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 circuits.

• 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.

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NOTE:

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

1. ENGINE COMPARTMENT AND ROOM



- () Cowl panel weather attaching hole 6 mm (0.24 in) dia.
- ① Hood hinge front attaching hole M8
- Strut mount attaching hole (Front center) 9.5 mm (0.374 in) dia.
- ③ Front fender attaching hole (Tip) M6
- ④ Rear upper surface of front side frame 12 mm (0.47 in) dia.
- (5) Middle upper surface of front side frame 20 mm (0.79 in) dia.
- Front side frame front upper surface 14 x 16 mm (0.55 x 0.63 in) dia. oblong hole
- ③ Side frame of front side frame 12 mm (0.47 in) dia.
- Headlight attaching hole at radiator side panel 6.2 x 9 mm (0.244 x 0.35 in) dia.
- (1) Radiator panel side (LWR) gauge hole 23 mm (0.91 in) dia.
- (a) Rear strut mount attaching hole (Side) 10 mm (0.39 in) dia.
- (a) Rear strut mount attaching hole (Center) 12 mm (0.47 in) dia.
- (3) Radiator panel (UPR) middle hole 6 mm (0.24 in) dia.
- (a) Front fender attaching hole at radiator panel side M6
- (7) Front fender attaching hole at front pillar lower portion M6
- B Hinge middle hole at front pillar center 10 mm (0.39 in) dia.
- (a) Front fender attaching hole at front pillar center portion M6
- (ii) Retainer attaching square hole at front pillar 7 x 7 mm (0.28 x 0.28 in)

- Retainer attaching hole at center pillar (Front) 3.5 mm (0.138 in) dia.
- Retainer attaching hole at center pillar (Rear) 3.5 mm (0.138 in) dia.
- 3) Lower side of rear door hinge M8
- (a) Center pillar (LWR) gauge hole 27 mm (1.06 in) dia.
- (iii) Rear quarter outer corner patch attaching hole 5.2 mm (0.205 in) dia.
- (3) Front rail center notch
- Front glass upper locating notch RH: 6.5 mm (0.256 in) dia., LH: 6.5 x 10 mm (0.256 x 0.39 in) dia. oblong hole
- (1) Stud bolt lower locating notch
- (4) Front center of rear floor pan 8 mm (0.31 in) dia.
- (f) Front upper pillar (Inner) 7 mm (0.28 in) dia.
- (b) Front seat belt adjust plate attaching hole 12 mm (0.47 in) dia.
- (3) Rear door hinge middle hole 10 mm (0.39 in) dia.
- (4) Rear floor, near door 8 mm (0.31 in) dia.
- (5) Trim upper attaching hole at 6 light 8 mm (0.31 in) dia.
- (f) Trim lower attaching hole at 6 light 8 mm (0.31 in) dia.
- (a) Rear floor, near floor strut 15 x 20 mm (0.59 x 0.79 in) dia. oblong hole

2. LUGGAGE COMPARTMENT AND ROOM (SEDAN)



- (s) 6 light upper retainer attaching square hole 7 x 7 mm (0.28 x 0.28 in)
- (2) Rear rail center notch
- (a) Rear glass upper locating hole RH: 6.5 mm (0.256 in) dia., LH: 6.5 x 10 mm (0.256 x 0.39 in) dia. oblong hole
- (4) Rear glass molding attaching square hole 8 x 8 mm (0.31 x 0.31 in)
- (4) Rear panel drain locater concave part
- (f) Front panel gauge hole 10 mm (0.39 in) dia.
- (1) Tunnel center M8
- (B) Rear bumper attaching hole 45 mm (1.77 in) dia.
- (6) Rear wiper attaching hole M6
- (6) Trim attaching hole at rear skirt (UPR) 7 mm (0.28 in) dia.
- (b) Rear bumper side attaching hole 6 mm (0.24 in) dia.
- (B) Rear combination light mounting hole 8 mm (0.31 in) dia.
- (B) Rear bumper beam attaching hole RH: 8 mm (0.31 in) dia., LH: 8 x 12 mm (0.31 x 0.47 in) dia. oblong hole

3. LUGGAGE COMPARTMENT AND ROOM (WAGON)



- (i) D pillar cover attaching hole 12 x 8 mm (0.47 x 0.31 in) dia.
- (3) Shoulder mole attaching hole 8 mm (0.31 in) dia.
- Front pillar (LWR) gauge hole 10 mm (0.39 in) dia. (On both Sedan and Wagon)
- (f) Front pillar (UPR) gauge hole 16 mm (0.63 in) dia. (On both Sedan and Wagon)
- (g) Retainer attaching square hole at C pillar (UPR) 7 x 7 mm (0.28 x 0.28 in)
- (n) Trim attaching hole at rear skirt (UPR) 15 mm (0.59 in) dia.
- (f) Rear bumper side attaching hole 6 mm (0.24 in) dia.
- (2) Rear seat belt bolt hole 13 mm (0.51 in) dia.
- (3) Rear rail locator concave part
- Buffer attaching hole (UPR) M6
- (1) Rear quarter end (LWR) gauge hole 20 mm (0.79 in) dia.
- (7) Rear combination light mounting hole 7 mm (0.28 in) dia.

4. UNDERBODY



- (1) Radiator panel (LWR) frame gauge hole 10 mm (0.39 in) dia.
- (f) Front side frame front lower surface 20 mm (0.79 in) dia.
- (1) Front side frame center lower surface 20 mm (0.79 in) dia.
- (i) Front suspension attaching hole M14
- (ii) Suspension attaching bracket M14
- (5) Front side frame rear lower center surface 20 mm (0.79 in) dia.
- (f) Transmission mount attaching hole M10
- (r) Front side frame rear lower surface 15 mm (0.59 in) dia.
- (B) Rear frame front M12
- (1) Rear frame front hole 25 mm (0.98 in) dia.
- Rear crossmember attaching hole M12
- $\textcircled{\sc 0}$ Rear frame center hole 7 mm (0.28 in) dia.
- (2) Rear frame rear concave part 15 mm (0.59 in) dia.



















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.





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- Each dimension indicates a projected dimension between hole centers.

1. FRONT STRUCTURE



$ \begin{array}{c} \textcircled{0} & - & \textcircled{2}_{R} \\ \textcircled{0} & - & \textcircled{2}_{L} \end{array} \right\} : 522 \ (20.55) $	$ \begin{array}{c} (1)_{R} - (2)_{R} \\ (1)_{L} - (2)_{L} \end{array} : 373 (14.69) $
(0) - (6) + (38.58)	2 _R — 2 _L : 966 (38.03)
	(5) _R — (5) _L : 850 (33.46)
$ \begin{array}{c} (0) & - (7)_{R} \\ (0) & - (7)_{L} \end{array} \right\} : 966 \ (38.03) $	(\$ _R — (\$ _L (\$ _R — (\$ _L }); 1,011 (39.80)
$\begin{pmatrix} 0 & - & 3 \\ 0 & - & 3 \\ \end{pmatrix}$: 1,008 (39.68)	(8) _R — (8) _L : 914 (35.98)
(1) — (25) : 863 (33.98)	$(4)_{R} - (6)_{L}$ $(6)_{R} - (4)_{L}$; 1,115 (43.90)

$ \begin{array}{c} (1)_{R} - (3)_{R} \\ (1)_{L} - (3)_{L} \end{array} $: 845 (33.27)	9 _R —
$ \begin{array}{c} (3)_{R} - (9)_{R} \\ (3)_{L} - (9)_{L} \end{array} : 347 (13.66) $	9 _в — 8 _в —
① _R — ① _L : 1,408 (55.43)	8 _R —
$(1)_{R} - (3)_{L}$ $(3)_{R} - (1)_{L}$:1,623 (63.90)	® ⊩ —
3 _R — 3 _L : 1,364 (53.70)	26 _r — 26 _l —
(4) _R — (4) _L : 803 (31.61)	

(9 _R — (9 _L : 924 (36.38)
$\left(\begin{array}{c} {{\left({\left. {\left. {\left. {\left. {\left. {\left. {\left. {\left. {\left. {\left.$
(8) _R — (8) _L : 730 (28.74)
$ \begin{array}{c} $

2. CENTER STRUCTURE

Unit: mm (in)







3. FRONT WINDSHIELD AND REAR WINDOW



 $\begin{array}{c} \textcircled{0} & - & \textcircled{0}_{R} \\ \textcircled{0} & - & \textcircled{0}_{L} \end{array} \right\} : 1,133 \ (44.61) \\ \textcircled{9} & - & \textcircled{0}_{L} \end{array} \right\} : 940 \ (37.01) \\ \textcircled{9} & - & \textcircled{0}_{L} \end{array} \right\} : 940 \ (37.01) \\ \textcircled{0}_{R} - & \textcircled{0}_{L} : 1,076 \ (42.36)$

 $\begin{array}{c} \textcircled{40}_{R} & - & \textcircled{41}_{L} \\ \textcircled{61}_{R} & - & \textcircled{61}_{L} \end{array} \right\} : 1,411 (55.55)$

 4. DOORS



	1,445 (56.89)
Ø _R — ³³ _R }: Ø ∟ — ³³ _L }:	1,087 (42.80)
Ø _R — ¾ _R Ø _L — ¾ _L }:	921 (36.26)
²⁸ _R — ³ 1 _R 28 _L — ³ 1 _L }:	1,246 (49.06)
Ø _R — 33 _R Ø _L — 33 _L }:	1,043 (41.06)

28 _R — 34 _R 28 _L — 34 _L }:	1,029 (40.51)
29 _R — 34 _R 29 _L — 34 _L }:	1,020 (40.16)
30 _R — 34 _R 30 _L — 34 _L }:	974 (38.35)
Ĵ) _R — Ĵ() _R Ĵ) _L — Ĵ() _L }:	931 (36.65)
34 _R — 35 _R 34 _L — 35 _L }:	1,101 (43.35)

34 _в — 34 _с —	36 ⊓ 36 ∟}:	1,193 (46.97)
32 _в — 32 _с —	35 ⊓ 35 ∟}:	870 (34.25)
33 _в — 33 _с —	³⁵ г }: 35 _с }:	891 (35.08)
35 _в — 35 _г —	36 ⊓ 36 ∟}:	471 (18.54)
33 _в — 33 _с —	(10) R (10) L }:	1,773 (69.80)

5. TRUNK LID AND REAR GATE



TRUNK LID 🔞 _R — 🔞 _L : 1,346 (52.99)
® _R — ® _L : 1,080 (42.52)
65 — 69 _P : 771 (30.35) 65 — 69 ∟ : 785 (30.91)
65 — 66 _R : 592 (23.31) 65 — 66 ∟ : 604 (23.78)

REAR GATE
(1) - (1) R 1 1 707 (67 20)
(0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
(48) (63) : 1,466 (57.72)
$[64]_{R} [64]_{L} : 1,213 (47.76)$
•
⊕ — ♥ R

$ \begin{array}{c} 60_{R} - 64_{L} \\ 60_{L} - 64_{R} \end{array} \right\} : 984 (38.74) $
1,393 (54.84) 🕅 L : 1,393 (54.84)
1,320 (51.97) 🕅 L

6. COMPARTMENT



- $\begin{array}{c} (4) & -- & (5) \\$

68 _R — 68 _L : 1,000 (39.37)
69 _R — 69 ∟ 69 _R — 68 ∟}: 1,435 (56.50)
59 _R — 59 _L : 1,115 (43.90)
(1) — (6) : 840 (33.07)
🕢 — 🕘 _R : 905 (35.63)
街 — 🕘 L : 913 (35.94)
🕖 — 🗐 _R : 981 (38.62)
街 — 🗐 L : 988 (38.90)
 ⑦ — ⑤ _R: 992 (39.06) ⑦ — ⑥ _L: 998 (39.29)
⁷ (8) — (12) ^R (8) — (12) ^R . 1,327 (52.24)

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.



 $(0 - A_L \ 0 - A_R \)$: 1,015 (39.96)

 $(0 - (B_{L})) = (1,057 (41.61))$

1. Front Hood and Hood Lock



- ① Front hood
- ② Hinge (RH, LH)
- ③ Front hood seal
- ④ Lever ASSY
- ⑤ Cable
- 6 Striker
- ① Hood lock ASSY

- (a) Front hood stay
- I Front hood seal CTR
- Hood duct (Outback and GT model)
- Hood inner (Outback and GT model)
- Tightening torque: N·m (kg-m, ft-lb) T1: 14±9 (1.4±0.9, 10.1±6.5) T2: 32±1 (3.3±0.1, 23.9±0.7)

23

2. Trunk Lid



- ① Torsion bar
- Trunk lid
- ③ Weatherstrip
- ④ Rod
- 5 Trunk lid lock ASSY
- 6 Striker
- Hinge ASSY

Tightening torque: N·m (kg-m, ft-lb) T1: 14±4 (1.4±0.4, 10.1±2.9) T2: 18±5 (1.8±0.5, 13.0±3.6)

3. Front Bumper (Except outback with step roof)



- ① Licence plate bracket
- Bumper face
- Front bumper beam
- ④ Bracket
- (5) Stay
- 6 Back beam (Front)
- E-A foam (Front)

4. Rear Bumper (Sedan)



- ① Bumper beam (LWR)
- Bumper beam (UPR)
- Bracket (Side)
- ④ Bumper surface
- (5) E-A foam (Rear)

5. Rear Bumper (Wagon)



Bumper beam 1

- Bracket (Side) 2
- Bumper surface

③ Bumper surface④ E-A foam (Rear)

6. Sunroof



- Glass lid ASSY 1
- Deflector and guide rail ASSY 2
- Denector and gui
 Guide rail cover
 Frame ASSY
 Motor ASSY
 Drain ASSY
 Drain shade
 Drain tube
 Carrish

- (9) Garnish
- Set bracket

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

7. Steering Support Beam



① Bracket

Steering beam

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

8. Guard Pipe



Guard pipe
 Rear floor panel

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

9. Front Bumper (Outback with step roof)



- ① Bumper face
- Front bumper beam
- ③ Bracket
- ④ Stay
- (5) Back beam (Front)
- 6 E-A foam (Front)
- ① Holder
- (8) Back beam bracket





- ① Bumper beam
- Bracket (Side)
- ③ Bumper surface
- ④ E-A foam (Rear)
- (5) Lower bracket (Side)

1. Hood

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.



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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.





B5M0267

1) Remove front grille.

2) Remove release cable from opener lever in passenger compartment.

- 3) Remove release cable from lock assembly.
- 4) Remove cable clip from engine compartment.



4. HOOD DUCT

1) Open front hood.

2) Remove attaching tapping screws and screw rivet, then remove hood inner.

3) Remove attaching nuts, then remove hood duct.



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: INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

With buffer protruding about 18 mm (0.71 in) beyond radiator panel, make sure that:

- No clearance exists between buffer and inner hood.
- Hood main lock is applied when hood is released at a height of approximately 10 cm (3.94 in) above the closed position.

NOTE:

G5M0141

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

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



D: 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. Trunk Lid

A: REMOVAL

1. TRUNK LID

1) Open trunk lid.

2) Remove trunk lid mounting bolts and detach trunk lid from hinges.



2. TORSION BAR

1) Open trunk lid. Remove torsion bars from hinge links using ST.

ST 927780000 REMOVER

CAUTION:

Be careful because torsion bar quickly swings back when released.

2) Remove the left and right torsion bars.

WARNING:

Be careful because trunk lid drops under its own weight when torsion bars are removed.





3. TRUNK LID LOCK ASSEMBLY AND KEY CYLINDER

1) Remove rod of lock assembly from rod holder of key lock assembly.

2) Remove nuts which hold lock assembly and remove lock assembly.

NOTE:

• Always remove rear skirt trim panel beforehand, if so equipped.

• Be careful not to bend opener cable.

3) Remove rod holder and detach key cylinder from trunk lid.


4. TRUNK LID OPENER

1) Remove rear seats, center pillar lower cover, floor mat, rear arch cover and side sill cover (on the driver's side).

- 2) Remove all clips which hold cable.
- 3) Disconnect cable from pull handle assembly.
- 4) Remove bolts and detach pull handle assembly.
- 5) Loosen bolts which hold lock assembly, and remove it.
- 6) Remove striker from trunk lid.
- 7) Disconnect cable from striker.

NOTE:

• Be careful not to bend or break cable.

• Basic model vehicles do not have trunk lid opener system.



B: INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

• When installing cover to pull handle assembly, observe the following:

- Be careful not to catch harness.
- Engage pull handle assembly pawls firmly.
- After installing opener cable, ensure it moves smoothly.
- Apply a coat of grease to the rotary section of hinges and contact surfaces of torsion bars.

• Apply grease to sliding surfaces of lock assembly and striker.



C: ADJUSTMENT

1. TRUNK LID

1) To adjust left-right lid positioning, loosen bolts which hold trunk lid to hinges.

2) To adjust up-down lid alignment, place washer(s) between trunk lid and hinges or move trunk lock assembly up or down.





3. Fuel Flap

A: REMOVAL

1. FUEL FLAP

Remove bolts which hold hinge to fuel flap, and detach fuel flap.

2. FUEL FLAP OPENER

1) Remove rear seats, center pillar lower cover, floor mat, rear arch cover/rear quarter trim (Wagon), and side sill cover (on the driver's side).

- 2) Remove all clips which hold cable.
- 3) Disconnect cable from pull handle.
- 4) Detach pull handle by removing bolts.
- 5) Detach fuel lock holder by turning it.

B: INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- When installing cover to pull handle assembly, observe the following:
- Be careful not to catch harness.
- Engage pull handle assembly pawls firmly.
- Make sure the clearance between fuel flap and vehicle body is equal at all points.
- After installing opener cable, ensure it moves smoothly.

4. Front Bumper AIRBAG

A: REMOVAL

SUPPLEMENTAL RESTRAINT SYSTEM "AIRBAG"

Airbag system wiring harness is routed near the front bumper assembly.

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 front bumper assembly.



1. EXCEPT OUTBACK WITH STEP ROOF

- 1) Disconnect the ground cable from the battery.
- 2) Remove two bolts from lower center of bumper.
- Remove mud guard. <Ref. to 5-1 [W9A1].> NOTE:

It is not necessary to remove the entire mud guard. Remove clips from the front section of mud guard, if necessary.

- 4) Remove the canister. <Ref. to 2-1 [W3A0].>
- 5) Remove two bolts from side of bumper.
- Remove front grill. <Ref. to 5-1 [W12A0].>
- 7) Remove headlight. <Ref. to 6-2 [W4B2].>



8) Remove clips from both sides of front bumper.

NOTE:

When removing, push the pin at the center of clip with a thin screwdriver.





9) Remove bolts (engine compartment side) from bumper stays.

10) Remove front bumper assembly.

NOTE:

Front bumper surface is accessible for removal after removing the following parts:

Two bolts (on the lower center of bumper), mud guard, bolts (on the side of bumper), front grille, headlight, clips (on both sides of front bumper), clips (on the upper section of bumper), and clips (on the lower section of bumper).

2. OUTBACK WITH STEP ROOF

1) Disconnect the ground cable from the battery.

2) Remove two bolts from lower center of bumper.

3) Remove mud guard. <Ref. to 5-1 [W9A1].>

NOTE:

It is not necessary to remove the entire mud guard. Remove clips from the front section of mud guard, if necessary.

4) Remove the canister. <Ref. to 2-1 [W3A0].>

- 5) Remove two bolts from side of bumper.
- 6) Remove front grill. <Ref. to 5-1 [W12A0].>
- 7) Remove headlight. <Ref. to 6-2 [W4B2].>

SERVICE PROCEDURE



8) Remove fog lamps.

9) Remove clips from both sides of front bumper.

NOTE:

When removing, push the pin at the center of clip with a thin screwdriver.



10) Remove bolts (engine compartment side) from bumper stays.



11) Remove front bumper assembly. NOTE:

Front bumper surface is accessible for removal after removing the following parts:

Two bolts (on the lower center of bumper), mud guard, bolts (on the side of bumper), front grille, headlight, clips (on both sides of front bumper), clips (on the upper section of bumper), and clips (on the lower section of bumper).

B: INSTALLATION

1. EXCEPT OUTBACK WITH STEP ROOF

To install the front bumper, reverse the above removal procedures.

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.

• When installing canister, insert air vent hose of canister into the hole on body.

• To facilitate installation of front bumper, insert the protrusion inside bumper into the groove of body.





Groove on

body side



2. OUTBACK WITH STEP ROOF

To install the front bumper, reverse the above removal procedures.

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.

• When installing canister, insert air vent hose of canister into the hole on body.

5. Rear Bumper

A: REMOVAL

1. SEDAN

1) Remove one bolt and one clip from side of bumper.

2) Open trunk lid. Remove trunk trim panel clips and detach trim.

3) Remove rear bumper beam (upper) attaching nut.4) Remove bolts from bumper stays.



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B5M0378

5) Remove rear bumper assembly.



2. WAGON

- 1) Remove one bolt and one clip from side of bumper.
- 2) Open rear gate. Remove rear quarter trim lid.



2. OUTBACK WITH STEP ROOF

To install the front bumper, reverse the above removal procedures.

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.

• When installing canister, insert air vent hose of canister into the hole on body.

5. Rear Bumper

A: REMOVAL

1. SEDAN

1) Remove one bolt and one clip from side of bumper.

2) Open trunk lid. Remove trunk trim panel clips and detach trim.

3) Remove rear bumper beam (upper) attaching nut.4) Remove bolts from bumper stays.



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B5M0378

5) Remove rear bumper assembly.



2. WAGON

- 1) Remove one bolt and one clip from side of bumper.
- 2) Open rear gate. Remove rear quarter trim lid.



3) Remove two clips from lower center of bumper.



4) Remove bolts from bumper stays.



5) Remove rear bumper assembly.



- 3. OUTBACK WITH STEP ROOF
- 1) Remove one clip from side of bumper.
- 2) Open rear gate and remove rear quarter trim lid.

- 3) Remove five bolts from lower center of bumper.



4) Remove bolts from bumper stays.



5) Remove rear bumper assembly.







B: INSTALLATION

1. EXCEPT OUTBACK WITH STEP ROOF

To install the rear bumper, reverse the above removal procedures.

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.

• To facilitate installation of rear bumper, attach slider to the guide pin.

• To facilitate installation of rear bumper, insert the bumper hook into the body groove.







2. OUTBACK WITH STEP ROOF

To install the rear bumper, reverse the above removal procedures.

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.

• To facilitate installation of rear bumper, attach slider to the guide pin.

• To facilitate installation of rear bumper, insert the bumper hook into the body groove.

6. Coating Method for PP Bumper

1. PROCESS STEPS

Process No.	Process name	Job contents	
1	Bumper mounting	Set bumper on paint work table if required. Use paint work table conforming to inner shape of bumper when possible.	Bumper Set bumper section G5M0164
2	Masking	Mask specified part (black base) with masking tape. Use masking tape for PP (e.g., Nichiban No. 533, etc.).	
3	Degreasing, clean- ing	Clean all parts to be painted with white gasoline, normal alcohol, etc. to remove dirt, oil, fat, etc.	
4	Primer paint	First, apply one coat of primer to all parts to be painted, using air gun. Use primer (clear).	
5	Drying	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.	
6	Top coat paint (I)	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)	 Wetanic color 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/cm², 36 — 50 psi)
7	Drying	Not required.	Dry at normal temperature [10 min. or more at 20°C (68°F)]. In half-dried condition, avoid dust, dirt.
8	Top coat paint (II)	Not required.	 Apply a clear coat to parts with top coat paint (I), three times, at 5 — 7 minutes 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/cm², 36 — 50 psi)
9	Drying	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).	
10	Inspection	Paint check	
11	Masking removal	Remove masking in process No. 2.	

7. 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.

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

It is almost restorable as follows:

Process No.	Process name	Job contents	
1	Cleaning	Clean the area to be repaired using water.	
2	Sanding	Grind the repairing area with #500 sand paper 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.	

2. 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 dam- aged area	Cut off protruding area, if any, due to collision, using a putty knife.	
3	Sanding	Grind the affected area with #100 to #500 sand paper.	
4	Finish	Resin section	Coated section
		Same as process No. 3 in the "1." section.	Perform process No. 12 and subsequent opera- tions in the "3." section.

3. 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	Bumper removal	Remove bumper as required.		
2	Parts removal	Remove parts built into bumper as required.		
3	Bumper placement	Place bumper on a paint work table as required. It is recommended that contour of work table accommodates internal shape of bumper.	Bumper Set bumper section 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).		
5	Cutting	If nature of damage are 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.	Unit: mm (in) 20-30 (0.79-1.18) Paint surface 3 (0.12) PP base surface G5M0165	
6	Sanding (I)	Grind beveled surface with sand paper (#40 to #60) to smooth finish.		
7	Cleaning	Clean the sanded surface with the same solvent as used in process No. 4.		
			Grind the side just opposite the beveled area with sand paper (#40 to #60) and clean using a solvent. Temporarily spot-weld the side, using a PP welding rod and heater gun.	
8	Temporary welding	NOTE: • Do not melt welding rod until it flows out. This re-	Ided spot (Use heater gun I PP welding rod) PP base surface Inction G5M0166 essults in reduced strength.	

5-1 SERVICE PROCEDURE 7. Repair Instructions for Colored PP Bumper

Process No.	Process name	Job contents	
	Welding	Using a heater gun and PP welding rod, weld the beveled spot while melting the rod and damaged area.	
9		Melt hatched area	
		 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. 	
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 w		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 neces- sary. 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 dampended 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 sand paper and water.	

Process No.	Process name	Job contents	
18	Cleaning/degreasing	Same as process No. 12.	
		Solid color	Metallic color
19	Top coat (I)	 Use a "block" coating method. Recommended paint: Suncryl (SC) No. 307 Flex hardener SC reducer (thinner) Mixing ratio: 3 : 1 Suncryl (SC) vs. No. 307 Flex hardener Viscosity: 11 — 13 sec/20°C (68°F) Coated film thickness: 40 — 50µ Spraying thickness: 245 — 343 kPa (2.5 — 3.5 kg/cm², 36 — 50 psi) 	 Use a "block" coating method. Recommended paint: Suncryl (SC) No. 307 Flex hardener SC Reducer (thinner) Mixing ratio: 3 : 1 Suncryl (SC) vs. No. 307 Flex Hardener Viscosity: 11 — 13 sec/20°C (68°F) Coated film thickness: 20 — 30µ Spraying thickness: 245 — 343 kPa (2.5 — 3.5 kg/cm², 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.
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 Suncryl (SC) vs. No. 307 Flex hardener Viscosity: 10 — 13 sec/20°C (68°F) Coated film thickness: 20 — 30µ Spraying pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm², 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.	

8. Front Fender AIRBAG

A: REMOVAL

SUPPLEMENTAL RESTRAINT SYSTEM "AIRBAG"

Airbag system wiring harness is routed near the front fender.

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 front fender.



1) Disconnect ground cable from battery.

2) Remove bracket which secures mud guard to front fender.

3) Remove mud guard. <Ref. to 5-1 [W9A1].> NOTE:

Do not remove the entire mud guard, only the front section of it.

4) Remove headlight. <Ref. to 6-2 [W4B2].>



5) Remove bolts which secure front fender. Remove front fender.



- 1) Installation is in the reverse order of removal.
- 2) Check for alignment of front fender with hood and front door with front fender at all points. Adjust, if necessary.

5-1



9. Mud Guard and Rear Arch Protector AIRBAG

A: REMOVAL

SUPPLEMENTAL RESTRAINT SYSTEM "AIRBAG"

Airbag system wiring harness is routed near the mud guard.

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 mud guard.



1. MUD GUARD (EXCEPT OUTBACK WITH STEP ROOF)

- 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.



- 1) Installation is in the reverse order of removal.
- 2) Check for alignment of front fender with hood and front door with front fender at all points. Adjust, if necessary.

5-1



9. Mud Guard and Rear Arch Protector AIRBAG

A: REMOVAL

SUPPLEMENTAL RESTRAINT SYSTEM "AIRBAG"

Airbag system wiring harness is routed near the mud guard.

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 mud guard.



1. MUD GUARD (EXCEPT OUTBACK WITH STEP ROOF)

- 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.



2. REAR ARCH PROTECTOR

Remove rear arch protector.



3. MUD GUARD (OUTBACK WITH STEP ROOF)

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.

B: INSTALLATION

Installation is in the reverse order of removal. CAUTION: Only use new screws and clips.



10. Cowl Panel

A: REMOVAL

- 1) Remove wiper arms.
- 2) Open front hood.
- 3) Remove cowl panel seal using a plier.

B5M0291

4) Lift cowl panel and detach it from clips attached to body panel.



2. REAR ARCH PROTECTOR

Remove rear arch protector.



3. MUD GUARD (OUTBACK WITH STEP ROOF)

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.

B: INSTALLATION

Installation is in the reverse order of removal. CAUTION: Only use new screws and clips.



10. Cowl Panel

A: REMOVAL

- 1) Remove wiper arms.
- 2) Open front hood.
- 3) Remove cowl panel seal using a plier.

B5M0291

4) Lift cowl panel and detach it from clips attached to body panel.

Installation is in the reverse order of removal.

NOTE:

When installing cowl panel, first attach a middle clip to the cap attached to body panel. Then tap the cowl panel to attach it to other clips.



Hook

11. Molding and Retainer A: REMOVAL

- 1) Remove weatherstrip.
- 2) Remove tapping screws.

B: INSTALLATION

Installation is in the reverse order of removal.

NOTE:

Insert molding and retainer onto hook, then fasten with screws.



Clip

B5M0294A

12. Front Grille

A: REMOVAL

 Remove four upper clips from body panel. To facilitate removal, press portion shown in figure using screwdriver.
 Pull front grille to detach it from two lower clips. (Two lower clips remain on headlight.)

B: INSTALLATION

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

Installation is in the reverse order of removal.

NOTE:

When installing cowl panel, first attach a middle clip to the cap attached to body panel. Then tap the cowl panel to attach it to other clips.



Hook

11. Molding and Retainer A: REMOVAL

- 1) Remove weatherstrip.
- 2) Remove tapping screws.

B: INSTALLATION

Installation is in the reverse order of removal.

NOTE:

Insert molding and retainer onto hook, then fasten with screws.



Clip

B5M0294A

12. Front Grille

A: REMOVAL

 Remove four upper clips from body panel. To facilitate removal, press portion shown in figure using screwdriver.
 Pull front grille to detach it from two lower clips. (Two lower clips remain on headlight.)

B: INSTALLATION

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

Installation is in the reverse order of removal.

NOTE:

When installing cowl panel, first attach a middle clip to the cap attached to body panel. Then tap the cowl panel to attach it to other clips.



Hook

11. Molding and Retainer A: REMOVAL

- 1) Remove weatherstrip.
- 2) Remove tapping screws.

B: INSTALLATION

Installation is in the reverse order of removal.

NOTE:

Insert molding and retainer onto hook, then fasten with screws.



Clip

B5M0294A

12. Front Grille

A: REMOVAL

 Remove four upper clips from body panel. To facilitate removal, press portion shown in figure using screwdriver.
 Pull front grille to detach it from two lower clips. (Two lower clips remain on headlight.)

B: INSTALLATION

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



13. Door Mirror

- A: REMOVAL
- 1) Remove the gusset cover.



2) Remove inner remote control switch cover.



Connector_{B5M0298A}

Remove inner remote control switch.
 Remove front door trim.

5) Disconnect the door mirror connector.6) Remove the door mirror installation screws.

B: INSTALLATION

Installation is in the reverse order of removal.





14. Side Protector

A: REMOVAL

Side protector consists of three parts; front fender, front door and rear door.

1. SIDE PROTECTOR FRONT FENDER PORTION

1) Remove bracket which secures mud guard to front fender.

 Remove mud guard. <Ref. to 5-1 [W9A1].> NOTE:

Detach the rear part of mud guard as required for the procedure. It is not necessary to remove the entire mud guard. 3) Use pliers to remove a clip from inside front fender. Remove it from vehicle body but keep it with side protector.

2. SIDE PROTECTOR FRONT DOOR AND REAR DOOR PORTIONS

1) Remove trim panel. <Ref. to 5-2 [W2A2].>

2) Use pliers to remove clips from inside of doors. Remove them from vehicle body but keep them with side protector. NOTE:

Front door portion has five clips, rear door portion has four clips.

B: INSTALLATION

Installation is in the reverse order of removal.

NOTE:

To install side protector front door and rear door portions, insert the first clip into the base hole [9 mm (0.35 in) dia.], and then insert other clips.

CAUTION:

Insert clips firmly and carefully by hand. To avoid damaging clips, do not forcefully push or hit clips.



15. Roof Rack (Wagon only, if equipped)

A: REMOVAL

1) Remove roof trim, rear quarter trim, pillar trim, etc. <Ref. to 5-3 [W5A0].>

- 2) Remove flange bolts.
- 3) Remove flange nuts.
- 4) Remove roof rail.

B: INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

To prevent deformation, be sure to install roof rail in steps 4), 3), 2) and 1), in that order.



16. Sunroof

A: REMOVAL

1. GLASS LID ASSEMBLY

- 1) Completely open sun shade. (Push it back far.)
- 2) Remove a clip and detach guide rail cover.
- 3) Remove six nuts from the left and right lid bracket.
- 4) Working inside, slightly raise glass lid assembly until it is disengaged from lid bracket.
- 5) Hold both ends of glass lid assembly and remove it at an angle.



2. SUNROOF MOTOR AND RELAY

- 1) Remove center pillar trim upper. <Ref. to 5-3 [W5A3].>
- 2) Remove front pillar trim upper. <Ref. to 5-3 [W5A4].>
- 3) Remove assist grip on left side.
- 4) Remove sunvisor with hook.
- 5) Remove sunroof switch.
- 6) Remove rearview mirror.
- 7) While rolling up roof trim, disconnect harness clips and connector.
- 8) While rolling up roof trim, remove spot lamp bracket and sunroof motor.



15. Roof Rack (Wagon only, if equipped)

A: REMOVAL

1) Remove roof trim, rear quarter trim, pillar trim, etc. <Ref. to 5-3 [W5A0].>

- 2) Remove flange bolts.
- 3) Remove flange nuts.
- 4) Remove roof rail.

B: INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

To prevent deformation, be sure to install roof rail in steps 4), 3), 2) and 1), in that order.



16. Sunroof

A: REMOVAL

1. GLASS LID ASSEMBLY

- 1) Completely open sun shade. (Push it back far.)
- 2) Remove a clip and detach guide rail cover.
- 3) Remove six nuts from the left and right lid bracket.
- 4) Working inside, slightly raise glass lid assembly until it is disengaged from lid bracket.
- 5) Hold both ends of glass lid assembly and remove it at an angle.



2. SUNROOF MOTOR AND RELAY

- 1) Remove center pillar trim upper. <Ref. to 5-3 [W5A3].>
- 2) Remove front pillar trim upper. <Ref. to 5-3 [W5A4].>
- 3) Remove assist grip on left side.
- 4) Remove sunvisor with hook.
- 5) Remove sunroof switch.
- 6) Remove rearview mirror.
- 7) While rolling up roof trim, disconnect harness clips and connector.
- 8) While rolling up roof trim, remove spot lamp bracket and sunroof motor.



3. SUNROOF FRAME

Remove sunroof switch, center and rear room lamps.
 Remove roof trim, rear quarter trim, pillar trim, etc.

- <Ref. to 5-3 [W5A0].>
- 3) Remove glass lid assembly.
- 4) Remove two harness support clips.



5) Disconnect harness clips and connector of sunroof motor.

6) Disconnect front and rear drain tubes.

CAUTION:

When installing drain tube, insert it securely into drain pipe.

Length A: 15 mm (0.59 in) or more

7) Remove eight nuts.



Set bracket.

8) Remove set bracket mounting bolts.9) Remove sunroof frame.



B5M0382A

Installation is in the reverse order of removal.







1. ALIGNMENT OF HEIGHT BETWEEN GLASS LID ASSEMBLY AND ROOF PANEL

1) Remove guide rail cover.

2) Loosen nuts and adjust height by adding (Max: two pieces) and extracting (Max: one piece) shim(s) (Standard: one piece) between glass lid assembly and lid bracket.

Difference in height between glass lid assembly and roof panel:

0±0.5 mm (0±0.020 in)





1) Remove guide rail cover.

2) Loosen nuts and move glass lid assembly to either side to adjust front, rear, right, and left side partitions.

Partition clearance:

7.0±0.5 mm (0.276±0.020 in)



3. CHECKING FOR MOVEMENT OF GLASS LID ASSEMBLY ITSELF

1) Before installing sunroof motor, check glass lid assembly for movement.

2) Place a cloth on glass lid assembly and sun shade, and attach a spring scale to glass lid assembly edge using the cloth.

3) Pull spring scale to measure force required to move glass lid assembly.

Force required to move glass lid assembly and sun shade trim:

Less than 196 N (20 kg, 44 lb)

Considerable effort is required to start glass lid assembly moving, so take scale reading while glass lid assembly is moving smoothly.

4) If force required exceeds specifications, check the following points:

• Glass lid assembly, sun shade and deflector and guide rail assembly for improper installation

Cable for seizure



17. Roof Rail (Outback with step roof) A: REMOVAL

1) Remove roof trim, rear quarter trim, pillar trim, etc. <Ref. to 5-3 [W5A0].>

- 2) Remove flange bolts.
- 3) Remove flange nuts.
- 4) Remove roof rail.

B: INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

To prevent deformation, be sure to install roof rail in steps 4), 3), 2) and 1), in that order.



18. Undercover

A: REMOVAL AND INSTALLATION

1) Remove undercover mounting bolts.

2) Installation is in the reverse order of removal. NOTE:

Undercover is bolted along with mud guard.



19. Rear Spoiler (4 Door Sedan 2500 cc GT model only)

A: REMOVAL AND INSTALLATION

1) Open trunk lid.

2) Disconnect high-mount stop light connector located inside the trunk lid.

3) Remove rubber caps.

4) Remove rear spoiler mounting nuts.

CAUTION:

When removing nuts, be careful not to drop them inside rear gate.





17. Roof Rail (Outback with step roof) A: REMOVAL

1) Remove roof trim, rear quarter trim, pillar trim, etc. <Ref. to 5-3 [W5A0].>

- 2) Remove flange bolts.
- 3) Remove flange nuts.
- 4) Remove roof rail.

B: INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

To prevent deformation, be sure to install roof rail in steps 4), 3), 2) and 1), in that order.



18. Undercover

A: REMOVAL AND INSTALLATION

1) Remove undercover mounting bolts.

2) Installation is in the reverse order of removal. NOTE:

Undercover is bolted along with mud guard.



19. Rear Spoiler (4 Door Sedan 2500 cc GT model only)

A: REMOVAL AND INSTALLATION

1) Open trunk lid.

2) Disconnect high-mount stop light connector located inside the trunk lid.

3) Remove rubber caps.

4) Remove rear spoiler mounting nuts.

CAUTION:

When removing nuts, be careful not to drop them inside rear gate.





17. Roof Rail (Outback with step roof) A: REMOVAL

1) Remove roof trim, rear quarter trim, pillar trim, etc. <Ref. to 5-3 [W5A0].>

- 2) Remove flange bolts.
- 3) Remove flange nuts.
- 4) Remove roof rail.

B: INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

To prevent deformation, be sure to install roof rail in steps 4), 3), 2) and 1), in that order.



18. Undercover

A: REMOVAL AND INSTALLATION

1) Remove undercover mounting bolts.

2) Installation is in the reverse order of removal. NOTE:

Undercover is bolted along with mud guard.



19. Rear Spoiler (4 Door Sedan 2500 cc GT model only)

A: REMOVAL AND INSTALLATION

1) Open trunk lid.

2) Disconnect high-mount stop light connector located inside the trunk lid.

3) Remove rubber caps.

4) Remove rear spoiler mounting nuts.

CAUTION:

When removing nuts, be careful not to drop them inside rear gate.



5) Installation is in the reverse order of removal.

. Tightening torque: 7.4±2.0 № m (0.75±0.2 kg-m, 5.4±1.4 ft-lb)



20. Roof Spoiler (Station Wagon 2500 cc GT model only)

A: REMOVAL AND INSTALLATION

1) Open rear gate and remove rear gate trim upper and side.

2) Remove high-mount stop light. <Ref. to 6-2 [W5A4].>

Plastic cap Plastic cap Harness cover B5M0415A 3) Remove plastic caps and harness covers.





4) Remove roof spoiler mounting nuts.

CAUTION:

• When removing nuts, be careful not to drop them inside rear gate.

• Be careful since two-sided tape is placed between roof spoiler and body panel.

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)

21. Side Spoiler (2500 cc GT model only)

A: REMOVAL AND INSTALLATION

- 1) Remove tapping screws, clip and end cover.
- 2) Installation is in the reverse order of removal.

5) Installation is in the reverse order of removal.

. Tightening torque: 7.4±2.0 № m (0.75±0.2 kg-m, 5.4±1.4 ft-lb)



20. Roof Spoiler (Station Wagon 2500 cc GT model only)

A: REMOVAL AND INSTALLATION

1) Open rear gate and remove rear gate trim upper and side.

2) Remove high-mount stop light. <Ref. to 6-2 [W5A4].>

Plastic cap Plastic cap Harness cover B5M0415A 3) Remove plastic caps and harness covers.





4) Remove roof spoiler mounting nuts.

CAUTION:

• When removing nuts, be careful not to drop them inside rear gate.

• Be careful since two-sided tape is placed between roof spoiler and body panel.

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)

21. Side Spoiler (2500 cc GT model only)

A: REMOVAL AND INSTALLATION

- 1) Remove tapping screws, clip and end cover.
- 2) Installation is in the reverse order of removal.

5) Installation is in the reverse order of removal.

. Tightening torque: 7.4±2.0 № m (0.75±0.2 kg-m, 5.4±1.4 ft-lb)



20. Roof Spoiler (Station Wagon 2500 cc GT model only)

A: REMOVAL AND INSTALLATION

1) Open rear gate and remove rear gate trim upper and side.

2) Remove high-mount stop light. <Ref. to 6-2 [W5A4].>

Plastic cap Plastic cap Harness cover B5M0415A 3) Remove plastic caps and harness covers.





4) Remove roof spoiler mounting nuts.

CAUTION:

• When removing nuts, be careful not to drop them inside rear gate.

• Be careful since two-sided tape is placed between roof spoiler and body panel.

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)

21. Side Spoiler (2500 cc GT model only)

A: REMOVAL AND INSTALLATION

- 1) Remove tapping screws, clip and end cover.
- 2) Installation is in the reverse order of removal.



22. Front Under Spoiler (All models except 2500 cc GT)

A: REMOVAL AND INSTALLATION

- 1) Remove clips.
- 2) Installation is in the reverse order of removal.



23. Airdam Skirt (2500 cc GT model only)

A: REMOVAL AND INSTALLATION

- 1) Remove airdam skirt mounting bolts and clips.
- 2) Installation is in the reverse order of removal.



24. Rear Under Spoiler (2500 cc GT model only)

A: REMOVAL AND INSTALLATION

1) Remove tapping screws and clips.

2) Installation is in the reverse order of removal. NOTE:

- 12 tapping screws are used for 4 Door Sedan.
- 14 tapping screws are used for Station Wagon.


22. Front Under Spoiler (All models except 2500 cc GT)

A: REMOVAL AND INSTALLATION

- 1) Remove clips.
- 2) Installation is in the reverse order of removal.



23. Airdam Skirt (2500 cc GT model only)

A: REMOVAL AND INSTALLATION

- 1) Remove airdam skirt mounting bolts and clips.
- 2) Installation is in the reverse order of removal.



24. Rear Under Spoiler (2500 cc GT model only)

A: REMOVAL AND INSTALLATION

1) Remove tapping screws and clips.

2) Installation is in the reverse order of removal. NOTE:

- 12 tapping screws are used for 4 Door Sedan.
- 14 tapping screws are used for Station Wagon.



22. Front Under Spoiler (All models except 2500 cc GT)

A: REMOVAL AND INSTALLATION

- 1) Remove clips.
- 2) Installation is in the reverse order of removal.



23. Airdam Skirt (2500 cc GT model only)

A: REMOVAL AND INSTALLATION

- 1) Remove airdam skirt mounting bolts and clips.
- 2) Installation is in the reverse order of removal.



24. Rear Under Spoiler (2500 cc GT model only)

A: REMOVAL AND INSTALLATION

1) Remove tapping screws and clips.

2) Installation is in the reverse order of removal. NOTE:

- 12 tapping screws are used for 4 Door Sedan.
- 14 tapping screws are used for Station Wagon.

Entry of water into compartment	 Check roof panel and glass lid assembly for improper or poor sealing. Check drain tube for clogging. Check sunroof frame seal and body for improper fit.
Booming noise	 Check glass lid assembly and roof panel for improper clearance. Check sun shade and roof trim for improper clearance.
Abnormal motor noise	 Check motor for looseness. Check gears and bearings for wear. Check cable for wear. Check cable pipe for deformities.
Failure of sunroof to operate (Motor operates properly.)	 Check guide rail for foreign particles. Check guide rail for improper installation. Check parts for mutual interference. Check cable slider for improper clinching. Check cable for improper installation. Check clutch adjustment nut for improper tightness.
Motor does not rotate or rotates improperly. (Use sunroof wrench to check operation.)	 Check fuse for blowout. Check switch for improper function. Check motor for incorrect terminal voltage. Check relay for improper operation. Check poor grounding system. Check cords for discontinuity and terminals for poor connections. Check limit switch for improper operation.

1. Sunroof

- 1. Door and Rear Gate
- A: DOOR ALIGNMENT



B5M0051A

1. Front Door



- Gusset 1
- Weatherstrip (Outer) 2
- 3 Stabilizer
 4 Stabilizer
 5 Protector
 6 Stopper Stabilizer (Outer)
- Stabilizer (Inner)

- \bigcirc Knock pin

- (8) Checker
- Sealing cover 9
- Door panel
- (f) Lower hinge
- 1 Upper hinge
- (1) Door sash (Rear) (14)
- Door sash (Front)

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 (Outer)
- Stabilizer (Outer)
- Stabilizer (Inner)
- ④ Stopper
- (5) Knock pin
- 6 Checker
- Seating cover

- B Door panel
- ④ Lower hinge
- Upper hinge
- ① Door sash (Rear)
- (12) Door sash (Front)(13) Rear door catcher

 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±3 (2.5±0.3, 18.1±2.2)

 T4: 29±5 (3.0±0.5, 21.7±3.6)

 T5: 37±10 (3.8±1.0, 27.5±7.2)

3. Front Door Glass



- Glass 1
- 2 Regulator and motor ASSY
- (i) Regulator handle (Except power window)
 (i) Retainer spring
 (i) Regulator ASSY

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

4. Rear Door Glass



- Glass 1
- 2 Regulator and motor ASSY
- ③ Regulator handle (Except power window)
- ④ Retainer spring⑤ Regulator ASSY

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

5. Rear Gate and Glass



- ① Rear gate
- Key cylinder
- ③ Outer handle
- (Door lock actuator
- 5 Striker
- 6 Latch
- ① Glass pin

- Image: Book of the second s
- 9 Buffer
- Stopper
- (f) Gas stay
- ① Hinge
- (1) Rear gate handle

Tightening torque: N·m (kg-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: 13 ± 3 (1.3 ± 0.3 , 9.4 ± 2.2)T4: 14 ± 4 (1.4 ± 0.4 , 10.1 ± 2.9)T5: 25 ± 5 (2.5 ± 0.5 , 18.1 ± 3.6)

- 6. Door Lock Assembly
- 1. FRONT DOOR



- ① Holder remote
- Inner remote ASSY
- Door outer handle
- Striker
- 5 Door latch
- 6 Switch ASSY
- Auto-door lock actuator
- Bell crank
- In the second second

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)

2. REAR DOOR



- ① Door outer handle
- Door latch
- Door lock actuator
- ④ Striker
- ⑤ Rod holder
- 6 Holder remote
- 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) 7. Door Trim



- Trim panel 1
- Gusset cover
- i) Finite part
 i) Gusset of
 i) Arm rest
 ii) Orname
 ii) Bracket Arm rest
- Ornament

- 6 Pocket
- 1 Weatherstrip
- Rear gate upper trim
 Rear gate lower trim

8. Weatherstrip



- 1
- Rear gate weatherstrip Retainer and molding
- (2) Retainer and molding
 (3) Upper and side weatherstrip

- (4) (5) (6)
- Retainer (Center) Weatherstrip (Rear door) Weatherstrip (Front door)

1. Procedure Chart for Removing and Installing Door and Related Parts

NOTE:

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







2. Door

A: REMOVAL AND INSTALLATION

1. DOOR ASSY

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 pin by driving it upward. Be careful not to damage door and body.

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

Tightening torque: 25±3 №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

1) Press retainer spring ① with a thin flat bladed screwdriver and then remove regulator handle ②. (models without power window)



2) Remove gusset cover ① and three screws.





4) Remove trim panel and then disconnect connector. (models with power window)

CAUTION:

Be careful not to break clip by applying undue force. Installation is in the reverse order of removal.

3. SEALING COVER

1) Remove trim panel. <Ref. to 5-2 [W2A2].>

2) Remove speaker, remote assembly and disconnect connectors.

3) Remove sealer with a spatula.

CAUTION:

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

4) Install in reverse order of removal. Some special items will be described below.

5) Confirm that sealer is properly applied without breaks. Then install sealing cover.

6) When repairing or replacing sealing cover, use "CEME-DINE 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.

- Do not stop up drain hole ① with sealer.
- Do not stop up install hole 2 with sealing cover.
- Make sure sealing cover bonded areas are free from wrinkles or openings.





4. CHECKER

- 1) Remove trim panel. <Ref. to 5-2 [W2A2].>
- 2) Remove sealing cover. <Ref. to 5-2 [W2A3].>

3) Apply a cloth to door and body to prevent damaging them, and remove checker pin by driving it upward.

CAUTION:

Be careful not to damage door and body.

4) Completely close door glass.

5) Loosen two nuts securing checker, and take out checker through access hole in underside.

Installation should be made 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)

5. DOOR GLASS

- 1) Remove trim panel. <Ref. to 5-2 [W2A2].>
- 2) Remove sealing cover. <Ref. to 5-2 [W2A3].>
- 3) Disconnect door mirror connector and then remove gusset ①. <Ref. to 5-2 [W2A10].>
- 4) Remove inner remote. <Ref. to 5-2 [W2A6].>



5) Remove inner stabilizer ①.



6) Remove nut and then separate glass holder (1) from guide channel A (2).

NOTE:

When removing nut, move door window lower glass connecting section to service hole of door panel.

7) Remove window glass upward.

CAUTION:

After removing window glass, do not move regulator.





8) Remove regulator installing bolt and guide channel B installing nut.

9) Remove regulator through lower service hole of door panel.

10) Installation is in the reverse order of removal.

6. INNER REMOTE

- 1) Remove trim panel. <Ref. to 5-2 [W2A2].>
- 2) Remove sealing cover. <Ref. to 5-2 [W2A3].>
- 3) Disconnect joints of two rods.
- 4) Unlatch rod holder.

5) Remove remote holder (1) and then remove inner remote assembly (2).



6) Installation is in the reverse order of removal. Some special items will be described below.

7) After passing two rods through holder, attach remote assembly to inner panel.

8) Latch rod holder.



9) Lock the door and then loosen bolt ①.

10) Lower bell-crank (2) and then tighten bolt (2). NOTE:

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

- 7. DOOR LATCH
- 1) Remove trim panel. <Ref. to 5-2 [W2A2].>
- 2) Remove inner remote assembly. <Ref. to 5-2 [W2A6].>
- 3) Remove sealing cover around latch service hole. <Ref.
- to 5-2 [W2A3].>
- 4) Completely close door glass.



 \bigcirc

À

5) Remove latch and actuator assembly.

(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.

6) Loosen screws securing both latch and actuator, then remove latch and actuator assembly through service hole in bottom.

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

7) Installation is in the reverse order of removal. Some special items will be described below.

8) Check operation of each part.

9) Check each sliding part for proper lubrication.

CAUTION:

G5M0396

After installation, be sure lock mechanism operates normally.



8. OUTER HANDLE

1) Remove trim panel. <Ref. to 5-2 [W2A2].>

2) Remove sealing cover. <Ref. to 5-2 [W2A3].>

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.

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)



9. KEY LOCK

- 1) Remove trim panel. <Ref. to 5-2 [W2A2].>
- 2) Remove sealing cover. <Ref. to 5-2 [W2A3].>
- 3) Completely close door glass.
- 4) Remove outer handle. <Ref. to 5-2 [W2A8].>
- 5) Loosen spring ① securing key lock.
- 6) Remove key lock from outer handle.

Installation is in the reverse order of removal. NOTE:

Install so that key slot in key lock comes to center of hole in outer handle.



10. GUSSET

NOTE:

- Be sure window is all the way down.
- 1) Remove trim panel. <Ref. to 5-2 [W2A2].>
- 2) Remove door rearview mirror.
- 3) Remove sealing cover. <Ref. to 5-2 [W2A3].>
- 4) Remove bolts and nuts which secure gusset.
- 5) Lift out gusset ①.
- To install, reverse the above removal procedures.



11. REAR DOOR CATCHER

1) Open the rear door.

2) Using TORX[®] BIT (Tamper resistant type), remove rear door catcher.

3) Installation is in the reverse order of removal.

Tightening torque:

37±10 N·m (3.8±1.0 kg-m, 27.5±7.2 ft-lb)

B: ADJUSTMENT

1. DOOR ASSY

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 mounting screws approximately one rotation. Adjust striker ① position by lightly tapping with hammer. (To adjust, utilize the shape of striker nut plate ② support.) CAUTION:

- Use cloth to prevent damaging body or other parts.
- Do not directly tap striker plastic portion.

• Do not apply impact on spot-welded striker nut plate.

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. GUSSET

Loosen the 3 bolts and 1 nut securing the gusset. Rotate the gusset in the direction of the arrow until dimension A is within the specified range.

DIMENSION A:

0.5 — 1.5 mm (0.020 — 0.059 in)



NOTE:

If dimension A is not within the specified range, adjust the front door glass upper limit position as outlined in steps (1) and (2).

(1) Raise the front door glass to the upper limit position and set the SPACER (FRONT DOOR) in position.

ST 62065FA100 SPACER (FRONT DOOR)

(2) Loosen the front and rear glass upper stopper fixate bolts. Adjust the front door glass upper limit position, then re-adjust the gusset until dimension B is within the specified range.

DIMENSION B:

3 — 5 mm (0.12 — 0.20 in)



2. PROCEDURE CHART FOR ADJUSTING DOOR GLASS



3. 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 B channel regulator 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 midpoint of two outer stabilizers, press inner stabilizer until it just touches the glass, then secure it.

Load: F

Front door glass 39 N (4 kg, 9 lb) Rear door glass 34.3 N (3.5 kg, 7.7 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 \bigcirc and adjust glass to be parallel with center pillar, then after adjustment, tighten adjusting nut \bigcirc .



- 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 (indicated in figure) 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 above 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.

4. 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 below.





• Fore-aft adjustment

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

C: INSPECTION

- 1. FRONT AND REAR DOOR GLASS
- 1) Close front door and make sure of all clearances.



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

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) Remove high-mount stop light.

5) 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.

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

- 7) 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.

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









9) 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.

10) Installation is in the reverse order of removal.

CAUTION:

• 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, 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.

3. OUTER HANDLE

- 1) Remove trim panel.
- 2) Disconnect rod from outer handle.

3) Remove two nuts used to hold outer handle 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.

SERVICE PROCEDURE



4. KEY CYLINDER

- 1) Remove trim panel.
- 2) Disengage rod from holder (1).
- 3) Remove nut from key cylinder, and detach key cylinder.
- 4) Installation is in the reverse order of removal.



5. STRIKER

Remove two bolts from striker and detach striker.

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.



- A

- A



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B: ADJUSTMENT

1) Loosen striker screw.

2) For lateral adjustment, align striker and latch at their centers.

4. Procedure Chart for Removing and Installing Window Glass

1. PROCEDURES OF REMOVAL AND INSTALLATION



2. 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.
Таре	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 front side molding and front 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 front side molding and front 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 dam 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.

SERVICE PROCEDURE







- 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) Stick dam rubber and install front molding upper.

While aligning ceramic print notch ① on windshield upper portion with mark ② in center of upper front molding, install upper front molding on windshield.

7) 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.



8) 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.


- 9) 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.



10) 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) Install front side 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.

11) 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.
- 12) 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.

13) Install cowl panel and wiper arm.

6. Rear Window Glass

A: REMOVAL

- 1. 4 DOOR MODEL
- 1) Disconnect connector from rear defogger terminal.
- 2) Remove glass in the same manner as in windshield.



- 9) 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.



10) 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) Install front side 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.

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13) Install cowl panel and wiper arm.

6. Rear Window Glass

A: REMOVAL

- 1. 4 DOOR MODEL
- 1) Disconnect connector from rear defogger terminal.
- 2) Remove glass in the same manner as in windshield.

Δ



Matching pin

NOTE:

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

2. WAGON MODEL

NOTE:

Glass

G5M0412

It is impossible to remove the molding from the glass. If molding is broken, replace rear glass.

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

CAUTION:

In case of using a piano wire, when re-installing the old rear window glass, be careful not to damage molding. NOTE:

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



B: INSTALLATION

1. 4 DOOR MODEL

- 1) Install glass in the same manner as in windshield.
- 2) Stick dam rubber ①.

3) While aligning ceramic print notch (2) on rear window glass with marks in the center of upper and lower moldings, install the two moldings on rear window glass.

4) Make rear defogger connections.

5) After installation, test for water leakage after about one hour, and leave vehicle alone for 24 hours.



- 1) Install rear gate trim.

 Install glass in the same manner as in windshield.
 About one hour after installation, test for water leakage. Leave vehicle for 24 hours before using it.

- 4) Connect rear defogger connections.
- 5) Install high-mount stop light and rear wiper.

- 7. Rear Quarter Glass
- A: REMOVAL
- 1. 4 DOOR MODEL



- 1) Remove rear quarter molding.
- 2) Remove glass in the same manner as in windshield.

2. WAGON MODEL

- 1) Remove rear quarter molding.
- 2) Remove glass in the 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 matching 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.





Condition Apparent cause/Correction Glass in fully closed 1) Glass runs out of weatherstrip lip when considerable hand • Insufficient upward travel of glass pressure is applied to it from inside. Increase upward travel of glass. position OUT Roof IN Glass runs out of weatherstrip lip G5M0502 (This condition may cause wind/booming noise during highspeed operation.) 2) Clearance exists between glass and weatherstrip when light Insufficient glass-to-door • hand pressure is applied to it at center and rear pillar weatherstrip contact locations. Check stabilizer and glass for proper contact. Increase contact Clearance using upper sash adjustment bolt. Improper adjustment of striker in • in-out direction Close door and check for alignment of striker with vehicle body. Front Rear G5M0503 (This condition may cause wind noise and/or water leakage.) 3) Adjust door glass so that it is aligned with door rearview Window is not properly adjusted in • mirror gusset. up-down/fore-aft direction. Adjust window. If necessary, move B channel regulator to eliminate window tilt. Gusset is not properly adjusted in . Gusset fore-aft direction. Align glass edge Align Adjust gusset after loosing all bolts with gusset here. and nuts witch tightening it. Incorrect Window too far toward the back (There should be Incorrect no gap between gusset and window.) Window too far forward (Rubber part of gusset is forcefully elongated.) G5M0504

1. Door Glass

DIAGNOSTICS

	Condition	Apparent cause/Correction
Door in fully closed/ open position	1) Glass rides over weatherstrip lip when door is closed. OUT Check point Roof Lip caught by glass G5M0505 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 B channel regulator.
	2) Edge of glass contacts retainer when door is fully closed.	 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	 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: 44.1 N (4.5 kg, 9.9 lb) Point 5 mm (0.20 in) below fully closed position Other point (where glass begins contact weatherstrip) Front 	 Sliding resistance increased due to high stabilizer-to-glass contact pressure. Reduce contact by mounting inner stabilizer to inside of the vehicle. 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.

DIAGNOSTICS



1. Front Seat



- ① Headrest free bushing
- Headrest lock bushing
- Headrest ASSY
- ④ Front backrest frame ASSY
- 5 Protector
- 6 Cover (Bolt) (outer)
- ① Cover (Bolt) (inner)
- (8) Inner belt ASSY
- () Inner slide rail ASSY

- ① Connect wire
- Outer slide rail ASSY
- (1) Front cushion frame ASSY
- ① Cushion ASSY
- (1) Reclining lever
- (15) Hinge spring cover
- (f) Reclining hinge ASSY
- Backrest ASSY
- (18) Hinge cover

- (19) Tilt lever cover
- ⑦ Tilt lever ASSY

Tightening torque: N·m (kg-m, ft-lb) T1: 23±5 (2.3±0.5, 16.6±3.6) T2: 29±7 (3.0±0.7, 21.7±5.1) T3: 52±10 (5.3±1.0, 38±7) 2. Rear Seat

1. SEDAN MODEL



① Backrest

- 2 Striker
- 3 Lock cover
- ④ Bracket (LH)
- 5 Backrest (LH)
- 6 Cushion

① Lock ASSY

- (8) Backrest (RH)
- (9) Bracket (RH)
- Arm rest
- ① Hinge
- Cover

Tightening torque: N·m (kg-m, ft-lb) T1: 10±3 (1.0±0.3, 7.2±2.2) T2: 25±7 (2.5±0.7, 18.1±5.1)



- ① Hinge bracket (RH)
- Backrest (RH)
- ③ Pillow
- ④ Backrest (LH)
- Striker
- (6) Hinge bracket (LH)
- Lock hinge

- (8) Rear cushion
- Hinge
- Hinge cover
- (f) Backrest center hinge
- ① Pocket

Tightening torque: N·m (kg-m, ft-lb)T1: 2 ± 1 (0.2 \pm 0.1, 1.4 \pm 0.7)T2: 5.9 ± 1.5 (0.6 \pm 0.15, 4.3 \pm 1.1)T3: 10 \pm 3 (1.0 \pm 0.3, 7.2 \pm 2.2)T4: 25 \pm 7 (2.5 \pm 0.7, 18.1 \pm 5.1)

3. Front Seat Belt



- ① Adjuster anchor ASSY
- Through anchor cover
- Webbing guide
- ④ Inner belt ASSY
- (5) Outer belt ASSY

Tightening torque: N m (kg-m, ft-lb) T1: 13±3 (1.3±0.3, 9.4±2.2) T2: 35±13 (3.6±1.3, 26±9)

4. Rear Seat Belt



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

- (5) Lap anchor cover (LH)
- (6) Lap anchor cover (RH)

Tightening torque: N·m (kg-m, ft-lb) T: 35±13 (3.6±1.3, 26±9)

5. Inner Trim



- ① Front pillar upper trim
- Center pillar upper trim
- ③ Side sill rear upper cover
- ④ Side sill rear lower cover
- (5) Side sill front lower cover
- 6 Front pillar lower trim
- ① Center pillar lower trim

- (a) Rear quarter upper front trim
- (9) Rear quarter upper rear trim
- (1) Rear rail trim
- ① Edge rear trim
- 12 Rear quarter pillar lower trim
- (1) Cap strut
- (1) Lid pocket

- (15) Rear pillar upper
- (f) Rear upper bulk
- ① Trunk side trim
- (18) Trunk rear trim
- (19) Rear side bulk trim
- Rear pillar lower trim
- Lamp cover



1. Front Seat

A: REMOVAL

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

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, then install headrest. **CAUTION:**

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



B: INSTALLATION

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

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 vehicle body side.

4) Secure the front of seat using inward and outward bolts① and ② 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

(3) and (4) in that order.

7) Install bolt (5).

8) 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.

9) After installation, ensure that all mechanisms operate properly and lock.

10) If any mechanism does not function properly, loosen bolts (3), (4) and (5), slide seat as required, insert all lock plate pawls into holes in slide rail brackets, and tighten bolts (3), (4) and (5) in that order.

11) Install bolt cover on rear end of slide rail.

12) Install headrest on backrest.

NOTE:

Tighten bolts in the designated order.





2. Rear Seat

A: REMOVAL

1. SEDAN MODEL

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 "C". With cushion held in that position, move it forward until it is unhooked.

3) Remove bolts securing lower portion of backrest to body.

4) Pull strap (located in center of fold-down backrest) to release lock, and fold backrest onto cushion. (Fold-down type)

5) Lift rear seat backrest in direction "A" until it is released from upper hooks.



3) Position seat in compartment and align the holes on the seat with the holes on the vehicle body side.

4) Secure the front of seat using inward and outward bolts① and ② 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

(3) and (4) in that order.

7) Install bolt (5).

8) 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.

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11) Install bolt cover on rear end of slide rail.

12) Install headrest on backrest.

NOTE:

Tighten bolts in the designated order.





2. Rear Seat

A: REMOVAL

1. SEDAN MODEL

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 "C". With cushion held in that position, move it forward until it is unhooked.

3) Remove bolts securing lower portion of backrest to body.

4) Pull strap (located in center of fold-down backrest) to release lock, and fold backrest onto cushion. (Fold-down type)

5) Lift rear seat backrest in direction "A" until it is released from upper hooks.



1) Remove bolts securing hinges (located at front of seat) to body.

2) Pull strap (located in middle rear portion of cushion) to release lock. Lift cushion out and away from body.

3) Pull knobs (located at each side of backrest's upper portion) up to release lock, and fold backrest all the way forward.

(1) B5M0333A





5) Remove the bolt (2) and then remove backrest (RH side) from hinge bracket (3).





B: INSTALLATION

1. SEDAN MODEL

1) Before installing backrest, ensure that trim panel, insulator and seat belt are properly installed.

2) Transfer outer seat belt webbing to front of backrest and fold backrest forward. Attach seat wire to upper hooks (2 places), and move pillow in the direction of "B" until backrest is aligned with lower mounting holes in body.

3) Engage backrest's folding mechanism with striker.

4) Secure lower center and both sides of backrest to body with bolts.

5) Slightly raise front section of cushion while pushing down on cushion in the direction of "C". With cushion held in that position, attach rear section of cushion to hooks at lower frame location.

6) Secure front of cushion to body with bolts.

CAUTION:

• Before installing seat, ensure that seat belt is placed on cushion.

• Confirm that winding of three-point type seat belt can operate regularly.

Installation is in the reverse order of removal.

CAUTION:

• Do not allow center seat belt to get under cushion when folding cushion.

• Ensure that side seat belt tongue is free from cushion and trim panel.

• Lift front of cushion to ensure that cushion is properly locked.

3. Front Seat Belt

A: REMOVAL AND INSTALLATION

1. OUTER BELT

- 1) Remove through anchor cover cap.
- 2) Remove shoulder anchor bolt.

3) Remove side sill rear upper cover and front pillar lower trim.

- 4) Remove center pillar lower trim.
- 5) Remove webbing guide.
- 6) Roll up floor mat at the bottom of center pillar.
- 7) Remove lap anchor bolt.
- 8) Remove outer belt assembly.





2. INNER BELT

Remove anchor nut.



3. ADJUSTABLE SHOULDER ANCHOR

- 1) Remove shoulder anchor bolt.
- 2) Remove lower center pillar trim.
- 3) Remove front and center pillar upper trim.
- 4) Remove adjustable shoulder anchor assembly.
- 5) 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.

Installation is in the reverse order of removal.

CAUTION:

• Do not allow center seat belt to get under cushion when folding cushion.

• Ensure that side seat belt tongue is free from cushion and trim panel.

• Lift front of cushion to ensure that cushion is properly locked.

3. Front Seat Belt

A: REMOVAL AND INSTALLATION

1. OUTER BELT

- 1) Remove through anchor cover cap.
- 2) Remove shoulder anchor bolt.

3) Remove side sill rear upper cover and front pillar lower trim.

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- 5) Remove webbing guide.
- 6) Roll up floor mat at the bottom of center pillar.
- 7) Remove lap anchor bolt.
- 8) Remove outer belt assembly.





2. INNER BELT

Remove anchor nut.



3. ADJUSTABLE SHOULDER ANCHOR

- 1) Remove shoulder anchor bolt.
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- 3) Remove front and center pillar upper trim.
- 4) Remove adjustable shoulder anchor assembly.
- 5) 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.



4. Rear Seat Belt

A: REMOVAL AND INSTALLATION

1. SEDAN MODEL

- 1) Remove rear cushion from vehicle.
- 2) Remove rear backrest from vehicle.
- 3) Remove rear pillar upper trim.
- 4) Remove outer anchor bolts.



5) Remove ELR.

Bolt Bolt G5M0360 6) Remove anchor bolt of outer belt and then remove outer belt assembly.

- 7) Remove inner belt.
- 8) Installation is in the reverse order of removal.



2) Remove shoulder anchor bolt.
 3) Remove cap strut.

WAGON MODEL
 Raise rear cushion.

4) Remove rear quarter upper front trim.



5) Remove ELR assembly.

CAUTION:

Remove outer seat belt and center seat belt in similar manner used to remove those from Sedan model.



6) Remove lap anchor cover and then remove lower anchor bolt.

7) Remove outer belt assembly.

8) Installation is in the reverse order of removal. 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.



5. Inner Trim Panel

- A: REMOVAL AND INSTALLATION
- 1. SIDE SILL COVER
- 1) Remove front pillar lower trim ①.
- 2) Remove side sill rear upper cover trim 2).

2. CENTER PILLAR LOWER

Remove center pillar lower trim.





6) Remove lap anchor cover and then remove lower anchor bolt.

7) Remove outer belt assembly.

8) Installation is in the reverse order of removal. 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.



5. Inner Trim Panel

- A: REMOVAL AND INSTALLATION
- 1. SIDE SILL COVER
- 1) Remove front pillar lower trim ①.
- 2) Remove side sill rear upper cover trim 2).

2. CENTER PILLAR LOWER

Remove center pillar lower trim.



SERVICE PROCEDURE











3. CENTER PILLAR UPPER

- <Ref. to 5-3 [C500].>
- 1) Remove front pillar upper trim.
- 2) Remove upper anchor of front seat belt.
- 3) Remove center pillar upper trim panel.
- 4) 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.

4. FRONT PILLAR UPPER

<Ref. to 5-3 [C500].>

Remove front pillar upper trim panel.

CAUTION:

Be sure to securely hook pawls of front pillar upper trim panel on body flange.

5. REAR PILLAR UPPER

- 1) Remove rear seat cushion and backrest.
- 2) Remove rear seat belt. (Lower anchor bolt)
- 3) Remove rear pillar upper trim panel. <Ref. to 5-3 [C500].>

4) Installation is in the reverse order of removal.

CAUTION:

Be sure to securely hook pawls of rear pillar upper trim panel on body flange.

6. REAR PILLAR LOWER

<Ref. to 5-3 [C500].>

- 1) Remove side sill rear upper cover trim.
- 2) Remove rear pillar lower trim.

7. REAR QUARTER PILLAR UPPER

<Ref. to 5-3 [C500].>

- 1) Remove rear seat belt. (Upper anchor bolt)
- 2) Remove cap strut.
- 3) Remove rear quarter upper front trim ①.
- 4) Remove rear quarter upper rear trim (2).
- 5) Installation is in the reverse order of removal.

CAUTION:

Be sure to securely hook pawls of rear quarter pillar trim panel on body flange.



8. REAR QUARTER PILLAR LOWER

<Ref. to 5-3 [C500].>

- 1) Set rear seat cushion up.
- 2) Remove side sill rear upper cover.

3) Remove rear seat belt. (Upper anchor and lower anchor bolts)

- 4) Remove side skirt trim.
- 5) Remove cap strut.
- 6) Remove rear quarter upper rear trim.
- 7) Remove rear quarter pillar lower trim.
- 8) Installation is in the reverse order of removal.

CAUTION:

Be careful not to ride trim panel over harness, insulators, etc.



9. ROOF TRIM

<Ref. to 5-3 [C500].>

1) Remove room mirror, room light, sun visor and assist grip.

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

3) Using ST, remove clips and then detach roof trim.

ST 925580000 PULLER

4) Installation is in the reverse order of removal.

CAUTION:

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

10. FLOOR MAT AIRBAG

Supplemental Restraint System "Airbag"

Airbag system wiring harness is routed near floor mat.

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 servicing floor mat.

The following procedure is applicable to all models.

SERVICE PROCEDURE



- 1) Remove front seats.
- 2) Remove rear seat cushion.
- 3) Remove console box.
- 4) Remove front pillar lower trim panel.
- 5) Remove center pillar lower trim panel.
- 6) Remove side sill cover.
- 7) Remove fuel opener cover.



- 8) Remove clip under front seat.
- 9) Remove clip in toe board area.

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.

- 10) Remove mat hook.
- 11) Remove mat from toe board area.
- 12) Remove mat from heater module.
- 13) Roll mat, and take it out of opened rear door.

14) 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.

1. Instrument Panel

1. LHD MODEL



-) Pad and frame
- Grille SD def. (D)
- ③ Front def. grille
- ④ Grille SD def. (P)
- (5) Grille vent (P)
- 6 Cover
- ① Cover back panel
- Pocket ASSY

- Lock ASSY
- Meter visor
- (1) Grille CTR vent.(1) Panel CTR upper
- Panel CTR lower
- (i) Cup holder BRKT
- (5) Cup holder
- (i) Ash tray ASSY

- ⑦ Panel lower cover
- (B) Grille SD vent. (D)

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

2. RHD MODEL



- ① Pad and frame
- Grille SD def. (D)
- ③ Front def. grille
- Grille SD def. (P)
- 5 Grille vent. (P)
- 6 Cover
- Cover back panel
- Pocket ASSY

- Icock ASSY
- Meter visor
- Grille CTR vent.
- Panel CTR upper
- (1) Panel CTR lower
- (1) Cup holder BRKT
- (f) Cup holder
- (f) Ash tray ASSY

- 1) Panel lower cover
- (B) Grille SD vent. (D)

Tightening torque: N·m (kg-m, ft-lb) T: 7±1 (0.7±0.1, 5.1±0.7) 2. Console box



- Shift boot 1
- Shift boot
 Front cover (MT)
 Front cover (AT)
 Console cover
 Strip
 Lock
 Lid

- Hinge 8
- () Arm
- Ash tray ASSY
- (f) Console pocket ① Console BRKT
- (1) Console box

1. Instrument Panel AIRBAG

Airbag system wiring harness is routed near combination meter.

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 combination meter.

A: REMOVAL

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



4) Remove console box.



Clip

5) Remove lower cover and then disconnect connector.



6) Remove glove box.

B5M0025



7) Remove cover back panel.



8) Remove two bolts and lower steering column.



9) Set temperature control lever to Max. COLD position, and then disconnect temperature control cable from link of heater module.

NOTE:

Do not move lever and link when installing.



10) Remove bolt cover and bolt of both side.



11) Remove front side sill cover RH and then disconnect airbag connector (AB9) and (AB10) (Airbag model). <Ref. to 5-5 [M2-6].>



12) Disconnect harness connectors.

1	15P/Gray	
2	22P/Brown	
3	22P/White	
4	20P/Blue	
5	22P/Black	
6	4P/Sky blue	
\bigcirc	1P/Black	
8	1P/Black	

CAUTION:

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

NOTE:

Put matching mark, if necessary, for easy re-assembly.

13) Remove the installing bolt.



14) Remove front defroster grille and two bolts.

15) Remove instrument panel carefully from the body.

CAUTION:

Take care not to scratch the instrument panel and related parts.



CAUTION:

When storing removed instrument panel with passenger airbag module, place it standing up on the floor.



B: INSTALLATION

1) Installation is in the reverse order of removal. Do the following:

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

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.

2) Set clips located at both inside ends of instrument panel onto body side.



- 1. SRS Airbag
- 1. LHD MODEL



- ① Combination switch ASSY with roll connector
- TORX[®] bolt
- ③ Airbag module ASSY (Driver)
- (Airbag module ASSY (Passenger)
- 5 BRKT B
- 6 BRKT P AB
- BRKT SD A
- (8) Front sensor ASSY RH
- (1) Grommet
- ① TORX[®] bolt
- (f) Airbag control module
- 12 Protector RH
- (1) Protector LH
- (i) Airbag main harness
- (5) Front sensor ASSY LH

Tightening torque: N·m (kg-m, ft-lb)T1: 1.8 ± 0.5 (0.18 ± 0.05 , 1.3 ± 0.4)T2: 2.5 ± 0.5 (0.25 ± 0.05 , 1.8 ± 0.4)T3: 4.4 ± 1.5 (0.45 ± 0.15 , 3.3 ± 1.1)T4: 7.4 ± 0.5 (0.75 ± 0.05 , 5.4 ± 0.4)T5: 10 ± 2 (1.0 ± 0.2 , 7.2 ± 1.4)T6: 20 ± 4 (2.0 ± 0.4 , 14.5 ± 2.9)T7: 32 ± 10 (3.3 ± 1.0 , 23.9 ± 7.2)
2. RHD MODEL



- ① Combination switch ASSY with roll connector
- Cover
- TORX[®] bolt
- ④ Airbag module ASSY (Driver)
- (5) Airbag module ASSY (Passenger)
- 6 BRKT B
- BRKT P AB
- BRKT SD A
- (9) Front sensor ASSY RH
- (1) Grommet
- (f) TORX[®] bolt
- (1) Airbag control module
- (1) Protector RH
- (i) Protector LH
- (f) Airbag main harness
- (f) Front sensor ASSY LH

Tightening torque: N·m (kg-m, in-lb)T1: 1.8 ± 0.5 (0.18 ± 0.05 , 1.3 ± 0.4)T2: 2.5 ± 0.5 (0.25 ± 0.05 , 1.8 ± 0.4)T3: 4.4 ± 1.5 (0.45 ± 0.15 , 3.3 ± 1.1)T4: 7.4 ± 0.5 (0.75 ± 0.05 , 5.4 ± 0.4)T5: 10 ± 2 (1.0 ± 0.2 , 7.2 ± 1.4)T6: 20 ± 4 (2.0 ± 0.4 , 14.5 ± 2.9)T7: 32 ± 10 (3.3 ± 1.0 , 23.9 ± 7.2)



1. Precaution

1) 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.



2) 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.



3) 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.





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4) 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.

5) 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.

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

7) Before connecting the airbag system to ground, make sure that the grounding terminal is free from paint and contamination.



8) Do not allow water or oil to come in contact with the connector terminals. Do not touch the connector terminals.

9) When connecting or disconnecting airbag connector, make sure ignition switch is OFF.

2. Inspection and Replacement Standards

1. 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.

2. AIRBAG MODULE (DRIVER AND PASSENGER)

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.)

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.



8) Do not allow water or oil to come in contact with the connector terminals. Do not touch the connector terminals.

9) When connecting or disconnecting airbag connector, make sure ignition switch is OFF.

2. Inspection and Replacement Standards

1. 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.

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• The designated trouble code is output during self-diagnosis. (Refer to "Diagnostics" Section.)

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.



3. FRONT SENSOR

Inspection standard:

• Check the front section (Refer to shaded area of vehicle in figure) for damage, regardless of whether or not airbag is deployed.

• Check whether or not the designated trouble code is output during self-diagnosis. (Refer to "Diagnostics" Section.)

Replacement standard:

- Bracket is deformed.
- Housing is cracked or deformed.

• The label (that identifies the manufacturing number) is peeled or deteriorated.

• Harness circuit is broken, lead wire is exposed, corrugated tube is cracked, etc.

• Front sensor determined as faulty as a result of Diagnostics.

- Airbag is deployed.
- Front sensor dropped to the floor/ground.

4. MAIN HARNESS

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.)

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.

5. AIRBAG CONTROL MODULE

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.)

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.

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6. COMBINATION SWITCH

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.)

Replacement standard:

• Combination switch or steering roll connector is deformed or cracked.

7. STEERING WHEEL

Inspection standard:

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

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.



8. STEERING COLUMN ASSEMBLY Inspection standard:

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

Replacement standard:

• Check steering wheel free play 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)



• Check to ensure that clearance between capsule ① (at steering column) and cutout portion of column bracket ② on steering column upper side is within specifications.

Clearance between capsule and cutout portion of column bracket: L

Less than 0.5 mm (0.020 in)



3. Airbag Module

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.

- (1) Pad surface is scratched or cracked.
- (2) Connector harness is damaged.

(3) Inflator side structure of module is cracked or deformed.

- (4) Module is excessively stained with water, oil, etc.
- (5) 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.



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A: REMOVAL

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 [M2-6].>

6) Refer to "CAUTION" for handling of a removed airbag module. <Ref. to 5-5 [W300].>

2. PASSENGER SIDE

1) Remove instrument panel. <Ref. to 5-4 [W1A0].>



2) Remove four bolts and then carefully remove airbag module.

3) Refer to "**CAUTION**" for handling of a removed airbag module.

B: INSTALLATION

Installation is in reverse order of removal procedures. Observe the following: Make sure that ignition switch is off.

CAUTION:

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



4. Front Sensor

CAUTION:

• If the front end of the vehicle body is damaged by a collision, be sure to check the left and right front sensors, even if the airbag was not inflated. If any damage to the sensor or any deformation of the sensor mount is found, replace with a new genuine part.



• When painting or performing sheet metal work on the front part of vehicle body, including the front wheel apron, front fender and front side frame, take utmost care not to apply dryer heat, painting mist, or the flame of the welding burner directly to the front sensors and wire harness of the airbag system.

A: REMOVAL

- 1) Turn ignition switch off.
- 2) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.



2) Remove four bolts and then carefully remove airbag module.

3) Refer to "**CAUTION**" for handling of a removed airbag module.

B: INSTALLATION

Installation is in reverse order of removal procedures. Observe the following: Make sure that ignition switch is off.

CAUTION:

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



4. Front Sensor

CAUTION:

• If the front end of the vehicle body is damaged by a collision, be sure to check the left and right front sensors, even if the airbag was not inflated. If any damage to the sensor or any deformation of the sensor mount is found, replace with a new genuine part.



• When painting or performing sheet metal work on the front part of vehicle body, including the front wheel apron, front fender and front side frame, take utmost care not to apply dryer heat, painting mist, or the flame of the welding burner directly to the front sensors and wire harness of the airbag system.

A: REMOVAL

- 1) Turn ignition switch off.
- 2) Disconnect ground cable from battery and wait for at least 20 seconds before starting work.

SERVICE PROCEDURE



3) Remove lower cover. <Ref. to 5-4 [W1A0].> Disconnect airbag connector (AB3) and (AB8) below steer-

Do not reconnect airbag connector at steering column until front sensors are securely re-installed.

4) Remove console box. <Ref. to 5-4 [W1A0].> Disconnect 2-pin blue connector (AB4) (right side front sensor) and 2-pin orange connector (AB5) (left side front sensor) from airbag control module. <Ref. to 5-5 [M2-6].>

5) Roll up floor mat and side sill cover. <Refer to 5-3 [W5A10].> Remove front sensor harness from clip and pro-

6) Remove front wheels.

7) Remove front mud guard. <Refer to 5-1 [W9A0].>

9) Remove grommet.

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10) Remove front sensor.

B: INSTALLATION

Installation is in reverse order of removal procedures.

5. Main Harness

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 main harness are securely re-installed.

4) Remove console box. <Ref. to 5-4 [W1A0].> Disconnect 12-pin yellow connector (AB6) from airbag control module. <Ref. to 5-5 [M2-6].>



10) Remove front sensor.

B: INSTALLATION

Installation is in reverse order of removal procedures.

5. Main Harness

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 main harness are securely re-installed.

4) Remove console box. <Ref. to 5-4 [W1A0].> Disconnect 12-pin yellow connector (AB6) from airbag control module. <Ref. to 5-5 [M2-6].>



(AB10)

AB9

5) Disconnect body harness connector (B53) from connector (AB1).

NOTE:

The following procedures for removal are for "LHD model". The procedures for "RHD model" are symmetrically opposite.

6) Remove front side sill cover and then disconnect airbag connector (AB9) and (AB10). <Ref. to 5-5 [M2-6].>



7) Roll up floor mat and side sill lower cover of both side and then remove main harness.

B: INSTALLATION

Installation is in reverse order of removal procedures.



6. Airbag Control Module

- CAUTION:
- Do not disassemble the airbag control module.



(AB10)

AB9

5) Disconnect body harness connector (B53) from connector (AB1).

NOTE:

The following procedures for removal are for "LHD model". The procedures for "RHD model" are symmetrically opposite.

6) Remove front side sill cover and then disconnect airbag connector (AB9) and (AB10). <Ref. to 5-5 [M2-6].>



7) Roll up floor mat and side sill lower cover of both side and then remove main harness.

B: INSTALLATION

Installation is in reverse order of removal procedures.



6. Airbag Control Module

- 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.

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 airbag control module is securely re-installed.

4) Remove console box. <Ref. to 5-4 [W1A0].>

5) Disconnect 12-pin yellow, 2-pin blue and 2-pin orange connectors from airbag control module. <Ref. to 5-5 [M2-6].>



6) Using TORX[®] BIT T40 (Tamper resistant type), remove two TORX[®] bolts.
Discard the old TORX[®] bolts.
CAUTION:
Use new TORX[®] bolts during re-assembly.

B: INSTALLATION

Installation is in reverse order of removal procedures.

CAUTION:

Be sure to fully secure all airbag system connectors during re-assembly and confirm that all green double lock mechanisms are engaged.

7. 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 TORX $^{\mbox{\tiny B}}$ BIT T30, remove two TORX $^{\mbox{\tiny B}}$ bolts.





6) Using TORX[®] BIT T40 (Tamper resistant type), remove two TORX[®] bolts.
Discard the old TORX[®] bolts.
CAUTION:
Use new TORX[®] bolts during re-assembly.

B: INSTALLATION

Installation is in reverse order of removal procedures.

CAUTION:

Be sure to fully secure all airbag system connectors during re-assembly and confirm that all green double lock mechanisms are engaged.

7. 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 TORX $^{\mbox{\tiny B}}$ BIT T30, remove two TORX $^{\mbox{\tiny B}}$ bolts.





6) Disconnect airbag connector on back of airbag module. <Ref. to 5-5 [M2-6].> Remove airbag module, and place it with pad side facing upward. <Ref. to 5-5 [W300].>



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 two 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 ① **clockwise until it stops.**

3) Then, back off roll connector pin ① approximately 2.65 turns until "▲" marks aligned.





C: INSTALLATION

1) Before installing combination switch, check to ensure that combination switch is off and front wheels are set in the straight ahead position.

CAUTION:

Failure to do this might damage roll connector.

2) Install column cover and center roll connector.

3) Install steering wheel in neutral position. Carefully insert roll connector pin ① into hole on steering wheel. NOTE:

If steering wheel angle requires fine adjustment, adjust tierod. <Ref. to 4-3 [W3F0].>

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

- 1. SRS Airbag
- 1. LHD MODEL



- ① Combination switch ASSY with roll connector
- TORX[®] bolt
- ③ Airbag module ASSY (Driver)
- ④ Airbag module ASSY (Passenger)
- 5 BRKT B
- 6 BRKT P AB
- ① BRKT SD A
- TORX[®] bolt
- (9) Airbag control module
- 1 Protector RH
- (f) Protector LH
- (1) Airbag main harness

 Tightening torque: N·m (kg-m, ft-lb)

 T1: 1.8 ± 0.5 (0.18 ± 0.05 , 1.3 ± 0.4)

 T2: 2.5 ± 0.5 (0.25 ± 0.05 , 1.8 ± 0.4)

 T3: 4.4 ± 1.5 (0.45 ± 0.15 , 3.3 ± 1.1)

 T4: 7.4 ± 0.5 (0.75 ± 0.05 , 5.4 ± 0.4)

 T5: 10 ± 2 (1.0 ± 0.2 , 7.2 ± 1.4)

 T6: 32 ± 10 (3.3 ± 1.0 , 23.9 ± 7.2)

2. RHD MODEL



- ① Combination switch ASSY with roll connector
- TORX[®] bolt
- ③ Airbag module ASSY (Driver)
- ④ Airbag module ASSY (Passenger)
- 5 BRKT B
- 6 BRKT P AB
- ① BRKT SD A
- TORX[®] bolt
- () Airbag control module
- (1) Protector RH
- (f) Protector LH
- Airbag main harness

Tightening torque: N·m (kg-m, ft-lb)
T1: 1.8±0.5 (0.18±0.05, 1.3±0.4)
T2: 2.5±0.5 (0.25±0.05, 1.8±0.4)
T3: 4.4±1.5 (0.45±0.15, 3.3±1.1)
T4: 7.4±0.5 (0.75±0.05, 5.4±0.4)
T5: 10±2 (1.0±0.2, 7.2±1.4)
T6: 32±10 (3.3±1.0, 23.9±7.2)



1. Precaution

1) 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.



2) 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.



3) 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.





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4) 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.

5) 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.

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

7) Before connecting the airbag system to ground, make sure that the grounding terminal is free from paint and contamination.



8) Do not allow water or oil to come in contact with the connector terminals. Do not touch the connector terminals.

9) When connecting or disconnecting airbag connector, make sure ignition switch is OFF.

2. Inspection and Replacement Standards

1. 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 about 7 seconds and then it goes out for at least 30 seconds.

• The trouble code stored in memory must be erased after the check.

2. AIRBAG MODULE (DRIVER AND PASSENGER)

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.)

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.



8) Do not allow water or oil to come in contact with the connector terminals. Do not touch the connector terminals.

9) When connecting or disconnecting airbag connector, make sure ignition switch is OFF.

2. Inspection and Replacement Standards

1. 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 about 7 seconds and then it goes out for at least 30 seconds.

• The trouble code stored in memory must be erased after the check.

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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.)

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.



3. FRONT SENSOR

Inspection standard:

- Check the front section (Refer to shaded area of vehicle in figure) for damage, regardless of whether or not airbag is deployed.
- Check whether or not the designated trouble code is output during self-diagnosis. (Refer to "Diagnostics" Section.)

Replacement standard:

- Bracket is deformed.
- Housing is cracked or deformed.

• The label (that identifies the manufacturing number) is peeled or deteriorated.

• Harness circuit is broken, lead wire is exposed, corrugated tube is cracked, etc.

• Front sensor determined as faulty as a result of Diagnostics.

- Airbag is deployed.
- Front sensor dropped to the floor/ground.

4. MAIN HARNESS

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.)

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.

5. AIRBAG CONTROL MODULE

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.)

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.



6. COMBINATION SWITCH

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.)

Replacement standard:

• Combination switch or steering roll connector is deformed or cracked.

7. STEERING WHEEL

Inspection standard:

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

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.



8. STEERING COLUMN ASSEMBLY Inspection standard:

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

Replacement standard:

• Check steering wheel free play 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)



• Check to ensure that clearance between capsule ① (at steering column) and cutout portion of column bracket ② on steering column upper side is within specifications.

Clearance between capsule and cutout portion of column bracket: L

Less than 0.5 mm (0.020 in)



3. Airbag Module

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.



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• 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.

- (1) Pad surface is scratched or cracked.
- (2) Connector harness is damaged.

(3) Inflator side structure of module is cracked or deformed.

- (4) Module is excessively stained with water, oil, etc.
- (5) 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

SERVICE PROCEDURE

A: REMOVAL

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 [M2-6].>

6) Refer to "**CAUTION**" for handling of a removed airbag module. <Ref. to 5-5b [W300].>

2. PASSENGER SIDE

1) Remove instrument panel. <Ref. to 5-4 [W1A0].>



2) Remove four bolts and then carefully remove airbag module.

3) Refer to "**CAUTION**" for handling of a removed airbag module.

B: INSTALLATION

Installation is in reverse order of removal procedures. Observe the following: Make sure that ignition switch is off.

CAUTION:

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

4. Main Harness

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 main harness are securely re-installed.

4) Remove console box. <Ref. to 5-4 [W1A0].> Disconnect 12-pin yellow connector (AB6) from airbag control module. <Ref. to 5-5 [M2-6].>

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2) Remove four bolts and then carefully remove airbag module.

3) Refer to "**CAUTION**" for handling of a removed airbag module.

B: INSTALLATION

Installation is in reverse order of removal procedures. Observe the following: Make sure that ignition switch is off.

CAUTION:

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

4. Main Harness

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 main harness are securely re-installed.

4) Remove console box. <Ref. to 5-4 [W1A0].> Disconnect 12-pin yellow connector (AB6) from airbag control module. <Ref. to 5-5 [M2-6].>

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5) Disconnect body harness connector (B53) from connector (AB1).

NOTE:

The following procedures for removal are for "LHD model". The procedures for "RHD model" are symmetrically opposite.

AB9 AB9 B5M0029A

6) Remove front side sill cover and then disconnect airbag connector (AB9) and (AB10). <Ref. to 5-5 [M2-6].>



7) Roll up floor mat and side sill lower cover of both side and then remove main harness.

B: INSTALLATION

Installation is in reverse order of removal procedures.



5. Airbag Control Module

- CAUTION:
- Do not disassemble the airbag control module.



5) Disconnect body harness connector (B53) from connector (AB1).

NOTE:

The following procedures for removal are for "LHD model". The procedures for "RHD model" are symmetrically opposite.

AB9 AB9 B5M0029A

6) Remove front side sill cover and then disconnect airbag connector (AB9) and (AB10). <Ref. to 5-5 [M2-6].>



7) Roll up floor mat and side sill lower cover of both side and then remove main harness.

B: INSTALLATION

Installation is in reverse order of removal procedures.



5. Airbag Control Module

- 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.

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 airbag control module is securely re-installed.

4) Remove console box. <Ref. to 5-4 [W1A0].>

5) Disconnect 12-pin yellow connector from airbag control module. <Ref. to 5-5 [M2-6].>



6) Using TORX[®] BIT T40 (Tamper resistant type), remove two TORX[®] bolts.
Discard the old TORX[®] bolts.
CAUTION:
Use new TORX[®] bolts during re-assembly.

B: INSTALLATION

Installation is in reverse order of removal procedures.

CAUTION:

Be sure to fully secure all airbag system connectors during re-assembly and confirm that all green double lock mechanisms are engaged.

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 TORX $^{\otimes}$ BIT T30, remove two TORX $^{\otimes}$ bolts.







6) Using TORX[®] BIT T40 (Tamper resistant type), remove two TORX[®] bolts.
Discard the old TORX[®] bolts.
CAUTION:
Use new TORX[®] bolts during re-assembly.

B: INSTALLATION

Installation is in reverse order of removal procedures.

CAUTION:

Be sure to fully secure all airbag system connectors during re-assembly and confirm that all green double lock mechanisms are engaged.

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 TORX $^{\otimes}$ BIT T30, remove two TORX $^{\otimes}$ bolts.







6) Disconnect airbag connector on back of airbag module. <Ref. to 5-5 [M2-6].> Remove airbag module, and place it with pad side facing upward. <Ref. to 5-5b [W300].>



7) Using steering puller, remove steering wheel.

CAUTION:

Do not allow connector to interfere when removing steering wheel.

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8) Remove steering column covers.

9) Removing two 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 ① **clockwise** until it stops.

3) Then, back off roll connector pin ① approximately 2.65 turns until "▲" marks aligned.





C: INSTALLATION

1) Before installing combination switch, check to ensure that combination switch is off and front wheels are set in the straight ahead position.

CAUTION:

Failure to do this might damage roll connector.

2) Install column cover and center roll connector.

3) Install steering wheel in neutral position. Carefully insert roll connector pin ① into hole on steering wheel. NOTE:

If steering wheel angle requires fine adjustment, adjust tierod. <Ref. to 4-3 [W3F0].>

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