1. Supplemental Restraint System “Airbag”

Airbag system wiring harness is routed on and along body panels.

CAUTION:
- All Airbag system wiring harness and connectors are colored yellow. Do not use electrical test equipment on these circuit.
- Be careful not to damage Airbag system wiring harness when repairing the body panel.

2. Body Datum Points

Various master repair locations are established as datum points used during body repairs. In addition, guide holes, locators and indents are provided to facilitate panel replacement and achieve alignment accuracy.

NOTE:
Left and right datum points are all symmetrical to each other.

1. Supplemental Restraint System “Airbag”

Airbag system wiring harness is routed on and along body panels.

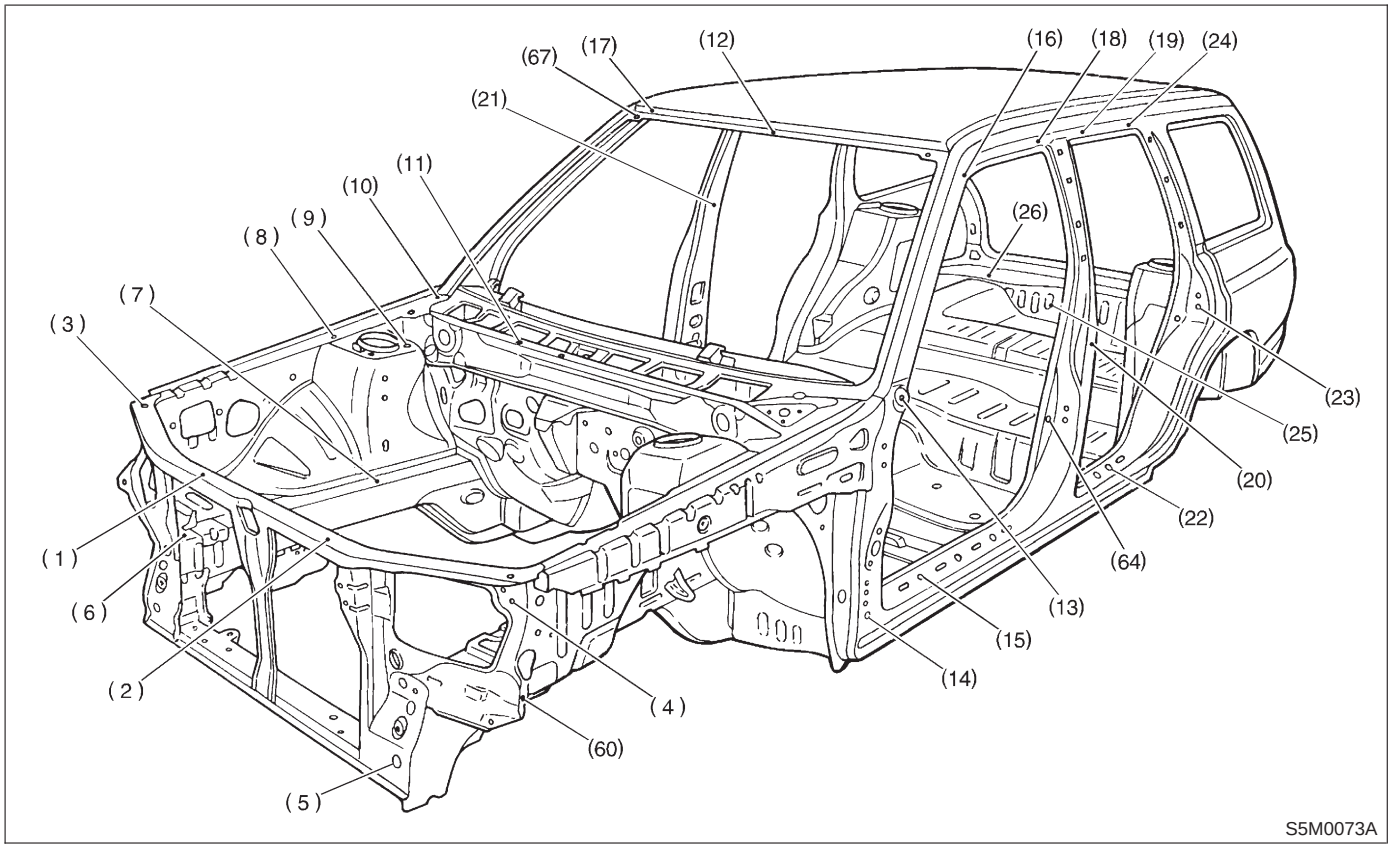
CAUTION:
- All Airbag system wiring harness and connectors are colored yellow. Do not use electrical test equipment on these circuit.
- Be careful not to damage Airbag system wiring harness when repairing the body panel.

2. Body Datum Points

Various master repair locations are established as datum points used during body repairs. In addition, guide holes, locators and indents are provided to facilitate panel replacement and achieve alignment accuracy.

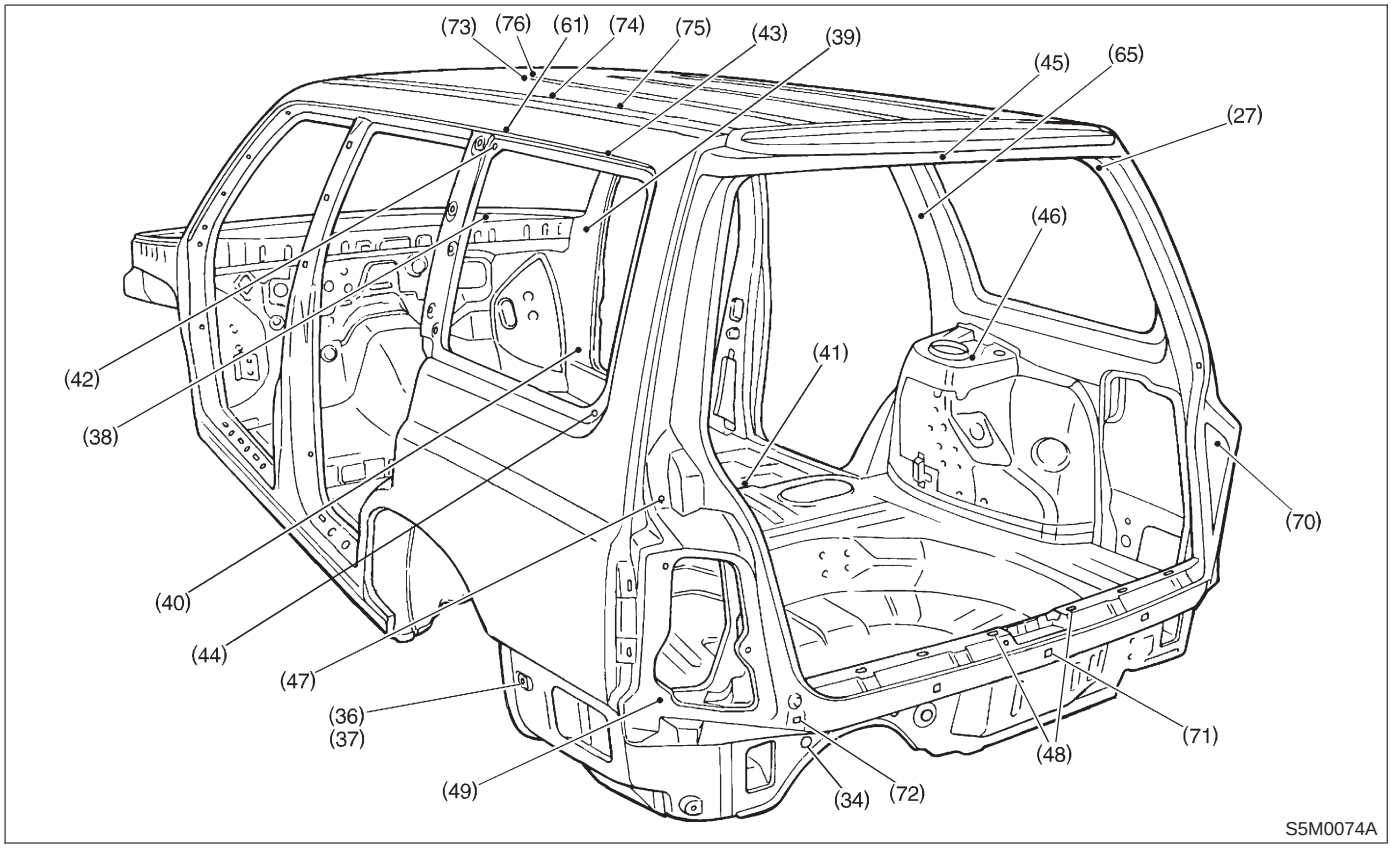
NOTE:
Left and right datum points are all symmetrical to each other.

A: ENGINE COMPARTMENT AND ROOM



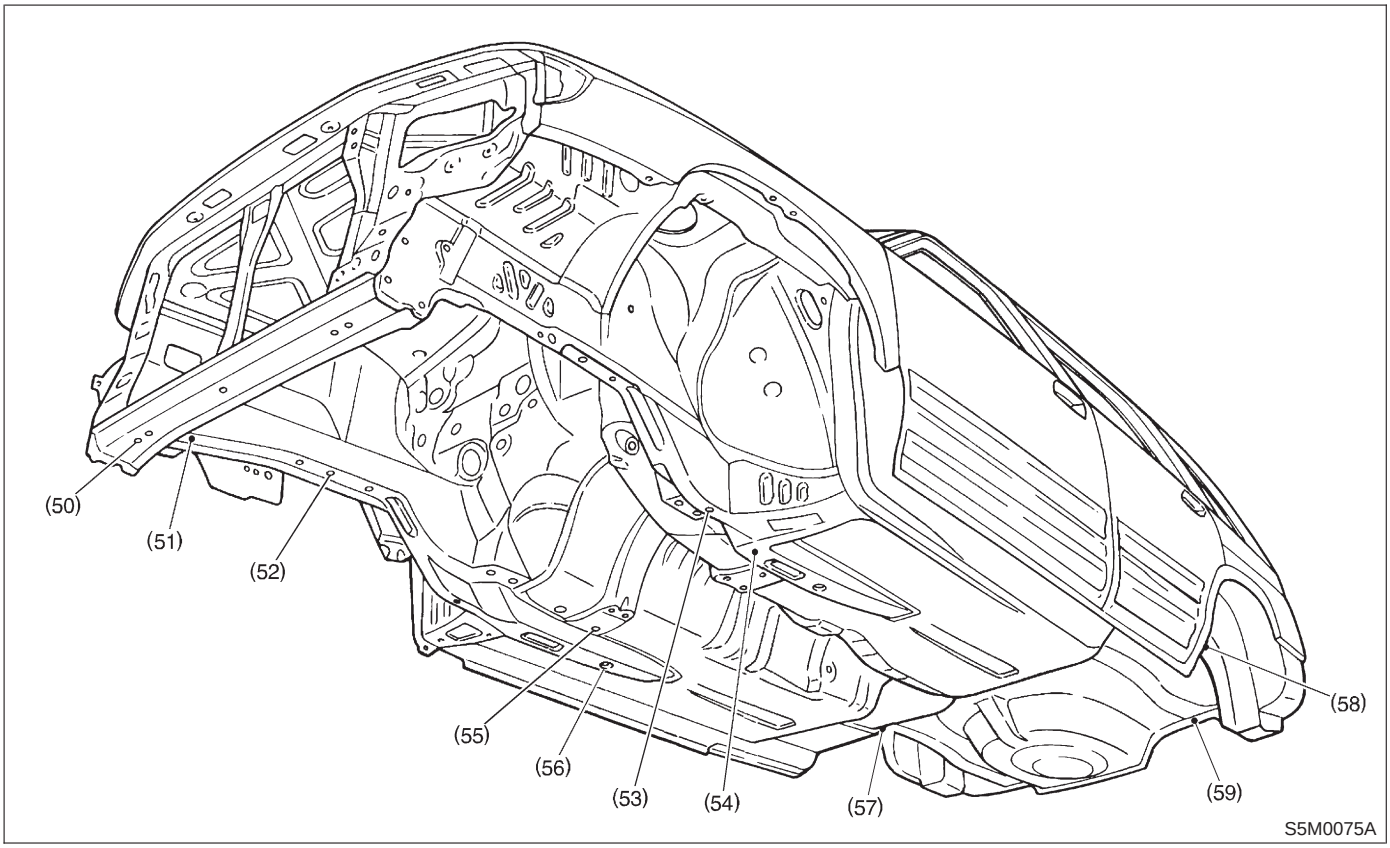
(1) Radiator panel (UPR) repair bolt hole M8 (Right)
(2) Radiator panel (UPR) repair bolt hole M8 (Left)
(3) Fender attaching bolt hole M6 (Symmetrical)
(4) Repair locator 8 mm (0.31 in) dia. (Symmetrical)
(5) Radiator panel side gauge hole 24 mm (0.94 in) dia. (Symmetrical)
(6) Front bumper mounting hole 14 × 17 mm (0.55× 0.67 in) dia. (Symmetrical)
(7) Front crossmember attaching bolt hole 12.4 mm (0.488 in) dia. (Symmetrical)
(8) Fender attaching bolt hole M6 (Symmetrical)
(9) Front strut mounting hole 10 mm (0.39 in) dia. (Symmetrical)
(10) Hood hinge attaching bolt hole M8 (Symmetrical)
(11) Cowl panel mounting hole 6 mm (0.24 in) dia. (Symmetrical)
(12) Roof inner trim attaching bolt hole 8 mm (0.31 in) dia.
(13) Fender attaching bolt hole M6 (Symmetrical)
(14) Front pillar gauge hole 20 mm (0.79 in) dia. (Symmetrical)
(15) Wax coat hole, 20 mm (0.79 in) dia. (Symmetrical)
(16) Retainer attaching square hole 7 mm (0.28 in) (Symmetrical)
(17) Sun visor attaching hole 20 mm (0.79 in) dia. (Symmetrical)
(18) Retainer attaching square hole 7 mm (0.28 in) (Symmetrical)
(19) Retainer attaching square hole 7 mm (0.28 in) (Symmetrical)
(20) Center pillar gauge hole 12 mm (0.47 in) dia. (Symmetrical)
(21) Belt anchor attaching bolt hole 12 mm (0.47 in) dia. (Symmetrical)
(22) Wax coat hole, 20 mm (0.79 in) dia. (Symmetrical)
(23) Rear door switch attaching hole 20 mm (0.79 in) dia. (Symmetrical)
(24) Retainer attaching square hole 7 mm (0.28 in) (Symmetrical)
(25) Spare tire attaching bolt hole M8
(26) Air draw hole 7 mm (0.28 in) dia. (Symmetrical)
(60) Fender attaching bolt hole M6 (Symmetrical)
(64) Door switch attaching hole 13.5 mm (0.531 in) dia. (Symmetrical)
(67) Front glass attaching hole Right 6.5 mm (0.256 in) dia. Left 6.5 × 10 mm (0.256 × 0.39 in) dia.

B: LUGGAGE COMPARTMENT AND ROOM



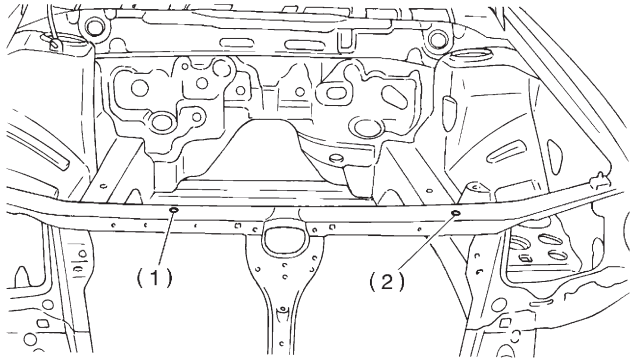
(27) Rear pillar (Inner) harness clip attaching hole 8 mm (0.31 in) dia. (Symmetrical)
(34) Rear skirt gauge hole 20 mm (0.79 in) dia. (Symmetrical)
(36) Rear quarter bumper side gauge hole 20 mm (0.79 in) dia. (Left)
(37) Rear quarter bumper side gauge hole 20 mm (0.79 in) dia. (Right)
(38) Instrument panel attaching square hole 22 × 34.5 mm (0.87 × 1.358 in) (Right)
(39) Steering support beam attaching bolt hole M8 (Symmetrical)
(40) Front pillar (Inner) gauge hole 10 mm (0.39 in) dia. (Symmetrical)
(41) Floor mat attaching clip hole 8 mm (0.31 in) dia. (Symmetrical)
(42) Rear quarter glass attaching hole 8 × 15 mm (0.31 × 0.59 in) dia. (Symmetrical)
(43) Roof rail attaching square hole 9 mm (0.35 in) dia. (Symmetrical)
(44) Rear quarter glass attaching hole 8 mm (0.31 in) dia. (Symmetrical)
(45) Rear locator hollow 4 mm (0.16 in) dia.
(46) Rear strut mounting hole 10 mm (0.39 in) dia. (Symmetrical)
(47) Rear gate stay attaching bolt hole M8 (Symmetrical)
(48) Inner trim clip attaching hole 8 × 20 mm (0.31 × 0.79 in) dia. (Symmetrical)
(49) Rear combination light mounting hole 8 mm (0.31 in) dia. (Symmetrical)
(61) Side rail (Inner) gauge hole 8 mm (0.31 in) dia. (Symmetrical)
(65) Seat belt anchor attaching bolt hole 12 mm (0.47 in) dia. (Symmetrical)
(70) Buffer attaching hole M6 (Symmetrical)
(71) Bumper face attaching square hole 8 × 9 mm (0.31 × 0.35 in)
(72) Rear quarter and square hole 8 × 9 mm (0.31 × 0.35 in) (Symmetrical)
(73) Head console attaching hole 8 mm (0.31 in) dia.
(74) Inner shim carrier attaching bolt hole M6 (Symmetrical)
(75) Inner shim carrier attaching bolt hole M6 (Symmetrical)
(76) Head console attaching hole 8 mm (0.31 in) dia.

C: UNDER BODY

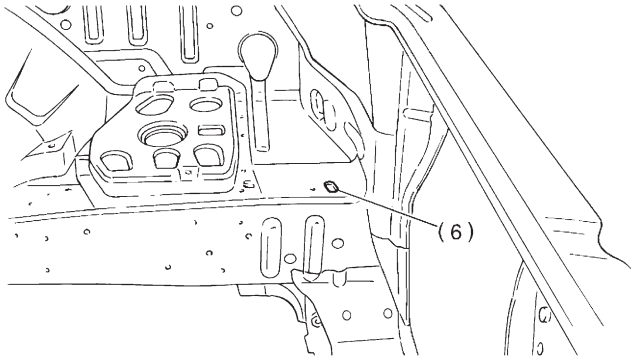


(50) Radiator panel (LWR) frame gauge hole 15 mm (0.59 in) dia. (Symmetrical)
(51) Front side frame gauge hole 20 mm (0.79 in) dia. (Symmetrical)
(52) Front crossmember attaching hole 12.4 mm (0.488 in) dia. (Symmetrical)
(53) Front suspension attaching bolt hole M14
(54) Side frame gauge hole 20 mm (0.79 in) dia. (Symmetrical)
(55) Transmission mount attaching bolt hole 10 mm (0.39 in) dia. (Symmetrical)
(56) Side frame gauge hole 15 mm (0.59 in) dia. (Symmetrical)
(57) Rear differential attaching bolt hole 12 mm (0.47 in) dia. (Symmetrical)
(58) Rear suspension attaching bolt hole M12 (Symmetrical)
(59) Rear side frame gauge hole 15 mm (0.59 in) dia. (Symmetrical)

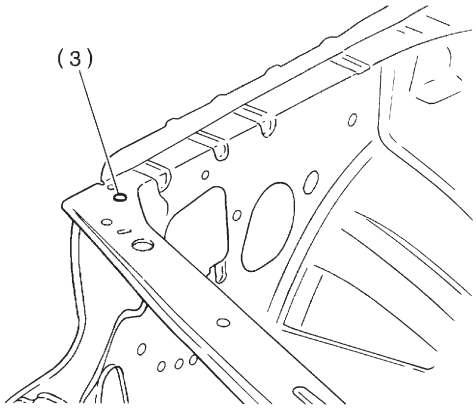
D: DATUM POINT LOCATION



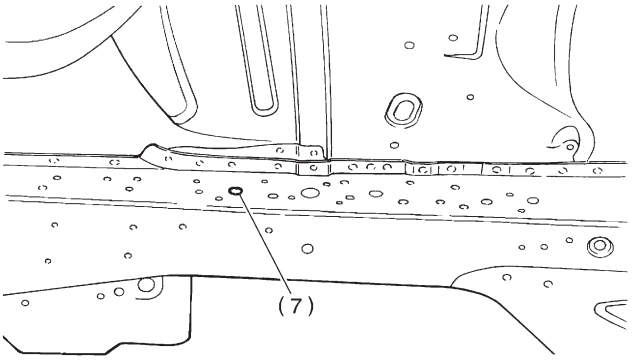
S5M0076A



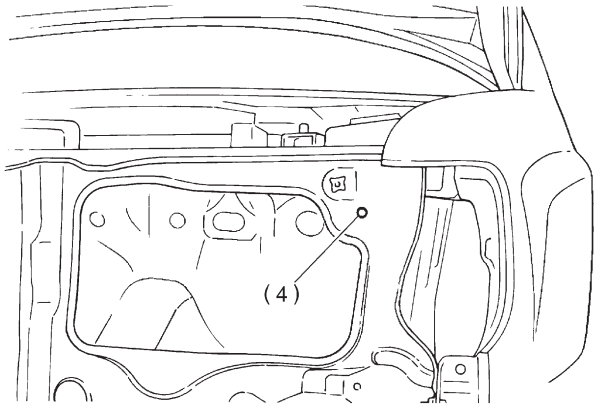
S5M0077A



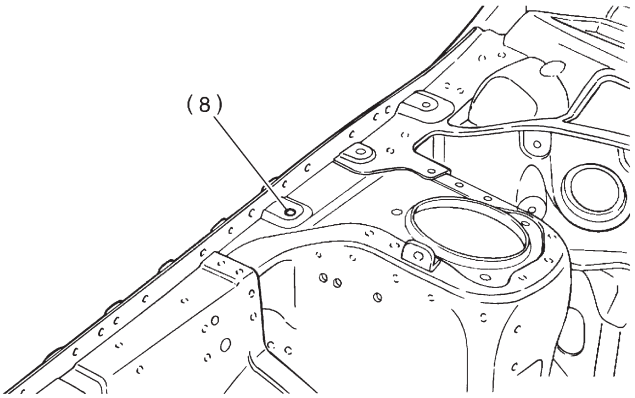
S5M0078A



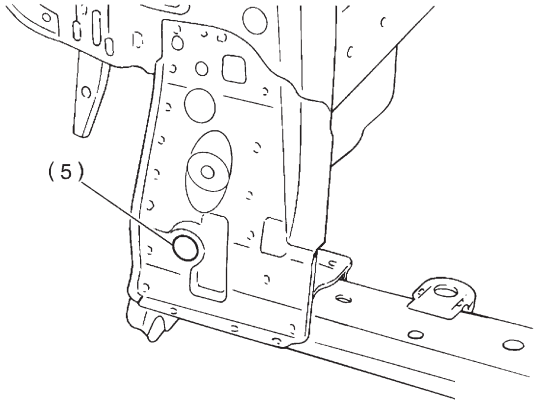
S5M0079A



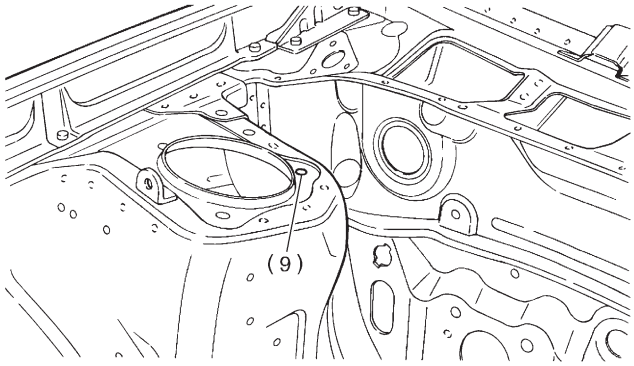
S5M0080A



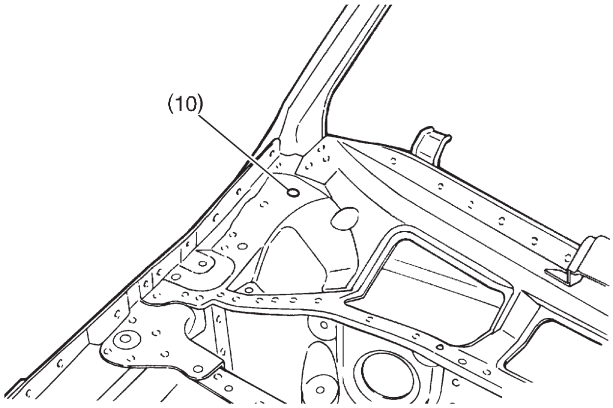
S5M0081A



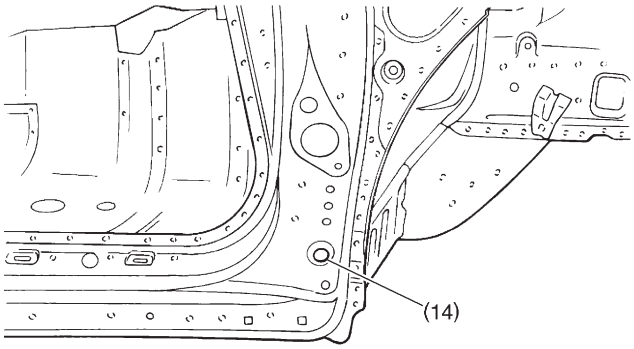
S5M0082A



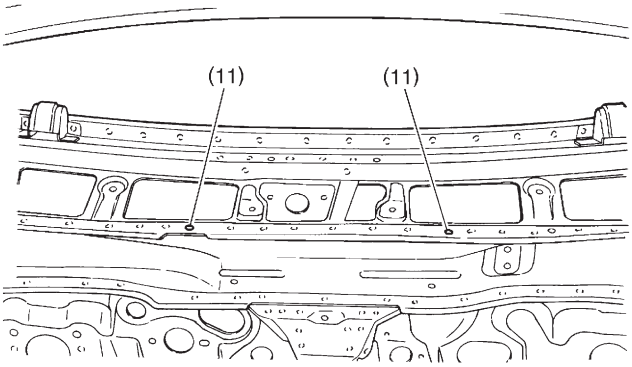
S5M0083A



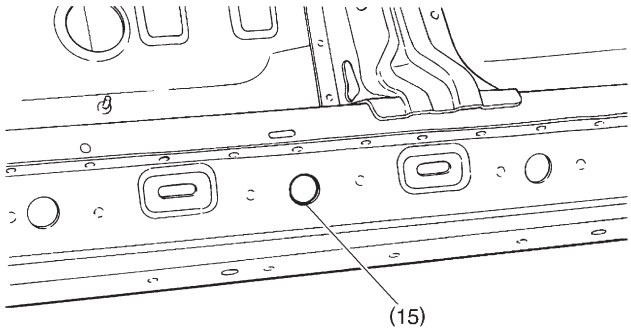
S5M0084A



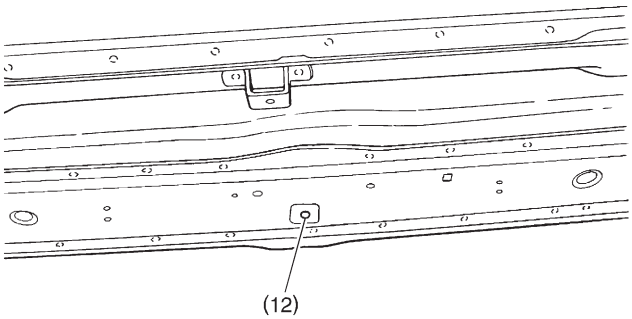
S5M0085A



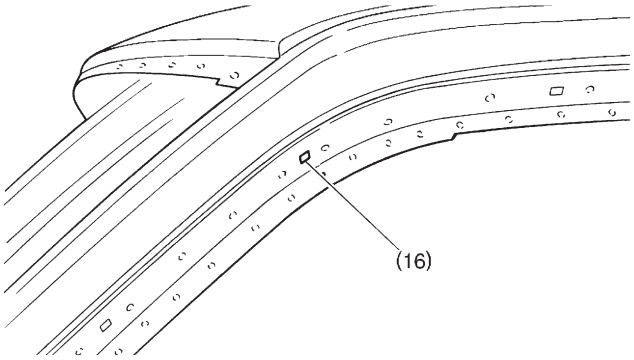
S5M0086A



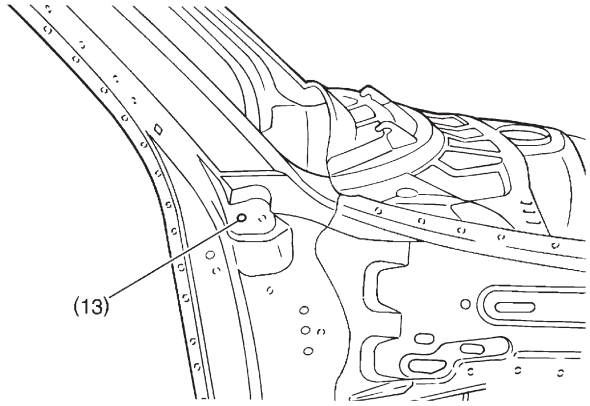
S5M0087A



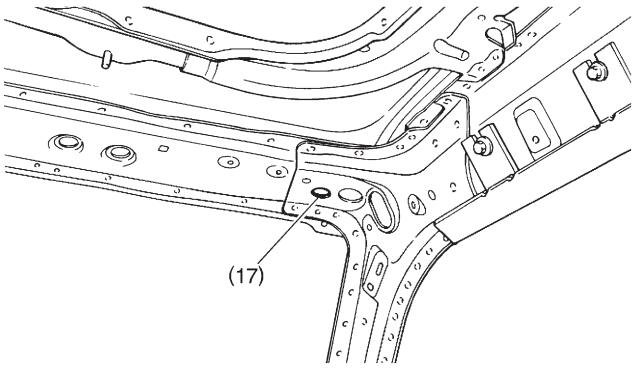
S5M0088A



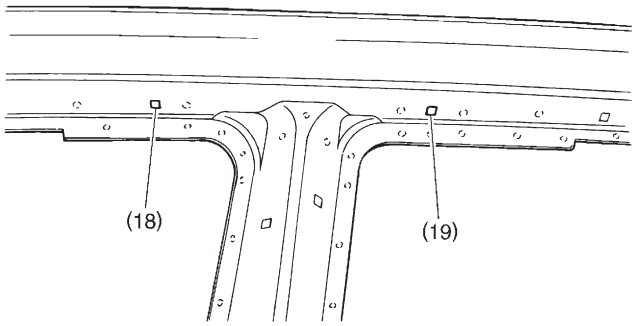
S5M0089A



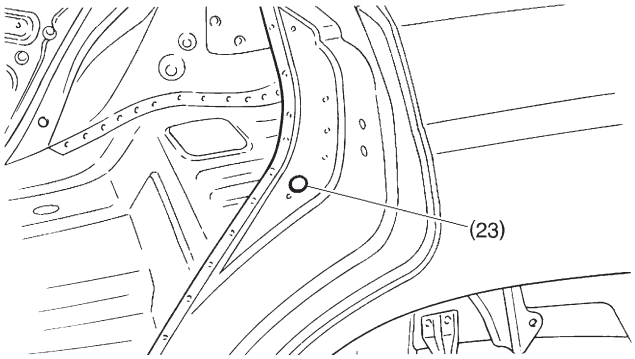
S5M0090A



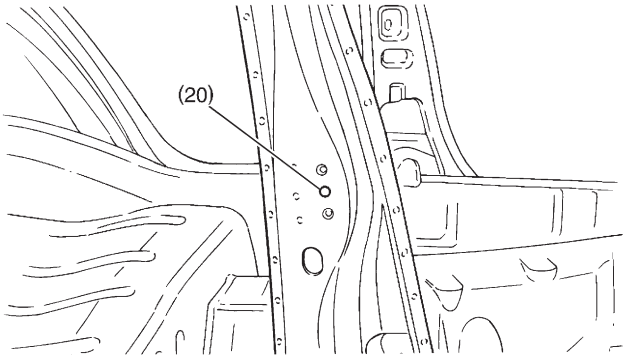
S5M0091A



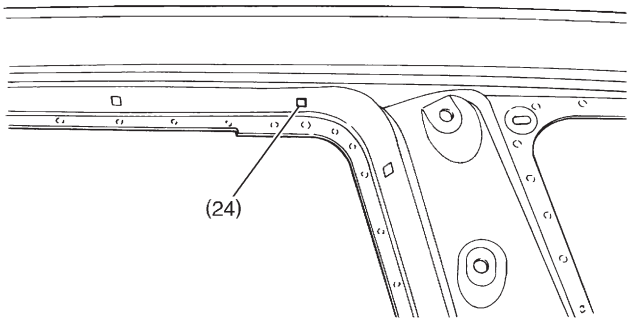
S5M0092A



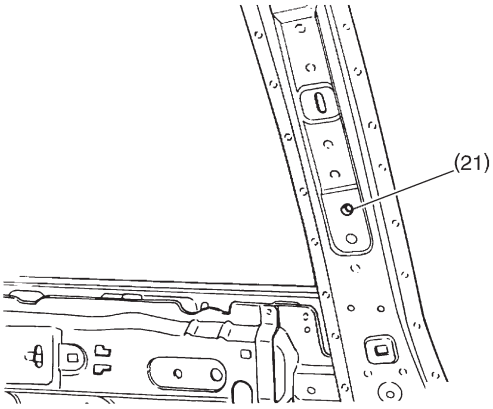
S5M0093A



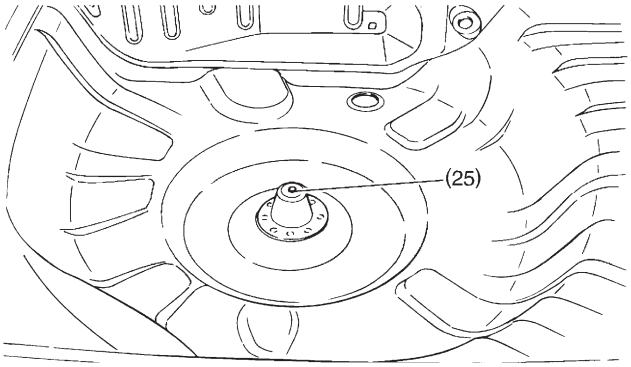
S5M0094A



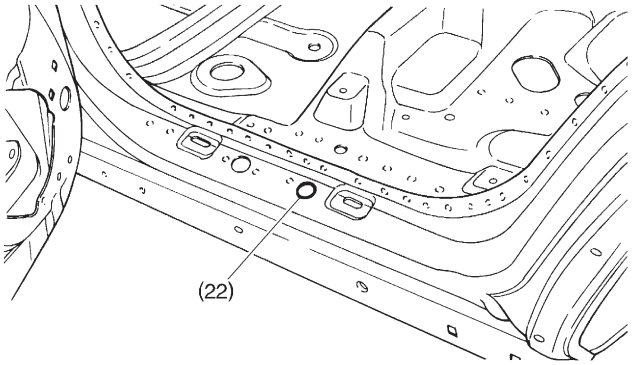
S5M0095A



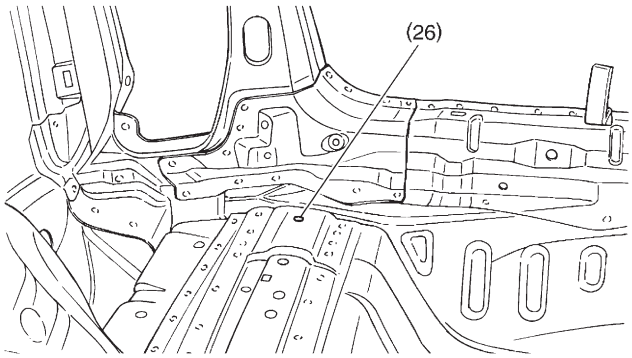
S5M0096A



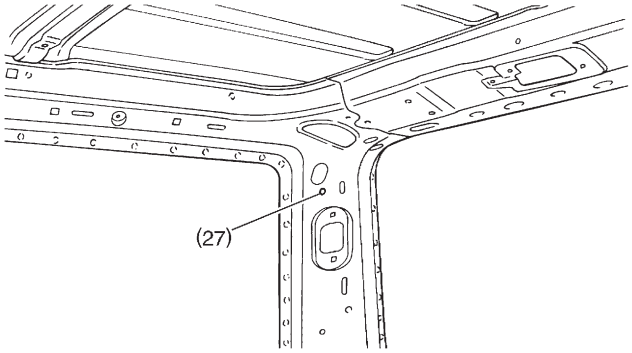
S5M0097A



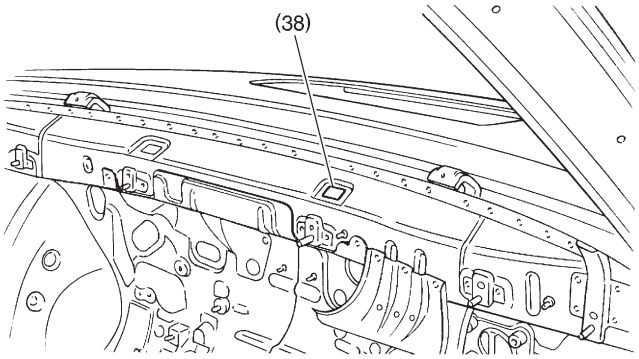
S5M0098A



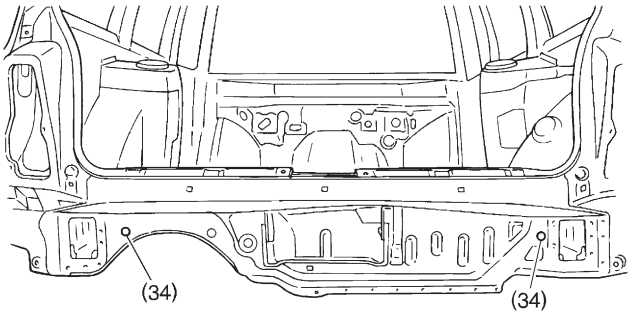
S5M0099A



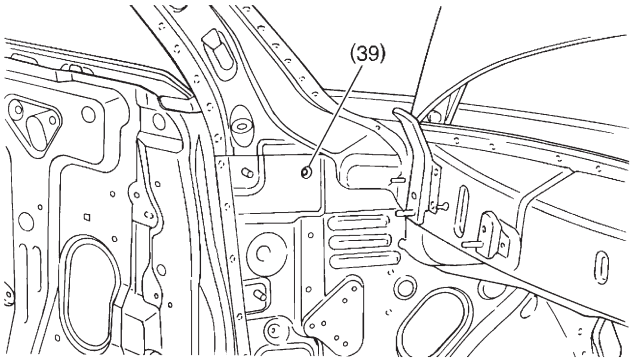
S5M0100A



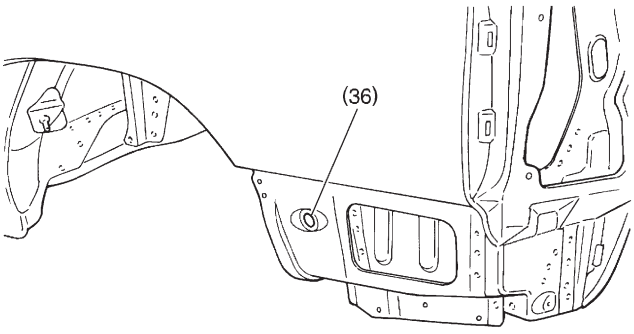
S5M0101A



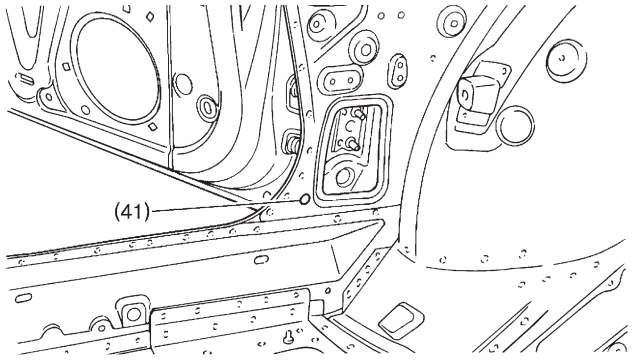
S5M0102A



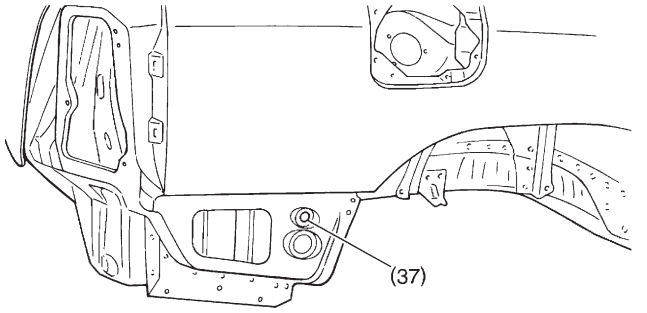
S5M0103A



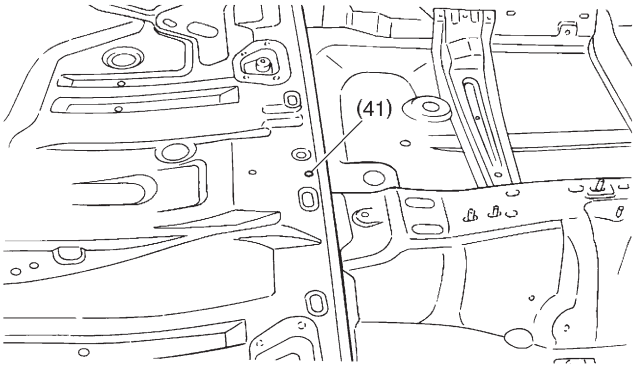
S5M0104A



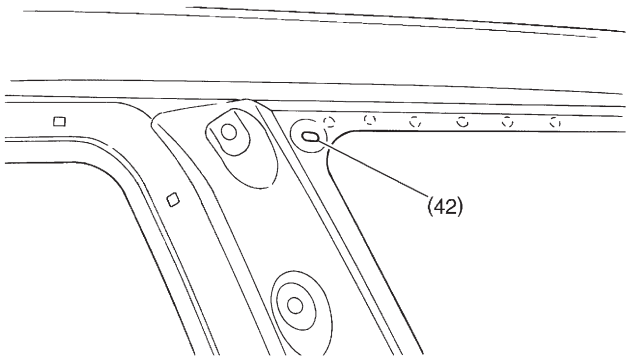
S5M0105A



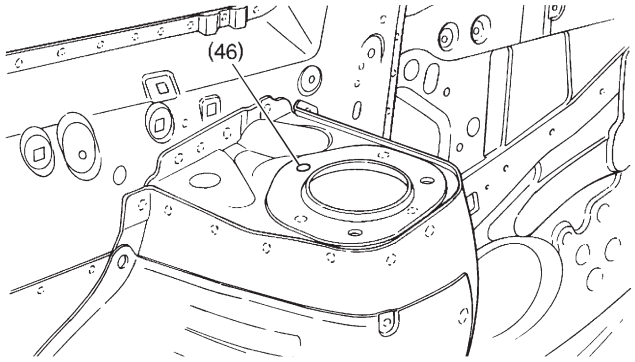
S5M0106A



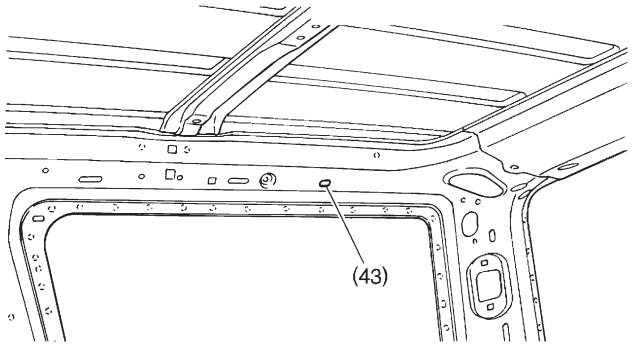
S5M0107A



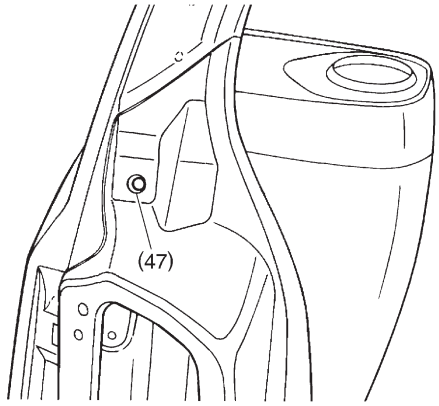
S5M0108A



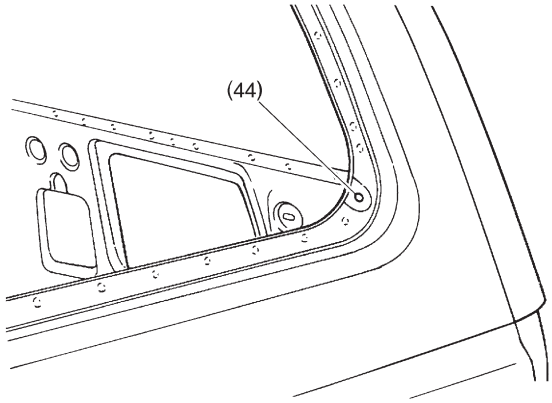
S5M0109A



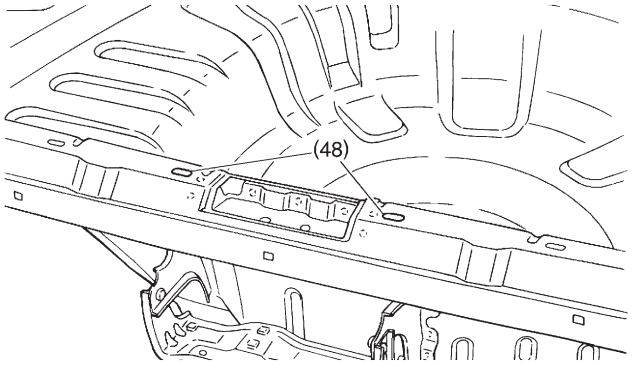
S5M0110A



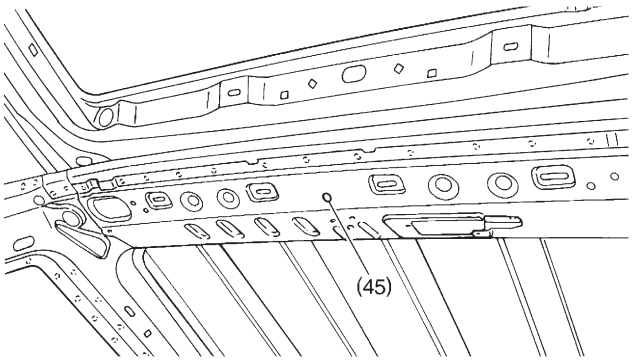
S5M0111A



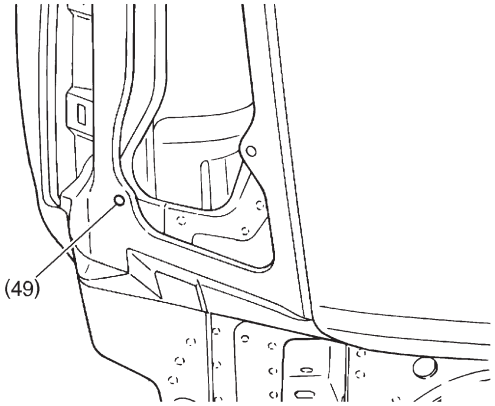
S5M0112A



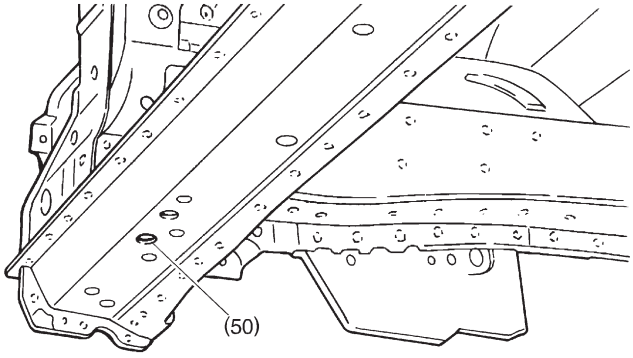
S5M0113A



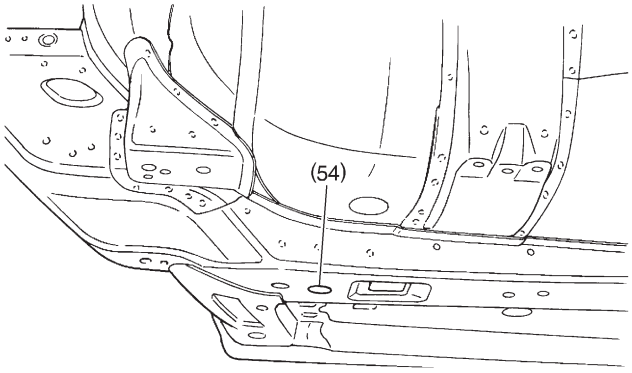
S5M0114A



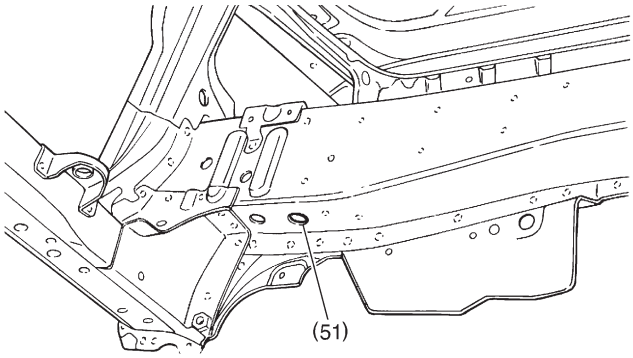
S5M0115A



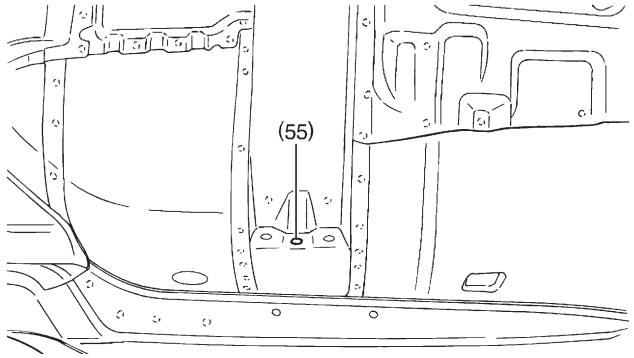
S5M0116A



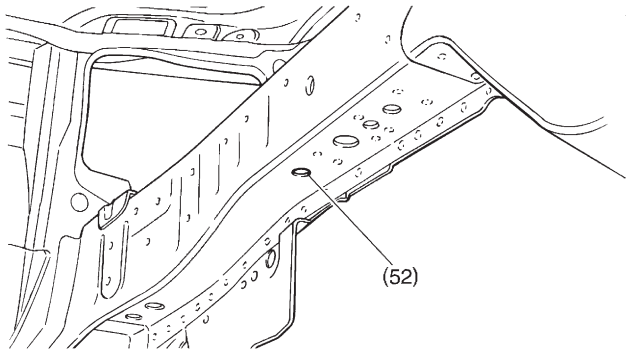
S5M0117A



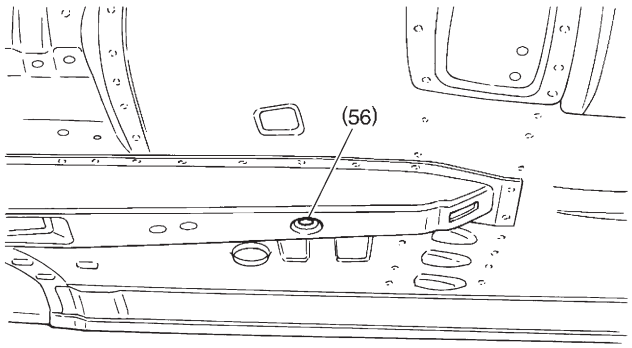
S5M0118A



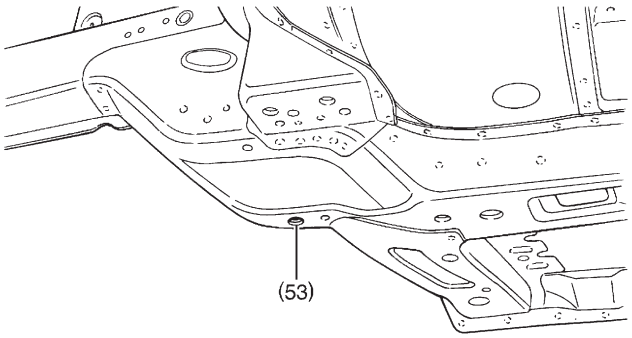
S5M0119A



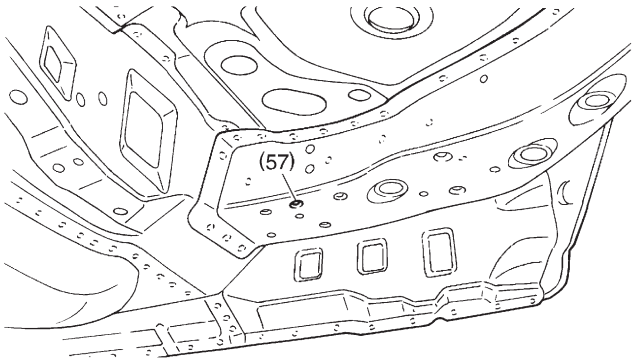
S5M0120A



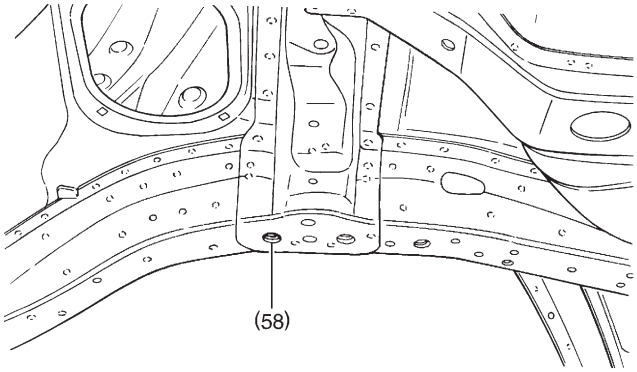
S5M0121A



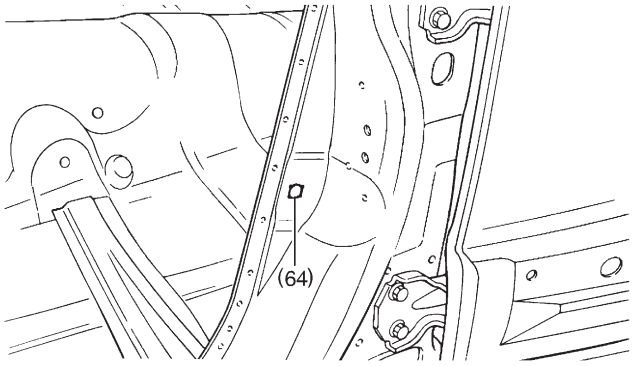
S5M0122A



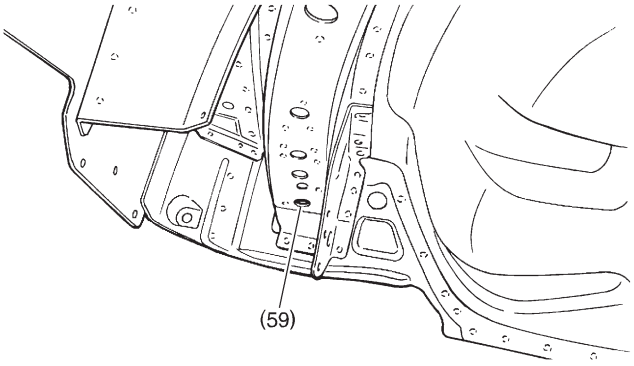
S5M0123A



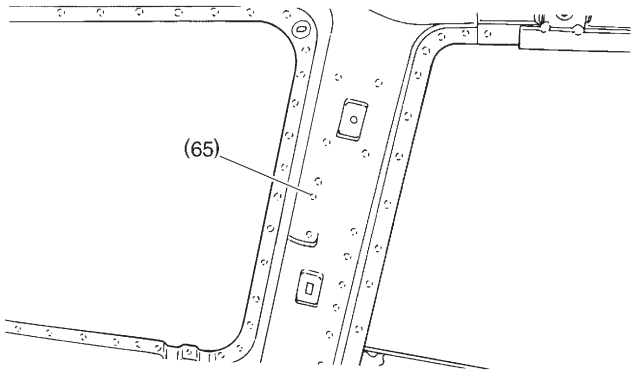
S5M0124A



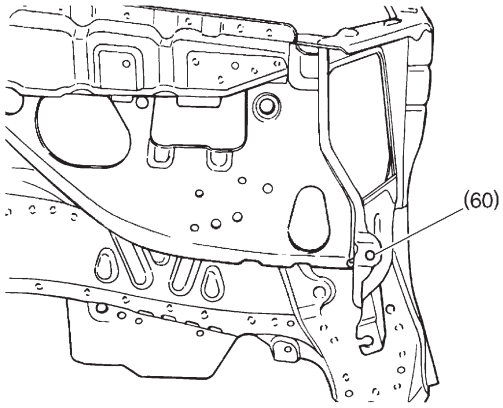
S5M0125A



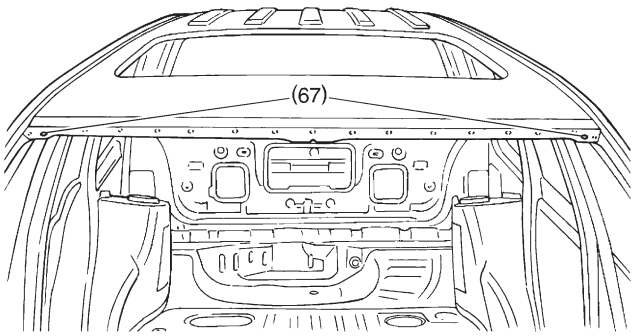
S5M0126A



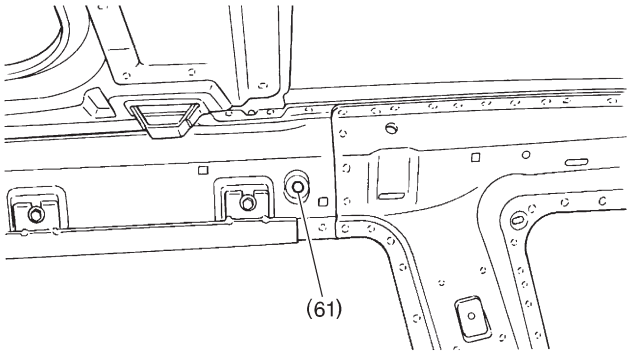
S5M0127A



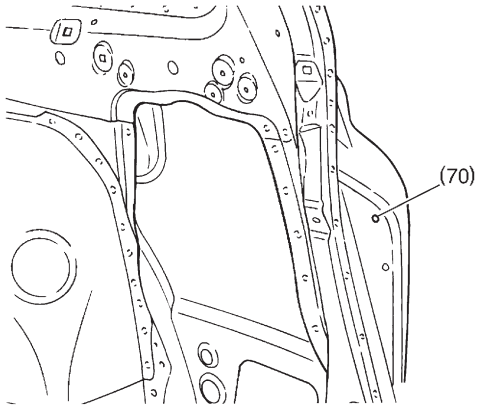
S5M0128A



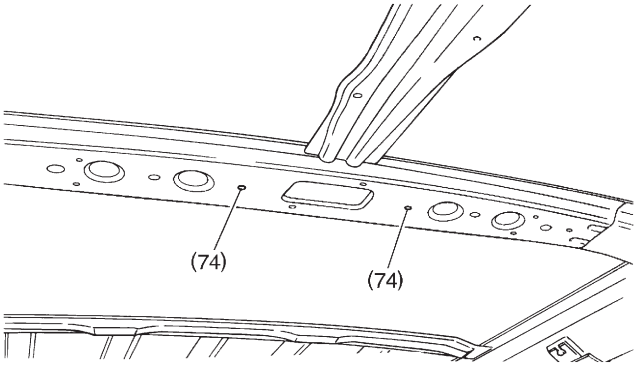
S5M0129A



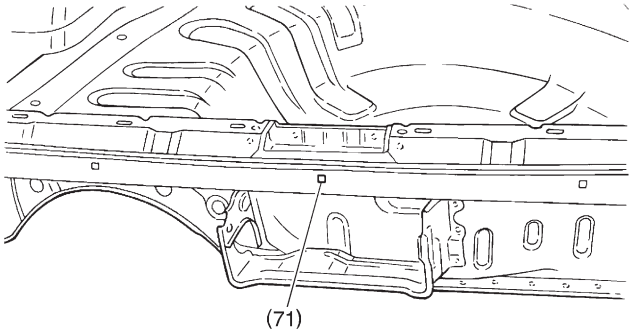
S5M0130A



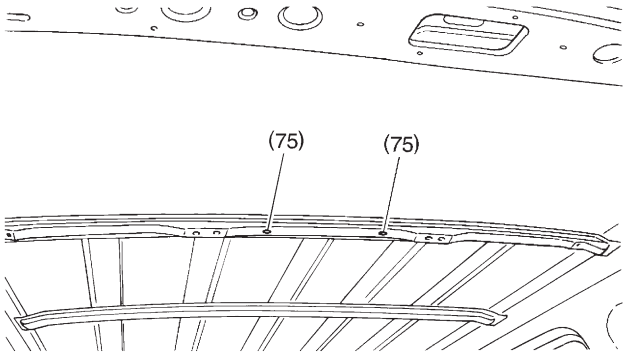
S5M0131A



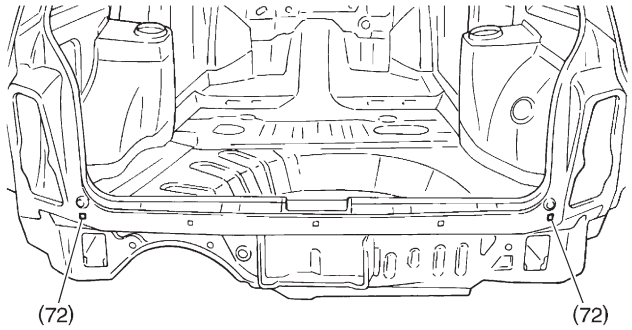
S5M0132A



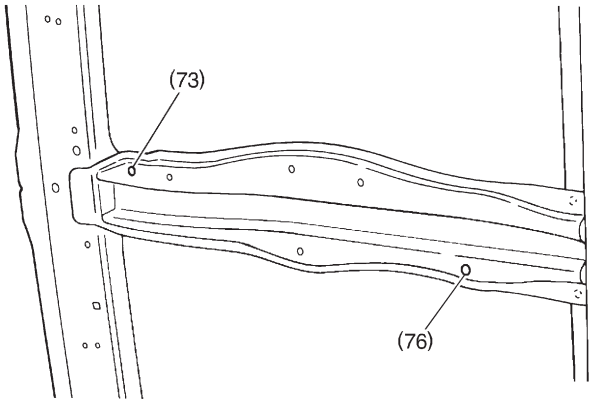
S5M0133A



S5M0134A



S5M0135A



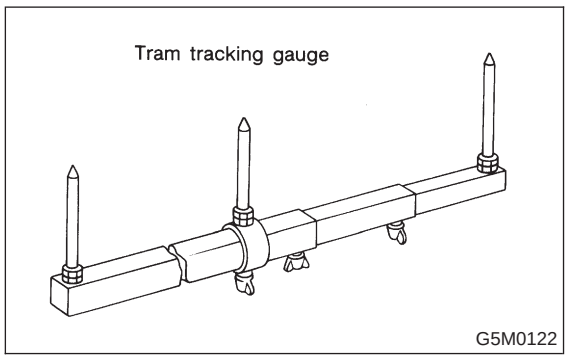
S5M0136A

MEMO:

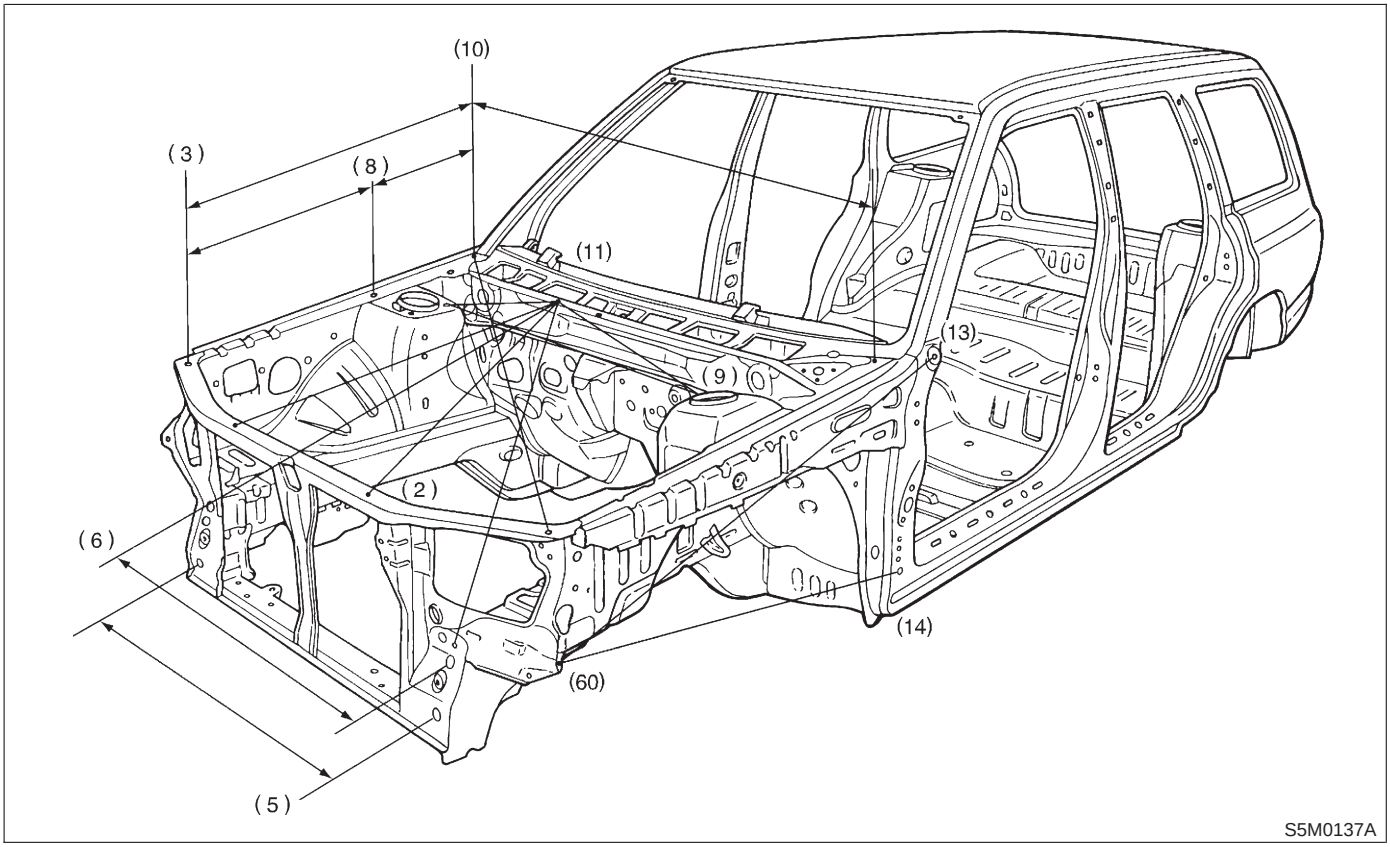
3. Datum Dimensions

Use a tram tracking gauge to measure all dimensions. If a measuring tape is used, be extremely careful because it tends to deflect or twist, which results in a false reading.

NOTE:
- A suffix character “R” or “L” refers to the right or the left.
- All dimensions refer to the distance between the centers of holes measured in a straight line
- Each dimension indicates a projected dimension between hole centers.



A: FRONT STRUCTURE

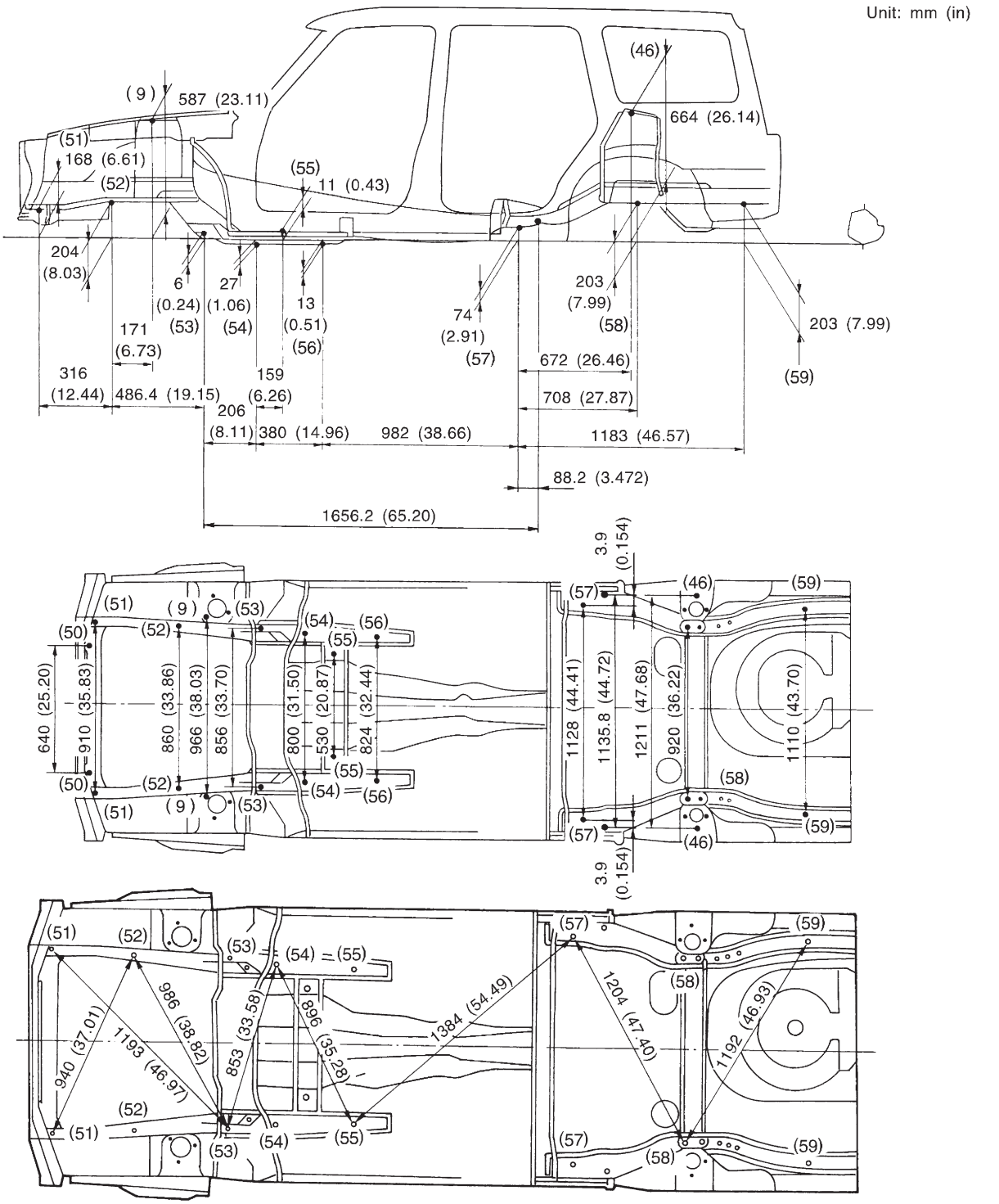


Unit: mm (in)

Point to point	Dimension		Point to point	Dimension
(11) R to (1)	851 (33.50)		(10) R to (8) R	388 (15.28)
(11) L to (1)	912 (35.91)		(10) L to (8) L	388 (15.28)
(11) R to (2)	960 (37.80)		(11) L to (9) R	658 (25.91)
(11) L to (2)	864 (34.02)		(11) R to (9) L	658 (25.91)
(11) R to (9) R	391 (15.39)		(9) R to (9) L	965 (37.99)
(11) L to (9) L	391 (15.39)		(11) L to (6) R	1,058 (41.65)
(11) R to (6) R	924 (36.38)		(11) R to (6) L	1,058 (41.65)
(11) L to (6) L	924 (36.38)		(6) R to (6) L	914 (35.98)
(11) R to (3) R	891 (35.08)		(6) R to (10) L	1,549 (60.98)
(11) L to (3) L	891 (35.08)		(6) L to (10) R	1,549 (60.98)
(10) R to (3) R	915 (36.02)		(8) R to (3) R	528 (20.79)
(10) L to (3) L	915 (36.02)		(8) L to (3) L	528 (20.79)
(10) R to (10) L	1,374 (54.09)		(10) L to (3) R	1,636 (64.41)
(3) R to (3) L	1,338 (52.68)		(8) R to (8) L	1,396 (54.96)
(5) R to (5) L	924 (36.38)		(8) R to (10) L	1,438 (56.61)
(4) R to (4) L	1,296 (51.02)		(8) L to (10) R	1,438 (56.61)
(5) R to (4) L	1,167 (45.94)		(3) R to (8) L	1,465 (57.68)
(5) L to (4) R	1,167 (45.94)		(3) L to (8) R	1,465 (57.68)
(60) R to (13) R	1,174 (46.22)		(7) R to (7) L	860 (33.86)
(60) L to (13) L	1,174 (46.22)		(7) R to (6) L	982 (38.66)
(60) R to (14) R	1,076 (42.36)		(7) L to (6) R	982 (38.66)
(60) L to (14) L	1,076 (42.36)		(7) R to (10) L	1,301 (51.22)
(10) R to (3) L	1,636 (64.41)		(7) L to (10) R	1,301 (51.22)

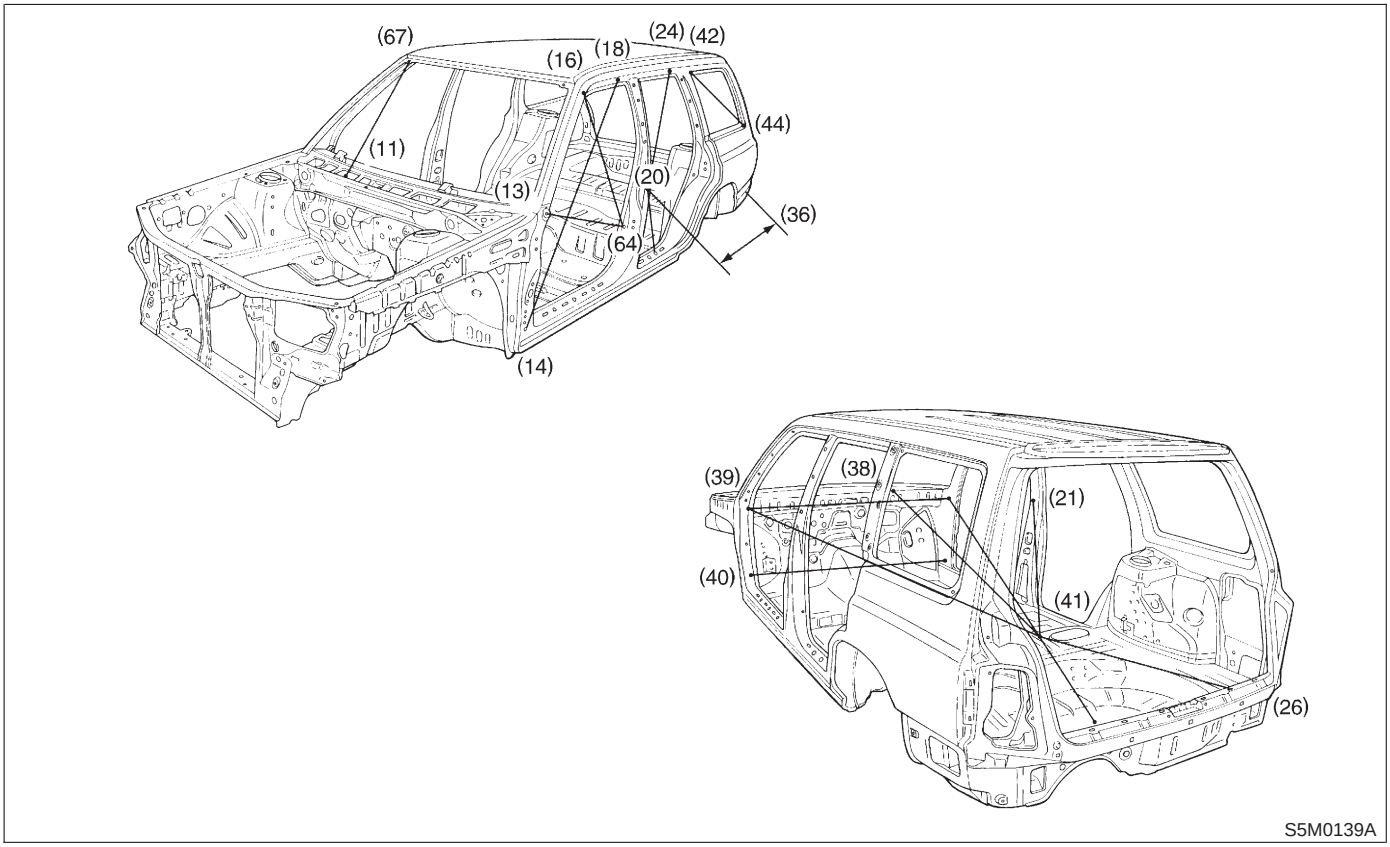
B: CENTER STRUCTURE

Unit: mm (in)



S5M0138A

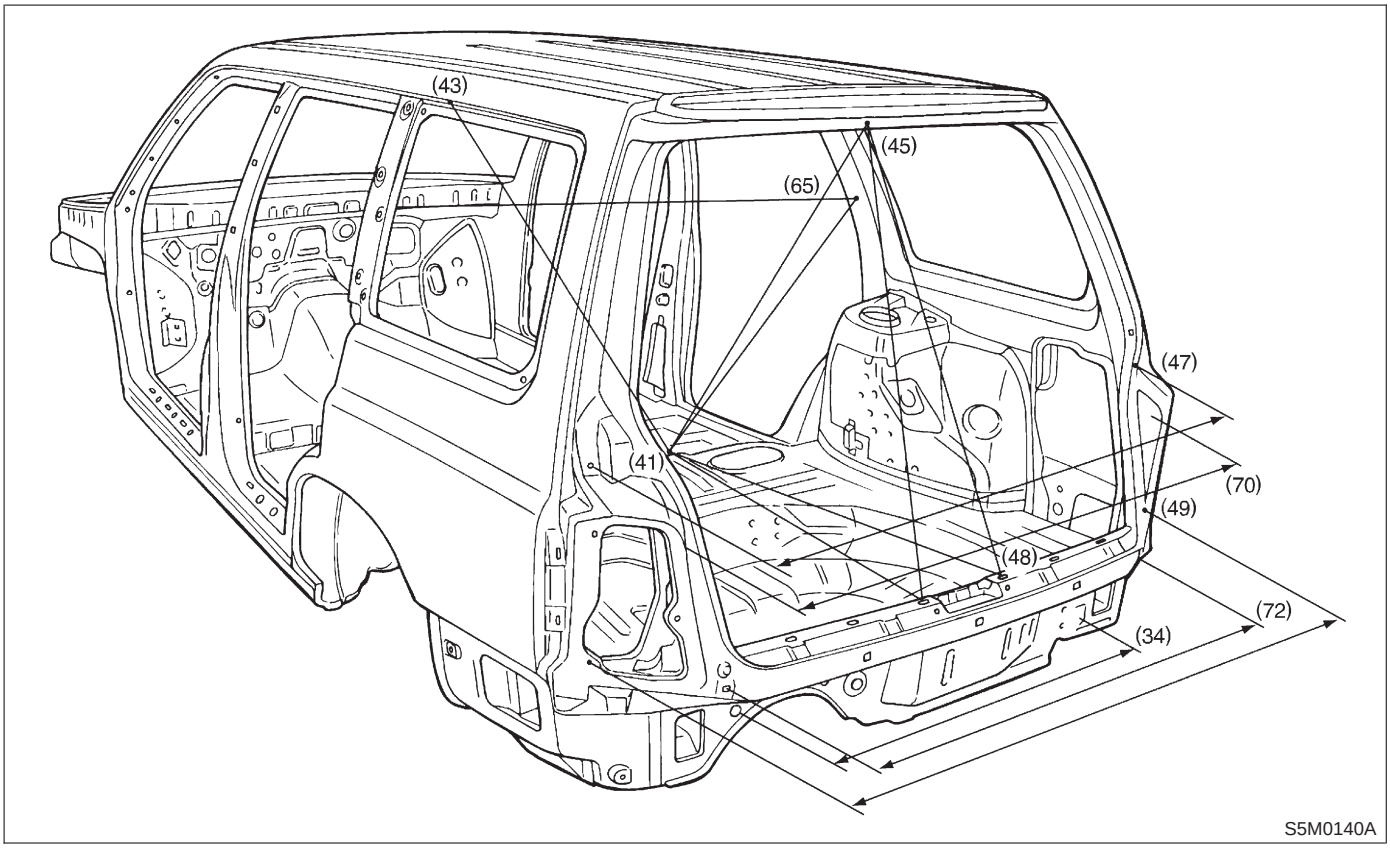
C: DOORS AND PASSENGER COMPARTMENT



Unit: mm (in)

Point to point	Dimension		Point to point	Dimension
(14) L to (18) L	1,454 (57.24)		(16) L to (64) L	860 (33.86)
(14) R to (18) R	1,454 (57.24)		(16) R to (64) R	860 (33.86)
(13) L to (64) L	944 (37.17)		(20) L to (23) L	845 (33.27)
(13) R to (64) R	944 (37.17)		(20) R to (23) R	845 (33.27)
(20) L to (24) L	660 (25.98)		(19) L to (23) L	885 (34.84)
(20) R to (24) R	660 (25.98)		(19) R to (23) R	885 (34.84)
(20) L to (36)	1,484 (58.43)		(11) L to (67) R	1,170 (46.06)
(20) R to (37)	1,487 (58.54)		(11) R to (67) L	1,170 (46.06)
(42) L to (44) L	769 (30.28)		(41) to (38)	1,518 (59.76)
(42) R to (44) R	769 (30.28)		(41) to (39) R	1,581 (62.24)
(11) R to (12)	920 (36.22)		(41) to (39) L	1,581 (62.24)
(11) L to (12)	920 (36.22)		(41) to (40) R	1,499 (59.02)
(67) R to (67) L	1,045 (41.14)		(41) to (40) L	1,499 (59.02)
(11) R to (67) R	1,040 (40.94)		(41) to (15) R	1,186 (46.69)
(11) L to (67) L	1,040 (49.94)		(41) to (15) L	1,186 (46.69)
(12) to (67) L	503 (19.80)		(41) to (22) R	733 (28.86)
(12) to (67) R	503 (19.80)		(41) to (22) L	733 (28.86)
(12) to (10) L	1,027 (40.43)		(41) to (26) R	1,568 (61.73)
(12) to (10) R	1,027 (40.43)		(41) to (26) L	1,568 (61.73)
(21) R to (21) L	1,322 (52.05)		(41) to (25)	1,211 (47.68)
(15) R to (15) L	1,452 (57.17)		(41) to (12)	1,299 (51.14)
(22) R to (22) L	1,452 (57.17)		(41) to (21) R	962 (37.87)
(39) R to (39) L	1,392 (54.80)		(41) to (21) L	962 (37.87)
(40) R to (40) L	1,402 (55.20)		(41) to (17) R	1,333 (52.48)
(11) L to (17) R	1,149 (45.24)		(41) to (17) L	1,333 (52.48)
(11) R to (17) L	1,149 (45.24)			

D: LUGGAGE COMPARTMENT



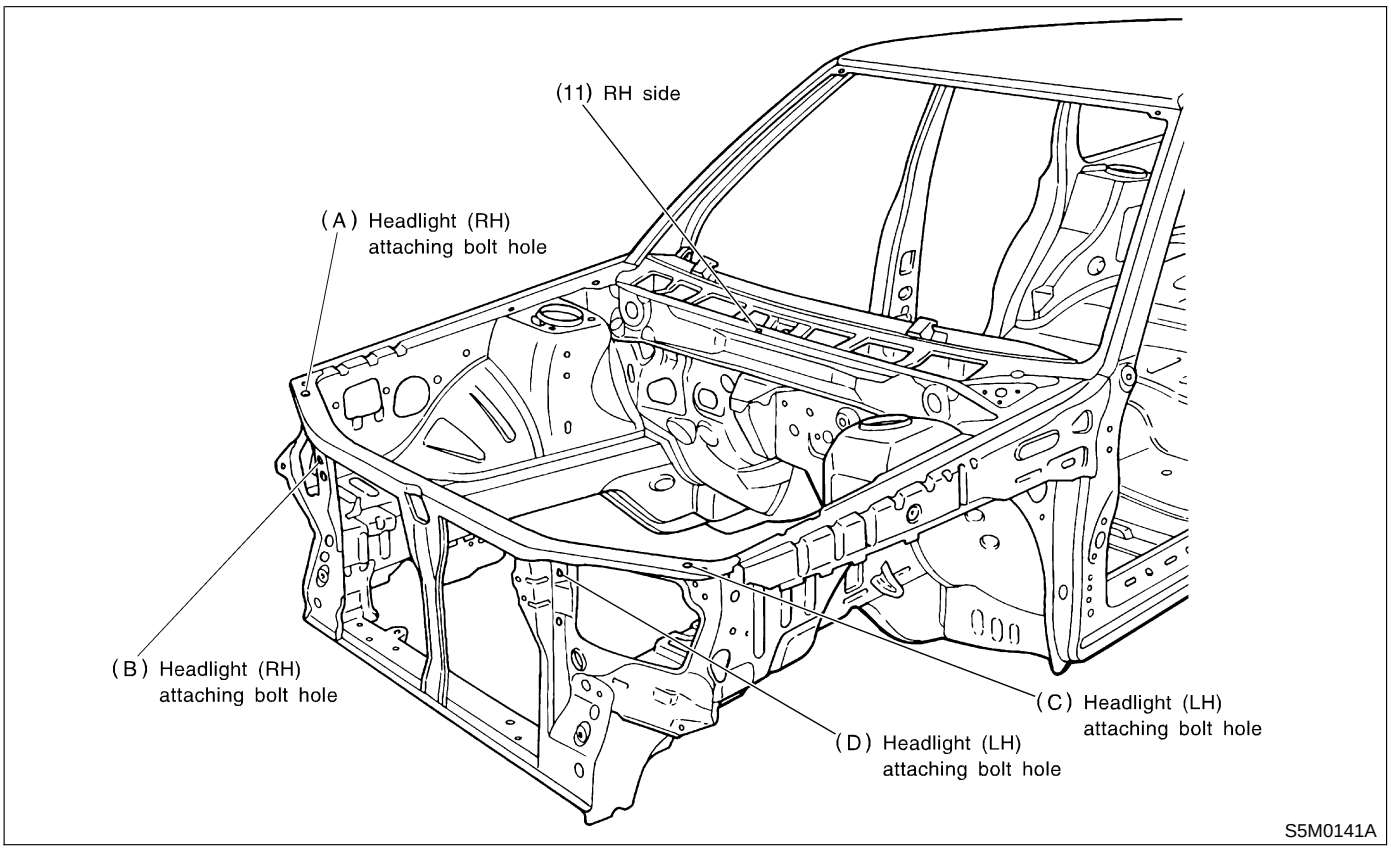
Unit: mm (in)

Point to point	Dimension		Point to point	Dimension
(45) to (48) L	913 (35.94)		(41) to (65) R	1,105 (43.05)
(45) to (48) R	913 (35.94)		(41) to (65)L	1,105 (43.05)
(45) to (47) L	876 (34.49)		(41) to (45)	1,570 (61.81)
(45) to (47) R	876 (34.49)		(41) to (43) R	1,436 (56.54)
(47) R to (47) L	1,426 (56.14)		(41) to (43) L	1,436 (56.54)
(49)R to (49) L	1,478 (58.19)		(41) to (48) L	1,576 (62.05)
(34) R to (34) L	945 (37.20)		(41) to (48) R	1,576 (62.05)
(48) R to (46) R	992 (39.06)		(65) R to (65) L	1,268 (49.92)
(48) L to (46) L	992 (39.06)		(17) R to (76)	627 (24.68)
(70) R to (70) L	1,218 (47.95)		(17) L to (76)	680 (26.77)
(61) R to (75) R	448 (17.64)		(72) R to (72) L	1,118 (44.02)
(61) L to (75) L	448 (17.64)		(74) R to (75) R	480 (18.90)
(17) R to (75) R	705 (27.76)		(74) L to (75) L	480 (18.90)
(17) L to (75) L	705 (27.76)		(17) R to (73)	518 (20.39)
(45) to (71)	913 (35.94)		(17) L to (73)	476 (18.74)

4. Datum Points and Dimensions Concerning On-Board Aiming Adjustment

If headlight aiming is misaligned due to damaged body panel, repair headlight mating surface using body and headlight datum points as a guide.

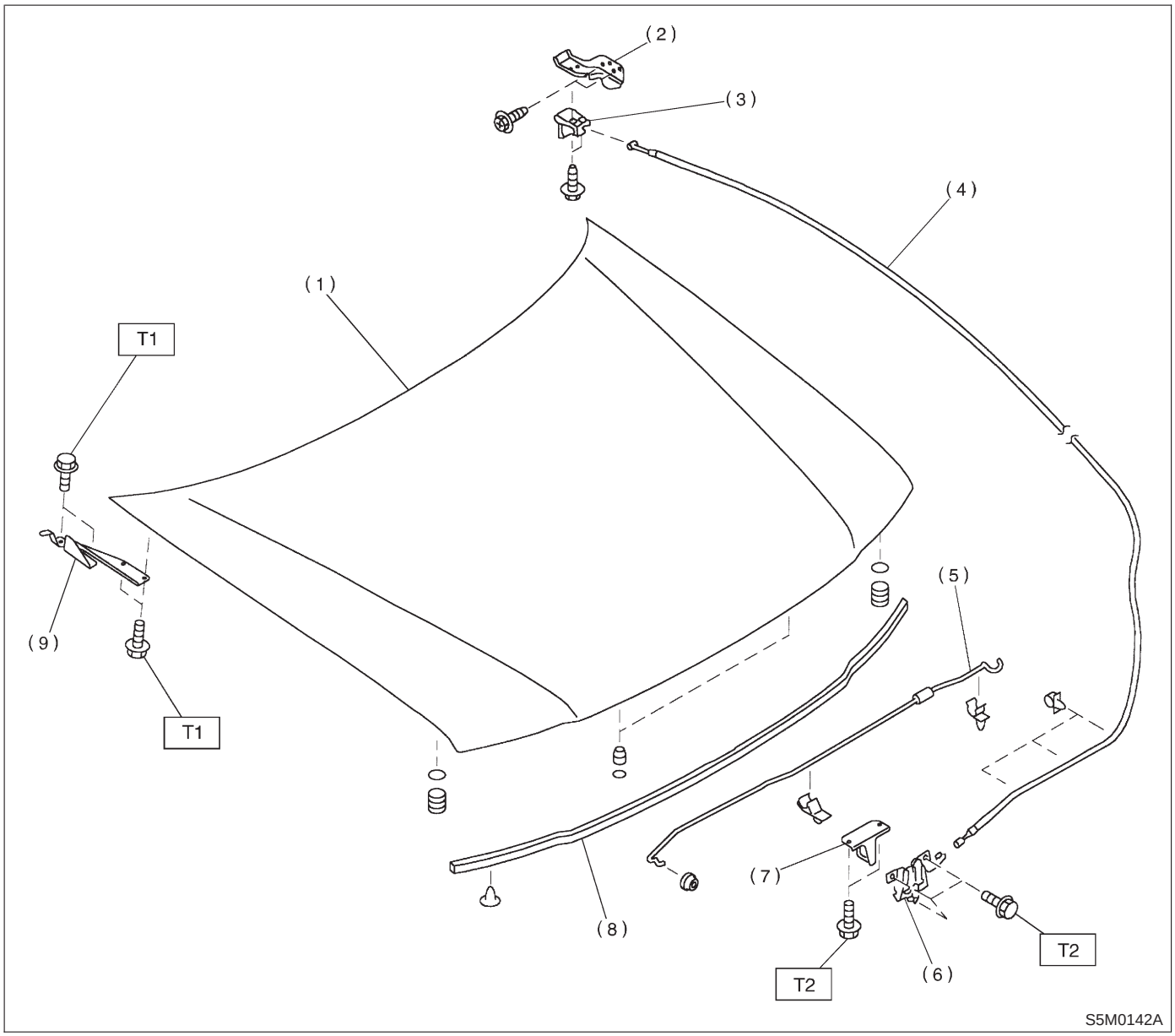
NOTE:
It is recommended to conduct On-board aiming adjustment with headlights turned OFF. If turned ON during the adjustment, the duration should be within two minutes.



Unit: mm (in)

Point to point	Dimension		Point to point	Dimension
(11) to (A)	890.6 (35.06)		(11) to (C)	1,087.7 (42.82)
(11) to (B)	913.4 (35.96)		(11) to (D)	1,023.7 (40.30)

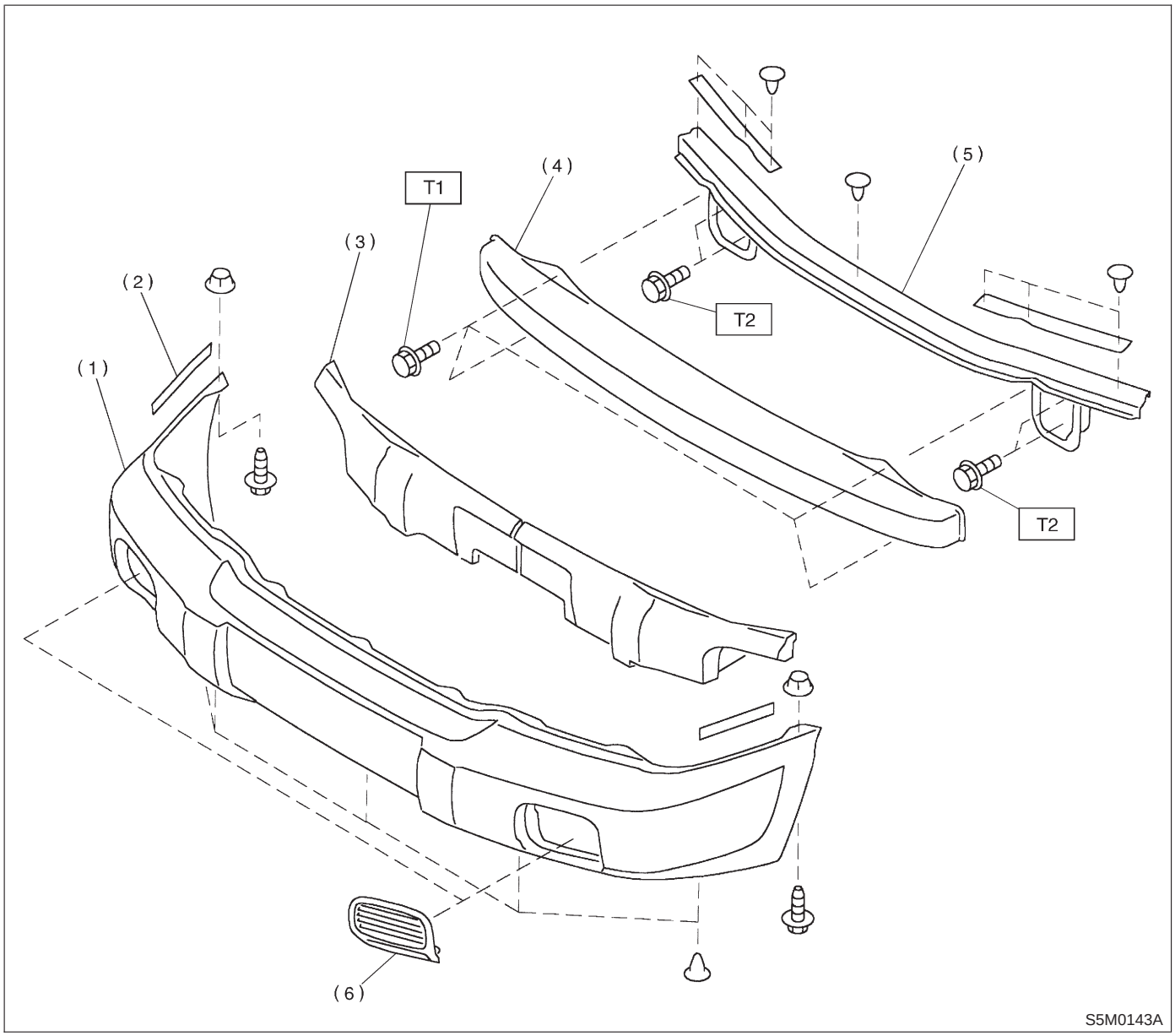
1. Front Hood and Hood Lock



(1) Front hood
(2) Hinge bracket
(3) Lever ASSY
(4) Cable
(5) Front hood stay
(6) Hood lock ASSY
(7) Striker
(8) Seal (Front hood)
(9) Hinge (RH, LH)

Tightening torque: N·m (kg-m, ft-lb)
T1: 14±1 (1.4±0.1, 10.1±0.7)
T2: 32±1 (3.3±0.1, 23.9±0.7)

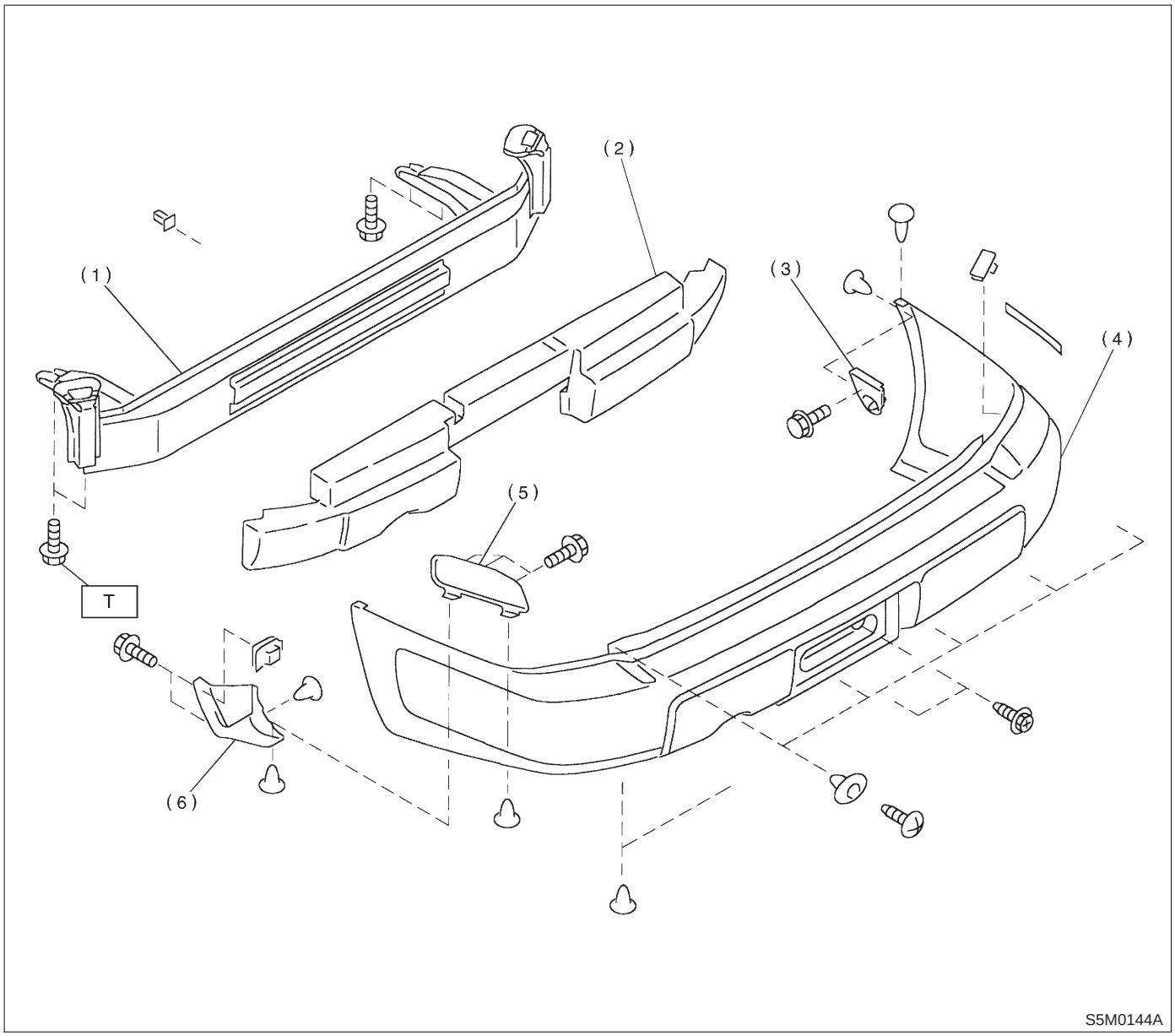
2. Front Bumper



(1) Bumper face
(2) Spacer
(3) E/A form
(4) Back beam
(5) Beam upper
(6) Fog light cover

Tightening torque: N·m (kg-m, ft-lb)
T1: 33±1 (3.4±0.1, 24.6±0.7)
T2: 70±1 (7.1±0.1, 51.4±0.7)

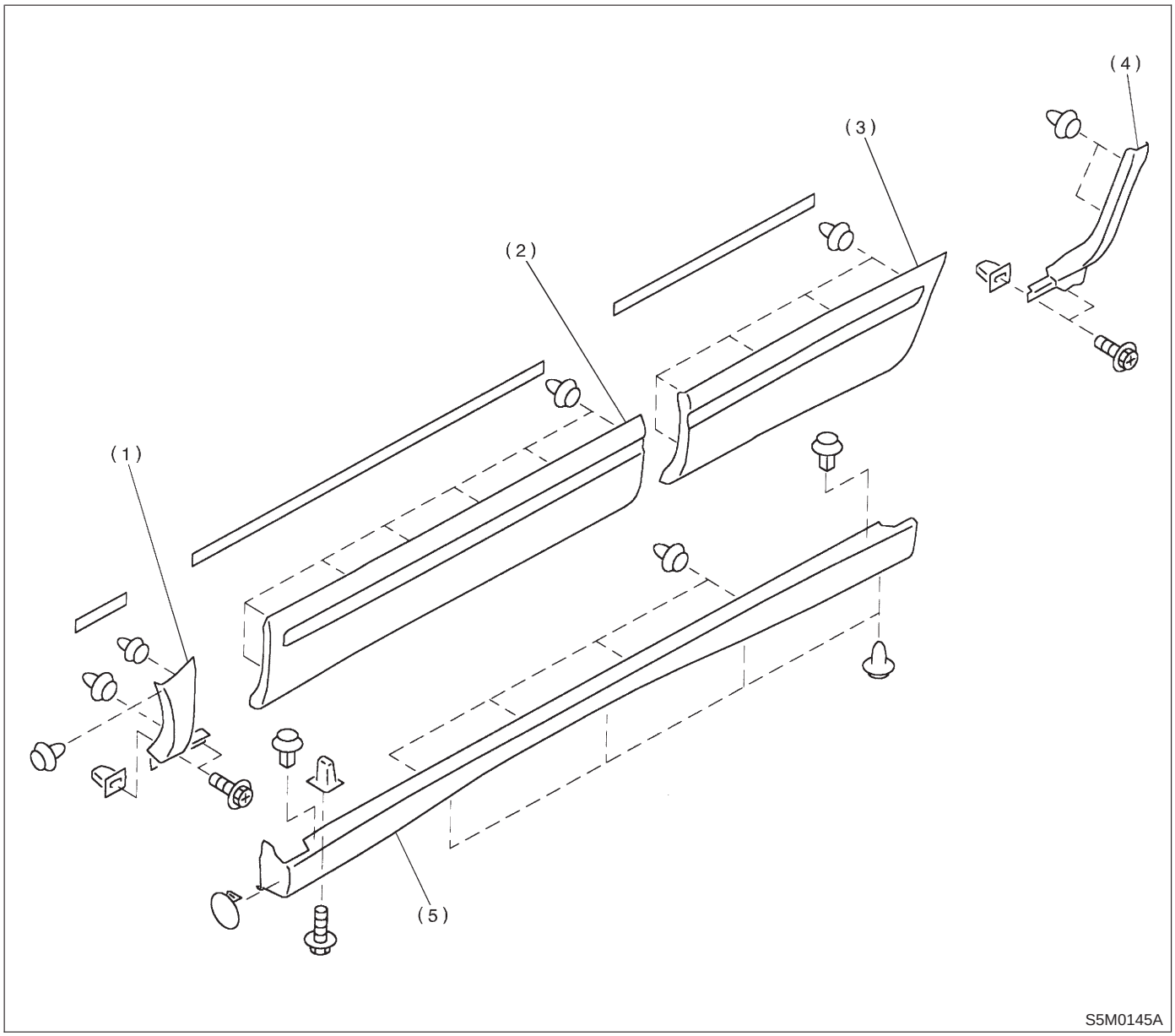
3. Rear Bumper



(1) Bumper beam
(2) E/A form
(3) Side upper bracket
(4) Bumper face
(5) Bumper side plate
(6) Rear arch cover

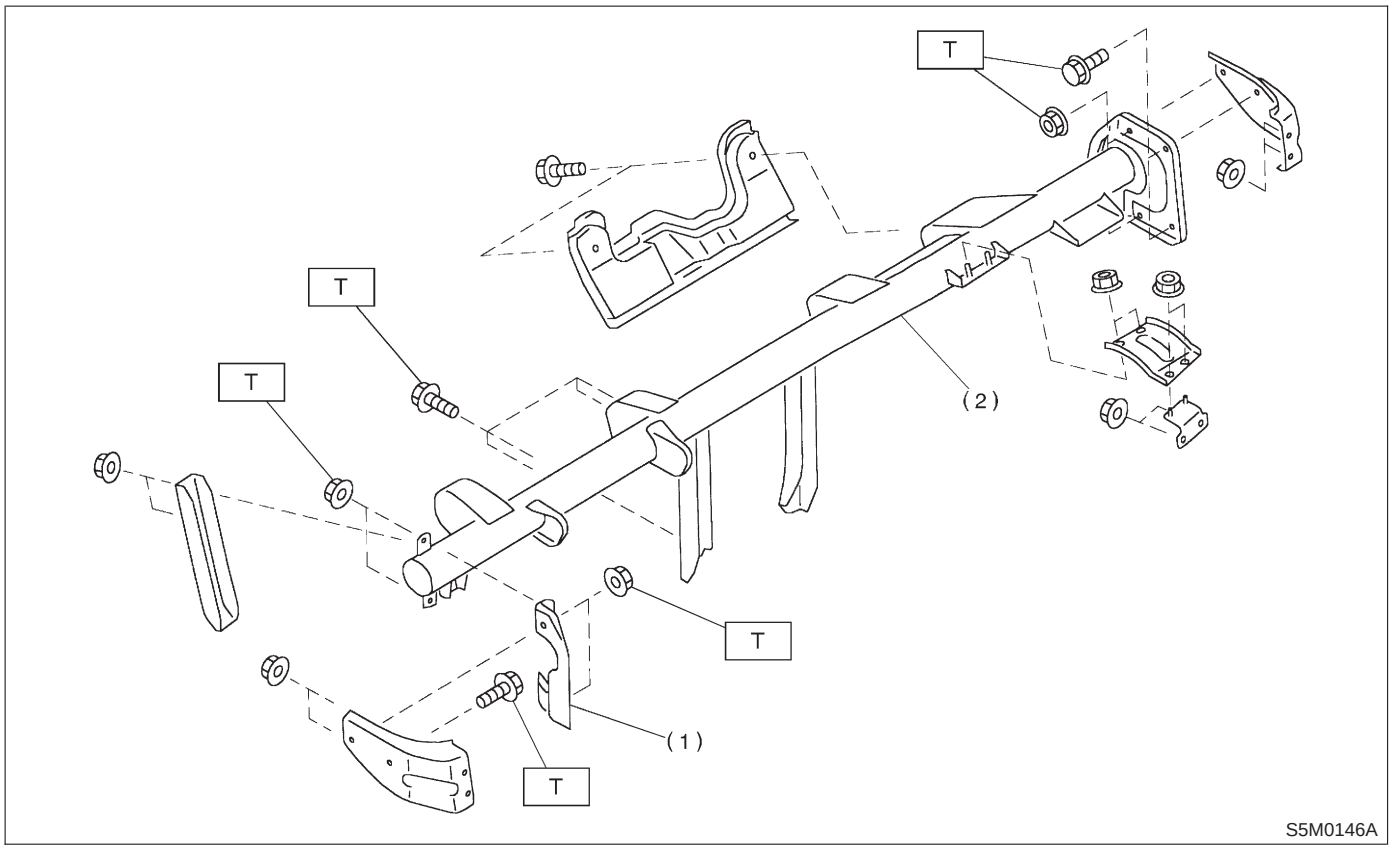
Tightening torque: N·m (kg-m, ft-lb)
T: 93±25 (9.5±2.5, 69±18)

4. Side Protector



(1) Side protector (Front fender)
(2) Side protector (Front door)
(3) Side protector (Rear door)
(4) Side protector (Rear quarter)
(5) Side protector (Side sill)

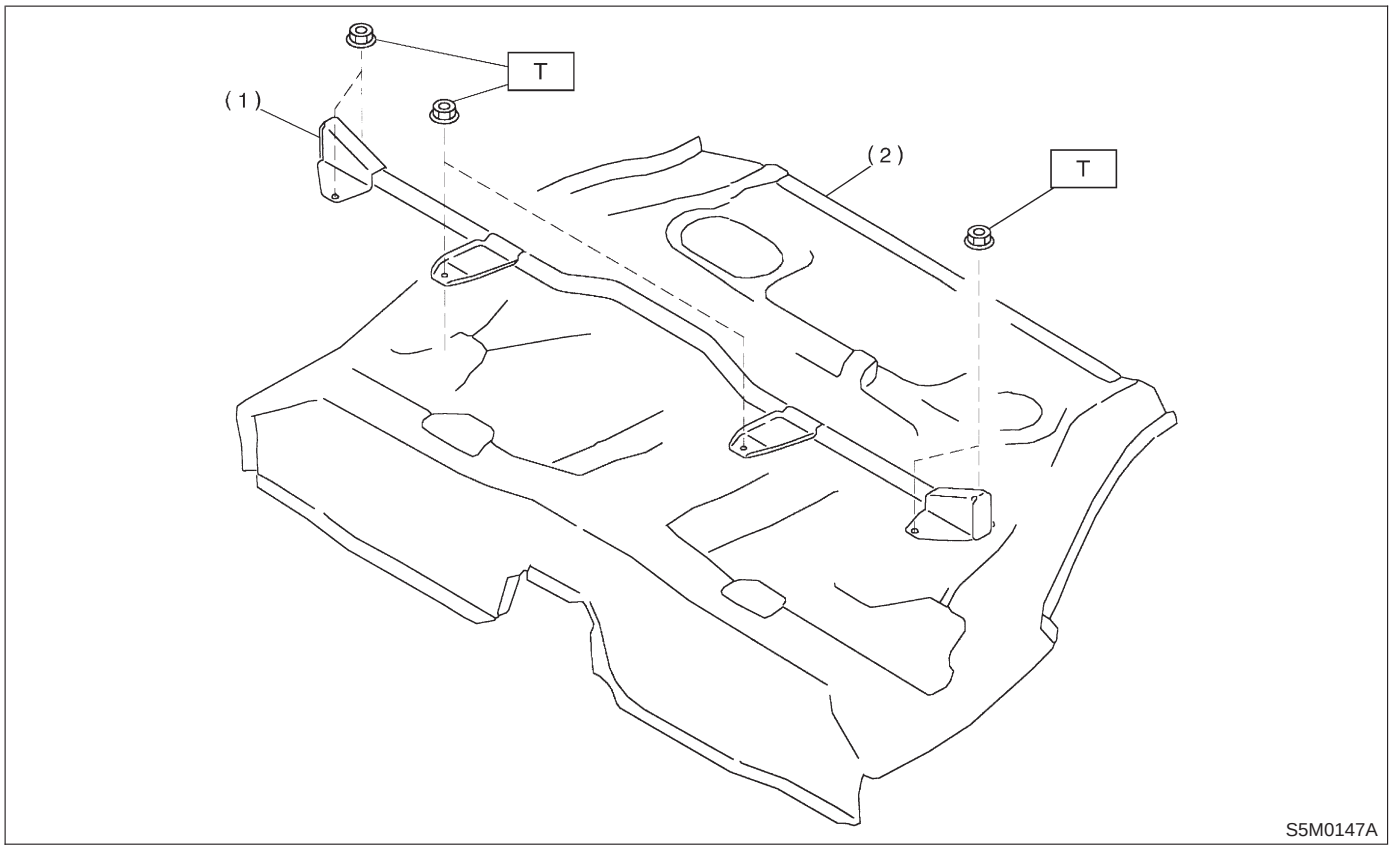
5. Steering Support Beam



(1) Bracket
(2) Steering beam

Tightening torque: N·m (kg-m, ft-lb)
T: 18±5 (1.8±0.5, 13.0±3.6)

6. Guard Pipe



(1) Guard pipe
(2) Rear floor panel

Tightening torque: N·m (kg-m, ft-lb)
T: 32±10 (3.3±1.0, 23.9±7)

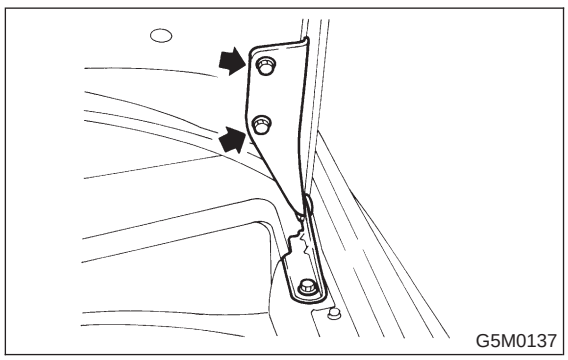
1. Hood

A: REMOVAL AND INSTALLATION

NOTE:
The hood lock has a dual locking design which consists of a main lock and a safety lock mechanism. When the release knob located at the front pillar on the driver's side is pulled back, the main lock is released through the cable attached to the knob.
The safety lock can be released by pushing the lever protruding above the front grill while opening the hood.

1. HOOD

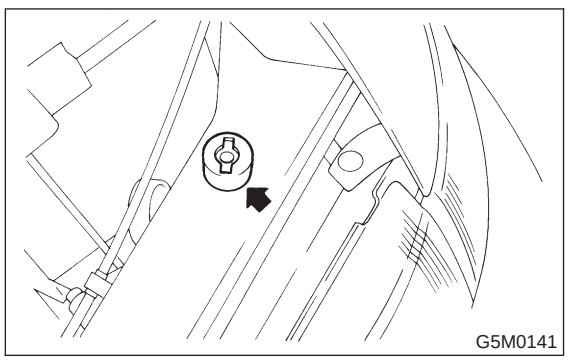
1) Open front hood, and remove washer hose.
2) Remove attaching bolts.



3) Detach front hood from hinges.
4) Installation is in the reverse order of removal.

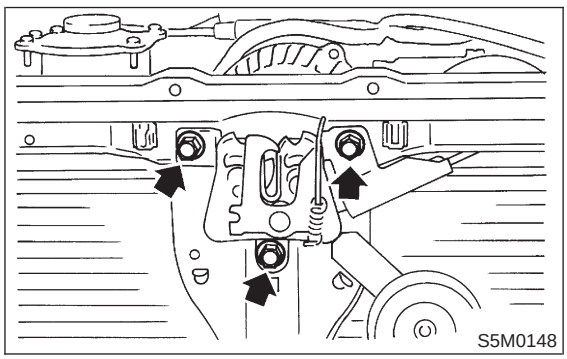
CAUTION:
Adjust buffer assembly on each end so that main lock is applied securely when hood is released from a height of approx. 20 mm (0.79 in).

NOTE:
Align the center of striker with lock during installation. Make sure safety lever is properly caught by striker under the hood's own weight.



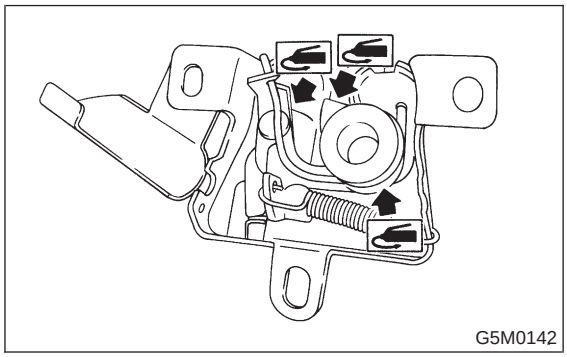
2. HOOD LOCK

1) Open front hood and remove front grille.
2) Remove bolts which secure lock assembly to radiator panel, and remove lock assembly.



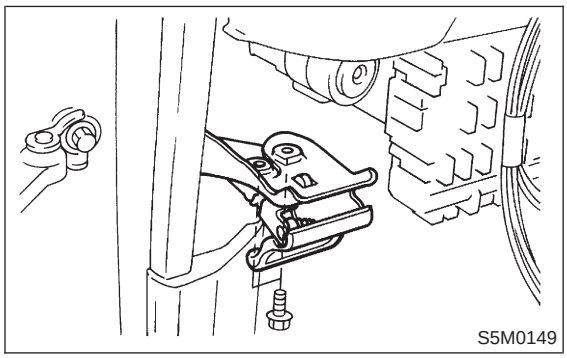
3) Disconnect release cable from lock assembly.
4) Installation is in the reverse order of removal.

NOTE:
● Route hood lock release cable and hold with clips.
● After installing release cable, ensure it operates smoothly.
● Apply grease to sliding surfaces of parts.



3. RELEASE CABLE

1) Remove front grille.
2) Remove release cable from lock assembly.
3) Remove cable clip from engine compartment.
4) Remove bracket from front pillar.

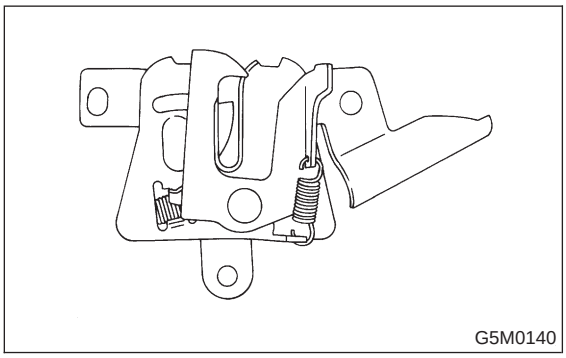


5) Installation is in the reverse order of removal.

B: POINTS TO CHECK

1) Check striker for bending or abnormal wear.
2) Check safety lever for improper movement.

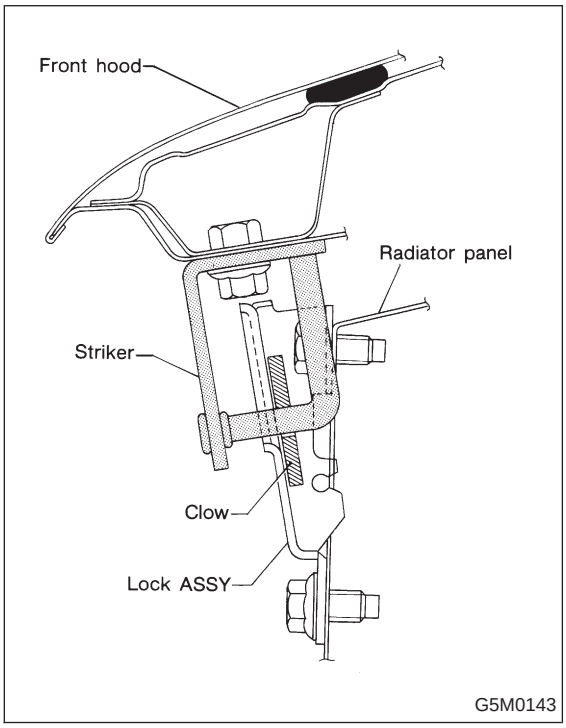
3) Check other levers and spring for rust formation and unsmooth movement.



C: ADJUSTMENT

1) Fore-aft and left-right adjustments Loosen striker mounting bolts and adjust fore-and-aft position of striker.

CAUTION:
Do not adjust striker position using the lock. Doing so may result in a misaligned front grille.

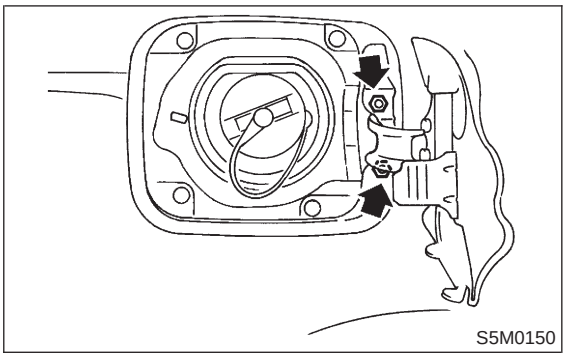


2) Up-down adjustment
Make up-and-down adjustment of striker only when hood does not properly contact buffer or hood is not flush with fender, or when release cable does not properly operate. Adjustment can be made by adjusting the stroke length of striker after lock assembly mounting screws are removed.

2. Fuel Flap

A: REMOVAL AND INSTALLATION

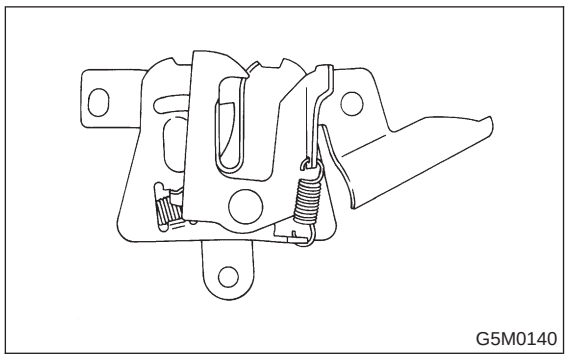
1) Remove bolts which hold hinge to car body, and detach fuel flap and hinge as a unit.



2) Installation is in the reverse order of removal.

CAUTION:
Make sure the clearance between fuel flap and car body is equal at all points.

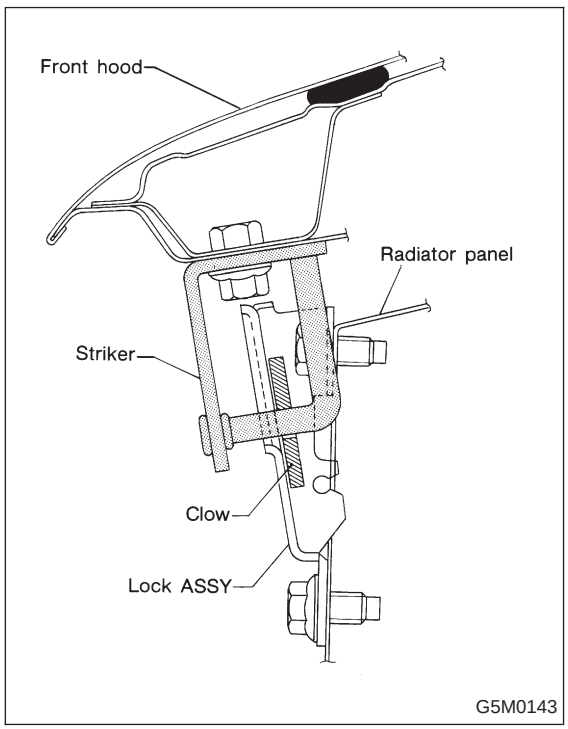
3) Check other levers and spring for rust formation and unsmooth movement.



C: ADJUSTMENT

1) Fore-aft and left-right adjustments Loosen striker mounting bolts and adjust fore-and-aft position of striker.

CAUTION:
Do not adjust striker position using the lock. Doing so may result in a misaligned front grille.

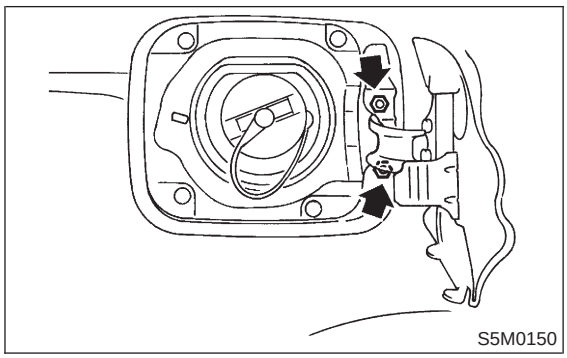


2) Up-down adjustment
Make up-and-down adjustment of striker only when hood does not properly contact buffer or hood is not flush with fender, or when release cable does not properly operate. Adjustment can be made by adjusting the stroke length of striker after lock assembly mounting screws are removed.

2. Fuel Flap

A: REMOVAL AND INSTALLATION

1) Remove bolts which hold hinge to car body, and detach fuel flap and hinge as a unit.



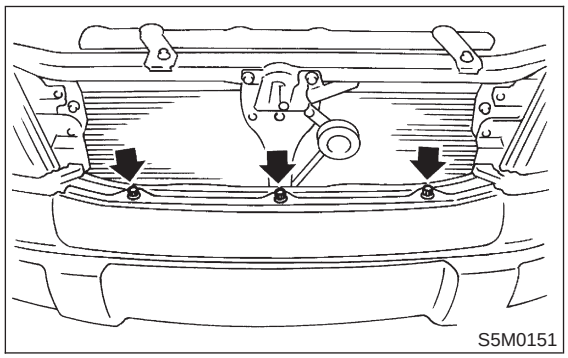
2) Installation is in the reverse order of removal.

CAUTION:
Make sure the clearance between fuel flap and car body is equal at all points.

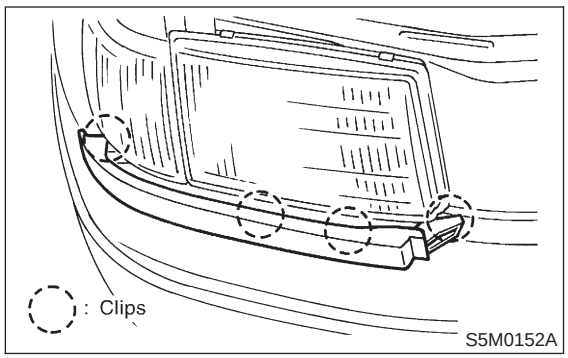
3. Front Bumper

A: REMOVAL AND INSTALLATION

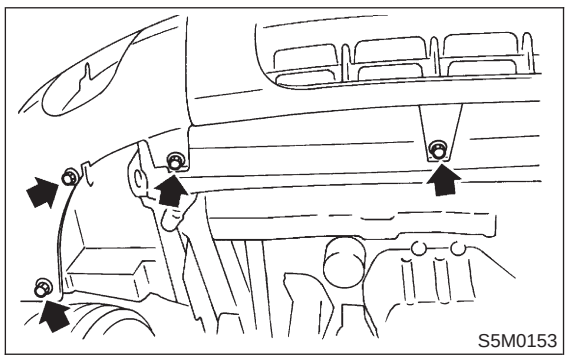
1) Disconnect the ground cable from the battery.
2) Remove front fog light.
3) Remove the front grille.
4) Remove three clips from upper side of bumper.



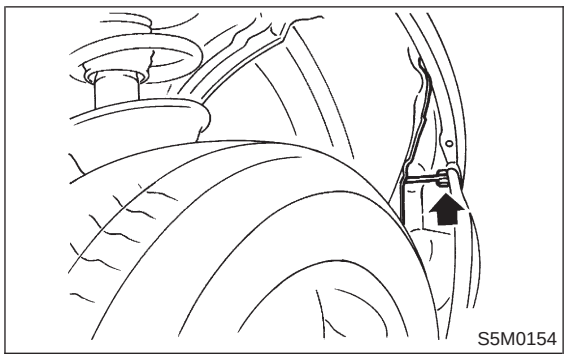
5) Remove the extension of both sides.



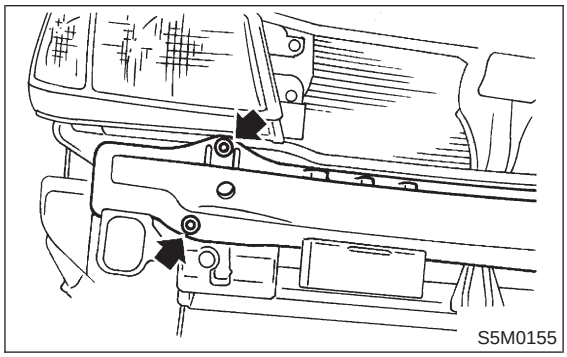
6) Remove under cover.
7) Remove seven clips from under side of bumper.



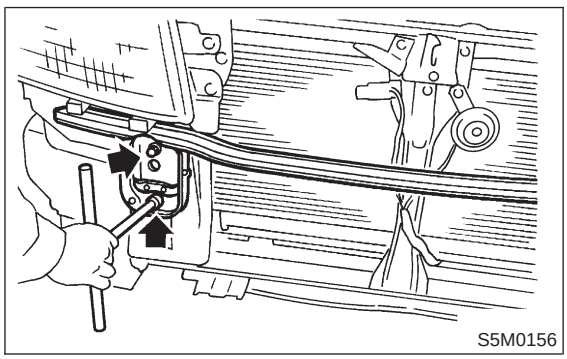
8) Turn over the front mud guard of the front portion and then remove bolt.



9) Remove bumper face and E/A form.
10) Remove back beam.



11) Remove beam upper.



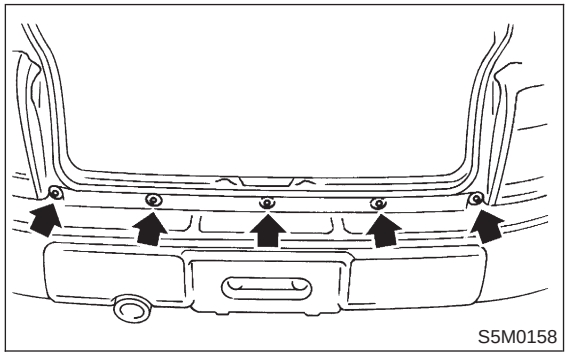
12) Installation is in the reverse order of removal.

CAUTION:
● Be extremely careful to prevent scratches on bumper face as it is made of resin.
● Be careful not to scratch the body when removing or installing the bumper.

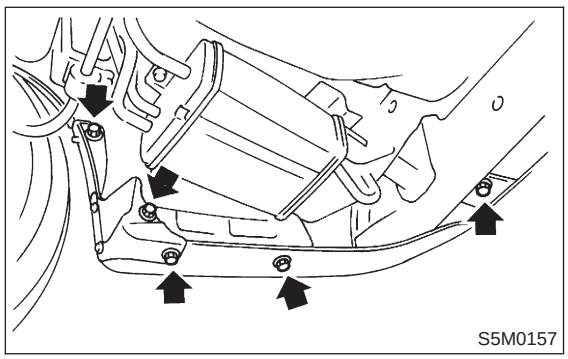
4. Rear Bumper

A: REMOVAL AND INSTALLATION

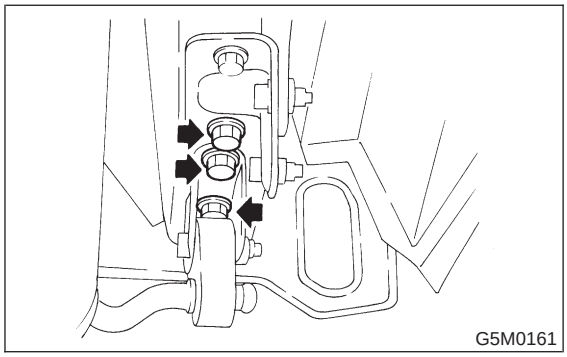
1) Disconnect the ground cable from the battery.
2) Open rear gate.
3) Remove five screws from upper side of bumper.


S5M0158

4) Disconnect license plate light connector.
5) Remove bolts and clips from under side of bumper.


S5M0157

6) Remove bumper face and E/A form.
7) Remove canister. <Ref. to 2–1 [W3A0].>
8) Remove bolts from bumper stay.

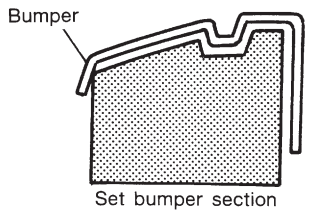

G5M0161

9) Remove rear bumper beam.
10) Installation is in the reverse order of removal.

CAUTION:
● Be extremely careful to prevent scratches on bumper face as it is made of resin.
● Be careful not to scratch the body when removing or installing bumper.

5. Coating Method for PP Bumper

A: PROCESS STEPS

<table>
<tr><th>Process No.</th><th>Process name</th><th colspan="2">Job contents</th></tr>
<tr><td>1</td><td>Bumper mounting</td><td>Set bumper on paint worktable if required. Use paint worktable conforming to inner shape of bumper when possible.</td><td> 

G5M0164</td></tr>
<tr><td>2</td><td>Masking</td><td colspan="2">Mask specified part (black base) with masking tape. Use masking tape for PP (example, Nichiban No. 533, etc.).</td></tr>
<tr><td>3</td><td>Degreasing, cleaning</td><td colspan="2">Clean all parts to be painted with white gasoline, normal alcohol, etc. to remove dirt, oil, fat, etc.</td></tr>
<tr><td>4</td><td>Primer paint</td><td colspan="2">Apply primer one to all parts to be painted, using air gun. Use primer (clear).</td></tr>
<tr><td>5</td><td>Drying</td><td colspan="2">Dry at normal temperature [10 to 15 min. at 20°C (68°F)]. In half-dried condition, PP primer paint is dissolved by solvent, e.g. thinner, etc. Therefore, if dust or dirt must be removed, use ordinary alcohol, etc.</td></tr>
<tr><td rowspan="2">6</td><td rowspan="2">Top coat paint (I)</td><td>Solid color</td><td>Metallic color</td></tr>
<tr><td>Use section (block) paint for top coat.
● Paint in use (for each color):
Solid paint
Hardener PB
Thinner T-301
● Mixing ratio: Main agent vs. hardener = 4:1
● Viscosity: 10 — 13 sec/20°C (68°F)
● Film thickness: 35 — 45μ
● Spraying pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)</td><td>Use section (block) paint for top coat.
● Paint in use (for each color):
Metallic paint
Hardener PB
Thinner T-306
● Mixing ratio: Main agent vs. hardener = 10:1
● Viscosity: 10 — 13 sec/20°C (68°F)
● Film thickness: 15 — 20μ
● Spraying pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)</td></tr>
<tr><td>7</td><td>Drying</td><td>Not required.</td><td>Dry at normal temperature [10 min. or more at 20°C (68°F)]. In half-dried condition, avoid dust, dirt.</td></tr>
<tr><td>8</td><td>Top coat paint (II)</td><td>Not required.</td><td>Apply a clear coat to parts with top coat paint (I), three times, at 5 — 7 minute intervals.
● Paint in use
Metallic paint
Hardener PB
Thinner T-301
● Mixing ratio: Clear vs. hardener = 6:1
● Viscosity: 14 — 16 sec/20°C (68°F)
● Film thickness: 25 — 30μ
● Spraying pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)</td></tr>
<tr><td>9</td><td>Drying</td><td colspan="2">60°C (140°F), 60 min. or 80°C (176°F), 30 min. If higher than 80°C (176°F), PP may be deformed. Keep maximum temperature of 80°C (176°F).</td></tr>
<tr><td>10</td><td>Inspection</td><td colspan="2">Paint check.</td></tr>
<tr><td>11</td><td>Masking removal</td><td colspan="2">Remove masking in process No. 2.</td></tr>
</table>

6. Repair Instructions for Colored PP Bumper

All PP bumpers are provided with a grained surface, and if the surface is damaged, it cannot normally be restored to its former condition. Damage limited to shallow scratches that cause only a change in the lustre of the base material or coating, can be almost fully restored. Before repairing a damaged area, explain this point to the customer and get an understanding about the matter. Repair methods are outlined below, based on a classification of the extent of damage.

A: MINOR DAMAGE CAUSING ONLY A CHANGE IN THE LUSTRE OF THE BUMPER DUE TO A LIGHT TOUCH

Almost restorable.

Process No.	Process name	Job contents	
1	Cleaning	Clean the area to be repaired using water.	
2	Sanding	Grind the repairing area with #500 sandpaper in a “feathering” motion.	
3	Finish	Resin section	Coated section
		Repeatedly apply wax to the affected area using a soft cloth (such as flannel). Recommended wax: NITTO KASEI Soft 99 TIRE WAX BLACK, or equivalent.	Perform either the same operation as for the resin section or process No. 18 and subsequent operations in the “(3)” section, depending on the degree and nature of damage.
		Polish the waxed area with a clean cloth after 5 to 10 minutes.	

B: DEEP DAMAGE CAUSED BY SCRATCHING FENCES, ETC.

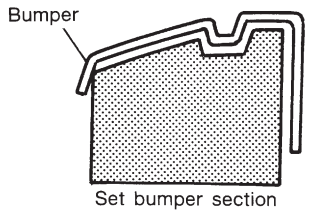
A dent cannot be repaired but a whitened or swelled part can be removed.

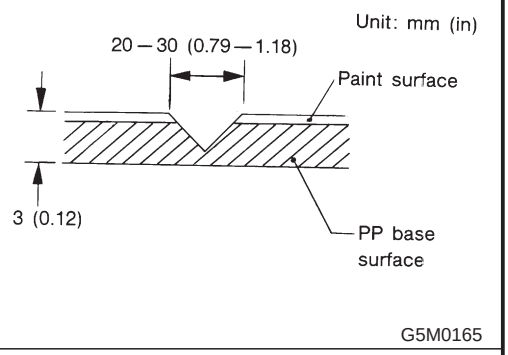
Process No.	Process name	Job contents	
1	Cleaning	Clean damaged area with water.	
2	Removal of damaged area	Cut off protruding area, if any, due to collision, using a putty knife.	
3	Sanding	Grind the affected area with #100 to #500 sandpaper.	
4	Finish	Resin section	Coated section
		Same as Process No. 3 in the “(1)” section.	Perform Process No. 12 and subsequent operations in the “(3)” section.

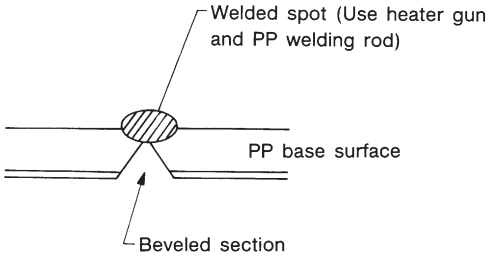
C: DEEP DAMAGE SUCH AS A BREAK OR HOLE THAT REQUIRES FILLING

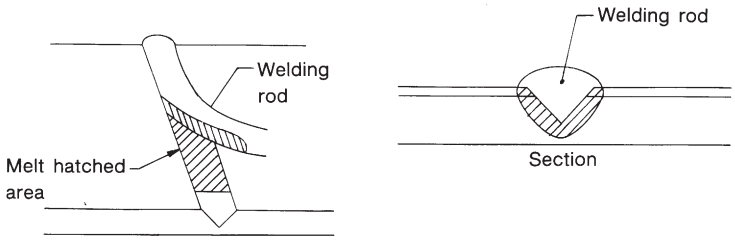
Much of the peripheral grained surface must be sacrificed for repair, and the degree of restoration is not really worth the expense. (The surface, however, will become almost flush with adjacent areas.)

Recommended repair kit: PP Part Repair Kit (NRM)

Process No.	Process name	Job contents	
1	Job contents	Remove bumper as required.	
2	Part removal	Remove parts built into bumper as required.	
3	Bumper placement	Place bumper on a paint worktable as required. It is recommended that contour of worktable accommodate internal shape of bumper.	 G5M0164
4	Surface preparation	Remove dust, oil, etc. from areas to be repaired and surrounding areas, using a suitable solvent (NRM No. 900 Precleno, white gasoline, or alcohol).	

<table>
<tr><th>Process No.</th><th>Process name</th><th colspan="2">Job contents</th></tr>
<tr><td>5</td><td>Cutting</td><td>If nature of damage is cracks or holes, cut a guide slit of 20 to 30 mm (0.79 to 1.18 in) in length along the crack or hole up to the bumper's base surface. Then, bevel or "vee- out" the affected area using a knife or grinder.</td><td> 

G5M0165</td></tr>
<tr><td>6</td><td>Sanding (I)</td><td colspan="2">Grind beveled surface with sandpaper (#40 to #60) to smooth finish.</td></tr>
<tr><td>7</td><td>Cleaning</td><td colspan="2">Clean the sanded surface with the same solvent as used in Process No. 4.</td></tr>
<tr><td rowspan="2">8</td><td rowspan="2">Temporary welding</td><td colspan="2">Grind the side just opposite the beveled area with sandpaper (#40 to #60) and clean using a solvent. Temporarily spot-weld the side, using a PP welding rod and heater gun.</td></tr>
<tr><td colspan="2"> 

G5M0166
NOTE:
● Do not melt welding rod until it flows out. This results in reduced strength.
● Leave the welded spot unattended until it cools completely.</td></tr>
<tr><td rowspan="2">9</td><td rowspan="2">Welding</td><td colspan="2">Using a heater gun and PP welding rod, weld the beveled spot while melting the rod and damaged area.</td></tr>
<tr><td colspan="2"> 

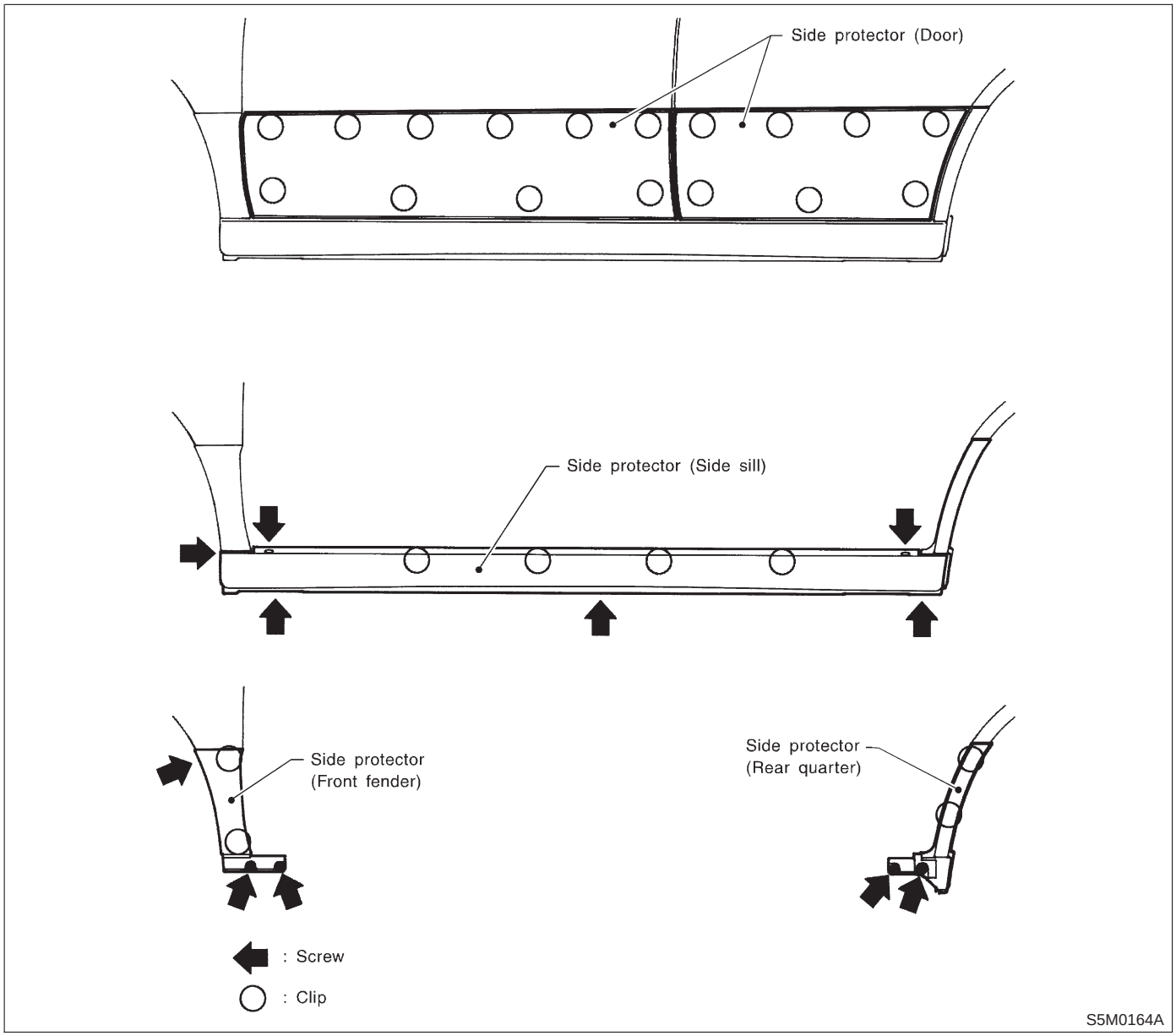
G5M0167
NOTE:
● Melt the sections indicated by hatched area.
● Do not melt welding rod until it flows out, in order to provide strength.
● Always keep the heater gun 1 to 2 cm (0.4 to 0.8 in) away from the welding spot.
● Leave the welded spot unattended until it cools completely.</td></tr>
</table>

Process No.	Process name	Job contents	
10	Sanding (II)	Remove excess part of weld with a putty knife. If a drill or disc wheel is used instead of the knife, operate it at a rate lower than 1,500 rpm and grind the excess part little by little. A higher rpm will cause the PP substrate to melt from the heat.	
		 G5M0168	
		Sand the welded spot smooth with #240 sand paper.	
11	Masking	Mask the black substrate section using masking tape. Recommended masking tape: Nichiban No. 533 or equivalent	
12	Cleaning/ degreasing	Completely clean the entire coated area, using solvent similar to that used in Process No. 4.	
13	Primer coating	Apply a coat of primer to the repaired surface and its surrounding areas. Mask these areas, if necessary. Recommended primer: Mp/ 364 PP Primer NOTE: Be sure to apply one coat of primer at a spraying pressure of 245 to 343 kPa (2.5 to 3.5 kg/cm^2, 36 to 50 psi) with a spray gun.	
14	Leave unattended.	Leave the repaired area unattended at 20°C (68°F) for 10 to 15 minutes until primer is half-dry. NOTE: If dirt or dust comes in contact with the coated area, wipe it off with a cloth damp-ended with alcohol. (Do not use thinner since the coated area tends to melt.)	
15	Primer surfacer coating	Apply a coat of primer surfacer to the repaired area two or three times at an interval of 3 to 5 minutes. Recommended surfacer: ● UPS 300 Flex Primer ● No. 303 UPS 300 Exclusive hardener ● NPS 725 Exclusive Reducer (thinner) ● Mixing ratio: 2 : 1 (UPS 300: No. 303) ● Viscosity: 12 — 14 sec/20°C (68°F) ● Coated film thickness: 40 — 50µ	
16	Drying	Allow the coated surface to dry for 60 minutes at 20°C (68°F) [or 30 minutes at 60°C (140°F)].	
17	Sanding (III)	Sand the coated surface and its surrounding areas using #400 sandpaper and water.	
18	Cleaning/ degreasing	Same as Process No. 12.	
19	Top coat (I)	Solid color	Metallic color
		Use a “block” coating method. ● Recommended paint: Suncryl (SC) No. 307 Flex Hardener SC Reducer (thinner) ● Mixing ratio: 3 : 1 (Suncryl: No. 307) ● Viscosity: 11 — 13 sec/20°C (68°F) ● Coated film thickness: 40 — 50µ ● Spraying thickness: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)	Use a “block” coating method. ● Recommended paint: Suncryl (SC) No. 307 Flex Hardener SC Reducer (thinner) ● Mixing ratio: 3 : 1 (Suncryl: No. 307) ● Viscosity: 11 — 13 sec/20°C (68°F) ● Coated film thickness: 20 — 30µ ● Spraying thickness: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)
20	Leave unattended.	Not required.	Leave unattended at 20°C (68°F) for at least 10 minutes until the top coated area is half-dry. NOTE: Be careful to keep dust or dirt from coming in contact with the affected area.

Process No.	Process name	Job contents	
21	Top coat (II)	Not required.	Apply a clear coat three times at an interval of 3 to 5 minutes. ● Recommended paint: SC710 Overlay Clear No. 307 Flex Hardener SC Reducer (thinner) ● Mixing ratio: 3 : 1 (SC710: No. 307) ● Viscosity: 10 — 13 sec/20°C (68°F) ● Coated film thickness: 20 — 30μ ● Spraying pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)
22	Drying	Allow the coated surface to dry at 20°C (68°F) for two hours or 60°C (140°F) for 30 minutes. NOTE: Do not allow the temperature to exceed 80°C (176°F) since this will deform the PP substrate.	
23	Inspection	Carefully check the condition of the repaired area.	
24	Masking removal	Remove masking tape applied in Process No. 11 and 13.	
25	Parts installation	Install parts on bumper in reverse order of removal.	
26	Bumper installation	Install bumper.	

7. Side Protector

A: REMOVAL AND INSTALLATION

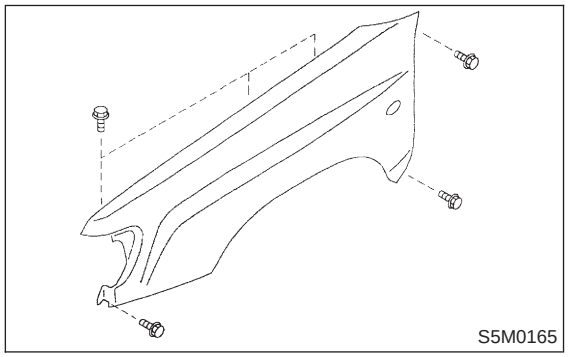


8. Front Fender

A: REMOVAL AND INSTALLATION

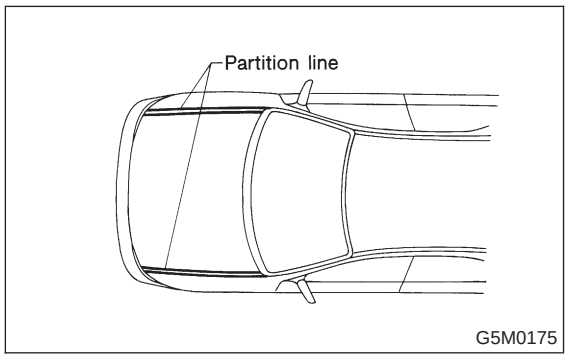
1) Disconnect ground cable from battery.
2) Remove mud guard.
3) Remove parking light and headlight.
4) Remove front bumper face.
5) Remove side protector. (Front fender)
6) Remove attaching bolt then remove fender.

CAUTION:
Be careful not to scratch body panels with fender edges when removing it.

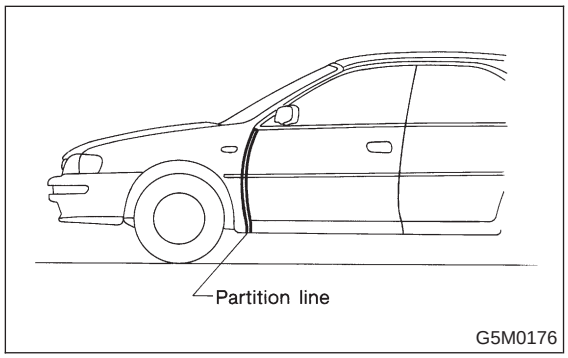

S5M0165

7) Installation is in the reverse order of removal.

NOTE:
Check for alignment of front fender with hood and front door with front fender at all points. Adjust, if necessary.



G5M0175

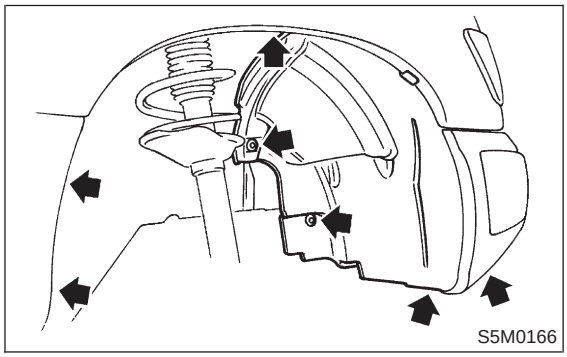


G5M0176

9. Mud Guard

A: REMOVAL AND INSTALLATION

1) Jack-up vehicle to remove tire.
2) Remove screws and clips. Move mud guard toward the center of the body and remove mud guard.


S5M0166

3) Installation is in the reverse order of removal.

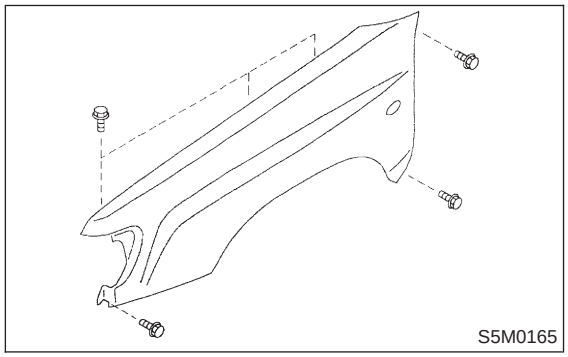
CAUTION:
Only use new nuts and clips.

8. Front Fender

A: REMOVAL AND INSTALLATION

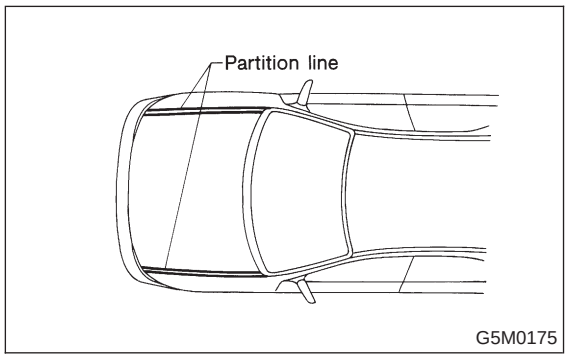
1) Disconnect ground cable from battery.
2) Remove mud guard.
3) Remove parking light and headlight.
4) Remove front bumper face.
5) Remove side protector. (Front fender)
6) Remove attaching bolt then remove fender.

CAUTION:
Be careful not to scratch body panels with fender edges when removing it.

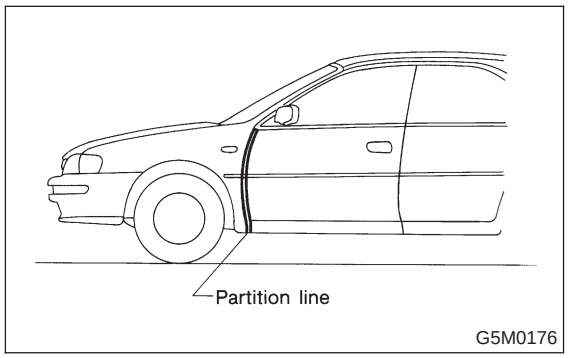

S5M0165

7) Installation is in the reverse order of removal.

NOTE:
Check for alignment of front fender with hood and front door with front fender at all points. Adjust, if necessary.



G5M0175

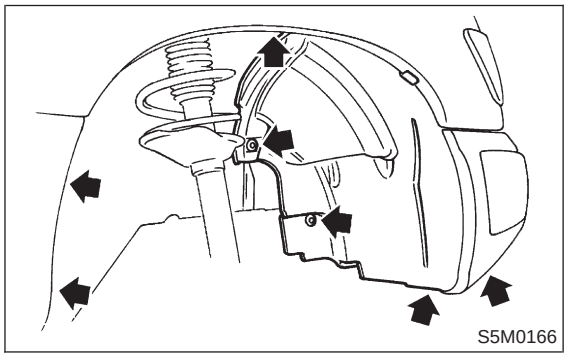


G5M0176

9. Mud Guard

A: REMOVAL AND INSTALLATION

1) Jack-up vehicle to remove tire.
2) Remove screws and clips. Move mud guard toward the center of the body and remove mud guard.


S5M0166

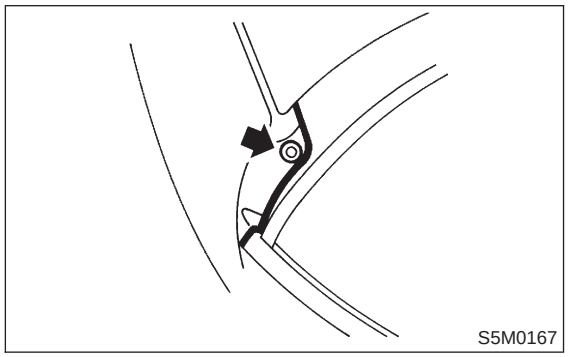
3) Installation is in the reverse order of removal.

CAUTION:
Only use new nuts and clips.

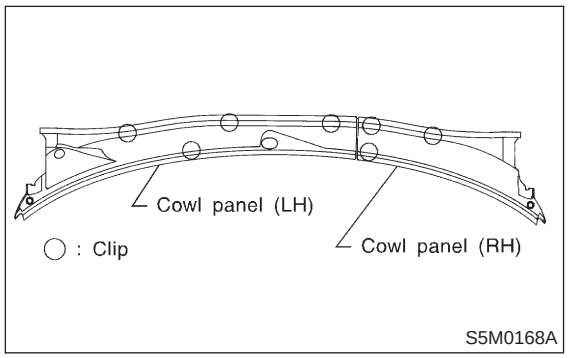
10. Cowl Panel

A: REMOVAL AND INSTALLATION

1) Remove cowl panel side.



2) Open front hood.
3) Remove wiper arms.
4) Lift cowl panel (RH) and then lift cowl panel (LH).

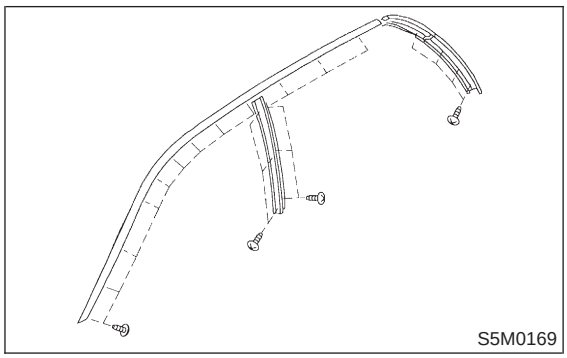


5) Installation is in the reverse order of removal.

11. Molding and Retainer

A: REMOVAL AND INSTALLATION

1) Remove weatherstrip.
2) Remove tapping screws.

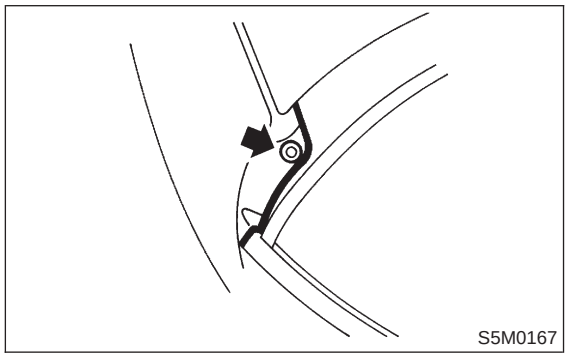


3) Installation is in the reverse order of removal.

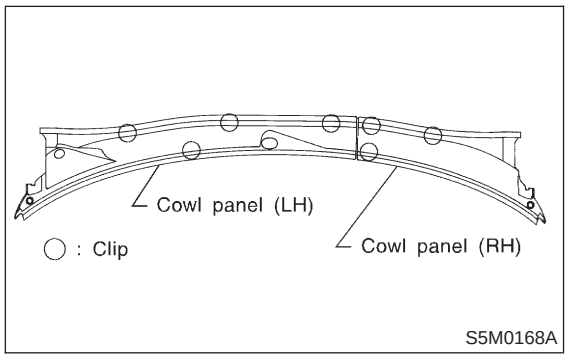
10. Cowl Panel

A: REMOVAL AND INSTALLATION

1) Remove cowl panel side.



2) Open front hood.
3) Remove wiper arms.
4) Lift cowl panel (RH) and then lift cowl panel (LH).

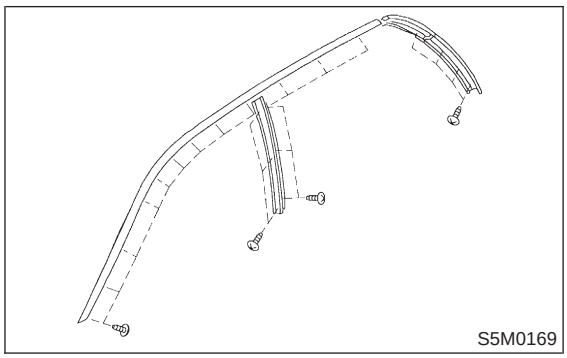


5) Installation is in the reverse order of removal.

11. Molding and Retainer

A: REMOVAL AND INSTALLATION

1) Remove weatherstrip.
2) Remove tapping screws.

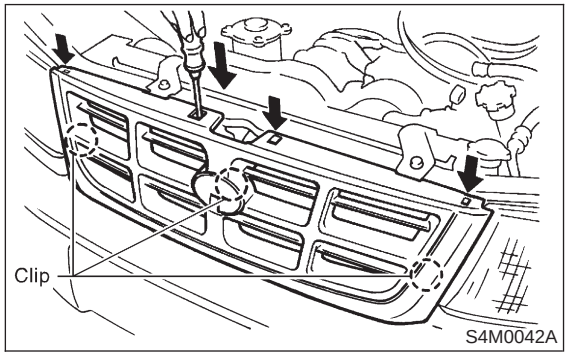


3) Installation is in the reverse order of removal.

12. Front Grill

A: REMOVAL AND INSTALLATION

1) Remove four upper clips from body panel. To facilitate removal, press portion shown in figure using screwdriver while lightly pulling front grille.



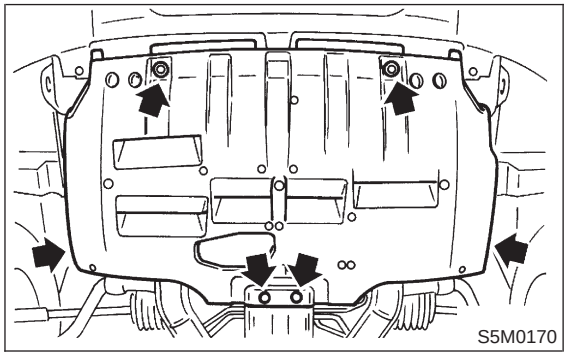
2) Installation is in the reverse order of removal.

NOTE:
Attach all clips to grille. Align them with clip hole in body and push them into place.

13. Under Cover

A: REMOVAL AND INSTALLATION

1) Lift-up the vehicle.
2) Remove bolts and clips then detach under cover.

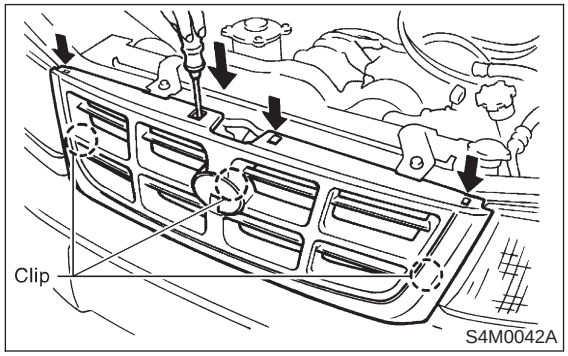


3) Installation is in the reverse order of removal.

12. Front Grill

A: REMOVAL AND INSTALLATION

1) Remove four upper clips from body panel. To facilitate removal, press portion shown in figure using screwdriver while lightly pulling front grille.



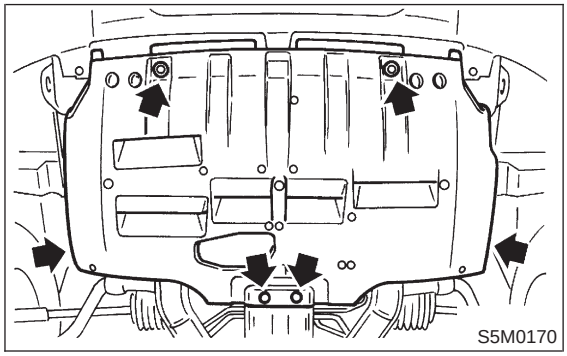
2) Installation is in the reverse order of removal.

NOTE:
Attach all clips to grille. Align them with clip hole in body and push them into place.

13. Under Cover

A: REMOVAL AND INSTALLATION

1) Lift-up the vehicle.
2) Remove bolts and clips then detach under cover.



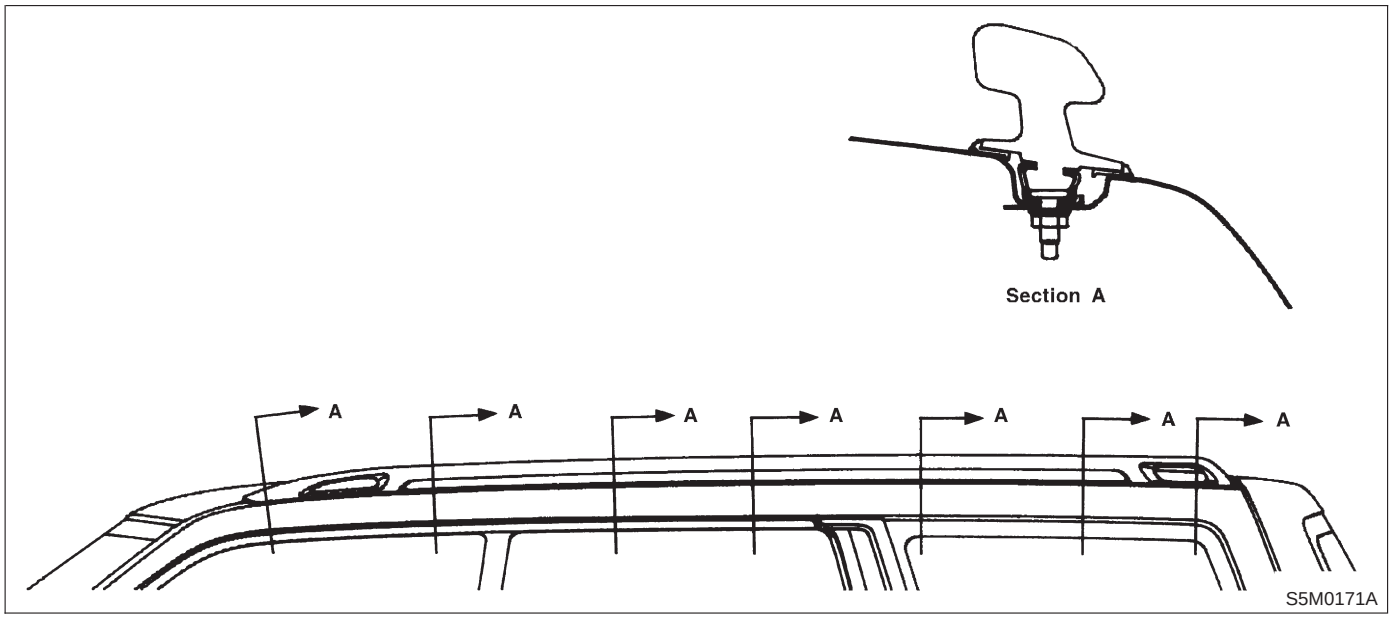
3) Installation is in the reverse order of removal.

14. Roof Rail

A: REMOVAL AND INSTALLATION

1) Remove roof trim.

2) Remove seven attaching bolts and then carefully detach roof rail.

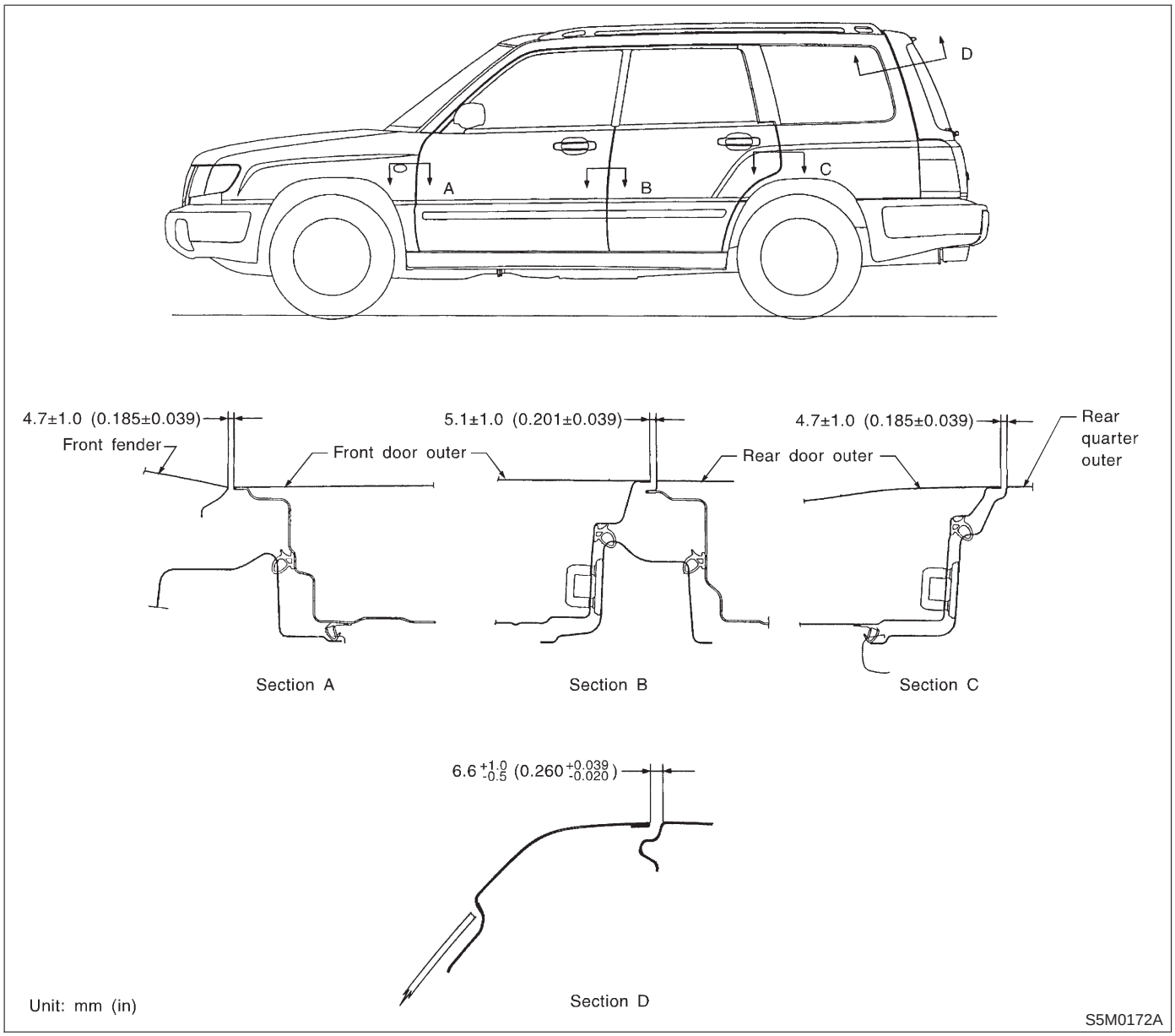


3) Installation is in the reverse order of removal.

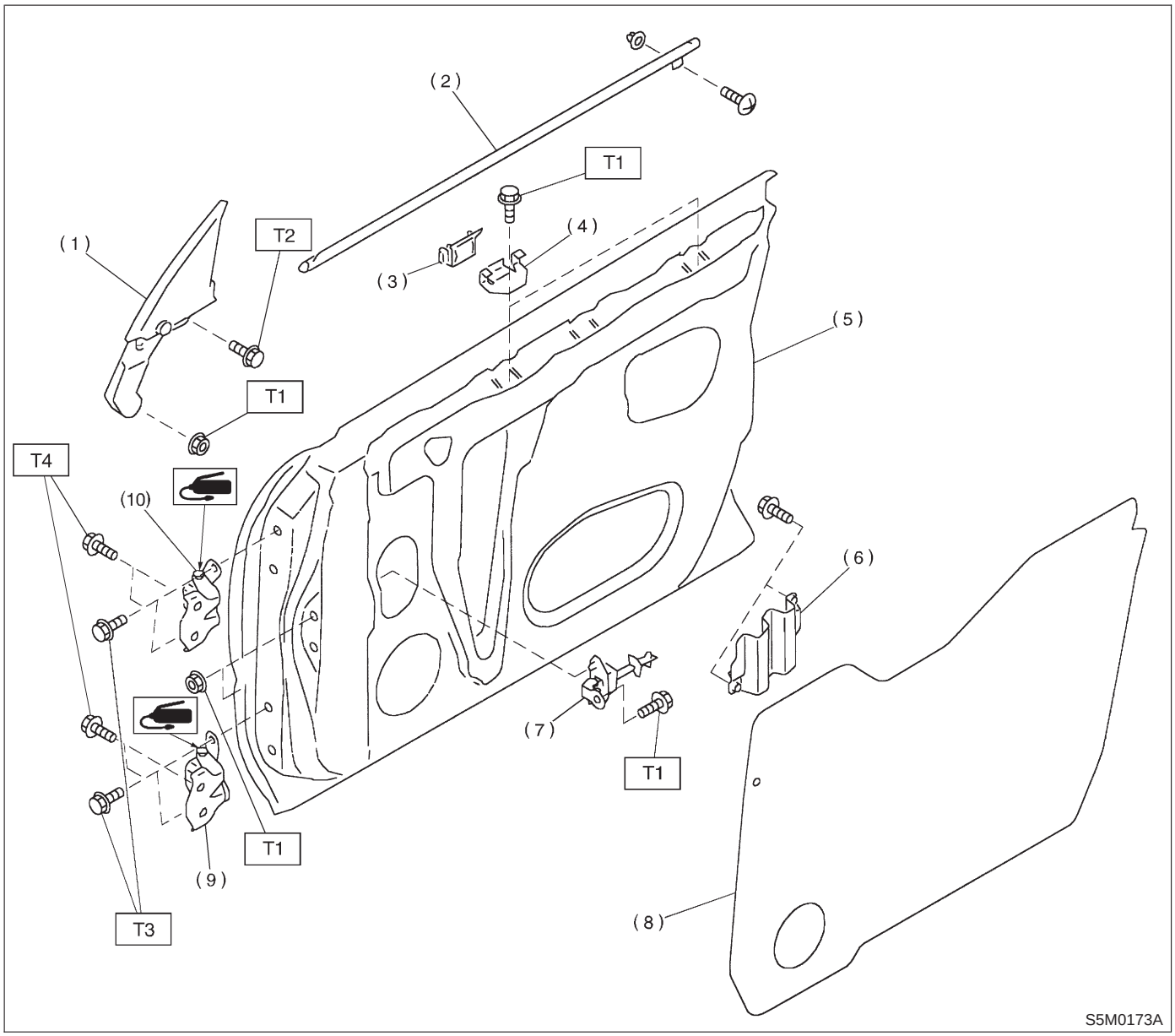
CAUTION:
Be careful not to scratch body panels with roof rail stud bolts when removing and installing them.

MEMO:

1. Door Alignment



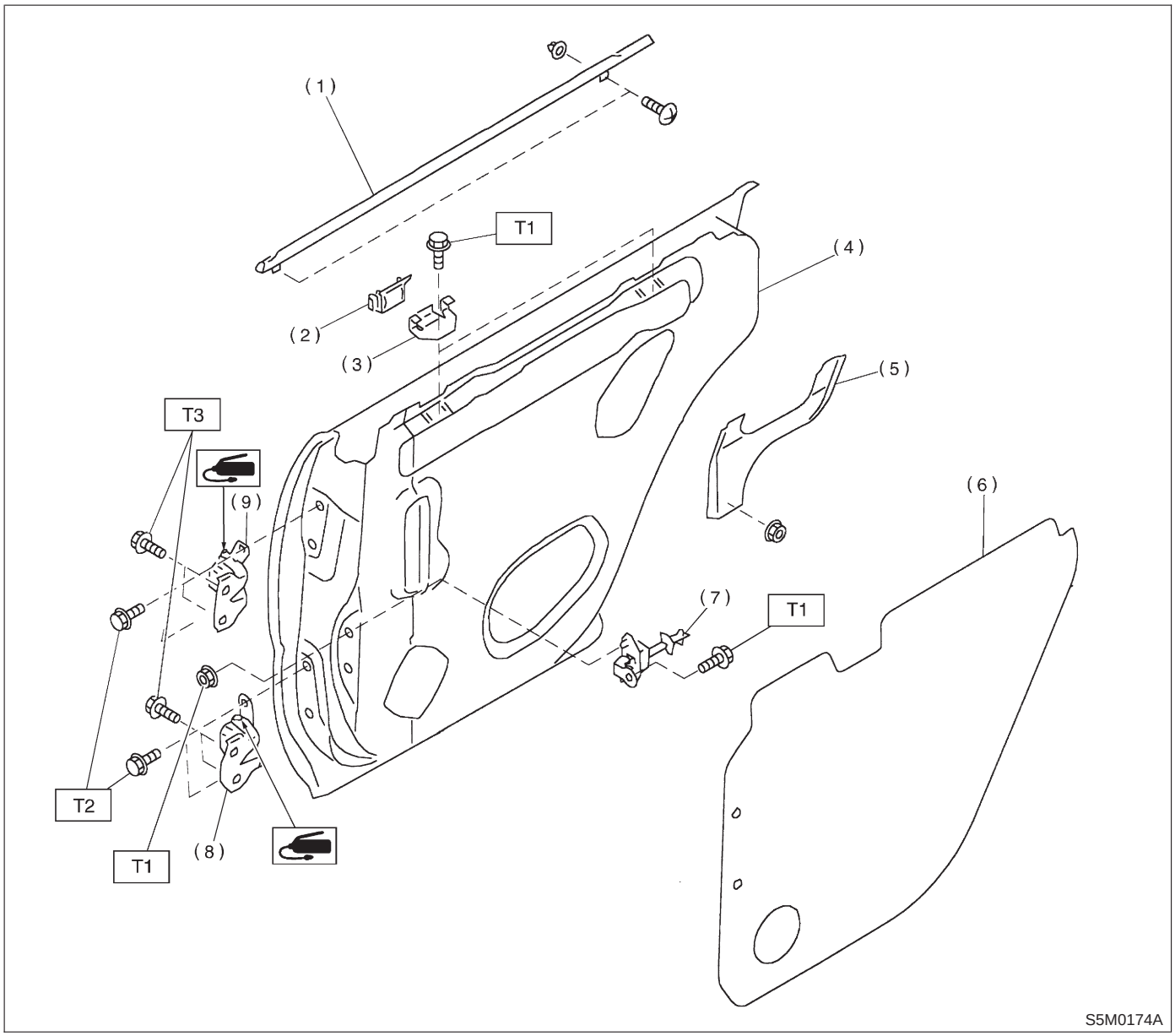
1. Front Door



(1) Gusset
(2) Weatherstrip
(3) Stabilizer (Outer)
(4) Stabilizer (Inner)
(5) Door panel
(6) Plate
(7) Checker
(8) Sealing cover
(9) Lower hinge
(10) Upper hinge

Tightening torque: N·m (kg-m, ft-lb)
T1: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T2: 13±3 (1.3±0.3, 9.4±2.2)
T3: 25±3 (2.5±0.3, 18.1±2.2)
T4: 29±5 (3.0±0.5, 21.7±3.6)

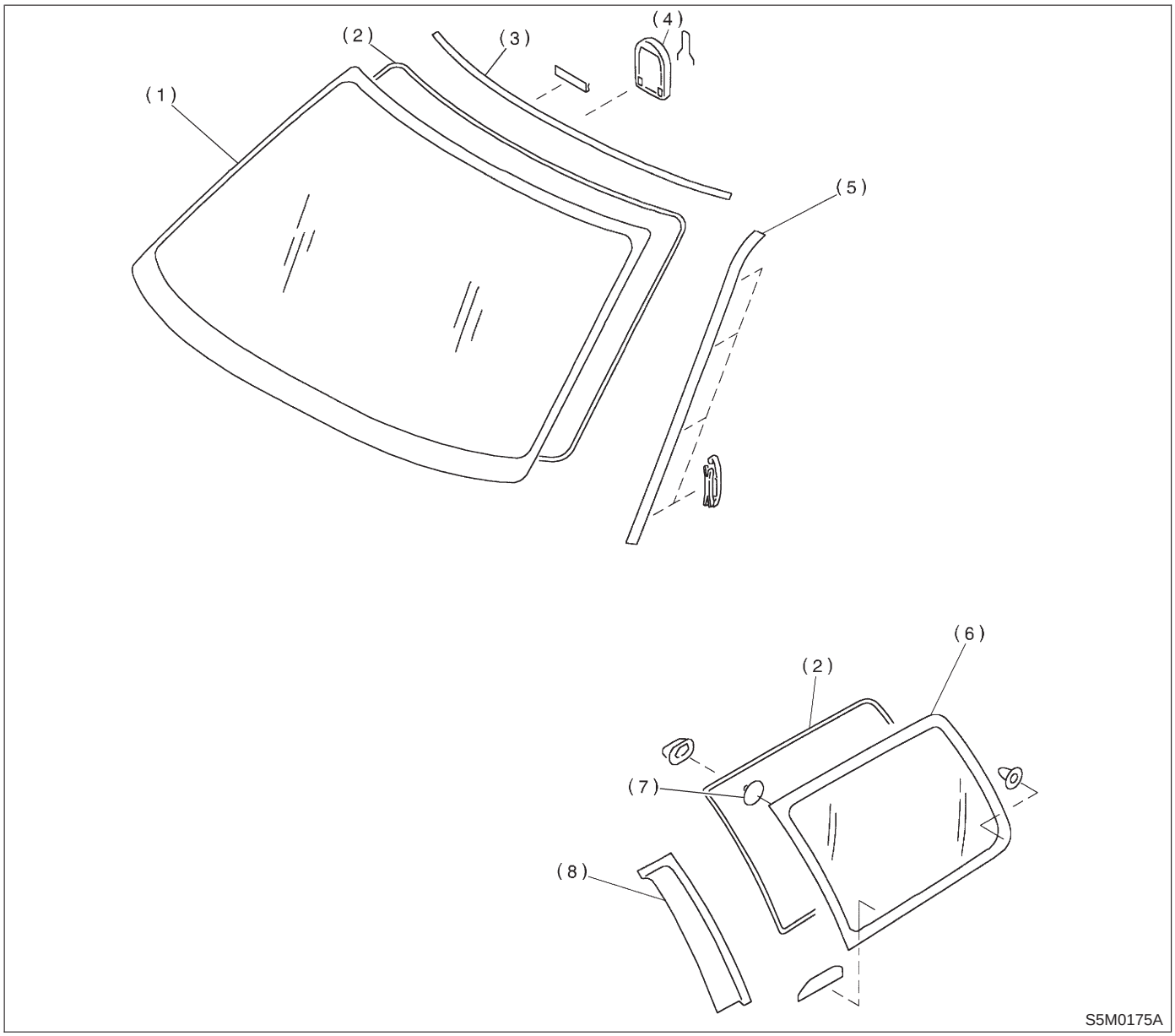
2. Rear Door



(1) Weatherstrip
(2) Stabilizer (Outer)
(3) Stabilizer (Inner)
(4) Door panel
(5) Plate
(6) Seating cover
(7) Checker
(8) Lower hinge
(9) Upper hinge

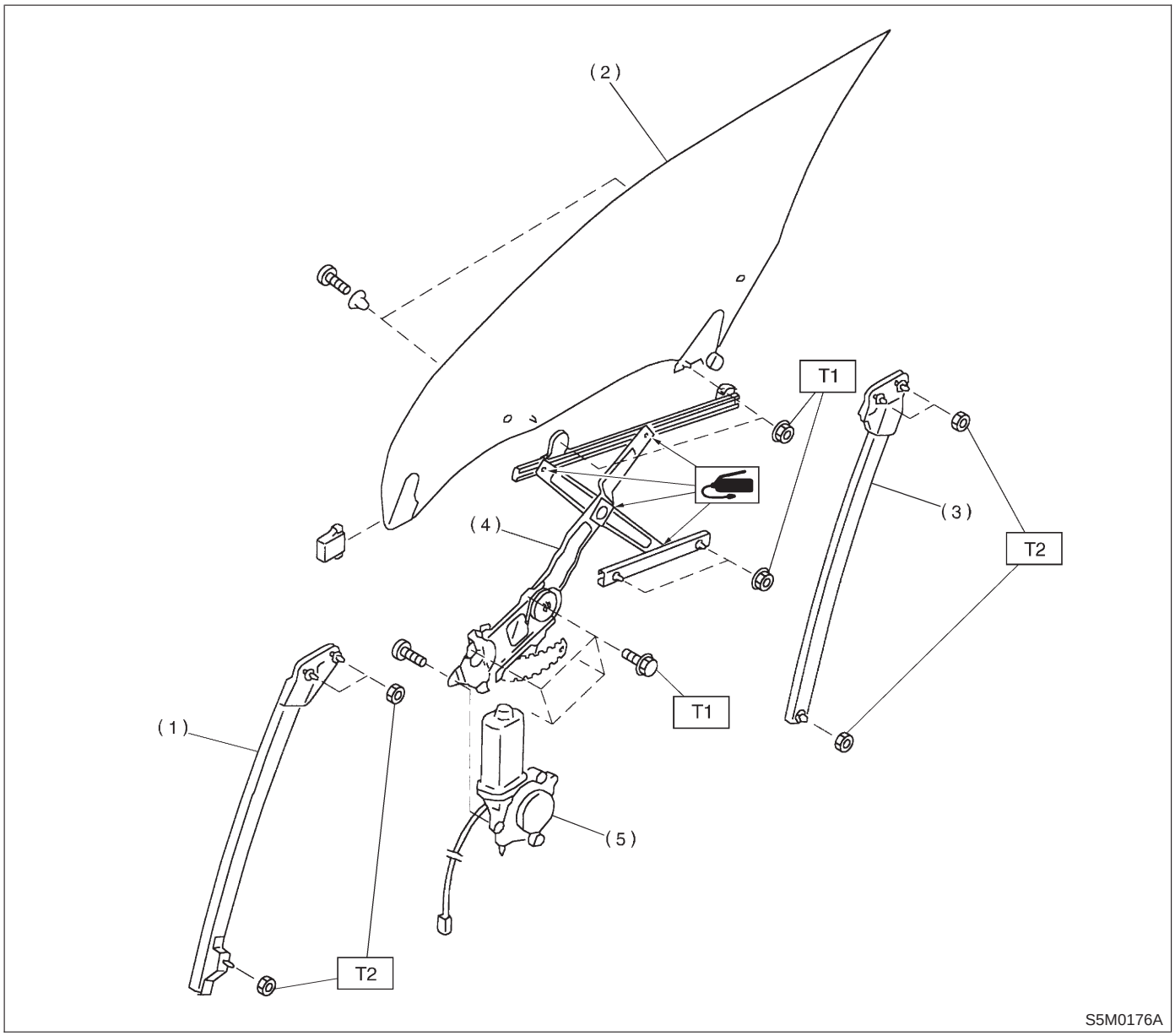
Tightening torque: N·m (kg-m, ft-lb)
T1: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T2: 25±3 (2.5±0.3, 18.1±2.2)
T3: 29±5 (3.0±0.5, 21.7±3.6)

3. Fixed Glass



(1) Windshield glass
(2) Dam rubber
(3) Molding
(4) Rearview mirror mount
(5) Side molding
(6) Rear quarter glass
(7) Locate pin
(8) Rear quarter garnish

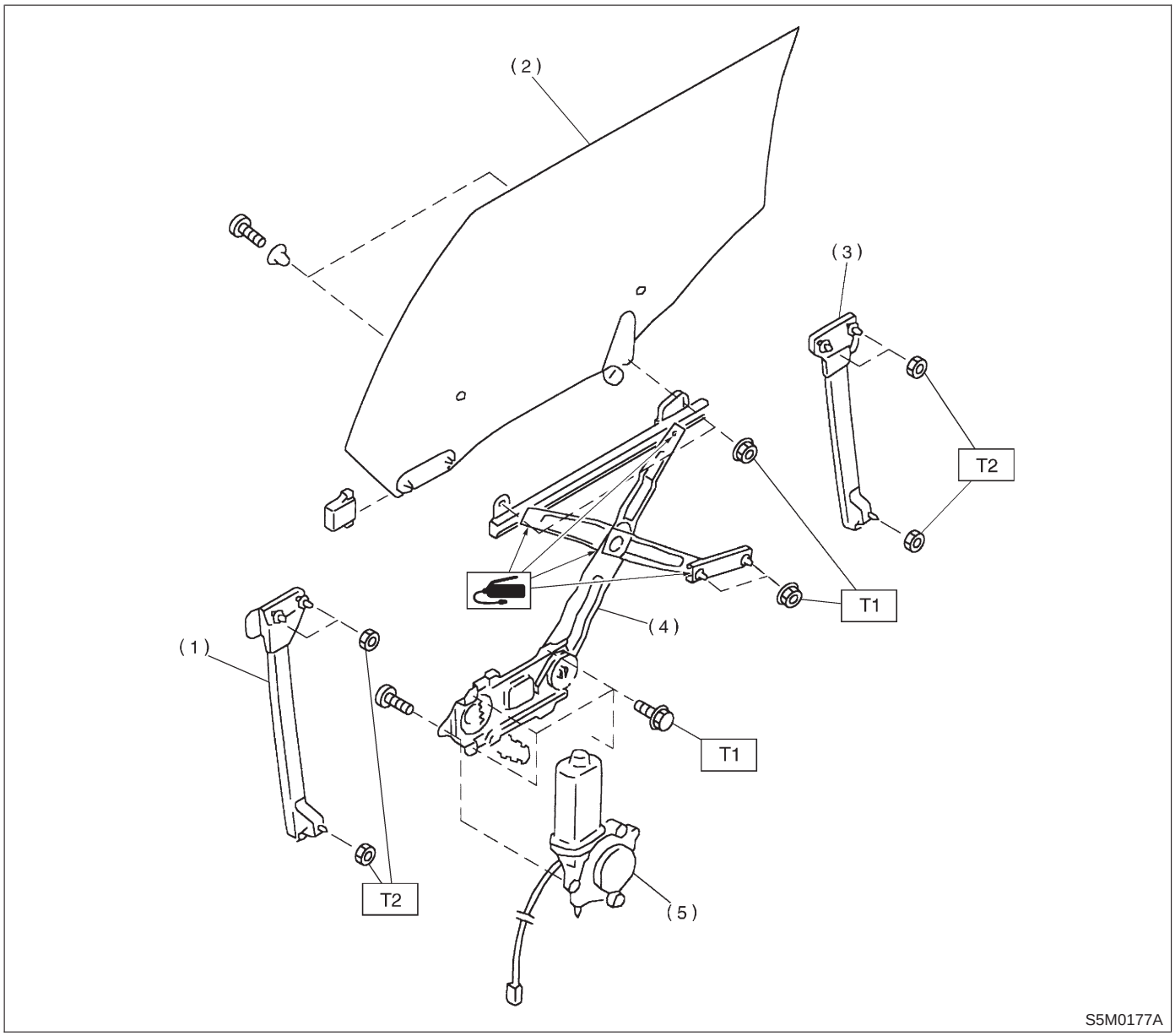
4. Front Door Glass



(1) Door sash (Front)
(2) Glass
(3) Door sash (Rear)
(4) Regulator ASSY
(5) Motor ASSY

Tightening torque: N·m (kg-m, ft-lb)
T1: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T2: 14±4 (1.4±0.4, 10.1±2.9)

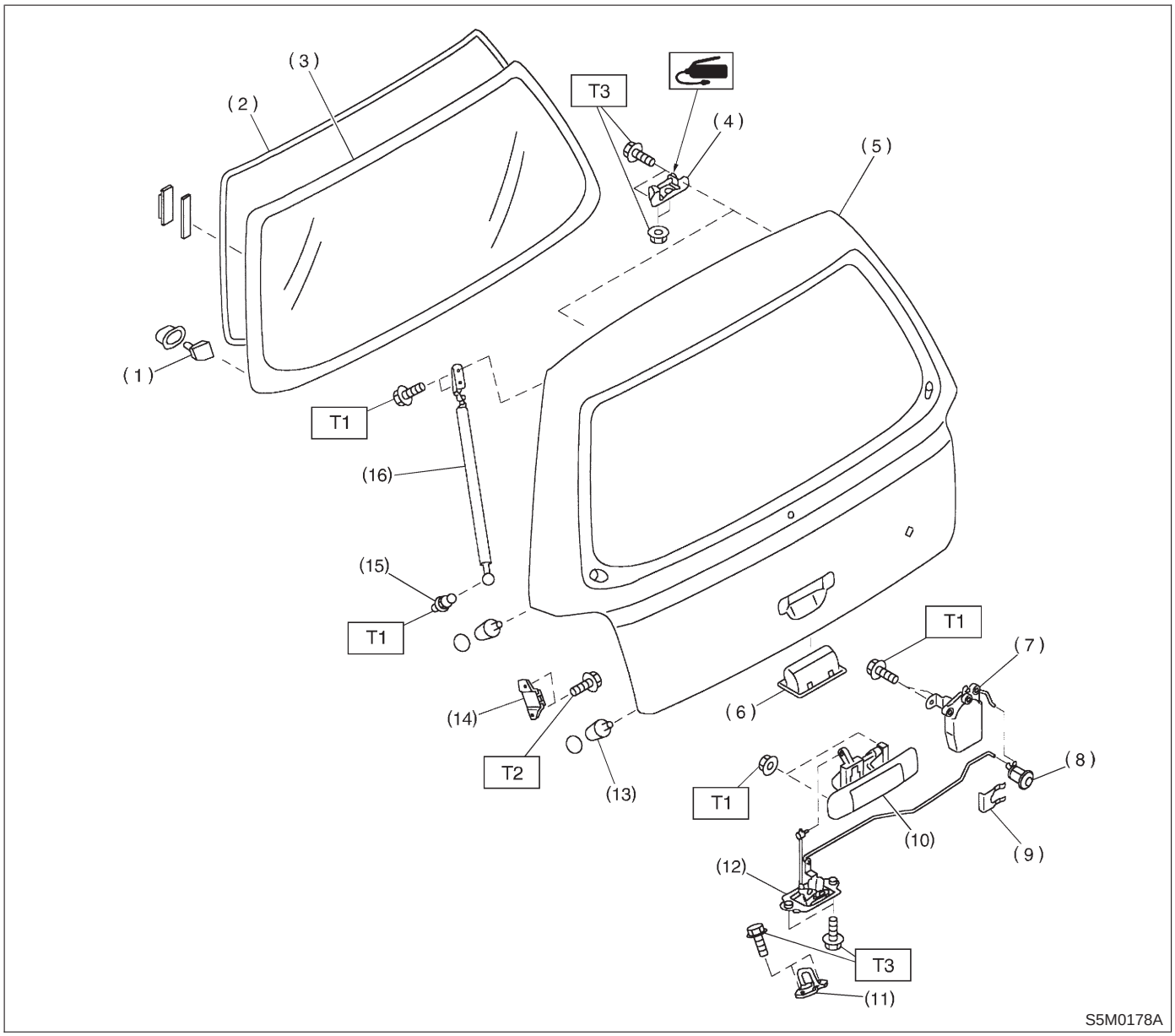
5. Rear Door Glass



(1) Door sash (Front)
(2) Glass
(3) Door sash (Rear)
(4) Regulator ASSY
(5) Motor ASSY

Tightening torque: N·m (kg-m, ft-lb)
T1: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T2: 14±4 (1.4±0.4, 10.1±2.9)

6. Rear Gate and Glass

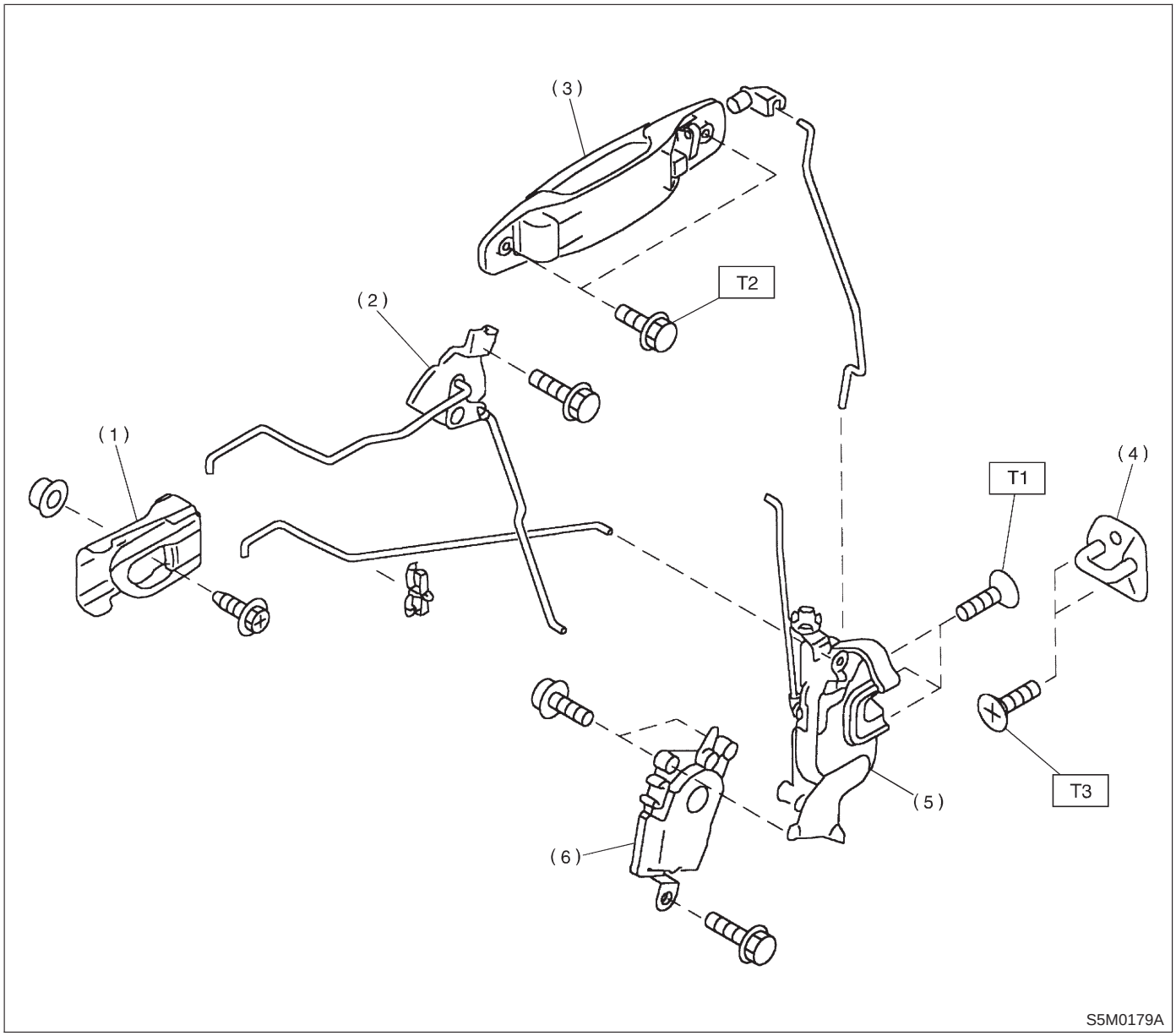


(1) Locate pin
(2) Dam rubber
(3) Glass
(4) Hinge
(5) Rear gate
(6) Handle
(7) Auto-door lock actuator
(8) Key cylinder
(9) Clip
(10) Outer handle
(11) Striker
(12) Latch
(13) Stopper
(14) Buffer
(15) Stud
(16) Gas stay

Tightening torque: N·m (kg-m, ft-lb)
T1: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T2: 14±4 (1.4±0.4, 10.1±2.9)
T3: 25±5 (2.5±0.5, 18.1±3.6)

7. Door Lock Assembly

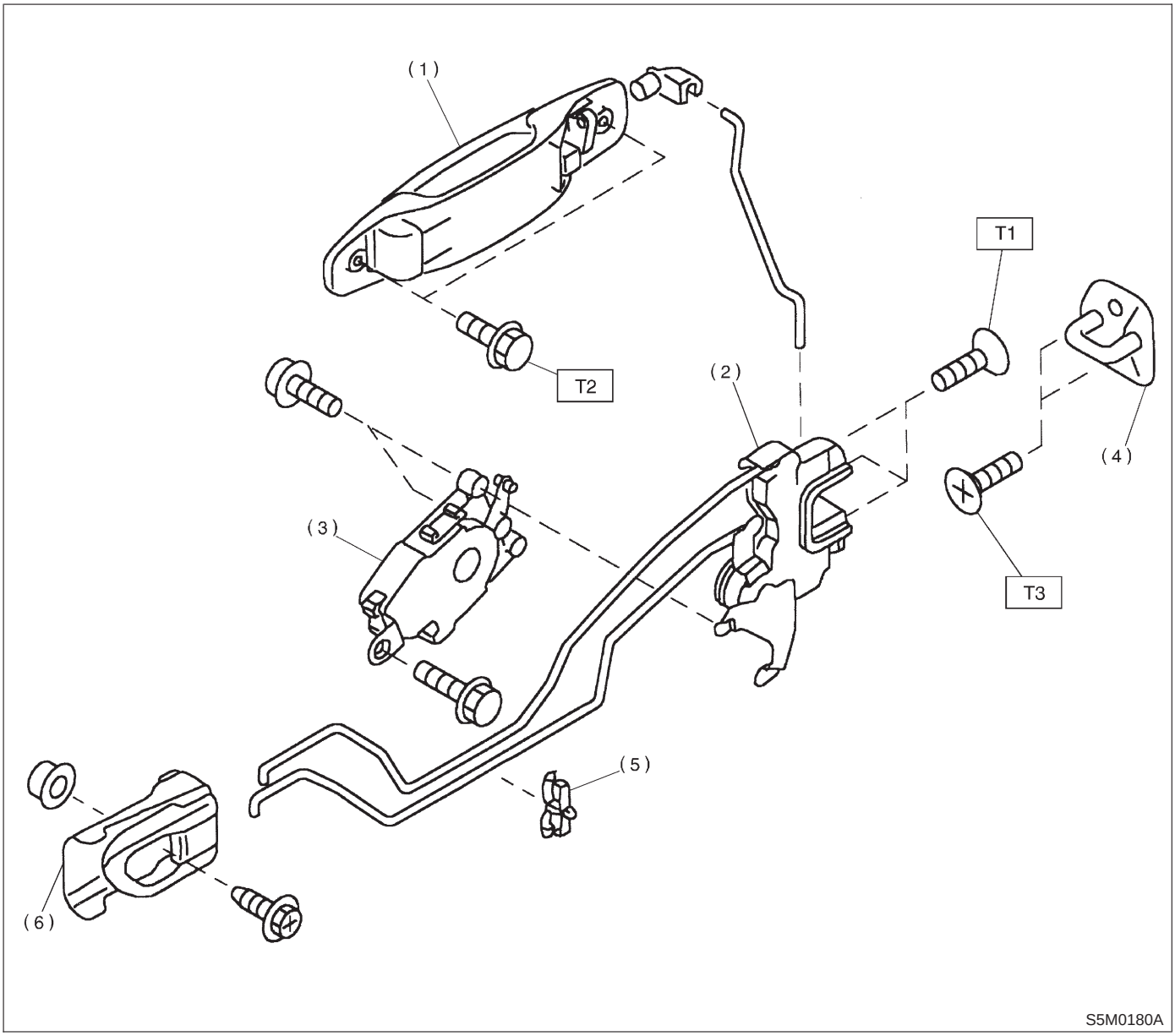
A: FRONT DOOR



(1) Inner remote ASSY
(2) Bell crank
(3) Door outer handle
(4) Striker
(5) Door latch
(6) Auto-door lock actuator

Tightening torque: N·m (kg-m, ft-lb)
T1: 6.4±2.0 (0.65±0.2, 4.7±1.4)
T2: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T3: 14±4 (1.4±0.4, 10.1±2.9)

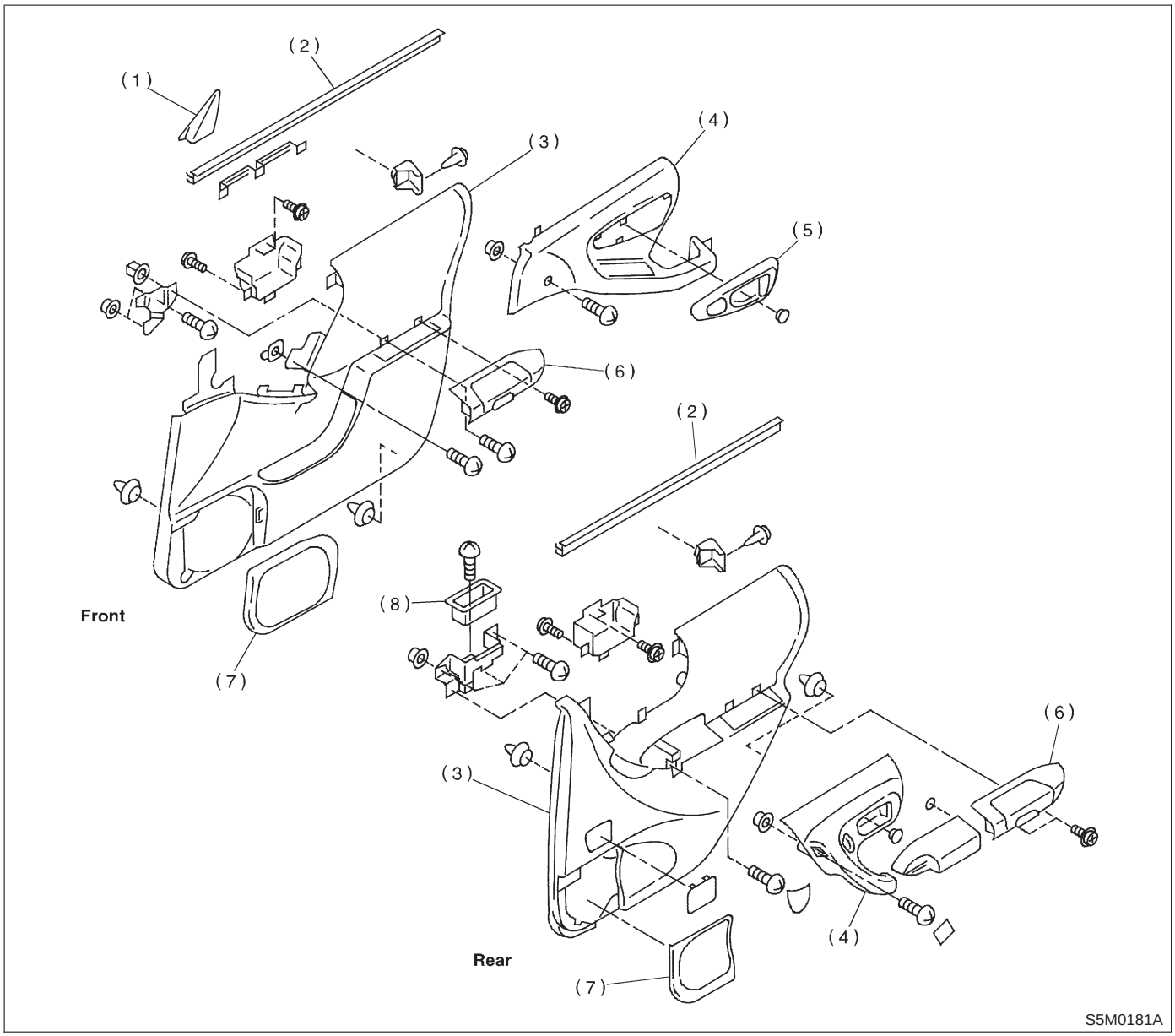
B: REAR DOOR



(1) Door outer handle
(2) Door latch
(3) Auto-door lock actuator
(4) Striker
(5) Rod holder
(6) Inner remote ASSY

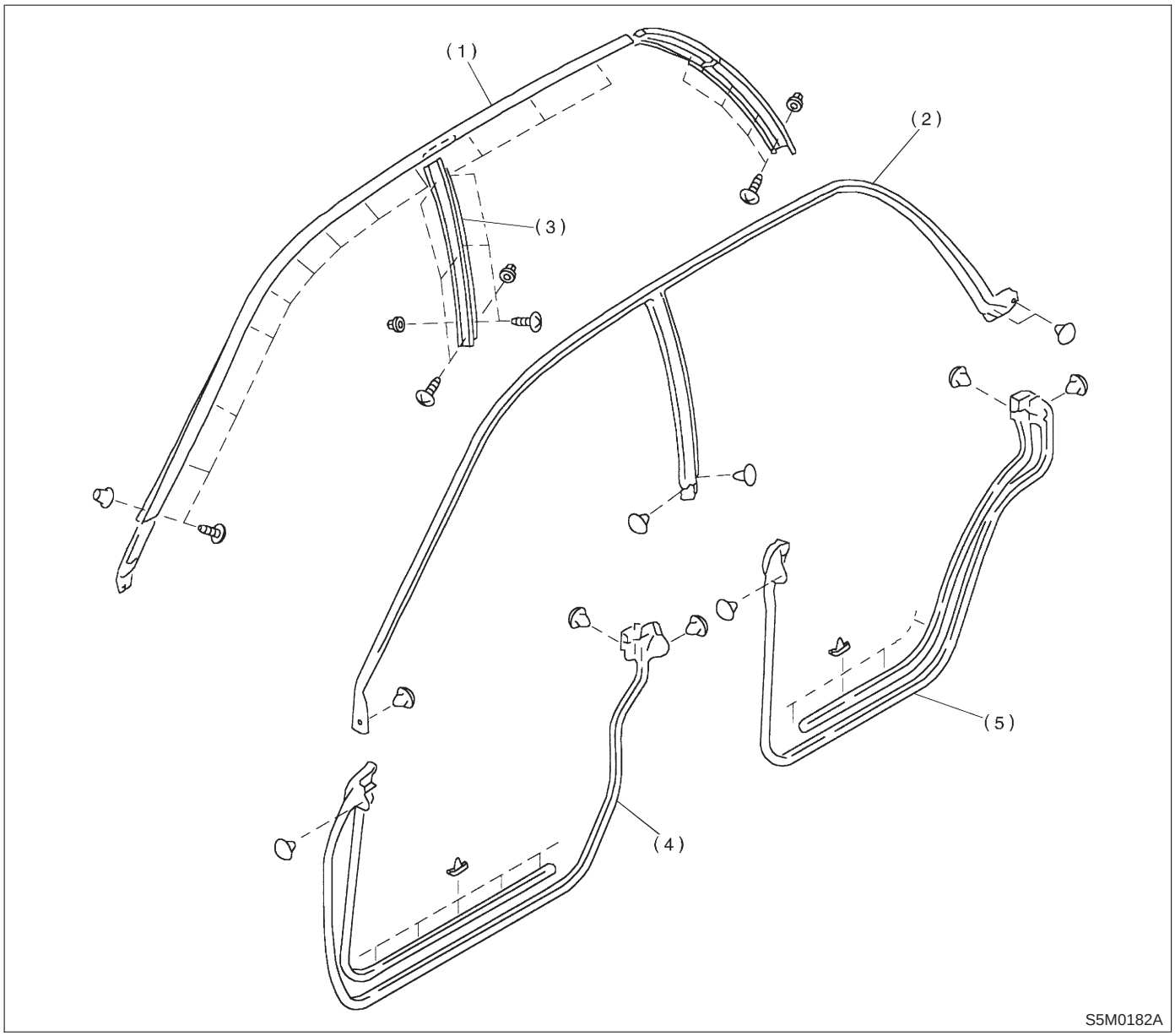
Tightening torque: N·m (kg-m, ft-lb)
T1: 6.4±2.0 (0.65±0.2, 4.7±1.4)
T2: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T3: 14±4 (1.4±0.4, 10.1±2.9)

8. Door Trim



(1) Gusset cover
(2) Weatherstrip
(3) Trim panel
(4) Pull handle
(5) Inner remote cover
(6) Pocket
(7) Speaker grille
(8) Handle

9. Weatherstrip

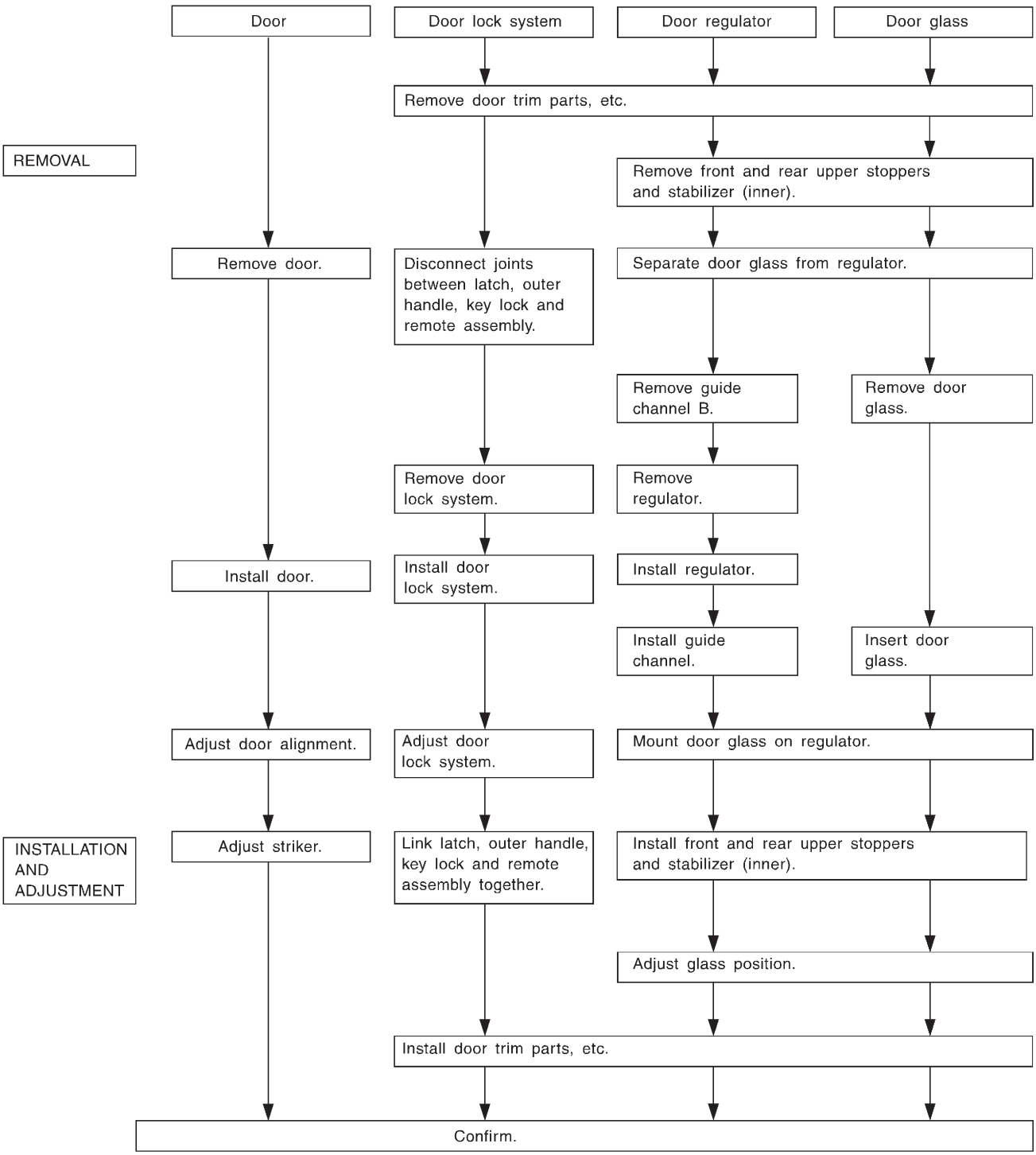


(1) Retainer and molding
(2) Upper and side weatherstrip
(3) Retainer (Center)
(4) Weatherstrip (Front door)
(5) Weatherstrip (Rear door)

1. Door and Related Parts

A: PROCEDURE CHART FOR REMOVING AND INSTALLING

NOTE:
This flowchart shows the main procedures for removing and installing the door and its related parts. For details, refer to the text.



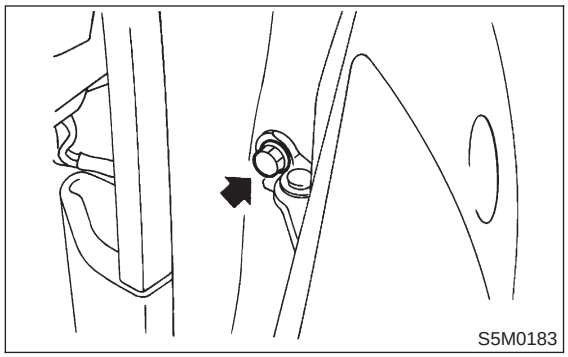
H5M0910A

2. Door

A: REMOVAL AND INSTALLATION

1. DOOR ASSEMBLY

1) Remove lower trim and disconnect connectors from body harness.
2) Place a cloth or a wood block under door to prevent damage, and support it with a jack.
3) Remove checker bolt.



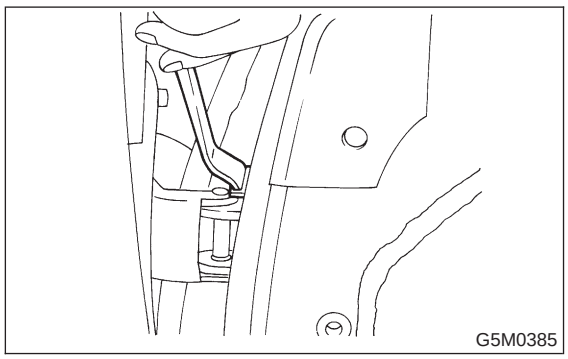
4) Remove bolts (M8) securing upper and lower hinges to door, and remove door from hinges.

Tightening torque:
25±3 N·m (2.5±0.3 kg-m, 18.1±2.2 ft-lb)

5) Remove hinges by loosening hinges mounting bolt (M8) off of body.

Tightening torque:
29±5 N·m (3.0±0.5 kg-m, 21.7±3.6 ft-lb)

CAUTION:
Work carefully to avoid damaging door.



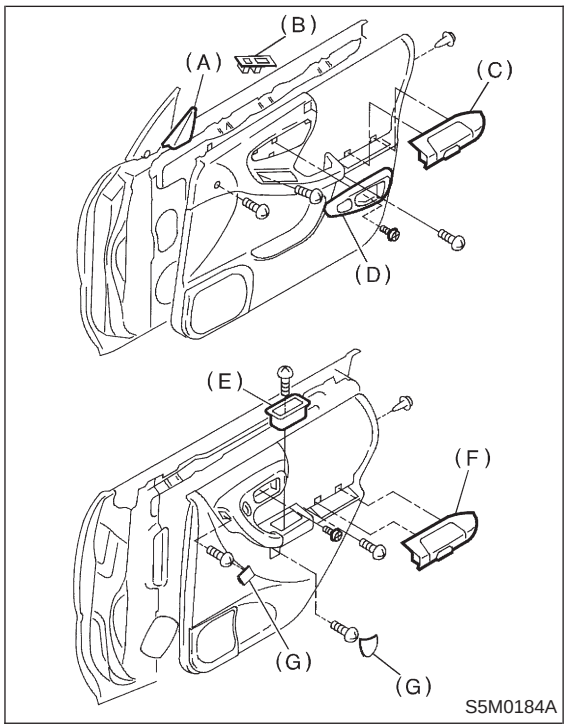
6) Installation is in the reverse order of removal.

NOTE:
Apply grease to moving parts of door hinges.

2. TRIM PANEL

CAUTION:
Be careful not to break clip by applying undue force.

1) Front door trim:
   (1) Remove gusset cover (A), power window switch assembly (B), pocket (C) and inner remote cover (D).
   (2) Remove screws and then disengage the clips.
   (3) Detach trim panel and then disconnect connector.
   (4) Installation is in the reverse order of removal.
2) Rear door trim:
   (1) Remove handle (E), pocket (F) and clips (G).
   (2) Remove screws and then disengage the clips.
   (3) Detach trim panel and then disconnect connector.
   (4) Installation is in the reverse order of removal.

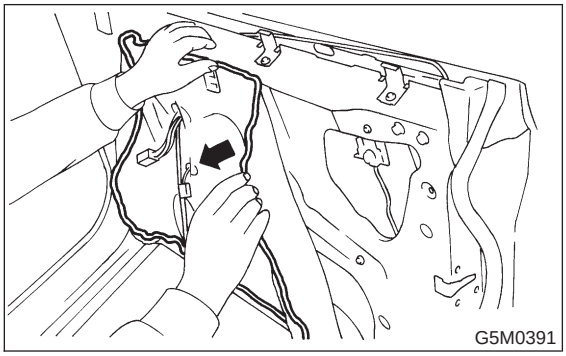


3. SEALING COVER

1) Remove trim panel.
2) Remove speaker, trim bracket and remote assembly and disconnect connectors.

3) Remove sealer with a spatula.

CAUTION:
Be careful because cover may break if sealer is removed forcefully.


G5M0391

4) Installation is in the reverse order of removal.

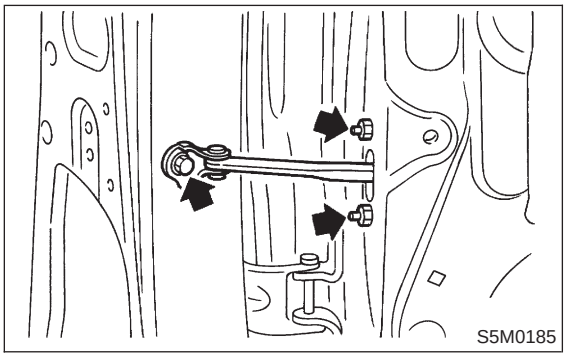
NOTE:
● Confirm that sealer is properly applied without breaks. Then install sealing cover.
● When repairing or replacing sealing cover, use "CEMEDINE 5430L" as sealer. It may be overlaid on existing sealer.

Sealer:
CEMEDINE 5430L

CAUTION:
● **Any breaks in sealer can cause water leakage or entry of air and dust. Be sure sealer is applied in a continuous line.**
● **Make sure sealing cover bonded areas are free from wrinkles or openings.**

4. CHECKER

1) Completely close door glass.
2) Remove trim panel.
3) Remove sealing cover.
4) Remove attaching bolt to body.
5) Loosen two nuts securing checker, and take out checker through access hole in underside.

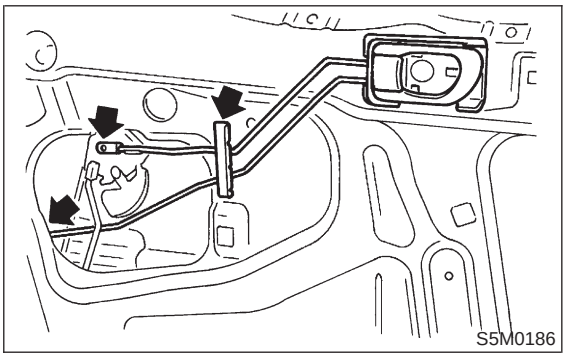

S5M0185

6) Installation should be made in the reverse order of removal.

Tightening torque:
7.5±2.0 N·m (0.75±0.2 kg-m, 5.4±1.4 ft-lb)

5. INNER REMOTE

1) Remove trim panel.
2) Remove sealing cover.
3) Disconnect joints of two rods.
4) Unlatch rod holder.
5) Remove inner remote assembly.

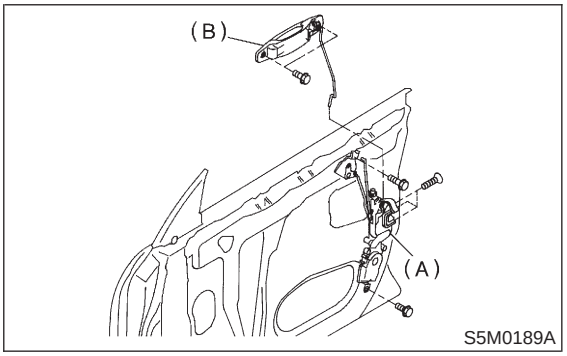

S5M0186

6) Installation is in the reverse order of removal.

NOTE:
If rear door is equipped with child safety lock, check that child lock lever moves without dragging.

6. DOOR LATCH AND OUTER HANDLE

1) Completely close door glass.
2) Remove door trim panel.
3) Remove inner remote assembly.
4) Remove sealing cover around latch service hole.
5) Remove latch and actuator assembly (A):
(1) Turn rod holder to disconnect joint between key lock and rod.
(2) Turn rod holder to disconnect joint between outer handle and rod.
(3) Turn rod holder to disconnect joint between crank and rod.
(4) Loosen screws securing both latch and actuator, then remove latch and actuator assembly through service hole in bottom.



S5M0189A

(5) Installation is in the reverse order of removal.

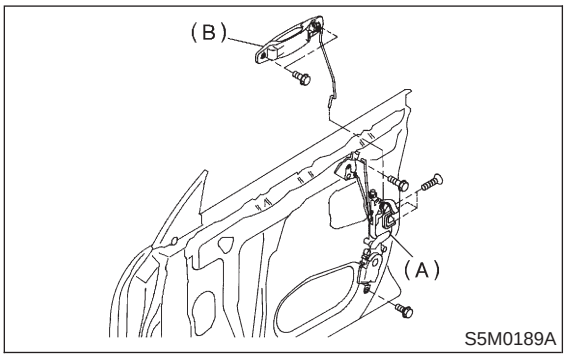
Tightening torque (screw):
6.4±2.0 N·m (0.65±0.2 kg-m, 4.7±1.4 ft-lb)

NOTE:
- Check operation of each part.
- Check each sliding part for proper lubrication.

CAUTION:
After installation, be sure lock mechanism operates normally.

6) Remove outer handle (B):
   (1) Remove trim panel.
   (2) Remove sealing cover.
   (3) Detach door latch rod from outer handle and key lock.
   (4) Loosen nut securing outer handle and then remove outer handle from outside.

CAUTION:
Be careful not to damage door.



   (5) Installation is in the reverse order of removal.

Tightening torque:
7.4±2.0 N·m (0.75±0.2 kg-m, 5.4±1.4 ft-lb)

7. KEY LOCK

1) Remove trim panel.
2) Remove sealing cover.
3) Completely close door glass.
4) Remove outer handle.
5) Loosen spring securing key lock.
6) Remove key lock from door panel.
7) Installation is in the reverse order of removal.

8. GUSSET

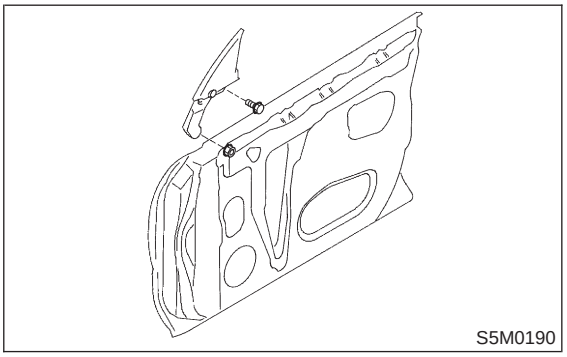
1) Be sure window is all the way down.
2) Remove gusset cover.
3) Remove trim panel.
4) Remove door rearview mirror.
5) Remove outer weatherstrip.
6) Remove sealing cover.

NOTE:
Be careful not to drop nuts on the “IN” side.

7) Remove bolts and nuts which secure gusset.

Tightening torque: Bolt
3±3 N·m (1.3±0.3 kg-m, 9.4±2.2 ft-lb)

Tightening torque: Nut
7.4±2.0 N·m (0.75±0.2 kg-m, 5.4±1.4 ft-lb)

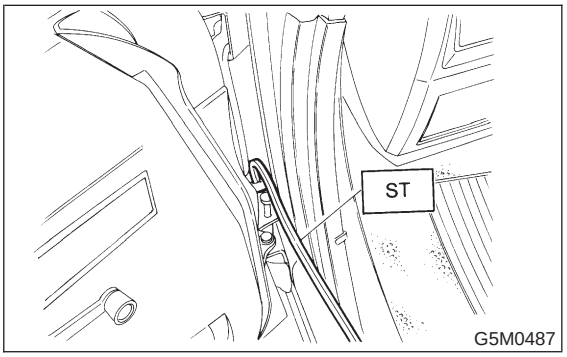


8) Lift out gusset.
9) Installation is in the reverse order of removal.

B: ADJUSTMENT

1. DOOR ASSEMBLY

1) Using ST, loosen bolts securing upper and lower hinges to body, and adjust fore-and-aft and vertical alignment of door.
ST 925610000 DOOR HINGE WRENCH



2) Loosen screw one complete rotation, and adjust opening/closing direction of door using a hammer covered with a cloth.

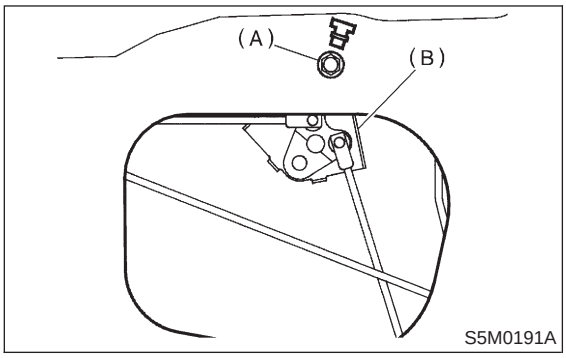
CAUTION:
Be careful not to damage striker.

Hinge tightening torque (body side):
29±5 N·m (3.0±0.5 kg-m, 21.7±3.6 ft-lb)

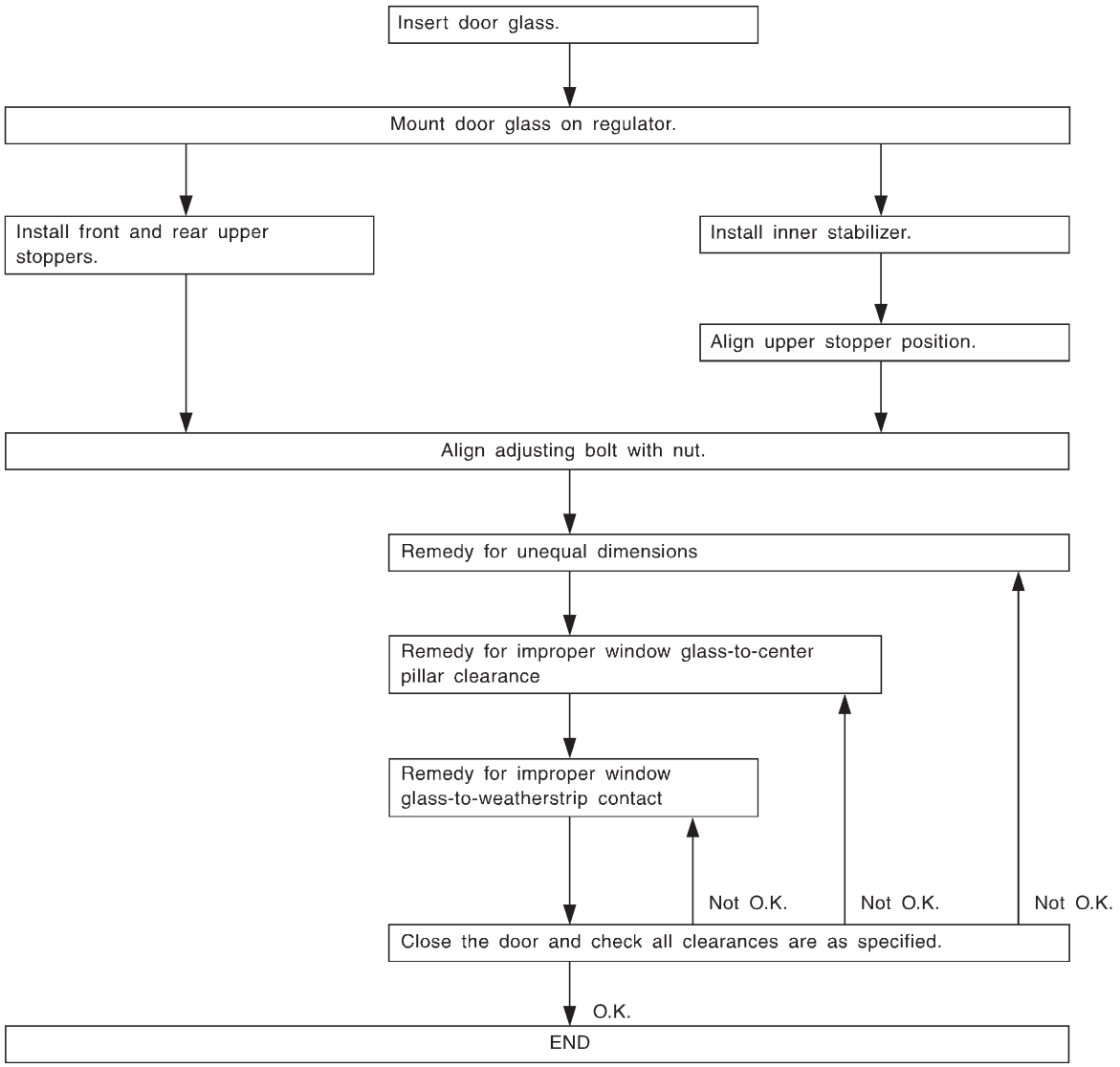
Striker tightening torque:
14±4 N·m (1.4±0.4 kg-m, 10.1±2.9 ft-lb)

2. INNER REMOTE

1) Lock the door.
2) Loosen bolt (A).
3) Lower bell crank (B) and then tighten bolt (A).

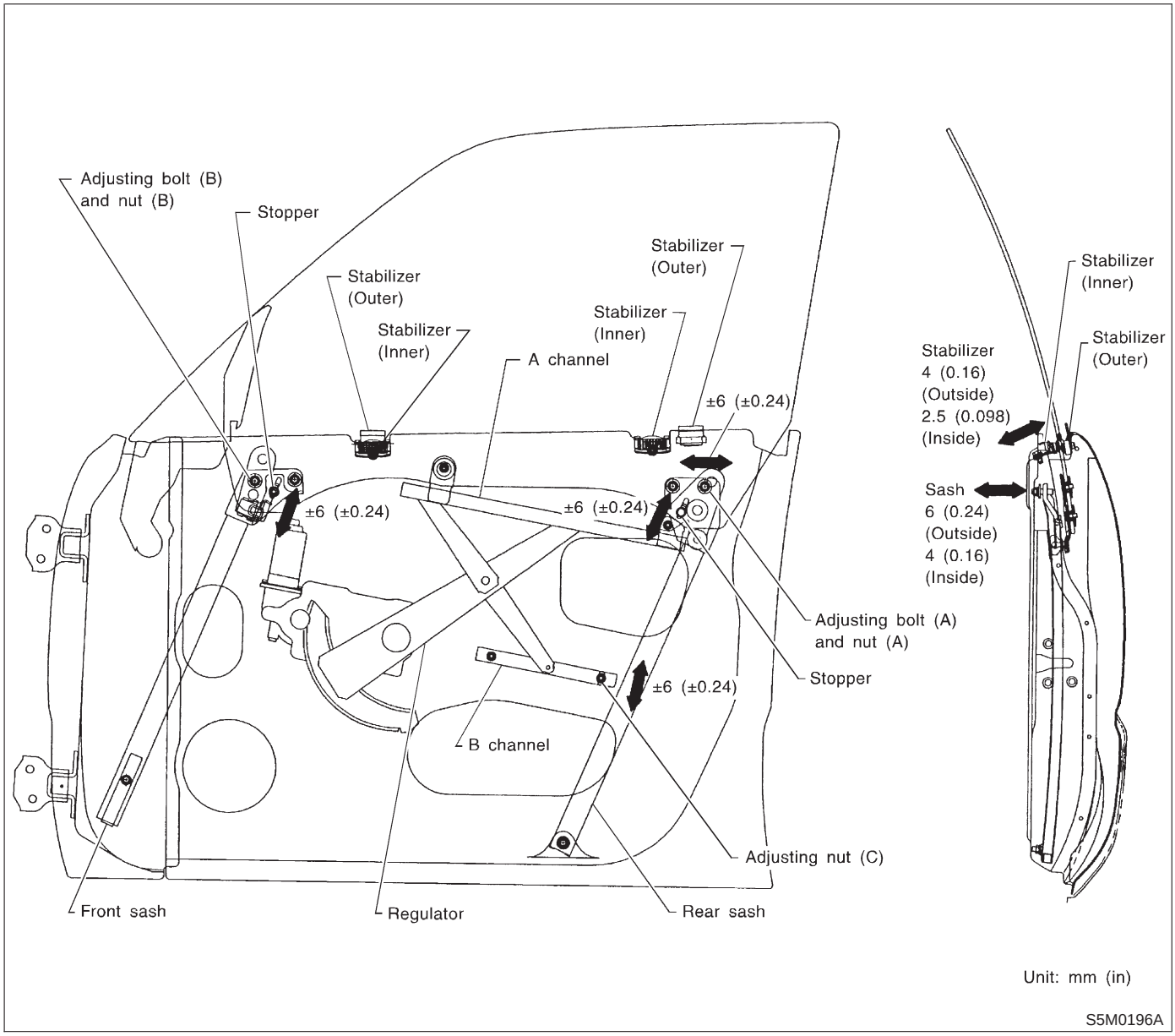


3. PROCEDURE CHART FOR ADJUSTING DOOR GLASS



H5M0912A

4. FRONT DOOR GLASS



● Door glass fit adjustment

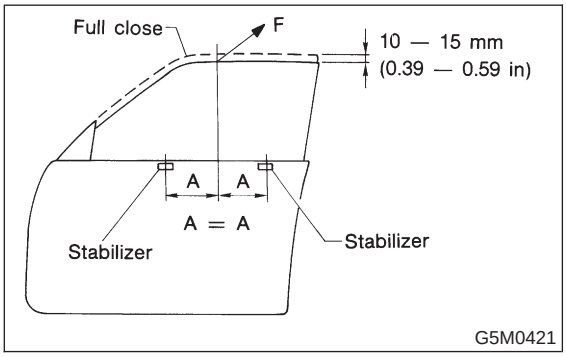
Before adjusting door glass alignment, ensure adjusting bolts for stabilizers, upper stoppers and sashes are loose and glass is raised so that it is in contact with upper and side weatherstrip.

1) Temporarily tighten one of the two rear sash adjusting bolts, at midpoint of oblong hole on inner panel.

2) Temporarily tighten regulator B channel at a position slightly lower than midpoint of oblong hole on inner panel.

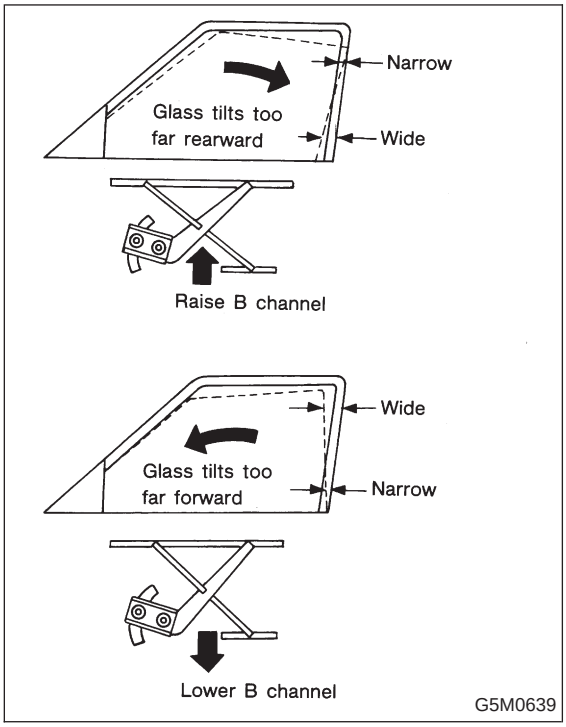
3) Lower door glass 10 to 15 mm (0.39 to 0.59 in) from fully closed position. While applying outward pressure (load) to upper edge of glass above mid-point of two outer stabilizers, press inner stabilizer until it just touches the glass, then secure it.

Load: F
Front door glass 44.1±4.9 N (4.5±0.5 kg, 9.9±1.1 lb)
Rear door glass 44.1±4.9 N (4.5±0.5 kg, 9.9±1.1 lb)



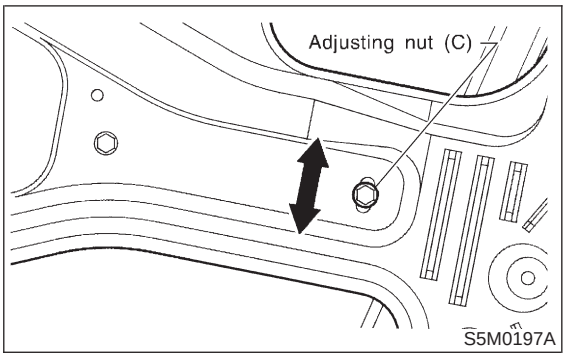
● Remedy for unequal dimensions, between upper, lower and center pillar sides

1) Close front door and raise door glass.
2) Make sure of unequal dimensions.



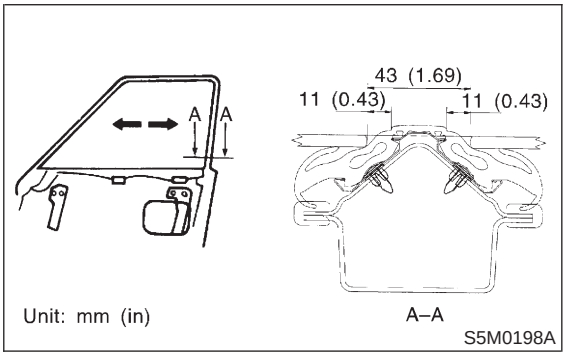
3) If glass tilts to far rearward, loosen adjusting nut (C) and adjust glass to be parallel with center pillar, then after adjustment, tighten adjusting nut (C).

Tightening torque:
7.4±2.0 N·m (0.75±0.2 kg-m, 5.4±1.4 ft-lb)

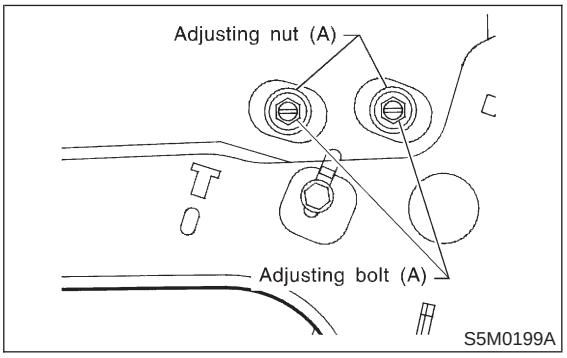


● Remedy for improper glass to center pillar clearance

1) Close front door and raise door glass.
2) Make sure of improper clearance.



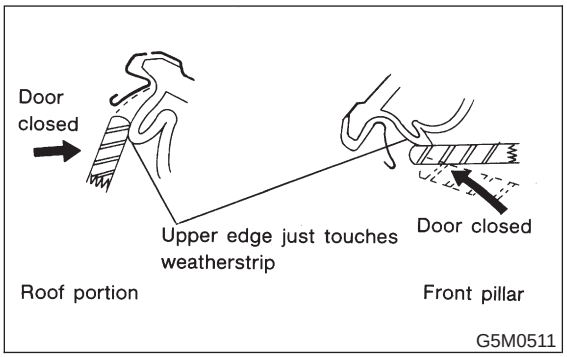
3) If clearance is improper, loosen adjusting nut (A), bolt (A) and adjust glass to center pillar.



● Remedy for improper upper stop point of door glass

1) Loosen front and rear sash stoppers.

2) Increase the upward travel of window glass up to the position where upper edge just touches weatherstrip surface with door closed.

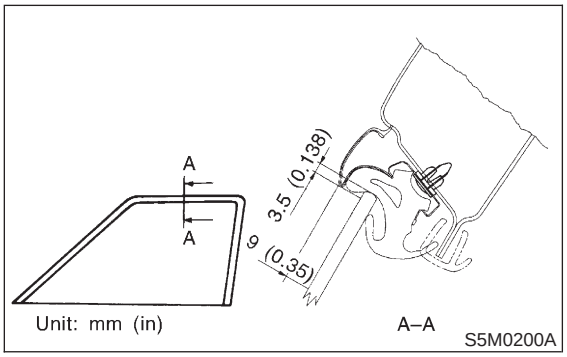


3) After adjustment, temporarily tighten stoppers.

NOTE:
Make sure that each glass stopper is touched.

● Remedy for incorrect contact of door glass to weatherstrip

1) Close front door and raise door glass.
2) If clearance is below specifications, loosen bolt (A) and bolt (B).
3) If clearance is over specifications, tighten bolt (A) and bolt (B).



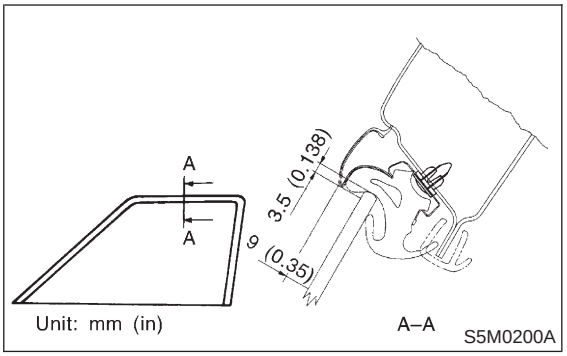
● Fit adjustment

Door glass fit is adjusted by displacing the glass front edge with a stabilizer.

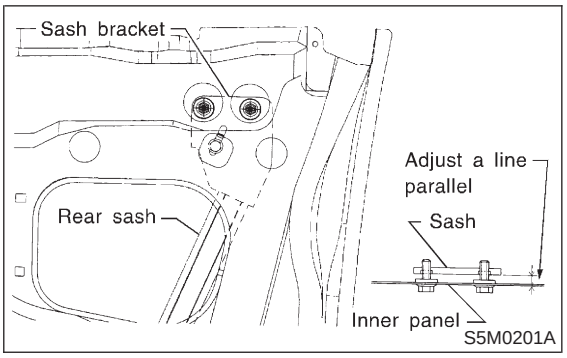
NOTE:
Before adjusting glass fit, visually check to determine relative adjusting positions of retainer and molding (on roof side) and glass surface.

1) Alternately adjust two rear sash adjusting bolts (A) until dimensions are obtained.

CAUTION:
Do not loosen two adjusting nuts (A) at the same time, as this moves sash fore and aft, creating unequal glass-to-sash clearance. During adjustment, loosen only one nut and keep the other tightened.



NOTE:
Always adjust two rear sash adjusting bolts (A) by the same amount. Do not adjust the adjusting bolts with sash bracket inclined toward inner panel, as this increases effort required to operate regulator.



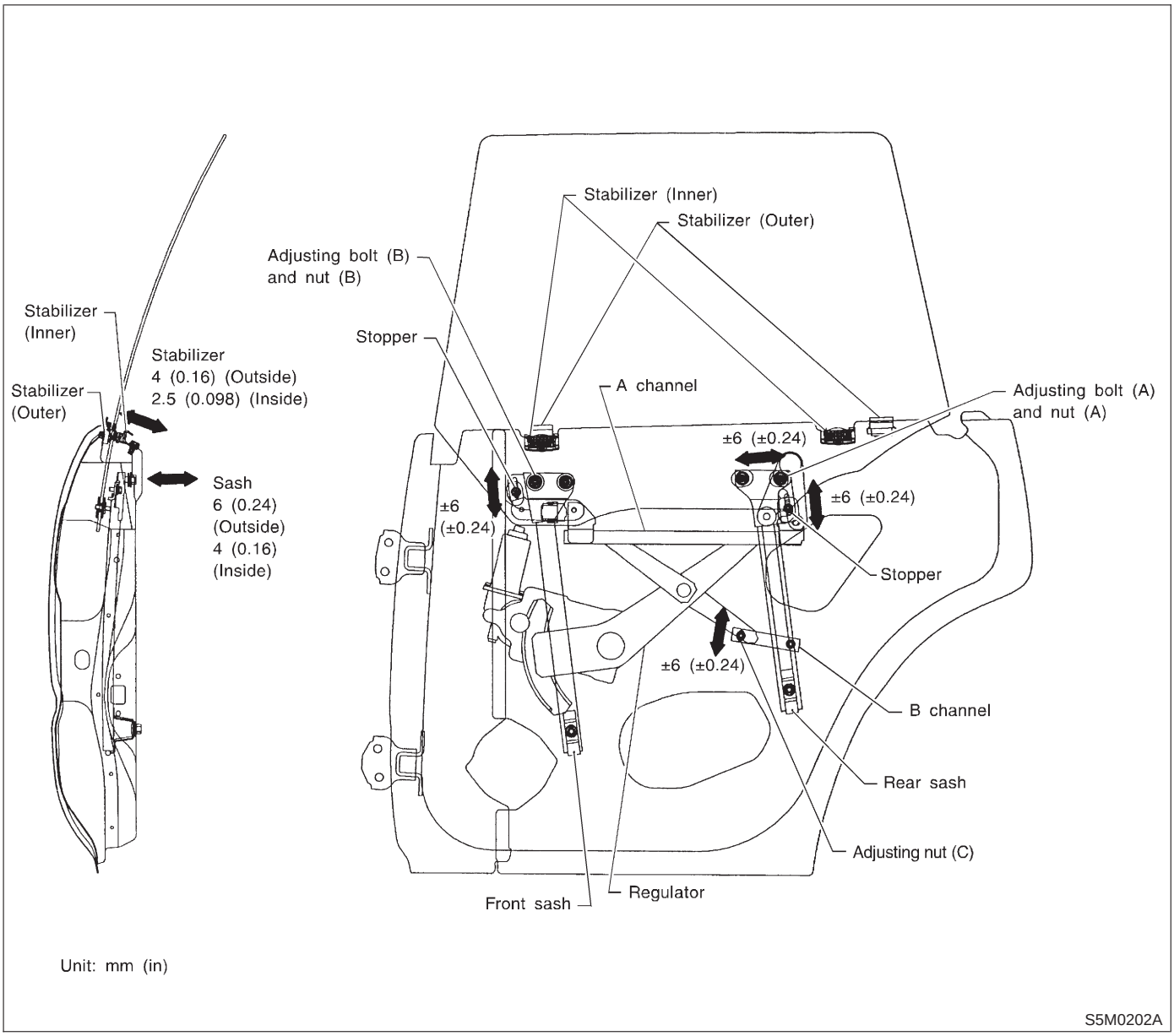
2) Adjust front sash fit using rear sash adjustment procedure outlined in the former procedure as a guide. Two adjusting bolts must be adjusted by the same amount.

NOTE:
● Front and rear sash adjustment procedures are basically the same; however, the amount of adjustment is not always the same due to alignment dispersion of individual doors.
● Adjust front and rear sash fit, as equally as possible. Otherwise, effort required to operate regulator may increase.

3) After adjusting front sash-to-glass fit, secure front sash.

5. REAR DOOR GLASS

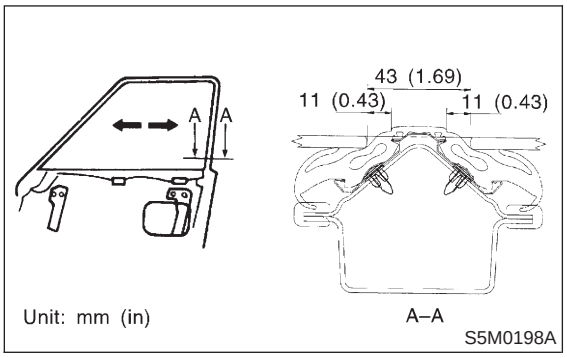
Alignment of rear door glass is basically the same as for the front door glass. Due to slight difference in adjustment dimensions for fore-aft, up-down, and in-out alignments, key points for rear door adjustment are described.



● **Fore-aft adjustment**

1) Door glass alignment must be adjusted so that glass-to-center pillar fit is equal at all points. Always use dimensions as a guide during adjustment.

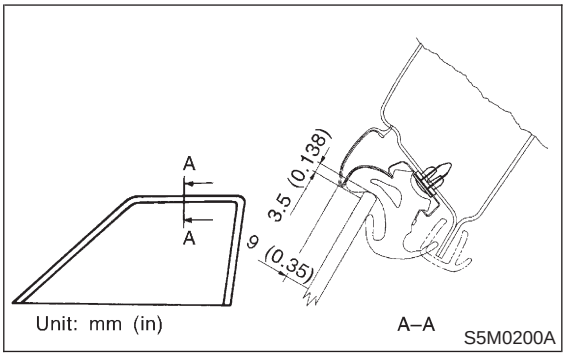
NOTE:
If dimensions are smaller than those indicated, glass will be caught in weatherstrip and may not raise to the fully closed position.



2) After making fore-aft adjustment, raise and lower glass to ensure it is free from any binding.

● **Fit adjustment**

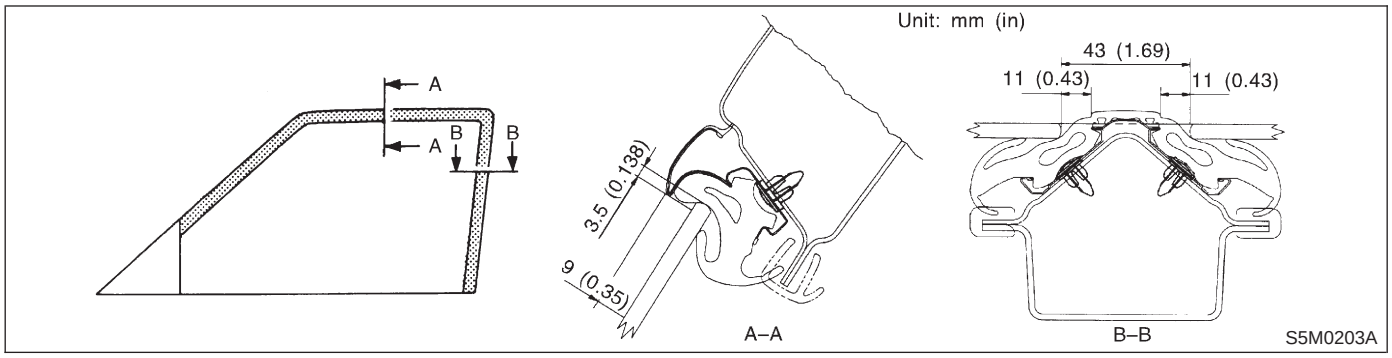
Increasing contact pressure causes rear door glass to be caught in center pillar upper and lower weatherstrip; this will cause premature weatherstrip wear. For this reason, always use dimensions indicated in figure as a guide during glass fit adjustment.



C: INSPECTION

1. FRONT DOOR GLASS

1) Close front door and make sure of all clearances.



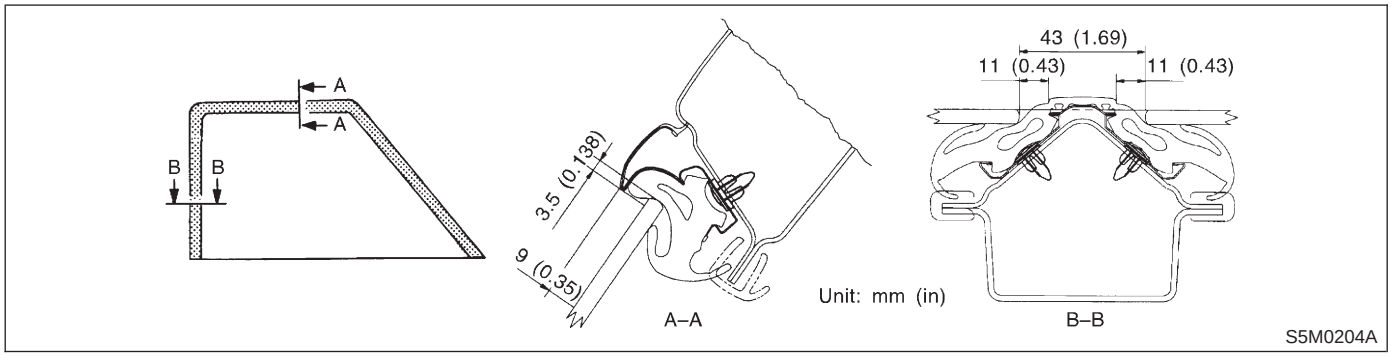
2) If any clearance is not correct, adjust affected parts. Re-check that all clearances are correct.

CAUTION:
● Repeatedly adjust parts until all clearances are correct.

● After clearance adjustment, make sure that all adjusting bolts and nuts are tightened.

2. REAR DOOR GLASS

1) Close rear door and make sure of all clearances.



2) If any clearance is not correct, adjust affected parts. Re-check that all clearances are correct.

CAUTION:
● Repeatedly adjust parts until all clearances are correct.
● After clearance adjustment, make sure that all adjusting bolts and nuts are tightened.

3. Rear Gate

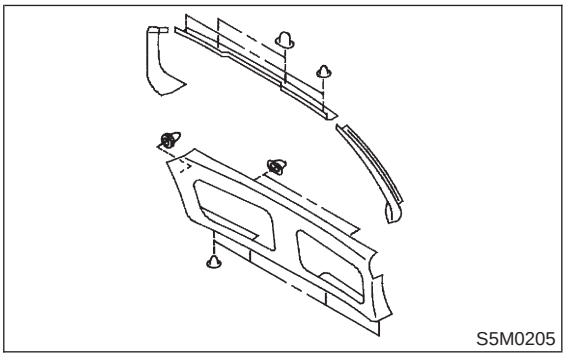
A: REMOVAL AND INSTALLATION

CAUTION:
● Be careful not to scratch coated surfaces of vehicle body and window glass during removal. Place a cloth over the affected area.
● Be careful not to damage trim panels.
● Use an assistant when handling heavy parts.
● Be careful not to damage or lose small parts.

1. REAR GATE ASSEMBLY

1) Remove clips from trim panel and detach trim panel.

CAUTION:
Be careful not to damage clips or their holes.



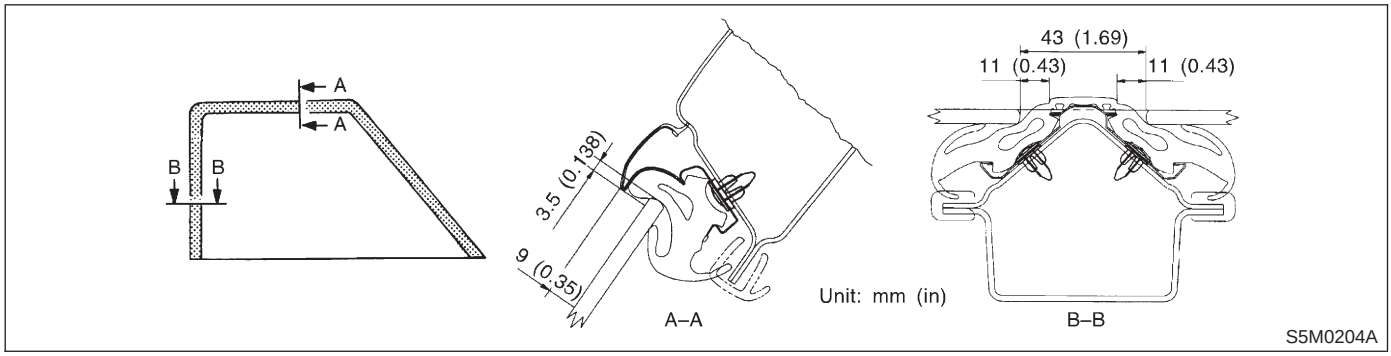
2) Disconnect connectors and terminal.
3) Disconnect rear washer hose from wiper motor.
4) If disconnected harness is re-used, tie connector with a string and place on the upper side of rear gate for ready use.

CAUTION:
Do not forcefully pull cords, lead wires, etc. since damage may result; carefully extract them in a wavy motion while holding connectors.

5) Remove both rubber ducts and then extract washer hose and harness connector.

2. REAR DOOR GLASS

1) Close rear door and make sure of all clearances.



2) If any clearance is not correct, adjust affected parts. Re-check that all clearances are correct.

CAUTION:
● Repeatedly adjust parts until all clearances are correct.
● After clearance adjustment, make sure that all adjusting bolts and nuts are tightened.

3. Rear Gate

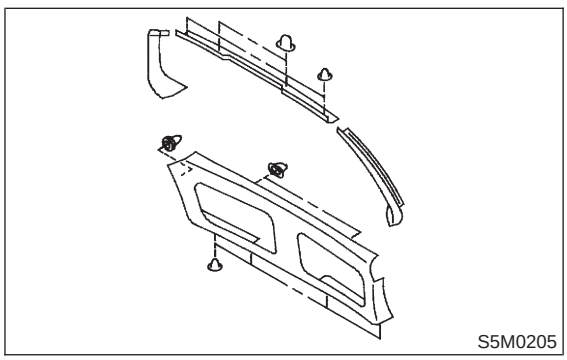
A: REMOVAL AND INSTALLATION

CAUTION:
● Be careful not to scratch coated surfaces of vehicle body and window glass during removal. Place a cloth over the affected area.
● Be careful not to damage trim panels.
● Use an assistant when handling heavy parts.
● Be careful not to damage or lose small parts.

1. REAR GATE ASSEMBLY

1) Remove clips from trim panel and detach trim panel.

CAUTION:
Be careful not to damage clips or their holes.



2) Disconnect connectors and terminal.
3) Disconnect rear washer hose from wiper motor.
4) If disconnected harness is re-used, tie connector with a string and place on the upper side of rear gate for ready use.

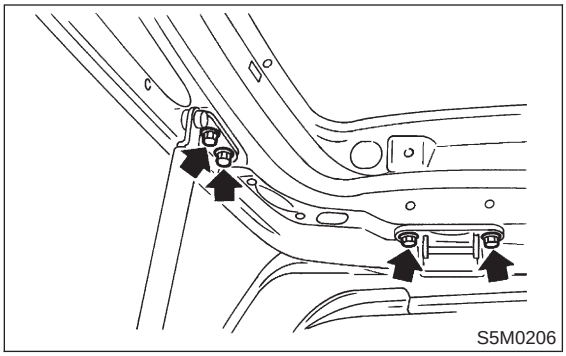
CAUTION:
Do not forcefully pull cords, lead wires, etc. since damage may result; carefully extract them in a wavy motion while holding connectors.

5) Remove both rubber ducts and then extract washer hose and harness connector.

6) Gas stay:
(1) Completely open rear gate.
(2) Remove bolts which hold gas stay to rear gate.

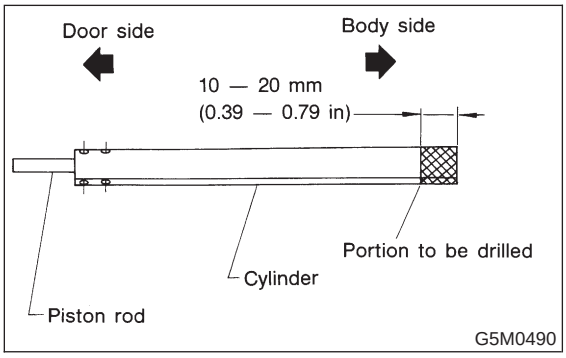
CAUTION:
● Be careful because rear gate drops while removing bolts. Have an assistant support it while removing bolts.
● Be sure to place a folded cloth between rear gate and body to prevent scratches.

7) Remove the bolts which hold rear gate to hinge and then detach rear gate.

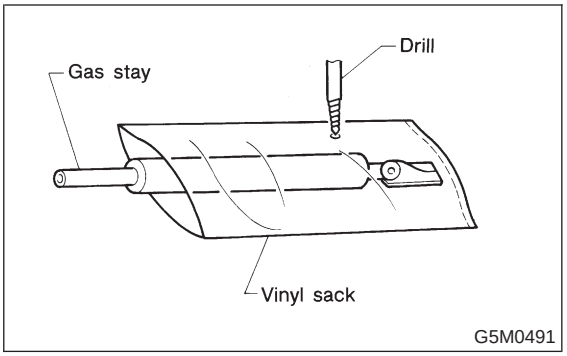

S5M0206

8) General precautions in handling rear gate gas stay

CAUTION:
● Do not attempt to disassemble gas stay because its cylinder is filled with gas.
● Before discarding gas stay, place it at a slight angle with the cylinder body side facing up and drill a 2 to 3 mm (0.08 to 0.12 in) dia. hole to completely discharge the content. (Gas is odorless, colorless and harmless; however, metal powder may come out of the hole.)



● It is good practice to place a vinyl sack over it before drilling the hole because oil may spurt out. Be careful to prevent vinyl cover from becoming entangled on the drill.



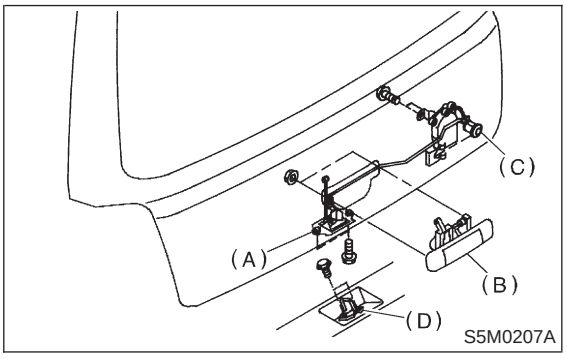
● Be careful not to scratch the exposed section of piston rod or allow oil or paint to come in contact with it.
● Do not attempt to rotate the extended piston rod.

9) Installation is in the reverse order of removal.

CAUTION:
● Be careful not to mistake RH and LH body side buffers.
● Be sure to add sealer to hinge.
● When installing rear gate, be careful not to damage coating on body and rear gate.

2. LATCH

1) Remove trim panel.
2) Disengage rod from holder (= key cylinder).
3) Remove bolts from auto-door lock actuator.
4) Remove bolts from latch (A), and detach latch.



5) Disconnect rear gate switch connector.
6) Disconnect auto-door lock actuator connector.
7) Detach latch.
8) Installation is in the reverse order of removal.

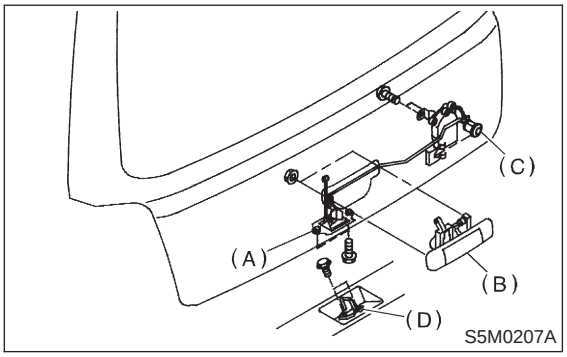
CAUTION:
Firmly join latch with key cylinder, and outer handle.

3. OUTER HANDLE

1) Remove trim panel.
2) Remove latch (A).

3) Remove two nuts used to hold outer handle (B) to the inside of rear gate, and detach outer handle.

CAUTION:
Be careful not to damage packing when removing outer handle.

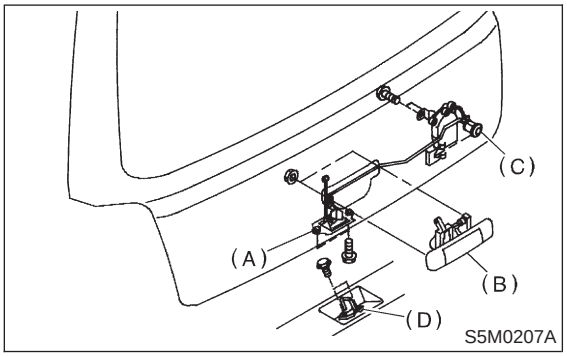


4) Installation is in the reverse order of removal.

CAUTION:
Completely insert latch pin into handle lever.

4. KEY CYLINDER

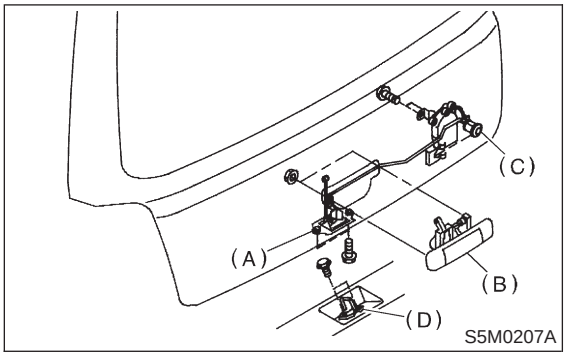
1) Remove trim panel.
2) Disengage rod from holder.
3) Remove retaining spring from key cylinder (C), and detach key cylinder from outside.



4) Installation is in the reverse order of removal.

5. STRIKER

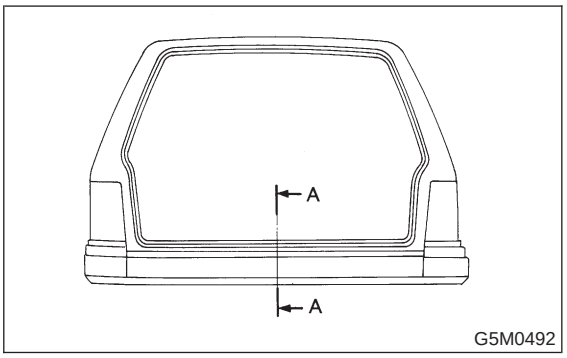
1) Remove rear skirt trim.
2) Remove two bolts from striker (D) and detach striker.



3) Installation is in the reverse order of removal.

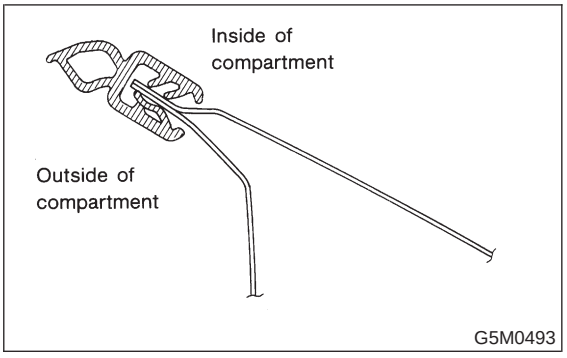
6. WEATHERSTRIP

1) Place weatherstrip so that its joints meet at lower center of vehicle body, and install by inserting flanged portion from below, as shown in section A—A in figure.



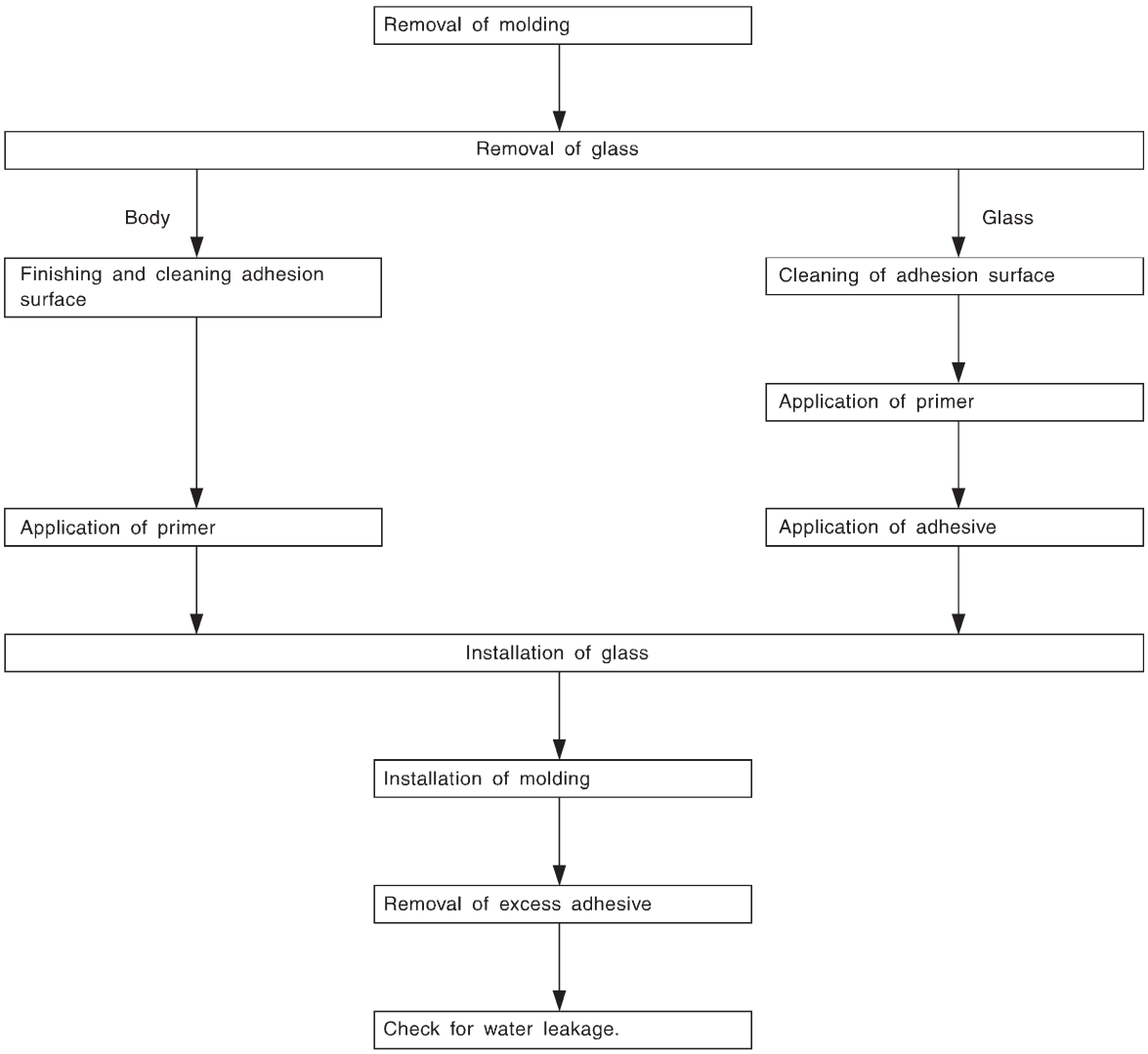
2) Tap along entire length with a rubber hammer to firmly insert body flange into weatherstrip.

CAUTION:
- **Be careful not to install in wrong direction.**
- **Install weatherstrip carefully and firmly.**



4. Procedure Chart for Removal and Installing Window Glass

A: REMOVAL AND INSTALLATION



H5M0914A

1. MATERIALS REQUIRED FOR APPLICATION

Description	Remarks
Repair adhesive set ● Cartridge of single-liquid urethane adhesive ● Primer for glass and body	Sunstar No. 580 or Essex Chemical Corp's Urethane E Sunstar No. 435-580
Windshield knife or piano wire	For cutting windshield
Sealant gun	For applying adhesive
Suction cups	For holding glass
Putty knife	For finishing adhesion surface and cutting spacer
Sponge	For applying primer
Gauze or cloth	For cleaning
Alcohol or white gasoline	For cleaning adhesion surface
Tape	For preventing damage to painted surface

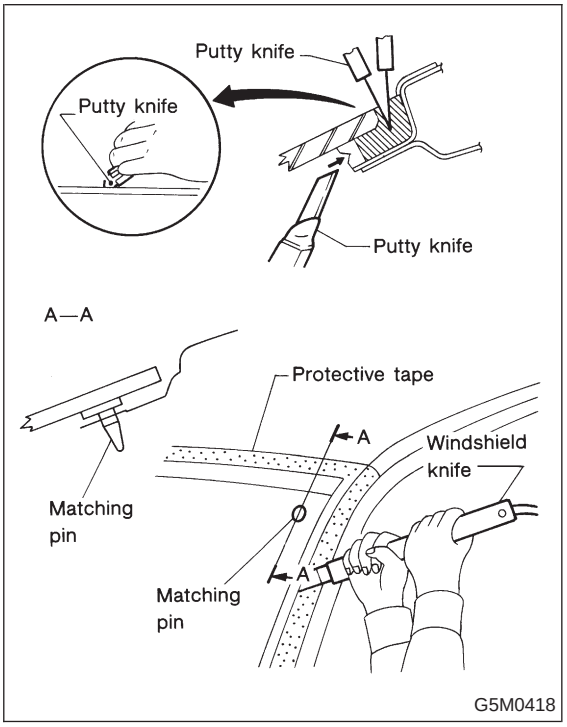
5. Windshield

A: REMOVAL

1. USING WINDSHIELD KNIFE

The following procedure for the front windshield can also be applied to other window glass.
1) Remove wiper arm and cowl panel.
2) Remove roof molding and front window molding upper.
3) Remove glass:
   (1) Put protective tape on body to prevent damage.
   (2) Apply soapy water to the surface of the adhesive agent so the knife blade slides smoothly.
   (3) Cut off excess adhesive agent.
   (4) Put windshield knife into layer of adhesive.
   (5) Cut adhesive layer with the windshield knife.

CAUTION:
● Keep knife edge along glass surface and end face.
● When first putting knife into layer of adhesive, select point with wide gap between body and glass.



1. MATERIALS REQUIRED FOR APPLICATION

Description	Remarks
Repair adhesive set ● Cartridge of single-liquid urethane adhesive ● Primer for glass and body	Sunstar No. 580 or Essex Chemical Corp's Urethane E Sunstar No. 435-580
Windshield knife or piano wire	For cutting windshield
Sealant gun	For applying adhesive
Suction cups	For holding glass
Putty knife	For finishing adhesion surface and cutting spacer
Sponge	For applying primer
Gauze or cloth	For cleaning
Alcohol or white gasoline	For cleaning adhesion surface
Tape	For preventing damage to painted surface

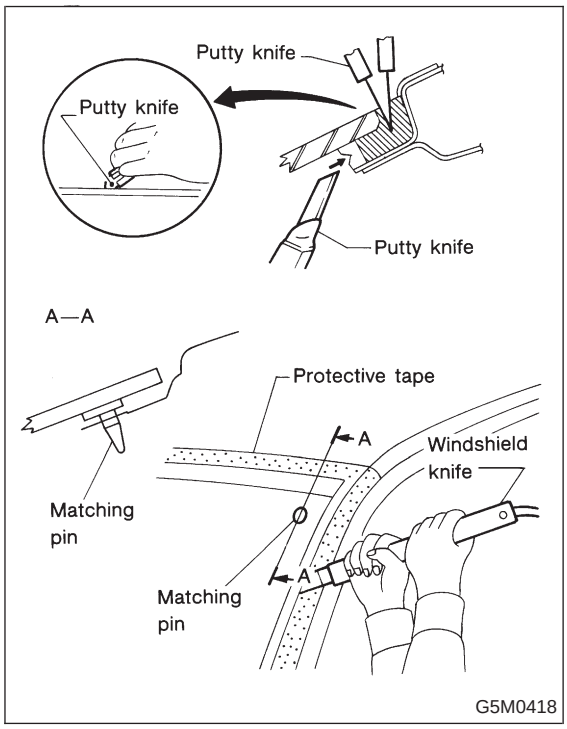
5. Windshield

A: REMOVAL

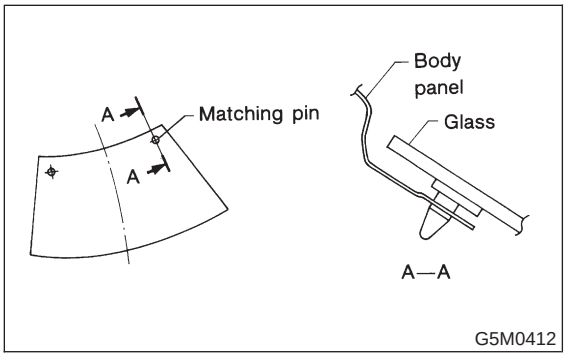
1. USING WINDSHIELD KNIFE

The following procedure for the front windshield can also be applied to other window glass.
1) Remove wiper arm and cowl panel.
2) Remove roof molding and front window molding upper.
3) Remove glass:
   (1) Put protective tape on body to prevent damage.
   (2) Apply soapy water to the surface of the adhesive agent so the knife blade slides smoothly.
   (3) Cut off excess adhesive agent.
   (4) Put windshield knife into layer of adhesive.
   (5) Cut adhesive layer with the windshield knife.

CAUTION:
● Keep knife edge along glass surface and end face.
● When first putting knife into layer of adhesive, select point with wide gap between body and glass.

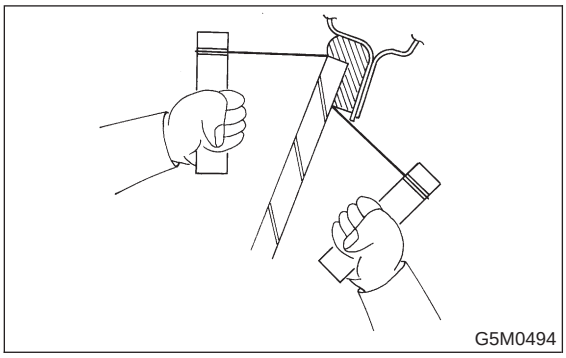


NOTE:
A matching pin is cemented to corners of glass on compartment side. Use a piano wire when cutting each pin.



2. USING PIANO WIRE

1) Remove wiper arm and cowl panel.
2) Remove roof molding and front window molding upper.
3) Remove glass:
   (1) Put protective tape on body to prevent damage.
   (2) Using drill or putty knife, make through-hole (one place) in adhesive agent.
   (3) Pass piano wire through the hole from inside the compartment, and connect both ends of wire securely to wooden blocks.



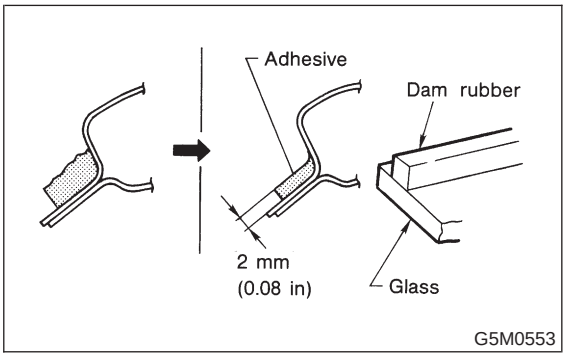
   (4) Cut adhesive layer with the wire by pulling it back and forth.

CAUTION:
When making through-hole into adhesive layer and cutting the adhesive, be careful not to damage interior and exterior parts.

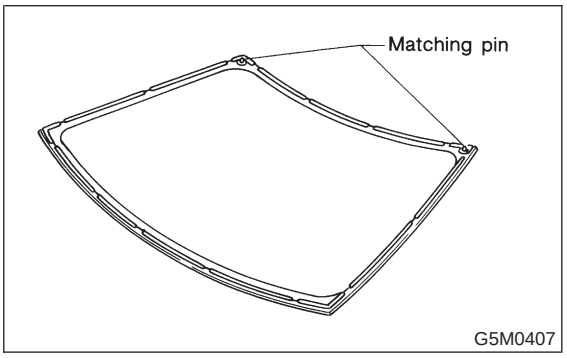
B: INSTALLATION

1) After cutting layer of adhesive, remove gum rubber remaining on body.
2) Finishing adhesion surface on body side: Using a cutter knife etc., cut layer of adhesive sticking firmly to body, and finish it to a smooth surface of about 2 mm (0.08 in) in thickness.

CAUTION:
Take extra care not to cause damage to body paint.



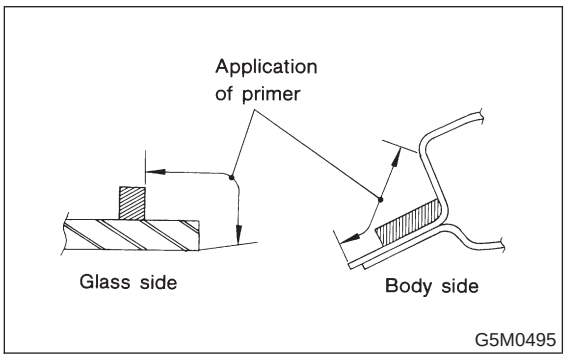
3) Cleaning body surface:
   (1) Thoroughly remove chips, dirt and dust from body surface.
   (2) Clean body wall surface and upper surface of layer of adhesive with a solvent such as alcohol or white gasoline.
4) Positioning glass:
   (1) Mount glass on body.
   (2) Adjust position of glass so that gap between body and glass is uniform on all sides.
   (3) Put matching pin on body and glass in several places.



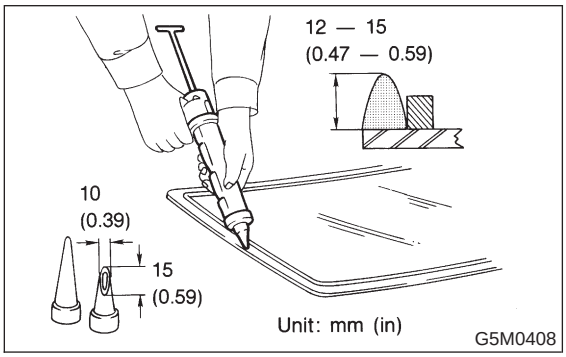
5) Cleaning glass:
   (1) Dismount glass from body.
   (2) Clean surface of glass to be adhered with alcohol or white gasoline.

6) Application of primer:
(1) Using a sponge, apply primer to part of glass to be adhered.
(2) Apply primer to part of body to be adhered.

CAUTION:
● Primer is hard to wipe off of body paint, instrument panel, inner trim, etc. So put masking around these areas for protection.
● After application, let 1st primer dry spontaneously for about 10 minutes.
● Do not touch primer-coated surface under any circumstances.

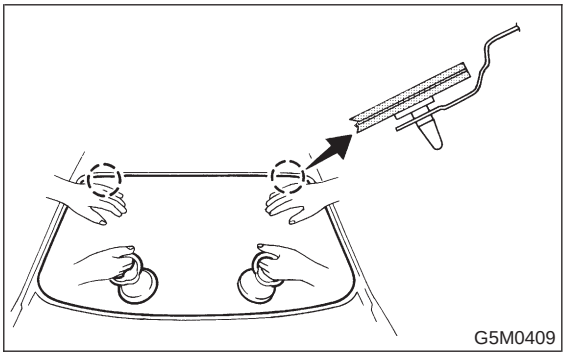


7) Application of adhesive:
(1) Cut nozzle tip of cartridge as shown in figure.



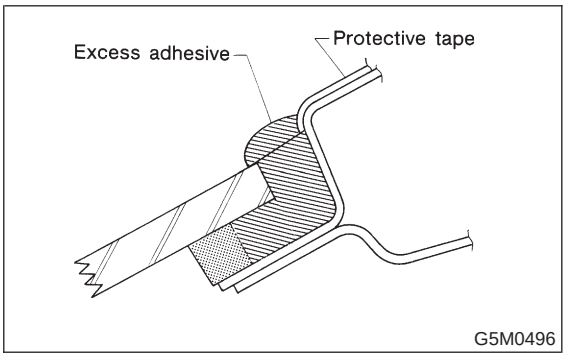
(2) Open cartridge and put it into a gun with nozzle attached.
(3) Apply adhesive uniformly to all sides of adhesion surface while operating gun along glass end face.

8) Installation of glass:
(1) Hold glass with rubber suction cups.
(2) Mount glass on body with matching pin aligned.



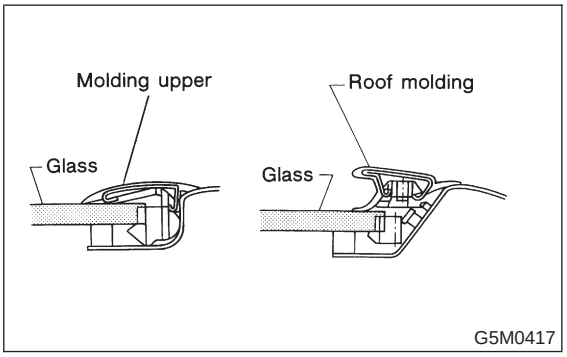
(3) Stick them fast by pressing all sides lightly.

9) Installation of molding:
(1) Remove adhesive overflowing from outside of glass until it becomes level with outer height of glass. Then, add adhesive to portions that need it, and clean with alcohol or white gasoline.



(2) Firstly, press-fit front window molding upper and lastly, roof molding.

CAUTION:
Do not open and close door after moldings have been installed. When opening and closing door for unavoidable reason, lower door glass and gently move door.



10) Water leakage test:
Test for water leakage about one hour after installation.

CAUTION:
- **Move vehicle very gently.**
- **Do not squirt strong hose stream on vehicle.**

11) Spontaneous drying:
After completing all operations, leave vehicle alone for 24 hours.

CAUTION:
When delivering vehicle to user, tell him that vehicle should not be subjected to heavy shocks for at least three days.

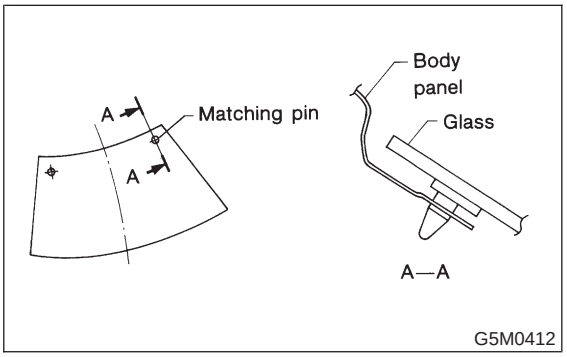
12) Install cowl panel and wiper arm.

6. Rear Gate Glass

A: REMOVAL

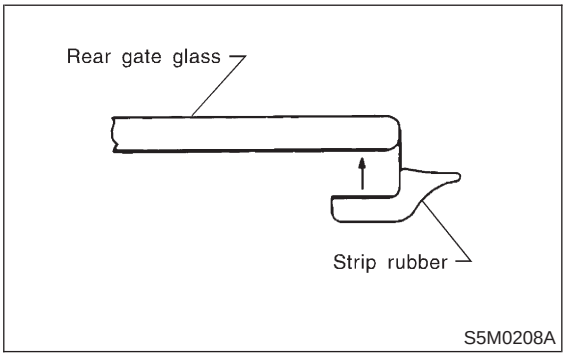
1) Remove rear wiper and rear gate trim.
2) Disconnect connector from rear defogger terminal.
3) Remove glass in same manner as for windshield.

NOTE:
A matching pin is cemented to corners of glass on compartment side. Use a piano wire when cutting each pin.



B: INSTALLATION

1) Install a new rubber strip by aligning it with the end of the gate glass.



CAUTION:
- **Move vehicle very gently.**
- **Do not squirt strong hose stream on vehicle.**

11) Spontaneous drying:
After completing all operations, leave vehicle alone for 24 hours.

CAUTION:
When delivering vehicle to user, tell him that vehicle should not be subjected to heavy shocks for at least three days.

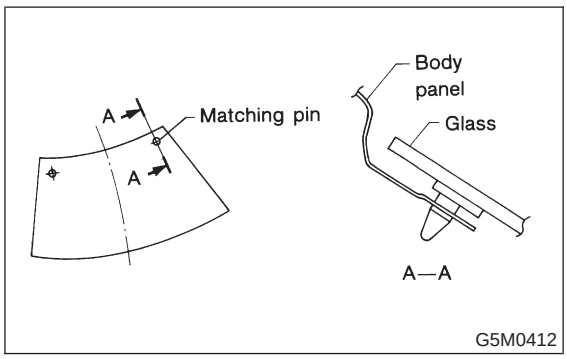
12) Install cowl panel and wiper arm.

6. Rear Gate Glass

A: REMOVAL

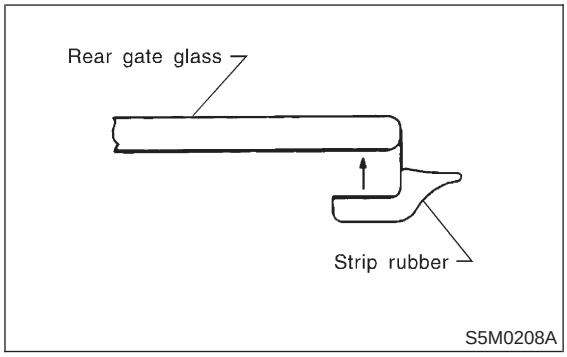
1) Remove rear wiper and rear gate trim.
2) Disconnect connector from rear defogger terminal.
3) Remove glass in same manner as for windshield.

NOTE:
A matching pin is cemented to corners of glass on compartment side. Use a piano wire when cutting each pin.

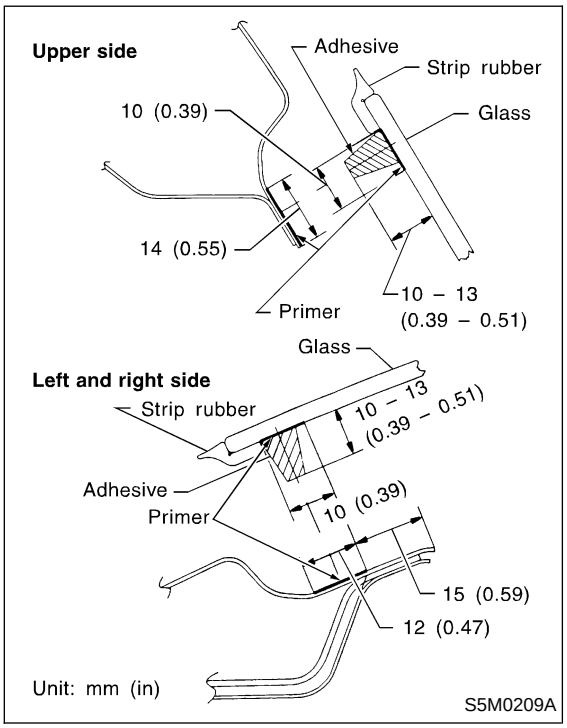


B: INSTALLATION

1) Install a new rubber strip by aligning it with the end of the gate glass.



2) Install glass in same manner as windshield.

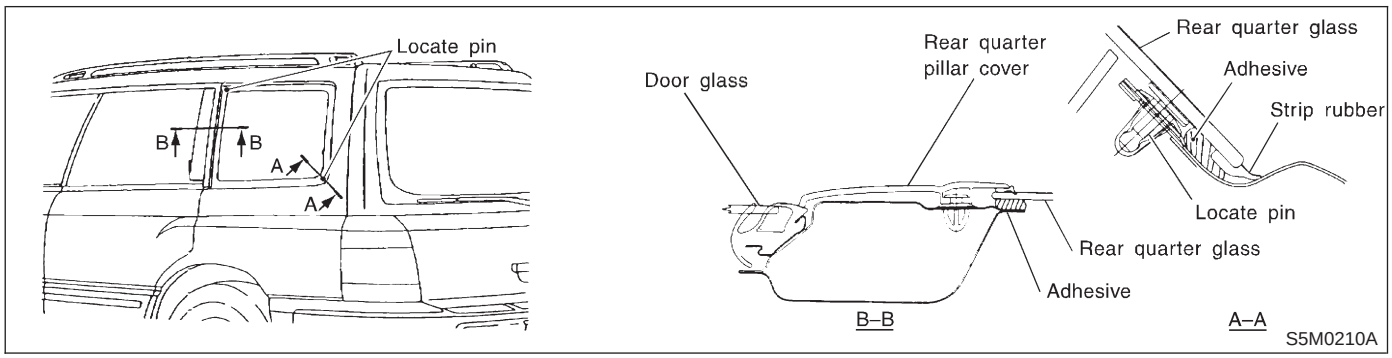


3) About one hour after installation, test for water leakage. Leave vehicle for 24 hours before using it.
4) Connect rear defogger connections.
5) Install rear gate trim and rear wiper.

7. Rear Quarter Glass

A: REMOVAL

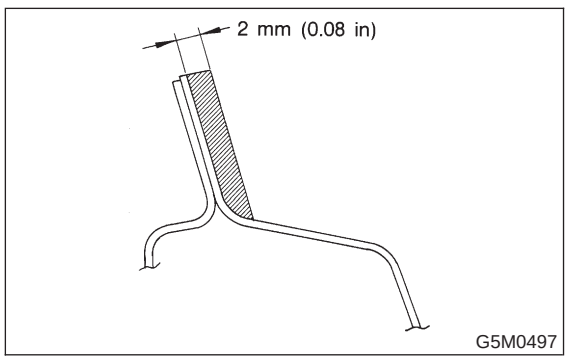
1) Remove rear quarter molding on corner.
2) Remove glass in same manner as in windshield.



B: INSTALLATION

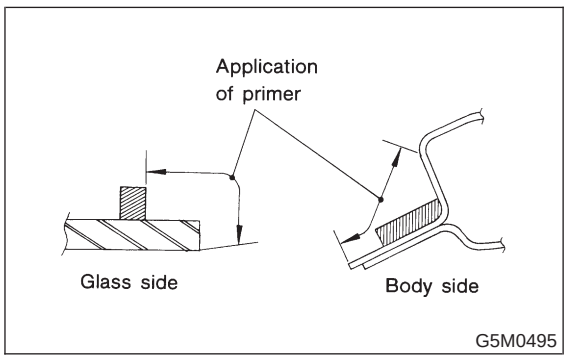
1) Finish surface of adhesive layer on body: Using a putty knife, etc., cut layer of adhesive stick firmly to body and finish it into a smooth surface of about 2 mm (0.08 in) in thickness.

CAUTION:
Be careful not to damage body finish.

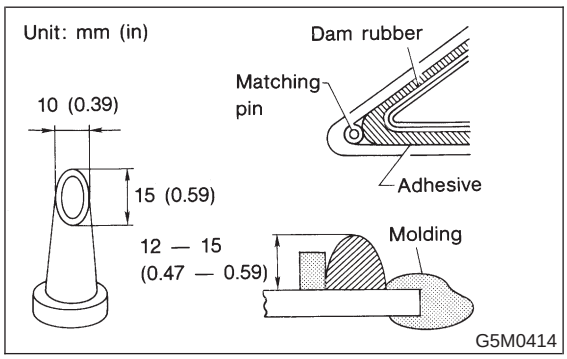


2) Cleaning of body surface:
   (1) Remove chips, dirt and dust from body surface.
   (2) Clean body wall surface and upper surface of adhesive layer with a solvent such as alcohol or white gasoline.
3) Cleaning glass:
   (1) Remove dirt and dust from surface of glass to be adhered.
   (2) Clean surface of glass to be adhered with alcohol or white gasoline.
4) Application of primer:
   (1) Using a sponge, apply primer to surface of glass to be adhered.
   (2) Apply primer to surface of body to be adhered.

CAUTION:
● If primer has dropped on body finish, it is hard to wipe it off. So protect with masking.
● Primer must not project from black frame of glass.
● After applying primer, let it dry spontaneously for about 10 minutes.

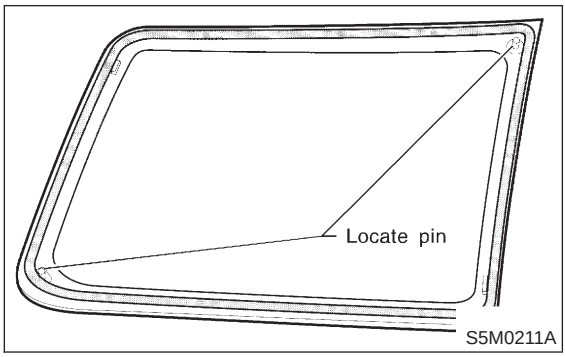


5) Application of adhesive:
   (1) Cut nozzle tip as shown in figure.



(2) Open cartridge and put it into a gun with nozzle attached.
(3) Apply adhesive uniformly to all sides of adhesion surface while operating gun along glass end face.

6) Installation of glass:
(1) Hold glass with rubber suction cups.
(2) Mount glass on body with locate pin aligned.



(3) Stick them fast by pressing all sides lightly.

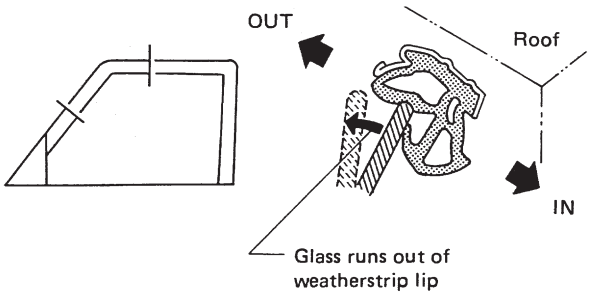
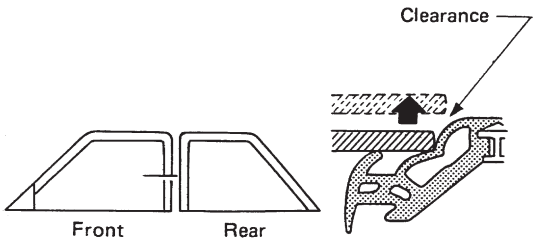
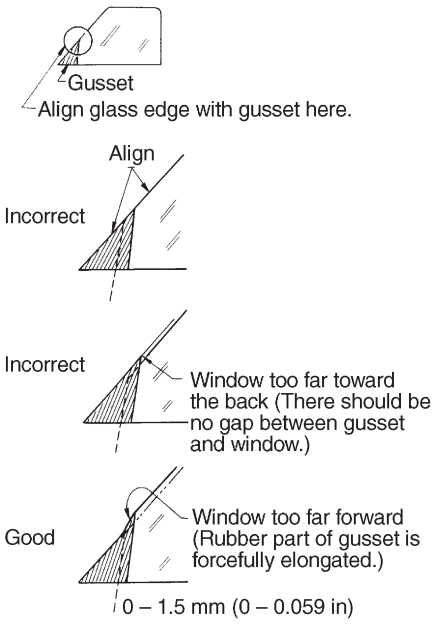
7) Water leakage test:
After installing glass, test for water leakage after about one hour.

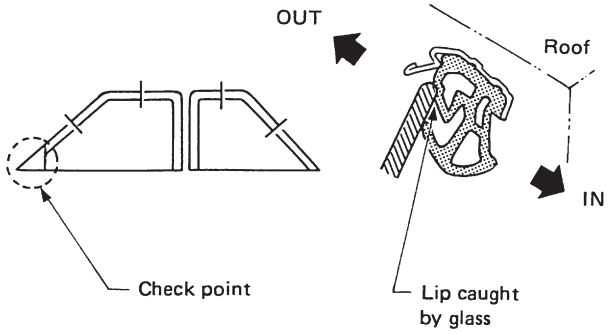
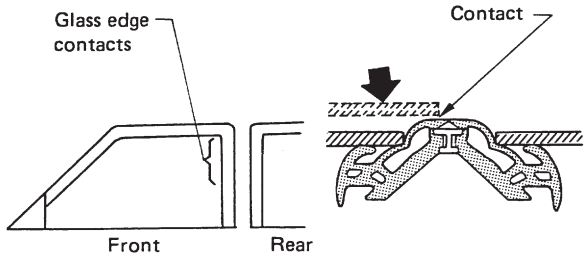
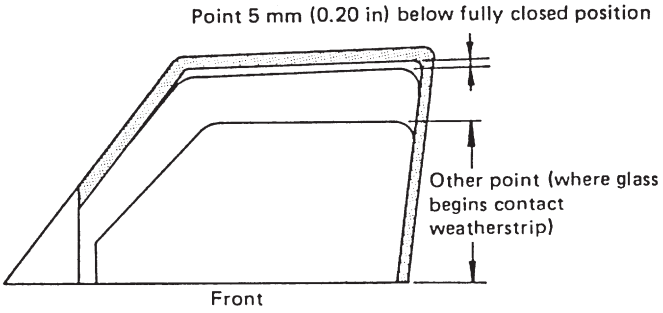
CAUTION:
- **Move vehicle slowly.**
- **When opening and closing door, lower door glass and move door gently.**
- **Do not squirt strong hose stream on vehicle.**

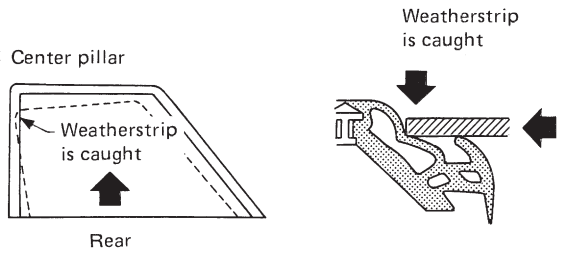
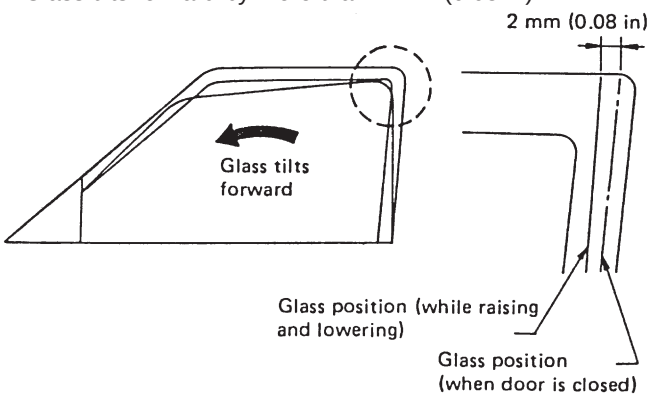
8) Spontaneous drying:
After completing all operations, leave vehicle alone for 24 hours.

CAUTION:
When delivering vehicle to user, tell him or her that vehicle should not be subjected to heavy shocks for at least three days.

1. Door Glass

	Condition	Apparent cause/Correction
Glass in fully closed position	1) Glass runs out of weatherstrip lip when considerable hand pressure is applied to it from inside.  G5M0502 (This condition may cause wind/booming noise during high-speed operation.)	● Insufficient upward travel of glass Increase upward travel of glass.
	2) Clearance exists between glass and weatherstrip when light hand pressure is applied to it at center and rear pillar locations.  G5M0503 (This condition may cause wind noise and/or water leakage.)	● Insufficient glass-to-door weatherstrip contact Check stabilizer and glass for proper contact. Increase contact using upper sash adjustment bolt. ● Insufficient glass-to-door weatherstrip contact Check stabilizer and glass for proper contact. Increase contact using upper sash adjustment bolt.
	3) Adjust door glass so that it is aligned with door rearview mirror gusset.  H5M0672A	● Window is not properly adjusted in up-down/fore-aft direction. Adjust window. If necessary, move “B” channel for regulator to eliminate window “tilt”. ● Gusset is not properly adjusted in fore-aft direction. Adjust gusset after loosing all bolts and nuts witch tightening it.

	Condition	Apparent cause/Correction
Door in fully closed/ open position	1) Glass rides over weatherstrip lip when door is closed.  G5M0505 (This condition increases wind/booming noise, leakage and/or effort required to close door.)	● Improper up-down and in-out glass alignments Adjust glass for up-down and in-out alignments (incl. rear sash, upper stopper adjustment, etc.). If necessary, correct glass tilt by moving regulator “B” channel.
	2) Edge of glass contacts retainer when door is fully closed.  G5M0506	● Improper glass-to-center pillar weatherstrip or excessive glass contact to weatherstrip Excessive adjusting in contact to weatherstrip causes rear edge of glass to tilt inboard closer to center pillar. Adjust rear sash adjustment bolt to reduce glass contact to weatherstrip.
Raise or lower window glass	1) Considerable effort or time is required to operate regulator. Standard operating effort: ● Entire up-down travel except for point 5 mm (0.20 in) below fully closed position: 29.4 N (3.0 kg, 6.6 lb) ● Point 5 mm (0.20 in) below fully closed position: 45.0 N (4.5 kg, 10.12 lb)  G5M0507	● Sliding resistance increased due to high stabilizer-to-glass contact pressure Reduce contact by mounting inner stabilizer to inside of the car. ● High glass-to-windshield contact pressure Reduce contact using upper sash adjustment bolt. ● Unequal contact adjustment stroke between front and rear sashes Set to equal stroke. ● Tilt of rear sash adjustment bolt mounting bracket Correct tilt of bracket so it is parallel to inner panel.

	Condition	Apparent cause/Correction
Raise or lower window glass	2) Center pillar weatherstrip is caught by rear window glass when glass is raised.  G5M0508	● Improper fore-aft or in-out alignment of window glass Lower regulator “B” channel to tilt window glass back.
	3) Glass tilts forward by more than 2 mm (0.08 in).  G5M0509 (Excessive tilt of glass forward is due to excessive glass “contact” which causes reaction of center pillar weatherstrip.) Glass can be tilted forward due to increase in reaction of shoulder weatherstrip or free play between sash and roller. Taking these symptoms into account, glass should be aligned.	● Excessive glass contact pressure or improper in-out alignment 1) Lower regulator “B” channel to tilt glass rearward. 2) Reduce contact pressure using upper sash adjustment bolt.

2. Door Lock System

No.	Trouble	Possible cause	Remedy
1	Door cannot be opened by outer handle. (Door can be opened by inner handle.)	Disconnect outer handle rod.	Connect firmly.
2	Door cannot be opened by inner handle. (Door can be opened by outer handle.)	a. Joint of upper rod is disconnected. b. Rear door child lock lever is set to lock side.	Connect firmly. Functionally normal.
3	Door does not open when outer or inner handle is operated with inner lock knob set to unlock position.	a. Joint of lower rod is disconnected. b. Lock is not released due to improper adjustment of lower rod.	Connect firmly. Remove rod from latch. Adjust rod so that lock knob is set in “lock” position is locked.
4	Door opens even when inner lock knob is set to lock position. (Keyless locking is impossible.)	a. Lower rod joint is separated. b. Door is not locked due to improperly adjusted lower rod.	Same as a in No. 3. Same as a in No. 3.
5	Child lock lever will not come up.	a. Inner handle fails to return completely. b. Joint of upper rod is disconnected.	Refer to No. 6.
6	Inner handle stops halfway.	Contact of upper rod with inner handle mounting case.	Eliminate contact by bending upper rod properly.
7	Door cannot be locked or unlocked by key.	Joint of key lock rod is disconnected.	Connect firmly.
8	Auto door-lock switch does not act when inner lock knob is pushed.	Auto door-lock switch does not act due to improperly adjusted lower rod.	Same as a in No. 3.

3. Power Window

	Symptom			
	All windows do not move.	The window of driver side does not move.	The window of driver side does not move “AUTO” down.	The window of each passenger sides does not move.
Battery	(1)			
Fuse in fuse box	(2)			
Circuit breaker and relay	(3)			
Main switch	(4)	(1)	(1)	(1)
Sub switch of each passenger sides				(2)
Motor of driver side		(2)	(2)	
Motor of each passenger sides				(3)
Regulator assembly of each windows				(4)
Power supply line of main switch	(5)	(3)	(3)	
Ground line	(6)			
Haness and connector	(7)	(4)	(4)	(5)
( ): Figures in a parenthesis refer to diagnostics procedures.				

2. Door Lock System

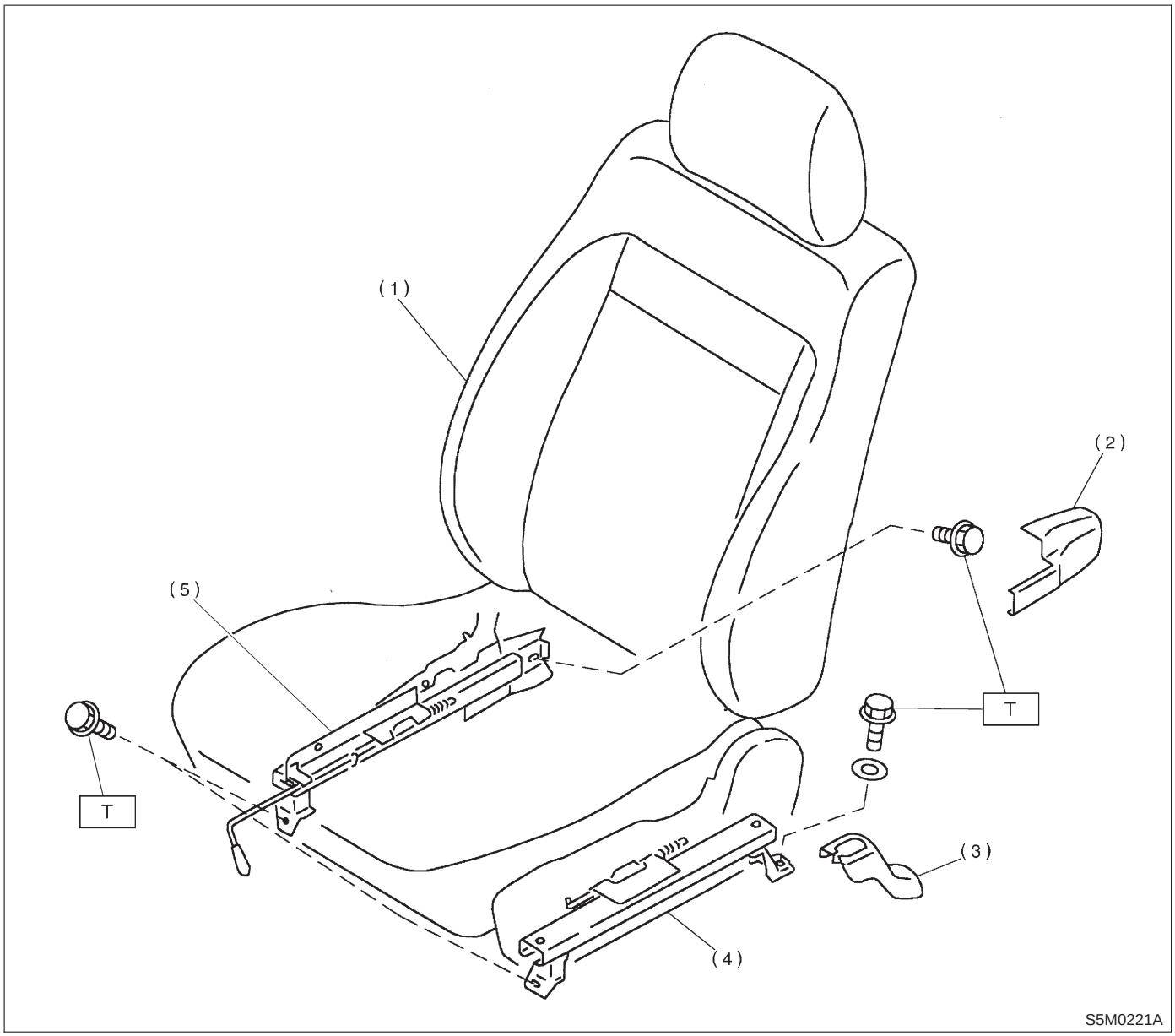
No.	Trouble	Possible cause	Remedy
1	Door cannot be opened by outer handle. (Door can be opened by inner handle.)	Disconnect outer handle rod.	Connect firmly.
2	Door cannot be opened by inner handle. (Door can be opened by outer handle.)	a. Joint of upper rod is disconnected. b. Rear door child lock lever is set to lock side.	Connect firmly. Functionally normal.
3	Door does not open when outer or inner handle is operated with inner lock knob set to unlock position.	a. Joint of lower rod is disconnected. b. Lock is not released due to improper adjustment of lower rod.	Connect firmly. Remove rod from latch. Adjust rod so that lock knob is set in “lock” position is locked.
4	Door opens even when inner lock knob is set to lock position. (Keyless locking is impossible.)	a. Lower rod joint is separated. b. Door is not locked due to improperly adjusted lower rod.	Same as a in No. 3. Same as a in No. 3.
5	Child lock lever will not come up.	a. Inner handle fails to return completely. b. Joint of upper rod is disconnected.	Refer to No. 6.
6	Inner handle stops halfway.	Contact of upper rod with inner handle mounting case.	Eliminate contact by bending upper rod properly.
7	Door cannot be locked or unlocked by key.	Joint of key lock rod is disconnected.	Connect firmly.
8	Auto door-lock switch does not act when inner lock knob is pushed.	Auto door-lock switch does not act due to improperly adjusted lower rod.	Same as a in No. 3.

3. Power Window

	Symptom			
	All windows do not move.	The window of driver side does not move.	The window of driver side does not move “AUTO” down.	The window of each passenger sides does not move.
Battery	(1)			
Fuse in fuse box	(2)			
Circuit breaker and relay	(3)			
Main switch	(4)	(1)	(1)	(1)
Sub switch of each passenger sides				(2)
Motor of driver side		(2)	(2)	
Motor of each passenger sides				(3)
Regulator assembly of each windows				(4)
Power supply line of main switch	(5)	(3)	(3)	
Ground line	(6)			
Haness and connector	(7)	(4)	(4)	(5)
( ): Figures in a parenthesis refer to diagnostics procedures.				

MEMO:

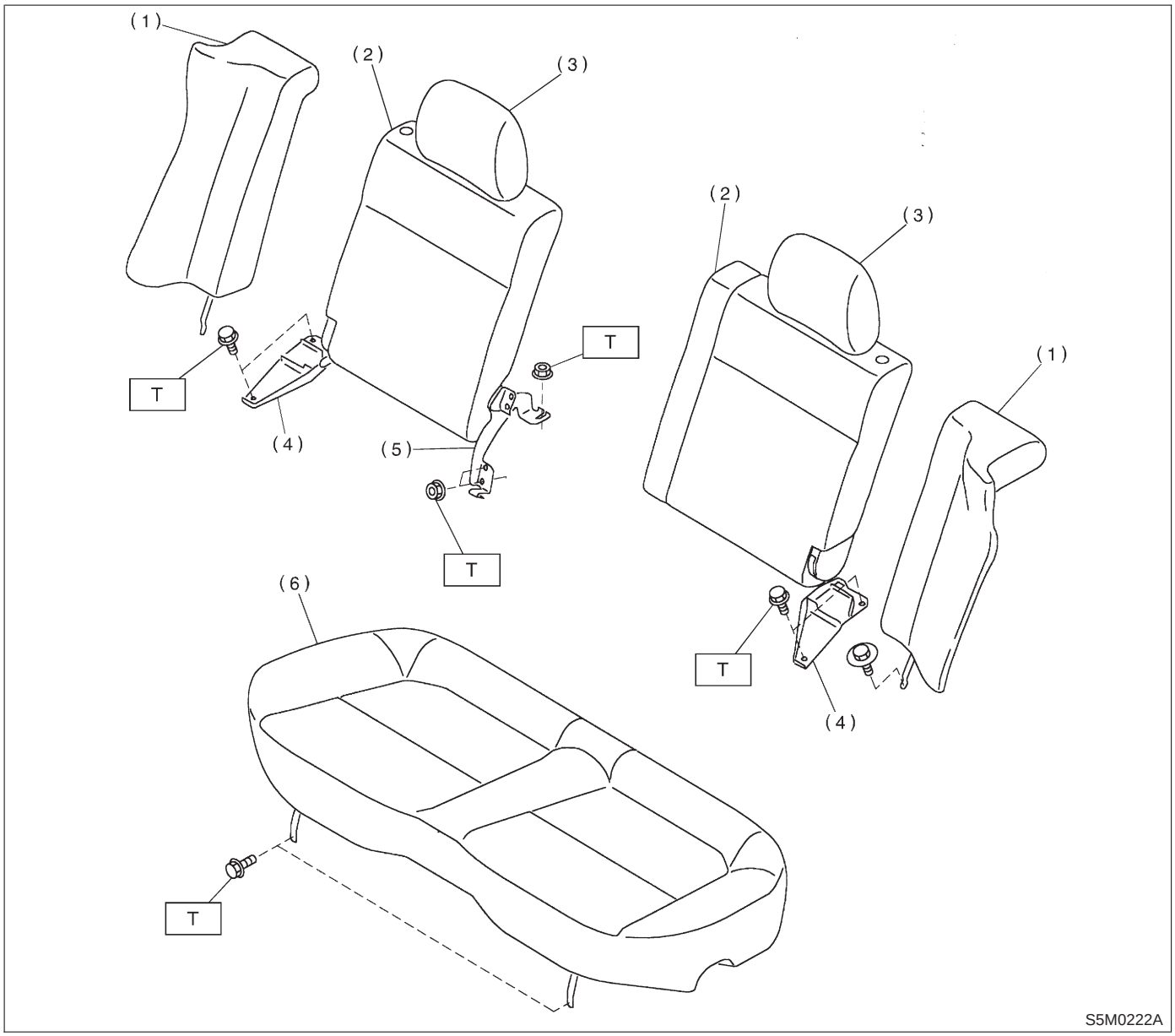
1. Front Seat



(1) Front seat ASSY
(2) Rail cover RH
(3) Rail cover LH
(4) Slide rail LH
(5) Slide rail RH

Tightening torque: N·m (kg-m, ft-lb)
T: 52±10 (5.3±1.0, 38±7)

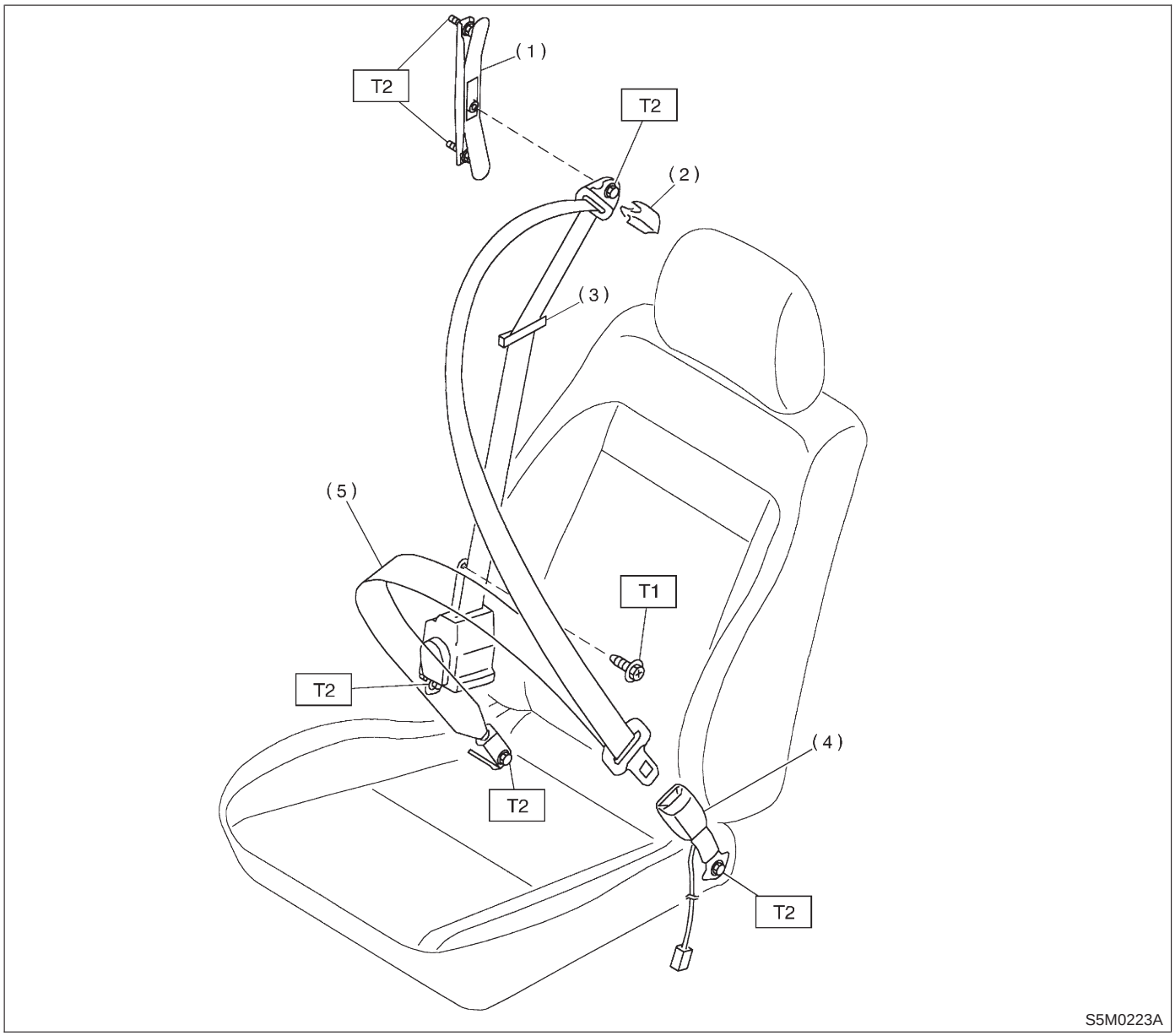
2. Rear Seat



(1) Side pad
(2) Backrest
(3) Pillow
(4) Side hinge
(5) Center hinge
(6) Cushion

Tightening torque: N·m (kg-m, ft-lb)
T: 25±7 (2.5±0.7, 18.1±5.1)

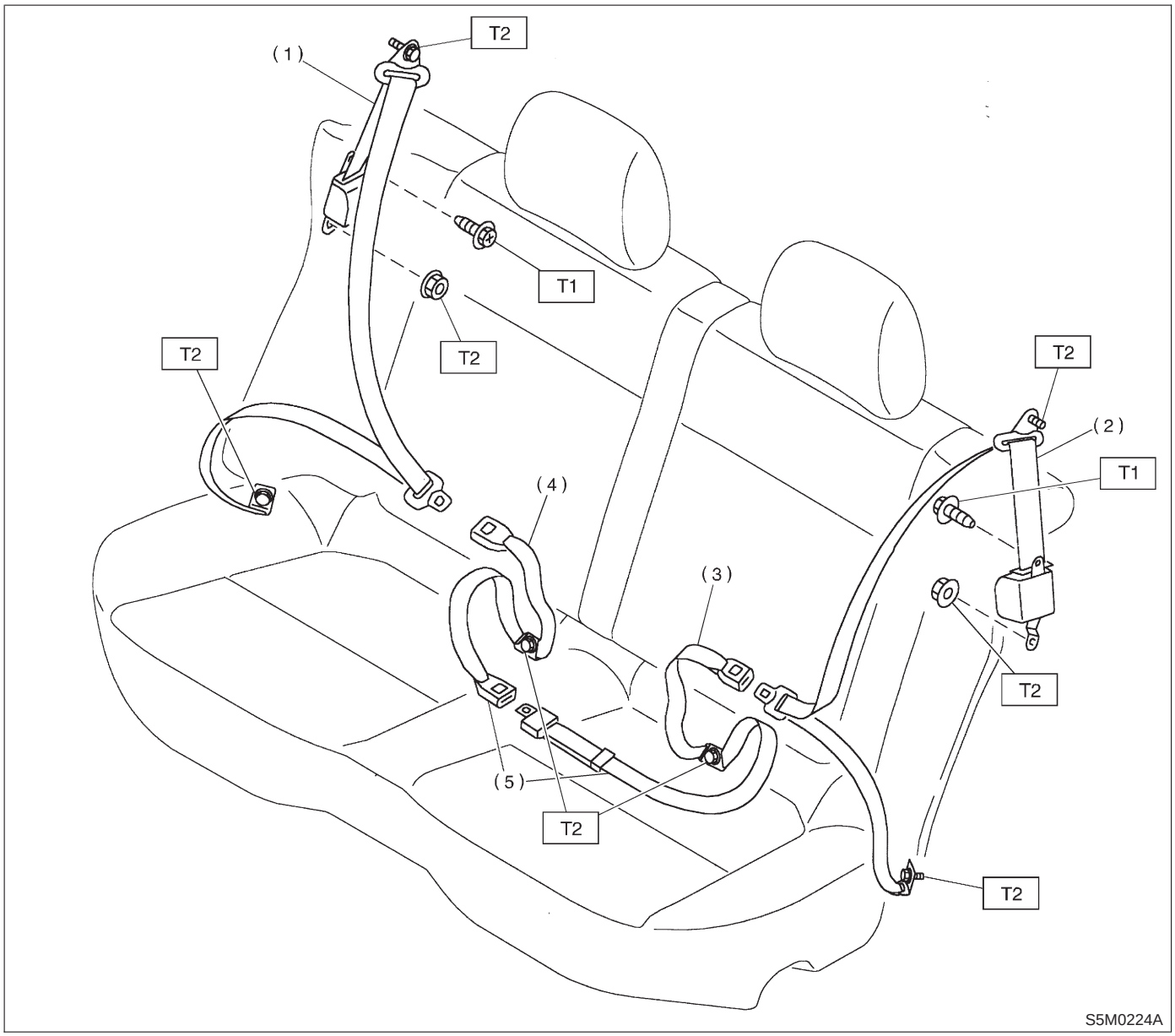
3. Front Seat Belt



(1) Adjuster anchor ASSY
(2) Anchor cover
(3) Webbing guide
(4) Inner belt ASSY
(5) Outer belt ASSY

Tightening torque: N·m (kg-m, ft-lb)
T1: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T2: 29^{+20}_{-7} ($3.0^{+2.0}_{-0.7}$, $21.7^{+14.5}_{-5.1}$)

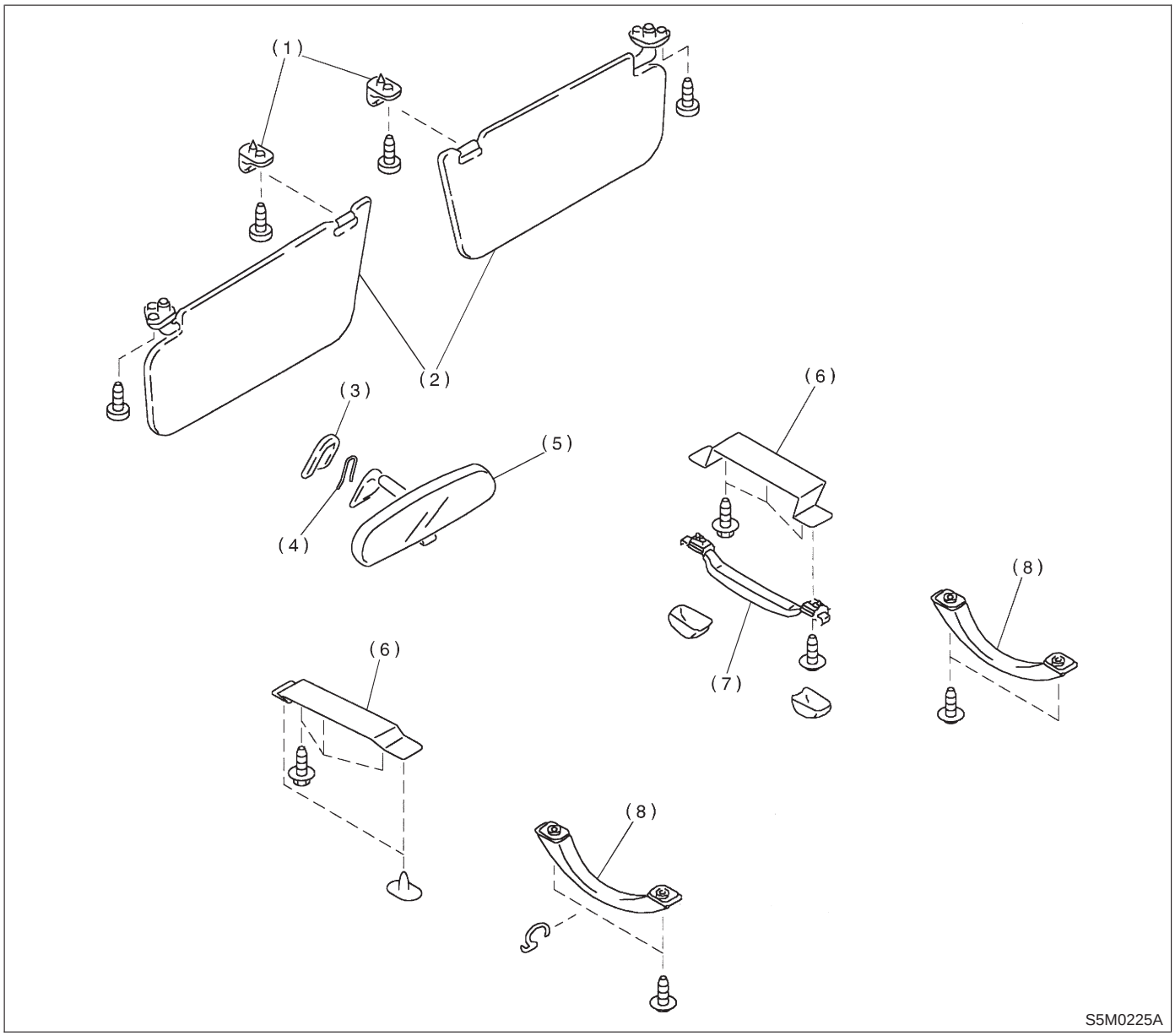
4. Rear Seat Belt



(1) Outer seat belt RH
(2) Outer seat belt LH
(3) Inner seat belt LH
(4) Inner seat belt RH
(5) Center seat belt

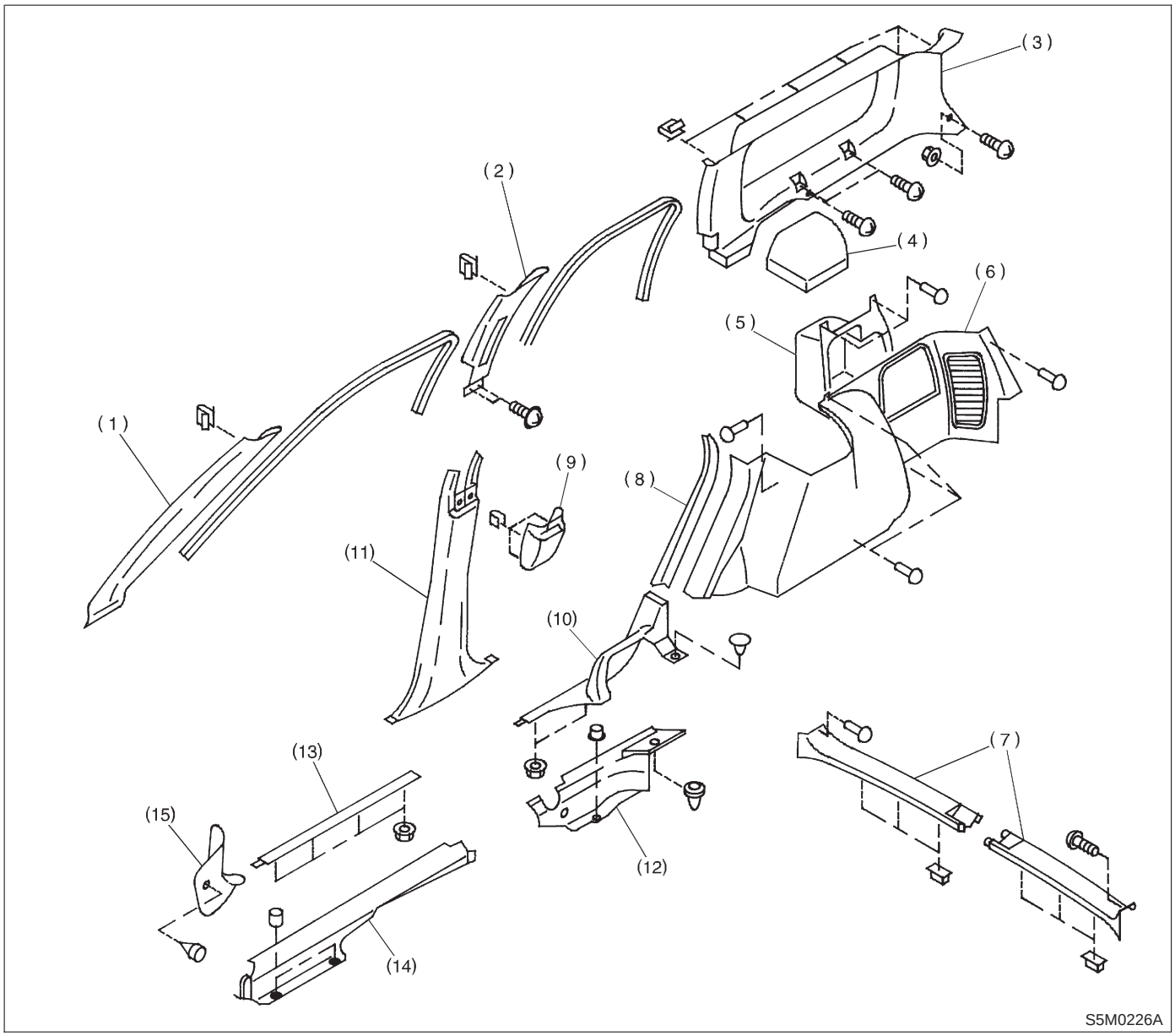
Tightening torque: N·m (kg-m, ft-lb)
T1: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T2: 29^{+20}_{-7} ($3.0^{+2.0}_{-0.7}$, $21.7^{+14.5}_{-5.1}$)

5. Inner Accessories



(1) Hook
(2) Sun visor
(3) Mount
(4) Spring
(5) Rearview mirror
(6) Assist rail bracket
(7) Assist grip (retractable)
(8) Assist grip (fixed)

6. Inner Trim

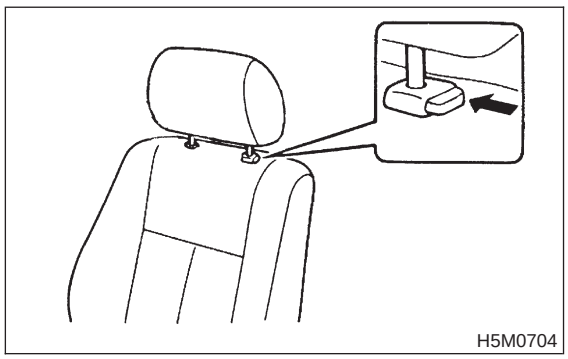


(1) Front pillar upper trim
(2) Center pillar upper trim
(3) Rear quarter upper trim
(4) Cover
(5) Pocket
(6) Rear quarter lower trim
(7) Rear skirt trim
(8) Rear pillar lower trim
(9) Center pillar cover
(10) Side sill rear upper cover
(11) Center pillar lower trim
(12) Side sill rear lower cover
(13) Side sill front upper cover
(14) Side sill front lower cover
(15) Front pillar lower trim

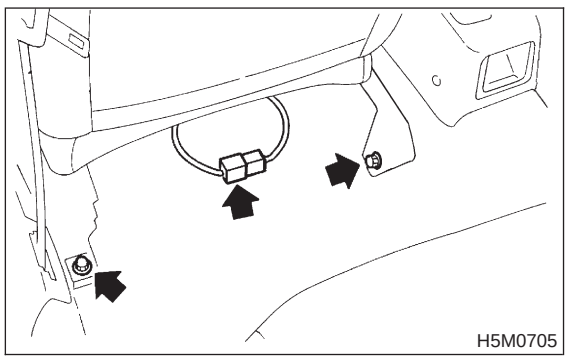
1. Front Seat

A: REMOVAL

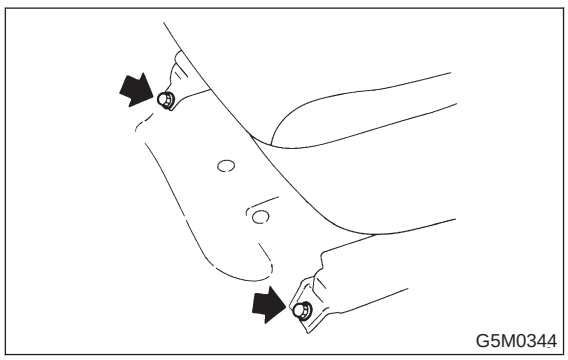
1) While operating button (located on top of backrest), lift headrest out with hand placed between backrest and headrest.



2) Pull reclining lever back to fold backrest all the way forward. While pulling slide adjuster lever, move seat all the way forward.
3) Disconnect connector under driver's seat.
4) Remove bolt cover at rear end of slide rail.
5) Remove bolts securing seat rear.



6) While pulling slide adjuster lever, slide seat all the way back.
7) Remove bolts securing front of seat.

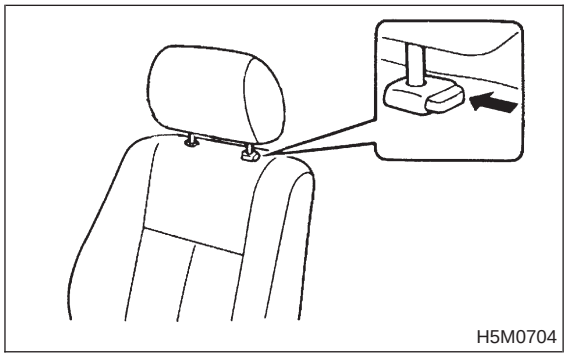


8) Remove front seat from vehicle.

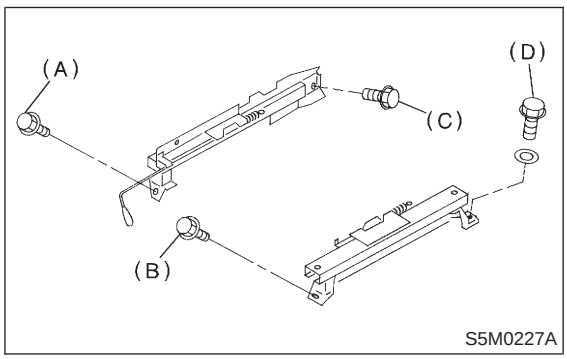
CAUTION:
Be careful not to scratch seat when removing it from vehicle.

B: INSTALLATION

1) While operating button (located on top of backrest), lift headrest out by placing your hand between backrest and headrest.



2) Pull reclining lever back to fold backrest all the way forward. Pull slide adjuster lever and move lower slide rail all the way backward.
3) Position seat in compartment and align the holes on the seat with the holes on the car body side.
4) Secure the front of seat using inward and outward bolts (A) and (B) in that order.
5) While pulling slide adjuster lever, move seat all the way forward.
6) Secure the rear of seat using inward and outward bolts (C) and (D).



7) Connect connector under driver's seat.

CAUTION:
Check that all lock plate pawls are completely and equally inserted into the holes in the slide rail brackets.

8) After installation, ensure that all mechanisms operate properly and lock.
9) If any mechanism does not function properly, loosen bolts (C) and (D), slide seat as required, insert all lock plate pawls into holes in slide rail brackets, and tighten bolts (C) and (D) in that order.
10) Install bolt cover on rear end of slide rail.
11) Install headrest on backrest.

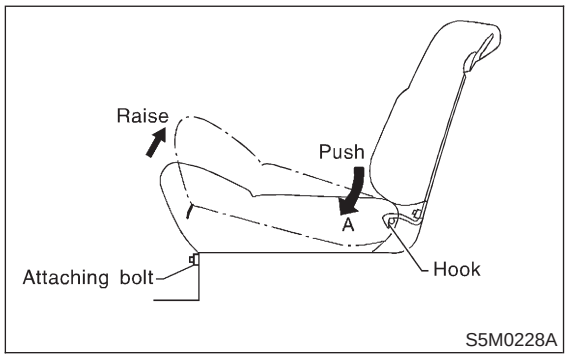
NOTE:
Tighten bolts in the designated order.

2. Rear Seat

A: REMOVAL AND INSTALLATION

1. CUSHION

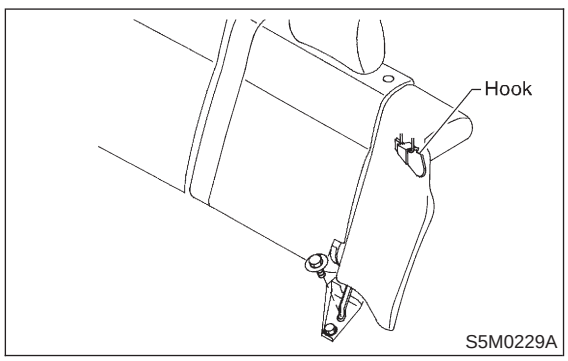
1) Remove bolts securing hinges (located at front of cushion) to body.
2) Slightly raise front of cushion while pushing down on cushion in the direction of “A”. With cushion held in that position, move it forward until it is unhooked.



3) Installation is in the reverse order of removal.

2. SIDE PAD

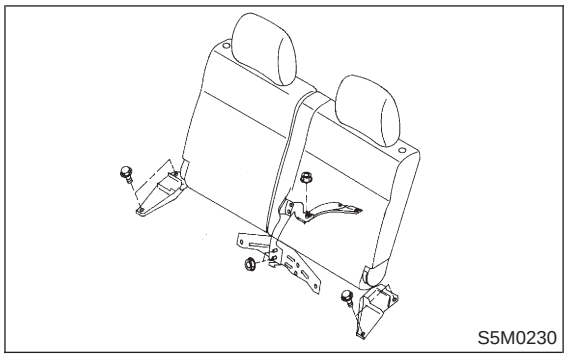
1) Remove cushion.
2) Remove bolt and then release hook.
3) Detach side pad.



4) Installation is in the reverse order of removal.

3. BACKREST

1) Remove cushion.
2) Remove side pad.
3) Remove bolts and nuts.
4) Detach backrest.



5) Installation is in the reverse order of removal.

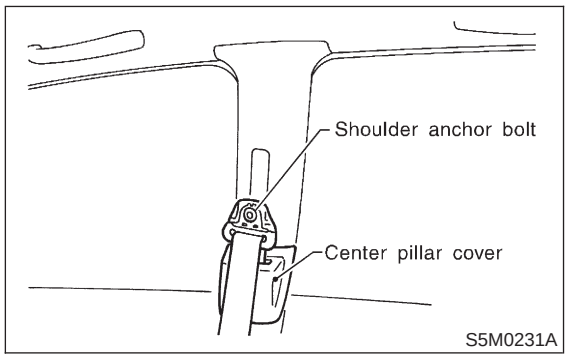
CAUTION:
● Before installing seat, ensure that seat belt is placed on cushion.
● Confirm that winding of three-point type seat belt can operate regularly.

3. Front Seat Belt

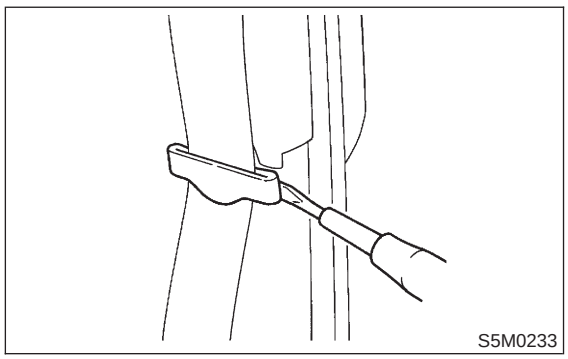
A: REMOVAL AND INSTALLATION

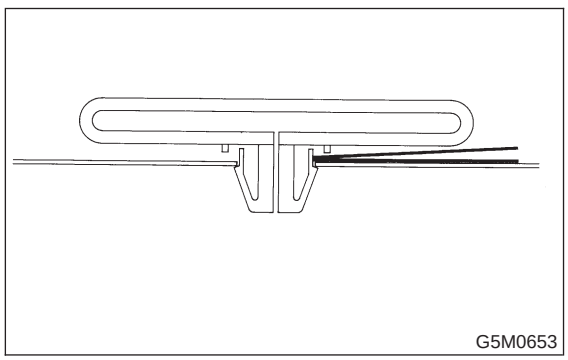
1. OUTER BELT

1) Remove anchor cover.
2) Remove shoulder anchor bolt.
3) Remove center pillar cover.

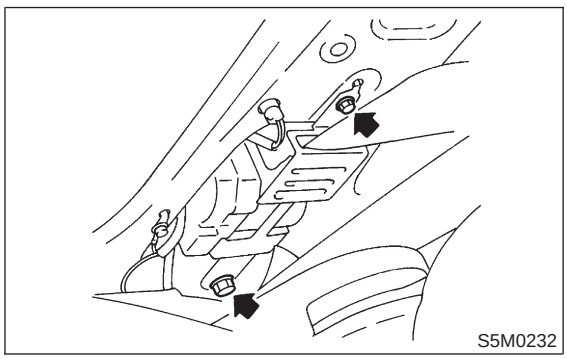


4) Remove center lower pillar trim panel.
5) Remove webbing guide.





6) Remove lap anchor bolt.
7) Remove belt retractor and outer belt.

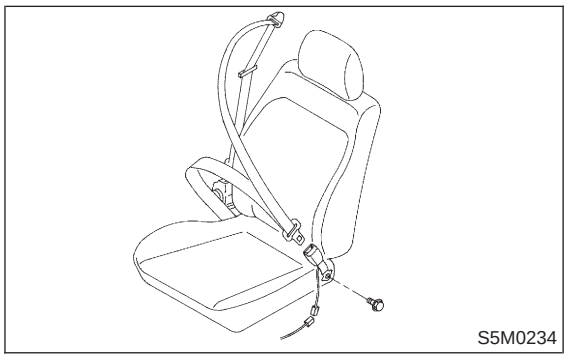


8) Installation is in the reverse order of removal.

CAUTION:
● The left and right ELR's are not mutually interchangeable because different sensors are used.
● Be careful not to twist belts during installation.

2. INNER BELT

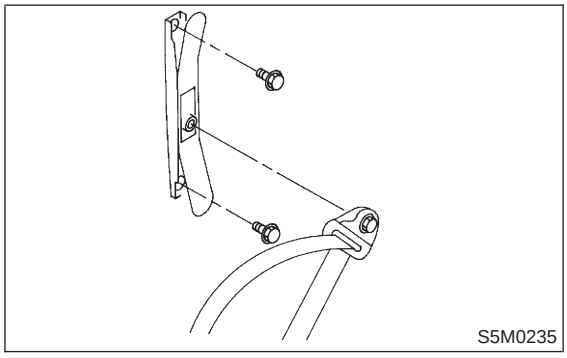
1) Disconnect connector.
2) Remove anchor bolt and then detach inner belt.



3) Installation is in the reverse order of removal.

3. ADJUSTABLE SHOULDER ANCHOR

1) Remove shoulder anchor bolt.
2) Remove center pillar cover.
3) Remove center pillar upper trim.
4) Remove adjustable shoulder anchor assembly.



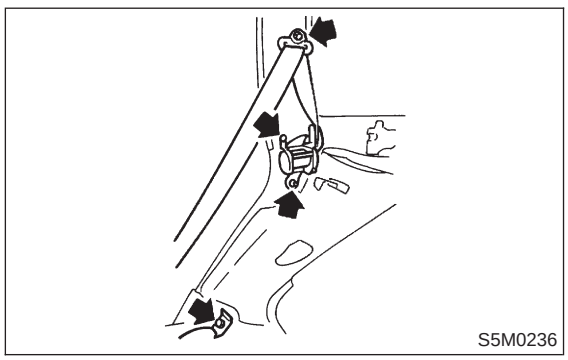
5) Installation is in the reverse order of removal.

4. Rear Seat Belt

A: REMOVAL AND INSTALLATION

1. OUTER BELT

1) Remove rear cushion and side pad.
2) Remove rear backrest.
3) Remove rear quarter upper trim and rear quarter lower trim.
4) Remove anchor bolts.
5) Remove bolt and nut and then detach outer belt assembly.


S5M0236

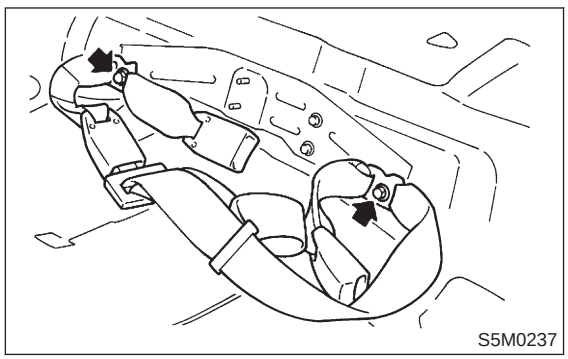
6) Installation is in the reverse order of removal.

NOTE:
Ensure that seat belt is properly reeled on and off after installation of ELR.

CAUTION:
● Be extremely careful not to confuse center seat anchor plate with outer seat anchor plate during installation.
● Ensure that seat belts are free from twisting after installation.
● Ensure that tongues, buckles and belts are properly placed on seat.

2. INNER BELT AND CENTER BELT

1) Remove rear cushion.
2) Remove bolts and then remove inner belt and center belt.


S5M0237

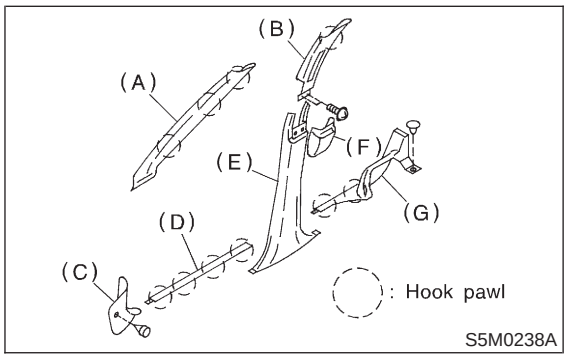
3) Installation is in the reverse order of removal.

5. Inner Trim Panel

A: REMOVAL AND INSTALLATION

1. FRONT SECTION

1) Removal order of trim panel:
(1) Remove front pillar upper trim (A).
(2) Remove front pillar lower trim (C).
(3) Remove side sill front upper cover (D).
(4) Remove rear seat cushion and then remove side sill rear upper cover (G).
(5) Remove center pillar cover (F).
(6) Remove screws and then remove center pillar upper trim (B).
(7) Remove center pillar lower trim (E).



S5M0238A

2) Installation is in the reverse order of removal.

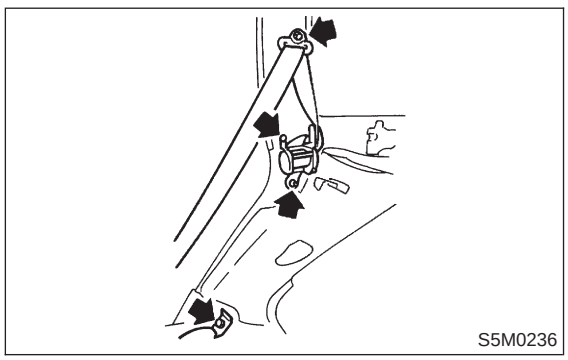
CAUTION:
Be sure to securely hook pawls of inner trim panel on body flange.

4. Rear Seat Belt

A: REMOVAL AND INSTALLATION

1. OUTER BELT

1) Remove rear cushion and side pad.
2) Remove rear backrest.
3) Remove rear quarter upper trim and rear quarter lower trim.
4) Remove anchor bolts.
5) Remove bolt and nut and then detach outer belt assembly.


S5M0236

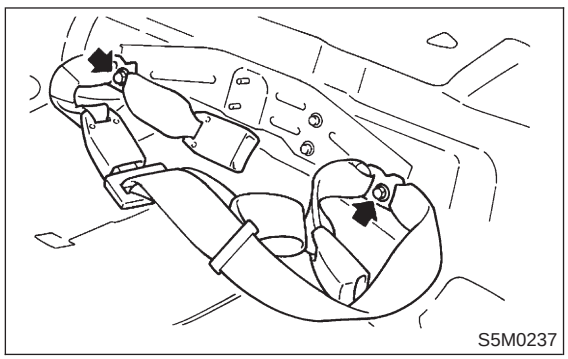
6) Installation is in the reverse order of removal.

NOTE:
Ensure that seat belt is properly reeled on and off after installation of ELR.

CAUTION:
● Be extremely careful not to confuse center seat anchor plate with outer seat anchor plate during installation.
● Ensure that seat belts are free from twisting after installation.
● Ensure that tongues, buckles and belts are properly placed on seat.

2. INNER BELT AND CENTER BELT

1) Remove rear cushion.
2) Remove bolts and then remove inner belt and center belt.


S5M0237

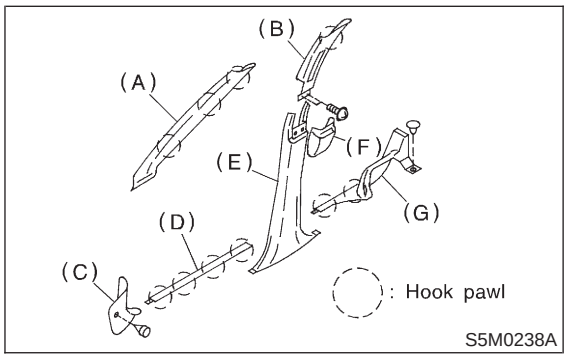
3) Installation is in the reverse order of removal.

5. Inner Trim Panel

A: REMOVAL AND INSTALLATION

1. FRONT SECTION

1) Removal order of trim panel:
(1) Remove front pillar upper trim (A).
(2) Remove front pillar lower trim (C).
(3) Remove side sill front upper cover (D).
(4) Remove rear seat cushion and then remove side sill rear upper cover (G).
(5) Remove center pillar cover (F).
(6) Remove screws and then remove center pillar upper trim (B).
(7) Remove center pillar lower trim (E).



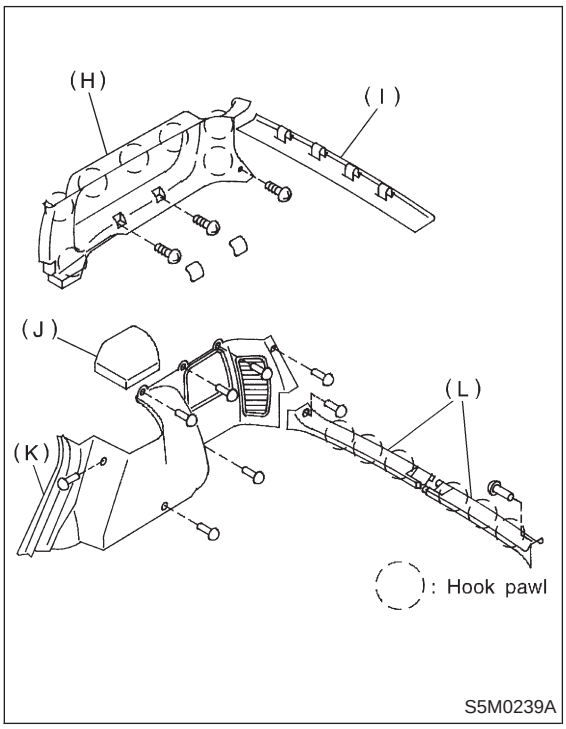
S5M0238A

2) Installation is in the reverse order of removal.

CAUTION:
Be sure to securely hook pawls of inner trim panel on body flange.

2. REAR SECTION

1) Removal order of trim panel:
(1) Remove rear rail trim (I).
(2) Remove strut cover (J).
(3) Remove caps and screws then remove rear quarter upper trim (H).
(4) Remove rear skirt trim (L).
(5) Remove rear floor box and then remove rear quarter lower trim (K).



2) Installation is in the reverse order of removal.

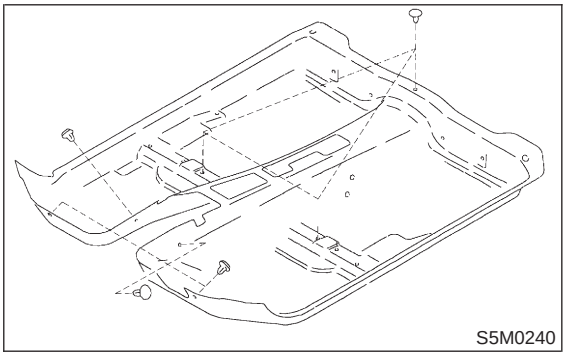
CAUTION:
Be sure to securely hook pawls of inner trim panel on body flange.

3. FLOOR SECTION

1) Removal order of floor mat:
(1) Remove front seats.
(2) Remove rear seat cushion.
(3) Remove console box, depending on the specifications.
(4) Remove front pillar lower trim panel.
(5) Remove center pillar lower trim panel.
(6) Remove side sill cover.
(7) Remove clips from floor mat.

NOTE:
When pulling out edge, do not pull mat alone; pull mat together with edge. Pry off two steel clips on side sill front cover and one on side sill rear cover using screwdriver.

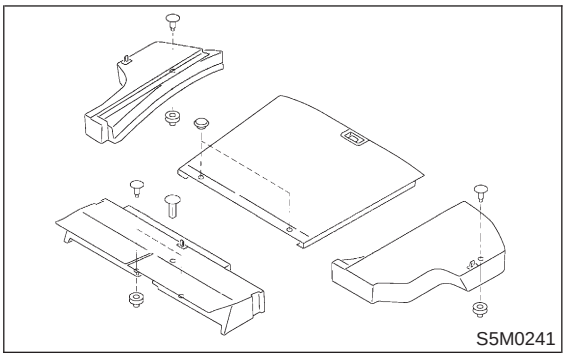
(8) Remove mat hook.
(9) Remove mat from toe board area.
(10) Remove mat from rear heater duct.
(11) Roll mat, and take it out of opened rear door.



(12) Installation is in the reverse order of removal.

NOTE:
- Secure mat firmly with hook and velcro tape.
- Insert mat edge firmly into the groove of side sill cover.

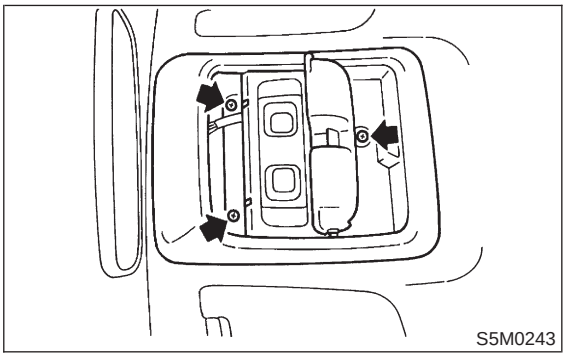
2) Removal order of rear floor box:
(1) Remove clips and then detach rear floor boxes.



(2) Installation is in the reverse order of removal.

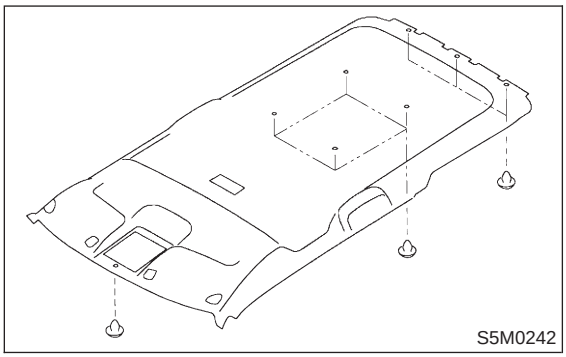
4. ROOF TRIM

1) Remove head console.



2) Remove sunvisor and assist rail.
3) Remove front pillar upper trim, center pillar upper trim, rear quarter upper trim and rear rail trim.

4) Using ST, remove clips and then detach roof trim.
ST 925580000 PULLER

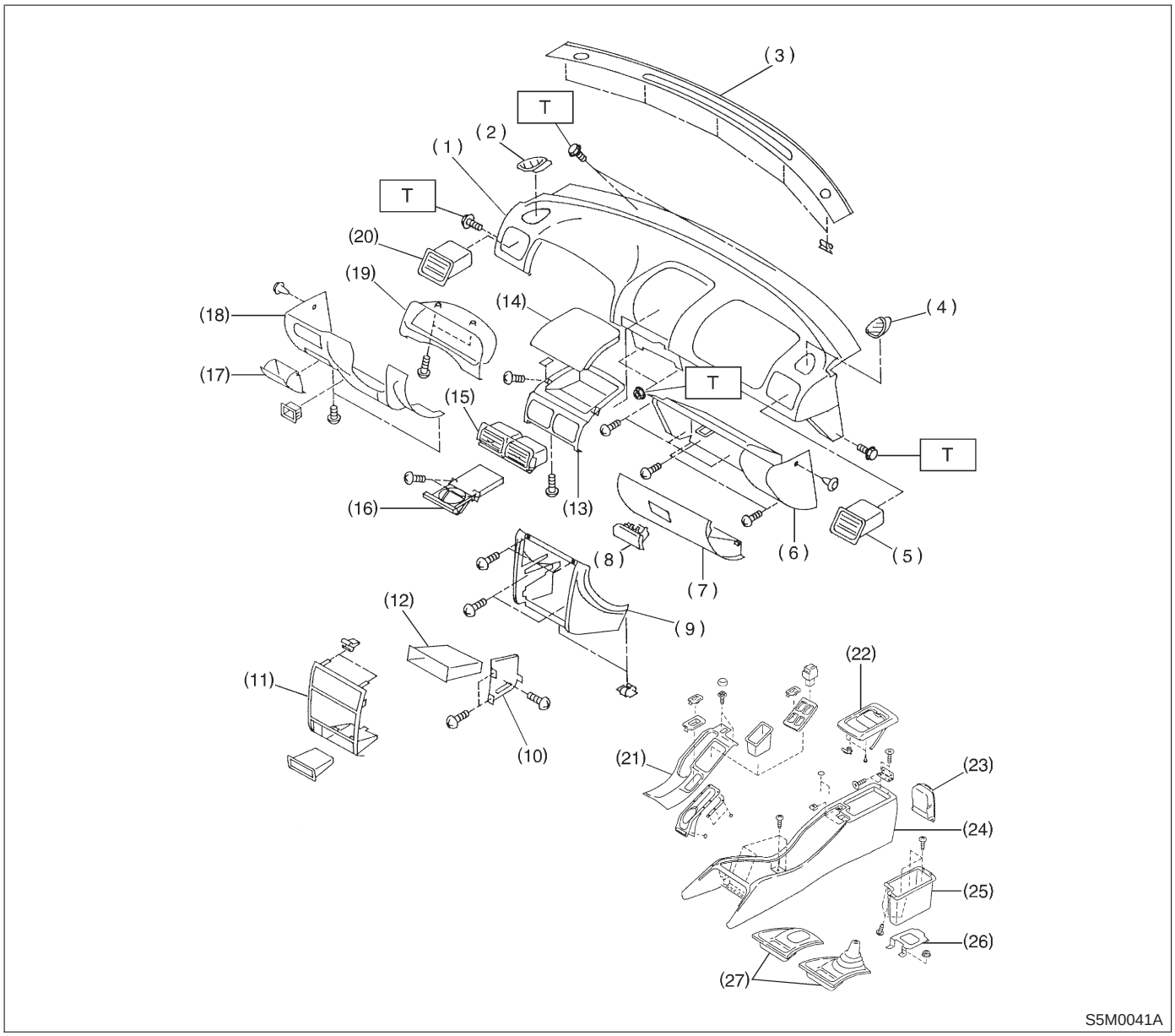


5) Installation is in the reverse order of removal.

CAUTION:
When removing clip, use great care to prevent damaging the roof trim.

MEMO:

1. Instrument Panel



(1) Pad & frame
(2) Grille side (D)
(3) Front def. grille
(4) Grille side (P)
(5) Grille vent (P)
(6) Glove box panel
(7) Glove box lid
(8) Knob
(9) Instrument panel center console
(10) BRKT (Radio)
(11) Center console cover
(12) Pocket
(13) Panel center
(14) Center pocket lid
(15) Grille center
(16) Cup holder
(17) Side pocket
(18) Lower cover ASSY
(19) Meter visor
(20) Grille vent (D)
(21) Console cover
(22) Console lid
(23) Rear cup holder
(24) Console box
(25) Console pocket
(26) Rear console BRKT
(27) Front cover

Tightening torque: N·m (kg-m, ft-lb)
T: 7±1 (0.7±0.1, 5.1±0.7)

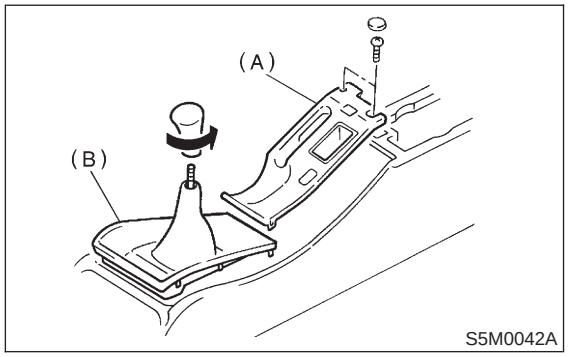
1. Instrument Panel AIRBAG

A: REMOVAL

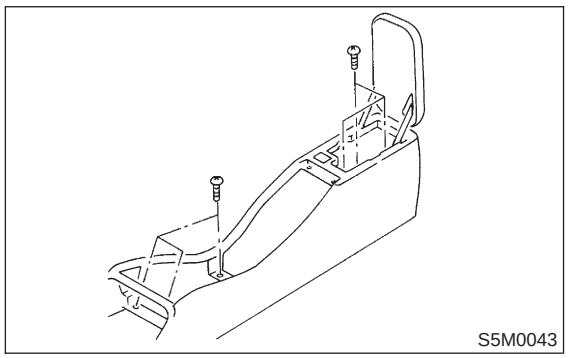
Airbag system wiring harness is routed on steering support beam.

CAUTION:
● All Airbag system wiring harness and connectors are colored yellow. Do not use electrical test equipment on these circuits.
● Be careful not to damage Airbag system wiring harness when servicing the instrument panel.

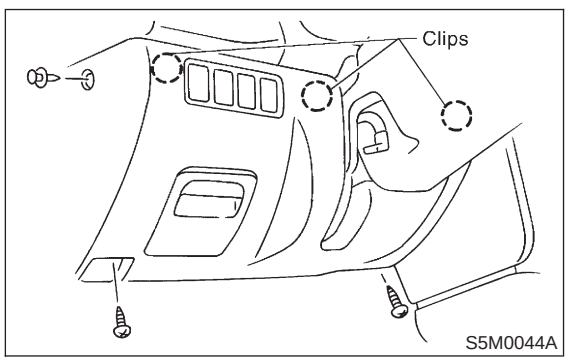
1) Disconnect GND cable from battery.
2) Remove shift knob (MT model).
3) Remove console cover (A) and front cover (B).



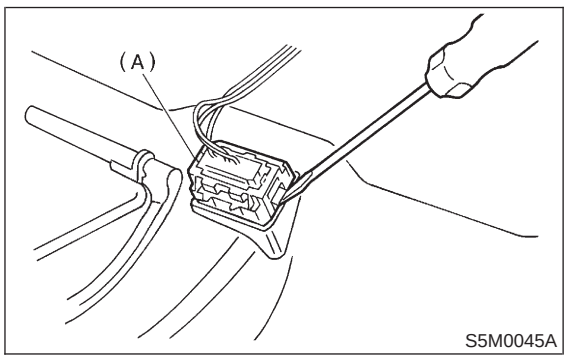
4) Remove console box.



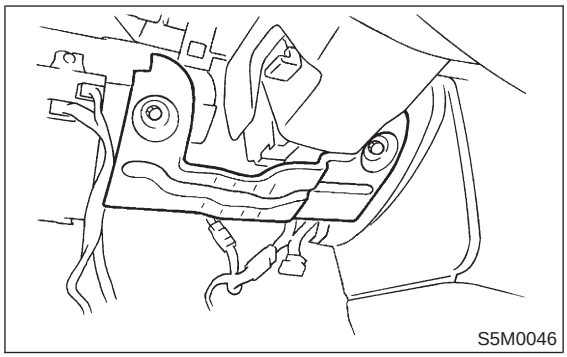
5) Remove lower cover and then disconnect connector.



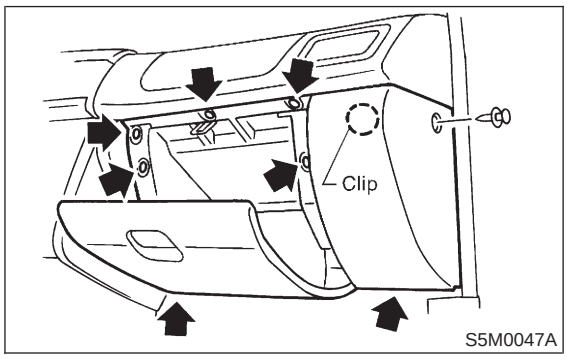
6) Disconnect data link connector (A) from lower cover.



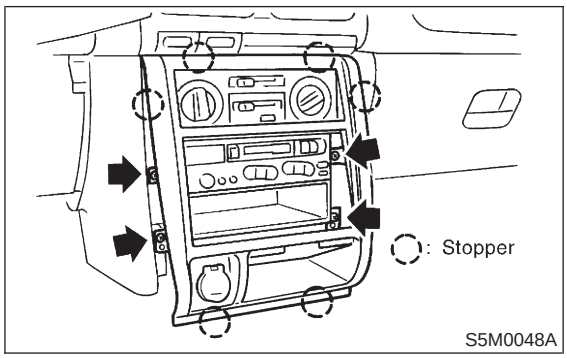
7) Remove knee panel.



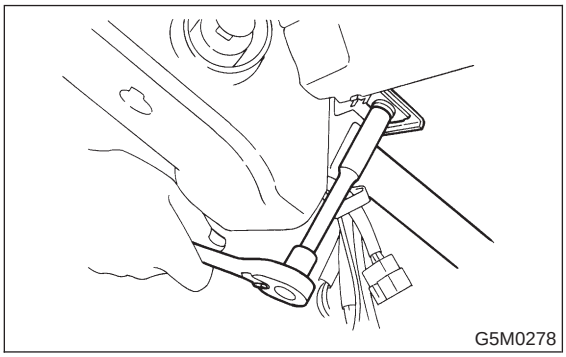
8) Remove glove box.



9) Remove center panel and disconnect connector.
10) Remove audio.



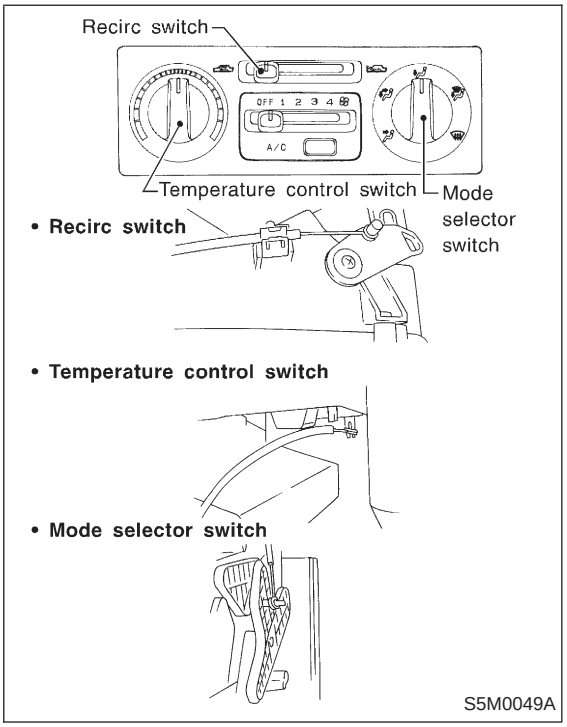
11) Remove two bolts and lower steering column.



12) Set temperature control switch to “FULL HOT”, mode selector switch to “DEF” position and recirc switch to “FRESH” position.

13) Disconnect temperature control cable and mode control cable from heater unit then disconnect recirc control cable from intake unit.

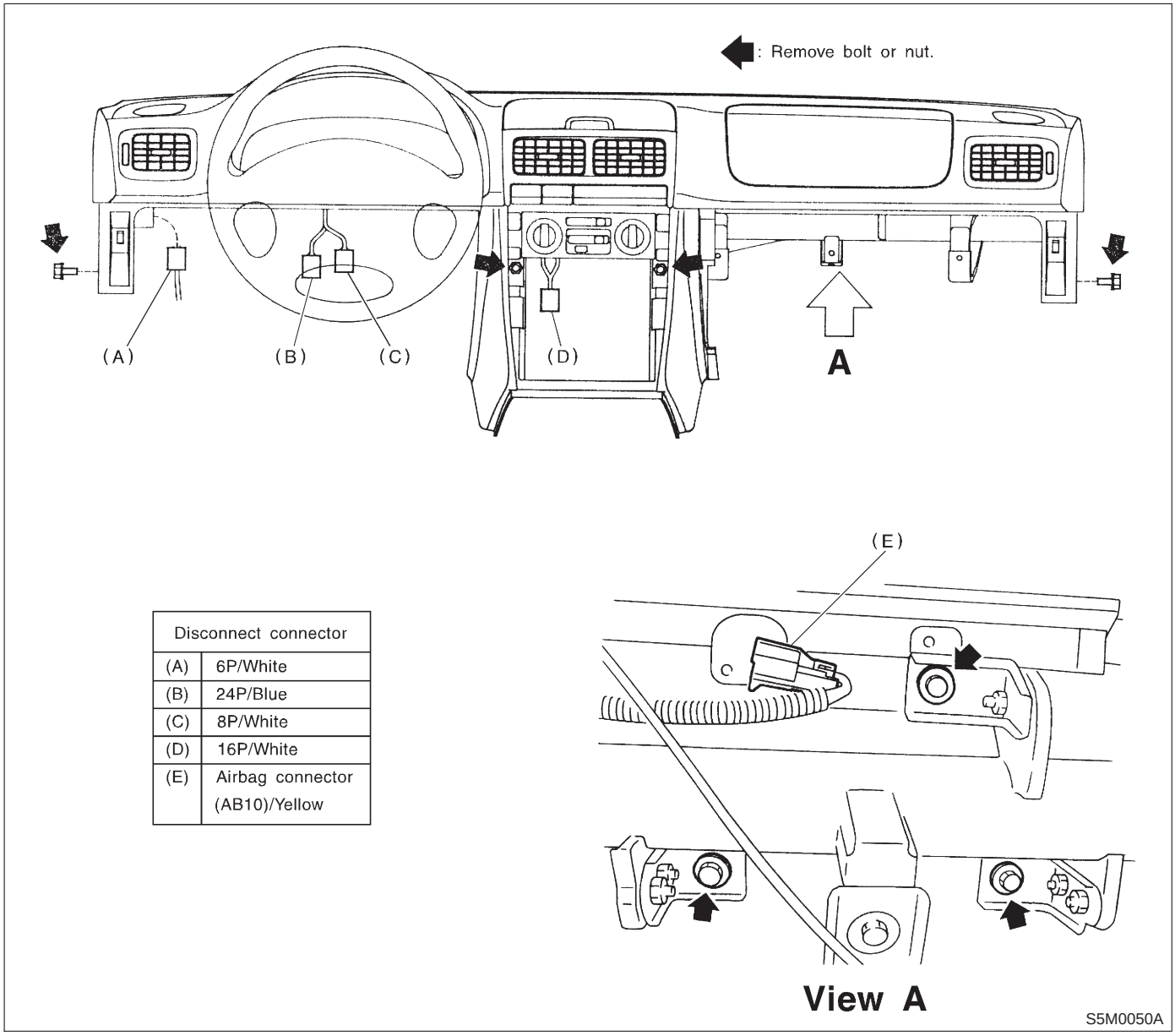
NOTE:
Do not move switch and link when installing.



14) Disconnect harness connectors and then remove the installing bolts and nuts.

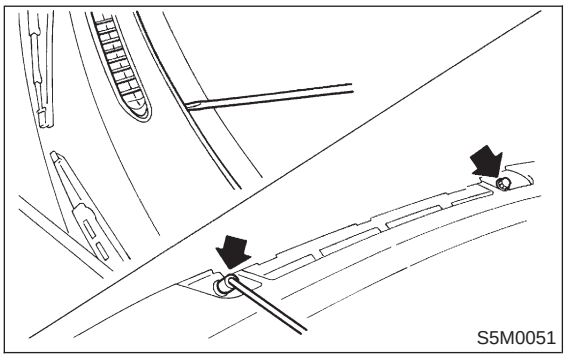
CAUTION:
Be sure to hold socket section and not harness when disconnecting.

NOTE:
Put matching mark, if necessary, for easy reassembly.



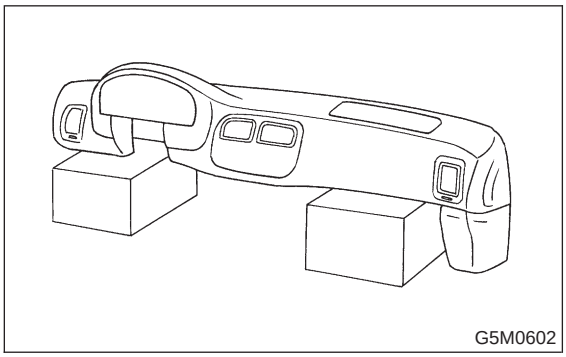
Disconnect connector	
(A)	6P/White
(B)	24P/Blue
(C)	8P/White
(D)	16P/White
(E)	Airbag connector (AB10)/Yellow

15) Remove front defroster grille and two bolts.



16) Remove instrument panel carefully from the body.

CAUTION:
- **Take care not to scratch the instrument panel and related parts.**
- **When storing removed instrument panel with passenger airbag module, place it standing up on the floor.**

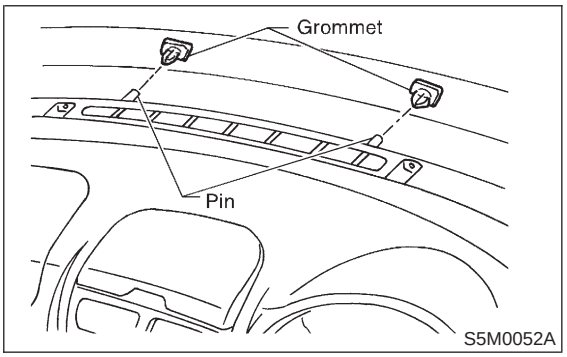


B: INSTALLATION

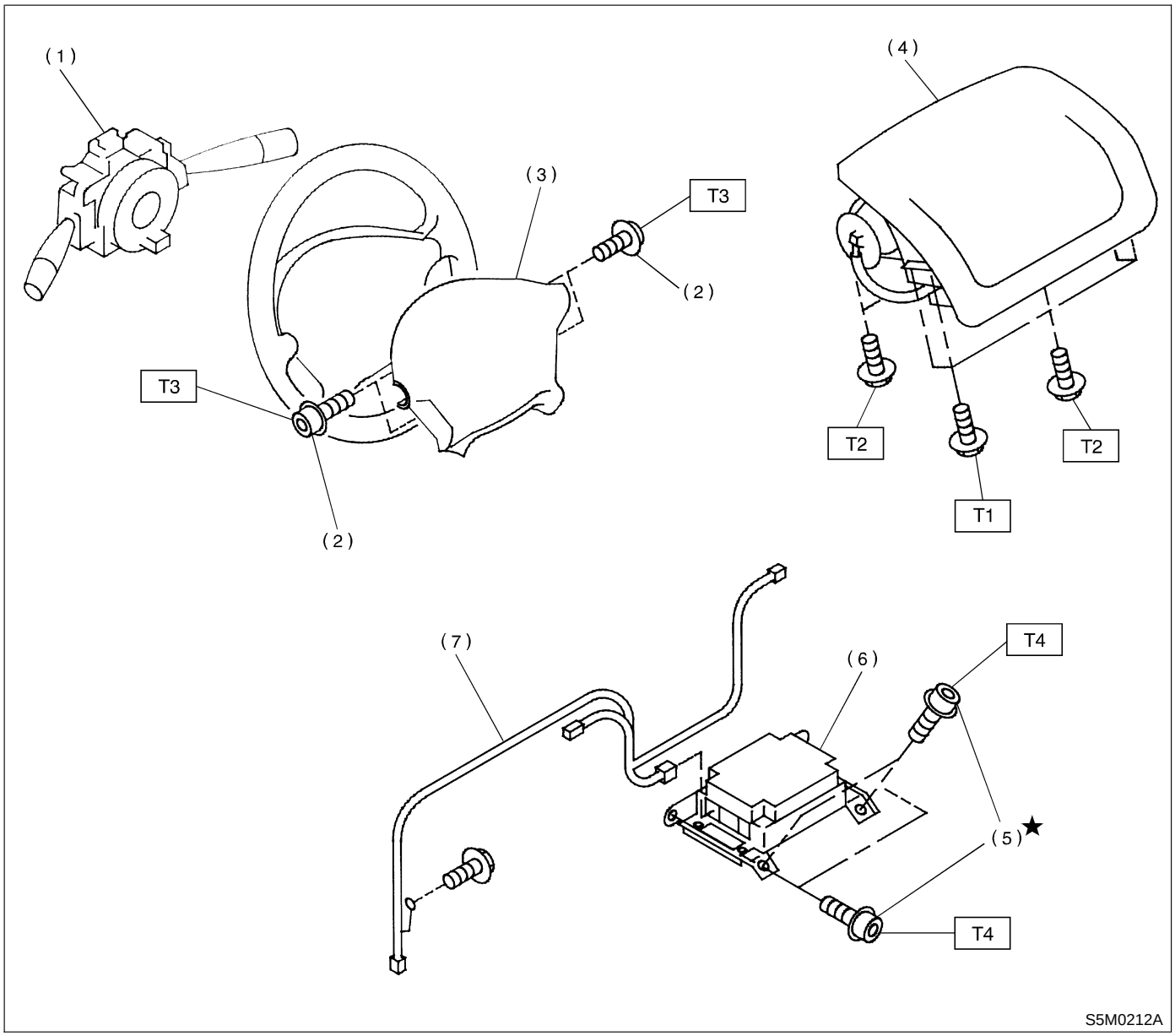
Installation is in the reverse order of removal.

CAUTION:
- **Be careful not to snag the harness.**
- **Make sure to connect harness connectors.**
- **Take care not to scratch the instrument panel and related parts.**

NOTE:
When setting instrument panel into position, push two pins into grommet on body panel.



1. SRS Airbag



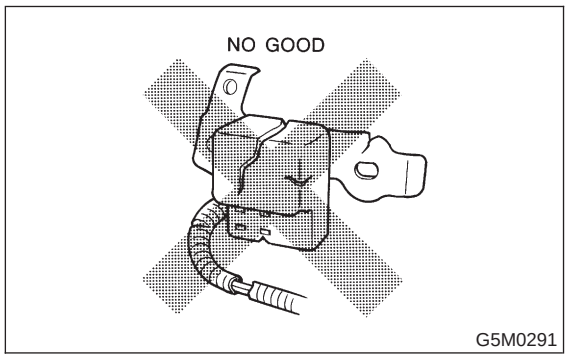
(1) Combination switch ASSY with roll connector
(2) TORX® bolt T30
(3) Airbag module ASSY (Driver)
(4) Airbag module ASSY (Passenger)
(5) TORX® bolt T40
(6) Airbag control module
(7) Airbag main harness

Tightening torque: N·m (kgf-m, ft-lb)
T1: 4.4±1.5 (0.45±0.15, 3.3±1.1)
T2: 7.4±2.0 (0.75±0.2, 5.4±1.4)
T3: 10±2 (1.0±0.2, 7.2±1.4)
T4: 25±2 (2.5±0.2, 18.1±1.4)

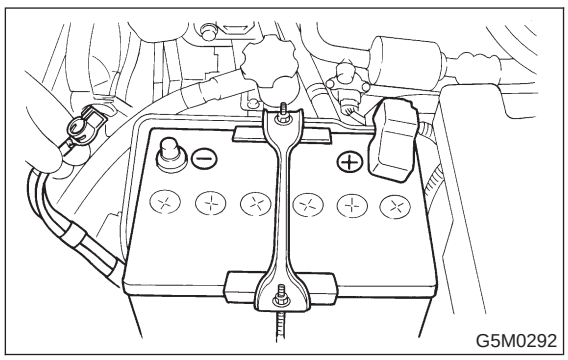
1. General

A: PRECAUTION

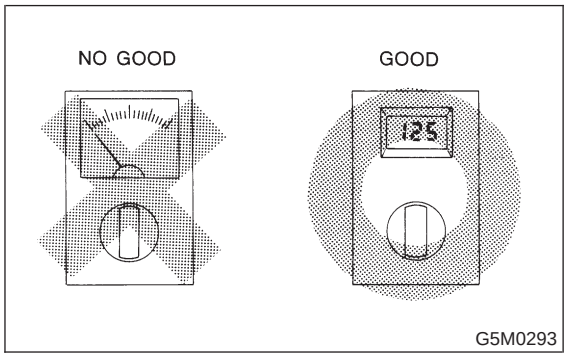
● If any of the airbag system parts such as sensors, airbag module, airbag control module and harness are damaged or deformed, replace with new genuine parts.

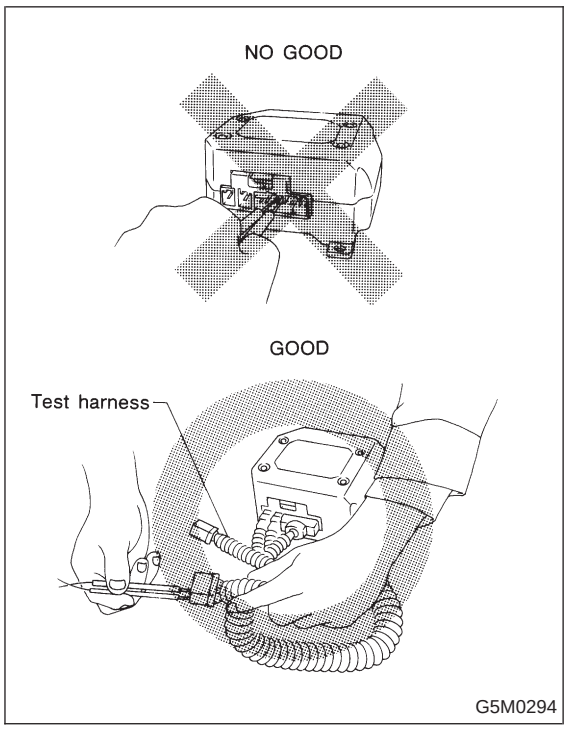


● When servicing, be sure to turn the ignition switch off, disconnect the negative (−) battery terminal then the positive (+) terminal in advance, and wait for more than 20 seconds before starting work.

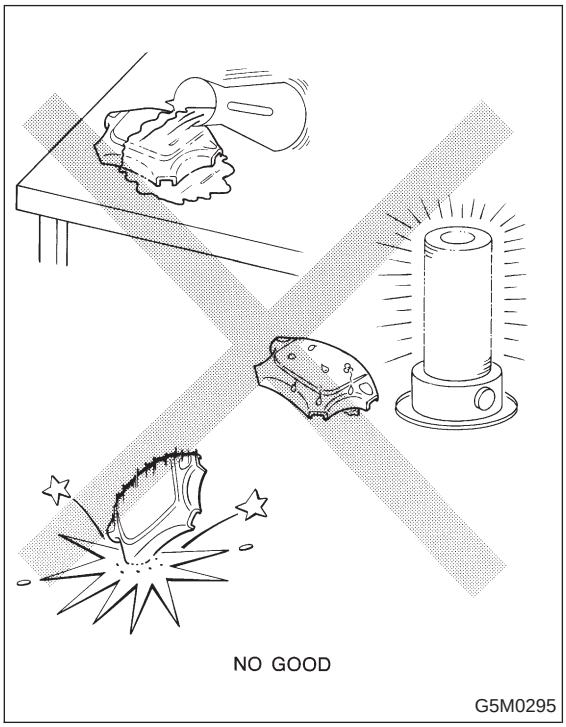


● When checking the system, be sure to use a digital circuit tester. Use of an analog circuit tester may cause the airbag to activate erroneously. Do not directly apply the tester probe to any connector terminal of the airbag. When checking, use a test harness.

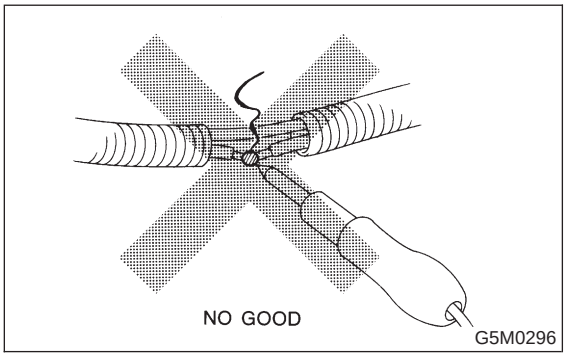




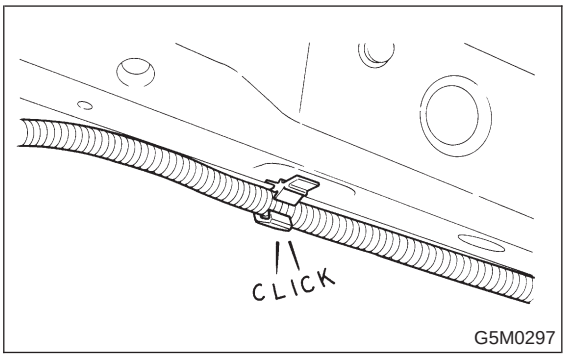
● Do not drop the airbag modulator parts, subject it to high temperatures over 90°C (194°F), or apply oil, grease, or water to it; otherwise, the internal parts may be damaged and its reliability greatly lowered.



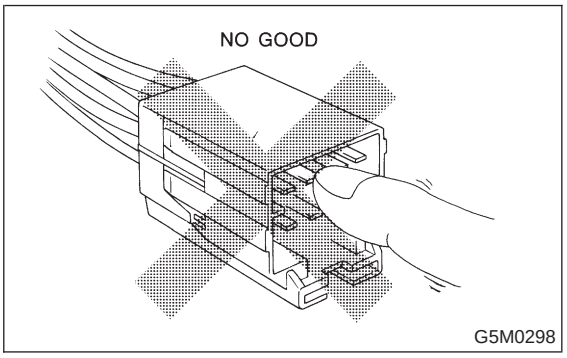
● If any damage or open is found on the SRS airbag system wire harness, do not attempt to repair using soldering, etc. Be sure to replace the faulty harness with a new genuine part.



● Install the wire harness securely with the specified clips so as to avoid interference or jamming with other parts.



● Before connecting the airbag system to ground, make sure that the grounding terminal is free from paint and contamination.
● Do not allow water or oil to come in contact with the connector terminals. Do not touch the connector terminals.



● When cpnnecting or disconnecting airbag connector, make sure ignition switch is OFF.

2. Inspection and Replacement Standards

A: VEHICLES WHICH BECOME INVOLVED IN A COLLISION

If the vehicle equipped with an SRS airbag system is damaged in a collision, the airbag system parts must be checked and replaced in accordance with the following standards:
● After faulty parts are replaced, the warning light operation must be checked.
● When the ignition switch is turned ON, it lights up for 8 seconds and then it goes out for at least 30 seconds.
● The trouble code stored in memory must be erased after the check.

B: AIRBAG MODULE (DRIVER AND PASSENGER)

1. INSPECTION STANDARD

● The vehicle damaged in a collision (regardless of whether or not airbag is deployed).
● The designated trouble code is output during self-diagnosis. (Refer to “Diagnostics” Section.)

2. REPLACEMENT STANDARD

● Airbag is deployed.
● The pad surface is scratched or cracked.
● Harness and/or connector is deformed or cracked, their circuits are broken, lead wire is exposed, etc.
● Mounting bracket is cracked or deformed.
● The module surface is fouled with foreign matter. (grease, oil, water, cleaning solvent, etc.)
● Airbag module dropped to the floor/ground.
● Airbag module determined as faulty during self-diagnosis.

C: MAIN HARNESS

1. INSPECTION STANDARD

● A vehicle damaged in a collision (regardless of whether or not airbag is deployed).
● The designated trouble code is output during self-diagnosis. (Refer to “Diagnostics” Section.)

2. REPLACEMENT STANDARD

● Harness circuit is broken, lead wire is exposed, corrugated tube is cracked, etc.
● Connector is scratched or cracked.
● The designated trouble code is output during self-diagnosis.

D: AIRBAG CONTROL MODULE

1. INSPECTION STANDARD

● A vehicle damaged in a collision (regardless of whether or not airbag is deployed).
● The designated trouble code is output during self-diagnosis. (Refer to “Diagnostics” Section.)

2. REPLACEMENT STANDARD

● Control module is cracked or deformed.
● Mounting bracket is cracked or deformed.
● Connector is scratched or cracked.
● Control module dropped to the floor/ground.
● Control module determined as faulty during diagnostics.
● Airbag is deployed.

E: COMBINATION SWITCH

1. INSPECTION STANDARD

● A vehicle damaged in a collision (regardless of whether or not airbag is deployed).
● The designated trouble code is output during self-diagnosis. (Refer to “Diagnostics” Section.)

2. REPLACEMENT STANDARD

● Steering roll connector is deformed or cracked.

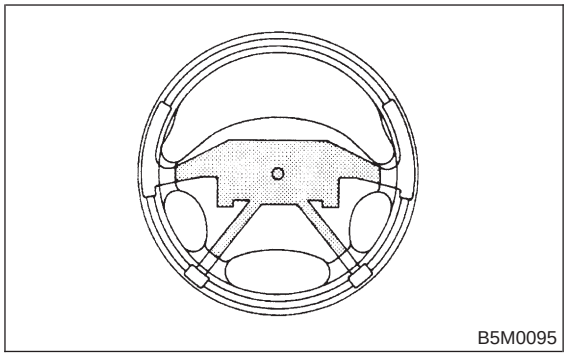
F: STEERING WHEEL

1. INSPECTION STANDARD

● A vehicle damaged in a collision (regardless of whether or not airbag is deployed).

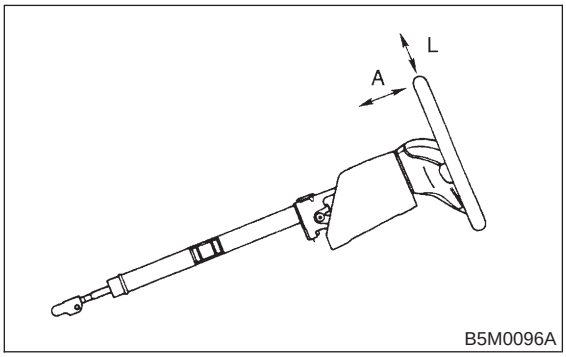
2. REPLACEMENT STANDARD

● Check steering wheel insert for cracks or deformities.
● Check to ensure that new airbag module is properly installed in steering wheel
● After installing airbag module, check to ensure that it is free of interference with steering wheel and that clearance between the two is equal at all points.


B5M0095

● Check steering wheel distortion in axial and radial directions.

Specifications:
Axial free play A
Less than ±6 mm (0.24 in)
Radial free play L
Less than ±7 mm (0.28 in)



G: STEERING COLUMN ASSEMBLY

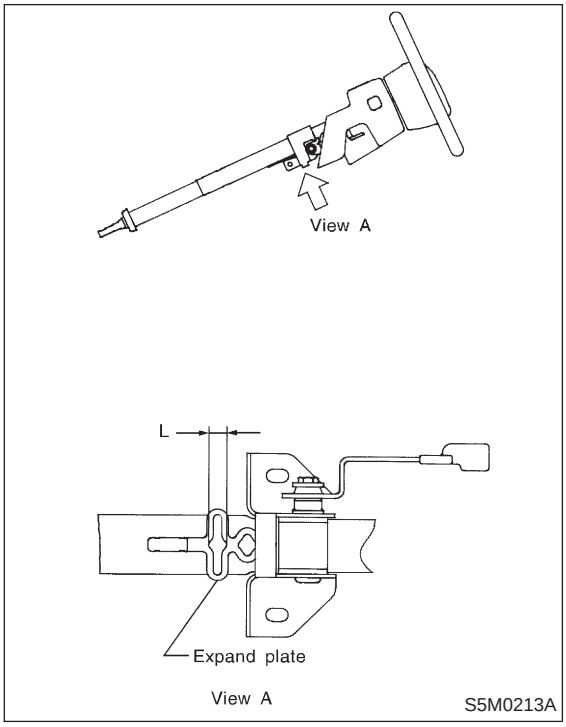
1. INSPECTION STANDARD

● A vehicle damaged in a collision (regardless of whether or not airbag is deployed).

2. REPLACEMENT STANDARD

● Check to ensure that clearance of expand plate on steering column under side is within specifications.

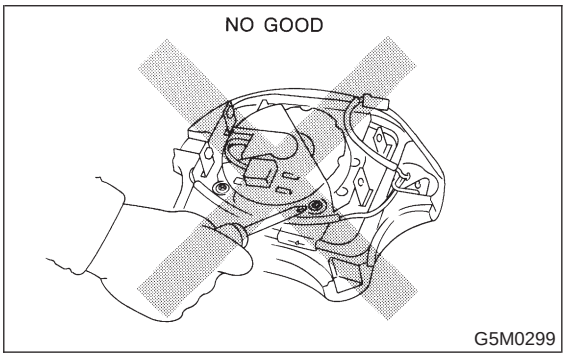
Clearance of expand plate: L
More than 15 mm (0.59 in)



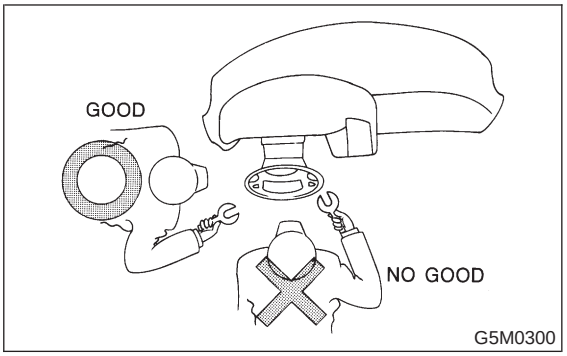
3. Airbag Module

A: REMOVAL AND INSTALLATION

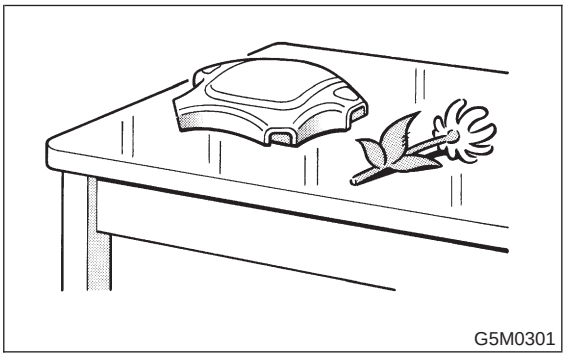
CAUTION:
● The airbag module (driver side and passenger side) must not be disassembled. The airbag module cannot be used again once inflated.



● When removing and installing the airbag module (driver side and passenger side), the operator should stand, as much as possible, on the side of the airbag module.

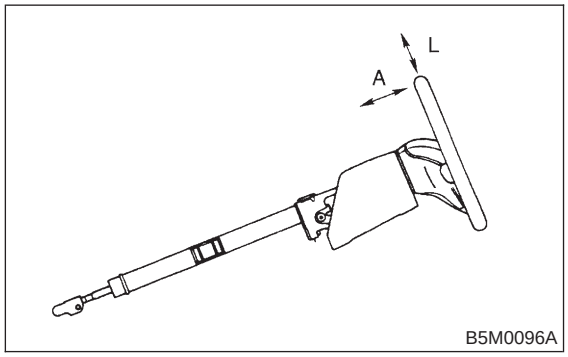


● After removal, the airbag module (driver side and passenger side) should be kept away from heat and light sources, and stored on a clean, flat surface to prevent from any damage to its lower structure.



● Check steering wheel distortion in axial and radial directions.

Specifications:
Axial free play A
Less than ±6 mm (0.24 in)
Radial free play L
Less than ±7 mm (0.28 in)



G: STEERING COLUMN ASSEMBLY

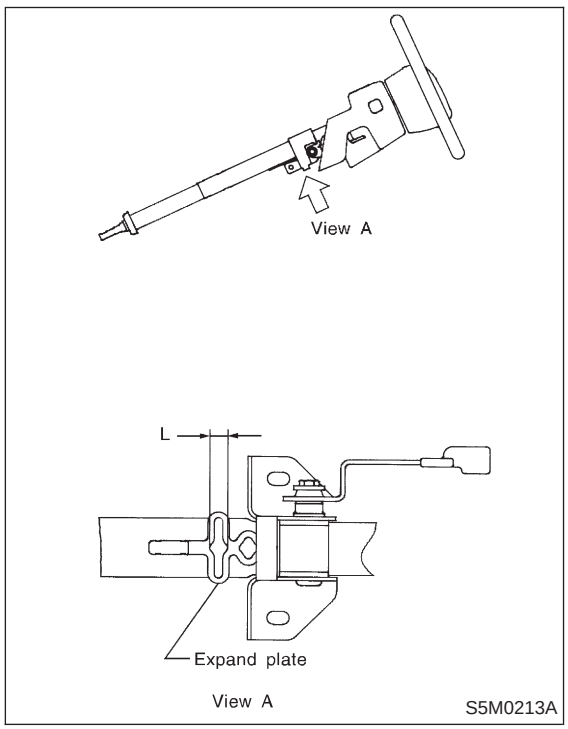
1. INSPECTION STANDARD

● A vehicle damaged in a collision (regardless of whether or not airbag is deployed).

2. REPLACEMENT STANDARD

● Check to ensure that clearance of expand plate on steering column under side is within specifications.

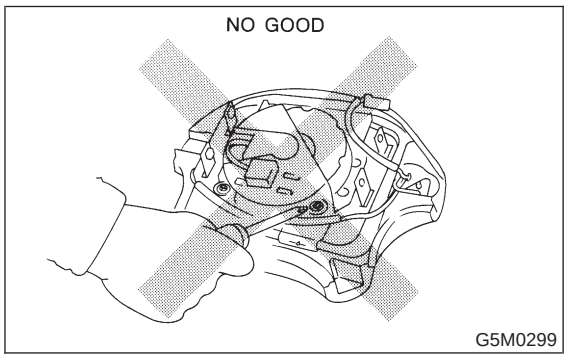
Clearance of expand plate: L
More than 15 mm (0.59 in)



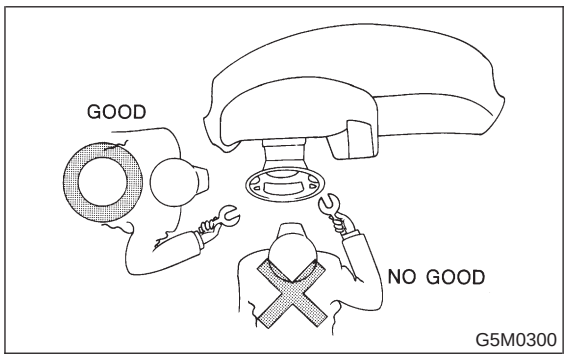
3. Airbag Module

A: REMOVAL AND INSTALLATION

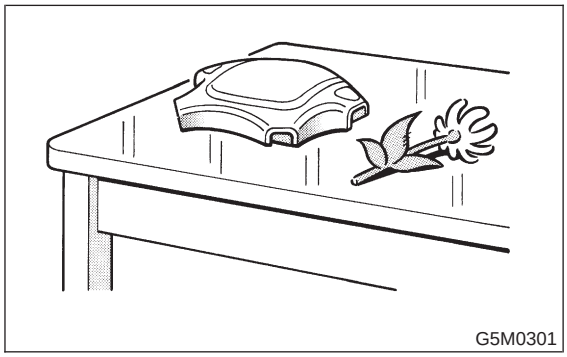
CAUTION:
● The airbag module (driver side and passenger side) must not be disassembled. The airbag module cannot be used again once inflated.



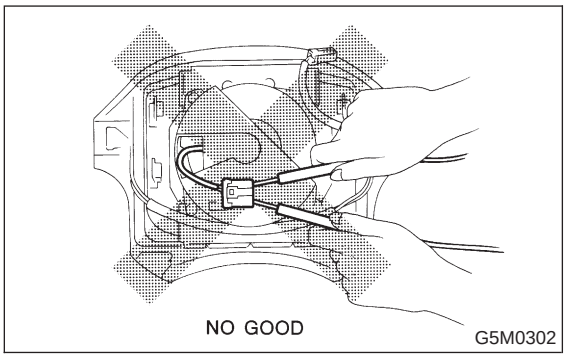
● When removing and installing the airbag module (driver side and passenger side), the operator should stand, as much as possible, on the side of the airbag module.



● After removal, the airbag module (driver side and passenger side) should be kept away from heat and light sources, and stored on a clean, flat surface to prevent from any damage to its lower structure.

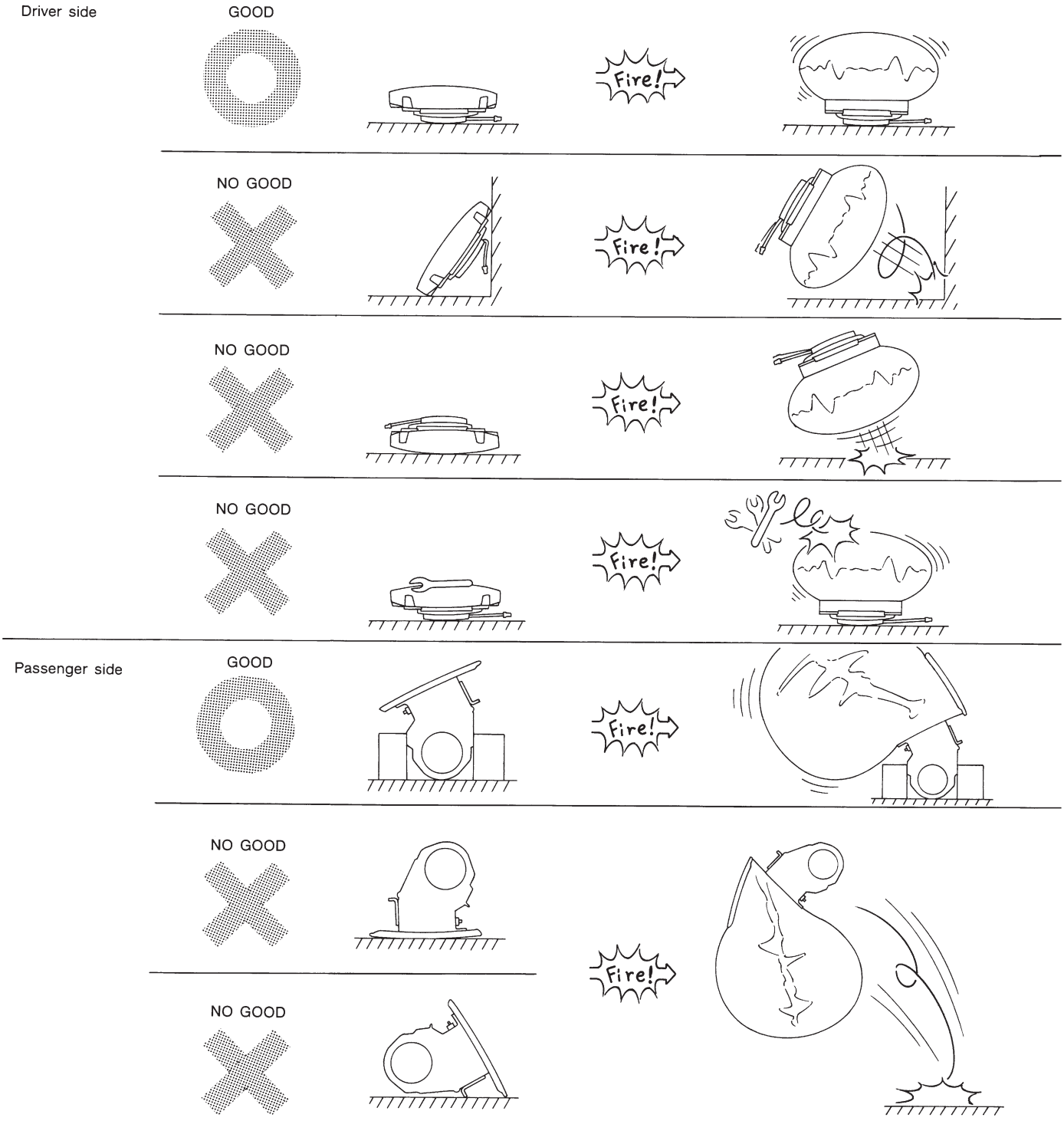


● Do not check airbag module (driver side and passenger side) continuity with airbag removed from the vehicle body.



● Replace airbag module (driver side and passenger side) with a new one, should any of the following conditions develop:
- **Pad surface is scratched or cracked.**
- **Connector harness is damaged.**
- **Inflator side structure of module is cracked or deformed.**
- **Module is excessively stained with water, oil, etc.**
- **Module was accidentally dropped.**

● When storing a removed airbag module (driver side and passenger side), be sure to place it in parallel with floor with the pad facing up. Do not place it against a wall, or place anything on the pad; otherwise, a dangerous condition may be created if the module malfunctions.

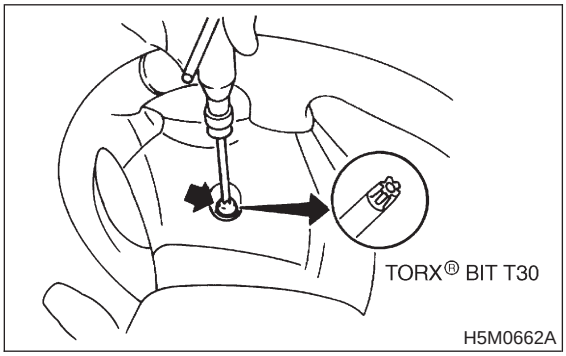


G5M0604

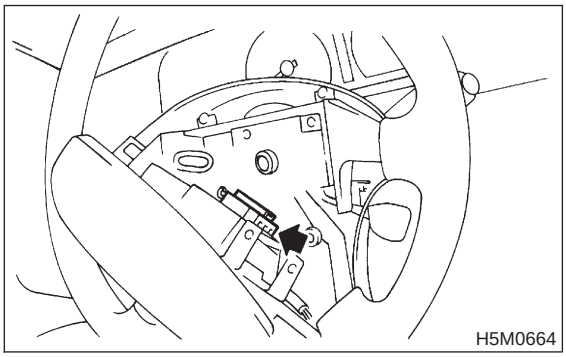
1. DRIVER SIDE

1) Set front wheels in straight ahead position.
2) Turn ignition switch off.
3) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.

4) Using TORX® BIT T30, remove two TORX® bolts.



5) Disconnect airbag connector on back of airbag module. <Ref. to 5-5 [M2E2].>

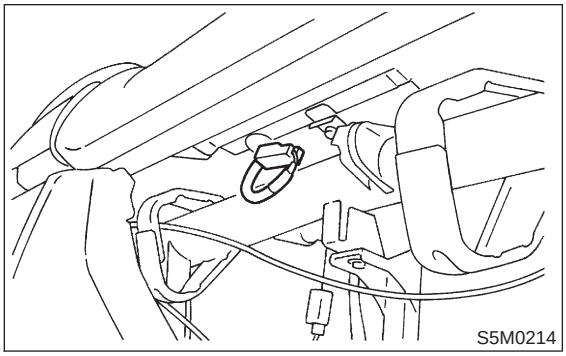


6) Refer to "**CAUTION:**" for handling of a removed airbag module. <Ref. to 5-5 [W3A0].>
7) Installation is in the reverse order of removal.

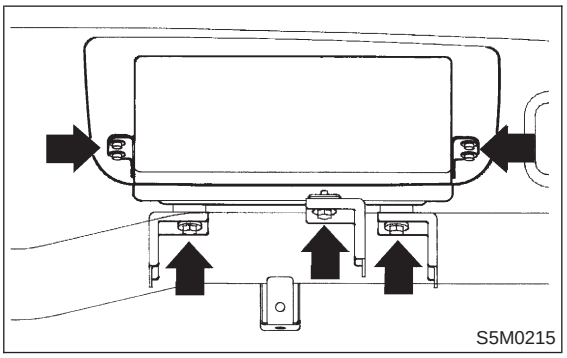
CAUTION:
Do not allow harness and connectors to interfere or get caught with other parts.

2. PASSENGER SIDE

1) Turn ignition switch off.
2) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.
3) Remove glove box. <Ref. to 5-4 [W1A0].>
4) Disconnect airbag connector. <Ref. to 5-5 [M2E2].>



5) Remove seven bolts and then carefully remove airbag module.



6) Refer to "**CAUTION:**" for handling of a removed airbag module. <Ref. to 5-5 [W3A0].>
7) Installation is in the reverse order of removal.

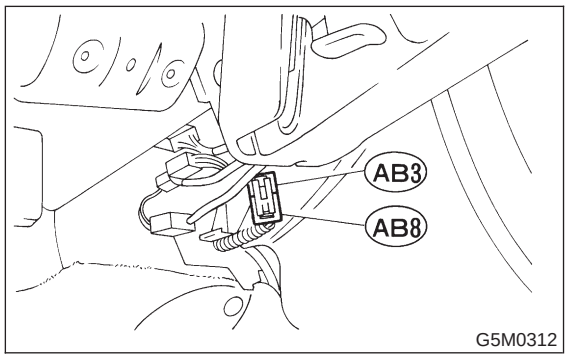
CAUTION:
Do not allow harness and connectors to interfere or get caught with other parts.

4. Main Harness

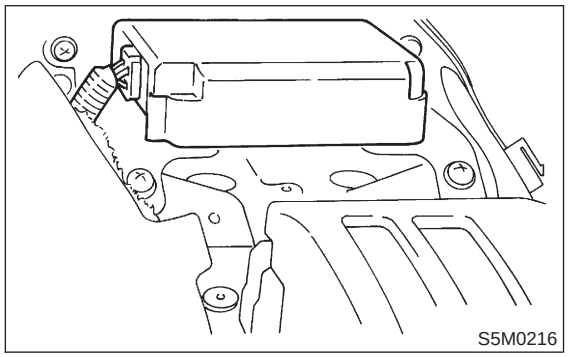
A: REMOVAL AND INSTALLATION

1) Turn ignition switch off.
2) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.
3) Remove lower cover. <Ref. to 5-4 [W1A0].>
4) Disconnect airbag connector (AB3) and (AB8) below steering column. <Ref. to 5-5 [M2E2].>

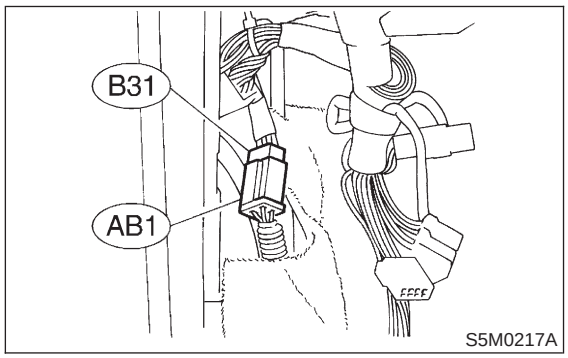
CAUTION:
Do not reconnect airbag connector at steering column until main harness are securely re-installed.



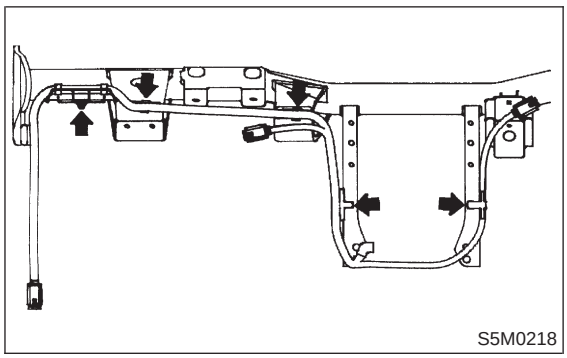
5) Remove instrument panel. <Ref. to 5-4 [W1A0].>
6) Disconnect 11-pin yellow connector (AB6) from airbag control module.



7) Disconnect body harness connector (B31) from connector (AB1).



8) Detach clips from steering support beam and remove main harness.

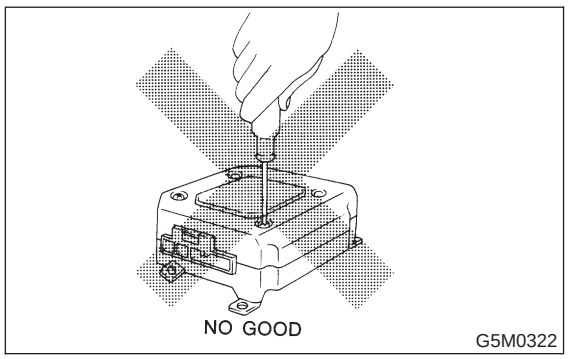


9) Installation is in the reverse order of removal.

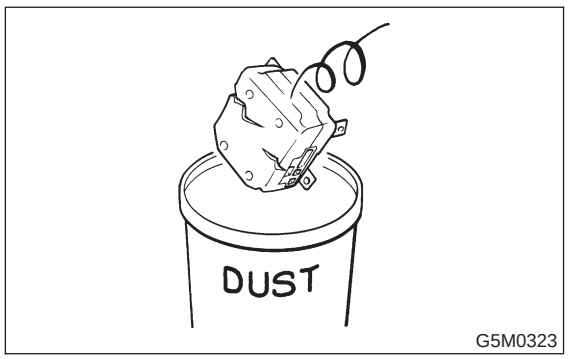
5. Airbag Control Module

A: REMOVAL AND INSTALLATION

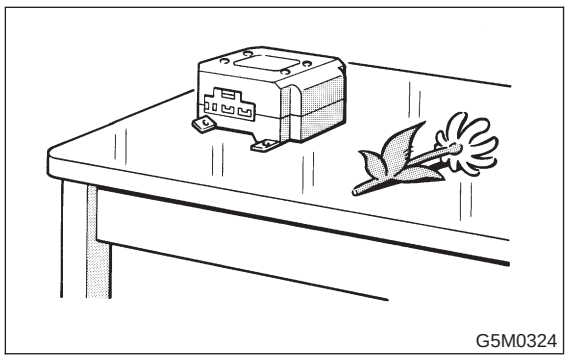
CAUTION:
● Do not disassemble the airbag control module.



● If the airbag control module is deformed, or if water damage is suspected, replace the airbag control module with a new genuine part.

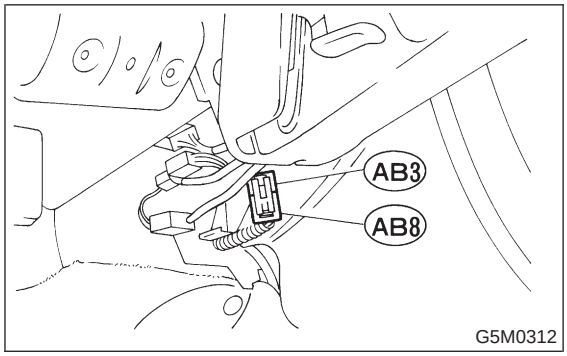


● After removal, keep the airbag control module on a dry, clean surface away from heat and light sources, and moisture and dust.



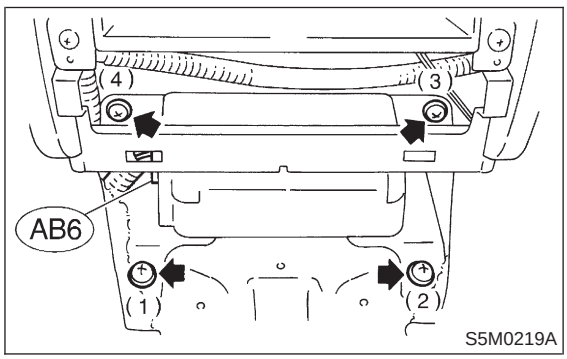
1) Turn ignition switch off.
2) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.
3) Remove lower cover. <Ref. to 5-4 [W1A0].>
4) Disconnect airbag connector (AB3) and (AB8) below steering column.

CAUTION:
Do not reconnect airbag connector at steering column until airbag control module is securely re-installed.



5) Remove instrument panel console. <Ref. to 5-4 [W1A0].>
6) Disconnect 11-pin yellow connector (AB6) from airbag control module. <Ref. to 5-5 [M2E2].>
7) Using T40 TORX® bit (Tamper resistant type), remove four TORX® bolts in numerical sequence shown in figure. Discard the old TORX® bolts.

CAUTION:
Use new TORX® bolts during re-assembly.



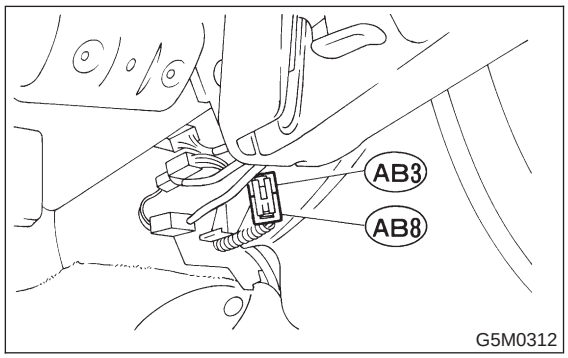
8) Installation is in the reverse order of removal.

6. Combination Switch

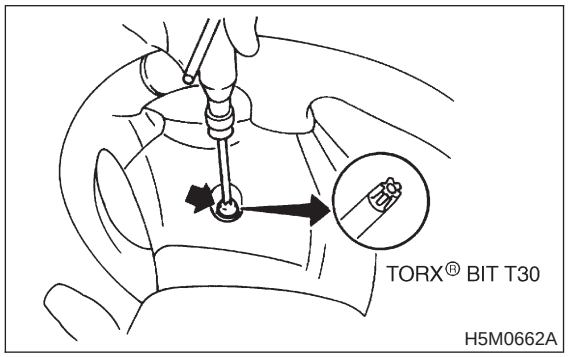
A: REMOVAL

1) Turn ignition switch off.
2) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.
3) Remove lower cover. <Ref. to 5-4 [W1A0].> Disconnect airbag connector (AB3) and (AB8) below steering column.

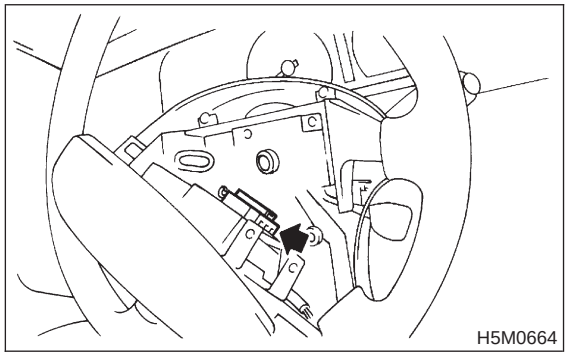
CAUTION:
Do not reconnect airbag connector at steering column until combination switch is securely re-installed.



4) Disconnect combination switch connectors from body harness connector.
5) Set front wheels in straight ahead position. Using T30 TORX® bit, remove two TORX® bolts.

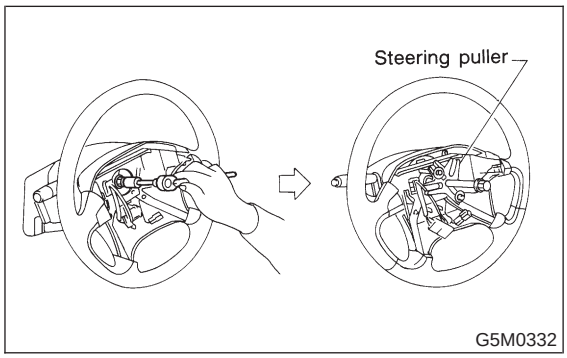


6) Disconnect airbag connector on back of airbag module. Remove airbag module, and place it with pad side facing upward. <Ref. to 5-5 [W3A0].>

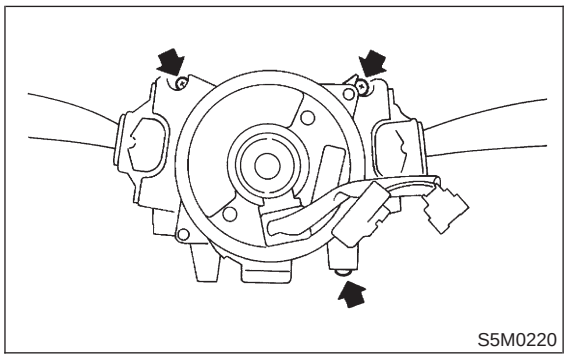


7) Using steering puller, remove steering wheel.

CAUTION:
Do not allow connector to interfere when removing steering wheel.



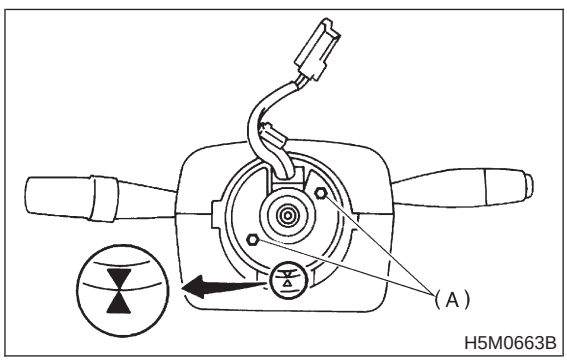
8) Remove steering column covers.
9) Removing three retaining screws, remove combination switch.



B: ADJUSTMENT

1. CENTERING ROLL CONNECTOR

Before installing steering wheel, make sure to center roll connector built into combination switch.
1) Make sure that front wheels are positioned straight ahead.
2) Install steering gearbox, steering shaft and combination switch properly. Turn roll connector pin (A) clockwise until it stops.
3) Then, back off roll connector pin (A) approximately 2.65 turns until "▲" marks aligned.

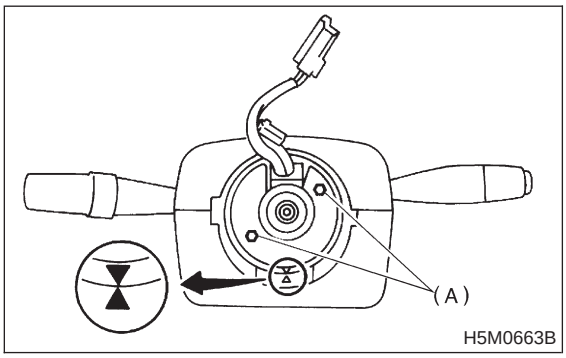


C: INSTALLATION

CAUTION:
Failure to do this might damage roll connector.

1) Before installing combination switch, check to ensure that combination switch is off and front wheels are set in the straight ahead position.
2) Install column cover and center roll connector. <Ref. to 5-5 [W6B1].>
3) Install steering wheel in neutral position. Carefully insert roll connector pin (A) into hole on steering wheel.

NOTE:
If steering wheel angle requires fine adjustment, adjust tie-rod.



4) Install airbag module and lower cover in the reverse order of removal.

MEMO: