described in the document "Door lock in front door...". Refer to **51 21 090 REMOVING AND INSTALLING/REPLACING DOOR LOCK IN LEFT OR RIGHT FRONT DOOR** .

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

Necessary preliminary tasks:

- Remove rear wheel arch cover, right. Refer to **51 71 041 REMOVING AND INSTALLING/REPLACING REAR LEFT OR RIGHT WHEEL ARCH COVER** .

Loosen screws (1).



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Fig. 2: Removing Servodrive For Fuel Filler Flap
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Make sure servodrive for fuel filler flap (2) is correctly adjusted.

It must be possible to lock or unlock the fuel filler flap completely.

Feed servodrive for fuel filler flap (2) in direction of arrow out of mounting plate (3).

Installation:

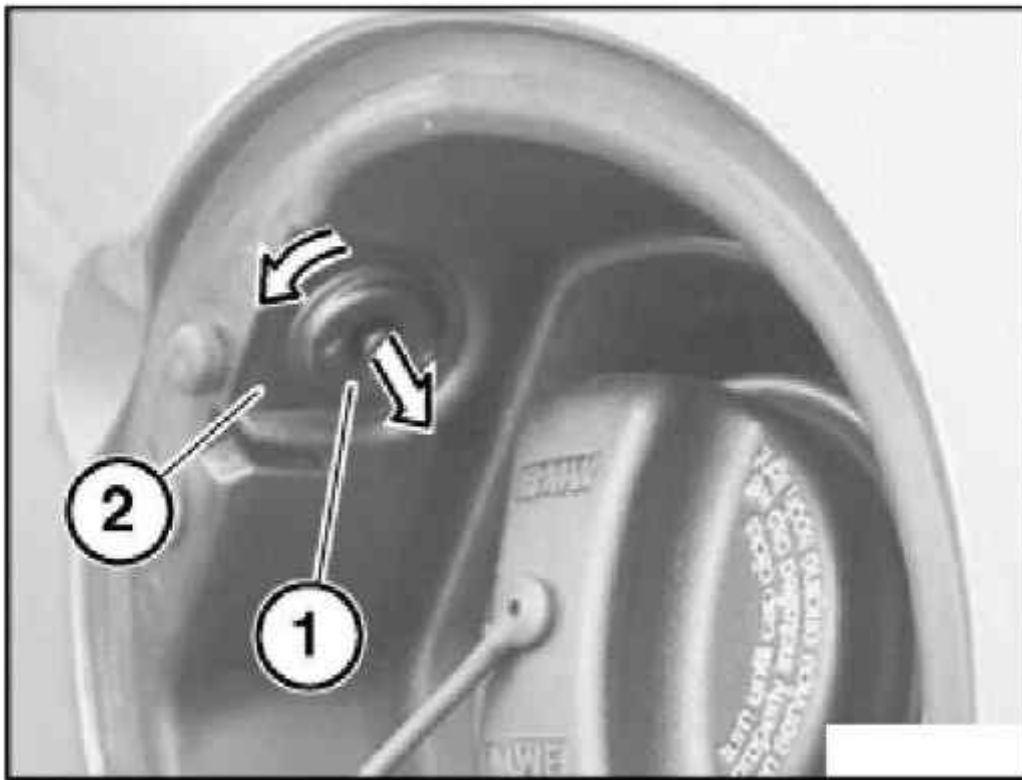
To make it easier to feed in, pull out locking pin for fuel filler flap (2) completely.

Unlock plug connection behind and disconnect.

Detach emergency actuation pull strap on servodrive for fuel filler flap (2).

Remove servodrive for filler flap (2).

Turn sleeve (1) with a suitable tool (e.g.: pointed pliers) approx.



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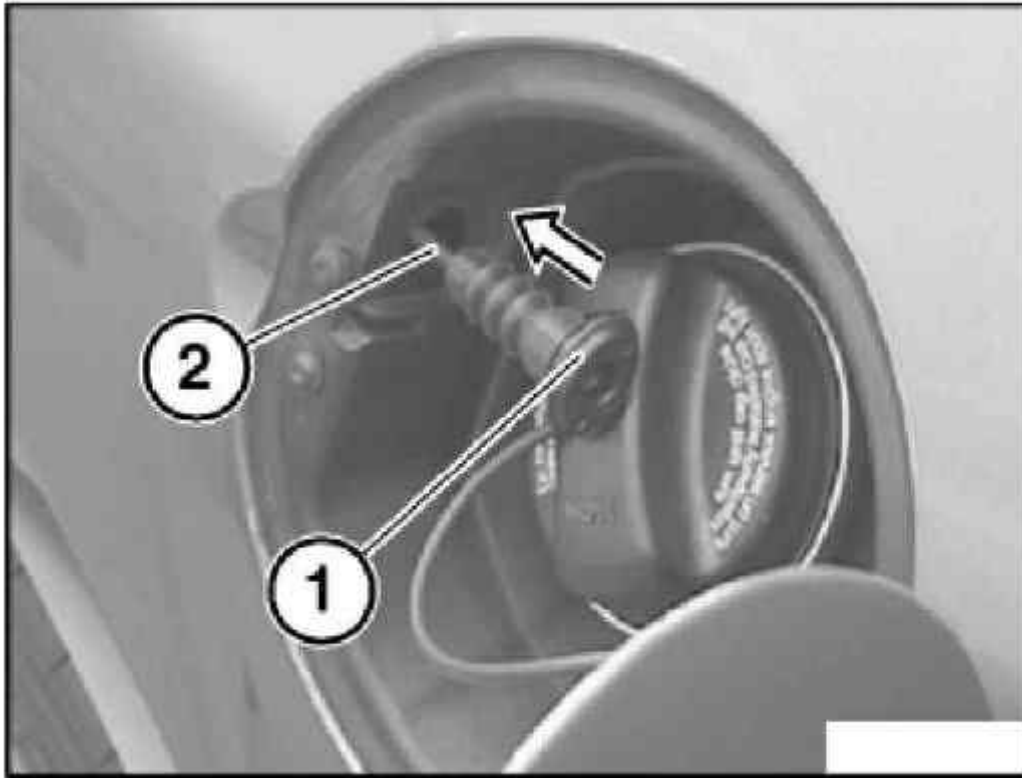
Fig. 3: Removing Sleeve

Courtesy of BMW OF NORTH AMERICA, INC.

45° in direction of arrow and pull out of cover housing (2).

Installation:

Make sure sleeve (1) is correctly seated on locking pin for tank filler flap (2).



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Fig. 4: Installing Sleeve

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." Refer to **51 24 100 REMOVING AND INSTALLING/REPLACING REAR LID LOCK (UPPER SECTION)**.

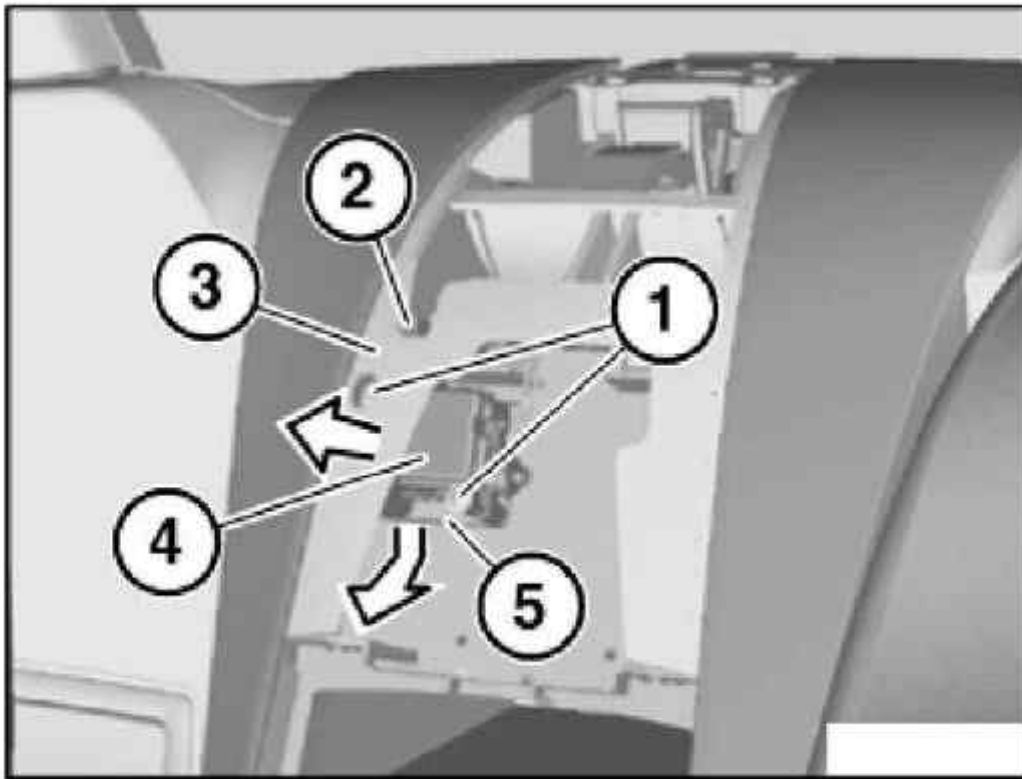
67 11 600 REMOVING AND INSTALLING/REPLACING SERVODRIVE IN STORAGE BOX

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Necessary preliminary tasks:

- Remove lock on rear storage box. Refer to **51 16 248 REMOVING AND INSTALLING/REPLACING LOCK ON REAR STORAGE BOX**.

Release screws (1).



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Fig. 5: Removing Servodrive

Courtesy of BMW OF NORTH AMERICA, INC.

Unfasten plug connection (2) and disconnect.

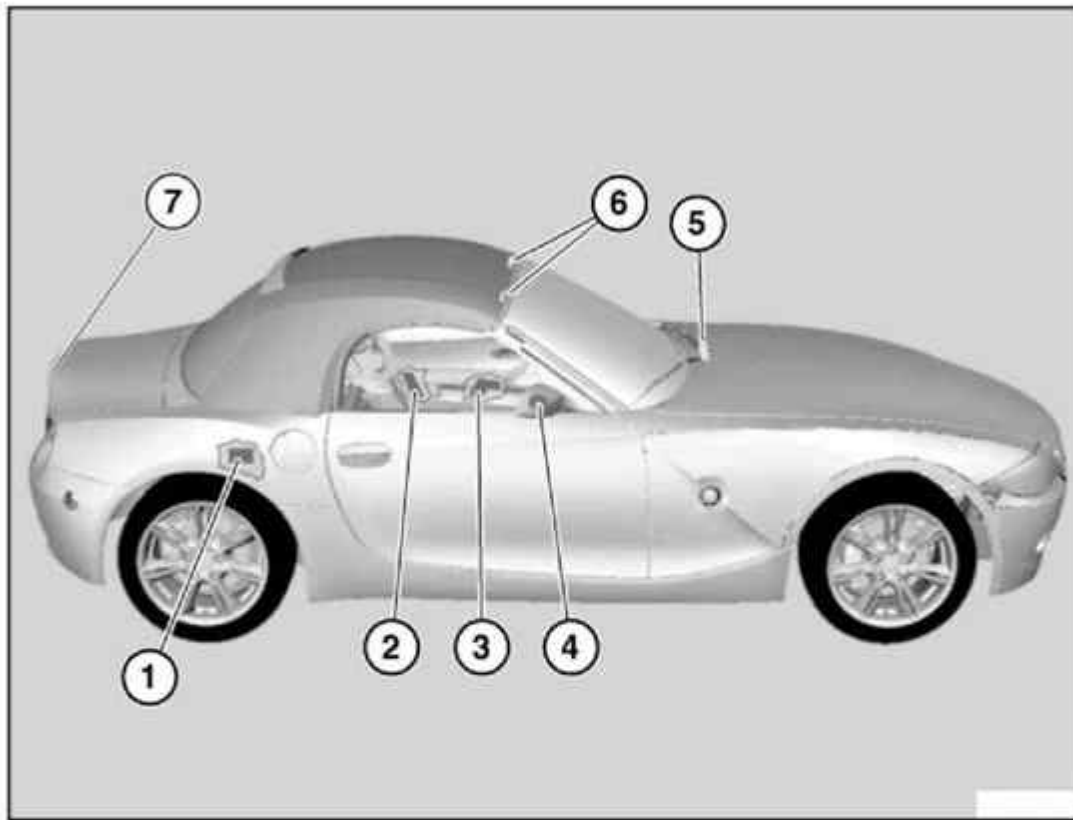
If necessary, raise storage box trim (3) slightly and feed servodrive (4) as illustrated out of recess in storage box (5).

Remove servodrive (4).

MIRROR ADJUSTMENT

a

67 11... OVERVIEW OF SERVODRIVES



- | | | | |
|---|--|---|--|
| 1 | <u>Servodrive for fuel filler flap</u> | 5 | <u>Wiper motor</u> |
| 2 | <u>Servodrive for door locking</u> | 6 | <u>Drive for convertible top catch</u> |
| 3 | <u>Flat motor for window lift</u> | 7 | <u>Servodrive for rear lid lock</u> |
| 4 | <u>Drive for electrically adjustable door mirror</u> | | |

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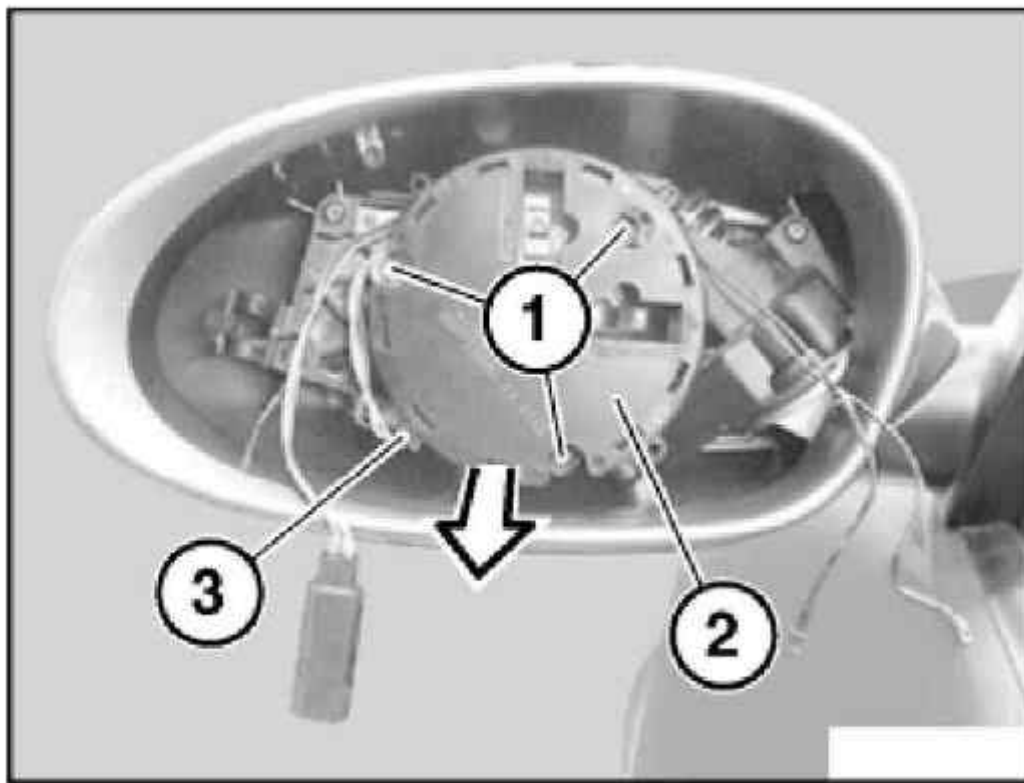
Fig. 6: Overview Of Servodrives

Courtesy of BMW OF NORTH AMERICA, INC.

67 13 001 REPLACING DRIVE UNIT FOR ELECTRICALLY OPERATED LEFT OR RIGHT DOOR MIRROR*Necessary preliminary tasks:*

- Remove mirror glass for rearview mirror. Refer to **51 16 026 REPLACING MIRROR GLASS**.

Release screws (1).



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Fig. 7: Removing Drive For Electrically Adjustable Door Mirror
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Tightening torque 1.1 Nm.

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).

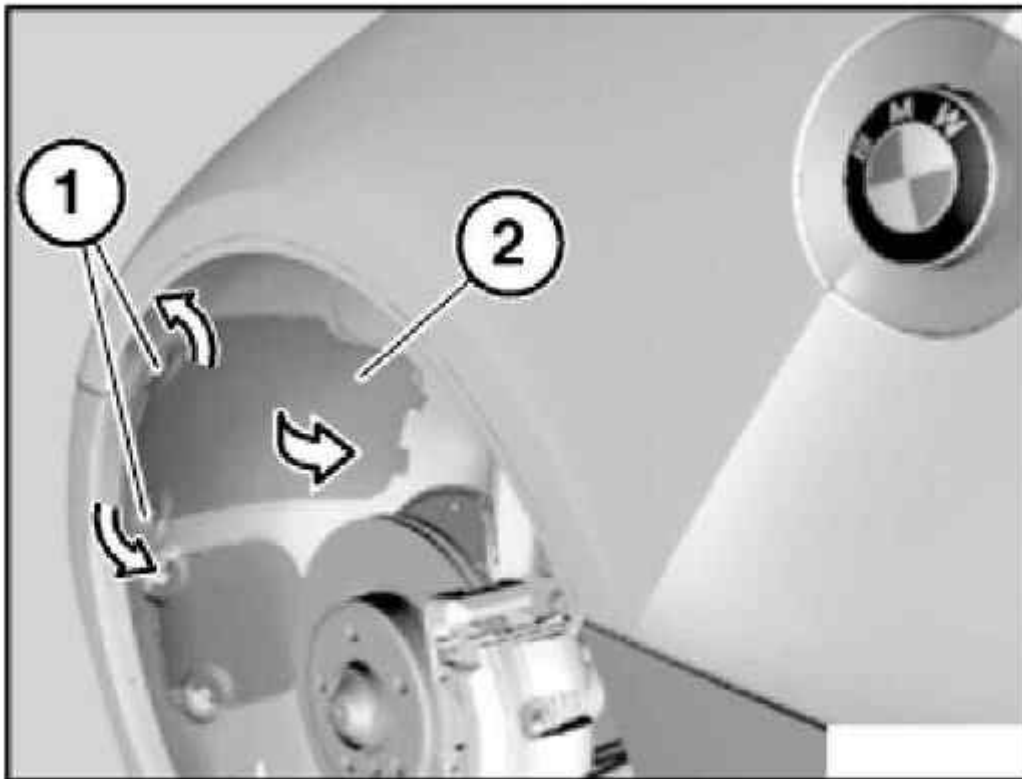
SERVO/POSITIONING DRIVES

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

Necessary preliminary tasks:

- Remove front wheel. Refer to **36 10 300 REMOVING OR INSTALLING FRONT OR REAR WHEEL**.

Unlock fasteners (1) by turning counterclockwise through 180° and fold up cover (2) in direction of arrow.



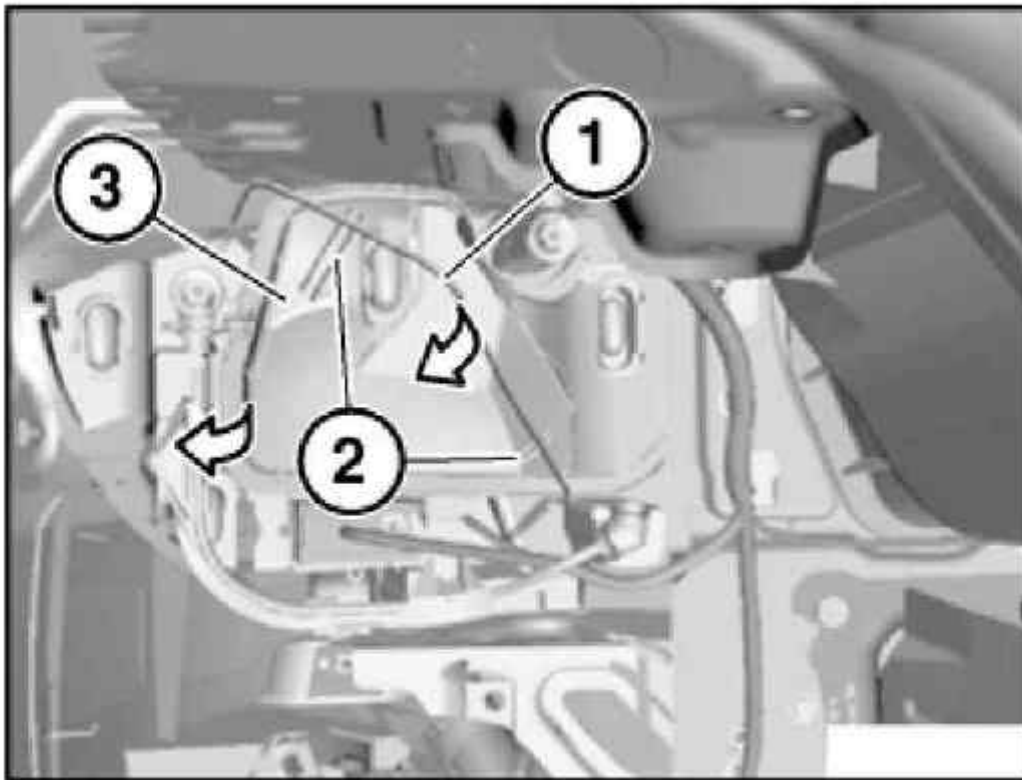
G03298769

Fig. 8: Folding Up Cover

Courtesy of BMW OF NORTH AMERICA, INC.

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.

Lift locking bracket (1) out of mounts (2) and fold down as illustrated.



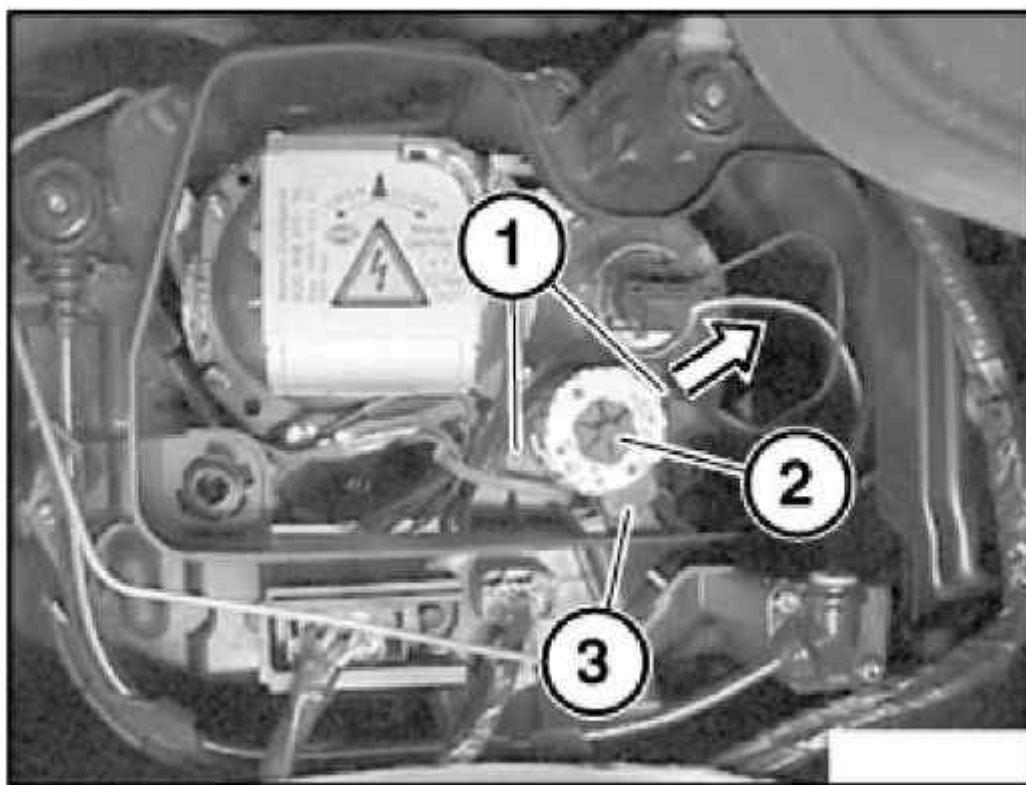
G03298770

Fig. 9: Removing Cover

Courtesy of BMW OF NORTH AMERICA, INC.

Feed out cover (3) in direction of arrow and remove.

Release screws (1).



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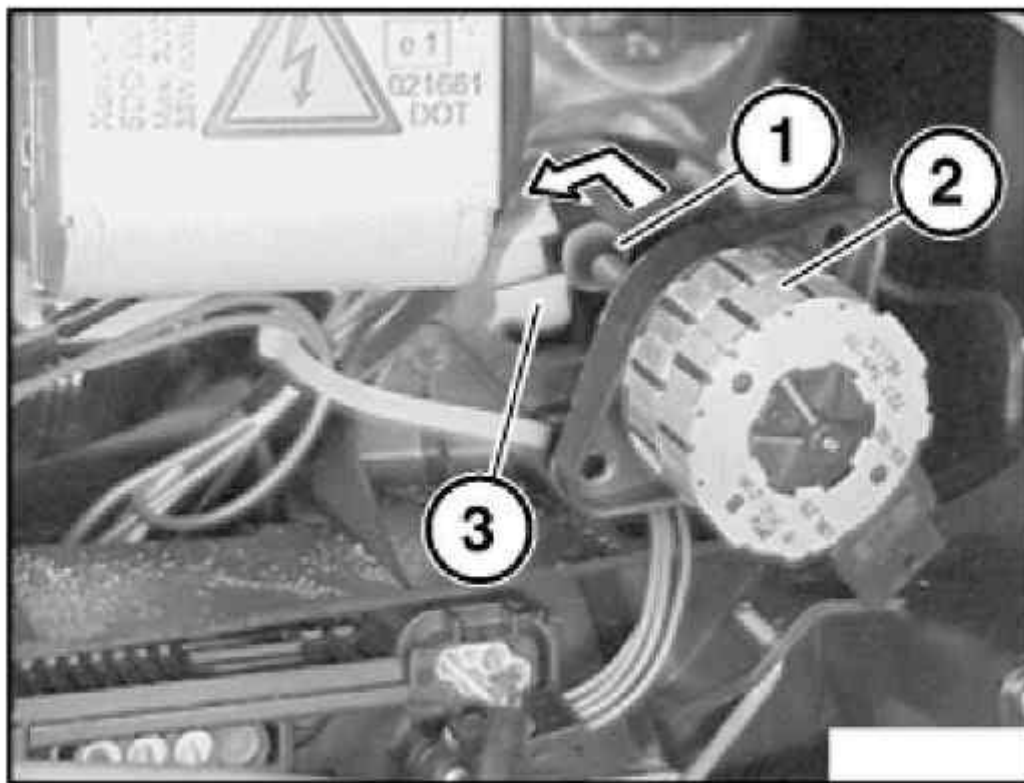
Fig. 10: Removing Headlight Vertical Aim Adjuster
Courtesy of BMW OF NORTH AMERICA, INC.

Feed out headlight vertical aim adjuster (2) in direction of arrow, unlock plug connection (3) and disconnect.

Remove headlight vertical aim adjuster (2).

Installation:

Feed ball head (1) of headlight vertical aim adjuster (2) in direction of arrow into mounting (3).



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Fig. 11: Installing Headlight Vertical Aim Adjuster
Courtesy of BMW OF NORTH AMERICA, INC.

Gripping the reflector makes it easier to feed in the ball head.

Make sure ball head (1) is exactly seated in mounting (3).

Adjust headlights. Refer to **63 10 004 ADJUSTING HEADLIGHTS** .

DRIVE, SEAT ADJUSTMENT

67 31... OVERVIEW OF DRIVES FOR SEAT ADJUSTMENT

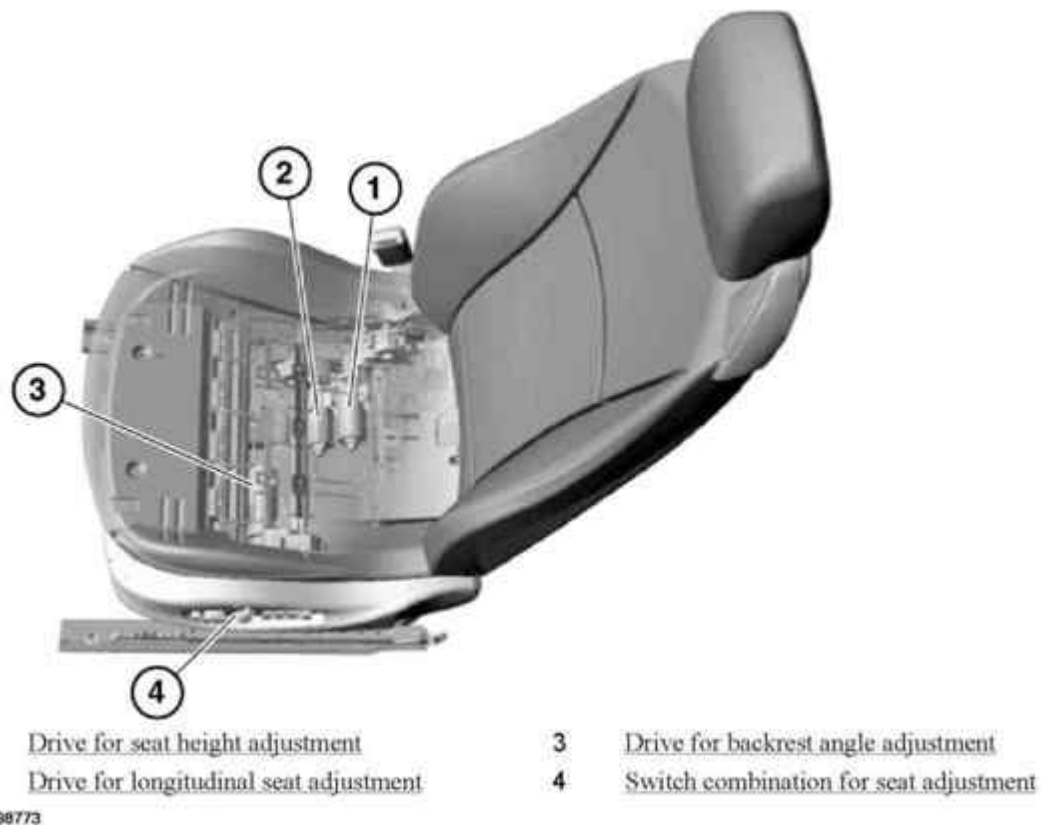
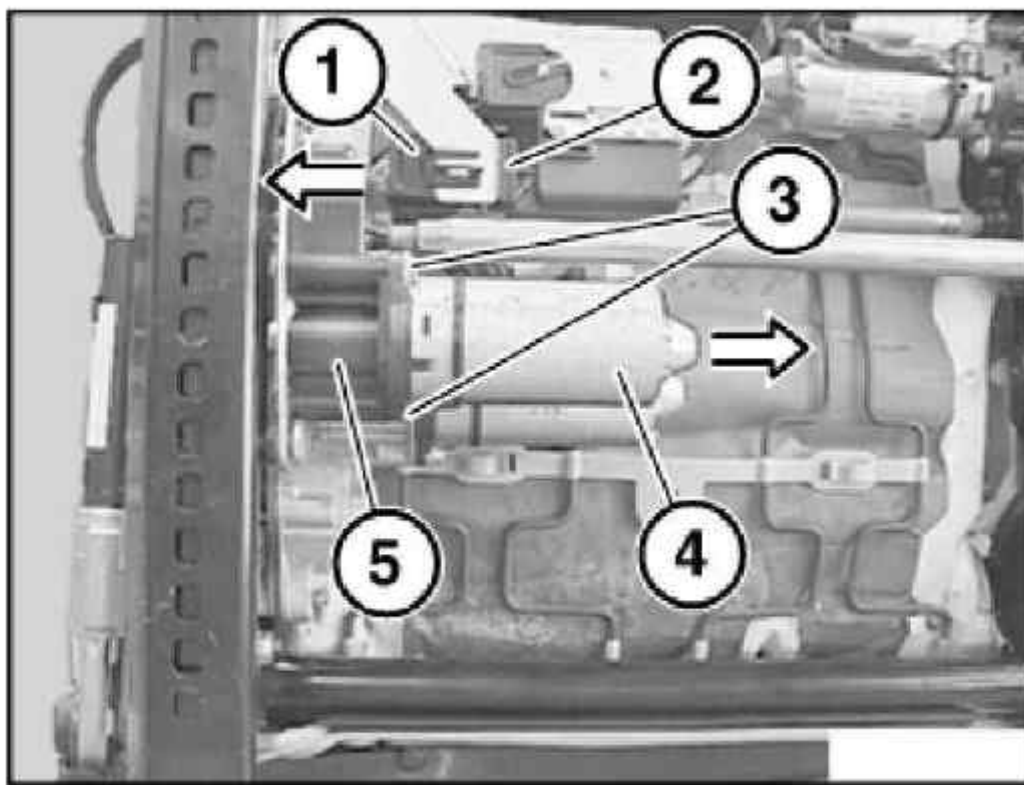


Fig. 12: Overview Of Drives For Seat Adjustment
 Courtesy of BMW OF NORTH AMERICA, INC.

67 31 501 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR LONGITUDINAL SEAT ADJUSTMENT

NOTE: Front seat is removed. Refer to 52 13 000 REMOVING AND INSTALLING LEFT OR RIGHT FRONT SEAT .

Unlock plug housing (1) and unclip in direction of arrow.



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Fig. 13: Removing Drive For Longitudinal Seat Adjustment
Courtesy of BMW OF NORTH AMERICA, INC.

Unfasten plug connection (2) and disconnect.

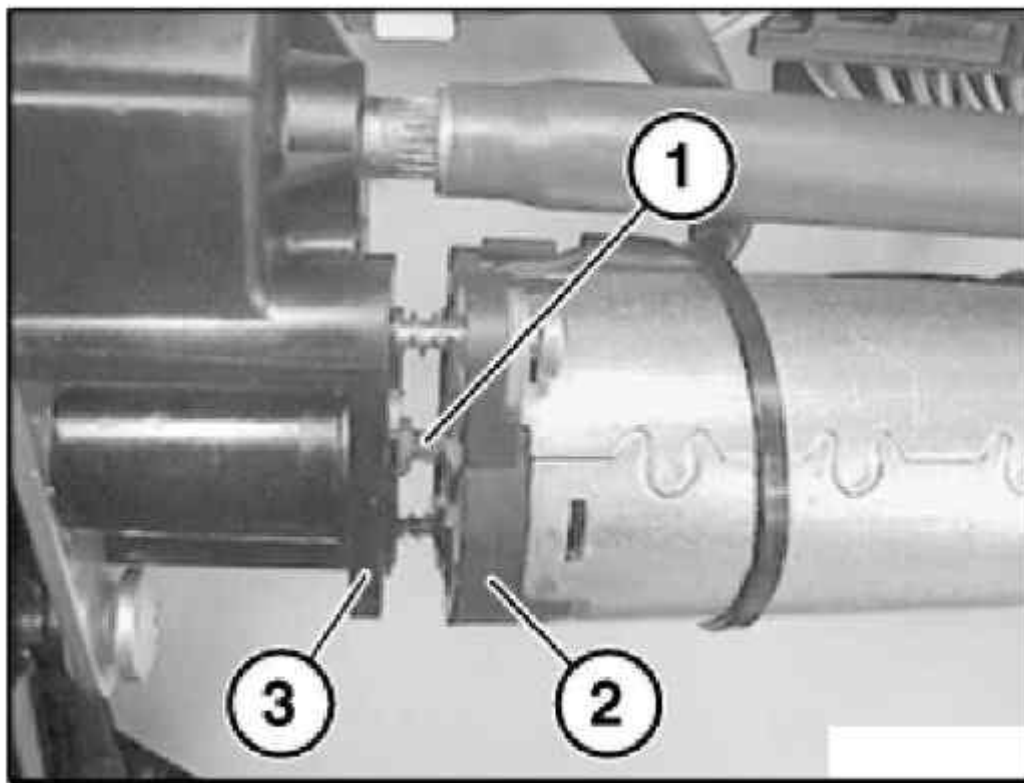
NOTE: **Secure drive for longitudinal seat adjustment (4) against falling out.**

Release screws (3) and remove drive for longitudinal seat adjustment (4) in direction of arrow from flange (5).

If necessary, remove inner drive shaft from drive for longitudinal seat adjustment (4).

Installation:

Make sure drive shaft (1) is correctly seated.



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Fig. 14: Identifying Drive Shaft

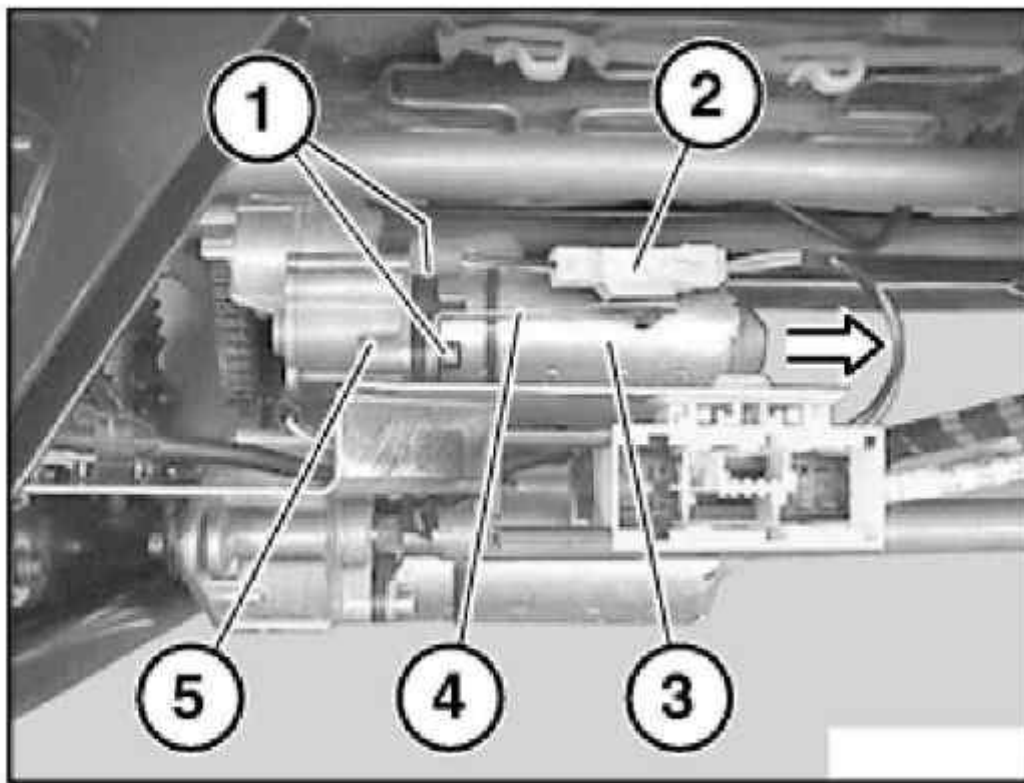
Courtesy of BMW OF NORTH AMERICA, INC.

Make sure drive for longitudinal seat adjustment (2) is correctly seated on flange (3).

67 31 521 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR SEAT HEIGHT ADJUSTMENT

NOTE: Front seat is removed. Refer to 52 13 000 REMOVING AND INSTALLING LEFT OR RIGHT FRONT SEAT .

Unfasten plug connection (2) and disconnect.



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Fig. 15: Removing Drive For Seat Height Adjustment
Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: Secure drive for seat height adjustment (3) against falling out.

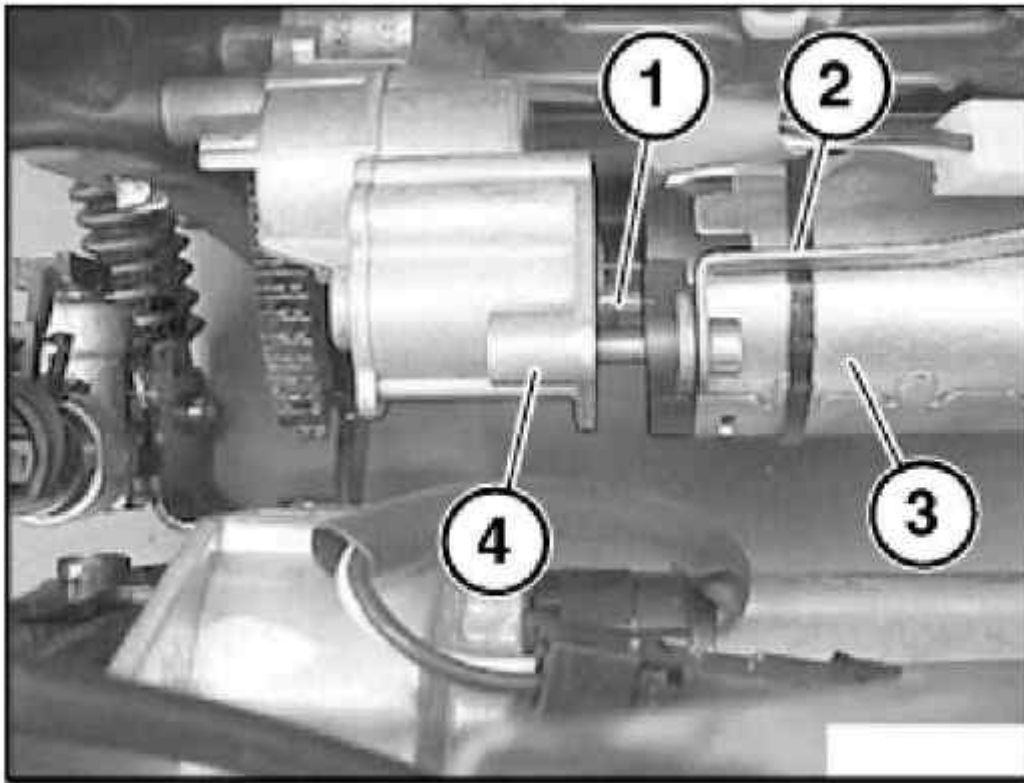
Release screws (1).

Remove drive for seat height adjustment (3) with fixture for plug connection (4) in direction of arrow from flange (5).

If necessary, remove inner drive shaft from drive for seat height adjustment (3).

Installation:

Make sure drive shaft (1) is correctly seated.



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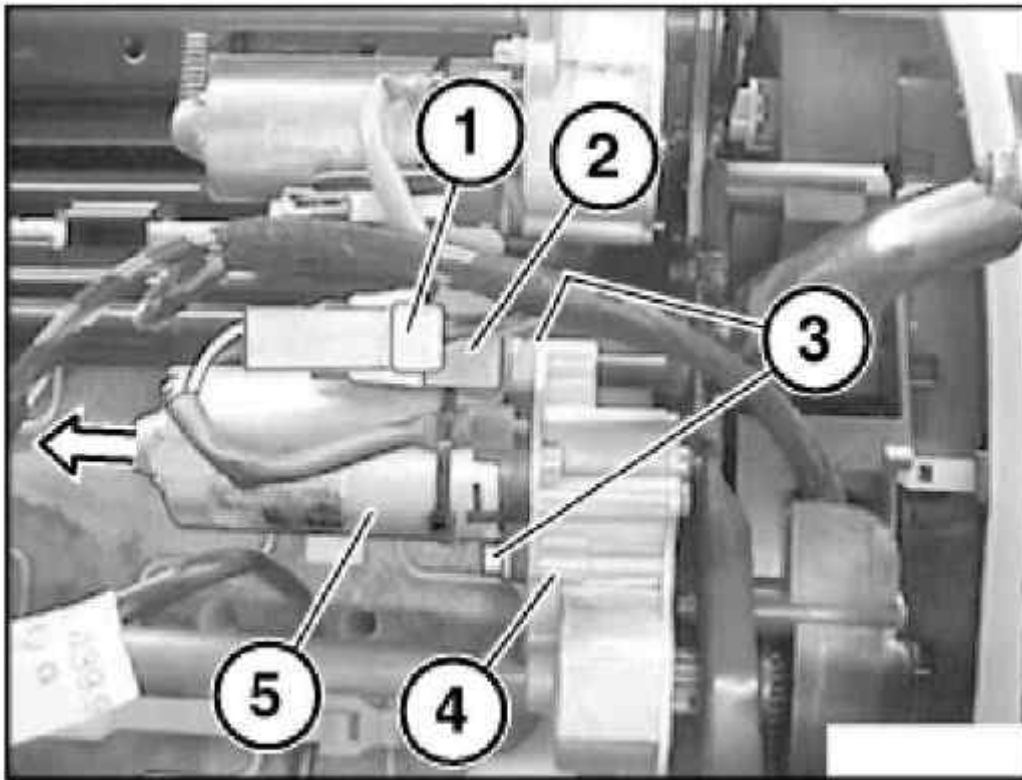
Fig. 16: Installing Drive For Seat Height
Courtesy of BMW OF NORTH AMERICA, INC.

Make sure fixture for plug connection (2) and drive for seat height adjustment (3) are correctly seated on flange (4).

67 31 531 REMOVING AND INSTALLING/REPLACING DRIVE UNIT FOR BACKREST ANGLE ADJUSTMENT

NOTE: Front seat is removed. Refer to 52 13 000 REMOVING AND INSTALLING LEFT OR RIGHT FRONT SEAT.

Unfasten plug connection (1) and disconnect.



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Fig. 17: Removing Drive For Backrest Angle Adjustment
Courtesy of BMW OF NORTH AMERICA, INC.

NOTE: Secure drive for backrest angle adjustment (5) against falling out.

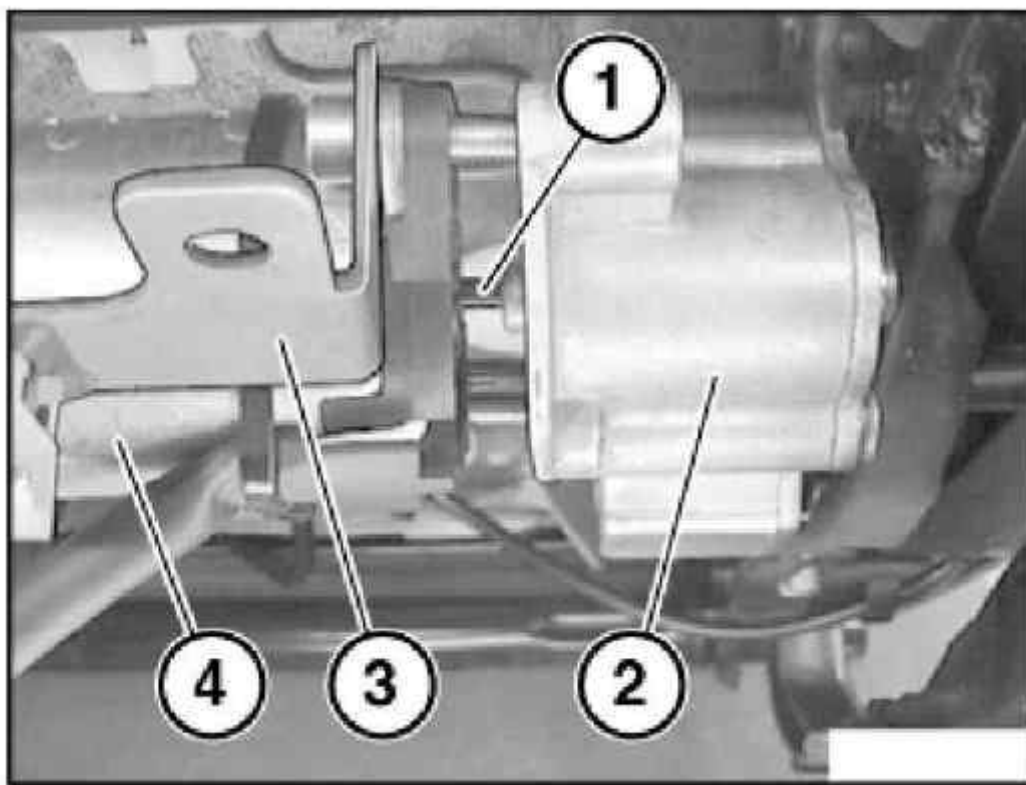
Release screws (3).

Remove drive for backrest angle adjustment (5) with fixture for plug connection (2) in direction of arrow from flange (4).

If necessary, remove inner drive shaft from drive for backrest angle adjustment (5).

Installation:

Make sure drive shaft (1) is correctly seated.



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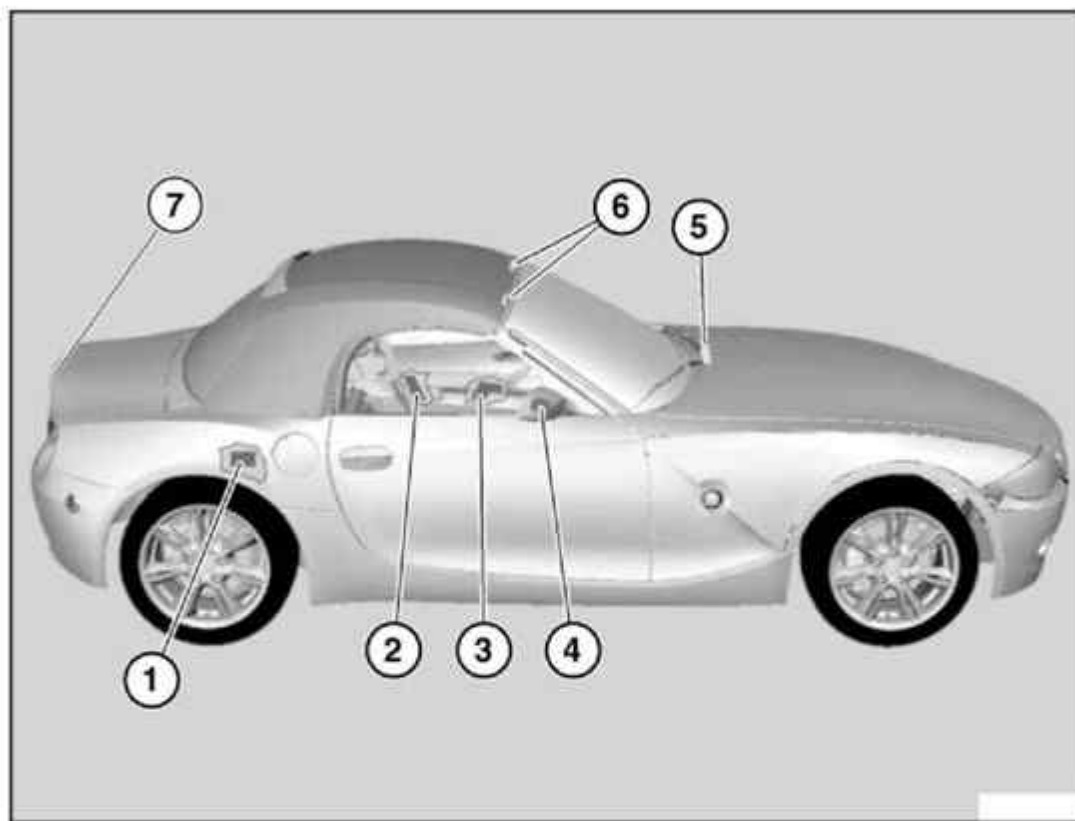
Fig. 18: Installing Drive For Backrest Angle Adjustment

Courtesy of BMW OF NORTH AMERICA, INC.

Make sure fixture for plug connection (3) and drive for backrest angle adjustment (4) are correctly seated on flange (2).

DRIVE, SLIDE-TILT SUNROOF CONV. TOP

67 11... OVERVIEW OF SERVODRIVES



- | | | | |
|---|---|---|---------------------------------|
| 1 | Servodrive for fuel filler flap | 5 | Wiper motor |
| 2 | Servodrive for door locking | 6 | Drive for convertible top catch |
| 3 | Flat motor for window lift | 7 | Servodrive for rear lid lock |
| 4 | Drive for electrically adjustable door mirror | | |

G03298780

Fig. 19: Overview Of Servodrives Component
 Courtesy of BMW OF NORTH AMERICA, INC.

67 61 030 REMOVING AND INSTALLING/REPLACING DRIVE FOR CONVERTIBLE TOP LOCK

WARNING: Observe notes on EH convertible top. Refer to 54 31 ... NOTES ON CONVERTIBLE TOP .

Necessary preliminary tasks:

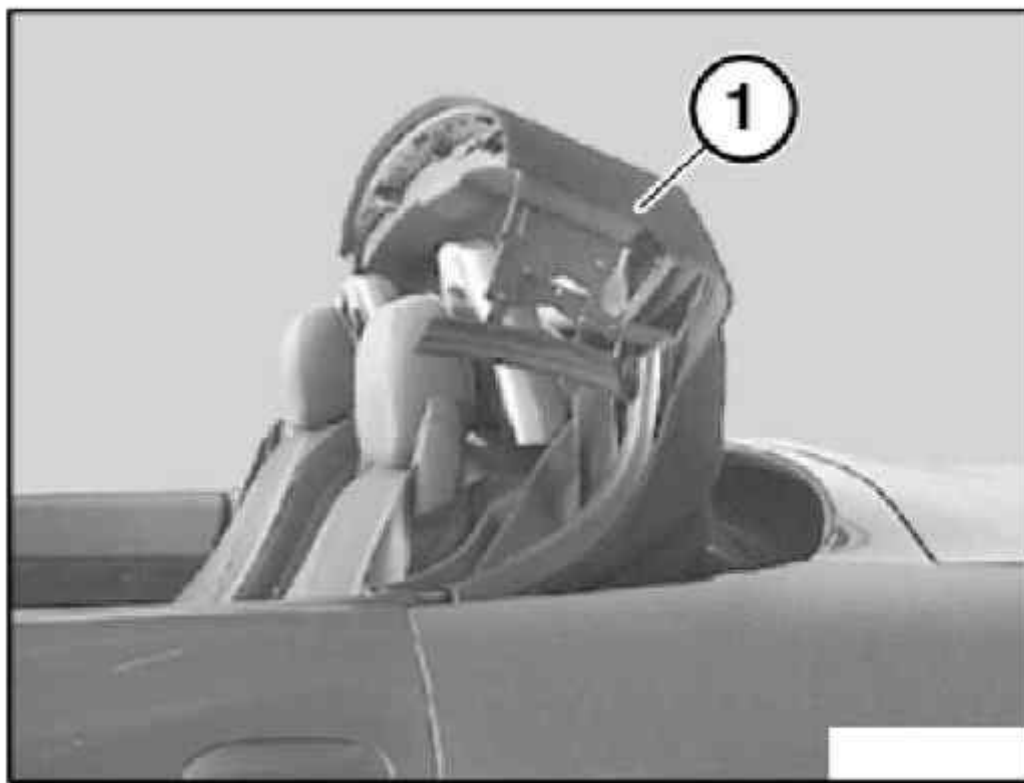
- Remove trim on convertible top catch, refer to **54 34 125 REMOVING AND INSTALLING/REPLACING TTRIM ON CONVERTIBLE TOP LOCK**

WARNING: Danger of locking in position!

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Secure convertible top against lowering.

NOTE: Keep convertible top (1) half open as illustrated.

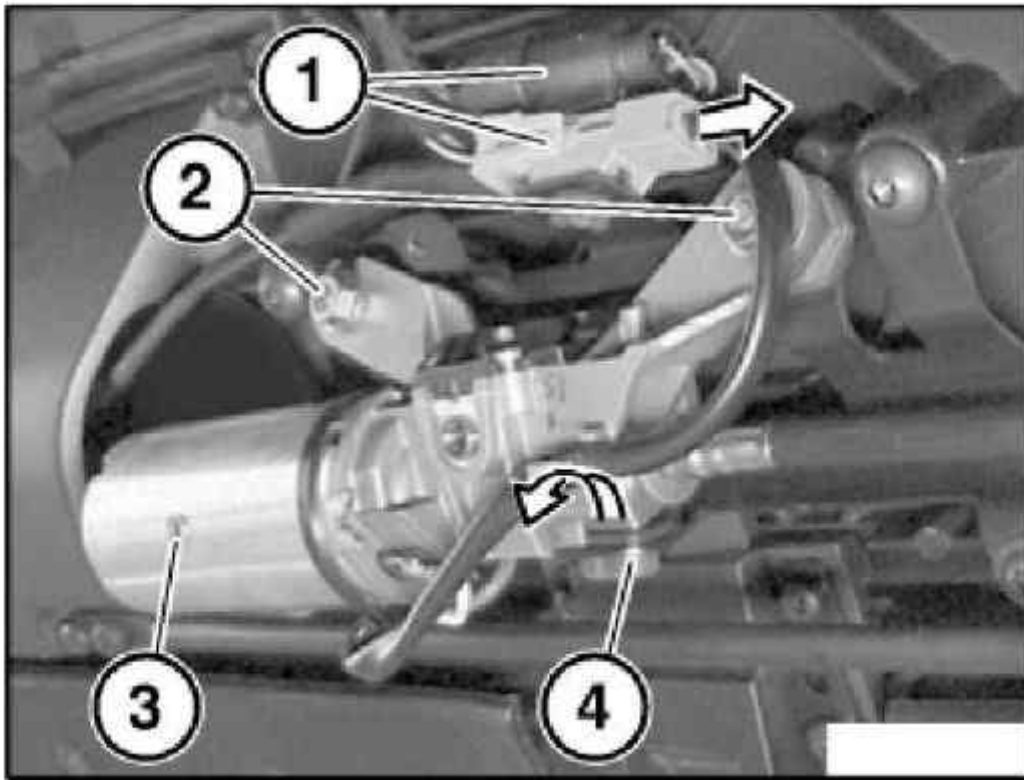


G03298781

Fig. 20: Identifying Convertible Top

Courtesy of BMW OF NORTH AMERICA, INC.

Unlock complete plug connections (1) and unclip in direction of arrow from holder.



G03298782

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

Unlock and disconnect plug connections (1), unlock and disconnect plugs that remain connected to each other.

NOTE: **Secure drive for convertible top catch (3) against falling out.**

Release nuts (2), tightening torque 54 34 2AZ. Refer to **SLIDE/TILT ROOF AND CONVERTIBLE TOP - TIGHTENING TORQUES**.

Installation:

Screws for nuts (1) are microencapsulated.

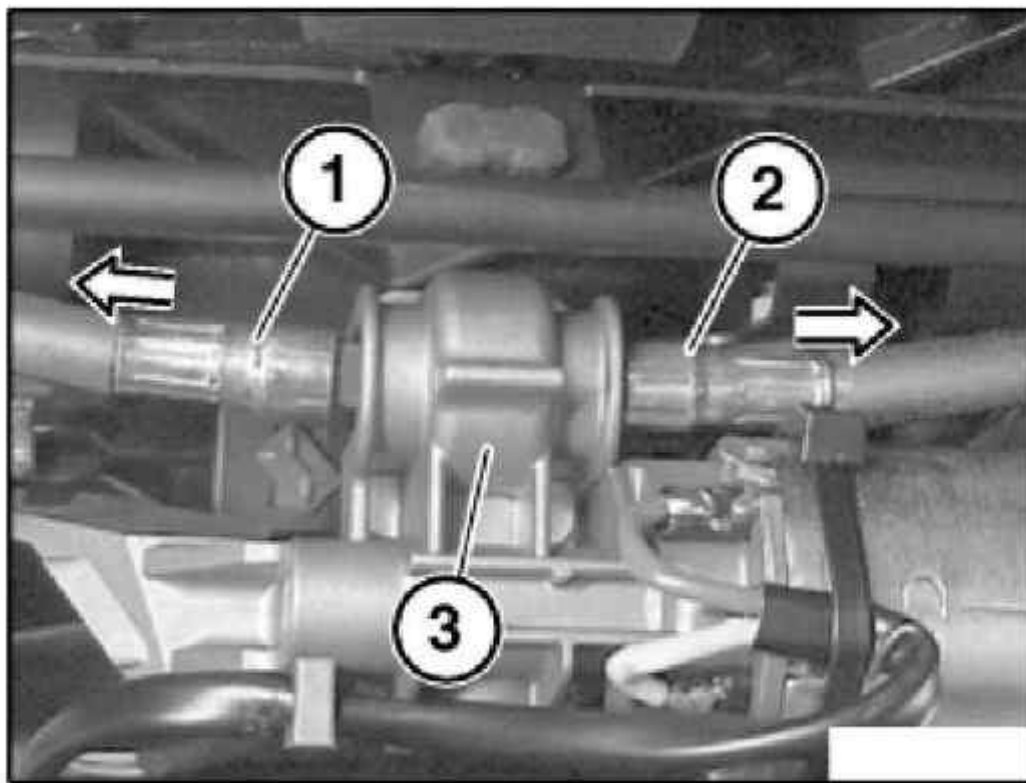
Feed drive for convertible top catch (3) in direction of arrow out of rubber sleeve (4).

Installation:

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If necessary, replace rubber sleeve (4).

Detach drive shafts (1) and (2) in direction of arrow and remove drive for convertible top catch (3).



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Fig. 22: Detaching Drive Shafts

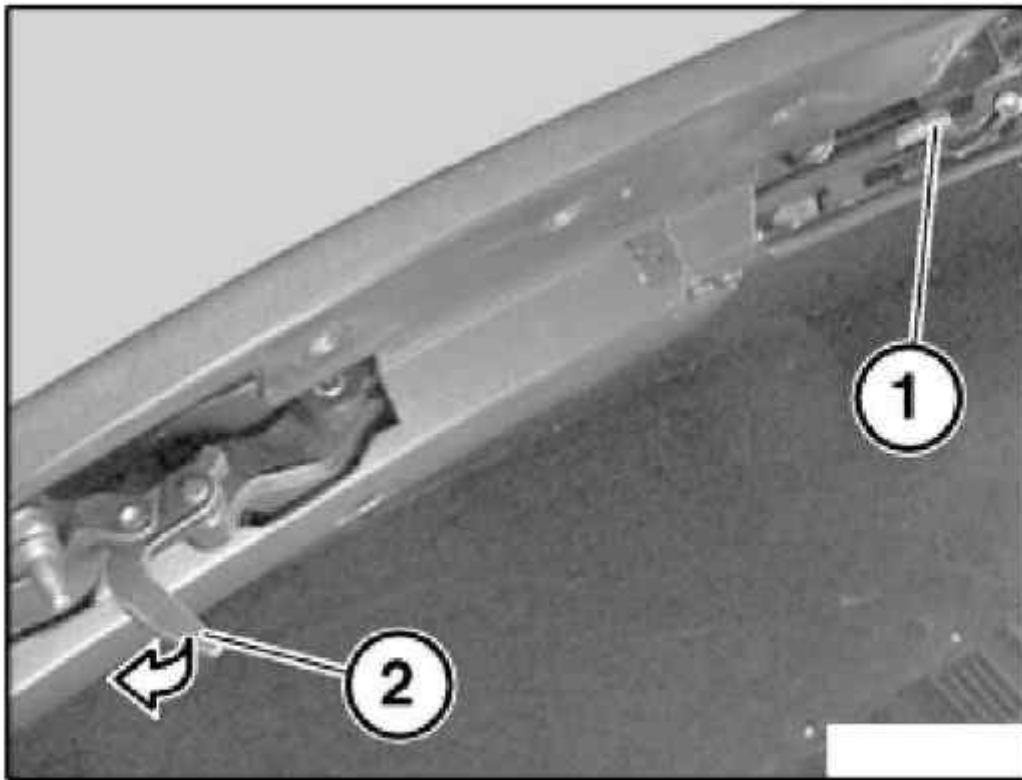
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Do not mix up drive shafts (1) and (2), pay attention to relevant markings.

Installation:

Rotate relevant drive shaft (1) to open catch (2) completely towards outer side of vehicle.

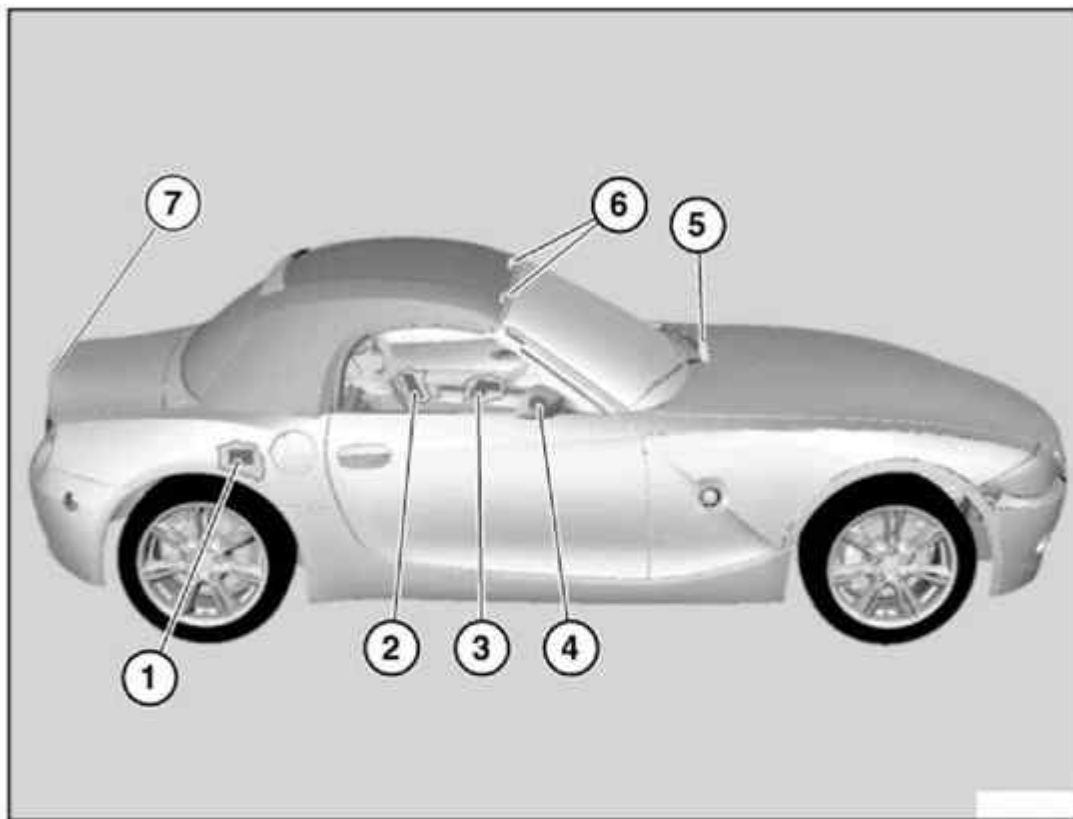


G03298784

Fig. 23: Rotating Relevant Drive Shaft
Courtesy of BMW OF NORTH AMERICA, INC.

DRIVE, WINDROW REGULATOR

67 11... OVERVIEW OF SERVODRIVES



- | | | | |
|---|---|---|---------------------------------|
| 1 | Servodrive for fuel filler flap | 5 | Wiper motor |
| 2 | Servodrive for door locking | 6 | Drive for convertible top catch |
| 3 | Flat motor for window lift | 7 | Servodrive for rear lid lock |
| 4 | Drive for electrically adjustable door mirror | | |

G03298785

Fig. 24: Identifying Overview Of Servodrives
 Courtesy of BMW OF NORTH AMERICA, INC.

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

Necessary preliminary tasks:

- Close window in front door
- Remove sound insulation on front door, refer to **51 48... REMOVING AND INSTALLING/REPLACING SOUND INSULATION IN FRONT DOOR, LEFT OR RIGHT**

Unfasten plug connection (1) and disconnect.

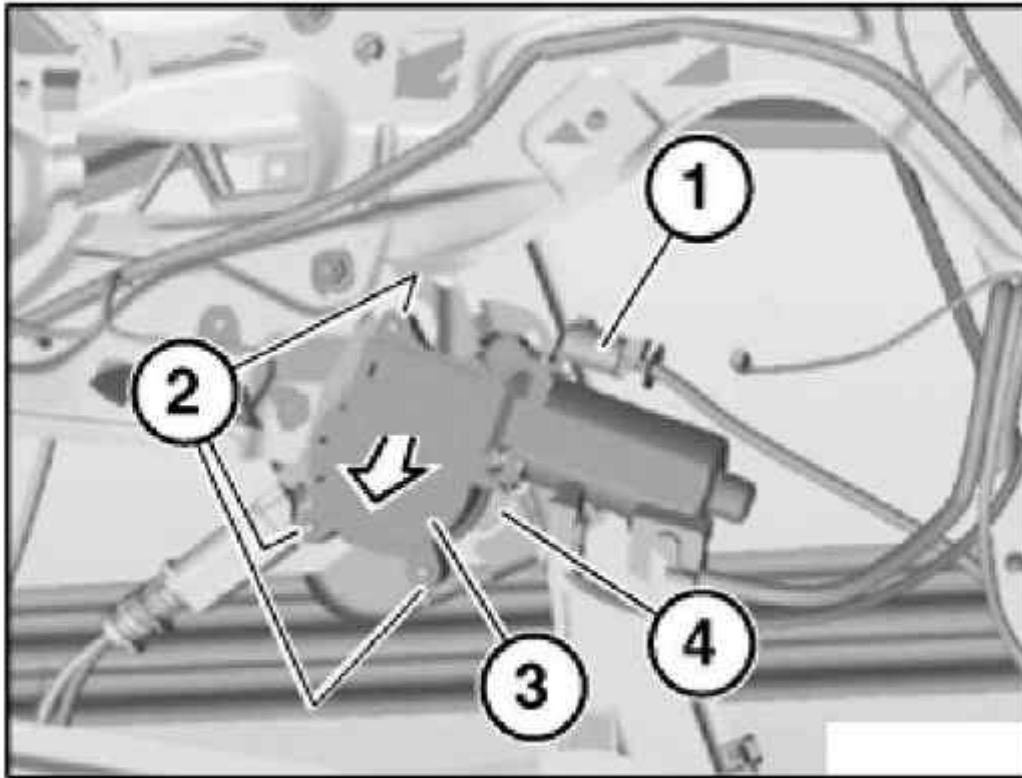
Release screws (2).

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Installation:

Tightening torque, 67 62 1AZ. Refer to **ELECTRICAL DRIVES - TIGHTENING TORQUES** .

Detach flat motor for window lift (3) in direction of arrow from window lift (4) and remove from door.



G03298786

Fig. 25: Detaching Flat Motor For Window Lift
Courtesy of BMW OF NORTH AMERICA, INC.

Replacement:

A normalization must be carried out in order to activate antitrapping protection.

NOTE: Carry out following procedure twice for corresponding window.

Operating sequence for normalization:

- Open window completely.

a

- Operate power window switch in "Close" position (second switch stage).
- Once the upper end position has been reached, hold power window switch down for approx. 1 second more.

Normalization is thus completed.

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