

412 Trunk lid, Tailgate

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GENERAL

This repair group covers trunk lid and tailgate removal and installation. Replacement procedure for gas-charged support struts that hold tailgate in open position is also covered.

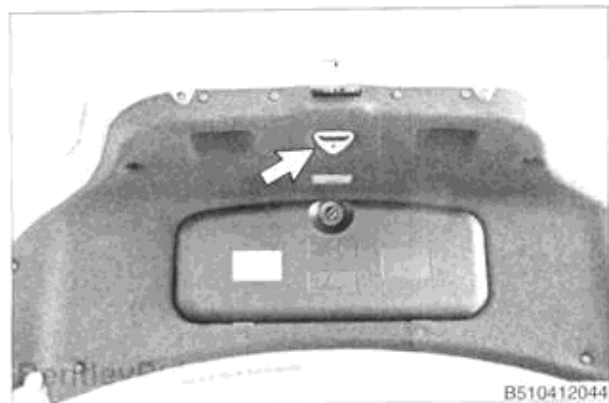
CAUTION—

- The body is painted at the factory after assembly. Realignment of body panels may expose unpainted metal. Paint exposed metal once work is complete.

TRUNK LID (SEDAN)

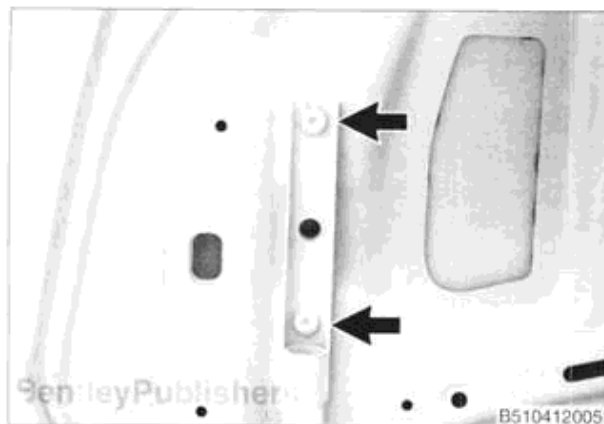
Emergency release

- In case of emergency, pull handle (arrow) to open trunk lid from inside luggage compartment.



412-2 Trunk lid, Tailgate

Trunk lid, removing and installing



Trunk lid, removing and installing

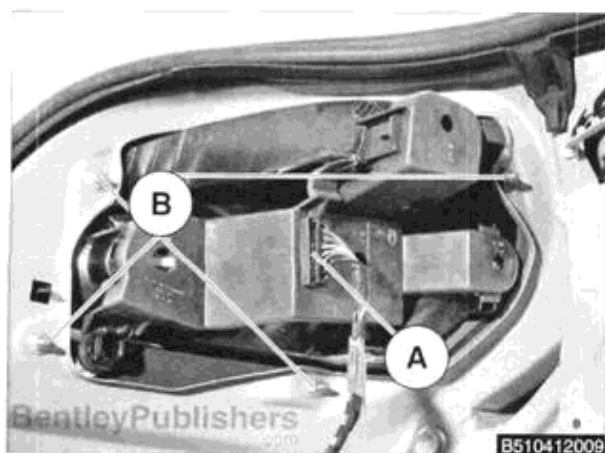
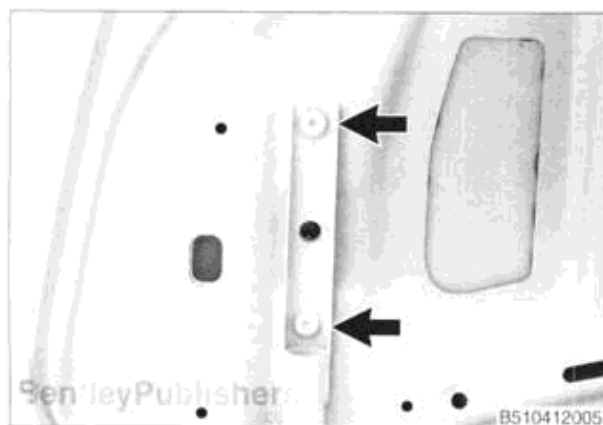
- Raise and support trunk lid.
- Remove trunk lid trim panel. See **513 Interior Trim**.
- Mark hinge and hinge fastener locations for reinstallation.
- Unscrew left side hinge fasteners (**arrows**). Repeat on right and remove trunk lid with help of assistant.
- Installation is reverse of removal. If necessary, align trunk lid to body. See **Trunk lid, aligning** in this repair group.

Tightening torque

Trunk lid to hinge (M8 x 19.5 mm, 8.8 grade)	18.5 Nm (13.5 ft-lb)
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Trunk lid, aligning

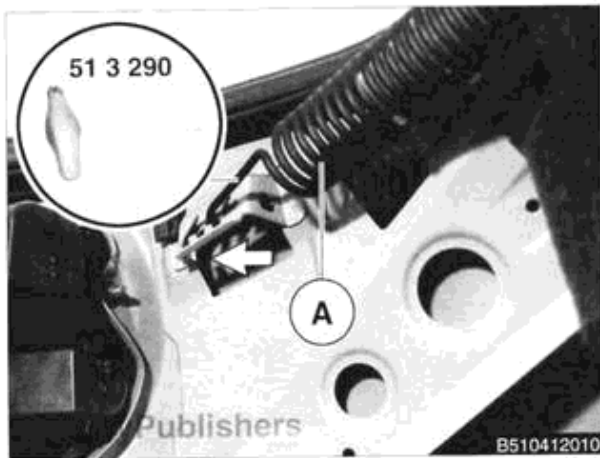
- Raise and support trunk lid.
- Remove trunk lid trim panel. See **513 Interior Trim**.
- Loosen left and right hinge fasteners (**arrows**) so that trunk lid can be moved to set correct gap. Tighten bolts.
- Remove trunk lower trim panel and left side trim panel. See **513 Interior Trim**.



- Disconnect electrical connector (**A**).
- Release fasteners (**B**) and remove taillight.

Trunk lid, Tailgate 412-3

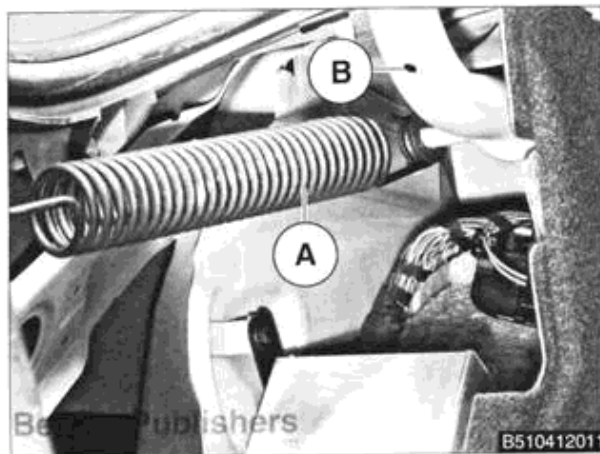
Trunk lid, aligning



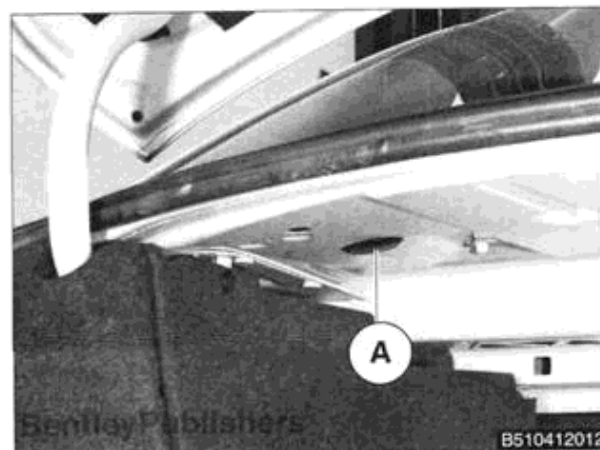
- Using BMW special tool 51 3 290 (inset) or equivalent, pull trunk lid tension spring (A) toward rear to release from side panel.

CAUTION—

- Support trunk lid in open position.



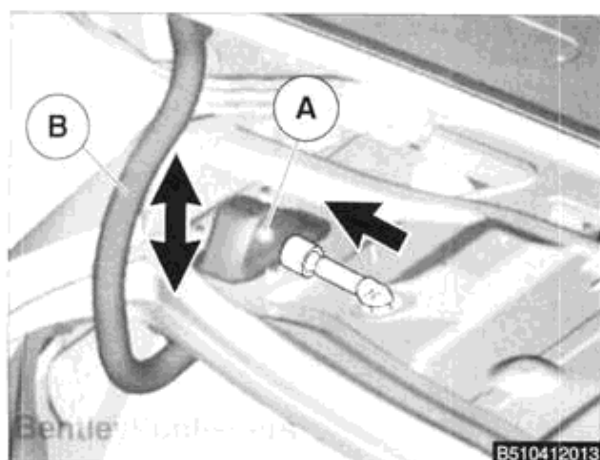
- Unhook tension spring (A) from trunk lid hinge (B).



- Remove cap (A) from opening.

412-4 Trunk lid, Tailgate

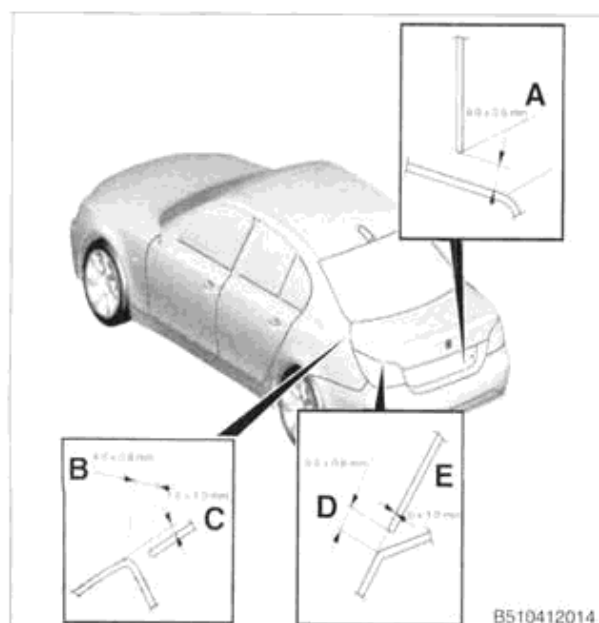
Trunk lid, aligning



- Loosen fastener (A) until trunk lid hinge (B) can be moved.

NOTE—

- Rear parcel shelf is shown removed for purpose of clarity.



- Sedan: Set gap measurements as listed below.

Table a. Trunk lid gap specifications (Sedan)

• Dimension A	6.0 ± 0.5 mm (0.24 ± 0.02 in)
• Dimension B	4.0 ± 0.8 mm (0.16 ± 0.03 in)
• Dimension C	1.0 ± 1.0 mm (0.04 ± 0.04 in)
• Dimension D	5.0 ± 0.8 mm (0.20 ± 0.03 in)
• Dimension E	0.0 ± 1.0 mm (0.00 ± 0.04 in)

CAUTION—

- Before closing trunk lid, be sure that trunk lid and body do not scrape.

- Adjust trunk lock striker. See **515 Central Locking and Anti-Theft**.
- Unscrew trunk lid detent buffers until left and right sides of lid rest on buffers with trunk lid closed.

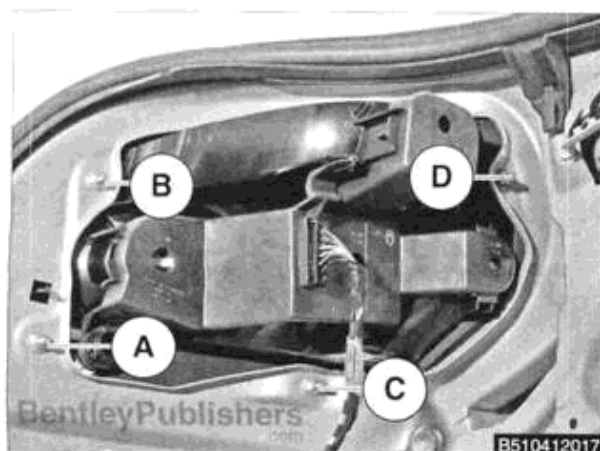
NOTE—

- Be sure top surface of trunk lid is even with top surfaces of fenders.

- Installation is reverse of removal. Tighten taillight fasteners in the following sequence: (A, B, C, D).

Tightening torques

Taillight to body	2.5 Nm (22 in-lb)
Trunk hinge to body (M8)	20 Nm (15 ft-lb)
Trunk lid to hinge (M8 x 19.5 mm)	18.5 Nm (13.5 ft-lb)
Trunk striker to body	10 Nm (7 ft-lb)





TAILGATE (SPORTS WAGON)

Tailgate service position

- Raise and support tailgate.
 - Remove tailgate gas strut or hydraulic cylinder. See **Tailgate gas strut, removing and installing** or **Tailgate hydraulic cylinder, removing and installing** in this repair group.
- Replace with BMW special tool 51 0 050 or equivalent.

Tailgate, removing and installing

- Open rear window.
 - Unclip and remove tailgate upper rear window frame trim panel.
 - Unplug electrical connectors.
 - Unhook tailgate gas strut from tailgate. See **Tailgate gas strut, removing and installing** in this repair group.
- Remove fasteners (A) and remove tailgate with help from assistant.

CAUTION—

- The tailgate is very heavy. Use assistance to support both sides prior to removal of hinge bolts.

- Installation is reverse of removal. To align, see **Tailgate, aligning** in this repair group.

Tightening torque

Tailgate to tailgate hinge (M10)	38 Nm (28 ft-lb)
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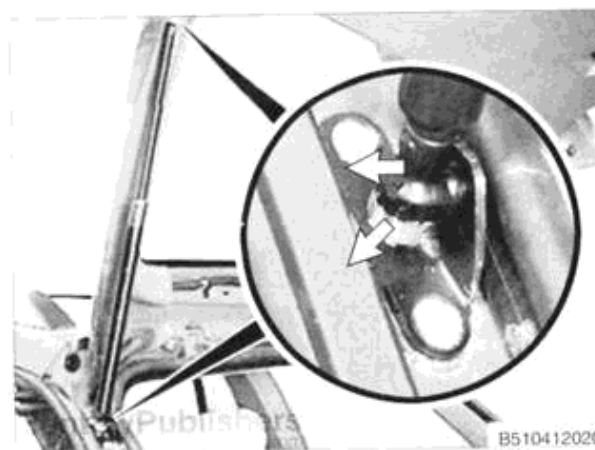
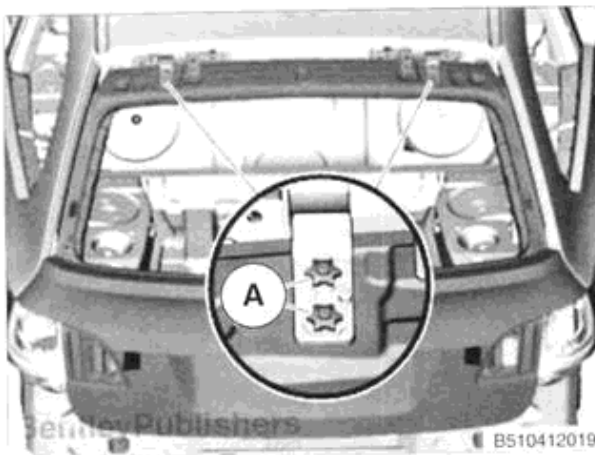
Tailgate gas strut, removing and installing

- Open and support tailgate. Remove retaining clip (arrows) on upper end of gas strut.

CAUTION—

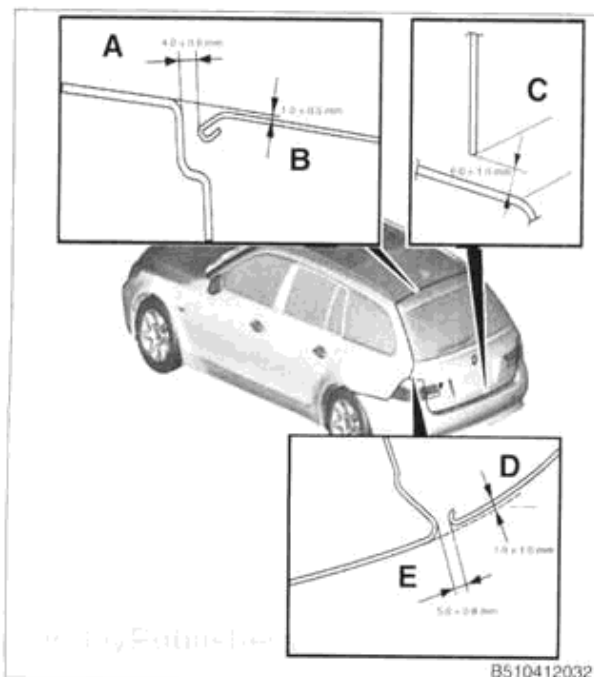
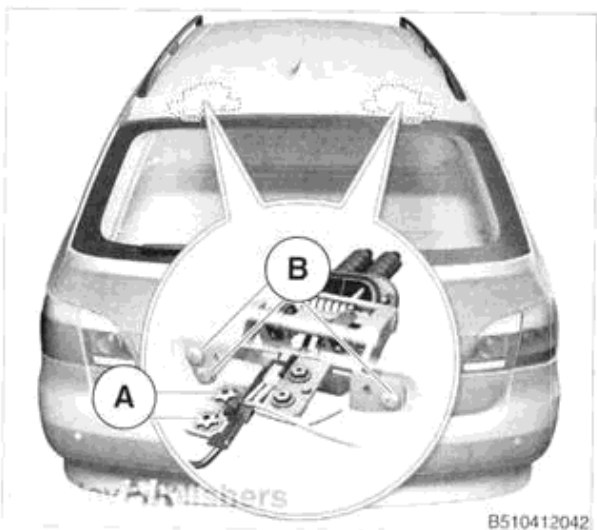
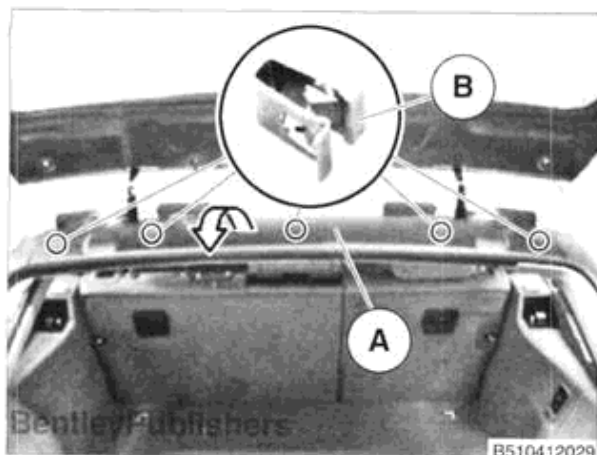
- The tailgate is very heavy and will close without both pressurized struts installed. Properly support tailgate prior to removal of a strut.

- Pull gas strut off tailgate.
- Remove retaining clip from lower end of gas strut.
- Remove gas strut.
- Installation is reverse of removal. Replace retaining clips if damaged during removal.



412-6 Trunk lid, Tailgate

Tailgate, aligning



Tailgate, aligning

- Using plastic prying tool, remove upper rear window frame trim (A) by releasing from trim clips (B).

- Loosen tailgate-to-hinge fasteners (A) so tailgate can move relative to hinge.

- Loosen hinge-to-body fasteners (B) so hinge can move relative to side panel.

- Set gap measurements as listed below for Sports Wagon.

Table b. Tailgate gap specifications (Sports Wagon)

• Dimension A	4.0 ± 0.8 mm (0.16 ± 0.03 in)
• Dimension B	1.0 ± 0.5 mm (0.04 ± 0.02 in)
• Dimension C	6.0 ± 1.0 mm (0.24 ± 0.04 in)
• Dimension D	1.0 ± 1.0 mm (0.04 ± 0.04 in)
• Dimension E	5.0 ± 0.8 mm (0.20 ± 0.03 in)

Tightening torques

Tailgate hinge to body (M8)	20 Nm (15 ft-lb)
Tailgate to tailgate hinge (M10 nut)	38 Nm (28 ft-lb)

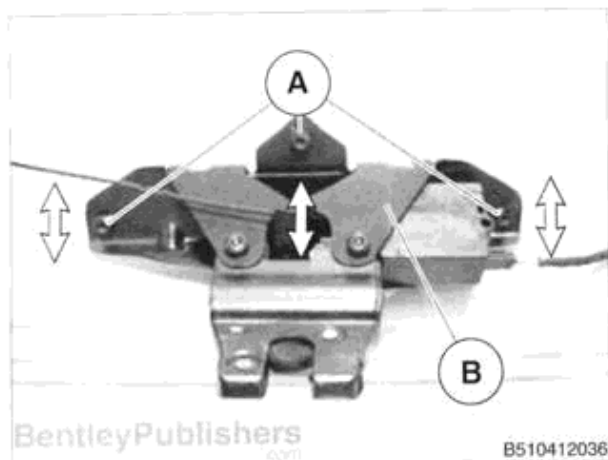
CAUTION—

- Before closing truck lid, be sure that trunk lid and body do not scrape.

- Adjust tailgate striker assembly. See 515 Central Locking and Anti-Theft.

Trunk lid, Tailgate 412-7

Rear spoiler, removing and installing



◀ If necessary, loosen fasteners (A) so that upper section of tailgate lock (B) can be adjusted.

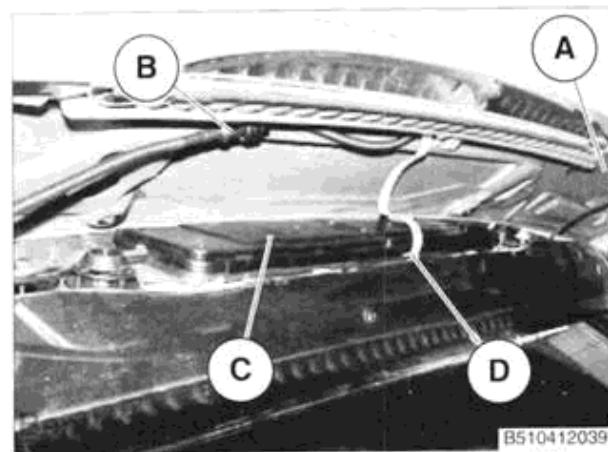
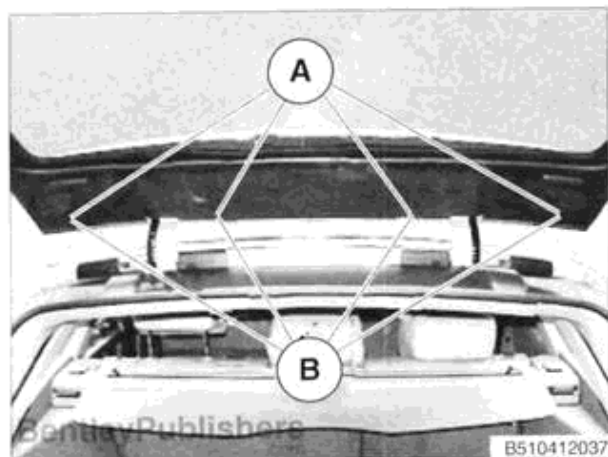
- Check lock adjustment. Repeat if necessary.

REAR SPOILER (SPORTS WAGON)

Rear spoiler, removing and installing

Removing

- Open and raise tailgate.
- ◀ Pry out plugs (A) and remove screws underneath (B).



- ◀ Raise rear spoiler slightly.
- Disconnect electrical connector (A) and hose (B).
- Pull up and remove antenna amplifier cover (C).
- Disconnect electrical connector (D).
- Remove rear spoiler from tailgate and set down on clean surface.
- Installation is reverse of removal.

Tightening torque

Rear spoiler to tailgate	8 Nm (71 in-lb)
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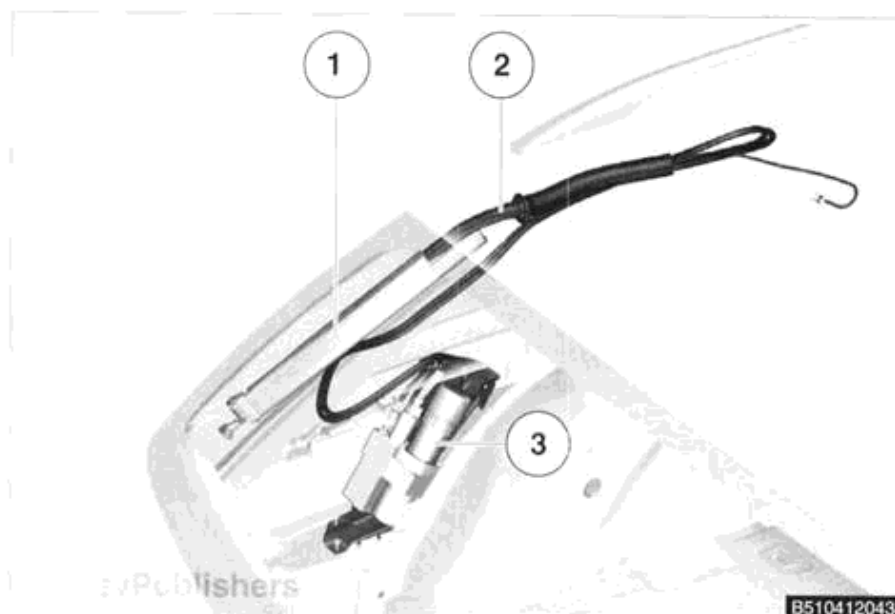
412-8 Trunk lid, Tailgate

Tailgate hydraulic cylinder, removing and installing

AUTOMATIC TAILGATE

Tailgate hydraulic cylinder, removing and installing

Removal of tailgate hydraulic cylinder and hydraulic lines requires disconnecting hydraulic lines at hydraulic unit, and removing headliner and left rear speaker. After replacement of hydraulic cylinder, check fluid level in hydraulic unit (see **Tailgate hydraulic fluid, checking and correcting level** in this repair group) and set readiness (see **Tailgate hydraulic unit, setting readiness** in this repair group).



1. Hydraulic cylinder
2. Hydraulic lines
3. Hydraulic unit

Tailgate hydraulic unit, removing and installing

- Raise tailgate and put into service position. See **Tailgate service position** in this repair group.
- Remove rear left side trim panel and sound insulation.

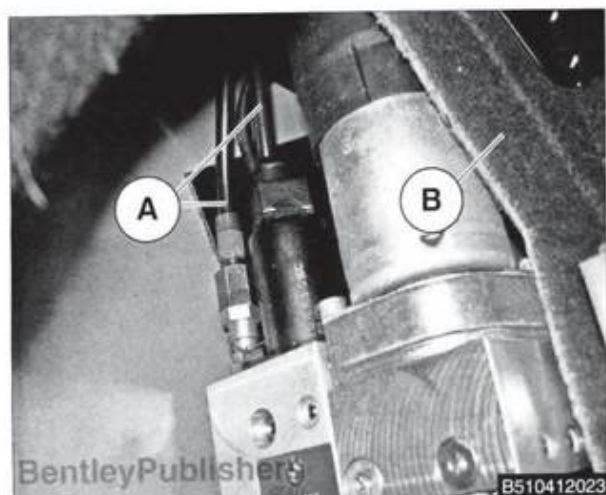
NOTE—

- Have a cloth ready to catch any spilled hydraulic fluid.

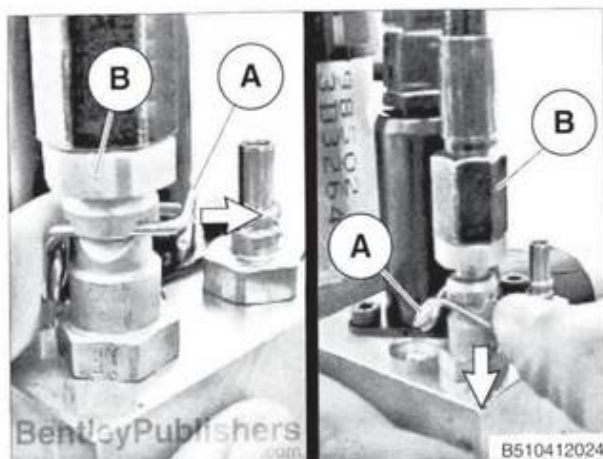
- Release fasteners (**arrows**) securing hydraulic unit bracket to side panel.



Tailgate hydraulic fluid, checking and correcting level



- ✦ Unclip hydraulic lines (A) from bracket (B) and remove hydraulic unit.



- ✦ Disconnect hose coupling (B) from hydraulic unit by sliding retainer wire (A) to right, pressing downward, and pulling hose coupling up off hydraulic unit. Be sure to catch any escaping hydraulic fluid. Dispose of safely.

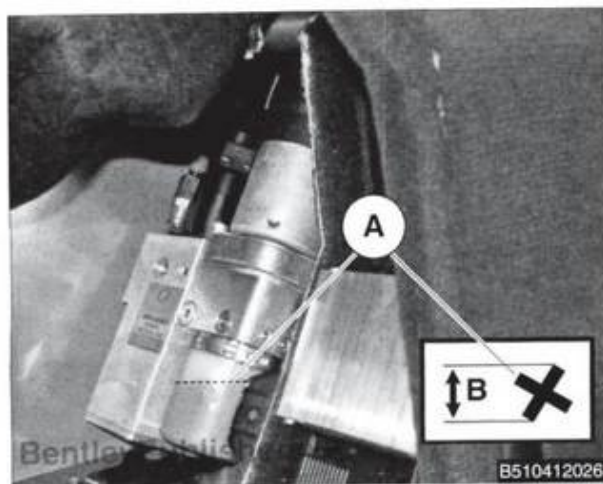
- Installation is reverse of removal. Check and correct fluid level if necessary. See **Tailgate hydraulic fluid, checking and correcting level** in this repair group.
- Set readiness. See **Tailgate hydraulic unit, setting readiness** in this repair group.

Tailgate hydraulic fluid, checking and correcting level

- Open and close tailgate via automatic function to bleed hydraulic system.
- Open tailgate again via automatic function.
- Remove tailgate hydraulic unit. See **Tailgate hydraulic unit, removing and installing** in this repair group.

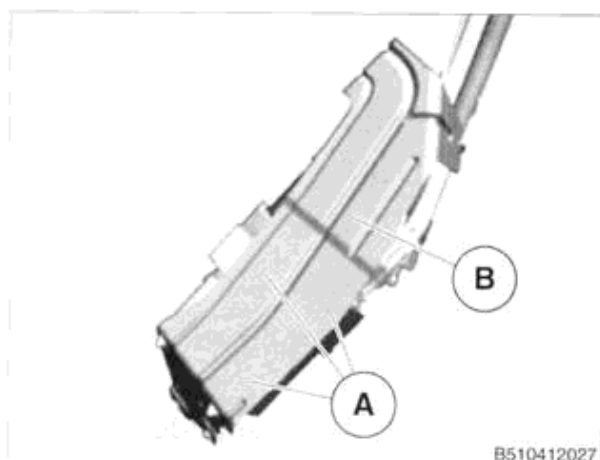
Checking fluid level

- ✦ Set hydraulic unit down on a horizontal surface at angle of installation in vehicle. Fluid level (A) must match marking B.



412-10 Trunk lid, Tailgate

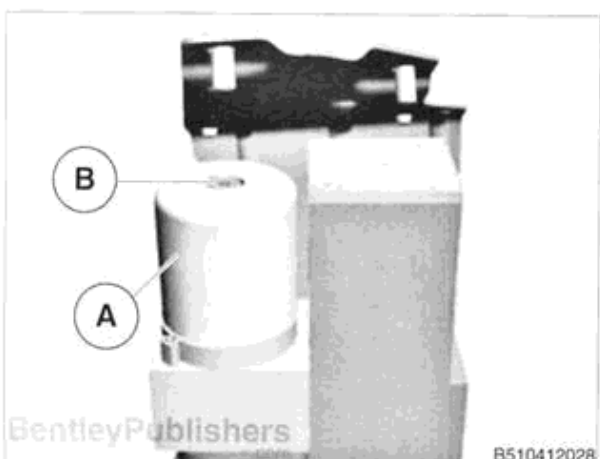
Tailgate hydraulic unit, setting readiness



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Correcting fluid level

- Remove fasteners (A) and separate hydraulic unit from bracket (B).



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- Set tailgate hydraulic unit down on level surface with fluid tank (A) facing up.
- Open oil filler plug (B) and add hydraulic fluid as necessary.
- Installation is reverse of removal.

Tightening torques

Oil filler plug to fluid tank	1 Nm (9 in-lb)
Tailgate hydraulic unit to bracket	2 Nm (18 in-lb)

Tailgate hydraulic unit, setting readiness

When a new hydraulic cylinder is installed, make sure system detects "rear lid open" deactivation point.

- Disconnect and reconnect battery.
- Press button on tailgate. Tailgate hydraulic unit runs for 13 seconds in "open" direction. Readiness is set.

