

411 Doors

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GENERAL

This repair group covers front and rear door repair information and includes door trim panel service.

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.

For additional information, see:

- **512 Door Windows** for power door windows and door glass replacement
- **515 Central Locking and Anti-theft** for power door locks
- **721 Airbag system (SRS)** for side airbags

Warnings and cautions

CAUTION—

- Prior to disconnecting the battery, read the battery disconnection cautions given in **001 Warnings and Cautions**.
- To avoid damaging plastic interior trim, use a plastic prying tool or a screwdriver with the tip wrapped with masking tape.

WARNING—

- E60 and E61 cars are fitted with side-impact airbags in the front doors and optional side impact airbags in the rear doors. When servicing doors, always disconnect the negative (-) battery terminal. See **721 Airbag System (SRS)** for cautions and procedures relating to the airbag system.

411-2 Doors

Door check, replacing

DOORS

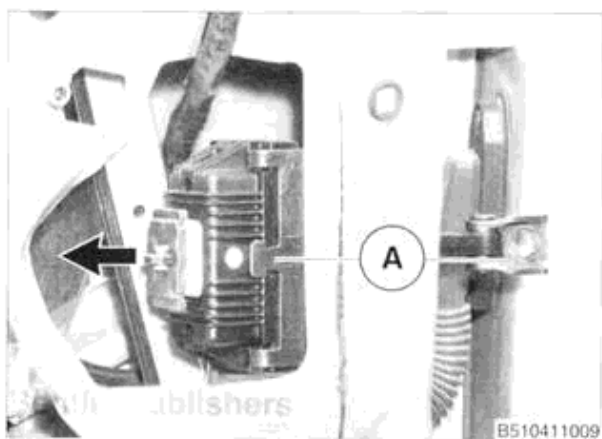
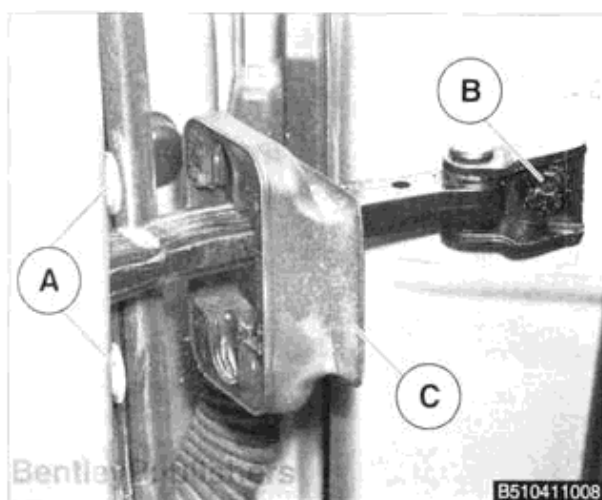
Door check, replacing

- Close door window completely.
- Disconnect negative (-) battery cable.

CAUTION—

- Prior to disconnecting the battery, read the battery disconnection cautions given in 001 Warnings and Cautions.

- Remove interior door panel. See **Door trim panel, removing and installing** in this repair group.
- Remove door check seal (C).
- Release door check screws (A and B).

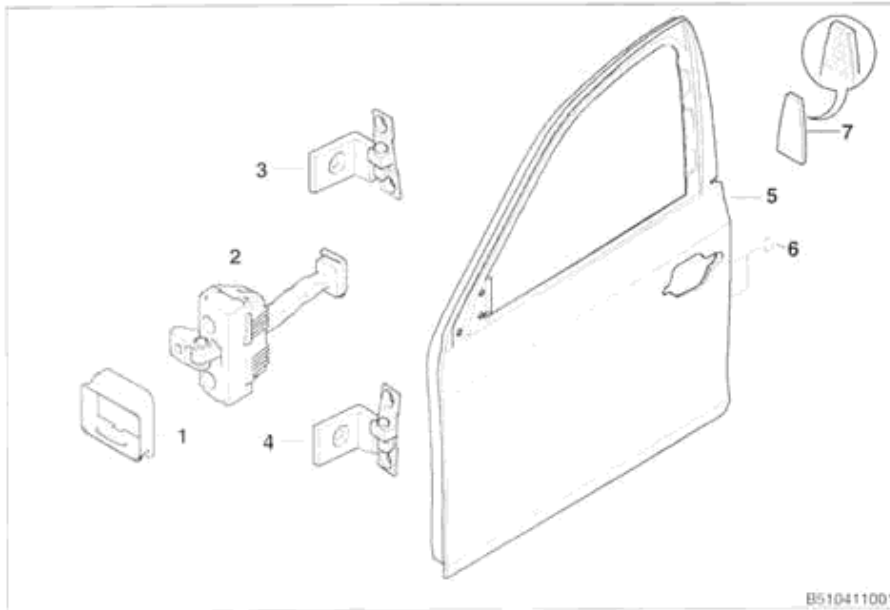


- Working inside door, remove door check assembly (A).
- Installation is reverse of removal.

Tightening torques

Door check to body	21 Nm (15 ft-lb)
Door check to door	10 Nm (7 ft-lb)

Door hinge assembly, front

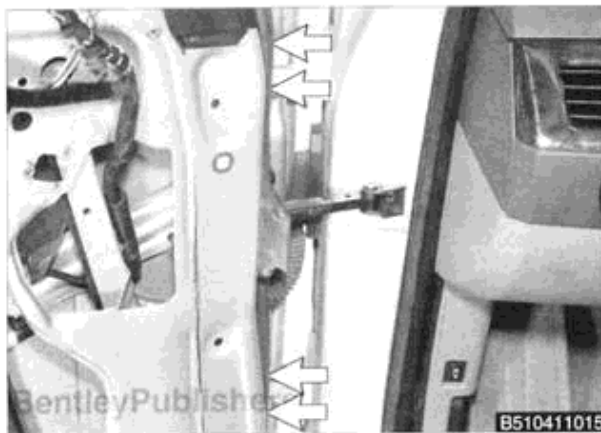


1. Door check seal
2. Door check
3. Upper door hinge
4. Lower door hinge
5. Door
6. Plug
7. Reflector

Door, adjusting

Front and rear door adjustment procedures are similar.

- ⚠ If installed door is uneven or out of parallel, loosen nuts at door hinges (**arrows**) to adjust at top and bottom.
- If more adjustment is necessary, spacers (or shims) can be used to correct door alignment. Spacers are placed behind hinges.

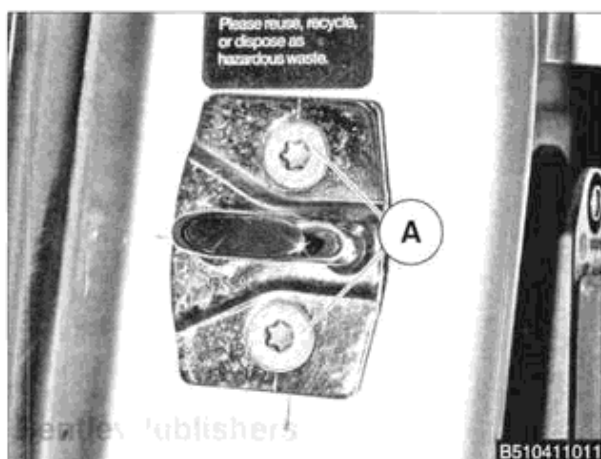


411-4 Doors

Door, removing and installing



- Check that adjoining body parts are flush in terms of height (**dotted line**) and correct if necessary. After adjustment, tighten hinge nuts and screws.



- Loosen screws (**A**) to adjust lock striker.

NOTE—

- When door is closed, lock striker must not touch or brush against door lock. Avoid scratching door.

Tightening torques

Door to door hinge (M8 x 28 mm)	20 Nm (15 ft-lb)
Lock striker to body	21 Nm (15 ft-lb)

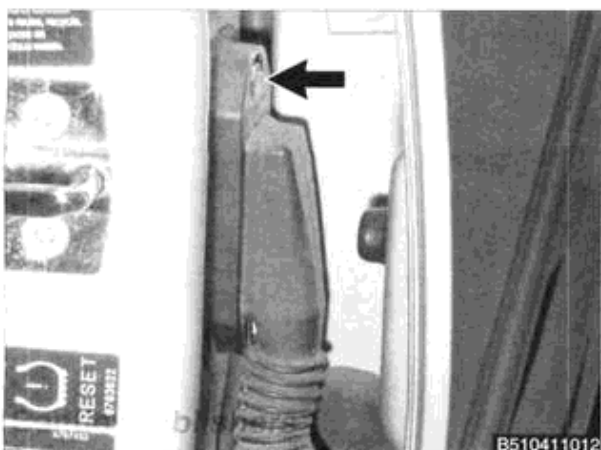
Door, removing and installing

Front and rear door removal and installation are similar.

Disconnect negative (-) battery cable.

CAUTION—

- Prior to disconnecting the battery, read the battery disconnection cautions given in **001 Warnings and Cautions**.

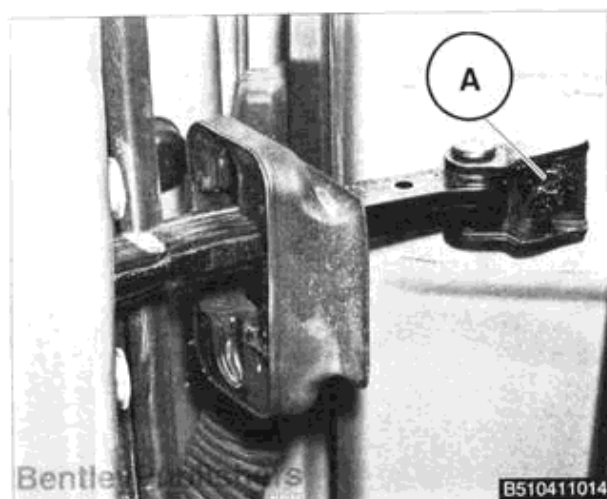


- Remove harness connector mounting bolt (**arrow**) at door pillar.



➤ Pull plug connection from door pillar by lifting it up and out.

— Detach plug connection (**arrows**).



➤ Remove door check mounting bolt (**A**).



➤ With door fully open, unscrew door hinge pin bolts (**arrows**) from top and bottom hinges.

411-6 Doors

Door trim panel, removing and installing



➤ Remove door by pulling out sideways.

— Installation is reverse of removal. Note the following:

- Mount and align rear doors first (if applicable), followed by front doors.
- Align door so that panel gaps are equal on either side. If necessary, adjust door hinges. See **Door, adjusting** in this repair group.
- Adjust lock striker so that trailing edge of front door is slightly higher than leading edge of rear door.
- Repair paint damage and paint exposed metal.

Tightening torques

Door check to body	21 Nm (15 ft-lb)
Door electrical harness to body (M5 x 16 mm)	3 Nm (27 in-lb)
Door hinge pin bolts	27 Nm (20 ft-lb)

DOOR PANELS

Sedan left front door panel is illustrated. Other door panels are similar.

Door trim panel, removing and installing

WARNING—

- E60 and E61 cars are fitted with side-impact airbags in the front doors and optional side impact airbags in the rear doors. When servicing doors, always disconnect the negative (-) battery terminal. See **721 Airbag System (SRS)** for cautions and procedures relating to the airbag system.

NOTE—

- Vehicle through 03 / 2007 shown, later vehicles similar

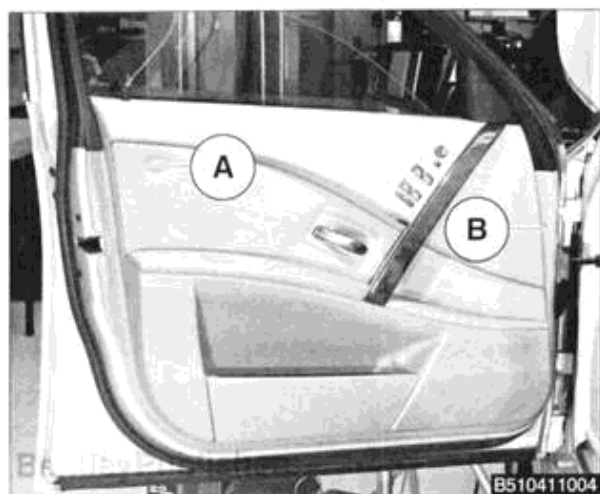
— Disconnect negative (-) battery cable.

CAUTION—

- Prior to disconnecting the battery, read the battery disconnection cautions given in **001 Warnings and Cautions**.

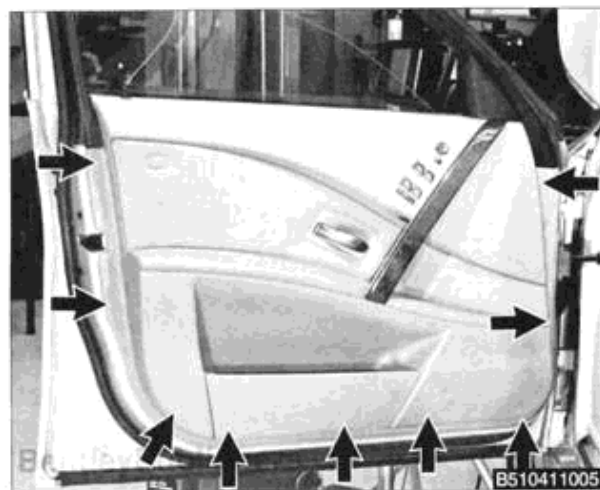


➤ Pry out footwell light (arrow) using plastic prying tool, disconnect from harness connector and remove.

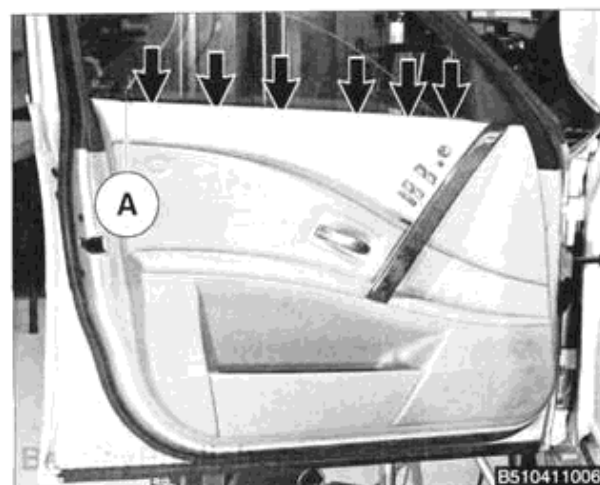


➤ Pry out airbag emblem (A) on door trim panel using plastic prying tool and release screw underneath.

— Remove cap (B) and screw underneath.



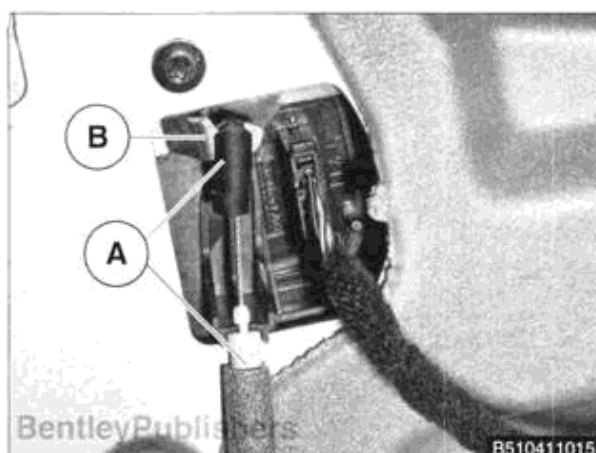
➤ Unclip door trim panel starting at bottom. Unclip door trim panel clips (arrows) using plastic prying tool.



➤ Carefully unclip door trim panel from retainers (arrows) by pulling straight out. Pull door trim panel up out of central mounting clip and release button (A).

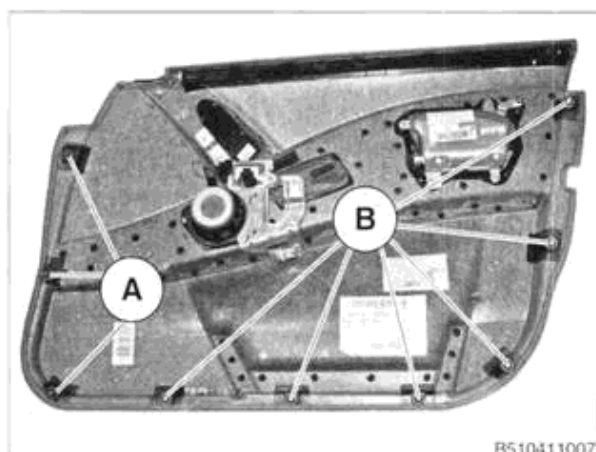
411-8 Doors

Door trim panel, removing and installing



➤ Unhook Bowden cable (A) from inner door opener by unlatching tab (B).

- Disconnect side airbag harness connector.
- Disconnect wiring harness for window switch panel and remove door trim panel.



➤ If necessary, replace any broken clips (A and B). Install clips in correct position. Clips A are gray and clips B are white.

- Attach central mounting clip to door trim panel. Remainder of installation is reverse of removal. Check door lock mechanism and window for ease of movement and proper function.

Tightening torque

Door trim panel to door (screw under airbag emblem)	8 Nm (71 in-lb)
Door trim panel to door (screw under cap)	0.8 Nm (7 in-lb)

