
SECTION 9C

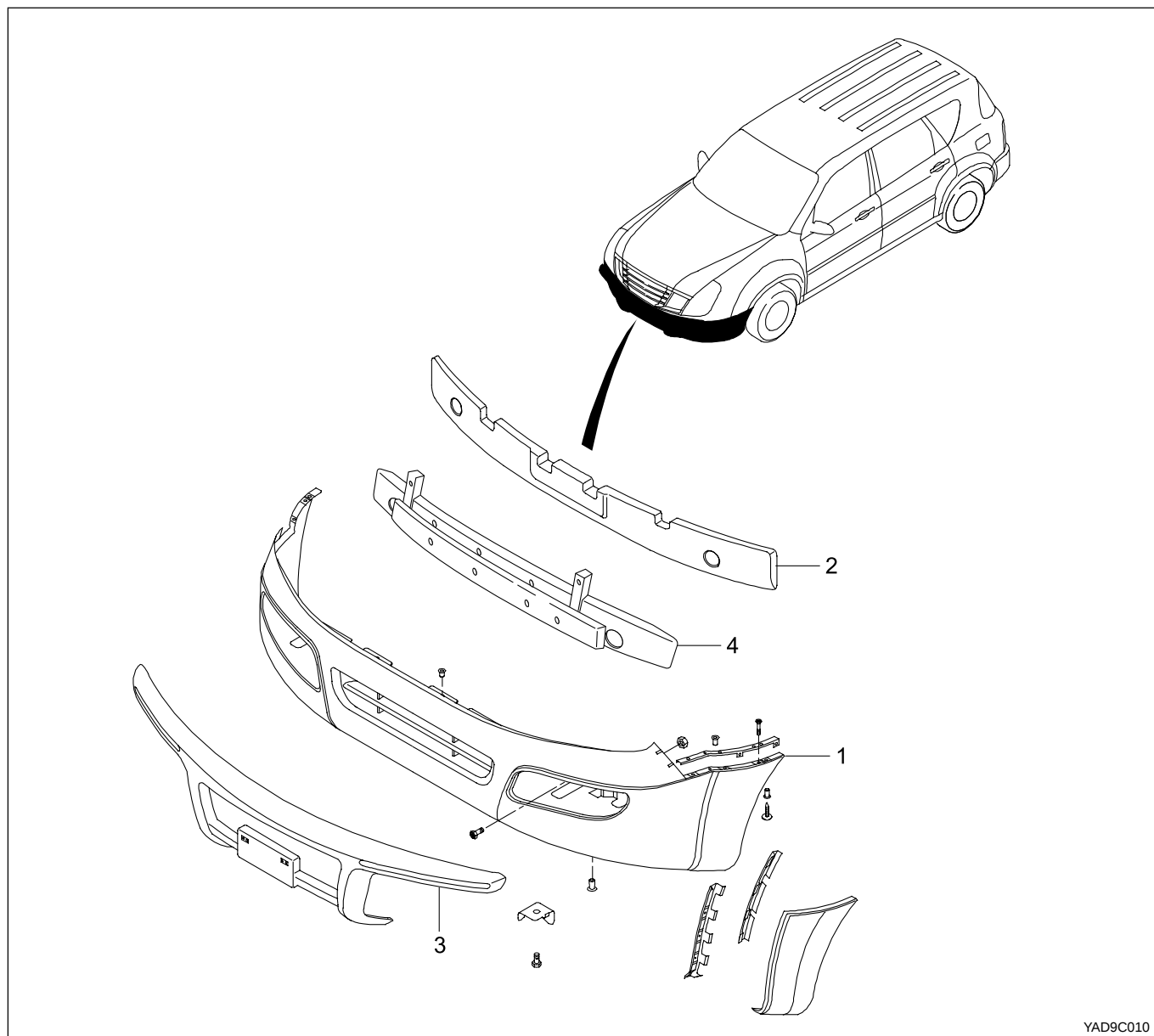
BODY EXTERIOR

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PARTS COMPONENTS

FRONT BUMPER

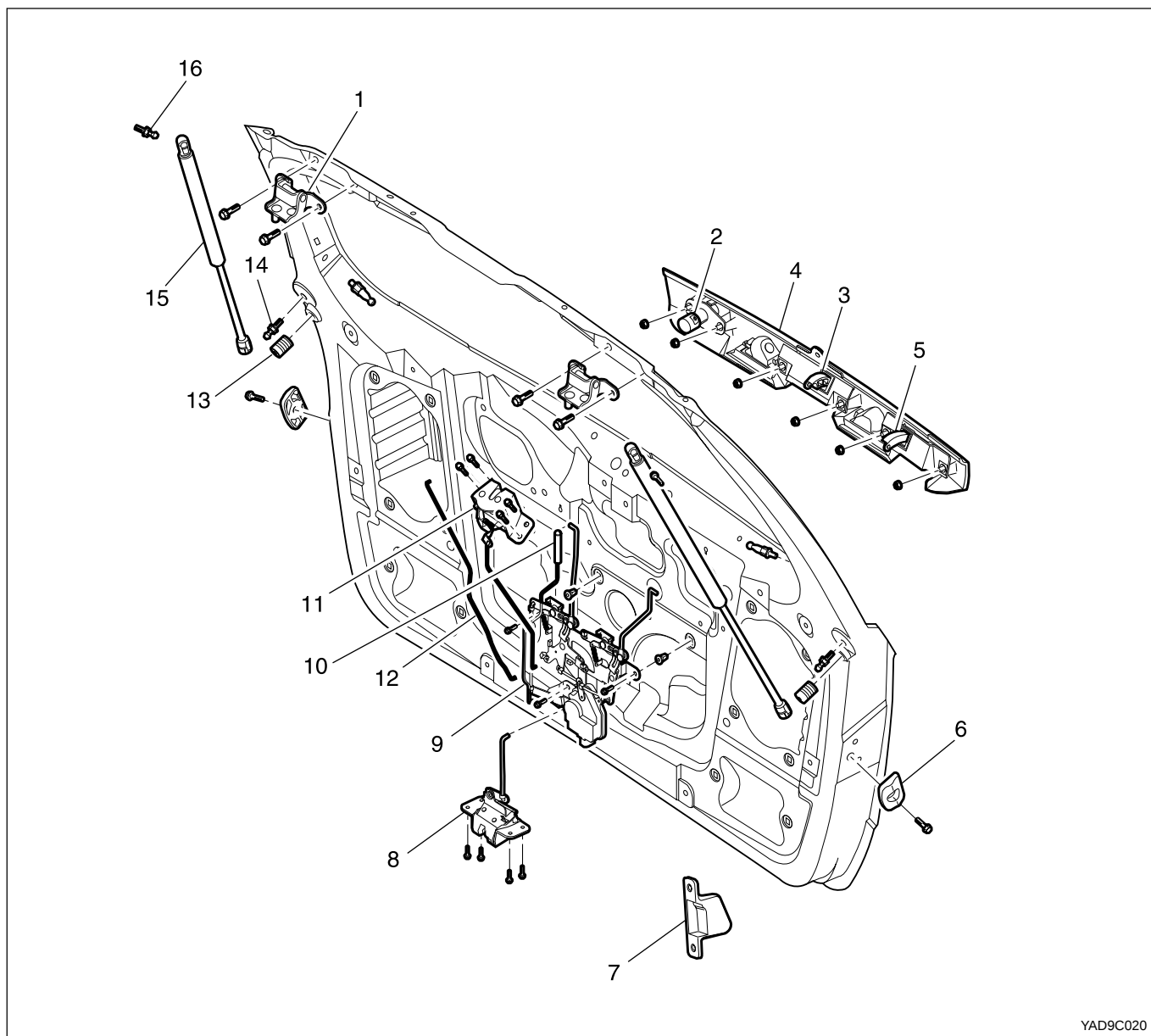


YAD9C010

- 1 Front Bumper Facia Assembly
- 2 Energy Absorber

- 3 Front Nudge Bar Assembly
- 4 Bumper

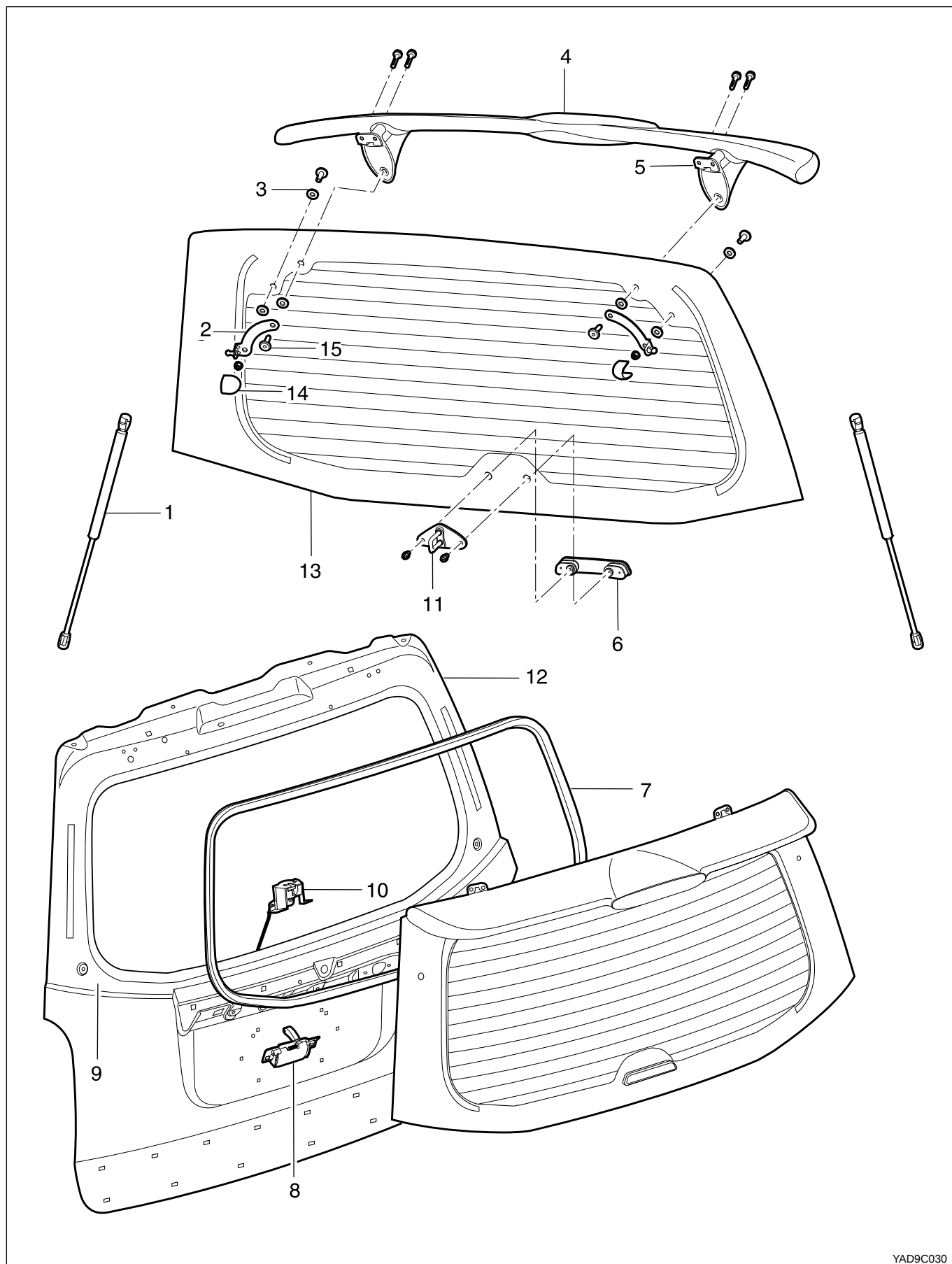
TAIL GATE Mechanism



YAD9C020

- | | |
|----------------------------|-----------------------------|
| 1 Hinge | 9 Door Safety Rod Box Crank |
| 2 Key | 10 Safety Nob |
| 3 Tail Gate Release Handle | 11 Glass Open Latch |
| 4 Garnish | 12 Key Rod |
| 5 Glass Handle | 13 Over Slam Bumper |
| 6 Guide Bumper | 14 Ball Stud |
| 7 Body Side Guide Bumper | 15 Lifter |
| 8 Tail Gate Latch | 16 Ball Stud |

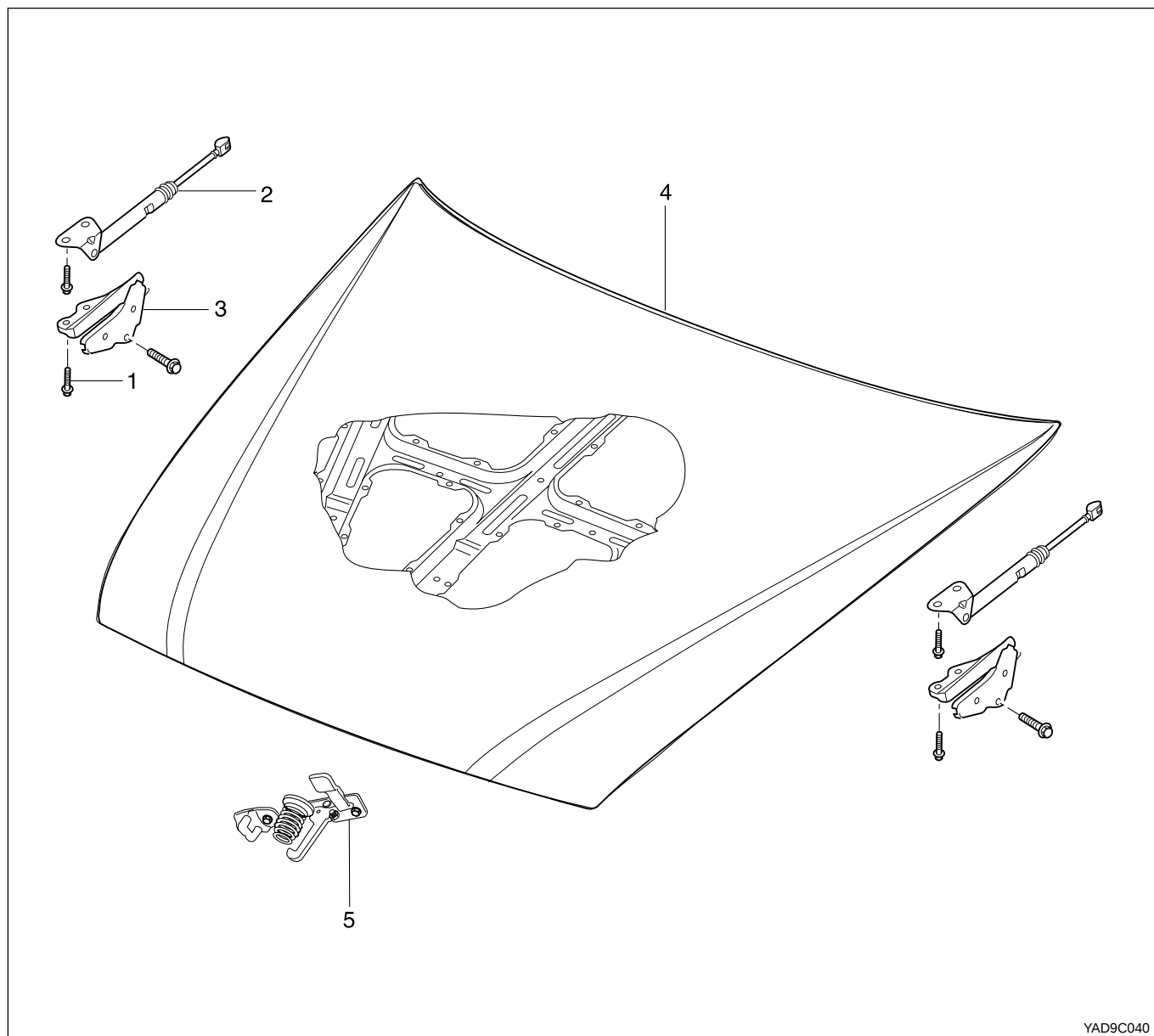
FLIP- UP SYSTEM



YAD9C030

- | | |
|------------------------|---|
| 1 Glass Lifter | 9 Over Slam Bumper |
| 2 Ball Stud Bracket | 10 Latch |
| 3 Bolt Pad | 11 Striker |
| 4 Spoiler | 12 Panel |
| 5 Glass Open Hinge | 13 Glass (Standard : 4.0 T Flip-Up : 5.0 T) |
| 6 Glass Handle | 14 Bracket Cover Of Ball Stud |
| 7 Glass Weather Strip | 15 Bolt |
| 8 Glass Release Handle | |
-

HOOD

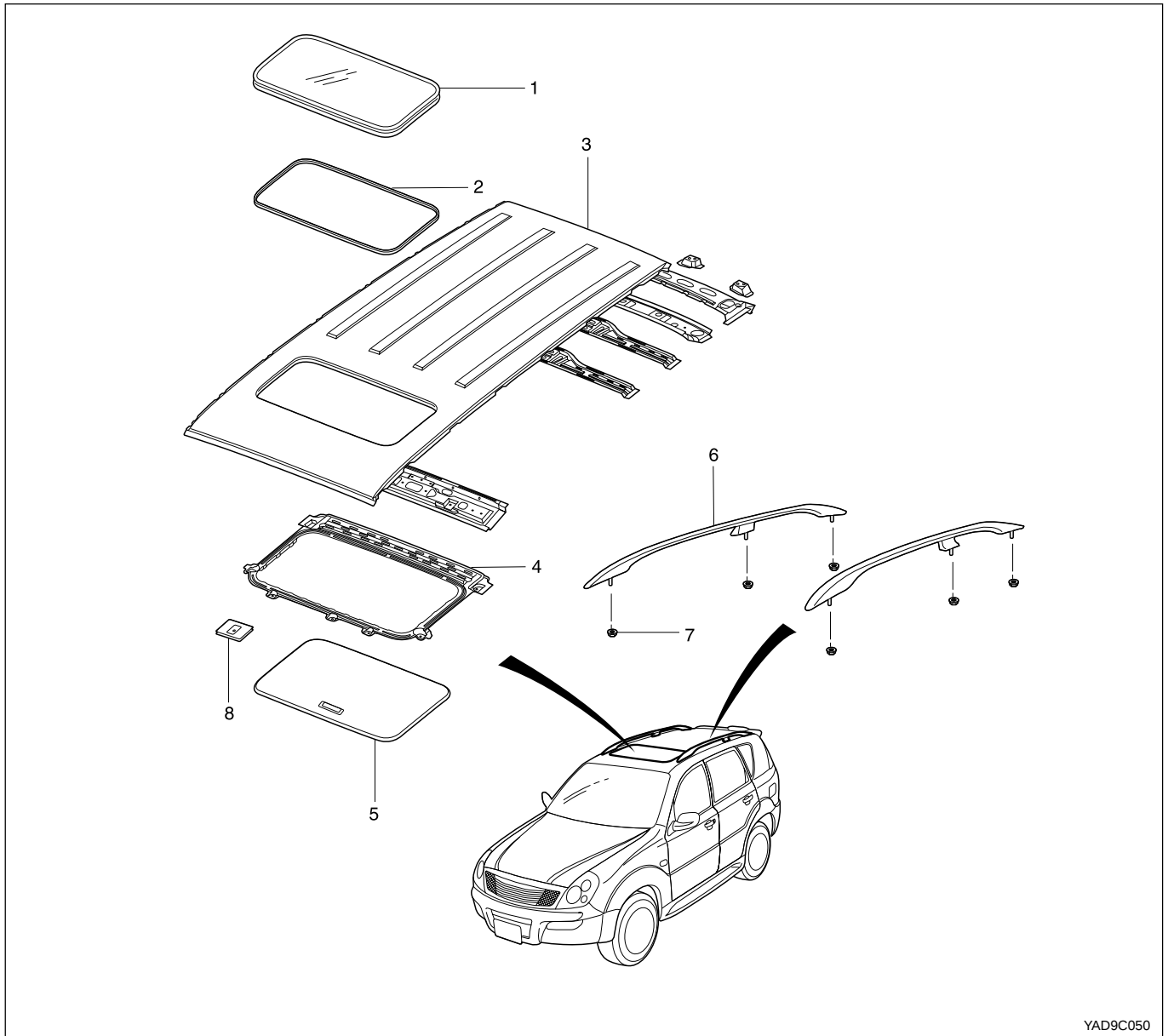


YAD9C040

- 1 Bolt
- 2 Shock Absorber
- 3 Hood Hinge

- 4 Hood
- 5 Hood Striker

SUN-ROOF AND ROOF RACK

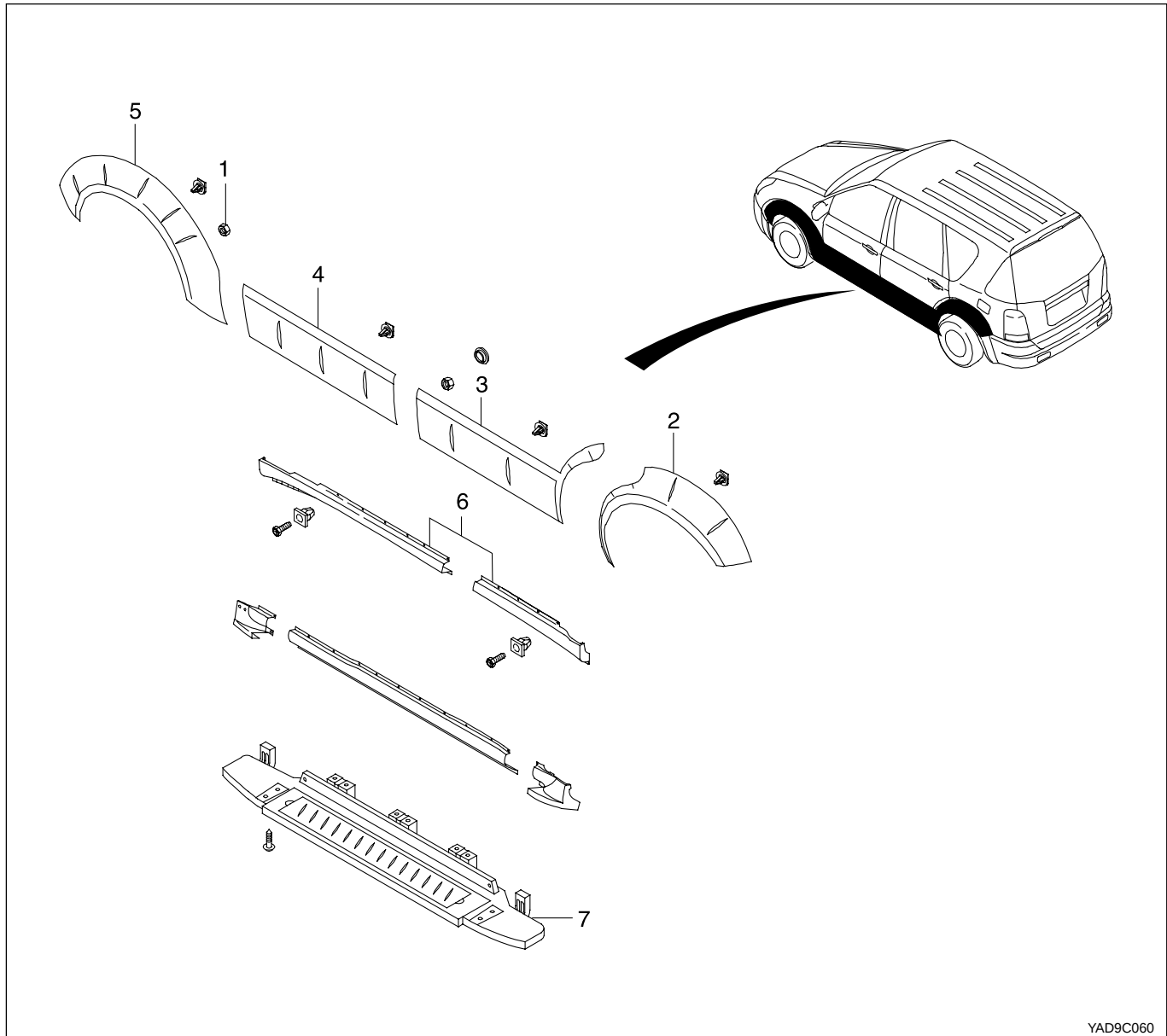


YAD9C050

- 1 Sun-Roof Glass
- 2 Glass Moulding
- 3 Head-Lining Assembly
- 4 Roof Channel

- 5 Sun-Roof Glass Panel
- 6 Roof Carrier
- 7 Nut
- 8 Motor And Relay Box

MOULDING



YAD9C060

- 1 Nut (M5)
- 2 Wheel Arch Front Moulding
- 3 Front Door Garnish
- 4 Rear Door Garnish

- 5 Wheel Arch Rear Moulding
- 6 Moulding
- 7 Side Step

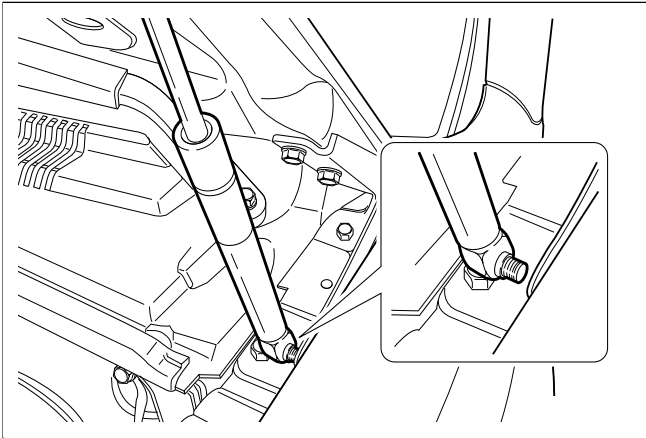
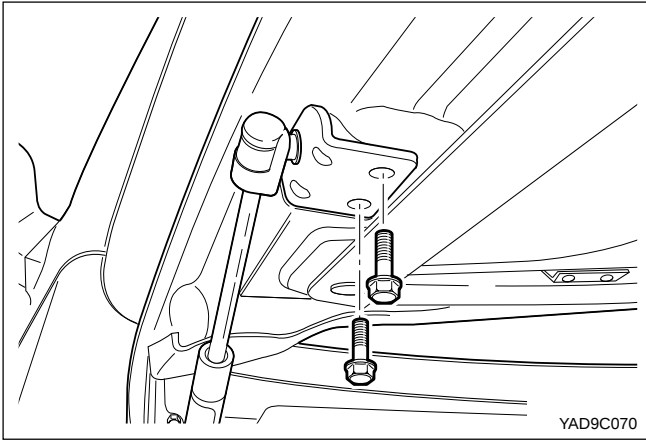
REPAIR PROCEDURE

HOOD ASSEMBLY

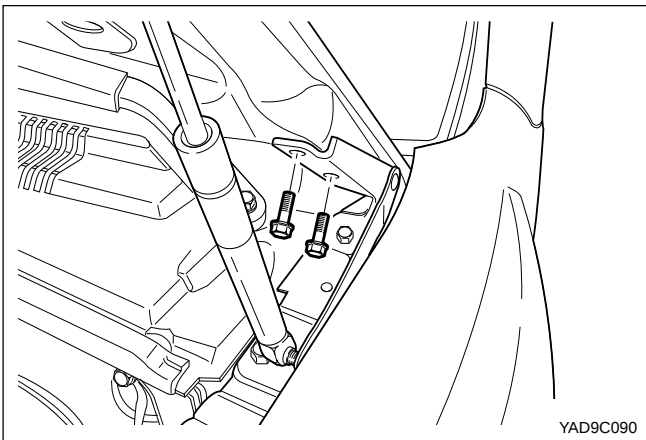
Removal and Installation

1. Release bolt of fixing bracket of shock absorber in the hood.

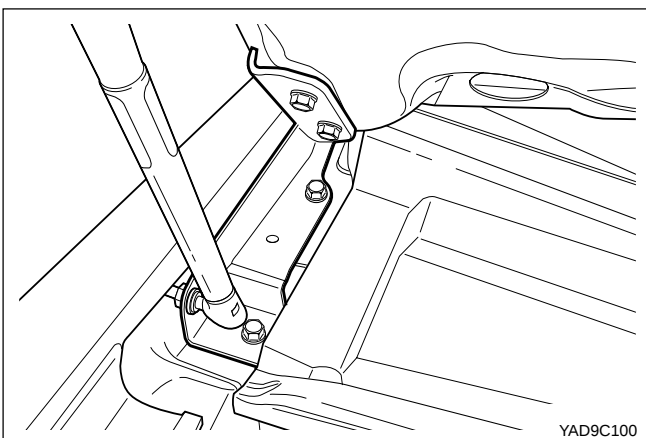
Notice: While fixing bracket of shock absorber is removed, back up hood, to prevent closing of hood or use another supporting bar to prevent closing of hood.



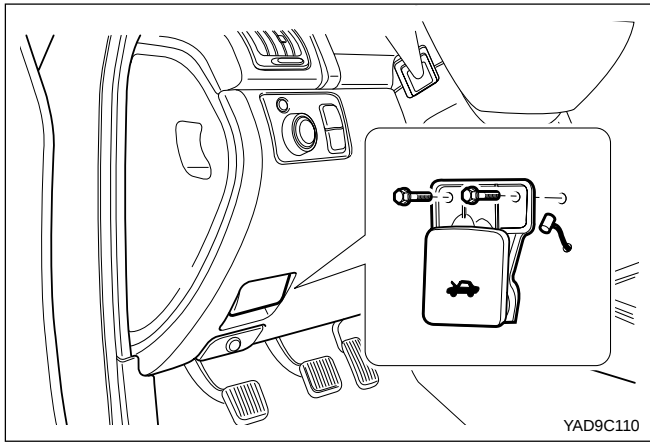
2. Remove shock absorber. (Method to remove shock absorber ; refer to replacement shock absorber of hood)



3. Remove hose of wiper washer.
4. After releasing fixing bolt of hood hinge, remove hood assembly.

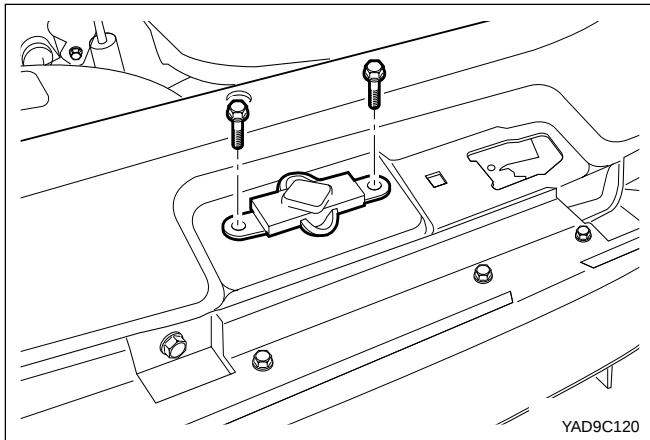


5. After releasing fixing bolt of hood hinge, remove hood hinge.

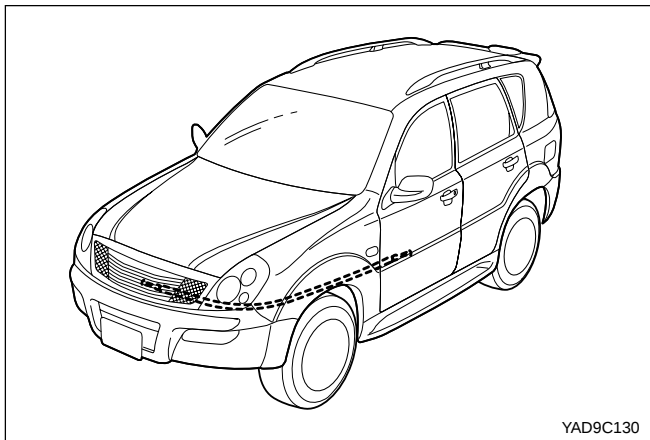


6. Remove hood latch and cable.

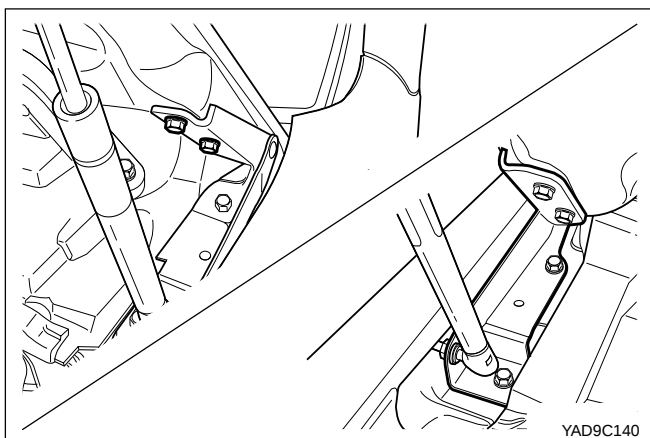
- 1) Remove cable and hood latch lever in the lower main panel.



- 2) Push cable removed through groove of body into direction of engine room.
- 3) After releasing fixing bolt of hood latch, remove latch and cable.



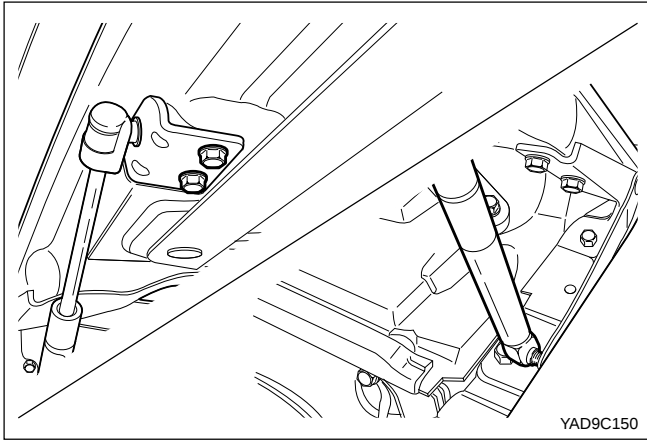
- 4) Remove cable of hood latch.



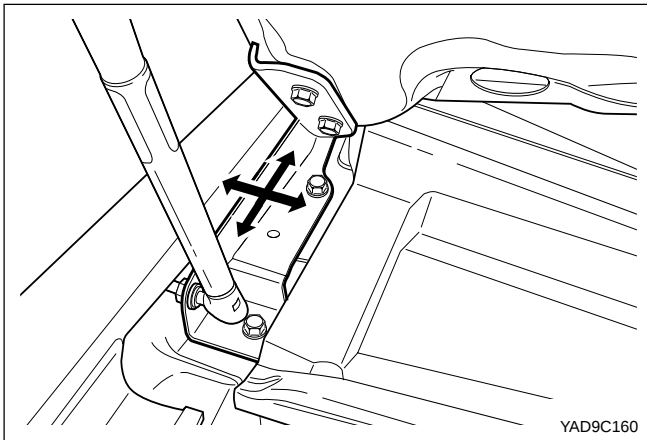
7. Install the reverse order of removal .

- 1) After installing hood hinge into body and hood, tighten fixing bolt with the torque of specification.

Tightening Torque	29 - 39 N•m (21 - 29 lb-ft)
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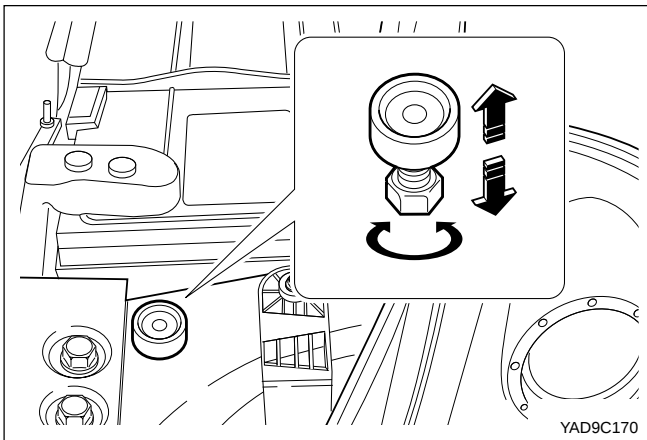


2) Install the shock absorber.

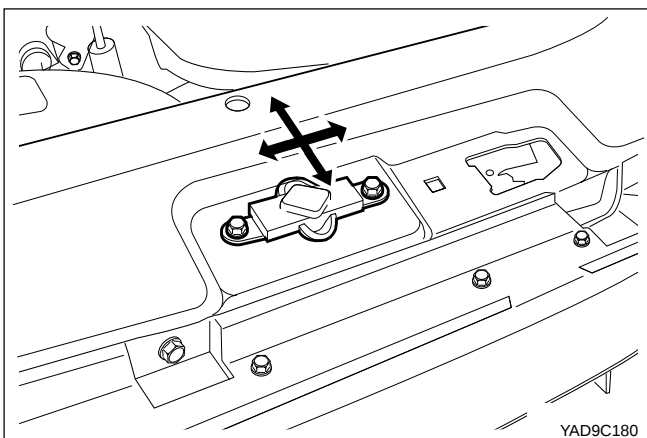


Adjusting Hood Hinge

1. Release little bit fixing bolt of hood hinge.
2. After adjusting hood hinge to forward and backward, left and right, check whether right position of hood is installed or not.



3. After adjusting over slam bumper, adjust height of front end of hood.

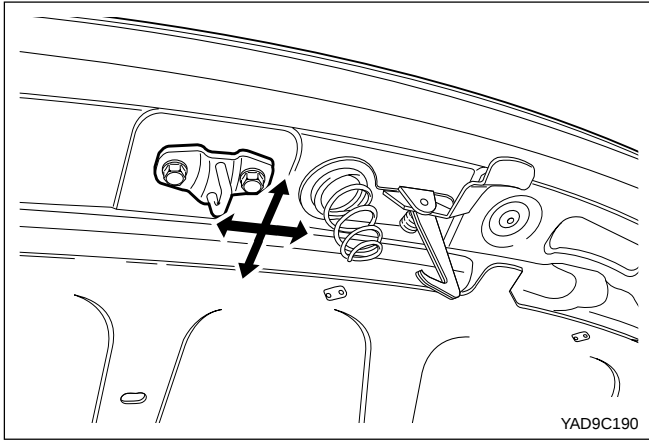


Adjusting Hood Latch

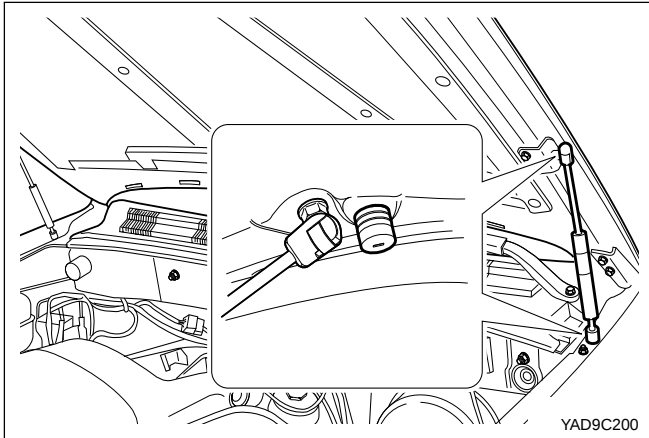
1. Install hood latch on the right position, if hood latch is not installed on the right position, while hood is installed, hood may distort and be unbalanced.

Bolt of Hood Latch

8 - 11 N•m
(44 - 52 lb-ft)

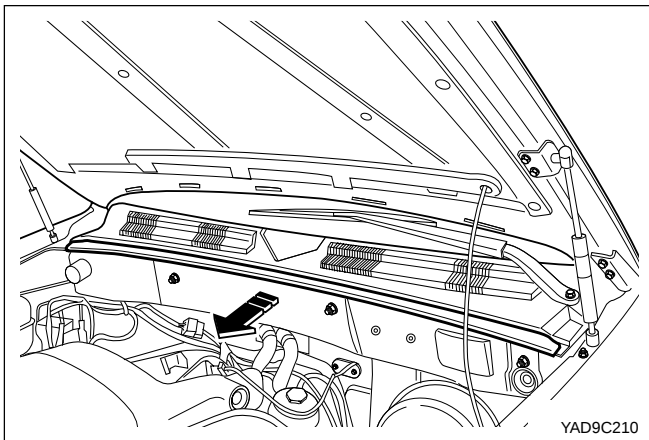


2. Release a little bit fixing bolt of striker.
3. After adjusting position of striker to forward and backward, left and right, put center of latch.



Replacement Shock Absorber of Hood

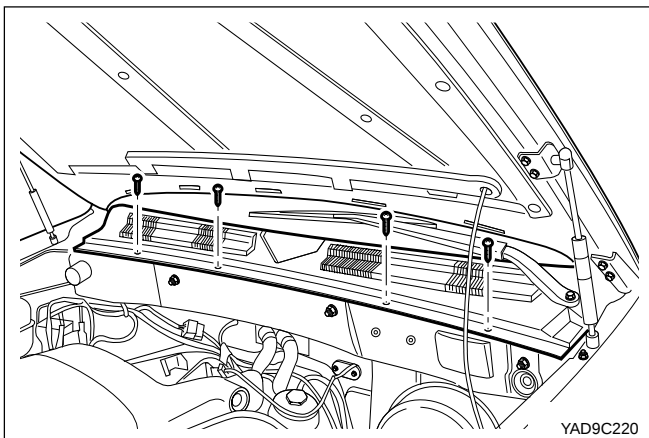
1. After inserting driver on the upper of bending equipped both end of shock absorber, get the bending out of shock absorber, and then, remove shock absorber.
2. Insert shock absorber, until is sounded like a kind of equipped sound.



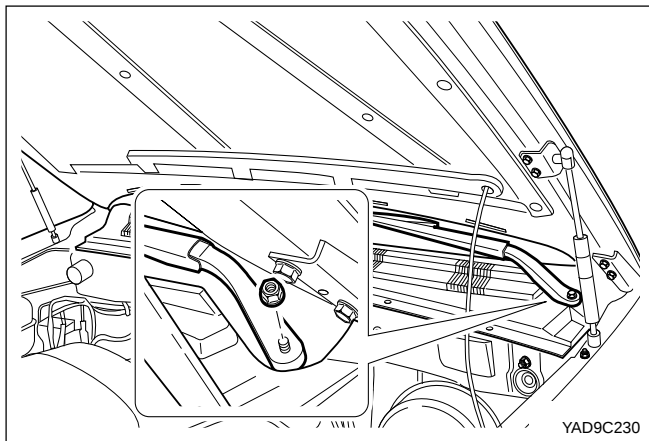
COWL GRILL

Removal and Installation

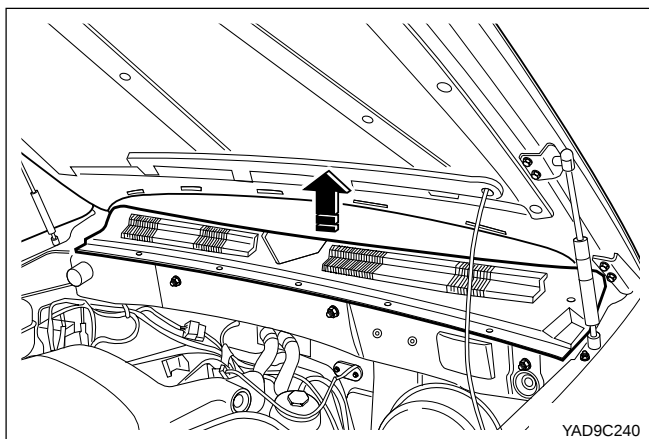
1. Remove wiper arm and fixing nut of wiper in the right and left. (M8)



2. Remove weather strip.



3. Separate fixing clip of cowl. (4 EA)

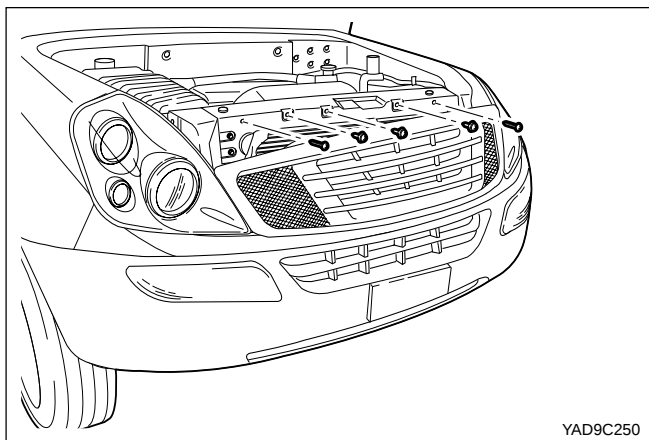


4. Remove cowl of left / right. (first, cowl of right is removed, and then cowl of left is removed)

5. Install reverse order of removal.

Wiper Fixing Nut

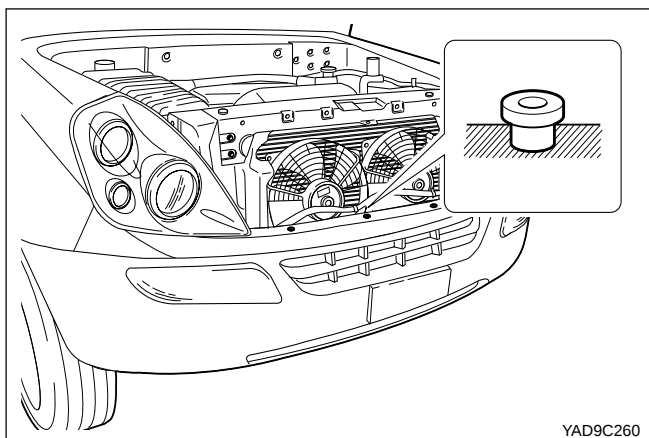
14 - 17 N•m
(44 - 52 lb-ft)



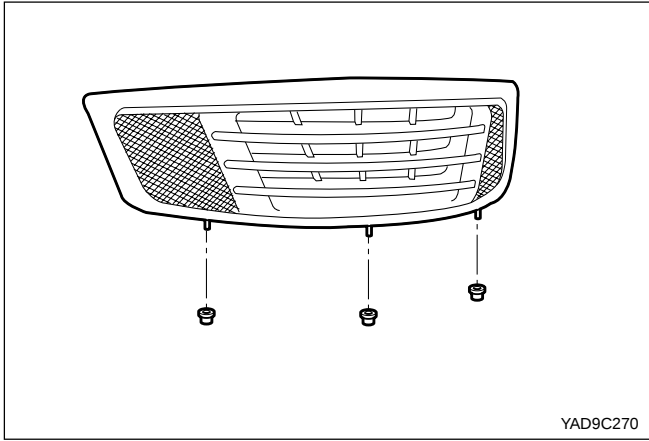
RADIATOR GRILL

Removal and Installation

1. Remove fixing screw (2 ea) of radiator grill and rivet (3 ea).

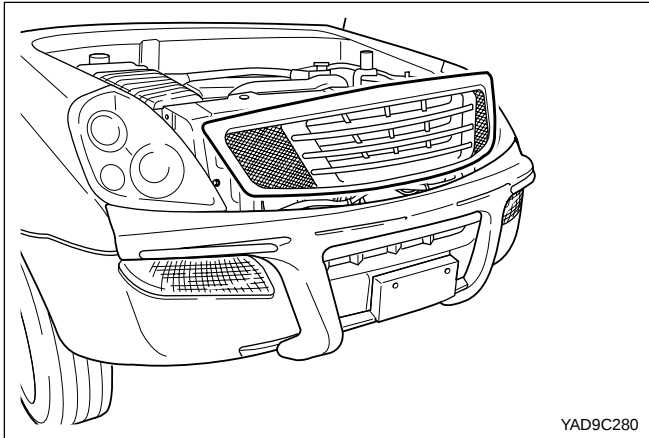


2. Remove radiator grill and fixing rubber of grill.



3. Install reverse order of removal.

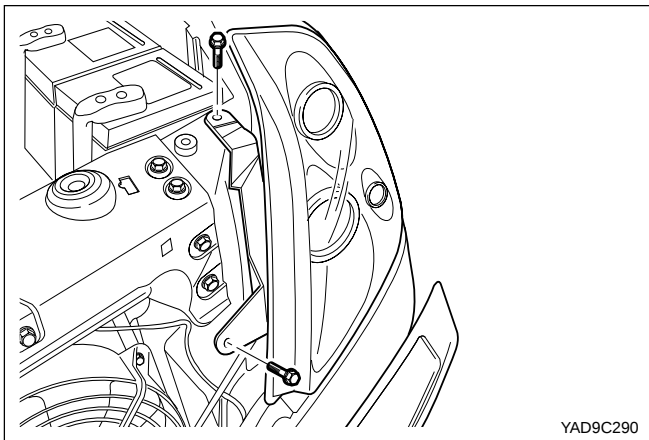
Notice: Check damage of fixing rubber and damage of grill.



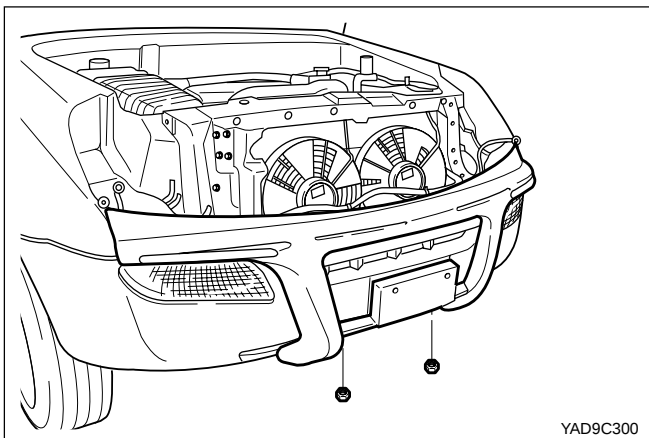
FRONT BUMPER ASSEMBLY

Removal and Installation

1. After releasing screw of radiator grill and screw rivet, remove grill assembly.

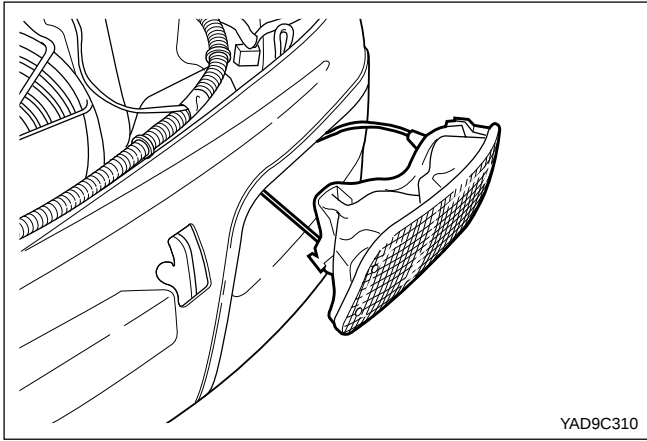


2. After releasing fixing bolt, remove connector of headlamp and remove headlamp. (first, after removing cap of wheel house cover, remove fixing nut of headlamp)

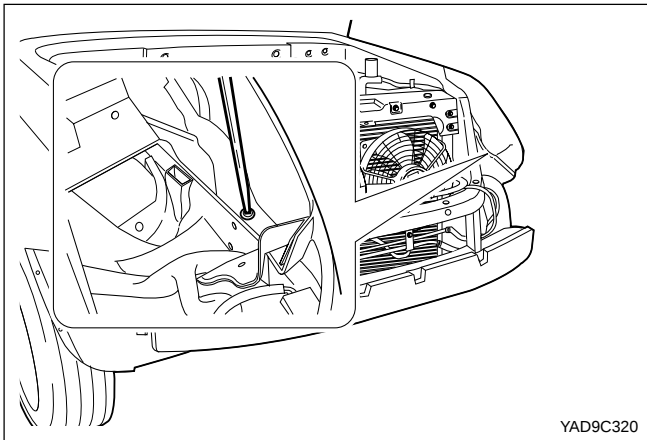


3. After releasing fixing bolt (4 ea) of bumper guide, remove bumper guide from bumper.

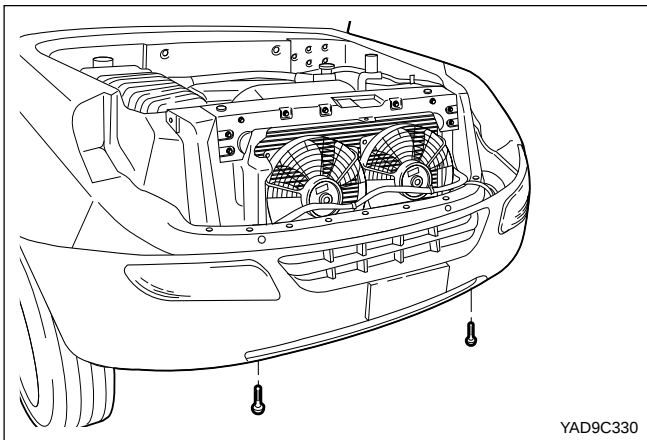
- After releasing fixing bolt of bumper guide support, remove bumper guide support.



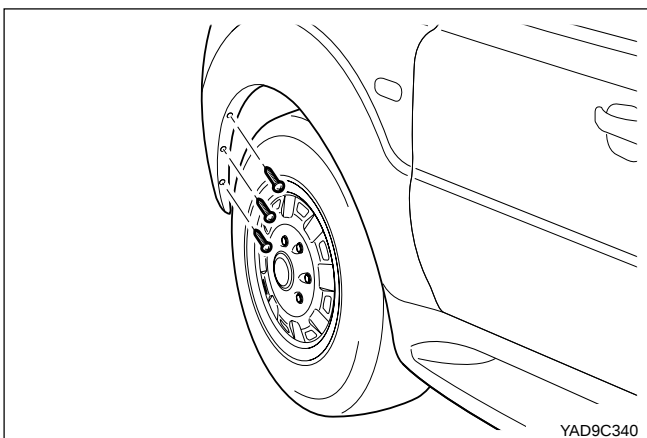
4. Remove fog lamp. (After releasing nut (2 ea) of internal section of bumper fascia)



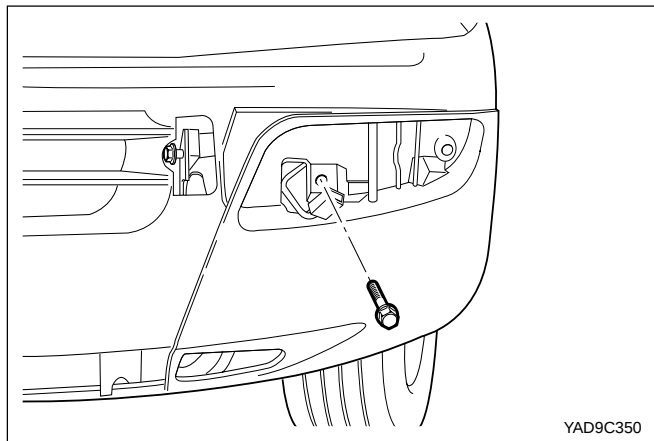
5. Remove bumper cover
 - 1) Separate rivet (6 ea) of the upper of bumper fascia.
 - Remove screw (2 ea) and nut (2 ea) of fender.



- 2) Separate screw of the lower of bumper fascia. (2 ea)

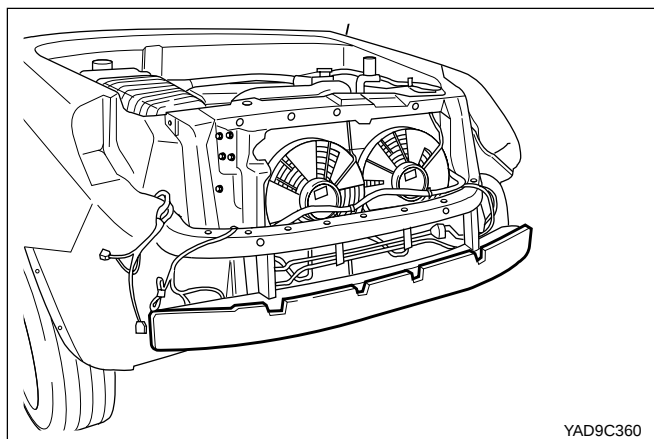


- 3) Separate screw of bumper fascia in the wheel house.
 - Side section : 4 ea
 - Rivet of lower section : 1 ea

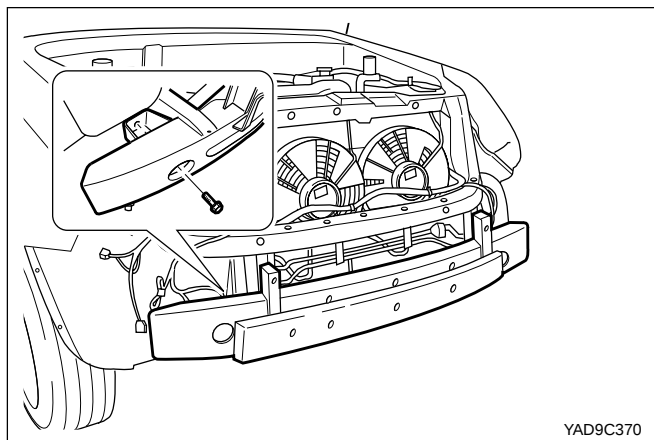


4) After releasing fixing bolt of center of bumper fascia, remove bumper fascia.

- Left : 1 ea
- Right: 1 ea



6. Remove energy absorber.



7. After releasing fixing bolt of bumper in the frame, remove bumper.

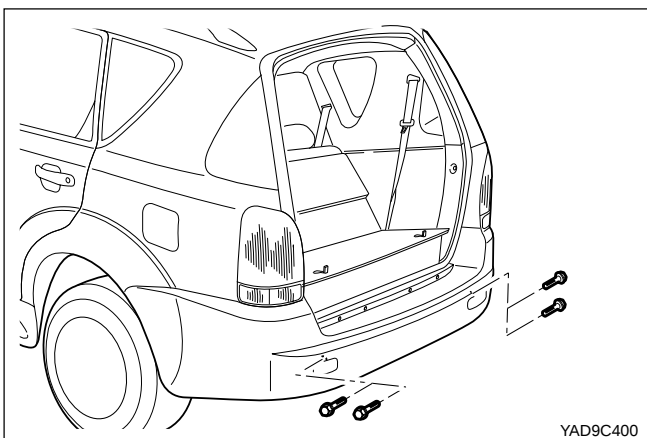
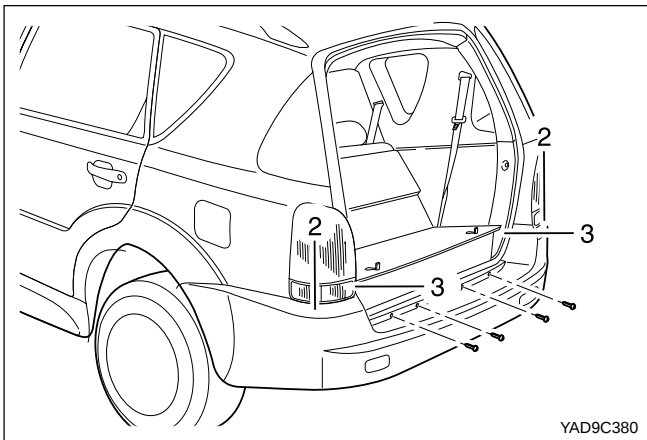
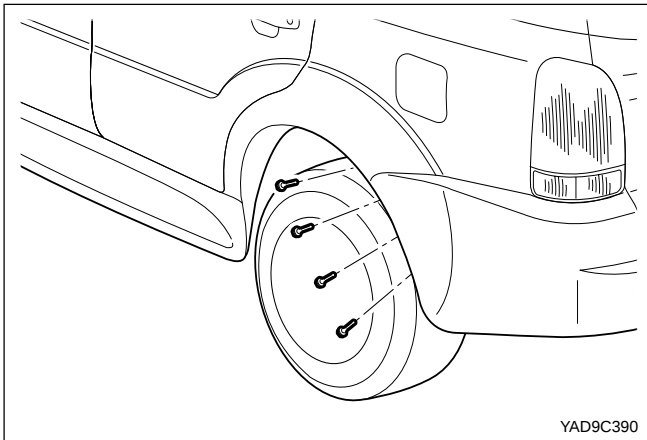
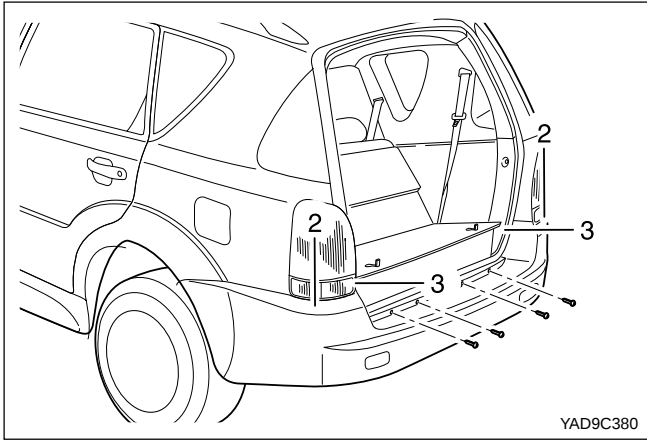
8. Install reverse order of removal.

Fixing Bolt of Bumper	76 - 114 N•m
Bolt of Bumper cover	2.8 - 5.2 N•m
Bolt of Bumper Guide	16.8 - 31.2 N•m

REAR BUMPER ASSEMBLY

Facia

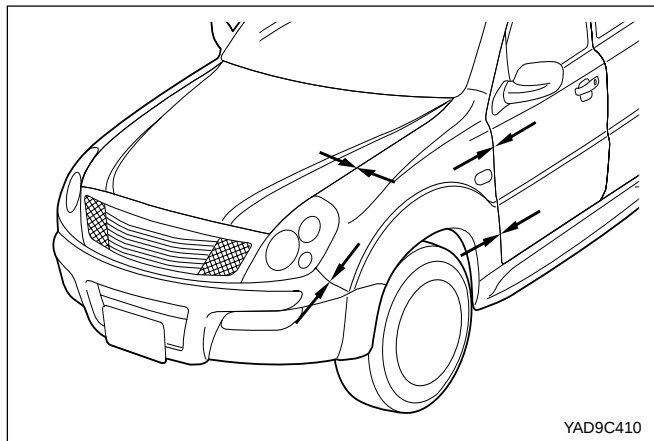
1. Remove rear combi - lamp.
2. Separate screw of section of combi - lamp.
(left: 1 ea, right: 2 ea)
3. Separate screw of the upper of the bumper.
(left: 1 ea, right: 1 ea)
4. Separate rivet of the upper of bumper facia.
(5 ea)
5. Separate fixing screw of bumper facia in the rear wheel house. (left: 4 ea, right: 4 ea)
6. Install reverse order of removal.



BACK BEAM

1. After releasing fixing bolt of rear bumper, remove back beam assembly.
2. Install reverse order of removal.

Tightening Torque	41.6 - 62.4 N•m (44 - 52 lb-ft)
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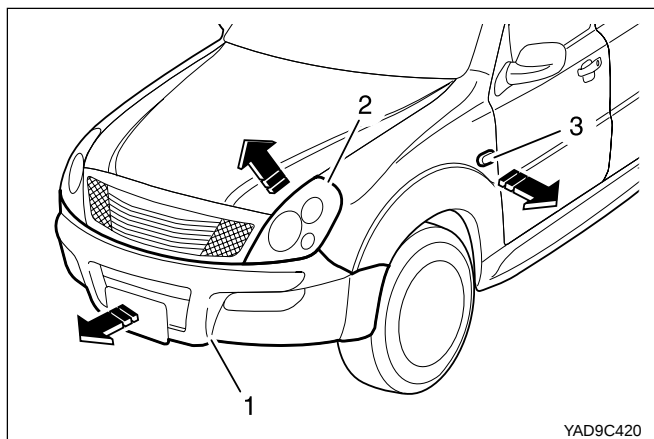


FENDER

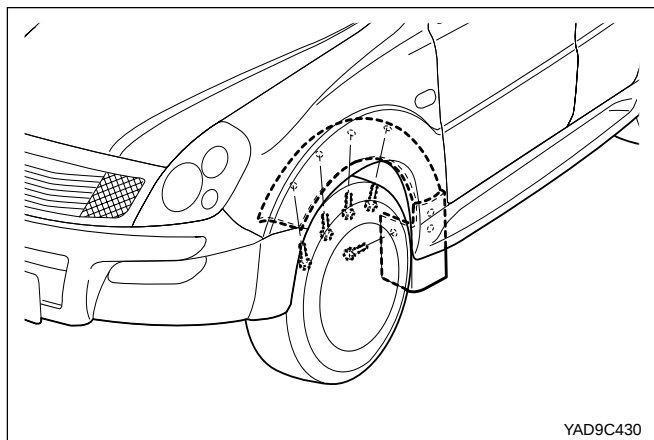
Removal and Installation

1. Vehicle is fixed safely, and then lift up the vehicle.

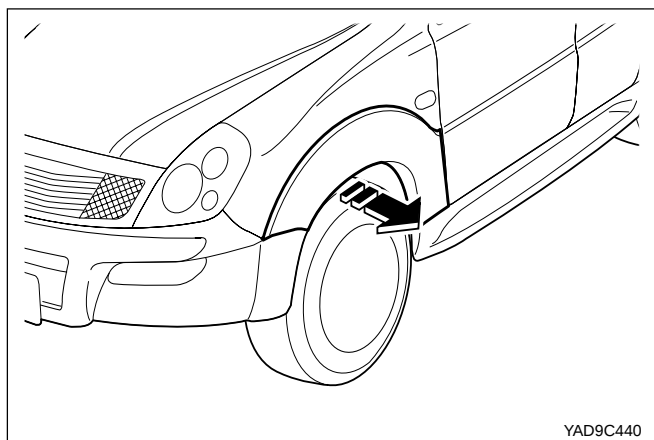
Notice: Before the fender is removed, adjust and check the gap and clearance between front door, side sill, and front bumper.



2. Remove front bumper facia (1 ea), head lamp (2 ea), head lamp guide bracket, side repeater.

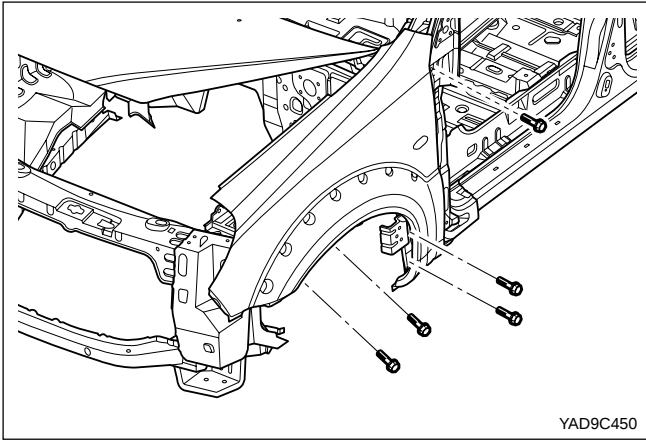


3. Separate wheel guard, mud guard, and spring nut.

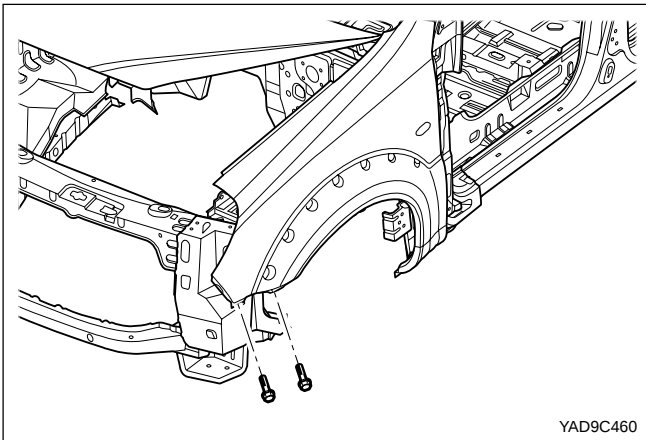


4. Using driver, special service tool, remove fender garnish.

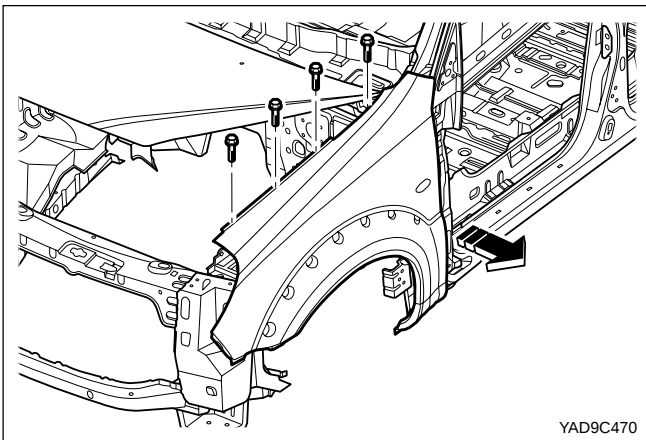
Notice: Be careful about damage paint of body, not to make blemishes.



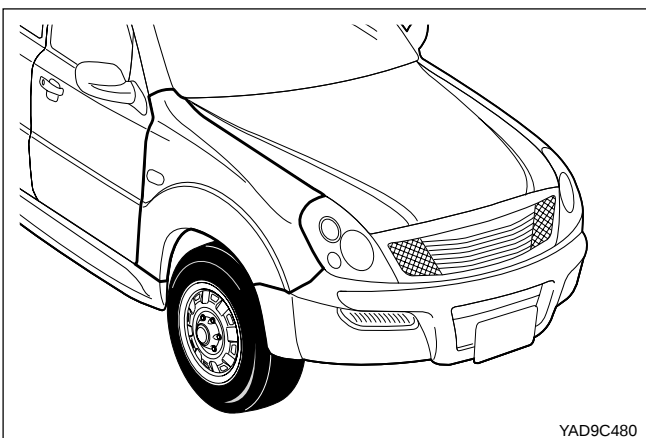
5. Release fixing bolt (2 ea) of mud guard in the lower vehicle. (the section of wheel rear)
6. After opening the door, release fixing bolt of fender. (1ea)



7. Release bolt (2ea) of the section of bumper fascia.



8. Separate fixing bolt (1ea) of rear section of hood hinge and separate fixing bolt (3ea) of the upper section of fender and then remove fender.



9. Install reverse order of removal.

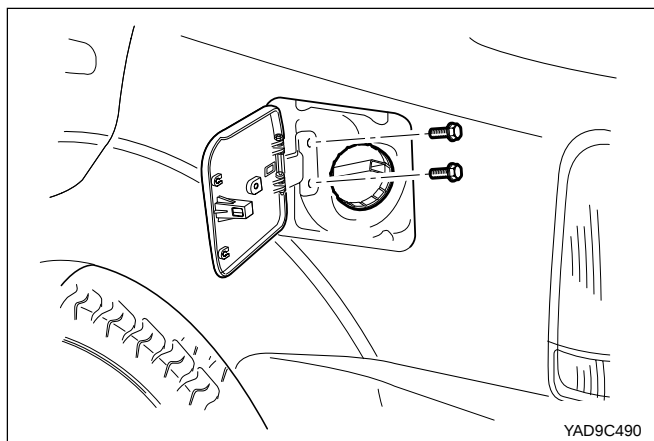
Notice:

- 1) Paint internal section of fender and installed section of fender.
- 2) After installing fender, tighten temporarily bolt (2 ea) the upper section of hood, in the back and front, adjust the gap and clearance of door, hood, and lamp.

- 3) After spread water-proof materials on the section of tightening, tighten the bolt with the torque of specification.

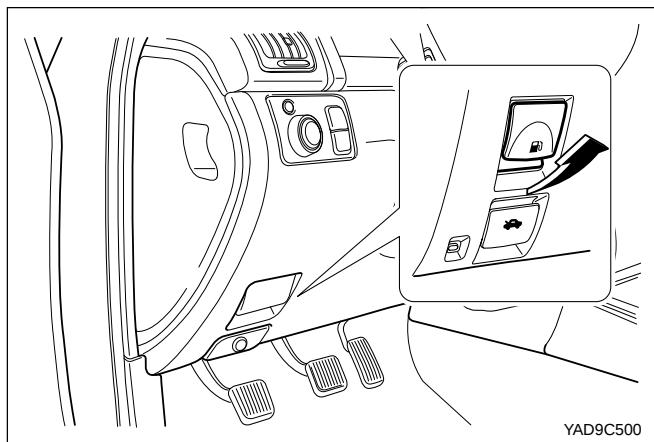
Fender Bolt	6.9 - 8.8 N•m (44 - 52 lb-ft)
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- 4) After painting, check connection of electrical parts and operation.

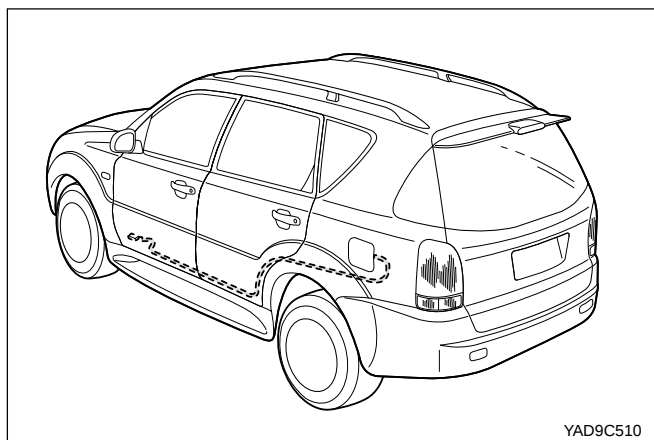


FUEL FILLER OPENING SYSTEM

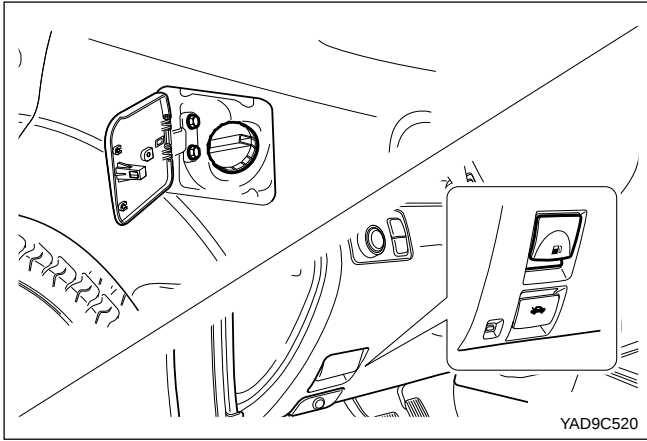
1. After opening the door of fuel filler, separate fixing bolt of door.



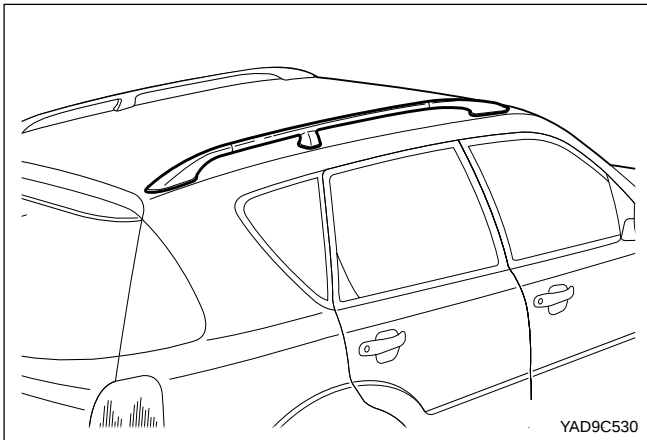
2. Separate release handle of fuel filler in the lower main panel of driver seat.



3. Remove the cable of fuel filler in the vehicle.



4. Install the reverse order of removal

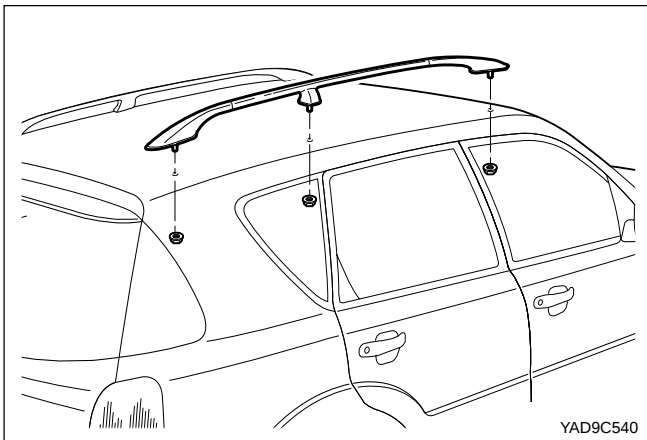


ROOF CARRIER

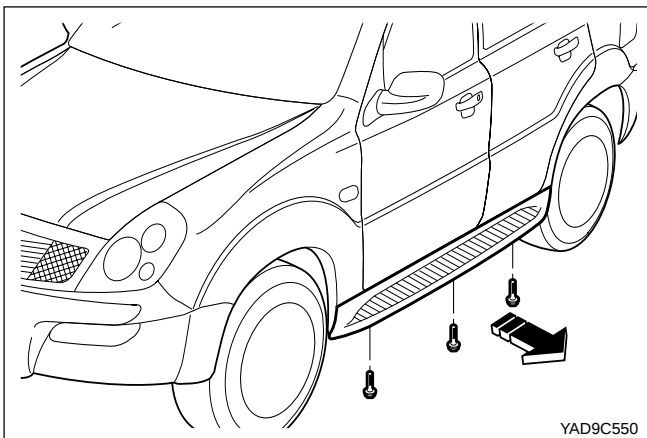
Removal and Installation

1. In order to remove roof carrier , first remove headlining
2. After releasing fixing nut of roof carrier, remove roof carrier, assembly.
3. Install reverse order of removal.

Roof Carrier Nut	7 - 10 N•m (44 - 52 lb-ft)
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Notice: Maximum load of roof carrier is approximately 45 kg, all the load should equivalently distribute on the roof carrier.

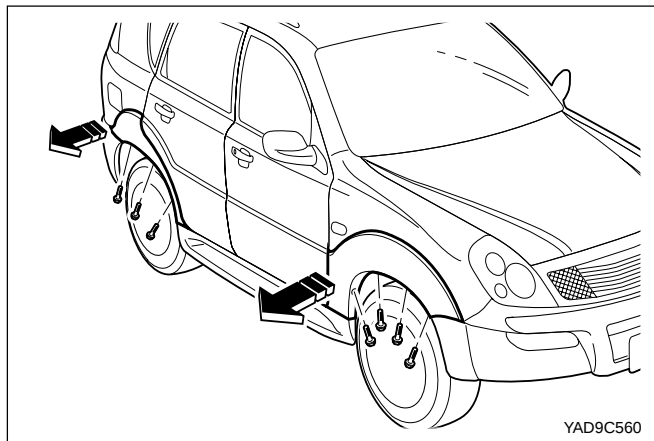


SIDE STEP

Removal and Installation

1. After releasing bolt and nut of side step , remove side step assembly.
2. Install reverse order of removal.

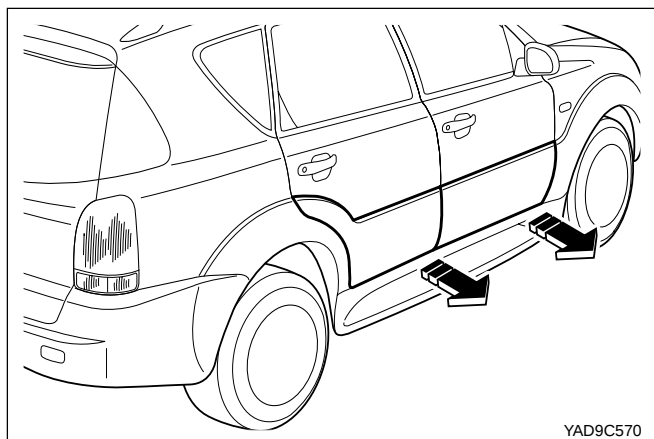
Bolt and Nut of Side Step	16.8 - 31.2 N•m (44 - 52 lb-ft)
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SIDE MOULDING

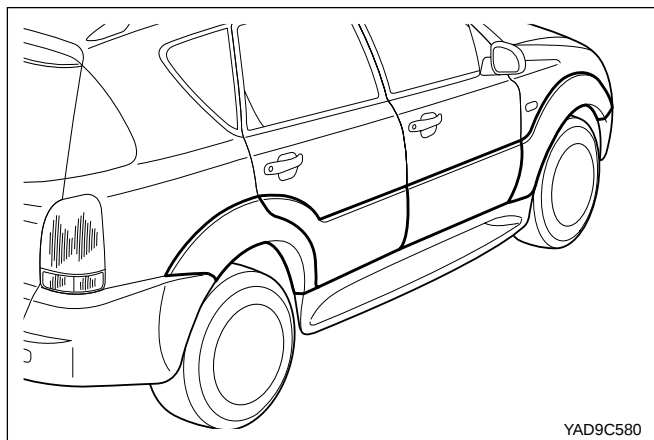
Removal and Installation

1. After releasing fixing screw of wheel housing moulding in the front and rear, remove moulding.



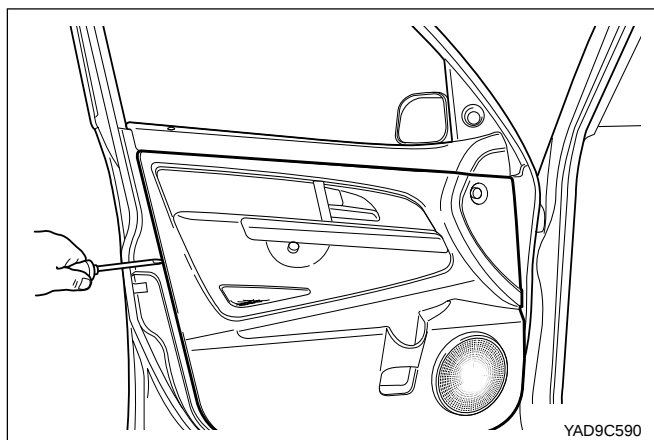
2. Using special service tool, remove door moulding of front and rear.

Notice: While door moulding and moulding of wheel housing is removed, pay attention on the damage of painting section, in order not to make scratch of moulding.



3. Install reverse order of removal .

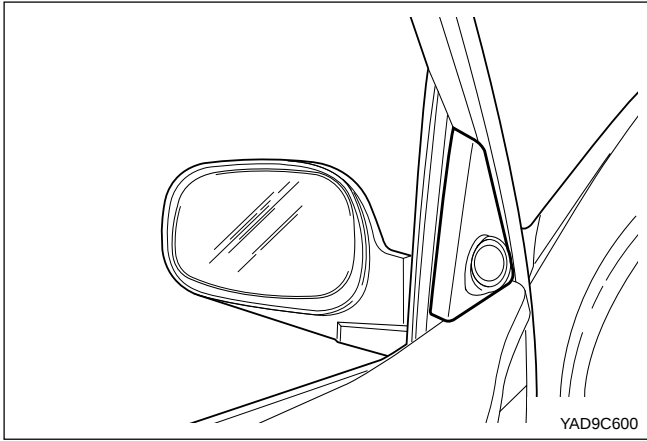
Notice: While moulding is installed, install moulding tightly, not to make the gap.



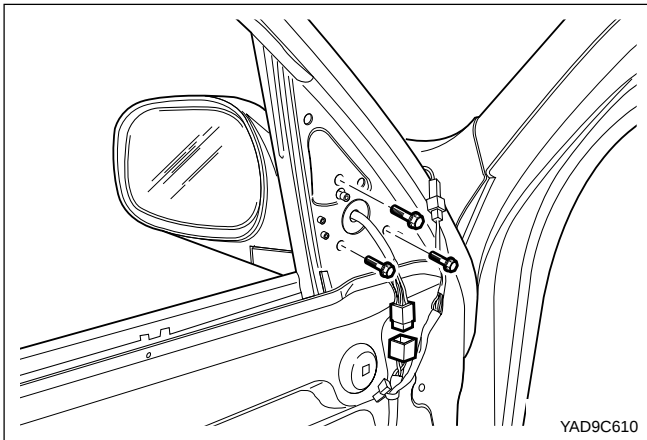
OUTSIDE MIRROR

Removal and Installation

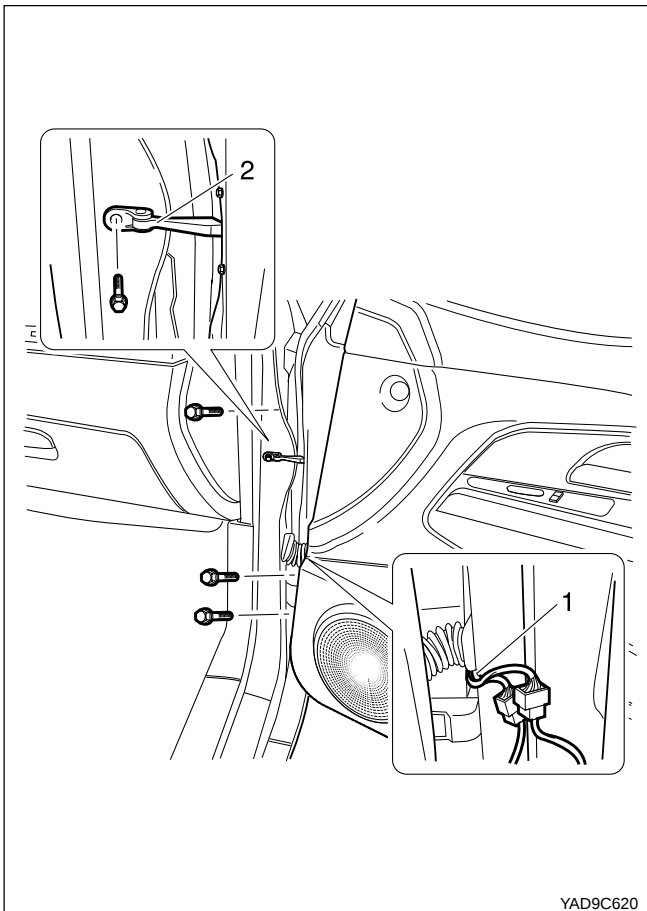
1. Remove trim cover of front door.



2. Remove inner cover of outside mirror or cover of speaker assembly.



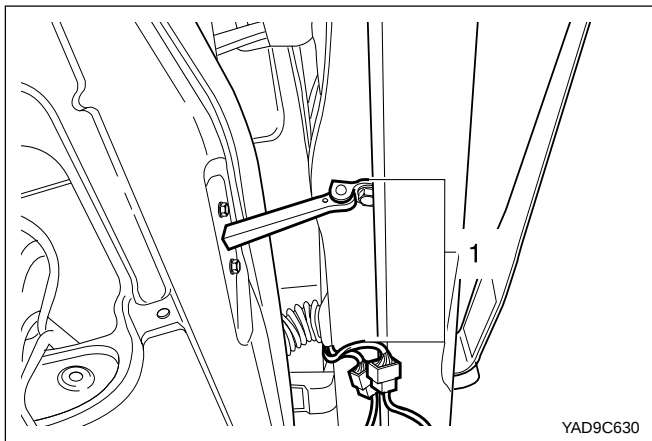
3. Separate fixing bolt (3 ea) of outside mirror.
4. Separate connector of outside mirror, remove outside mirror.
5. Install reverse order of removal.



DOOR ASSEMBLY

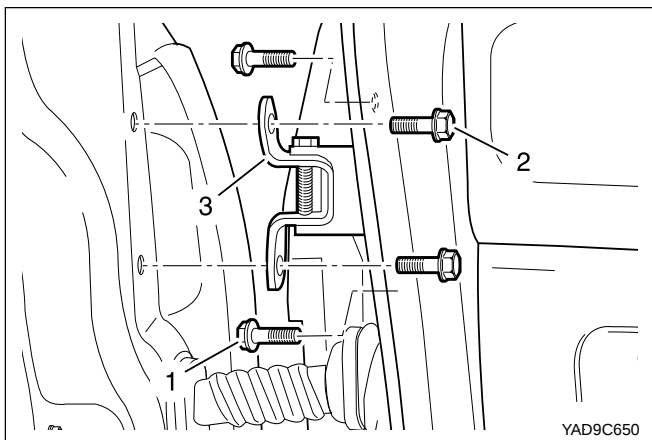
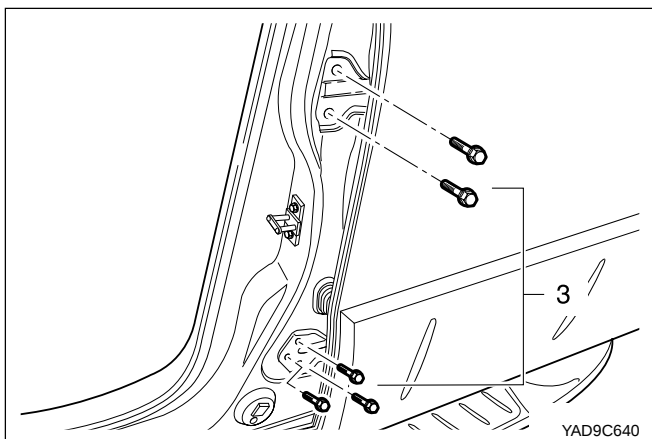
Removal and Installation

1. remove the negative (-) terminal of battery.
2. After removing the trim of cowl side, separate connector of door(1).
3. Disassemble the bolt of check link(2ea) in the body.
4. Disassemble the fixing bolt(3ea) of hinge in the body.
5. Remove the door assembly.



6. Install reverse order of removal.

Bolt of Door Hinge	44 - 54 N•m
Bolt of Door Check Link	20 - 30 N•m

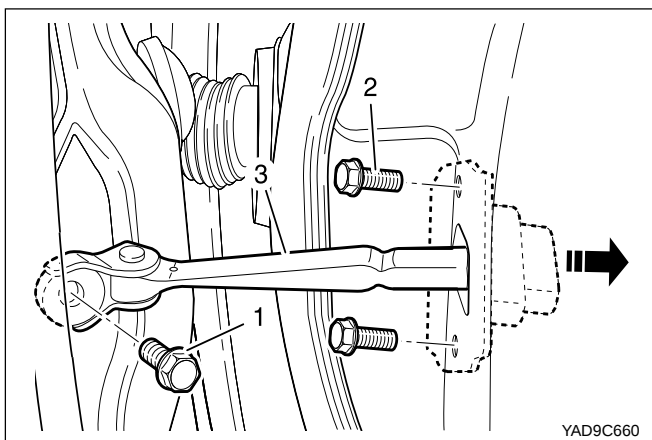


DOOR HINGE

Removal and Installation

- After opening the door, remove hinge of door.
 - Release the bolt(2ea) of in the body side.
 - Release the bolt(2ea) of door.
 - Remove the hinge.
- Install the reverse order of removal.

Bolt of Door Hinge	16 - 29 N•m (44 - 52 lb-ft)
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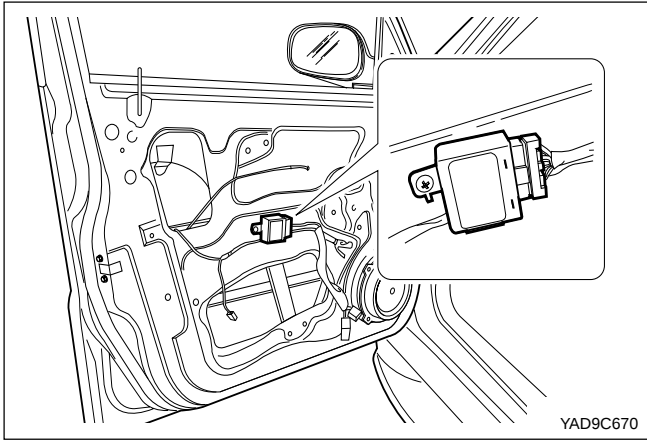


DOOR CHECK LINK

Removal and Installation

- Remove vinyl seal of door trim.
- Remove door check link.
 - Release bolt (3 ea).
 - Remove door check link.
- Install reverse order of installation.

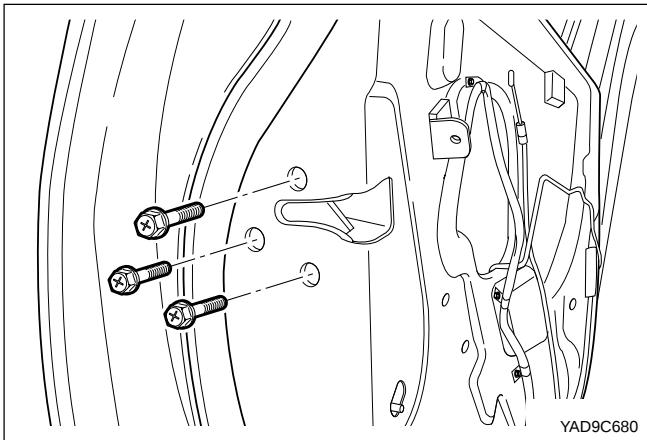
Door Check Link Bolt	7 - 11 N•m (44 - 52 lb-ft)
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DOOR LOCK ASSEMBLY

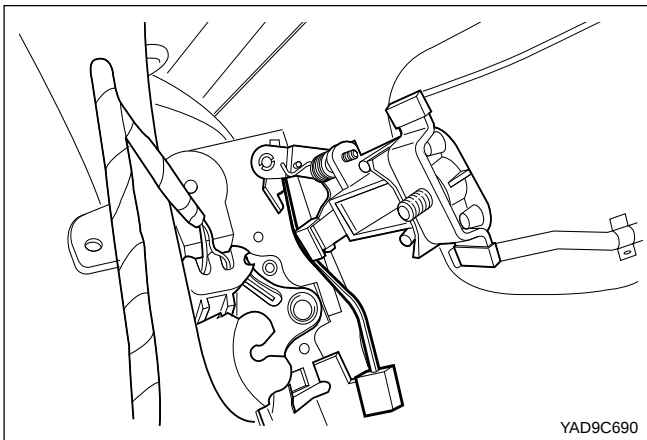
Removal and Installation

1. Remove the negative (-) terminal of battery
2. Remove vinyl seal and internal trim of door
3. In case door lock of central locking system, separate connector of door actuator and then remove actuator.



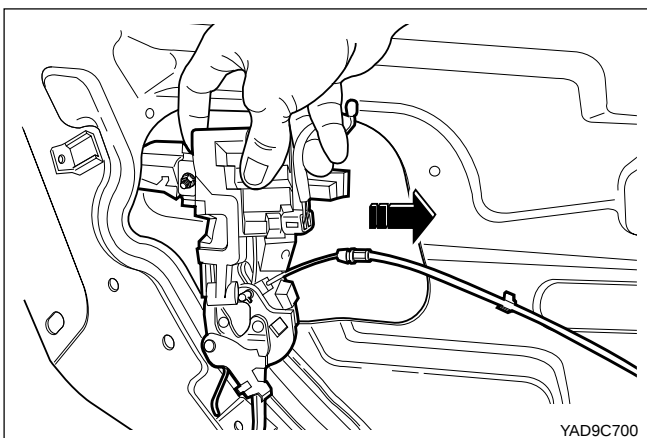
4. After releasing fixing bolt of door lock, separate glass panel.

Door Lock Bolt	7 - 9 N•m (44 - 52 lb-ft)
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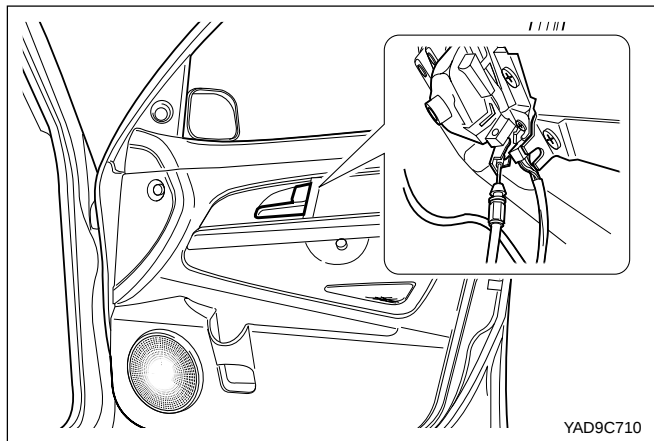
5. After removing rod and cable from the door lock assembly, remove door lock assembly.

- 1) Separate rod of the external door handle.



- 2) Remove the connector.

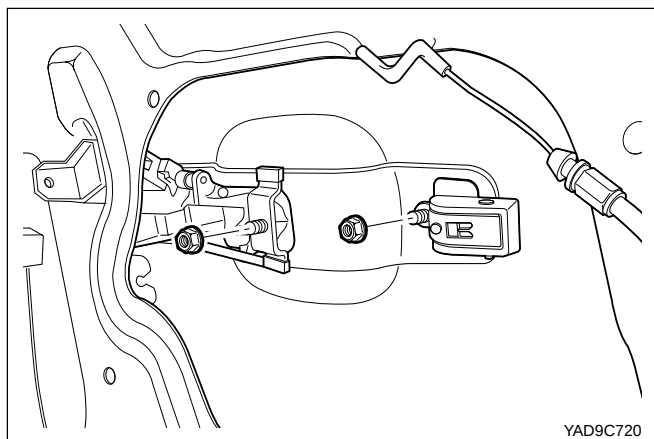
- 3) After removing internal cable of handle, remove door lock assembly.



DOOR HANDLE

Removal and Installation

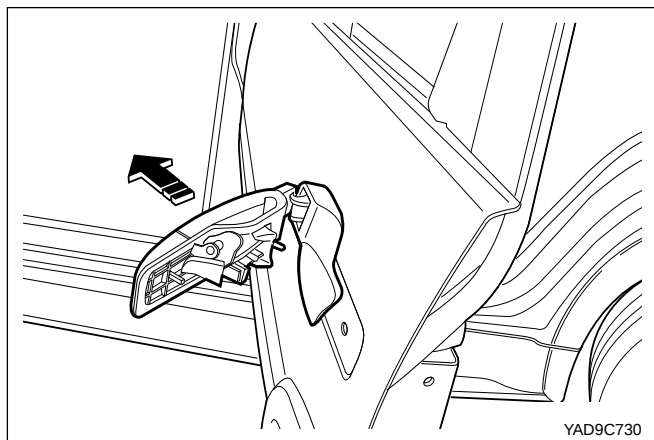
1. After removing door trim, separate internal handle cable of door trim.



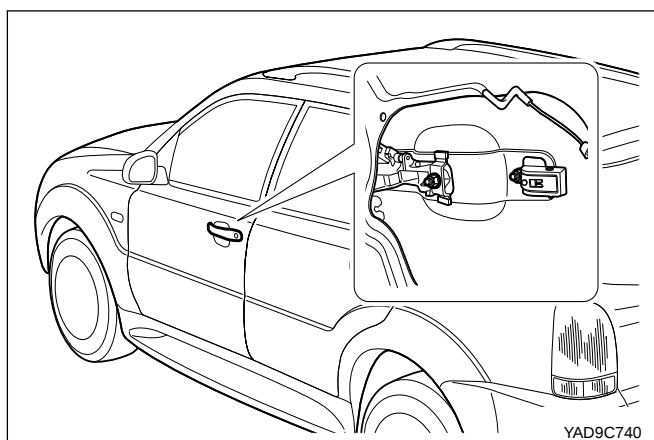
2. Remove door lock assembly

Notice: After removing rod of key lock, separate fixing nut of front external door handle

3. Release external fixing nut of door.



4. Remove external handle of door.



5. Install reverse order of installation.

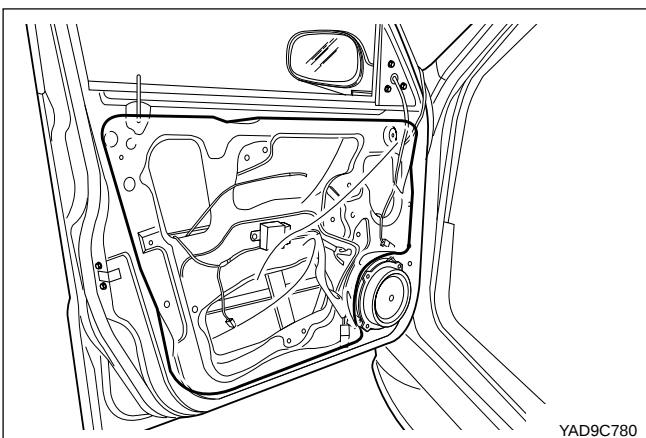
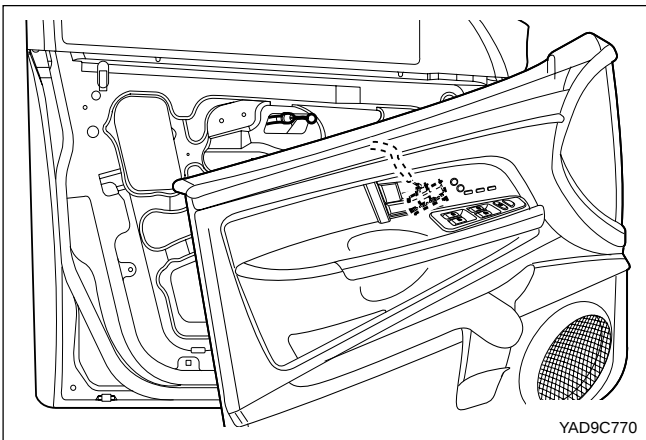
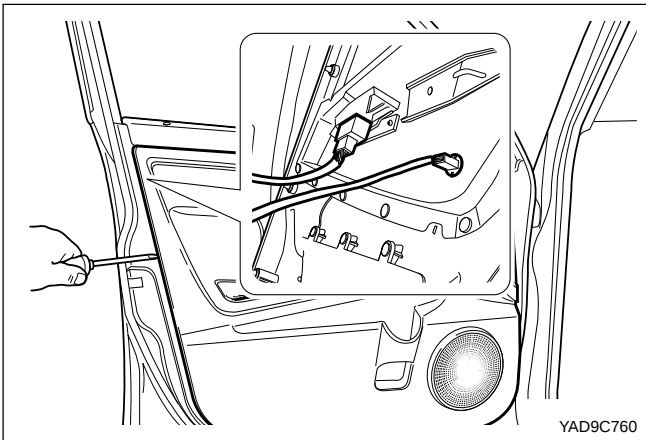
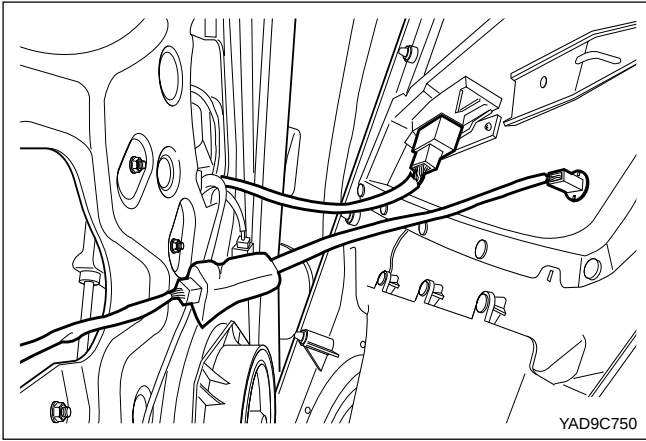
Fixing Nut of Handle	4 - 5 N•m (44 - 52 lb-ft)
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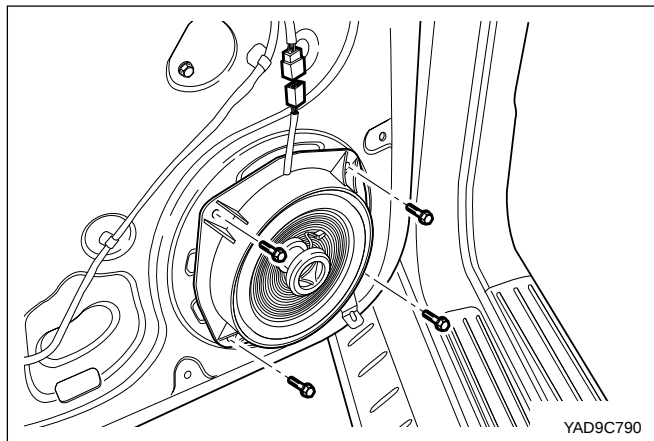
DOOR TRIM

Removal and Installation

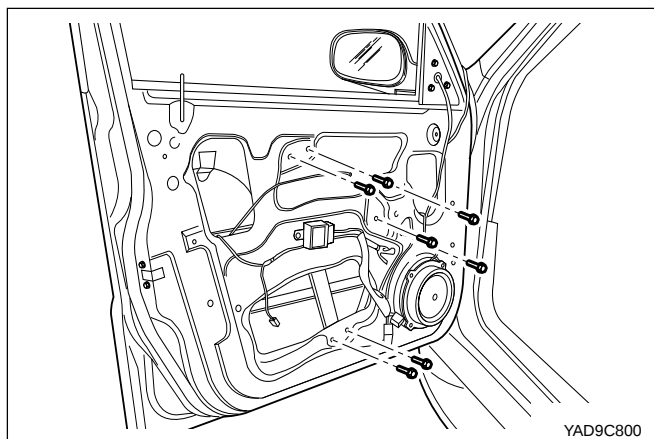
1. Remove the negative (-) terminal of battery.
2. Separate power window switch assembly.
3. After inserting special tool or driver, remove door trim.
4. After removing door trim , remove connector of door lamp and, cable of internal door handle.
5. Remove seal of door trim.

Notice: Pay attention about damage of seal.

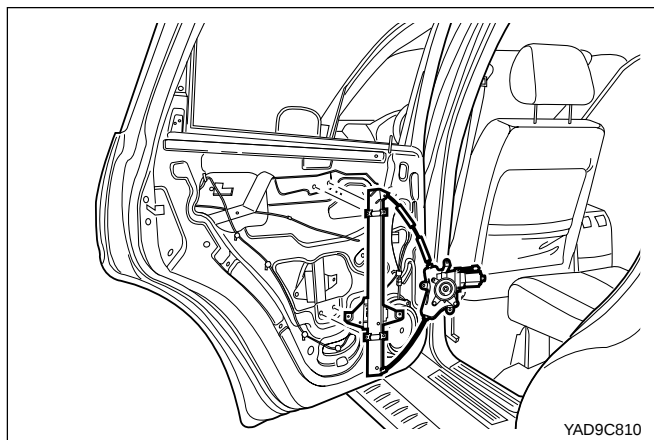




6. After fixing screw of door speaker, separate connector and then, remove speaker.

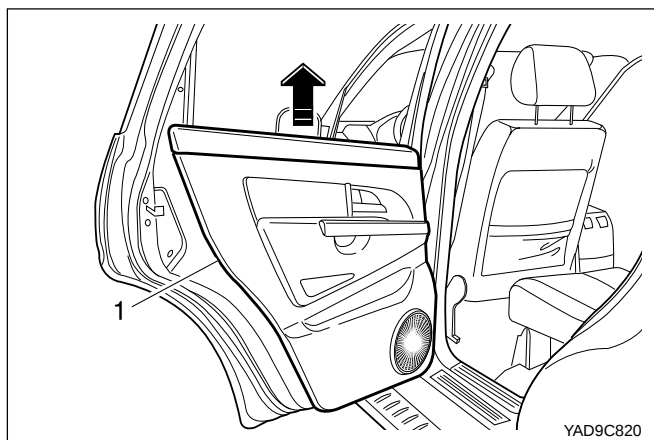


7. After releasing nut of regulator and window motor, remove regulator and window assembly.



8. Install reverse order of removal.

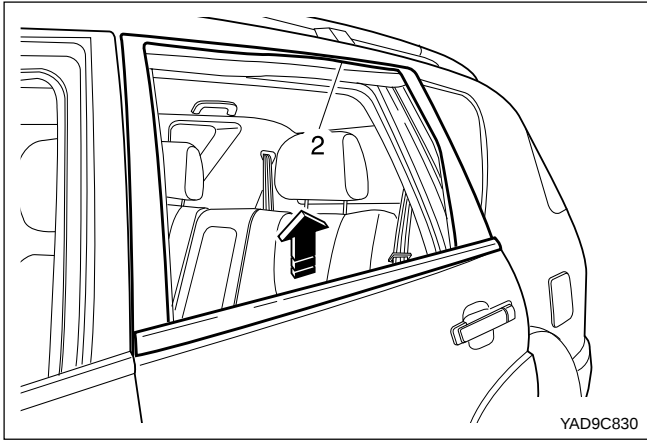
Notice: Spread sealant on the seal of door trim, and then install the right position.



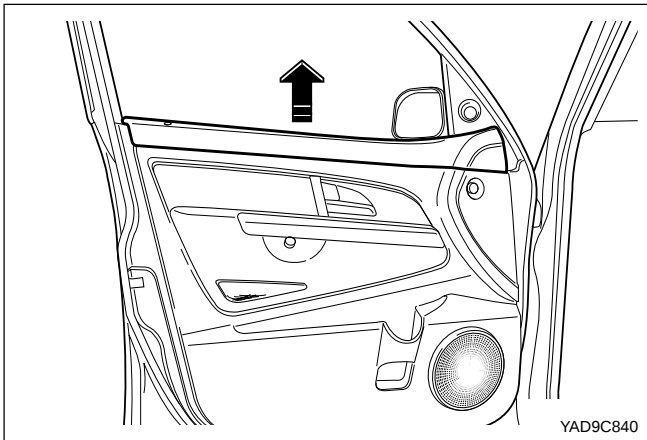
DOOR OPENING WEATHER STRIP

Removal and Installation

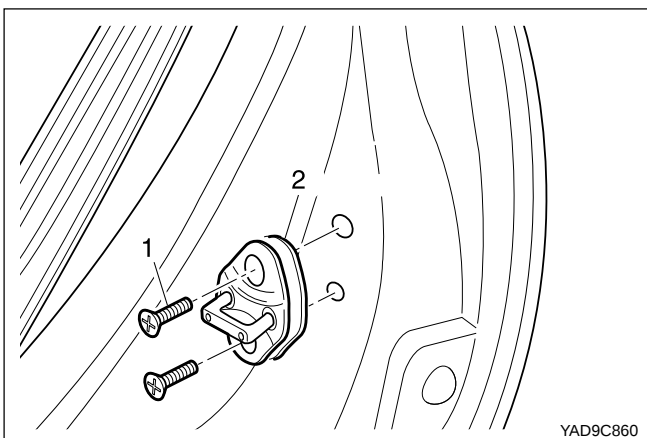
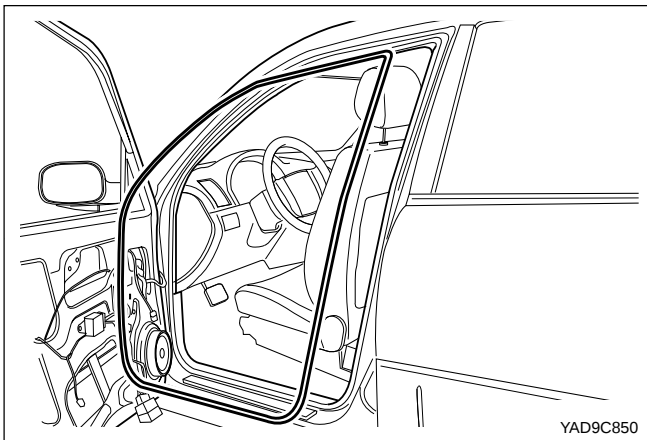
1. Remove door checker in the body.



2. Remove the upper section from the rail.
3. After removing the clip, remove the lower section.



Notice: As clip and door opening weather strip is removed, due to damage of those part, install the new one.



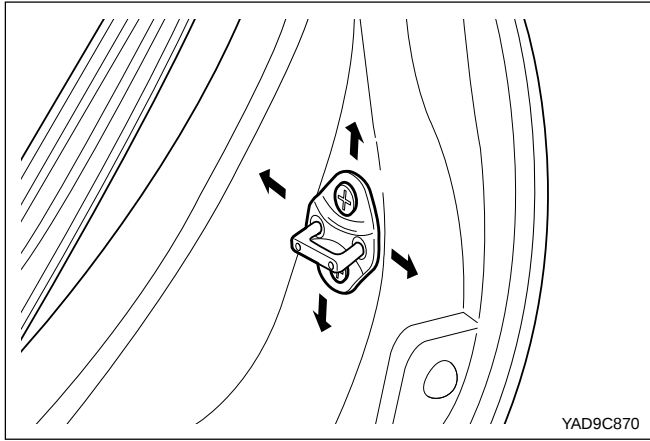
FORK STRIKER

Removal and Inatallation

1. Remove the striker of door lock.
 - 1) Release screw (2 ea).
 - 2) Remove the striker.
2. Install the striker of door lock.
 - 1) Install temporarily striker of door lock .
 - 2) After opening and closing the door, tighten screw in the proper position.

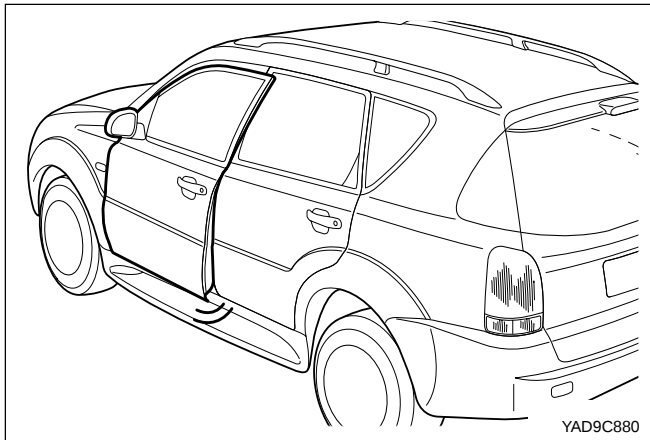
Screw of Door Lock

20 - 28 N•m
(44 - 52 lb-ft)



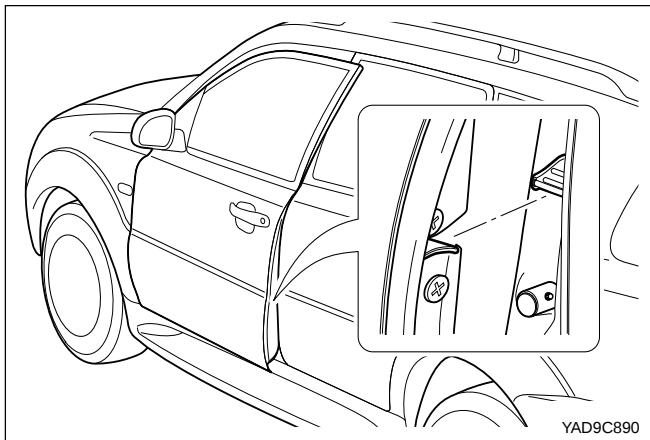
Adjusting Striker of Door Lock

Notice: Striker of door lock consists of striker and plate of floating cage in the pillar body, plate of floating cage can easily adjust by controlling striker up and down, left and right. As fork snap of door lock is linking the striker, the door comes to position of closing.

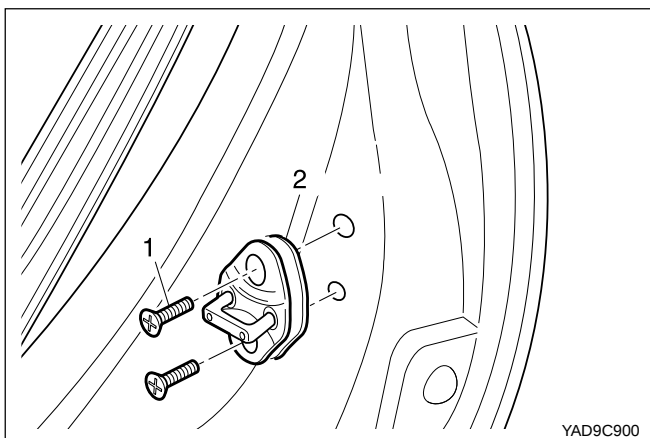


Adjusting Forward and Backward

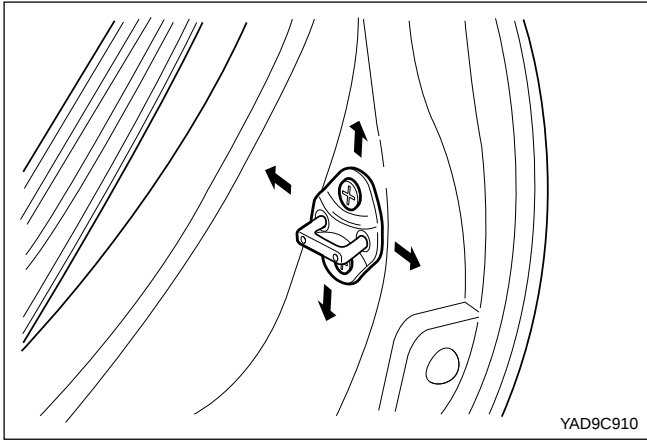
1. Door keep on the one line between door lock fork and striker.
2. Handle of door is pushing fork of door lock into contact on striker.
3. After door is set on position of opening, to keep contact fork of door lock with striker, open and close the door slow repeatedly.



4. Technician can see keeping fork of door lock alignment with striker. Fork of door lock is linking perpendicular to center of striker, is linking center of body pillar.



5. As striker is required for adjusting to forward and backward, proceed following the descriptions.
 - 1) Release fixing bolt of striker.
 - 2) If striker move to backward of vehicle , spacer is removed.
 - 3) If striker move to forward of vehicle, put addition spacer (2 mm).
 - 4) Tighten fixing bolt of striker.
6. Proceed to repair adjusting up and down, forward and backward.



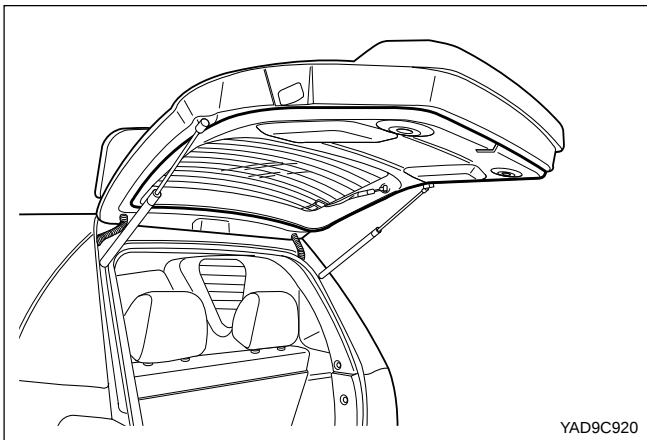
Adgusting Up and Down, Left and Right

Adjusting striker up and down, left and right is required in following case, such as damage of vehicle collision, installation of new weather strip , wind-noise, difficulty of opening and closing door, in case adjusting up and down, left and right, proceed to repair the following.

1. Door keep on the one line between door lock fork and striker.
2. Release fixing bolt of door striker.
3. Plate of plotting gauge moves little bit to end of striker screw, plate of plotting gauge is put to adjust the position which is wanted.

Notice: To protect section of screw from damage, while plate of plotting gauge is adjusted, flat rotary pile is used for adjusting.

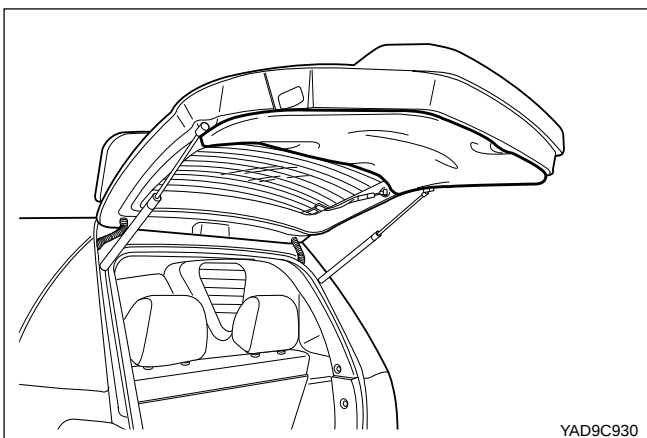
4. As adjusting is required beyond of limit of distance movable, in order to make big hall , electrical hand drill or flat rotary pile (3/8Φ) is used.
5. According to direction adjusted, tighten fixing bolt of striker.



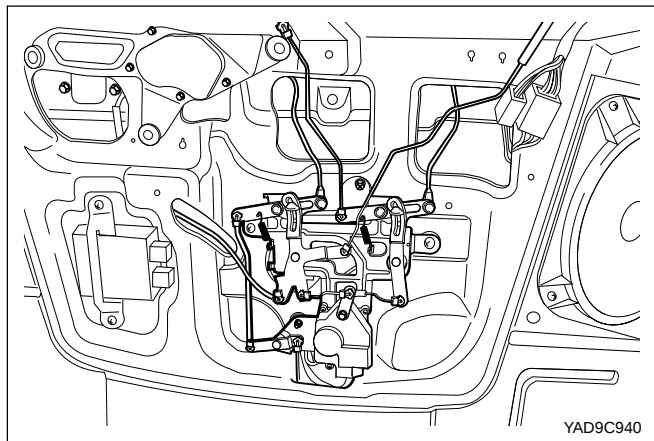
TAIL GATE CRANK

Removal and Installation

1. Separate the negative (-) terminal of battery.
2. Remove inner panel trim cover of tail gate.



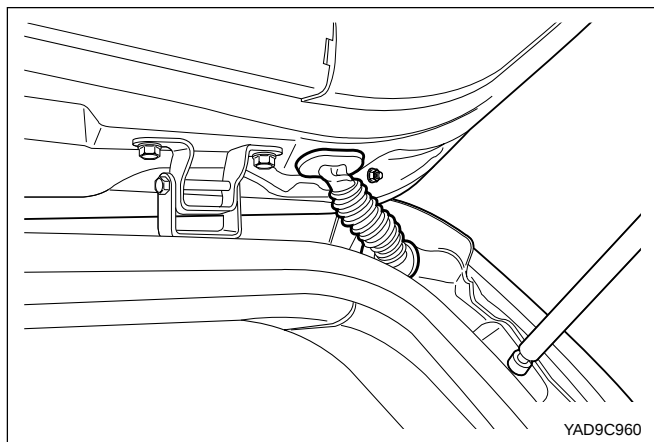
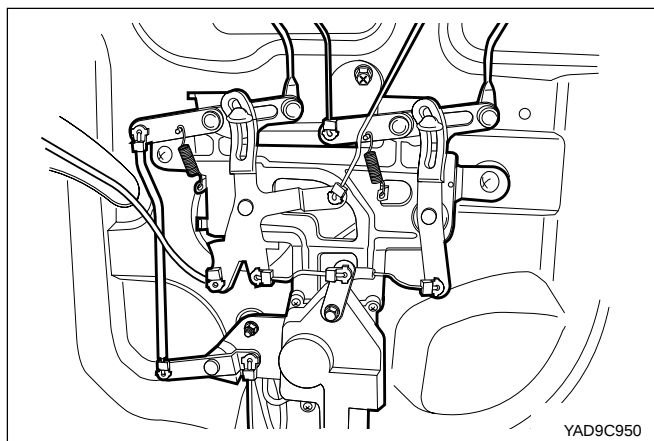
3. Remove inner panel trim vinyl seal of tail gate.
4. Separate wiring connector of actuator.
5. Separate outside handle, glass handle.
6. Separate safety rod.
7. Remove tail gate, glass latch rod.



8. After separating fixing bolt (3 ea) of crank of tail gate, remove crank.

Notice: If rekes is installed, key road is removed.

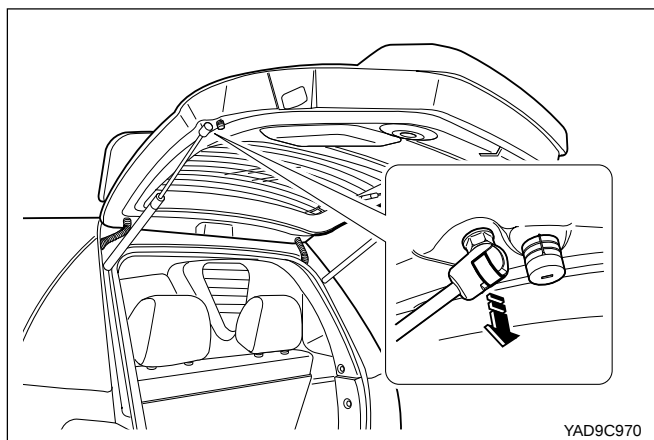
9. Install reverse order of removal.

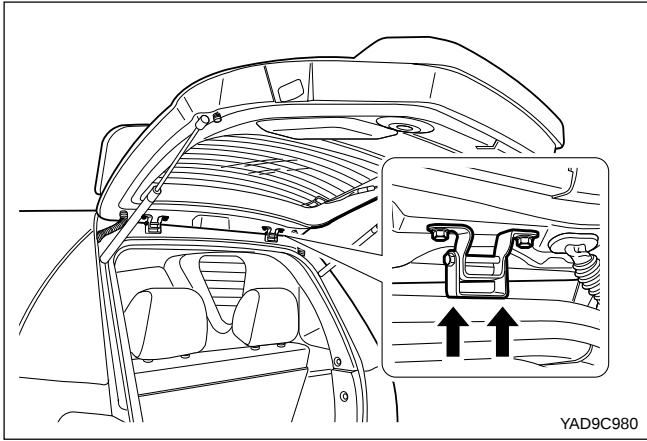


TAIL GATE

Removal and Installation

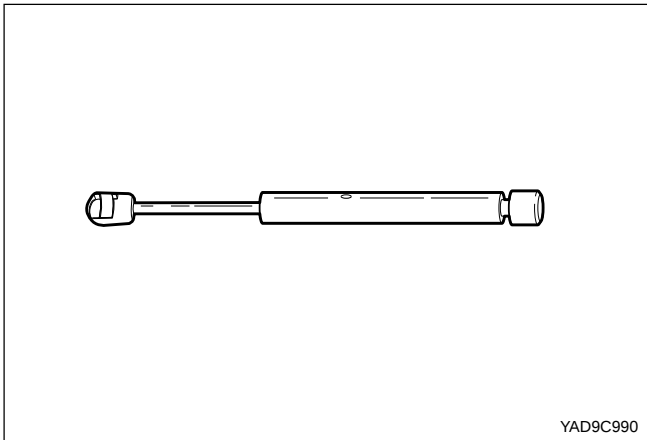
1. After separating grommet of tail gate and wiring connector (2 section), remove hose of nozzle washer.
2. Using service tool, after opening up clip (4 ea) at end of both gas lifter, remove gas lifter (right/left).





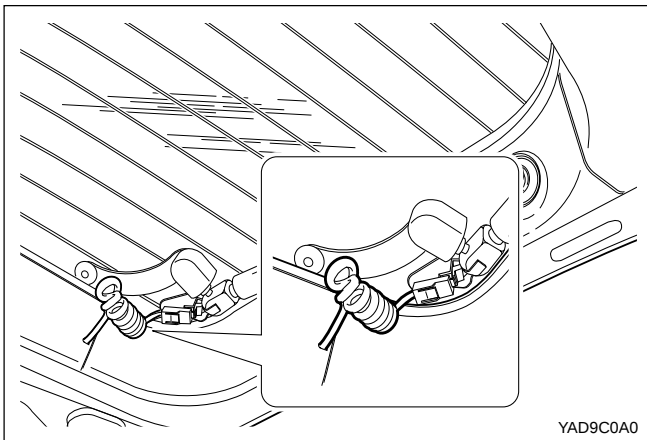
3. After releasing nut (4 ea) of body of tail gate hinge, remove tail gate from the body (proceed to remove after removing head-lining).

Notice: In order for tail gate not to deflect, staff technician should support tail gate.



4. Install reverse order of removal.

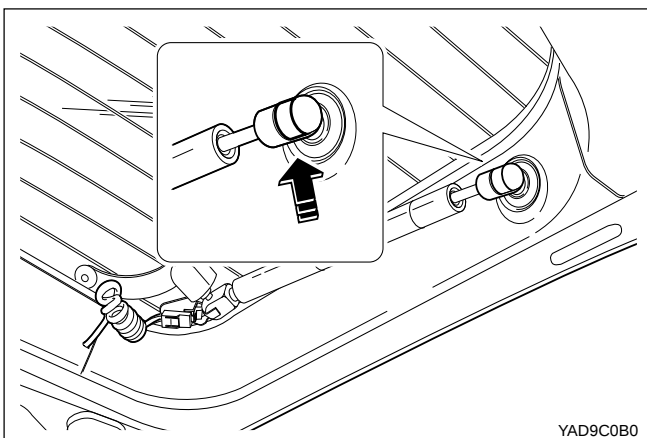
Notice: High pressing nitrogen gas and oil is filled in the gas lifter, as gas lifter is removed, to prevent damage of (body of technician) and explosion, make hole (diameter 3 mm) into gas lifter for removal gas.



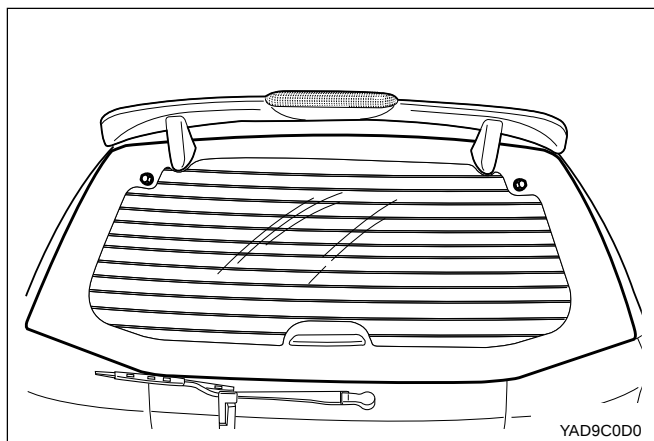
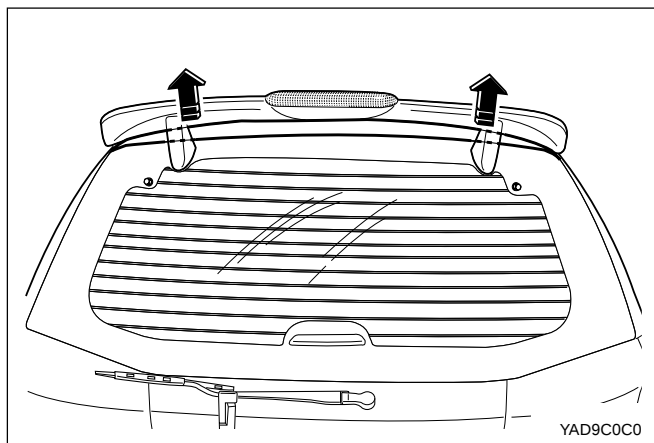
TAIL GATE FLIP UP SYSTEM

Removal and Installation

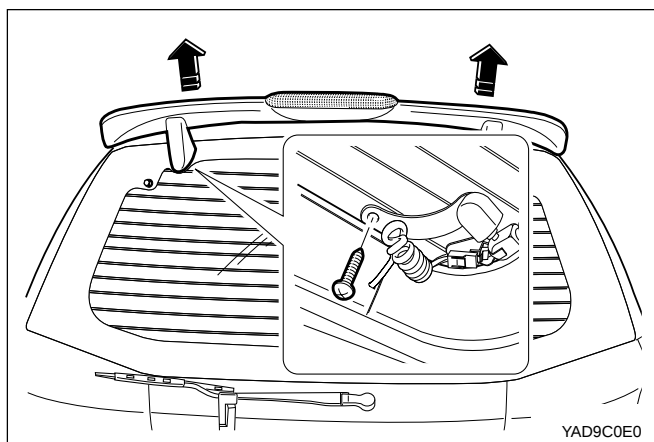
1. Remove the upper garnish.
2. Separate wiring (2 ea) in the connector of heating line of rear glass and wiring (1 ea) of stop lamp (section of left spoiler).



3. Using service tool, after opening up clip (4 ea) at end of both gas lifter, remove gas lifter (right/left).



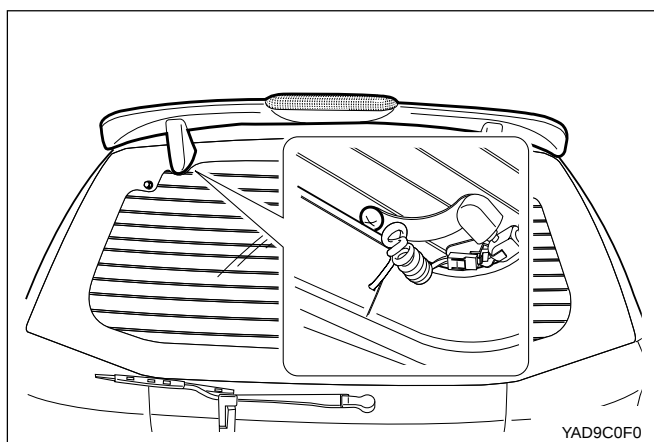
4. After separating fixing bolt (2 ea) of hinge (right/ left) of glass, remove glass from tail gate.
5. Install reverse order of removal.

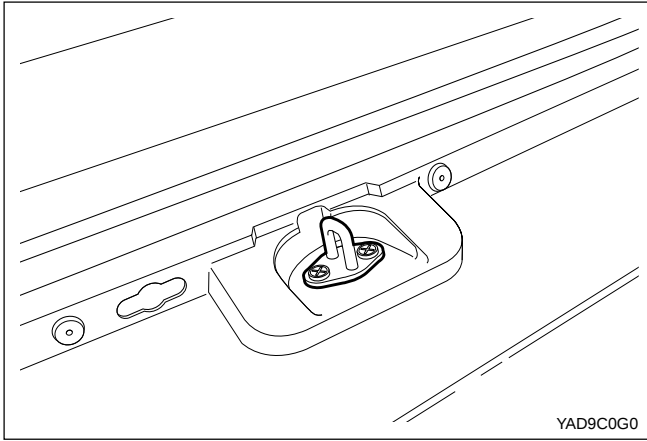


TAIL GATE AIR SPOILER

Removal and Installation

1. Separate fixing bolt (2 ea) of hinge in the left / right.
2. Remove air spoiler of tail gate.
3. Install reverse order of removal.

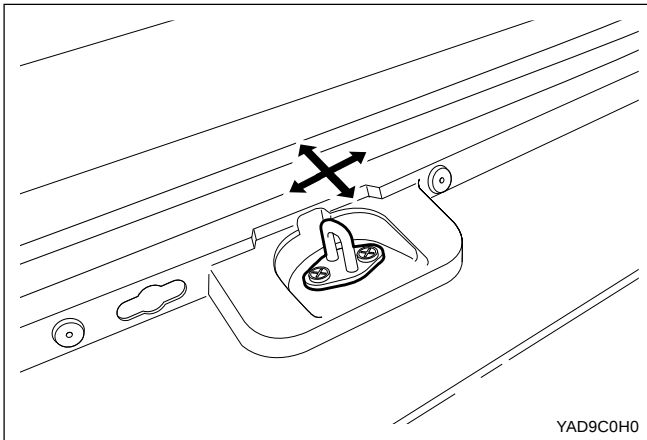




CHECK AND ADJUST TAIL GATE

Lock striker of back door consists of striker and tail gate striker plate. Tail gate striker plate can be adjusted easily by fixing bolt of striker, up and down, forward and backwards. Lock of back door is linking striker and then turn to position of closing.

Notice: As latch of tail gate and glass latch is installed, bolt of ground should be used.

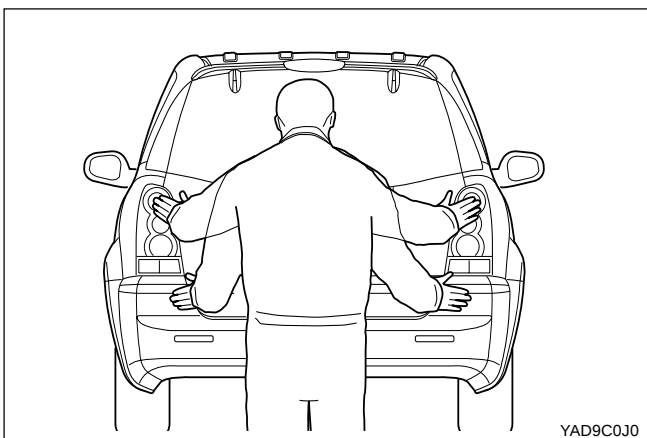


Adjust Striker Forward and Backward, Left and Right

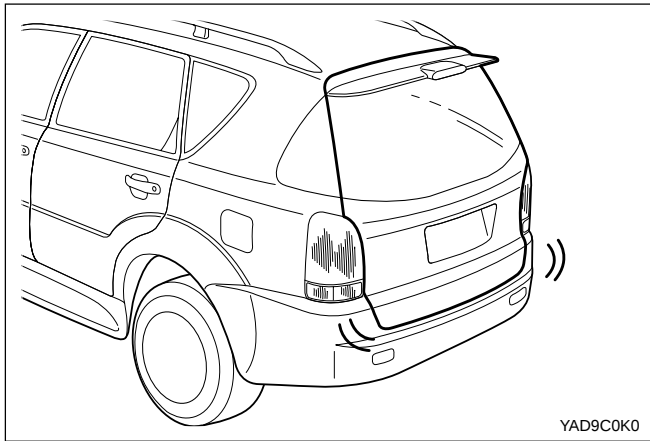
Adjusting of striker of tail gate to forward and backward, left and right is required in, case of damage of frame due to collision, wind-noise, difficulty of opening and closing. If striker is adjusted to forward and backward, left and right, proceed to repair as following.

1. Tail gate keep on the one line.
2. Release fixing bolt of striker of tail gate.
3. Plate of plotting gauge moves little bit to end of striker screw, tail gate striker plate is put to adjust the position which is wanted.

Notice: To protect section of screw from damage, while tail gate striker plate is adjusted, flat rotary pile is used for adjusting.

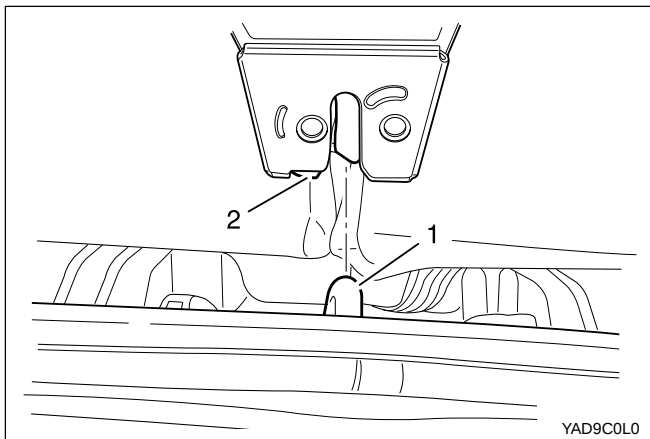


4. As adjusting is required beyond of limit of distance movable, in order to make big hall, electrical hand drill or flat rotary pile (3/8") is used.
5. According to direction adjusted, tighten fixing bolt of striker.
6. Proceed to adjust up and down.

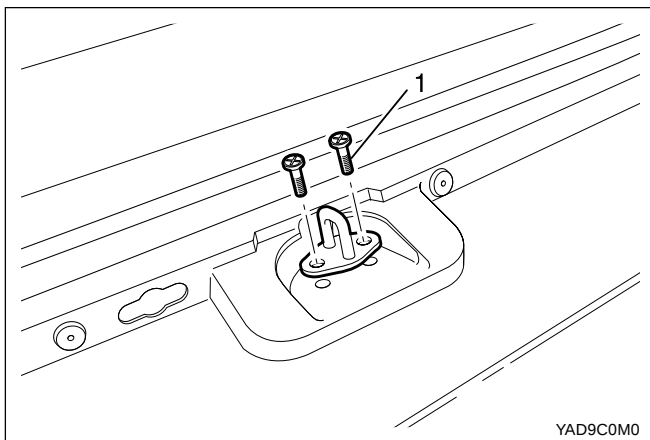


Adjust Up and Down

1. Door of tail gate keep on the one line around parts.
2. Back door keep closing until door lock fork of tail gate into contacting to striker.
3. After door is set on position of opening, to keep contact fork of door lock with striker, open and close the door repeatedly.



4. Technician can see and keep fork of door lock alignment with striker, fork of door lock is linking perpendicular to center of striker, is linking center of body pillar.



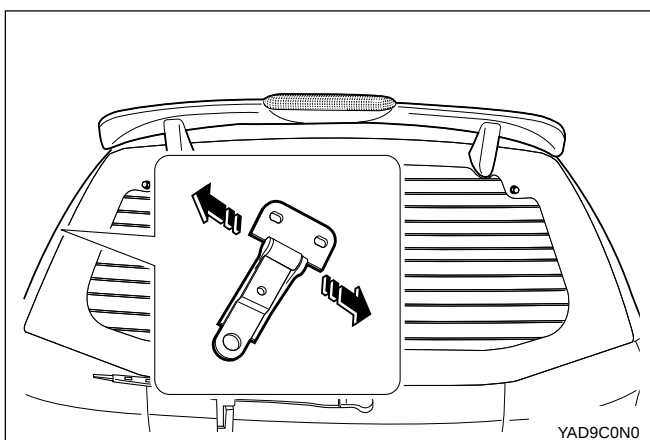
5. As striker is required for adjusting to up and down, proceed to repair, following the descriptions.

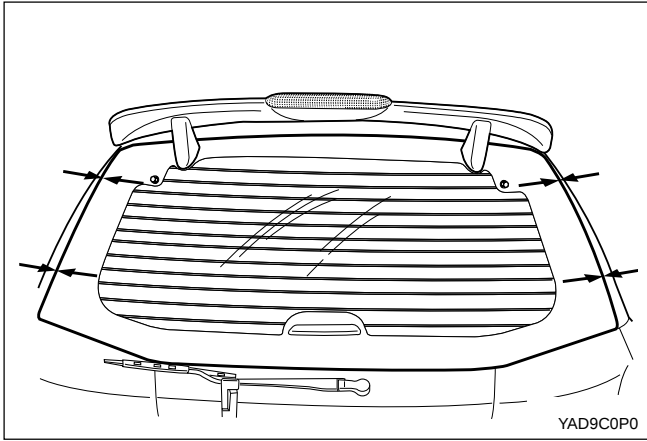
- 1) Release fixing bolt of striker.
- 2) If striker move to upward, put addition spacer (2 mm).
- 3) Tighten fixing bolt of striker.

Torque of Tightening	10 - 14 N•m (44 - 52 lb-ft)
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Adjust Flip Up

1. After removing the upper garnish, release little bit mounting bolt of flip up glass.

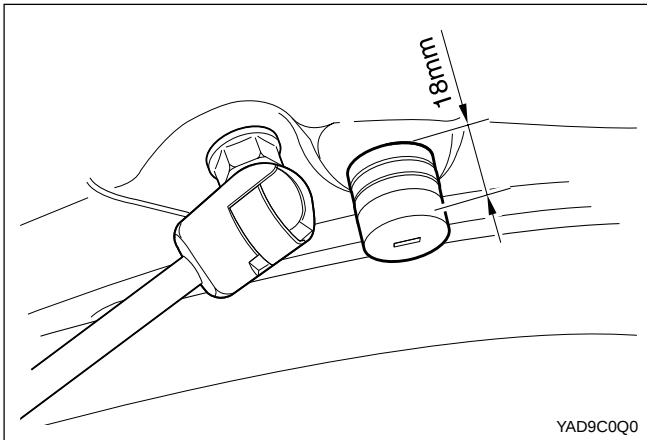




- After adjusting glass left and right, fit gap with quarter glass.

Torque of Tightening

9 - 10 N•m
(44 - 52 lb-ft)

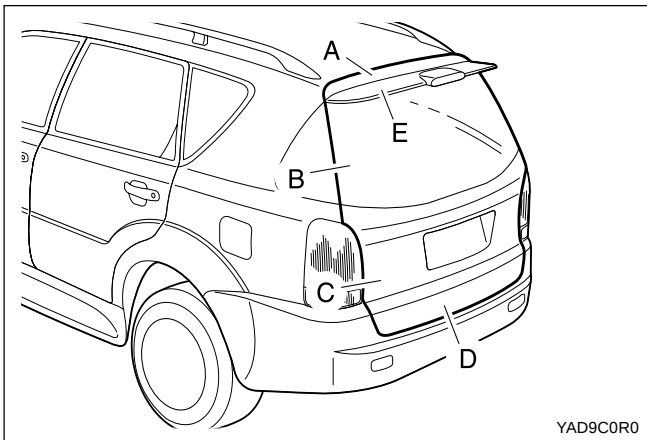


Check the Deflection

As tail gate is pushed from the external, not to occur the deflection, adjust overlap.

Standard

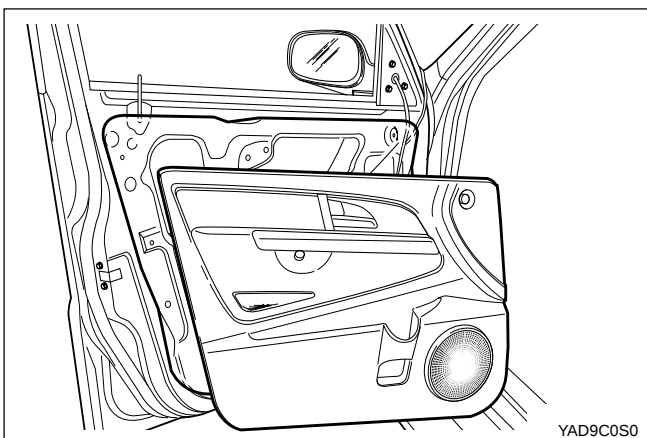
18 mm



Adjust Gap of Fitting

(mm)

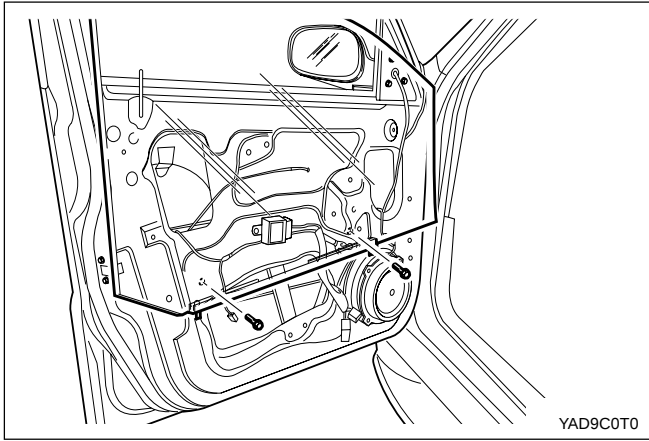
Section	A	B	C	D	E
Gap	11	5	5	5.7	4.2



FRONT DOOR WINDOW

Removal and Installation

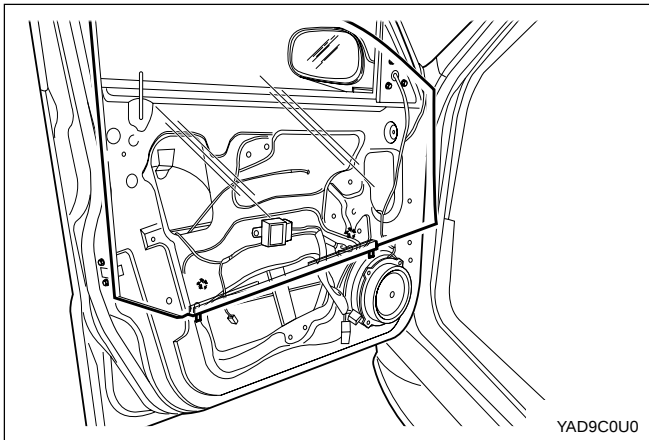
- Remove seal and door trim.



2. Remove glass of front door.

- 1) Release fixing screw (2 ea) of glass, at this time, position of plate of regulator carrier should be position of installation.
- 2) Remove glass.

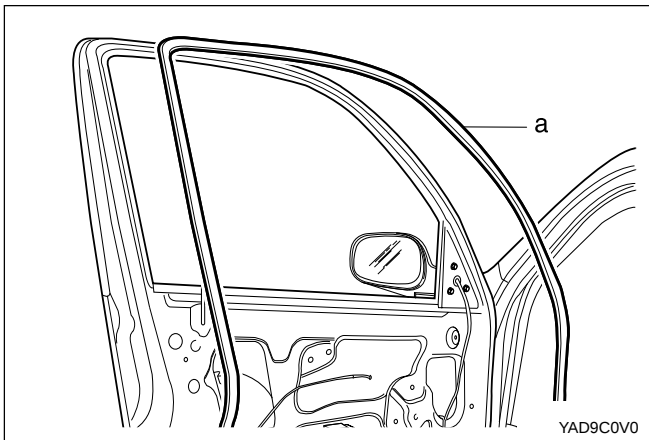
Notice: If glass interfere to the body, damage of section of body painting may happen, so glass should not interfere body.



3. Install reverse order of removal.

Fixing Bolt of Glass	3 N•m (26 lb-ft)
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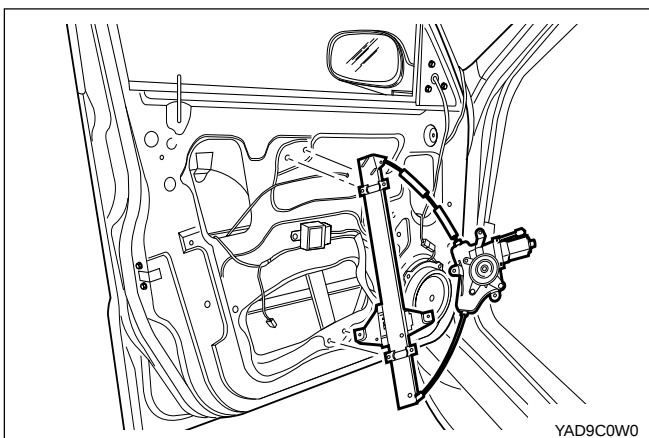
Notice: If water of soap spread on contacting section between glass run and glass, so that, can be installed easily.



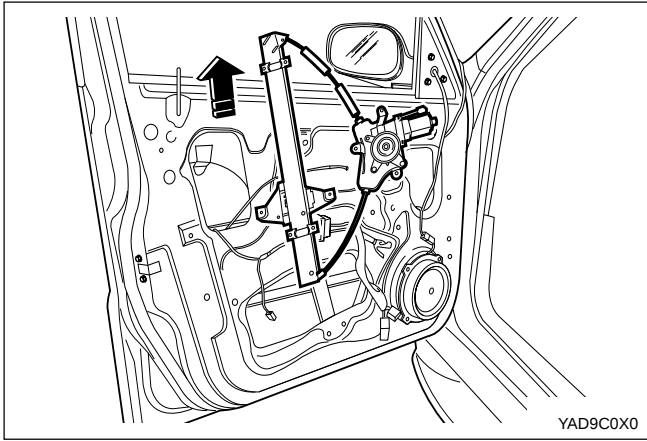
FRONT DOOR GLASS RUN AND REGULATOR

Removal and Installation

1. Remove door trim, seal, and window glass.
2. Remove door glass run from door .

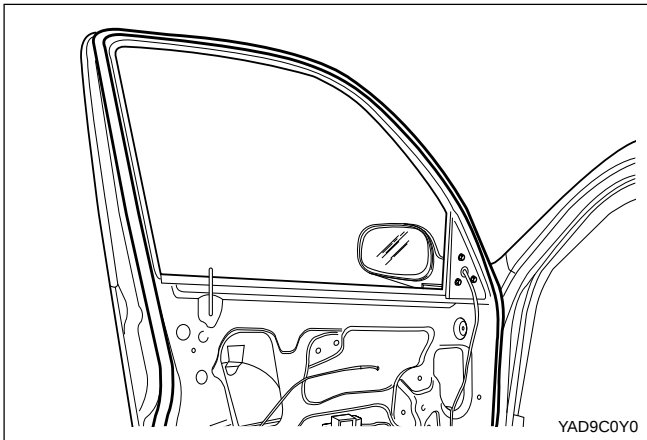


3. After releasing fixing nut of door regulator, and then remove motor connector of power window.

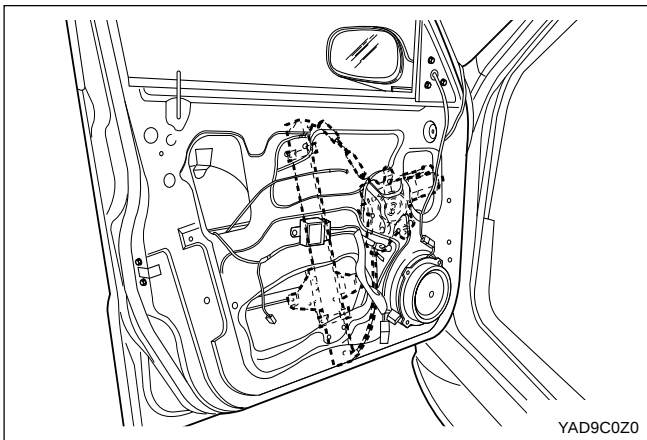


4. Remove door regulator assembly.

Notice: After separating door glass run and regulator, remove and install them .

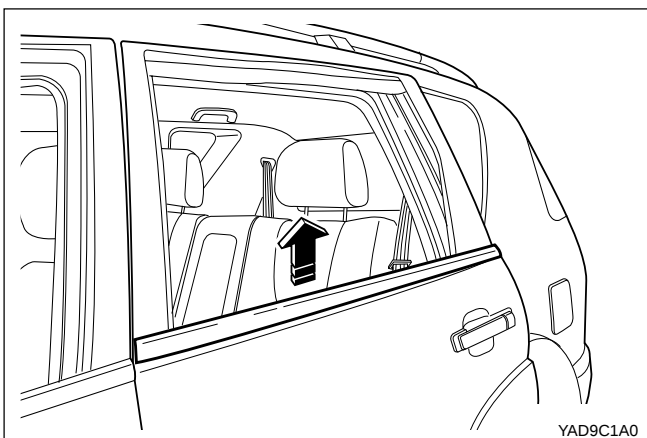


5. As door glass run is installed, water of soap spread on section of glass run so door glass run can be installed easily.



6. Install reverse order of removal.

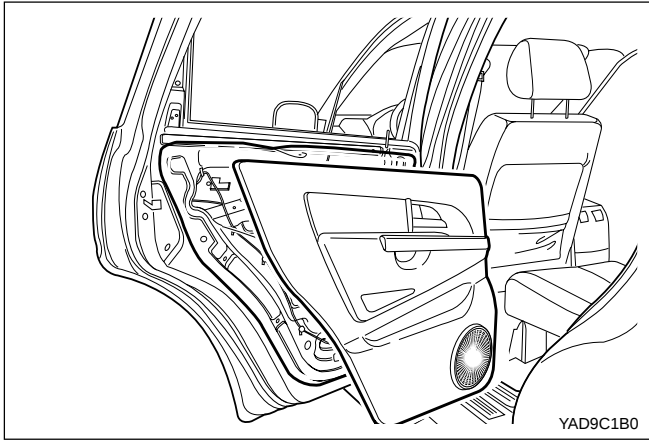
Fixing Nut of Regulator	8 N•m (26 lb-ft)
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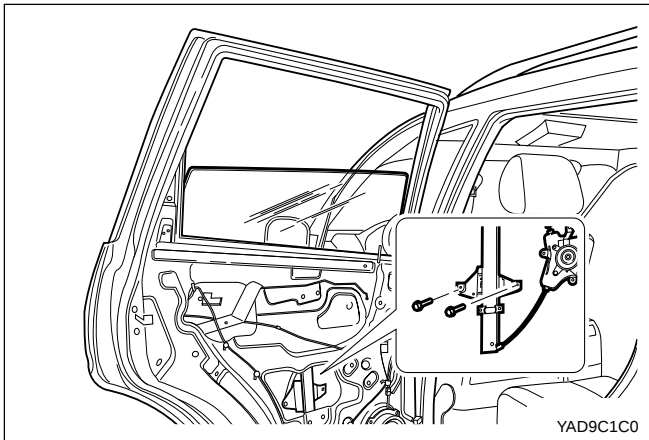
REAR WINDOW

Removal and Installation

1. Remove external weather strip of door window
2. Remove front garnish of rear door.



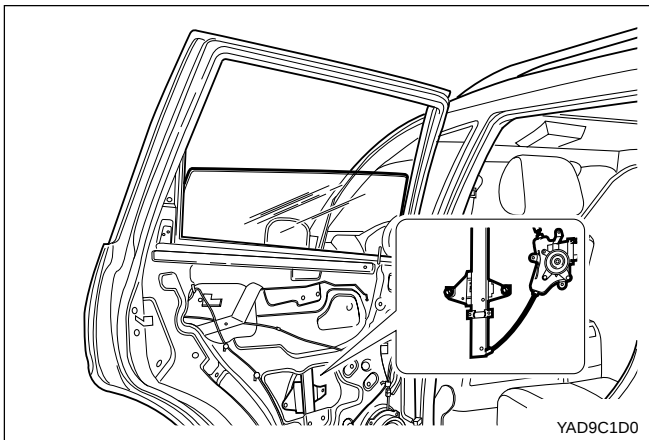
3. Remove seal and door trim.



4. Remove rear door glass.

- 1) Release screw (move up carrier plate of regulator).
- 2) Extract glass upwards.

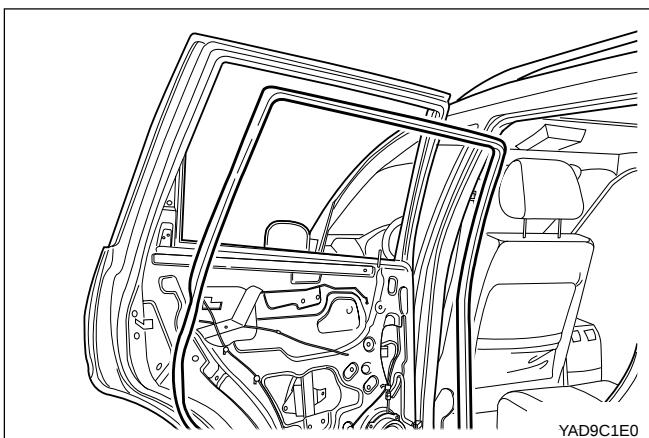
Notice: If glass interfere to the body, damage of section of body painting may happen, so glass should not interfere body.



5. Install reverse order of removal.

Fixing Nut of Glass	3 N•m (26 lb-ft)
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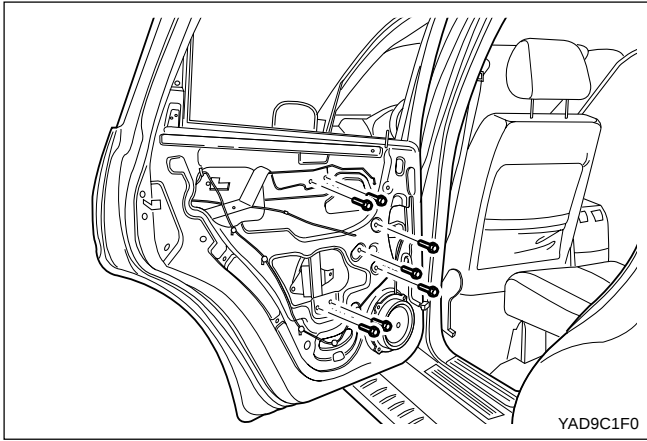
Notice: As door glass run is installed, water of soap spread on section of glass run so door glass run can be installed easily.



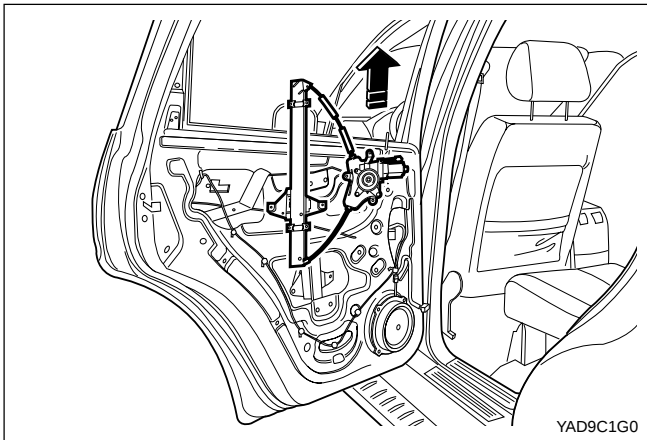
REAR GLASS RUN/ REGULATOR/ CHANNEL

1. Remove door trim, seal, and glass
2. Remove glass run.
 - Pull door glass run internally, and then extract glass run.

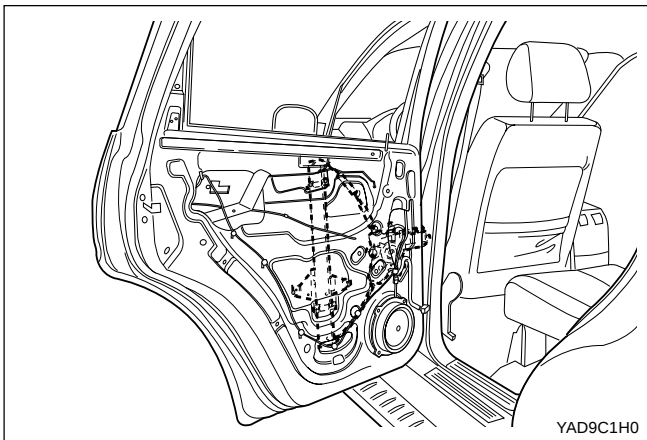
Notice: As door glass run is installed, water of soap spread on section of glass run so door glass run can be installed easily.



3. Remove door regulator assembly.
 - 1) Separate connector of window motor.
 - 2) After separating fixing nut (7 ea) of window regulator, remove regulator assembly.

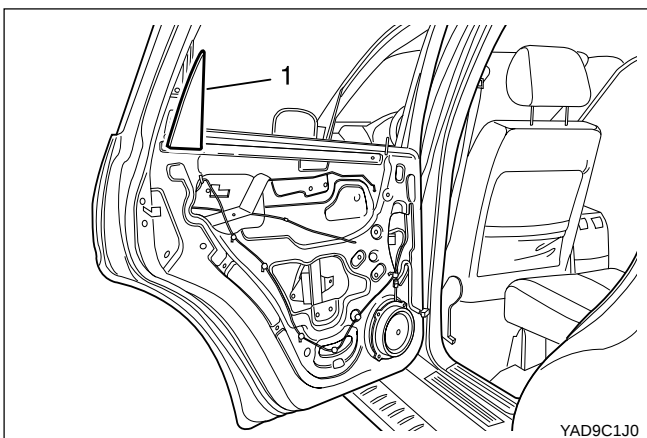


- 3) Remove regulator assembly.

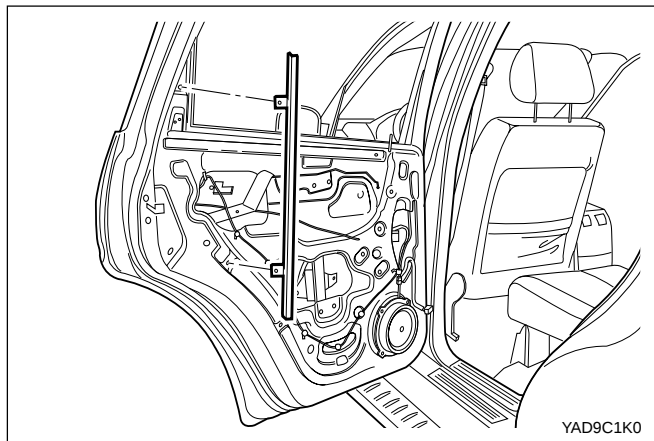


Installation

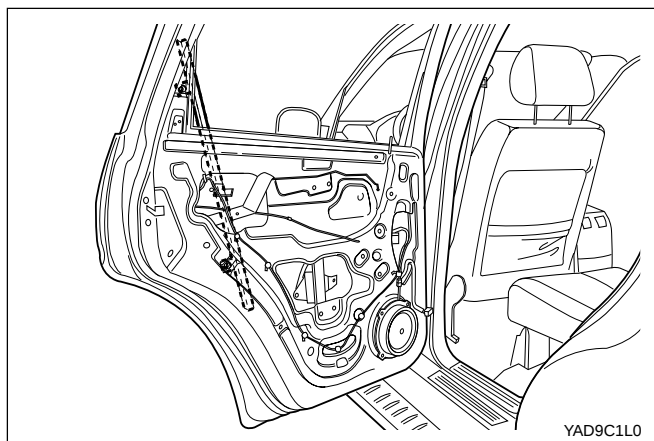
Fixing Nut of Regulator	8 N•m (26 lb-ft)
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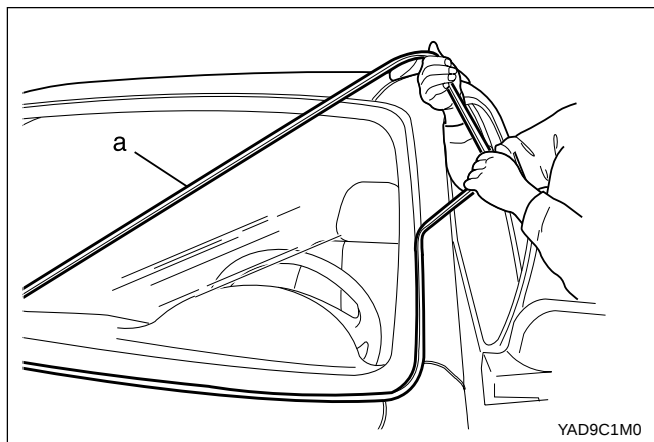
4. Remove glass channel.
 - 1) Remove internal (1) panel of rear door.



- 2) After releasing fixing nut of glass channel, remove glass channel.



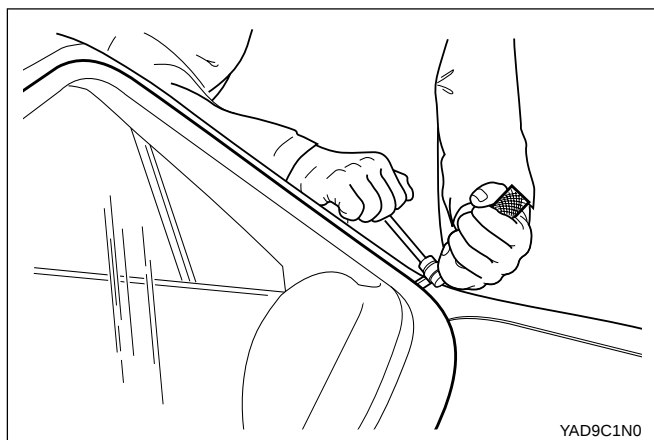
- 3) As glass channel is installed, in order for glass channel not to change up and down, should be installed right position, tighten fixing bolt.



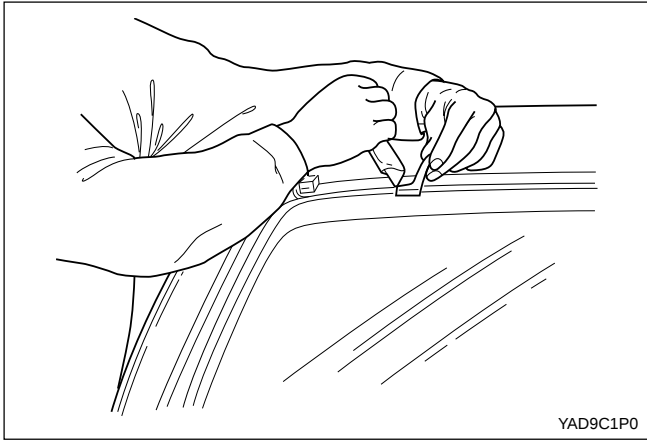
WIND SHIELD GLASS

Removal

1. Remove cowl grill.
2. Remove room back mirror.
3. Remove moulding (a) of wind shield glass.

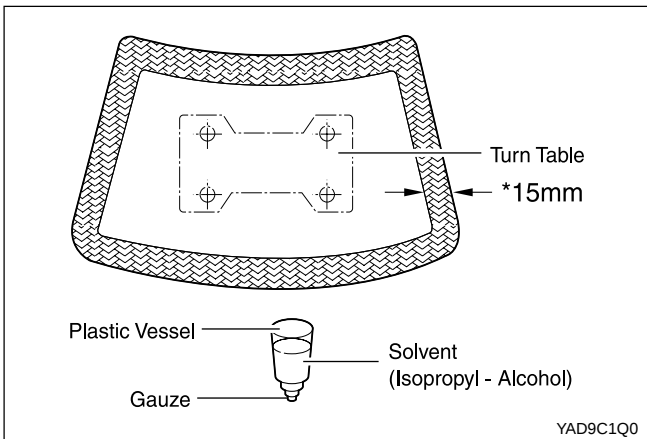


4. Using special tool, cut sealant of wind shield glass.



5. Remove wind shield glass
6. Using knife, remove sealant of wind shield glass and frame.

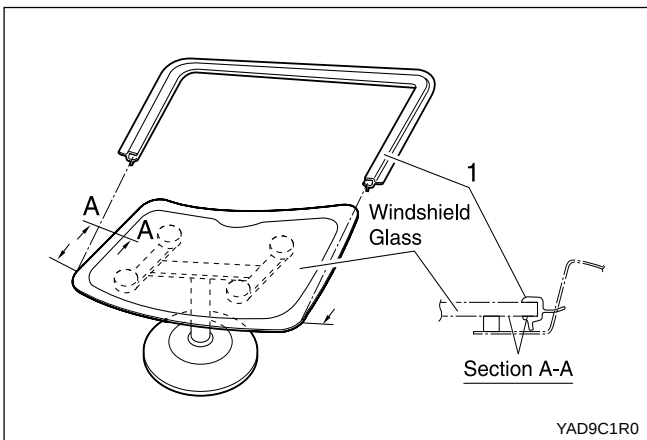
Notice: In order to prevent damage of painting, approximately 1mm of sealant should not be removed from body.



Installation

1. Clean up section to spread primer of wind shield glass by washing.
 - 1) Section of washing keep distance 15 mm from the end of glass.
 - 2) After using gauze 20 times, gauze is thrown away.
 - 3) Gauze is a solvent (isopropyl alcohol), gauze keep wet completely.
 - 4) Keep an eye on the washed section of glass not to be touched by any thing polluted.
 - 5) After washed glass, spread primer on the glass section of wet state.
2. Install new wind shield moulding on wind shield glass.

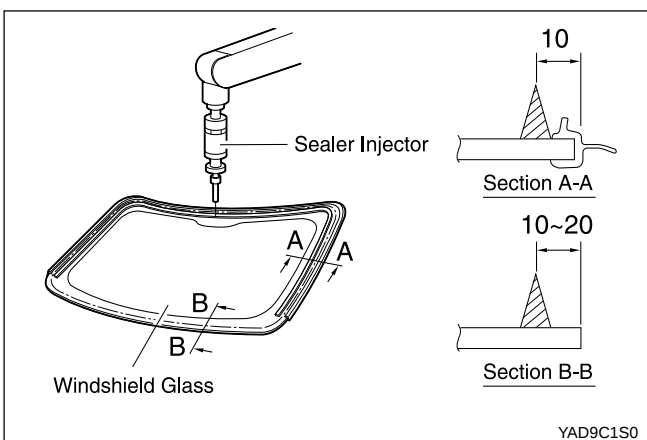
Notice: After spreading sealant on the glass, glass should be installed within 5 minutes.

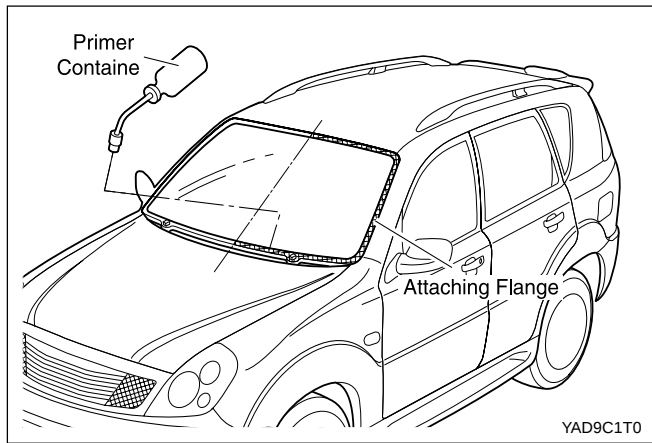


3. Spread sealant on the wind shield.

Notice:

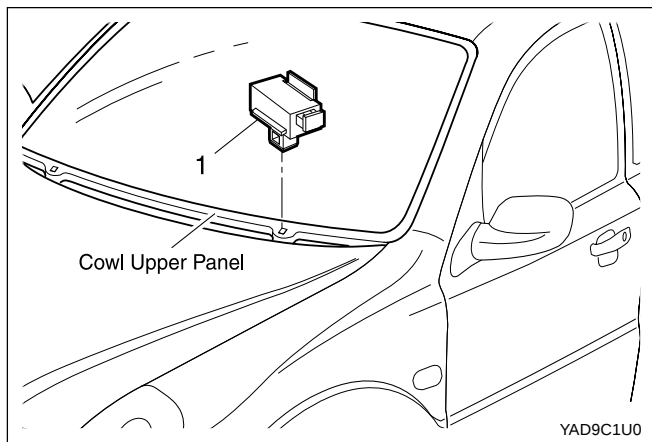
- 1) If shape of spreading is not uniform, thickness of spreading is not uniform after installing wind shield, leaking of water may occur.
- 2) As sealant is spreading, due to interfering of nozzle, keep eye on for glass moulding, glass dam not to drop.





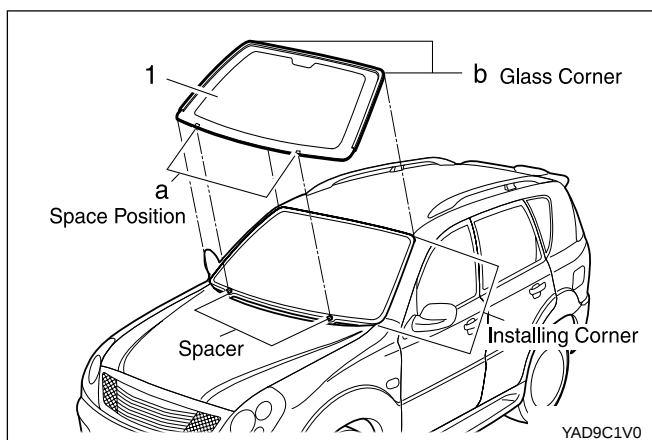
4. Wash up flange of wind shield glass.

- After using gauze 20 times, gauze is thrown away
- Gauze is a solvent (isopropyl alcohol), gauze keep wet completely
- Keep an eye on the washed section of glass not to be touched by any thing polluted.
- After washed body flange, spread primer on the glass section of wet state.
- If oil is stuck on the body flange, primer does not spread on the body flange.
- After spreading, is available time for use : from 3 hours to 8 hours
- As the body is polluted by primer, as soon as possible mixing with ethil alcohol and ethil asetate (as a volume 50 : 50) and with this wet cloth is wiping solvent.
- Term of validity of primer (90 days) which is passed is thrown away.
- As spreading primer, flowing into other sections, pay attention not to pollute other sections.



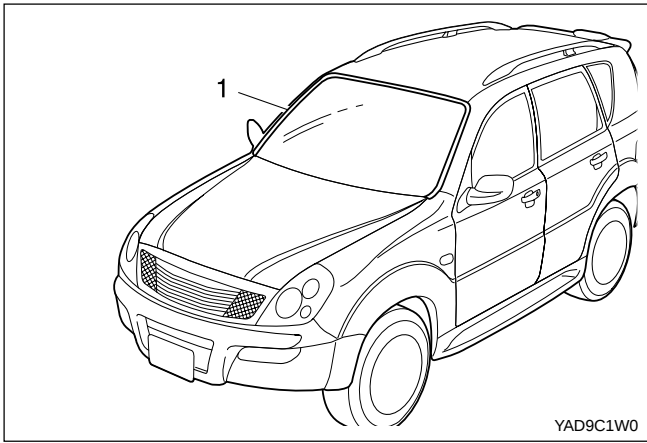
5. Insert spacer of wind shield.

- Insert spacer until kind of sound occur.
- After spacer insert body, no clearance.

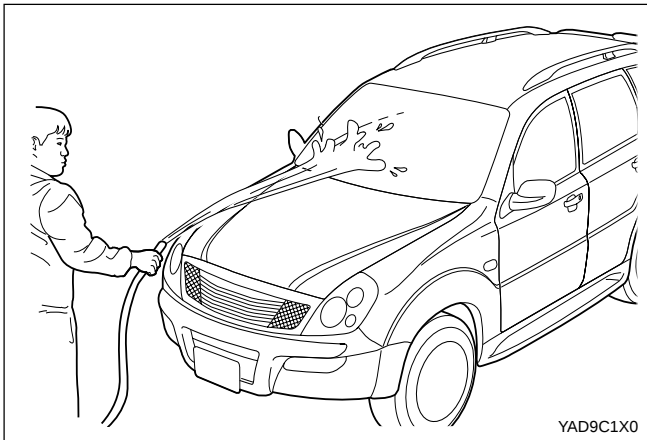


6. After install glass of wind shield, check the following description.

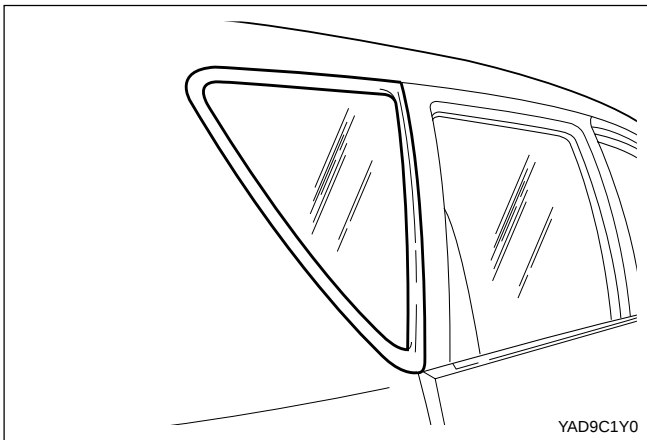
Notice: If the section (b) of glass corner happen clearance between moulding and body, spacer can adjust this clearance.



7. For the right position installed of glass which wind shield is fixed, stick tape on moulding, and frame of wind shield.
8. To keep sealant dry, park the vehicle for 24 hours.
9. Remove tape1.



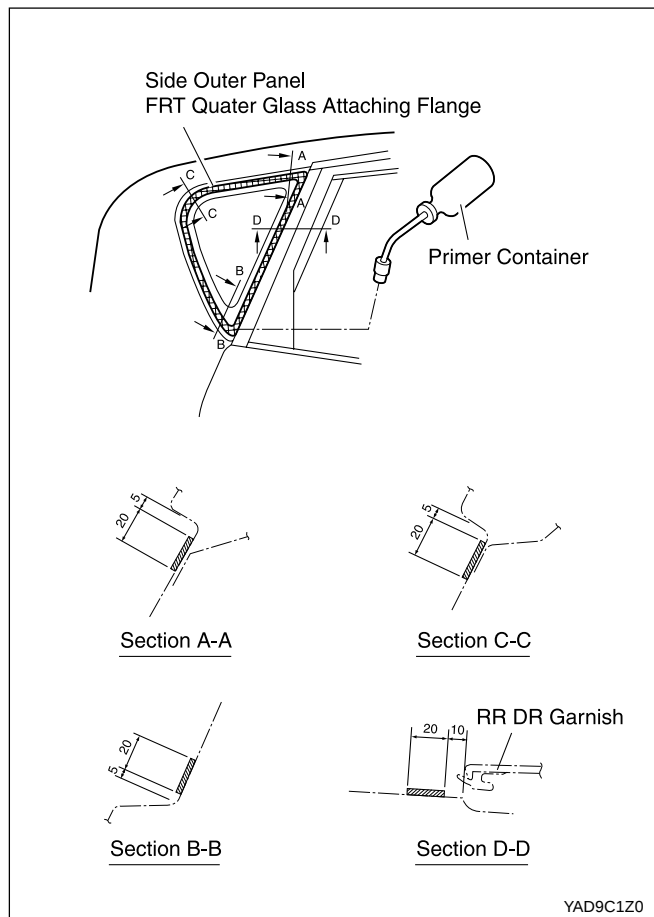
10. Spread water on the wind shield glass, and then check leaking of water. If leaking of water happen, after keep wind shield glass dry, fill sealant on the section of leaking, if leaking of water goes on, wind shield glass is removed, the above descriptive work proceed to repair once again.



FRONT QUARTER GLASS

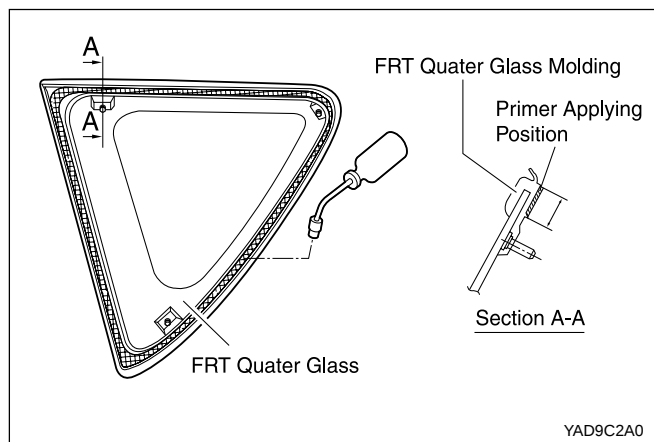
Removal

1. After releasing fixing nut of quarter glass, remove cover of glass moulding.
2. After removing quarter glass, using knife, remove sealant of quarter and frame.

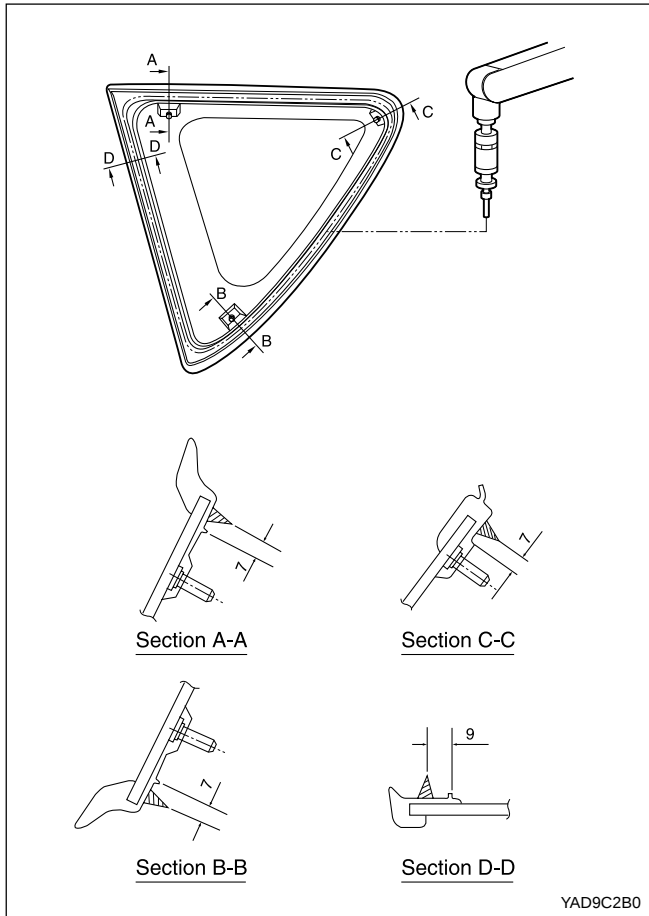


Installation

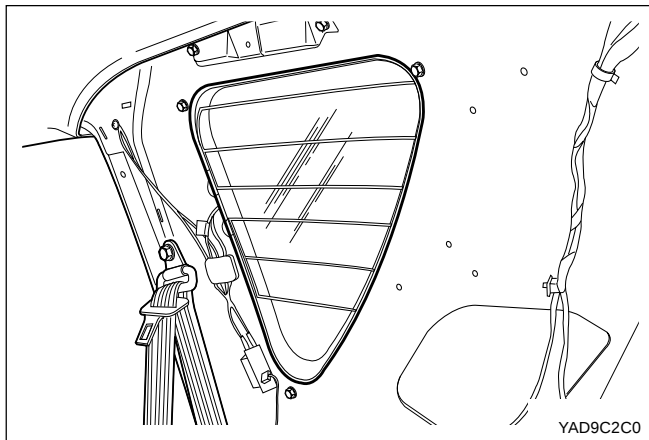
1. Wash up body frame (section of glass installed).
2. As keeping distance like the left picture, spread primer on the section of frame of installed glass.



3. Spread primer on the moulding of quarter glass of new quarter glass.

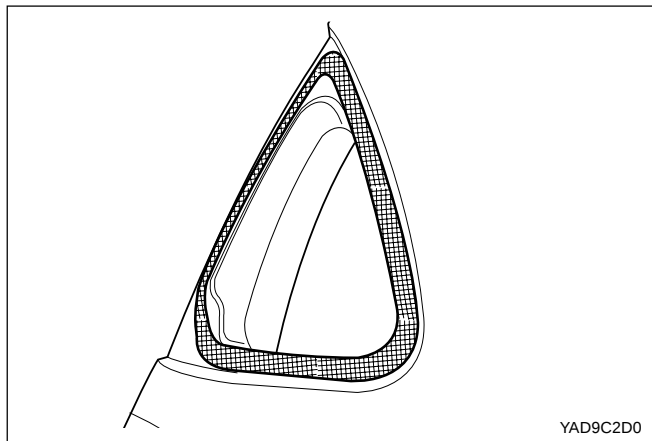


4. As keep distance like left picture, spread sealant on the glass.



5. After Install glass of front quarter on the body frame, tighten nut on the bolt of mounting.

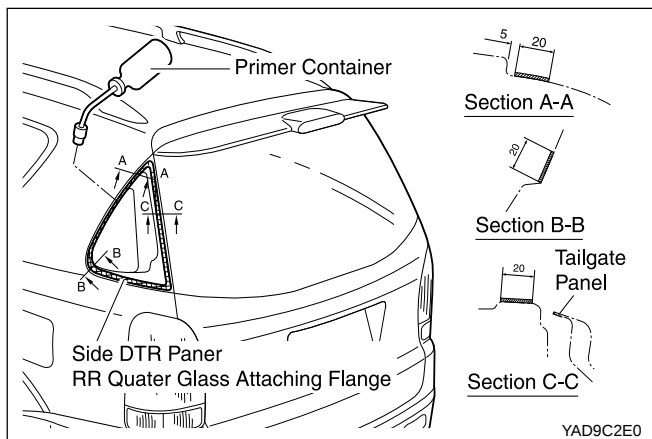
6. After installing front quarter glass, proceed to check leaking of water.



REAR QUARTER GLASS

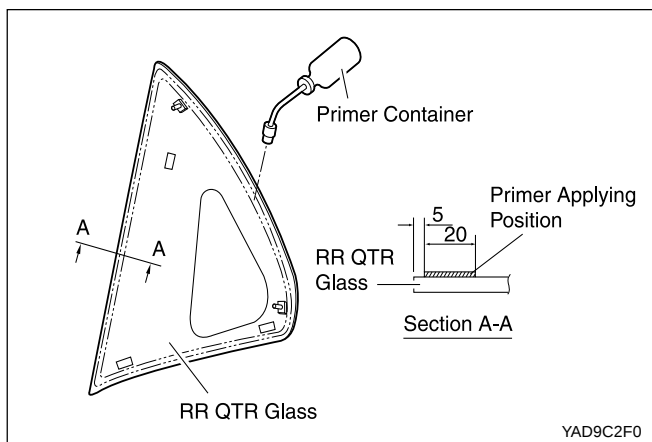
Removal

1. After using special tool, remove sealant around glass.
2. Remove rear quarter glass.

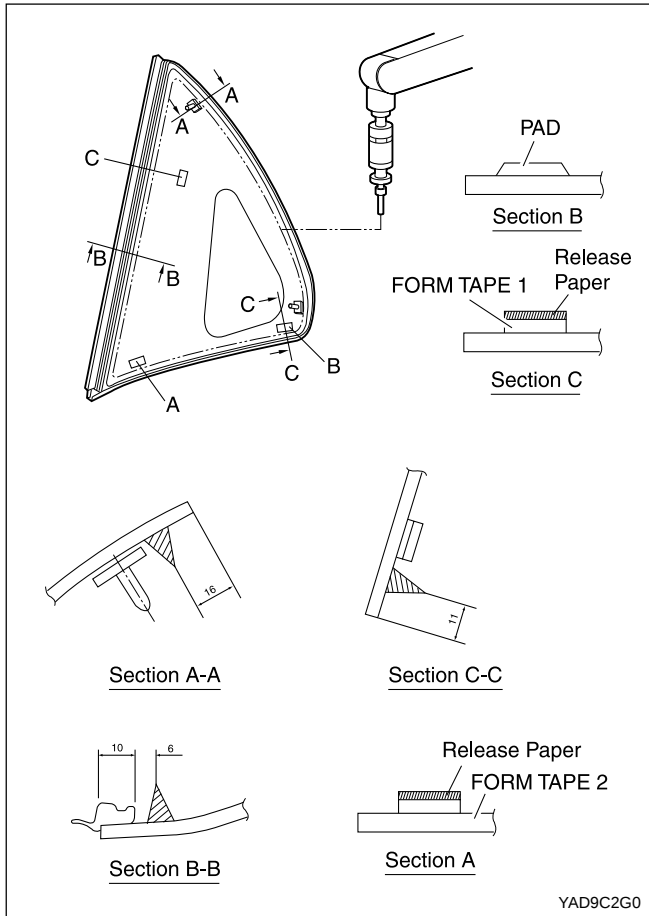


Installation

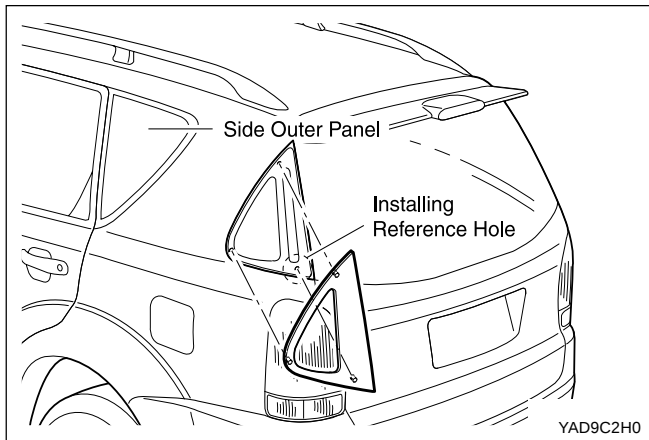
1. Wash up the section of body frame.
2. As keep distance like the left picture, spread primer.



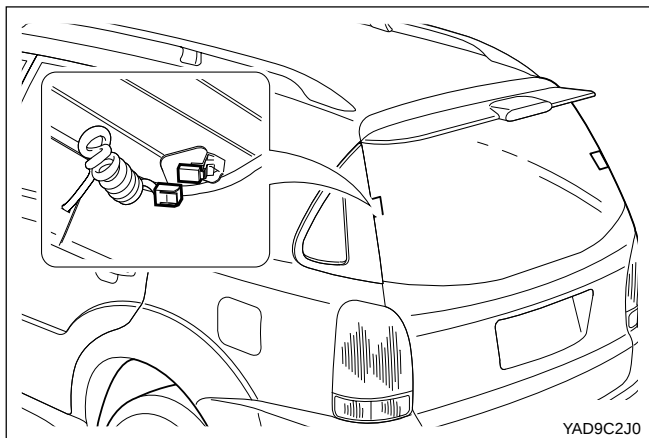
3. After spread on the new rear quarter glass, install glass moulding.



4. Spread sealant on the rear quarter glass.



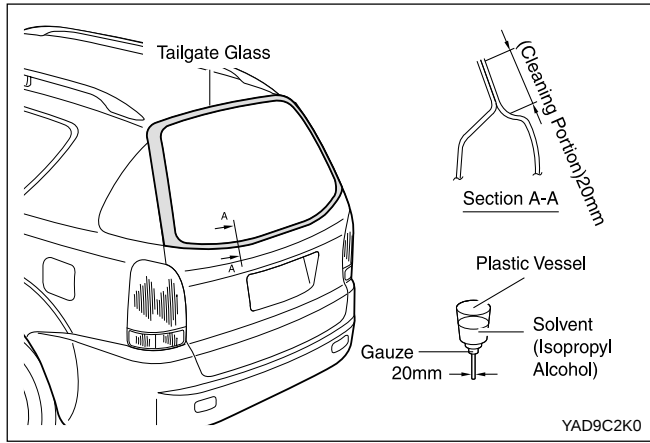
5. After installing rear quarter glass on the body frame, tighten nut on the bolt of mounting.
6. After installing rear quarter glass, proceed to check leaking of water.



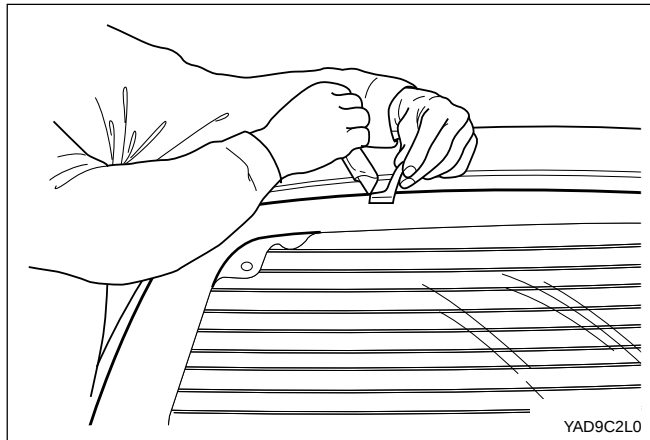
TAIL GATE GLASS

Removal

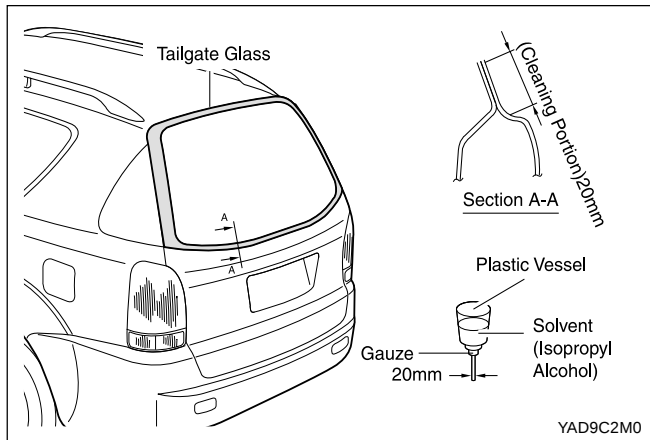
1. Separate negative cable of battery.
2. Separate connector of heat line of back door glass.



3. Using special tool, remove sealant of door glass of tail gate.

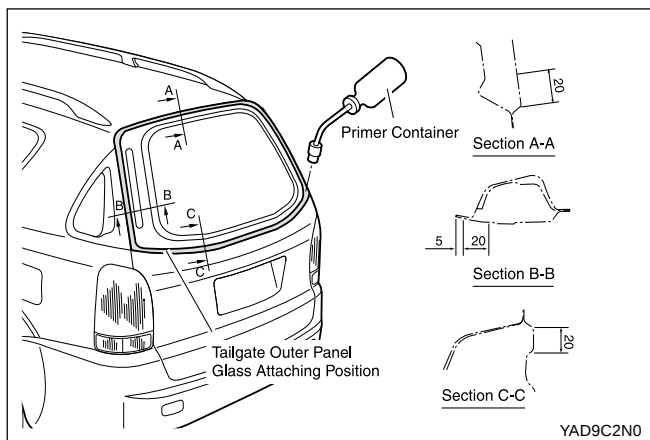


4. Remove door glass of tail gate from the vehicle.
5. Using the knife, remove sealant around door glass of tail gate and frame.

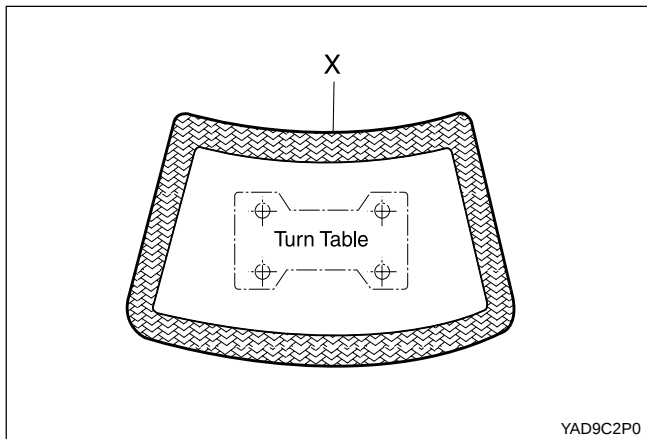


Installation

1. Wash up outer panel of tail gate.
 - After using gauze 20 times, gauze is thrown away.
 - Gauze is a solvent (isopropyl alcohol), gauze keep wet completely.
 - Keep an eye on the washing section of glass not to be touched by any thing polluted.
 - After washing glass, spread primer on the glass section of wet state.
 - Wash up on the section of spreading primer without being touched by any thing polluted.
2. After washing up outer panel of tail gate, and then spread primer.
 - Keep primer in the refrigerator.
 - Mix up primer.
 - Opening vessel, use them within 2 hours.
 - Opening vessel, immediately use them, if you reopen them, use them within 24 hours, as soon as possible.
 - Spread uniformly primer on the surface of vehicle.
 - Available hour for spreading primer to the vehicle : after 3 hour.

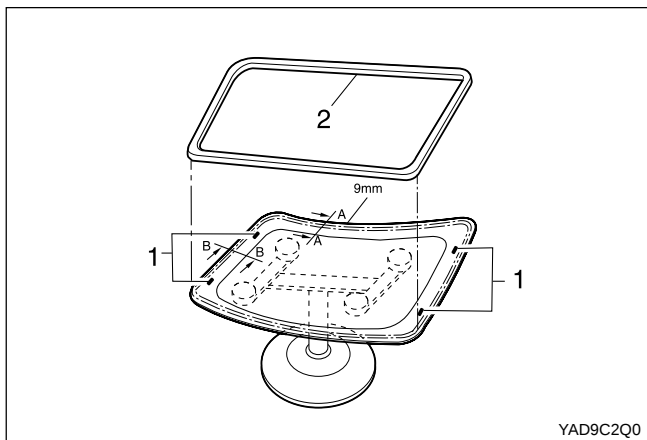


- If body of vehicle is polluted by primer : solvent is washed up to body of vehicle.
- Keep eye on section of spreading ,not to overflow other section to vehicle

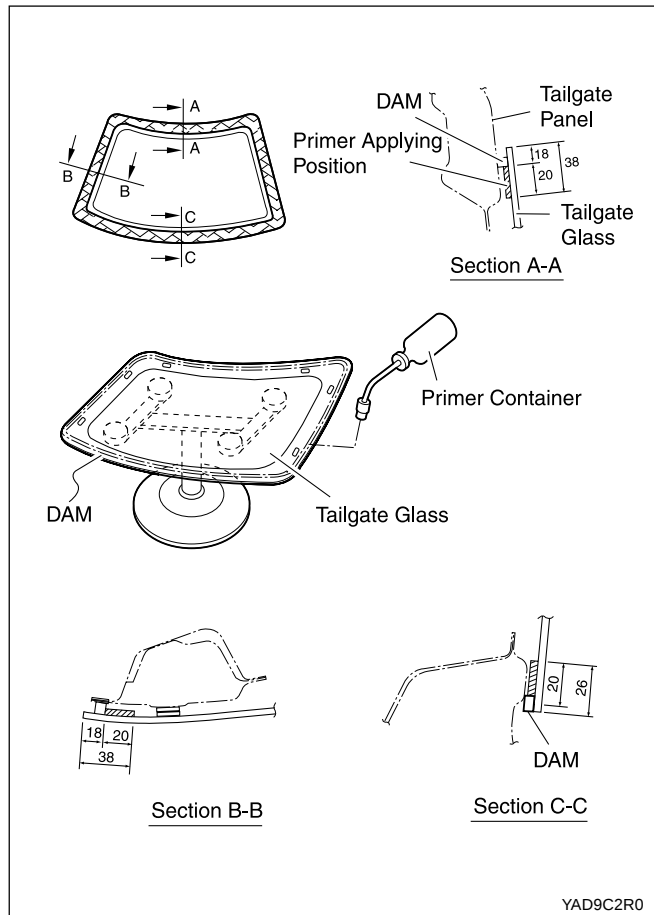


3. Wash up glass tail gate.

- The section washed of glass keep distance 15 mm from the end of glass.
- After using gauze 20 times, gauze is thrown away.
- Gauze is a solvent (isopropyl alcohol), gauze keep wet completely.
- Keep an eye on the washing section of glass not to be touched by any thing polluted.
- After washing glass, spread primer on the glass section of wet state.
- Wash up on the section of spreading primer without being touched by any thing polluted.

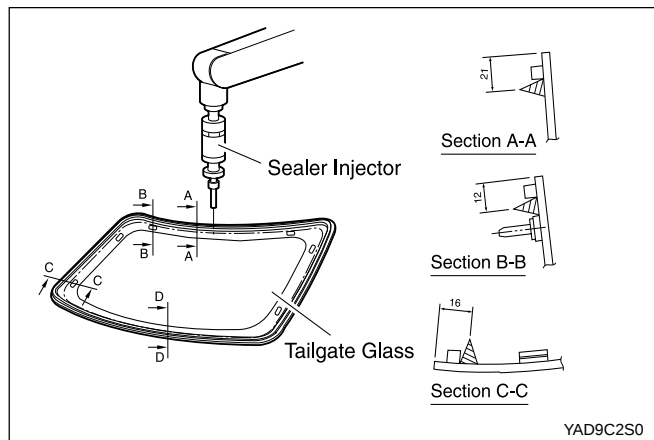


4. Installing dual lock (1) on the glass (2), install the glass dam.



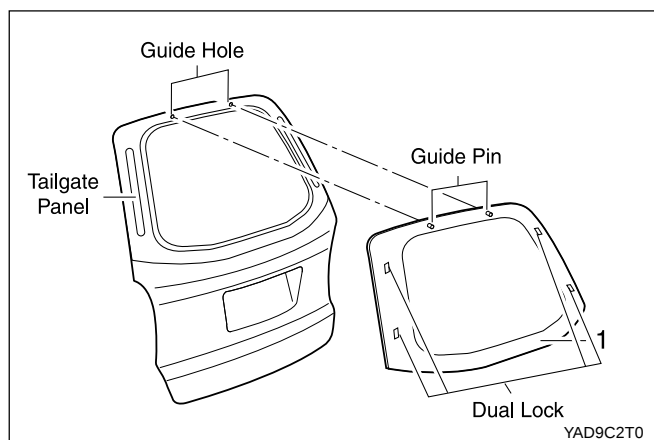
5. Spread primer on the glass of tail gate.

- Mix up primer.
- Due to excessive spreading, keep eye on overflowing spreading other section.
- Available hour for spreading primer to the vehicle: after 3hour.
- Sealant is not available, if sealant has sludgematerial.
- If available date of sealant is passed, this sealant is throwing away. available date of sealant is 90 day for use.
- After using gauze 20 times, gauze is thrown away.
- Spread uniformly primer on the surface of glass.



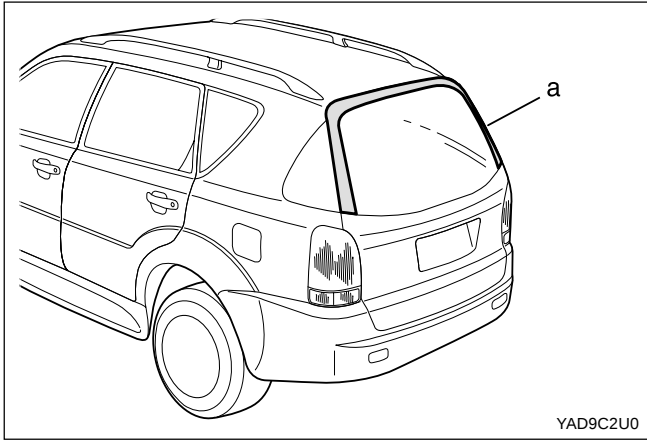
6. Spread sealant on the glass.

- Spread sealant point (200 mm) of lower section of right, like right picture.
- If shape of spreading, thickness is not uniform, leaking of water may occur.



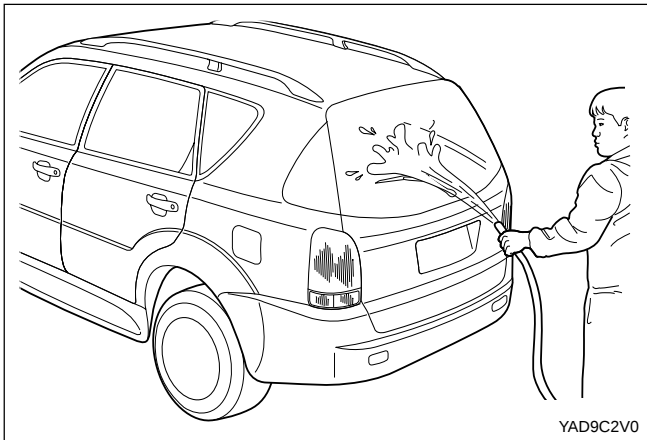
7. After spreading sealant, using compressor, install glass of tail gate within 5 minutes.

- After install glass, tape tail gate, two the point of glass and one point of the section of arm side.

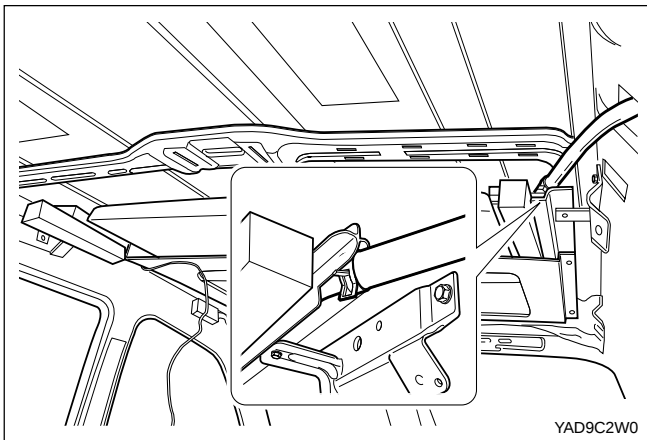


8. After installing, check leaking of water as following procedure.

- In order to fix glass of back door, in the right position of installing, tape glass and frame of door glass.
- To keep sealant dry, wait for 24 hours.
- Remove taping(a).



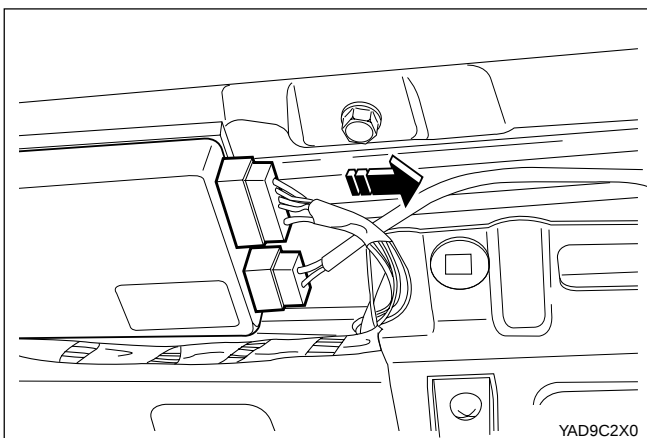
- After spread water on the door of tail gate, check leaking of water. If leaking of water occur, keeping door glass of tail gate dry, fill sealant in the section of leaking. Leaking of water goes on, remove door glass of tail gate, and then proceed to repair above procedure.
- Connect connector of heating line to the door glass of tail gate.
- Connect negative cable of battery.



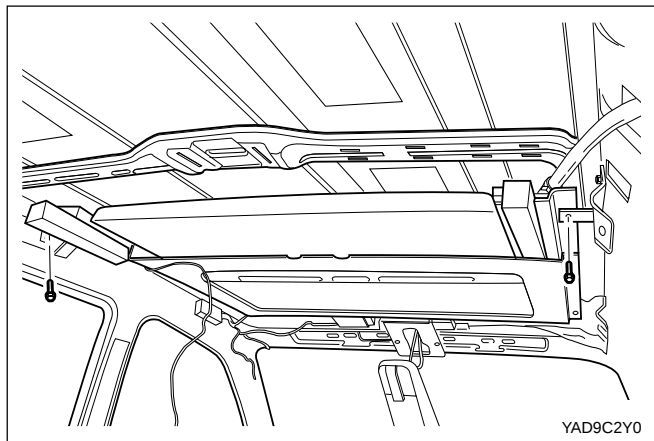
SUN ROOF

Removal and Installation

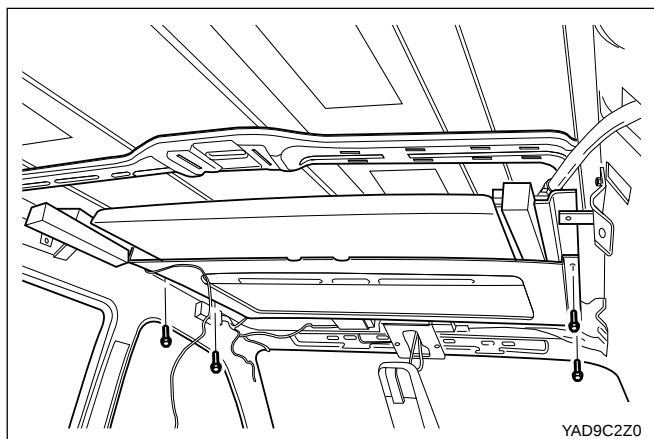
1. Remove headlining, room lamp, and sun visor.
2. Separate hose clip of drain hose of sun roof (4 ea), pull hose slow, turning hoses to the left direction and to the right direction slow.



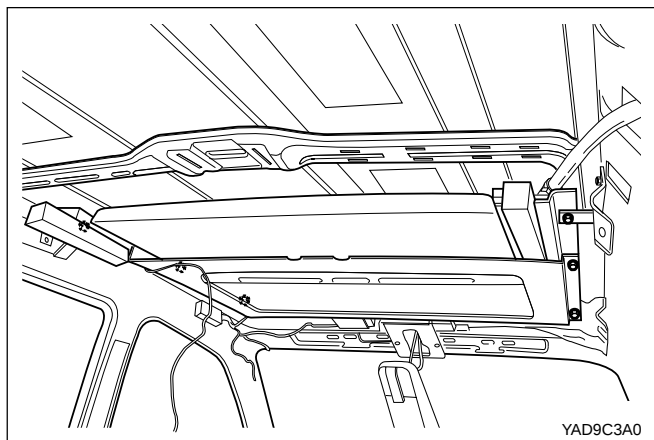
3. Remove the power connector in the relay box.



4. Remove fixing bracket of sun roof.

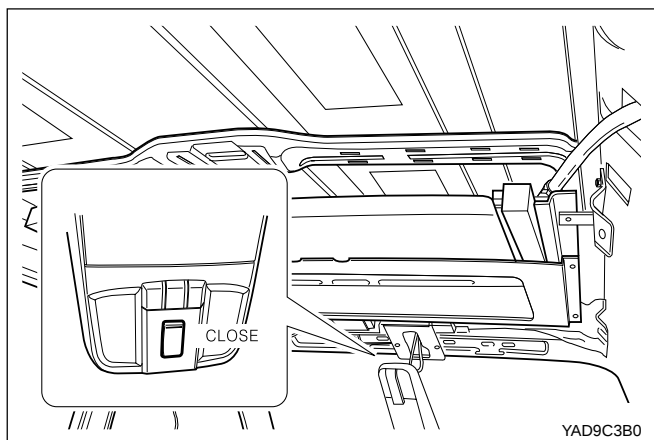


5. After releasing mounting bolt of sun, remove sun roof assembly.



6. Install reverse order of removal.

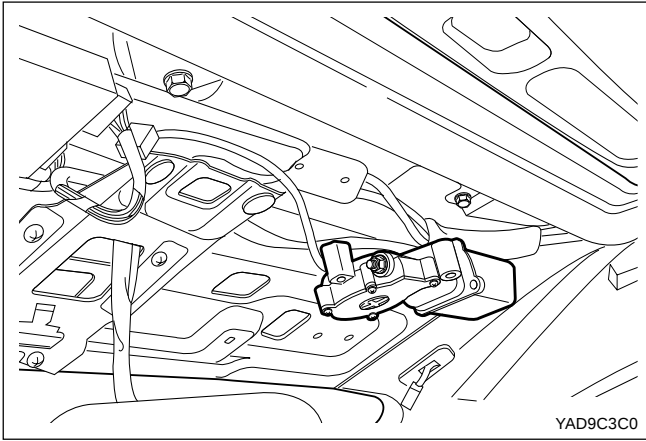
Bracket Bolt of Sun Roof	25 - 35 N•m
Fixing Bolt of Sun Roof	25 - 35 N•m



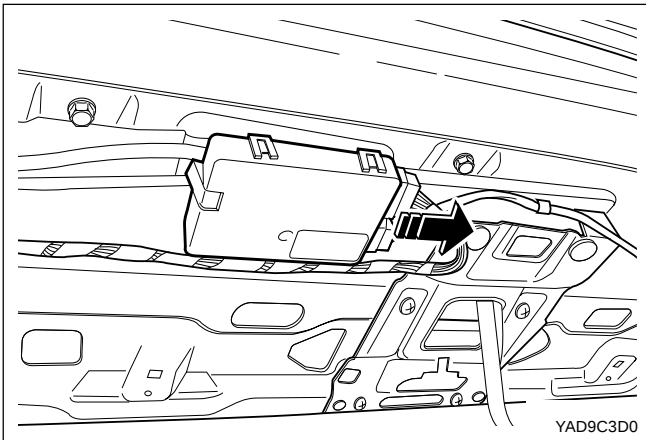
MOTOR AND RELAY BOX

Removal and Installation

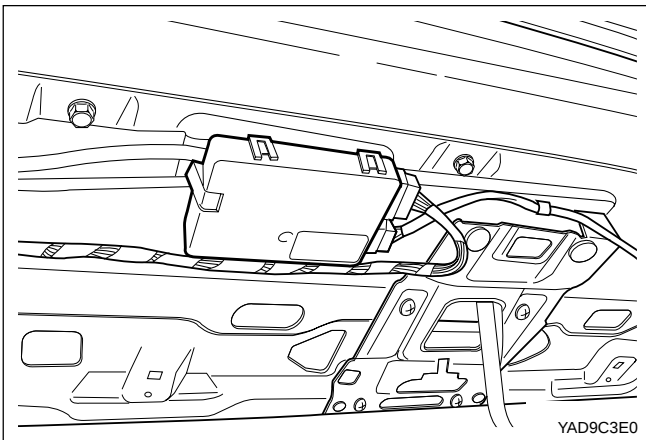
1. Close sun roof.
2. Remove head lining, room lamp, and sun visor.
3. Cut tie-wrap of relay box.



4. After releasing fixing bolt of motor, remove motor connector in the relay box, and then separate motor assembly.



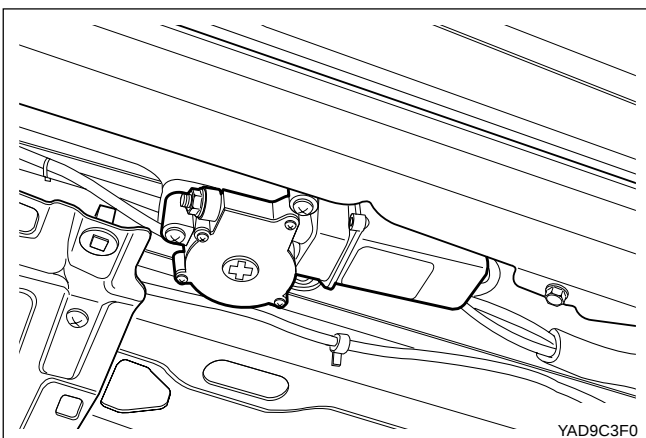
5. Separate power connector in the relay box.
6. After releasing fixing bolt of relay box, separate relay box from front beam (pushing hook of relay box of front beam by hand, remove it).



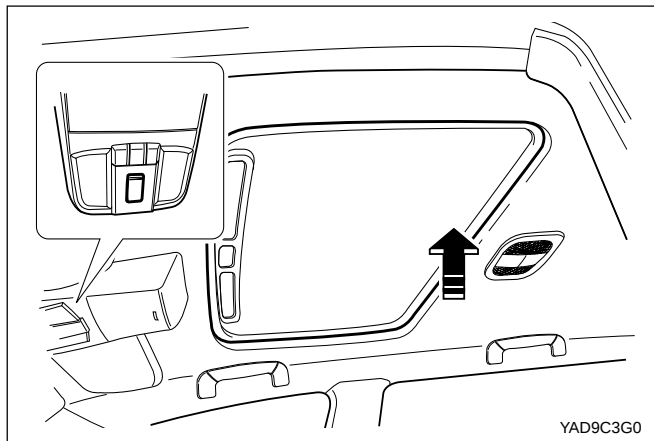
7. Install reverse order of removal.
 - 1) Assemble the closing state in the position of glass panel
 - 2) Check the position of normal close:
 - NORMAL CLOSE POSITION : After connecting between relay box and motor, connect the power and then touch on switch and then the motor stop.
 - 3) Install the motor.
 - 4) Tighten the fixing bolt of motor.

Tightening Torque

3 N•m (26 lb-ft)



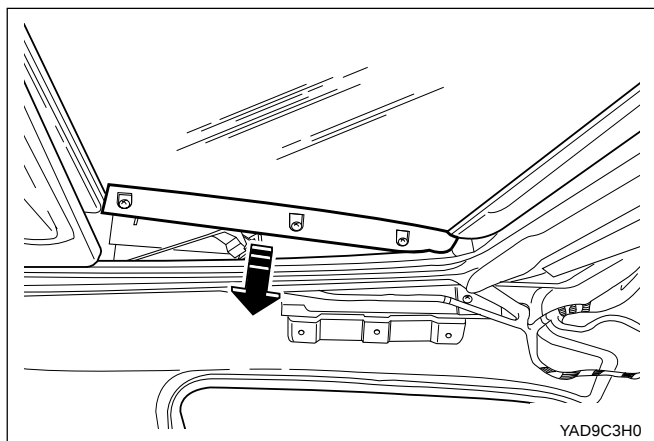
- 5) Insert hook of relay box into beam of front.
- 6) Fix relay box with tie wrap.
- 7) Check operation of sunroof.



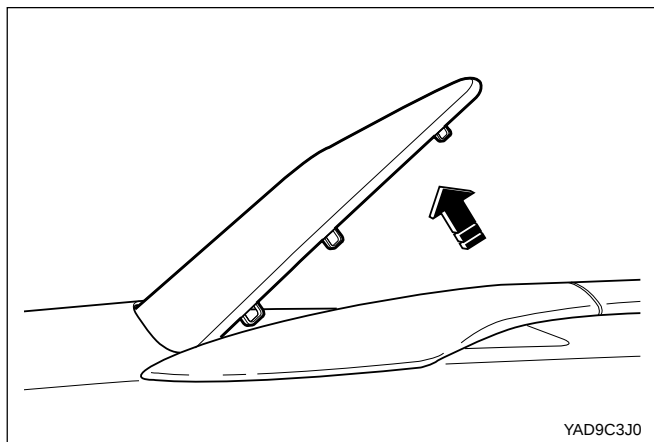
GLASS PANEL

Removal

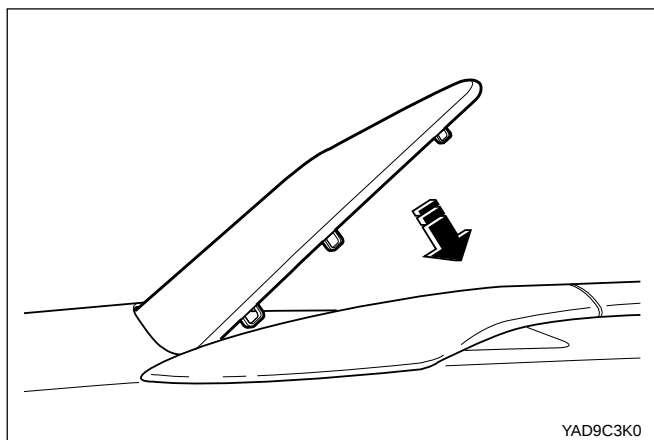
1. Turn on the switch, tilt glass.



2. Remove side inner cover.
3. Separate fixing bolt (6 ea) glass.



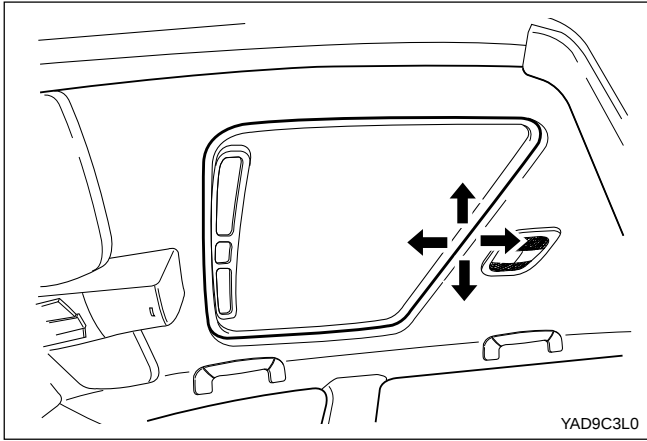
4. Extract panel of glass.



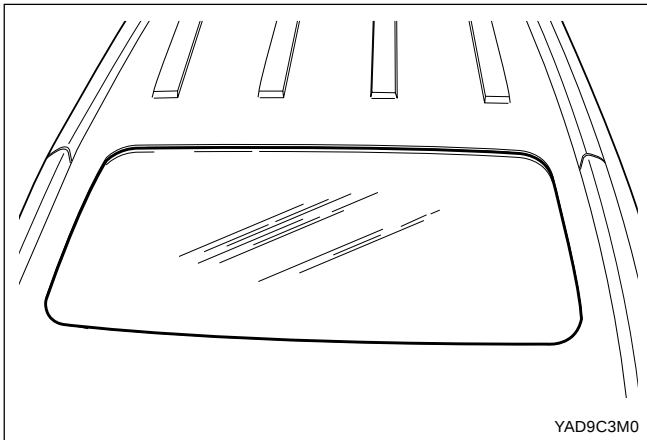
Installstion

1. Install glass panel on internal panel of cover (check the tightening position in the vehicle).

Notice: Install for marking glass indicator to put rear direction.



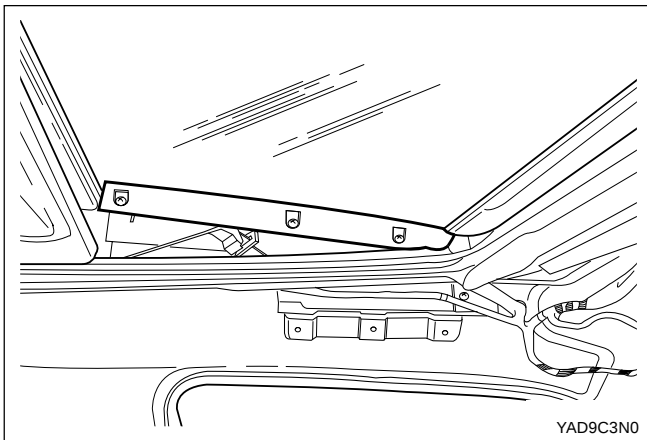
2. Tighten temporarily fixing bolt.
3. Using operation switch of sunroof, close glass panel slow. (Check motion of glass, up and down, forwards and backwards freely).



4. Pulling the glass panel, adjust the height of glass and body.
5. After hight of front glass put the same of height of body and glass seal and 1 mm height to the rear is higher than height of body, and then tighten the bolt.

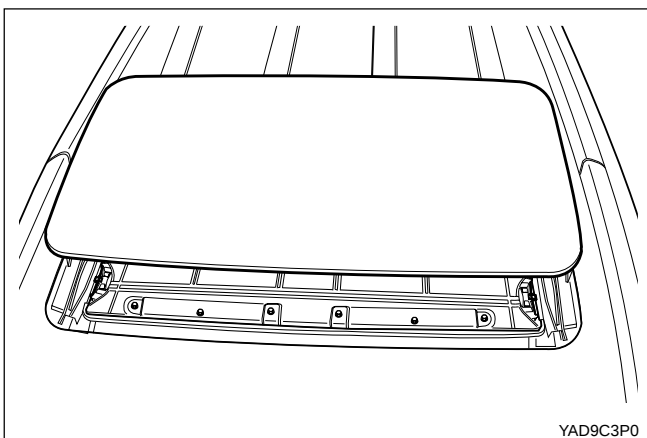
Tightening Torque	5 N•m (26 lb-ft)
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6. Using switch of sunroof, check operation.



7. Turn on the switch, up the glass.
8. Insert side cover (left/right).

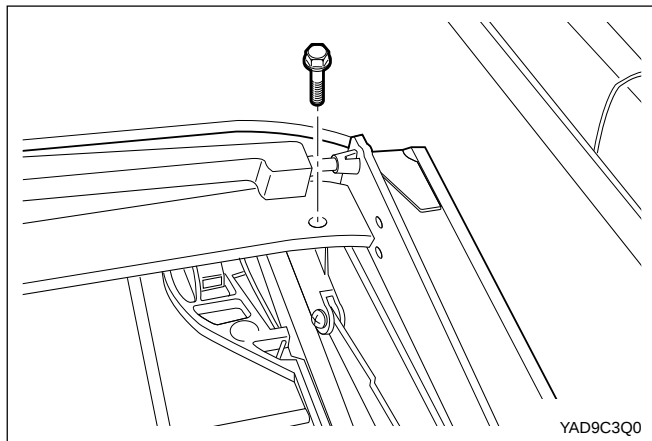
Notice: Check the state of installation between side inner cover and side outer cover.



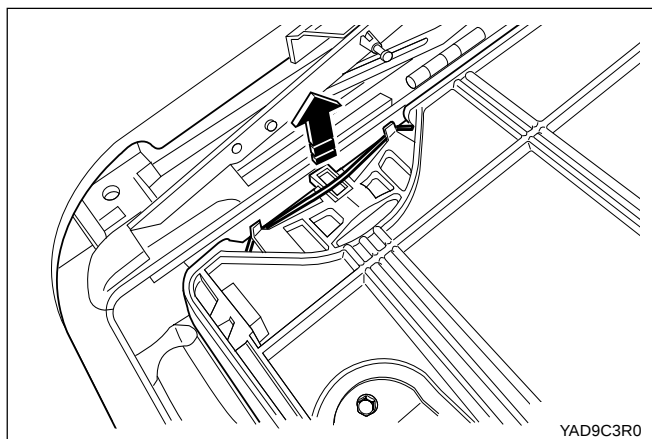
SUN SHADE

Removal

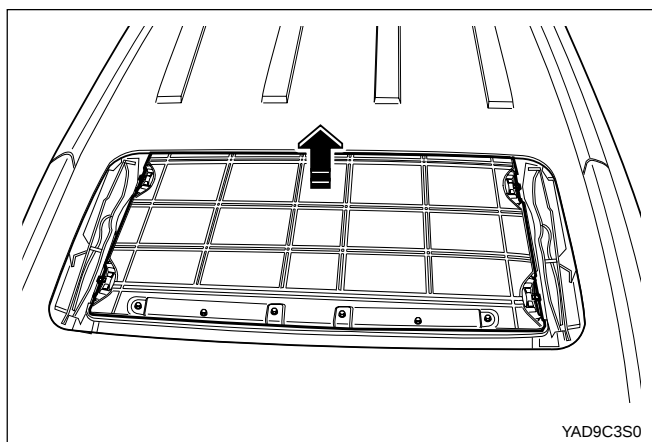
1. Remove glass panel.



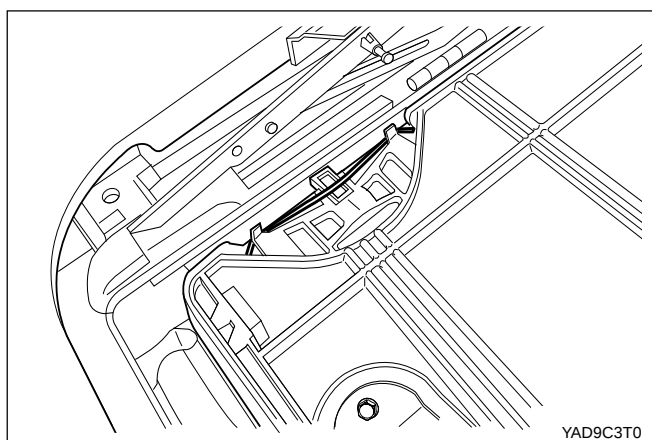
2. After removing fixing bolt of drain channel, push hook of support drain channel by hand, remove drain channel.



3. Close panel of sun shade, using driver, extract slide block of sun shade panel from the guide rail (4 ea).

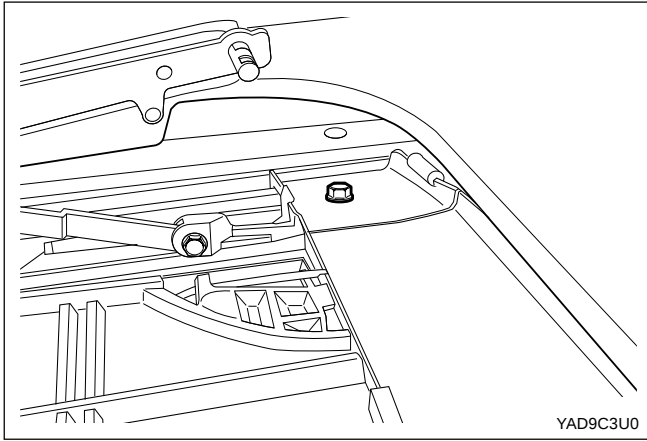


4. Remove panel of sun shade.



Installation

1. Put sun shade on the guide rail.
2. Using driver, pushing slide block of sun shade panel, and then insert guide rail.



3. After inserting drain channel into roof, and then insert drain channel into support drain channel and push front hook.

Tightening Torque	12 N•m (26 lb-ft)
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4. Check operation of sun shade panel.
5. Install the glass panel.