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Body dimensions

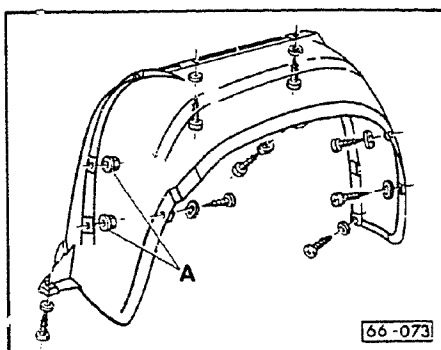
Refer to the Audi of America, Body Repair Manual, Lit No. **W42-701-002-1**.

Identifying/painting and repairing plastic parts

Refer to the Volkswagen of America Refinishing Guide, Lit No. **W42-701-008-1**.

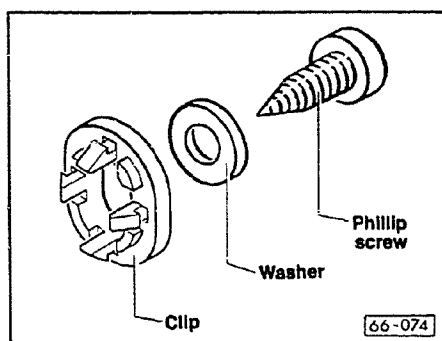
CAUTION

Part numbers are listed for reference only. Always consult with the Parts Department for latest information.



Front wheel house liner, removing

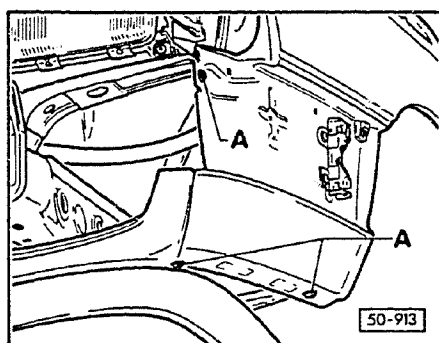
- remove Phillips screws
- remove plastic nuts A
- pull liner downward to remove



Front wheel house liner, installing

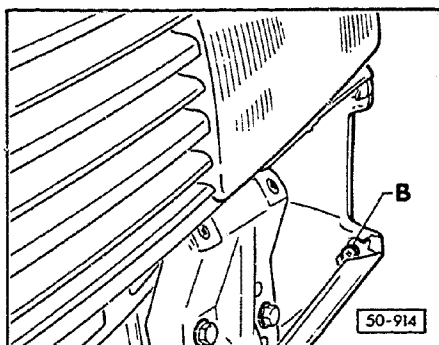
Install in reverse order of removal, note the following:

- replace plastic clips as required

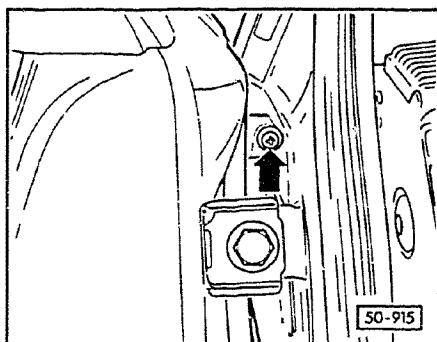


Front fender, removing

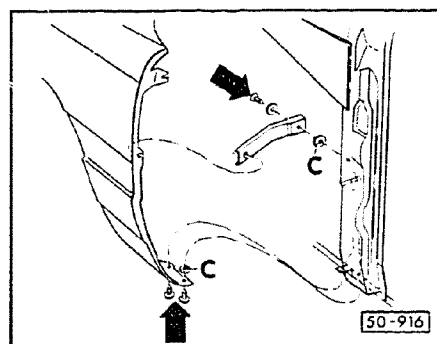
- remove front wheel house liner
- remove front bumper (see Repair Group 63)
- partially remove end of spoiler
- unclip turn signal housing
- remove Phillips screws A



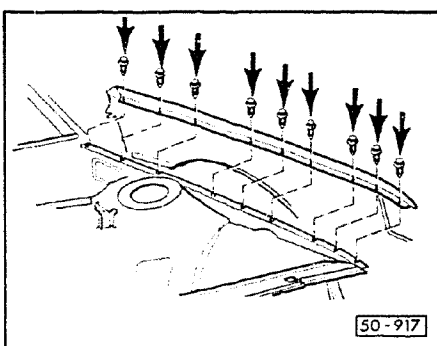
- remove Phillips screws B



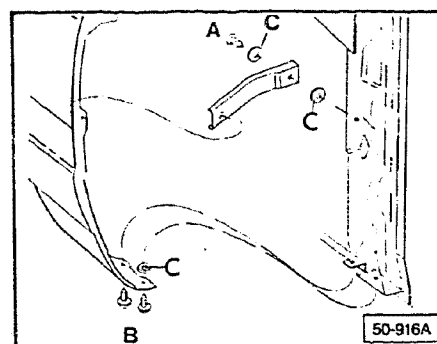
- remove Phillips screw (arrow)



- remove bolts (arrows)

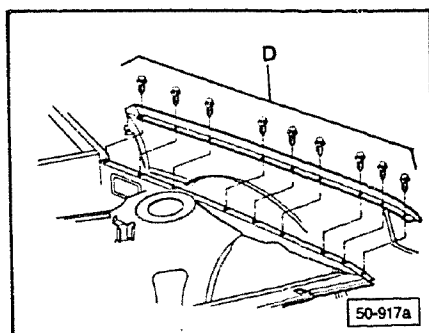


- remove bolts (arrows) and detach fender

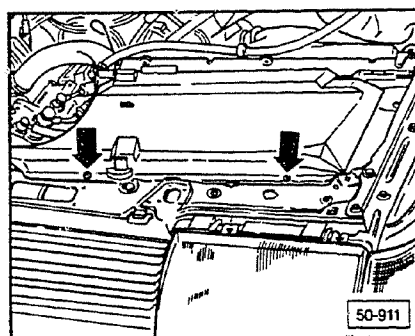


Front fender, installing

- install in reverse order, noting the following:
 - torque bolts
 - A — 8 Nm (6 ft lb)
 - B — 5 Nm (4 ft lb)
- install plastic washers C on both sides of bracket (as shown)

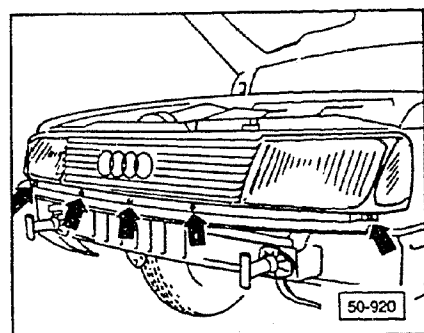


- torque bolts **D** 7.5 Nm (5.5 ft lb)

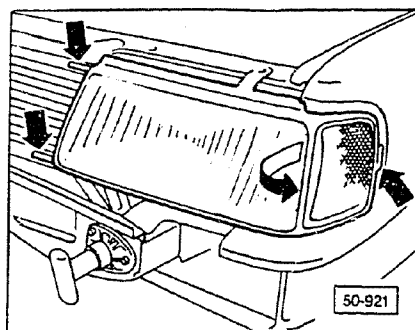


Lower front panel, removing

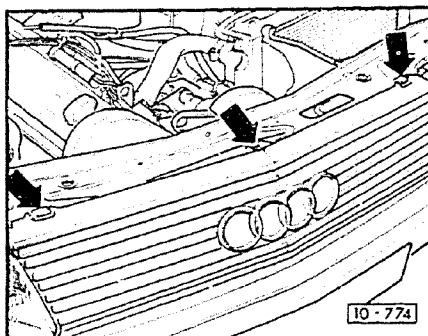
- disconnect negative (–) battery cable
- remove bumper (see Repair Group 63)
- remove cover over radiator (**arrows**)



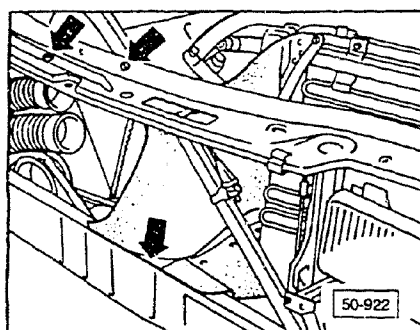
- remove center trim strip (**arrows**)



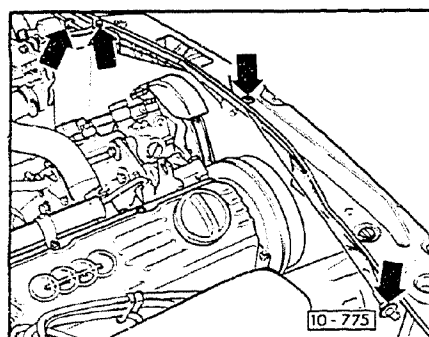
- unlatch headlite frame from fender (**left, right arrows**)
- swing frame out from radiator grille



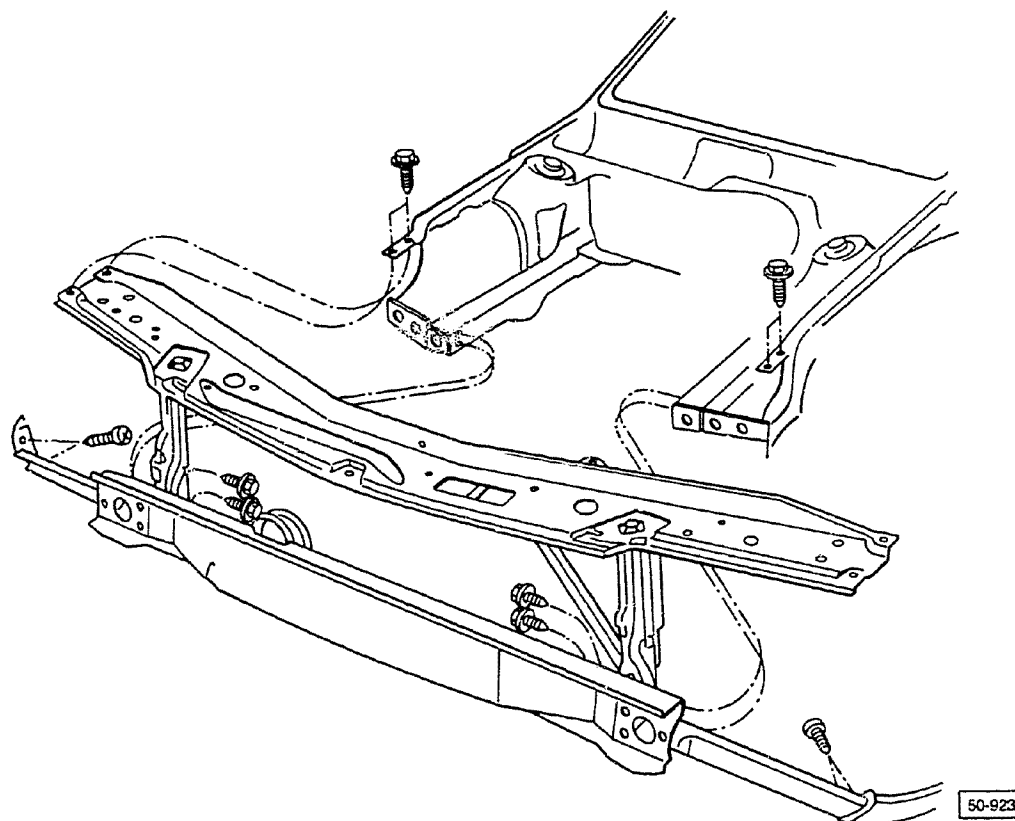
- remove radiator grille screws (**arrows**)
- pull grille from left and right clips
- remove grille



- remove cooling air hose and bracket from lower front panel (**arrows**)



- remove hood release cable (**left, right arrow**)
- unscrew top radiator brackets (**center arrow**)



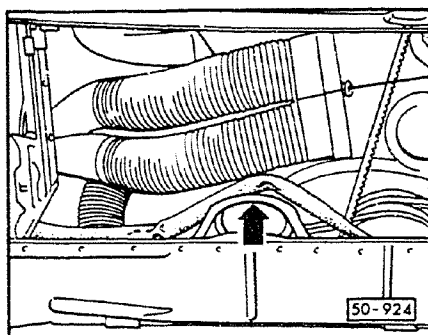
Lower front panel removing, continued

- remove headlight assemblies
- remove alternator air cooling hose from bumper cover
- remove outside air temp. wiring harness from lower front cover
- remove energy absorbers
- remove lower cooling air hose from lower front panel
- unbolt lower front panel (as shown) and remove

Lower front panel, installing

Install lower front panel in reverse order of removal, noting the following:

- install outside temp. sensor wiring harness
over engine mount (arrow)
- install lower panel bolts
- install energy absorber
 - 23 Nm (17 ft lb)
- tighten lower front panel bolts
 - 30 Nm (22 ft lb)
- install outside temp. sensor



Galvanized body panels

Welding, refinishing preparation

The body assembly of all Audi 100/200 vehicles is galvanized.

Special precautions must be followed when welding or refinishing.

Welding

WARNING

Fumes from welding galvanized sheet metal contain **TOXIC OXIDE of ZINC**. The zinc fumes, as well as the smoke from burnt paint and undercoating **MUST** be vented from workplace.

INSURE PROPER VENTILATION

Spot welding

- weld time, not current should be increased by 10 to 30% if **possible**
 - select highest possible electrode pressure

MIG welding

- work area must be ground clean
- decrease wire speed

Preparation of refinishing area

- coat welded areas with zinc spray or cold zinc paint
- prime with zinchromatic primer/filler or self-etching primer such as Dupont 6155; 6165 or equivalent

Note

On spare parts, grind black finish lightly, **do not** damage zinc coating

- wet sand scratches with 360-400 grit paper
- use filler on dents

CAUTION

After grinding black finish down to zinc metal do **NOT** allow filler to contact other black finish areas. A flaw will result in finish coat.

- proceed with normal refinishing methods

Pearl effect paint, painting

The Audi 100/200 will be available with special pearl white metallic paint as an option. Transparent white lamellar particles are used instead of the aluminum particles generally used in metallic finishes. This provides the iridescent effect peculiar to the pearl paint finish.

The major difference between the present two-stage metallic paint procedure and the new pearl effect procedure is the addition of a metallic base coat step. In addition, the wet-on-wet method is employed so the base coat shines through as a reflective color.

Materials required

Description	Part No.
2K Acrylic High Solid/Filler	ALN 786 001 13
Thinner	ALV 002 000 06
Special Metallic Base Coat	ALN 769 90E
White Pearl Effect Paint	ALD 649 0A0
2K Acrylic Clear Coat	ALN 769 001 10
2K Acrylic Hardener	ALZ 009 001 06
	(Slow)
	ALZ 009 002 06
	(Fast)

CAUTION

Part numbers are listed for reference only. Always consult with the Parts Department for latest information.

Paint procedure

Step 1:

- apply 2K acrylic high solid primer/filler as label directions recommend
- sand with ultra fine sandpaper
- clean with silicone remover

Step 2:

- spray special white metallic base coat
 - mixing ratio 2:1 with hardener
 - spray two covering coats
 - spray viscosity: 17 seconds, adjusted with thinner **ALV 002 000 06**
 - flash-off time: 10-15 minutes

Step 3:

- spray white pearl effect paint plus 80% synthetic thinner
 - spray three coats
 - spray viscosity: 17 seconds
 - flash-off time: 15 minutes

Step 4:

- spray 2K acrylic clear coat with 2K acrylic hardener
 - spray two coats
 - mixing ratio: 2:1
 - spraying viscosity: 16-17 seconds,
 - adjusted with thinner: **ALV 002 000 06**
 - flash-off time: 5-10 minutes
 - drying time: 60 minutes at 60°C (140°F)

Brilliant black ALD 626 Y9B, painting

Standard two-step painting and refinishing procedures apply. Note the following:

- do not mix or touchup with **L 041**
- do not mix or touchup with **ALN 769** finishing paint

CAUTION

Part numbers are listed for reference only. Always consult with the Parts Department for latest information.

Acid rain spots on paint, repairing

Acid rain spots are most visible under fluorescent light and look like water spots.

In most cases, you can remove these spots by the following procedures and thus avoid re-painting.

Do **NOT** confuse the effects of acid rain damage with industrial fallout. Industrial fallout consists of small airborne metallic particles that settle onto the paint and eventually eat their way into the finish. Rubbing your hand across the clean surface will reveal a gritty texture.

Inspect each new vehicle for acid rain spots as soon as it arrives at the dealership. Document your findings at that time in accordance with dealer instructions for Transportation Damage Claims. If you see acid rain spots; get prior approval from your DSM to do the reconditioning outlined in this circular.

If acid rain spot removal is new to you, we recommend that you contact a good body shop or reconditioning center.

WARNING

Before using any chemicals or cleaning compounds, carefully read all of the cautions and medical information on the container. Always follow all of the manufacturer's recommendations.

Most makers of professional automotive reconditioning products recommend the following six steps **IN SEQUENCE** to repair acid rain paint spots:

STEP 1: inspection

- wash vehicle with mild soap and water, then dry completely

CAUTION

Do **NOT** wash or dry vehicle in direct sunlight. Ordinary water spots could form and confuse the inspection.

- inspect the following surfaces under a fluorescent light
 - hood, roof, rear deck, tops of fenders, painted surfaces of bumpers and doors from the belt line up

STEP 2: Neutralization

The continuing effect of the acid must be stopped by neutralizing.

- mix a solution of baking soda and water (4 tablespoons per gallon) and stir until completely dissolved
- apply solution to all affected areas and let stand for a few minutes before rinsing off with clear water

Commercial neutralizing products such as "Blue Max" by Car Brite® or equivalent work well.

STEP 3: Buffing

You can buff by hand or with a low speed orbital buffer or with a high speed buffer.

CAUTION

It is extremely important that power buffing be done by an experienced person. If done incorrectly, power buffing can quickly and easily damage the paint finish.

Use clean buffing pads at ALL times.

- mask off any trim or glass close to affected areas
- buff small areas at a time, no larger than two feet by two feet
- buff using a light polishing compound such as "Finesse-It" by 3M®, "Acid Rain Creme" by Car Brite®, or equivalent. Follow the manufacturers instructions to achieve the best possible results.

CAUTION

Do **NOT** use general purpose rubbing or buffing compounds. They are too coarse for this application and could damage the finish.

- buff surface until acid spots are removed

Note

Inspect the work surface frequently during buffing to ensure that only a minimum of original finish is removed. If the color of the vehicle shows up on the buffing pad; you have cut through the clearcoat and you have to repaint the affected area.

STEP 4: Cleaning

- wash vehicle thoroughly with a solution of mild soap and water
- rinse vehicle with clear water then dry completely
- inspect vehicle to see if another application is necessary.

STEP 5: Polishing

Polish the finish to restore the original luster either by hand or with a power buffer. Always follow polishing with an application of wax.

CAUTION

It is extremely important that power buffing be performed by an experienced person. If done incorrectly, power buffing can quickly and easily damage the paint finish.

Use clean buffing pads at ALL times.

- buff with polishes such as "Liquid Polish" by 3M®, "Crystal Shine" by Car Brite®, or equivalent. Follow the manufacturers instructions to get the best possible results.

STEP 6: Waxing

Waxing (unlike polishing) will seal the finish and prevent acid rain from leaving spots.

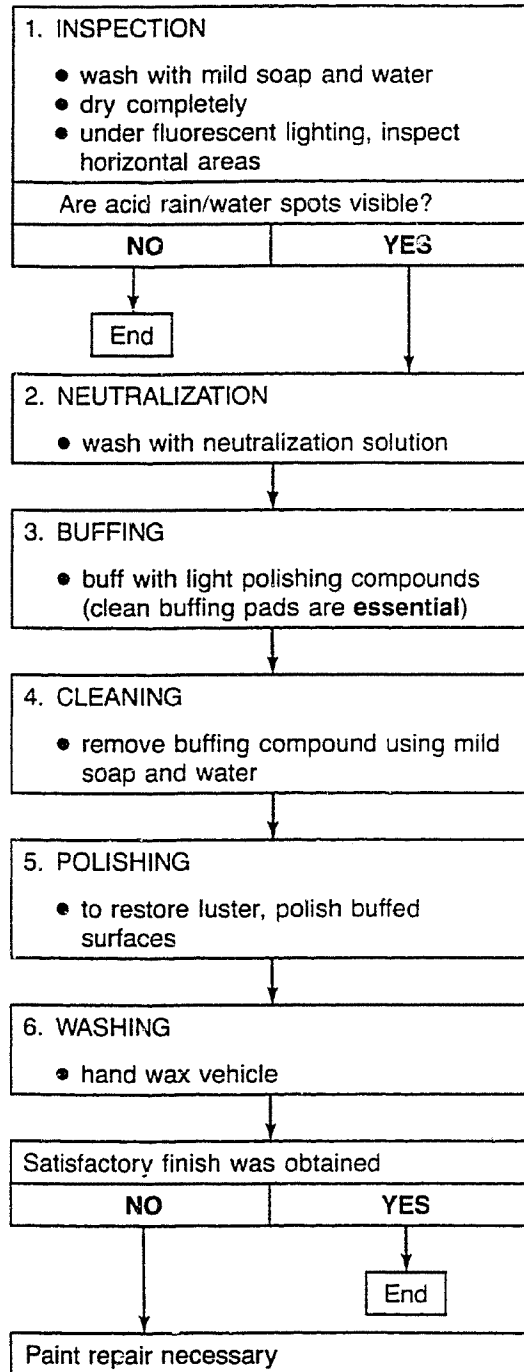
- **HAND WAX** using clean cheesecloth and a good quality non-abrasive wax.

If, in extreme cases, you can still see acid rain spots after the previous six steps, or if the clearcoat has been rubbed through, it will be necessary to re-paint the affected areas.

Get prior DSM authorization for ALL acid rain related reconditioning, as well as repainting.

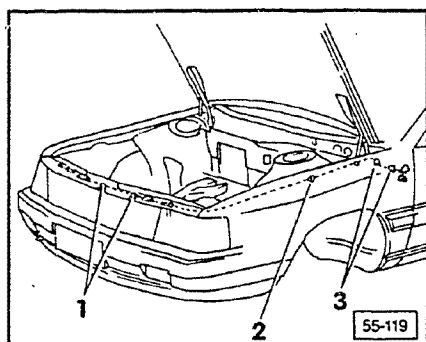
Acid Rain Spot Removal Flowchart

(See detailed instructions on previous pages)



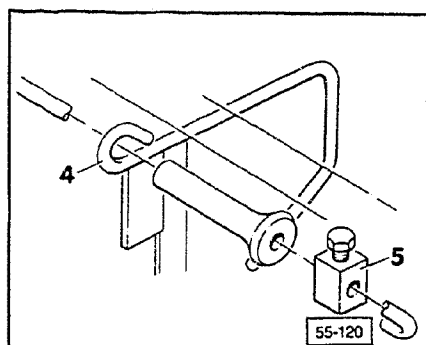
THIS FRAME INTENTIONALLY LEFT

BLANK

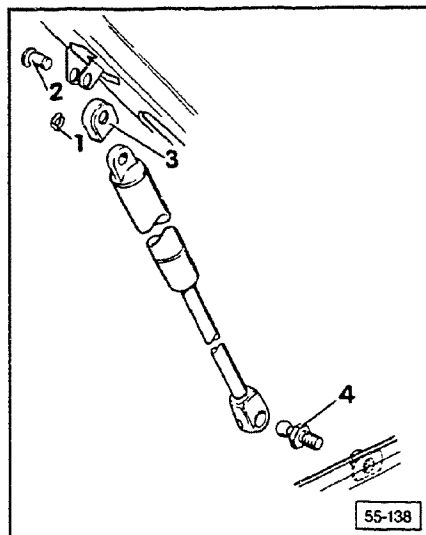


Front hood lock cable, adjusting

- 1 — retainer
- 2 — clip
- 3 — sleeves



- locking lever 4 must not be under tension when adjusting hood lock cable
- tighten bolt in cable holder 5 and bend cable end



Gas-filled strut, removing

Two types of hood struts are installed in production. These differ considerably in the method of detaching the lower ball socket.

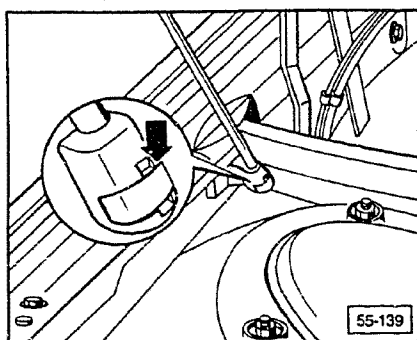
- support hood

CAUTION

Do not remove clip from socket. Clip will be damaged if completely removed.

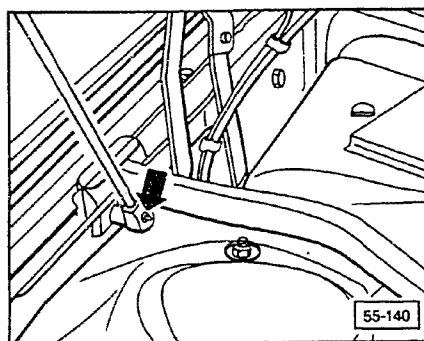
- remove locking washer and pull pin out

- 1 locking washer
- 2 pin
- 3 cap
- 4 ball stud



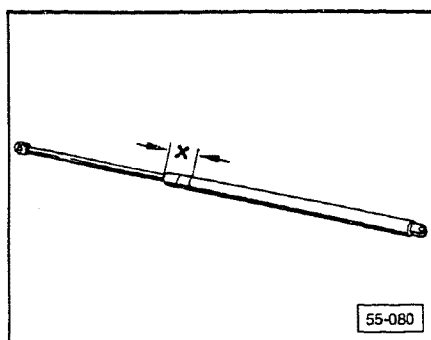
Strut with plastic ball socket

- lift retaining clip (**arrow**) approximately 4.0 mm (5/32 in.) with screwdriver



Strut with metal ball socket

- pull pin (**arrow**) out with pliers



Gas-filled strut, discarding

Note

After replacing gas-filled strut, gas should be released from unserviceable unit before discarding.

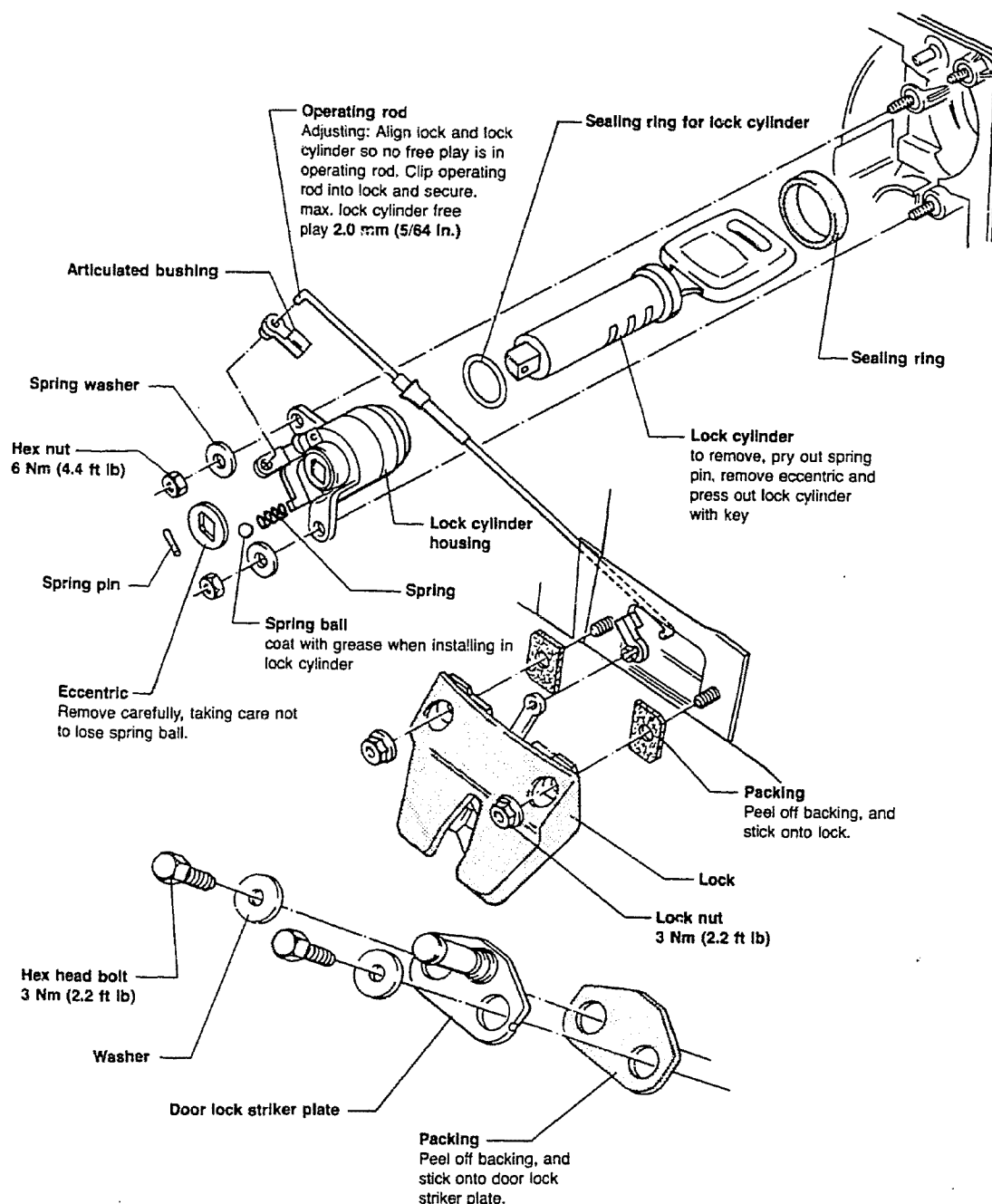
WARNING

Never squeeze strut in vise in area other than shown. To do so can cause strut caps on either end to pop off and release spring, which is under high pressure.

- put on protective goggles
- clamp first 50 mm (2.0 in.) of strut cylinder in vise as shown **X**
- using hack saw, cut cylinder open immediately to right of vise

Note

Cover area being cut open with rag to trap oil when it squirts out.



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