

General

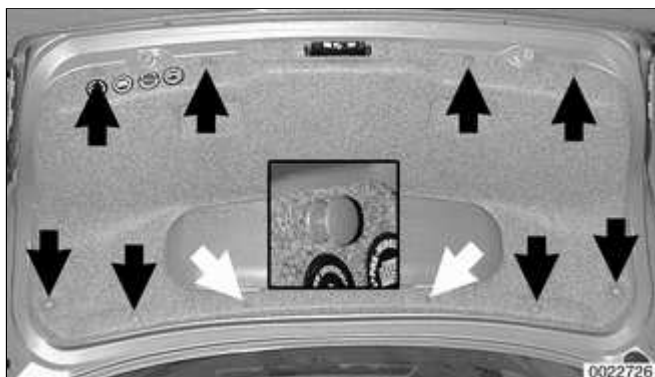
This repair group covers trunk lid and tailgate removal and installation. Also included here are replacement procedures for the gas-charged support struts that hold the trunk lid or tailgate in the open position.

Note:

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

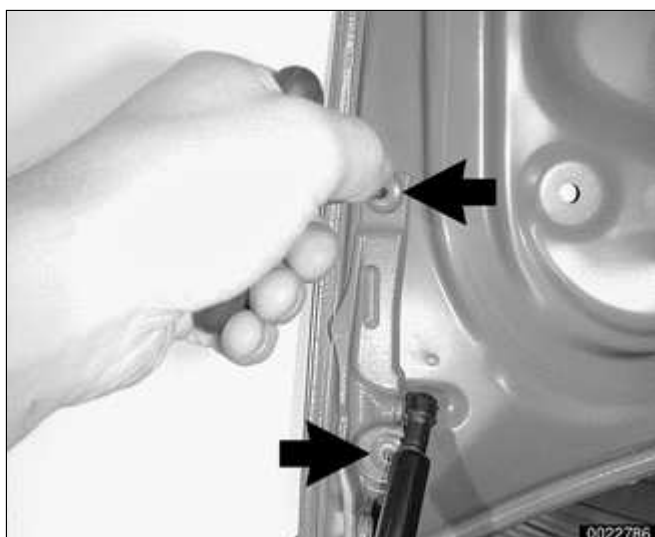
Trunk Lid

Trunk lid, removing and installing



Raise trunk lid.

- ◆ Open tool kit and remove screws attaching tool kit to trunk lid (**white arrows**).
- ◆ Unclip retaining strap at trunk lid and remove tool kit.
- ◆ Remove insulating liner expansion rivets (**black arrows**), by prying upper portion out (**inset**).
- ◆ Remove trunk liner.
- Disconnect electrical harness connectors from components and remove wiring harness from trunk lid.



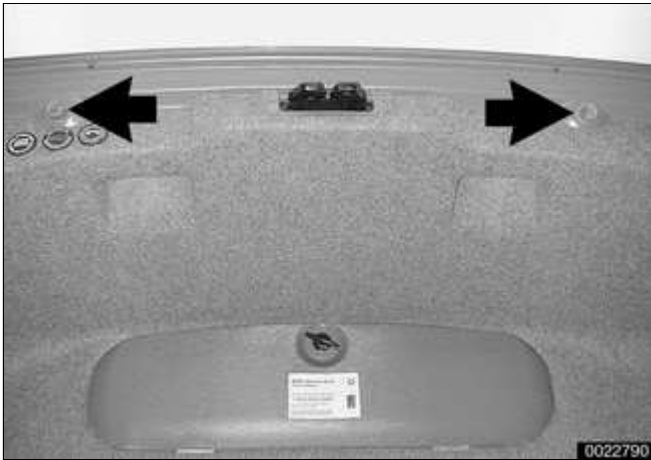
While supporting trunk lid, loosen top hinge screws (**arrows**) and remove lower screws from left and right sides.

Note:

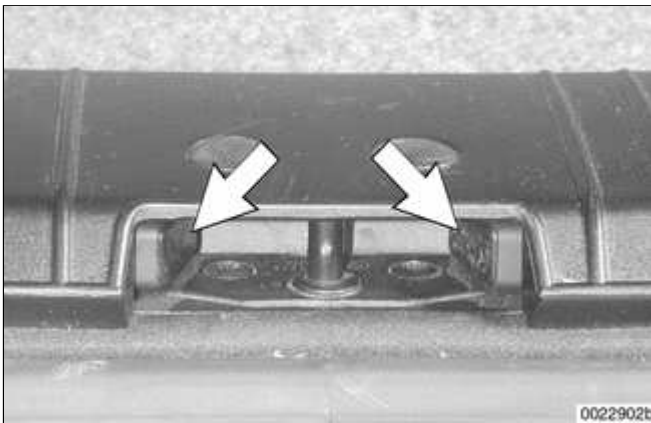
Before loosening hinge bolts, mark hinge and hinge bolt locations for reinstallation.

- Installation is reverse of removal. If necessary, align trunk lid to body as described next.

Trunk lid, aligning



- ✦ Raise trunk lid. Working at lower corners of trunk lid, unscrew out rubber buffers (**arrows**) on left and right sides.



- ✦ Inspect pads (**arrows**) on each side of latch assembly for damage or wear and replace if necessary.



- ✦ Remove protective caps at trunk lower trim panel and loosen screws of trunk lock until it can be moved.

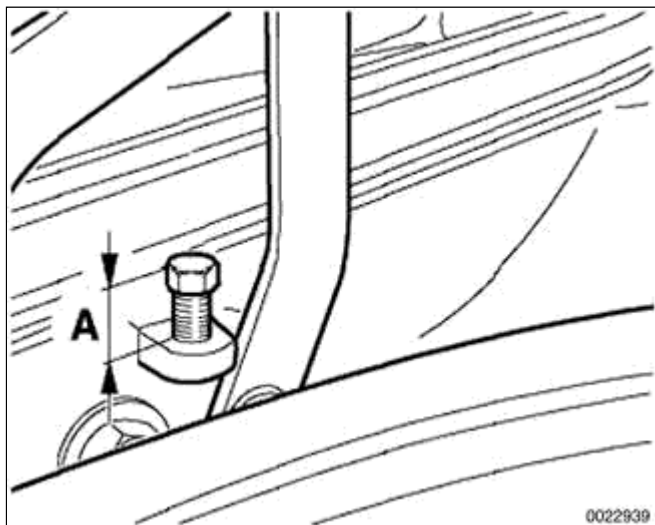


- ✦ Check stop screw at trunk lid hinge:
 - ◆ If stop screw has a round plastic head, cut or grind off bolt head. If head is removed, replace round headed stop screw with flat head

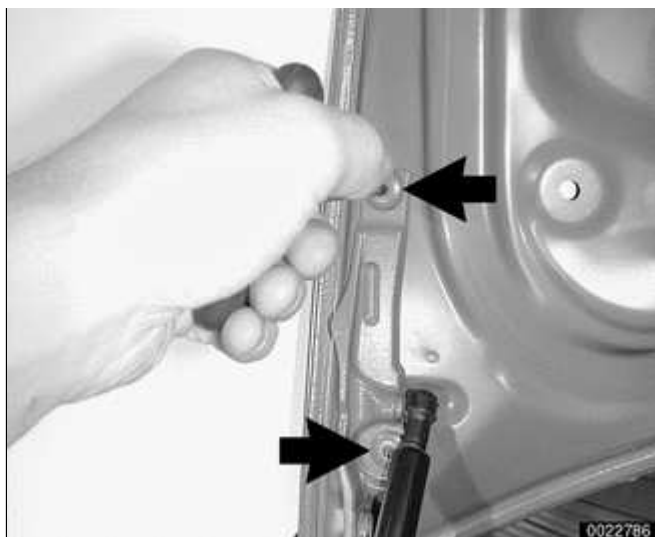


screw and protective cap.

- ◆ If stop screw has removable protective cap (**arrow**) remove protective cap from stop screw.



- ✦ Adjust stop screw so that head is set to (A) 10 mm (0.40 in.) above bore height.



- ✦ To adjust trunk lid gap at rear fender:
 - ◆ Loosen bolts retaining trunk hinge to trunk lid (**arrows**) until trunk lid is just able to move.
 - ◆ If range of adjustment is insufficient, loosen lower bolts on trunk hinge
 - ◆ Once trunk lid gap is within specification, tighten trunk hinge to lid bolts.

Trunk lid gap specification

Trunk lid gap at rear fender	4.25 ± 0.75 mm (0.17 ± 0.03 in.)
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CAUTION!

Before closing truck lid, be sure that trunk lid and body are not damaged.



To adjust trunk lid at lock:

- ◆ Remove protective caps from trim panel and loosen screws retaining latch assembly until it can just be moved.
- ◆ Inspect pads (**arrows**) on each side of latch assembly for damage or wear and replace if necessary.
- ◆ Insert key in trunk lock, and hold key in unlock position to prevent lock from closing. Close trunk lid to center latch assembly.
- ◆ Open trunk lid and tighten screws retaining latch. Replace protective caps on trim panel.
- ◆ Check adjustment of trunk lid and lock, repeat adjustment process if necessary.
- Screw in trunk lid detent buffers until left and right sides of lid rest on buffers with trunk lid closed.

CAUTION!

Top surface of trunk lid must not protrude above top lip of fenders or height adjustment can be distorted.

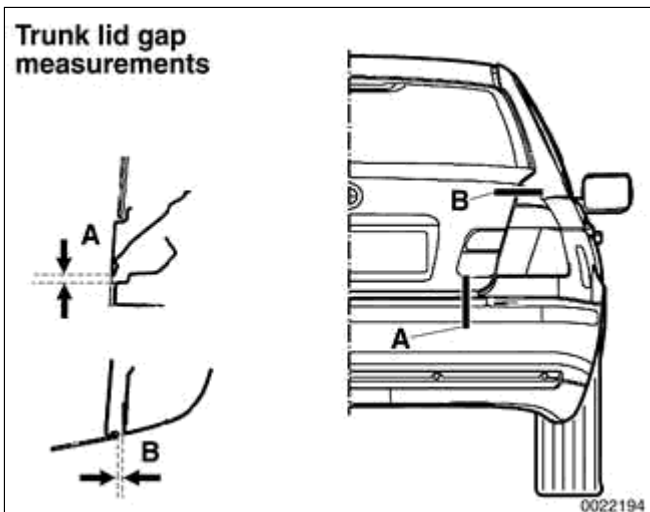
- Gently twist detent buffer ejector clockwise with screwdriver to unlock buffer and release ejector.
- To adjust stop screw at trunk lid hinge:
 - ◆ Working at trunk lid hinge, set stop screw to a height of 10 mm (0.40 in.). Place a strip of paper on

top of stop screw, and gently close trunk lid.

- ◆ Adjust height of stop screw until paper strip can be removed with slight resistance. Once stop screw height has been adjusted, lower adjusted height of stop screw 2.5 mm (0.1 in.) to accommodate for stop screw protective cap.
- ◆ Fit protective cap on stop screw. Check that trunk lid is in correct position, adjust if necessary.

CAUTION!

Excessive force should not be needed to close trunk lid.



- ⚡ Set gap measurements as listed below.

Trunk position gap adjustment	
Trunk lid / trunk panel (A)	$5 \pm 1.5 \text{ mm}$ ($0.2 \pm 0.06 \text{ in.}$)
Trunk lid / rear fender (B)	$4.25 \pm 0.75 \text{ mm}$ ($0.17 \pm 0.03 \text{ in.}$)

Trunk lid support strut, removing and installing

WARNING!

Make sure to support trunk lid before removing strut.



- ⚡ Open trunk lid and support in open position. Remove spring clips (**arrows**) from support strut ends.



- Remove strut from trunk lid.
- Installation is reverse of removal. Replace retaining clips damaged during removal.

Tailgate (Sport wagon models)

Tailgate, removing and installing

- Raise complete tailgate. Remove interior trim and disconnect wiring harnesses.
- Disconnect left and right support struts as detailed below.
- While supporting tailgate, remove hinge bolts for tailgate on left and right sides.

CAUTION!

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

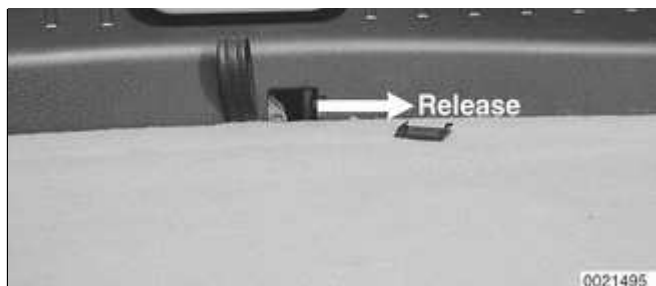
- Installation is the reverse of removal. Follow alignment procedures as shown below.

Tightening torques	
Tailgate to tailgate hinge (M8)	20 Nm (15 ft-lb)

Tailgate, emergency release



The tailgate of the E46 Sport Wagon has no key cylinder. An emergency release mechanism is incorporated into the tailgate latch. This allows mechanical opening of the latch in



case of an electrical failure. The release is located in the rear cargo area, along the lower edge of the rear apron behind a small access cover.

- Working inside car, at base of tailgate:

- ◆ Remove release cover.
- ◆ Push lever toward driver's side (**arrow**).

Tailgate support strut, removing and installing



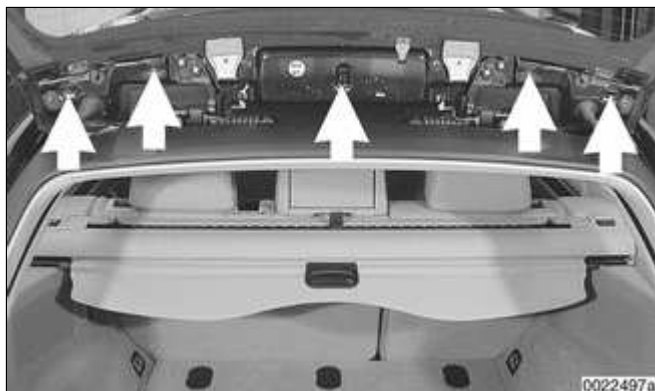
- ✦ Open tailgate fully. Support tailgate and remove retaining clips (**arrow**) on upper end of pressurized lifting struts.

CAUTION!

The tailgate is very heavy, and will close without both pressurized lifting struts installed. Properly support tailgate prior to removal of the lifting struts.

- Pull struts off tailgate.
- Remove spring retainer from lower end of support strut and remove strut.
- Installation is reverse of removal. Replace retaining clips if damaged during removal.

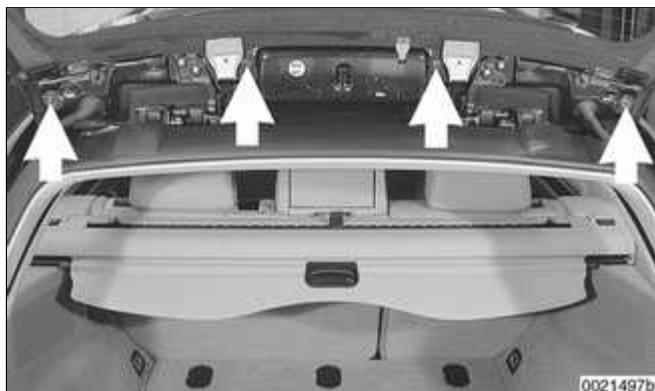
Rear spoiler, removing and installing



- ✦ Raise rear window. Remove inner trim from glass panel by releasing clips on trim from retainers (**arrows**). For clarity, trim is removed in photo.

Note:

Use two plastic prying wedge tools to release each pin retaining trim.

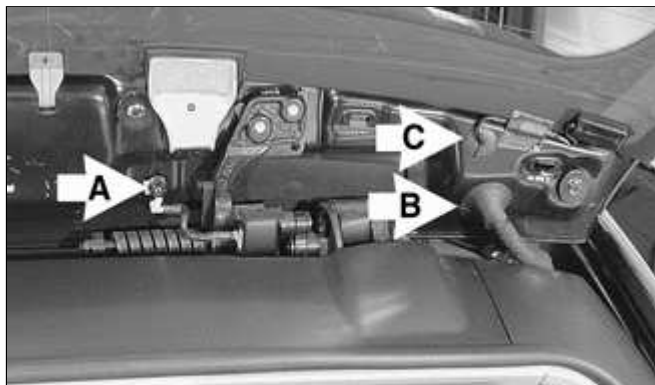


- ✦ Release spoiler mounting bolts (**arrows**). Disconnect wiring to brake light and AM radio antenna and release washer hose. Remove spoiler. (Window shown in place).

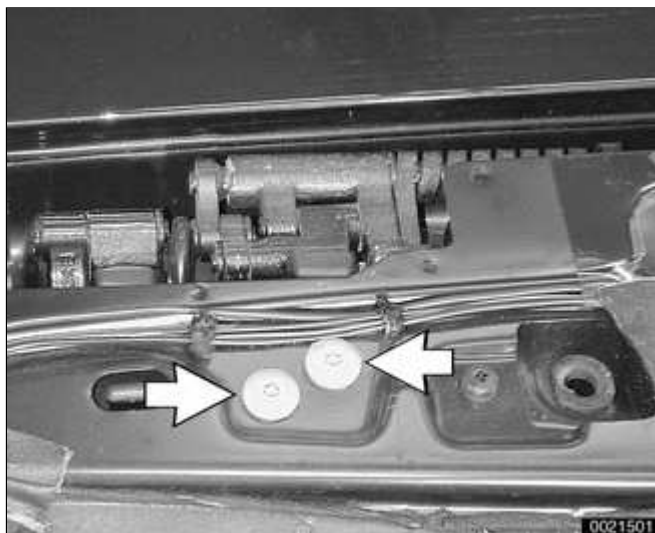
- Installation is the reverse of removal. Replace any waterproofing sheeting disturbed during removal. Adjust spoiler as shown later in this section.

Rear window, removing and installing

- Remove rear spoiler as detailed above.
- Working at top outside of window, remove waterproofing sheeting over antenna amplifier and disconnect wiring connections. Release tape retaining wiring harnesses.



- ✦ Release grounds (**A**) and rubber grommets (**B, C**) at both hinges.



- ✦ Support window in open position. Working at top of tailgate, loosen screws (**arrows**) on each window hinge. Note positions of any spacers for reinstallation.

CAUTION!

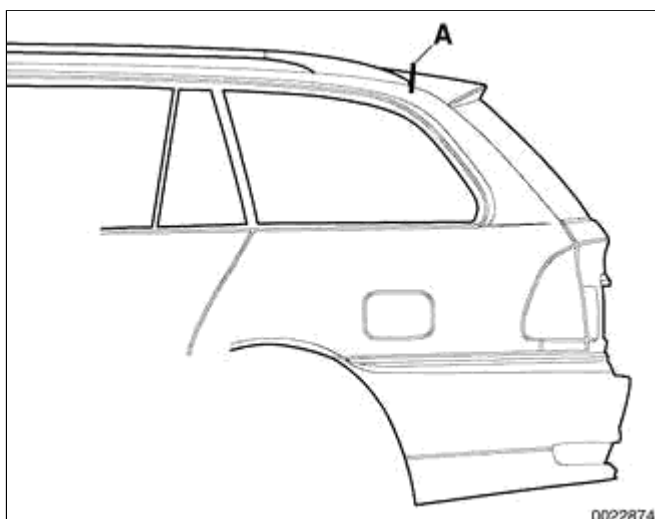
Rear window is heavy. Use a second person to support window prior to releasing from hinges.

- Remove screws and lift off window, taking care to release wiring to rear defroster/antenna.
- Installation is the reverse of removal. Replace waterproofing sheeting where disturbed. Align window as described below.

Tightening torques

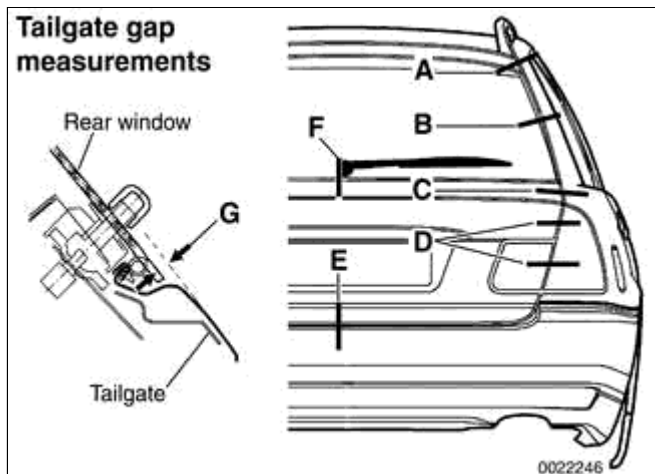
Hatchback window to hinge (M8)	16 Nm (12 ft-lb)
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Alignment of spoiler, rear window and tailgate



- ✦ Alignment procedures involve adjusting tailgate, window, and spoiler to have equal space between left and right sides and to be flush with body. Measurement locations and specific dimensions are shown.

- If alignment has been disturbed during repair adjust fit of tailgate to body. Then adjust fit of rear window to hatch.



- ◆ Clearance of the rear window is adjusted by adding or removing shims between hinge bracket and rear window (maximum of three shims).
- ◆ Adjust spoiler gap to body last. Height of spoiler is set by alignment of the rear hatch. Gap of spoiler to body is set by adjusting spoiler attachment bolts.

Seam clearance specification

Rear spoiler to roof (A)	4.25 - 5 mm (0.167 - 0.197 in.)
Max. deviation from parallel	0.5 mm (0.019 in.)

- ◀ Lateral and vertical alignment is adjusted using hinge bolts for window and tailgate. Fine adjustment of the tailgate to the body is made using rubber stop buffers and latch assembly.

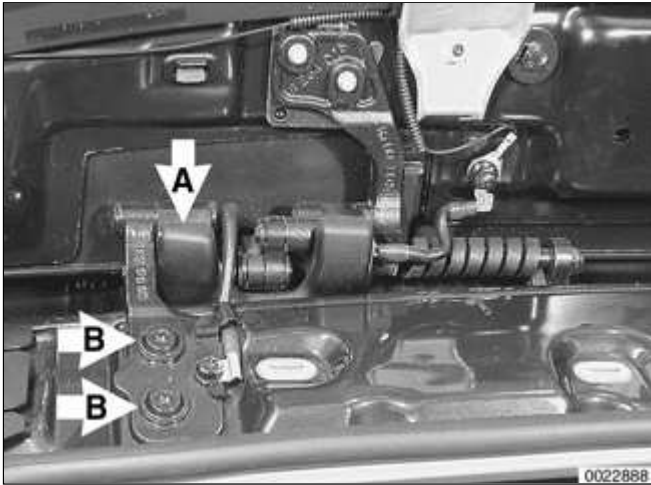
Tailgate and rear window position gap adjustment

Rear spoiler / side panel (A)	3.75 ± 1.3 mm (0.15 ± 0.05 in.)
Rear window / side panel (B)	3.5 ± 1.4 mm (0.14 ± 0.06 in.)
Tailgate / side panel (C)	3.6 ± 0.75 mm (0.14 ± 0.03 in.)
Tailgate / side panel (height) (D)	flush to 2 mm (0.08 in.) lower
Tailgate light / corner light (D)	4.25 ± 0.75 mm (0.17 ± 0.03 in.)
Tailgate / rear bumper (E)	5 ± 1 mm (0.2 ± 0.04 in.)

Tailgate and rear window position gap adjustment

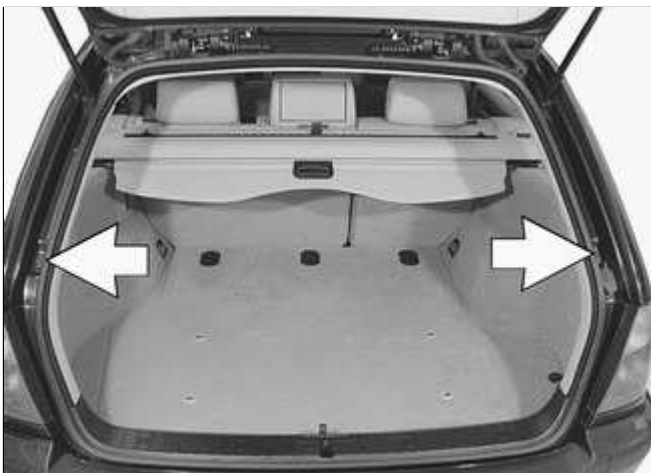
Rear window / tailgate (F)	$4 \pm 1 \text{ mm}$ ($0.16 \pm 0.04 \text{ in.}$)
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Rear window / tailgate (G)	$5.4 \pm 1 \text{ mm}$ ($0.21 \pm 0.04 \text{ in.}$)
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✎ To adjust fit of tailgate to body:

- ◆ Close tailgate and open rear window.
- ◆ Tailgate hinge bolts (A, behind trim) should be centered both vertically and horizontally within their adjustment range. When centered, tighten bolts.
- ◆ Loosen screws (B) on left and right to adjust horizontal location (gap on left and right). When gap is correct, tighten screws.
- ◆ To prevent damage or poor operation adjustments must be made to the rear window if the vertical adjustment of the tailgate is changed.
- ◆ Window hinge must be parallel to the tailgate hinge.



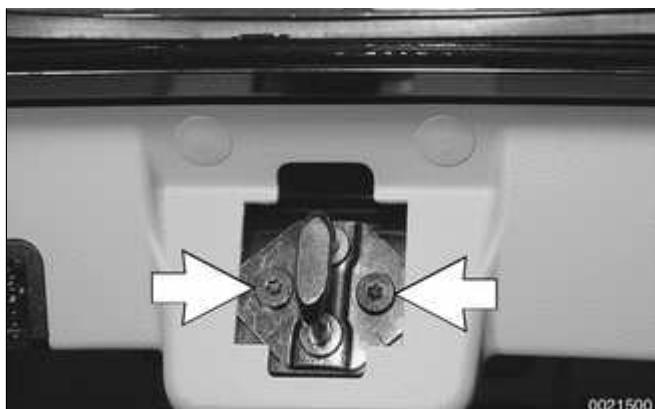
✎ Stop buffers (**arrows**) are adjustable and set height between tailgate and body at sides.

- ◆ To adjust buffers, remove inner trim panel and loosen lock nut.
- ◆ Initially adjust buffers to just contact tailgate when closed, then tighten buffers one turn. Tighten lock nut.



Tightening torques

Lock nut for stop buffer (M8)	15 Nm (11 ft-lb)
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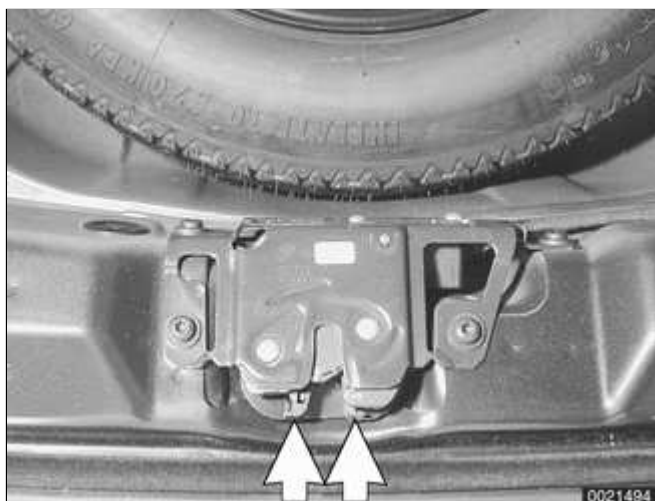
- Loosen screws (**arrows**) and reposition rear latch to further adjust gap between tailgate and body at sides, and to assure smooth operation.

- To adjust striker position:

- Close tailgate slowly, allowing striker to center itself on lock.
- Striker must not touch lock housing.
- Tighten striker mounting bolts, then check tailgate to body gaps as shown below.

Note:

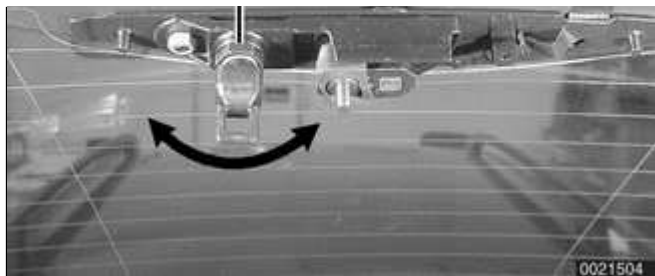
Do not lubricate lock or lock striker with grease.



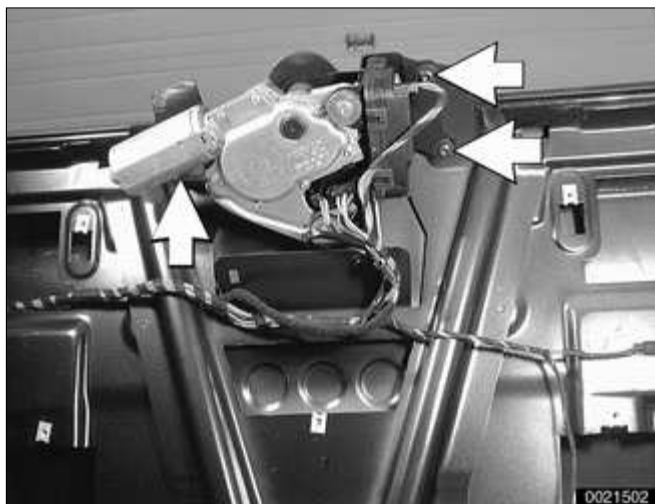
- Inspect plastic guides (**arrows**) on lock assembly for damage or wear, and replace if necessary. Trim panel is removed for clarity.



- The rear window lock striker height is adjusted by loosening lock nut **A**, then turning striker in or out.



- ◆ Retighten lock nut when window latch operates smoothly.



- ✦ To adjust rear window lock position, initially loosen lock mounting bolts (**arrows**).
- ◆ Close window slowly, allowing lock to center itself on striker.
- ◆ Tighten mounting bolts, then check rear window to body gaps as shown above.