

410-1

General

This repair group covers replacement of the front fenders and removal and installation of the engine hood.

Note:

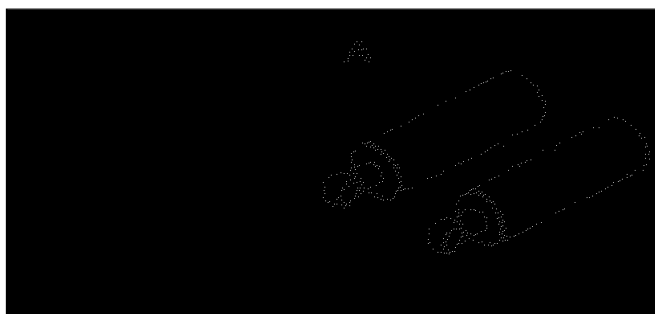
The body is painted at the factory after assembly. Realignment of body panels may expose unpainted metal. Paint all exposed metal once the work is complete.

Special tools

Most body repairs can be performed using regular automotive service tools. Some BMW special tools are required to set body pieces into the service positions.



Service position hood props BMW 51 2 160



Front Fenders

Front fender, removing and installing

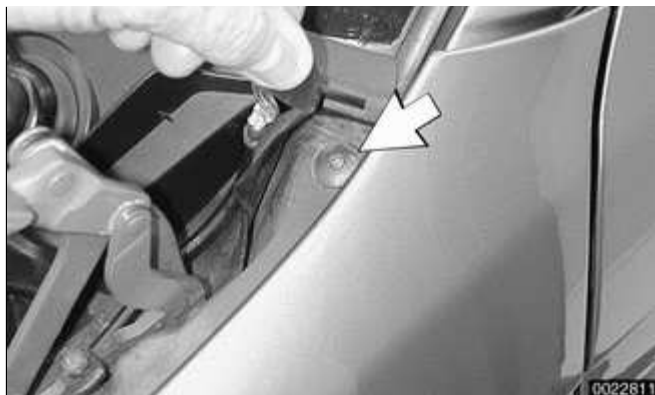
- Raise hood. Raise and safely support front of vehicle.

WARNING!

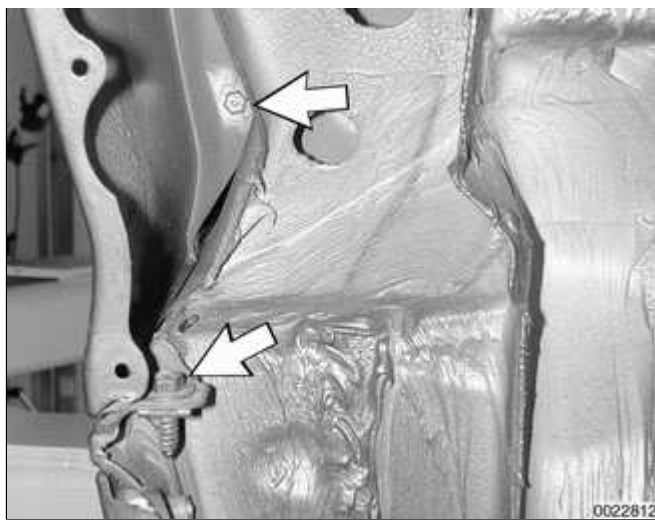
- ♦ *When raising the car using a floor jack or a hydraulic lift, carefully position the jack pad to prevent damaging the car body. A suitable liner (wood, rubber, etc.) should be placed between the jack and the car to prevent body damage.*
- ♦ *Watch the jack closely. Make sure it stays stable and does not shift or tilt. As the car is raised, the car may roll slightly and the jack may shift.*
- Remove front wheel. Remove inner plastic liner from wheel housing.
- Remove front turn signal/lens assembly from applicable front corner. Carefully pry out side directional from fender and disconnect. See ⇒ [630 Lights](#).
- Remove body colored trim panel underneath headlight assembly.



- ✦ Working at cowl, feed corner of side trim panel cover out from side of fender. Gently lift panel cover upwards



and remove retaining screw (**arrow**).



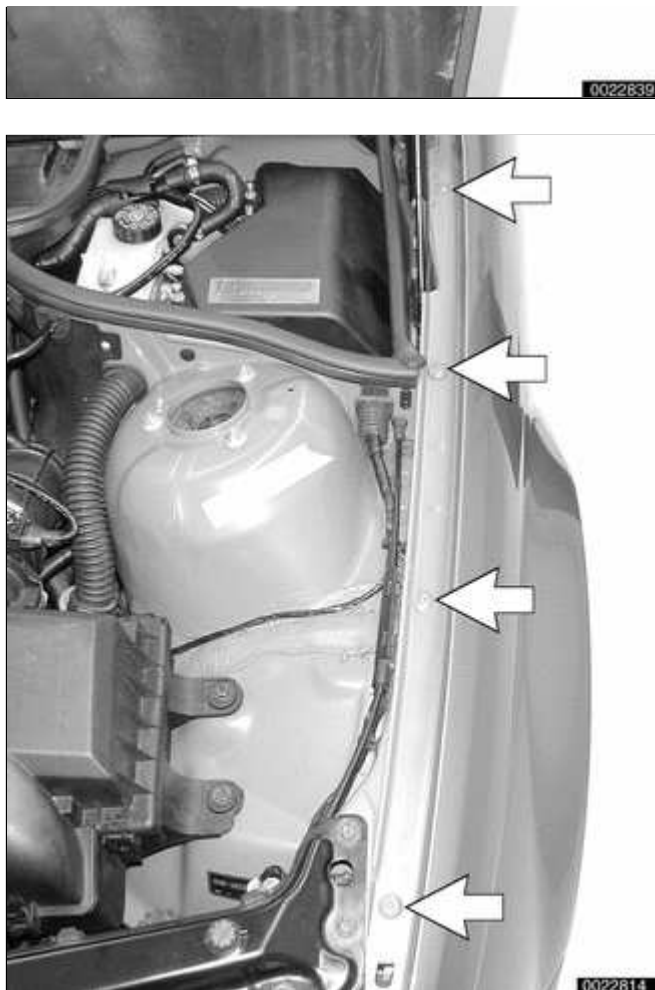
- Remove lower fender attaching bolts (**arrows**) at rear of wheel housing.



- With door open remove upper fender to door post attaching bolt (arrow).



- Remove screw (**arrow**) at front of fender.



✦ Remove bolts (**arrows**) along top edge of fender.

- Carefully remove fender from body.
- Installation is reverse of removal, noting the following:
 - ◆ Before installing new fender, clean old sealant and protective coating from mounting surfaces.
 - ◆ Position new fender and loosely install all mounting bolts. Align fender with door pillar and inner fender, then tighten bolts.
 - ◆ Repair any paint damage and paint any exposed metal.
 - ◆ Reseal and apply protective coating to mounting surfaces.

Clearance specification	
Fender to front hood or to door	4.25 ± 0.75 mm (0.167 ± 0.03 in.)

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Engine Hood

Hood, raising to service position

CAUTION!

- ♦ **Do not switch on the windshield wipers with the engine hood raised. As a precaution, remove the wiper motor fuse. See ⇒ [610 Electrical Component Locations](#).**
- ♦ **The hood is heavy. Before removing the hood supports, be sure to have an assistant help support the hood.**



- ◀ Open hood fully. With the help of a partner, support hood and remove retaining clips (**arrow**) on upper end of pressurized lifting struts. Pull struts off hood.
 - Raise hood higher and install BMW special tool 51 2 160 in between hood lift struts and hood brackets to hold hood in service position.

Hood, removing and installing

- ◀ Raise hood:
 - ♦ Disconnect washer fluid hose (**A**) from washer nozzles.
 - ♦ Where applicable, disconnect



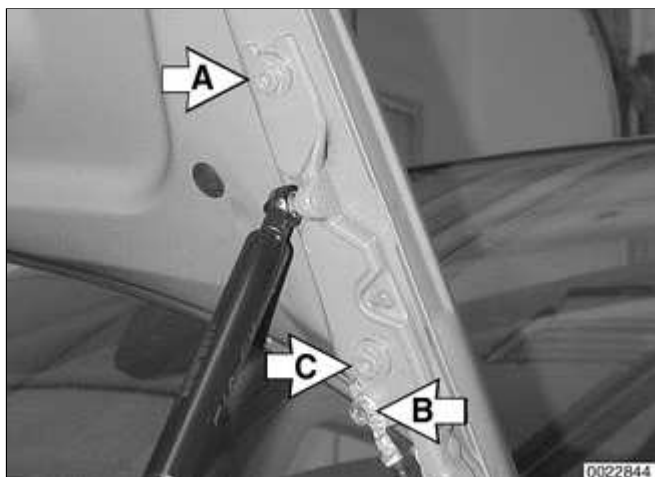


electrical harness connector (B) from heated nozzles.

- Detach gas-charged hood supports from hood.

CAUTION!

The hood is heavy. Before removing the hood supports or hood retaining bolts, be sure to have an assistant help support the hood.



- Loosen upper hood hinge bolts (A). Remove ground strap (B) and remove lower hinge bolts (C). Lift hood off carefully.

- Installation is reverse of removal.

- ◆ Repair any paint damage and paint any exposed metal.
- ◆ Check hood alignment as described next.

Note:

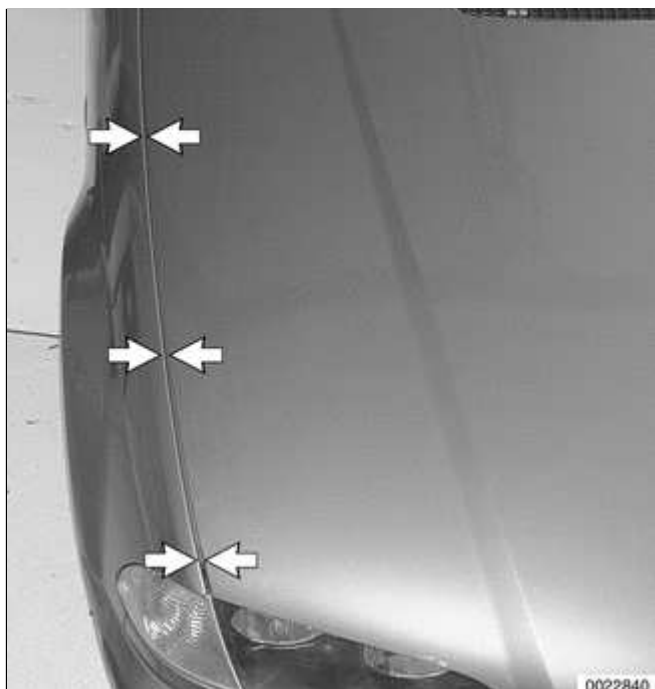
The hood was fitted and attached to an unfinished body at the factory. Unfinished surfaces exposed by this procedure must be touched up with paint.

Hood, aligning

When installing the hood, align the hinges as close to the original painted surface as possible. Movement of the hood on its attaching hardware may require touch-up paint.

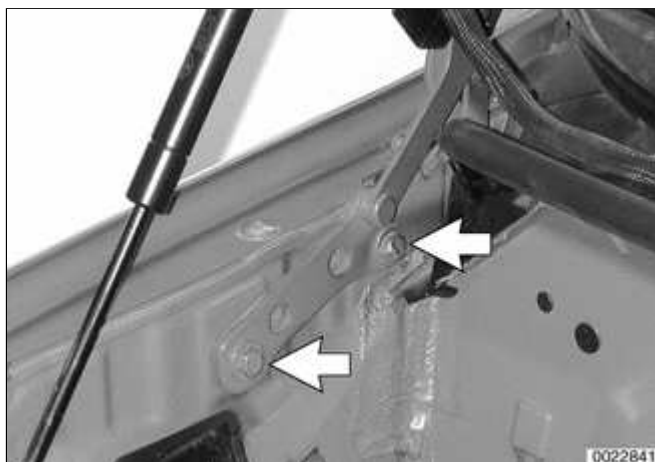


- The hood should be aligned so that gap (arrows) to fender is as even as possible.

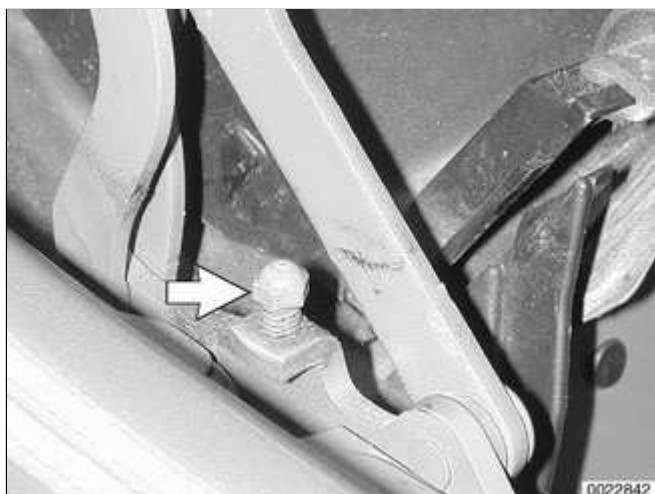
**Clearance specification**

Hood edges to
adjoining body
panel (gap)

5.5 mm (0.216
in.)



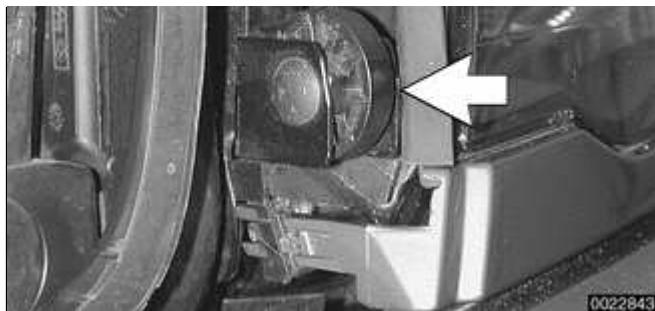
- ✦ If height adjustment at rear of hood cannot be completed using upper hinge, loosen lower hinge bolts (**arrows**) and reposition as necessary.



- ✦ Plastic coating on top of hinge stop screw must not be damaged or missing.



- ✦ Stop disk for front of hood (**arrow**) is eccentric, and is marked 0-10. Initial setting is with the 0 setting forward, for



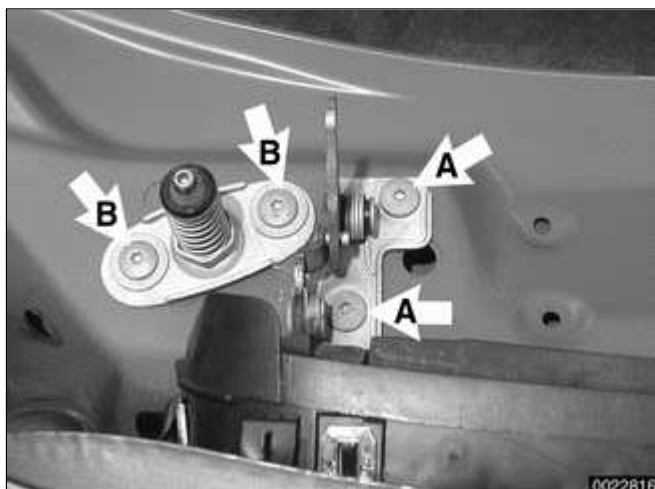
minimal clearance. Turn stop disk to move hood front stop further out.

- Height at front of hood is set using spring pins and rubber stop buffers.

Hood release cable and spring pins, adjusting

Before adjusting hood pins, be sure the hood is aligned evenly to fenders and front panel.

- Make sure bowden cable, which connects both hood locks together, is seated in lock guide on both left and right locks.



- ✦ Loosen hood spring pin bolts (**A**) and retaining hook bolts (**B**) at hood on left and right sides only enough to allow movement.

- Turn rubber stop buffers over headlights inwards to provide clearance.
- Lower (but do not fully latch) hood several times so pins on hood center themselves in lower locks.

CAUTION!

Do not let hood lock with latch bolts loose.

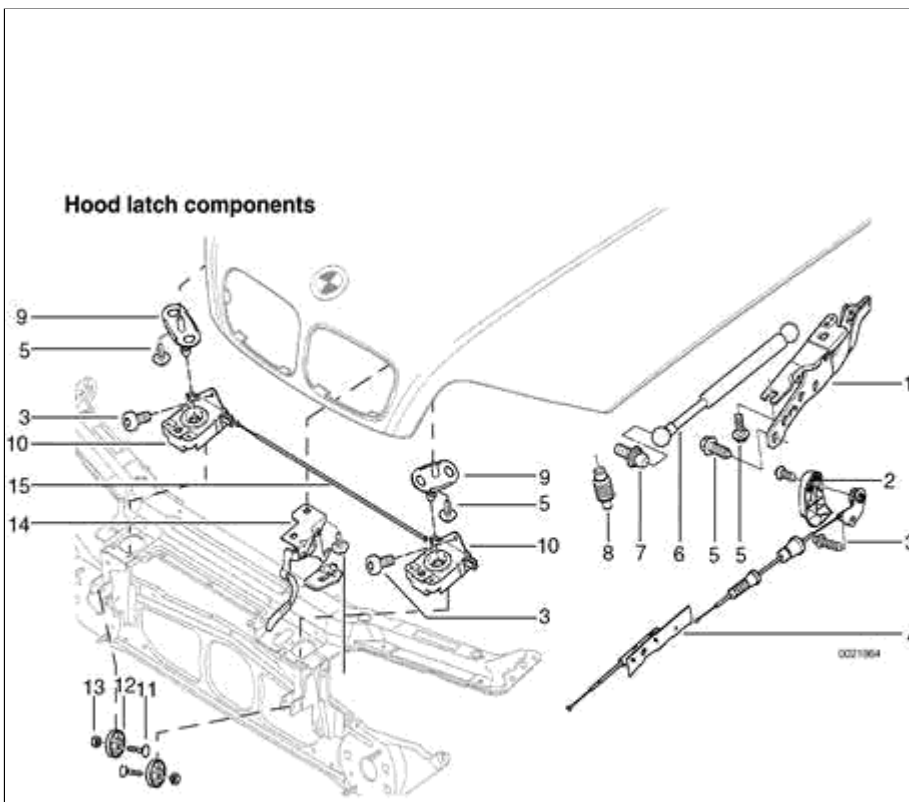
- Tighten hood spring pin bolts and latch bolts when alignment is correct.
- Remove one screw from each side, clean and coat with

Loctite®270 or equivalent, and reinstall.

- Unscrew rubber stop buffers above headlight assemblies until they support hood when closed without movement.
- Test hood for correct closure and opening. If hood does not spring open, lengthen spring pins.



- To lengthen spring pin, loosen locknut (**arrow**) with wrench inserted through spring, then turn pin counterclockwise.



Hood latch components, assembly

- 1 - Hood hinge
- 2 - Hood release lever
- 3 - Torx bolt
- 4 - Bowden cable, main
- 5 - Hex bolt
- 6 - Gas pressurized strut
- 7 - Ball pin



- 8 - Stop buffer
- 9 - Spring pin
- 10 - Lower hood lock
- 11 - Saucer head screw
- 12 - Eccentric wheel
- 13 - Hex nut with plate
- 14 - Hood catch
- 15 - Bowden cable, center