## 1. Precaution

### A: 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 wir-

ing harness when repairing the body panel.

## 2. Body Datum Points

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

#### NOTE:

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

## A: ROOM SECTION



- (13) Front fender attaching hole at front pillar center portion M6
- (14) Front fender attaching hole at front pillar lower portion M6
- (19) Retainer attaching hole at side rail outer 3.2 mm (0.126 in) dia.
- (20) Center pillar outer hole 14 mm (0.55 in) dia.
- (21) Front seat belt adjust plate attaching hole M10
- (22) Side sill outer hole 20 mm (0.79 in) dia.

- (23) Rear quarter outer door switch attaching hole 20 mm (0.79 in) dia.
- (64) Center pillar (LWR) gauge hole 13 mm (0.51 in) dia.
- (81) Rear shelf (UPR) center hole 8 mm (0.31 in) dia.
- (82) Rear side bulk head (UPR) gauge hole 7 mm (0.28 in) dia.
- (85) Rear quarter outer gauge hole20 mm (0.79 in) dia.

- (87) Six light upper retainer attaching hole 6.2 mm (0.244 in) dia.
- (88) Retainer attaching square hole at side rail outer 8  $\times$  8 mm (0.31  $\times$  0.31 in)
- (89) Retainer attaching square hole at rear quarter outer  $8 \times 8$  mm (0.31  $\times$  0.31 in)
- (92) Rear shelf (UPR) hole 6 mm (0.24 in) dia.

### **B: REAR SECTION**



- (38) Front panel instrument panel attaching hole  $18 \times 36$  mm (0.71  $\times$  1.42 in) dia. oblong hole
- (46) Rear shock absorber attaching hole 13 mm (0.51 in) dia.
- (83) Rear skirt outer gauge hole 20 mm (0.79 in) dia.
- (84) Rear extension attaching hole 6.2 mm (0.244 in) dia.
- (86) Skirt rear inner center location hole 7 mm (0.28 in) dia.

- (90) Roof trim attaching hole 8 mm (0.31 in) dia.
- (91) Rear glass upper locating hole RH: 6.8 mm (0.268 in) dia., LH:  $6.8 \times 10$  mm (0.268  $\times 0.39$  in) dia. oblong hole
- (93) Inner trim attaching hole (UPR) 8 mm (0.31 in) dia.
- (94) Inner trim attaching hole (LWR) 8 mm (0.31 in) dia.
- (95) Rear bumper attaching hole 12.5  $\times$  17 mm (0.492  $\times$  0.669 in) dia. oblong hole
- (97) Trim attaching hole at rear skirt 7 mm (0.28 in) dia.
- (98) Rear bumper side attaching hole 6.2 mm (0.244 in) dia.
- (99) Rear combination light mounting hole 8 mm (0.31 in) dia.
- (100)Rear bumper beam attaching hole 8.2 mm (0.323 in) dia.

### **C: UNDERBODY SECTION**



- (50) Radiator panel (LWR) frame gauge hole 15 mm (0.59 in) dia.
- (51) Front side frame (Ft) gauge hole 20 mm (0.79 in) dia.
- (52) Front side frame (Ft) gauge hole 20 mm (0.79 in) dia.
- (53) Front suspension attaching hole M14
- (54) Front side frame (Rr) gauge hole 20 mm (0.79 in) dia.
- (55) Crossmember front floor gauge hole M10
- (56) Side frame (Rr) gauge hole 18 mm (0.71 in) dia.
- (57) Frame rear floor side gauge hole 25 mm (0.98 in) dia.
- (58) Reinforcement crossmember B hole RH: 15 mm (0.59 in) dia., LH: 12 mm (0.47 in) dia.
- (59) Frame rear floor side gauge hole 30 mm (1.18 in) dia.

### **D: DATUM POINT LOCATION**





#### 5-1 [S2D0] 2. Body Datum Points





# 3. Datum Dimensions

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



#### NOTE:

• A suffix character "R" or "L" refers to the right or the left.

• All dimensions refer to the distance between the centers of holes measured in a straight line.

• Each dimension indicates a projected dimension between hole centers.

## A: FRONT STRUCTURE



Point to point	Dimension	Point to point	Dimension
(11) to (1)	888 (34.96)	(4) RH to (4) LH	1,320 (51.97)
(11) to (9) RH	519 (20.43)	(5) RH to (4) LH	1,073 (42.24)
(11) to (9) LH	519 (20.43)	(5) LH to (4) RH	1,073 (42.24)
(11) to (6) RH	950 (37.40)	(60) RH to (13) RH	1,179 (46.42)
(11) to (6) LH	950 (37.40)	(60) LH to (13) LH	1,179 (46.42)
(11) to (3) RH	1,008 (39.68)	(60) RH to (14) RH	1,135 (44.68)
(11) to (3) LH	1,008 (39.68)	(60) LH to (14) LH	1,135 (44.68)
(10) RH to (3) RH	897 (35.31)	(10) RH to (3) LH	1,679 (66.10)
(10) RH to (8) RH	504 (19.84)	(10) LH to (3) RH	1,679 (66.10)
(10) LH to (8) LH	504 (19.84)	(8) RH to (8) LH	1,398 (55.04)
(9) RH to (9) LH	1,020 (40.16)	(8) RH to (10) LH	1,519 (59.80)
(6) RH to (6) LH	870 (34.25)	(8) LH to (10) RH	1,519 (59.80)
(6) RH to (10) LH	1,522 (59.92)	(3) RH to (8) LH	1,439 (56.65)
(6) LH to (10) RH	1,522 (59.92)	(3) LH to (8) RH	1,439 (56.65)
(8) RH to (3) RH	395 (15.55)	(7) RH to (7) LH	860 (33.86)
(8) LH to (3) LH	395 (15.55)	(7) RH to (6) LH	943 (37.13)
(10) RH to (10) LH	1,470 (57.87)	(7) LH to (6) RH	943 (37.13)
(3) RH to (3) LH	1,370 (53.94)	(7) RH to (10) LH	1,322 (52.05)
(5) RH to (5) LH	720 (28.35)	(7) LH to (10) RH	1,322 (52.05)
Unit: mm (in)			

### **B: CENTER STRUCTURE**





Unit: mm (in)

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MEMO:

## C: WINDSHIELD AND DOORS



Point to point	Dimension	Point to point	Dimension
(14) RH to (18) RH	1,425 (56.10)	(12) to (10) RH	1,136 (44.72)
(14) LH to (18) LH	1,425 (56.10)	(12) to (10) LH	1,136 (44.72)
(13) RH to (64) RH	1,031 (40.59)	(11) to (17) RH	1,130 (44.49)
(13) LH to (64) LH	1,031 (40.59)	(11) to (17) LH	1,130 (44.49)
(16) RH to (64) RH	966 (38.03)	(81) to (82) RH	611 (24.06)
(16) LH to (64) LH	966 (38.03)	(81) to (82) LH	611 (24.06)
(20) RH to (23) RH	864 (34.02)	(81) to (21) RH	1,309 (51.54)
(20) LH to (23) LH	864 (34.02)	(81) to (21) LH	1,309 (51.54)
(20) RH to (24) RH	863 (33.98)	(81) to (23) RH	812 (31.97)
(20) LH to (24) LH	863 (33.98)	(81) to (23) LH	812 (31.97)
(19) RH to (23) RH	899 (35.39)	(82) LH to (21) LH	1,019 (40.12)
(19) LH to (23) LH	899 (35.39)	(82) RH to (21) LH	1,606 (63.23)
(20) RH to (36) RH	1,548 (60.94)	(82) RH to (82) LH	1,140 (44.88)
(20) LH to (36) LH	1,548 (60.94)	(85) LH to (20) LH	1,548 (60.94)
(42) RH to (44) RH	1,037 (40.83)	(85) LH to (64) LH	1,650 (64.96)
(42) LH to (44) LH	1,037 (40.83)	(19) LH to (64) LH	1,029 (40.51)
(11) to (12)	989 (38.94)	(20) LH to (87) LH	911 (35.87)
(67) RH to (67) LH	1,100 (43.31)	(20) LH to (88) LH	842 (33.15)
(11) to (67) RH	1,119 (44.06)	(20) LH to (64) LH	399 (15.71)
(11) to (67) LH	1,119 (44.06)	(23) LH to (89) LH	552 (21.73)
(12) to (67) RH	551 (21.69)	(88) LH to (64) LH	1,192 (46.93)
(12) to (67) LH	551 (21.69)	(89) LH to (64) LH	1,204 (47.40)
Unit: mm (in)			

### **D: COMPARTMENT**



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Point to point	Dimension	Point to point	Dimension
(21) RH to (21) LH	1,351 (53.19)	(41) to (22) LH	738 (29.06)
(15) RH to (15) LH	1,455 (57.28)	(41) to (26) RH	1,459 (57.44)
(22) RH to (22) LH	1,455 (57.28)	(41) to (26) LH	1,459 (57.44)
(39) RH to (39) LH	1,385 (54.53)	(41) to (25)	1,290 (50.79)
(40) RH to (40) LH	1,392 (54.80)	(41) to (12)	1,228 (48.35)
(41) to (38)	1,639 (64.53)	(41) to (21) RH	940 (37.01)
(41) to (39) RH	1,642 (64.65)	(41) to (21) LH	940 (37.01)
(41) to (39) LH	1,642 (64.65)	(41) to (17) RH	1,261 (49.65)
(41) to (40) RH	1,531 (60.28)	(41) to (17) LH	1,261 (49.65)
(41) to (40) LH	1,531 (60.28)	(65) RH to (65) LH	1,307 (51.46)
(41) to (15) RH	1,342 (52.83)	(41) to (65) RH	969 (38.15)
(41) to (15) LH	1,342 (52.83)	(41) to (65) LH	969 (38.15)
(41) to (22) RH	738 (29.06)		Unit: mm (in)

MEMO:

## E: TRUNK LID AND REAR GATE



-			
Point to point	Dimension	Point to point	Dimension
(45) to (48)	974 (38.35)	(84) RH to (84) LH	1,410 (55.51)
(45) to (47) RH	797 (31.38)	(100) RH to (84) LH	1,226 (48.27)
(45) to (47) LH	797 (31.38)	(86) to (21) RH	2,073 (81.61)
(47) RH to (47) LH	1,289 (50.75)	(86) to (21) LH	2,086 (82.13)
(49) RH to (49) LH	1,313 (51.69)	(86) to (38)	3,143 (123.74)
(34) RH to (34) LH	700 (27.56)	(86) to (46) RH	1,121 (44.13)
(41) to (45)	1,482 (58.35)	(86) to (46) LH	1,140 (44.88)
(41) to (43) RH	1,206 (47.48)	(86) to (96)	558 (21.97)
(41) to (43) LH	1,199 (47.20)	(90) to (22) RH	1,319 (51.93)
(41) to (48)	1,663 (65.47)	(90) to (22) LH	1,319 (51.93)
(48) to (46) RH	1,191 (46.89)	(22) RH to (94) LH	1,710 (67.32)
(48) to (46) LH	1,191 (46.89)	(22) LH to (94) RH	1,710 (67.32)
(70) RH to (70) LH	1,215 (47.83)	(38) to (97) RH	3,100 (122.05)
(72) RH to (72) LH	1,320 (51.97)	(38) to (97) LH	3,100 (122.05)
(81) to (38)	2,351 (92.56)	(92) to (91) RH	776 (30.55)
(81) to (90)	444 (17.48)	(92) to (91) LH	776 (30.55)
(81) to (93) RH	719 (28.31)	(91) RH to (91) LH	976 (38.43)
(81) to (93) LH	719 (28.31)	(46) LH to (97) LH	1,008 (39.68)
(81) to (94) RH	632 (24.88)	(46) LH to (97) RH	1,374 (54.09)
(81) to (94) LH	632 (24.88)	(46) LH to (46) RH	1,052 (41.42)
(38) to (82) RH	2,178 (85.75)	(93) RH to (93) LH	1,099 (43.27)
(38) to (82) LH	2,419 (95.24)	(94) RH to (94) LH	1,257 (49.49)
(83) RH to (83) LH	930 (36.61)	(95) RH to (95) LH	1,115 (43.90)
(84) RH to (83) LH	1,216 (47.87)	(97) RH to (97) LH	830 (32.68)
(99) RH to (83) LH	1,246 (49.06)	(99) RH to (99) LH	1,370 (53.94)
(100) RH to (83) LH	991 (39.02)	(100) RH to (100) LH	1,020 (40.16)
Unit: mm (in)			

# 1. Front Hood and Hood Lock



- (1) Front hood
- (2) Lever ASSY
- (3) Seal (Front hood)
- (4) Hinge

- (5) Front hood stay
- (6) Hood lock ASSY
- (7) Cable

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

# 2. Front Bumper



- (1) Bumper face
- (2) E/A form
- (3) Bumper beam
- (4) Side stay

- (5) Side bracket
- (6) Cover (Tie down hook)
- Tightening torque: N⋅m (kg-m, ft-lb) T: 70±1 (7.1±0.1, 51.4±0.7)

(7) Cover

# 3. Rear Bumper

# A: SEDAN BODY



#### (1) Bumper beam

- (2) Upper beam
- (3) Resin beam
- (4) Side bracket

- (5) Bumper face
- (6) Hook
- (7) Side stay

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

### **B: WAGON BODY**



- (1) Bumper beam
- (2) Resin beam
- (3) Side bracket

- (4) Bumper face
- (5) Hook
- (6) Side stay

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

# 4. Side Protector



- (1) Side protector (Front fender)
- (2) Side protector (Front door)
- (3) Side protector (Rear door)
- (4) Side protector (Rear quarter)
- (5) Side garnish (Front fender)
- (6) Side garnish (Front door)
- (7) Side garnish (Rear door)
- (8) Side garnish (Rear quarter)
- (9) Side garnish (Side sill)

# 5. Steering Support Beam



(1) Steering beam

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

# 6. Sunroof

# A: SEDAN BODY



- (1) Glass lid
- (2) Guide rail cover
- (3) Sunshade
- (4) Drain tube
- (5) Sunroof bracket (Rear)
- (6) Sunroof bracket (Front)
- (7) Motor cover
- (8) Motor ASSY
- (9) Frame ASSY
- (10) Deflector

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

### **B: WAGON BODY**



- (1) Glass lid (Front)
- (2) Glass lid (Rear)
- (3) Sunshade
- (4) Frame ASSY (Rear)

- (5) Frame ASSY (Front)
- (6) Drain tube
- (7) Cover
- (8) Frame bracket

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

# 7. Trunk Lid



- (2) Trunk lid
- Weatherstrip (3)
- (4) Rod

- (5) Trunk lid lock ASSY
- (6) Lock ASSY cover
- (7) Hinge ASSY
- (8) Cover

Tightening torque: N⋅m (kg-m, ft-lb) T: 14±4 (1.4±0.4, 10.1±2.9)

# 1. Hood

## A: REMOVAL AND INSTALLATION

#### NOTE:

The hood lock has a dual locking design which consists of a main lock and a safety lock mechanism. When the release knob located at the front pillar on the driver's side is pulled back, the main lock is released through the cable attached to the knob.

The safety lock can be released by pushing the lever protruding above the front grill while opening the hood.

### 1. HOOD

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



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

#### CAUTION:

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



#### NOTE:

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

### 2. HOOD LOCK

1) Open front hood.

2) Remove bolts which secure lock assembly to radiator panel, and remove lock assembly.



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

#### NOTE:

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

#### 3. RELEASE CABLE

1) Remove release cable from hood lock assembly. <Ref. to 5-1 [W1A2].>

2) Remove cable clip from engine compartment.

3) Remove opener lever from front pillar while disengaging cable from opener lever.



4) Installation is in the reverse order of removal.

### **B: POINTS TO CHECK**

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

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

## **C: ADJUSTMENT**

#### 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 hood lock assembly mounting screws are removed.



# 2. Fuel Flap

### A: REMOVAL AND INSTALLATION

#### 1. FUEL FLAP

1) Remove bolts which hold hinge to vehicle body and disconnect tether from fuel flap. Detach fuel flap and hinge as a unit.



2) Installation is in the reverse order of removal.

#### **CAUTION:**

Make sure the clearance between fuel flap and vehicle body is equal at all points.

- 2. FUEL FLAP OPENER
- 1) Remove driver's seat and rear seat cushion.
- 2) Turn over the floor mat (driver's side).
- 3) Remove all clips which hold cable.
- 4) Disconnect cable from pull handle.
- 5) Detach pull handle by removing bolts.



- 6) Detach fuel lock holder by turning it.
- 7) Installation is in the reverse order of removal.

#### CAUTION:

After installing opener cable, ensure it moves smoothly.

# 3. Front Bumper

# A: REMOVAL AND INSTALLATION

- 1) Disconnect the ground cable from the battery.
- 2) Remove front fog light. <Ref. to 6-2 [W11A0].>
- 3) Open the hood.

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



5) Remove the clips from under side.



6) Remove under cover. <Ref. to 5-1 [W13A0].>7) Remove clips (A) from bumper face and then detach bumper face.



8) Remove E/A form from bumper beam.

### NOTE:

Do not forcefully remove E/A form as it may break easily.



9) Remove bumper beam.



10) Installation is in the reverse order of removal.

#### CAUTION:

• Be extremely careful to prevent scratches on bumper face as it is made of resin.

• Be careful not to scratch the body when removing or installing the bumper.

## 4. Rear Bumper

## A: REMOVAL AND INSTALLATION

### 1. SEDAN BODY

1) Remove bolts and clips.



2) Remove clips and then detach trunk rear trim.



3) Remove hook (A) and then turn over the trunk side trim of the rear portion.



4) Remove two nuts of both sides and then detach bumper assembly.



5) Remove eight clips and then disconnect upper beam (A) from bumper face (B).



6) Remove resin beam.



7) Installation is in the reverse order of removal.

#### CAUTION:

• Be extremely careful to prevent scratches on bumper face as it is made of resin.

• Be careful not to scratch the body when removing or installing bumper.

• To facilitate installation of rear bumper, attach slider (A) to the guide pin (B).



### 2. WAGON BODY

- 1) Remove trailer hitch. (with trailer hitch vehicles) <Ref. to 5-1 [W18A0].>
- 2) Remove bolts and clips.



3) Remove rear floor box. <Ref. to 5-3 [W5A9].>

4) Turn over the rear quarter lower trim of the rear portion and then remove caps.



5) Remove bolts and then detach bumper assembly.



6) Remove clips (A) and then disconnect bumper beam assembly (B) from bumper face (C).



7) Disconnect resin beam from bumper beam.



8) Installation is in the reverse order of removal.

#### **CAUTION:**

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

# 5. Coating Method for PP Bumper

## A: PROCESS STEPS

Process	Process name	Job contents		
1	Bumper mounting	Set bumper on paint worktable if required. Use paint worktable conforming to inner shape of bumper when possible.	Bumper Set bumper section	
2	Masking	Mask specified part (black base) with masking t Nichiban No. 533, etc.).	ape. Use masking tape for PP (example,	
3	Degreasing, cleaning	Clean all parts to be painted with white gasoline etc.	e, normal alcohol, etc. to remove dirt, oil, fat,	
4	Primer paint	Apply primer one to all parts to be painted, usin	g 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.		
6	Top coat paint (I)	Solid color 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: $35 - 45\mu$ • Spraying pressure: $245 - 343$ kPa ( $2.5 - 3.5$ kg/cm <sup>2</sup> , $36 - 50$ psi)	Metallic colorUse section (block) paint for top coat.Paint in use (for each color):Metallic paintHardener PBThinner T-306Mixing ratio:Main agent vs. hardener = 10:1Viscosity: 10 — 13 sec/20°C (68°F)Film thickness: 15 — 20µSpraying 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.	<ul> <li>Apply a clear coat to parts with top coat paint (I), three times, at 5 — 7 minutes intervals.</li> <li>Paint in use:</li> <li>Metallic paint</li> <li>Hardener PB</li> <li>Thinner T-301</li> <li>Mixing ratio: Clear vs. hardener = 6:1</li> <li>Viscosity: 14 — 16 sec/20°C (68°F)</li> <li>Film thickness: 25 — 30µ</li> <li>Spraying pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm<sup>2</sup>, 36 — 50 psi)</li> </ul>	
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.		

# 6. Repair Instructions for Colored PP Bumper

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

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

Almost restorable.

Process No.	Process name	Job contents	
1	Cleaning	Clean the area to be repaired using water.	
2	Sanding	Grind the repairing area with #500 sand paper in a "feathering" motion.	
	Resin section	Coated section	
3	Finish	Repeatedly apply wax to the affected area using a soft cloth (such as flannel). Recom- mended wax: NITTO KASEI Soft 99 TIRE WAX BLACK, or equivalent. Polish the waxed area with a clean cloth after 5 to 10 minutes.	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.

## **B: DEEP DAMAGE CAUSED BY SCRATCHING FENCES, ETC.**

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

Process No.	Process name	Job contents	
1	Cleaning	Clean damaged area with water.	
2	Removal of 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
	Finish	Same as Process No. 3 in the "(1)" section.	Perform Process No. 12 and subsequent operations in the "(3)" section.

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

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

Process No.	Process name	Job contents	
1	Bumper removal	Remove bumper as required.	
2	Part removal	Remove parts built into bumper as required.	
3	Bumper place- ment	Place bumper on a paint worktable as required. It is recommended that contour of worktable accommodate internal shape of bumper. G5M0164	
4	Surface prepara- tion	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 "veeout" the affected area using a knife or grinder. Unit: mm (in) 3 (0.12)	
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	
8	Temporary weld-	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. Welded spot (Use heater gun and PP welding rod) PP base surface Beveled section	
		G5M0166 NOTE: • Do not melt welding rod until it flows out. This results in reduced strength. • Leave the welded spot unattended until it cools completely.	

Process No.	Process name	Job contents	
		Using a heater gun and PP welding rod, weld the beveled spot while melting the rod and dam- aged area.	
9	Welding	Melt hatched area	
		G5M0167 NOTE: • Melt the sections indicated by hatched area. • Do not melt welding rod until it flows out, in order to provide strength. • Always keep the heater gun 1 to 2 cm (0.4 to 0.8 in) away from the welding spot. • Leave the welded spot unattended until it cools completely.	
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.	
		Sand the welded spot smooth with #240 sand paper.	
11	Masking	Mask the black substrate section using masking tape. Recommended masking tape: Nichiban No. 533 or equivalent	
12	Cleaning/ degreasing	Completely clean the entire coated area, using solvent similar to that used in Process No. 4.	
13	Primer coating	Apply a coat of primer to the repaired surface and its surrounding areas. Mask these areas, if necessary. Recommended primer: Mp/ 364 PP Primer NOTE: Be sure to apply one coat of primer at a spraying pressure of 245 to 343 kPa	
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	<ul> <li>Apply a coat of primer surfacer to the repaired area two or three times at an interval of 3 to 5 minutes.</li> <li>Recommended surfacer:</li> <li>UPS 300 Flex Primer</li> <li>No. 303 UPS 300 Exclusive hardener</li> <li>NPS 725 Exclusive Reducer (thinner)</li> <li>Mixing ratio: 2 : 1 (UPS 300: No. 303)</li> <li>Viscosity: 12 — 14 sec/20°C (68°F)</li> <li>Coated film thickness: 40 — 50μ</li> </ul>	
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.	
18	Cleaning/ degreasing	Same as Process No. 12.	
Process No.	Process name	Job contents	
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		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/cm <sup>2</sup> , 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/cm <sup>2</sup> , 36 — 50 psi)
20	Leave unattended.	Not required.	Leave unattended at 20°C (68°F) for at least 10 minutes until the topcoated 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.	<ul> <li>Apply a clear coat three times at an interval of 3 to 5 minutes.</li> <li>Recommended paint: SC710 Overlay Clear</li> <li>No. 307 Flex Hardener</li> <li>SC Reducer (thinner)</li> <li>Mixing ratio: 3 : 1</li> <li>Suncryl (SC) vs. No. 307 Flex Hardener</li> <li>Viscosity: 10 — 13 sec/20°C (68°F)</li> <li>Coated film thickness: 20 — 30µ</li> <li>Spraying pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm<sup>2</sup>, 36 — 50 psi)</li> </ul>
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 installa- tion	Install bumper.	

### 7. Side Protector

### A: REMOVAL AND INSTALLATION

#### 1. DOOR MOLDING

1) Open front door, and remove nut (a) from back side of front door molding.

2) Carefully remove door molding, paying attention to the location of clip (b).

NOTE:

Double faced adhesive tape is affixed to the areas surrounding side protector.



#### 2. SIDE PROTECTOR

- Remove clip (a) and bolt (b).
   Carefully remove each protectors, paying atten-
- tion to the location of clip (c).



## 8. Front Fender

### A: REMOVAL AND INSTALLATION

- 1) Disconnect ground cable from battery.
- 2) Remove mud guard. <Ref. to 5-1 [W9A0].>
- 3) Remove headlight. <Ref. to 6-2 [W4B2].>

4) Remove front bumper face. <Ref. to 5-1 [W3A0].>

5) Remove side sill protector. <Ref. to 5-1 [W7A2].>

6) Remove attaching bolt then remove fender.

#### CAUTION:

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



Installation is in the reverse order of removal.
 NOTE:

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



### 9. Mud Guard

### A: REMOVAL AND INSTALLATION

1) Jack-up vehicle and remove tire.

2) Remove screws and clips. Move mud guard toward the center of the body and remove mud guard.



3) Installation is in the reverse order of removal.

#### CAUTION: Only use new nuts and clips.

## 8. Front Fender

### A: REMOVAL AND INSTALLATION

- 1) Disconnect ground cable from battery.
- 2) Remove mud guard. <Ref. to 5-1 [W9A0].>
- 3) Remove headlight. <Ref. to 6-2 [W4B2].>

4) Remove front bumper face. <Ref. to 5-1 [W3A0].>

5) Remove side sill protector. <Ref. to 5-1 [W7A2].>

6) Remove attaching bolt then remove fender.

#### CAUTION:

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



Installation is in the reverse order of removal.
 NOTE:

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



### 9. Mud Guard

### A: REMOVAL AND INSTALLATION

1) Jack-up vehicle and remove tire.

2) Remove screws and clips. Move mud guard toward the center of the body and remove mud guard.



3) Installation is in the reverse order of removal.

#### CAUTION: Only use new nuts and clips.

# 10. Cowl Panel

### A: REMOVAL AND INSTALLATION

- 1) Remove cowl panel side (A).
- 2) Open front hood.
- 3) Remove wiper arms.
- 4) Detach cowl panel (B).



5) Installation is in the reverse order of removal.

# 11. Molding and Retainer

### A: REMOVAL AND INSTALLATION

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



# 10. Cowl Panel

### A: REMOVAL AND INSTALLATION

- 1) Remove cowl panel side (A).
- 2) Open front hood.
- 3) Remove wiper arms.
- 4) Detach cowl panel (B).



5) Installation is in the reverse order of removal.

# 11. Molding and Retainer

### A: REMOVAL AND INSTALLATION

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



# 12. Front Grill

# A: REMOVAL AND INSTALLATION

1) Open front hood.

2) Remove six nuts and one bolt then detach front grill.



3) Installation is in the reverse order of removal.

# 13. Under Cover

# A: REMOVAL AND INSTALLATION

1) Lift-up the vehicle.

2) Remove bolts and clips then detach under cover.



# 12. Front Grill

# A: REMOVAL AND INSTALLATION

1) Open front hood.

2) Remove six nuts and one bolt then detach front grill.



3) Installation is in the reverse order of removal.

# 13. Under Cover

# A: REMOVAL AND INSTALLATION

1) Lift-up the vehicle.

2) Remove bolts and clips then detach under cover.



# 14. Roof Rail

### A: REMOVAL AND INSTALLATION

- 1) Remove roof trim. <Ref. to 5-3 [W5A10].>
- 2) Remove five attaching nuts and then carefully detach roof rail.



3) Installation is in the reverse order of removal.

#### CAUTION:

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

# 15. Sunroof

### A: REMOVAL AND INSTALLATION

### 1. GLASS LID (SEDAN BODY)

1) Completely open sun shade. (Push it back far.)

2) Remove a clip (a) and detach guide rail cover (b).

3) Remove four nuts from the left and right lid bracket (c).

4) Working inside, slightly raise glass lid (d) until it is disengaged from lid bracket.

5) Hold both ends of glass lid (d) and remove it at an angle.



6) Installation is in the reverse order of removal.

### 2. SUNROOF FRAME (SEDAN BODY)

1) Remove sunroof garnish (a).



2) Remove roof trim. <Ref. to 5-3 [W5A4].>

3) Remove harness support clips from sunroof frame.



- 4) Disconnect connector of sunroof motor.
- 5) 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



6) Remove motor cover.



7) Remove front sunroof bracket (a) and rear sunroof bracket (b).



8) Detach sunroof frame while removing mounting nut.



9) Pull out sun shade from sunroof frame.



10) Installation is in the reverse order of removal.

#### CAUTION:

#### Be careful not to snag the harness.

NOTE:

Make sure to connect harness connector.

#### 3. FRONT GLASS LID (WAGON BODY)

- 1) Tilt up the front sunroof (Most upper position).
- 2) Disconnect ground cable from battery.
- 3) Remove sunroof switch then remove two bolts.
- 4) Remove cover (A) then remove two nuts from
- tilt up assembly.
- 5) Take off the sunroof panel from body.



6) Installation is in the reverse order of removal.

#### CAUTION:

When installing sunroof panel, ensure not to pinch its panel end lip.



# 4. FRONT SUNROOF FRAME (WAGON BODY)

- 1) Remove roof trim. <Ref. to 5-3 [W5A10].>
- 2) Remove front glass lid. <Ref. to 5-1 [W15A3].>3) Disconnect drain tubes (A) from front sunroof
- frame.
- 4) Disconnect sunroof harness.

5) Remove bolts (B), nuts (C) and clips (D) then detach sunroof frame.



#### CAUTION:

#### Be careful not to snag the harness.

NOTE:

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

#### Length A:

#### 15 mm (0.59 in) or more



### 5. REAR GLASS LID (WAGON BODY)

- 1) Completely close glass lid and open sunshade.
- 2) Detach covers (A) and then remove nuts (B).



- 3) Carefully remove rear glass lid.
- 4) Installation is in the reverse order of removal.

# 6. REAR SUNROOF FRAME (WAGON BODY)

- 1) Remove roof trim. <Ref. to 5-3 [W5A10].>
- 2) Remove rear glass lid. <Ref. to 5-1 [W15A5].>

3) Disconnect drain tubes (C) from rear sunroof frame.

4) Disconnect sunroof harness connector.

5) Remove installation bolts (D) and nuts (E) and then detach sunroof frame.



6) Installation is in the reverse order of removal.

#### CAUTION: Be careful not to snag the harness.

NOTE:

• Make sure to connect harness connector.

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

#### Length A: 15 mm (0.59 in) or more



### **B: ADJUSTMENT**

#### 1. ALIGNMENT OF HEIGHT BETWEEN SUNROOF GLASS LID AND ROOF PANEL

Loosen sunroof glass lid installation nuts and then adjust height by adding (max: two pieces) and extracting (max: one piece) shim(s) (standard: one piece) between sunroof glass lid and body.

#### Difference in height between sunroof rear glass lid and roof panel: L L: 2.0±0.5 mm (0.079±0.020 in)



# 2. CHECKING FOR MOVEMENT OF SUNROOF PANEL ITSELF

1) Place a cloth on rear sunshade, and attach a spring scale to sunshade edge using the cloth.





2) Pull spring scale to measure force required to move rear sunshade.

#### Force required to move rear sunshade: Less than 24.5±4.9 N (2.5±0.5 kg, 5.5±1.1 lb)

NOTE:

Considerable effort is required to start rear sunshade moving, so take scale reading while sunroof panel is moving smoothly.

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

Sunroof rear glass lid, rear sunshade and guide rail assembly for improper installation

# 16. Trunk Lid

### A: REMOVAL AND INSTALLATION

#### 1. TRUNK LID

- 1) Open trunk lid.
- 2) Disconnect trunk lid harness connector.

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



4) Installation is in the reverse order of removal.

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

Apply a coat of grease to the rotary section of hinges and contact surfaces of torsion bars.

#### 3. TRUNK LID LOCK ASSEMBLY

- 1) Remove rod of lock assembly from rod holder of key lock assembly.
- 2) Remove lock assembly cover (A).

3) Remove nuts which hold lock assembly and remove lock assembly (B).



4) Installation is in the reverse order of removal.

#### NOTE:

Apply grease to sliding surfaces of lock assembly and striker.

#### 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.

8) 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.

#### NOTE:

After installing opener cable, ensure it moves smoothly.

### **B: 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.



# 17. Crossbar

### A: REMOVAL

1) Loosen and remove TORX bolt T30 from the top of each crossbar end support.

2) Rotate lower clamp on the bottom of each end support downward approximately 90°.



3) Remove crossbar.

### **B: INSTALLATION**

#### 1. FRONT CROSSBAR

#### NOTE:

Front crossbar has "MAXIMUM LOAD 100LBS. EVENLY DISTRIBUTED" label on LH side.

1) Rotate lower clamp on the bottom of each end support downward approximately 90°.

2) With the front direction arrow label on the top right side of the crossbar pointing toward the front of the vehicle, carefully place the crossbar across the top of the vehicle so that the crossbar end supports rest on the top of the roof rails approximately 152.4 mm (6 in) rearward from the joint between the front roof rail support and the roof rail.

#### Length:

A: 152.4 mm (6 in)



3) Rotate the lower clamp up to the bottom of the roof rail and loose assemble the TORX bolt T30, through the top of the end support and into the threaded insert in the lower clamp on each end of the crossbar.

#### NOTE:

It may be necessary to squeeze the lower clamp and the end support together to compress the pads and gain a better alignment of the pieces while trying to start the screw. Be careful not to cross thread the screw in the insert.

4) Tighten TORX bolt T30.

#### Tightening torque:

3.7±0.3 N·m (0.38±0.03 kg-m, 2.75±0.22 ft-lb)



#### 2. REAR CROSSBAR

#### NOTE:

Rear crossbar does not have the "MAXIMUM LOAD 100LBS. EVENLY DISTRIBUTED" label.

1) Rotate lower clamp on the bottom of each end support downward approximately 90°.

2) With the front direction arrow label on the top right side of the crossbar pointing toward the front of the vehicle, carefully place the crossbar across the top of the vehicle so that the crossbar end supports rest on the top of the roof rails approximately 152.4 mm (6 in) forward from the joint between the rear roof rail support and the roof rail.

#### Length:

B: 152.4 mm (6 in)



3) Rotate the lower clamp up to the bottom of the roof rail and loose assemble the TORX bolt T30, through the top of the end support and into the threaded insert in the lower clamp on each end of the crossbar.

#### NOTE:

It may be necessary to squeeze the lower clamp and the end support together to compress the pads and gain a better alignment of the pieces while trying to start the screw. Be careful not to cross thread the screw in the insert.

4) Tighten TORX bolt T30.

#### Tightening torque: 3.7±0.3 N⋅m (0.38±0.03 kg-m, 2.75±0.22 ft-lb)



# 18. Trailer Hitch

### A: REMOVAL AND INSTALLATION

1) Lift-up the vehicle.

2) Disconnect rubber cushion from body.

NOTE:

To facilitate removal, apply a coat of SUBARU CRC to mating area of rubber cushions in advance.

#### SUBARU CRC (Part No. 004301003)



3) Cut the strap (a).

4) Remove bolts and then detach trailer hitch while lowering the muffler.

#### CAUTION:

Two people are required to do this procedure.



5) Installation is in the reverse order of removal.

NOTE:

• Securely fasten trailer hitch harness using a strap.

• Be sure to set the bolt in position as shown in the figure.



- (a) Bolt
- (b) Spring washer
- (c) Flat washer
- (d) Plate
- (e) Nut

#### Tightening torque:

68 N·m (6.9 kg-m, 50 ft-lb)

# 19. Rear Spoiler

### A: REMOVAL AND INSTALLATION

1) Open trunk lid.

2) Disconnect high-mounted stop light connector (a).

3) Remove rear spoiler mounting nuts and then detach rear spoiler.

#### CAUTION:

When removing nuts, be careful not to drop them inside trunk lid.



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

### DIAGNOSTICS

# 1. Sunroof

Entry of water into compartment	<ol> <li>Check roof panel and sunroof glass lid for improper or poor sealing.</li> <li>Check drain tube for clogging.</li> <li>Check sunroof frame seal and body for improper fit.</li> </ol>
Booming noise	<ul><li>(1) Check sunroof glass lid and roof panel for improper clearance.</li><li>(2) Check sunshade and roof trim for improper clearance.</li></ul>
Abnormal motor noise	<ol> <li>Check motor for looseness.</li> <li>Check gears and bearings for wear.</li> <li>Check cable for wear.</li> <li>Check cable pipe for deformities.</li> </ol>
Failure of sunroof to operate (Motor operates properly.)	<ol> <li>Check guide rail for foreign particles.</li> <li>Check guide rail for improper installation.</li> <li>Check parts for mutual interference.</li> <li>Check cable slider for improper clinching.</li> <li>Check cable for improper installation.</li> <li>Check clutch adjustment nut for improper tightness.</li> </ol>
Motor does not rotate or rotates improperly. (Use sunroof wrench to check operation.)	<ol> <li>Check fuse for blowout.</li> <li>Check switch for improper function.</li> <li>Check motor for incorrect terminal voltage.</li> <li>Check relay for improper operation.</li> <li>Check poor grounding system.</li> <li>Check cords for discontinuity and terminals for poor connections.</li> <li>Check limit switch for improper operation.</li> </ol>

# 1. Door Alignment



# 1. Front Door



- (1) Gusset
- (2) Weatherstrip
- (3) Clip (Weatherstrip)
- (4) Stabilizer (Lifter)
- (5) Stabilizer (Outer)
- (6) Stabilizer (Inner)

- (7) Sealing cover
- (8) Checker
- (9) Lower hinge
- (10) Upper hinge
- (11) Door panel

 Tightening torque: N-m (kg-m, ft-lb)

 T1: 7.4±2.0 (0.75±0.2, 5.4±1.4)

 T2: 25±3 (2.5±0.3, 18.1±2.2)

 T3: 29±5 (3.0±0.5, 21.7±3.6)

# 2. Rear Door



- (1) Weatherstrip
- (2) Clip (Weatherstrip)
- (3) Stabilizer (Outer)
- (4) Stabilizer (Inner)
- (5) Door panel
- (6) Plate

- (7) Sealing cover
- (8) Checker
- (9) Lower hinge
- (10) Upper hinge

 Tightening torque: N-m (kg-m, ft-lb)

 T1: 7.4±2.0 (0.75±0.2, 5.4±1.4)

 T2: 25±3 (2.5±0.3, 18.1±2.2)

 T3: 29±5 (3.0±0.5, 21.7±3.6)

# 3. Fixed Glass

# A: SEDAN



- (1) Windshield glass
- (2) Dam rubber
- (3) Molding

- (4) Rearview mirror mount
- (5) Locate pin
- (6) Rear window glass

(7) Rear quarter glass

### **B: WAGON**



- (2) Dam rubber
- (3) Molding

(5) Locate pin

(6) Fastener

# 4. Front Door Glass



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

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

# 5. Rear Door Glass



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

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

(5) Motor ASSY

### 6. Rear Gate and Glass



- (1) Gas stay
- (2) Hinge
- (3) Rear gate
- (4) Buffer (Rear gate)
- (5) Buffer cover
- (6) Buffer (Back door)

- (7) Glass
- (8) Locate pin
- (9) Handle
- (10) Key cylinder
- (11) Latch ASSY
- (12) Striker

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

# 7. Door Lock Assembly



- (1) Inner remote ASSY
- (2) Inner remote cover
- (3) Bell crank
- (4) Auto-door lock actuator
- (5) Door latch

- (6) Striker
- (7) Door outer handle

 Tightening torque: N-m (kg-m, ft-lb)

 T1: 6.4±2.0 (0.65±0.2, 4.7±1.4)

 T2: 7.4±2.0 (0.75±0.2, 5.4±1.4)

 T3: 14±4 (1.4±0.4, 10.1±2.9)

# 8. Door Trim



- (1) Gusset cover
- (2) Bracket
- (3) Weatherstrip upper
- (4) Clip

- (5) Pad
- (6) Trim panel
- (7) Power window switch cover
- (8) Weatherstrip lower

- (9) Cover
- (10) Upper trim
- (11) Side trim
- (12) Lower trim

# 9. Weatherstrip



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

### 1. Door and Related Parts

### A: PROCEDURE CHART FOR REMOVING AND INSTALLING

#### NOTE:

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



H5M0910A

## 2. Door

### A: REMOVAL AND INSTALLATION

### 1. DOOR ASSEMBLY

1) Remove front pillar lower trim <Ref. to 5-3 [W5A1].> and disconnect connectors from body harness.



2) Place a cloth or a wood block under door to prevent damage, and support it with a jack.3) Remove checker bolt.



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

#### Tightening torque:

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

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

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

#### CAUTION: Work carefully to avoid damaging door.



Installation is in the reverse order of removal.
 NOTE:

Apply grease to moving parts of door hinges.

#### 2. TRIM PANEL

#### CAUTION:

# Be careful not to break clip by applying undue force.

1) Front door trim:

(1) Remove gusset cover (A), power window switch assembly (B), cover (C) and inner remote cover (D).

(2) Remove screws and then disengage the clips.

(3) Detach trim panel and then disconnect connector.

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

2) Rear door trim:

(1) Remove cover (E), power window switch assembly (F) and inner remote cover (G).

(2) Remove screws and then disengage the clips.

(3) Detach trim panel and then disconnect connector.

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



#### 3. SEALING COVER

- 1) Remove door trim panel. <Ref. to 5-2 [W2A2].>
- 2) Remove speaker, trim bracket, remote assem-
- bly and disconnect connectors.
- 3) Remove sealer with a spatula.

#### CAUTION:

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



4) Installation is in the reverse order of removal.

#### NOTE:

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

• When repairing or replacing sealing cover, use "CEMEDINE 5430L" as sealer. It may be overlaid on existing sealer.

#### Sealer:

#### **CEMEDINE 5430L**

#### CAUTION:

• Any breaks in sealer can cause water leakage or entry of air and dust. Be sure sealer is applied in a continuous line.

• Make sure sealing cover bonded areas are free from wrinkles or openings.

#### 4. CHECKER

- 1) Completely close door glass.
- 2) Remove door trim panel. <Ref. to 5-2 [W2A2].>
- 3) Remove sealing cover. <Ref. to 5-2 [W2A3].>
- 4) Remove attaching bolt to body.

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



# **5-2** [W2A5] 2. Door

# SERVICE PROCEDURE

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

#### Tightening torque:

7.5±2.0 N⋅m (0.75±0.2 kg-m, 5.4±1.4 ft-lb)

### 5. INNER REMOTE

- 1) Remove door trim panel. <Ref. to 5-2 [W2A2].>
- 2) Remove sealing cover. <Ref. to 5-2 [W2A3].>
- 3) Disconnect joints of two rods.
- 4) Remove inner remote assembly.



5) Installation is in the reverse order of removal.

#### NOTE:

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

#### 6. DOOR LATCH AND OUTER HANDLE

1) Completely close door glass.

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

3) Remove inner remote assembly. <Ref. to 5-2 [W2A5].>

4) Remove sealing cover around latch service hole.

5) Remove latch and actuator assembly (A):

(1) Turn rod holder to disconnect joint between key lock and rod.

(2) Turn rod holder to disconnect joint between outer handle and rod.

(3) Turn rod holder to disconnect joint between crank and rod.

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



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

#### NOTE:

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

#### CAUTION:

# After installation, be sure lock mechanism operates normally.

6) Remove outer handle (B):

(1) Remove door 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.



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

### 7. KEY LOCK

- 1) Remove door 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 [W2A6].>
- 5) Loosen spring securing key lock.
- 6) Remove key lock from outer handle.
- 7) Installation is in the reverse order of removal.

#### 8. GUSSET

- 1) Be sure window is all the way down.
- 2) Remove gusset cover.
- 3) Remove trim panel. <Ref. to 5-2 [W2A2].>
- 4) Remove door rearview mirror.
- 5) Remove outer weatherstrip.
- 6) Remove sealing cover. <Ref. to 5-2 [W2A3].>

#### NOTE:

Be careful not to drop nuts on the "IN" side.

7) Remove bolt and nut which secure gusset.



8) Lift out gusset.

9) Installation is in the reverse order of removal.

Tightening torque: Bolt and nut 7.4±2.0 N⋅m (0.75±0.2 kg-m, 5.4±1.4 ft-lb)

#### **B: ADJUSTMENT**

#### 1. DOOR ASSEMBLY

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

ST 925610000 DOOR HINGE WRENCH

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



2) Loosen mounting screws (A) approximately one rotation.

3) Adjust striker (B) position by lightly tapping with a hammer.



#### **CAUTION:**

• Use a cloth to prevent damaging body or other parts.

• Do not directly tap plastic portion of striker.

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

Striker tightening torque: 14±4 N·m (1.4±0.4 kg-m, 10.1±2.9 ft-lb)
**5-2 [W2B2]** 2. Door

#### 2. PROCEDURE CHART FOR ADJUSTING DOOR GLASS



H5M0912A

#### 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 regulator B channel at a position slightly lower than midpoint of oblong hole on inner panel.

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

#### Load: F

Front door glass 49.0±4.9 N (5.0±0.5 kg, 11.0±1.1 lb) Rear door glass 49.0±4.9 N (5.0±0.5 kg, 11.0±1.1 lb)



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

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



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

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



# • Remedy for improper front glass to rear glass clearance

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



3) If clearance is improper, loosen adjusting nuts and bolts (A) and (B) then adjust glass to rear glass.



# • 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.



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 nuts and bolts (A) and (B).



3) If clearance is over specifications, tighten nuts and bolts (A) and (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 nuts and bolts (A) until dimensions are obtained.

#### CAUTION:

Do not loosen two adjusting nuts and bolts (A) and (B) 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 nuts and bolts (A) by the same amount. Do not adjust the adjusting nuts and bolts (A) with sash bracket inclined toward inner panel, as this increases effort required to operate regulator.



2) Adjust front sash fit using rear sash adjustment procedure outlined in the former procedure as a guide. Two adjusting nuts and bolts (B) 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.

#### • Fore-aft adjustment

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

#### NOTE:

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



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

#### • Fit adjustment

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



# **C: INSPECTION**

#### 1. FRONT DOOR GLASS

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





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

#### CAUTION:

• Repeatedly adjust parts until all clearances are correct.

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

### 2. REAR DOOR GLASS

1) Close rear door and make sure of all clear-ances.



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

A–A

#### CAUTION:

Unit: mm (in)

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

# 3. Rear Gate

### A: REMOVAL AND INSTALLATION

#### **CAUTION:**

• Be careful not to scratch coated surfaces of vehicle body and window glass during removal. Place a cloth over the affected area.

- Be careful not to damage trim panels.
- Use an assistant when handling heavy parts.
- Be careful not to damage or lose small parts.

#### 1. REAR GATE ASSEMBLY

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

#### CAUTION:

Be careful not to damage clips or their holes.



2) Disconnect connectors and terminal.

3) Disconnect rear washer hose from wiper motor.

4) If disconnected harness is re-used, the connector with a string and place on the upper side of rear gate for ready use.

#### CAUTION:

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

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



- 6) Gas stay:
  - (1) Completely open rear gate.

(2) Remove bolts which hold gas stay to rear gate.

#### CAUTION:

• Be careful because rear gate drops while removing bolts. Have an assistant support it while removing bolts.

• Be sure to place a folded cloth between rear gate and body to prevent scratches.

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



8) General precautions in handling rear gate gas stay are as follows.

#### CAUTION:

• Do not attempt to disassemble gas stay because its cylinder is filled with gas.

• Before discarding gas stay, place it at a slight angle with the cylinder body side facing up and drill a 2 to 3 mm (0.08 to 0.12 in) dia. hole to completely discharge the content. (Gas is odorless, colorless and harmless; however, metal powder may come out of the hole.)



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



• Be careful not to scratch the exposed section of piston rod or allow oil or paint to come in contact with it.

• Do not attempt to rotate the extended piston rod.

9) Installation is in the reverse order of removal.

#### **CAUTION:**

• Be careful not to mistake RH and LH body side buffers.

• Be sure to add sealer to hinge.

• When installing rear gate, be careful not to damage coating on body and rear gate.

#### 2. LATCH

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



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

#### CAUTION:

Firmly join latch with key cylinder, and outer handle.

#### 3. OUTER HANDLE

- 1) Remove trim panel.
- 2) Disengage cable from outer handle bracket (E).
- 3) Remove two nuts used to hold outer handle (B)

to the inside of rear gate, and detach outer handle.

#### CAUTION:

Be careful not to damage packing when removing outer handle.



4) Installation is in the reverse order of removal.

#### CAUTION:

Completely insert latch pin into handle lever.

- 4. KEY CYLINDER
- 1) Remove trim panel.
- 2) Disengage rod from holder.
- 3) Remove nuts from key cylinder (C), and detach
- key cylinder from inside.



4) Installation is in the reverse order of removal.

### 5. STRIKER

1) Remove rear skirt trim.

2) Remove two bolts from striker (D) and detach striker.



3) Installation is in the reverse order of removal.

#### 6. WEATHERSTRIP

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



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

#### CAUTION:

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



# 4. Procedure Chart for Removal and Installation of Window Glass

### A: REMOVAL AND INSTALLATION



H5M0914A

### 1. MATERIALS REQUIRED FOR APPLICATION

Description	Remarks
<ul><li>Repair adhesive set</li><li>Cartridge of single liquid urethane adhesive</li><li>Primer for glass and body</li></ul>	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 roof molding and front window molding upper.

3) Remove glass:

(1) Put protective tape on body to prevent damage.

(2) Using drill or putty knife, make through-hole (one place) in adhesive agent.

(3) Pass piano wire through the hole from inside the compartment, and connect both ends of wire securely to wooden blocks.



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

#### CAUTION:

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

### **B: INSTALLATION**

1) After cutting layer of adhesive, remove 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.

- 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) Installation of molding:

When installing molding to windshield, align mark (B) on molding to notch (A) on ceramic print.



- 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.

#### CAUTION:

Do not open and close door after moldings have been installed. When opening and closing door for unavoidable reason, lower door glass and gently move door. 10) Water leakage test:

Test for water leakage about one hour after installation.

#### CAUTION:

- Move vehicle very gently.
- Do not squirt strong hose stream on vehicle.
- 11) Spontaneous drying:

After completing all operations, leave vehicle alone for 24 hours.

#### **CAUTION:**

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

12) Install cowl panel and wiper arm.

# 6. Rear Gate Glass

# A: REMOVAL

1) Remove rear wiper motor. <Ref. to 6-2 [W6B3].>

2) Disconnect connector from rear defogger terminal.

3) Remove glass in the same manner as in wind-shield.

#### NOTE:

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



# **B: INSTALLATION**

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



2) Fit fastener (A) in window frame flange at locator position.



3) Install glass in same manner as windshield.

#### NOTE:

After setting locator and fastener in position, lightly press the perimeters so locator and fastener are in close contact with mating part surface.



4) About one hour after installation, test for water leakage. Leave vehicle for 24 hours before using it.

- 5) Connect rear defogger connections.
- 6) Install rear gate trim and rear wiper.

# 7. Rear Quarter Glass

# A: REMOVAL

### 1. SEDAN



Remove glass in the same manner as in wind-shield.

#### NOTE:

Matching pins are cemented at the glass corners on the compartment side. Use a piano wire when cutting each pin.

#### 2. WAGON

1) Remove rear quarter molding on corner.

2) Remove glass in the same manner as in wind-shield.

# **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.

# 8. Rear Window Glass

### A: REMOVAL

1) Disconnect connector from rear defogger terminal.

2) Remove glass in the same manner as in windshield. <Ref. to 5-2 [W5A0].>

#### NOTE:

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



## **B: INSTALLATION**

1) Stick dam rubber and matching pin.



2) Install glass in the same manner as in windshield. <Ref. to 5-2 [W5B0].>

3) Make rear defogger connections.

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

# 1. Door Glass

	Condition	Apparent cause/Correction
Glass in fully closed	1) Glass runs out of weatherstrip lip when considerable hand	<ul> <li>Insufficient upward travel of glass</li> </ul>
position	pressure is applied to it from inside.	Increase upward travel of glass.
OUT Roof		
	Glass runs out of weatherstrip lip	
	G5M0502 (This condition may cause wind/booming noise during high- speed operation.)	
	2) Clearance exists between glass and weatherstrip when light hand pressure is applied to it at center and rear pillar locations.	<ul> <li>Insufficient glass-to-door weather- strip contact</li> <li>Check stabilizer and glass for proper contact. Increase contact using upper sash adjustment bolt.</li> <li>Improper adjustment of striker in in- out direction</li> <li>Close door and check for alignment of striker with vehicle body.</li> </ul>
	G5M0503 (This condition may cause wind noise and/or water leakage.)	
	3) Adjust door glass so that it is aligned with door rearview mirror gusset.	<ul> <li>Window is not properly adjusted in up-down/fore-aft direction. Adjust window. If necessary, move B channel regulator to eliminate window tilt.</li> <li>Gusset is not properly adjusted in fore-aft direction. Adjust gusset after loosing all bolts and nuts witch tightening it.</li> </ul>
	Good Good i the back (There should be no gap between gusset and window.) Window too far forward (Rubber part of gusset is forcefully elongated.) i 0 – 1.5 mm (0 – 0.059 in) H5M0672C	

# DIAGNOSTICS

	Condition	Apparent cause/Correction
Door in fully closed/ open position	1) Glass rides over weatherstrip lip when door is closed. OUT Roof IN Check point Check po	• Improper up-down and in-out glass alignments Adjust glass for up-down and in-out alignments (incl. rear sash, upper stop- per adjustment, etc.). If necessary, cor- rect glass tilt by moving B channel regulator.
	2) Edge of glass contacts retainer when door is fully closed.	<ul> <li>Improper glass-to-center pillar weatherstrip or excessive glass contact to weatherstrip</li> <li>Excessive adjusting in contact to weatherstrip</li> <li>Causes rear edge of glass to tilt inboard closer to center pillar.</li> <li>Adjust rear sash adjustment bolt to reduce glass contact to weatherstrip.</li> </ul>
	G5M0506	

#### **5-2** [K100] 1. Door Glass

# DIAGNOSTICS



# 2. Door Lock System

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

# 3. Power Window

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

# 2. Door Lock System

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

# 3. Power Window

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

# 1. Front Seat



- (1) Front seat ASSY
- (2) Rail cover IN
- (3) Rail cover OUT
- (4) Slide rail OUT

Tightening torque: N·m (kg-m, ft-lb) T1: 29<sup>+20</sup>/<sub>−7</sub> (3.0<sup>+2.0</sup>/<sub>−0.7</sub>, 21.7<sup>+14.5</sup>/ <sub>−5.1</sub>) T2: 52±10 (5.3±1.0, 38±7)

(5) Slide rail IN

# 2. Rear Seat

# A: SEDAN BODY



(1) Backrest

(3) Cushion

(2) Head restraint

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

## **B: WAGON BODY**



- (1) Cover
- (2) Cushion
- (3) Hook
- (4) Backrest RH

- (5) Backrest LH
- (6) Head restraint
- (7) Striker

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)

# 3. Front Seat Belt



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

(5) Outer belt ASSY

Tightening torque: N·m (kg-m, ft-lb) T1: 7.4±2.0 (0.75±0.2, 5.4±1.4) T2: 29<sup>+20</sup>/<sub>-7</sub> (3.0<sup>+2.0</sup>/<sub>-0.7</sub>, 21.7<sup>+14.5</sup>/ \_5.1) T3: 52±10 (5.3±1.0, 38.3±7.2)

# 4. Rear Seat Belt

### A: SEDAN BODY



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

- (5) Inner seat belt CENTER
- (6) Inner seat belt LH
- (7) Case center ELR

Tightening torque: N·m (kg-m, ft-lb) T: 29<sup>+20</sup>/<sub>-7</sub> (3.0<sup>+2.0</sup>/<sub>-0.7</sub>, 21.7<sup>+14.5</sup>/ <sub>-5.1</sub>)

### **B: WAGON BODY**



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

Tightening torque: N·m (kg-m, ft-lb) T1: 29<sup>+20</sup>/<sub>−7</sub> (3.0<sup>+2.0</sup>/<sub>−0.7</sub>, 21.7<sup>+14.5</sup>/ <sub>−5.1</sub>) T2: 52±10 (5.3±1.0, 38.3±7.2)

(5) Inner seat belt LH

# 5. Inner Accessories



- (1) Hook
- (2) Sun visor
- (3) Mount

- (4) Spring
- (5) Rearview mirror
- (6) Assist rail bracket

(7) Assist grip

# 6. Inner Trim

# A: SEDAN BODY



- (1) Front pillar upper trim
- (2) Center pillar upper trim
- (3) Rear pillar upper trim
- (4) Rear shelf trim
- (5) Rear bulk trim

- (6) Trunk rear trim
- (7) Trunk side trim
- (8) Rear pillar lower trim
- (9) Side sill rear upper cover
- (10) Center pillar lower trim
- (11) Side sill rear lower cover
- (12) Front pillar lower trim
- (13) Side sill front lower cover
- (14) Pad stopper A pillar
- (15) Pad B pillar upper

### **B: WAGON BODY**



- (1) Front pillar upper trim
- (2) Center pillar upper trim
- (3) Rear pillar upper trim
- (4) Rear rail trim
- (5) Pocket
- (6) Rear quarter lower trim

- (7) Lid
- (8) Rear skirt trim
- (9) Hook
- (10) Side sill rear upper cover
- (11) Center pillar lower trim
- (12) Side sill rear lower cover
- (13) Front pillar lower trim
- (14) Side sill front lower cover
- (15) Pad stopper A pillar
- (16) Pad B pillar upper

# 7. Built-in Child Restraint



- (1) Mat
- (2) Retractor ASSY
- (3) Back panel
- (4) Hinge LH
- (5) Hinge RH

- (6) Cushion board
- (7) Cushion pad ASSY

 Tightening torque: N·m (kg-m, ft-lb)

 T1:  $6.9\pm1.5$  ( $0.7\pm0.15$ ,  $5.1\pm1.1$ )

 T2:  $10^{+10}/_0$  ( $1.0^{+1}/_0$ ,  $7.2^{+7.2}/_0$ )

 T3:  $18^{+10}/_0$  ( $1.8^{+1}/_0$ ,  $13.0^{+7.2}/_0$ )

## SERVICE PROCEDURE

# 1. Front Seat

### A: REMOVAL

#### CAUTION:

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

• After the front seat has been removed from side airbag equipped vehicle, store it as instructed in section 5-5 AIRBAG REPAIR SEC-TION. <Ref. to 5-5 [W3A0].>

1) Disconnect ground cable from battery.

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



3) Pull reclining lever back to fold backrest all the way forward. Move seat all the way forward.

- 4) Disconnect connector under the seat.
- 5) Disconnect side airbag connector. (Side airbag equipped vehicle) <Ref. to 5-5 [M2F2].>
- 6) Remove bolt cover at rear end of slide rail.
- 7) Remove bolts securing seat rear.



- 8) Slide seat all the way back.
- 9) Remove bolts securing front of seat.



10) Remove front seat from vehicle, then install headrest.

### **B: INSTALLATION**

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



2) Pull reclining lever back to fold backrest all the way forward.

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

#### NOTE:

Be sure to position seat so rear seat rails sit on their location bolt (A).



4) Secure the front of seat using inward and outward bolts (A) and (B) in that order.

5) Move seat all the way forward.

6) Secure the rear of seat using inward and outward bolts (C) and (D).

#### **CAUTION:**

Check that all lock plate pawls are completely and equally inserted into the holes in the slide rail brackets. (Conventional seat)



7) Connect connector under the seat.

8) Connect side airbag connector. (Side airbag equipped model)

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

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

- 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 AND INSTALLATION

- 1. SEDAN BODY
- 1) Remove bolts.



2) Slightly raise front of cushion while pushing down on cushion in the direction of "A". With cushion held in that position, move it forward until it is unhooked.



3) Remove bolts securing lower portion of backrest and then open the center trunk through lid.



4) Lift rear seat backrest in direction "B" until it is released.



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

When installing backrest, secure two wires to their respective vehicle body hooks. These wires are located on both sides of upper portion of backrest.



#### CAUTION:

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

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

#### 2. CUSHION (WAGON BODY)

1) Raise the cushion, then remove bolt cover (A).



2) Remove bolts, then remove cushion.



3) Installation is in the reverse order of removal.

### 3. BACKREST (WAGON BODY)

- 1) Raise the cushion.
- 2) Remove clips (A), then remove mat (B).



3) Remove bolts and nut, then detach backrest.



4) Installation is in the reverse order of removal.

#### CAUTION:

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

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

# 3. Front Seat Belt

### A: REMOVAL AND INSTALLATION

#### 1. ELR WITH PRETENSIONER

#### WARNING:

Replace ELR with pretensioner worn by occupants of a vehicle that has been in a serious accident. The entire assembly should be replaced even if damage is not obvious.

#### **CAUTION:**

• Do not strike, drop, or apply any other impact to ELR with pretensioner.

• If oil, grease, or water adheres to ELR with pretensioner, wipe it off immediately with a dry cloth.

• Do not allow current to flow through or voltage to reach ELR with pretensioner. Do not use a circuit tester to check resistance of ELR with pretensioner.

• Wear gloves and goggles during this operation and wash hands afterwards.

• If ELR with pretensioner activates, discard it and replace with new one.

• Do not expose ELR with pretensioner to high temperature or fire.

• Do not attempt to disassemble or repair ELR with pretensioner.

• When an undeployed ELR with pretensioner has to be disposed of in a case such as vehicle scrapping, be sure to deploy it with the procedure described in "DISPOSAL OF PRETEN-SIONER" <Ref. to 5-3 [W3C0].> before the disposal.

1) Disconnect ground cable from battery.

2) Fold backrest all the way forward, then move front seat all the way forward.

3) Remove center pillar lower trim. <Ref. to 5-3 [W5A0].>

- 4) Removal order of front seat belt is as follows:
  - (1) Disconnect "YELLOW" connector (H). <Ref. to 5-5 [M2F3].>
  - (2) Remove anchor cover (A).

(3) Loosen shoulder anchor bolt (B), then detach shoulder anchor from center pillar.

- (4) Remove bracket (D) and bracket (E).
- (5) Detach webbing guide (C).
- (6) Turn over the floor mat, then remove bolt (F).
- (7) Remove bolt (I), then detach ELR (G).



<sup>5)</sup> Installation is in the reverse order of removal.

#### CAUTION:

• The left and right ELR's are not mutually interchangeable because different sensors are used.

• Be careful not to twist belts during installation.

### 2. INNER BELT

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



3) Installation is in the reverse order of removal.

#### 3. ADJUSTABLE SHOULDER ANCHOR

1) Remove shoulder anchor cover and shoulder anchor bolt.

- 2) Remove center pillar upper trim.
- 3) Remove adjustable shoulder anchor assembly.



4) Installation is in the reverse order of removal.

## **B: INSPECTION**

#### **1. ELR WITH PRETENSIONER**

If ELR with pretensioner is dented, cracked, or deformed due to falling or strong impact, replace it with a new one.

#### NOTE:

After deployment of ELR with pretensioner, the webbing cannot be pulled out or extracted.

### C: DISPOSAL OF PRETENSIONER

#### WARNING:

Do not discard undeployed ELR with pretensioner since it can cause serious personal injury when accidentally deployed.

#### CAUTION:

• Deployment of ELR with pretensioner should be done on a flat place free from any possible danger. Avoid outdoors during rain or windy weather.

• Since deploying ELR with pretensioner causes a high explosive noise, make sure to warn people around you and do not allow anyone within a 5 m (16 ft) radius of the disposal site.

• Some smoke will be emitted from deployment of ELR with pretensioner. Therefore, do not activate near fire or smoke sensor.

• Wear gloves and goggles during this operation and wash hands afterwards.

#### 1. WHILE STILL INSTALLED

1) Turn ignition switch off.

2) Disconnect ground cable from battery, and wait for at least 20 seconds before starting work.

3) Remove center pillar lower trim. <Ref. to 5-3 [W5A1].>

4) Disconnect "YELLOW" connector (a) from ELR with pretensioner. <Ref. to 5-5 [M2F3].>


5) Short terminal to alligator clip furnished as deployment tool.

#### Deployment tool: (PN. 98299PA030)

#### **CAUTION:**

Deployment tool should be kept shorted until just before deployment of ELR with pretensioner.



6) Connect deployment tool connector (1D) and ELR with pretensioner "YELLOW" connector.

7) Extend deployment tool to the limit and make sure vehicle is empty. Completely close vehicle all windows, sunroof and rear gate.



8) Move battery at least 5 meter (16 ft) from vehicle and secure area. Connect deployment tool alligator clip to battery minus terminal. Connect the other terminal of deployment tool to battery plus terminal.



9) After deployment, ELR with pretensioner is extremely hot. Leave it unattended for 40 minutes.

#### CAUTION:

#### Do not apply water to cool it down.

10) Remove deployed ELR with pretensioner. Wrap it in an airtight vinyl bag and discard. Do not attempt to disassemble or incinerate ELR with pretensioner.



# 2. AS A DETACHED ELR WITH PRETENSIONER

1) Turn ignition switch off.

2) Disconnect ground cable from battery, and wait for at least 20 seconds before starting work.

3) Remove ELR with pretensioner. <Ref. to 5-3 [W3A1].>

4) Cut the webbing of ELR with pretensioner.

#### NOTE:

Cut webbing as close possible to ELR.



5) Short deployment tool alligator clip to terminal.

#### Deployment tool: (PN. 98299PA030)

#### CAUTION:

Deployment tool should be kept shorted until just before deployment of ELR with pretensioner.



6) Connect deployment tool connector (1D) and ELR with pretensioner "YELLOW" connector.

7) Bundle three wire automotive harnesses [each with a sectional area of 1.25 mm<sup>2</sup> (0.00194 sq in) or more] and bind them two folds around ELR with pretensioner bracket.

8) Install ELR with pretensioner on disk wheel with tire attached.



9) Pile three tires without disk wheel upon the tire installed with ELR with pretensioner. Pile upon this an additional tire with disk wheel. Fasten this pile tight with rope.



10) Extend deployment tool to the limit. Secure area. Then connect deployment tool alligator clip to battery minus terminal and the other terminal to battery plus terminal.



11) After deployment, ELR with pretensioner is extremely hot. Leave it unattended for 40 minutes.

#### CAUTION:

#### Do not apply water to cool it down.

12) Remove deployed ELR with pretensioner. Wrap it in an airtight vinyl bag and discard. Do not attempt to disassemble or incinerate ELR with pretensioner.



## 4. Rear Seat Belt

## A: REMOVAL AND INSTALLATION

#### WARNING:

Replace rear seat belt worn by occupants of a vehicle that has been in a serious accident. The entire assembly should be replaced even if damage is not obvious.

#### 1. OUTER BELT SIDE (SEDAN BODY)

1) Remove rear shelf trim and side sill rear upper cover. <Ref. to 5-3 [W5A0].>

2) Remove bolts, then detach outer belt side.



3) Installation is in the reverse order of removal.

#### NOTE:

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

#### CAUTION:

## • Ensure that seat belts are free from twisting after installation.

• Ensure that tongues, buckles and belts are properly placed on seat.

#### 2. OUTER BELT CENTER (SEDAN BODY)

- 1) Remove rear shelf trim. <Ref. to 5-3 [W5A6].>
- 2) Remove bolt, then detach outer belt center.



3) Installation is in the reverse order of removal.

#### NOTE:

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

#### CAUTION:

• Ensure that seat belts are free from twisting after installation.

• Ensure that tongues, buckles and belts are properly placed on seat.

#### 3. INNER BELT (SEDAN BODY)

- 1) Detach the rear cushion. <Ref. to 5-3 [W2A1].>
- 2) Remove bolt, then remove inner belt.



3) Installation is in the reverse order of removal.

#### CAUTION:

• Ensure that seat belts are free from twisting after installation.

• Ensure that tongues, buckles and belts are properly placed on seat.

#### 4. OUTER BELT SIDE (WAGON BODY)

1) Remove rear pillar upper trim, rear quarter lower trim and side sill rear upper cover. <Ref. to 5-3 [W5A8].>

2) Remove bolt and nut, then detach outer belt side.



3) Installation is in the reverse order of removal.

#### NOTE:

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

#### **CAUTION:**

• Ensure that seat belts are free from twisting after installation.

• Ensure that tongues, buckles and belts are properly placed on seat.

#### 5. OUTER BELT CENTER (WAGON BODY)

1) Remove rear end of roof trim, then hang down roof trim. <Ref. to 5-3 [W5A10].>

2) Remove cover (B), then pass the tongue (A) from roof trim hole.



3) Remove bolts, then detach outer belt center.



4) Installation is in the reverse order of removal.

#### NOTE:

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

#### 6. INNER BELT (WAGON BODY)

- 1) Raise the rear cushion.
- 2) Remove bolt, then remove inner belt.



3) Installation is in the reverse order of removal.

## 5. Inner Trim Panel

## A: REMOVAL AND INSTALLATION

### 1. FRONT SECTION (SEDAN BODY)

- 1) Removal order of trim panel is as follows:
  - (1) Remove front mole (H).
  - (2) Remove front pillar upper trim (A).
  - (3) Remove front pillar lower trim (C).
  - (4) Remove side sill front lower cover (D).

(5) Remove rear seat cushion <Ref. to 5-3 [W2A1].>, then remove side sill rear upper cover (F).

- (6) Remove side sill rear lower cover (G).
- (7) Remove center pillar lower trim (E).

(8) Detach front seat belt shoulder anchor <Ref. to 5-3 [W3A3].>, then remove center pillar upper trim (B).



2) Installation is in the reverse order of removal.

#### CAUTION:

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

#### NOTE:

When installing center pillar upper trim and front pillar upper trim, be sure to set front mole as shown in figure.



#### 2. REAR SECTION (SEDAN BODY)

- Removal order of trim panel is as follows:
   (1) Remove rear mole (K).
  - (2) Remove rear shelf trim. <Ref. to 5-3</li>[W5A0].>

(3) Remove side sill rear upper cover (F). <Ref. to 5-3 [W5A6].>

- (4) Remove rear pillar lower trim (J).
- (5) Remove rear pillar upper trim (I).



2) Installation is in the reverse order of removal.

#### CAUTION:

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

#### NOTE:

When installing rear quarter upper trim, be sure to set rear mole as shown in figure.



#### 3. FLOOR SECTION (SEDAN BODY)

- 1) Removal order of floor mat is as follows:
  - (1) Remove front seats.
  - (2) Remove rear seat cushion.

(3) Remove console box, depending on the specifications.

- (4) Remove front pillar lower trim panel.
- (5) Remove center pillar lower trim panel.
- (6) Remove side sill rear upper cover.
- (7) Remove clips from floor mat.

#### NOTE:

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

- (8) Remove mat hook.
- (9) Remove mat from toe board area.
- (10) Remove mat from rear heater duct.

(11) Roll mat, then take it out of opened rear door.



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

#### NOTE:

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

#### 4. ROOF TRIM (SEDAN BODY)

1) Remove sunvisor while disconnecting connector and assist rail.

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

- 3) Remove sunroof garnish. (with sunroof vehicle)
- 4) Using ST, remove clips (A).
- ST 925580000 PULLER



5) Installation is in the reverse order of removal.

#### CAUTION:

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

#### 5. TRUNK TRIM (SEDAN BODY)

1) Remove clips, then detach trunk rear trim (A).

2) Remove luggage hook (B) and clips, then detach trunk side trim (C).



3) Installation is in the reverse order of removal.

#### 6. REAR SHELF TRIM (SEDAN BODY)

1) Remove high-mounted stoplight.



2) Remove rear seat backrest. <Ref. to 5-3 [W2A1].>

3) Remove inner seat belt RH, then disconnect inner seat belt RH (A) and outer belt center (B).



4) Detach rear shelf trim through each rear outer seat belt from slits (A) and hole (B) of rear shelf trim.



5) Installation is in the reverse order of removal.

#### 7. FRONT SECTION (WAGON BODY)

- 1) Removal order of trim panel is as follows:
  - (1) Remove front mole (H).
  - (2) Remove front pillar upper trim (A).
  - (3) Remove front pillar lower trim (C).
  - (4) Remove side sill front lower cover (D).

(5) Raise the rear seat cushion, then remove side sill rear upper cover (F).

- (6) Remove side sill rear lower cover (G).
- (7) Remove center pillar lower trim (E).

(8) Detach front seat belt shoulder anchor <Ref. to 5-3 [W3A3].>, then remove center pillar upper trim (B).



2) Installation is in the reverse order of removal.

#### CAUTION:

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

#### NOTE:

When installing center pillar upper trim and front pillar upper trim, be sure to set front mole as shown in figure.



#### 8. REAR SECTION (WAGON BODY)

- 1) Removal order of trim panel is as follows:
  - (1) Remove rear mole (M).
  - (2) Remove rear rail trim (L).

(3) Remove rear seat belt shoulder anchor <Ref. to 5-3 [W4A4].>, then remove rear quarter upper trim (I).

(4) Remove side sill rear upper cover (F). <Ref. to 5-3 [W5A7].>

(5) Remove rear skirt trim (K).

(6) Remove rear floor box <Ref. to 5-3 [W5A9].>, then remove rear quarter lower trim (J).



2) Installation is in the reverse order of removal.

#### CAUTION:

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

#### NOTE:

When installing rear quarter upper trim, be sure to set rear mole as shown in figure.



#### 9. FLOOR SECTION (WAGON BODY)

- 1) Removal order of floor mat is as follows:
  - (1) Remove front seats.
  - (2) Remove rear seat cushion.

(3) Remove console box, depending on the specifications.

- (4) Remove front pillar lower trim panel.
- (5) Remove center pillar lower trim panel.
- (6) Remove side sill rear upper cover.
- (7) Remove clips from floor mat.

#### NOTE:

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

- (8) Remove mat hook.
- (9) Remove mat from toe board area.
- (10) Remove mat from rear heater duct.

(11) Roll mat, then take it out of opened rear door.



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

#### NOTE:

- Secure mat firmly with hook and velcro tape.
- Insert mat edge firmly into the groove of side sill cover.
- 2) Removal order of rear floor box is as follows:
  - (1) Remove clips, then detach rear floor boxes.

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

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#### 10. ROOF TRIM (WAGON BODY)

1) Remove sunvisor and assist rail.

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

3) Open the rear sunroof, then remove four clips. (Sunroof equipped model)



- 4) Using ST, remove clips.
- ST 925580000 PULLER

5) Remove cover (B) while detaching snap lock carefully. Pass outer belt center tongue (A) through hole on roof trim, then remove roof trim.





6) Installation is in the reverse order of removal.

#### CAUTION:

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

#### NOTE:

- When installing roof trim, pass the outer belt center tongue through hole on roof trim.
- After installing roof trim, push snap lock to set roof trim in position.

## 6. Built-in Child Restraint A: REMOVAL AND INSTALLATION

## 1. RETRACTOR ASSEMBLY

#### WARNING:

Replace the built-in child restraint equipped vehicle seatback assembly if the child restraint was in use during a serious collision. The built-in restraint may be severely weakened. In a subsequent accident, it might not be able to provide adequate protection. The entire assembly should be replaced even if damage is not obvious.

1) Detach mat and then remove nuts and screws from back panel (a).

2) Detach back panel while removing webbing of built-in child restraint.



3) Remove screws and then detach cushion board (a).



4) Remove screws and then detach retractor assembly (a).



5) Installation is in the reverse order of removal.

## 1. Instrument Panel



- (1) Pad & frame
- (2) Grille side (D)
- (3) Hook
- (4) Grille side (P)
- (5) Grille vent (P)
- (6) Glove box panel
- (7) Glove box lid
- (8) Center panel side (D)
- (9) Center panel side (P)
- (10) Front cover (AT)

- (11) Front cover (MT)
- (12) Rear cup holder
- (13) Console box
- (14) Rear ash tray
- (15) Console lid
- (16) Console cover
- (17) Tray
- (18) Ash tray
- (19) Lower cover
- (20) Center panel

- (21) Front cup holder
- (22) Switch panel
- (23) Meter visor
- (24) Grille vent (D)
- (25) Grille center

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

## 1. Instrument Panel AIRBAG

## A: REMOVAL

Airbag system wiring harness is routed near combination meter.

#### CAUTION:

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

1) Disconnect GND cable from battery.

2) Remove shift knob (A) (MT model) and front cover (B).



3) Remove lower cover and then disconnect connector.



4) Remove knee pad.



5) Remove stopper (A) and then remove glove box.



6) Remove center panel side of both sides.



7) Remove tray (A) and console cover (B) while disconnecting connector.



8) Remove console box (A).



9) Remove front pillar upper trim of both sides.



10) Remove front pillar lower trim (A) of passenger side.



- 11) Remove passenger side airbag module. <Ref. to 5-5 [W3A2].>
- 12) Remove two bolts and lower steering column.



13) Set temperature control switch (A) to "FULL HOT" and then disconnect temperature control cable from bottom of heater unit.

#### NOTE:

Do not move switch and link when installing.



14) Remove the installing bolts and screw.



15) Remove instrument panel carefully from the body while disconnecting connectors.

#### CAUTION:

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

NOTE:

Put matching mark, if necessary, for easy reassembly.



(1) SMJ/White

(4) 8P/White

(2) 12P/Blue

(5) 1P/Black

(3) 10P/White

(6) 1P/Black

#### CAUTION:

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

• When storing removed instrument panel, place it standing up on the floor.



#### (7) Antenna feeder

(8) 16P/Blue

## **B: INSTALLATION**

Installation is in the reverse order of removal.

#### CAUTION:

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

#### NOTE:

When setting instrument panel into position, push three hooks into grommet (A) on body panel.



## 1. SRS Airbag



- (1) Combination switch ASSY with roll connector
- (2) TORX<sup>®</sup> bolt T30
- (3) Airbag module ASSY (Driver)
- (4) Airbag module ASSY (Passenger)
- (5) Airbag control module
- (6) TORX<sup>®</sup> bolt T40

- (7) Side airbag sensor
- (8) Side airbag harness
- (9) Side airbag module
- (10) Airbag main harness
- (11) Front sub sensor harness
- (12) Front sub sensor
- (13) TORX® nut E12

- Tightening torque: N·m (kg-m, ft-lb) T1: 7.4±2.0 (0.75±0.2, 5.4±1.4) T2: 10±2 (1.0±0.2, 7.2±1.4) T3: 20±4 (2.0±0.4, 14.5±2.9)
  - T4: 25±2 (2.5±0.2, 18.1±1.4)

2

## 1. General

## A: PRECAUTION

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



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



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





• Do not drop the airbag modulator parts, subject it to high temperatures over 93°C (199°F), or apply oil, grease, or water to it; otherwise, the internal parts may be damaged and its reliability greatly lowered.



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



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



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

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



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

# 2. Inspection and Replacement Standards

## A: VEHICLES WHICH BECOME INVOLVED IN A COLLISION

If the vehicle equipped with an SRS airbag system is damaged in a collision, the airbag system parts must be checked and replaced in accordance with the following standards:

• After faulty parts are replaced, the warning light operation must be checked.

• When the ignition switch is turned ON, it lights up for 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.

# B: AIRBAG MODULE (DRIVER AND PASSENGER)

#### **1. INSPECTION STANDARD**

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

• The designated trouble code is output during self-diagnosis. <Ref. to 5-5 [T4A0].>

#### 2. REPLACEMENT STANDARD

- Airbag is deployed.
- The pad surface is scratched or cracked.

• Harness and/or connector is deformed or cracked, their circuits are broken, lead wire is exposed, etc.

• Mounting bracket is cracked or deformed.

• The module surface is fouled with foreign matter. (grease, oil, water, cleaning solvent, etc.)

Airbag module dropped to the floor/ground.
Airbag module determined as faulty during selfdiagnosis.

## C: AIRBAG MODULE (SIDE)

#### **1. INSPECTION STANDARD**

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

• The designated trouble code is output during self-diagnosis. <Ref. to 5-5 [T4A0].>

#### 2. REPLACEMENT STANDARD

- Side airbag is deployed.
- The front seat assembly is damaged or deformed.

• Harness and/or connector is deformed or cracked, their circuits are broken, lead wire is exposed, etc.

Mounting bracket is cracked or deformed.

• Side airbag module determined as faulty during self-diagnosis.

## **D: MAIN HARNESS**

#### 1. INSPECTION STANDARD

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

• The designated trouble code is output during self-diagnosis. <Ref. to 5-5 [T4A0].>

#### 2. REPLACEMENT STANDARD

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

• Connector is scratched or cracked.

• The designated trouble code is output during self-diagnosis.

## E: AIRBAG CONTROL MODULE

#### **1. INSPECTION STANDARD**

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

• The designated trouble code is output during self-diagnosis. <Ref. to 5-5 [T4A0].>

#### 2. REPLACEMENT STANDARD

- Control module is cracked or deformed.
- Mounting bracket is cracked or deformed.
- Connector is scratched or cracked.
- Control module dropped to the floor/ground.

• Control module determined as faulty during diagnostics.

• Airbag is deployed.

#### **F: COMBINATION SWITCH**

#### **1. INSPECTION STANDARD**

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

• The designated trouble code is output during self-diagnosis. <Ref. to 5-5 [T4A0].>

#### 2. REPLACEMENT STANDARD

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

## G: STEERING WHEEL

#### 1. INSPECTION STANDARD

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

#### 2. REPLACEMENT STANDARD

• Check steering wheel insert for cracks or deformities.

• Check to ensure that new airbag module is properly installed in steering wheel.

• After installing airbag module, check to ensure that it is free of interference with steering wheel and that clearance between the two is equal at all points.



• Check steering wheel distortion in axial and radial directions.

#### Specifications:

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



## H: STEERING COLUMN ASSEMBLY

## 1. INSPECTION STANDARD

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

## 2. REPLACEMENT STANDARD

• Check to ensure that clearance between capsule (A) and tip of column bracket (B) on steering column upper side is within specifications.

# Clearance between capsule and tip of column bracket: L

Less than 1.3 mm (0.051 in)



## I: FRONT SUB SENSOR

## 1. INSPECTION STANDARD

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



• The designated trouble code is output during self-diagnosis. <Ref. to 5-5 [T4A0].>

## 2. 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 sub sensor determined as faulty as a result of Diagnostics.
- Airbag is deployed.
- Front sub sensor dropped to the floor/ground.

## J: SIDE AIRBAG SENSOR

#### 1. INSPECTION STANDARD

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



• The designated trouble code is output during self-diagnosis. <Ref. to 5-5 [T4A0].>

#### 2. 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.
- Side airbag sensor determined as faulty as a result of Diagnostics.
- Side airbag is deployed.
- Side airbag sensor dropped to the floor/ground.

## 3. Airbag Module

## A: REMOVAL AND INSTALLATION

#### CAUTION:

• The airbag module (driver, passenger and side) must not be disassembled. The airbag module cannot be used again once inflated.



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



• After removal, the airbag module (driver, passenger and 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, passenger and side) continuity with airbag removed from the vehicle body.



• Replace airbag module (driver, passenger and side) with a new one, should any of the following conditions develop:

- Pad surface is scratched or cracked.
- Connector harness is damaged.
- Inflator side structure of module is cracked or deformed.
- Module is excessively stained with water, oil, etc.
- Module was accidentally dropped.
- The front seat assembly is damaged or deformed.

• The removed front seat with the airbag module must be kept on its back. At this time, keep the module side at least 200 mm (7.87 in) away from walls or other objects.



• When storing a removed airbag module (driver and passenger), 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.

Driver side	GOOD	Fire!			
	NO GOOD	Fire!			
	NO GOOD	 Fire!~	As Non		
		Fire!			
Passenger side	GOOD	Fire!			
_	NO GOOD				
	NO GOOD	Jure:			

G5M0604

#### 1. DRIVER'S AIRBAG MODULE

- 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<sup>®</sup> BIT T30, loosen two TORX<sup>®</sup> bolts.



5) Disconnect airbag connector on back of airbag module. <Ref. to 5-5 [M2F2].>



6) Refer to "**CAUTION**" for handling of a removed airbag module. <Ref. to 5-5 [W3A0].>

7) Installation is in the reverse order of removal.

#### CAUTION:

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

#### 2. PASSENGER'S AIRBAG MODULE

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

4) Disconnect airbag connector (A) <Ref. to 5-5 [M2F2].> and then detach airbag connector from support beam bracket.

5) Remove three bolts and then carefully remove airbag module while lifting it.



6) Refer to "**CAUTION**" for handling of a removed airbag module. <Ref. to 5-5 [W3A0].>

7) Installation is in the reverse order of removal.

#### CAUTION:

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

#### 3. SIDE AIRBAG MODULE

The side airbag module cannot be detached from the front seat assembly. When replacing side airbag module, replace front seat assembly. <Ref. to 5-3 [W100].>

## 4. Main Harness

## A: REMOVAL AND INSTALLATION

1) Turn ignition switch off.

2) Disconnect ground cable from battery and wait

for at least 20 seconds before starting work.

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

below steering column. <Ref. to 5-5 [M2F2].>

#### CAUTION:

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



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

6) Disconnect connector from airbag control module.



7) Disconnect body harness connector (B31) from airbag connector (AB1) located in front pillar lower (driver side). <Ref. to 5-5 [M2F3].>



8) Disconnect front sub sensor connector (blue) from airbag main harness. <Ref. to 5-5 [M2F2].>



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



10) Installation is in the reverse order of removal.

## 5. Side Airbag Harness

## A: REMOVAL AND INSTALLATION

1) Turn ignition switch off.

2) Disconnect ground cable from battery and wait

for at least 20 seconds before starting work.

3) Remove front seat <Ref. to 5-3 [W100].> and then roll up floor mat <Ref. to 5-3 [W5A0].>.

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

5) Disconnect two 12-pin yellow connectors from airbag control module.

6) Remove side airbag sensor <Ref. to 5-5 [W7A0].> and then disconnect connector from side airbag sensor. <Ref. to 5-5 [M2F4].>

7) Detach clips and then remove side airbag harness.



8) Installation is in the reverse order of removal.

## 6. Airbag Control Module

## A: REMOVAL AND INSTALLATION

#### CAUTION:

• Do not disassemble the airbag control module.



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



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



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

5) Disconnect connector from airbag control module.

## 5. Side Airbag Harness

## A: REMOVAL AND INSTALLATION

1) Turn ignition switch off.

2) Disconnect ground cable from battery and wait

for at least 20 seconds before starting work.

3) Remove front seat <Ref. to 5-3 [W100].> and then roll up floor mat <Ref. to 5-3 [W5A0].>.

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

5) Disconnect two 12-pin yellow connectors from airbag control module.

6) Remove side airbag sensor <Ref. to 5-5 [W7A0].> and then disconnect connector from side airbag sensor. <Ref. to 5-5 [M2F4].>

7) Detach clips and then remove side airbag harness.



8) Installation is in the reverse order of removal.

## 6. Airbag Control Module

## A: REMOVAL AND INSTALLATION

#### CAUTION:

• Do not disassemble the airbag control module.



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



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



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

5) Disconnect connector from airbag control module.

6) Using T40 TORX<sup>®</sup> bit (Tamper resistant type), remove four TORX<sup>®</sup> bolts in numerical sequence shown in figure. Discard the old TORX<sup>®</sup> bolts.

#### CAUTION:

Use new TORX<sup>®</sup> bolts during re-assembly.



7) Installation is in the reverse order of removal.

## 7. Side Airbag Sensor

## A: REMOVAL AND INSTALLATION

#### CAUTION:

• If the side of the vehicle body is damaged by a collision, be sure to check the left and right side airbag 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 side part of vehicle body, including the side sill, center pillar, front and rear doors, take utmost care not to apply dryer heat, painting mist, or the flame of the welding burner directly to the side airbag sensors and wire harness of the airbag system.

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

3) Remove center pillar lower trim. <Ref. to 5-3 [W5A1].>

4) Remove ELR with pretensioner. <Ref. to 5-3 [W3A1].>

5) Remove bracket (A) and then remove cap (B).



6) Remove two TORX<sup>®</sup> nuts and then detach side airbag sensor (A) while disconnecting connector. <Ref. to 5-5 [M2F4].>



Installation is in the reverse order of removal.
 NOTE:

Discard the used TORX<sup>®</sup> nuts. Use new TORX<sup>®</sup> nuts when installation.

## 8. 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. <Ref. to 5-5 [M2F2].>

#### CAUTION:

Do not reconnect airbag connector at steering column until combination switch is securely reinstalled.



4) Disconnect combination switch connectors from body harness connector.

5) Set front wheels in straight ahead position. Using T30 TORX<sup>®</sup> bit, remove two TORX<sup>®</sup> bolts.



6) Disconnect airbag connector on back of airbag module. <Ref. to 5-5 [M2F2].> Remove airbag module, and place it with pad side facing upward. <Ref. to 5-5 [W3A0].>



7) Using steering puller, remove steering wheel.

#### CAUTION:

Do not allow connector to interfere when removing steering wheel.



8) Remove steering column covers.

9) Removing three retaining screws, remove combination switch.



## **B: ADJUSTMENT**

#### **1. CENTERING ROLL CONNECTOR**

Before installing steering wheel, make sure to center roll connector built into combination switch.

1) Make sure that front wheels are positioned straight ahead.

2) Install steering gearbox, steering shaft and combination switch properly. Turn roll connector pin (A) clockwise until it stops.

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



## **C: INSTALLATION**

#### CAUTION:

#### Failure to do this might damage roll connector.

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

2) Install column cover and center roll connector. <Ref. to 5-5 [W8B1].>

3) Install steering wheel in neutral position. Carefully insert roll connector pin (A) into hole on steering wheel.

#### NOTE:

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



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

## 9. Front Sub Sensor

## A: REMOVAL AND INSTALLATION

#### CAUTION:

• If the front end of the vehicle body is damaged by a collision, be sure to check the left and right front sub 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 sub sensors and wire harness of the airbag system.



## 1. FRONT SUB SENSOR HARNESS

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

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

5) Disconnect front sub sensor connector (blue) from airbag main harness. <Ref. to 5-5 [M2F2].>



6) Remove front wheel and mud guard.

7) Disconnect connector from front sub sensor assembly. <Ref. to 5-5 [M2F4].>



8) Remove wiring harness clips.

9) Remove grommet and then detach front sub sensor harness (A).



#### 2. FRONT SUB SENSOR ASSEMBLY

- 1) Turn ignition switch off.
- 2) Disconnect ground cable from battery and wait
- for at least 20 seconds before starting work.
- 3) Remove front wheel and mud guard.
- 4) Disconnect connector from front sub sensor assembly. <Ref. to 5-5 [M2F4].>



5) Remove front sub sensor (A).



6) Installation is in the reverse order of removal.

MEMO:

## **1. Electrical Components Location**



Connec- tor No.	(AB1)	(AB2)	(AB3)	(AB6)	(AB7)	(AB8)	(AB9)	(AB10)	(AB11)	(AB12)	(AB13)	(AB14)
Pole	7	2	2	28	2	2	2	2	2	2	2	2
Color	Yellow	Blue	Blue	Yellow	Blue							
Male/ Female	Male	Male	Male	Female	Female	Female	Female	Male	Female	Male	Female	Female
			•	•		•		•		•		
Connec- tor No.	(AB15)	(AB16)	(AB17)	(AB18)	(AB19)	(AB20)	(AB21)	(AB23)	(AB24)	(AB25)	(AB26)	(AB28)
Pole	2	2	12	12	2	2	2	4	2	2	2	4
Color	Blue	Yellow										
Male/ Female	Male	Female	Female	Female	Female	Male	Female	Female	Female	Male	Female	Female

## 2. Schematic



B5M0926A

## 3. Tools for Diagnostics

#### CAUTION:

Be sure to use specified test harness A, F, G, H and I or I2 when measuring voltage, resistance, etc. of AIRBAG system component parts.

## A: TEST HARNESS A


## **B: TEST HARNESS F**



## C: TEST HARNESS G



## D: TEST HARNESS H



## E: TEST HARNESS I



S5M0340A

## F: TEST HARNESS I2



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## G: AIRBAG RESISTOR

The airbag resistor is used during diagnostics. The airbag resistor has the same resistance as the airbag module and thus provides safety when used instead of the airbag module. It also makes it possible to finish, diagnostics in less time.



## 4. Diagnostics Chart for Onboard Diagnostic System A: BASIC DIAGNOSTICS PROCEDURE

4A1 : CHECK AIRBAG WARNING LIGHT ILLUMINATES.

1) Turn ignition switch to ON (engine OFF).

- 2) Check airbag warning light illuminates.
- CHECK : Does airbag warning light stay ON after about 7 seconds or remain OFF, or come back ON after 30 seconds?
- (YES) : Repair and replace. <Ref. to 5-5 [T4D0].>
- (NO) : Go to step 4A2.

## 4A2 : CHECK TROUBLE CODE INDICATES.

Perform ON-BOARD DIAGNOSTICS. <Ref. to 5-5 [T4B0].>

- **CHECK : Does trouble code indicate? <Ref. to** 5-5 [T5A0].>
- **YES** : Repair and replace. <Ref. to 5-5 [T5AB0].> Go to step **4A3**.
- (NO) : Repair and replace. <Ref. to 5-5 [T5AC0].> Go to step **4A3**.

4A3 : CHECK AIRBAG WARNING LIGHT ILLUMINATES.

- 1) Turn ignition switch to ON (engine OFF).
- 2) Check airbag warning light illuminates.
- CHECK : Does airbag warning light stay ON after about 7 seconds or come back ON after 30 seconds?
- (VES) : Repair and replace. <Ref. to 5-5 [T4D0].>
- : Go to step **4A4**.

#### 4A4 : CHECK AIRBAG WARNING LIGHT ILLUMINATES.

Check airbag warning light illuminates.

- **CHECK** : Does airbag warning light come ON for about 7 seconds, then go out and stay out?
- (YES) : Perform clear memory. <Ref. to 5-5 [T4C0].>
- (NO) : Go to step 4A1.

## **B: ON-BOARD DIAGNOSTIC**

When the airbag system is in functioning condition, the airbag warning light will remain on for about 7 seconds and go out when the ignition switch is set to ON.

If there is any malfunction, the airbag warning light will either stay on or off continuously. In such cases, perform on-board diagnostic in accordance with the specified procedure to determine trouble codes.

1) Turn ignition switch ON (with engine OFF).

2) Connect DIAG. terminal to No. 2 terminal of diagnosis connector located inside lower cover.



3) Check in accordance with the trouble code indicated by the AIRBAG warning light, and record the trouble codes.

4) Turn the ignition switch "OFF" and remove the DIAG. terminal from No. 2 terminal of diagnosis connector.

## C: CLEAR MEMORY

After eliminating problem as per trouble code, clear memory as follows:

1) Make sure ignition switch is ON (and engine off). Connect one DIAG. terminal "A" on diagnosis connector terminal No. 2.

While warning light is flashing, contact the other DIAG. terminal "B" on terminal No. 3 for at least three seconds.



2) After memory is cleared, normal warning light flashing rate resumes. (Warning light flashes every 0.6 seconds ON-OFF operation.) Memory cannot be cleared if any problem exists.

3) After clear memory and then DIAG. terminals "A" and "B", extract from diagnosis connector.

## **D: DIAGNOSTICS PROCEDURE**

## 4D1 : CHECK TROUBLE CODE INDICATES.

1) Perform on-board diagnostic. <Ref. to 5-5 [T4B0].>

2) Check trouble code indicates.

- CHECK : Are trouble codes 11, 12, 15 or 16 indicated? <Ref. to 5-5 [T5A2].>
- **YES** : Go to step **4D2**.
- Perform diagnostics and repair according to indicated trouble code. <Ref. to 5-5 [T5A0].>

4D2 : CHECK TROUBLE CODE INDICATES.

Check trouble code indicates.

CHECK	:	Are trouble codes 12, 16 indicated?
$\smile$		<ref. 5-5="" [t5a2].="" to=""></ref.>

- (VES) : Go to step 4D3.
- (NO) : Go to step 4D4.

# 4D3 : CHECK AIRBAG WARNING LIGHT ILLUMINATES.

1) Turn ignition switch to OFF. Disconnect battery ground cable, and wait 20 seconds.

2) Remove glove box <Ref. to 5-4 [W1A0].> and disconnect passenger's airbag module connector (AB9) to (AB10). <Ref. to 5-5 [W3A2].>

3) Connect test harness F connector (1F) to (AB9).

4) Connect airbag resistor to test harness F connector (3F).



5) Connect battery ground cable and turn ignition switch to ON.

6) Check airbag warning light illuminates.

## NOTE:

In some cases the airbag warning light will go OFF after about 7 seconds but will turn ON again within 30 seconds. In this case continue diagnostics with the basic diagnostics procedures or trouble code procedures.

CHECK : Does airbag warning light go off after about 7 seconds and remain off for more than 30 seconds?

- Replace with a new passenger's airbag module. <Ref. to 5-5 [W3A2].> Go to step 4D6.
- Perform diagnostics and repair according to indicated trouble code. <Ref. to 5-5 [T5A0].>

#### 4D4 : CHECK AIRBAG WARNING LIGHT ILLUMINATES.

1) Turn ignition switch to "OFF". Disconnect battery ground cable, and wait 20 seconds.

2) Connect connector (AB8) to (AB3).

3) Remove driver's airbag module and connect test harness F connector (1F) to (AB7). <Ref. to 5-5 [W3A1].>

4) Connect airbag resistor to test harness F connector (3F).



5) Connect battery ground cable and turn ignition switch to ON.

6) Check airbag warning light illuminates.

### NOTE:

In some cases the airbag warning light will go OFF after about 7 seconds but will turn ON again within 30 seconds. In this case continue diagnostics with the basic diagnostics procedures or trouble code procedures.

CHECK : Does airbag warning light go off after about 7 seconds and remain off for more than 30 seconds?

- Replace with a new driver's airbag module.
   Ref. to 5-5 [W3A1].> Go to step 4D6.
- (NO) : Go to step 4D5.

# 4D5 : CHECK AIRBAG WARNING LIGHT ILLUMINATES.

1) Turn ignition switch to OFF. Disconnect battery ground cable, and wait 20 seconds.

2) Remove lower cover panel and connect test harness F connector (1F) to (AB8) <Ref. to 5-4 [W1A0].> with airbag resistor attached to test harness F connector (3F).



3) Connect battery ground cable and turn ignition switch to ON.

4) Check airbag warning light illuminates.

## NOTE:

In some cases the airbag warning light will go OFF after about 7 seconds but will turn ON again within 30 seconds. In this case continue diagnostics with the basic diagnostics procedures or trouble code procedures.

CHECK : Does airbag warning light go off after about 7 seconds and remain off for more than 30 seconds?

- (YES) : Replace with a new combination switch.<Ref. to 5-5 [W800].> Go to step 4D6.
- Perform diagnostics and repair according to indicated trouble code. <Ref. to 5-5 [T5A0].>

# 4D6 : CHECK AIRBAG WARNING LIGHT ILLUMINATES.

1) Connect battery ground cable and turn ignition switch to ON.

2) Check airbag warning light illuminates.

#### NOTE:

In some cases the airbag warning light will go OFF after about 7 seconds but will turn ON again within 30 seconds. In this case continue diagnostics with the basic diagnostics procedures or trouble code procedures.

CHECK

#### ) : Does airbag warning light go off after about 7 seconds and remain off for more than 30 seconds?

- (YES) : Perform clear memory. <Ref. to 5-5 [T4C0].>
- **NO** : Go to step **4D1**.

## 5. Diagnostics Chart with Trouble Code

## A: TROUBLE CODES

## 1. LIST OF TROUBLE CODES

Trouble code/ Contents of troubles	Memory function	Contents of diagnosis	Index No.
11	Provided.	<ul> <li>Airbag main harness circuit is open, shorted or shorted to ground.</li> <li>Airbag module harness (driver) circuit is open, shorted or shorted to ground.</li> <li>Roll connector circuit is open, shorted or shorted to ground.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5b0].="" to=""></ref.>
12	Provided.	<ul> <li>Airbag main harness circuit is open, shorted or shorted to ground.</li> <li>Airbag module harness (passenger) circuit is open, shorted or shorted to ground.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5c0].="" to=""></ref.>
15	Provided.	<ul> <li>Airbag main harness circuit (driver) is shorted to power supply.</li> <li>Airbag module harness (driver) is shorted to power supply.</li> <li>Roll connector is shorted to power supply.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5d0].="" to=""></ref.>
16	Provided.	<ul> <li>Airbag main harness circuit (passenger) is shorted to power supply.</li> <li>Airbag module harness (passenger) is shorted to power supply.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5e0].="" to=""></ref.>
21	Provided.	Airbag control module is faulty.	<ref. 5-5="" [t5f0].="" to=""></ref.>
22	Provided.	Front airbag module and ELR with pretensioner (LH/RH) are inflated.	<ref. 5-5="" [t5g0].="" to=""></ref.>
23	Not provided.	(AB6), (AB17) and (AB18) are not connected properly to airbag control module.	<ref. 5-5="" [t5h0].="" to=""></ref.>
24	Not provided.	<ul> <li>Airbag control module is faulty.</li> <li>Airbag main harness circuit is open.</li> <li>Fuse No. 11 (in joint box) is blown.</li> <li>Body harness circuit is open.</li> </ul>	<ref. 5-5="" [t5i0].="" to=""></ref.>
25	Provided.	<ul> <li>Airbag control module is faulty.</li> <li>Airbag main harness circuit is open.</li> <li>Fuse No. 6 (in joint box) is blown.</li> <li>Body harness circuit is open.</li> </ul>	<ref. 5-5="" [t5j0].="" to=""></ref.>
31	Provided.	<ul> <li>Front sub sensor harness (RH) circuit is shorted.</li> <li>Front sub sensor harness (RH) circuit is open.</li> <li>Front sub sensor (RH) is faulty.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5k0].="" to=""></ref.>
32	Provided.	<ul> <li>Front sub sensor harness (LH) circuit is shorted.</li> <li>Front sub sensor harness (LH) circuit is open.</li> <li>Front sub sensor (LH) is faulty.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5l0].="" to=""></ref.>
41	Provided.	<ul> <li>Side airbag harness (RH) is faulty.</li> <li>Side airbag module (RH) is faulty.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5m0].="" to=""></ref.>
42	Provided.	<ul> <li>Side airbag harness (LH) is faulty.</li> <li>Side airbag module (LH) is faulty.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5n0].="" to=""></ref.>
45	Provided.	<ul> <li>Side airbag harness (RH) is faulty.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5o0].="" to=""></ref.>

Trouble code/ Contents of troubles	Memory function	Contents of diagnosis	Index No.
46	Provided.	<ul><li>Side airbag harness (LH) is faulty.</li><li>Airbag control module is faulty.</li></ul>	<ref. 5-5="" [t5p0].="" to=""></ref.>
51	Provided.	<ul> <li>Side airbag sensor (RH) is faulty.</li> <li>Side airbag harness (RH) is faulty.</li> </ul>	<ref. 5-5="" [t5q0].="" to=""></ref.>
52	Provided.	<ul><li>Side airbag sensor (LH) is faulty.</li><li>Side airbag harness (LH) is faulty.</li></ul>	<ref. 5-5="" [t5r0].="" to=""></ref.>
53	Provided.	Side airbag sensor (RH) is faulty.	<ref. 5-5="" [t5s0].="" to=""></ref.>
54	Provided.	Side airbag sensor (LH) is faulty.	<ref. 5-5="" [t5t0].="" to=""></ref.>
55	Provided.	Side airbag module is inflated.	<ref. 5-5="" [t5u0].="" to=""></ref.>
61	Provided.	<ul> <li>ELR with pretensioner (RH) circuit is open, shorted or shorted to ground.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5v0].="" to=""></ref.>
62	Provided.	<ul> <li>ELR with pretensioner (LH) circuit is open, shorted or shorted to ground.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5w0].="" to=""></ref.>
65	Provided.	ELR with pretensioner (RH) circuit is shorted to power supply.	<ref. 5-5="" [t5x0].="" to=""></ref.>
66	Provided.	ELR with pretensioner (LH) circuit is shorted to power supply.	<ref. 5-5="" [t5y0].="" to=""></ref.>
Airbag warning light remains on.	Not provided.	<ul> <li>Airbag warning light is faulty.</li> <li>Airbag control module to airbag warning light harness circuit is shorted or open.</li> <li>Grounding circuit is faulty.</li> <li>Airbag control module is faulty.</li> <li>(AB1) and (B31) are not connected properly.</li> <li>(AB6) is not connected properly to airbag control module.</li> </ul>	<ref. 5-5="" [t5z0].="" to=""></ref.>
Airbag warning light remains off.	Not provided.	<ul> <li>Fuse No. 5 (in main fuse box) is blown.</li> <li>Body harness circuit is open.</li> <li>Airbag warning light is faulty.</li> <li>Airbag main harness is faulty.</li> <li>Airbag control module is faulty.</li> </ul>	<ref. 5-5="" [t5aa0].="" to=""></ref.>
Warning light indicates trouble code, then normal code. (Flashing trouble code.)	Provided.	Airbag system component parts are faulty.	<ref. 5-5="" [t5ab0].="" to=""></ref.>
Warning light indicates trouble code, then normal code. (Flashing normal code.)	Not provided.	<ul> <li>Airbag connector is faulty.</li> <li>Fuse No. 11 (in joint box) is blown.</li> <li>Airbag main harness is faulty.</li> <li>Airbag control module is faulty.</li> <li>Body harness is faulty.</li> </ul>	<ref. 5-5="" [t5ac0].="" to=""></ref.>

## 2. HOW TO READ TROUBLE CODES

The AIRBAG warning light flashes a code corresponding to the faulty parts. The long segment (1.2 sec on) indicates a "ten", and the short segment (0.3 sec on) indicates a "one".



## **B: TROUBLE CODE 11**

## **DIAGNOSIS:**

• Airbag main harness circuit is open, shorted or shorted to ground.

• Airbag module harness (Driver) circuit is open, shorted or shorted to ground.

• Roll connector circuit is open, shorted or shorted to ground.

• Airbag control module is faulty.

## **CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).

#### 5B1 : AIRBAG MAIN HARNESS INSPEC-TION

1) Remove lower cover panel <Ref. to 5-4 [W1A0].>, and connect connector (AB8) below steering column to test harness F connector (1F).



2) Disconnect connector (AB6) <Ref. to 5-5 [W6A0].> from airbag control module, and connect it to test harness I or I2 connector (1I) terminal.
 3) Measure resistance between test harness I or I2 connector (2I) and test harness F connector (3F) terminals.

## Connector & terminal (2I) No. 1 — (3F) No. 4:



- CHECK) : Is resistance less than 10  $\Omega$ ?
- YES : Go to step 5B2.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

### 5B2 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between test harness I or I2 connector (2I) and test harness F connector (3F) terminals.

#### Connector & terminal (2I) No. 4 — (3F) No. 3:



: Is resistance less than 10  $\Omega$ ?

CHECK YES NO

: Go to step 5B3.

: Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5B3: AIRBAG MAIN HARNESS INSPEC-TION

1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Measure resistance between test harness I or I2 connector (2I) terminal.

#### Connector & terminal (2I) No. 1 — No. 4:



: Is resistance more than 1 M $\Omega$ ?

- : Go to step 5B4.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5B4 : AIRBAG MAIN HARNESS INSPEC-TION

1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Measure resistance between test harness I or I2 connector (2I) terminals and chassis ground.

## Connector & terminal (2I) No. 4 (+) — Chassis ground (–):



- $\overline{CHECK}$  : Is resistance more than 1 M $\Omega$ ?
- **YES** : Go to step **5B5**.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5B5 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between test harness I or I2 connector (2I) terminals and chassis ground.

## Connector & terminal (2I) No. 1 (+) — Chassis ground (–):



CHECK

## $_{0}$ : Is resistance more than 1 M $\Omega$ ?

- YES : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- NO : Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## C: TROUBLE CODE 12

## DIAGNOSIS:

• Airbag main harness circuit is open, shorted or shorted to ground.

• Airbag module harness (Passenger) circuit is open, shorted or shorted to ground.

• Airbag control module is faulty.

## CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).



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

2) Disconnect connector (AB9) and (AB10) <Ref. to 5-5 [W3A2].> and connect connector (AB9) to test harness F connector (1F).

3) Disconnect connector (AB6) <Ref. to 5-5 [W6A0].> from airbag control module, and connect it to test harness I or I2 connector (1I) terminal.

4) Measure resistance between test harness I or I2 connector (2I) and test harness F connector (3F) terminals.

Connector & terminal (2I) No. 2 — (3F) No. 4:





NO

## : Is resistance less than 10 $\Omega$ ?

- : Go to step **5C2**.
- : Replace airbag main harness. <Ref. to 5-5 [W4A0].>

5C2: AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between test harness I or I2 connector (2I) and test harness F connector (3F) terminals.

#### Connector & terminal (2I) No. 5 — (3F) No. 3:



## (CHECK) : Is resistance less than 10 $\Omega$ ?

- **YES** : Go to step **5C3**.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

### 5C3: AIRBAG MAIN HARNESS INSPEC-TION

1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Measure resistance between test harness I or I2 connector (2I) terminal.

#### Connector & terminal (2I) No. 2 — No. 5:



(CHECK) : Is resistance more than 10 k $\Omega$ ?

- Sector Step 5C4.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

### 5C4 : AIRBAG MAIN HARNESS INSPEC-TION

1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Measure resistance between test harness I or I2 connector (2I) terminals and chassis ground.

## Connector & terminal

(21) No. 2 (+) — Chassis ground (–):



## $\widehat{\mathbf{CHECK}}$ : Is resistance more than 1 M $\Omega$ ?

: Go to step **5C5**.

Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5C5 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between test harness I or I2 connector (2I) terminals and chassis ground.

## Connector & terminal







YES

## ) : Is resistance more than 1 M $\Omega$ ?

- Replace airbag control module. <Ref. to 5-5 [W6A0].>
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## D: TROUBLE CODE 15

## **DIAGNOSIS:**

• Airbag main harness circuit (Driver) is shorted to power supply.

• Airbag module harness (Driver) is shorted to power supply.

- Roll connector is shorted to power supply.
- Airbag control module is faulty.

### **CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).

### 5D1: AIRBAG MAIN HARNESS INSPEC-TION

1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Connect battery ground cable and turn ignition switch "ON" (engine off).

3) Measure voltage across each test harness I or I2 connector (2I) terminal and chassis ground.

## Connector & terminal (2I) No. 4 (+) — Chassis ground (–):



## CHECK : Is voltage less than 1 V?

**YES** : Go to step **5D2**.

Replace airbag main harness. <Ref. to 5-5 [W4A0].>

### 5D2 : AIRBAG MAIN HARNESS INSPEC-TION

Measure voltage across each test harness I or I2 connector (2I) terminal and chassis ground.

## Connector & terminal

YES

### (2I) No. 1 (+) — Chassis ground (-):



CHECK) : Is voltage less than 1 V?

- : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## E: TROUBLE CODE 16

## DIAGNOSIS:

- Airbag main harness circuit (Passenger) is shorted to power supply.
- Airbag module harness (Passenger) is shorted to power supply.
- Airbag control module is faulty.

## CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).

5E1 : AIRBAG MAIN HARNESS INSPEC-TION

1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Connect battery ground cable and turn ignition switch "ON" (engine off).

3) Measure voltage across each test harness I or I2 connector (2I) terminal and chassis ground.

## Connector & terminal (2I) No. 2 (+) — Chassis ground (–):



- CHECK) : Is voltage less than 1 V?
- YES : Go to step 5E2.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

#### 5E2 : AIRBAG MAIN HARNESS INSPEC-TION

Measure voltage across each test harness I or I2 connector (2I) terminal and chassis ground.

## Connector & terminal

(21) No. 5 (+) — Chassis ground (-):



CHECK : Is voltage less than 1 V?

YES)

- : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## F: TROUBLE CODE 21

## DIAGNOSIS:

Airbag control module is faulty.

## CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal, and then wait at least 20 seconds.

5F1 : CHECK IF TROUBLE CODE 21 IS INDICATED.

Confirm flashing trouble code according to "BASIC DIAGNOSTICS PROCEDURE". <Ref. to 5-5 [T4A0].>

- CHECK : Is airbag warning light trouble code 21 indicated?
- (YES) : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- (NO) : Perform clear memory. <Ref. to 5-5 [T4C0].>

## G: TROUBLE CODE 22

## DIAGNOSIS:

Front airbag module and ELR with pretensioner (LH/RH) are inflated.

## CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal, and then wait at least 20 seconds.

5G1 : CHECK IF TROUBLE CODE 22 IS INDICATED.

Confirm flashing trouble code according to "BASIC DIAGNOSTICS PROCEDURE". <Ref. to 5-5 [T4A0].>

- CHECK : Is airbag warning light trouble code 22 indicated?
- Replace airbag control module <Ref. to 5-5 [W6A0].>, front sub sensor <Ref. to 5-5 [W9A0].>, front airbag module of both sides <Ref. to 5-5 [W3A0].> and ELR with pretensioner of both sides.
   <Ref. to 5-3 [W3A1].>
- Perform clear memory. <Ref. to 5-5 [T4C0].>

## H: TROUBLE CODE 23

## **DIAGNOSIS:**

(AB6), (AB17) and (AB18) are not connected properly to airbag control module.

## CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

5H1: CHECK POOR CONTACT IN CON-NECTORS (AB6), (AB17) AND (AB18).

Check connectors (AB6), (AB17) and (AB18) connected to airbag control module. <Ref. to 5-5 [W6A0].>

- CHECK : Is there poor contact in connectors (AB6), (AB17) and (AB18)?
- (YES) : Repair poor contact in connectors (AB6), (AB17) and (AB18).
- NO : Replace airbag control module. <Ref. to 5-5 [W6A0].>

## I: TROUBLE CODE 24

## **DIAGNOSIS:**

- Airbag control module is faulty.
- Airbag main harness circuit is open.
- Fuse No. 11 (in joint box) is blown.
- Body harness circuit is open.

## CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).

511 :	AIRBAG CONTROL MODULE INSPEC-
	TION

1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Connect battery ground cable and turn ignition switch "ON" (engine off).

3) Measure voltage across connector (2I) terminal and chassis ground.

## Connector & terminal

## (21) No. 3 (+) — Chassis ground (-):



- CHECK) : Is voltage more than 10 V?
  - : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- **NO** : Go to step **512**.

YES)

### 512 : AIRBAG MAIN HARNESS INSPEC-TION

1) Go to following procedure after performing diagnostics on airbag system as per diagnosis procedure under "511 AIRBAG CONTROL MODULE INSPECTION" <Ref. to 5-5 [T511].> previously out-lined.

2) Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

3) Disconnect connector (AB1) from body harness connector (B31) located in front pillar lower (driver side), and connect connector (AB1) to test harness A connector (2A).



4) Measure resistance between test harness A connector (5A) and test harness I or I2 connector (2I) terminals.

## Connector & terminal (5A) No. 9 — (2I) No. 3:



CHECK : Is resistance less than 10  $\Omega$ ?

- YES : Go to step 513.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5I3 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between each terminal of connectors (5A) and chassis ground.

## **Connector & terminal**

(5A) No. 9 (+) — Chassis ground (–):





- : Go to step **5I4**.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

: Is resistance more than 1  $M\Omega$ ?

5I4 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between each terminal of connectors (2I) and chassis ground.

## **Connector & terminal**

```
(2I) No. 3 (+) — Chassis ground (–):
```



- **CHECK** : Is resistance more than 1  $M\Omega$ ?
- YES : Go to step 515.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 515 : FUSE NO. 11 (IN JOINT BOX) INSPEC-TION

Make sure ignition switch is turned "OFF", then remove and visually check fuse No. 11 (in joint box).





## : Is fuse No. 11 blown?

- Seplace fuse No. 11. If fuse No. 11 blows again, repair body harness.
- **NO** : Repair body harness.

## J: TROUBLE CODE 25

## **DIAGNOSIS:**

- Airbag control module is faulty.
- Airbag main harness circuit is open.
- Fuse No. 6 (in joint box) is blown.
- Body harness circuit is open.

## CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

After 20 seconds elapse, remove instrument panel lower cover, and disconnect (AB3) and (AB8), (AB9) and (AB10).



1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].> and connect it to test harness I or I2 connector (1I).

2) Connect battery ground cable and turn ignition switch "ON". (engine off)

3) Measure voltage across connector (2I) terminal and chassis ground.

### Connector & terminal (2I) No. 6 (+) — Chassis ground (–):



- CHECK) : Is voltage more than 10 V?
  - : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- NO: Go to step 5J2.

YES)

### 5J2 : AIRBAG MAIN HARNESS INSPEC-TION

1) Go to following procedure after performing diagnostics on airbag system as per diagnosis procedure under "5J1 AIRBAG CONTROL MODULE INSPECTION" <Ref. to 5-5 [T5J1].> previously outlined.

 2) Turn ignition switch "OFF", disconnect battery ground terminal and then wait at least 20 seconds.
 3) Disconnect body harness connector (B31) from connector (AB1) located in front pillar lower (driver side), and connect connector (AB1) to test harness A connector (2A).



4) Measure resistance between test harness A connector (5A) terminal and test harness I or I2 connector (2I) terminal.

Connector & terminal (5A) No. 1 — (2I) No. 6:



CHECK) : Is resistance less than 10  $\Omega$ ?

- **YES** : Go to step **5J3**.
- NO : Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5J3 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between (5A) connector terminal and chassis ground.

### **Connector & terminal**

(5A) No. 1 (+) — Chassis ground (–):



- CHECK YES NO
  - : Go to step 5J4.
  - : Replace airbag main harness. <Ref. to 5-5 [W4A0].>

: Is resistance more than 1  $M\Omega$ ?

5J4 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between (2I) connector terminal and chassis ground.

## Connector & terminal

```
(2I) No. 6 (+) — Chassis ground (–):
```



- **CHECK** : Is resistance more than 1  $M\Omega$ ?
- YES : Go to step 5J5.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5J5 : FUSE NO. 6 (IN JOINT BOX) INSPEC-TION

1) Turn ignition switch "OFF".

2) Remove and visually check fuse No. 6 (in joint box).





- : Is fuse No. 6 blown?
- Replace fuse No. 6 if fuse No. 6 blows again, repair body harness.
- **NO** : Repair body harness.

## K: TROUBLE CODE 31

## DIAGNOSIS:

- Front sub sensor harness (RH) circuit is shorted.
- Front sub sensor harness (RH) circuit is open.
- Front sub sensor (RH) is faulty.
- Airbag control module is faulty.

### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal, and then wait at least 20 seconds.

5K1 :	FRONT SUB SENSOR (RH) AND
	FRONT SUB SENSOR HARNESS
	(RH) INSPECTION

1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Measure resistance between test harness I or I2 connector (3I) terminal.

#### Connector & terminal (3I) No. 2 — No. 4:



- CHECK : Is the resistance between 750  $\Omega$  and 1 k $\Omega$ ?
- YES : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- **NO**: Go to step **5K2**.

#### 5K2 : FRONT SUB SENSOR (RH) AND FRONT SUB SENSOR HARNESS (RH) INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

#### Connector & terminal (3I) No. 2 (+) — Chassis ground (–):



- (CHECK) : Is the resistance more than 10 k $\Omega$ ?
- YES : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- **NO** : Go to step **5K3**.

## 5K3 : FRONT SUB SENSOR (RH) AND FRONT SUB SENSOR HARNESS (RH) INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

## Connector & terminal (3I) No. 4 (+) — Chassis ground (–):



- CHECK) : Is the resistance more than 10 k $\Omega$ ?
- Feblace airbag control module. <Ref. to 5-5 [W6A0].>
- (NO) : Go to step 5K4.

#### 5K4: AIRBAG MAIN HARNESS AND FRONT SUB SENSOR HARNESS (RH) INSPECTION

1) Connect test harness I or I2 connector (1I) and connector (AB6).

2) Disconnect connector (AB16) from front sub sensor (RH) <Ref. to 5-5 [W9A0].> and then connect test harness H connector (1H) and connector (AB16).

3) Measure resistance between test harness I or I2 connector (3I) terminal and test harness H connector (3H) terminal.

## Connector & terminal

5-5 [T5K4]



- : Is the resistance less than 10  $\Omega$ ? CHECK
- : Go to step 5K5. YES)
- : Go to step 5K8. NO)

#### 5K5: **AIRBAG MAIN HARNESS AND** FRONT SUB SENSOR HARNESS (RH) INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness H connector (3H) terminal.

### Connector & terminal (3I) No. 4 — (3H) No. 6:



- : Is the resistance less than 10  $\Omega$ ? CHECK
- Go to step 5K6. (YES)
- : Go to step 5K8. (NO)

#### 5K6: **AIRBAG MAIN HARNESS AND** FRONT SUB SENSOR HARNESS (RH) INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

## **Connector & terminal** (3I) No. 2 (+) — Chassis ground (-):



- Is the resistance more than 10 k $\Omega$ ? CHECK
- Go to step 5K7. 2 (YES)
- : Go to step 5K8. NO)

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#### 5K7 : AIRBAG MAIN HARNESS AND FRONT SUB SENSOR HARNESS (RH) INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

Connector & terminal

(3I) No. 4 (+) — Chassis ground (–):



CHECK YES NO

: Go to step **5K16**.

: Go to step 5K8.

### 5K8 : AIRBAG MAIN HARNESS INSPEC-TION

1) Disconnect connector (AB14) and (AB15), then connect test harness F connector (2F) and connector (AB14).

2) Measure resistance between test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

#### Connector & terminal (3I) No. 2 — (3F) No. 6:



- : Is the resistance less than 10  $\Omega$ ?
- Sector Step 5K9.

CHECK

Replace airbag main harness. <Ref. to 5-5 [W4A0].>

#### 5K9 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

Connector & terminal (3I) No. 4 — (3F) No. 5:



- (CHECK) : Is the resistance less than 10  $\Omega$ ?
- **YES** : Go to step **5K10**.
- NO : Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5K10 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

### Connector & terminal (3I) No. 2 (+) — Chassis ground (–):





- : Is the resistance more than 10 kΩ?
   : Go to step 5K11.
- YES
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5K11 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

## Connector & terminal

(3I) No. 4 (+) — Chassis ground (–):



- **CHECK)** : Is the resistance more than 10 k $\Omega$ ?
  - : Go to step 5K12.

YES)

Replace airbag main harness. <Ref. to 5-5 [W4A0].>

### 5K12 : FRONT SUB SENSOR HARNESS (RH) INSPECTION

1) Connect test harness F connector (1F) and connector (AB15).

 2) Disconnect connector (AB16) from front sub sensor (RH) <Ref. to 5-5 [W9A0].> and then test harness H connector (1H) and connector (AB16).
 3) Measure resistance between test harness F connector (3F) terminal and test harness H connector (3H) terminal.

#### Connector & terminal (3F) No. 3 — (3H) No. 5:



- CHECK : Is the resistance less than 10  $\Omega$ ?
- Sector Step 5K13.

NO)

: Replace front sub sensor harness (RH). <Ref. to 5-5 [W9A0].>

## 5K13: FRONT SUB SENSOR HARNESS (RH) INSPECTION

Measure resistance between test harness F connector (3F) terminal and test harness H connector (3H) terminal.

#### Connector & terminal (3F) No. 4 — (3H) No. 6:



- (CHECK) : Is the resistance less than 10  $\Omega$ ?
- ΥES : Go to step 5K14.
- Replace front sub sensor harness (RH).
  <Ref. to 5-5 [W9A0].>

## 5K14 : FRONT SUB SENSOR HARNESS (RH) INSPECTION

Measure resistance across test harness F connector (3F) terminal and chassis ground.

## Connector & terminal (3F) No. 3 (+) — Chassis ground (–):



CHECK

- : Is the resistance more than 10 k $\Omega$ ?
- YES : Go to step 5K15.
- Replace front sub sensor harness (RH).
  <Ref. to 5-5 [W9A0].>

#### 5K15 : FRONT SUB SENSOR HARNESS (RH) INSPECTION

Measure resistance across test harness F connector (3F) terminal and chassis ground.

Connector & terminal

(3F) No. 4 (+) — Chassis ground (–):



- **CHECK** : Is the resistance more than 10 k $\Omega$ ?
  - : Go to step 5K16.

YES)

NO

: Replace front sub sensor harness (RH). <Ref. to 5-5 [W9A0].>

### 5K16 : FRONT SUB SENSOR (RH) INSPEC-TION

1) Connect test harness H connector (2H) and front sub sensor (RH).

2) Measure resistance between test harness H connector (3H) terminal.

### Connector & terminal (3H) No. 3 — No. 4:



- CHECK : Is the resistance between 750  $\Omega$  and 1 k $\Omega$ ?
- **YES** : Go to step **5K17**.
- Replace front sub sensor (RH). <Ref. to</li>
   5-5 [W9A0].>

#### 5K17 : FRONT SUB SENSOR (RH) INSPEC-TION

Measure resistance across test harness H connector (3H) terminal and chassis ground.

## Connector & terminal

(3H) No. 3 (+) — Chassis ground (–):



- (CHECK) : Is the resistance more than 10 k $\Omega$ ?
- **YES** : Go to step **5K18**.
- Replace front sub sensor (RH). <Ref. to 5-5 [W9A0].>

5K18 : FRONT SUB SENSOR (RH) INSPEC-TION

Measure resistance across test harness H connector (3H) terminal and chassis ground.

## Connector & terminal

```
(3H) No. 4 (+) — Chassis ground (–):
```



CHECK

: Is the resistance more than 10 k $\Omega$ ?

YES : Perform clear memory. <Ref. to 5-5 [T4C0].>

Replace front sub sensor (RH). <Ref. to</li>
 5-5 [W9A0].>

## L: TROUBLE CODE 32

## DIAGNOSIS:

- Front sub sensor harness (LH) circuit is shorted.
- Front sub sensor harness (LH) circuit is open.
- Front sub sensor (LH) is faulty.
- Airbag control module is faulty.

## CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal, and then wait at least 20 seconds.

5L1 :	FRONT SUB SENSOR (LH) AND
	FRONT SUB SENSOR HARNESS (LH)
	INSPECTION

1) Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Measure resistance between test harness I or I2 connector (3I) terminal.

## Connector & terminal

(31) No. 1 — No. 3:



- CHECK : Is the resistance between 750  $\Omega$  and 1 k $\Omega$ ?
- YES : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- **NO** : Go to step **5L2**.

#### 5L2 : FRONT SUB SENSOR (LH) AND FRONT SUB SENSOR HARNESS (LH) INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

## Connector & terminal

### (3I) No. 1 (+) — Chassis ground (–):



- (CHECK) : Is the resistance more than 10 k $\Omega$ ?
- YES : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- **NO** : Go to step **5L3**.

## 5L3 : FRONT SUB SENSOR (LH) AND FRONT SUB SENSOR HARNESS (LH) INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

### Connector & terminal (3I) No. 3 (+) — Chassis ground (–):



- CHECK) : Is the resistance more than 10 k $\Omega$ ?
- YES : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- (NO) : Go to step **5L4**.

#### 5L4 : AIRBAG MAIN HARNESS AND FRONT SUB SENSOR HARNESS (LH) INSPECTION

1) Connect test harness I or I2 connector (1I) and connector (AB6).

2) Disconnect connector (AB13) from front sub sensor (LH) <Ref. to 5-5 [W9A0].> and then connect test harness H connector (1H) and connector (AB13).

3) Measure resistance between test harness I or I2 connector (3I) terminal and test harness H connector (3H) terminal.

## Connector & terminal

(31) No. 3 — (3H) No. 5:



- CHECK) : Is the resistance less than 10  $\Omega$ ?
- YES : Go to step 5L5.
- . Go to step **5L8**.

### 5L5 : AIRBAG MAIN HARNESS AND FRONT SUB SENSOR HARNESS (LH) INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness H connector (3H) terminal.

#### Connector & terminal (3I) No. 1 — (3H) No. 6:



- CHECK : Is the resistance less than 10  $\Omega$ ?
- YES : Go to step 5L6.
- **NO** : Go to step **5L8**.

### 5L6 : AIRBAG MAIN HARNESS AND FRONT SUB SENSOR HARNESS (LH) INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

## Connector & terminal (3I) No. 3 (+) — Chassis ground (–):



- снеск) : Is the resistance more than 10 k $\Omega$ ?
- **YES** : Go to step **5L7**.
- (NO) : Go to step 5L8.

#### 5L7 : AIRBAG MAIN HARNESS AND FRONT SUB SENSOR HARNESS (LH) INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

### Connector & terminal

(3I) No. 1 (+) — Chassis ground (–):





: Is the resistance more than 10 kΩ?
: Go to step 5L16.

: Go to step 5L8.

## 5L8 : AIRBAG MAIN HARNESS INSPEC-TION

1) Disconnect connector (AB11) and (AB12), then connect test harness F connector (2F) and connector (AB11).

2) Measure resistance between test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

#### Connector & terminal (3I) No. 3 — (3F) No. 6:



- : Is the resistance less than 10  $\Omega$ ?
- Sector Step 5L9.

CHECK

Replace airbag main harness. <Ref. to 5-5 [W4A0].>

#### 5L9 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

#### Connector & terminal (3I) No. 1 — (3F) No. 5:



- (CHECK) : Is the resistance less than 10  $\Omega$ ?
- **YES** : Go to step **5L10**.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

## 5L10 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

### Connector & terminal (3I) No. 3 (+) — Chassis ground (–):



CHECK

- : Is the resistance more than 10 k $\Omega$ ?
- YES NO
- : Go to step **5L11**. : Replace airbag main harness. <Ref. to

5-5 [W4A0].>

#### 5L11 : AIRBAG MAIN HARNESS INSPEC-TION

Measure resistance across test harness I or I2 connector (3I) terminal and chassis ground.

Connector & terminal

(3I) No. 1 (+) — Chassis ground (–):



- CHECK : Is the resistance more than 10 k $\Omega$ ?
  - : Go to step 5L12.

YES)

Replace airbag main harness. <Ref. to 5-5 [W4A0].>

### 5L12 : FRONT SUB SENSOR HARNESS (LH) INSPECTION

1) Connect test harness F connector (1F) and connector (AB12).

 2) Disconnect connector (AB13) from front sub sensor (LH) <Ref. to 5-5 [W9A0].> and then test harness H connector (1H) and connector (AB13).
 3) Measure resistance between test harness F connector (3F) terminal and test harness H connector (3H) terminal.

#### Connector & terminal (3F) No. 3 — (3H) No. 5:



- CHECK) : Is the resistance less than 10  $\Omega$ ?
- **YES** : Go to step **5L13**.

NO)

: Replace front sub sensor harness (LH). <Ref. to 5-5 [W9A0].>

## 5L13 : FRONT SUB SENSOR HARNESS (LH) INSPECTION

Measure resistance between test harness F connector (3F) terminal and test harness H connector (3H) terminal.

#### Connector & terminal (3F) No. 4 — (3H) No. 6:



- (CHECK) : Is the resistance less than 10  $\Omega$ ?
- ΥES : Go to step 5L14.
- Replace front sub sensor harness (LH).
  <Ref. to 5-5 [W9A0].>

## 5L14 : FRONT SUB SENSOR HARNESS (LH) INSPECTION

Measure resistance across test harness F connector (3F) terminal and chassis ground.

## Connector & terminal (3F) No. 3 (+) — Chassis ground (–):



CHECK

- : Is the resistance more than 10 k $\Omega$ ?
- **YES** : Go to step **5L15**.
- Replace front sub sensor harness (LH).
  <Ref. to 5-5 [W9A0].>

### 5L15 : FRONT SUB SENSOR HARNESS (LH) INSPECTION

Measure resistance across test harness F connector (3F) terminal and chassis ground.

**Connector & terminal** 

(3F) No. 4 (+) — Chassis ground (–):



- CHECK : Is the resistance more than 10 k $\Omega$ ?
  - : Go to step **5L16**.

YES)

NO

: Replace front sub sensor harness (LH). <Ref. to 5-5 [W9A0].>

## 5L16 : FRONT SUB SENSOR (LH) INSPEC-TION

1) Connect test harness H connector (2H) and front sub sensor (LH).

2) Measure resistance between test harness H connector (3H) terminal.

## Connector & terminal (3H) No. 3 — No. 4:



- CHECK : Is the resistance between 750  $\Omega$  and 1 k $\Omega$ ?
- **YES** : Go to step **5L17**.
- Replace front sub sensor (LH). <Ref. to 5-5 [W9A0].>

### 5L17 : FRONT SUB SENSOR (LH) INSPEC-TION

Measure resistance across test harness H connector (3H) terminal and chassis ground.

## Connector & terminal

(3H) No. 3 (+) — Chassis ground (–):



- (CHECK) : Is the resistance more than 10 k $\Omega$ ?
- **YES** : Go to step **5L18**.
- Replace front sub sensor (LH). <Ref. to 5-5 [W9A0].>

5L18 : FRONT SUB SENSOR (LH) INSPEC-TION

Measure resistance across test harness H connector (3H) terminal and chassis ground.

## Connector & terminal



CHECK

- $_{
  m 0}$  : Is the resistance more than 10 k $\Omega$ ?
- YES : Perform clear memory. <Ref. to 5-5 [T4C0].>
- NO : Replace front sub sensor (LH). <Ref. to 5-5 [W9A0].>

## M: TROUBLE CODE 41

## DIAGNOSIS:

- Side airbag harness (RH) is faulty.
- Side airbag module (RH) is faulty.
- Airbag control module is faulty.

## CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

1) Disconnect connector (AB26) from ELR with pretensioner on RH side. <Ref. to 5-3 [W3A1].>

2) Disconnect connector (AB24) and (AB25), and then connect connector (AB24) and test harness F connector (1F).

3) Connect test harness F connector (3F) and airbag resistor <Ref. to 5-5 [T3F0].>.

4) Connect battery ground cable and then turn ignition switch ON.

# CHECK : Does the airbag warning light come on?

- (YES) : Replace front seat with side airbag module (RH). <Ref. to 5-3 [W100].>
- **NO** : Go to step **5M2**.

### 5M2: SIDE AIRBAG HARNESS (RH) INSPECTION

1) Turn ignition switch OFF, disconnect battery ground cable and then wait at least 20 seconds.

 Disconnect test harness F and airbag resistor.
 Disconnect connector (AB18) from airbag contral module (AB16) and connect test

trol module <Ref. to 5-5 [W6A0].> and connect test harness I or I2 connector (1I).

4) Measure resistance between test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

## Connector & terminal

(31) No. 7 — (3F) No. 4:



### (CHECK) : Is the resistance less than 10 $\Omega$ ?

- YES : Go to step 5M3.
- Replace side airbag harness (RH).
  <Ref. to 5-5 [W5A0].>

## 5M3: SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

### Connector & terminal (3I) No. 9 — (3F) No. 3:





: Go to step **5M4**.

: Replace side airbag harness (RH). <Ref. to 5-5 [W5A0].>

: Is the resistance less than 10  $\Omega$ ?

## 5M4: SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance of test harness I or I2 connector (3I) terminal.

### Connector & terminal (3I) No. 7 — No. 9:



 $\widehat{\mathbf{CHECK}}$  : Is the resistance more than 1 M $\Omega$ ?

YES : Go to step 5M5.

NO

: Replace side airbag harness (RH). <Ref. to 5-5 [W5A0].>

## 5M5 : SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance of test harness F connector (3F) terminal.

Connector & terminal (3F) No. 3 — No. 4:



- CHECK) : Is the resistance more than 1 M $\Omega$ ?
  - : Go to step 5M6.
- NO : Replace side airbag harness (RH).
  <Ref. to 5-5 [W5A0].>

## 5M6 : SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance between connector (3F) terminal and chassis ground.

## Connector & terminal (3F) No. 3 (+) — Chassis ground (–):



CHECK :

YES

- $\Sigma$  : Is the resistance more than 1 M $\Omega$ ?
- YES : Go to step 5M7.
- NO : Replace side airbag harness (RH). <Ref. to 5-5 [W5A0].>
#### 5M7: SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance between connector (3F) terminal and chassis ground.

- **Connector & terminal** 
  - (3F) No. 4 (+) Chassis ground (–):



- CHECK YES NO
  - : Go to step 5M8.
  - : Replace side airbag harness (RH). <Ref. to 5-5 [W5A0].>

: Is the resistance more than 1  $M\Omega$ ?

5M8 : SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

#### Connector & terminal

```
(3I) No. 7 (+) — Chassis ground (–):
```



- $\widehat{\mathbf{C}}_{\mathbf{HECK}}$  : Is the resistance more than 1 M $\Omega$ ?
- YES : Go to step 5M9.
- Replace side airbag harness (RH).
   <Ref. to 5-5 [W5A0].>

#### 5M9: SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

#### Connector & terminal

(3I) No. 9 (+) — Chassis ground (–):



- (CHECK) : Is the resistance more than 1 M $\Omega$ ?
- YES : Replace airbag control module. <Ref. to 5-5 [W6A0].>

Replace side airbag harness (RH).
<Ref. to 5-5 [W5A0].>

## N: TROUBLE CODE 42

#### **DIAGNOSIS:**

- Side airbag harness (LH) is faulty.
- Side airbag module (LH) is faulty.
- Airbag control module is faulty.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

5N1: SIDE AIRBAG MOD	ULE INSPECTION
----------------------	----------------

1) Disconnect connector (AB21) from ELR with pretensioner on LH side. <Ref. to 5-3 [W3A1].>

2) Disconnect connector (AB19) and (AB20), and then connect connector (AB19) and test harness F connector (1F).

3) Connect test harness F connector (3F) and airbag resistor. <Ref. to 5-5 [T3F0].>

4) Connect battery ground cable and then turn ignition switch ON.

## CHECK : Does the airbag warning light come on?

- (YES) : Replace front seat with side airbag module (LH). <Ref. to 5-3 [W100].>
- **NO** : Go to step **5N2**.

#### 5N2: SIDE AIRBAG HARNESS (LH) INSPECTION

1) Turn ignition switch OFF, disconnect battery ground cable and then wait at least 20 seconds.

Disconnect test harness F and airbag resistor.
 Disconnect connector (AB17) from airbag con-

trol module <Ref. to 5-5 [W6A0].> and connect test harness I or I2 connector (1I).

4) Measure resistance between test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

#### Connector & terminal (3I) No. 12 — (3F) No. 4:



(CHECK) : Is the resistance less than 10  $\Omega$ ?

- YES : Go to step 5N3.
- Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5N3 : SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

#### Connector & terminal (3I) No. 10 — (3F) No. 3:





CHECK

NO

## : Is the resistance less than 10 Ω? : Go to step 5N4.

: Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5N4 : SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance of test harness I or I2 connector (3I) terminal.

#### Connector & terminal (3I) No. 10 — No. 12:





- YES : Go to step 5N5.
  - : Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5N5: SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance of test harness F connector (3F) terminal.

#### Connector & terminal (3F) No. 3 — No. 4:



- CHECK) : Is the resistance more than 1 M $\Omega$ ?
  - : Go to step **5N6**.

YES

 Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5N6: SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between connector (3F) terminal and chassis ground.

#### Connector & terminal (3F) No. 3 (+) — Chassis ground (–):



CHECK

- ) : Is the resistance more than 1 M $\Omega$ ?
- YES : Go to step 5N7.
- Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5N7: SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between connector (3F) terminal and chassis ground.

#### Connector & terminal

(3F) No. 4 (+) — Chassis ground (–):



- CHECK YES NO
- : Go to step 5N8.
- : Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

: Is the resistance more than 1 M $\Omega$ ?

5N8 : SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

#### Connector & terminal

```
(3I) No. 10 (+) — Chassis ground (–):
```



- $G_{\text{HECK}}$  : Is the resistance more than 1 M $\Omega$ ?
- YES: : Go to step 5N9.
- Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5N9: SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

#### Connector & terminal

(3I) No. 12 (+) — Chassis ground (–):



- - : Is the resistance more than 1 M $\Omega$ ?
  - : Replace airbag control module. <Ref. to 5-5 [W6A0].>

Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

### O: TROUBLE CODE 45

#### DIAGNOSIS:

- Side airbag harness (RH) is faulty.
- Airbag control module is faulty.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

#### 501 : SIDE AIRBAG MODULE INSPECTION

1) Disconnect connector (AB26) from ELR with pretensioner on RH side. <Ref. to 5-3 [W3A1].>

2) Disconnect connector (AB24) and (AB25), and then connect connector (AB24) and test harness F connector (1F).

3) Connect test harness F connector (3F) and airbag resistor <Ref. to 5-5 [T3F0].>.

4) Connect battery ground cable and then turn ignition switch ON.

- CHECK : Does the airbag warning light come on?
- (VES) : Replace front seat with side airbag module (RH). <Ref. to 5-3 [W100].>
- **NO** : Go to step **502**.

#### 502 : SIDE AIRBAG HARNESS (RH) INSPECTION

1) Turn ignition switch OFF, disconnect battery ground cable and then wait at least 20 seconds.

2) Disconnect test harness F and airbag resistor.

3) Disconnect connector (AB18) from airbag control module and connect it to test harness I or I2 connector (1I).

4) Connect battery ground cable and turn ignition switch ON. (engine off)

5) Measure voltage across connector (3I) terminal and chassis ground.

#### Connector & terminal

(3I) No. 7 (+) — Chassis ground (–):



- ) : Is the voltage less than 1 V?
  - : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- **•••** : Go to step **503**.

#### 503 : SIDE AIRBAG HARNESS (RH) INSPECTION

Measure voltage across connector (3I) terminal and chassis ground.

#### Connector & terminal

YES)

(3I) No. 9 (+) — Chassis ground (–):



- **CHECK)** : Is the voltage less than 1 V?
  - : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- Replace side airbag harness (RH).
  <Ref. to 5-5 [W5A0].>

## P: TROUBLE CODE 46

#### **DIAGNOSIS:**

- Side airbag harness (LH) is faulty.
- Airbag control module is faulty.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

#### 5P1 : SIDE AIRBAG MODULE INSPECTION

1) Disconnect connector (AB21) from ELR with pretensioner on LH side. <Ref. to 5-3 [W3A1].>

2) Disconnect connector (AB19) and (AB20), and then connect connector (AB19) and test harness F connector (1F).

3) Connect test harness F connector (3F) and airbag resistor. <Ref. to 5-5 [T3F0].>

4) Connect battery ground cable and then turn ignition switch ON.

## CHECK : Does the airbag warning light come on?

- (YES) : Replace front seat with side airbag module (LH). <Ref. to 5-3 [W100].>
- **NO** : Go to step **5P2**.

#### 5P2: SIDE AIRBAG HARNESS (LH) INSPECTION

1) Turn ignition switch OFF, disconnect battery ground cable and then wait at least 20 seconds.

2) Disconnect test harness F and airbag resistor.

3) Disconnect connector (AB17) from airbag control module and connect it to test harness I or I2 connector (1I).

4) Connect battery ground cable and turn ignition switch ON. (engine off)

5) Measure voltage across connector (3I) terminal and chassis ground.

#### Connector & terminal

(3I) No. 10 (+) — Chassis ground (–):



#### 5P3 : SIDE AIRBAG HARNESS (LH) INSPECTION

Measure voltage across connector (3I) terminal and chassis ground.

#### Connector & terminal

CHECK)

YES)

(3I) No. 12 (+) — Chassis ground (–):



- : Is the voltage less than 1 V?
- : Replace airbag control module. <Ref. to 5-5 [W6A0].>

Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

- CHECK
- : Is the voltage less than 1 V?
- : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- **NO** : Go to step **5P3**.

## Q: TROUBLE CODE 51

#### DIAGNOSIS:

- Side airbag sensor (RH) is faulty.
- Side airbag harness (RH) is faulty.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

#### 5Q1: SIDE AIRBAG HARNESS (RH) INSPECTION

1) Disconnect connector (AB26) from ELR with pretensioner on RH side. <Ref. to 5-3 [W3A1].> 2) Disconnect connector (AB24) and (AB25) at

below front seat on RH side. (Side airbag equipped vehicle)

3) Disconnect connector (AB18) from airbag control module and connect it to test harness I or I2 connector (1I).

4) Disconnect connector (AB28) from side airbag sensor (RH) and connect it to test harness G connector (1G).

5) Measure resistance between test harness I or I2 connector (3I) terminal and test harness G connector (3G) terminal.

#### Connector & terminal (3I) No. 17 — (3G) No. 2:



: Is the resistance less than 10  $\Omega$ ?

: Go to step **5Q2**.

CHECK)

YES

NO)

: Replace side airbag harness (RH). <Ref. to 5-5 [W5A0].>

#### 5Q2: SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness G connector (3G) terminal.

#### Connector & terminal (3I) No. 19 — (3G) No. 5:



- (CHECK) : Is the resistance less than 10  $\Omega$ ?
- **YES** : Go to step **5Q3**.
- Replace side airbag harness (RH).
   <Ref. to 5-5 [W5A0].>

#### 5Q3: SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness G connector (3G) terminal.

#### Connector & terminal (3I) No. 18 — (3G) No. 1:



**CHECK)** : Is the resistance less than 10  $\Omega$ ?

- ΥES : Go to step 5Q4.
- NO : Replace side airbag harness (RH). <Ref. to 5-5 [W5A0].>

#### SIDE AIRBAG HARNESS (RH) 5Q4: INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness G connector (3G) terminal.

**Connector & terminal** (31) No. 20 — (3G) No. 4:





- : Go to step **5Q5**.
- : Replace side airbag harness (RH). <Ref. to 5-5 [W5A0].>

: Is the resistance less than 10  $\Omega$ ?

#### 5Q5: SIDE AIRBAG HARNESS (RH) **INSPECTION**

Measure resistance between connector (3I) terminal and chassis ground.

## **Connector & terminal**

(3I) No. 18 (+) — Chassis ground (–):



- : Is the resistance more than 1 M $\Omega$ ? CHECK
- : Go to step **5Q6**. YES)

NO

: Replace side airbag harness (RH). <Ref. to 5-5 [W5A0].>

#### SIDE AIRBAG HARNESS (RH) 5Q6: INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

#### Connector & terminal

(31) No. 20 (+) — Chassis ground (–):



- : Is the resistance more than 1  $M\Omega$ ? (CHECK)
  - Go to step 5Q7.

YES

: Replace side airbag harness (RH). NO <Ref. to 5-5 [W5A0].>

#### 5Q7: SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

#### Connector & terminal (3I) No. 17 (+) — Chassis ground (–):



CHECK)

- : Is the resistance more than 1  $M\Omega$ ?
- Go to step 5Q8. YES)
- : Replace side airbag harness (RH). (NO) <Ref. to 5-5 [W5A0].>

#### 5Q8: SIDE AIRBAG HARNESS (RH) INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

#### Connector & terminal

YES)

(3I) No. 19 (+) — Chassis ground (–):



#### $\widehat{\mathbf{C}}$ : Is the resistance more than 1 M $\Omega$ ?

: Replace side airbag sensor (RH). <Ref. to 5-5 [W7A0].>

NO: Replace side airbag harness (RH). <Ref. to 5-5 [W5A0].>

## R: TROUBLE CODE 52

#### DIAGNOSIS:

- Side airbag sensor (LH) is faulty.
- Side airbag harness (LH) is faulty.

#### **CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

#### 5R1: SIDE AIRBAG HARNESS (LH) INSPECTION

1) Disconnect connector (AB21) from ELR with pretensioner on LH side. <Ref. to 5-3 [W3A1].>

2) Disconnect connector (AB19) and (AB20) at below front seat on LH side. (Side airbag equipped vehicle)

3) Disconnect connector (AB17) from airbag control module and connect it to test harness I or I2 connector (1I).

4) Disconnect connector (AB23) from side airbag sensor (LH) and connect it to test harness G connector (1G).

5) Measure resistance between test harness I or I2 connector (3I) terminal and test harness G connector (3G) terminal.

#### Connector & terminal (3I) No. 14 — (3G) No. 5:



(CHECK) : Is the resistance less than 10  $\Omega$ ?

- YES : Go to step 5R2.
- Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5R2 : SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness G connector (3G) terminal.

Connector & terminal (3I) No. 16 — (3G) No. 2:





- $\Sigma$  : Is the resistance less than 10  $\Omega$ ?
  - : Go to step 5R3.
  - : Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5R3: SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness G connector (3G) terminal.

#### Connector & terminal (3I) No. 15 — (3G) No. 1:



- $\widehat{\mathbf{C}}_{\mathbf{HECK}}$  : Is the resistance less than 10  $\Omega$ ?
- YES : Go to step 5R4.

NO

: Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5R4 : SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and test harness G connector (3G) terminal.

#### Connector & terminal (3I) No. 5 — (3G) No. 4:



- (CHECK) : Is the resistance less than 10  $\Omega$ ?
- ΥES : Go to step 5R5.
- Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5R5 : SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between connector (3G) terminal and chassis ground.

#### Connector & terminal (3I) No. 15 (+) — Chassis ground (–):



CHECK

- : Is the resistance more than 1 M $\Omega$ ?
- **YES** : Go to step **5R6**.
- Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5R6 : SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

Connector & terminal

```
(3I) No. 5 (+) — Chassis ground (–):
```



- CHECK : Is the resistance more than 1 M $\Omega$ ?
- $\overbrace{\mathbf{YES}}$  : Go to step **5R7**.
  - : Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

5R7: SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

#### Connector & terminal

NO

```
(3I) No. 14 (+) — Chassis ground (–):
```



- $\widehat{\mathbf{CHECK}}$  : Is the resistance more than 1 M $\Omega$ ?
- YES: : Go to step 5R8.
- Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

#### 5R8 : SIDE AIRBAG HARNESS (LH) INSPECTION

Measure resistance between connector (3I) terminal and chassis ground.

#### Connector & terminal

(3I) No. 16 (+) — Chassis ground (–):



- - : Is the resistance more than 1 M $\Omega$ ?
  - : Replace side airbag sensor (LH). <Ref. to 5-5 [W7A0].>

 Replace side airbag harness (LH). <Ref. to 5-5 [W5A0].>

### S: TROUBLE CODE 53

#### **DIAGNOSIS:**

Side airbag sensor (RH) is faulty.

#### **CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal, and then wait at least 20 seconds.

## 5S1 : CHECK IF TROUBLE CODE 53 IS INDICATED.

Confirm flashing trouble code according to "BASIC DIAGNOSTICS PROCEDURE". <Ref. to 5-5 [T4A0].>

- CHECK : Is airbag warning light trouble code 53 indicated?
- (YES) : Replace side airbag sensor (RH). <Ref. to 5-5 [W7A0].>
- NO : Perform clear memory. <Ref. to 5-5 [T4C0].>

### T: TROUBLE CODE 54

#### **DIAGNOSIS:**

Side airbag sensor (LH) is faulty.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal, and then wait at least 20 seconds.

5T1 : CHECK IF TROUBLE CODE 54 IS INDICATED.

Confirm flashing trouble code according to "BASIC DIAGNOSTICS PROCEDURE". <Ref. to 5-5 [T4A0].>

- CHECK : Is airbag warning light trouble code 54 indicated?
- (YES) : Replace side airbag sensor (LH). <Ref. to 5-5 [W7A0].>
- NO : Perform clear memory. <Ref. to 5-5 [T4C0].>

### U: TROUBLE CODE 55

#### **DIAGNOSIS:**

Side airbag module is inflated.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

5U1 : CHECK IF TROUBLE CODE 55 IS INDICATED.

Confirm flashing trouble code according to "BASIC DIAGNOSTICS PROCEDURE". <Ref. to 5-5 [T4A0].>

- **CHECK** : Is airbag warning light trouble code 55 indicated?
- Replace front seat with side airbag module (Operating side) <Ref. to 5-3 [W100].>, side airbag sensor (Operating side) <Ref. to 5-5 [W7A0].> and airbag control module. <Ref. to 5-5 [W6A0].>
- Perform clear memory. <Ref. to 5-5 [T4C0].>

## V: TROUBLE CODE 61

#### DIAGNOSIS:

• ELR with pretensioner (RH) circuit is open, shorted or shorted to ground.

• Airbag control module is faulty.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

5V1 : ELR WITH PRETENSIONER INSPEC-TION

 Disconnect connector (AB26) from ELR with pretensioner RH side <Ref. to 5-3 [W3A1].>, and connect (AB26) to test harness F connector (1F).
 Connect airbag resistor to test harness F con-

nector (3F).

3) Connect battery ground cable and then turn ignition switch to ON (engine off). Observe airbag warning light.

**CHECK** : Does the airbag warning light come on for about 7 seconds, then go out and stay out?

- (VES) : Replace ELR with pretensioner RH side. <Ref. to 5-3 [W3A1].>
- **NO** : Go to step **5V2**.

#### 5V2 : SIDE AIRBAG HARNESS OPEN CIR-CUIT INSPECTION

1) Turn ignition switch OFF, disconnect battery ground cable and then wait at least 20 seconds.

2) Disconnect side airbag connector RH side (AB24) and (AB25). (Side airbag equipped vehicle) <Ref. to 5-3 [W1A0].>

3) Disconnect connector (AB18) from airbag control module <Ref. to 5-5 [W6A0].>, and connect (AB18) to test harness I or I2 connector (1I).

4) Measure resistance across test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

#### Connector & terminal (3I) No. 8 — (3F) No. 4:



- $\widehat{\mathbf{CHECK}}$  : Is the resistance less than 10  $\Omega$ ?
  - : Go to step 5V3.

YES)

NO

: Replace side airbag harness. <Ref. to 5-5 [W5A0].>

#### 5V3: SIDE AIRBAG HARNESS OPEN CIR-CUIT INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

#### Connector & terminal (3I) No. 6 — (3F) No. 3



- (CHECK) : Is the resistance less than 10  $\Omega$ ?
- YES : Go to step 5V4.
- Replace side airbag harness. <Ref. to 5-5 [W5A0].>

#### 5V4 : SIDE AIRBAG HARNESS SHORTED CIRCUIT INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal.

#### Connector & terminal (3I) No. 6 — No. 8:



CHECK

- : Is the resistance more than 1 MΩ?
  : Go to step 5V5.
- YES :
- Replace side airbag harness. <Ref. to 5-5 [W5A0].>

#### 5V5: SIDE AIRBAG HARNESS SHORTED TO GROUND CIRCUIT INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and chassis ground.

#### Connector & terminal

(3I) No. 6 (+) — Chassis ground (-):



- $\widehat{\mathbf{CHECK}}$  : Is the resistance more than 1 M $\Omega$ ?
  - : Go to step 5V6.
  - : Replace side airbag harness. <Ref. to 5-5 [W5A0].>

#### 5V6 : SIDE AIRBAG HARNESS SHORTED TO GROUND CIRCUIT INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and chassis ground.

#### Connector & terminal







YES)

NO

#### : Is the resistance more than 1 M $\Omega$ ?

- Replace airbag control module. <Ref. to 5-5 [W6A0].>
- Replace side airbag harness. <Ref. to 5-5 [W5A0].>

## W: TROUBLE CODE 62

#### **DIAGNOSIS:**

- ELR with pretensioner (LH) circuit is open, shorted or shorted to ground.
- Airbag control module is faulty.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

5W1 : ELR WITH PRETENSIONER INSPEC-TION

 Disconnect connector (AB21) from ELR with pretensioner LH side <Ref. to 5-3 [W3A1].>, and connect (AB21) to test harness F connector (1F).
 Connect airbag resistor to test harness F con-

nector (3F).

3) Connect battery ground cable and then turn ignition switch to ON (engine off). Observe airbag warning light.

#### CHECK : Does the airbag warning light come on for about 7 seconds, then go out and stay out?

- (VES) : Replace ELR with pretensioner LH side. <Ref. to 5-3 [W3A1].>
- **NO** : Go to step **5W2**.

#### 5W2 : SIDE AIRBAG HARNESS OPEN CIR-CUIT INSPECTION

1) Turn ignition switch OFF, disconnect battery ground cable and then wait at least 20 seconds.

2) Disconnect side airbag connector LH side (AB19) and (AB20). (Side airbag equipped vehicle) <Ref. to 5-3 [W1A0].>

3) Disconnect connector (AB17) from airbag control module <Ref. to 5-5 [W6A0].>, and connect (AB17) to test harness I or I2 connector (1I).

4) Measure resistance across test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

#### Connector & terminal (3I) No. 11 — (3F) No. 4:



- $\widehat{\mathbf{CHECK}}$  : Is the resistance less than 10  $\Omega$ ?
  - : Go to step 5W3.

YES)

NO

: Replace side airbag harness. <Ref. to 5-5 [W5A0].>

#### 5W3: SIDE AIRBAG HARNESS OPEN CIR-CUIT INSPECTION

Measure resistance across test harness I or I2 connector (3I) terminal and test harness F connector (3F) terminal.

### Connector & terminal

(3I) No. 13 — (3F) No. 3:



- (CHECK) : Is the resistance less than 10  $\Omega$ ?
- **YES** : Go to step **5W4**.
- NO : Replace side airbag harness. <Ref. to 5-5 [W5A0].>

#### 5W4 : SIDE AIRBAG HARNESS SHORTED CIRCUIT INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal.

#### Connector & terminal (3I) No. 11 — No. 13:



CHECK

- : Is the resistance more than 1 MΩ?
  : Go to step 5W5.
- YES : Go t
- NO : Replace side airbag harness. <Ref. to 5-5 [W5A0].>

#### 5W5 : SIDE AIRBAG HARNESS SHORTED TO GROUND CIRCUIT INSPECTION

Measure resistance between test harness I or I2 connector (3I) terminal and chassis ground.

#### Connector & terminal

(3I) No. 11 (+) — Chassis ground (-):



- $\widehat{\mathbf{CHECK}}$  : Is the resistance more than 1 M $\Omega$ ?
  - : Go to step 5W6.

: Replace side airbag harness. <Ref. to 5-5 [W5A0].>



Measure resistance between test harness I or I2 connector (3I) terminal and chassis ground.

#### Connector & terminal

(3I) No. 13 (+) — Chassis ground (–):



YES)

NO

#### : Is the resistance more than 1 M $\Omega$ ?

- Replace airbag control module. <Ref. to 5-5 [W6A0].>
- Replace side airbag harness. <Ref. to 5-5 [W5A0].>

## X: TROUBLE CODE 65

#### DIAGNOSIS:

ELR with pretensioner (RH) circuit is shorted to power supply.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

5X1 : ELR WITH PRETENSIONER INSPEC-TION

1) Disconnect connector (AB26) from ELR with pretensioner RH side <Ref. to 5-3 [W3A1].>, and connect (AB26) to test harness F connector (1F). 2) Connect airbag resistor to test harness F connector (3F).

3) Connect battery ground cable and then turn ignition switch to ON (engine off). Observe airbag warning light.

## CHECK

Does the airbag warning light come on for about 7 seconds, then go out and stay out?

- YES : Replace ELR with pretensioner RH side. <Ref. to 5-3 [W3A1].>
- **NO** : Go to step **5X2**.

#### 5X2 : SIDE AIRBAG HARNESS SHORTED TO POWER SUPPLY CIRCUIT INSPECTION

 Turn ignition switch OFF, disconnect battery ground cable and then wait at least 20 seconds.
 Disconnect side airbag connector RH side (AB24) and (AB25). (Side airbag equipped vehicle)
 <Ref. to 5-3 [W1A0].>

3) Disconnect connector (AB18) from airbag control module <Ref. to 5-5 [W6A0].>, and connect (AB18) to test harness I or I2 connector (1I).

4) Connect battery ground cable and then turn ignition switch ON (engine off).

5) Measure voltage between test harness I or I2 connector (3I) terminal and chassis ground.

#### Connector & terminal





CHECK) : Is the voltage less than 1 V?

: Go to step 5X3.

YES)

NO)

: Replace side airbag harness. <Ref. to 5-5 [W5A0].>

#### 5X3 : SIDE AIRBAG HARNESS SHORTED TO POWER SUPPLY CIRCUIT INSPECTION

Measure voltage between test harness I or I2 connector (3I) terminal and chassis ground.

#### Connector & terminal (3I) No. 8 (+) — Chassis ground (–):



CHECK) : Is the voltage less than 1 V?

(YES)

- Replace airbag control module. <Ref. to 5-5 [W6A0].>
- Replace side airbag harness. <Ref. to 5-5 [W5A0].>

### Y: TROUBLE CODE 66

#### DIAGNOSIS:

ELR with pretensioner (LH) circuit is shorted to power supply.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

5Y1 : ELR WITH PRETENSIONER INSPEC-TION

 Disconnect connector (AB21) from ELR with pretensioner LH side <Ref. to 5-3 [W3A1].>, and connect (AB21) to test harness F connector (1F).
 Connect airbag resistor to test harness F connector (3F).

3) Connect battery ground cable and then turn ignition switch to ON (engine off). Observe airbag warning light.

- CHECK : Does the airbag warning light come on for about 7 seconds, then go out and stay out?
- YES : Replace ELR with pretensioner LH side. <Ref. to 5-3 [W3A1].>
- **NO** : Go to step **5Y2**.

#### 5Y2 : SIDE AIRBAG HARNESS SHORTED TO POWER SUPPLY CIRCUIT INSPECTION

1) Turn ignition switch OFF, disconnect battery ground cable and then wait at lest 20 seconds.

2) Disconnect side airbag connector LH side (AB19) and (AB20). (Side airbag equipped vehicle) <Ref. to 5-3 [W1A0].>

3) Disconnect connector (AB17) from airbag control module <Ref. to 5-5 [W6A0].>, and connect (AB17) to test harness I or I2 connector (1I).

4) Connect battery ground cable and then turn ignition switch ON (engine off).

5) Measure voltage between test harness I or I2 connector (3I) terminal and chassis ground.

#### Connector & terminal (3I) No. 11 (+) — Chassis ground (–):



СНЕСК) : *Is* 

#### Is the voltage less than 1 V?

ΥES : Go to step 5Y3.

NO : Replace side airbag harness. <Ref. to 5-5 [W5A0].>

#### 5Y3 : SIDE AIRBAG HARNESS SHORTED TO POWER SUPPLY CIRCUIT INSPECTION

Measure voltage between test harness I or I2 connector (3I) terminal and chassis ground.

#### Connector & terminal

(3I) No. 13 (+) — Chassis ground (–):



- CHECK) : Is the voltage less than 1 V?
- Feelace airbag control module. <Ref. to 5-5 [W6A0].>
- Replace side airbag harness. <Ref. to 5-5 [W5A0].>

# Z: AIRBAG WARNING LIGHT REMAINS ON.

#### DIAGNOSIS:

• Airbag warning light is faulty.

• Airbag control module to airbag warning light harness circuit is shorted or open.

- Grounding circuit is faulty.
- Airbag control module is faulty.
- (AB1) and (B31) are not connected properly.

• (AB6) is not connected properly to airbag control module.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

5Z1: CHECK POOR CONTACT IN CON-NECTORS (AB1) AND (B31).

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

2) Check poor contact in connectors (AB1) and (B31) located in front pillar lower (driver side).



CHECK

## : Is there poor contact in double lock of connectors (AB1) and (B31)?

- (YES) : Repair poor contact in double lock of connectors (AB1) and (B31).
- **NO** : Go to step **5Z2**.

#### 5Z2: INSPECTION OF AIRBAG WARNING LIGHT

1) Turn ignition switch "OFF" and connect body harness connector (B31) to test connector A connector (1A).

2) Connect battery ground cable and turn ignition switch "ON", (engine off) and connect connectors (3A) and (4A).



- CHECK : Does the airbag warning light come off?
- YES : Go to step 5Z4.
- **ND** : Go to step **5Z3**.

### 5Z3: INSPECTION OF BODY HARNESS

Check body harness.

#### NOTE:

After problem has been eliminated, disconnect connectors (3A) and (4A).



- CHECK : Is there anything unusual to body harness?
- (YES) : Repair body harness.
- Replace airbag warning light bulb or combination meter printed circuit. <Ref. to 6-2 [W800].>

#### 5Z4 : CHECK POOR CONTACT IN CON-NECTOR (AB6).

Check connector (AB6) connected to airbag control module. <Ref. to 5-5 [W6A0].>

## **GHECK** : Is there poor contact in connector (AB6)?

- **(VES)** : Repair poor contact in connector (AB6).
- **•••** : Go to step **5Z5**.

5Z5 : INSPECTION OF AIRBAG MAIN HAR-NESS

1) Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds, and re-connect connectors (AB1) and (B31).

2) Disconnect connector (AB3) with (AB8) and (AB9) with (AB10), then disconnect connector (AB6) from airbag control module, <Ref. to 5-5 [W6A0].> and connect it to test harness I or I2 connector (1I).

3) Connect battery ground cable and turn ignition switch "ON", (engine off) and connect connectors (4I) and (5I).

#### NOTE:

After problem has been eliminated, disconnect connectors (4I) and (5I).



- CHECK : Does the airbag warning light come off?
- **YES** : Go to step **5Z6**.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

#### 5Z6: GROUNDING CIRCUIT INSPECTION

1) Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.

2) Disconnect connector (AB1) from body harness connector (B31), and connect connector (B31) to test harness A connector (1A).

3) Measure resistance between connector (5A) terminal and chassis ground.

#### Connector & terminal (5A) No. 17 (+) — Chassis ground (–):



- CHECK) : Is resistance less than 10  $\Omega$ ?
- Sector Step 527.
- : Repair body grounding circuit.

#### 5Z7 : GROUNDING CIRCUIT INSPECTION

Measure resistance between connector (5A) terminal and chassis ground.

Connector & terminal (5A) No. 18 (+) — Chassis ground (–):



- $\widehat{\mathbf{C}}_{\mathbf{CHECK}}$  : Is resistance less than 10  $\Omega$ ?
- YES : Go to step 5Z8.
- : Repair body grounding circuit.

#### 5Z8 : INSPECTION OF AIRBAG MAIN HAR-NESS

1) Connect connectors (AB1) and (B31). Disconnect connector (AB6) from airbag control module <Ref. to 5-5 [W6A0].>, and connect it to test harness I or I2 connector (1I).

2) Measure resistance between each test harness I or I2 connector (2I) terminal and chassis ground.

#### Connector & terminal (2I) No. 9 (+) — Chassis ground (–):



(CHECK) : Is resistance less than 10  $\Omega$ ?

- Sector Step 529.
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

#### 5Z9 : INSPECTION OF AIRBAG MAIN HAR-NESS

Measure resistance between each test harness I or I2 connector (2I) terminal and chassis ground.

#### Connector & terminal (2I) No. 10 (+) — Chassis ground (–):



#### (CHECK) : Is resistance less than 10 $\Omega$ ?

- FES : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- Replace airbag main harness. <Ref. to 5-5 [W4A0].>

# AA: AIRBAG WARNING LIGHT REMAINS OFF.

#### **DIAGNOSIS:**

- Fuse No. 5 (in main fuse box) is blown.
- Body harness circuit is open.
- Airbag warning light is faulty.
- Airbag main harness is faulty.
- Airbag control module is faulty.

#### **CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground terminal, and then wait at least 20 seconds.

5AA1 : FUSE NO. 5 (IN MAIN FUSE BOX) INSPECTION

Remove and visually check fuse No. 5 (In main fuse box).



CHECK) : Is fuse No. 5 blown?

- Replace fuse No. 5. If fuse No. 5 blows again, Go to step 5AA2.
- (NO) : Go to step 5AA2.

#### 5AA2 : BODY HARNESS INSPECTION

Turn ignition switch "ON" (engine off) to make sure other warning lights (in combination meter) illuminate.

CHECK : Do all the warning lights (in combination meter) except airbag warning light come on?

**YES** : Go to step **5AA3**.

: Repair body harness.

#### 5AA3 : AIRBAG WARNING LIGHT MODULE (IN COMBINATION METER) INSPECTION

 Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.
 Disconnect body harness connector (B31) from connector (AB1) located in front pillar lower (driver side).



3) Connect battery ground cable and turn ignition switch "ON" (engine off) to make sure airbag warning light illuminates.



CHECK : Does the airbag warning light come on?

- (YES) : Go to step 5AA4.
- Replace airbag warning light bulb or combination meter printed circuit. <Ref. to 6-2 [W800].>

#### 5AA4 : AIRBAG MAIN HARNESS INSPEC-TION

 Turn ignition switch "OFF", disconnect battery ground cable and then wait at least 20 seconds.
 Connect body harness connector (B31) and connector (AB1).

3) Disconnect connector (AB6) from airbag control module. <Ref. to 5-5 [W6A0].>

4) Connect battery ground cable and turn ignition switch "ON" to make sure airbag warning light illuminates.

CHECK	:	Does	the	airbag	warning	light	come
$\smile$		on?		-	-	-	

- (VES) : Replace airbag control module. <Ref. to 5-5 [W6A0].>
- NO : Replace airbag main harness. <Ref. to 5-5 [W4A0].>

#### AB: WARNING LIGHT INDICATES TROUBLE CODE, THEN NORMAL CODE. (FLASHING TROUBLE CODE.)

#### DIAGNOSIS:

Airbag system component parts are faulty.

#### CAUTION:

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable, and then wait at least 20 seconds.

#### 5AB1 : AIRBAG COMPONENT PARTS APPEARANCE INSPECTION

1) Conduct on-board diagnostic and call up trouble codes stored in memory. <Ref. to 5-5 [T4B0].>

2) Select trouble code required to check airbag component parts from those listed in table and reproduce symptom.

Trouble codes	Check parts	Index. No.
5	<ul> <li>Airbag module (Driver)</li> <li>Roll connector</li> <li>Airbag main harness</li> <li>Airbag control module</li> </ul>	<ref. 5-5="" [w300].="" to=""> <ref. 5-5="" [w800].="" to=""> <ref. 5-5="" [w400].="" to=""> <ref. 5-5="" [w600].="" to=""></ref.></ref.></ref.></ref.>
11	<ul> <li>Roll connector</li> <li>Airbag module (Driver)</li> <li>Airbag main harness</li> <li>Airbag control module</li> </ul>	<ref. 5-5="" [w800].="" to=""> <ref. 5-5="" [w300].="" to=""> <ref. 5-5="" [w400].="" to=""> <ref. 5-5="" [w600].="" to=""></ref.></ref.></ref.></ref.>
12	<ul> <li>Airbag module (Passenger)</li> <li>Airbag main harness</li> <li>Airbag control module</li> </ul>	<ref. 5-5="" [w300].="" to=""> <ref. 5-5="" [w400].="" to=""> <ref. 5-5="" [w600].="" to=""></ref.></ref.></ref.>
15	<ul> <li>Airbag module (Driver)</li> <li>Roll connector</li> <li>Airbag main harness</li> <li>Airbag control module</li> </ul>	<ref. 5-5="" [w300].="" to=""> <ref. 5-5="" [w800].="" to=""> <ref. 5-5="" [w400].="" to=""> <ref. 5-5="" [w600].="" to=""></ref.></ref.></ref.></ref.>
16	<ul> <li>Airbag main harness</li> <li>Airbag module (Passenger)</li> <li>Airbag control module</li> </ul>	<ref. 5-5="" [w400].="" to=""> <ref. 5-5="" [w300].="" to=""> <ref. 5-5="" [w600].="" to=""></ref.></ref.></ref.>
21	Airbag control module	<ref. 5-5="" [w600].="" to=""></ref.>
22	Airbag control module	<ref. 5-5="" [w600].="" to=""></ref.>
25	<ul> <li>Fuse No. 6</li> <li>Airbag main harness</li> <li>Airbag control module</li> <li>Body harness</li> </ul>	<ref. 5-5="" [t5j5].="" to=""> <ref. 5-5="" [w400].="" to=""> <ref. 5-5="" [w600].="" to=""> <ref. 5-3="" [w100].="" to=""></ref.></ref.></ref.></ref.>
26	Side airbag module LH in front seat	<ref. 5-3="" [w100].="" to=""></ref.>
31	<ul> <li>Airbag main harness</li> <li>Front sub sensor and front sub sensor harness (RH)</li> </ul>	<ref. 5-5="" [w400].="" to=""> <ref. 5-5="" [w900].="" to=""></ref.></ref.>
32	<ul> <li>Airbag main harness</li> <li>Front sub sensor and front sub sensor harness (LH)</li> </ul>	<ref. 5-5="" [w400].="" to=""> <ref. 5-5="" [w900].="" to=""></ref.></ref.>
41	Side airbag module RH in front seat	<ref. 5-3="" [w100].="" to=""></ref.>
42	Side airbag module LH in front seat	<ref. 5-3="" [w100].="" to=""></ref.>
45	<ul><li>Airbag control module</li><li>Side airbag module RH in front seat</li></ul>	<ref. 5-5="" [w600].="" to=""> <ref. 5-3="" [w100].="" to=""></ref.></ref.>
46	<ul> <li>Airbag control module</li> <li>Side airbag module LH in front seat</li> </ul>	<ref. 5-5="" [w600].="" to=""> <ref. 5-3="" [w100].="" to=""></ref.></ref.>
51	Side airbag sensor RH	<ref. 5-5="" [w700].="" to=""></ref.>
52	Side airbag sensor	<ref. 5-5="" [w700].="" to=""></ref.>
53	Side airbag sensor (RH)	<ref. 5-5="" [w700].="" to=""></ref.>
54	Side airbag sensor (LH)	<ref. 5-5="" [w700].="" to=""></ref.>
55	Side airbag module in front seat	<ref. 5-3="" [w100].="" to=""></ref.>

Trouble codes	Check parts	Index. No.
61	<ul> <li>ELR with pretensioner (RH)</li> <li>Side airbag harness</li> <li>Airbag control module</li> </ul>	<ref. 5-3="" [w300].="" to=""> <ref. 5-5="" [w500].="" to=""> <ref. 5-5="" [w600].="" to=""></ref.></ref.></ref.>
62	<ul> <li>ELR with pretensioner (LH)</li> <li>Side airbag harness</li> <li>Airbag control module</li> </ul>	<ref. 5-3="" [w300].="" to=""> <ref. 5-5="" [w500].="" to=""> <ref. 5-5="" [w600].="" to=""></ref.></ref.></ref.>
65	<ul> <li>ELR with pretensioner (RH)</li> <li>Side airbag harness</li> <li>Airbag control module</li> </ul>	<ref. 5-3="" [w300].="" to=""> <ref. 5-5="" [w500].="" to=""> <ref. 5-5="" [w600].="" to=""></ref.></ref.></ref.>
66	<ul> <li>ELR with pretensioner (LH)</li> <li>Side airbag harness</li> <li>Airbag control module</li> </ul>	<ref. 5-3="" [w300].="" to=""> <ref. 5-5="" [w500].="" to=""> <ref. 5-5="" [w600].="" to=""></ref.></ref.></ref.>

3) Conduct appearance inspection on parts selected.

#### NOTE:

(YES)

Also check connector terminals, wiring harness, case, etc. for damage.

- **CHECK** : Is there anything unusual about the appearance of airbag component parts?
  - : Replace faulty airbag component parts.
- $\overline{\mathbf{NO}}$  : Go to step **5AB2**.

#### 5AB2 : AIRBAG COMPONENT PARTS VIBRATION INSPECTION

 Gently shake check parts (to determine faults.).
 To check airbag module or roll connector, turn and tilt steering wheel.

#### CAUTION:

#### Do not shake or vibrate airbag control module.

- CHECK : Does the component malfunction again when shaking?
- **(VES)** : Replace faulty airbag component parts.
- (NO) : Go to step **5AB3**.

#### 5AB3 : SHOWERING INSPECTION TO BODY

Spray water on vehicle body.

#### CAUTION:

Do not directly spray water on airbag components.

#### NOTE:

Also check wiring harnesses as water may leak along them and get airbag component parts wet.



# CHECK : Does water leak into the passenger compartment when showering vehicle?

- **YES** : Replace faulty airbag component parts.
- Perform clear memory. <Ref. to 5-5
   [T4C0].>

#### AC: WARNING LIGHT INDICATES TROUBLE CODE, THEN NORMAL CODE. (FLASHING NORMAL CODE.)

#### **DIAGNOSIS:**

- Airbag connector is faulty.
- Fuse No. 11 (in joint box) is blown.
- Airbag main harness is faulty.
- Airbag control module is faulty.
- Body harness is faulty.

#### **CAUTION:**

Before performing diagnostics on airbag system, turn ignition switch "OFF", disconnect battery ground cable, and then wait at least 20 seconds.

#### 5AC1 : AIRBAG CONNECTOR APPEAR-ANCE INSPECTION

Conduct appearance inspection on airbag connectors (AB2) through (AB26). <Ref. to 5-5 [T100].>

#### NOTE:

Check terminals, case and wiring harnesses for damage.

- CHECK : Is there anything unusual about the appearance of connectors (AB2) through (AB26)?
- **YES** : Replace faulty airbag component parts.
- **NO**: Go to step **5AC2**.

5AC2 : AIRBAG CONNECTOR VIBRATION INSPECTION

Conduct vibration inspection on airbag connectors (AB2) through (AB26). <Ref. to 5-5 [T100].>

#### NOTE:

Gently shake each airbag connector.

- CHECK : Do the connectors (AB2) through (AB26) malfunction again when shaking?
- **YES** : Replace faulty airbag component parts.
- **NO** : Go to step **5AC3**.

#### 5AC3 : SHOWERING INSPECTION TO BODY

Spray water on vehicle body.

#### CAUTION:

Do not directly spray water on airbag components.

#### NOTE:

If leaks are noted, also check wiring harnesses as water may leak along them and wet airbag connectors.



- CHECK : Does water leak into the passenger compartment when showering vehicle?
- **YES** : Replace faulty airbag component parts.
- **NO**: Go to step **5AC4**.

#### 5AC4 : FUSE NO. 11 (IN JOINT BOX), AIR-BAG MAIN HARNESS, AIRBAG CONTROL MODULE, BODY HAR-NESS APPEARANCE INSPECTION

Conduct appearance inspection on fuse No. 11 <Ref. to 5-5 [T5I5].>, airbag main harness <Ref. to 5-5 [W4A0].>, airbag control module <Ref. to 5-5 [W6A0].> and body harness.

#### NOTE:

Also check connectors, terminals, wiring harness and case for damage.

- CHECK : Is there anything unusual about the appearance of fuse No. 11, airbag main harness, airbag control module or body harness?
- **YES** : Replace faulty airbag component parts.
- (NO) : Go to step 5AC5.

#### 5AC5 : FUSE NO. 11 (IN JOINT BOX), AIR-BAG MAIN HARNESS, BODY HAR-NESS VIBRATION INSPECTION

Conduct vibration inspection on fuse No. 11, airbag main harness and body harness.

#### CAUTION:

Do not shake or vibrate airbag control module.

NOTE:

Gently shake each part.

- **CHECK** : Do fuse No. 11, airbag main harness or body harness malfunction again when shaking?
- **YES** : Replace faulty airbag component parts.
- NO: Go to step 5AC6.

5AC6 : SHOWERING INSPECTION TO BODY

Spray water on vehicle body.

#### CAUTION:

#### Do not directly spray water on each part.

NOTE:

If leaks are noted, check wiring harnesses as water may leak along them and get parts wet.



- CHECK : Does water leak into the passenger compartment when showering vehicle?
- **YES** : Replace faulty airbag component parts.
- : Go to step **5AC7**.

#### 5AC7 : WARNING LIGHT ILLUMINATION CHECK

Turn ignition switch "ON" (engine off) and observe airbag warning light.

CHECK : Does the airbag warning light come on for about 7 seconds, then go out and stay out?

- (YES) : Perform clear memory. <Ref. to 5-5 [T4C0].>
- NO : Go to "DIAGNOSTICS PROCEDURE". <Ref. to 5-5 [T4D0].>

MEMO: