# BODY ELECTRICAL SYSTEM

BE09Y-01

## PRECAUTION

Take care to observe the following precautions when performing inspections or removal and replacement of body electrical related parts.

**1. HEADLIGHT SYSTEM**

- Halogen bulbs have pressurized gas inside and require special handling. They can burst if scratched or dropped. Hold a bulb only by its plastic or metal case. Don't touch the glass part of a bulb with bare hands.

**2. SRS (SUPPLEMENTAL RESTRAINT SYSTEM)**

- The CAMRY is equipped with an SRS (Supplemental Restraint System) such as the driver airbag and front passenger airbag. Failure to carry out service operation in the correct sequence could cause the SRS to unexpectedly deploy during servicing, possibly leading to a serious accident. Before servicing (including removal or installation of parts, inspection or replacement), be sure to read the precautionary notices in the RS section.

**3. AUDIO SYSTEM**

- If the negative (–) terminal cable is disconnected from the battery, the preset AM, FM 1 and FM 2 stations stored in memory are erased, so make sure to note the stations and reset them after the negative (–) terminal cable is reconnected to the battery.
- If the negative (–) terminal cable is disconnected from the battery, the "ANTI–THEFT SYSTEM" will operate when the cable is reconnected, but the radio, tape player and CD player will not operate. Be sure to input the correct ID number so that the radio, tape player and CD player can be operated again.

**4. MOBILE COMMUNICATION SYSTEM**

- If the vehicle is equipped with a mobile communication system, refer to precautions in the IN section.

BE09Z-03

# PROBLEM SYMPTOMS TABLE

## POWER OUTLET

| Symptom | Suspect Area | See page |
|---|---|---|
| Electric power source cannot be taken out of the power outlet | 11. Battery<br>12. POWER OUTLET Fuse (I/P J/B No.1)<br>13. Wire Harness | –<br>–<br>– |

## HEADLIGHT AND TAILLIGHT SYSTEM (USA)

| Symptom | Suspect Area | See page |
|---|---|---|
| Headlight does not light.<br>(Taillight is normal) | 1. HEAD–(LH, RH) Fuse (E/G Room J/B No.2)<br>2. Headlight Bulb<br>3. Wire Harness | –<br>–<br>– |
| Headlight does not light.<br>(Taillight does not light up) | 1. HEAD–(LH, RH) Fuse (E/G Room J/B No.2)<br>2. Headlight Control Relay (E/G Room J/B No.2)<br>3. Headlight Bulb<br>4. Wire Harness | –<br>BE–24<br>–<br>– |
| Only one side light does not light. | 1. HEAD–(LH, RH) Fuse (E/G Room J/B No.2)<br>2. Headlight Bulb<br>3. Wire Harness | –<br>–<br>– |
| "Lo–Beam" does not light. | 1. Headlight Bulb<br>2. Light Control Switch<br>3. Wire Harness | –<br>BE–24<br>– |
| "Hi–Beam" does not light. | 1. Headlight Dimmer Switch<br>2. Light Control Switch<br>3. Wire Harness | BE–24<br>BE–24<br>– |
| "Flash" does not light. | 1. Headlight Dimmer Switch<br>2. Wire Harness | BE–24<br>– |
| "Auto Turn–off System" does not operate. | 1. GAUGE Fuse (I/P J/B No.1)<br>2. DOME Fuse (E/G Room J/B No.2)<br>3. Integration Relay (I/P J/B No.2)<br>4. Door Courtesy Switch (Driver's)<br>5. Ignition Switch<br>6. Wire Harness | –<br>–<br>BE–14<br>BE–24<br>BE–14<br>– |
| Taillight does not light. (Headlight does not light) | 1. Light Control Switch<br>2. Integration Relay (I/P J/B No.1)<br>3. Wire Harness | BE–24<br>BE–14<br>– |
| Taillight does not light.<br>(Headlight is normal) | 1. TAIL Fuse (I/P J/B No.1)<br>2. Taillight Control Relay (I/P J/B No.1)<br>3. Light Control Switch<br>4. Integration Relay (I/P J/B No.1)<br>5. Wire Harness | –<br>BE–24<br>BE–24<br>BE–14<br>– |
| Only one side light does not light. | 1. Bulb<br>2. Wire Harness | –<br>– |
| Rear Combination light does not light. | 1. Bulb<br>2. Light Failure Sensor<br>3. Wire Harness | –<br>BE–37<br>– |
| "Auto Turn–off System" does not operate. | 1. GAUGE Fuse (I/P J/B No.1)<br>2. Integration Relay (I/P J/B No.1)<br>3. Door Courtesy Switch (Driver's)<br>4. Wire Harness | –<br>BE–14<br>BE–32<br>– |

## HEADLIGHT AND TAILLIGHT SYSTEM (CANADA)

| Symptom | Suspect Area | See page |
|---|---|---|
| Headlight does not light.<br>(Taillight is normal) | 1. Wire Harness | – |
| Headlight does not light.<br>(Taillight does not light up) | 1. Wire Harness | – |
| Only one side light does not light. | 1. Headlight Bulb<br>2. HEAD LO (LH, RH) Fuse (E/G Room R/B No.2)<br>3. Wire Harness | –<br>–<br>– |
| "Lo–Beam" does not light. | 1. Headlight Bulb<br>2. HEAD LO (LH, RH) Fuse (E/G Room R/B No.2)<br>3. Headlight Control Relay (E/G Room J/B No.2)<br>4. Integration Relay (I/P J/B No.1)<br>5. Light Control Switch<br>6. Wire Harness | –<br>–<br>BE–24<br>BE–14<br>BE–24<br>– |
| "Hi–Beam" does not light. | 1. Headlight Bulb<br>2. ECU–B Fuse (E/G Room J/B No.2)<br>3. HEAD HI (LH, RH) Fuse (E/G Room J/B No.2)<br>4. DRL Fuse (E/G Room R/B No.2)<br>5. Daytime Running Light Relay No.2 (E/G Room R/B No.2)<br>6. Daytime Running Light Relay No.3 (E/G Room R/B No.2)<br>7. Daytime Running Light Relay No.4 (E/G Room R/B No.2)<br>8. Daytime Running Light Relay (Main)<br>9. Headlight Dimmer Switch<br>10.Wire Harness | –<br>–<br>–<br>–<br>–<br>BE–24<br>–<br>BE–24<br>–<br>BE–24<br>BE–24<br>BE–24<br>– |
| "Flash" does not light. | 1. Headlight Bulb<br>2. ECU–B Fuse (E/G Room J/B No.2)<br>3. HEAD HI (LH, RH) Fuse (E/G Room J/B No.2)<br>4. DRL Fuse (E/G Room R/B No.2)<br>5. Daytime Running Light Relay No.2 (E/G Room R/B No.2)<br>6. Daytime Running Light Relay No.3 (E/G Room R/B No.2)<br>7. Daytime Running Light Relay No.4 (E/G Room R/B No.2)<br>8. Daytime Running Light Relay (Main)<br>9. Headlight Dimmer Switch<br>10.Wire Harness | –<br>–<br>–<br>–<br>–<br>BE–24<br>–<br>BE–24<br>–<br>BE–24<br>BE–24<br>BE–24<br>– |
| "Auto Turn–off System" does not operate. | 1. GAUGE Fuse (I/P J/B No.1)<br>2. DOME Fuse (E/G Room J/B No.2)<br>3. Integration Relay (I/P J/B No.2)<br>4. Door Courtesy Switch (Driver's)<br>5. Ignition Switch<br>6. Wire Harness | –<br>–<br>BE–14<br>BE–24<br>BE–14<br>– |
| Headlight does not light with engine running and light control SW OFF. | 1. Headlight Bulb<br>2. ECU–B Fuse (E/G Room J/B No.2)<br>3. GAUGE Fuse (I/P J/B No.1)<br>4. HEAD HI (LH, RH) Fuse (E/G Room J/B No.2)<br>5. Daytime Running Light Relay (Main)<br>6. Wire Harness<br>7. Other Parts* | –<br>–<br>–<br>–<br>BE–24<br>–<br>– |

| | | |
|---|---|---|
| Taillight does not light.<br>(Headlight does not light) | 1. Integration Relay (I/P J/B No.1)<br>2. Light Control Switch<br>3. Wire Harness | BE–14<br>BE–24<br>– |
| Taillight does not light.<br>(Headlight is normal) | 1. TAIL Fuse (I/P J/B No.1)<br>2. Taillight Control Relay (I/P J/B No.1)<br>3. Integration Relay (I/P J/B No.1)<br>4. Light Control Switch<br>5. Wire Harness | –<br>BE–24<br>BE–14<br>BE–24<br>– |
| Only one side light does not light. | 1. Bulb<br>2. Wire Harness | –<br>– |
| Rear Combination light does not light. | 1. Bulb<br>2. Light Failure Sensor<br>3. Wire Harness | –<br>BE–37<br>– |
| "Auto Turn–off System" does not operate. | 1. GAUGE Fuse (I/P J/B No.1)<br>2. Integration Relay (I/P J/B No.1)<br>3. Door Courtesy Switch (Driver's)<br>4. Wire Harness | –<br>BE–14<br>BE–24<br>– |

*Terminal L of generator and parking brake switch

## TURN SIGNAL AND HAZARD WARNING SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| "Hazard" and "Turn" do not light up. | 1. Hazard Warning Switch<br>2. Turn Signal Flasher<br>3. Wire Harness | BE–30<br>BE–30<br>– |
| The flashing frequency is abnormal. | 1. Bulb<br>2. Turn Signal Switch<br>3. Wire Harness | –<br>BE–30<br>– |
| Hazard warning light does not light up.<br>(Turn is normal.) | 1. HORN Fuse (E/G Room J/B No.2)<br>2. Wire Harness | –<br>– |
| Hazard warning light does not light up in one direction. | 1. Hazard Warning Switch<br>2. Wire Harness | BE–30<br>– |
| *1Turn signal does not light up. | 1. Ignition Switch<br>2. TURN Fuse (I/P J/B No.1)<br>3. Turn Signal Switch<br>4. Wire Harness | BE–14<br>–<br>BE–30<br>– |
| *2Turn signal does not light up. | 1. TURN Fuse (I/P J/B No.1)<br>2. Turn Signal Switch<br>3. Wire Harness | –<br>BE–30<br>– |
| Turn signal does not light up in one direction. | 1. Turn Signal Switch<br>2. Wire Harness | BE–30<br>– |
| Only one bulb does not light up. | 1. Bulb<br>2. Wire Harness | –<br>– |

*1: Combination meter, wiper and washer do not operate.

*2: Combination meter, wiper and washer are normal.

## INTERIOR LIGHT SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| "Illuminated Entry System" does not operate. | 1. Door Courtesy Switch<br>2. Integration Relay (I/P J/B No.1)<br>3. Wire Harness | BE–32<br>BE–14<br>– |
| Only one interior light does not light up. | 1. Bulb<br>2. Wire Harness | –<br>– |
| Interior light does not light up (All). | 1. DOME Fuse (E/G Room J/B No.2)<br>2. Wire Harness | –<br>– |

| | | |
|---|---|---|
| Dome light does not light up. | 1. Bulb<br>2. Dome Light<br>3. Wire Harness | –<br>BE–32<br>– |
| Map Light does not light up. | 1. Bulb<br>2. Map Light<br>3. Wire Harness | –<br>BE–32<br>– |
| Luggage compartment light does not light up. | 1. Bulb<br>2. Luggage compartment door courtesy switch<br>3. Wire Harness | –<br>BE–32<br>– |

## BACK–UP LIGHT SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| Back–Up Light does not light up. | 1. GAUGE Fuse (I/P J/B No.1)<br>2. Ignition Switch<br>3. Wire Harness<br>4. Bulb | –<br>BE–14<br>–<br>– |
| Back–Up Light remains always ON. | 1. Back–Up Light Switch (M/T)<br>2. Park/Neutral Position Switch (A/T) (A140E)<br>(A541E)<br>3. Wire Harness | BE–35<br>DI–424<br>DI–479<br>– |
| Only one light does not light up. | 1. Bulb<br>2. Wire Harness | –<br>– |

## STOP LIGHT SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| Stop light does not light up. | 1. STOP Fuse (I/P J/B No.1)<br>2. Stop Light Switch<br>3. Wire Harness | –<br>BE–37<br>– |
| Only one light always lights up. | 1. Wire Harness | – |
| Only one light does not light. | 1. Bulb<br>2. Wire Harness | –<br>– |

## WIPER AND WASHER SYSTEM

*1: Inspect wiper arm and blade set position

| Symptom | Suspect Area | See page |
|---|---|---|
| Wiper and washers do not operate. | 1. WIPER Fuse (I/P J/B No.1)<br>2. Wiper Switch<br>3. Wiper Motor<br>4. Wire Harness | –<br>BE–40<br>BE–40<br>– |
| Wipers do not operate in LO or HI. | 1. Wiper Switch<br>2. Wiper Motor<br>3. Wire Harness | BE–40<br>BE–40<br>– |
| Wipers do not operate in INT. | 1. Wiper Switch<br>2. Wiper Motor<br>3. Wire Harness | BE–40<br>BE–40<br>– |
| Washer motor does not operate. | 1. Washer Switch<br>2. Washer Motor<br>3. Wire Harness | BE–40<br>BE–40<br>– |
| Wipers do not operate when washer switch in ON. | 1. Washer Motor<br>2. Wire Harness | BE–40<br>– |

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|---|---|---|
| Washer fluid does not operate. | 1. Washer Hose and Nozzle | – |
| ◆In wiper switch HI position, the wiper blade is in contact with the body.<br>◆When the wiper switch is OFF, the wiper blade does not retract or the retract position is wrong. | 1. *1Wiper Switch<br>2. Wire Harness | BE–40<br>– |

## COMBINATION METER
## METER, GAUGES AND ILLUMINATION:

| Symptom | Suspect Area | See page |
|---|---|---|
| Tachometer, Fuel Gauge and Engine Coolant Temperature Gauge do not operate. | 1. GAUGE Fuse (I/P J/B No.1)<br>2. Meter Circuit Plate<br>3. Wire Harness | –<br>BE–46<br>– |
| Speedometer does not operate. | 1. No.1 Vehicle Speed Sensor<br>2. Meter Circuit Plate<br>3. Wire Harness | BE–47<br>BE–46<br>– |
| Tachometer does not operate. | 1. Igniter (5S–FE)<br>(1MZ–FE)<br>2. Meter Circuit Plate<br>3. Wire Harness | IG–1<br>IG–1<br>BE–46<br>– |
| Fuel Gauge does not operate or abnormal operation. | 1. Fuel Receiver Gauge<br>2. Fuel Sender Gauge<br>3. Meter Circuit Plate<br>4. Wire Harness | BE–47<br>BE–47<br>BE–46<br>– |
| Engine Coolant Temperature Gauge does not operate or abnormal operation | 1. Engine Coolant Temperature Receiver Gauge<br>2. Engine Coolant Temperature Sender Gauge<br>3. Meter Circuit Plate<br>4. Wire Harness | BE–47<br>BE–47<br>BE–46<br>– |
| All illumination lights do not light up. | 1. TAIL Fuse (I/P J/B No.1)<br>2. Light Control Rheostat<br>3. Wire Harness | –<br>BE–47<br>– |
| Brightness does not change even when rheostat turned. | 1. Bulb<br>2. Wire Harness | –<br>– |
| Only one illumination light does not light up. | 1. Bulb<br>2. Wire Harness | –<br>– |

## COMBINATION METER
## WARNING LIGHTS:

| Symptom | Suspect Area | See page |
|---|---|---|
| Warning lights do not light up. (Except Discharge, Open Door and SRS) | 1. GAUGE Fuse (I/P J/B No.1)<br>2. Meter Circuit Plate<br>3. Wire Harness | –<br>BE–46<br>– |
| Low Oil Pressure warning light does not light up. | 1. Bulb<br>2. Low Oil Pressure Warning Switch<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>BE–47<br>BE–46<br>– |
| Fuel Level warning light does not light up. | 1. Bulb<br>2. Fuel Level Warning Switch<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>BE–47<br>BE–46<br>– |
| ABS warning light does not light up. | 1. Bulb<br>2. ABS ECU<br>3. Wire Harness | –<br>IN–31<br>– |

| | | |
|---|---|---|
| Seat Belt warning light does not light up. | 1. Bulb<br>2. Seat Belt Buckle Switch<br>3. Integration Relay (I/P J/B No.1)<br>4. Wire Harness | –<br>BE–47<br>BE–47<br>– |
| Discharge warning light does not light up. | 1. IGN Fuse (I/P J/B No.1)<br>2. Bulb<br>3. Wire Harness<br>4. Generator (5S–FE)<br>(1MZ–FE) | –<br>–<br>–<br>CH–1<br>CH–1 |
| Light Failure warning light does not light up. | 1. Bulb<br>2. Light Failure Sensor<br>3. Bulb Check Relay<br>4. Wire Harness<br>5. Taillight system | –<br>BE–37<br>BE–47<br>–<br>BE–24 |
| Brake warning light does not light up. | 1. Bulb<br>2. Parking Brake Switch<br>3. Brake Fluid Level Warning Switch<br>4. Bulb Check Relay<br>5. Meter Circuit Plate<br>6. Wire Harness | –<br>BE–47<br>BE–47<br>BE–47<br>BE–46<br>– |
| SRS Warning light does not light up. | 1. ECU–B Fuse (E/G Room J/B No.2)<br>2. Bulb<br>3. Airbag Sensor Assembly<br>4. Meter Circuit Plate<br>5. Wire Harness | –<br>–<br>DI–626<br>BE–46<br>– |
| Open Door warning light does not light up. | 1. DOME Fuse (E/G Room J/B No.2)<br>2. Bulb<br>3. Door Courtesy Switch<br>4. Meter Circuit Plate<br>5. Wire Harness | –<br>–<br>BE–32<br>BE–46<br>– |
| Washer Level warning light does not light up. | 1. Bulb<br>2. Washer Fluid Level Warning Switch<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>BE–47<br>BE–46<br>– |

## COMBINATION METER INDICATOR LIGHTS:

| Symptom | Suspect Area | See page |
|---|---|---|
| O/D OFF indicator light does not light up. | 1. Bulb<br>2. O/D OFF Switch (A140E)<br>(A541E)<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>DI–431<br>DI–487<br>BE–46<br>– |
| Cruise Control indicator light does not light up. | 1. Bulb<br>2. Cruise Control ECU<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>IN–31<br>BE–46<br>– |
| High beam indicator light does not light up. | 1. Bulb<br>2. Meter Circuit Plate<br>3. Wire Harness<br>4. Headlight System | –<br>BE–46<br>–<br>BE–22 |
| Turn indicator light does not light up. | 1. Bulb<br>2. Meter Circuit Plate<br>3. Wire Harness<br>4. Turn Signal and Hazard Warning System | –<br>BE–46<br>–<br>BE–29 |

| | | |
|---|---|---|
| Shift indicator lights do not light up. | 1. Bulb<br>2. Meter Circuit Plate<br>3. Park/Neutral Position Switch (A140E)<br>(A541E)<br>4. Wire Harness | –<br>BE–46<br>DI–424<br>DI–479<br>– |
| Only one shift indicator does not light up. | 1. Bulb<br>2. Meter Circuit Plate | –<br>BE–46 |
| Malfunction indicator light does not light up. | 1. Bulb<br>2. ECM<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>–<br>BE–46<br>– |
| SLIP indicator light does not light up. | 1. Bulb<br>2. Traction ECU<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>–<br>BE–46<br>– |
| TRAC OFF indicator light does not light up. | 1. Bulb<br>2. Traction ECU<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>–<br>BE–46<br>– |
| Security indicator light does not light up. | 1. Bulb<br>2. Security ECU<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>–<br>BE–46<br>– |
| Indicator lights do not light up. (Except Turn, Hi–beam and security) | 1. GAUGE Fuse (I/P J/B No.1)<br>2. Wire Harness | –<br>– |

## DEFOGGER SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| All defogger systems do not operate. | 1. DEFOG M–Fuse (I/P J/B No.1)<br>2. HTR Fuse (I/P J/B No.1)<br>3. Defogger Relay (I/P J/B No.1)<br>4. Defogger Switch<br>5. Wire Harness | –<br>–<br>BE–56<br>BE–56<br>– |
| Rear window defogger does not operate. | 1. Defogger Wire<br>2. Choke Coil<br>3. Wire Harness | BE–56<br>–<br>– |
| Mirror defogger does not operate. | 1. MIR/HTR Fuse (I/P J/B No.1)<br>2. Mirror Defogger<br>3. Wire Harness | –<br>BE–56<br>– |

## POWER WINDOW CONTROL SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| Power window does not operate (ALL).<br>(Power Door Lock does not operate) | 1. POWER M–Fuse (I/P J/B No.1)<br>2. Power Main Relay (I/P J/B No.1)<br>3. Wire Harness | –<br>BE–60<br>– |
| Power window does not operate (ALL).<br>(Power Door Lock is normal) | 1. Ignition Switch<br>2. Power Window Master Switch<br>3. Wire Harness | BE–14<br>BE–60<br>– |
| "One Touch Power Window System" does not operate. | 1. Power Window Master Switch | BE–60 |
| Only one window glass does not move. | 1. Power Window Master Switch<br>2. Power Window Switch<br>3. Power Window Motor<br>4. Wire Harness | BE–60<br>BE–60<br>BE–60<br>– |
| "Window Lock System" does not operate. | 1. Power Window Master Switch | BE–60 |

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|---|---|---|
| "Window Lock Illumination" does not light up. | 1. Power Window Master Switch | BE–60 |
| Key–off power window does not operate. | 1. GAUGE Fuse (I/P J/B No.1)<br>2. Integration Relay (I/P J/B No.1)<br>3. Ignition Switch<br>4. Door Courtesy Switch<br>5. Wire Harness | –<br>BE–60<br>BE–14<br>BE–32<br>– |

## POWER DOOR LOCK CONTROL SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| "Door lock system" does not operate at all. | 1. POWER M–Fuse (I/P J/B No.1)<br>2. CIG Fuse (I/P J/B No.1)<br>3. DOOR Fuse (I/P J/B No.1)<br>4. Integration Relay (I/P J/B No.1)<br>5. Wire Harness | –<br>–<br>–<br>BE–70<br>– |
| Door lock system does not operate by manual switch. | 1. Power Window Master Switch<br>2. Door Lock Manual Switch<br>3. Integration Relay (I/P J/B No.1)<br>4. Wire Harness | BE–60<br>BE–70<br>BE–70<br>– |
| Door lock system does not operate by door key. | 1. Door Key Lock and Unlock Switch<br>2. Integration Relay (I/P J/B No.1)<br>3. Wire Harness<br>4. Door Lock Link Disconnected | BE–70<br>BE–70<br>–<br>– |
| Fault in 2–Operation unlock function of Driver's side door key lock and unlock switch. | 1. Door Key Lock and Unlock Switch<br>2. Integration Relay (I/P J/B No.1)<br>3. Wire Harness | BE–70<br>BE–70<br>– |
| Fault in key confine prevention operate. | 1. Integration Relay (I/P J/B No.1)<br>2. Key Unlock Warning Switch<br>3. Door Courtesy Switch<br>4. Wire Harness | BE–70<br>BE–14<br>BE–32<br>– |
| Only one door lock does not operate. | 1. Door Lock Motor<br>2. Wire Harness | BE–70<br>– |

## SLIDING ROOF SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| Sliding roof system does not operate.<br>(Door Lock does not operate) | 1. POWER M–Fuse (I/P J/B No.1)<br>2. Power Main Relay (I/P J/B No.1)<br>3. Wire Harness | –<br>BE–60<br>– |
| Sliding roof system does not operate.<br>(Door Lock is normal) | 1. Ignition Switch<br>2. Sliding Roof Control Relay and Switch<br>3. Sliding Roof Motor and Limit Switch<br>4. Wire Harness | BE–14<br>BE–74<br>BE–74<br>– |
| Sliding roof system operates abnormally. | 1. Sliding Roof Control Relay and Switch<br>2. Sliding Roof Motor and Limit Switch<br>3. Wire Harness | BE–74<br>BE–74<br>– |
| Sliding roof system stops operation half way.<br>(Stones of foreign material trapped in motor assembly) | 1. Sliding Roof Control Relay and Switch<br>2. Sliding Roof Motor and Limit Switch<br>3. Wire Harness | BE–74<br>BE–74<br>– |
| "Key–off Sliding Roof" operation does not operate. | 1. DOME Fuse (E/G Room J/B No.2)<br>2. GAUGE Fuse (I/P J/B No.1)<br>3. Ignition Switch<br>4. Integration Relay (I/P J/B No.1)<br>5. Wire Harness | –<br>–<br>BE–14<br>BE–14<br>– |

## POWER SEAT CONTROL SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| Power seat does not operate.<br>(Door lock system does not operate) | 1. POWER M–Fuse (I/P J/B No.1)<br>2. Wire Harness | –<br>– |
| Power seat does not operate.<br>(Door lock system is normal) | 1. Power Seat Swtich (D,P)<br>2. Wire Harness | BE–78<br>– |
| "Slide operation" does not operate. | 1. Power Seat Switch (D, P)<br>2. Wire Harness<br>3. Slide Motor (D, P) | BE–78<br>–<br>BE–78 |
| "Lifter Operation" does not operate. | 1. Power Seat Switch (D, P)<br>2. Wire Harness<br>3. Lifter Motor (D, P) | BE–78<br>–<br>BE–78 |
| "Reclining Operation" does not operate. | 1. Power Seat Switch (D, P)<br>2. Wire Harness<br>3. Reclining Motor (D, P) | BE–78<br>–<br>BE–78 |

(D): Driver's seat
(P): Passenger's seat

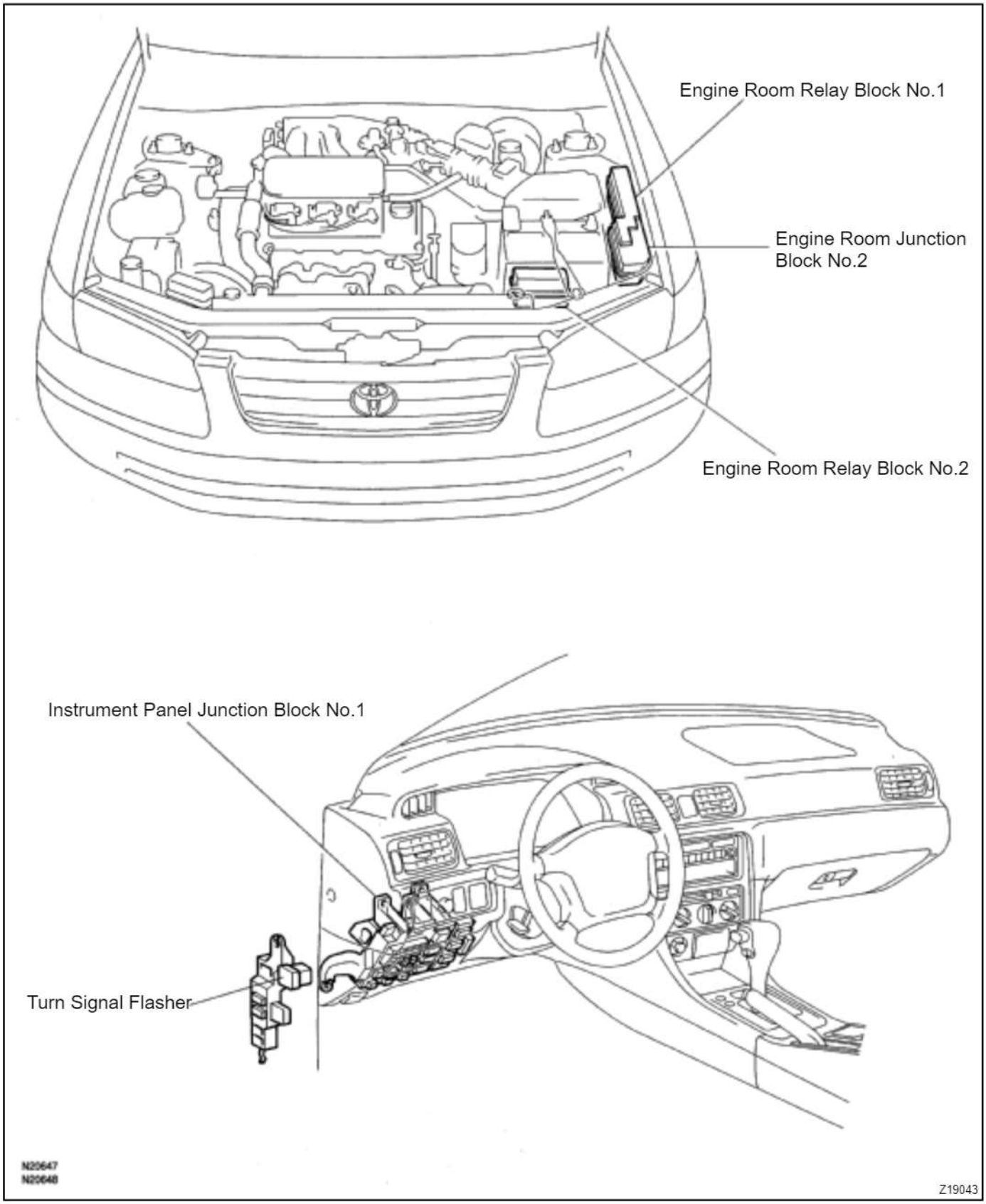
## POWER MIRROR CONTROL SYSTEM

| Symptom | Suspect Area | See page |
|---|---|---|
| Mirror does not operate. | 1. CIG Fuse (I/P J/B No.1)<br>2. Mirror Switch<br>3. Mirror Motor<br>4. Wire Harness | –<br>BE–83<br>BE–83<br>– |
| Mirror operates abnormally. | 1. Mirror Switch<br>2. Mirror Motor<br>3. Wire Harness | BE–83<br>BE–83<br>– |

# POWER SOURCE

## LOCATION

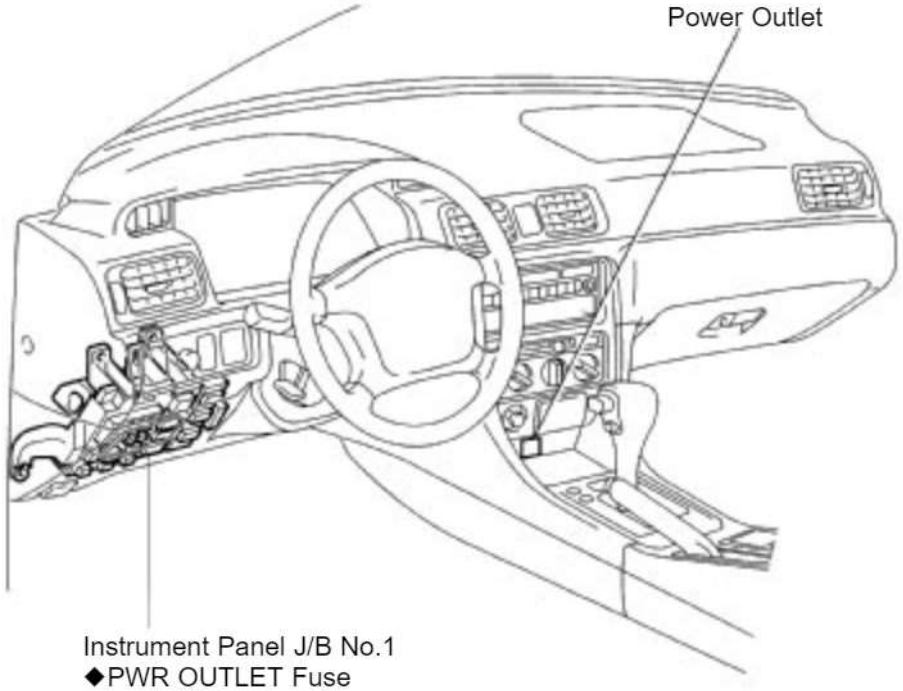
BE0A0-03



# POWER OUTLET

## LOCATION

BE0A1-03

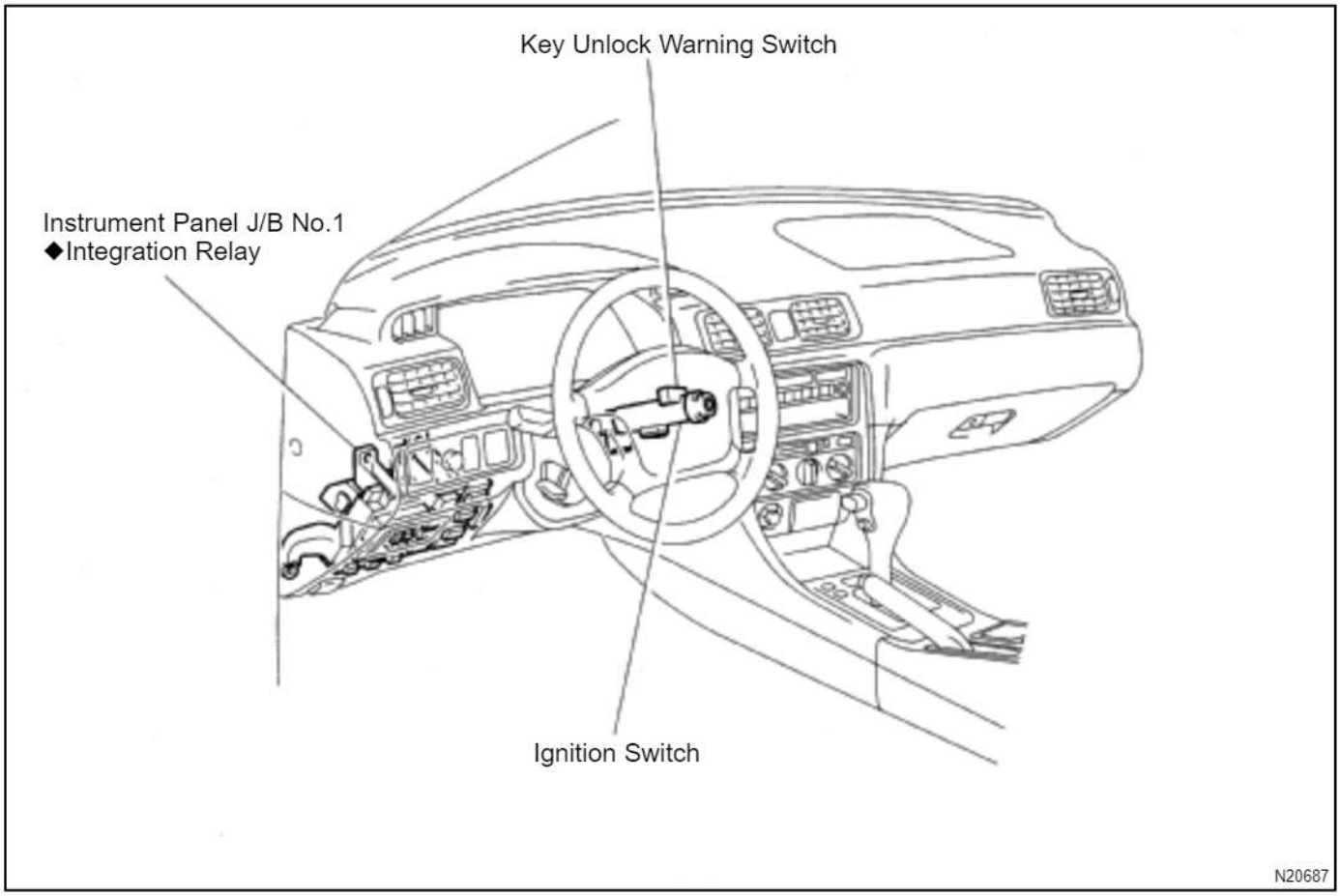



N20688

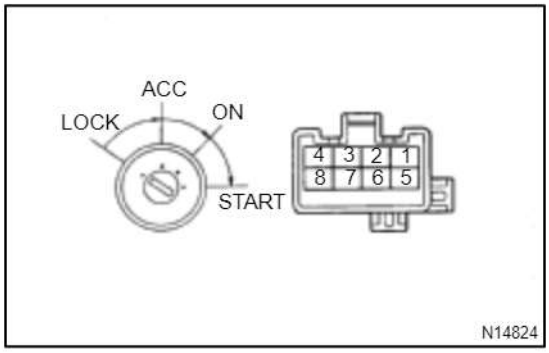
# IGNITION SWITCH AND KEY UNLOCK WARNING SWITCH

BE0A2-03

## LOCATION



BE0A3-02

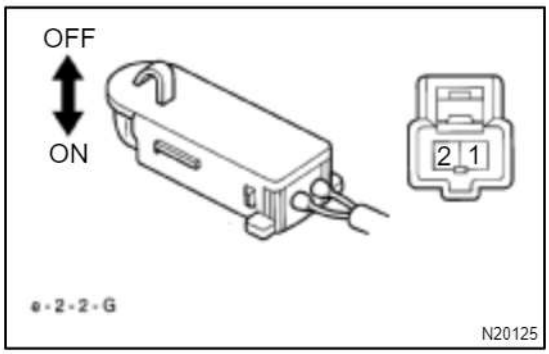



# INSPECTION

## 1. INSPECT IGNITION SWITCH CONTINUITY

| Switch position | Tester connection | Specified condition |
|---|---|---|
| LOCK | – | No continuity |
| ACC | 2 – 3 | Continuity |
| ON | 2 – 3 – 4<br>6 – 7 | Continuity |
| START | 1 – 2 – 4<br>6 – 7 – 8 | Continuity |

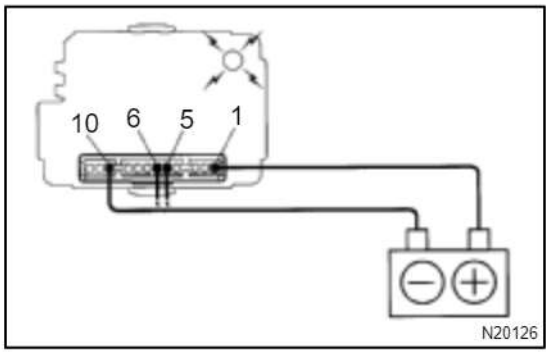
If continuity is not as specified, replace the switch.




## 2. INSPECT KEY UNLOCK WARNING SWITCH CONTINUITY

| Switch position | Tester connection | Specified condition |
|---|---|---|
| OFF (Key removed) | – | No continuity |
| ON (Key set) | 1 – 2 | Continuity |

If continuity is not as specified, replace the switch.

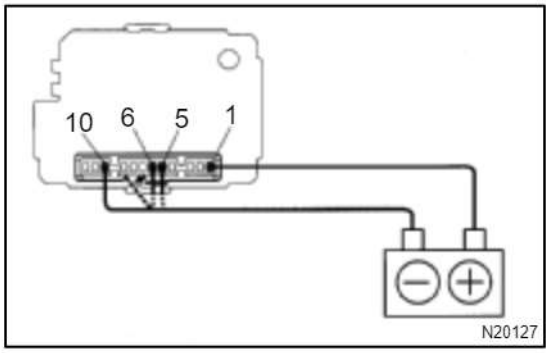



## 3. Key unlock warning system: INSPECT INTEGRATION RELAY (TYPE A) OPERATION

(a) Connect the positive (+) lead from the battery to terminal 1.

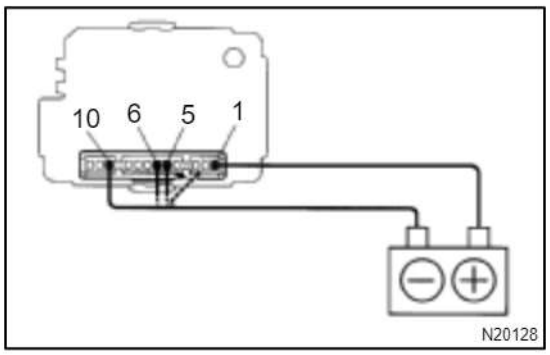
(b) Connect the negative (–) lead from the battery to terminals 5, 6 and 10.

(c) Check the buzzer sounds.



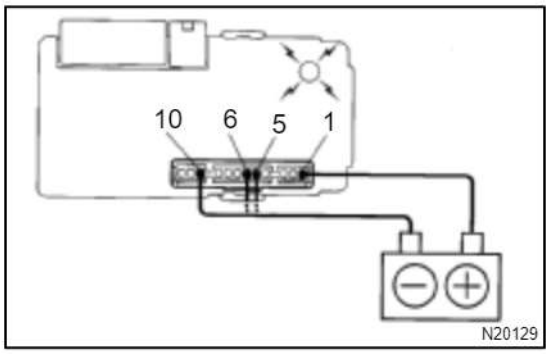

(d) Disconnect the negative (–) lead from the battery to terminal 6.

(e) Check that the buzzerr stops sounding.



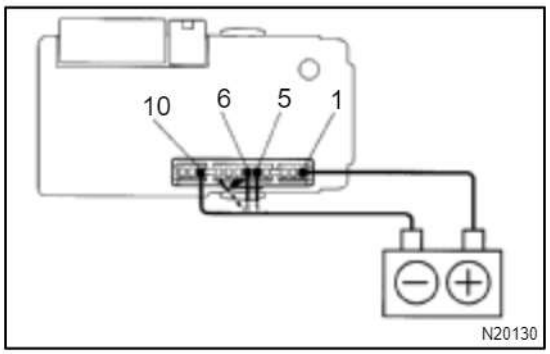

(f) Connect the negative (–) lead from the battery to terminal 6.
(g) Disconnect the negative (–) lead from the battery to terminal 5.
(h) Check that the buzzerr stops sounding.

If operation is not as specified, replace the relay.

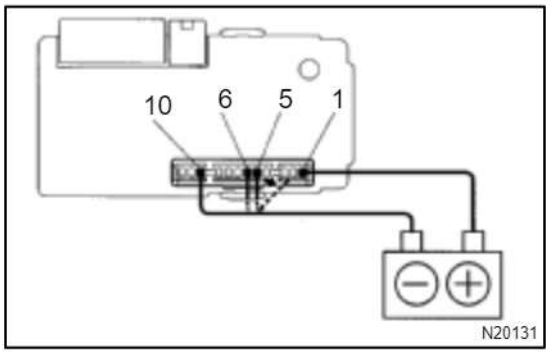



**4. Key unlock warning system:**
**INSPECT INTEGRATION RELAY (TYPE B) OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 1.
(b) Connect the negative (–) lead from the battery to terminals 5, 6 and 10.
(c) Check the buzzerr sounds.

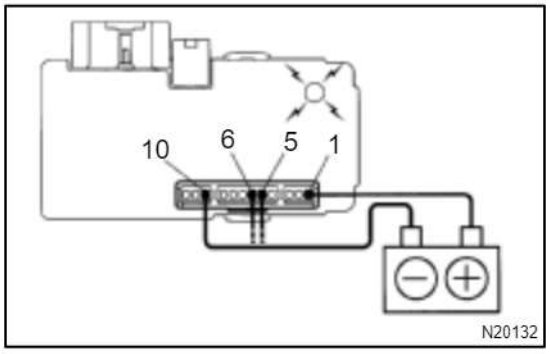



(d) Disconnect the negative (–) lead from the battery to terminal 6.
(e) Check that the buzzerr stops sounding.



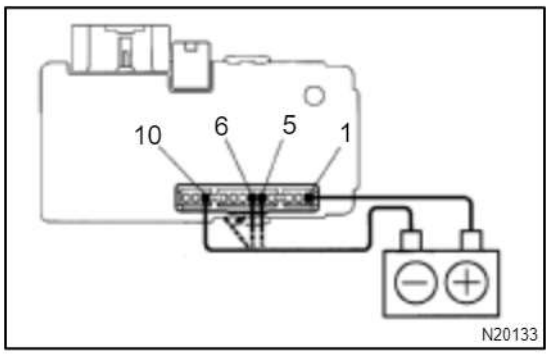

(f) Connect the negative (–) lead from the battery to terminal 6.
(g) Disconnect the negative (–) lead from the battery to terminal 5.
(h) Check that the buzzerr stops sounding.

If operation is not as specified, replace the relay.

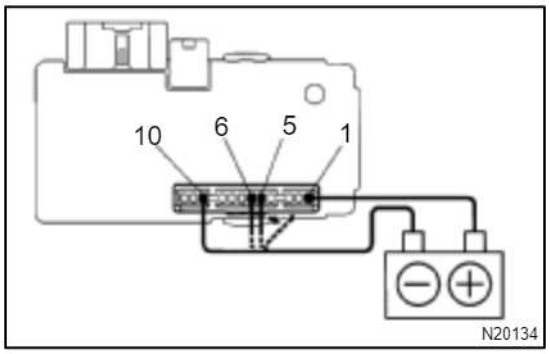



**5. Key unlock warning system:**
**INSPECT INTEGRATION RELAY (TYPE C) OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 1.
(b) Connect the negative (–) lead from the battery to terminals 5, 6 and 10.
(c) Check the buzzerr sounds.



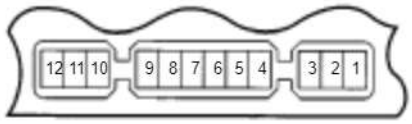

(d) Disconnect the negative (–) lead from the battery to terminal 6.
(e) Check that the buzzerr stops sounding.




(f) Connect the negative (–) lead from the battery to terminal 6.
(g) Disconnect the negative (–) lead from the battery to terminal 5.
(h) Check that the buzzerr stops sounding.

If operation is not as specified, replace the relay.

**Junction block side:**




**6. INSPECT INTEGRATION RELAY (TYPE A) CIRCUIT**

(a) Remove the relay from the junction block No.1 and inspect the connector on the junction block side.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 2 – Ground<br>4 – Ground | Passenger's door courtesy switch OFF (Door closed) | No continuity |
| 2 – Ground<br>4 – Ground | Passenger's door courtesy switch ON (Door opened) | Continuity |
| 5 – Ground | Key unlock warning switch OFF | No continuity |
| 5 – Ground | Key unlock warning switch ON | Continuity |
| 6 – Ground | Driver's door courtesy switch OFF | No continuity |
| 6 – Ground | Driver's door courtesy switch ON | Continuity |
| 8 – Ground | Buckle switch OFF (Seat belt unfastened) | No continuity |
| 8 – Ground | Buckle switch ON (Seat belt fastened) | Continuity |
| 10 – Ground | Constant | Continuity |
| 1 – Ground | Constant | Battery positive voltage |
| 7 – Ground<br>9 – Ground | Ignition switch LOCK or ACC | No voltage |
| 7 – Ground<br>9 – Ground | Ignition switch ON | Battery positive voltage |

**Wire harness side:**




h-4-1 N20136

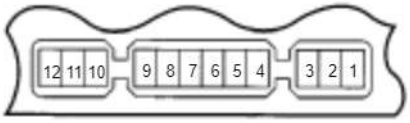
(b) Disconnect the connector from the integration relay and inspect the connector on the wire harness side.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 1 – Ground | Light control switch OFF | No continuity |
| 1 – Ground | Light control switch HEAD or TAIL | Continuity |
| 4 – Ground | Light control switch OFF or TAIL | No continuity |
| 4 – Ground | Light control switch HEAD | Continuity |
| 2 – Ground<br>3 – Ground | Constant | Battery positive voltage |

If the circuit is as specified, try replacing the relay with a new one.

If the circuit is not as specified, inspect the circuits connected to other parts.

**Junction block side:**




N20135

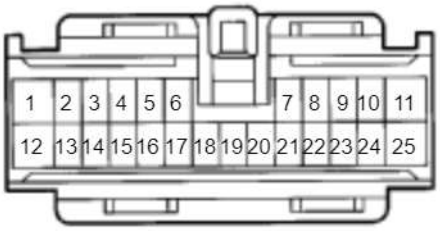
**7. INSPECT INTEGRATION RELAY (TYPE B) CIRCUIT**

(a) Remove the relay from the junction block No.1 and inspect the connector on the junction block side.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 2 – Ground | All door courtesy switches OFF (Except Driver's Door/ Door closed) | No continuity |
| 2 – Ground | One of the door courtesy switches ON (Except Driver's Door/ Door opened) | Continuity |
| 4 – Ground | Door courtesy switches except that of the driver's door OFF (Door closed) | No continuity |
| 4 – Ground | One of the door courtesy switches except that of the driver's door ON (Door opened) | Continuity |

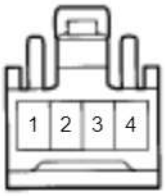
| | | |
|---|---|---|
| 5 – Ground | Key unlock warning switch OFF | No continuity |
| 5 – Ground | Key unlock warning switch ON | Continuity |
| 6 – Ground | Driver's door courtesy switch OFF (Door closed) | No continuity |
| 6 – Ground | Driver's door courtesy switch ON (Door opened) | Continuity |
| 8 – Ground | Buckle switch OFF (Seat belt unfastened) | No continuity |
| 8 – Ground | Buckle switch ON (Seat belt fastened) | Continuity |
| 10 – Ground | Constant | Continuity |
| 1 – Ground | Constant | Battery positive voltage |
| 7 – Ground<br>9 – Ground | Ignition switch LOCK or ACC | No voltage |
| 7 – Ground<br>9 – Ground | Ignition switch ON | Battery positive voltage |
| 11 – Ground | Ignition switch LOCK | No voltage |
| 11 – Ground | Ignition switch ACC or ON | Battery positive voltage |

**Wire harness side:**




Connector "A"

**Wire harness side:**




eh–25–1
h–4–1

Connector "B"

N20137

(b) Disconnect the connector from the integration relay and inspect the connectors on the wire harness side.

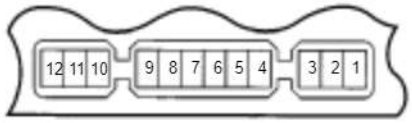
| Tester connection | Condition | Specified condition |
|---|---|---|
| A3 – Ground | Constant | Continuity |
| A5 – Ground | Driver's door unlock detection switch OFF (Door locked) | No continuity |
| A5 – Ground | Driver's door unlock detection switch ON (Door unlocked) | Continuity |
| A6 – Ground | Passenger's door courtesy switch OFF (Door closed) | No continuity |

| | | |
|---|---|---|
| A6 – Ground | Passenger's door courtesy switch ON (Door opened) | Continuity |
| A7 – Ground | Passenger's door unlock detection switch OFF (Door locked) | No continuity |
| A7 – Ground | Passenger's door unlock detection switch ON (Door unlocked) | Continuity |
| A9 – Ground | Rear door unlock detection switch OFF (Door locked) | No continuity |
| A9 – Ground | Rear door unlock detection switch ON (Door unlocked) | Continuity |
| A11 – A12<br>A12 – A25 | Constant | Continuity |
| A16 – Ground | Door lock manual switch OFF or UNLOCK | No continuity |
| A16 – Ground | Door lock manual switch LOCK | Continuity |
| A17 – Ground | Door lock manual switch OFF or LOCK | No continuity |
| A17 – Ground | Door lock manual switch UNLOCK | Continuity |
| A18 – Ground | Driver's and passenger's door key lock and unlock switch OFF or UNLOCK | No continuity |
| A18 – Ground | Driver's or passenger's door key lock and unlock switch LOCK | Continuity |
| A19 – Ground | Driver's door key lock and unlock switch OFF or LOCK | No continuity |
| A19 – Ground | Driver's door key lock and unlock switch UNLOCK | Continuity |
| A20 – Ground | Passenger's door key lock and unlock switch OFF or LOCK | No continuity |
| A20 – Ground | Passenger's door key lock and unlock switch UNLOCK | Continuity |
| A1 – Ground | Constant | Battery positive voltage |
| B1 – Ground | Light control switch OFF | No voltage |
| B1 – Ground | Light control switch TAIL or HEAD | Battery positive voltage |
| B4 – Ground | Light control switch OFF or TAIL | No voltage |
| B4 – Ground | Light control switch HEAD | Battery positive voltage |
| B2 – Ground<br>B3 – Ground | Constant | Battery positive voltage |

If the circuit is as specified, try replacing the relay with a new one.

If the circuit is not as specified, inspect the circuits connected to other parts.

**Junction block side:**



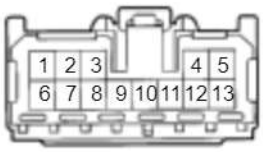

N20135

**8. INSPECT INTEGRATION RELAY (TYPE C) CIRCUIT**

(a) Remove the relay from the junction block No.1 and inspect the connector on the junction block side.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 2 – Ground | All door courtesy switches OFF (Except Driver's Door/ Door closed) | No continuity |
| 2 – Ground | One of the door courtesy switches ON (Except Driver's Door/ Door opened) | Continuity |
| 4 – Ground | Door courtesy switches except that of the driver's door OFF (Door closed) | No continuity |
| 4 – Ground | One of the door courtesy switches except that of the driver's door ON (Door opened) | Continuity |
| 5 – Ground | Key unlock warning switch OFF | No continuity |
| 5 – Ground | Key unlock warning switch ON | Continuity |
| 6 – Ground | Driver's door courtesy switch OFF (Door closed) | No continuity |
| 6 – Ground | Driver's door courtesy switch ON (Door opened) | Continuity |
| 8 – Ground | Buckle switch OFF (Seat belt unfastened) | No continuity |
| 8 – Ground | Buckle switch ON (Seat belt fastened) | Continuity |
| 10 – Ground | Constant | Continuity |
| 1 – Ground | Constant | Battery positive voltage |
| 7 – Ground<br>9 – Ground | Ignition switch LOCK or ACC | No voltage |
| 7 – Ground<br>9 – Ground | Ignition switch ON | Battery positive voltage |
| 11 – Ground | Ignition switch LOCK | No voltage |
| 11 – Ground | Ignition switch ACC or ON | Battery positive voltage |

**Wire harness side:**




Connector "A"

**Wire harness side:**




Connector "B"

e-13-1-A
h-4-1

N20138

(b) Disconnect the connector from the integration relay and inspect the connectors on the wire harness side.

| Tester connection | Condition | Specified condition |
|---|---|---|
| A1 – Ground | Door lock manual switch OFF or UNLOCK | No continuity |
| A1 – Ground | Door lock manual switch LOCK | Continuity |
| A2 – Ground | Door lock manual switch OFF or LOCK | No continuity |
| A2 – Ground | Door lock manual switch UNLOCK | Continuity |
| A3 – Ground | Driver's and passenger's door key lock and unlock switch OFF or UNLOCK | No continuity |
| A3 – Ground | Driver's or passenger's door key lock and unlock switch LOCK | Continuity |
| A4 – Ground | Driver's door key lock and unlock switch OFF or LOCK | No continuity |
| A4 – Ground | Driver's door key lock and unlock switch UNLOCK | Continuity |
| A5 – Ground | Passenger's door key lock and unlock switch OFF or LOCK | No continuity |
| A5 – Ground | Passenger's door key lock and unlock switch UNLOCK | Continuity |
| A6 – A7 | Constant | Continuity |
| A8 – Ground | Passenger's door courtesy switch OFF (Door closed) | No continuity |
| A8 – Ground | Passenger's door courtesy switch ON (Door opened) | Continuity |
| A9 – Ground | Driver's door unlock detection switch OFF (Door closed) | No continuity |
| A9 – Ground | Driver's door unlock detection switch ON (Door opened) | Continuity |
| A10 – Ground | Passenger's door unlock detection switch OFF (Door closed) | No continuity |
| A10 – Ground | Passenger's door unlock detection switch ON (Door opened) | Continuity |
| A11 – Ground | Rear door unlock detection switch OFF (Door closed) | No continuity |
| A11 – Ground | Rear door unlock detection switch ON (Door opened) | Continuity |
| A12 – Ground | Constant | Continuity |
| A13 – Ground | Constant | Battery positive voltage |
| B1 – Ground | Light control switch OFF | No voltage |
| B1 – Ground | Light control switch TAIL or HEAD | Battery positive voltage |
| B4 – Ground | Light control switch OFF or TAIL | No voltage |
| B4 – Ground | Light control switch HEAD | Battery positive voltage |
| B2 – Ground<br>B3 – Ground | Constant | Battery positive voltage |

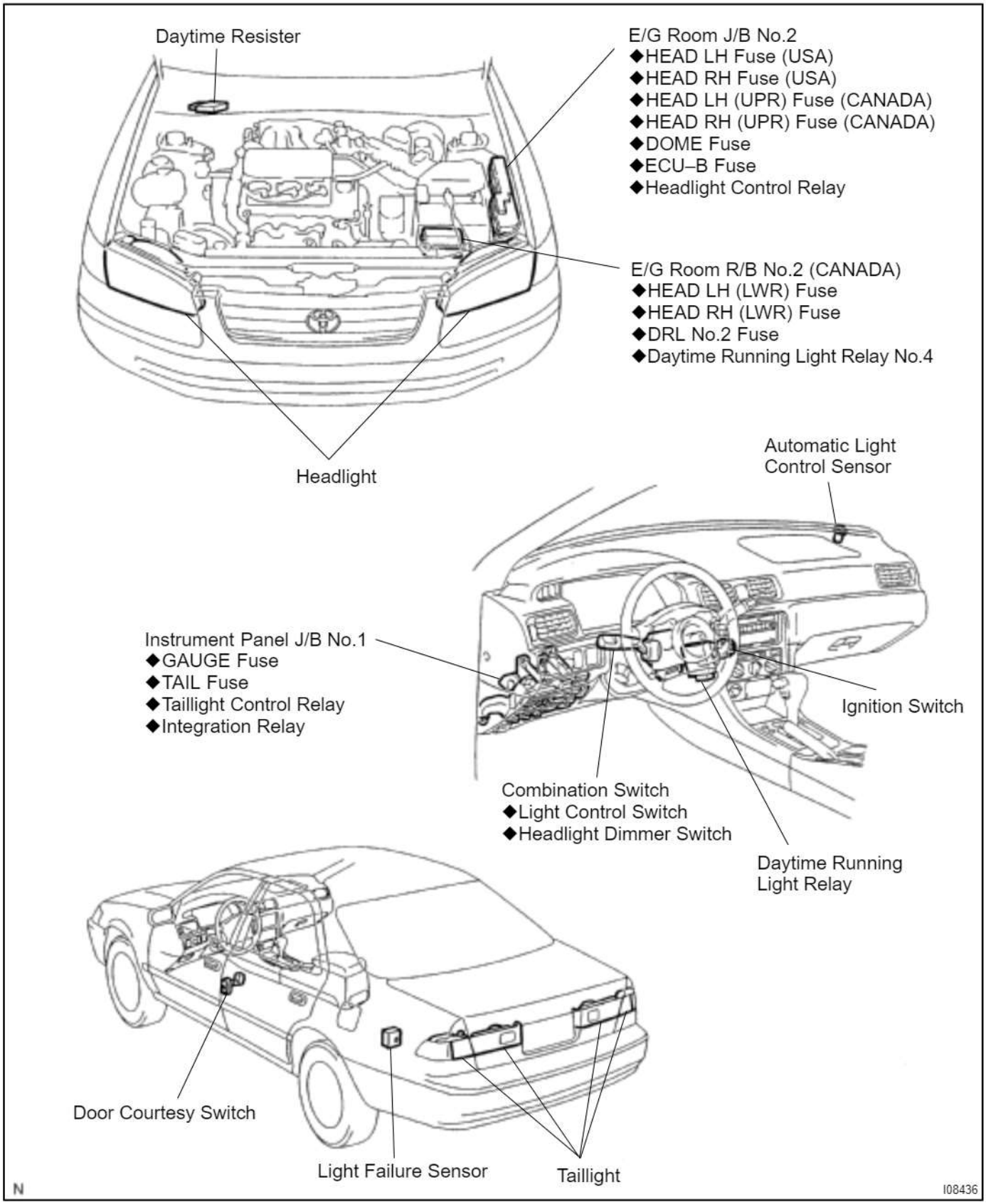
If the circuit is as specified, try replacing the relay with a new one.

If the circuit is not as specified, inspect the circuits connected to other parts.

# HEADLIGHT AND TAILLIGHT SYSTEM

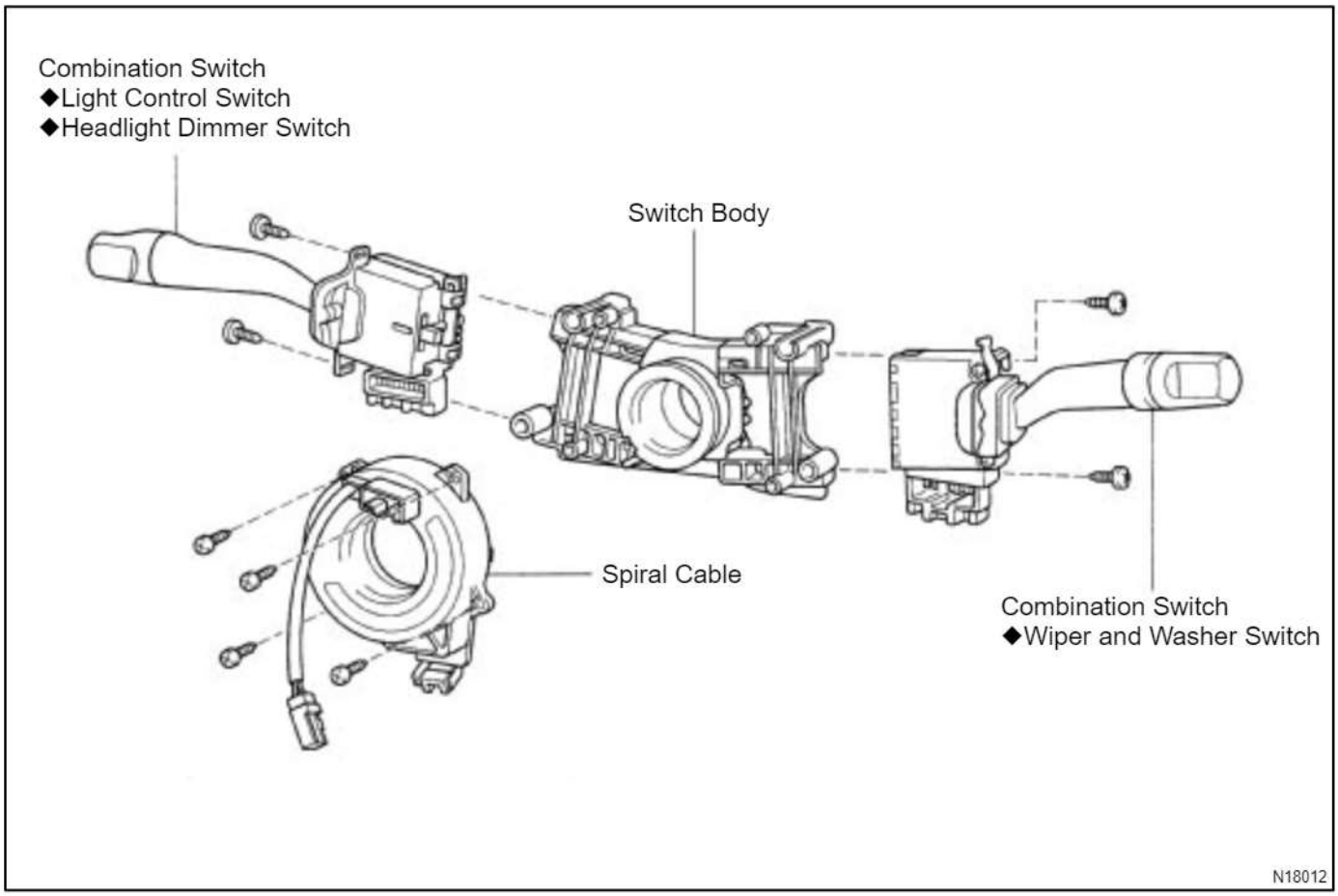
BE0A4-02

## LOCATION



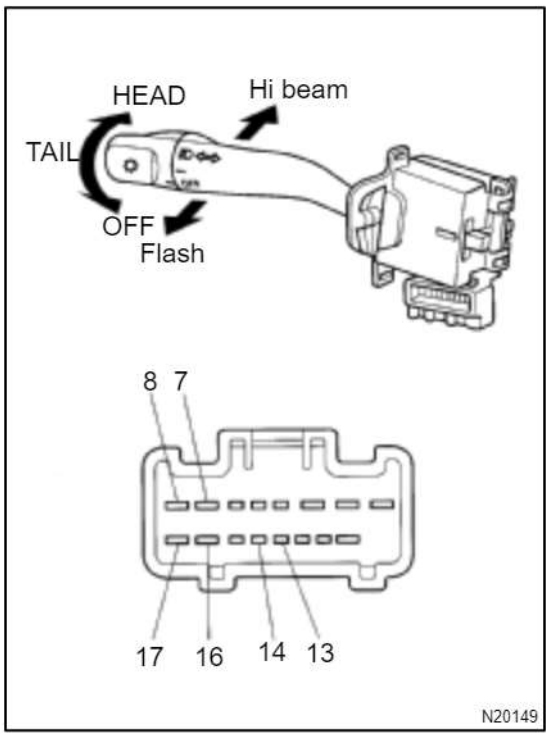
BE0A5-02

# COMPONENTS



BE10D-01

# INSPECTION




## 1. INSPECT LIGHT CONTROL SWITCH CONTINUITY

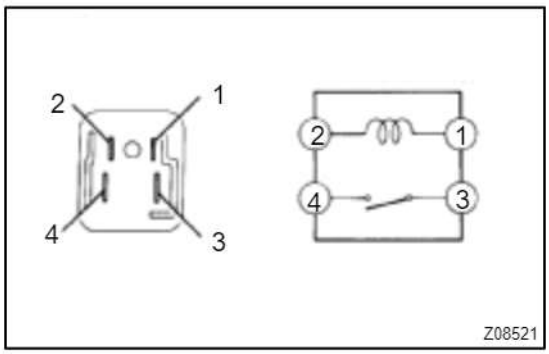
| Switch position | Tester connection | Specified condition |
|---|---|---|
| OFF | – | No continuity |
| TAIL | 14 – 16 | Continuity |
| HEAD | 13 – 14 – 16 | Continuity |

If continuity is not as specified, replace the switch.

## 2. INSPECT HEADLIGHT DIMMER SWITCH CONTINUITY

| Switch position | Tester connection | Specified condition |
|---|---|---|
| Low beam | 16 – 17 | Continuity |
| High beam | 7 – 16 | Continuity |
| Flash | 7 – 8 – 16 | Continuity |

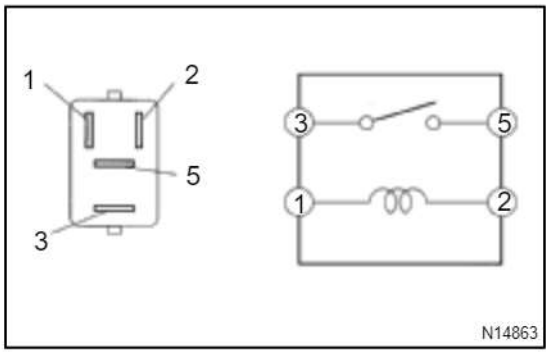
If continuity is not as specified, replace the switch.




## 3. INSPECT HEADLIGHT CONTROL RELAY CONTINUITY

| Condition | Tester connection | Specified condition |
|---|---|---|
| Constant | 1 – 2 | Continuity |
| Apply B+ between terminals 1 and 2. | 3 – 4 | Continuity |

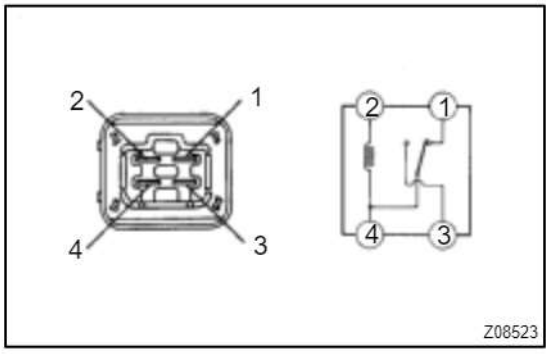
If continuity is not as specified, replace the relay.




## 4. INSPECT TAILLIGHT CONTROL RELAY CONTINUITY

| Condition | Tester connection | Specified condition |
|---|---|---|
| Constant | 1 – 2 | Continuity |
| Apply B+ between terminals 1 and 2. | 3 – 5 | Continuity |

If continuity is not as specified, replace the relay.




## 5. INSPECT HEADLIGHT DIMMER RELAY CONTINUITY

| Condition | Tester connection | Specified condition |
|---|---|---|
| Constant | 1 – 4, 2 – 4 | Continuity |
| Apply B+ between terminals 2 and 4. | 3 – 4 | Continuity |

If continuity is not as specified, replace the relay.

**Wire harness side:**



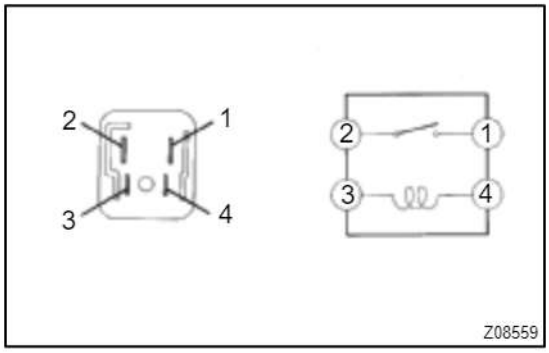

Y I08219

## 6. INSPECT DAYTIME RUNNING LIGHT RELAY (MAIN) CIRCUIT

Disconnect the connector from the relay and inspect the connector on the wire harness side.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 2 – Ground | Light control switch position OFF or TAIL | No continuity |
| 2 – Ground | Light control switch position HEAD | Continuity |
| 3 – Ground | Headlight dimmer switch position Low beam | No continuity |
| 3 – Ground | Headlight dimmer switch position High beam of Flash | Continuity |
| 4 – Ground | Brake fluid level warning position OFF | No continuity |
| 4 – Ground | Brake fluid level warning position ON | Continuity |
| 12 – Ground | Constant | Continuity |
| 14 – Ground | Parking brake switch position OFF (Parking brake lever released) | No continuity |
| 14 – Ground | Parking brake switch position ON (Parking brake lever pulled up) | Continuity |
| 17 – Ground | Light control switch position OFF or HEAD | No voltage |
| 17 – Ground | Light control switch position TAIL | Continuity |
| 20 – Ground | Constant | Continuity |
| 21 – Ground | Constant | Continuity |
| 13 – Ground | Engine Stop | No voltage |
| 13 – Ground | Engine Running | Battery positive voltage |
| 16 – Ground | Constant | Battery positive voltage |
| 18 – Ground | Ground terminal 19 | Battery positive voltage |
| 19 – Ground | Constant | Battery positive voltage |
| 22 – Ground | Constant | Battery positive voltage |
| 23 – Ground | Ignition switch position LOCK or ACC | No voltage |
| 23 – Ground | Ignition switch position ON or START | Battery positive voltage |

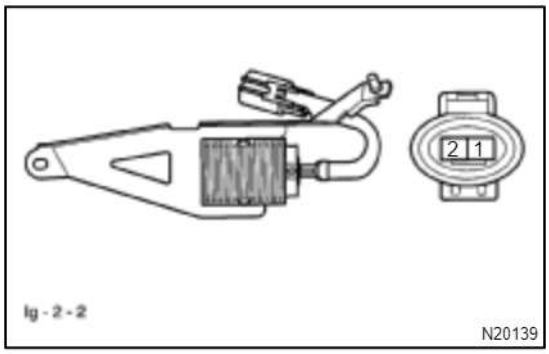
If circuit is as specified, try replacing the relay with a new one.
If circuit is not as specified, inspect the circuits connected to other parts.




**7. INSPECT DAYTIME RUNNING LIGHT NO.4 RELAY CONTINUITY**

| Condition | Tester connection | Specified condition |
|---|---|---|
| Constant | 3 – 4 | Continuity |
| Apply B+ between terminals 3 and 4. | 1 – 2 | Continuity |

If continuity is not as specified, replace the relay.

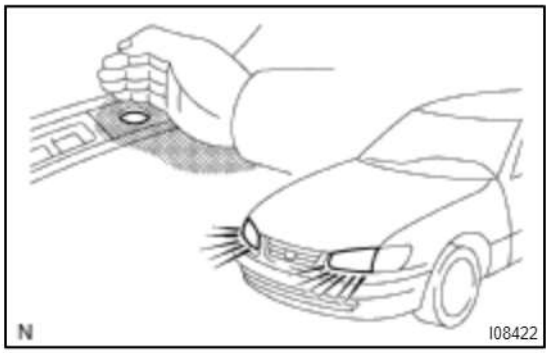



**8. INSPECT DAYTIME RUNNING LIGHT RESISTER CONTINUITY**

| Condition | Tester connection | Specified condition |
|---|---|---|
| Constant | 1 – 2 | Approx. 250mΩ |

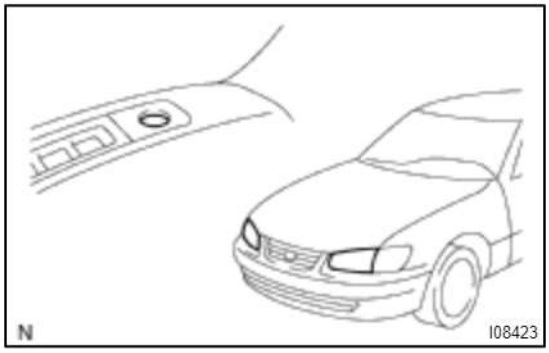
If continuity is not as specified, replace the resistor.

**9. INSPECT LIGHT AUTO TURN OFF SYSTEM**
**(See Integration relay circuit on page BE–14)**




**10. INSPECT AUTOMATIC LIGHT CONTROL**

(a) Turn the ignition switch ON.
(b) Turn the light control switch to OFF.
(c) Parking brake lever released.
(d) Gradually cover the top of the sensor.
(e) Verify that the lights should turn ON the accessory lights and the headlights.




**11. INSPECT AUTOMATIC LIGHT CONTROL**

(a) Gradually expose the sensor.
(b) Verify that the lights should turn OFF the headlights and the accessory lights.

**12. INSPECT LIGHT–OFF CONDITION**

(a) Turn the ignition switch ON.
(b) Gradually cover the top of the sensor.
Lights auto ON:

**13. INSPECT LIGHTS–ON CONDITION**

(a) Open the driver's door while the ignition switch is OFF.
(b) Turn the light control switch to OFF leaving the door open and cover the top of the sensor, and verify that the lights go on when the ignition switch is turned ON.

Wire harness side:




I01254

## 14. INSPECT AUTOMATIC LIGHT CONTROL SENSOR CIRCUIT

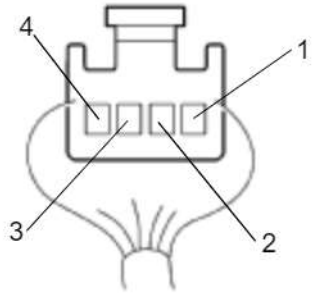
**Connector disconnected:**

Disconnect the connector from the sensor and inspect the connector on the wire harness side, as shown in the table.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 3 – Ground | Constant | Constant |
| 1 – Ground | Ignition switch LOCK or ACC | No voltage |
| 1 – Ground | Ignition switch ON | Battery positive voltage |
| 4 – Ground | Ignition switch LOCK or ACC | No voltage |
| 4 – Ground | Ignition switch ON | 5.2 – 9.0 v |

If circuit is as specified, perform the inspection on the following page.

If the circuit is not as specified, inspect the circuit connected to other parts.




I01255

## 15. INSPECT AUTOMATIC LIGHT CONTROL SENSOR CIRCUIT

**Connector disconnected:**

Connect the wire harness side connector to the sensor and inspect wire harness side connector from the back side, as shown.

HINT:

- Ignition switch ON.
- Light control switch OFF.
- Vehicle's surroundings are bright.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 3 – Ground | Constant | Continuity |
| 1 – Ground | Ignition switch LOCK or ACC | No voltage |
| 1 – Ground | Ignition switch ON | 9.5 V or more |
| Vehicle under the direct sun light.<br>(Sensor is not covered) | | Taillight and Headlight are ON. |

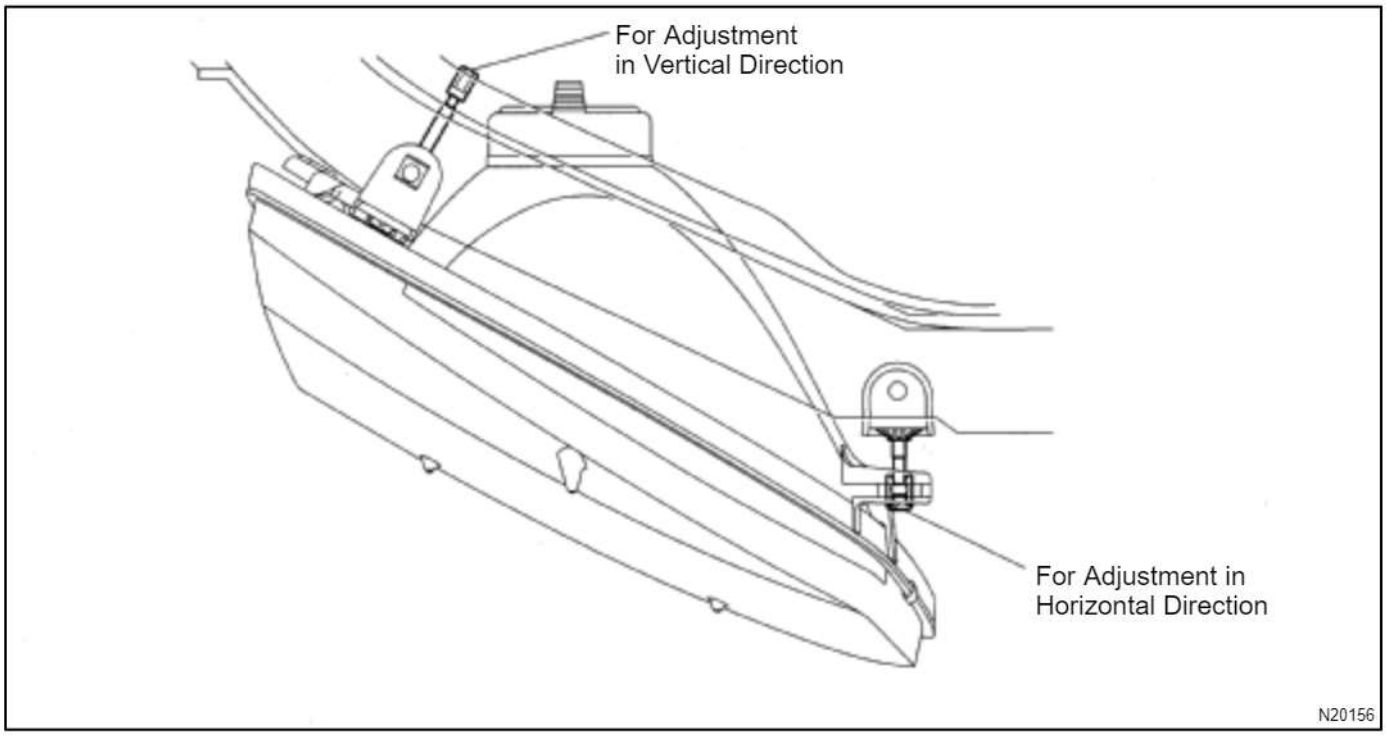
If circuit is as specified, try replacing the sensor with a new one.

If the circuit is not as specified, inspect the circuit connected to other parts.

BE0A7-02

# ADJUSTMENT

## 1. ADJUST HEADLIGHT AIMING



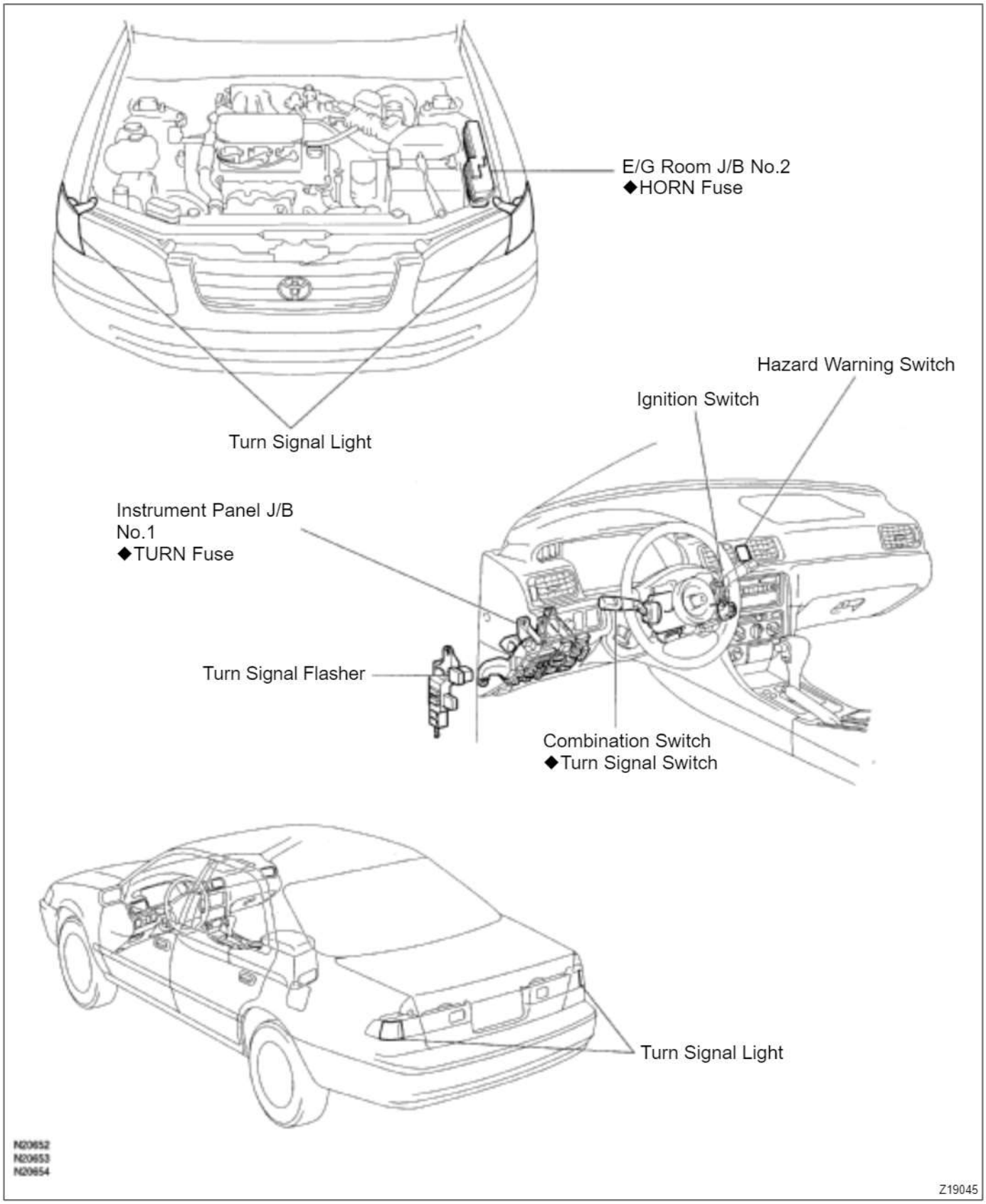

## 2. ADJUST SPIRAL CABLE

(See page SR–16)

# TURN SIGNAL AND HAZARD WARNING SYSTEM

BE0A8-03

## LOCATION



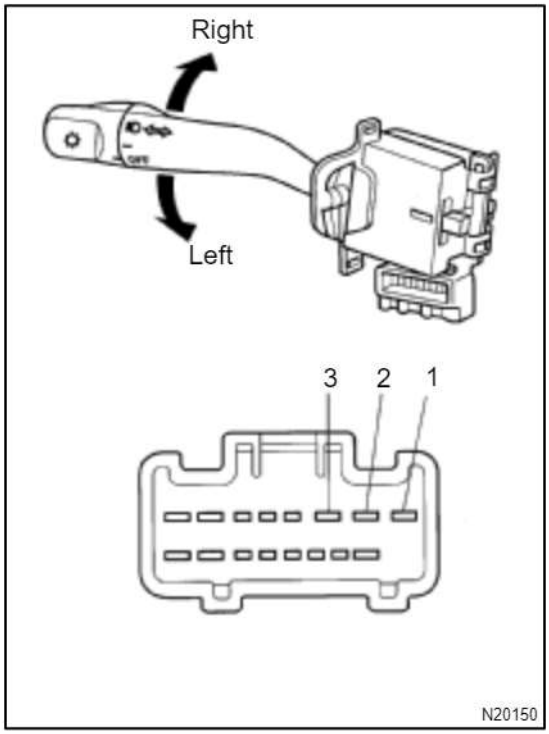
BE0A9-02

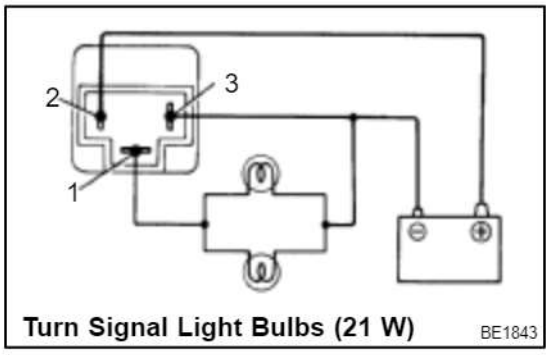
# INSPECTION

## 1. INSPECT TURN SIGNAL SWITCH CONTINUITY

| Switch position | Tester connection | Specified condition |
|---|---|---|
| Left turn | 1 – 2 | Continuity |
| Neutral | – | No continuity |
| Right turn | 2 – 3 | Continuity |

If continuity is not as specified, replace the switch.



**Turn Signal Light Bulbs (21 W)**

## 2. INSPECT TURN SIGNAL FLASHER OPERATION

(a) Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 3.

(b) Connect the 2 turn signal light bulbs in parallel to each other to terminals 1 and 3, check that the bulbs flash.

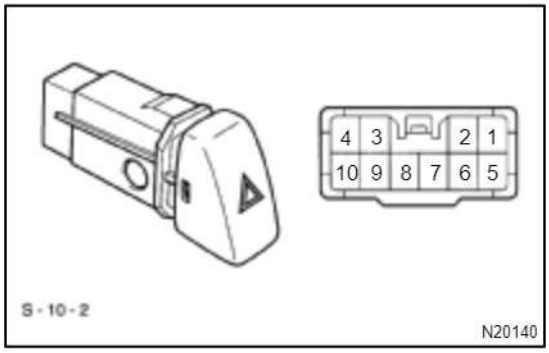
HINT:

The turn signal lights should flash 60 to 120 times per minute.
If one of the front or rear turn signal lights has an open circuit, the number of flashes will be more than 140 per minute.
If operation is not as specified, replace the flasher.

## 3. INSPECT HAZARD WARNING SWITCH CONTINUITY

| Switch position | Tester connection | Specified condition |
|---|---|---|
| Switch OFF | 7 – 10 | Continuity |
| Switch ON | 5 – 6 – 9<br>7 – 8 | Continuity |
| Illumination circuit | 2 – 3 | Continuity |

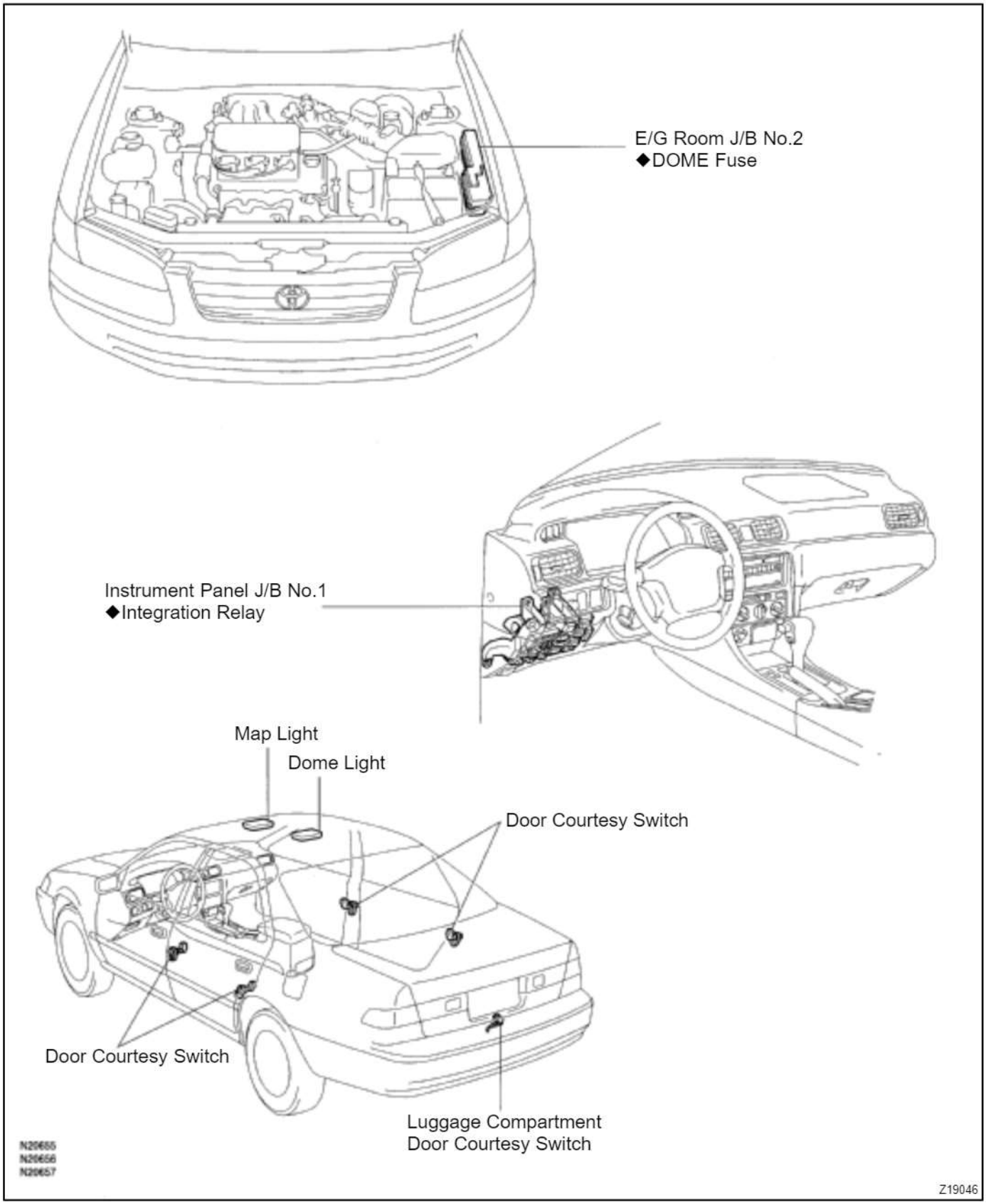
If continuity is not as specified, replace the switch.



# INTERIOR LIGHT SYSTEM

BE0AA-03

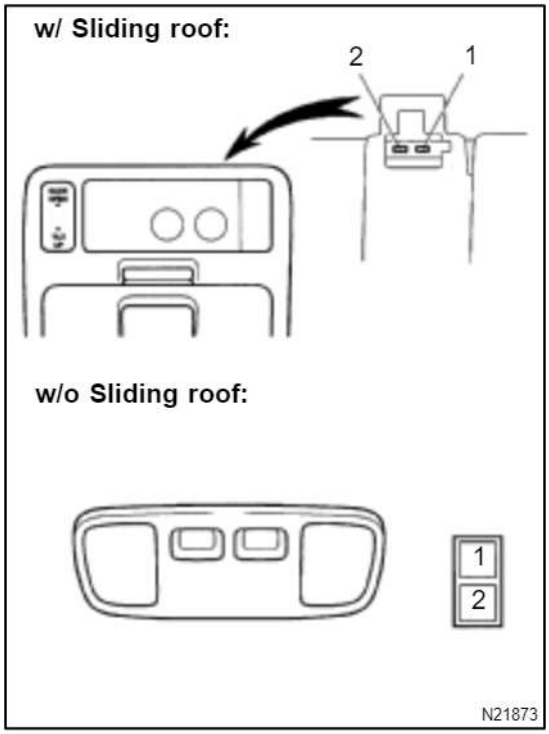
## LOCATION



BE0AB-03

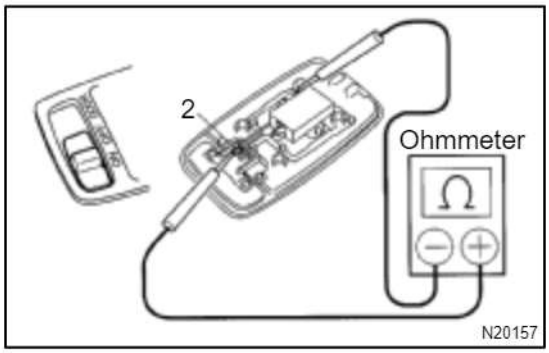
# INSPECTION

## 1. INSPECT MAP LIGHT SWITCH CONTINUITY




| Switch position | Tester connection | Specified condition |
|---|---|---|
| OFF | – | No continuity |
| ON | 1 – 2 | Continuity |

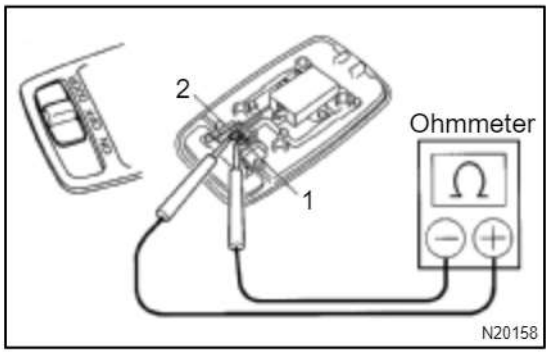
If continuity is not as specified, replace the light assembly or bulb.




## 2. INSPECT DOME LAMP SWITCH

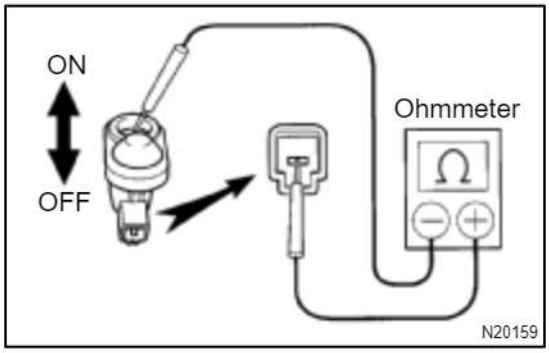
(a) Disconnect the connector from the dome lamp.

(b) Turn the dome lamp switch ON, check that continuity exists between terminal 2 and body ground.




(c) Turn the dome lamp switch DOOR, check that there is continuity exists between terminal 1 and 2.

If operation is not as specified, replace the switch.

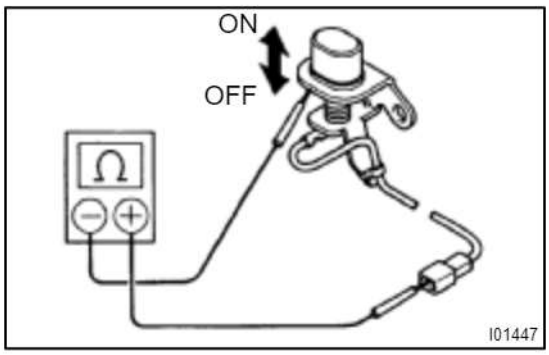



## 3. INSPECT DOOR COURTESY SWITCH CONTINUITY

(a) Check that continuity exists between terminal and the switch body with the switch ON (switch pin released: opened door).

(b) Check that no continuity exists between terminal and the switch body with the switch OFF (switch pin pushed in: closed doors).

If operation is not as specified, replace the switch.




**4. INSPECT LUGGAGE COMPARTMENT DOOR COURTESY SWITCH CONTINUITY**

(a) Check that continuity exists between terminal and switch body with the switch ON (switch pin released: opened door).

(b) Check that no continuity exists between the terminal and switch body with the switch OFF (switch pin pushed in: closed door).

If operation is not as specified, replace the switch.

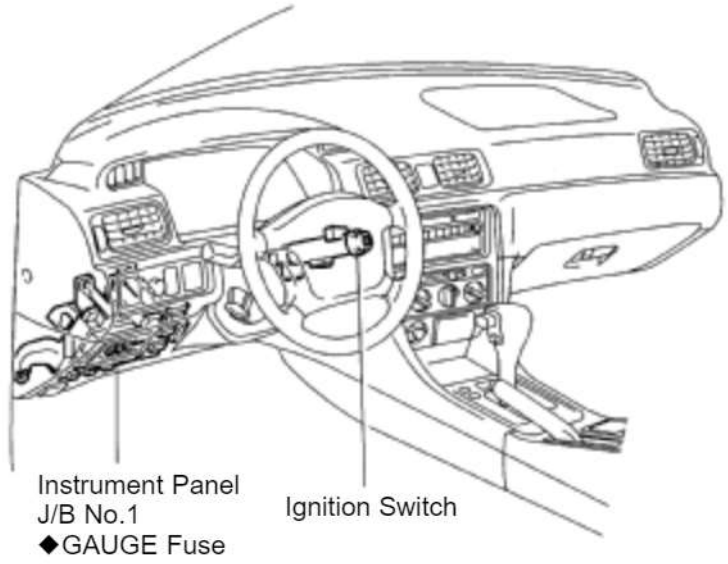
**5. INSPECT ILLUMINATED ENTRY SYSTEM**

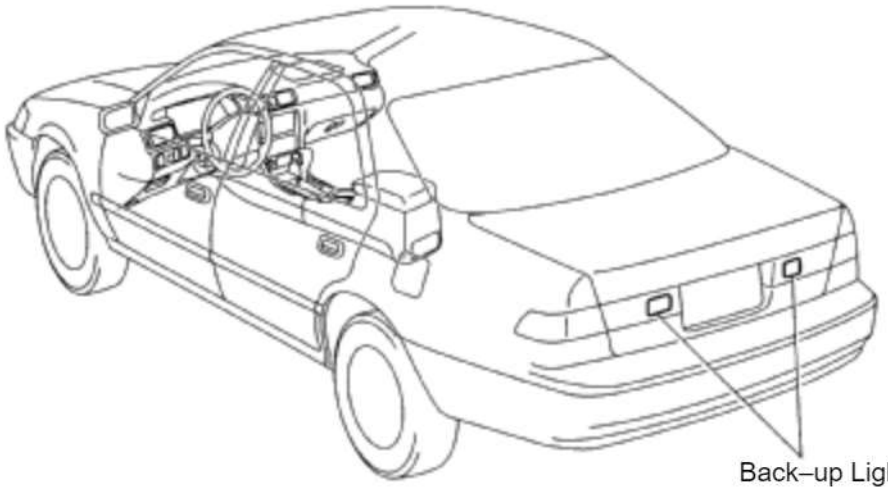
**(See Integration relay circuit on page BE–14)**

# BACK–UP LIGHT SYSTEM

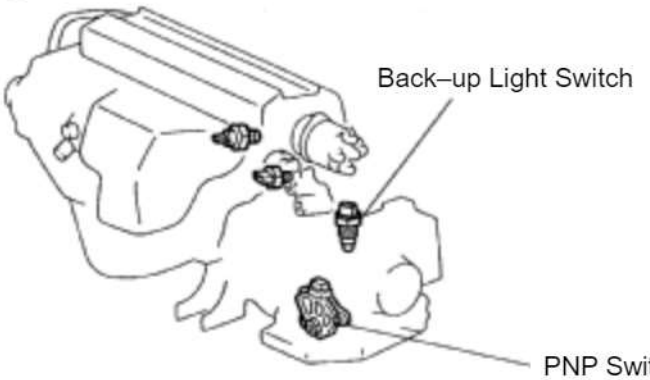
## LOCATION

BE0AC-02

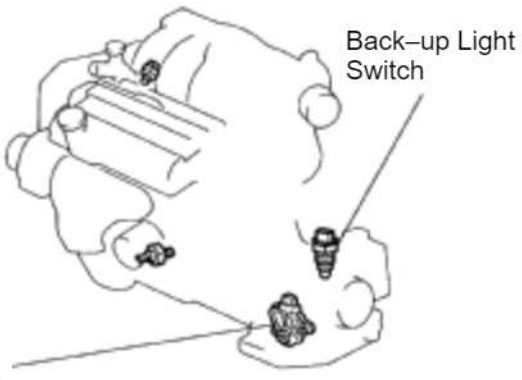



**5S–FE engine:**



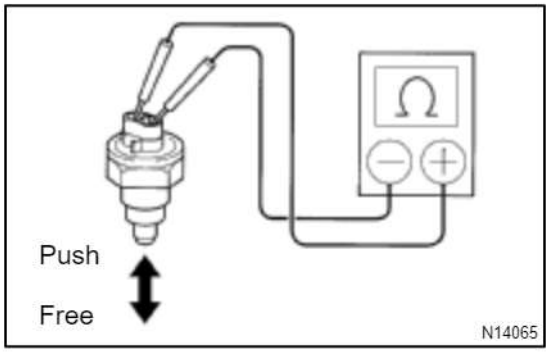

**1MZ–FE engine:**




N20658
N20659
N20660

Z19047

BE0AD–02




# INSPECTION

## INSPECT BACK–UP LIGHT SWITCH CONTINUITY

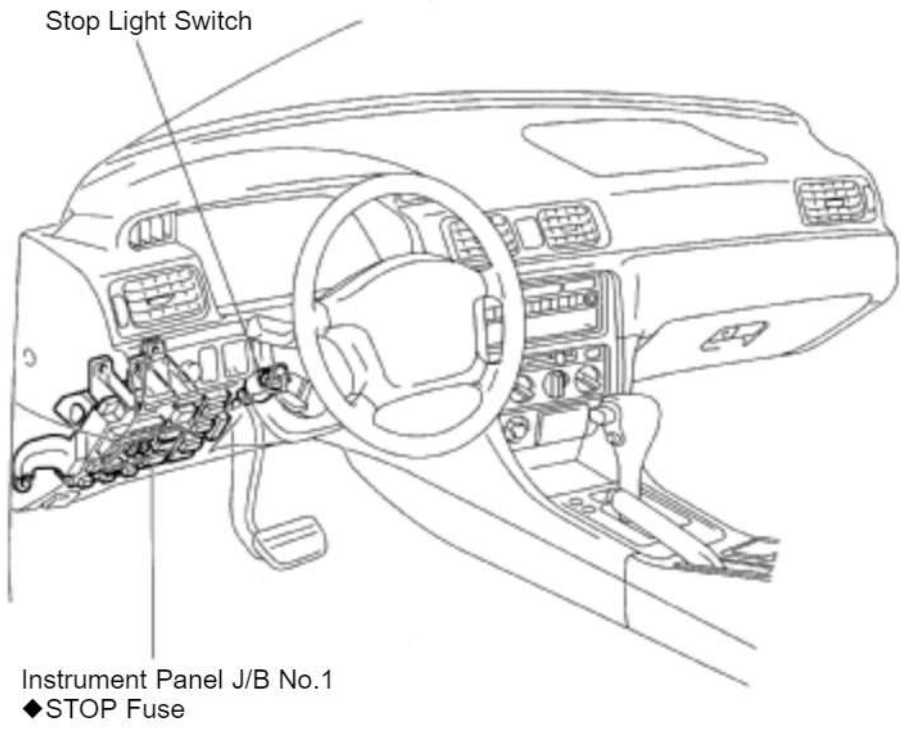
| Condition | Tester connection | Specified condition |
|---|---|---|
| Free | – | No continuity |
| Push | 1 – 2 | Continuity |

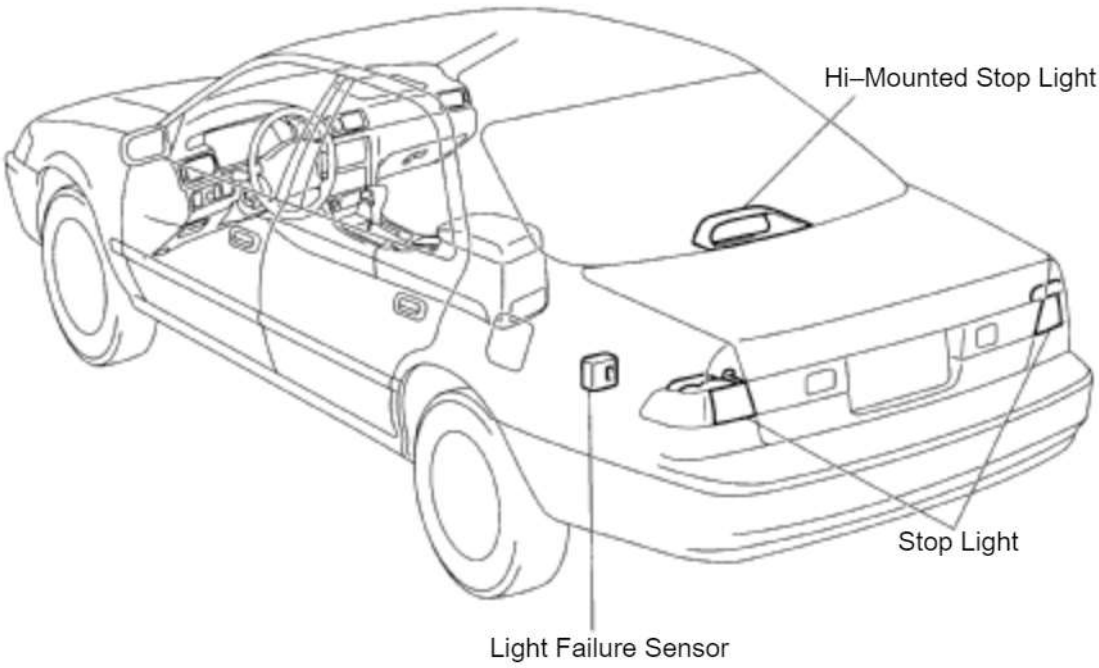
If continuity is not as specified, replace the switch.

# STOP LIGHT SYSTEM

## LOCATION

BE0AE-02

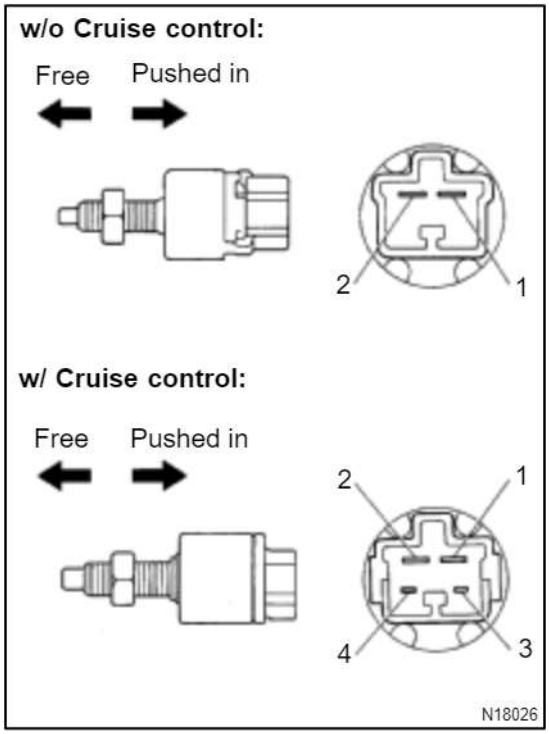



N20681
N20682

Z19048

BE0AF-02




# INSPECTION

**1. w/o Cruise control:**
**INSPECT STOP LIGHT SWITCH CONTINUITY**

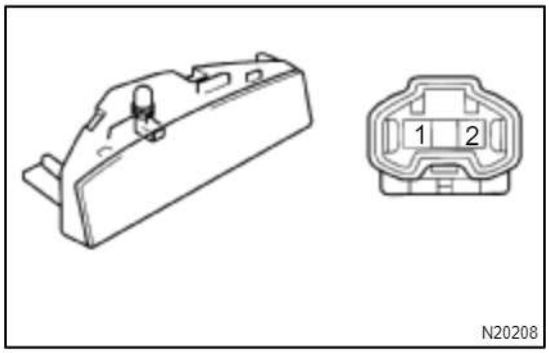
| Switch position | Tester connection | Specified condition |
|---|---|---|
| Switch pin free | 1 – 2 | Continuity |
| Switch pin pushed in | 1 – 2 | No continuity |

If continuity is not as specified, replace the switch.

**2. w/ Cruise control:**
**INSPECT STOP LIGHT SWITCH CONTINUITY**

| Switch position | Tester connection | Specified condition |
|---|---|---|
| Switch pin free | 1 – 2 | Continuity |
| Switch pin pushed in | 1 – 2 | No continuity |
| Switch pin free | 3 – 4 | No continuity |
| Switch pin pushed in | 3 – 4 | Continuity |

If continuity is not as specified, replace the switch.

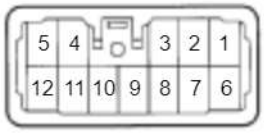



**3. INSPECT HI–MOUNTED STOP LIGHT ASSEMBLY CONTINUITY**

Using the ohmmeter, check that continuity exists between terminals.

If continuity is not as specified, replace the bulb or light assembly.

**Wire harness side:**




e–12–2–B N20209

## 4. INSPECT LIGHT FAILURE RELAY CIRCUIT

Disconnect the connector from the relay and inspect the connector on the wire harness side, as shown.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 1 – Ground | Constant | Continuity* |
| 2 – Ground | Constant | Continuity* |
| 9 – Ground | Constant | Continuity* |
| 11 – Ground | Constant | Continuity |
| 3 – Ground | Light control switch OFF | No voltage |
| 3 – Ground | Light control switch TAIL or HEAD | Battery positive voltage |
| 4 – Ground | Ignition switch LOCK or ACC | No voltage |
| 4 – Ground | Ignition switch ON | Battery positive voltage |
| 7 – Ground | Stop light switch OFF | No voltage |
| 7 – Ground | Stop light switch ON | Battery positive voltage |
| 8 – Ground | Ignition switch LOCK or ACC | No voltage |
| 8 – Ground | Ignition switch ON | Battery positive voltage |

*: There is resistance because this circuit is grounded through the bulb.

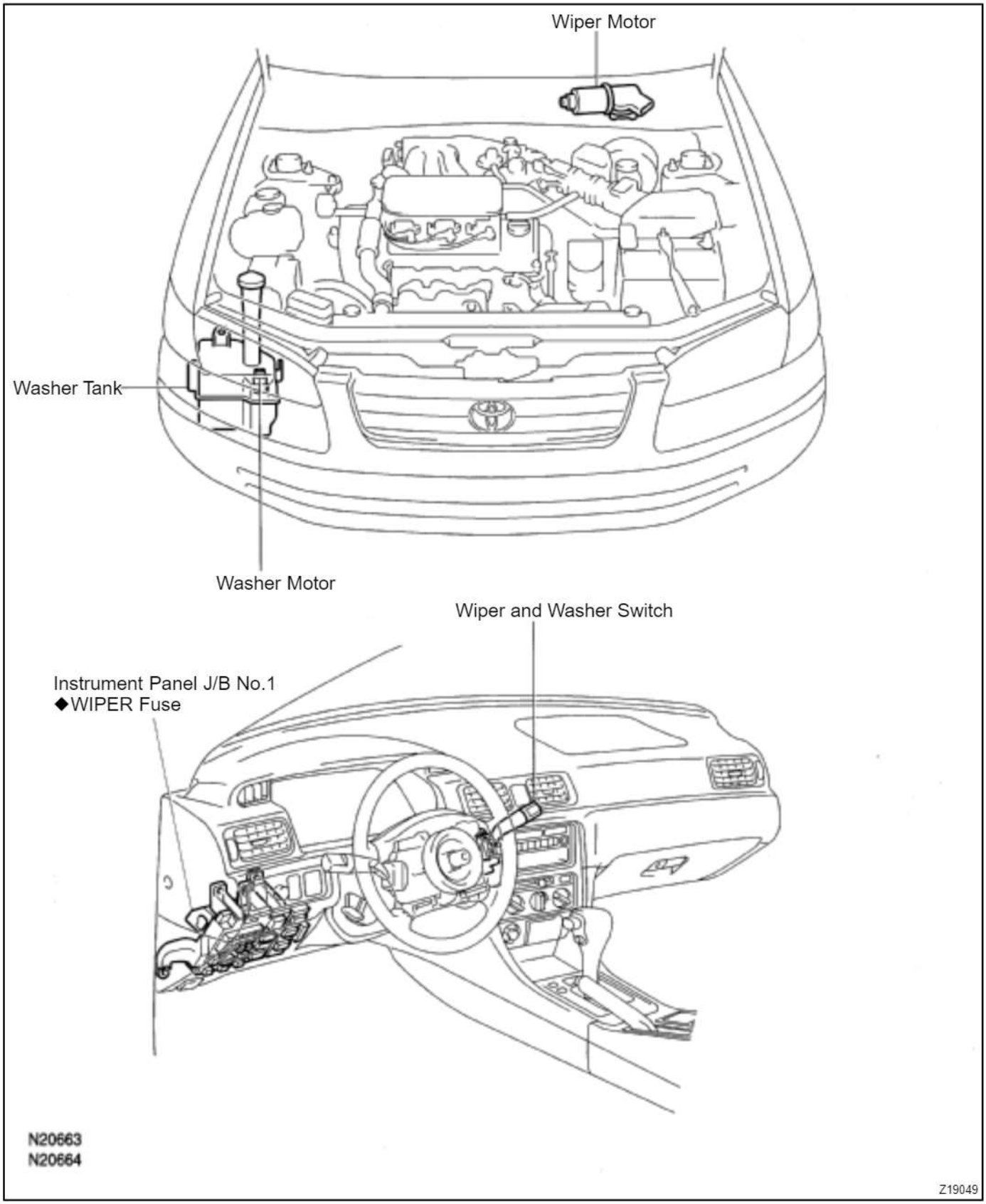
If the circuit is as specified, replace the relay.

If the circuit is not as specified, inspect the circuits connected to other parts.

# WIPER AND WASHER SYSTEM

BE0AG-03

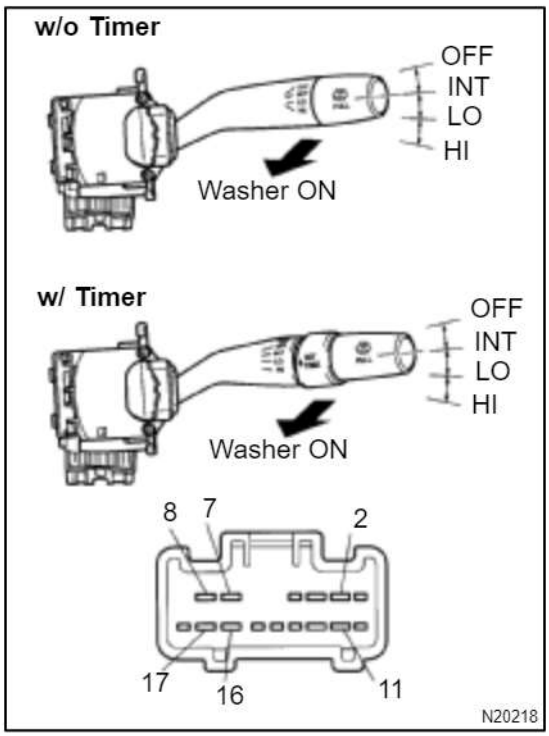
## LOCATION



BE0AH-03

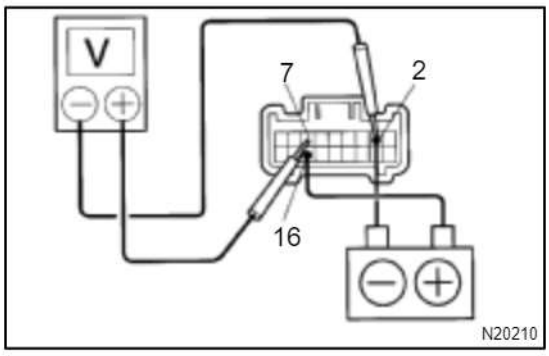
# INSPECTION

## 1. INSPECT FRONT WIPER AND WASHER SWITCH CONTINUITY




| Switch position | Tester connection | Specified condition |
|---|---|---|
| OFF | 7 – 16 | Continuity |
| INT | 7 – 16 | Continuity |
| LO | 7 – 17 | Continuity |
| HI | 8 – 17 | Continuity |
| Washer ON | 2 – 11 | Continuity |

If continuity is not as specified, replace the switch.



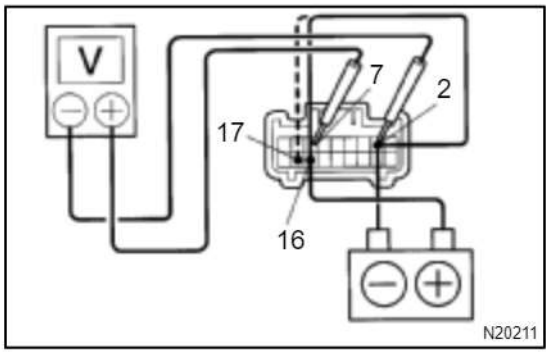

## 2. INSPECT INTERMITTENT OPERATION

(a) Turn the wiper switch to INT position.

(b) Turn the intermittent time control switch to FAST position.

(c) Connect the positive (+) lead from the battery to terminal 16 and the negative (–) lead to terminal 2.

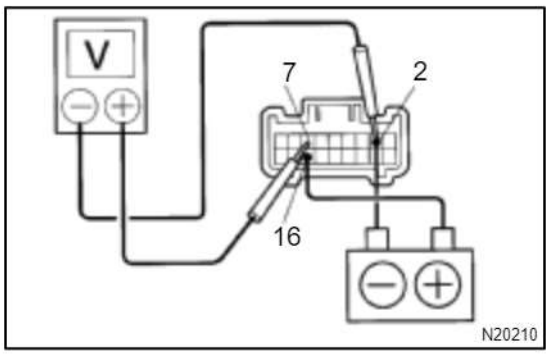
(d) Connect the positive (+) lead from the voltmeter to terminal 7 and the negative (–) lead to terminal 2, check that the meter needle indicates battery positive voltage.




(e) After connecting terminal 16 to terminal 17, connect it to terminal 2, check the voltage rises from 0 volts to battery positive voltage within the time, as shown in the table.

| INT time control switch position | Voltage |
|---|---|
| FAST | Approx. 2 sec. — Battery positive voltage — 0 V |
| SLOW | 10.7 ± 5 sec. — Battery positive voltage — 0 V |
| Non variable type | 3.3 ± 1 sec. — Battery positive voltage — 0 V |

If operation is not as specified, replace the wiper and washer switch.

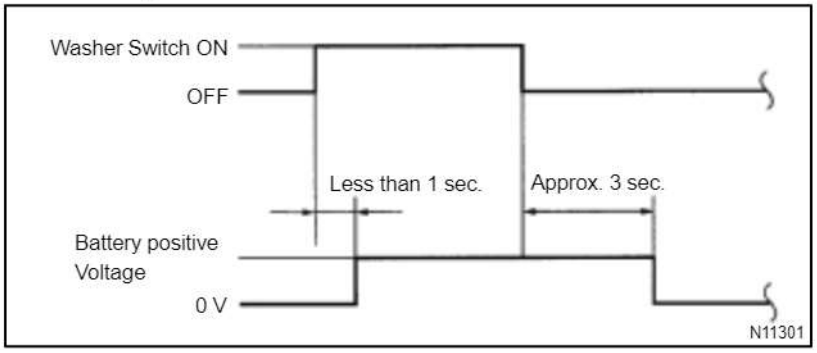



### 3. INSPECT WASHER LINKED OPERATION

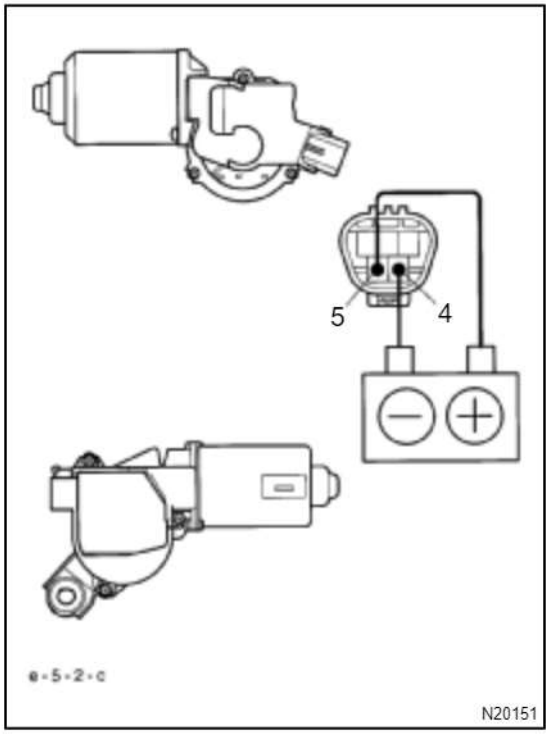
(a) Connect the positive (+) lead from the battery to terminal 16 and the negative (–) lead to terminal 2.

(b) Connect the positive (+) lead from the voltmeter to terminal 7 and the negative (–) lead to terminal 2.

(c) Push in the washer switch, and check that the voltage changes as shown in the chart.



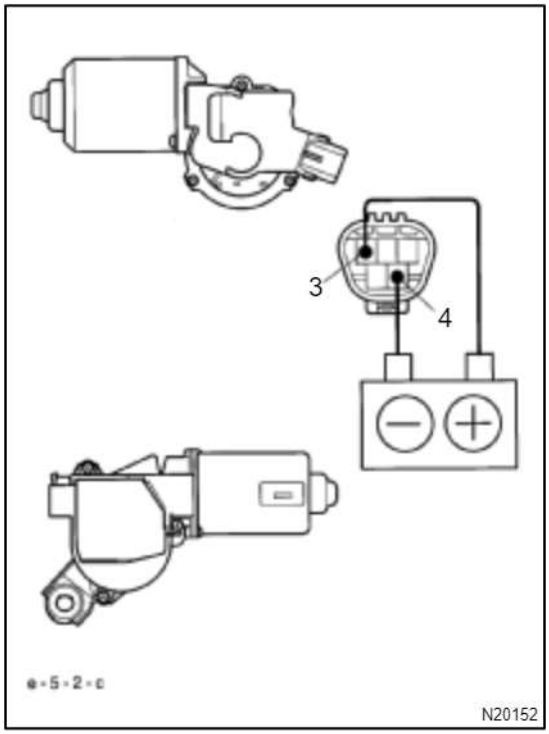

If operation is not as specified, replace the wiper and washer switch.




### 4. Low speed: INSPECT FRONT WIPER MOTOR OPERATION

Connect the positive (+) lead from the battery to terminal 5 and the negative (–) lead to terminal 4, check that the motor operates at low speed.

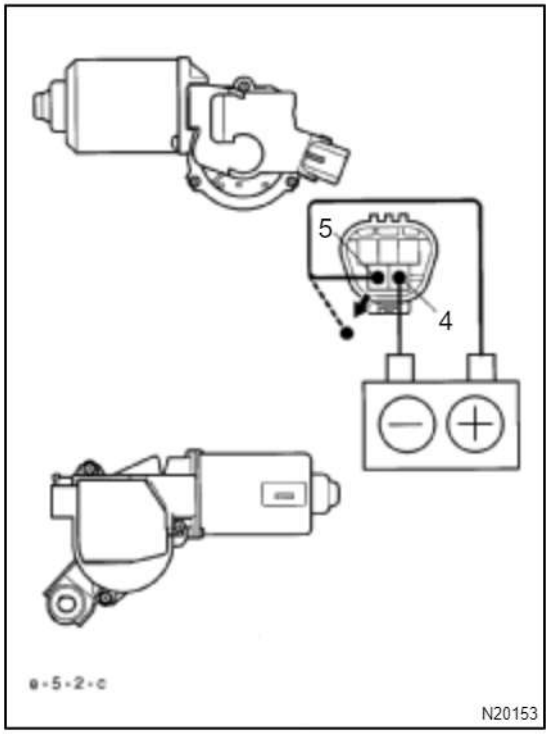
If operation is not as specified, replace the motor.




**5. High speed:**
**INSPECT FRONT WIPER MOTOR OPERATION**

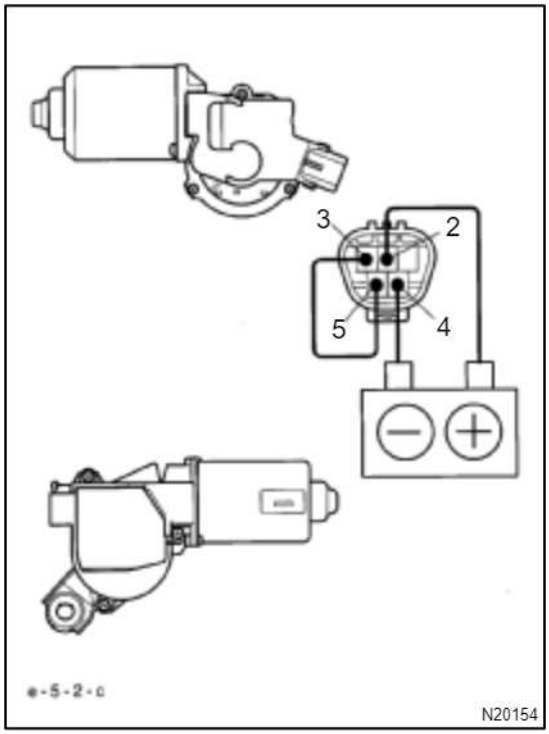
Connect the positive (+) lead from the battery to terminal 3 and the negative (–) lead to terminal 4, check that the motor operates at high speed.

If operation is not as specified, replace the motor.



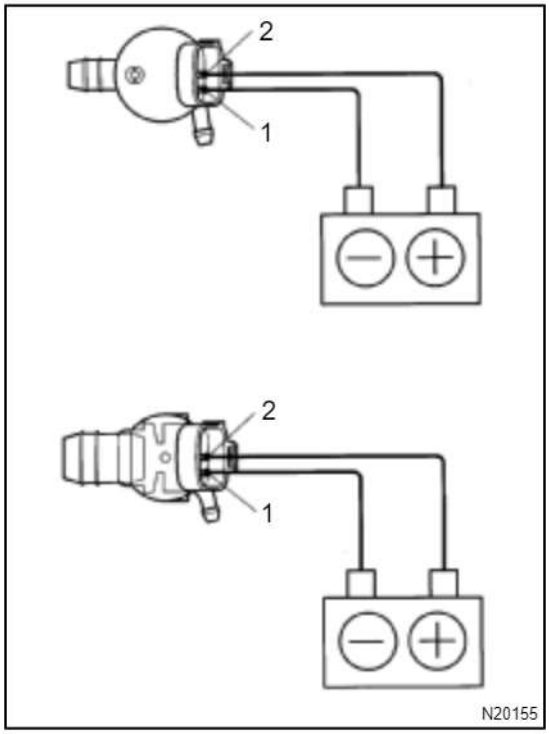

**6. Stopping in stop position:**
**INSPECT FRONT WIPER MOTOR OPERATION**

(a) Operate the motor at low speed and stop the motor operation anywhere except in the stop position by disconnecting positive (+) lead from terminal 5.




(b) Connect terminals 3 and 5.
(c) Connect the positive (+) lead from the battery to terminal 2 and negative (–) lead to terminal 4, check that the motor stops running in the stop position after the motor operates again.

If operation is not as specified, replace the motor.




### 7. INSPECT WASHER MOTOR OPERATION

Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, check that the motor operates.

**NOTICE:**

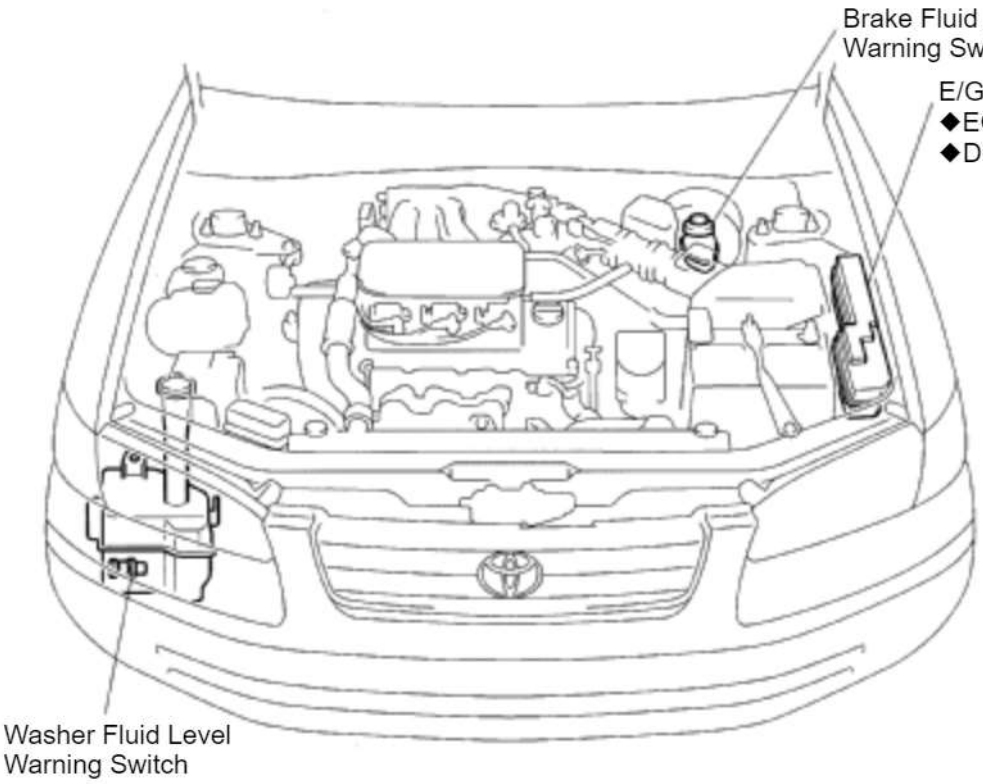
**These tests must be performed quickly (within 20 seconds) to prevent the coil from burning out.**

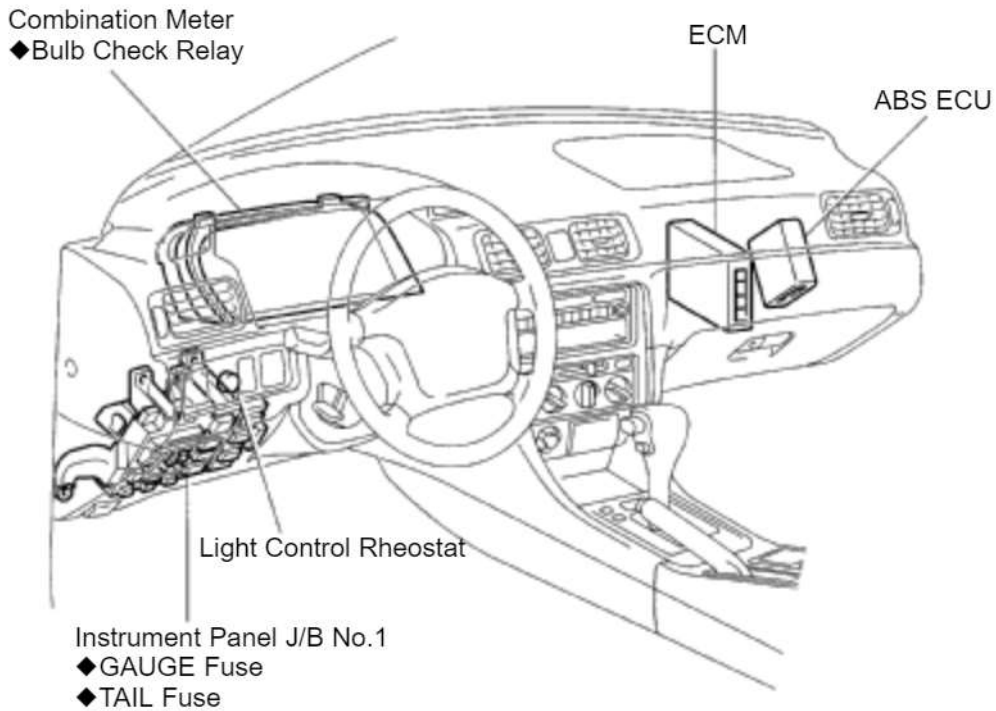
If operation is not as specified, replace the motor.

# COMBINATION METER

## LOCATION

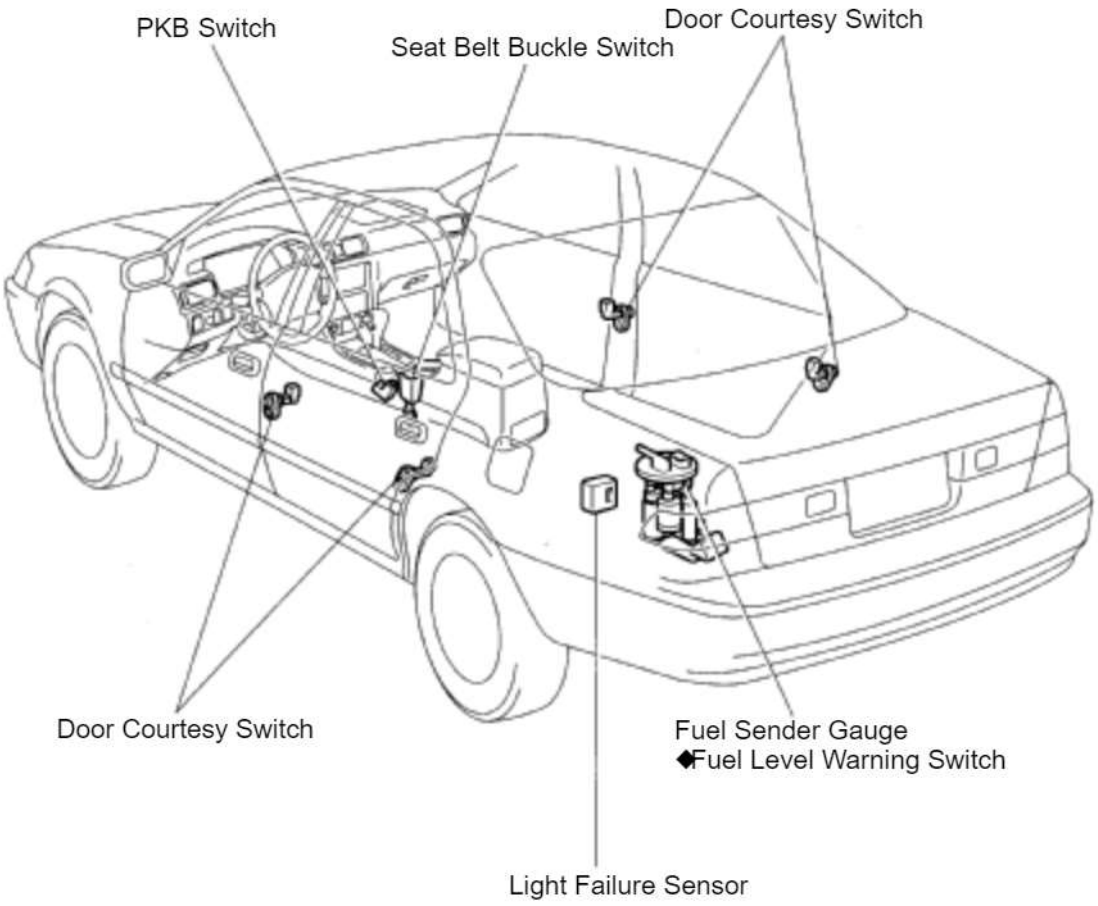
BE0AI-03



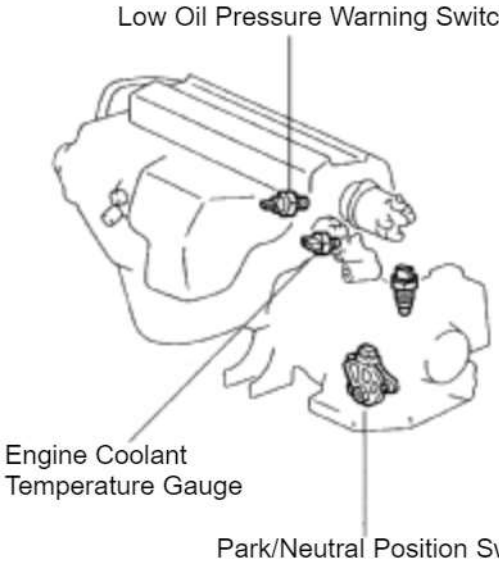




N20665
N20666

Z19050

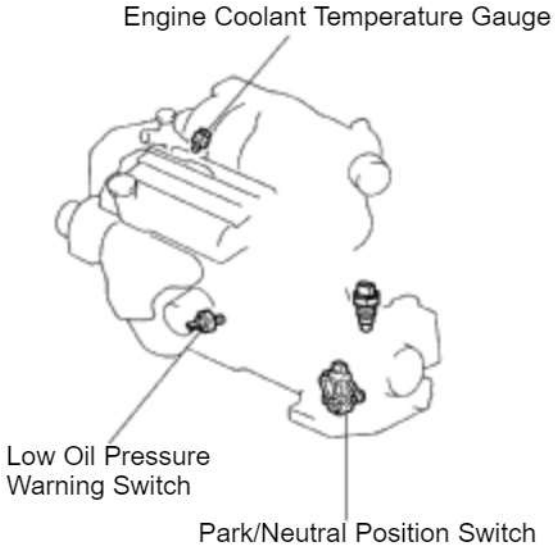



**5S–FE engine:**




N20867
N20868

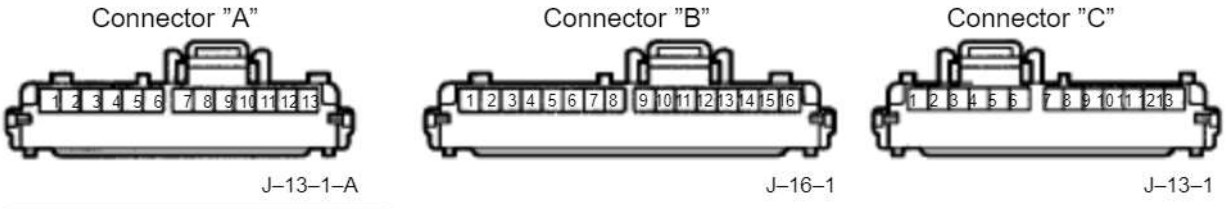
**1MZ–FE engine:**

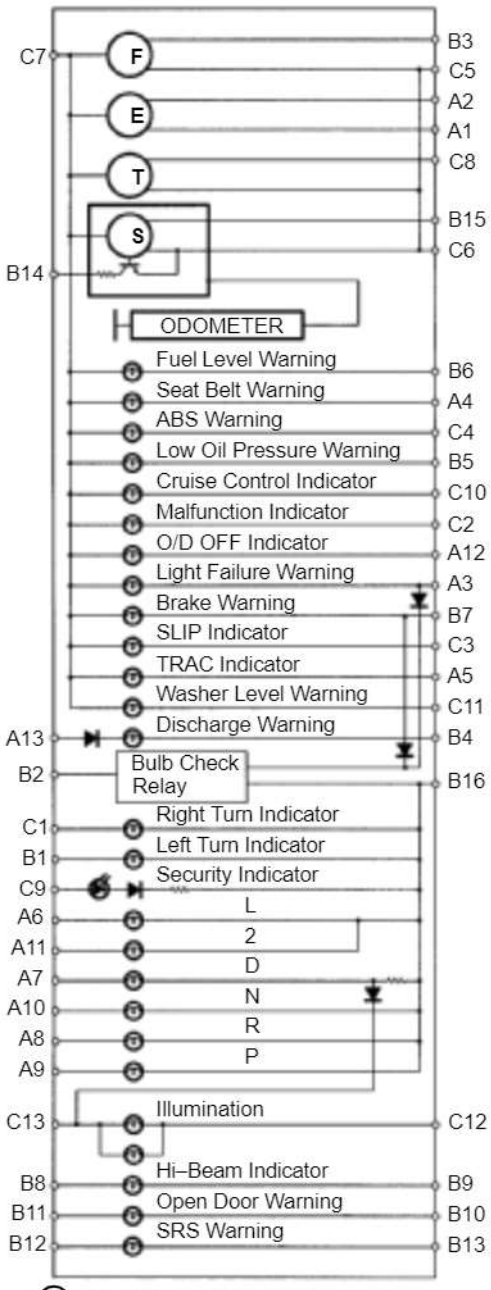



Z19055

BE0AJ-03

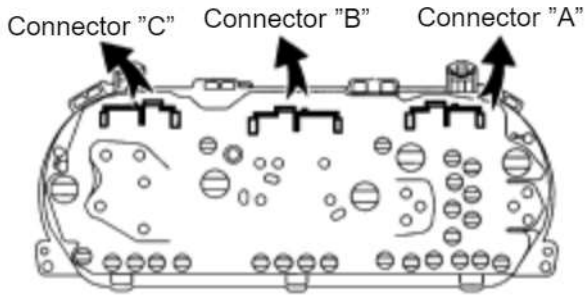
# CIRCUIT




Ⓕ : Fuel Gauge
Ⓔ : Engine Coolant Temperature Gauge
Ⓣ : Tachometer
Ⓢ : Speedometer

N20107 N20108




| No. | | Wire Harness Side |
|---|---|---|
| A | 1 | Engine coolant temperature sender gauge |
| | 2 | Ground |
| | 3 | Light failure sensor |
| | 4 | Integration relay |
| | 5 | Traction ECU |
| | 6 | Park/neutral position switch (A/T) |
| | 7 | Park/neutral position switch (A/T) |
| | 8 | Park/neutral position switch (A/T) |
| | 9 | Park/neutral position switch (A/T) |
| | 10 | Park/neutral position switch (A/T) |
| | 11 | Park/neutral position switch (A/T) |
| | 12 | O/D OFF switch (A/T) |
| | 13 | IGN fuse |
| B | 1 | Turn signal switch |
| | 2 | ST relay |
| | 3 | Fuel sender gauge |
| | 4 | Generator |
| | 5 | Oil pressure switch |
| | 6 | Fuel sender gauge |
| | 7 | Parking brake switch and brake fluid level warning switch |
| | 8 | Headlight dimmer switch |
| | 9 | Headlight dimmer switch |
| | 10 | Door courtesy switch |
| | 11 | DOME fuse |
| | 12 | ECU–B fuse |
| | 13 | Airbag sensor assembly |
| | 14 | ECM |
| | 15 | No.1 Vehicle speed sensor |
| | 16 | Ground |
| C | 1 | Turn signal switch |
| | 2 | ECM |
| | 3 | Traction ECU |
| | 4 | ABS ECU |
| | 5 | Ground |
| | 6 | No.1 Vehicle speed sensor |
| | 7 | GAUGE fuse |
| | 8 | Igniter |
| | 9 | Security ECU |
| | 10 | Cruise control ECU |
| | 11 | Washer fluid level warning switch |
| | 12 | Light control rheostat |
| | 13 | TAIL fuse |

Z18937

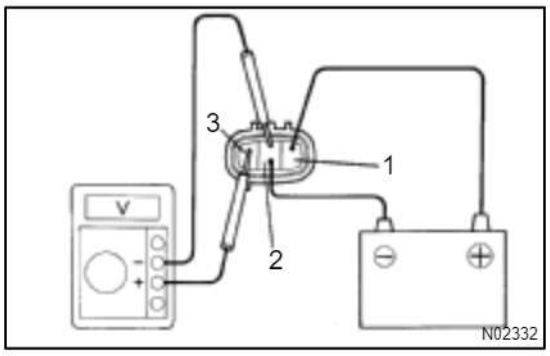
BE0AK-03

# INSPECTION

## 1. INSPECT SPEEDOMETER ON–VEHICLE

Using a speedometer tester, inspect the speedometer for allowable indication error and check the operation of the odometer.
HINT:
Tire wear and tire over or under inflation will increase the indication error.
If error is excessive, replace the speedometer.

| USA (mph) | | CANADA (km/h) | |
|---|---|---|---|
| Standard indication | Allowable range | Standard indication | Allowable range |
| 20 | 18 – 24 | 20 | 17 – 24 |
| 40 | 38 – 44 | 40 | 38 – 46 |
| 60 | 56 – 66 | 60 | 57.5 – 67 |
| 80 | 78 – 88 | 80 | 77 – 88 |
| 100 | 98 – 110 | 100 | 96 – 109 |
| 120 | 118 – 132 | 120 | 115 – 130 |
| | | 140 | 134 – 151.5 |
| | | 160 | 153 – 173 |




## 2. INSPECT VEHICLE SPEED SENSOR OPERATION

(a) Connect the positive (+) lead from the battery to terminal 1 and negative (–) lead to terminal 2.
(b) Connect the positive (+) lead from the tester to terminal 3 and the negative (–) lead to terminal 2.
(c) Rotate the shaft.
(d) Check that there is voltage change from approx. 0 V to 11 V or more between terminals 2 and 3.

HINT:
The voltage change should be performed 4 times for every revolution of the speed sensor shaft.
If operation is not as specified, replace the sensor.

## 3. INSPECT TACHOMETER ON–VEHICLE

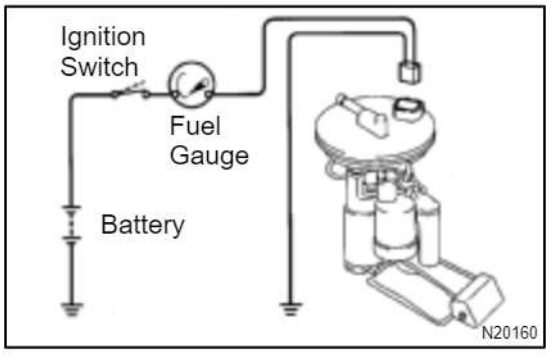
(a) Connect a tune–up test tachometer, and start the engine.

**NOTICE:**

- **Reversing the connection of the tachometer will damage the transistors and diodes inside.**
- **When removing or installing the tachometer, be careful not to drop or subject it to heavy shocks.**

(b) Compare the tester with tachometer indications.
**DC 13.5 V 25˚C at (77 ˚F)**

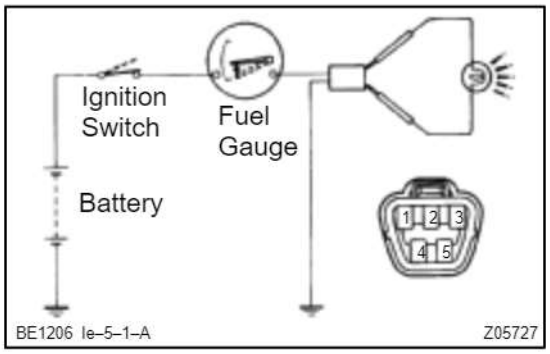
| Standard indication | Allowable range |
|---|---|
| 700 | 630 – 770 |
| 1,000 | 900 – 1,100 |
| 2,000 | 1,850 – 2,150 |
| 3,000 | 2,800 – 3,200 |
| 4,000 | 3,800 – 4,200 |
| 5,000 | 4,800 – 5,200 |
| 6,000 | 5,750 – 6,250 |
| 7,000 | 6,700 – 7,300 |




**4. INSPECT FUEL RECEIVER GAUGE OPERATION**

(a) Disconnect the connector from the sender gauge.

(b) Turn the ignition switch ON, check that the receiver gauge needle indicates EMPTY.



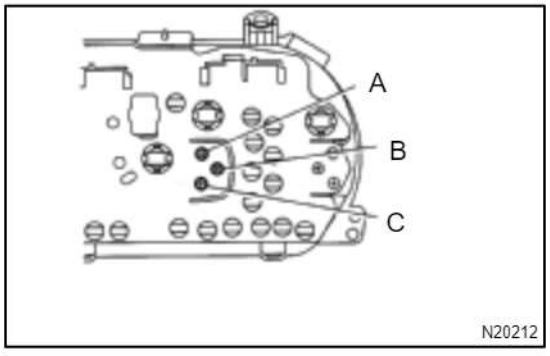

(c) Connect terminals 2 and 3 on the wire harness side connector through a 3.4–W test bulb.

(d) Turn the ignition switch ON, check that the bulb lights up and the receiver gauge needle moves towards the full side.

HINT:

Because of the silicon oil in the gauge, it will take a short time for needle to stabilize.

If operation is not as specified, inspect the receiver gauge resistance.

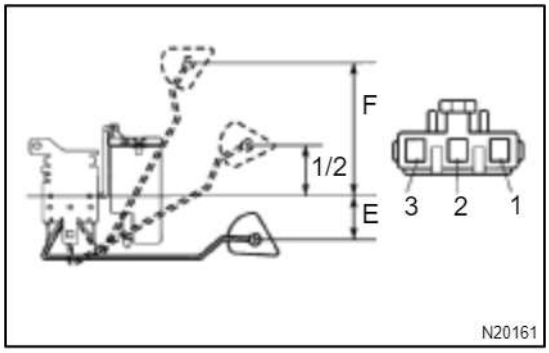



**5. INSPECT FUEL RECEIVER GAUGE RESISTANCE**

Measure the resistance between terminals.

| Tester connection | Resistance (Ω) |
|---|---|
| A – B | Approx. 126.2 |
| A – C | Approx. 280.5 |
| B – C | Approx. 154.3 |

If resistance value is not as specified, replace the receiver gauge.

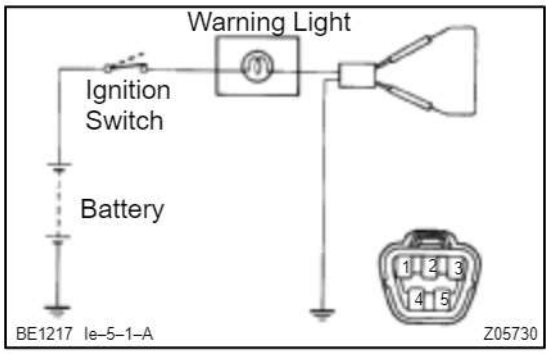



### 6. INSPECT FUEL SENDER GAUGE RESISTANCE

Measure the resistance between terminals 2 and 3 for each float position.

| Float position mm (in.) | Resistance (Ω) |
|---|---|
| F: Approx. –91.1 (–3.587) | Approx. 3.0 |
| 1/2: Approx. –34.2 (–1.346) | Approx. 31.7 |
| E: Approx. 30.8 (1.213) | Approx. 110.0 |

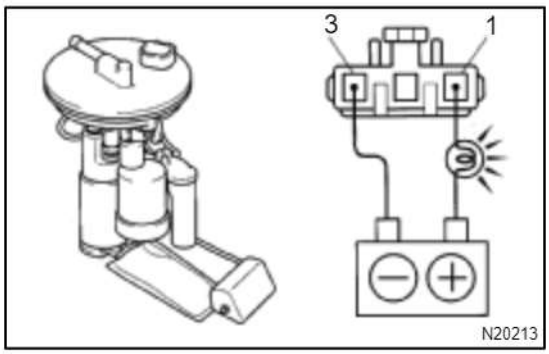
If resistance value is not as specified, replace the sender gauge.




### 7. INSPECT FUEL LEVEL WARNING LIGHT

(a) Disconnect the connector from the sender gauge.
(b) Connect terminals 1 and 3 on the wire harness side connector.
(c) Turn the ignition switch ON, check that the warning light lights up.

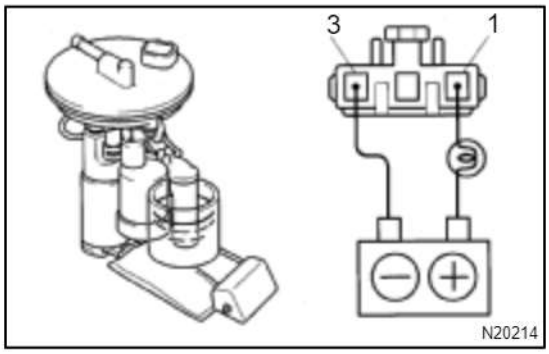
If the warning light does not light up, test the bulb or inspect wire harness.




### 8. INSPECT FUEL LEVEL WARNING SWITCH

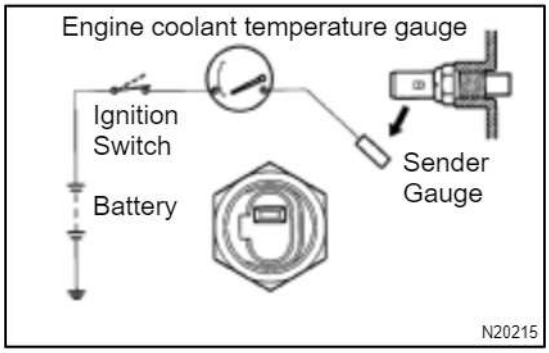
(a) Apply battery positive voltage between terminals 1 and 3 through a 3.4–W test bulb, check that the bulb lights up.

HINT:
It takes a short time for the bulb to light up.



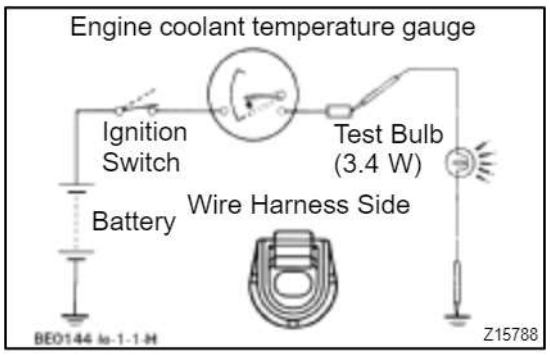

(b) Submerge the switch in fuel, check that the bulb goes out.

If operation is not as specified, replace the sender gauge.



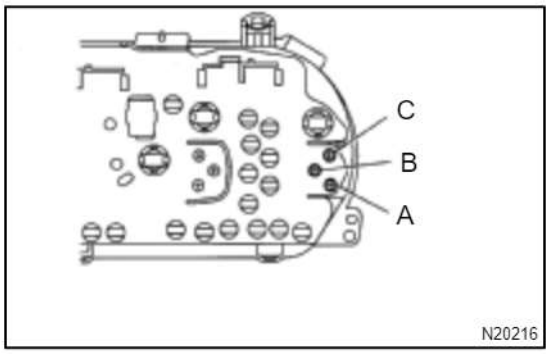

### 9. INSPECT ENGINE COOLANT TEMPERATURE RECEIVER GAUGE OPERATION

(a) Disconnect the connector from the sender gauge.
(b) Turn the ignition switch ON and check that the receiver gauge needle indicates COOL.




(c) Ground terminal on the wire harness side connector through a 3.4–W test bulb.
(d) Turn the ignition switch ON, and check that the bulb lights up and the receiver gauge needle moves to the hot side.

If operation is as specified, replace the sender gauge.
Then, recheck the system.
If operation is not as specified, measure the receiver gauge resistance.

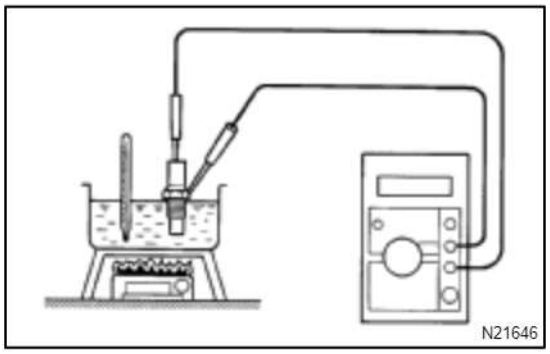



### 10. INSPECT ENGINE COOLANT TEMPERATURE RECEIVER GAUGE RESISTANCE

Measure the resistance between terminals.

| Tester connection | Resistance (Ω) * |
|---|---|
| A – B | Approx. 175.7 |
| A – C | Approx. 54.0 |
| B – C | Approx. 229.7 |

*: This circuit includes the diode.
HINT:
Connect the test leads so that the current from the ohmmeter can flow according to the above order.
If resistance value is not as specified, replace the receiver gauge.

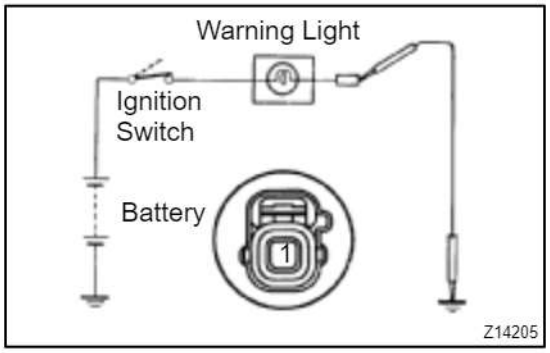



### 11. INSPECT ENGINE COOLANT TEMPERATURE SENDER GAUGE RESISTANCE

Measure the resistance between the terminal and gauge body.

| Temperature °C (°F) | Resistance (Ω) |
|---|---|
| 50 (122.0) | 274 |
| 120 (248.0) | 26.4 |

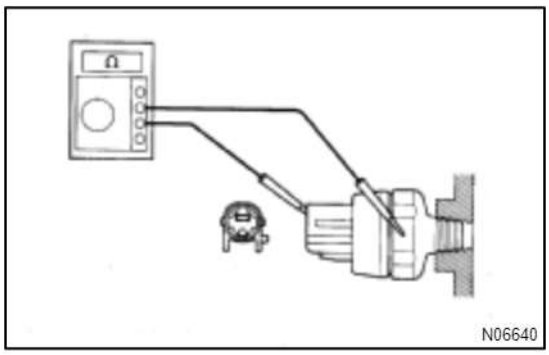
If resistance value is not as specified, replace the engine coolant temperature sender gauge.




### 12. INSPECT LOW OIL PRESSURE WARNING LIGHT

(a) Disconnect the connector from the warning switch and ground terminal on the wire harness side connector.
(b) Turn the ignition switch ON and check that the warning light lights up.

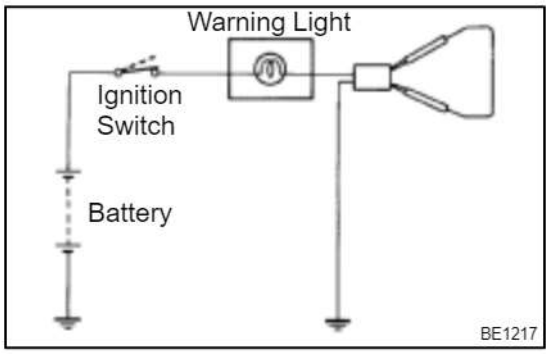
If the warning light does not light up, test the bulb.




**13. INSPECT LOW OIL PRESSURE SWITCH**

(a) Disconnect the connector from the switch.
(b) Check that continuity exists between terminal and ground with the engine stopped.
(c) Check that no continuity exists between terminal and ground with the engine running.

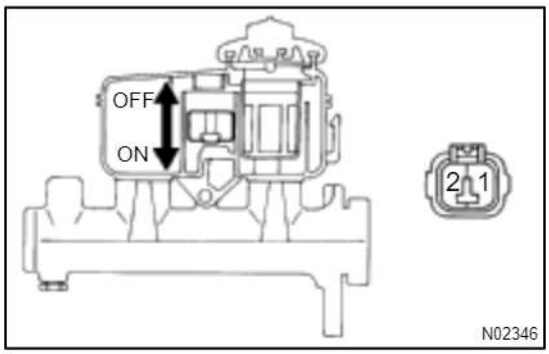
HINT:
Oil pressure should be over 24.5 kPa (0.25 kgf/cm$^2$, 3.55 psi).
If operation is not as specified, replace the switch.




**14. INSPECT BRAKE SYSTEM WARNING LIGHT**

(a) Disconnect the connector from the brake fluid warning switch.
(b) Release the parking brake pedal.
(c) Connect the terminals on the wire harness side of the level warning switch connector.
(d) Start the engine, check that the warning light lights up.

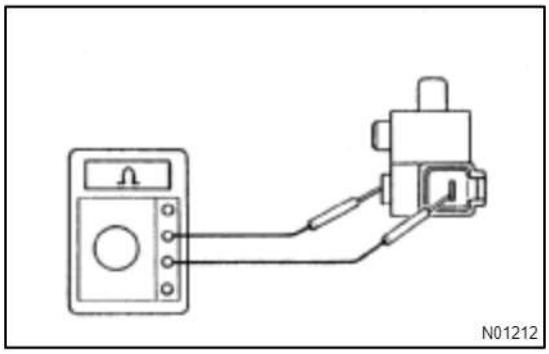
If the warning light does not light up, test the bulb or wire harness.




**15. INSPECT BRAKE FLUID LEVEL WARNING SWITCH**

(a) Remove the reservoir tank cap and strainer.
(b) Disconnect the connector.
(c) Check that no continuity exists between the terminals with the switch OFF (float up).
(d) Use syphon, etc. to take fluid out of the reservoir tank.
(e) Check that continuity exists between the terminals with the switch ON (float down).
(f) Pour the fluid back in the reservoir tank.

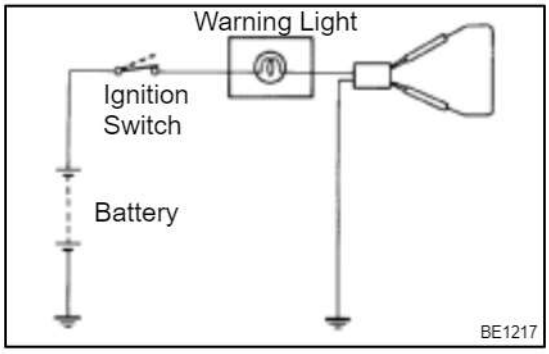
If operation is not as specified, replace the switch.




**16. INSPECT PARKING BRAKE SWITCH**

(a) Check that continuity exists between the terminal and switch body with the switch ON (switch pin released).
(b) Check that no continuity exists between the terminal and switch body with the switch OFF (switch pin pushed in).

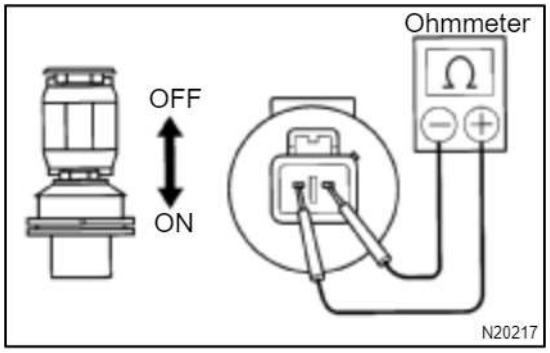
If operation is not as specified, replace the switch or inspect ground point.




**17. INSPECT WASHER FLUID LEVEL WARNING LIGHT**

(a) Disconnect the connectors from the level warning switch and parking brake switch.
(b) Connect terminals on the wire harness side connector of the level warning switch connector.
(c) Remove the GAUGE fuse and turn the ignition switch ON, and check that the warning light comes on.

If the warning light does not light up, test the bulb.

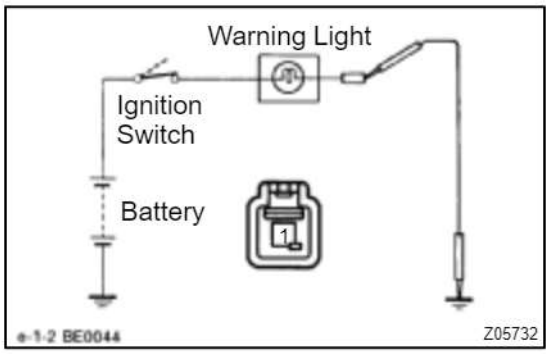



**18. INSPECT WASHER FLUID LEVEL WARNING SWITCH**

(a) Check that no continuity exists between terminals with the switch OFF (float up).

(b) Check that continuity exists between terminals with the switch ON (float down).

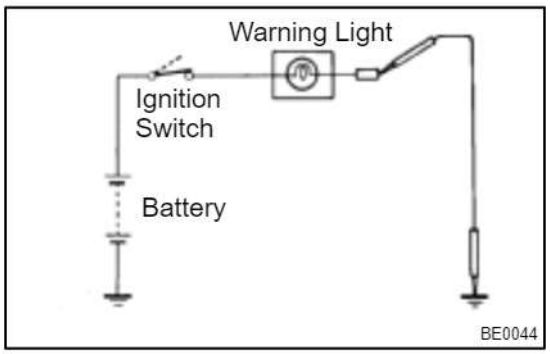
If operation is not as specified, replace the switch.




**19. INSPECT OPEN DOOR WARNING LIGHT**

Disconnect the connector from the door courtesy switch and ground terminal 1 on the wire harness side, and check that the warning light lights up.

If the warning light does not light up, inspect the bulb or wire harness.



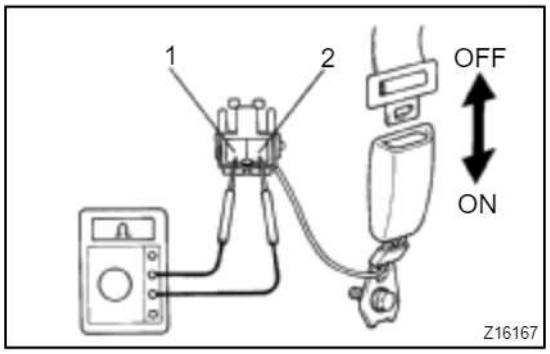

**20. INSPECT SEAT BELT WARNING LIGHT**

(a) Remove the integration relay from the instrument panel junction block.

(b) Ground terminal 2 on the integration relay with the connectors still connected.

(c) Turn the ignition switch ON and check that the warning light lights up.

If the warning light does not light up, inspect the bulb or wire harness.

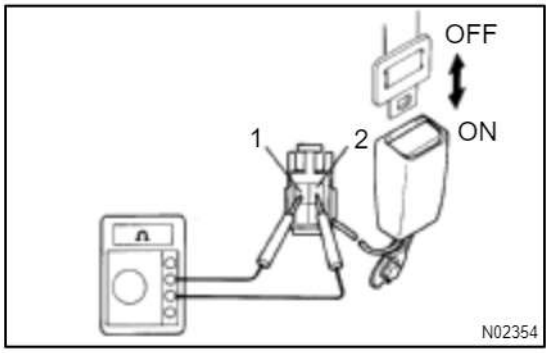



**21. w/o Power seat:**
**INSPECT BUCKLE SWITCH CONTINUITY**

(a) Check that continuity exists between the terminals on the switch side connector with the switch ON (belt fastened).

(b) Check that no continuity exists between the terminals on the switch side connector with the switch OFF (belt unfastened).

If operation is not as specified, replace the seat belt inner belt.

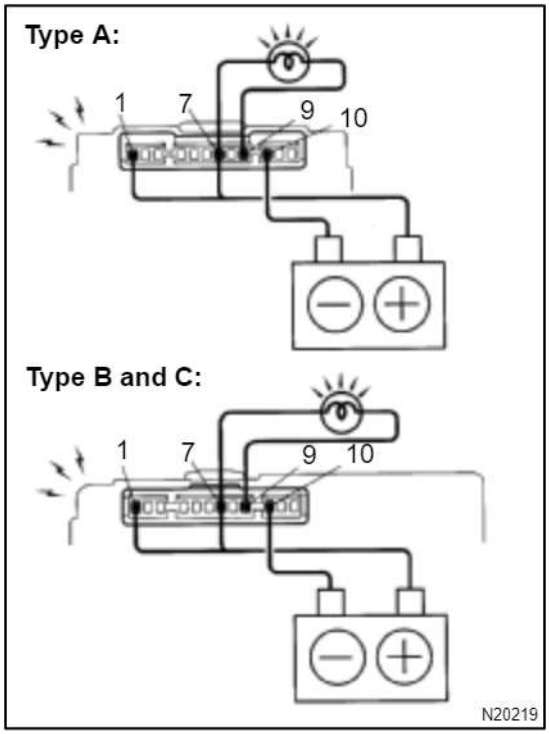



**22. w/ Power seat:**
**INSPECT BUCKLE SWITCH CONTINUITY**

(a) Check that continuity exists between terminals 1 and 2 on the switch side connector with the switch ON (belt fastened).

(b) Check that no continuity exists between terminals 1 and 2 on the switch side connector with the switch OFF (belt unfastened).

If operation is not as specified, replace the seat belt inner belt.




**23. INSPECT INTEGRATION RELAY OF SEAT BELT WARNING SYSTEM OPERATION**

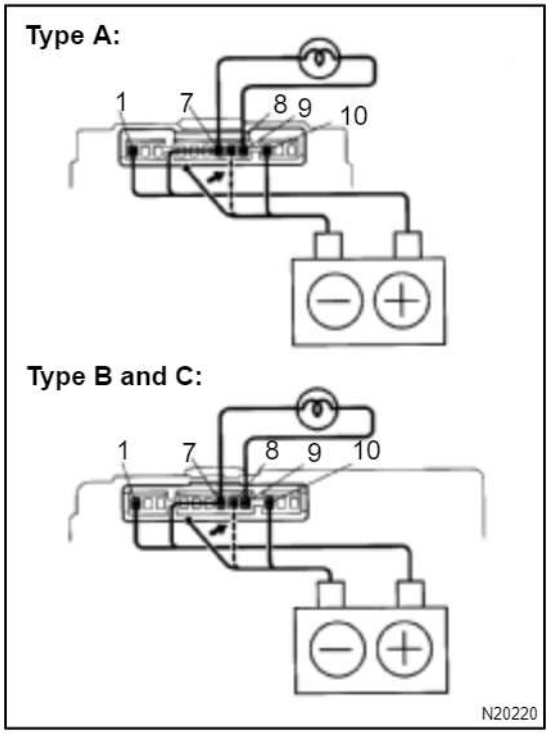
(a) Connect the positive (+) lead from the battery to terminals 1 and 7.

(b) Connect the terminal 7 to terminal 9 through the 3.4–W test bulb.

(c) Connect the negative (–) lead from the battery to terminal 10.

(d) Check that the bulb lights and the buzzer sounds for 4 – 8 seconds.

(e) Return to step (a) and operate the chime again.




(f) Connect the negative (–) lead from the battery to terminal 8.

(g) Check that the buzzer stops sounding.

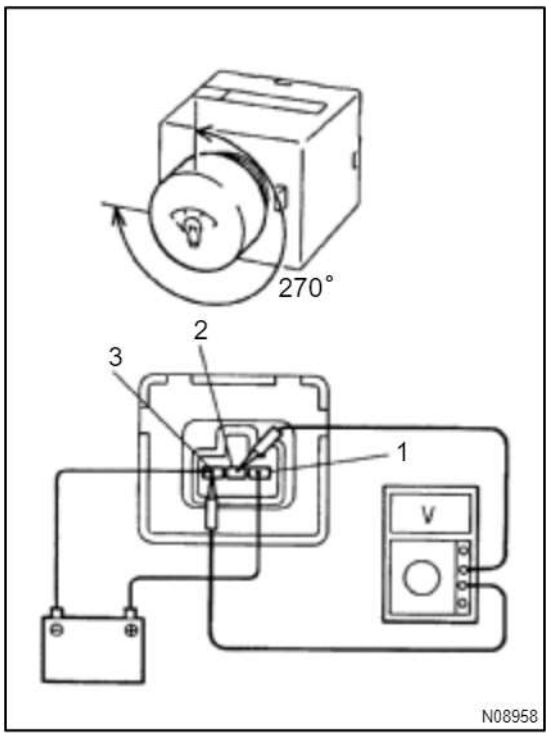
HINT:

Check the buzzer within a period of 4 to 8 seconds.

If operation is not as specified, replace the relay.

**24. INSPECT INTEGRATION RELAY CIRCUIT**

**See page BE–14**

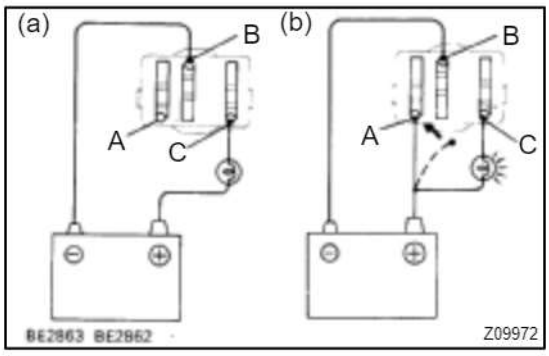



## 25. INSPECT LIGHT CONTROL RHEOSTAT

(a) Connect the positive (+) lead from the battery to terminal 1 and negative lead (–) to terminal 3.

(b) Connect the positive (+) lead from the voltmeter to terminal 2 and negative lead to terminal 3.

(c) Turn the rheostat knob and check that the voltage changes.




## 26. INSPECT BULB CHECK RELAY OPERATION

(a) Connect the positive (+) lead from the battery to terminal C through a 1.4–W test bulb and the negative (–) lead to terminal B, check that the test bulb does not light up.

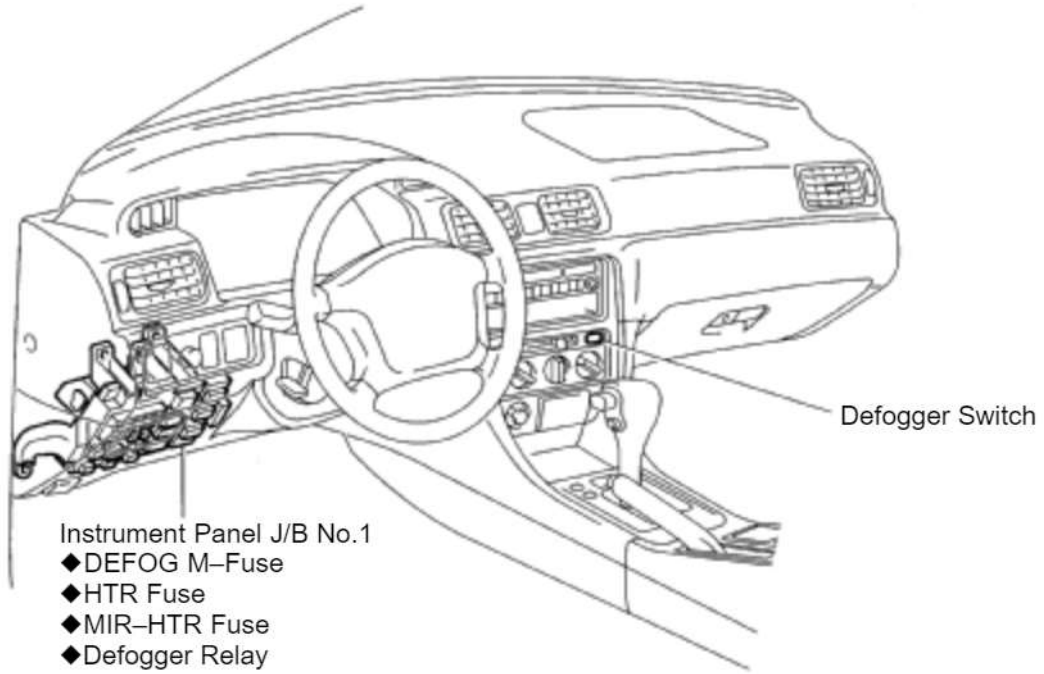
(b) Connect the positive (+) lead from the battery to terminal A and check that the test bulb lights up.

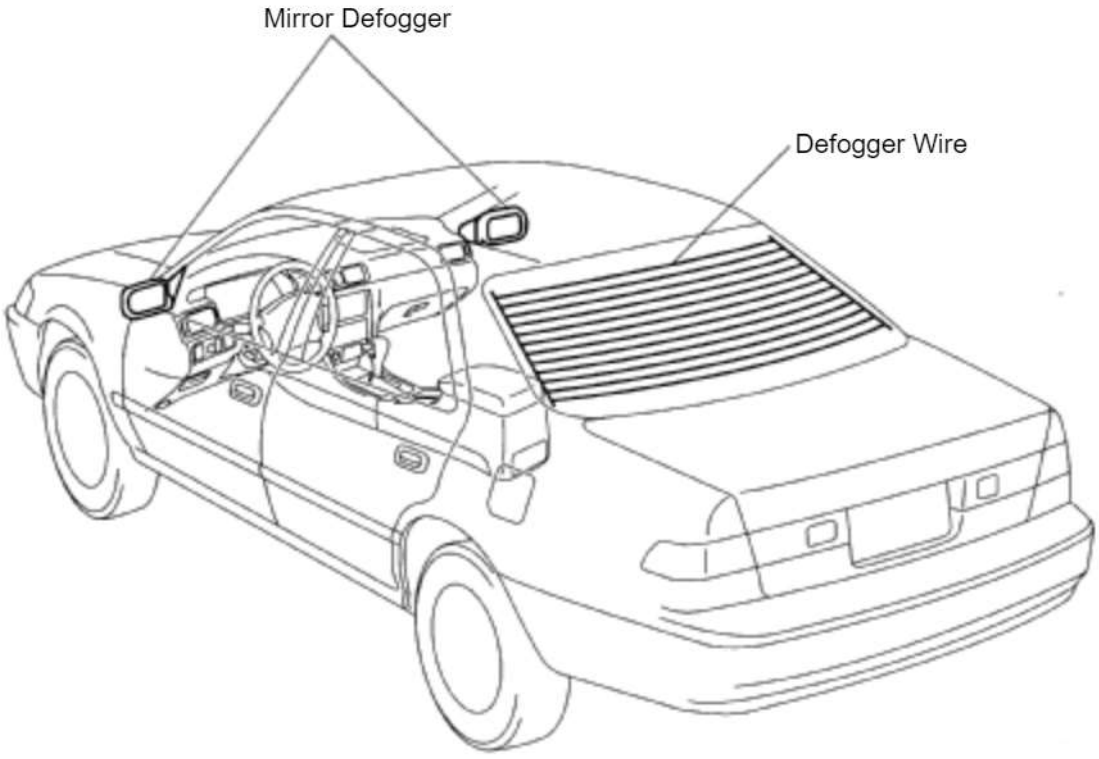
If operation is not as specified, replace the relay.

# DEFOGGER SYSTEM

## LOCATION

BE0AL-03




N20668
N20669

Z19051

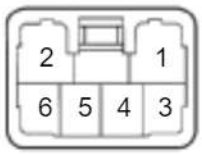
BE0AM-03

# INSPECTION

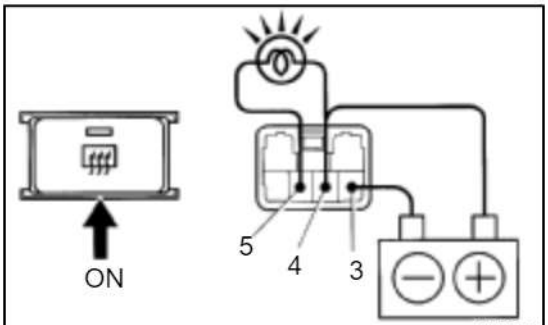
## 1. INSPECT DEFOGGER SWITCH CONTINUITY

Check that is continuity exists between terminals 2 and 6.
If continuity is not as specified, check the bulb.

**Switch side:**




s-6-2 N20315




N20314

## 2. INSPECT DEFOGGER TIMER OPERATION

(a) Connect the positive (+) lead from the battery to terminal 4 and the negative (–) lead to terminal 3.
(b) Connect the positive (+) lead from the battery to terminal 5 through a 3.4–W tester bulb.
(c) Push the defogger switch ON, check that the indicator light and test bulb light up for 12 to 18 minutes, then the indicator light and test bulb light goes out.

If operation is not as specified, replace the switch.

**Wire harness side:**



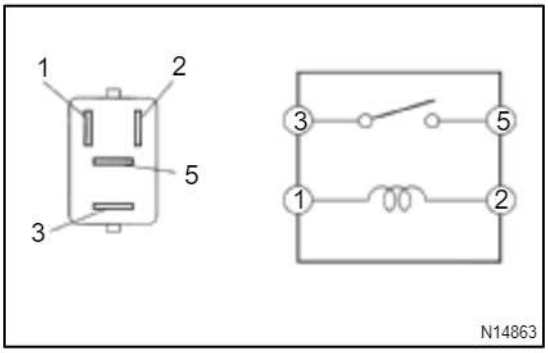

S–6–1 Z08467

## 3. INSPECT DEFOGGER TIMER CIRCUIT

Disconnect the connector from the switch and inspect the connector on the wire harness side, as shown in the table.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 3 – Ground | Constant | Continuity |
| 4 – Ground | Ignition switch LOCK or ACC | No voltage |
| 4 – Ground | Ignition switch ON | Battery positive voltage |
| 5 – Ground | Ignition switch LOCK or ACC | No voltage |
| 5 – Ground | Ignition switch ON | Battery positive voltage |
| – | Connect terminals 3 and 5. | Defogger system operation is normal |

If the circuit is not as specified, replace the switch.

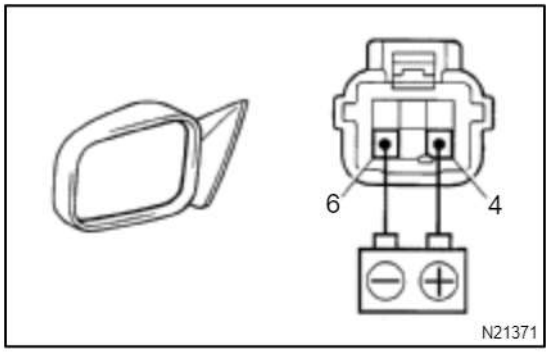



N14863

## 4. INSPECT DEFOGGER RELAY CONTINUITY

| Condition | Tester connection | Specified condition |
|---|---|---|
| Constant | 1 – 2 | Continuity |
| Apply B+ between terminals 1 and 2. | 3 – 5 | Continuity |

If continuity is not as specified, replace the relay.



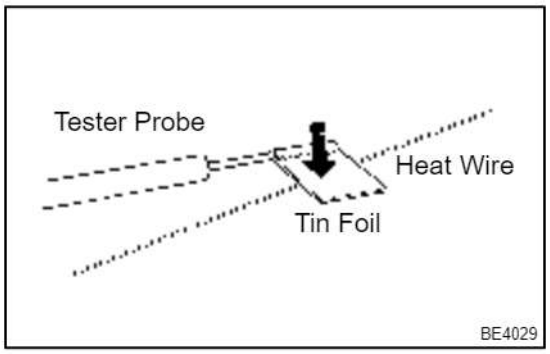

**5. w/ Heater:**
**INSPECT MIRROR DEFOGGER**

(a) Connect the positive (+) lead from the battery to terminal 4 and the negative (–) lead to terminal 6.

(b) Check that the mirror becomes warm.

HINT:

It takes short time for the mirror to become warm.




**6. INSPECT DEFOGGER WIRE**

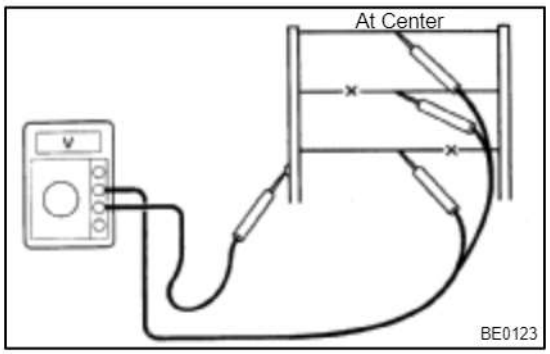
**NOTICE:**

- **When cleaning the glass, use a soft, dry cloth, and wipe the glass in the direction of the wire. Take care not to damage the wires.**
- **Do not use detergents or glass cleaners with abrasive ingredients.**
- **When measuring voltage, wind a piece of tin foil around the top of the negative probe and press the foil against the wire with your finger, as shown.**

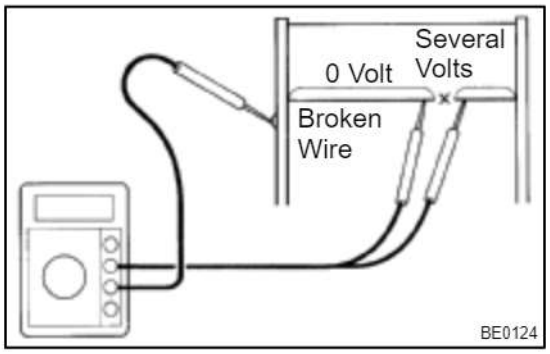
(a) Turn the ignition switch ON.

(b) Turn the defogger switch ON.

(c) Inspect the voltage at the center of each heat wire, as shown.




| Voltage | Criteria |
|---|---|
| Approx. 5V | Okay (No break in wire) |
| Approx.10V or 0V | Broken wire |




HINT:

If there is approximately 10 V, the wire is broken between the center of the wire and the positive (+) end. If there is no voltage, the wire is broken between the center of the wire and ground.

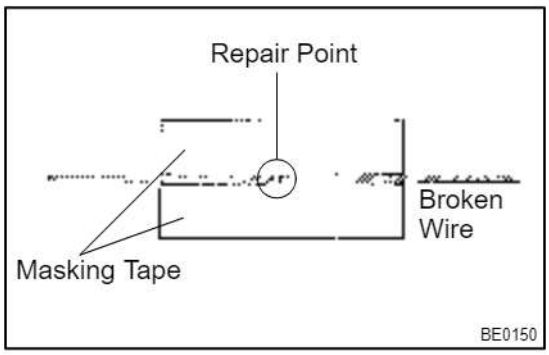
(d) Place the voltmeter positive (+) lead against the defogger positive (+) terminal.

(e) Place the voltmeter negative (–) lead with the foil strip against the heat wire at the positive (+) terminal end and slide it toward the negative (–) terminal end.

(f) The point where the voltmeter deflects from zero to several V is the place where the heat wire is broken.

HINT:

If the heat wire is not broken, the voltmeter indicates 0 V at the positive (+) end of the heat wire but gradually increases to about 12 V as the meter probe is moved to the other end.

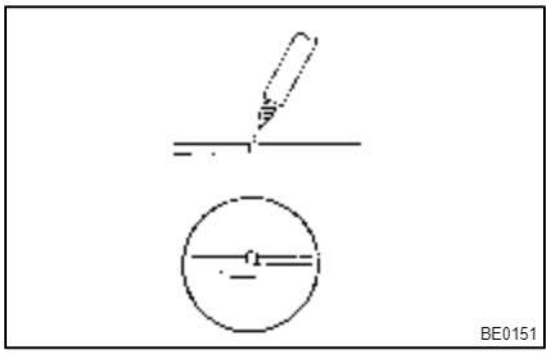



**7. IF NECESSARY, REPAIR DEFOGGER WIRE**

(a) Clean the broken wire tips with grease, wax and silicone remover.

(b) Place the masking tape along both sides of the wire to be repaired.

(c) Thoroughly mix the repair agent (Dupont paste No. 4817).




(d) Thoroughly mix the repair agent (Dupont paste No. 4817 or equivalent).

(e) Using a fine tip brush, apply a small amount to the wire.

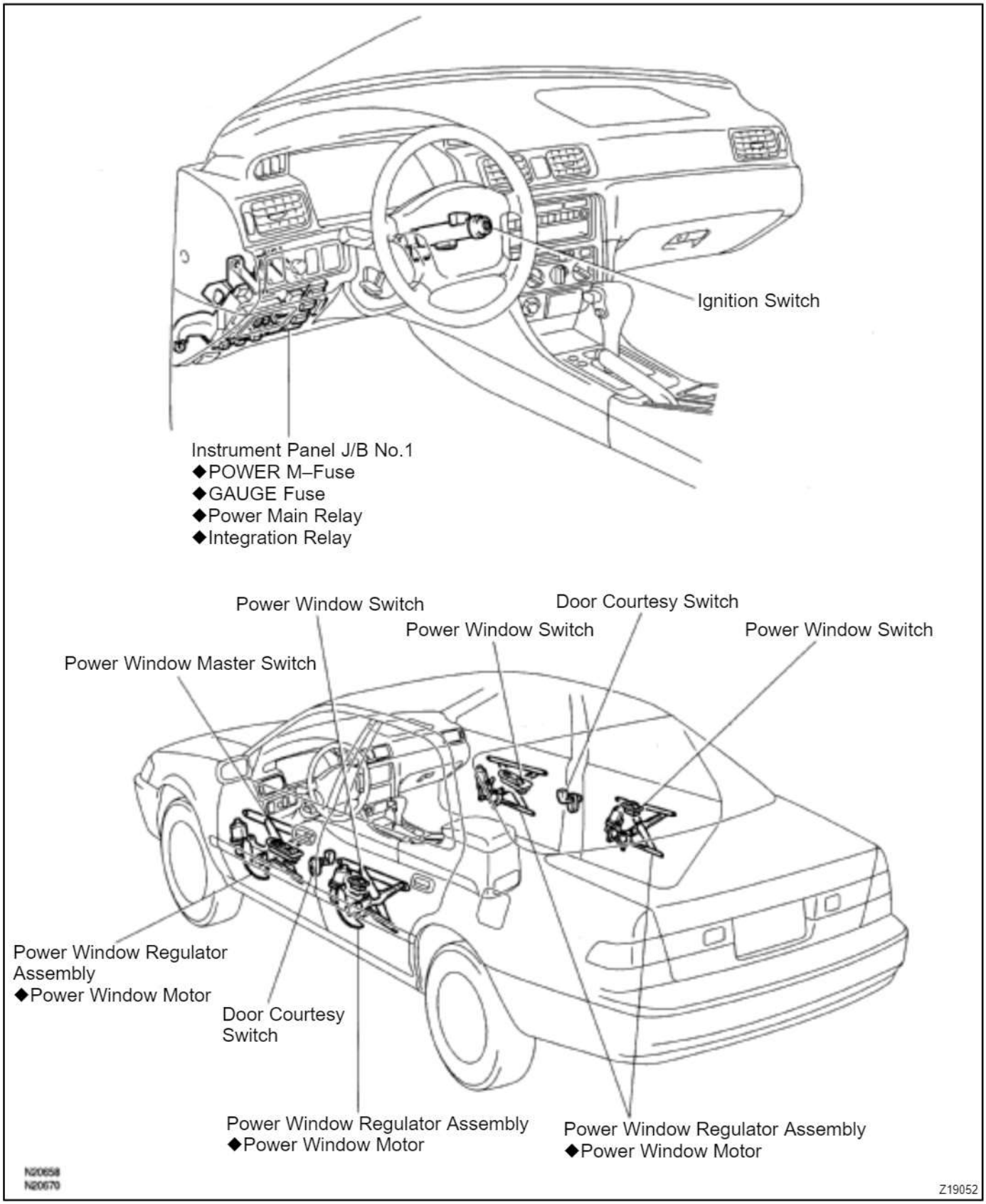
(f) After a few minutes, remove the masking tape.

(g) Do not repair the defogger wire for at least 24 hours.

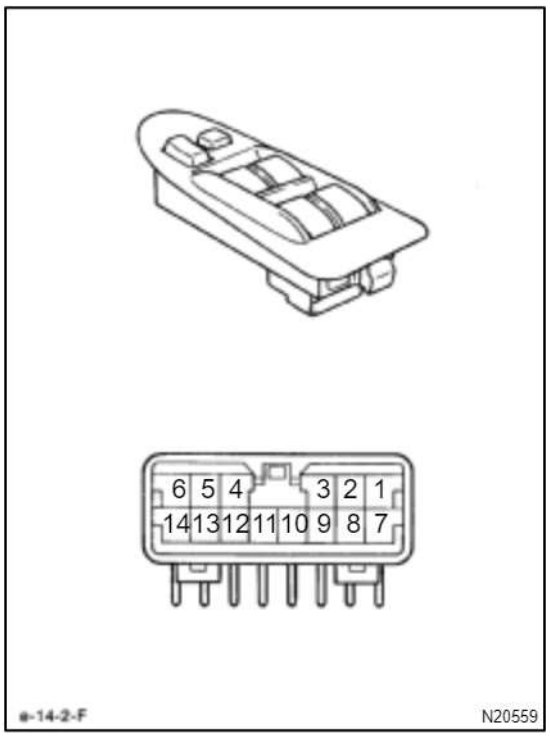
# POWER WINDOW CONTROL SYSTEM

BE0AN-03

## LOCATION



BE0AO-02




# INSPECTION

## 1. INSPECT POWER WINDOW MASTER SWITCH CONTINUITY

(a) Inspect the front driver's switch.

Window unlock:

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 3 – 8 – 9<br>4 – 5 – 6 | Continuity |
| OFF | 3 – 4 – 5<br>4 – 5 – 6 | Continuity |
| DOWN | 6 – 8 – 9<br>3 – 4 – 5 | Continuity |

Window lock:

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 3 – 8 – 9<br>4 – 5 – 6 | Continuity |
| OFF | 3 – 4 – 5<br>4 – 5 – 6 | Continuity |
| DOWN | 6 – 8 – 9<br>3 – 4 – 5 | Continuity |

(b) Inspect the front passenger's switch.

Window unlock:

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 8 – 9 – 11<br>4 – 5 – 13 | Continuity |
| OFF | 4 – 5 – 11<br>4 – 5 – 13 | Continuity |
| DOWN | 8 – 9 – 13<br>4 – 5 – 11 | Continuity |

Window lock:

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 8 – 9 – 11 | Continuity |
| OFF | 11 – 13 | Continuity |
| DOWN | 8 – 9 – 13 | Continuity |

(c) Inspect the rear left switch.

Window unlock:

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 8 – 9 – 10<br>4 – 5 – 12 | Continuity |
| OFF | 4 – 5 – 10<br>4 – 5 – 12 | Continuity |
| DOWN | 8 – 9 – 12<br>4 – 5 – 10 | Continuity |

Window lock:

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 8 – 9 – 10 | Continuity |
| OFF | 10 – 12 | Continuity |
| DOWN | 8 – 9 – 12 | Continuity |

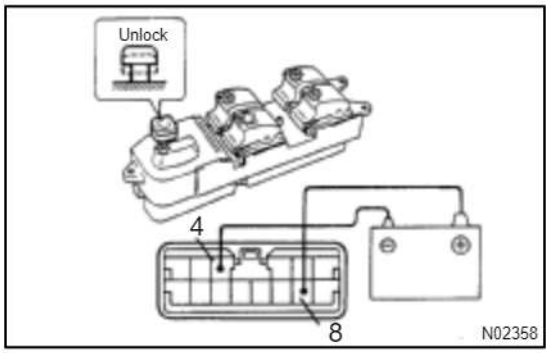
(d) Inspect the rear right switch.
Window unlock:

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 7 – 8 – 9<br>4 – 5 – 14 | Continuity |
| OFF | 4 – 5 – 7<br>4 – 5 – 14 | Continuity |
| DOWN | 8 – 9 – 14<br>4 – 5 – 7 | Continuity |

Window lock:

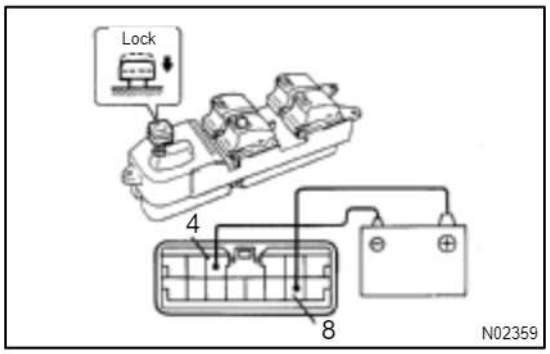
| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 7 – 8 – 9 | Continuity |
| OFF | 7 – 14 | Continuity |
| DOWN | 8 – 9 – 14 | Continuity |

If continuity is not as specified, replace the master switch.



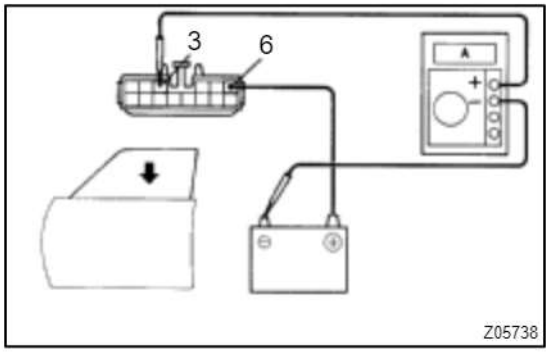

## 2. INSPECT POWER WINDOW MASTER SWITCH ILLUMINATION

(a) Set the window lock switch to the unlock position.
(b) Connect the positive (+) lead from the battery to terminal 8 and the negative (–) lead to terminal 4, and check that all the illuminations light up.



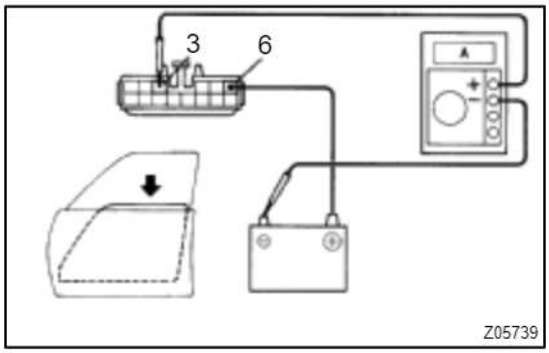

(c) Set the window lock switch to the lock position, check that all the passenger's power window switch illuminations go out.

If operation is not as specified, replace the master switch.



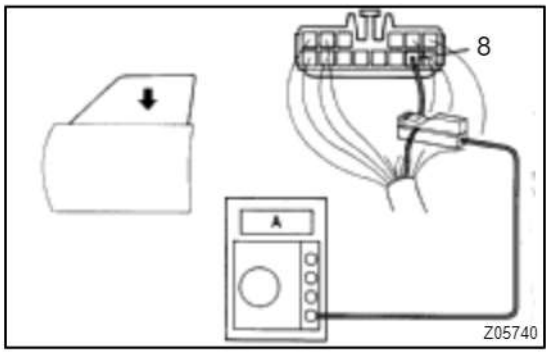

**3. Using an ammeter:**
**INSPECT ONE–TOUCH POWER WINDOW SYSTEM/ CURRENT OF CIRCUIT**

(a) Disconnect the connector from the master switch.
(b) Connect the positive (+) lead from the ammeter to terminal 3 on the wire harness side connector and the negative (–) lead to negative terminal of the battery.
(c) Connect the positive (+) lead from the battery to terminal 6 on the wire harness side connector.
(d) As the window goes down, check that the current flow is approximately 7 A.



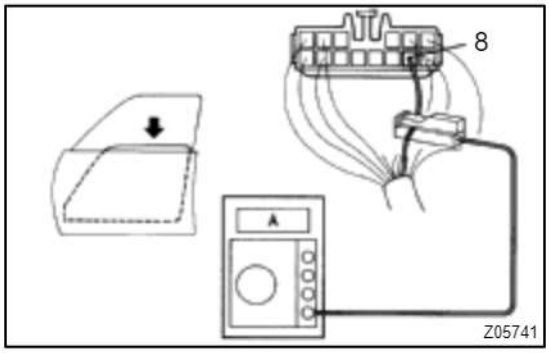

(e) Check that the current increases up to approximately 14.5 A or more when the window stops going down.

HINT:
The circuit breaker opens some 4 – 40 seconds after the window stops going down, so that check must be done before the circuit breaker operates.
If the operation is as specified, replace the master switch.




**4. Using an ammeter with a current – measuring probe:**
**INSPECT ONE–TOUCH POWER WINDOW SYSTEM/ CURRENT OF CIRCUIT**

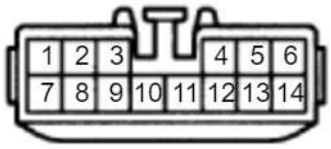
(a) Remove the master switch with connector connected.
(b) Attach a current–measuring probe to terminal 8 of the wire harness.
(c) Turn the ignition switch ON and set the power window switch in the down position.
(d) As the window goes down, check that the current flow is approximately 7 A.




(e) Check that the current increases up to approximately 14.5 A or more when the window stops going down.

HINT:
The circuit breaker opens some 4 – 40 seconds after the window stops going down, so that check must be done before the circuit breaker operates.
If operation is as specified, replace the master switch.

Wire harness side:




e–14–1–A Z05742

## 5. INSPECT POWER WINDOW MASTER SWITCH CIRCUIT

Disconnect the connector from the master switch and inspect the connector on the wire harness side, as shown in the following page.

| Tester connection | Condition | Specified condition |
|---|---|---|
| 4 – Ground | Constant | Continuity |
| 8 – Ground | Ignition switch position LOCK or ACC | *No voltage |
| 8 – Ground | Ignition switch position ON | Battery positive voltage |

*Exceptions: During 60 seconds after the ignition switch is turned ON to OFF (ACC) or until driver or a passenger's door is opened after the ignition switch is turned ON to OFF (ACC). If the circuit is not as specified, inspect the circuits connected to other parts.




e-5-2 N20560

## 6. Front passenger's door: INSPECT POWER WINDOW SWITCH CONTINUITY

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 1 – 2, 3 – 4 | Continuity |
| OFF | 1 – 2, 3 – 5 | Continuity |
| DOWN | 1 – 4, 3 – 5 | Continuity |

If continuity is not as specified, replace the switch.

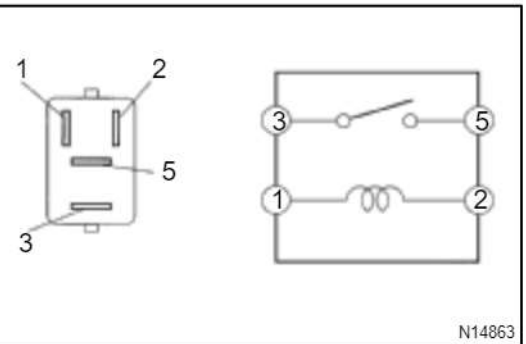



S-5-2-C N20561

## 7. Rear door: INSPECT POWER WINDOW SWITCH CONTINUITY

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 1 – 3, 4 – 5 | Continuity |
| OFF | 1 – 2, 4 – 5 | Continuity |
| DOWN | 1 – 2, 3 – 5 | Continuity |

If continuity is not as specified, replace the switch.

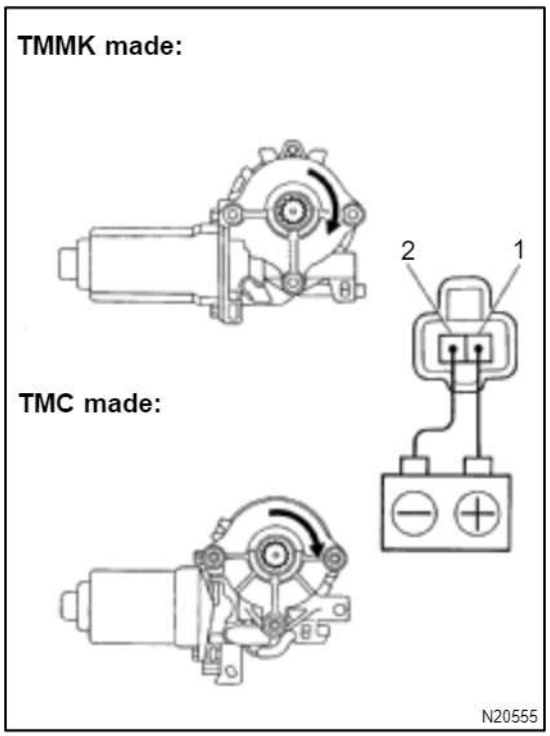



N14863

## 8. INSPECT POWER MAIN RELAY CONTINUITY

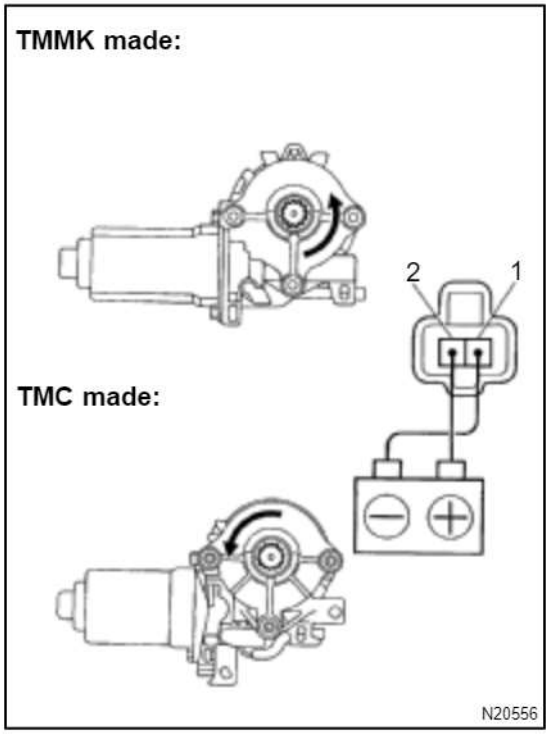
| Condition | Tester connection | Specified condition |
|---|---|---|
| Constant | 1 – 2 | Continuity |
| Apply B+ between terminals 1 and 2. | 3 – 5 | Continuity |

If continuity is not as specified, replace the relay.



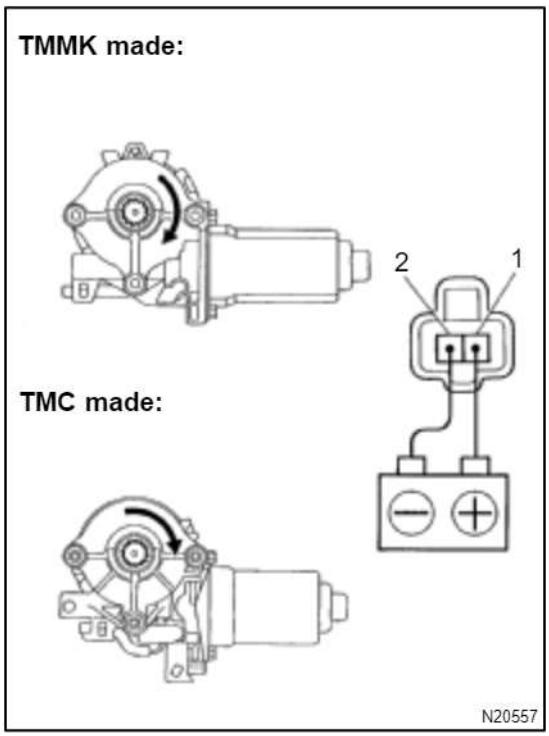

**9. Left side door:**
**INSPECT MOTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to terminal 2, and check that the motor turns clockwise.



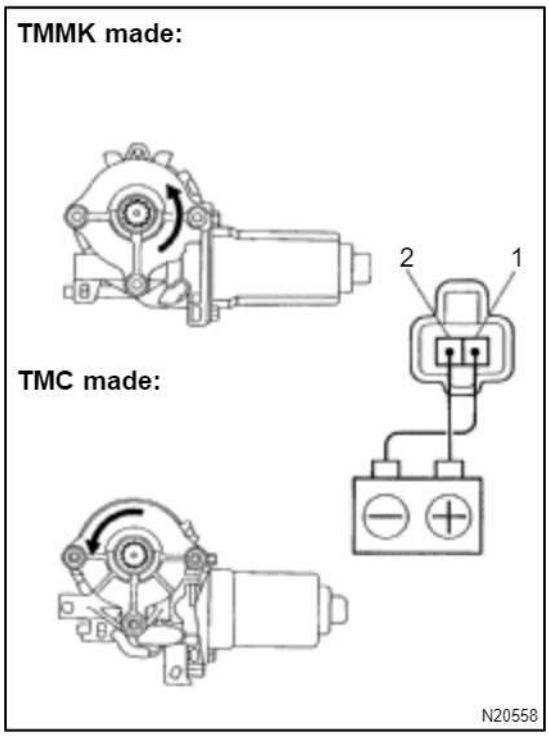

(b) Reverse the polarity, and check that the motor turns counterclockwise.

If operation is not as specified, replace the motor.



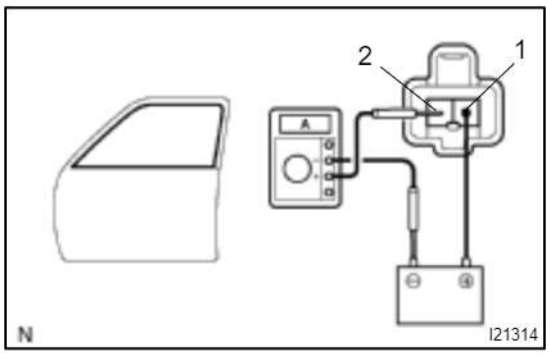

**10. Right side door:**
**INSPECT MOTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to terminal 2, and check that the motor turns clockwise.



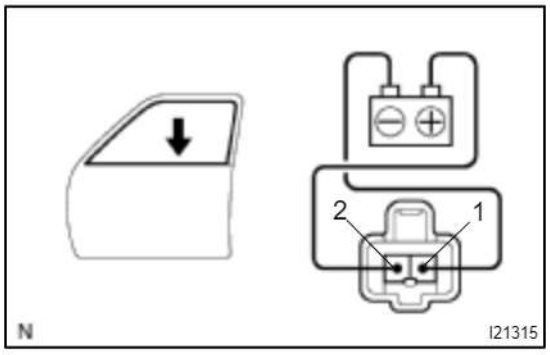

(b) Reverse the polarity, and check that the motor turns counterclockwise.

If operation is not as specified, replace the motor.



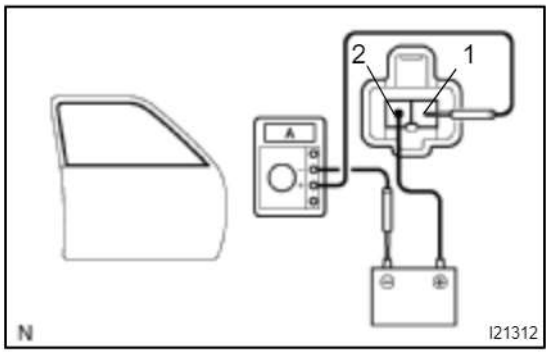

**11. Driver's door:**
**INSPECT POWER WINDOW MOTOR PTC THERMISTOR OPERATION**

(a) Disconnect the connector from the master switch.
(b) Connect the positive (+) lead from the ammeter to terminal 2 on the wire harness side connector and the negative (–) lead to negative terminal of the battery.
(c) Connect the positive (+) lead from the battery to terminal 1 on the wire harness side connector, and raise the window to the fully position.
(d) Continue to apply voltage and check that the current changes to less than 1 A within 4 to 90 seconds.
(e) Disconnect the leads from the terminals.



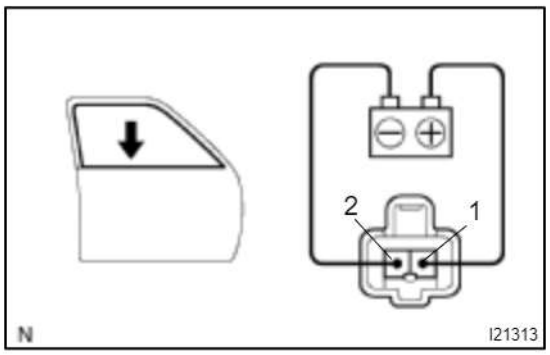

(f) Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, and check that the window begins to descend.

If operation is not as specified, replace the motor.



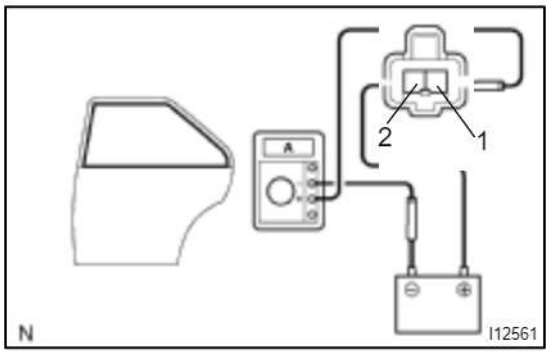

**12. Passenger's door:**
**INSPECT POWER WINDOW MOTOR PTC THERMISTOR OPERATION**

(a) Disconnect the connector from the power window switch.
(b) Connect the positive (+) lead from the ammeter to terminal 1 on the wire harness side connector and the negative (–) lead to negative terminal of the battery.
(c) Connect the positive (+) lead from the battery to terminal 2 on the wire harness side connector, and raise the window to the fully position.
(d) Continue to apply voltage and check that the current changes to less than 1 A within 4 to 90 seconds.
(e) Disconnect the leads from the terminals.




(f) Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to terminal 2, and check that the window begins to descend.

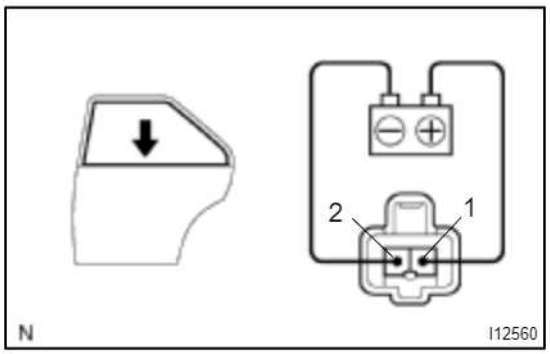
If operation is not as specified, replace the motor.

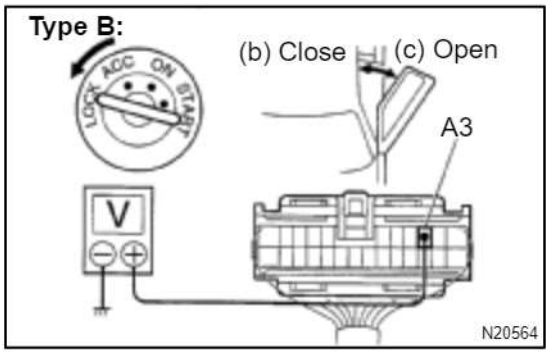



**13. Rear Door:**
**INSPECT POWER WINDOW MOTOR PTC THERMISTOR OPERATION**

(a) Disconnect the connector from the power window switch.
(b) Connect the positive (+) lead from the ammeter to terminal 1 on the wire harness side connector and the negative (–) lead to negative terminal of the battery.
(c) Connect the positive (+) lead from the battery to terminal 2 on the wire harness side connector, and raise the window to the fully position.
(d) Continue to apply voltage and check that the current changes to less than 1 A within 4 to 90 seconds.
(e) Disconnect the leads from the terminals.
(f) Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, and check that the window begins to descend.

If operation is not as specified, replace the motor.

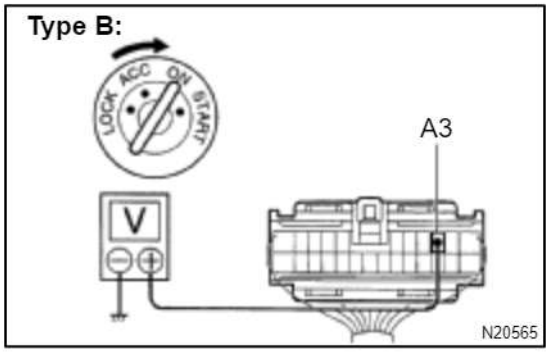



**14. Key–off power window signal:**
**INSPECT INTEGRATION RELAY (TYPE B) OPERATION**

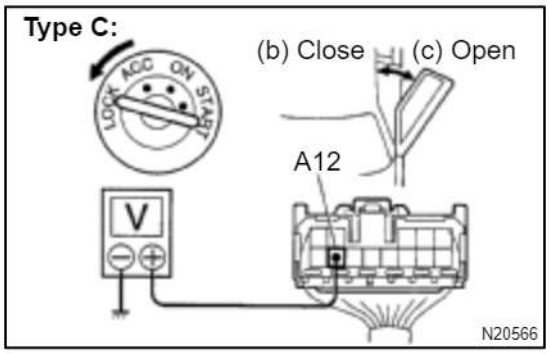
HINT:
When the relay circuit is as specified, inspect the key–off power window signal.

(a) Connect the positive (+) lead from the voltmeter to terminal A3 and the negative (–) lead to body ground.
(b) Close the door with ignition switch turned to LOCK or ACC, and check that the meter needle indicates battery positive voltage.
(c) Open the door and check that the meter needle indicates 0 V.




(d) Turn the ignition switch ON and check that the meter needle indicates battery positive voltage again.

If operation is not as specified, replace the relay.



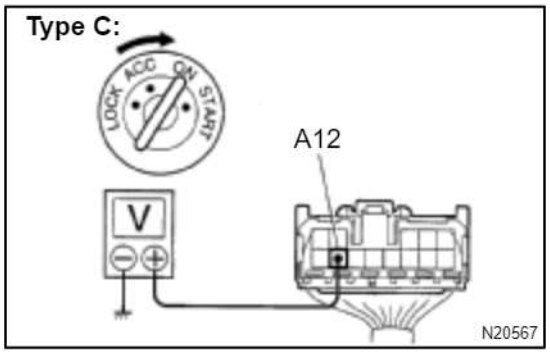

**15. Key–off power window signal:**
**INSPECT INTEGRATION RELAY (TYPE C) OPERATION**

HINT:

When the relay circuit is as specified, inspect the key–off power window signal.

(a) Connect the positive (+) lead from the voltmeter to terminal A12 and the negative (–) lead to body ground.

(b) Close the door with ignition switch turned to LOCK or ACC, and check that the meter needle indicates battery positive voltage.




(c) Open the door and check that the meter needle indicates 0 V.

(d) Turn the ignition switch ON and check that the meter needle indicates battery positive voltage again.

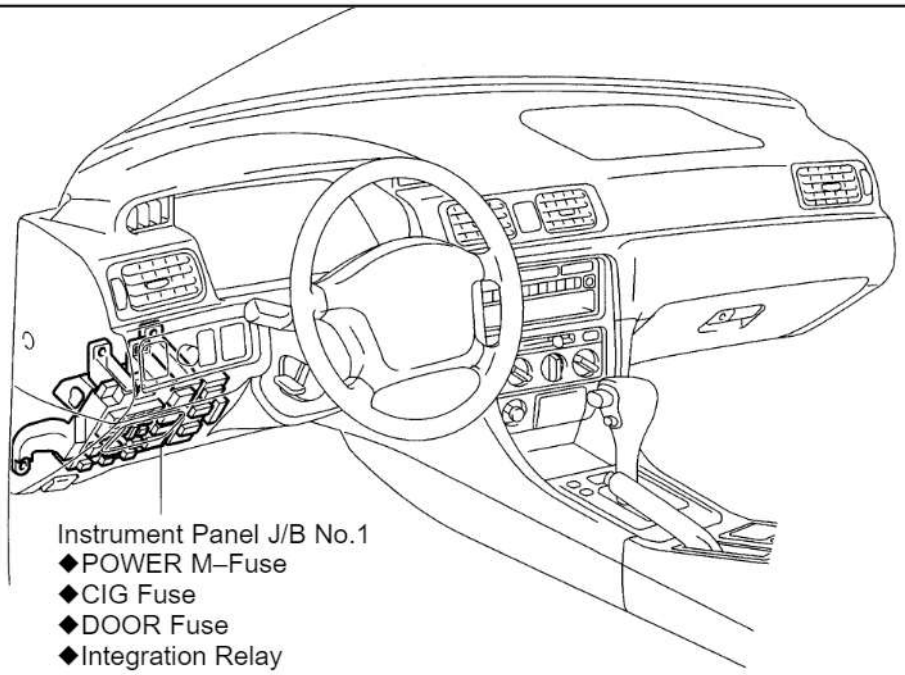
If operation is not as specified, replace the relay.

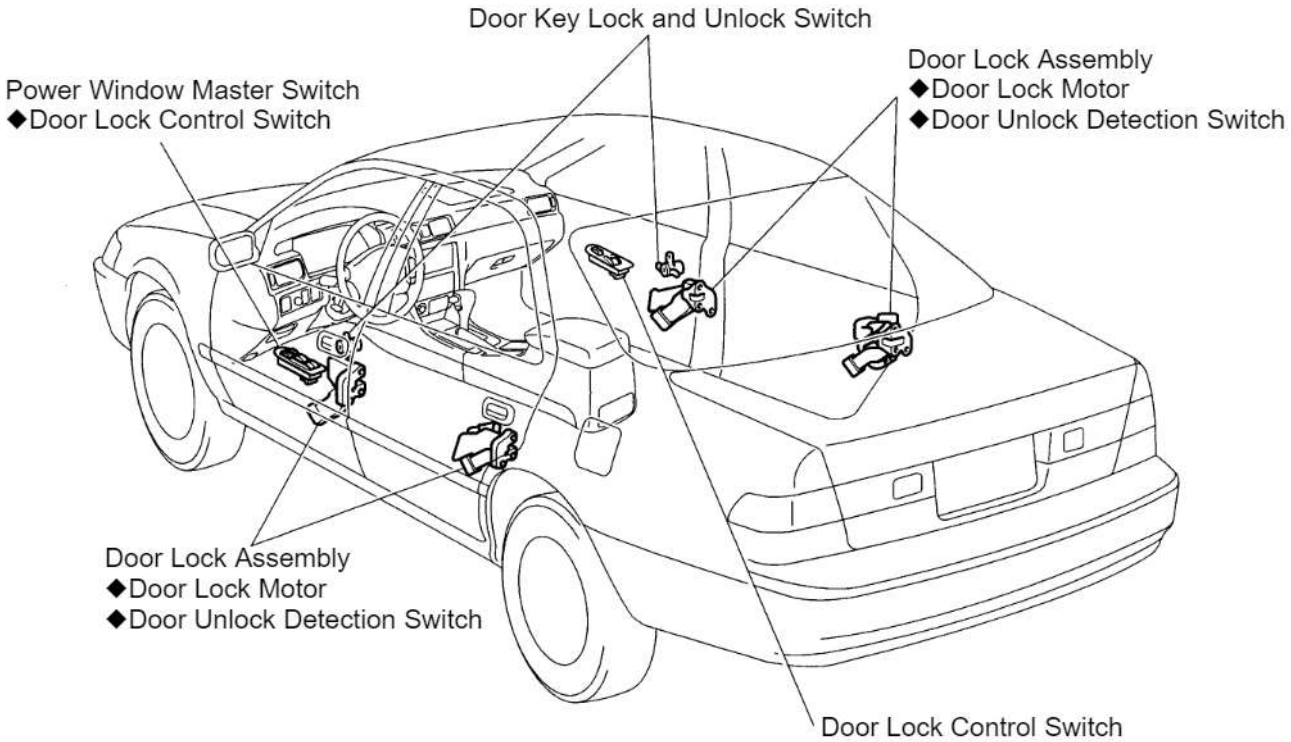
**16. INSPECT INTEGRATION RELAY CIRCUIT**
**(See page XX–XXX)**

# POWER DOOR LOCK CONTROL SYSTEM

BE0AP–02

## LOCATION



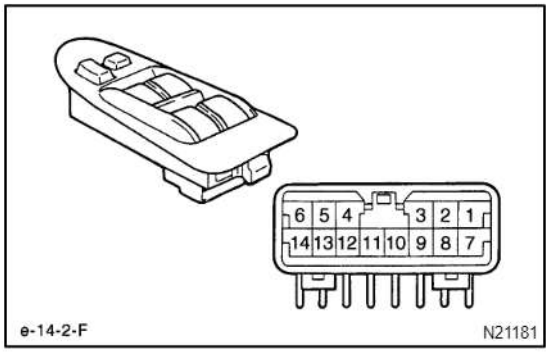




N20671
N20672

Z19053

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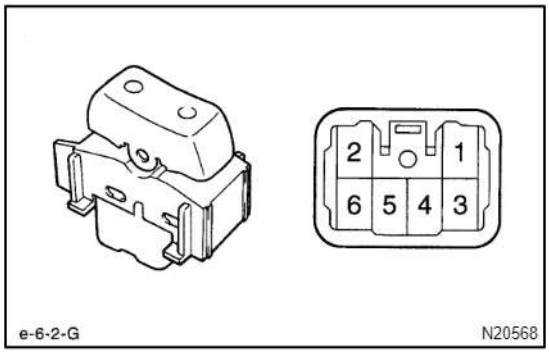
# INSPECTION




**1. Master switch:**
**INSPECT DRIVER'S DOOR LOCK CONTROL SWITCH CONTINUITY**

| Switch position | Tester connection | Specified condition |
|---|---|---|
| LOCK | 2 – 4 | Continuity |
| OFF | – | No continuity |
| UNLOCK | 4 – 7 | Continuity |

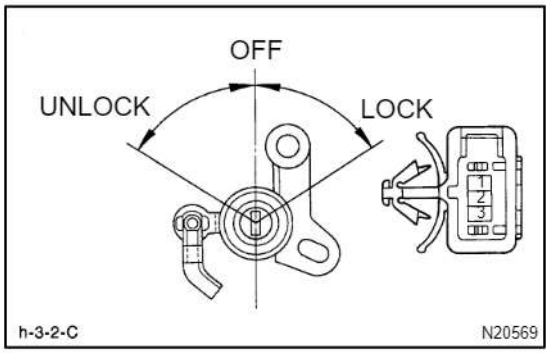
If continuity is not as specified, replace the switch.




**2. INSPECT PASSENGER'S DOOR LOCK CONTROL SWITCH CONTINUITY**

| Switch position | Tester connection | Specified condition |
|---|---|---|
| LOCK | 3 – 6 | Continuity |
| OFF | – | No continuity |
| UNLOCK | 3 – 5 | Continuity |

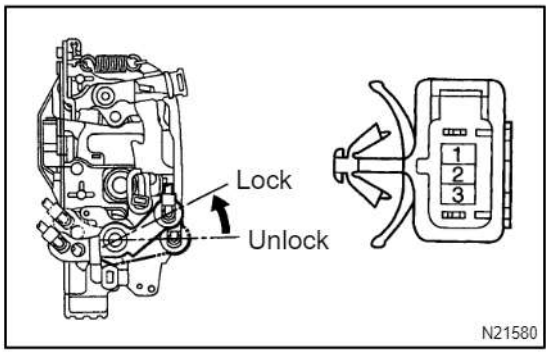
If continuity is not as specified, replace the switch.




**3. w/ Theft deterrent system:**
**INSPECT DOOR KEY LOCK AND UNLOCK SWITCH CONTINUITY**

| Switch position | Tester connection | Specified condition |
|---|---|---|
| LOCK | 2 – 1 | Continuity |
| OFF | – | No continuity |
| UNLOCK | 3 – 1 | Continuity |

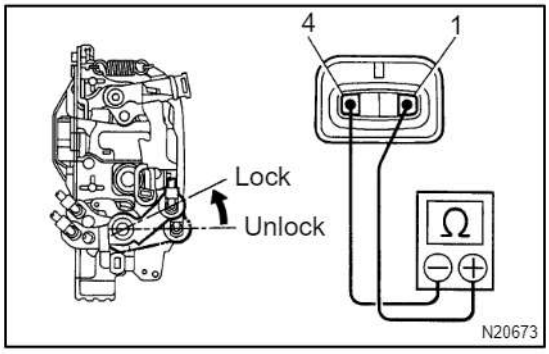
If continuity is not as specified, replace the switch.




**4. w/o Theft deterrent system:**
**INSPECT DOOR KEY LOCK AND UNLOCK SWITCH CONTINUITY**

| Switch position | Tester connection | Specified condition |
|---|---|---|
| LOCK | 2 – 1 | Continuity |
| OFF | – | No continuity |
| UNLOCK | 3 – 1 | Continuity |

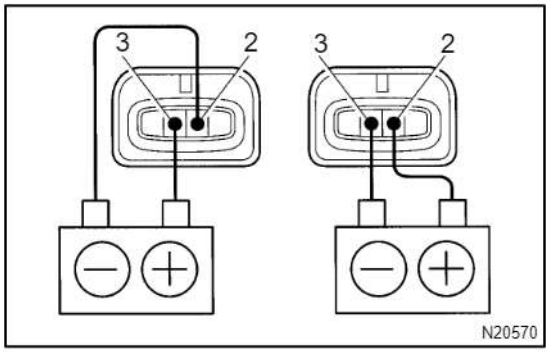
If continuity is not as specified, replace the switch.




**5. INSPECT DOOR UNLOCK DETECTION SWITCH CONTINUITY**

| Switch position | Tester connection | Specified condition |
|---|---|---|
| OFF (Door Lock set to LOCK) | – | No continuity |
| ON (Door Lock set to UNLOCK) | 1 – 4 | Continuity |

If continuity is not as specified, replace the switch.

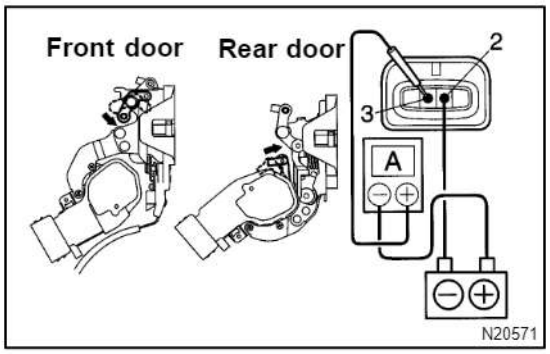



**6. INSPECT MOTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 3 and the negative (–) lead to terminal 2, and check that the door lock link moves to UNLOCK position.

(b) Remove the polarity and check that the door lock link moves to LOCK position.

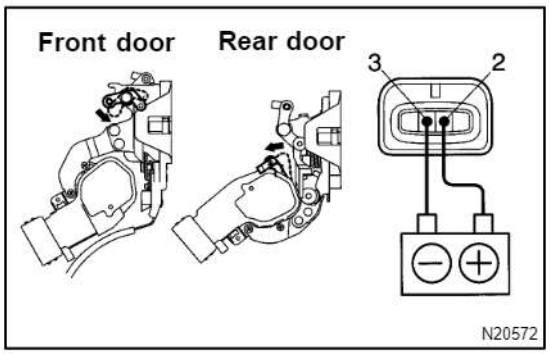
If operation is not as specified, replace the door lock assembly.




**7. Using an ammeter:**
**INSPECT PTC THERMISTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 3.

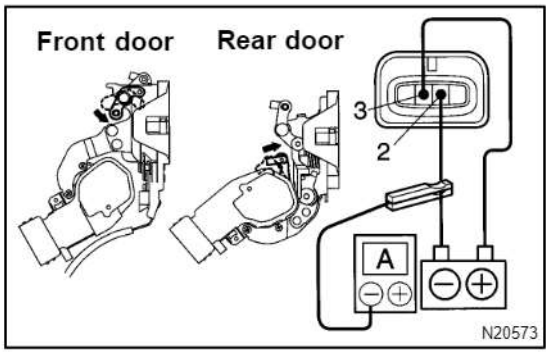
(b) Connect the positive (+) lead from the ammeter to terminal 2 and the negative (–) lead to battery negative (–) terminal, and check that the current changes from approximately 3.2 A to less than 0.5 A within 20 to 70 seconds.




(c) Disconnect the leads from terminals.

(d) Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 3, and check that the door lock moves to the LOCK position.

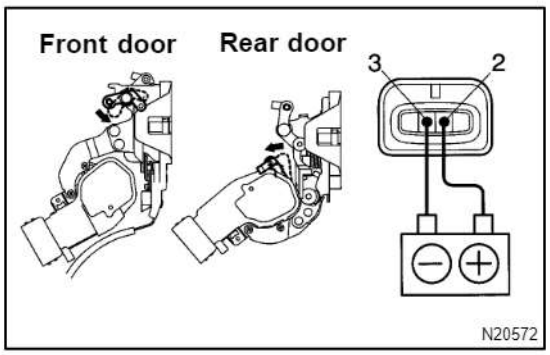
If operation is not as specified, replace the door lock assembly.




**8. Using an ammeter with a current–measuring probe:**
**INSPECT PTC THERMISTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 3 and the negative (–) lead to terminal 2.

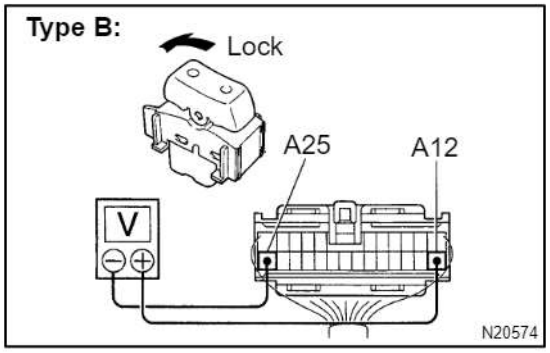
(b) Attach a current–measuring probe to either the positive (+) lead or the negative (–) lead, and check that the current changes from approximately 3.2 A to less than 0.5 A within 20 to 70 seconds.

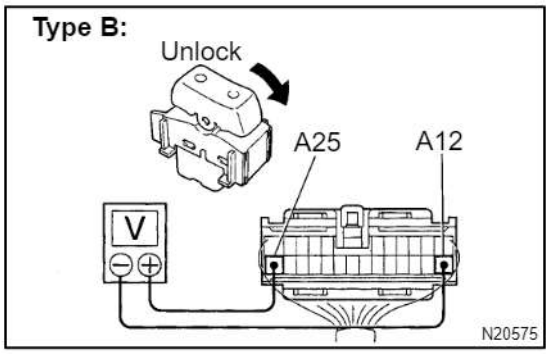



(c) Disconnect the leads from terminals.

(d) Approximately 60 seconds later, reverse the polarity, and check that the door lock moves to the LOCK position.

If operation is not as specified, replace the door lock assembly.




**9. Door lock signal:**
**INSPECT INTEGRATION RELAY (Type B) OPERATION**

HINT:

When the relay circuit is as specified, inspect the door lock signal.

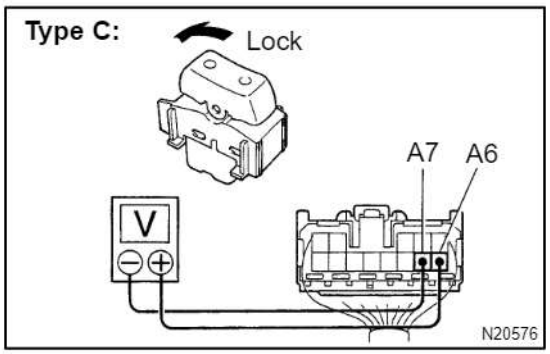
(a) Connect the positive (+) lead from the voltmeter to terminal A12 and the negative (–) lead to terminal A25.

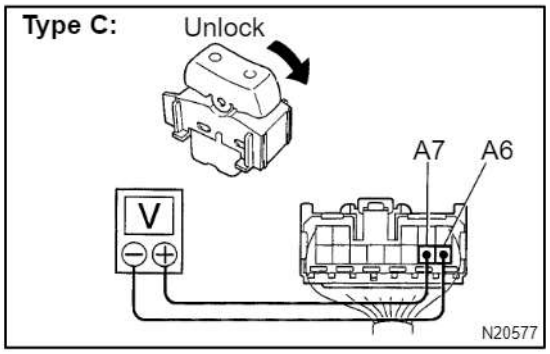
(b) Set the door lock control switch to UNLOCK and check that the voltage rises from 0 V to battery positive voltage for approximately 0.2 seconds.

(c) Reverse the polarity of the voltmeter leads.

(d) Set the door lock control switch to LOCK and check that the voltage rises from 0 V to battery positive voltage for approximately 0.2 seconds.

If operation is not as specified, replace the relay.




**10. Door lock signal:**
**INSPECT INTEGRATION RELAY (Type C) OPERATION**

HINT:

When the relay circuit is as specified, inspect the door lock signal.

(a) Connect the positive (+) lead from the voltmeter to terminal A6 and the negative (–) lead to terminal A7.

(b) Set the door lock control switch to UNLOCK and check that the voltage rises from 0 V to battery positive voltage for approximately 0.2 seconds.

(c) Reverse the polarity of the voltmeter leads.

(d) Set the door lock control switch to LOCK and check that the voltage rises from 0 V to battery positive voltage for approximately 0.2 seconds.

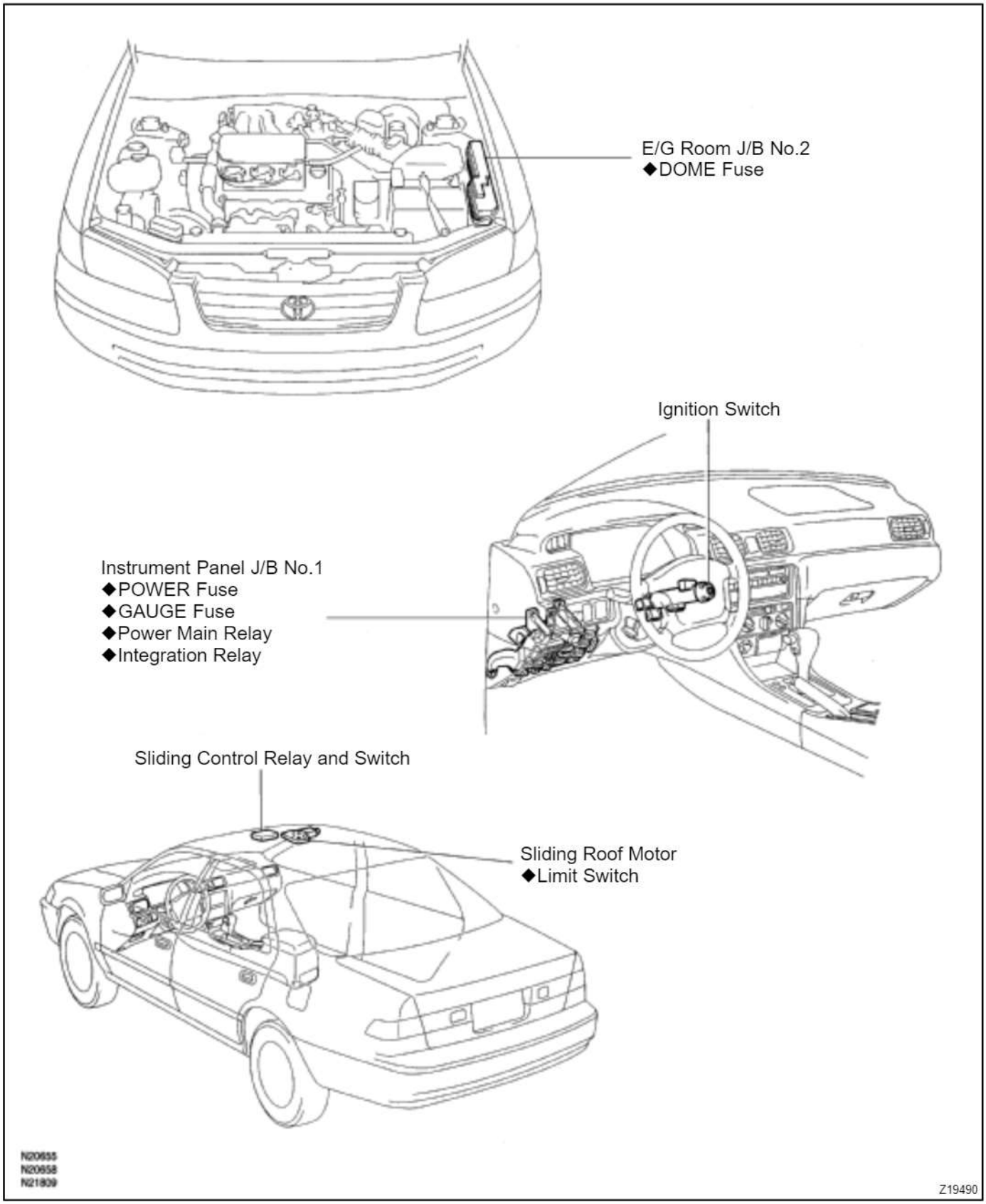
If operation is not as specified, replace the relay.

**11. INSPECT INTEGRATION RELAY CIRCUIT**
**(See page BE–14)**

# SLIDING ROOF SYSTEM

## LOCATION

BE0AR-02



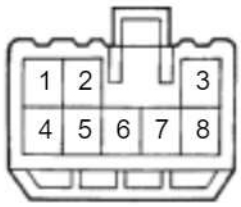
BE0AS–02

# INSPECTION

## 1. INSPECT SLIDING ROOF CONTROL RELAY AND SWITCH CIRCUIT

Disconnect the connector from the relay and switch and inspect the connector on the wire harness side, as shown in the table.

**Wire harness side:**




s–8–1 N21643

**TMMK made:**

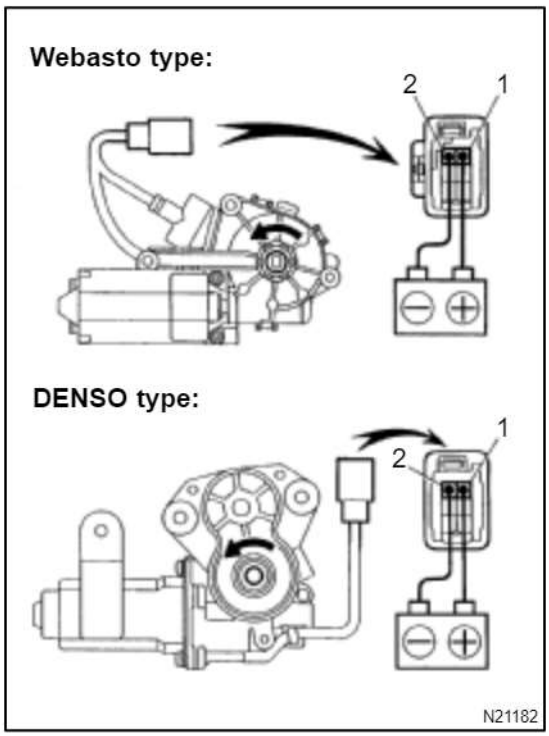
| Tester connection | Condition | Specified condition |
|---|---|---|
| 1 – 5 | Constant | Continuity |
| 2 – Ground | Constant | Continuity |
| 3 – Ground | Limit switch No.1 is OFF (Sliding roof is in a closed position) | No continuity |
| 3 – Ground | Limit switch No.1 is ON (Sliding roof is in an open position) | Continuity |
| 7 – Ground | Limit switch No.2 is OFF (Sliding roof is in a tilt up position) | No continuity |
| 7 – Ground | Limit switch No.2 is ON (Sliding roof is in the open position) | Continuity |
| 8 – Ground | Limit switch No.3 is OFF (Sliding roof is in a closed position) | No continuity |
| 8 – Ground | Limit switch No.3 is ON (Sliding roof is in an open position) | Continuity |
| 4 – Ground | Ignition switch is in a LOCK or ACC position | * No voltage |
| 4 – Ground | Ignition switch is in an ON position | Battery positive voltage |

**TMC made:**

| Tester connection | Condition | Specified condition |
|---|---|---|
| 1 – 5 | Constant | Continuity |
| 2 – Ground | Constant | Continuity |
| 3 – Ground | No.1 limit switch OFF (Sliding roof closed) | No continuity |
| 3 – Ground | No.1 limit switch ON (Sliding roof opened) | Continuity |
| 7 – Ground | No.2 limit switch OFF (Sliding roof tilted up open approx. 200 mm (7.87 in.) | No continuity |
| 7 – Ground | No.2 limit switch ON (Except for conditions mentioned above) | Continuity |
| 4 – Ground | Ignition switch LOCK or ACC | * No voltage |
| 4 – Ground | Ignition switch ON | Battery positive voltage |

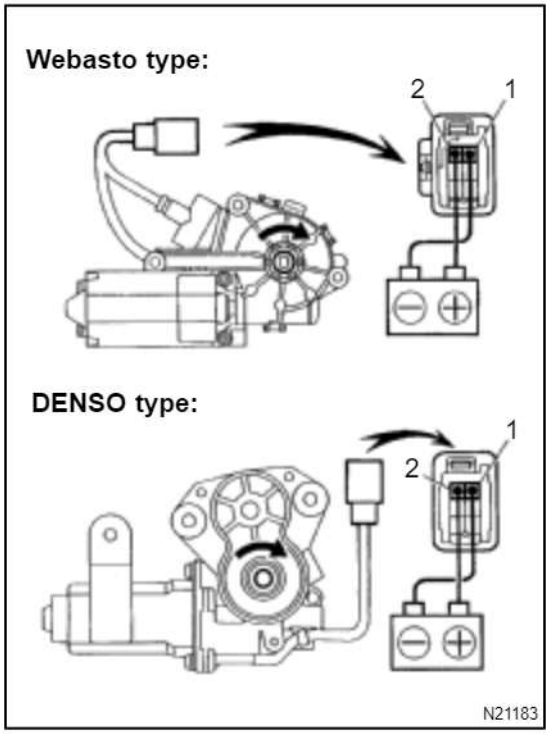
*: Exceptions: For 60 seconds after the ignition switch is turned ON to OFF (ACC) or until driver or passenger door is opened after the ignition switch is turned ON to OFF (ACC).

If the circuit is not as specified, replace the relay and switch.



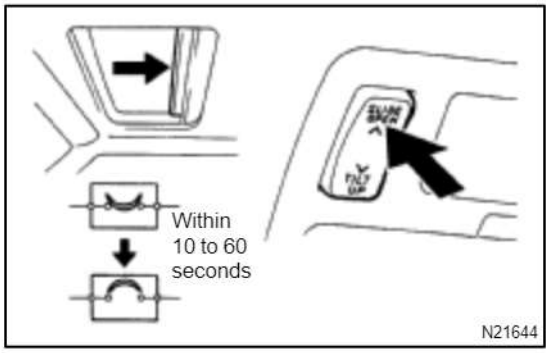

## 2. INSPECT SLIDING ROOF MOTOR OPERATION

(a) Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, check that the motor turns counterclockwise (moves to the close and up side).



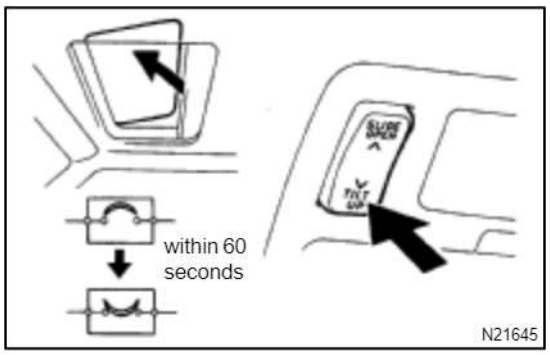

(b) Reverse the polarity, check that the motor turns clockwise (moves to the open and down side).

If operation is not as specified, replace the motor.



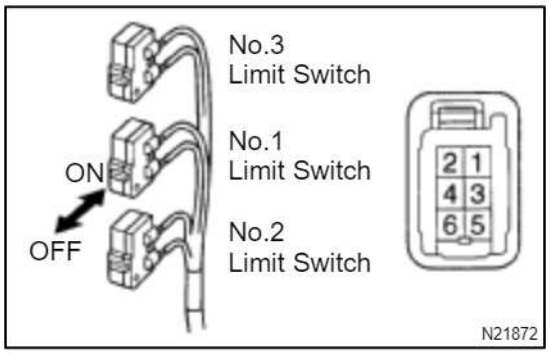

## 3. INSPECT CIRCUIT BREAKER OPERATION

(a) With the sliding roof in the fully opened position, hold the sliding roof switch in ”OPEN” position and check that is a circuit breaker operation noise is heard within 10 to 60 seconds.



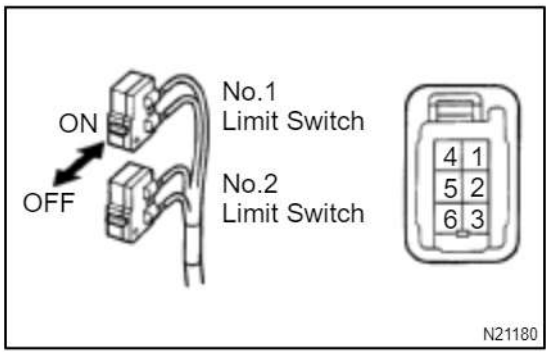

(b) With the sliding roof in fully opened position, hold the sliding roof switch in "TILT UP" position and check that the sliding roof begins to close within 60 seconds.

If operation is not as specified, replace the motor.




**4. TMMK made:**
**INSPECT SLIDING ROOF LIMIT SWITCH CIRCUIT**

| Switch position | Tester connection | Specified condition |
|---|---|---|
| No.1 limit switch OFF (SW pin released) | 3 – 5 | No continuity |
| No.1 limit switch ON (SW pin pushed in) | 3 – 5 | Continuity |
| No.2 limit switch OFF (SW pin released) | 3 – 6 | No continuity |
| No.2 limit switch ON (SW pin pushed in) | 3 – 6 | Continuity |
| No.3 limit switch OFF (SW pin released) | 3 – 4 | No continuity |
| No.3 limit switch ON (SW pin pushed in) | 3 – 4 | Continuity |




**5. TMC made:**
**INSPECT SLIDING ROOF LIMIT SWITCH CIRCUIT**

| Switch position | Tester connection | Specified condition |
|---|---|---|
| No.1 limit switch OFF (SW pin released) | 4 – 5 | No continuity |
| No.1 limit switch ON (SW pin pushed in) | 4 – 5 | Continuity |
| No.2 limit switch OFF (SW pin released) | 4 – 6 | No continuity |
| No.2 limit switch ON (SW pin pushed in) | 4 – 6 | Continuity |

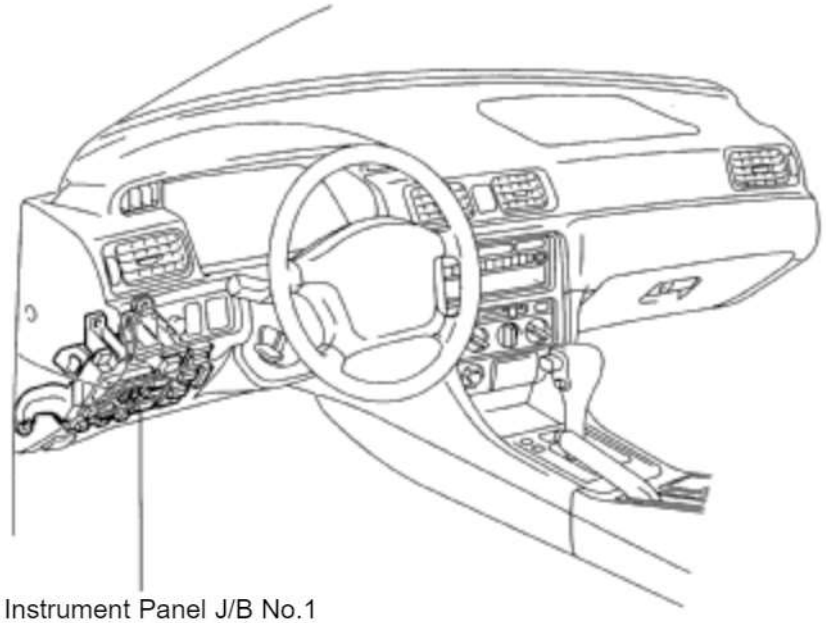
If continuity is not as specified, replace the switch.

**6. INSPECT KEY–OFF SLIDING ROOF OPERATION**
**(See integration relay circuit on page BE–14)**

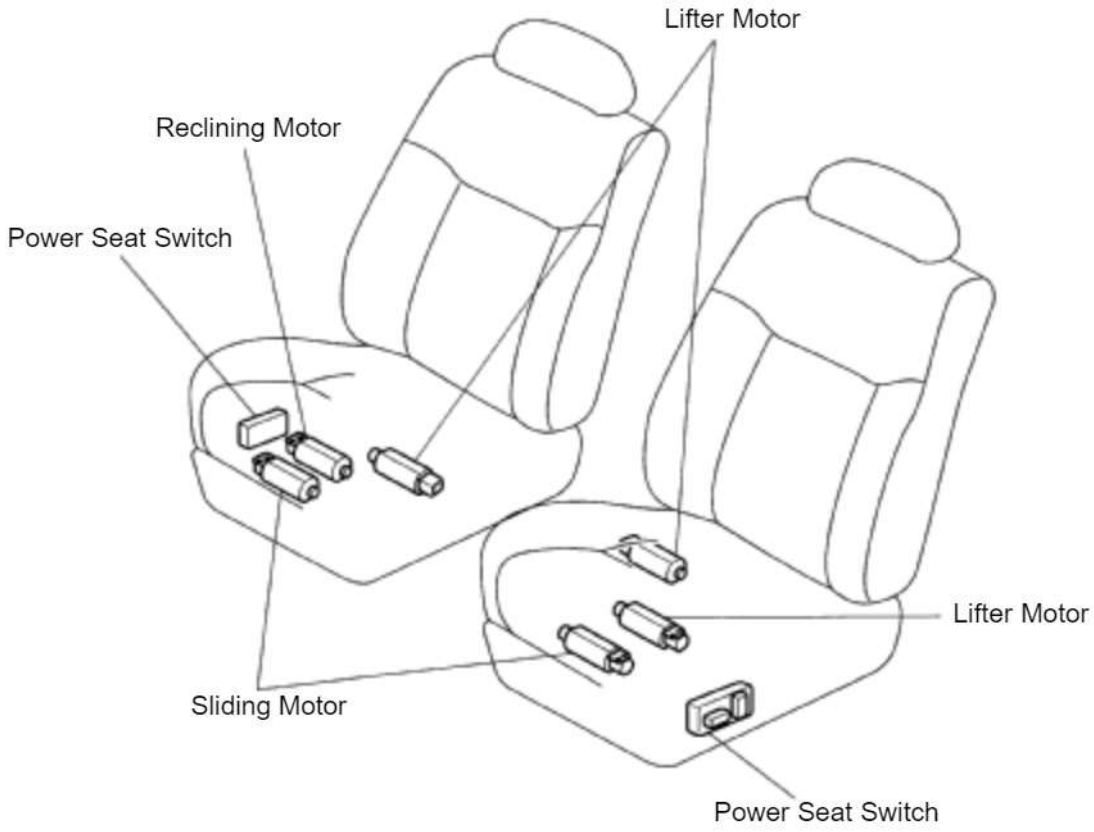
# POWER SEAT CONTROL SYSTEM

BE0AT-02

## LOCATION

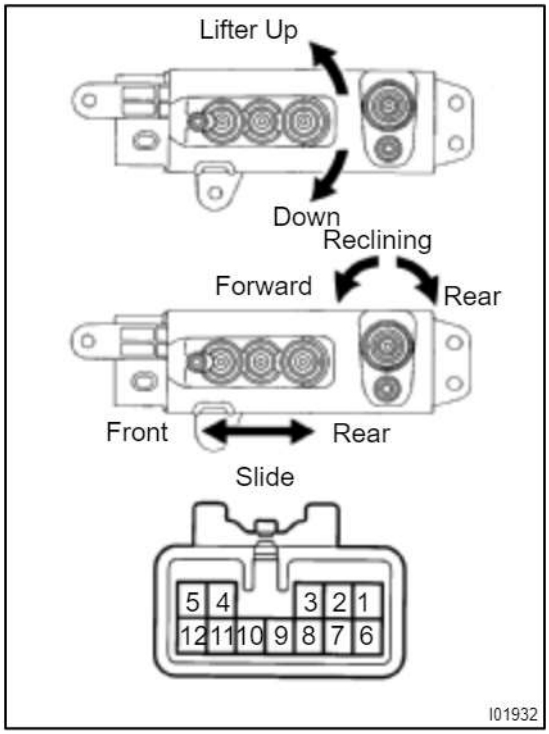


Instrument Panel J/B No.1
◆CIG Fuse




N20856
N21938

Z19504




BE0AU-02

# INSPECTION

**1. TMC made:**

**INSPECT DRIVER'S SEAT SWITCH CONTINUITY**

(a) Inspect the slide switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| FRONT | 4 – 6, 8 – 11 | Continuity |
| OFF | 4 – 6, 6 – 8 | Continuity |
| BACK | 6 – 8, 4 – 11 | Continuity |

(b) Inspect the lifter switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 2 – 11, 3 – 6 | Continuity |
| OFF | 3 – 6, 2 – 6 | Continuity |
| DOWN | 2 – 6, 3 – 11 | Continuity |

(c) Inspect the reclining switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| FORWARD | 1 – 11, 5 – 6 | Continuity |
| OFF | 1 – 6, 5 – 6 | Continuity |
| REAR | 1 – 6, 5 – 11 | Continuity |

If continuity is not as specified, replace the switch.

**2. TMMK made:**

**INSPECT DRIVER'S SEAT SWITCH CONTINUITY**

(a) Inspect the slide switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| FRONT | 2 – 11, 4 – 7 | Continuity |
| OFF | 4 – 11, 4 – 7 | Continuity |
| BACK | 2 – 7, 4 – 11 | Continuity |

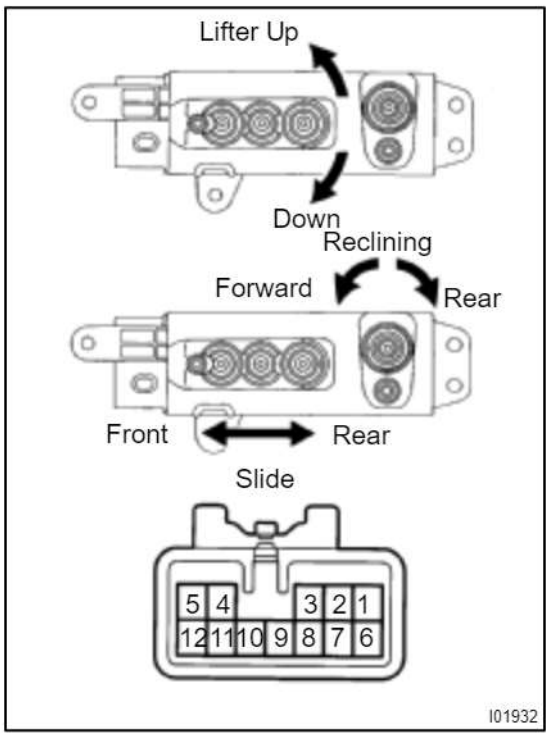
(b) Inspect the lifter switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 2 – 5, 4 – 8 | Continuity |
| OFF | 4 – 5, 4 – 8 | Continuity |
| DOWN | 2 – 8, 4 – 5 | Continuity |

(c) Inspect the reclining switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| FORWARD | 2 – 12, 4 – 6 | Continuity |
| OFF | 4 – 12, 4 – 6 | Continuity |
| REAR | 2 – 6, 4 – 12 | Continuity |

If continuity is not as specified, replace the switch.




**3. TMC made:**
**INSPECT PASSENGER'S SEAT CONTINUITY**

(a) Inspect the slide switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| FRONT | 4 – 6, 8 – 11 | Continuity |
| OFF | 4 – 6, 6 – 8 | Continuity |
| BACK | 6 – 8, 4 – 11 | Continuity |

(b) Inspect the lifter switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 2 – 6, 3 – 11 | Continuity |
| OFF | 3 – 6, 2 – 6 | Continuity |
| DOWN | 3 – 6, 2 – 11 | Continuity |

(c) Inspect the reclining switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| FORWARD | 5 – 6, 1 – 11 | Continuity |
| OFF | 1 – 6, 5 – 6 | Continuity |
| REAR | 1 – 6, 5 – 11 | Continuity |

If continuity is not as specified, replace the switch.

**4. TMMK made:**
**INSPECT PASSENGER'S SEAT CONTINUITY**

(a) Inspect the slide switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| FRONT | 2 – 11, 4 – 7 | Continuity |
| OFF | 4 – 11, 4 – 7 | Continuity |
| BACK | 2 – 7, 4 – 11 | Continuity |

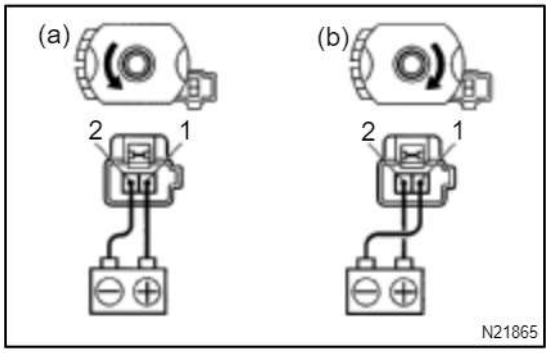
(b) Inspect the lifter switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| UP | 2 – 8, 4 – 5 | Continuity |
| OFF | 4 – 5, 4 – 8 | Continuity |
| DOWN | 2 – 5, 4 – 8 | Continuity |

(c) Inspect the reclining switch.

| Switch position | Tester connection | Specified condition |
|---|---|---|
| FORWARD | 2 – 12, 4 – 6 | Continuity |
| OFF | 4 – 12, 4 – 6 | Continuity |
| REAR | 2 – 6, 4 – 12 | Continuity |

If continuity is not as specified, replace the switch.

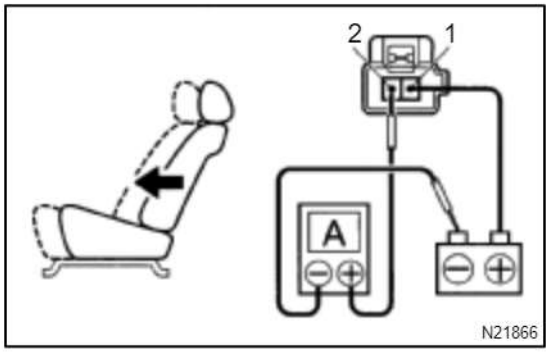



**5. INSPECT SLIDE MOTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, check that the motor turns counterclockwise.

(b) Reverse the polarity, check that the motor turns clockwise.

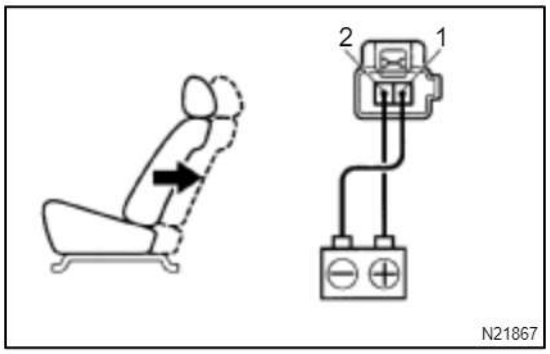
If operation is not as specified, replace the seat adjuster.




**6. INSPECT SLIDE MOTOR PTC THERMISTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 1, the positive (+) lead from the ammeter to terminal 2 and the negative (–) lead to the battery negative (–) terminal, then move the seat cushion to the front position.

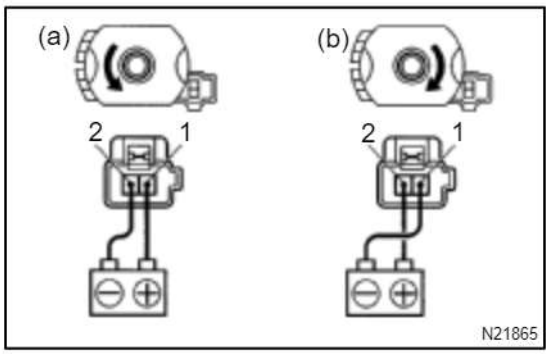
(b) Continue to apply voltage, check that the current changes to less than 1 ampere within 4 to 90 seconds.




(c) Disconnect the leads from terminals.

(d) Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, check that the seat cushion begins to move backwards.

If operation is not as specified, replace the seat adjuster.

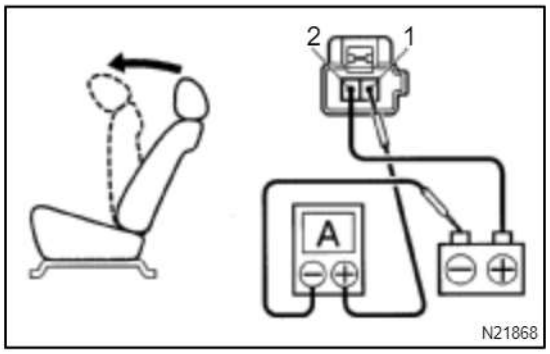



**7. INSPECT LIFTER MOTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, check that the motor turns counterclockwise.

(b) Reverse the polarity, check that the motor turns clockwise.

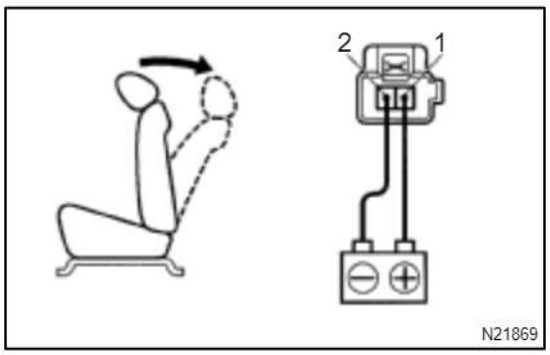
If operation is not as specified, replace the seat adjuster.




**8. INSPECT LIFTER PTC THERMISTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 1, the positive (+) lead from the ammeter to terminal 2 and the negative (–) lead to the battery negative (–) terminal, then move the seat cushion to the highest position.

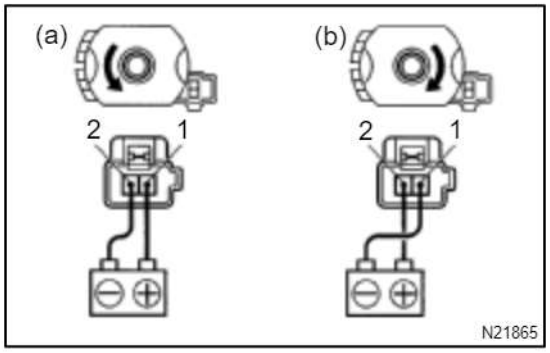
(b) Continue to apply voltage, check that the current changes to less than 1 ampere within 4 to 90 seconds.




(c) Disconnect the leads from the terminals.

(d) Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, check that the seat cushion begins to fall down.

If operation is not as specified, replace the seat adjuster.

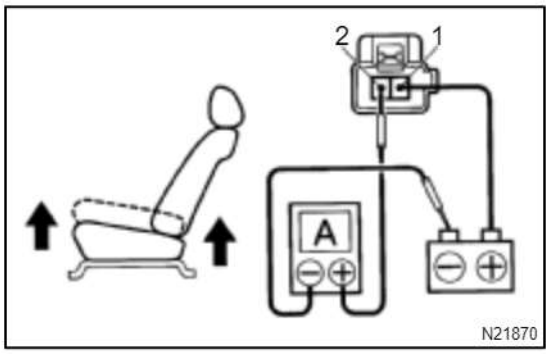



**9. INSPECT RECLINING MOTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, check that the motor turns counterclockwise.

(b) Reverse the polarity, check that the motor turns clockwise.

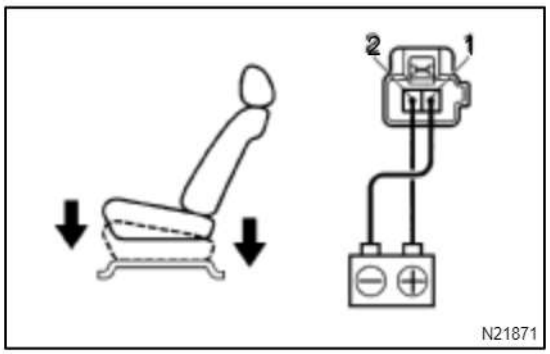
If operation is not as specified, replace the seat adjuster.




**10. INSPECT RECLINING MOTOR PTC THERMISTOR OPERATION**

(a) Connect the positive (+) lead from the battery to terminal 2, the positive (+) lead from the ammeter to terminal 1 and the negative (–) lead to the battery negative (–) terminal, then recline the seat back to the most forward position.

(b) Continue to apply voltage, check that the current change to less than 1 ampere within 4 to 90 seconds.




(c) Disconnect the leads from the terminals.

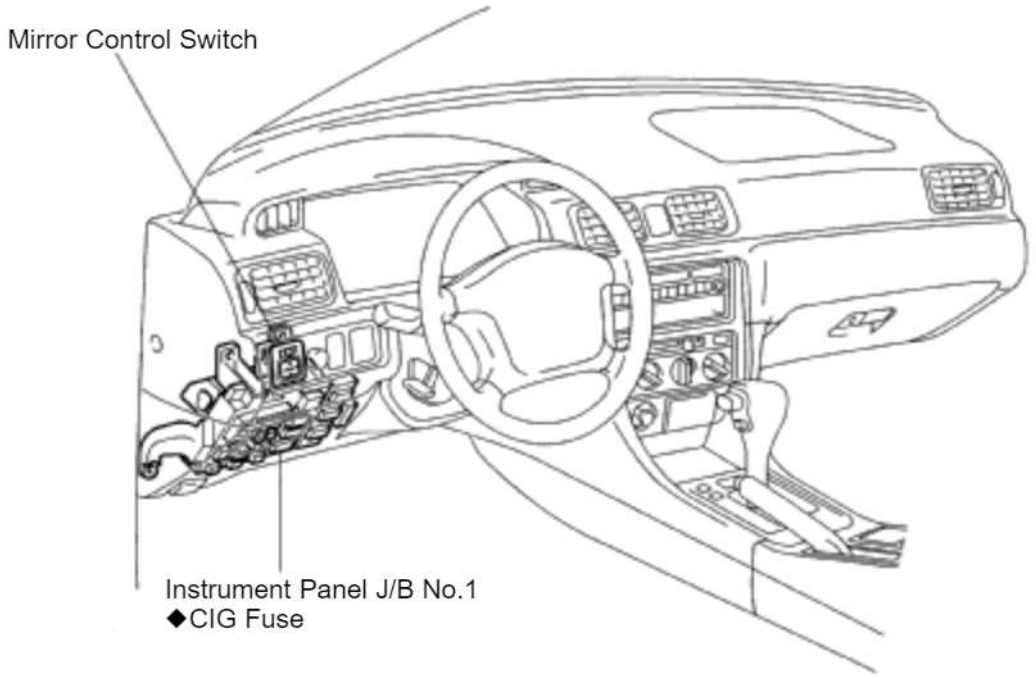
(d) Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to terminal 2, check that the seat back starts to fall backward.

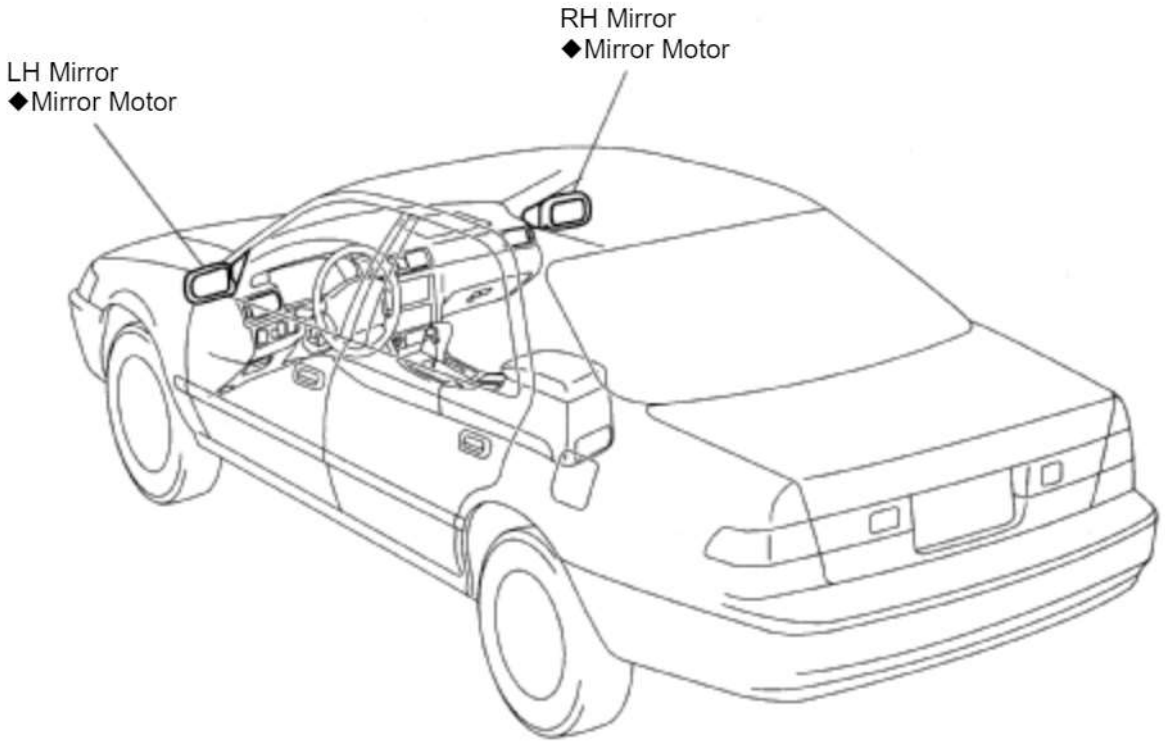
If operation is not as specified, replace the seat adjuster.

# POWER MIRROR CONTROL SYSTEM

BE0AV-03

## LOCATION

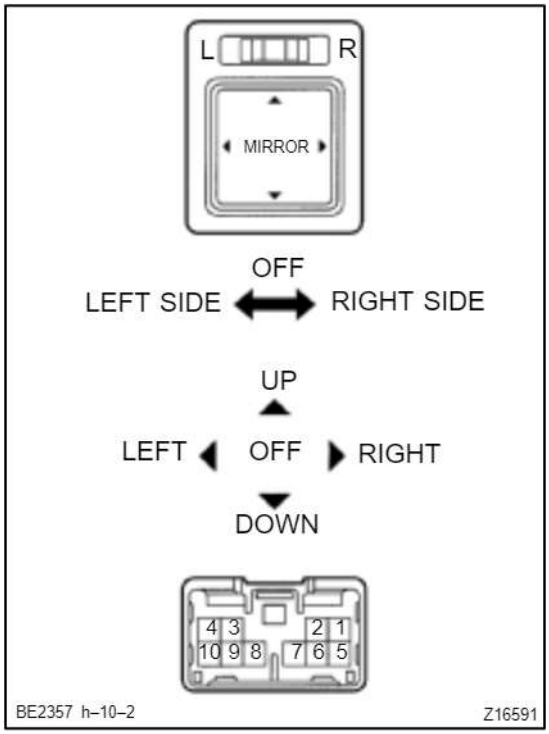



N21806
N21807

Z19488

BE0AW-03




# INSPECTION

**1. Master switch left side:**
**INSPECT MIRROR CONTROL SWITCH CONTINUITY**

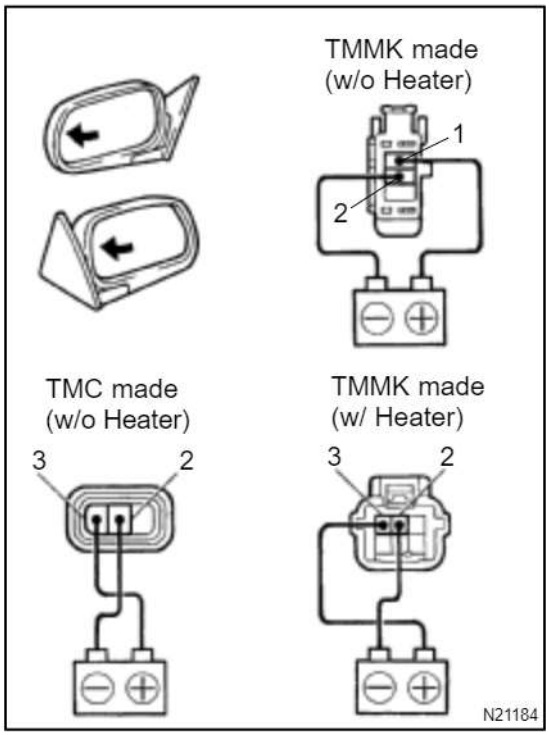
| Switch position | Tester connection | Specified condition |
|---|---|---|
| OFF | – | No continuity |
| UP | 1 – 9, 6 – 10 | Continuity |
| DOWN | 1 – 10, 6 – 9 | Continuity |
| LEFT | 5 – 9, 6 – 10 | Continuity |
| RIGHT | 5 – 10, 6 – 9 | Continuity |

If continuity is not as specified, replace the switch.

**2. Master switch right side:**
**INSPECT MIRROR CONTROL SWITCH CONTINUITY**

| Switch position | Tester connection | Specified condition |
|---|---|---|
| OFF | – | No continuity |
| UP | 6 – 10, 7 – 9 | Continuity |
| DOWN | 6 – 9, 7 – 10 | Continuity |
| LEFT | 6 – 10, 8 – 9 | Continuity |
| RIGHT | 6 – 9, 8 – 10 | Continuity |

If continuity is not as specified, replace the switch.

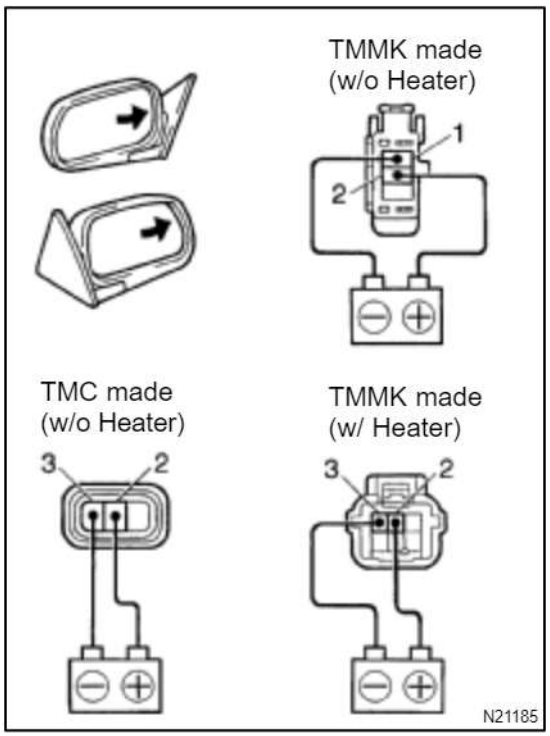



**3. INSPECT MIRROR MOTOR**

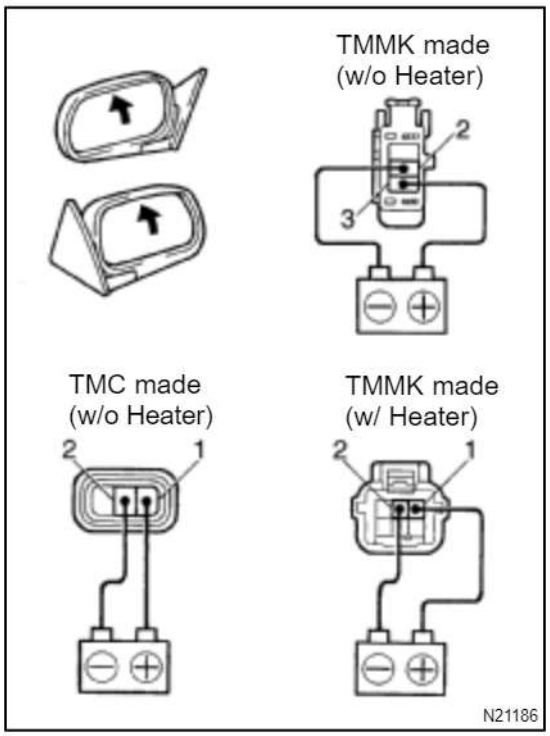
(a) TMMK made (w/o Heater):
Connect the positive (+) lead from the battery to terminal 1 and negative (–) lead to terminal 2, check that the mirror turns to left side.

(b) TMC made (w/o Heater):
Connect the positive (+) lead from the battery to terminal 3 and negative (–) lead to terminal 2, check that the mirror turns to left side.

(c) TMMK made (w/ Heater):
Connect the positive (+) lead from the battery to terminal 3 and negative (–) lead to terminal 2, check that the mirror turns to left side.



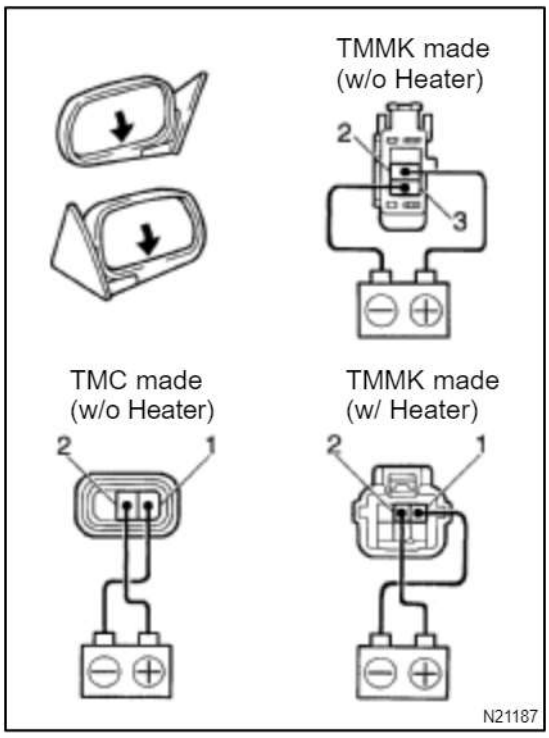

(d) Reverse the polarity and check that the mirror turns to right side.




(e) TMMK made (w/o Heater):
Connect the positive (+) lead from the battery to terminal 3 and the negative (–) lead to terminal 2, check that the mirror turns upward.

(f) TMC made (w/o Heater):
Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to terminal 2, check that the mirror turns upward.

(g) TMMK made (w/ Heater):
Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to terminal 2, check that the mirror turns upward.




(h) Reverse the polarity, check that the mirror turns downward.

If operation is not as specified, replace the mirror assembly.

# AUDIO SYSTEM

## DESCRIPTION

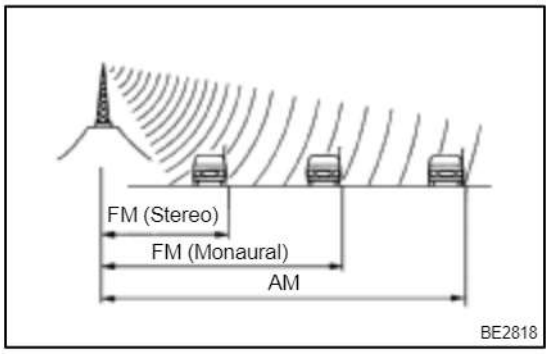
BE0AX-03

### 1. RADIO WAVE BAND

The radio wave bands used in radio broadcasting are as follows:

| Frequency | 30 kHz | 300 kHz | 3 MHz | 30 MHz | 300 MHz |
|---|---|---|---|---|---|
| Designation | LF | MF | HF | VHF | |
| Radio wave | | AM ⟷ | | FM ⟷ | |
| Modulation method | Amplitude modulation | | | Frequency modulation | |

LF: Low frequency MF: Medium Frequency HF: High Frequency VHF: Very High Frequency

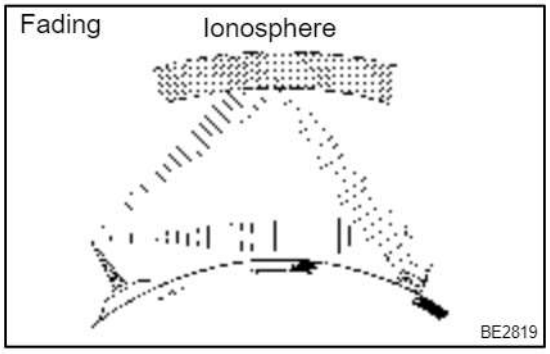



### 2. SERVICE AREA

There are great differences in the size of the service area for AM and FM monaural. Sometimes FM stereo broadcasts cannot be received even through AM comes in very clearly.
Not only does FM stereo have the smallest service area, but it also picks up static and other types of interference (”noise”) easily.

### 3. RECEPTION PROBLEMS

Besides the problem of static, there are also the problems called ”fading”, ”multipath” and ”fade out”. These problems are caused not by electrical noise but by the nature of the radio waves themselves.




◆ Fading

Besides electrical interference, AM broadcasts are also susceptible to other types of interference, especially at night. This is because AM radio waves bounce off the ionosphere at night. These radio waves then interfere with the signals from the same transmitter that reach the vehicle’s antenna directly. This type of interference is called ”fading”.

Multipath



BE2820

◆ Multipath

One type of interference caused by bouncing of radio waves off obstructions is called "multipath". Multipath occurs when a signal from the broadcast transmitter antenna bounces off buildings and mountains and interferes with the signal that is received directly.

Fade Out



BE2821

◆ Fade Out

Because FM radio waves are of higher frequencies than AM radio waves, they bounce off buildings, mountains, and other obstructions. For this reason, FM signals often seem to gradually disappear or fade away as the vehicle goes behind a building or other obstructions. This is called "fade out".

## 4. NOISE PROBLEMS

(a) Questionnaire for noise:

It is very important for noise troubleshooting to have good understanding of the claims from the customers, so that make the best use of following quenstionnaire and diagnose the problem accurately.

| | | |
|---|---|---|
| AM | Noise occurs at a specific place. | Strong possibility of foreign noise. |
| | Noise occurs when listening to faint broadcasting. | There is a case that the same program is broadcasted from each local station and that may be the case you are listening to different station if the program is the same. |
| | Noise occurs only at night. | Strong possibility of the beat from a distant broadcasting. |
| FM | Noise occurs while driving and at a specific place. | Strong possibility of multipath noise and fading noise caused by the changes of FM waves. |

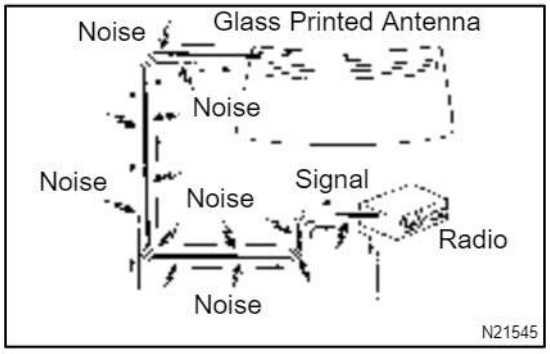
HINT:

In the case that the noise occurrence condition does not meet any of the above quenstionnaire, check based on the "Trouble Phenomenon".

Refer to previous page for multipath and fading.

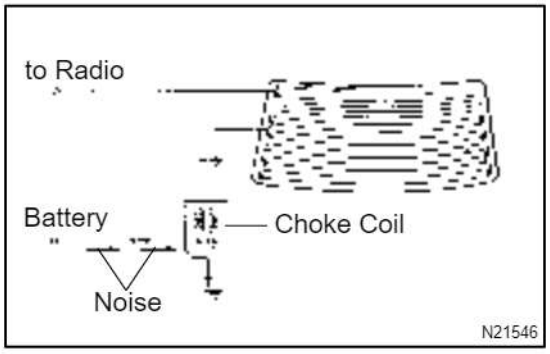
(b) Matlers that require attention when checking:

- Noise coming into the radio usually has no harm for practical use as the noise protection is taken and it is hardly thinkable for an extremely loud noise to come in. When extremely loud noise comes into the radio, check if the grounding is normal where the antenna is installed.
- Check if all the regular noise prevention parts are properly installed and if there is any installation of non–authorized parts and non–authorized wiring.
- If you leave the radio out of tune (not tuning), it is easy to diagnose the phenomenon as noise occurs frequently.



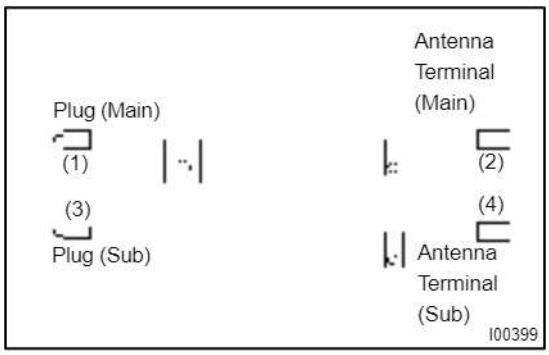

(c) Antenna and noise:

Electronic signal received by the antenna will reach to the radio transmitting through the core wire of the coaxial cable. Any noise wave other than radio wave is mixed into this core wire, that naturally causes noise in the radio and poor sound quality. In order to prevent these noises from mixing into the radio, the core wire inside the coaxial cable is covered with a mesh wire called shield wire. This shield wire shelters the noise and transmits it to the ground, thus preventing noise from mixing in. If this shield wire has grounding failure, that causes noise.




(d) Choke coil and noise:

The choke coil is connected in the rear window defogger circuit. This is conneted so to prevent noise from mixing into the radio by making the noise current included in the power source of the rear window defogger flow to the ground.




## 5. Glass printed antenna: GROUNDING FOR THE ANTENNA CORD AND CHOKE COIL

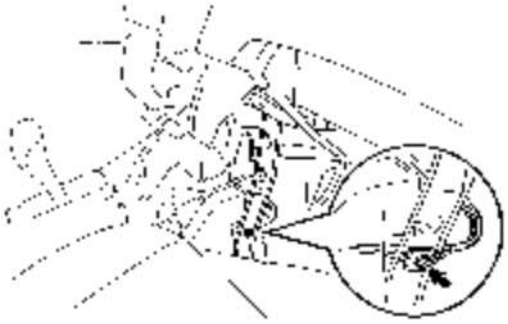
HINT:

During troubleshooting, in case that the antenna code continuity check, grounding check and grounding check of the choke coil are needed, please check refering to the following illustration.

| Terminal connection | Normal condition |
|---|---|
| (1) ↔ (2) | Continuity |
| (3) ↔ (4) | Continuity |

**Ground point:**

Antenna Cord

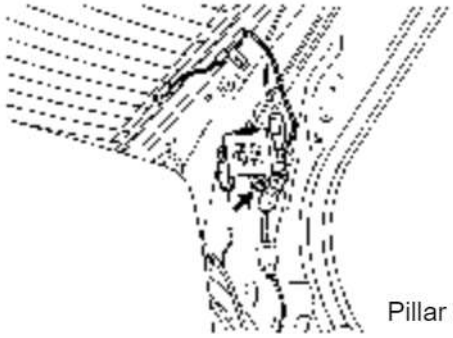


Center Brace



Pillar (RH)

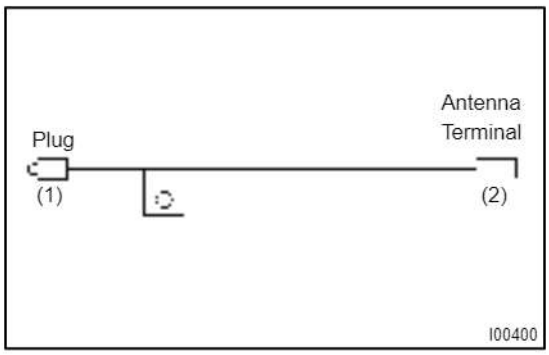
Choke Coil



Pillar (LH)

N21548 I00402
I00403

I00407



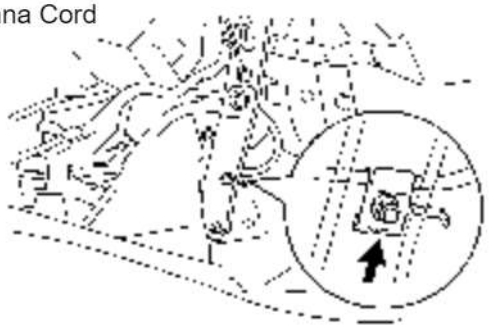

**6. Fixed mast antenna:**
**GROUNDING FOR THE ANTENNA CORD AND CHOKE COIL**

HINT:
During troubleshooting, in case that the antenna code continuity check, grounding check and grounding check of the choke coil are needed, please check refering to the following illustrations.

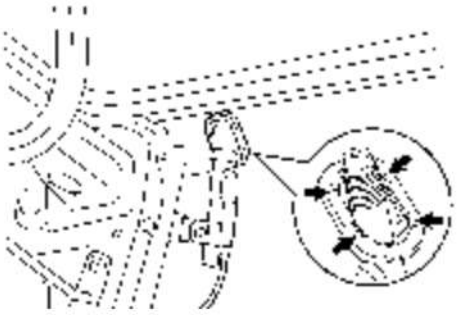
| Terminal connection | Normal condition |
|---|---|
| (1) ↔ (2) | Continuity |

**Ground point:**

Antenna Cord

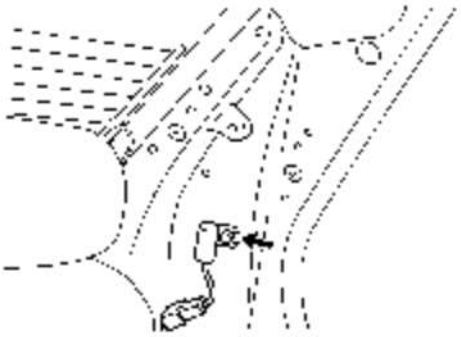


Center Brace



Luggage Room (RH side)

Noise Filter



I00427 I00428
I00429

Pillar (LH)

I00408

BE0AY-05

# TROUBLESHOOTING

**NOTICE:**

**When replacing the internal mechanism (computer part) of the audio system, be careful that no part of your body or clothing comes in contact with the terminals of the leads from the IC, etc. of the replacement part (spare part).**

HINT:

This inspection procedure is a simple troubleshooting which should be carried out on the vehicle during system operation and was prepared on the assumption of system component troubles (except for the wires and connectors, etc.).

Always inspect the trouble taking the following items into consideration.

Open or short circuit of the wire harness

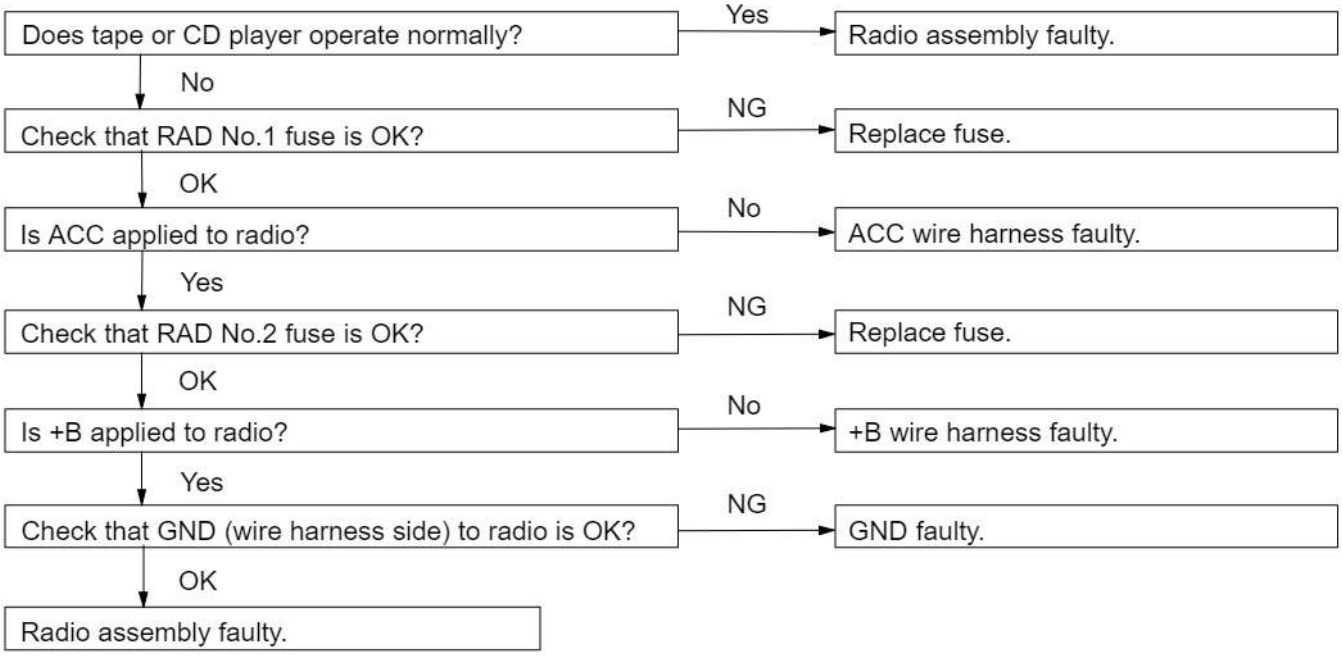
Connector or terminal connection fault

| | Problem | No. |
|---|---|---|
| Radio | Radio not operating when power switch turned 'ON'. | 1 |
| | Display indicates when power switch turned 'ON', but no sound (including 'noise') is produced. | 2 |
| | Noise present, but AM – FM not operating. | 3 |
| | Any speaker does not work. | 4 |
| | Either AM or FM does not work, reception poor (volume faint), Fewer station presets. | 5 |
| | Poor reception. | 6 |
| | Sound quality poor. | 7 |
| | Preset memory disappears. | 8 |
| Tape Player | Cassette tape cannot be inserted. | 9 |
| | Cassette tape is inserted, but no power. | 10 |
| | Power coming in, but tape player not operating. | 11 |
| | Either speaker does not work. | 12 |
| | Sound quality poor. (volume faint) | 13 |
| | Tape jammed, malfunction with tape speed or auto–reverse. | 14 |
| | Cassette tape will not be ejected. | 15 |
| CD Player | CD cannot be inserted. | 16 |
| | CD inserted, but no power. | 17 |
| | Power coming in, but CD player not operating. | 18 |
| | Sound jumps. | 19 |
| | Sound quality poor (Volume faint). | 20 |
| | Either speaker does not work. | 21 |
| | CD will not be ejected. | 22 |
| Noise | Noise occurs. | 23 |
| | Noise produced by vibration or shock while driving. | 24 |
| | Noise produced when engine starts. | 25 |

The term "AM" includes LW, MW and SW, and the term "FM" includes UKW.

| 1 | Radio | RADIO NOT OPERATING WHEN POWER SWITCH TURNED 'ON' |
|---|---|---|

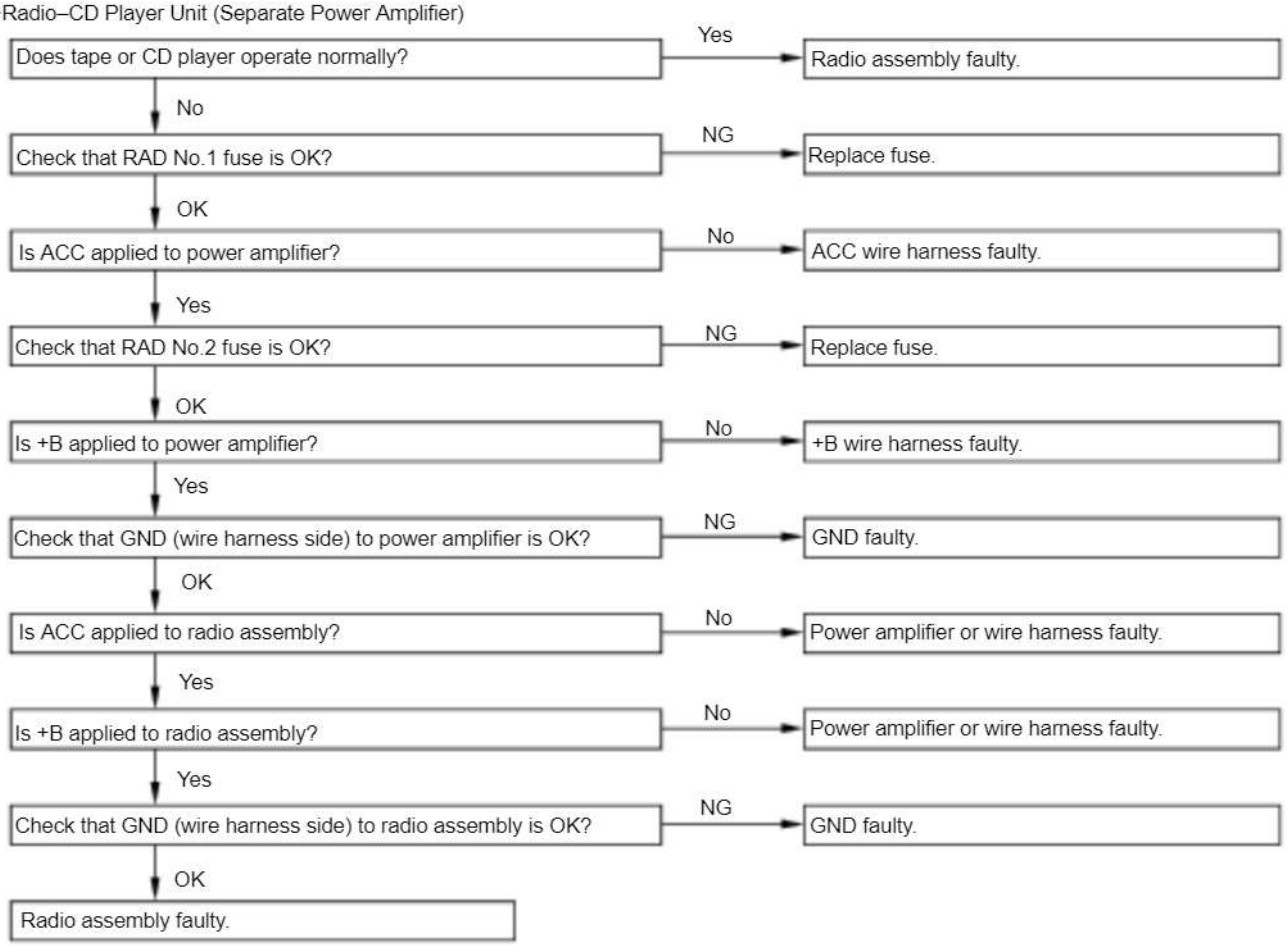
◆Radio–CD Plater Unit (Built–in Power Amplifier)
◆Radio–Tape Plater Unit (Built–in Power Amplifier)



◆Radio–Tape Player Unit (Separate Power Amplifier)

◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)

◆Radio–CD Player Unit (Separate Power Amplifier)

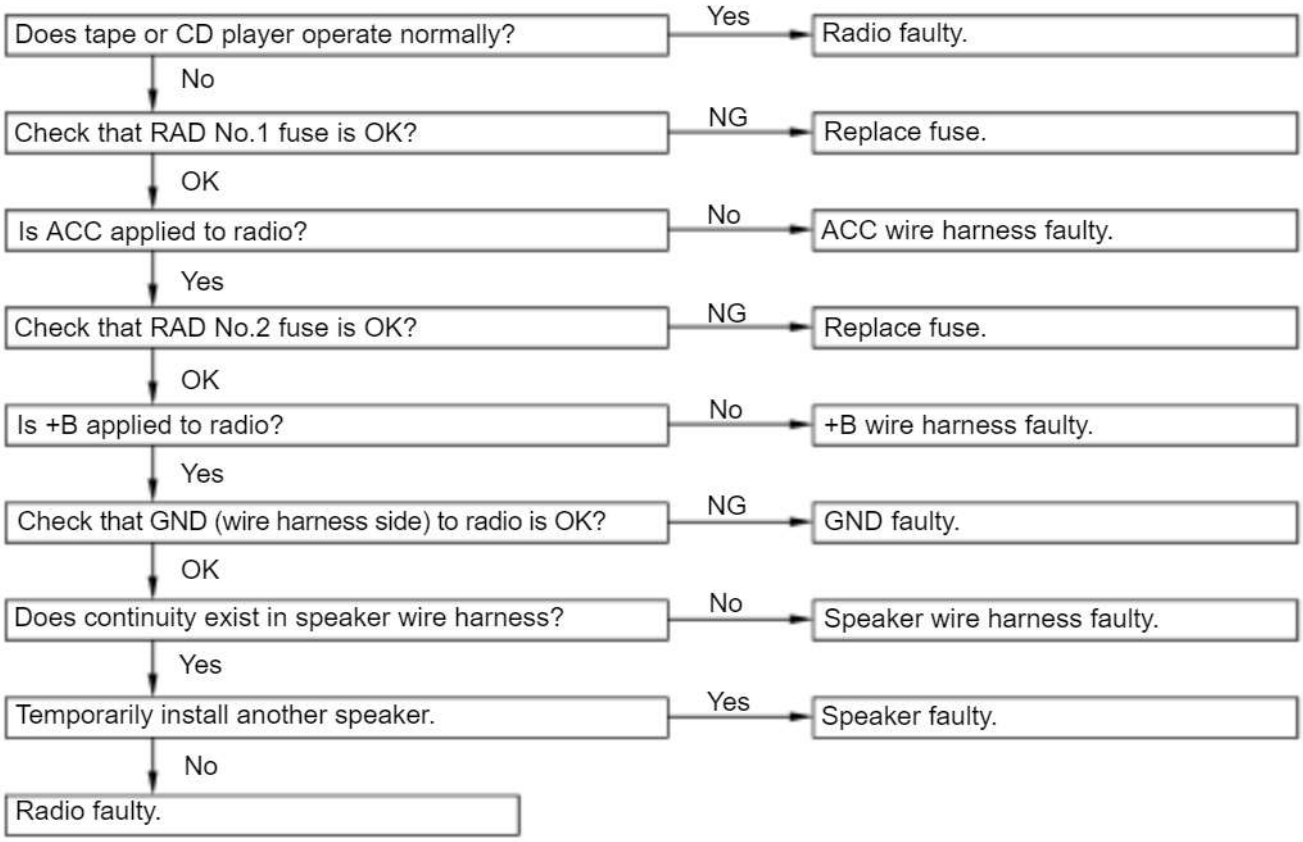



I03349

| | | |
|---|---|---|
| 2 | Radio | DISPLAY INDICATES WHEN POWER SWITCH TURNED 'ON', BUT NO SOUND (INCLUDING 'NOISE') IS PRODUCED |

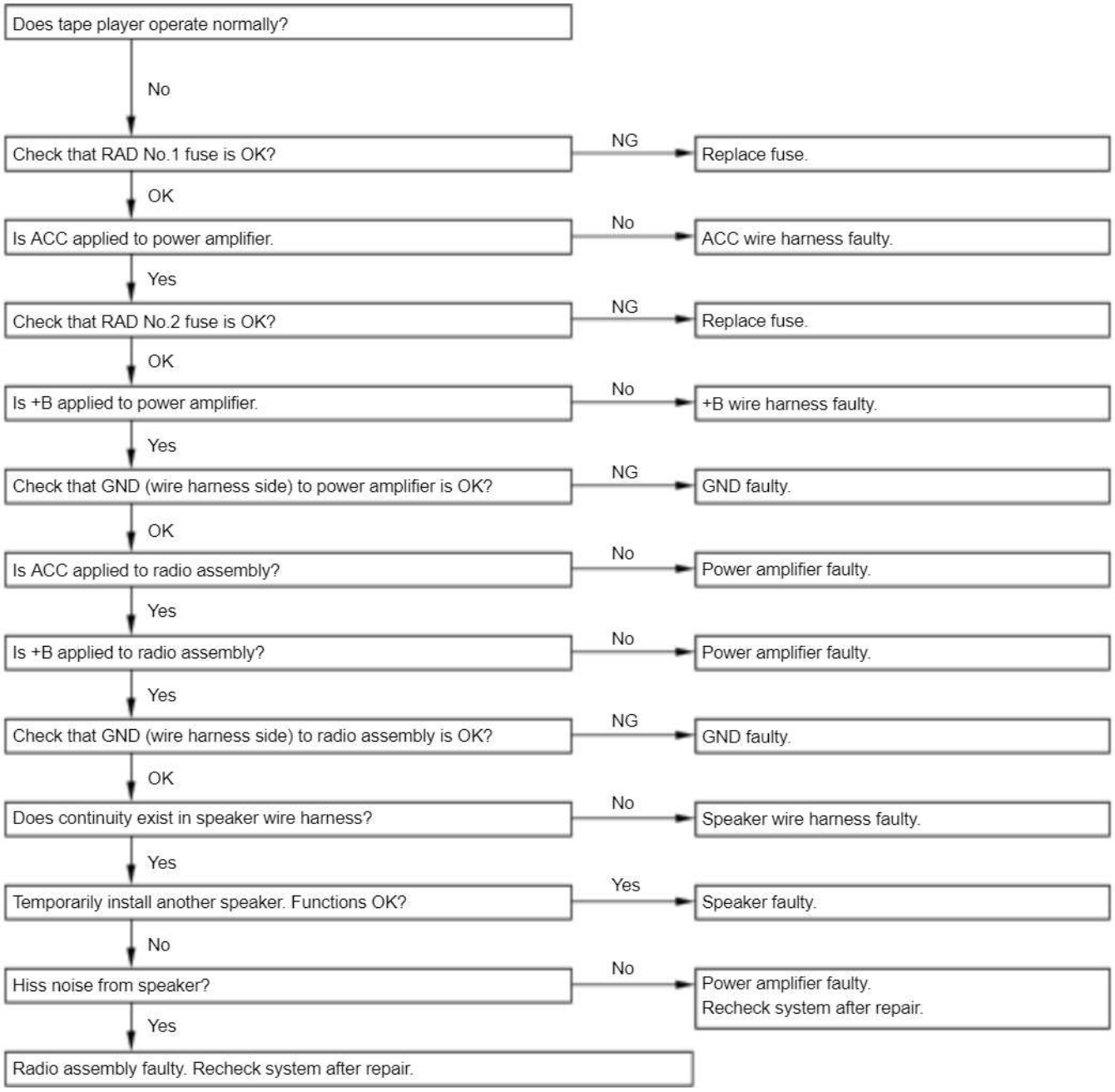
◆Radio–Tape Player Unit (Built–in Power Amplifier)

◆Radio–CD Player Unit (Built–in Power Amplifier)



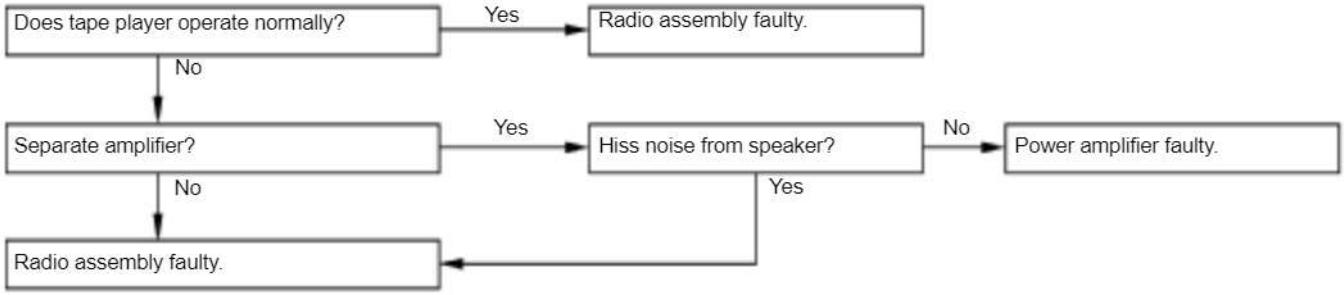

I03350

◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)



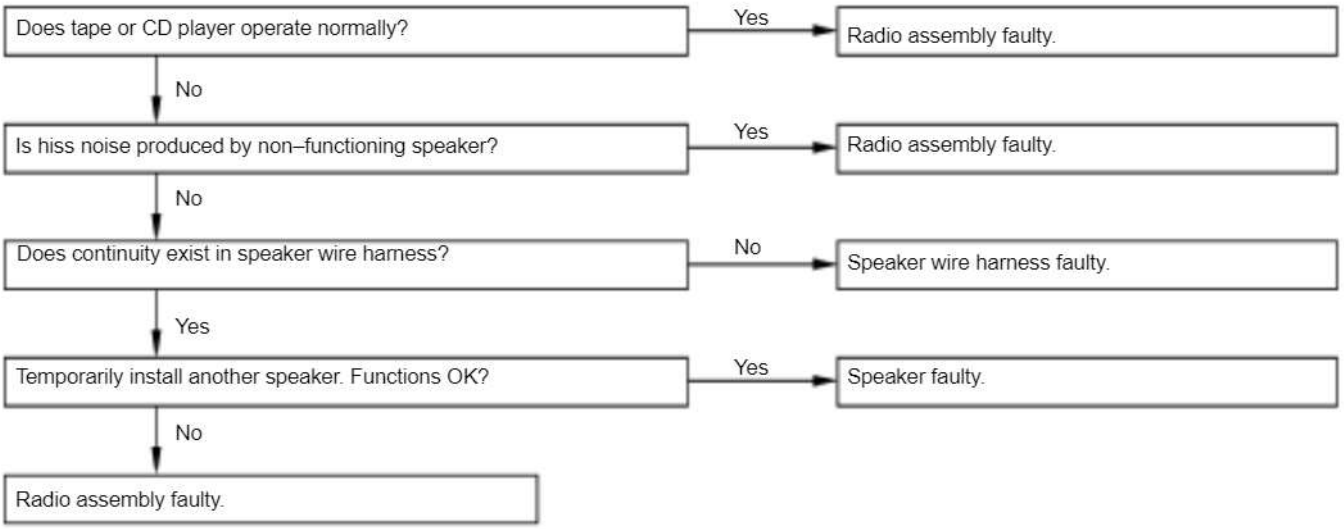

V08239

| 3 | Radio | NOISE PRESENT, BUT AM–FM NOT OPERATING |
|---|---|---|

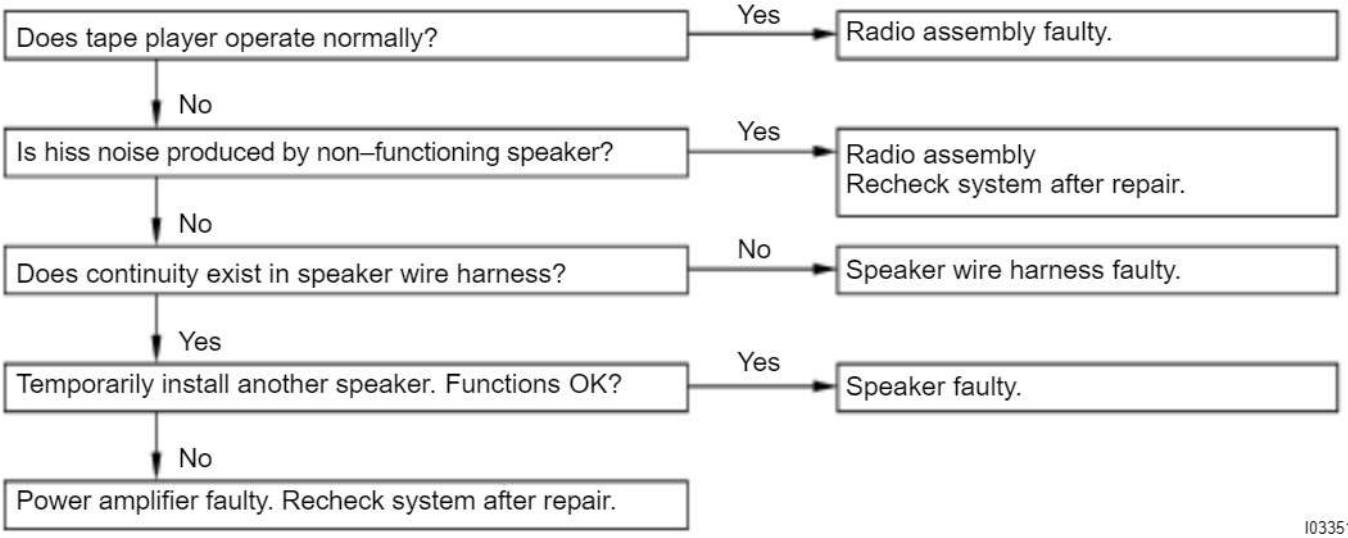



| 4 | Radio | ANY SPEAKER DOSE NOT WORK |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Built–in Power Amplifier)



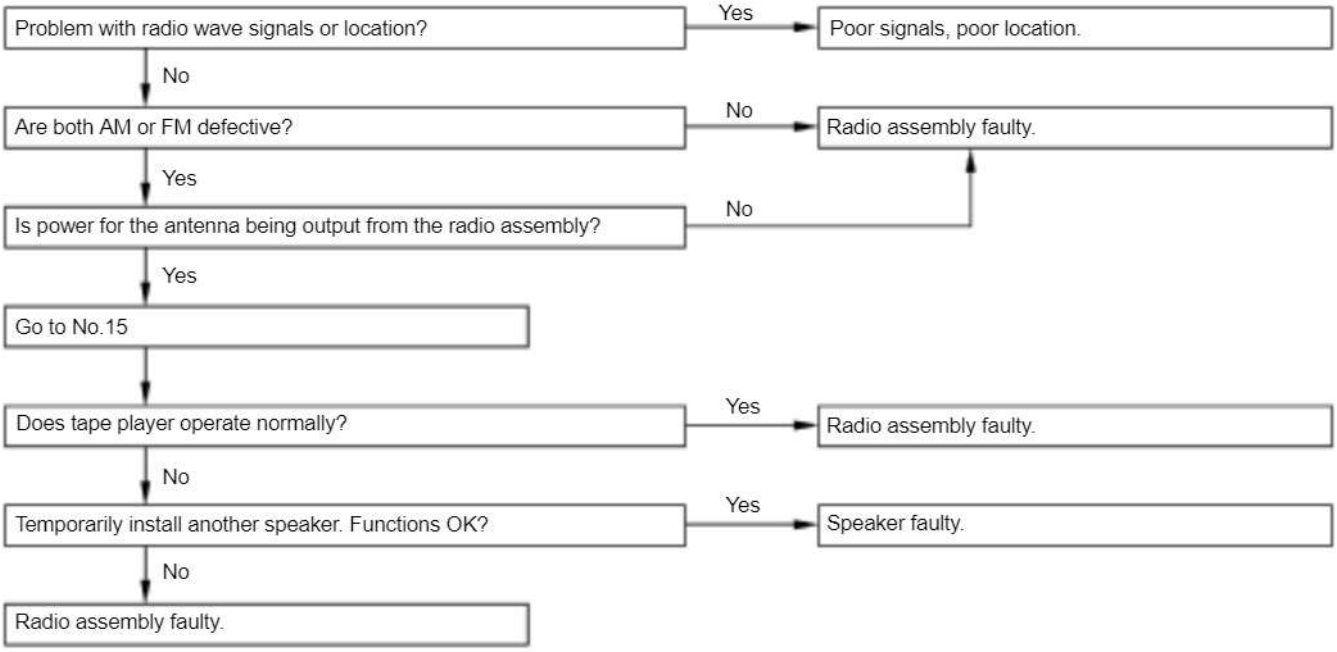

◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)



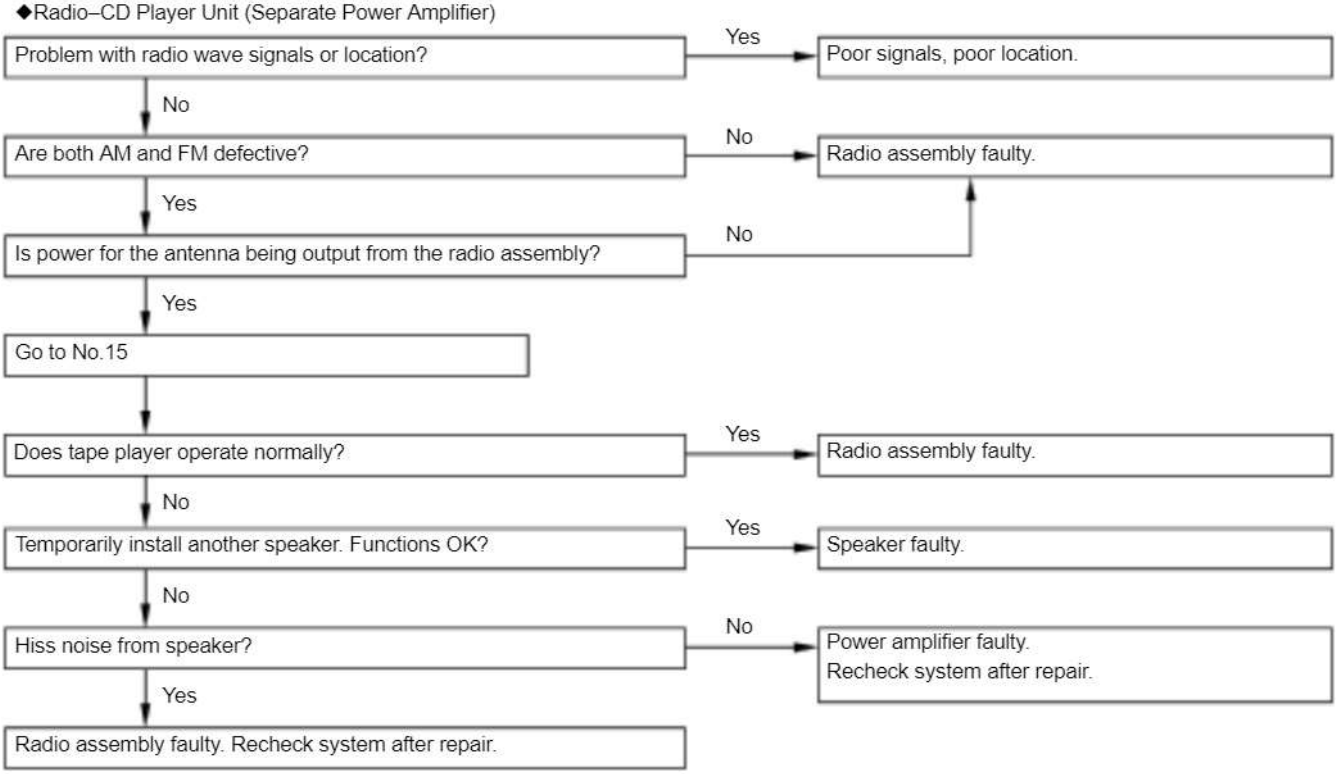

I03351

| 5 | Radio | EITHER AM OR FM DOES NOT WORK, RECEPTION POOR (VOLUME FAINT), FEWER STATION PRESETS |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Built–in Power Amplifier)



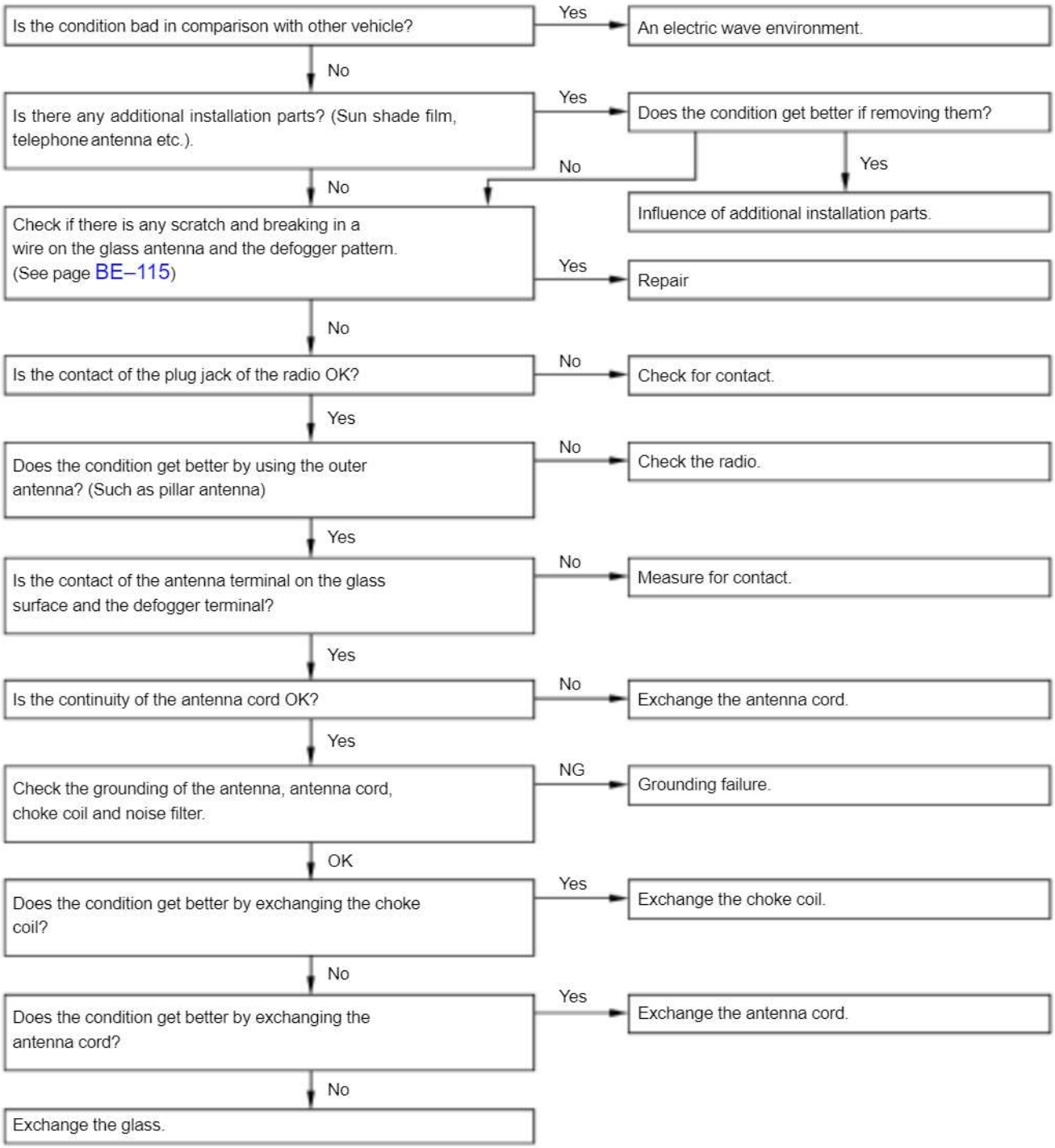

◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)




V08242

I03352

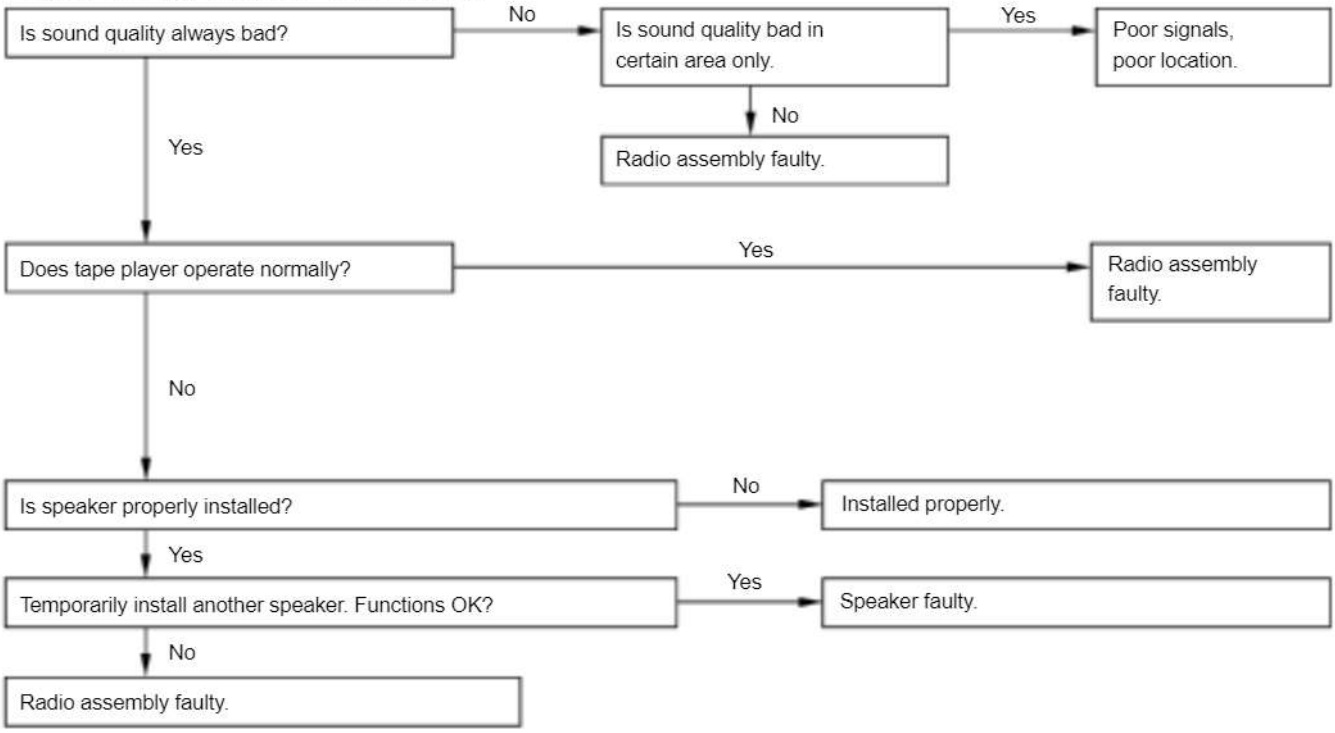
| 6 | Radio | POOR RECEPTION |
|---|---|---|



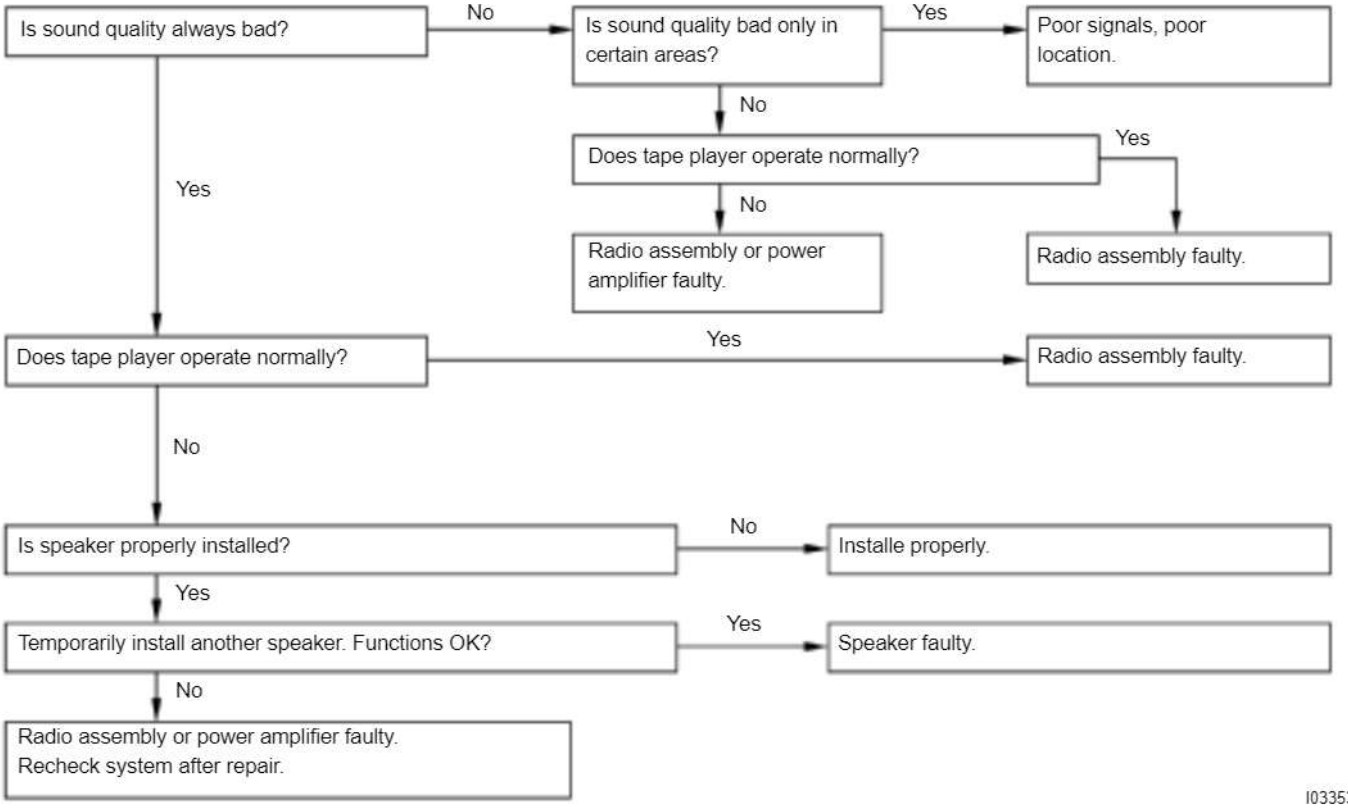

I01472

| 7 | Radio | SOUND QUALITY POOR |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Built–in Power Amplifier)




◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power amplifier)
◆Radio–Tape CD Unit (Separate Power Amplifier)




I03353

| 8 | Radio | PRESET MEMORY DISAPPEARS |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Built–in Power Amplifier)

Can cassette tape be inserted in tape player? —Yes→ Radio assembly faulty.
↓ No
Replace fuse. —NG→ Check that RAD No.1 fuse is OK?
↓ OK
Is +B applied to radio assembly? —No→ +B wire harness faulty.
↓ Yes
Check that GND (wire harness side) to radio? —NG→ GND faulty.
↓ OK
Radio assembly faulty.

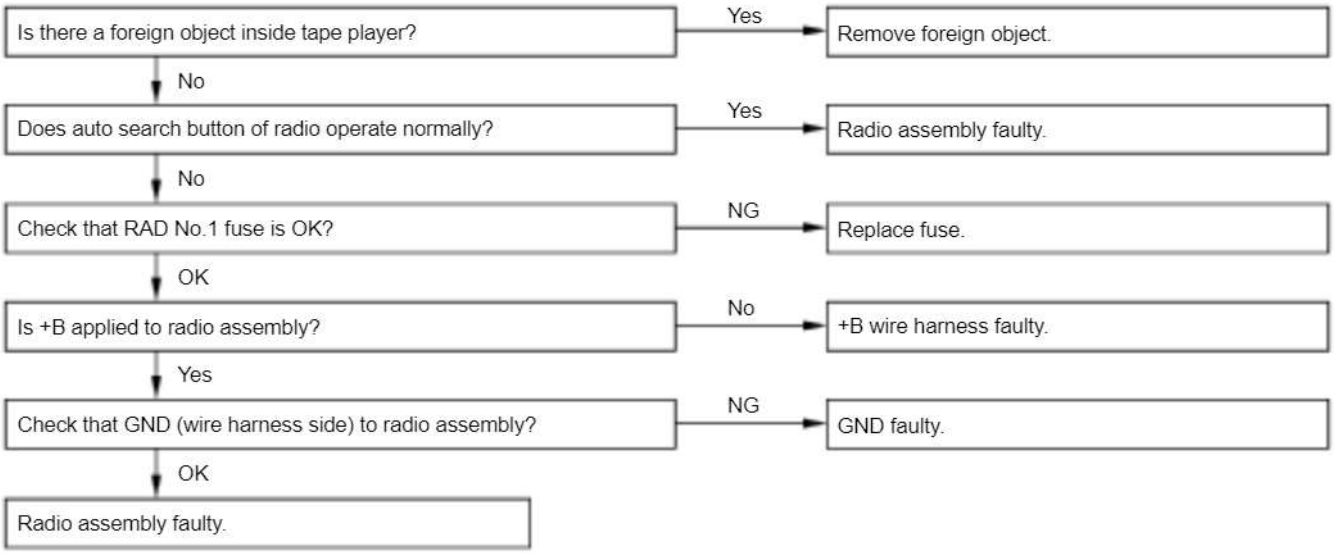
◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)

Can cassette tape be inserted in tape player? —Yes→ Radio assembly faulty.
↓ No
Check that RAD No.1 fuse is OK? —NG→ Replace fuse.
↓ OK
Is +B applied to power amplifier? —No→ +B wire harness faulty.
↓ Yes
Check that GND (wire harness side) to power amplifier? —NG→ GND faulty.
↓ OK
Is +B applied to radio assembly? —No→ Power amplifier faulty.
↓ Yes
Check that GND (wire harness side) to radio assembly? —NG→ Power amplifier faulty.
↓ OK
Radio assembly faulty.

I03354

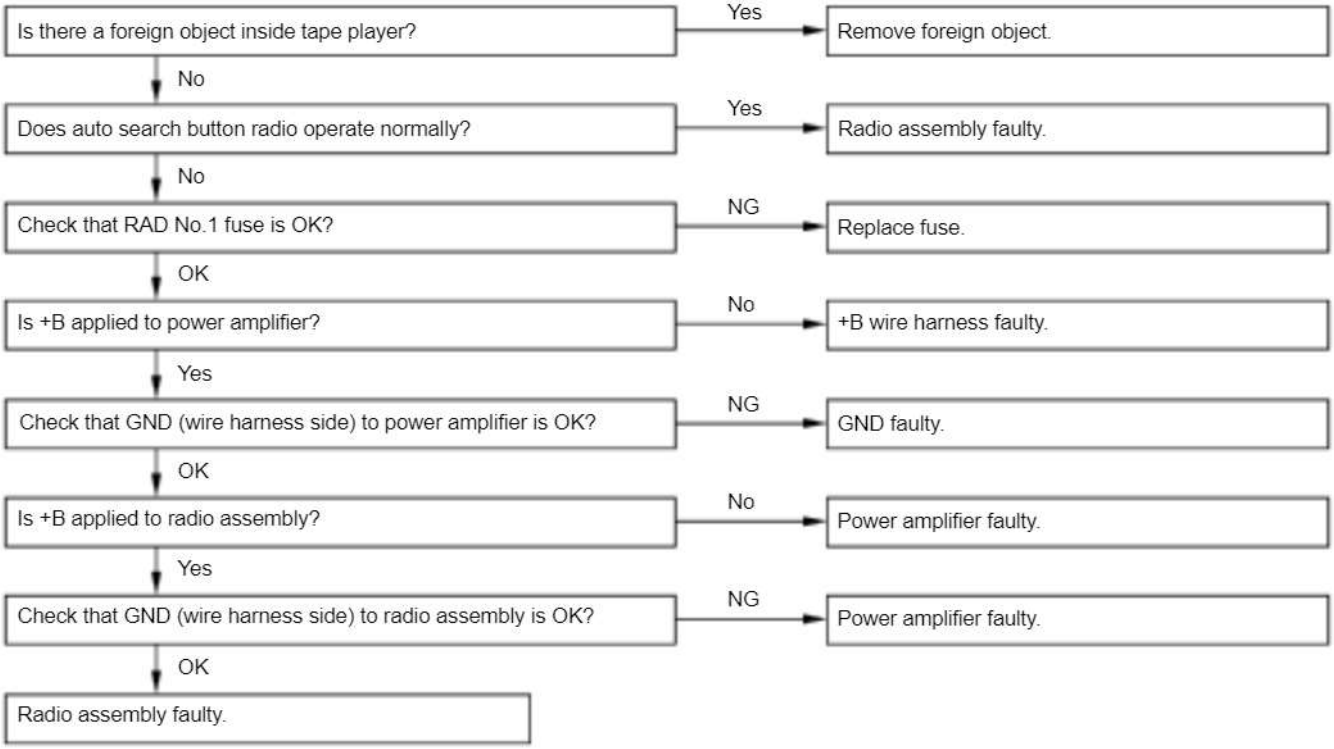
| 9 | Tape Player | CASSETTE TAPE CANNOT BE INSERTED |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)




◆Radio–Tape Player Unit (Separate Power Amplifier)

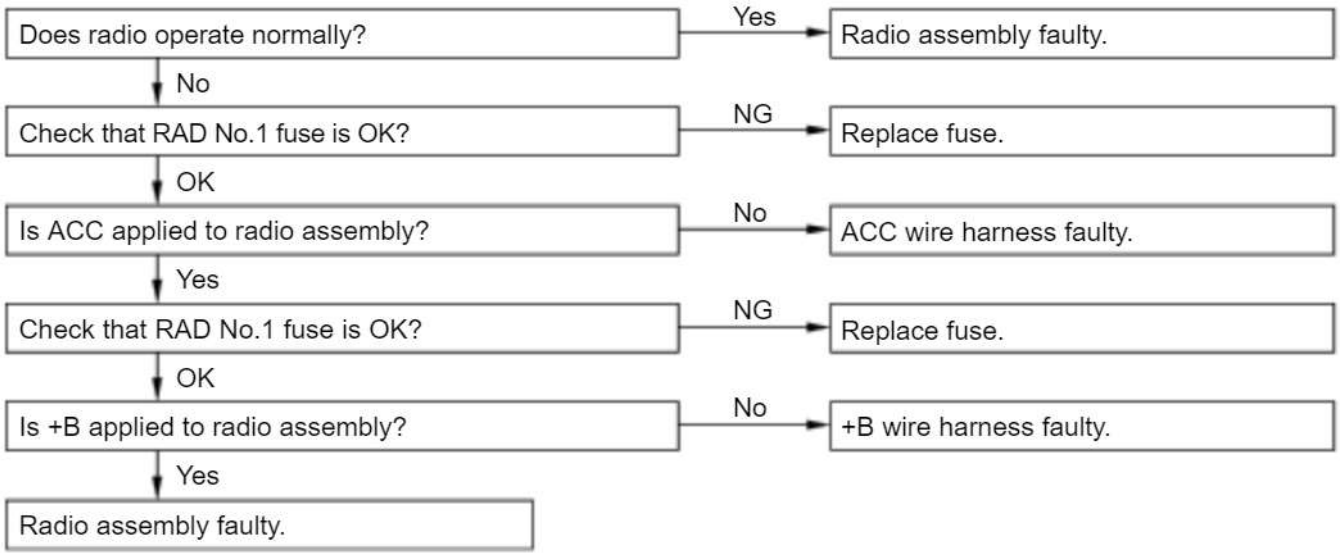
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)



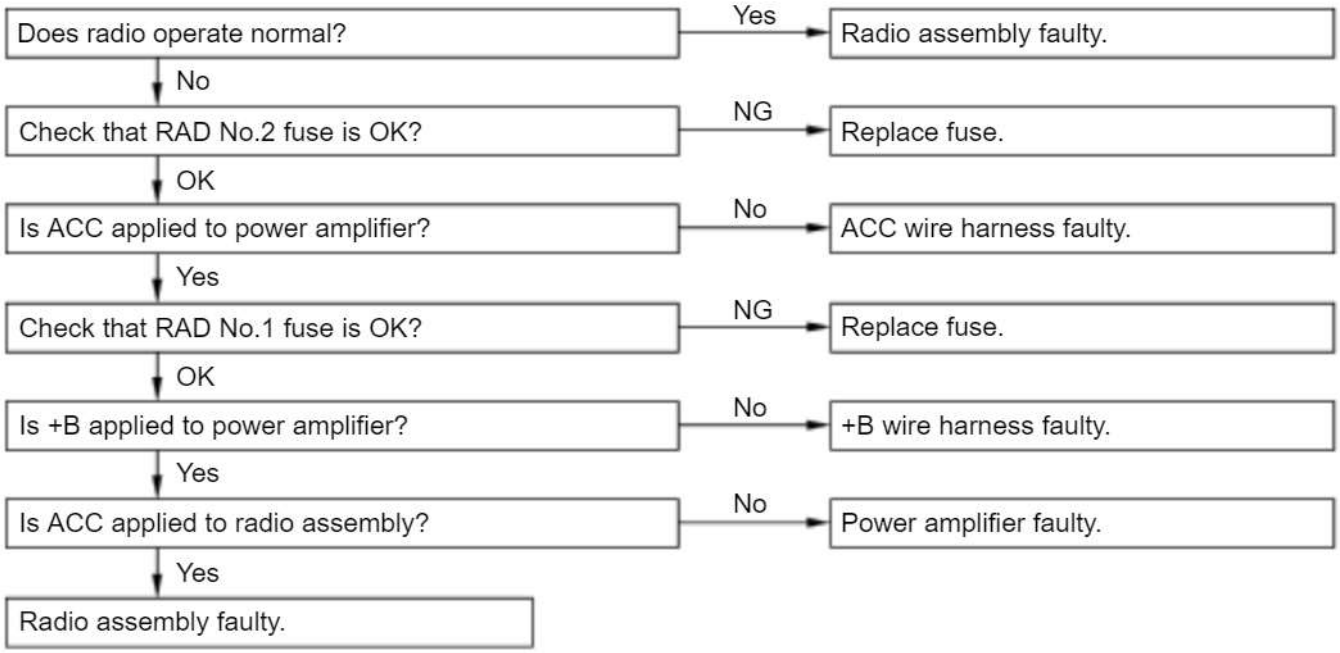

V08246

| 10 | Tape Player | CASSETTE TAPE IS INSERTED, BUT NO POWER |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)



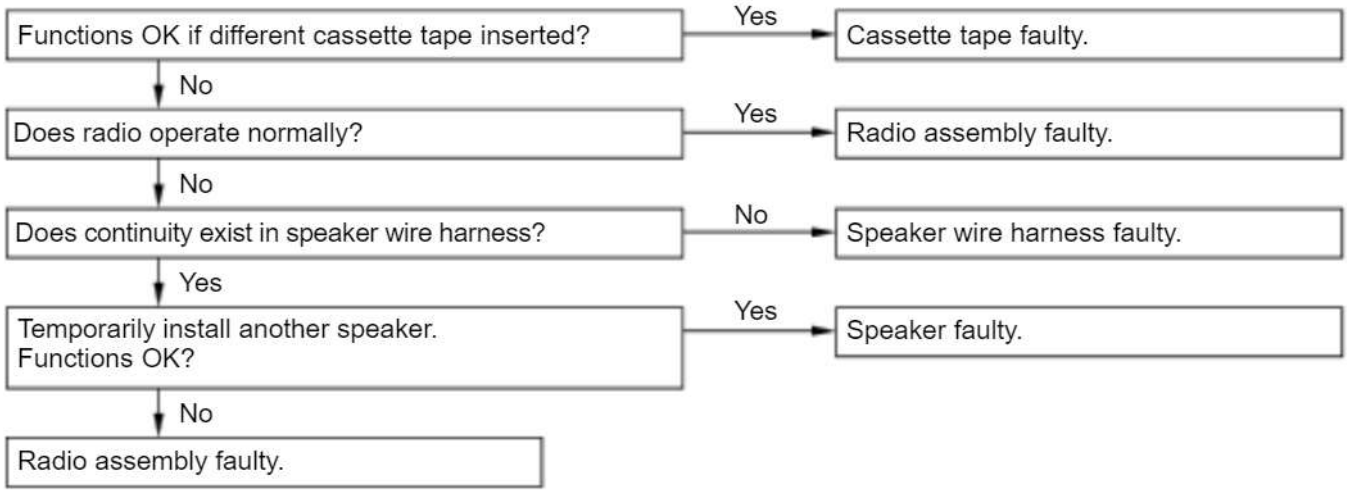

◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)



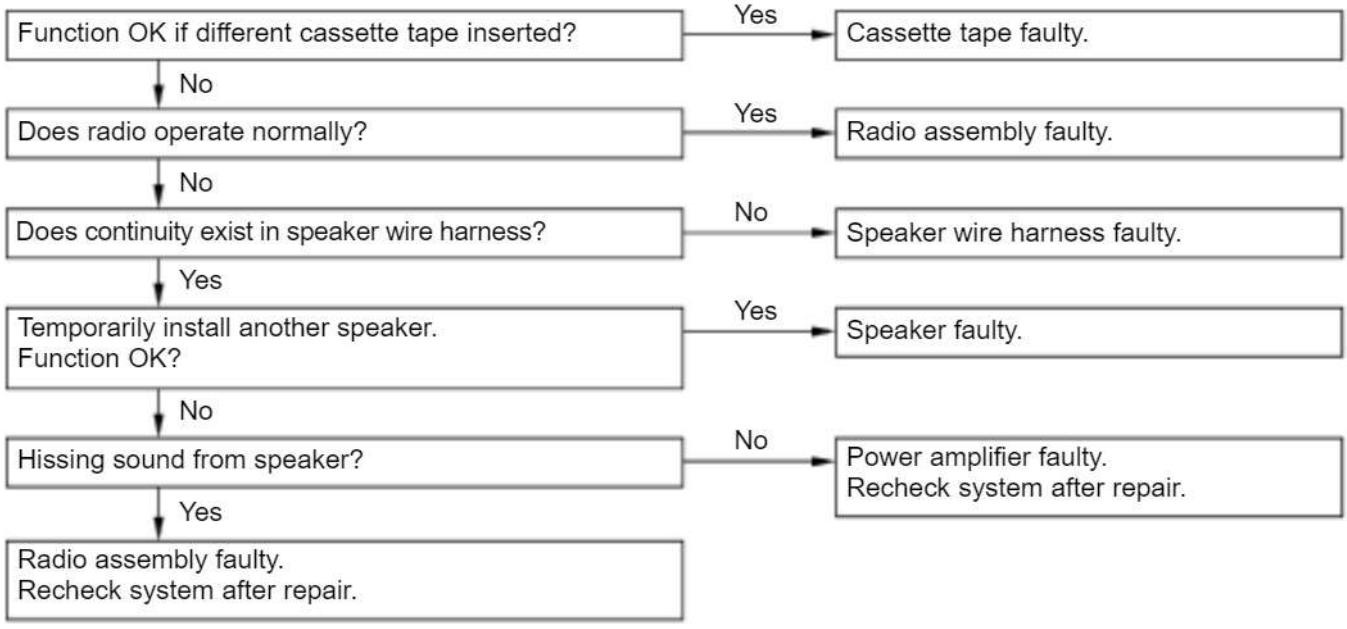

V08247

| 11 | Tape Player | POWER COMING IN, BUT TAPE PLAYER NOT OPERATING |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)



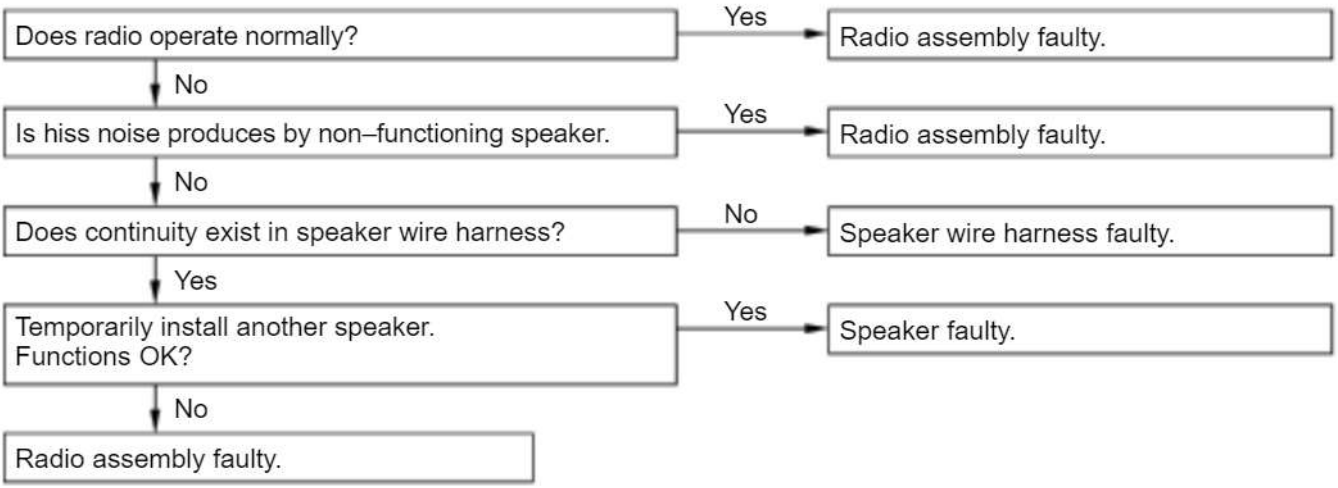

◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)



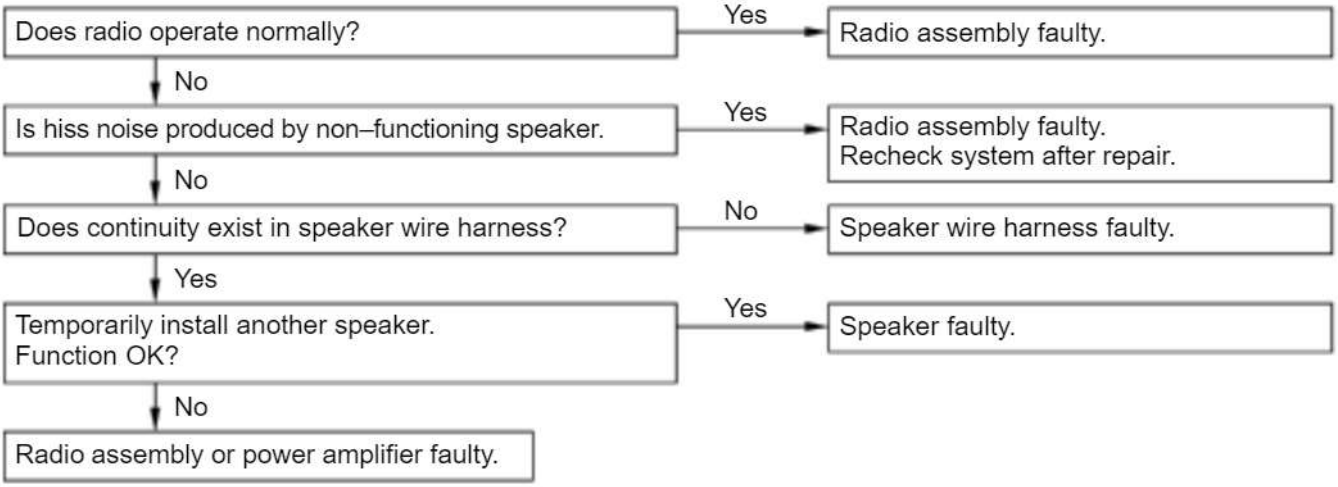

V08248

| 12 | Tape Player | EITHER SPEAKER DOES NOT WORK |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)



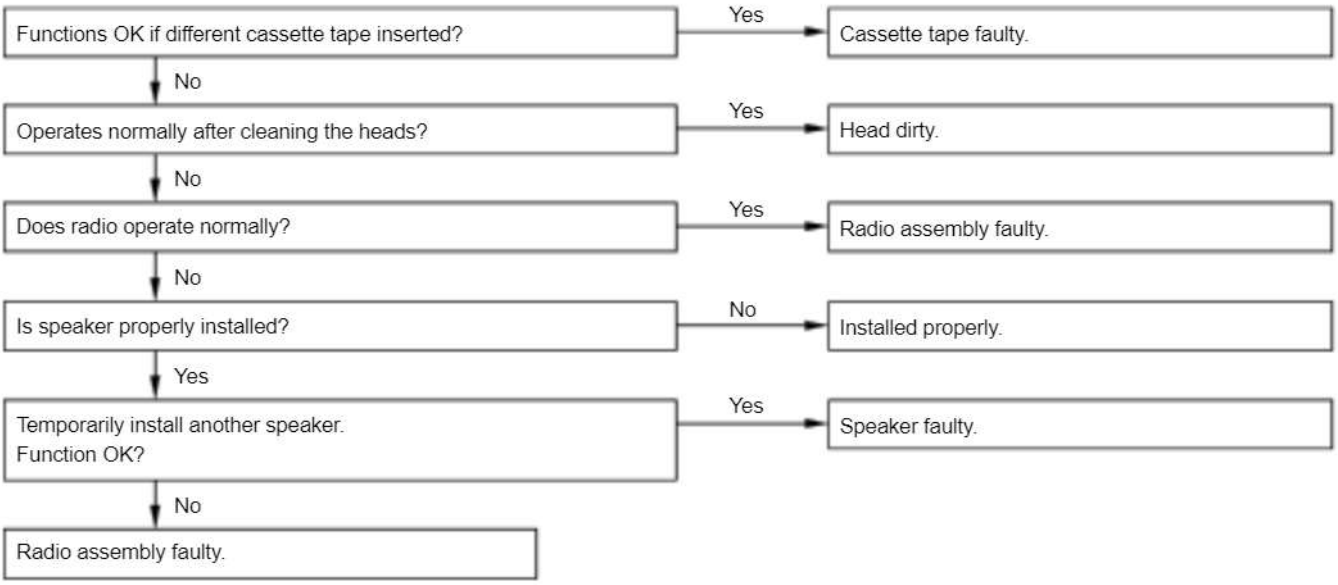

◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)



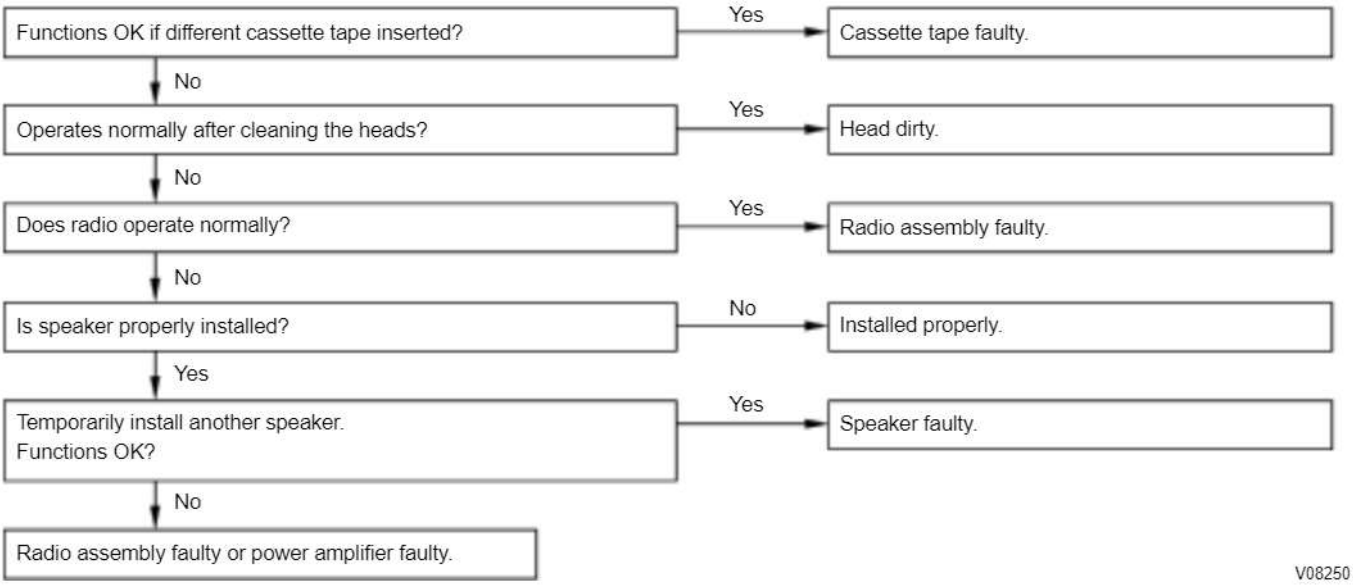

V08249

| 13 | Tape Player | SOUND QUALITY POOR (VOLUME FAINT) |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)




◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)




V08250

| 14 | Tape Player | TAPE JAMMED, MALFUNCTION WITH TAPE SPEED OR AUTO–REVERSE |
|---|---|---|

Function OK if different tape (less than 120 mints.) inserted?
- Yes → Cassette tape faulty.
- No ↓

Is there a foreign object inside tape player?
- Yes → Remove foreign object.
- No ↓

Operates normally after cleaning the heads?
- Yes → Head dirty.
- No ↓

Radio assembly faulty.

| 15 | Tape Player | CASSETTE TAPE WILL NOT BE EJECTED |
|---|---|---|

◆Radio–Tape Player Unit (Built–in Power Amplifier)

Does tape player operate normally?
- No → Cassette tape jammed.
- Yes ↓

Is auto search button of radio operating normally?
- Yes → Radio assembly faulty.
- No ↓

Check that RAD No.1 fuse is OK?
- NG → Replace fuse.
- OK ↓

Is +B applied to radio assembly?
- No → +B wire harness faulty.
- Yes ↓

Radio assembly faulty.

◆Radio–Tape Player Unit (Separate Power Amplifier)
◆Radio–Tape Player–CD Player Unit (Separate Power Amplifier)

Does tape player operate normally?
- No → Cassette tape jammed.
- Yes ↓

Is auto search button of radio operating normally?
- Yes → Radio assembly faulty.
- No ↓

Check that RAD No.1 fuse is OK?
- NG → Replace fuse.
- OK ↓

Is +B applied to power amplifier?
- No → +B wire harness faulty.
- Yes ↓

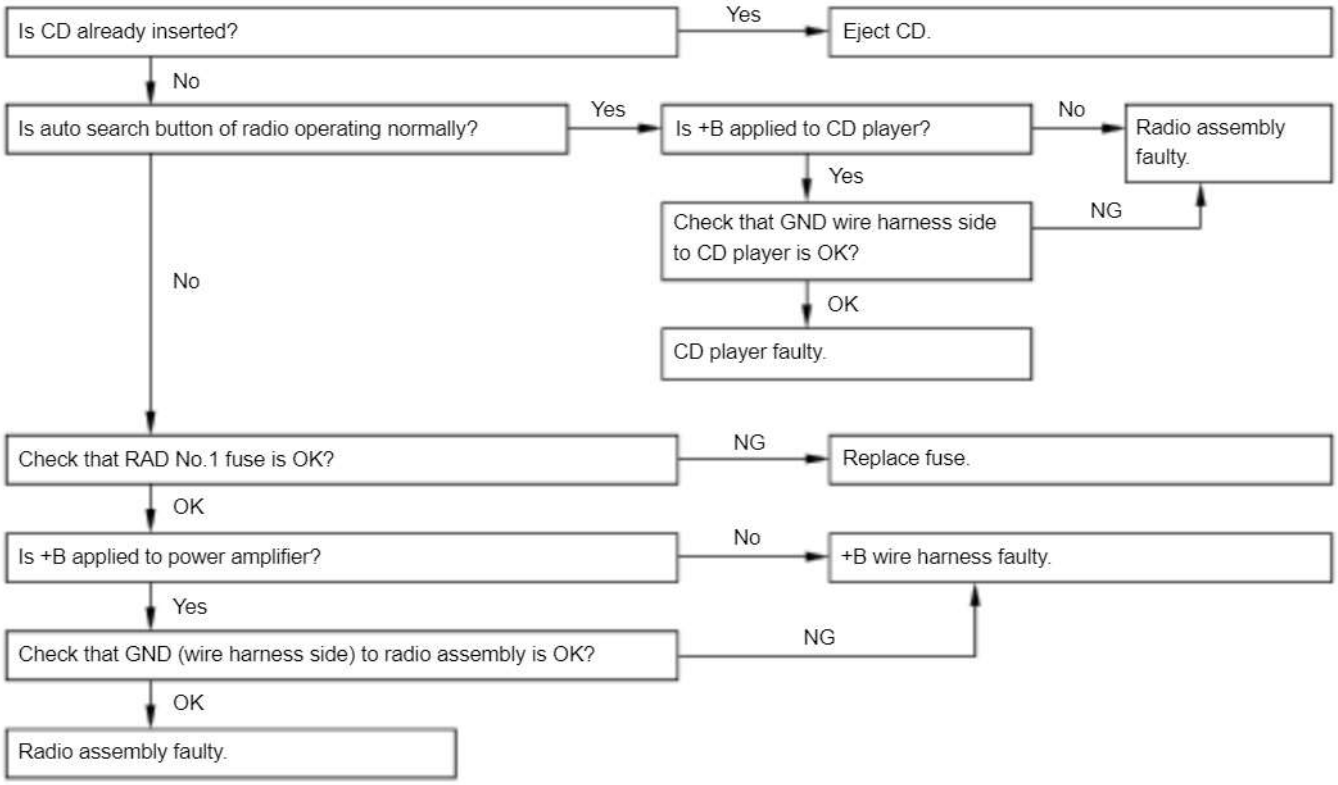
Is +B applied to radio assembly?
- No → Power amplifier faulty.
- Yes ↓

Radio assembly faulty.

V08251

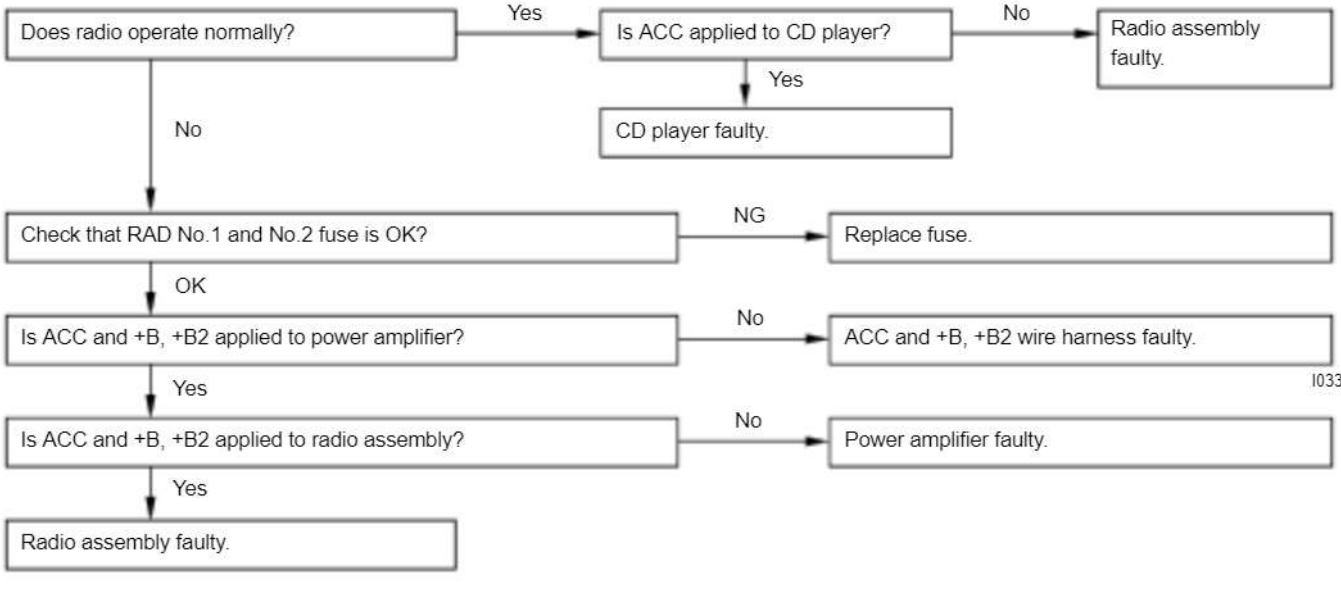
| 16 | CD Player | CD CANNOT BE INSERTED |
|---|---|---|

◆Radio–CD Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)
◆Radio–Tape Player – CD Player (Separate Power Amplifier)




| 17 | CD Player | CD INSERTED, BUT NO POWER |
|---|---|---|

◆Radio–CD Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)
◆Radio–Tape Player – CD Player (Separate Power Amplifier)

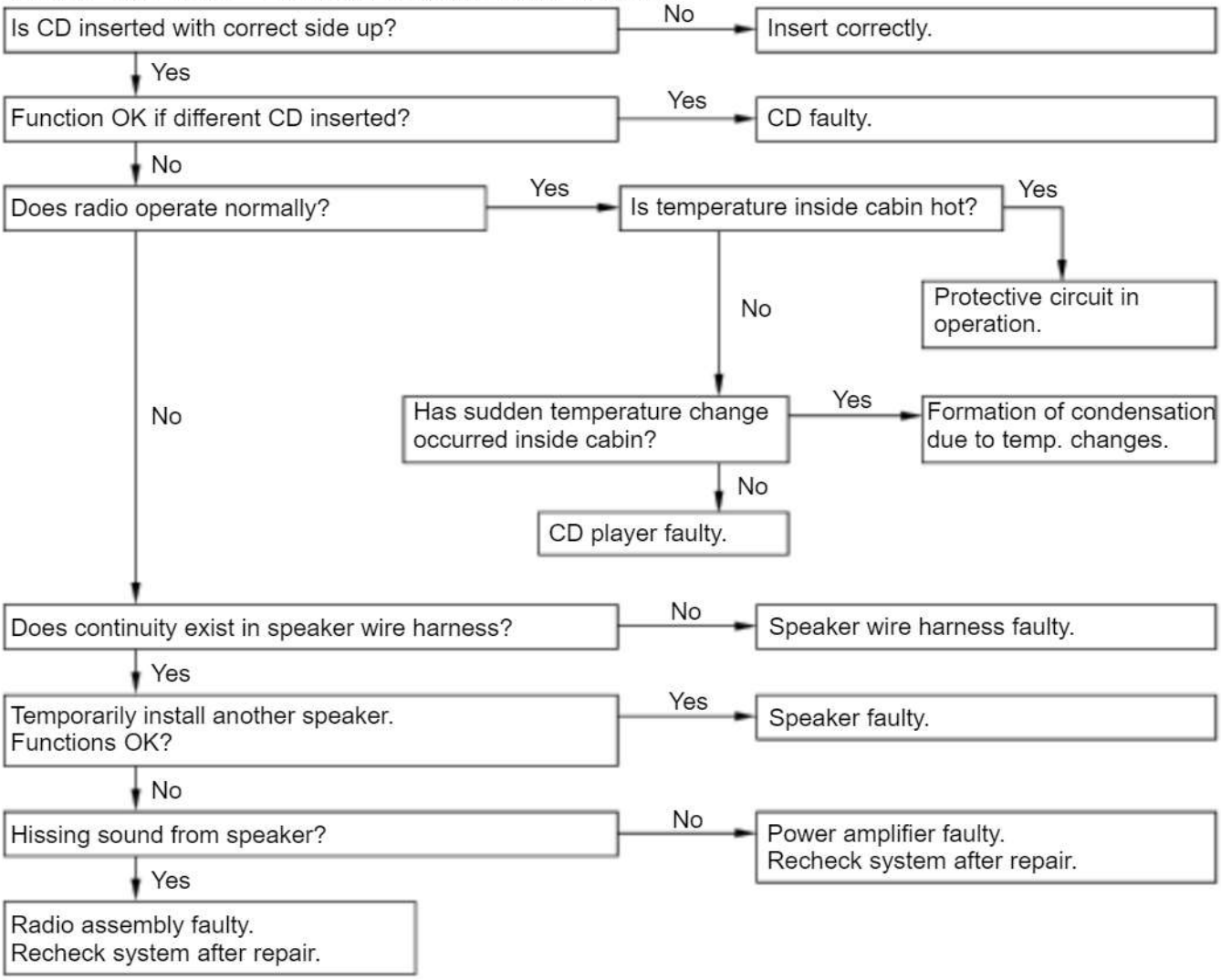



I03355

I03355

| 18 | CD Player | POWER COMING IN, BUT CD PLAYER NOT OPERATING |
|---|---|---|

◆Radio–CD Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)
◆Radio–Tape Player – CD Player (Separate Power Amplifier)




I03356

| 19 | CD Player | SOUND JUMPS |
|---|---|---|

◆Radio–CD Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)
◆Radio–Tape Player – CD Player (Separate Power Amplifier)

Does sound jump only during strong vibration? — Yes → Jumping caused by vibration.
↓ No
Is CD player properly installed? — No → Installed properly.
↓ Yes
Functions OK if different CD inserted? — Yes → CD faulty.
↓ No
Has sudden temperature change occurred inside cabin? — Yes → Formation of condensation due to temp. changes.
↓ No
CD player faulty.

| 20 | CD Player | SOUND QUALITY POOR (VOLUME FAINT) |
|---|---|---|

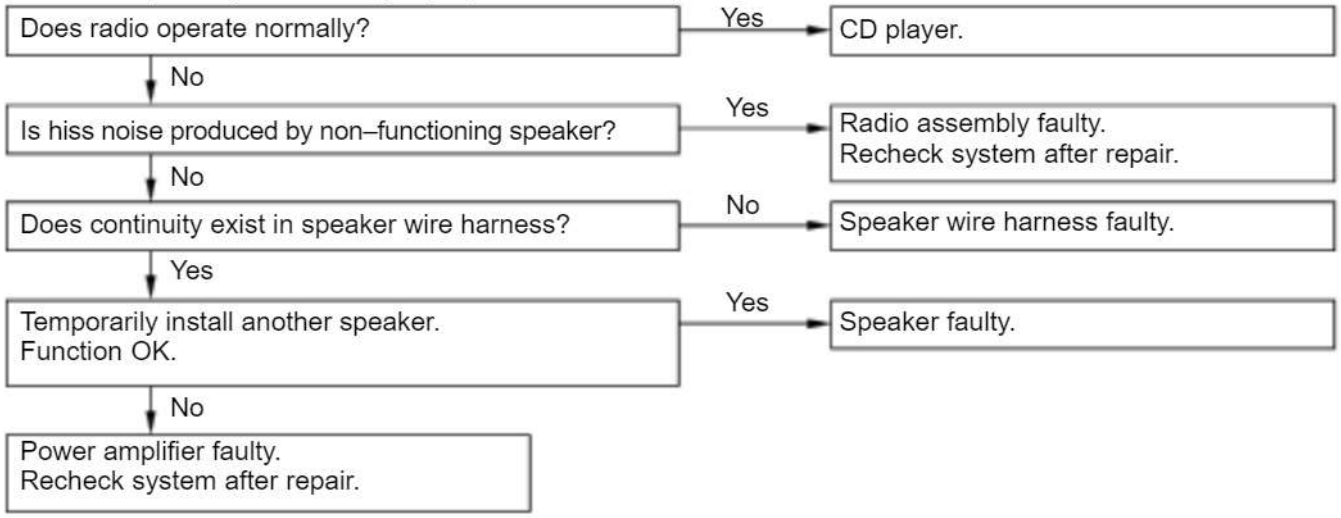
◆Radio–CD Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)
◆Radio–Tape Player – CD Player (Separate Power Amplifier)

Functions OK if different CD inserted? — Yes → CD faulty.
↓ No
Does radio operate normally? — Yes → CD player faulty.
↓ No
Is speaker properly installed? — No → Installed properly.
↓ Yes
Temporarily install another speaker. Functions OK? — Yes → Speaker faulty.
↓ No
Radio assembly or CD player or Power amplifier faulty.

I03357

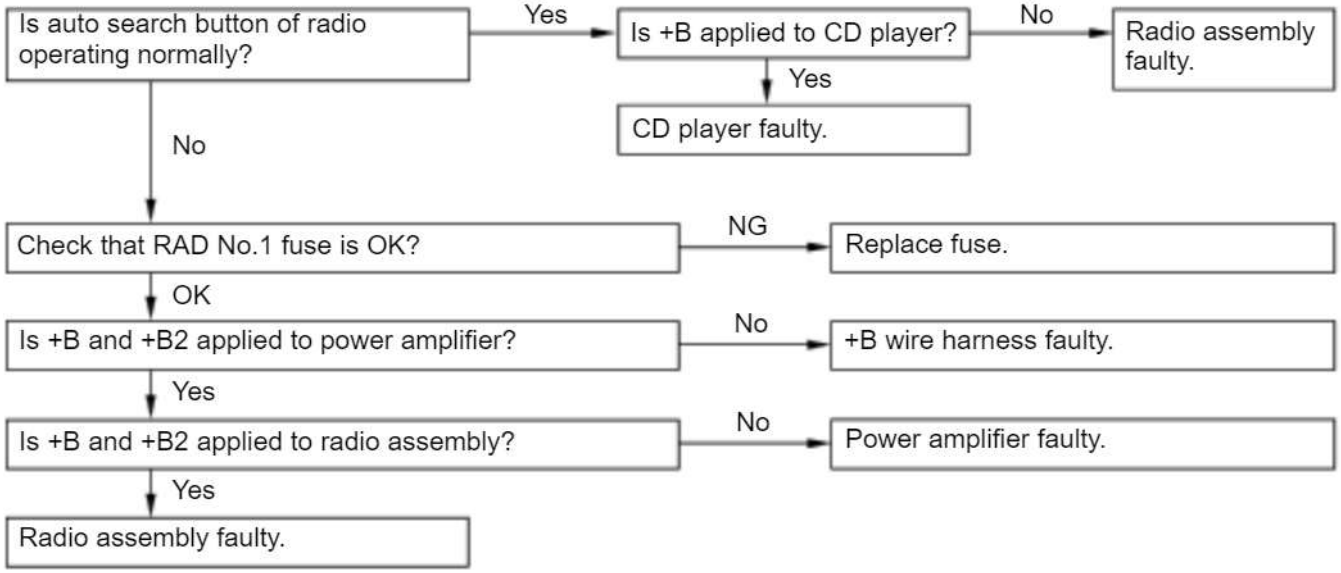
| 21 | CD Player | EITHER SPEAKER DOES NOT WORK |
|---|---|---|

◆Radio–CD Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)
◆Radio–Tape Player – CD Player (Separate Power Amplifier)



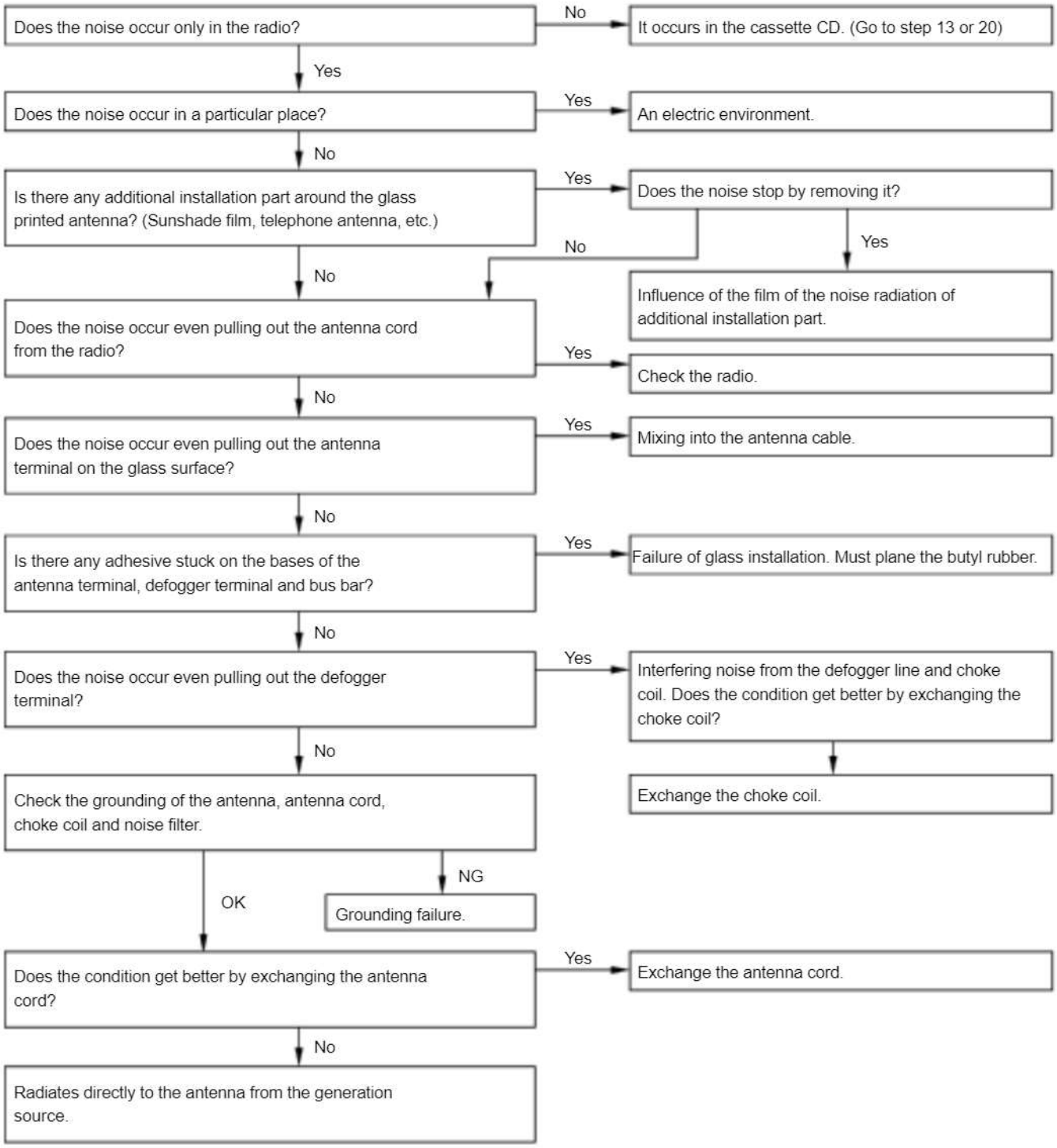

| 22 | CD Player | CD WILL NOT BE EJECTED |
|---|---|---|

◆Radio–CD Player Unit (Built–in Power Amplifier)
◆Radio–CD Player Unit (Separate Power Amplifier)
◆Radio–Tape Player – CD Player (Separate Power Amplifier)



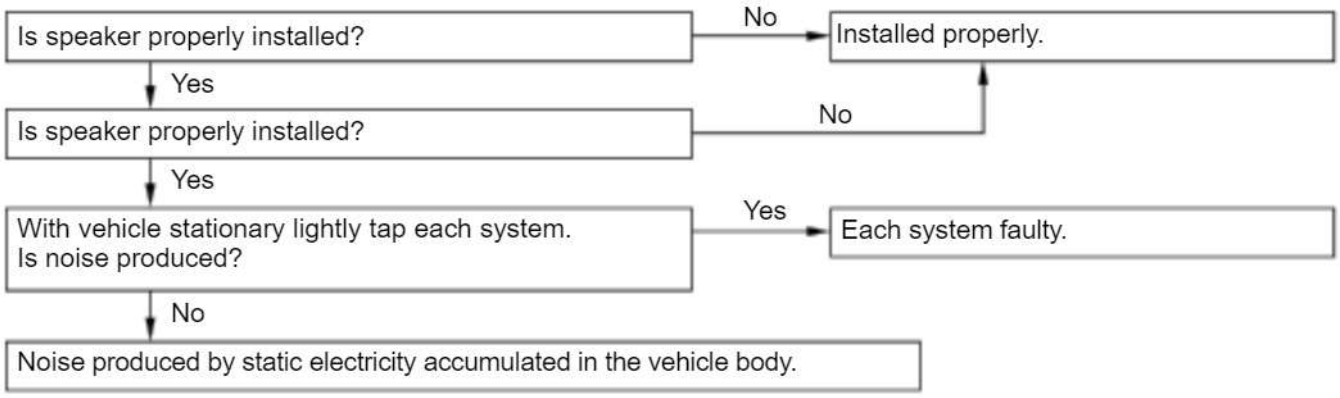

I03358

| 23 | Noise | NOISE OCCURS |
|---|---|---|



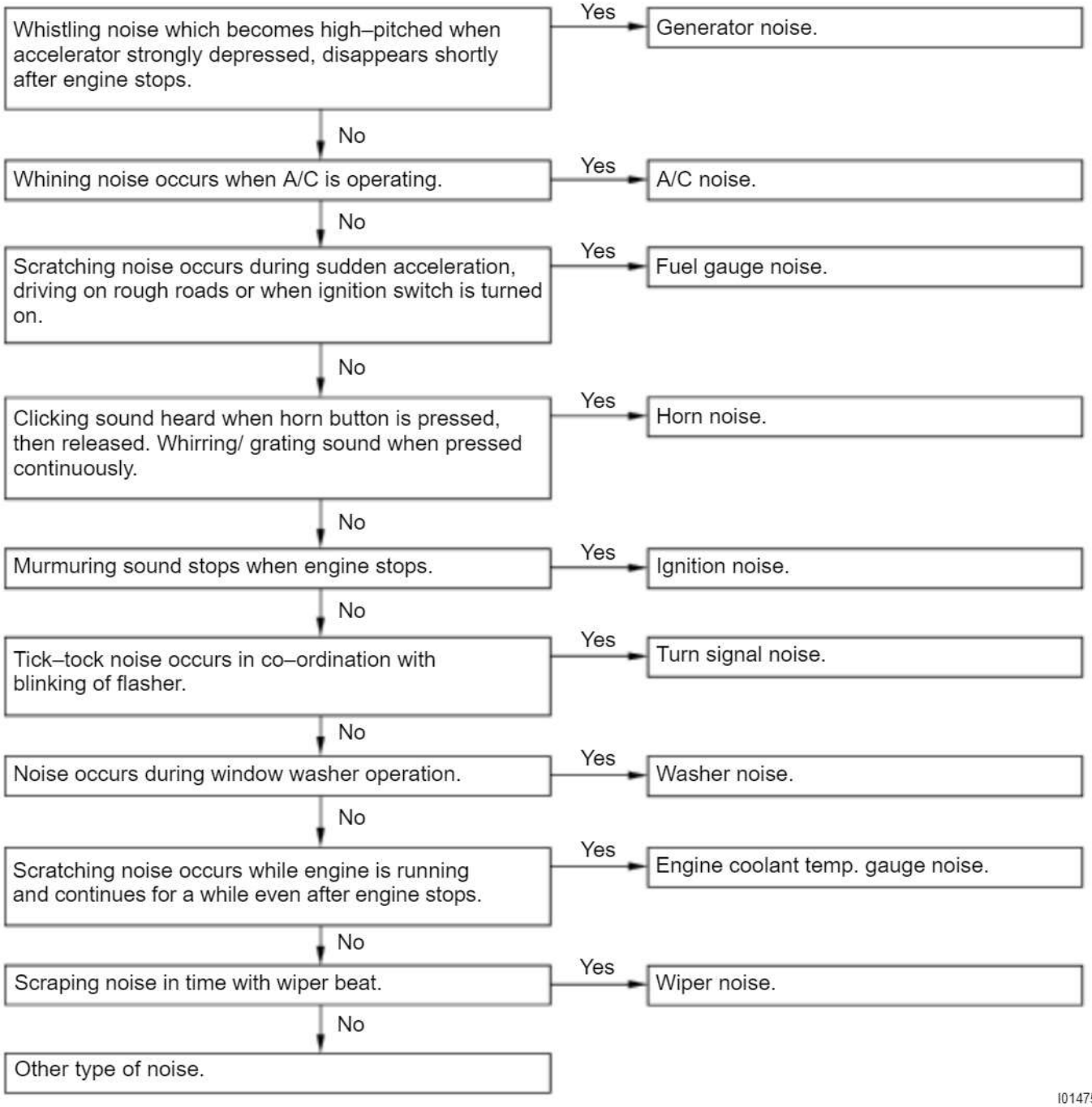

I01473

| 24 | Noise | NOISE PRODUCED BY VIBRATION OR SHOCK WHILE DRIVING |
|---|---|---|




I01474

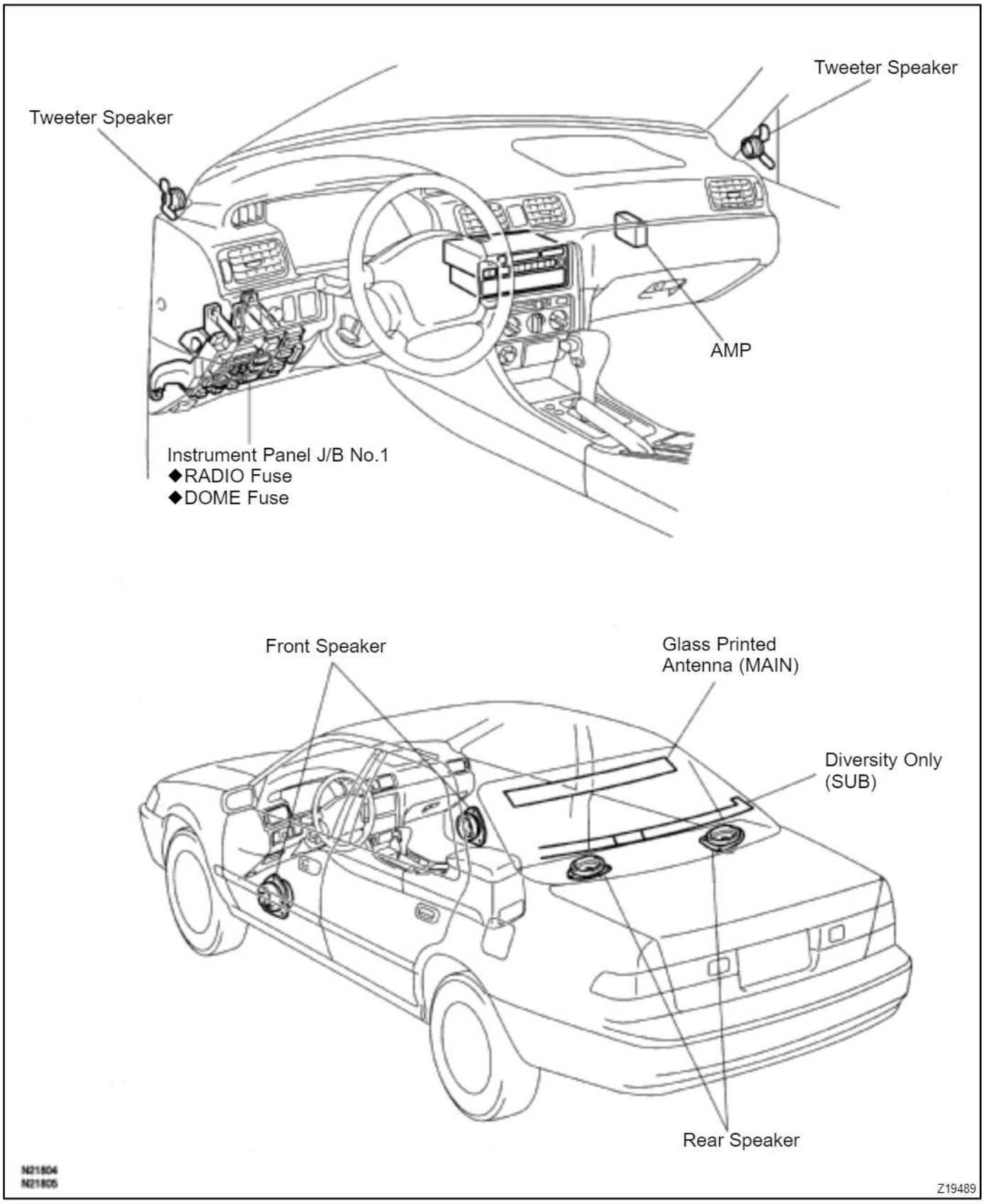
| 25 | Noise | NOISE PRODUCED WHEN ENGINE STARTS |
|---|---|---|




I01475

BE0AZ-05

# LOCATION



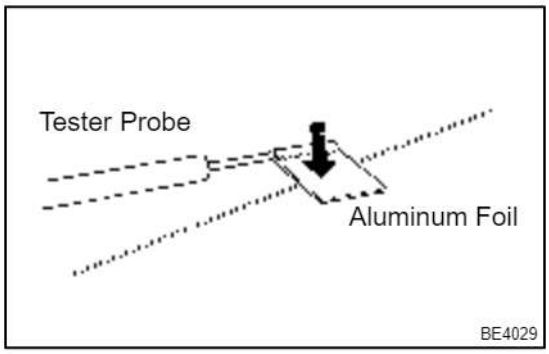
BE0B0-06

# INSPECTION

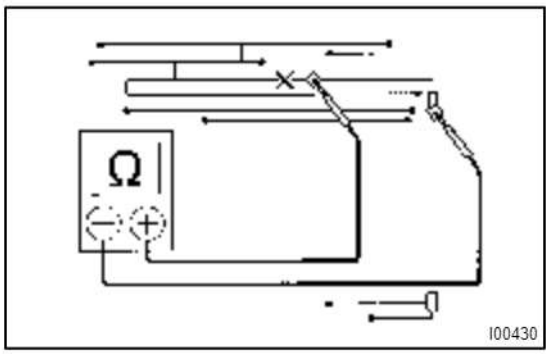
## 1. GLASS PRINTED ANTENNA INSPECTION PROCEDURE

**NOTICE:**

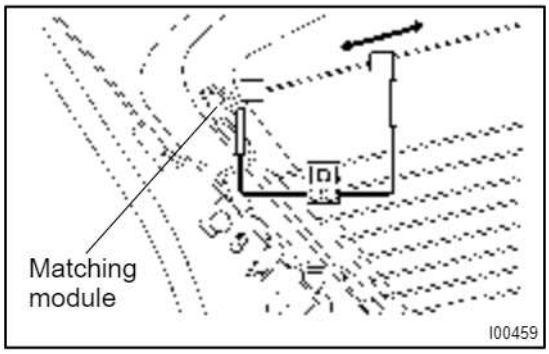
- **When cleaning the glass, use soft dry cloth, and wipe the glass in the direction of the wire.**
  **Take care not to damage the wires.**
- **Do not use detergents or glass cleaners with abrasive ingredients.**



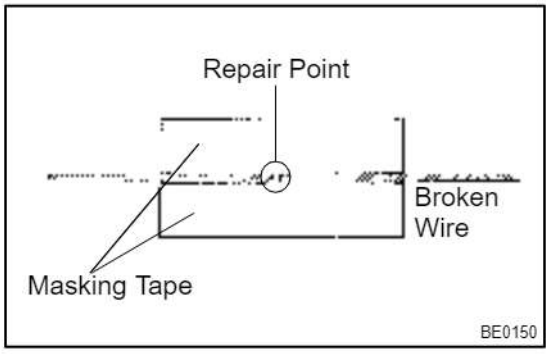

**NOTICE:**
**In order not to damage the glass printed antenna, wrap up the tip of the tester stick with aluminum foil as shown in the illustration and check by holding the aluminum foil with a finger.**




By placing and moving the tester stick along the glass printed antenna, check if continuity exists.

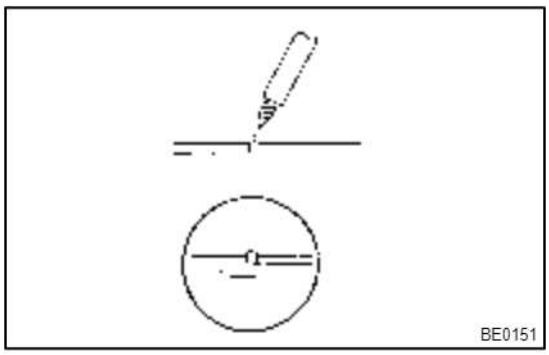



HINT:
Matching module is built in the bus bar of the glass printed antenna (main terminal side) of CAMRY and no continuity exists between the terminal and the antenna. Therefore, for the continuity checking of the glass printed antenna on the main antenna side of CAMRY, place one probe of the tester on the position beside the bus bar (position shown in the illustration) and check by making the other probe of the tester move along.




## 2. GLASS PRINTED ANTENNA REPAIR PROCEDURE

(a) Clean the broken wire tips with grease, wax and silicone remover.
(b) Place the masking tape along both sides of the wire for repair.
(c) Thoroughly mix the repair agent (Dupont paste No. 4817).




(d) Using a fine tip brush, apply a small amount of the agent to the wire.
(e) After a few minutes, remove the masking tape.

# CLOCK

## TROUBLESHOOTING

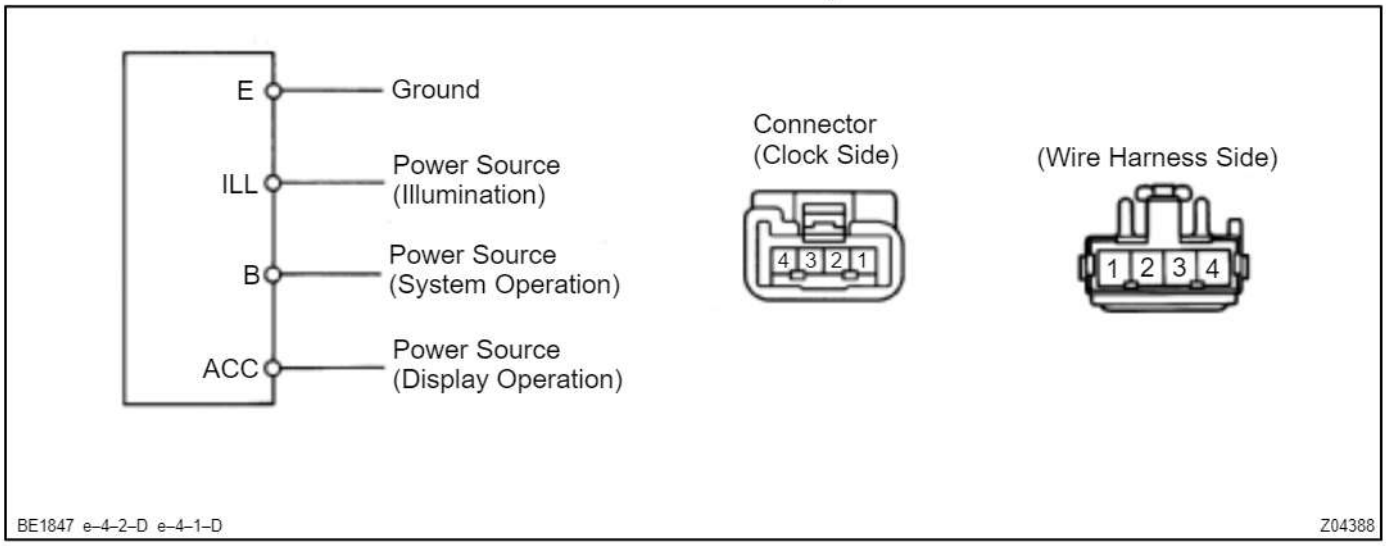
BE0B1-02

HINT:

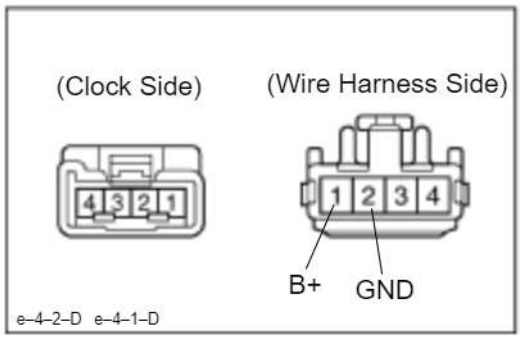
Troubleshoot the clock according to the table below.

| | |
|---|---|
| Clock will not operate | 1 |
| Clock loses or gains time | 2 |

± 1.5 seconds / day



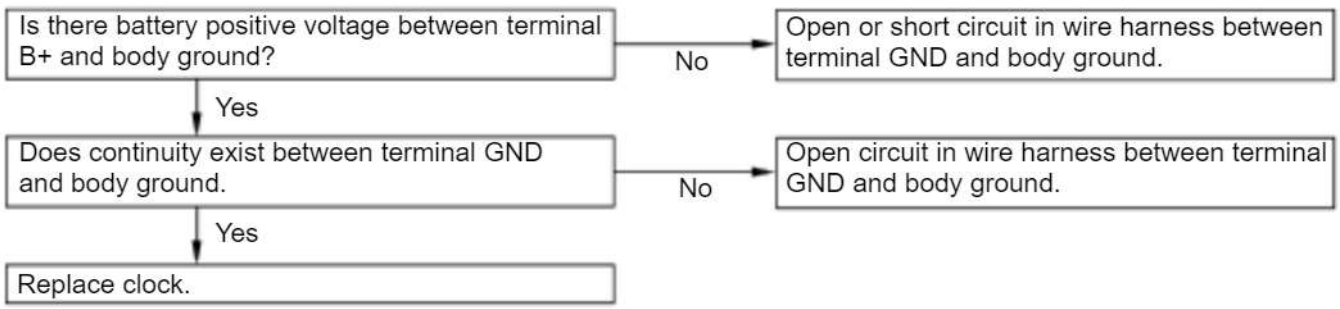

| 1 | CLOCK WILL NOT OPERATE |
|---|---|




(a) Check that the battery positive voltage is 10 – 16 V.
If voltage is not as specified, replace the battery.

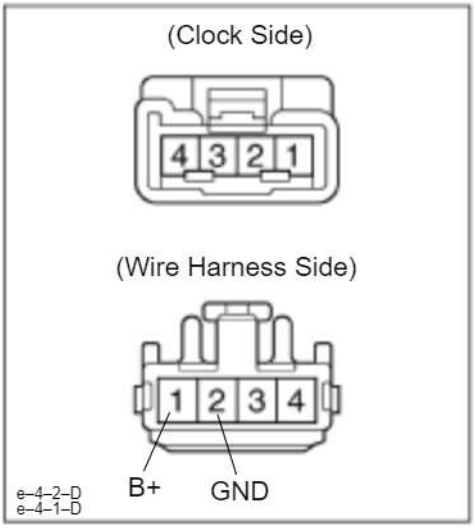
(b) Check that the DOME fuse is not blown.
If the fuse is blown, replace the fuse and check for short circuit.

(c) Troubleshoot the clock as follows.
HINT: Inspect the connector on the wire harness side.




V04421

| 2 | CLOCK LOSES OR GAINS TIME |
|---|---|




(a) Check that the battery positive voltage is 10 – 16 V.

If voltage is not as specified, replace the battery.

(b) Inspect the error of the clock.

Allowable error (per day): ± 1.5 seconds

If the error exceeds the allowable error, replace the clock.

(c) Check that the clock adjusting button is caught in position, and does not return.

If the button is not returned, repair or replace the clock.

(d) Troubleshoot the clock as follows.

HINT: Inspect the connector on the wire harness side.

Is there 10 – 16 V between terminal B+ and body ground?

Below 10 V → Locate cause and repair, or recharge battery.

Yes → Adjust or replace clock.

V04422

# ENGINE IMMOBILISER SYSTEM

BE0B2-06

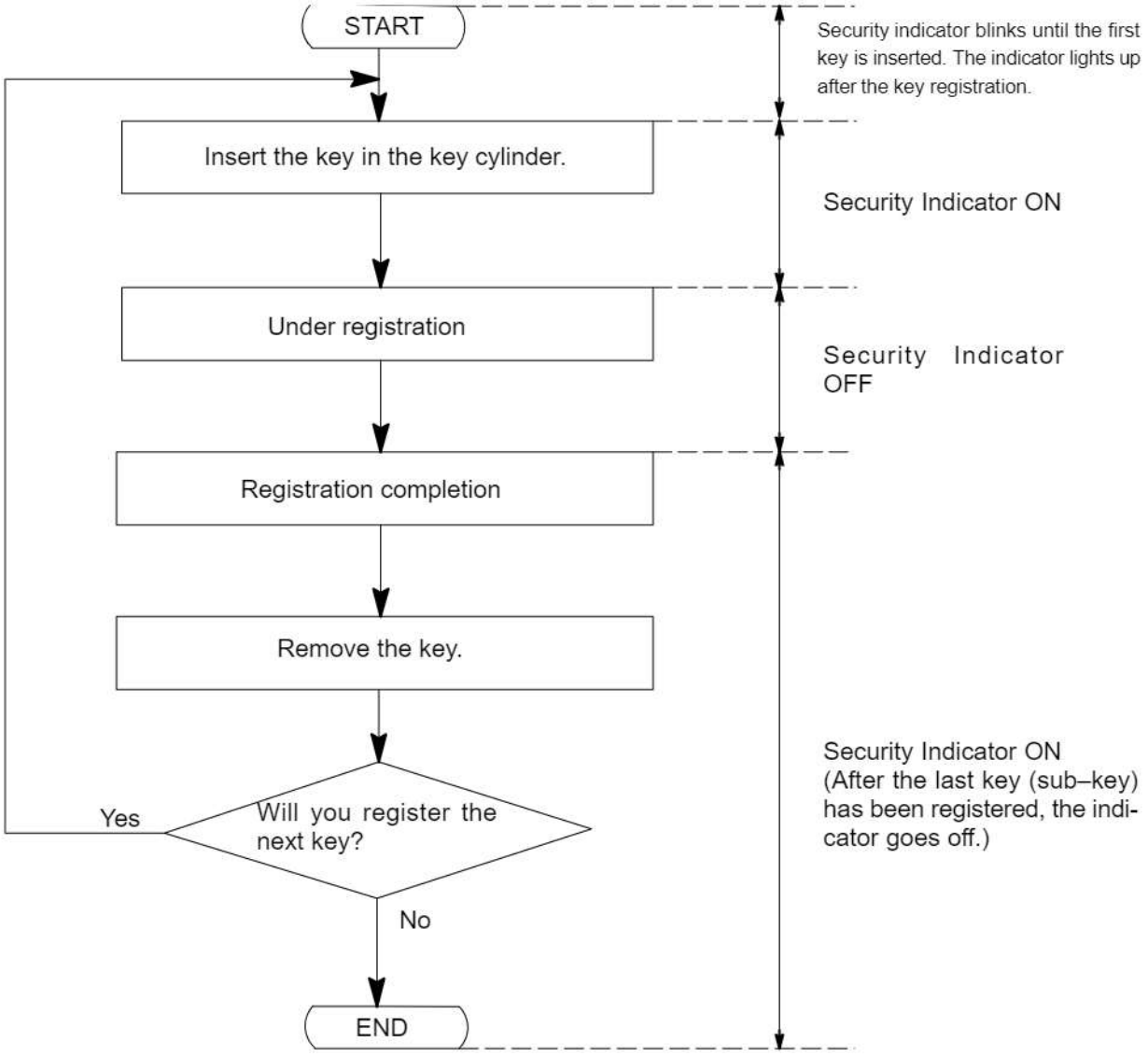
## REGISTRATION PROCEDURE

### 1. KEY REGISTRATION IN AUTOMATIC REGISTRATION MODE

(a) Registration of a new transponder key.

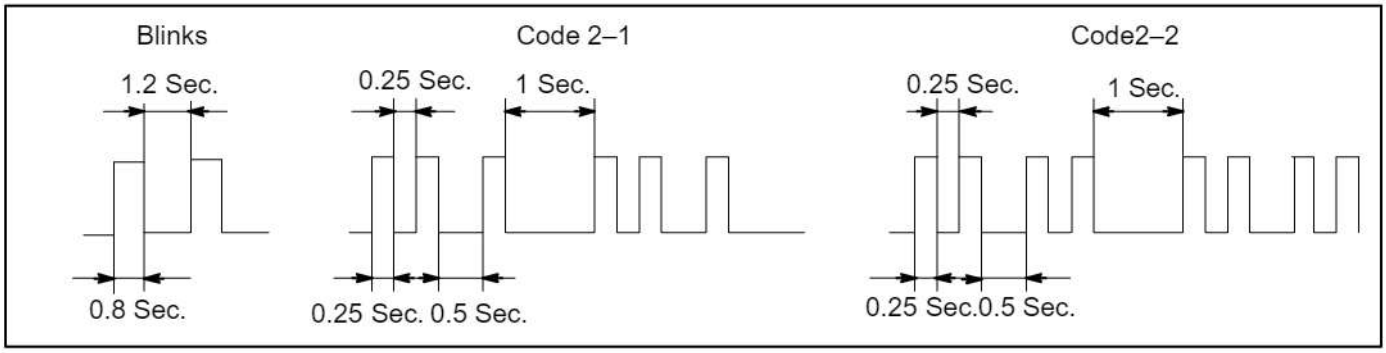
HINT:

- This must be done when you have installed a new ECM.
- The new ECM is in the automatic key code registration mode. The already fixed number of key codes for this ECM can be registered.
  On this type of vehicle, up to 4 key codes can be registered.
- In the automatic registration mode, the last key registered becomes sub–key.



HINT:

- When a key is not inserted in the key cylinder in the automatic registration mode, the security indicator always lights on.
- When the immobiliser system operations normally and the key is pull out, the security indicator blinks.
- When key code registration could not be performed in the automatic registration mode, code 2–1 is output from the security indicator and when inserting the already registered key, code 2–2 is output.




(b) Automatic registration mode completion

If completing the mode forcibly when more than 1 key code have been registered in the automatic registration mode, perform the following procedures.

After 1 more key code have been registered with master key, perform step (1) or (2) without pulling the key out or inserting the already registered key.

(1) Depress and release brake pedal 5 times or more within 15sec.

(2) With the TOYOTA hand–held tester, require automatic registration mode completion.

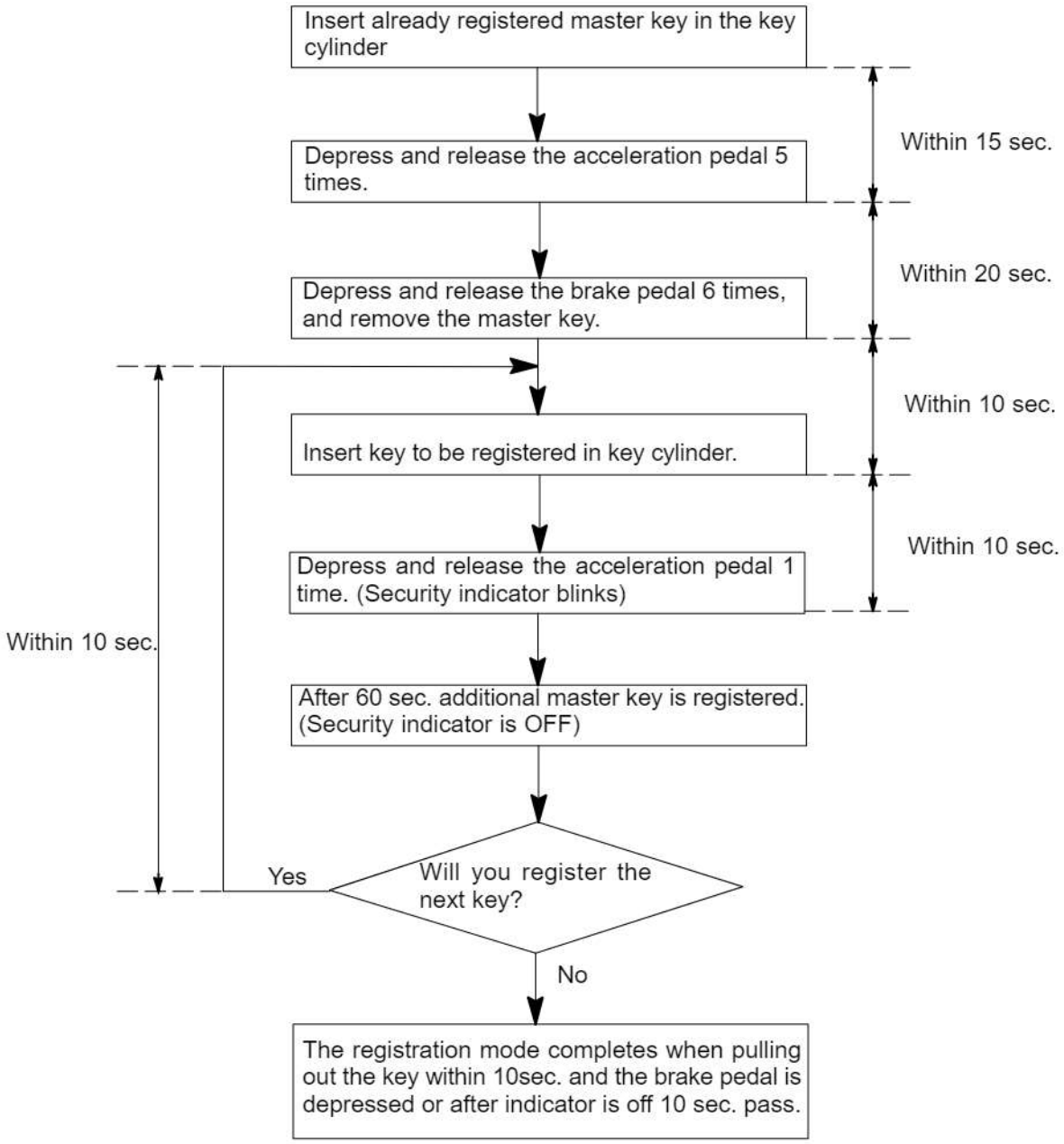
## 2. REGISTRATION OF ADDITIONAL MASTER KEY

There are 2 ways for registration of additional master key, one is depressing brake pedal and acceleration pedal and the other is using TOYOTA hand–held tester.

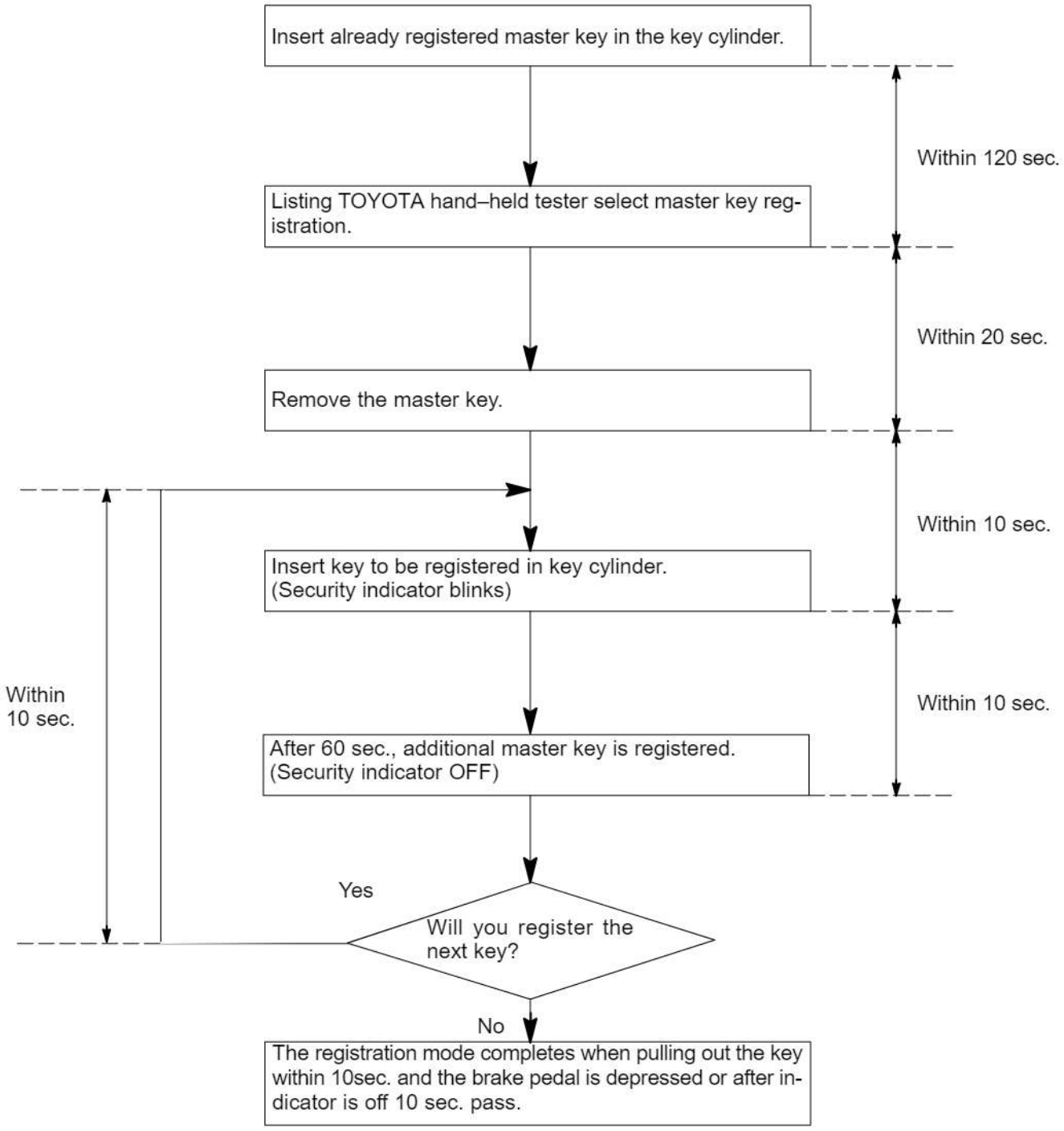
HINT:

- It is possible to register up to 7 master key codes including the already registered key code.
- When any operation time described below is over, registration mode completes.
- When the next procedure is performed while the timer is working, the timer completes counting time, then next timer starts.

(1) Depressing brake pedal and acceleration pedal:



(2) Using TOYOTA hand–held tester:



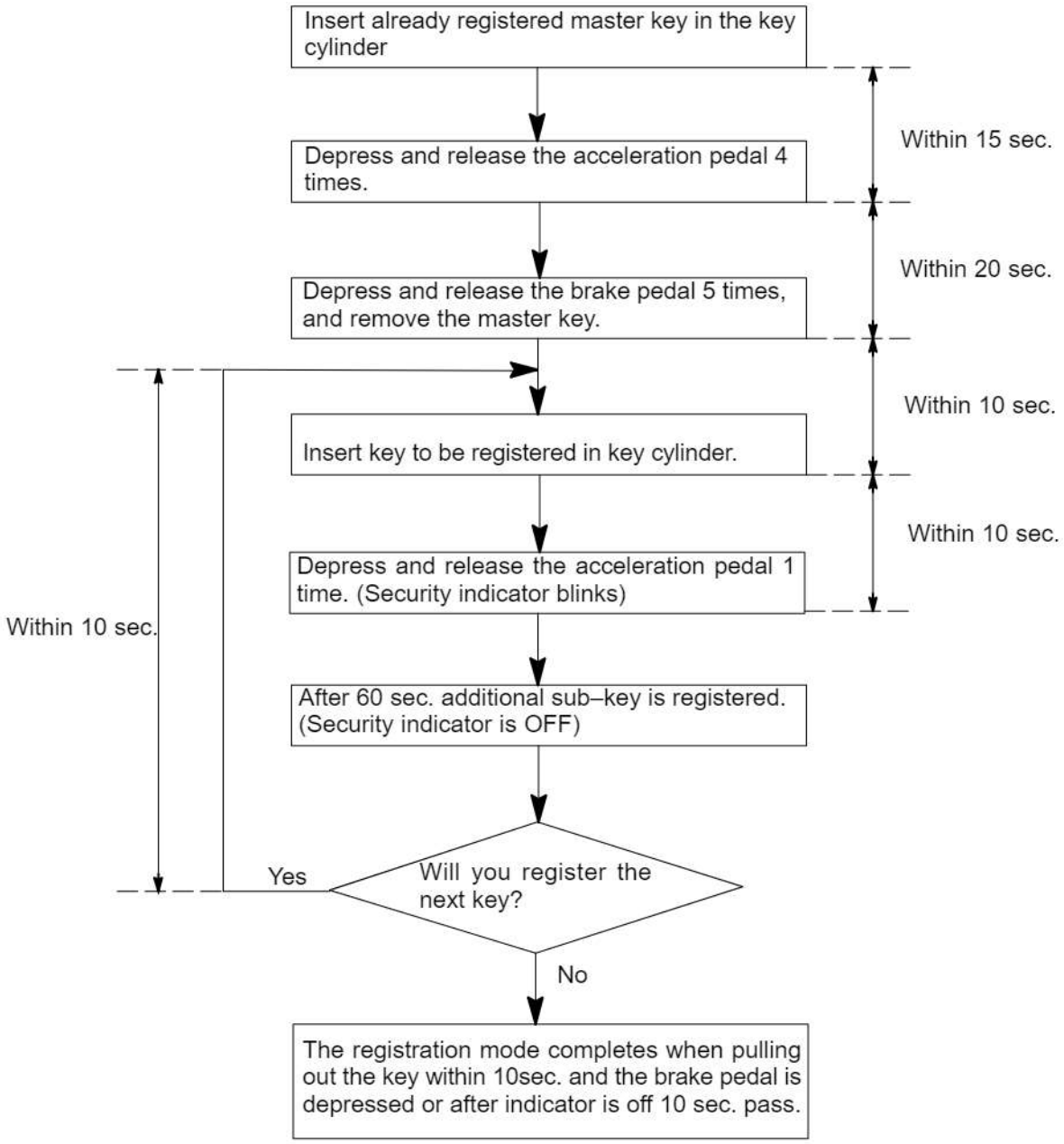
## 3. REGISTRATION ADDITIONAL OF SUB–KEY

There are 2 ways for registration of additional sub–key, one is depressing brake pedal and acceleration pedal and the other is using TOYOTA hand–held tester.

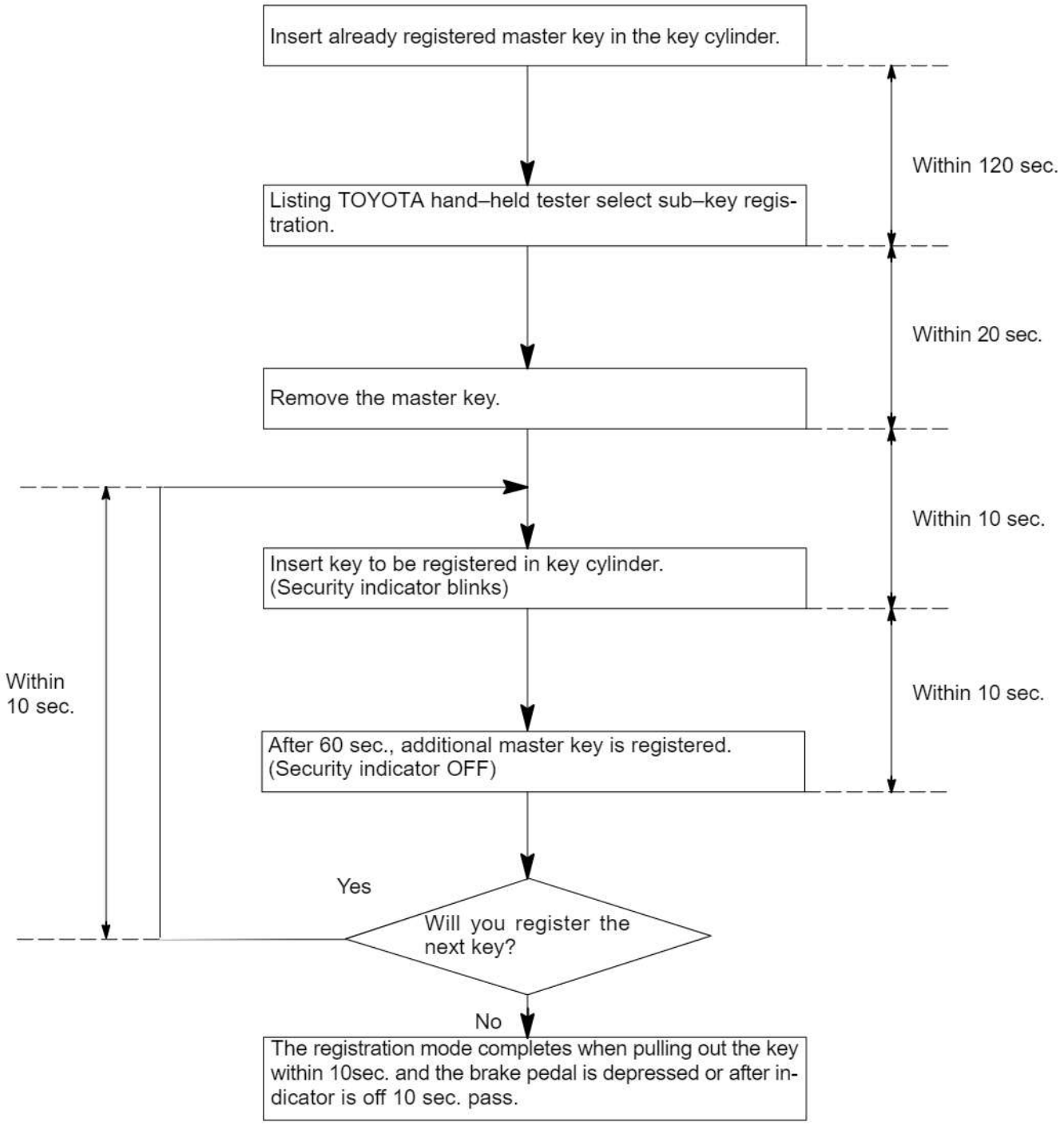
HINT:

- It is possible top register up to 3 sub–key codes including the already registered key code.
- When any operation time described below is over, registration mode completes.
- When the next procedure is performed while the timer is working, the timer completes counting time, then next timer starts.

(1) Depressing brake pedal and acceleration pedal:



(2) Using TOYOTA hand–held tester:



## 4. ERASURE OF TRANSPONDER KEY CODE

There are 2 ways for erasure of transponder key code, one is depressing brake pedal and acceleration pedal and the other is using TOYOTA hand–held tester.

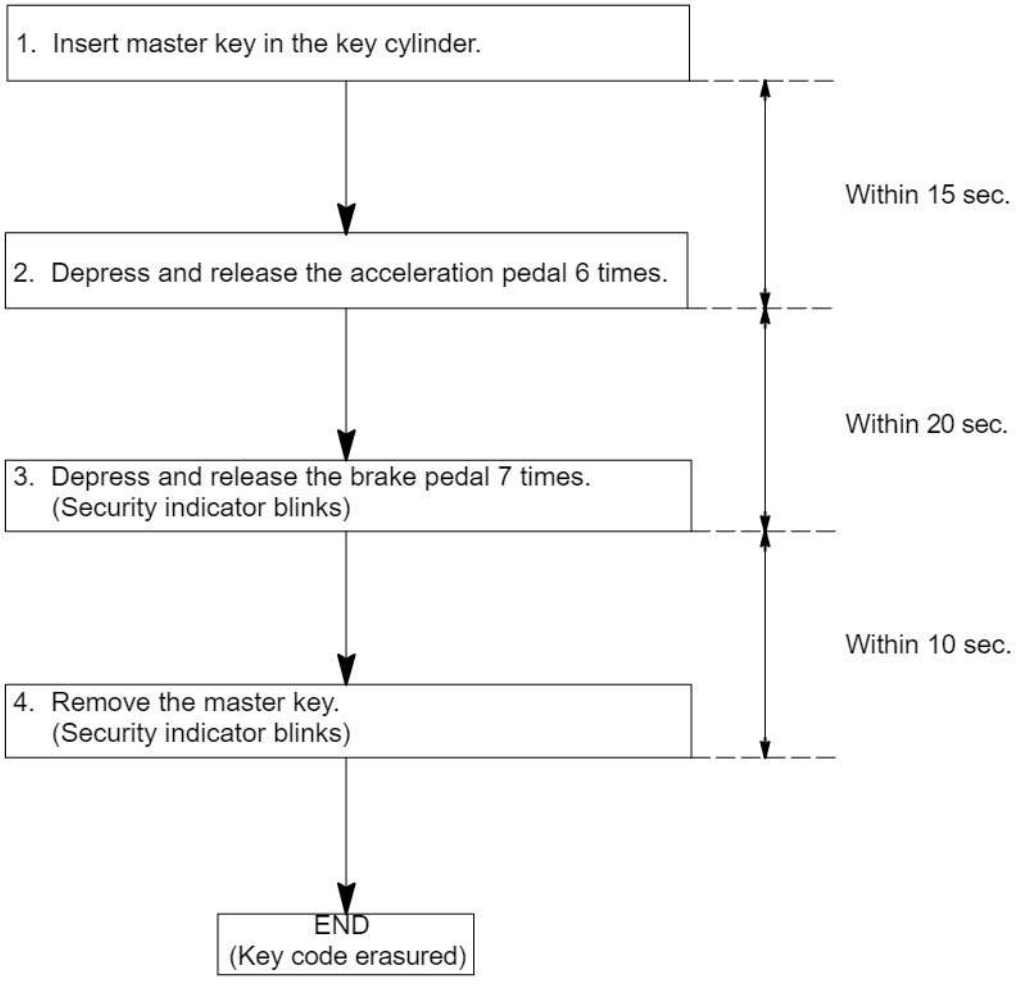
**NOTICE:**

**All other master and sub–key codes are deleted leaving the master key code to use the operation. When using the key which was used before deleting, it is necessary to register the code again.**

HINT:

- When any operation time described below is over, registration mode completes.
- When the next procedure is performed while the timer is working, the timer completes counting time, then next timer starts.

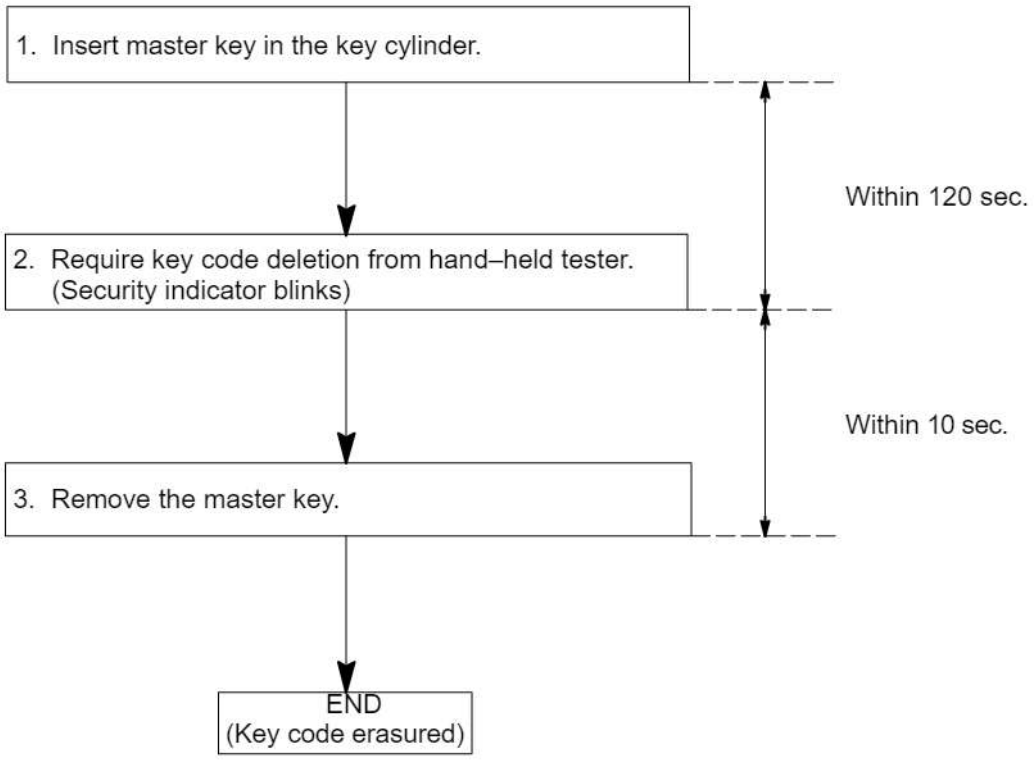
(1) Depressing brake pedal and acceleration pedal:




HINT:

When the key cannot be pulled out in the step 4, key code deletion is canceled.
(Security indicator is OFF)

(2) Using TOYOTA hand–held tester:

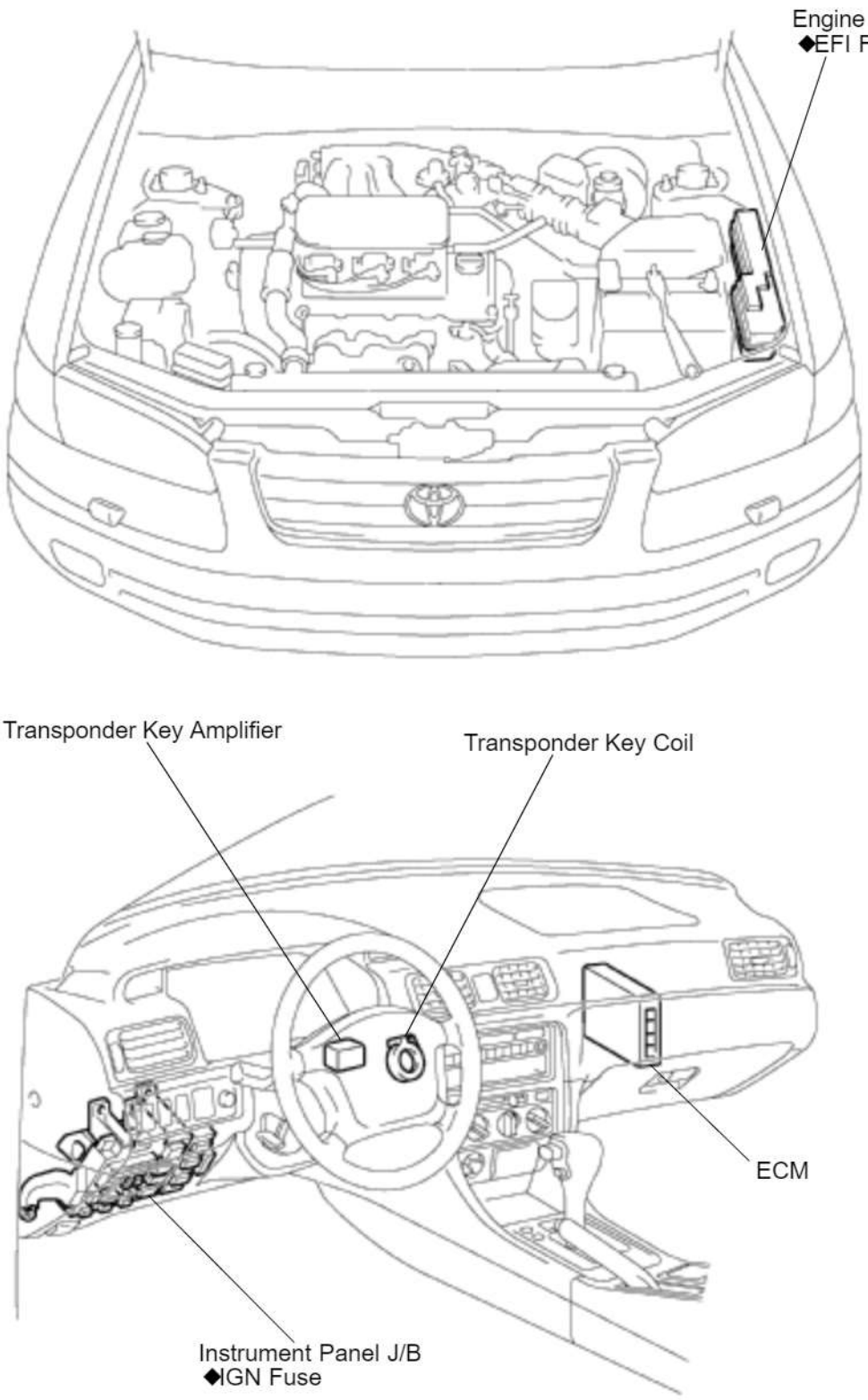



HINT:

When the key cannot be pulled out in the step 3, key code deletion is canceled.
(Security indicator is OFF)

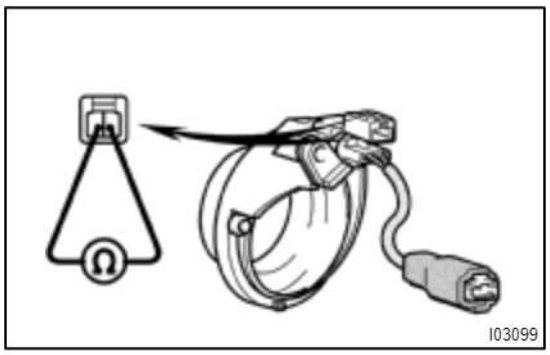
BE0B3-06

# LOCATION




I02682

BE0B4-05




# INSPECTION

## INSPECTION TRANSPONDER KEY COIL CONTINUITY

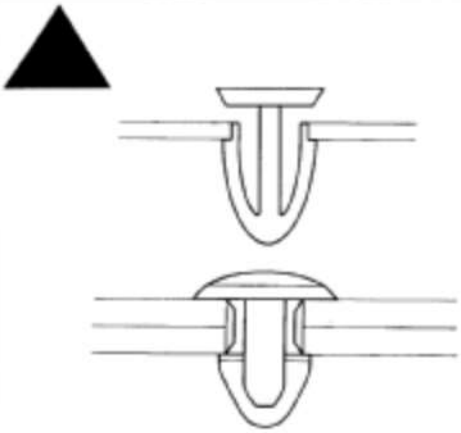
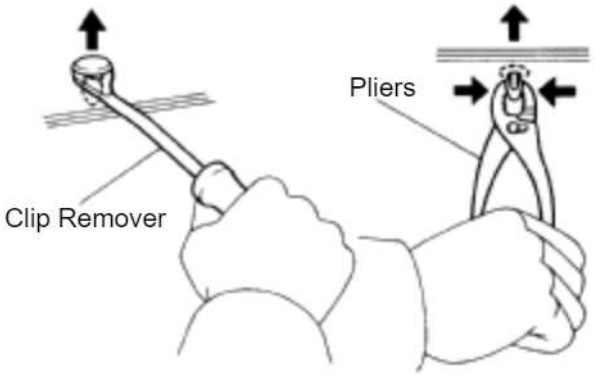
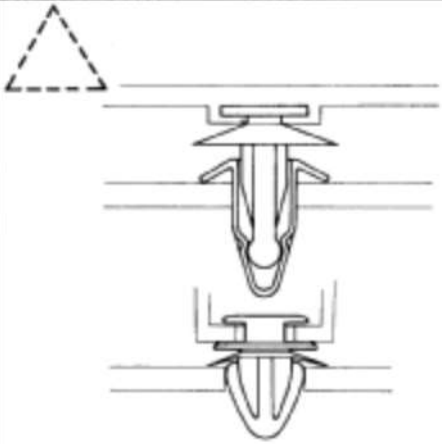
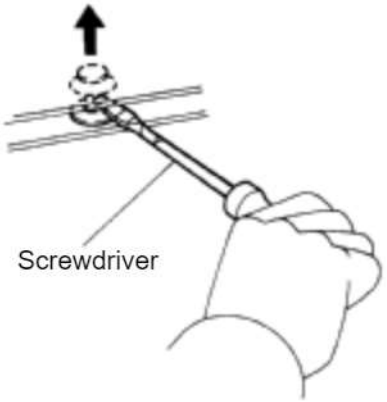
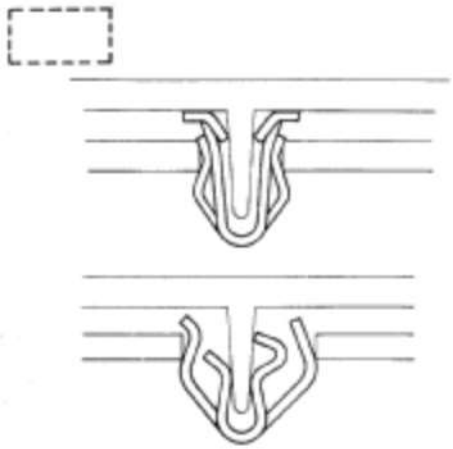
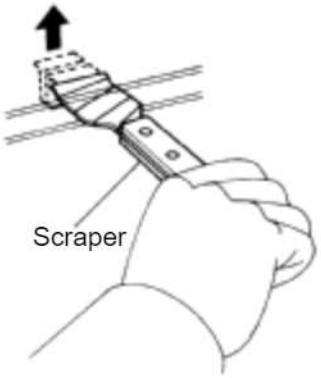
Check that continuity exists between terminal 1 and 2.
If continuity is not as specified, replace the coil.

# CLIP

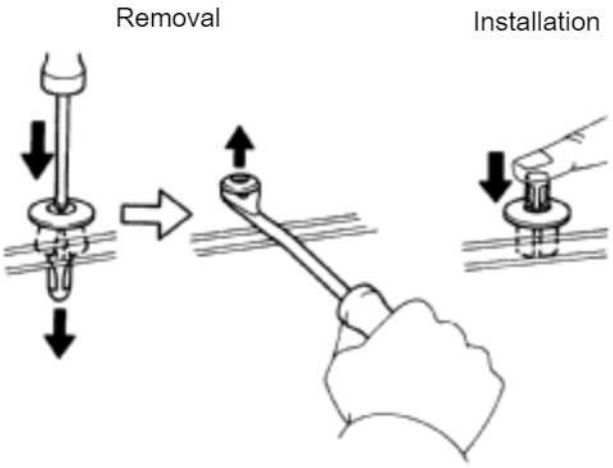
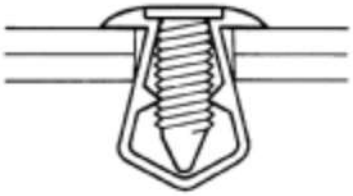
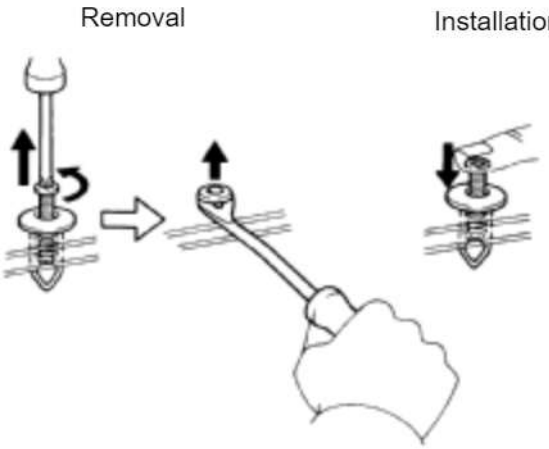
## REPLACEMENT

BO0LJ-01

The removal and installation methods of typical clips used in body parts are shown in the table below.
HINT:
If the clip is damaged during the operation, always replace it with a new clip.

| Shape (Example) | Removal/Installation |
|---|---|
|  |  |
|  |  |
|  |  |

V00005

| Shape (Example) | Removal/Installation |
|---|---|
|  |  |
|  |  |

V00012

# SRS AIRBAG

## PRECAUTION

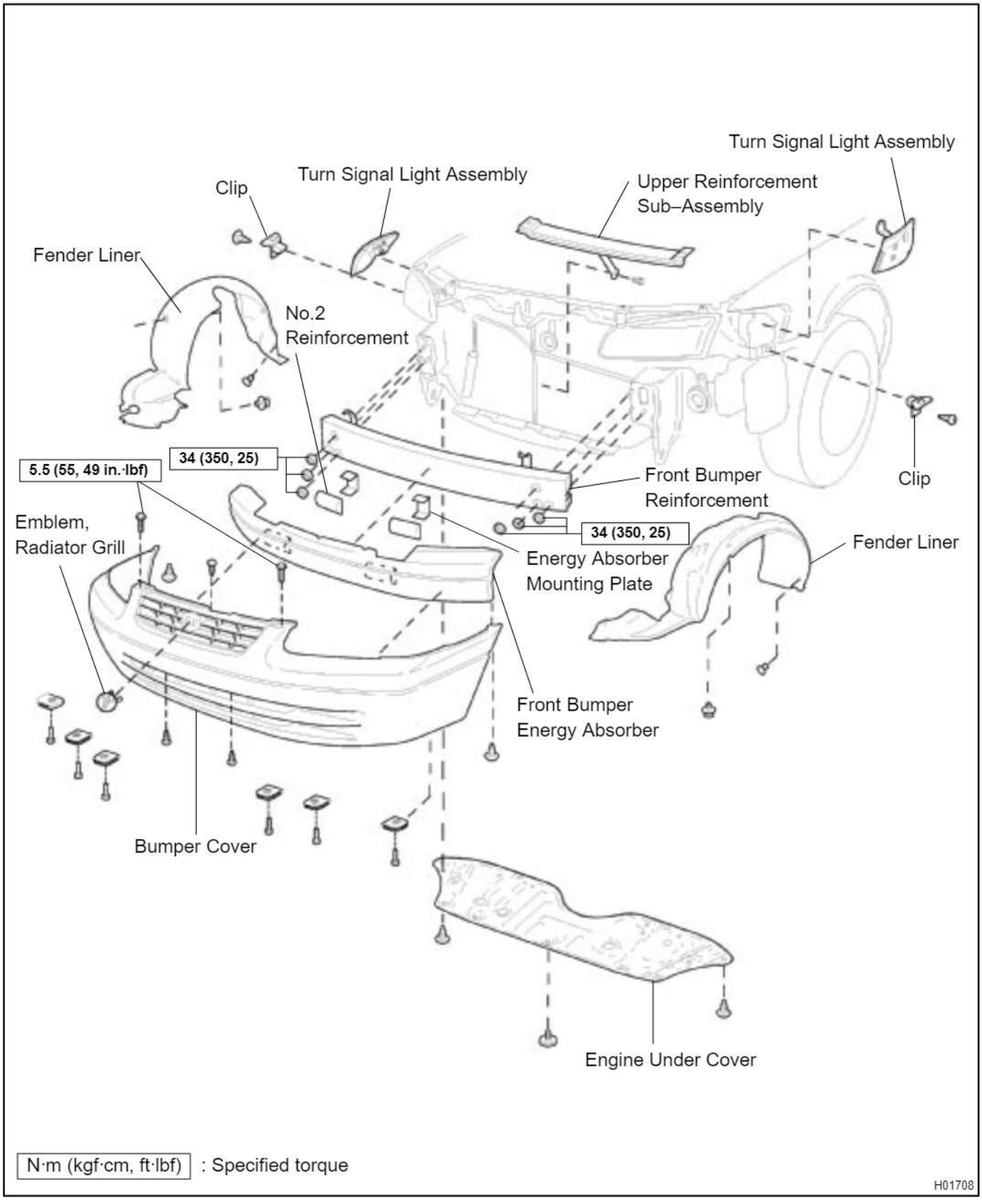
BO0KU-01

The CAMRY is equipped with SRS (Supplemental Restraint System) such as the driver airbag, front passenger airbag, side airbag and seat belt pretensioner. Failure to carry out service operation in the correct sequence could cause the SRS to unexpectedly deploy during servicing, possibly leading to a serious accident. Before servicing (including removal or installation of parts, inspection or replacement), be sure to read the precautionary notices in the RS section.

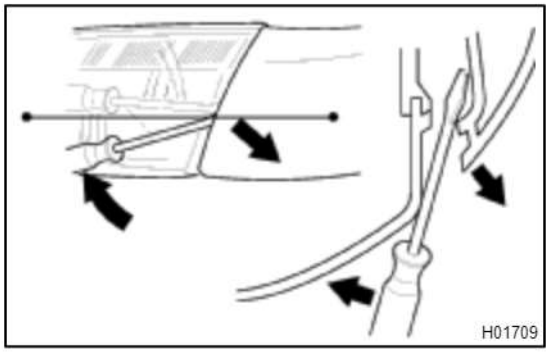
# FRONT BUMPER

## COMPONENTS

BO0KV-01



BO0KW-01




# REMOVAL

**1. REMOVE THESE PARTS:**

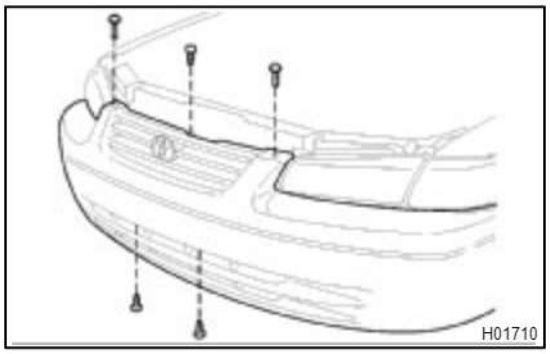
(a) Engine under cover

(b) Fender liner

(c) Turn signal light assembly

HINT:

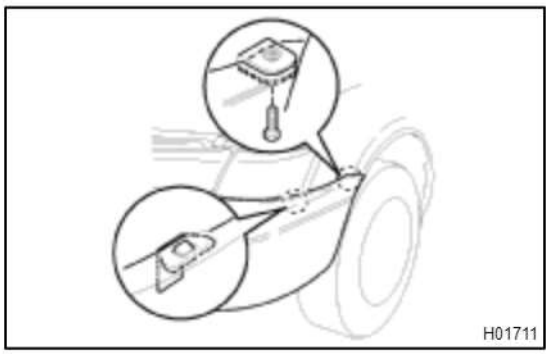
Remove the light assembly as shown.




**2. REMOVE BUMPER COVER**

(a) Remove the 2 bolts and 3 clips.

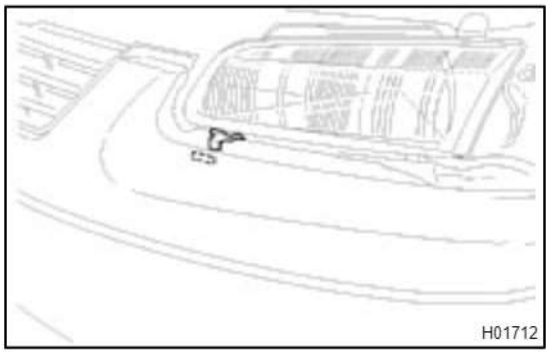
**Torque: 5.5 N·m (55 kgf·cm, 49 in.·lbf)**




(b) Remove the bolt holding the bumper end to the fender.

(c) Pull the bumper cover forward to remove the bumper cover from the clip under the turn signal light area.

(d) Pull the bumper cover forward to remove it.




HINT:

At the time of installation, please refer to the refer to the following item.

Align the holes of the bumper cover with the 2 bumper stays of the reinforcement.

**3. REMOVE THESE PARTS:**

(a) Front bumper energy absorber

(b) Front bumper reinforcement

**Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)**

(c) Front bumper upper reinforcement subassembly

BO0KX-01

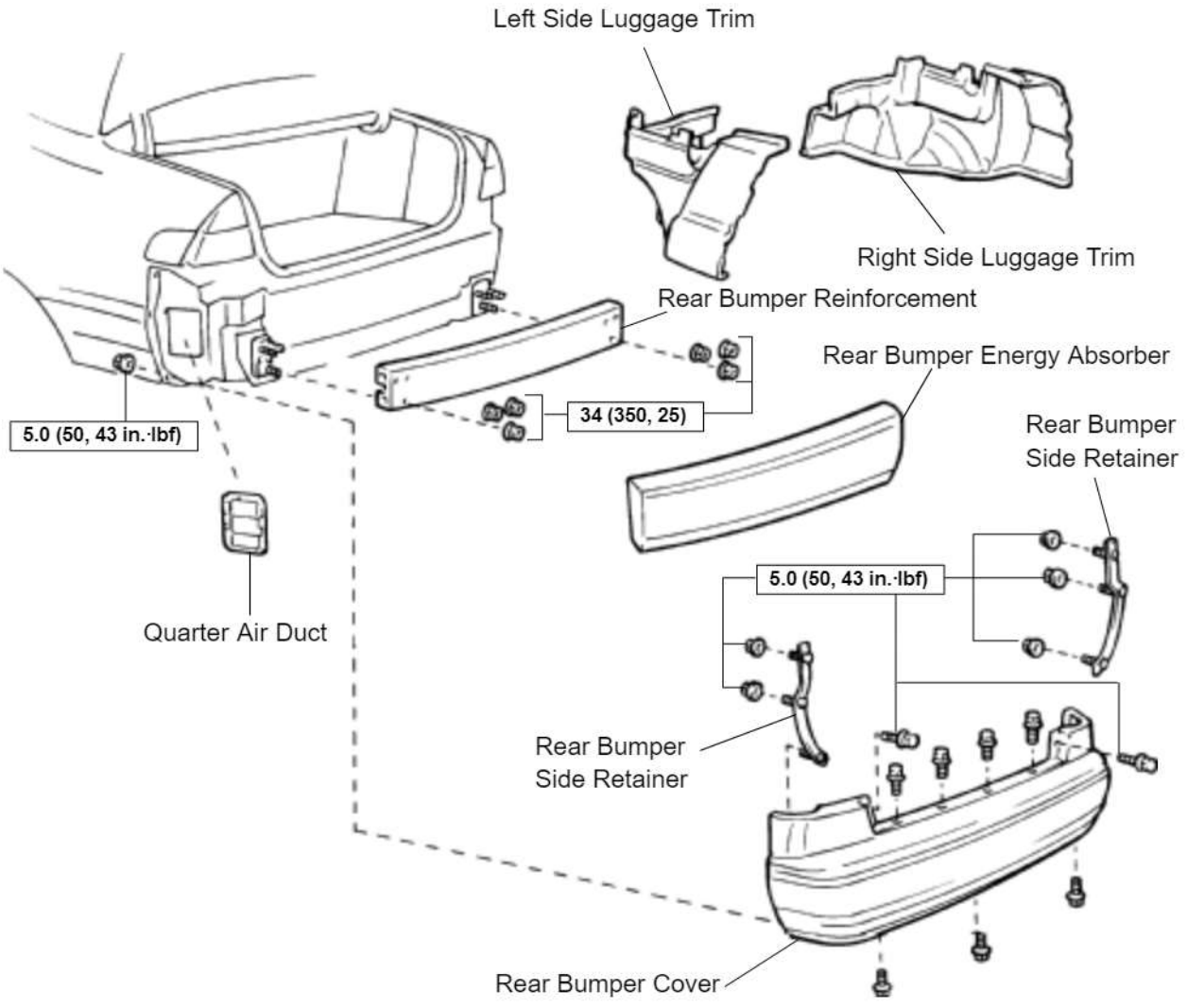
# INSTALLATION

**Installation is in the reverse order of removal (See page BO–5).**

# REAR BUMPER

## COMPONENTS

BO0KY-01

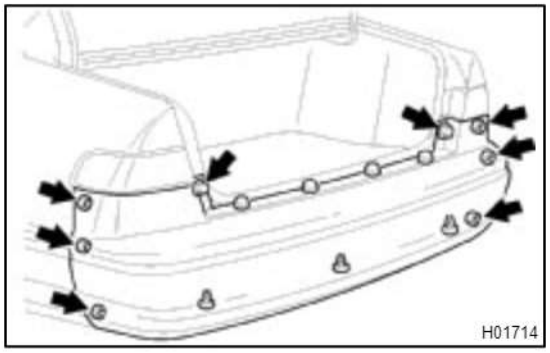



N·m (kgf·cm, ft·lbf) : Specified Torque

H01713

BO0KZ-01

# REMOVAL




**1. REMOVE THESE PARTS:**

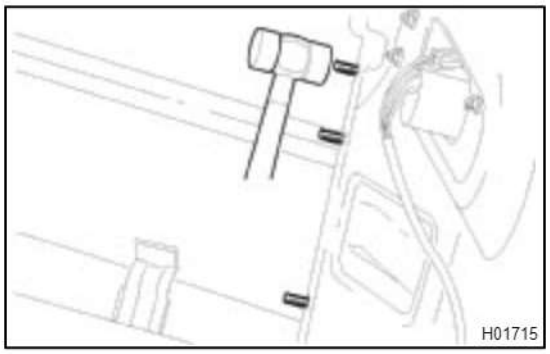
(a) Right side luggage trim

(b) Left side luggage trim

**2. REMOVE REAR BUMPER COVER**

(a) Remove the 7 clips, 2 bolts and 6 nuts from the bumper cover.

**Torque: 5.0 N·m (50 kgf·cm, 43 in.·lbf)**




(b) Pull the bumper cover rearward to remove it.

HINT:

With a plastic hammer, tap the ends of the bumper end bolts.

(c) Using a screwdriver, slide the rear bumper side retainers from the bumper ends.

(d) Remove the 2 gaskets from the side retainers.

HINT:

Use 2 new gaskets.

**3. REMOVE THESE PARTS:**

(a) Rear bumper energy absorber

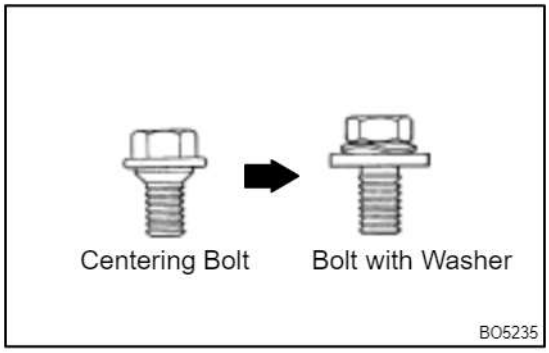
(b) Rear bumper reinforcement

**Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)**

BO0L0-01

# INSTALLATION

**Installation is in the reverse order of removal (See page BO–8).**

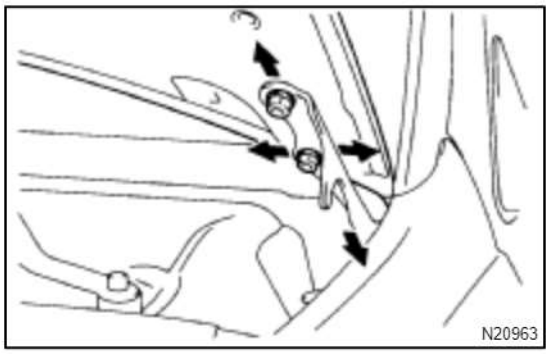



# HOOD

## ADJUSTMENT

BO0L1-01

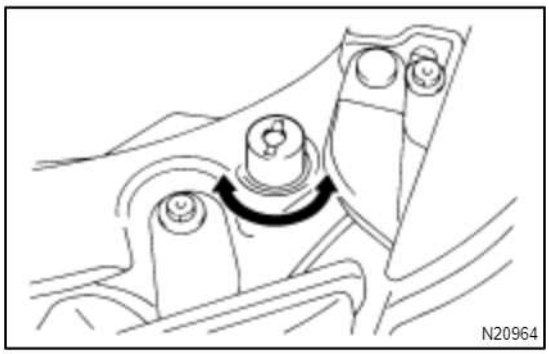
HINT:
Since the centering bolt is used as the hood hinge and lock set bolt, the hood and lock can not be adjusted with it on. Substitute a bolt and washer for the centering bolt.




### 1. ADJUST HOOD IN FORWARD/REARWARD AND LEFT/RIGHT DIRECTIONS

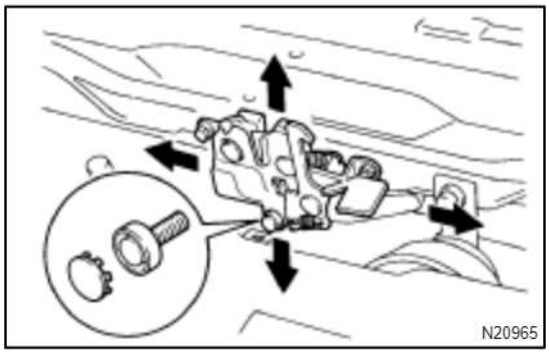
Adjust the hood by loosening the hood side hinge bolts.

**Torque: 26 N·m (260 kgf·cm, 19 ft·lbf)**




### 2. ADJUST FRONT EDGE OF HOOD IN VERTICAL DIRECTIONS

Adjust the hood by turning the cushions.




### 3. ADJUST HOOD LOCK

(a) Replace each centering bolt with a regular bolt and washer.

**Torque: 8.0 N·m (80 kgf·cm, 71 in.·lbf)**

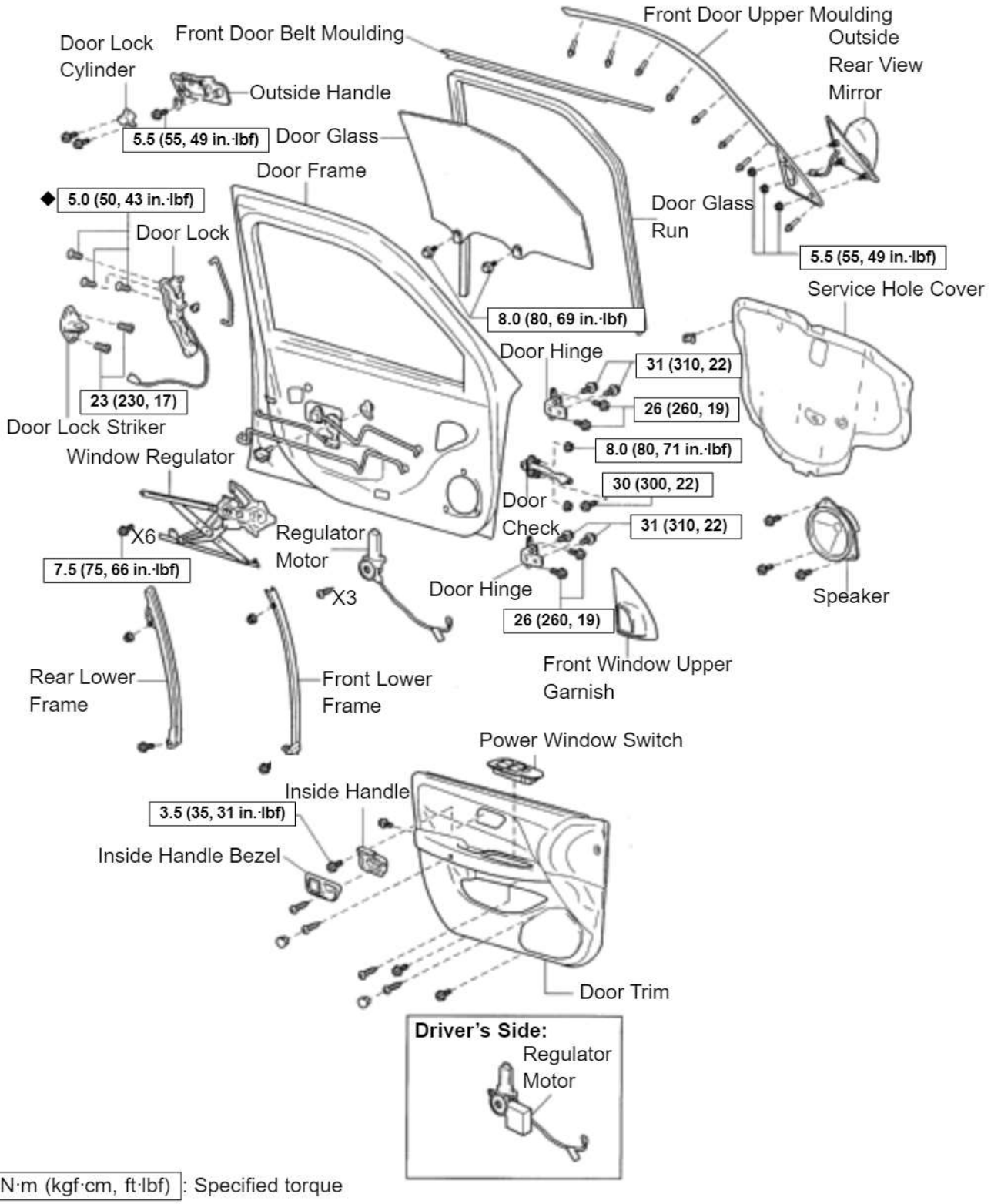
HINT:
Remove the anti–theft bolt cover, then remove the lower hood lock bolt. You may have to remove the front bumper to access this bolt.

(b) Adjust the lock by loosening the bolts.

# FRONT DOOR

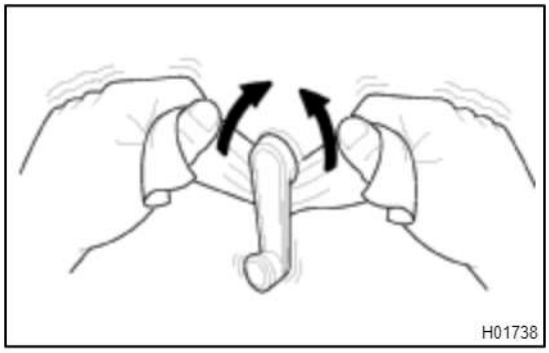
## COMPONENTS

BO0L2-01



BO0L3-01

# DISASSEMBLY



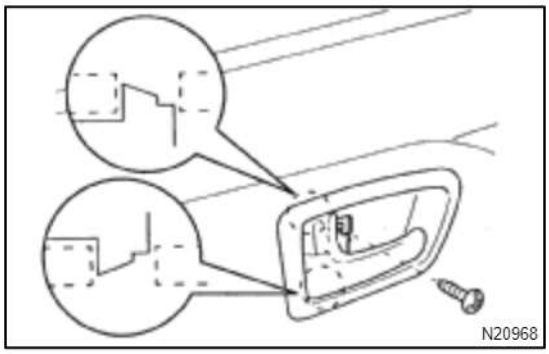

**1. w/o Power Window:**
**REMOVE REGULATOR HANDLE**

Pull off the snap ring with a shop rag and remove the regulator handle and plate.

HINT:

At the time of assembly, please refer to the following item.

With the door window fully closed, install the plate and the regulator handle with the snap ring.




**2. REMOVE INSIDE HANDLE BEZEL**

(a) Using a screwdriver, pry open the screw cover and remove the screw.

HINT:

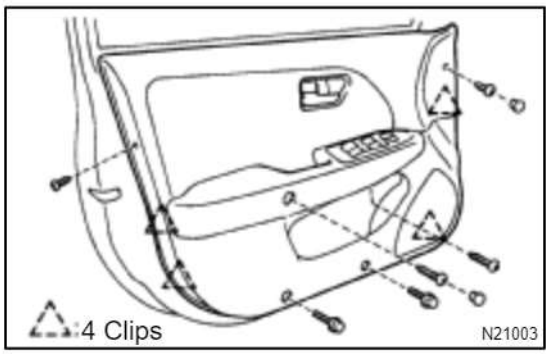
Tape the screwdriver tip before use.

(b) Using a screwdriver, pry out the bezel.

HINT:

Tape the screwdriver tip before use.

**3. REMOVE FRONT WINDOW UPPER GARNISH**




**4. REMOVE DOOR TRIM**

(a) Using a screwdriver, remove the screw caps.

HINT:

Tape the screwdriver tip before use.

(b) Remove the 2 clips, 2 screws and 2 bolts.

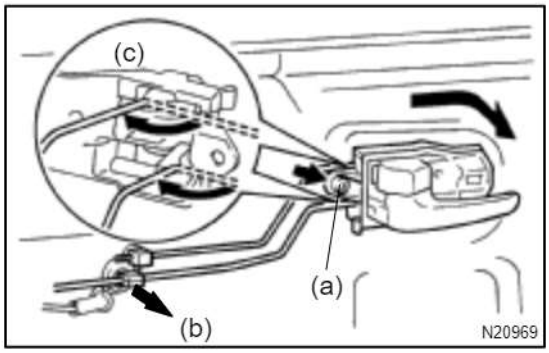
(c) Insert a screwdriver between the door and door trim to pry out.

(d) Pull the trim upward to remove it, then remove the power window switch and disconnect the harness connector.

**5. REMOVE THESE PARTS:**

(a) Outside rear view mirror
**Torque: 5.5 N·m (55 kgf·cm, 49 in.·lbf)**

(b) Speaker




**6. REMOVE DOOR INSIDE HANDLE**

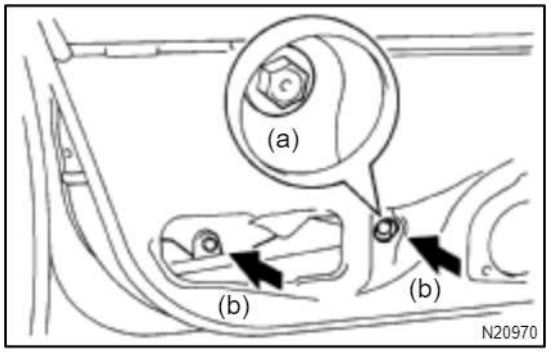
(a) Remove the screw and pull the handle forward.
**Torque: 3.5 N·m (35 kgf·cm, 31 in.·lbf)**

(b) Remove the link from the clamp.

(c) Remove the inside handle from the ends of the 2 links.

**7. REMOVE SERVICE HOLE COVER**

Remove the grommet, then remove the service hole cover.




**8. REMOVE DOOR GLASS**

(a) Open the door glass until the bolt appears in the service hole.

(b) Remove the 2 bolts and the door glass.

HINT:

Pull the glass upward.

**Torque: 8.0 N·m (80 kgf·cm, 71 in.·lbf)**

**9. REMOVE GLASS RUN**

HINT:

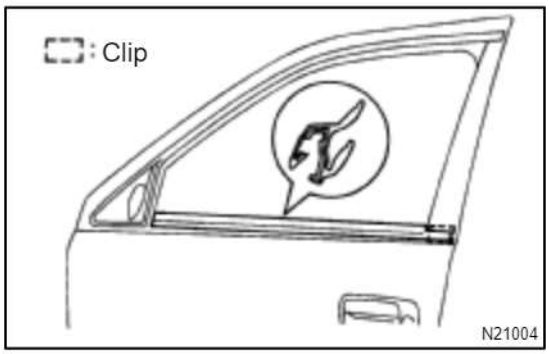
Pull the glass run upward.

**10. REMOVE FRONT AND REAR SIDE FRAMES**

Remove the 2 bolts, 2 nuts and the side frames.

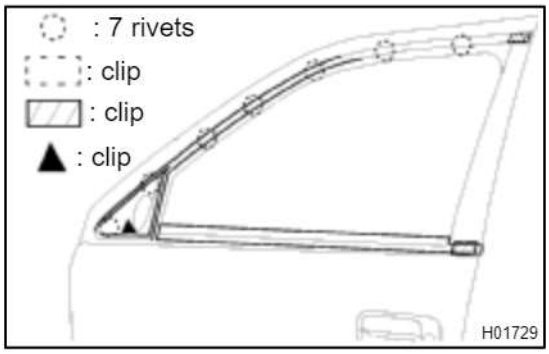
HINT:

Remove the side frames through the service hole.




**11. REMOVE FRONT DOOR BELT MOULDING**

Pry the rearward end of the front door belt moulding from the door and remove the moulding.




**12. REMOVE FRONT DOOR UPPER MOULDING**

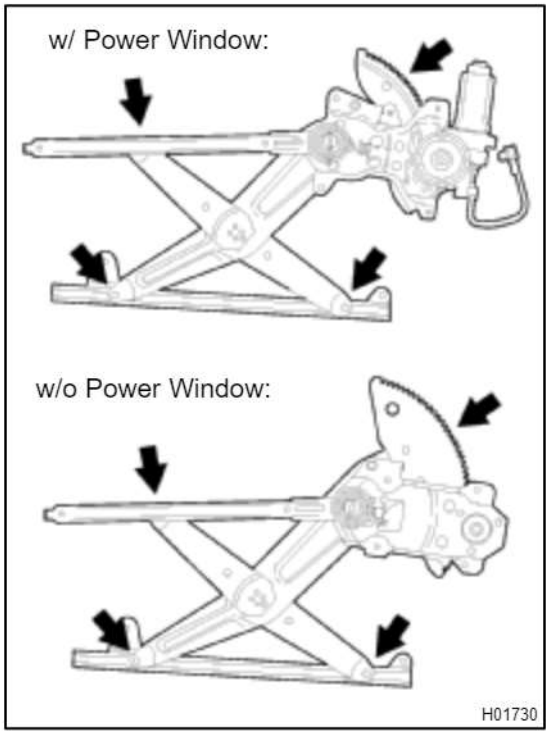
(a) Using a drill, cut the flange portion of the 7 rivets.

HINT:

At the time of assembly, please refer to the following item.

Use 7 new rivets.

(b) Pry out the 2 clips and remove the moulding.




**13. REMOVE WINDOW REGULATOR ASSEMBLY**

Remove the bolts and window regulator.

**Torque: 5.5 N·m (55 kgf·cm, 49 in.·lbf)**

HINT:

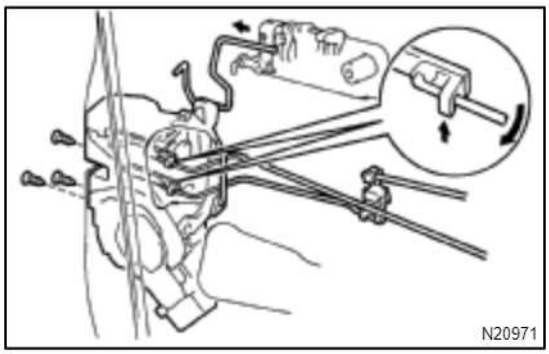
At the time of reassembly, please refer to the following item.

Apply MP grease to the window regulator rollers.

**14. w/ Power Window:**

**REMOVE MOTOR FROM WINDOW REGULATOR**

Remove the 3 screws and motor.




**15. REMOVE DOOR LOCK**

(a) Remove the 2 clips.

(b) Disconnect the 2 links from the door lock and remove the links.

(c) Disconnect the 2 links from the outside handle and the lock cylinder.

(d) Remove the 3 screws and door lock.

HINT:

At the time of reassembly, please refer to the following item.

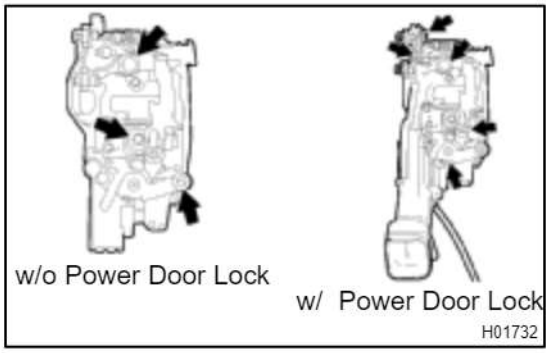
Apply adhesive to 3 screws.

**Part No. 08833–00070, THREE BOND 1324 or equivalent**

**Torque: 5.0 N·m (50 kgf·cm, 43 in.·lbf)**

(e) w/ Power Door Lock:
Disconnect the connector.

(f) Remove the door lock through the service hole.




HINT:

At the time of reassembly, please refer to the following item.

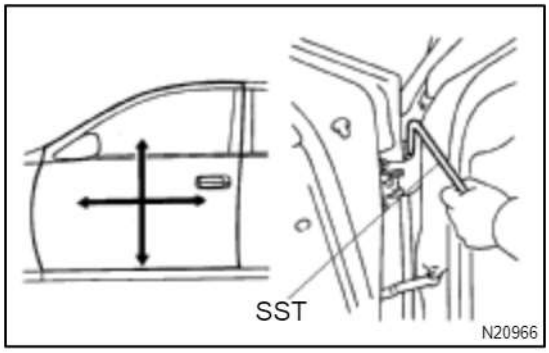
Apply MP grease to the sliding surface of the door lock.

**16. REMOVE OUTSIDE HANDLE**

**Torque: 7.0 N·m (70 kgf·cm, 61 in.·lbf)**

BO0L4-01

# ADJUSTMENT

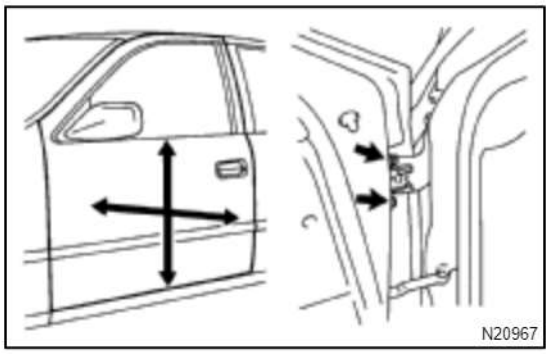



## 1. ADJUST DOOR IN FORWARD/REARWARD AND VERTICAL DIRECTIONS

Using SST, adjust the door by loosening the body side hinge bolts.

SST 09812–00020

**Torque: 31 N·m (310 kgf·cm, 22 ft·lbf)**



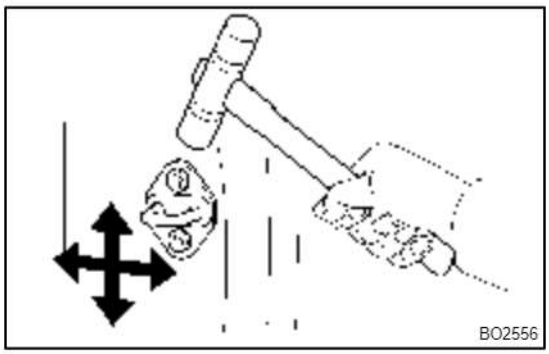

## 2. ADJUST DOOR IN LEFT/RIGHT AND VERTICAL DIRECTIONS

To adjust, loosen the door side hinge.

HINT:

Substitute the bolt and washer for the centering bolt.

**Torque: 26 N·m (260 kgf·cm, 19 ft·lbf)**




## 3. ADJUST DOOR LOCK STRIKER

(a) Check that door fits and the door lock linkages are adjusted correctly.

(b) Loosen the striker mounting screws to adjust.

(c) Using a plastic hammer, tap the striker to adjust it.

**Torque: 23 N·m (230 kgf·cm, 17 ft·lbf)**

BO0L5-01

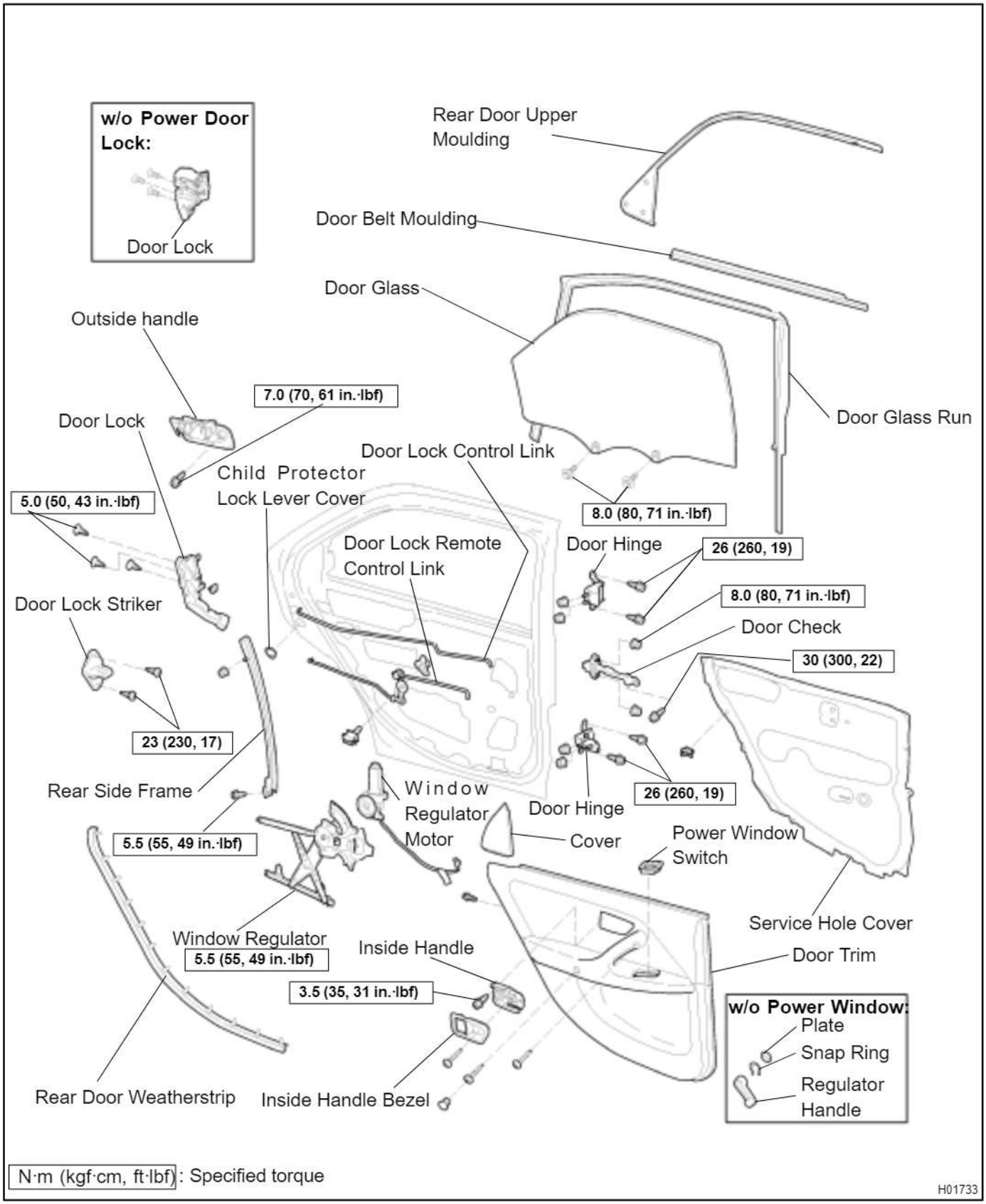
# REASSEMBLY

**Reassembly is in the reverse order of disassembly (See page BO–12).**

# REAR DOOR

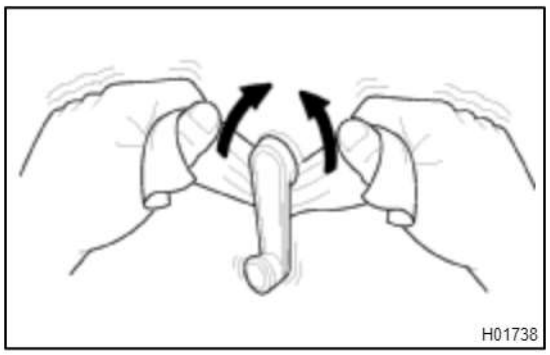
## COMPONENTS

BO0L6-01



BO0L8-01

# DISASSEMBLY




**1. w/o Power Window:**

**REMOVE REGULATOR HANDLE**

Pull off the snap ring with a shop rag and remove the regulator handle and plate.

HINT:

At the time of reassembly, please refer to the following item.

With the door window fully closed, install the plate and the regulator handle with the snap ring.

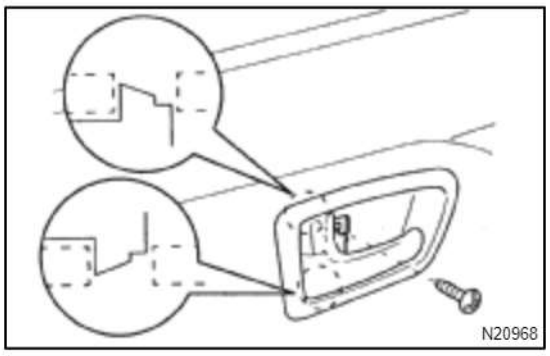
**2. w/ Power Window:**

**REMOVE POWER WINDOW SWITCH**

Using a screwdriver, pry out the switch, then disconnect the connector.

HINT:

Tape the screwdriver tip before use.




**3. REMOVE INSIDE HANDLE BEZEL**

(a) Using a screwdriver, pry open the screw cover and remove the screw.

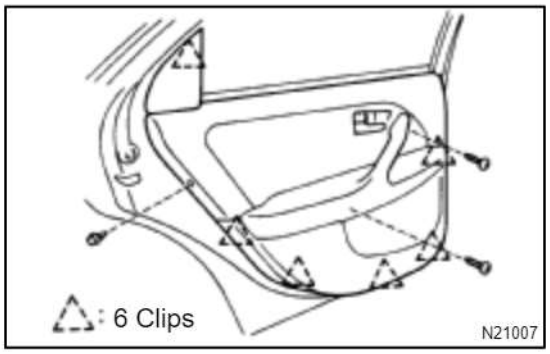
HINT:

Tape the screwdriver tip before use.

(b) Using a screwdriver, pry out the bezel.

HINT:

Tape the screwdriver tip before using. Use the screwdriver to release the bezel from the top and bottom protrusions on the handle assembly as shown.




**4. REMOVE DOOR TRIM**

HINT:

Tape a screwdriver tip before use.

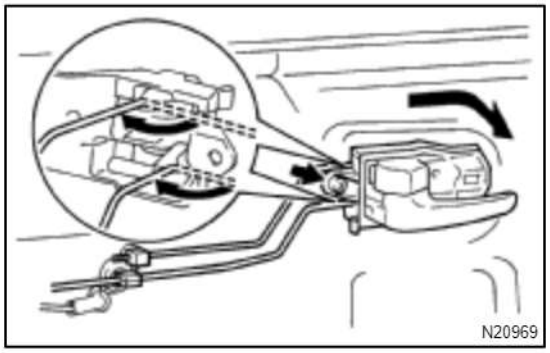
(a) Using the screwdriver, remove the 2 screw caps.

(b) Remove the inside cover.

(c) Remove the 2 screws and clip.

(d) Insert the screwdriver between the door and door trim to pry out.

(e) Pull the trim upward to remove it, then disconnect the connector.




**5. REMOVE DOOR INSIDE HANDLE**

(a) Remove the screw and pull the handle forward.

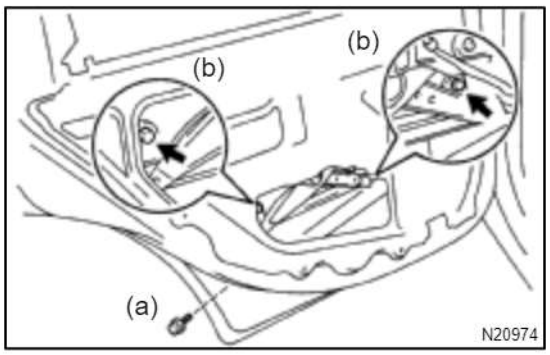
**Torque: 3.5 N·m (35 kgf·cm, 31 in.·lbf)**

(b) Remove the link from the clamp.

(c) Remove the inside handle from the ends of the 2 links.

**6. REMOVE SERVICE HOLE COVER**

Remove the grommet, then remove the service hole cover.




**7. REMOVE DOOR GLASS AND RUN**

(a) Remove the bolt and nut holding the rear side frame to the door.

(b) Remove the 2 bolts holding the door glass to the window regulator.

**Torque: 8.0 N·m (80 kgf·cm, 71 in.·lbf)**

(c) Remove the rear side frame and the rear section of the door glass run.

**Torque: 5.5 N·m (55 kgf·cm, 49 in.·lbf)**

HINT:

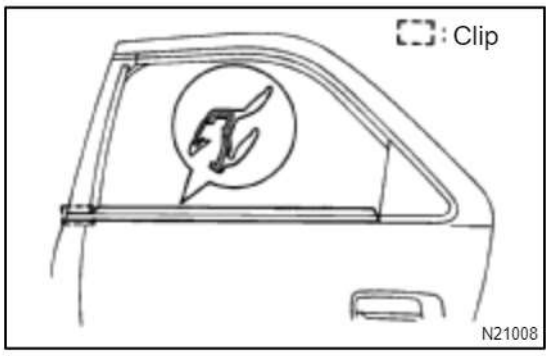
Pull the door glass run upward.

(d) Remove the door glass.

(e) Remove the entire door glass run.

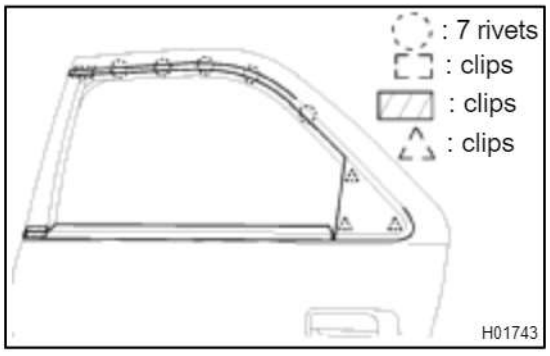
HINT:

Pull the door glass run upward.




**8. REMOVE REAR DOOR BELT MOULDING**

Pry the rearward end of the rear door belt moulding from the door and remove the moulding.



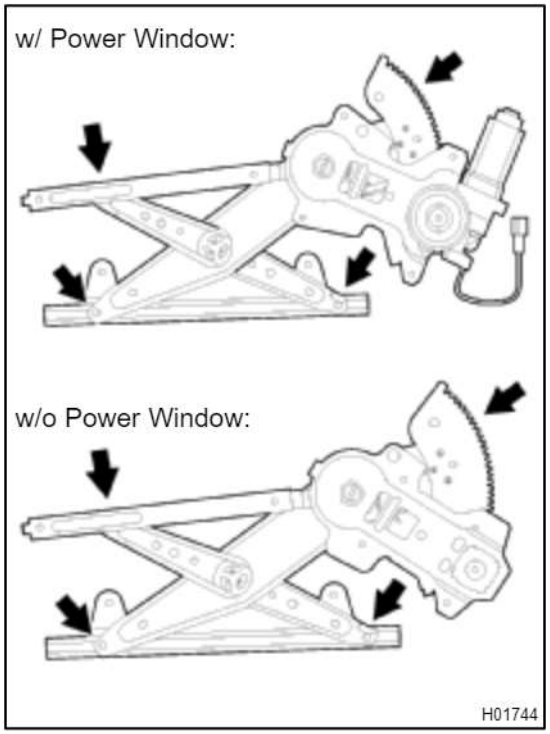

**9. REMOVE REAR DOOR UPPER MOULDING**

(a) Using a drill, cut the flange portion of the 5 rivets.

HINT:

Use 5 new rivets.

(b) Insert a screwdriver between the door and the rear door upper moulding and pry it off.




**10. REMOVE WINDOW REGULATOR ASSEMBLY**

Remove the bolts and window regulator assembly.

**Torque: 5.5 N·m (55 kgf·cm,49 in.·lbf)**

HINT:

At the time of reassembly, please refer to the following item.

Apply MP grease to the window regulator rollers.

**11. w/ Power Window:**
**REMOVE MOTOR FROM WINDOW REGULATOR**

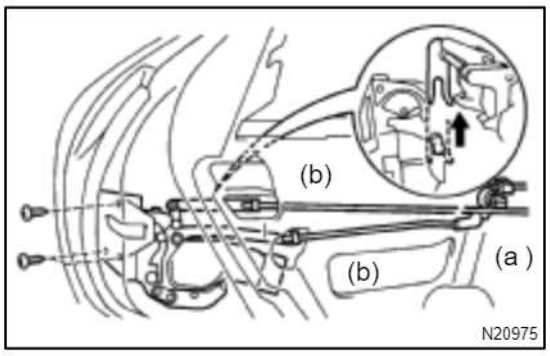
Remove the 3 screws and motor.

**12. REMOVE REAR DOOR LOCK CHILD PROTECTION COVER**

Using a screwdriver, pry out the cover.

HINT:

Tape the screwdriver tip before use.




**13. REMOVE DOOR LOCK**

(a) Remove the clip.

(b) Disconnect the 2 links from the door lock and remove the 2 links.

(c) Disconnect the link from the outside handle.

(d) Remove the 3 screws.

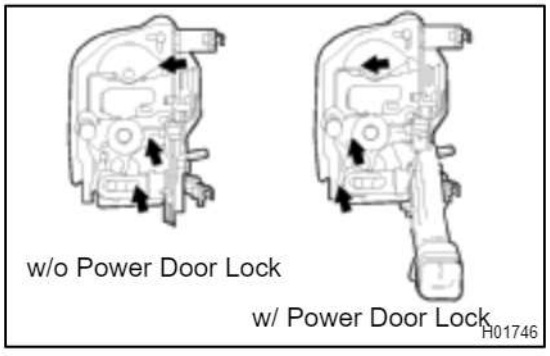
**Torque: 5.0 N·m (50 kgf·cm, 43 in.·lbf)**

HINT:

At the time of reassembly, please refer to the following item.

Apply adhesive to the 3 screws.

**Part No. 08833–00070, THREE BOND 1324 or equivalent**




(e) w/ Power Door Lock:
Disconnect the connector.

(f) Remove the door lock through the service hole.

HINT:

At the time of reassembly, please refer to the following item.

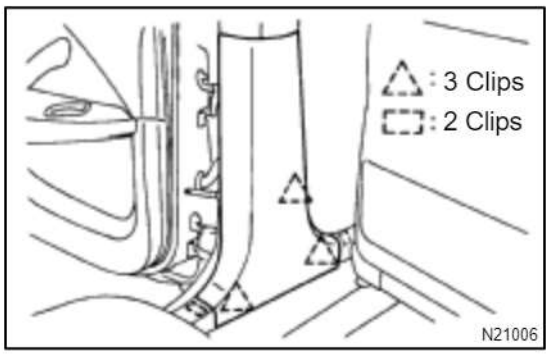
Apply MP grease to the sliding surface of the door lock.

**14. REMOVE OUTSIDE HANDLE**

**Torque: 7.0 N·m (70 kgf·cm, 61 in.·lbf)**

BO0L7-01

# ADJUSTMENT



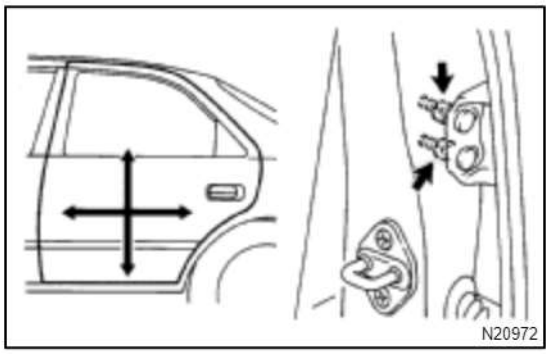

## 1. ADJUST DOOR IN FORWARD/REARWARD AND VERTICAL DIRECTION

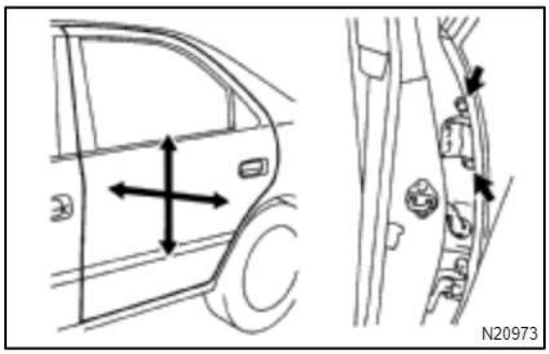
(a) Remove the front part of the rear seat side garnish.
(b) Remove the rear part of the front door inside scuff plate.
(c) Remove the center pillar lower garnish.

HINT:

Pull both sides of the top and bottom part of the garnish outward, then pull out to remove the garnish.

(d) Loosen the body side hinge nuts to adjust.
**Torque: 26 N·m (260 kgf·cm, 19 ft·lbf)**
(e) Install center pillar lower garnish.
(f) Install front door inside scuff plate.
(g) Install rear seat side garnish.



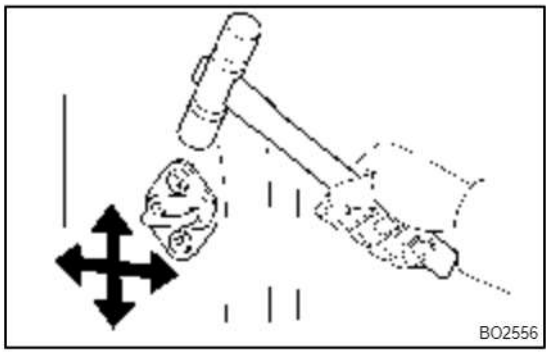

## 2. ADJUST DOOR IN LEFT/RIGHT AND VERTICAL DIRECTIONS

Loosen the door side hinge bolts to adjust.

HINT:

Substitute a bolt with washer for the centering bolt.

**Torque: 26 N·m (260 kgf·cm, 19 ft·lbf)**




## 3. ADJUST DOOR LOCK STRIKER

(a) Check that the door fit and door lock linkages are adjusted correctly.
(b) Loosen the striker mounting screws to adjust.
**Torque: 23 N·m (230 kgf·cm, 17 ft·lbf)**
(c) Using a plastic hammer, tap the striker to adjust it.

BO0L9-01

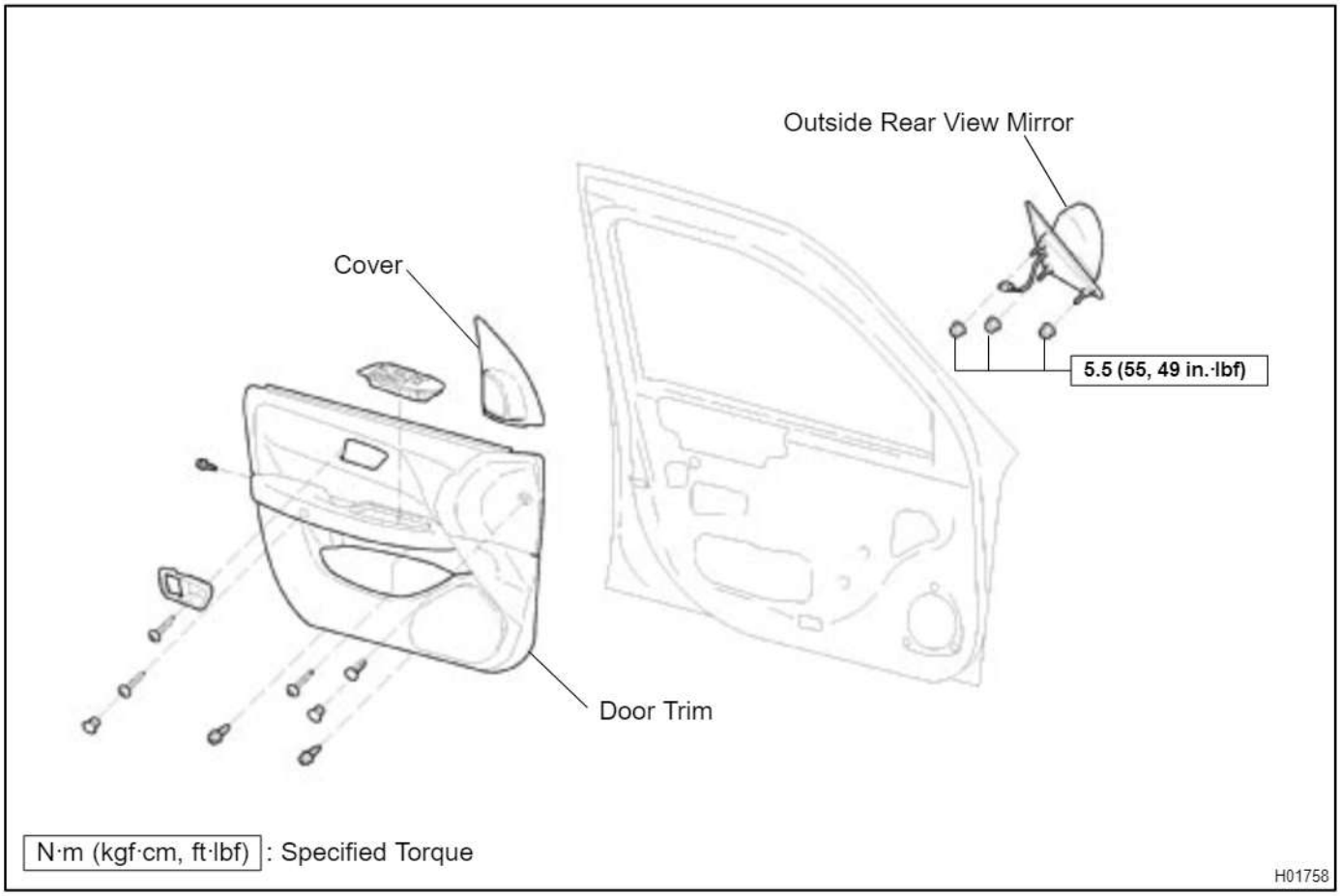
# REASSEMBLY

**Reassembly is in the reverse order of disassembly (See page BO–18).**

# OUTSIDE REAR VIEW MIRROR

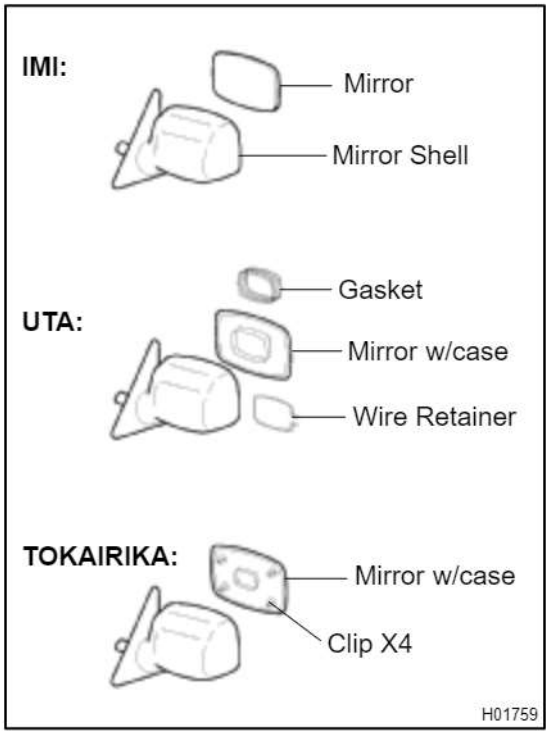
## COMPONENTS

BO0LA-01



BO0LB-01

# DISASSEMBLY



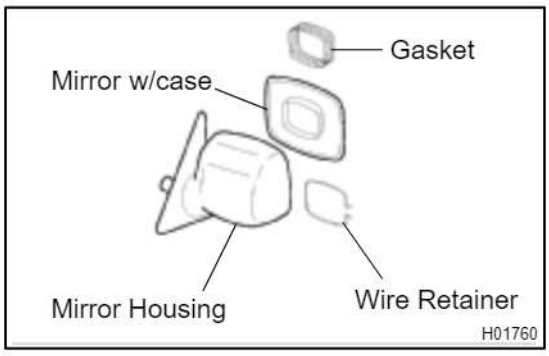

**1. IDENTIFY OUTSIDE REAR VIEW MIRROR**

(a) w/ Power Rear View Mirror:
UTA:
The mirror moves smoothly when pressing the end of the mirror inward.

(b) w/ Power Rear View Mirror:
IMI:
The mirror stutters when pressing the end of the mirror inward.

(c) w/ Power Rear View Mirror:
TOKAIRIKA:
Equipped only on vehicles manufactured by TMC.

(d) w/o Power Rear View Mirror:
Mirrors manufactured by IMI




**2. UTA:**
**DISASSEMBLE OUTSIDE REAR VIEW MIRROR**

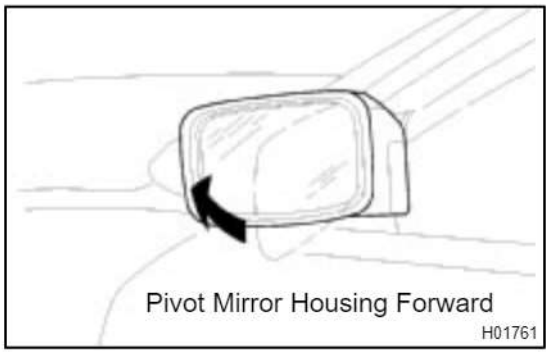
(a) Disconnect the battery.

(b) Press the inboard end of the mirror inward to access the rear of the mirror w/case assembly.

(c) Unlatch both ends of the wire retainer, then remove the mirror parts from the mirror housing.

**NOTICE:**

**Be careful not to damage the wires on heated mirrors. Disconnect the wires from the back side of the heater.**

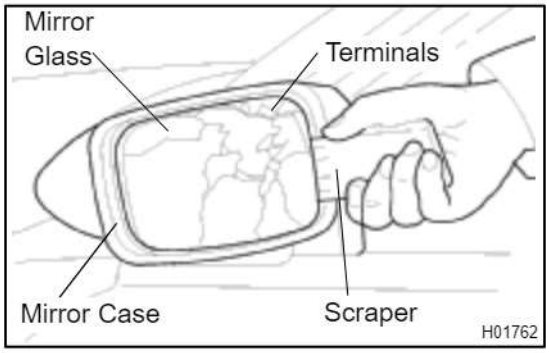



**3. IMI:**
**DISASSEMBLE OUTSIDE REAR VIEW MIRROR**

(a) w/Heated Mirrors:
Disconnect the battery.

(b) Protect the door surface.

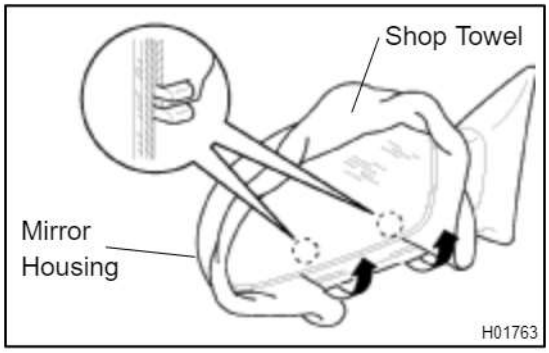
(c) Pivot the mirror housing to the forward position.




(d) Insert a scraper between the mirror and the case to remove the mirror.

**NOTICE:**

**Be careful not to damage the wires on heated mirrors. Disconnect the wires from the back side of the heater.**

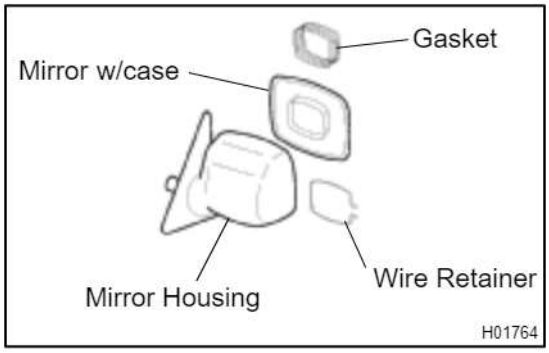



**4. TOKAIRIKA:**
**DISASSEMBLE OUTSIDE REAR VIEW MIRROR**

(a) Disconnect the battery.
(b) Slide a shop towel between the mirror and the mirror housing as shown.
(c) Pull the ends of the shop towel upward to disconnect the mirror from the housing.
(d) Pull the mirror upward and disconnect it.

**NOTICE:**
**Be careful not to damage the wires on heated mirrors. Disconnect the wires from the back side of the heater.**

BO0LC-01




# REASSEMBLY

**1. UTA:**

**ASSEMBLE OUTSIDE REAR VIEW MIRROR**

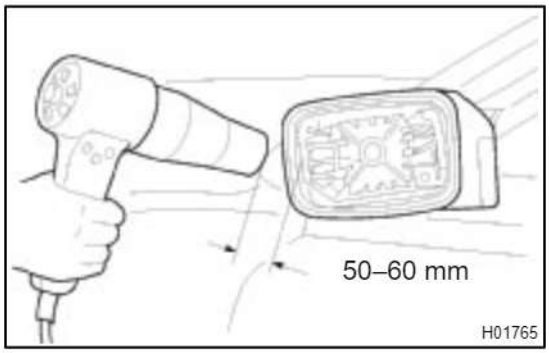
(a) w/Heated Mirrors:
Connect the heater wires.

(b) Install the wire retainer onto the mirror w/case assembly, then press the mirror firmly into place to engage the 6 lugs of the wire retainer.

**NOTICE:**

**Pull the mirror edges to confirm the wire retainer lugs completely engage with the mirror housing.**

(c) Reconnect the battery, then operate the mirror to its full stop position.




**2. IMI:**

**ASSEMBLE OUTSIDE REAR VIEW MIRROR**

(a) From a distance of 50–60 mm, use a heat gun or hair dryer to heat the edge of the mirror case until the mirror case becomes soft.

**CAUTION:**

**Use extreme caution when using a heat gun or hair dryer. Holding it too close can melt the mirror case.**

(b) w/ Heated Mirrors:
Connect the heater wires.

(c) Before the the case cools down, position and snap the new mirror glass into the case.

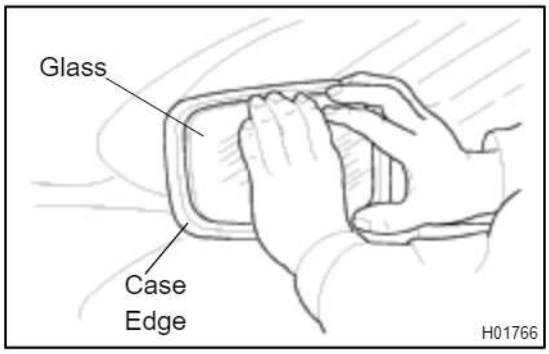
**NOTICE:**

**Verify the glass case edge completely surrounds the mirror glass.**

(d) Allow the case to cool down before moving the mirror back to its operating position.

(e) Recheck the fit between the glass and the case.

(f) Reconnect the battery, then operate the mirror to its full stop position.




**3. TOKAIRIKA:**

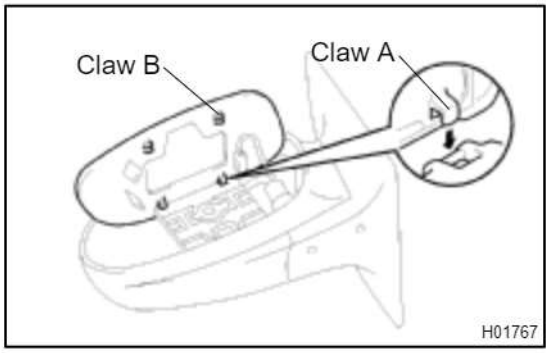
**ASSEMBLE OUTSIDE REAR VIEW MIRROR**

(a) w/ Heated Mirrors:
Connect the heater wires.

(b) Connect the claws (A) and install the mirror into the mirror housing.

(c) Push the mirror inward to connect the claws (B) onto the mirror housing.

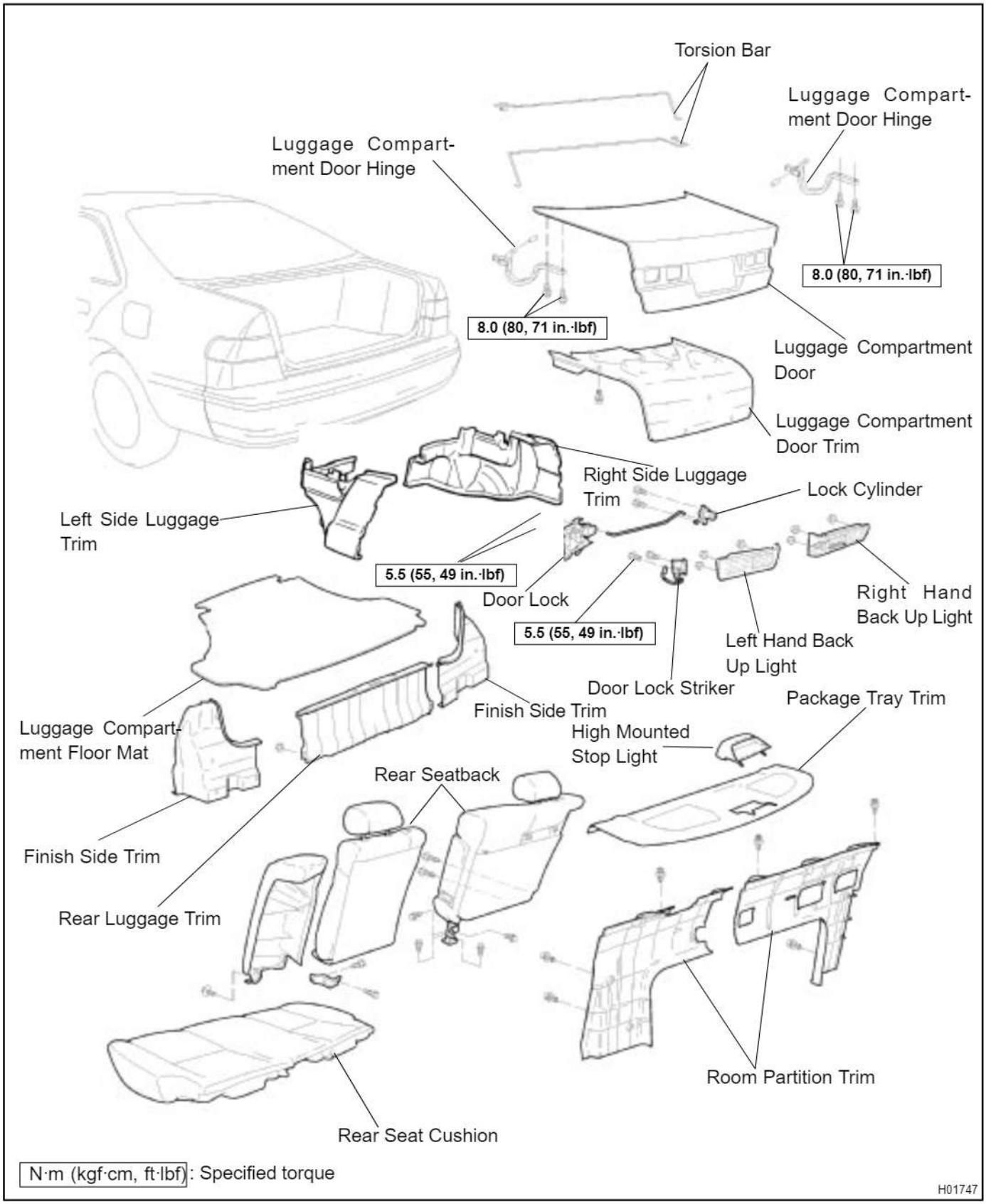
(d) Reconnect the battery, then operate the mirror to its full stop position.



# LUGGAGE COMPARTMENT DOOR AND HINGE

## COMPONENTS

BO0LD-01




N·m (kgf·cm, ft·lbf): Specified torque

H01747

BO0LE–01

# REMOVAL

**1. REMOVE LUGGAGE COMPARTMENT DOOR TRIM**

**2. REMOVE LUGGAGE COMPARTMENT DOOR**

(a) Disconnect the connector.

(b) Using a clip remover, disconnect the clamps.

(c) Remove the 4 bolts and door.

**Torque: 8.0 N·m (80 kgf·cm, 71 in.·lbf)**

**3. REMOVE THESE PARTS:**

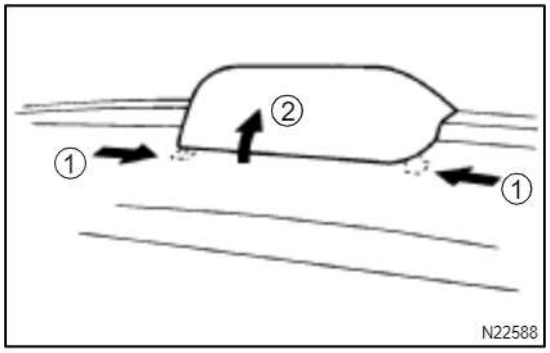
(a) Luggage compartment floor mat

(b) LH and RH rear floor finish side plates

(c) Inner cover trims

(d) Rear seat

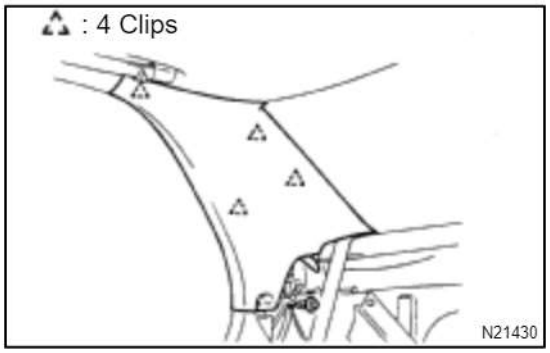
(e) Room partition trims




**4. REMOVE HIGH–MOUNTED STOP LIGHT**

(a) Push on the both side of the cover to release the claws by your hand and remove the cover as shown in the illustration.

(b) Remove the 2 bolts and stop light, then disconnect the connector.




**5. REMOVE ROOF SIDE INNER GARNISH**

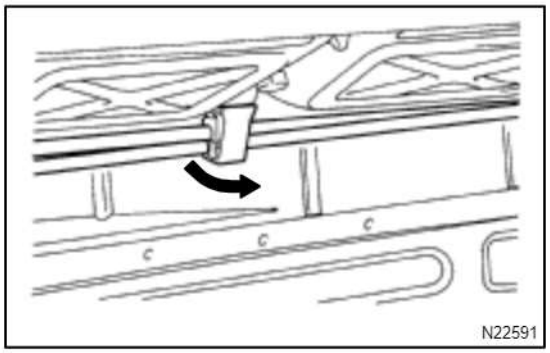
(a) Remove the clip.

(b) Using a screwdriver, pry loose and remove the garnish.

HINT:

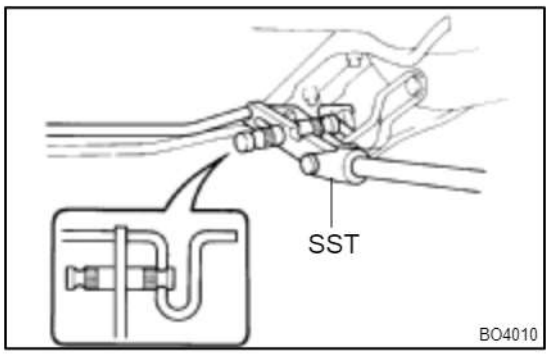
Tape the screwdriver tip before use.

**6. REMOVE PACKAGE TRAY TRIM**

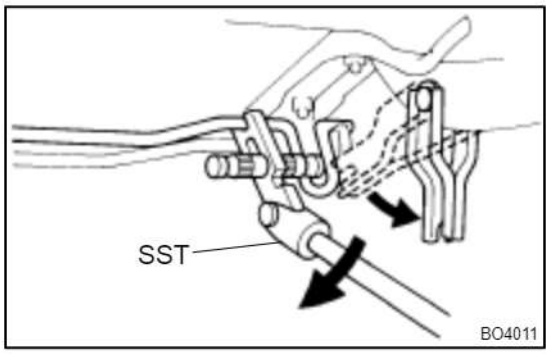



**7. REMOVE TORSION BAR**

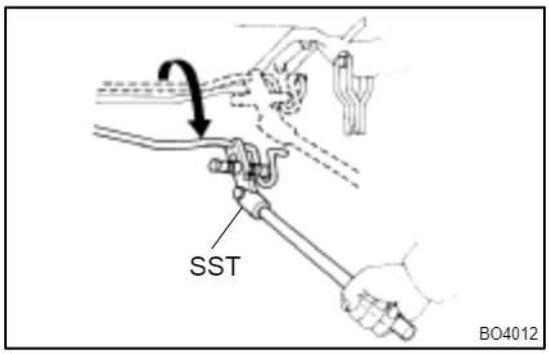
(a) Remove the torsion bar from the center bracket.




(b) Install SST to the torsion bar on the hinge side.
SST 09804–24010




(c) Push down on SST, and pull the luggage compartment door hinge from the torsion bar.




(d) Slowly lift SST, and remove the torsion bar from the torsion bar bracket with SST.
(e) Remove the torsion bar.
(f) Repeat for the other side.

BO0LF-01

# DISASSEMBLY

**1. REMOVE DOOR LOCK**

(a) Disconnect the control link.

(b) Remove the 2 bolts and lock.

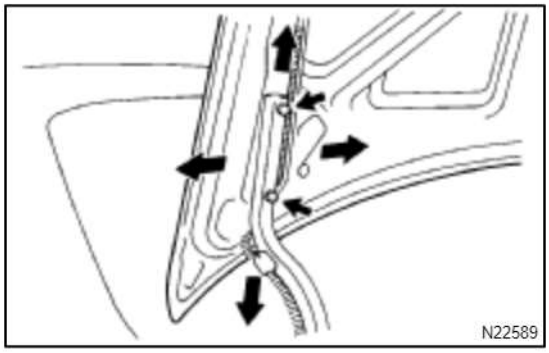
**Torque: 5.5 N·m (56 kgf·cm, 49 in.·lbf)**

**2. REMOVE REAR COMBINATION LIGHT**

(a) Disconnect the connector.

(b) Remove the 10 nuts and rear combination lights.

BO0LG-01




# ADJUSTMENT

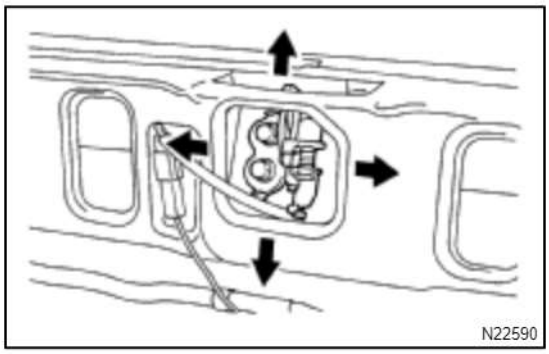
## 1. ADJUST LUGGAGE COMPARTMENT DOOR

(a) Remove the 11 clips and luggage compartment door trim.

(b) For forward/rearward and left/right adjustments loosen the bolts.

**Torque: 8.0 N·m (82 kgf·cm, 71 in.·lbf)**

(c) For vertical adjustment of the front end of the door, increase or decrease the number of washers between the hinge and the door.




## 2. ADJUST DOOR LOCK STRIKER

(a) Remove the LH and RH rear floor finish side plates.

(b) Remove the rear floor finish plate.

(c) Loosen the 2 lock striker set bolts.

**Torque: 5.5 N·m (56 kgf·cm, 49 in.·lbf)**

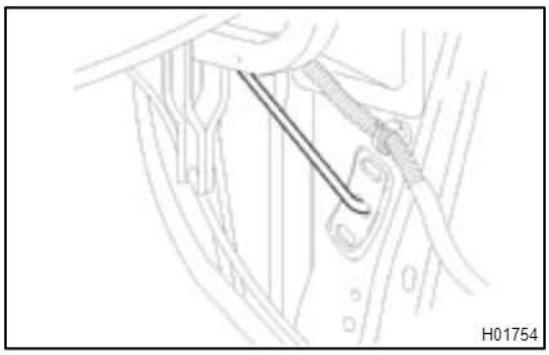
(d) Using a hammer and a brass bar, tap the striker to adjust it.

# REASSEMBLY

**Reassembly is in the reverse order of disassembly (See page BO–30).**

BO0LI-01

# INSTALLATION



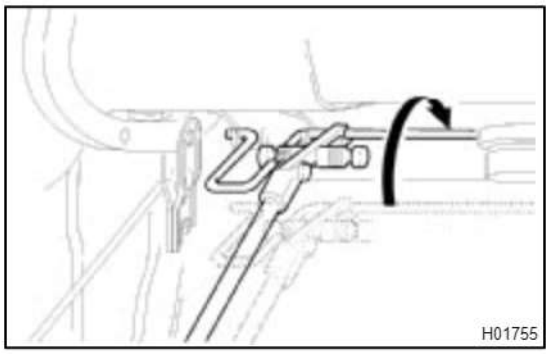

**1. INSTALL TORSION BAR**

(a) Insert the torsion bar into the bracket.

HINT:

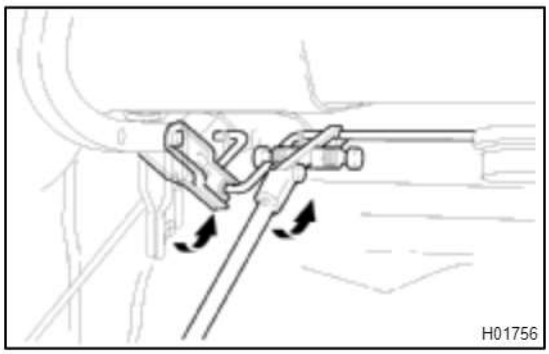
The center bracket opening is the nominal position of the torsion bar.

If needed, move the torsion bar to the upper or lower hole to provide the correct luggage door lift.




(b) Install the SST onto the torsion bar of the hinge side.
SST 09804–24010

(c) Slowly lift the torsion bar with the SST and place it in the torsion bar bracket.



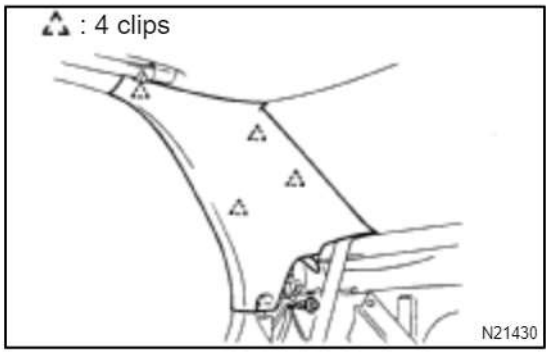

(d) Slowly push the SST down and install the torsion bar to the hinge.

(e) Slowly lift the SST and install the torsion bar.

(f) Install the torsion bar to the center bracket.

(g) Repeat for the other side.

**2. INSTALL PACKAGE TRAY TRIM**




**3. INSTALL ROOF SIDE INNER GARNISH**

**4. INSTALL HIGH MOUNTED STOP LIGHT**

**5. INSTALL THESE PARTS:**

(a) Room partition trims

(b) Rear seat

(c) Inner cover trims

(d) LH and RH rear floor finish side plates

(e) Luggage compartment floor mat

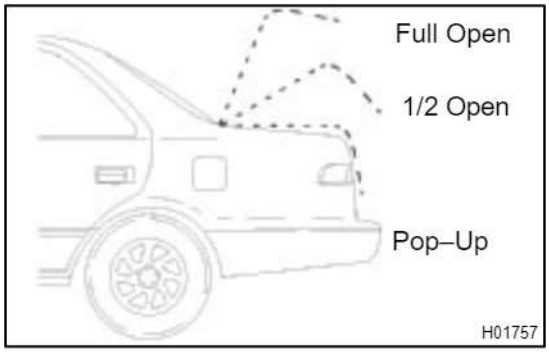
**6. INSTALL LUGGAGE COMPARTMENT DOOR**

(a) Install the door with 4 bolts.

(b) Install clamps.

(c) Connect the connector.

**7. INSTALL LUGGAGE COMPARTMENT DOOR TRIM**




**8. CHECK LUGGAGE DOOR LIFT**

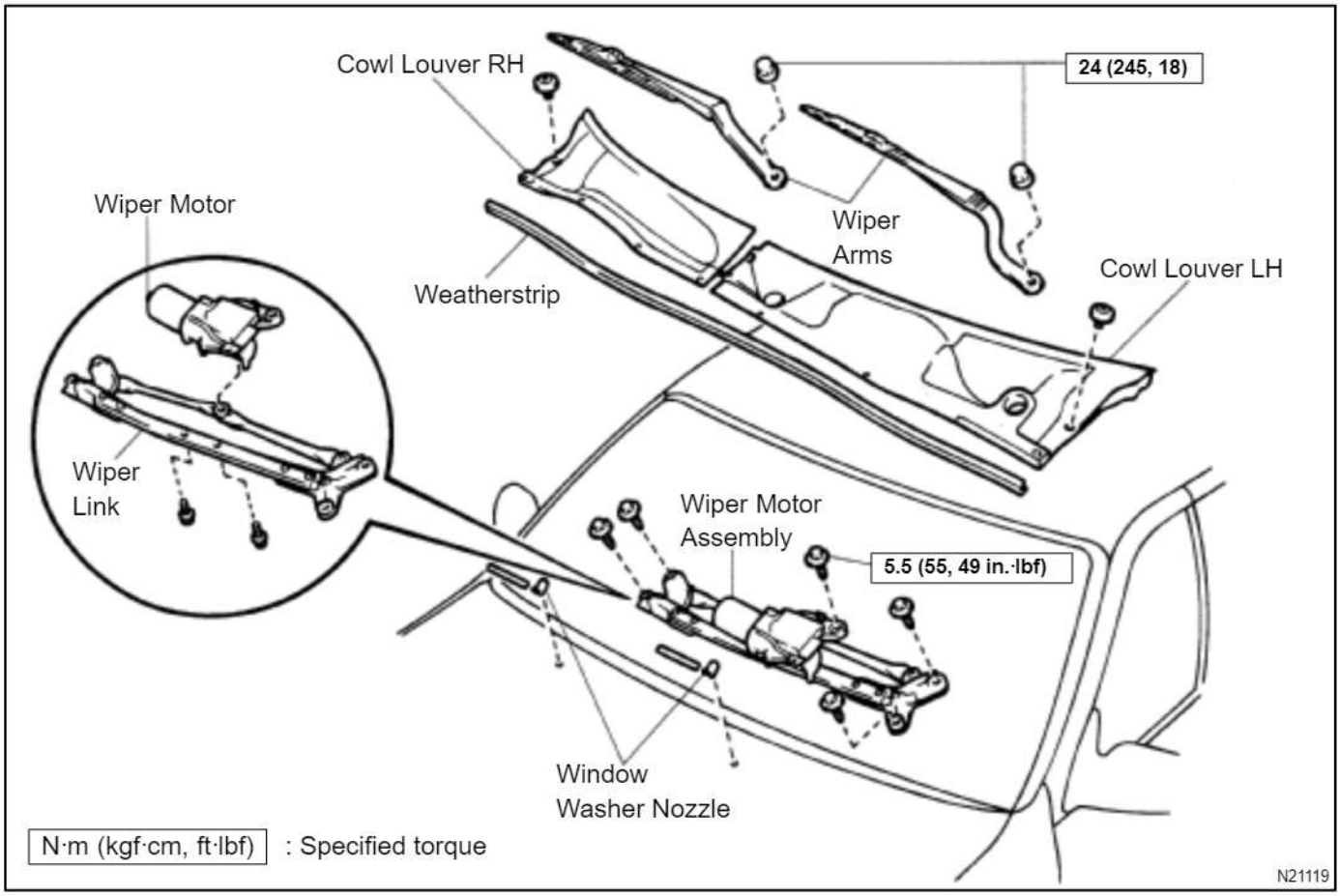
- Pop–up distance: 35 – 100 mm
- Pop– up to 1/2 open: Door should remain in any position.
- Past 1/2 open: Door should open fully by itself.
- Full open position: Door should not easily fall closed

If adjustment is necessary, refer to step 2 –(a) above.

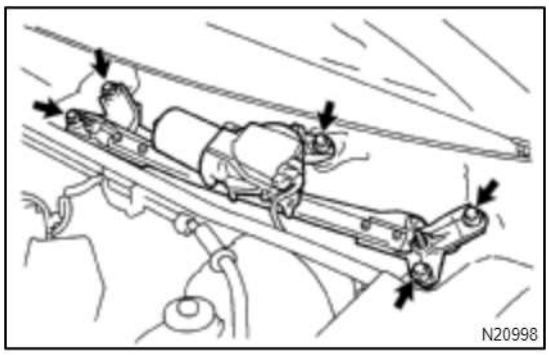
# FRONT WIPER AND WASHER

## COMPONENTS

BO0LK-01



BO0LL-01




# REMOVAL

**1. REMOVE WIPER ARMS**

**2. REMOVE WEATHERSTRIP AND COWL LOUVERS**

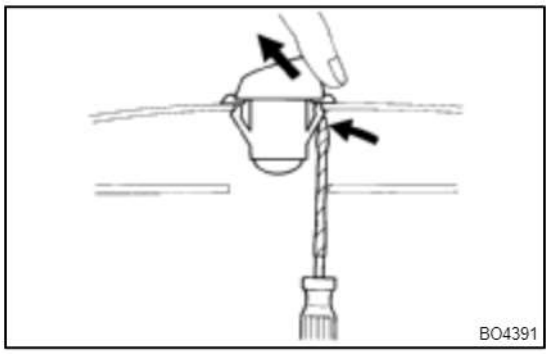
**3. REMOVE WIPER MOTOR ASSEMBLY**

(a) Disconnect the connector.

(b) Remove the 5 bolts and wiper motor assembly.

**4. REMOVE WIPER MOTOR**

Remove the 2 bolts, then separate the motor crank arm from the wiper links at the ball and socket joint.




**5. REMOVE WINDOW WASHER NOZZLE**

(a) Remove the hoses from the nozzles.

(b) Using a screwdriver, remove the nozzle.

HINT:

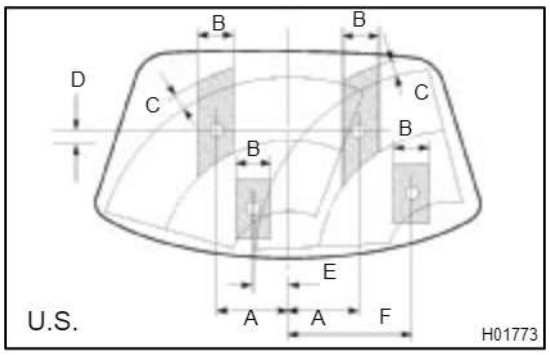
Tape the screwdriver tip before use.

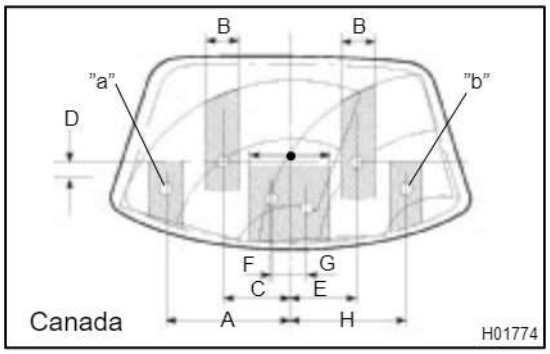
BO0LM-01

# ADJUSTMENT

## 1. INSPECT WASHER NOZZLE

(a) While operating the washer, check that the washer fluid hits the windshield and the upsurge area within the shaded areas.

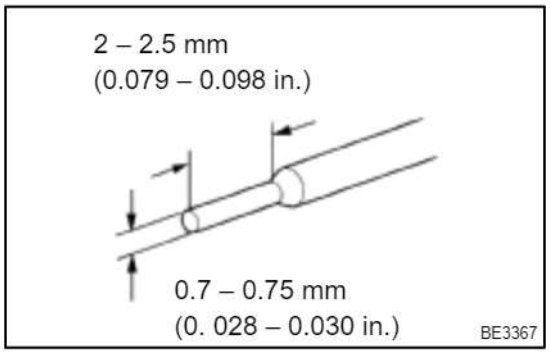



| | U.S. mm (in.) | Canada mm (in.), Approx. |
|---|---|---|
| "A" | 280 (11) | 600 (23.6) |
| "B" | 150 (5.9) | 150 (5.9) |
| "C" | 50 (2.0) | 250 (9.8) |
| "D" | 50 (2.0) Max | |
| "E" | 180 (7.1) | 360 (14) |
| "F" | 395 (15.5) | 114 (4.5) |
| "G" | — | 90 (3.5) |
| "H" | — | 474 (18.7) |
| "I" | — | 350 (13.8) |

(b) Canadian models:
Adust the nozzle so the outboard points "a" and "b" are within the wipe pattern.

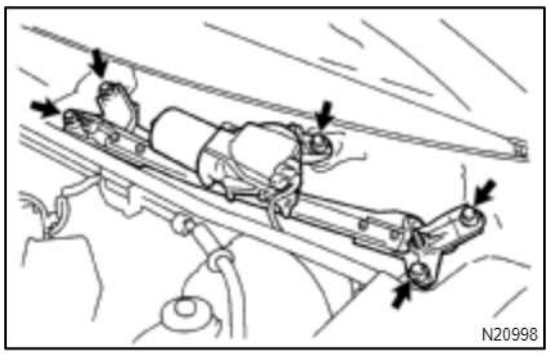
(c) Check if the lower point where the washer fluid hits the windshield is within the range of the wiping pattern (the area of the glass the wiper blades wipe).




## 2. ADJUST WASHER NOZZLE

Using a tool like that shown in the illustration, rotate the nozzle to adjust the fluid direction against the windshield.

BO0LN-01




# INSTALLATION

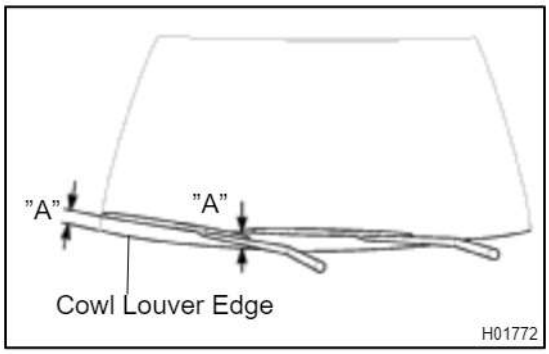
**1. INSTALL WINDOW WASHER NOZZLE**

**2. INSTALL WIPER LINK TO MOTOR**

**3. INSTALL THESE PARTS:**

(a) Wiper motor assembly
**Torque: 5.5 N·m (55 kgf·cm, 49 in.·lbf)**

(b) Cowl louvers and weatherstrip




**4. INSTALL WIPER ARMS**

(a) Operate the wipers once and turn the wiper switch OFF, then install the wiper arms.

HINT:

If the driver's side wiper arm mount has a blue dot on it, use an ITT wiper arm. If there is no mark, use a ND wiper arm.

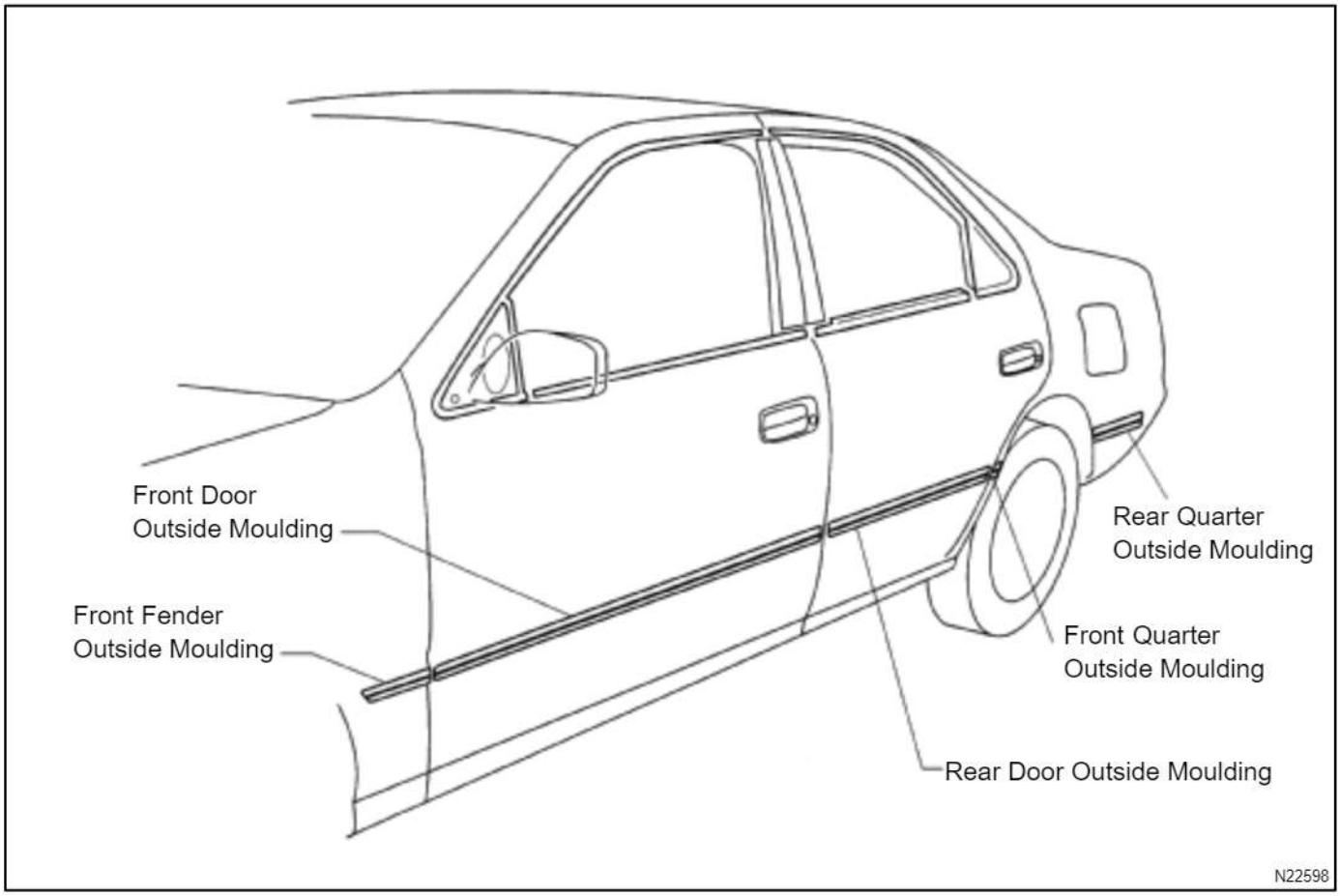
(b) Adjust the installation position of the wiper arms as shown (blade tip to cowl louver edge).
**"A" Approx. 35 mm (1.4 in.)**

(c) Tighten the wiper arm nut.
**Torque: 24 N·m (245 kgf·cm, 18 ft·lbf)**

# BODY OUTSIDE MOULDING

## COMPONENTS

BO0MB-01

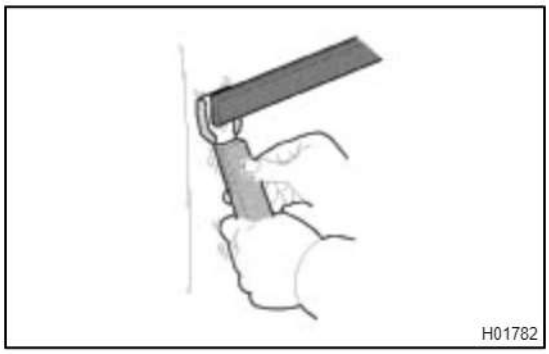


BO0M9-01

# REMOVAL

**CAUTION:**

- **Store in a cool place, avoiding direct sunlight, high temperature and dust.**
- **The moulding is made of polyvinyl chloride. Do not allow this material to come in contact with thinner or other solvents, open flame or boiling water.**
- **The storage time for the moulding and adhesive is limited to about 9 months.**

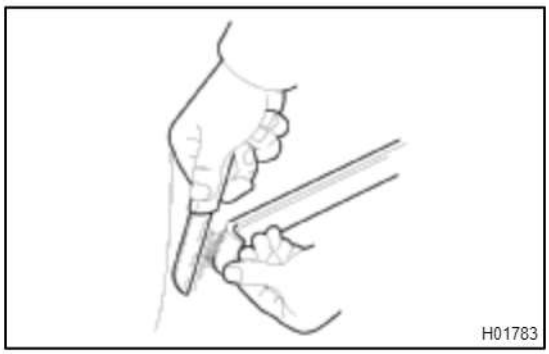



**1. REMOVE ENDS OF MOULDING**

Using a scraper, pry the moulding loose about 30 mm (1.18 in.) form each end.

HINT:

Tape the scraper tip before using.




**2. REMOVE MOULDING AND ADHESIVE**

(a) Pull off the moulding by cutting the adhesive with a knife.

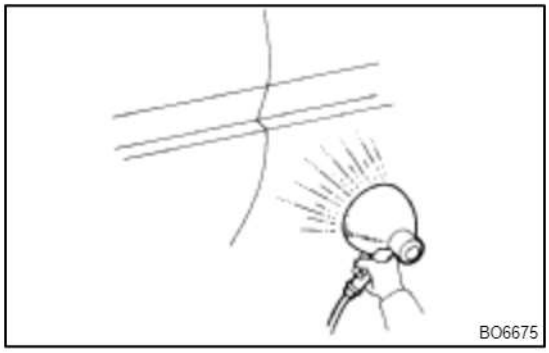
(b) Scrape off adhesive from the body with sandpaper cutter.

**NOTICE:**

- **Remember that 30 – 80 mm (1.18 – 3.15 in.) of the ends of the moulding are glued tightly with a strong adhesive.**
- **Do not reuse moulding.**

BO0MA-01

# INSTALLATION




## 1. HEAT BODY MOUNTING SURFACE

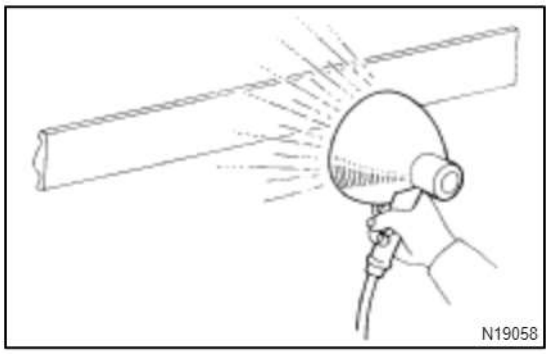
(a) Using a heat light, heat the body mounting surface to 40 – 60 °C (104 – 140 °F).

**NOTICE:**

**Do not heat body excessively.**

(b) Remove the adhesive tape from the body.

(c) Wipe off stains with cleaner.




## 2. CLEAN MOULDING

If reusing the moulding:

(a) Using a heat light, heat the moulding to 20 – 30 °C (68 – 86 °F).

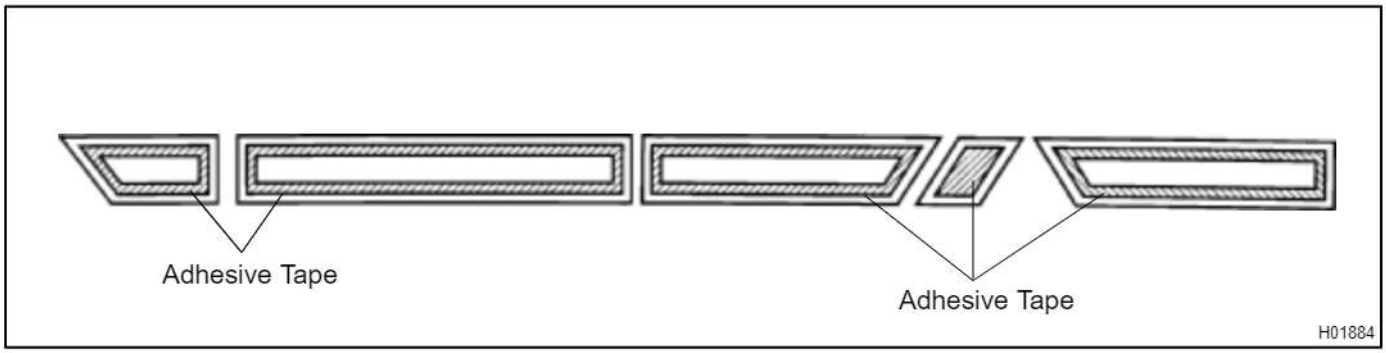
**NOTICE:**

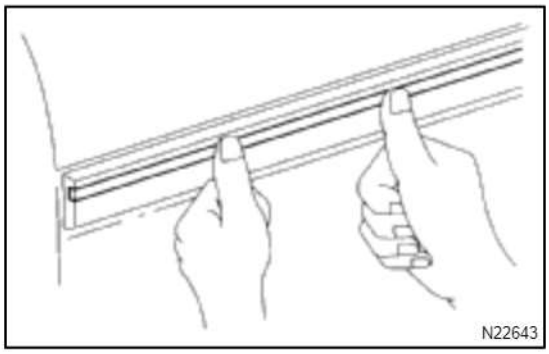
**Do not heat moulding excessively.**

(b) Remove the adhesive tape from the moulding.

(c) Wipe off stains with cleaner.

(d) Apply a new adhesive tape to moulding as shown in the illustration.




## 3. INSTALL MOULDING

(a) Using a heat light, heat the body and moulding.

**Body: 40 – 60 °C (104 – 140 °F)**

**Moulding: 20 – 30 °C (68 – 86 °F)**

**NOTICE:**

**Do not heat moulding excessively.**

(b) Lift moulding release sheet from face of moulding.

**NOTICE:**

**When the moulding release sheet is removed, make sure that no dirt or dust can get onto the uncoated area.**

(c) Align the bosses with their corresponding holes in the body, and press firmly on the moulding. Refer to the illustration for the front fender moulding application procedures.

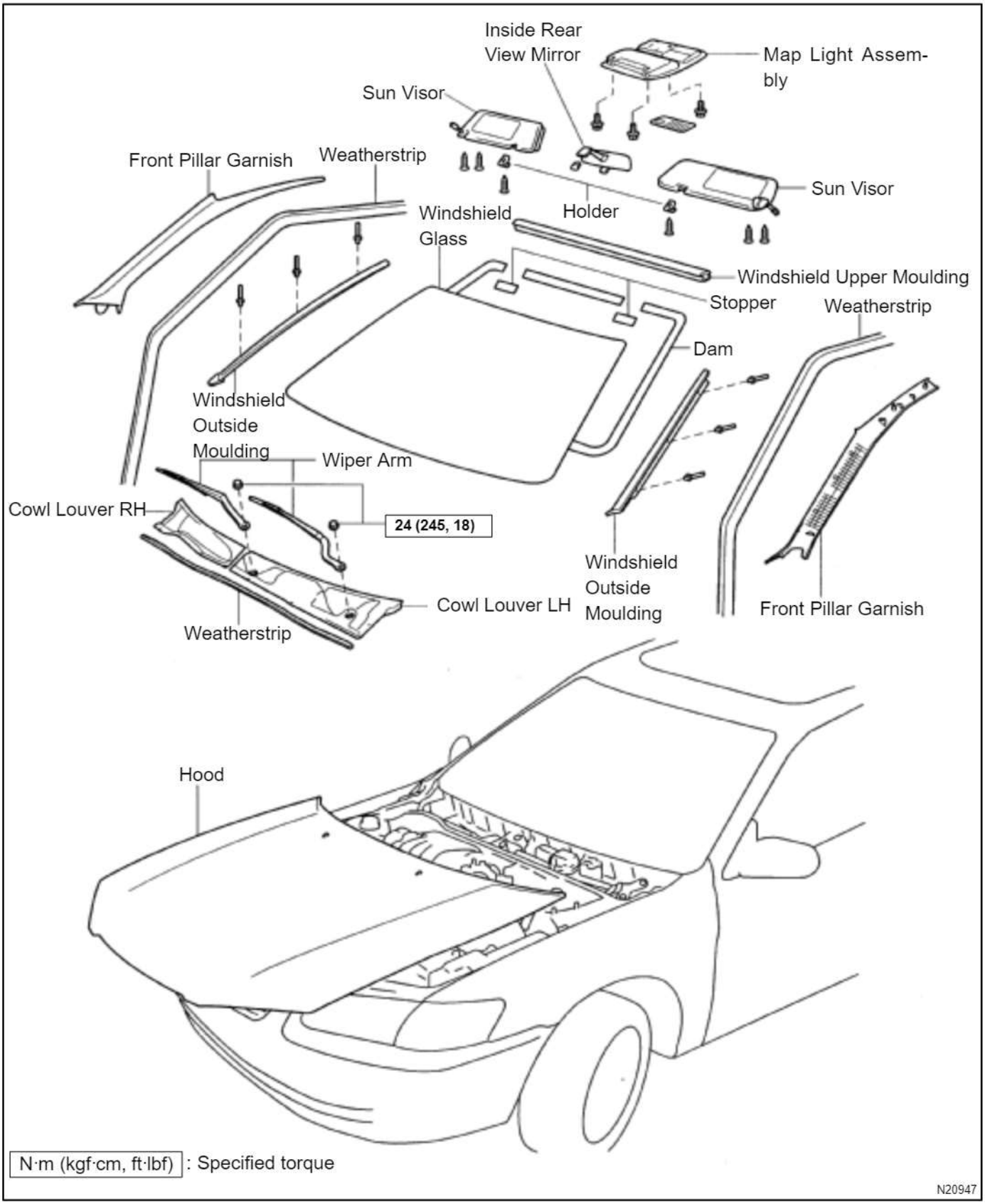
**NOTICE:**

**Do not apply excessive force onto the moulding, but steady pressure with your thumbs.**

# WINDSHIELD

## COMPONENTS

BO0LO-01

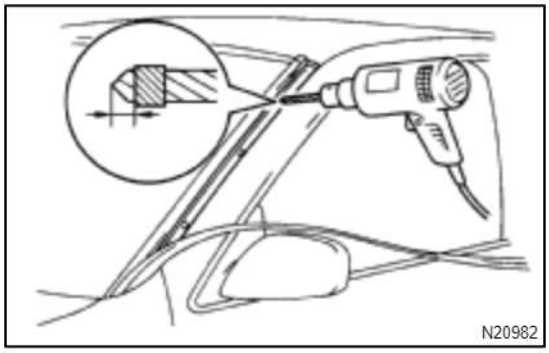


BO0LP-01

# REMOVAL

**1. REMOVE THESE PARTS:**

(a) Inner rear view mirror
(b) Sun visors and holders
(c) Map light assembly
(d) Front pillar garnishes
(e) Hood
(f) Wiper arms
(g) Cowl louvers
(h) Weatherstrips


N20982

**2. REMOVE WEATHERSTRIP**

Remove the weatherstrip by pulling.

HINT:

Remove only the front half of weatherstrip.

**3. REMOVE WINDSHIELD OUTSIDE MOULDING**

(a) Using a drill of less than ø 5.0 mm (0.20 in.), drill out the rivet heads and remove the moulding.
(b) Using a vacuum cleaner, remove the drill rivet and their dust from the inside of the door.

**CAUTION:**

**The cut rivet and rivet cutter will be not, avoid touching them.**

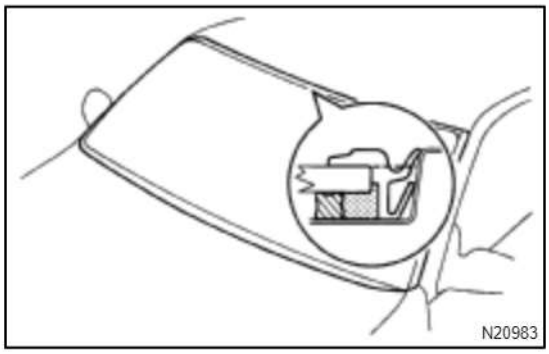
**NOTICE:**

**Do not jiggle the rivet cutter while cutting.You may enlarge the rivet hole or damage the rivet cutter.**

HINT:

Do not drill the body.

Sealant may cause the moulding to stick to the glass. If necessary, separate from the glass using a knife.

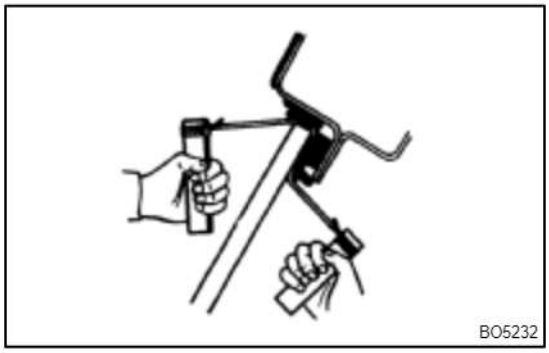

N20983

**4. REMOVE WINDSHIELD UPPER MOULDING**

Using a knife, cut off the moulding as shown.

**NOTICE:**

**Do not damage the body with the knife.**


BO5232

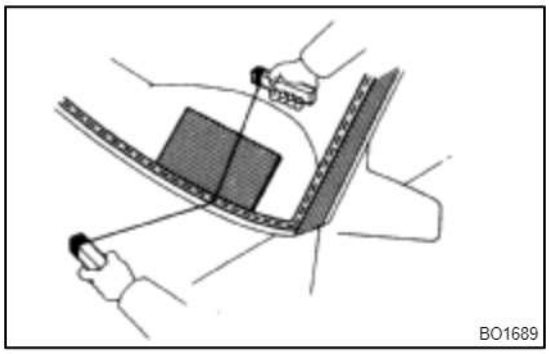
**5. REMOVE WINDSHIELD GLASS**

(a) Push piano wire through between the body and glass from the interior.
(b) Tie both wire ends to a wooden block or a similar object.

HINT:

Apply adhesive tape to the outer surface to prevent scratching.

**NOTICE:**
**When separating the glass, be careful not to damage the paint and interior and exterior ornaments. To prevent scratching the safety pad when removing the windshield, place a plastic sheet between the piano wire and safety pad.**


BO1689

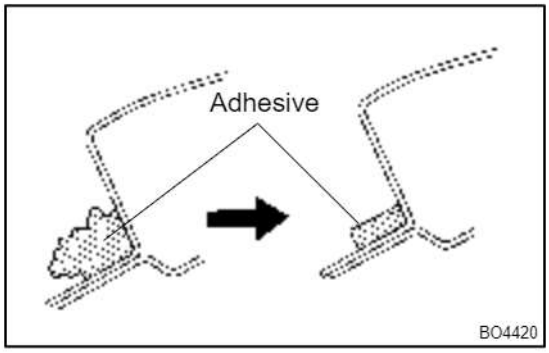
(c) Cut the adhesive by pulling the piano wire around it.
(d) Remove the glass.

**NOTICE:**
**Leave as much of the adhesive on the body as possible when removing the glass.**

**6. REMOVE RETAINERS**

BO0LQ-01

# INSTALLATION




## 1. CLEAN AND SHAPE CONTACT SURFACE OF BODY

(a) Using a knife, cut away any rough areas on the body.

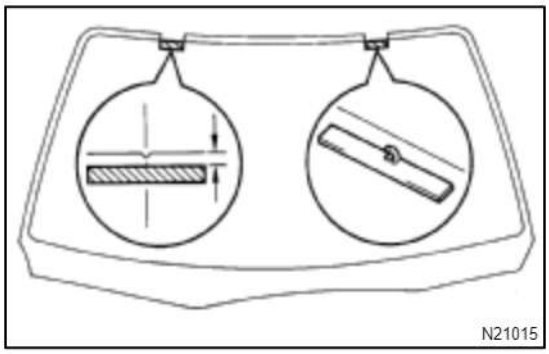
HINT:

Leave as much of the adhesive on the body as possible.

(b) Clean the cutting surface of the adhesive with a piece of shop rag saturated in cleaner.

HINT:

Even if all the adhesive has been removed, clean the body.




## 2. REPLACE STOPPER

(a) Remove the damaged stopper.

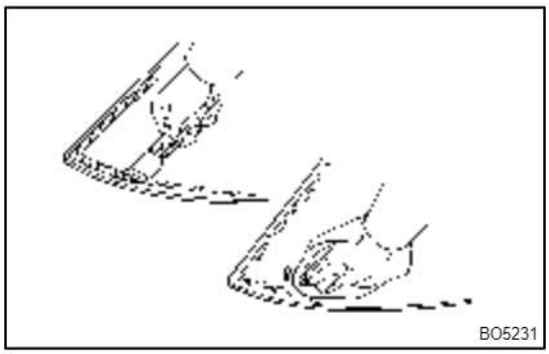
(b) Cut off the old adhesive around the stopper installation area.

**NOTICE:**

**Be careful not to damage the body.**

(c) Clean the installation area.

(d) Install a new stopper onto the body.



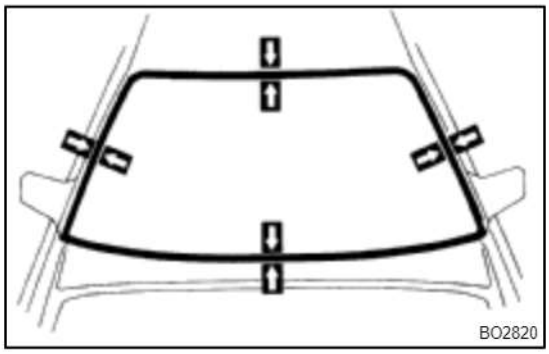

## 3. CLEAN REMOVED GLASS

(a) Using a scraper, remove the adhesive sticking to the glass.

(b) Clean the glass with cleaner.

**NOTICE:**

**Do not touch the glass after cleaning it.**



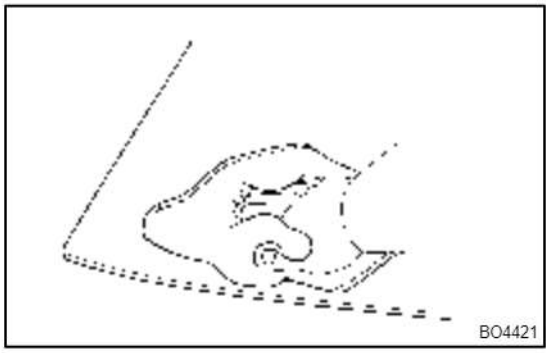

## 4. POSITION GLASS

(a) Place glass in the correct position.

(b) Check that all contacting parts of the glass rim are perfectly even and do not make contact with the fasteners.

(c) Place reference marks between the glass and body.

(d) Remove the glass.

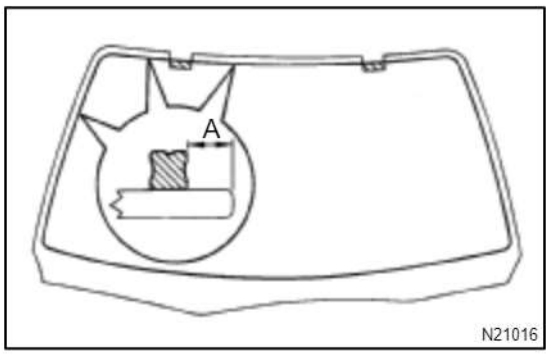



## 5. CLEAN CONTACT SURFACE OF GLASS

Using a cleaner, clean the contact surface black–colored area around the entire glass rim.

**NOTICE:**

**Do not touch the glass face after cleaning it.**



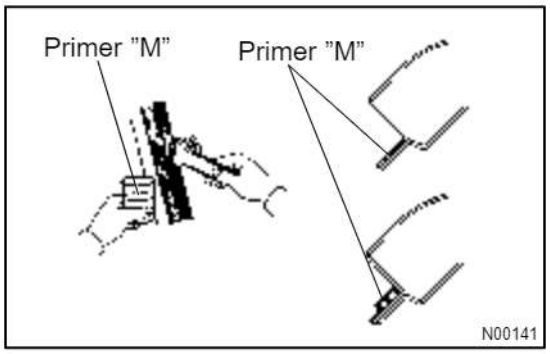

**6. INSTALL DAM**

Install the dam with double–stick tape as shown in the illustration.

**NOTICE:**

**Do not touch the glass face after cleaning it.**

**A: 7 mm (0.276 in.)**

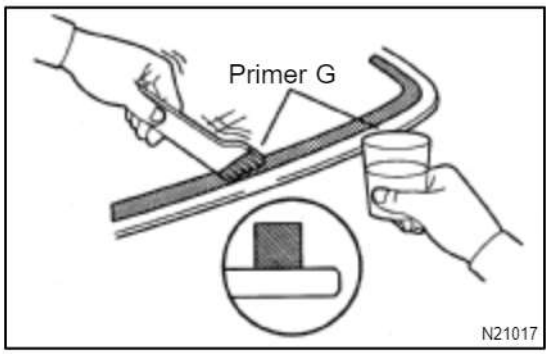



**7. COAT CONTACT SURFACE OF BODY WITH PRIMER "M"**

Using a brush, coat the contact surface on the body with Primer M.

**NOTICE:**

**Let the primer coating dry for 3 minutes or more. Do not coat Primer M to the adhesive. Do not keep any of the opened Primer M for later use.**



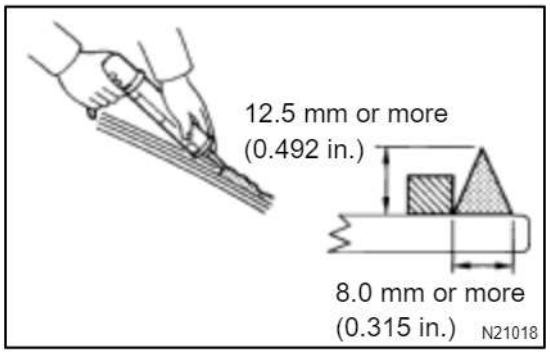

**8. COAT CONTACT SURFACE OF GLASS WITH PRIMER "G"**

(a) Using a brush or a sponge, coat the edge of the glass and the contact surface with Primer G.

(b) Before the primer dries, wipe it off with a clean shop rag.

**NOTICE:**

**Let the primer coating dry for 3 minutes or more. Do not keep any of the opened Primer G for later use.**




**9. APPLY ADHESIVE**

(a) Cut off the tip of the cartridge nozzle. Fill the cartridge with adhesive.

**Part No. 08850 – 00801 or equivalent**

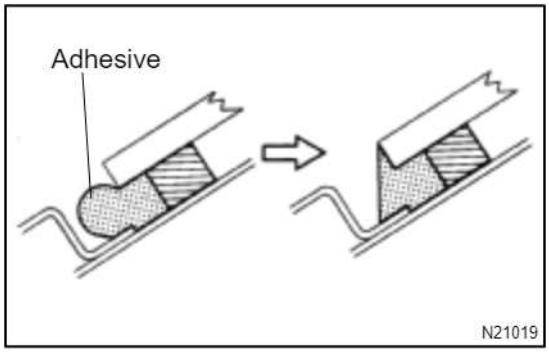
HINT:

After cutting off the tip, use all adhesive within the time described in the chart below.

| Temperature | Tackfree time |
|---|---|
| 35 °C (95 °F) | 15 minute |
| 20 °C (68 °F) | 100 minute |
| 5 °C (41 °F) | 8 hour |

(b) Load the cartridge into the sealer gun.

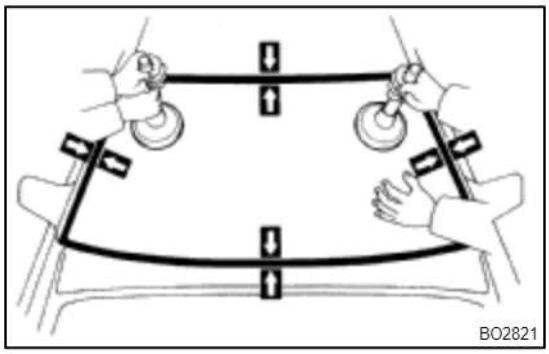
(c) Coat the glass with adhesive as shown.




**10. INSTALL GLASS**

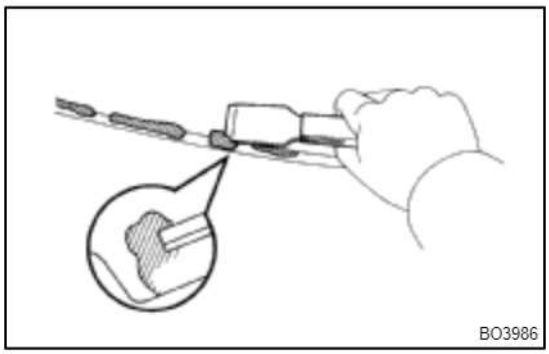
HINT:

Confirm that the dam is attached the body panel as shown in the illustration.




(a) Position the glass so that the reference marks are lined up, and press in gently along the rim.

(b) Using a spatula, apply adhesive on the glass rim.




(c) Use a scraper to remove any excess or protruding adhesive.

**NOTICE:**

**Take care not to drive the vehicle during the time described in the chart below.**

| Temperature | Minimum time prior to drive the vehicle |
|---|---|
| 35 °C (95 °F) | 1.5 hour |
| 20 °C (68 °F) | 5 hour |
| 5 °C (41 °F) | 24 hour |

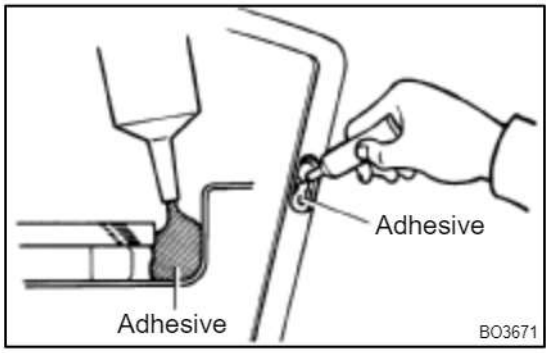
(d) Hold the windshield glass in place securely with a protective tape or equivalent until the adhesive hardened.

**11. INSPECT FOR LEAKS AND REPAIR**

(a) Do a leak test after the hardening time has elapsed.

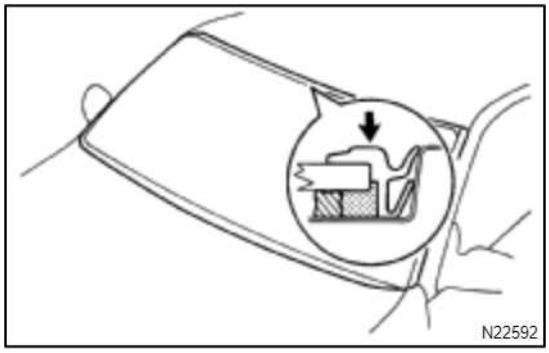
(b) Seal any leak with sealant.

**Part No. 08833 – 00030 or equivalent**



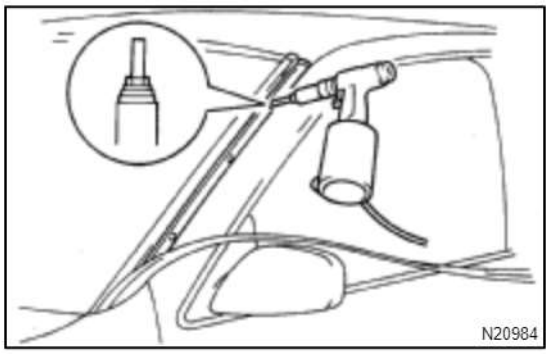

**12. APPLY ADHESIVE AT MOULDING INSTALLATION AREA**

**Part No. 08833 – 00030 or equivalent**




**13. INSTALL WINDSHIELD UPPER MOULDING**

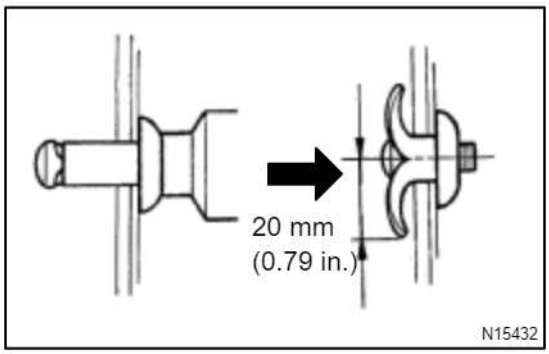
Place the moulding onto the body and tap it in by hand.




**14. INSTALL WINDSHIELD OUTSIDE MOULDING**

(a) Install the pawl of the outside moulding to the upper moulding to set the moulding to the body.

(b) Using an air riveter with nose piece, install the new 3 rivets and outside moulding.




**CAUTION:**

**To avoid personal injury and short of the wiring when installing ø 5.0 mm (0.20 in.) rivets keep your hands out of the 20 mm (0.79 in.) radius that the caulked ø 5.0 mm (0.20 in.) rivet will cover.**

HINT:

Install the rivet firmly pressed at a right angle (90°) against the installation hole.

**15. INSTALL THESE PARTS:**

(a) Cowl louvers

(b) Weatherstrips

(c) Wiper arms

**Torque: 24 N·m (245 kgf·cm, 18 ft·lbf)**

(d) Front pillar garnishes

(e) Map light assembly

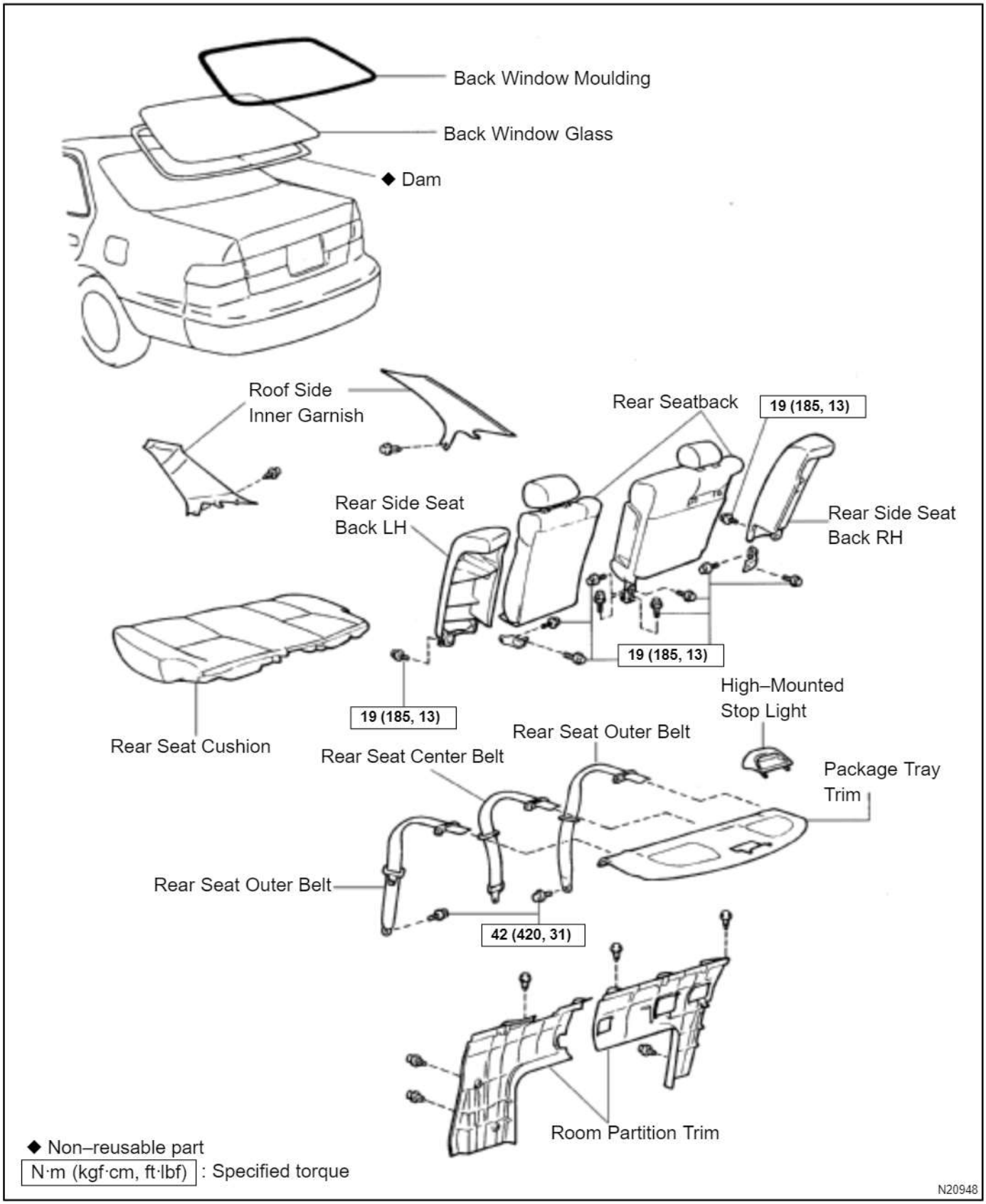
(f) Sun visors and holders

(g) Inner rear view mirror

# BACK WINDOW GLASS

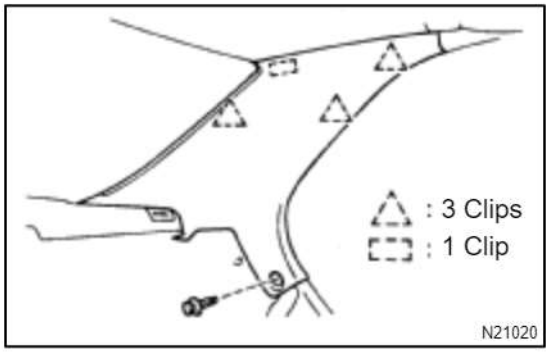
## COMPONENTS

BO0LR-01



BO0LS-01

# REMOVAL

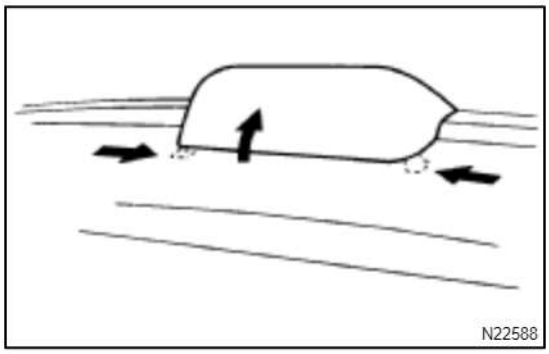



**1. REMOVE REAR SEAT CUSHION AND SEATBACKS**

**2. REMOVE ROOF SIDE INNER GARNISHES**

(a) Remove the clips.

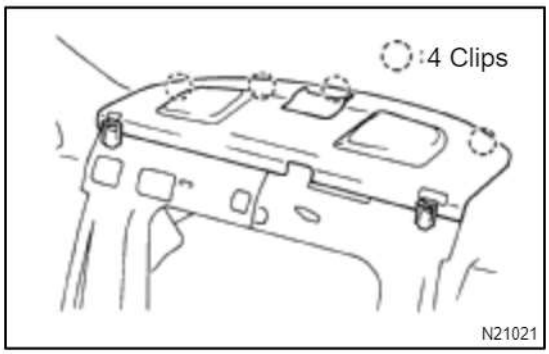
(b) Pull the garnish to remove it.




**3. REMOVE HIGH–MOUNTED STOP LIGHT**

(a) Push on the both side of the cover to release the claws by your hand and remove the cover as shown in the illustration.

(b) Remove the 2 bolts and stop light, then disconnect the connector.

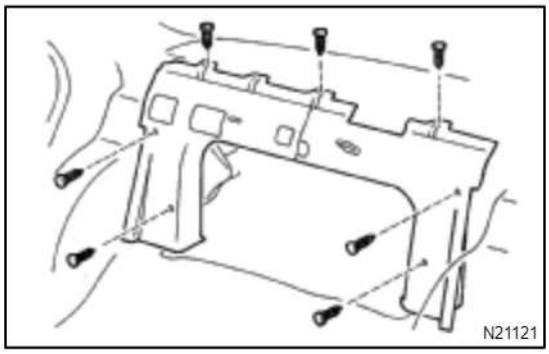



**4. REMOVE PACKAGE TRAY TRIM**

(a) Remove the bolts holding the rear seat belt lower side to the body.

(b) Remove the seat belts with seat belt hole covers from the package trim.

(c) Remove the trim by pulling forward.




**5. REMOVE ROOM PARTITION TRIMS**

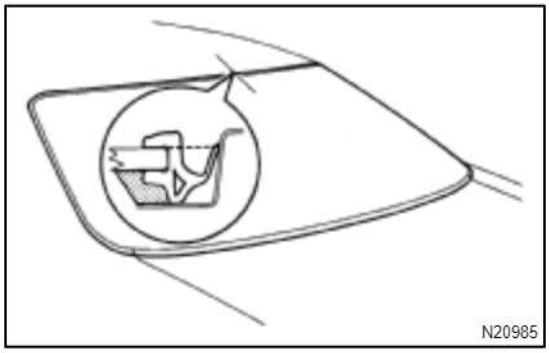
Remove the 6 clips and room partition trims.

**6. REMOVE THESE PARTS**

(a) Assist grips.

(b) Rear side of roof headlining.

**7. DISCONNECT DEFOGGER WIRE CONNECTORS**




**8. REMOVE BACK WINDOW MOULDING**

Using a knife, cut off the moulding as shown.

**NOTICE:**

**Do not damage the body with the knife.**

**9. REMOVE BACK WINDOW GLASS**

Remove the glass in the same way as windshield.

(See page BO–43)

BO0LT-01

# INSTALLATION

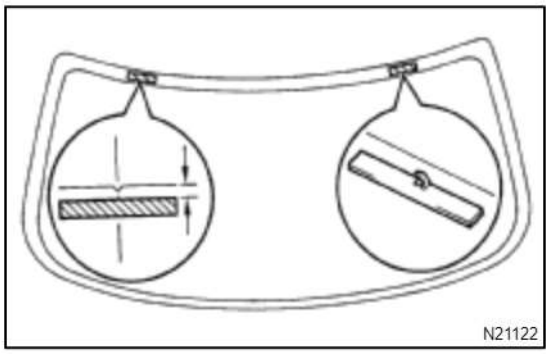
HINT:

Refer to the installation of windshield, install back window glass by the following operations.

(See page BO–45)

**1. CLEAN AND SHAPE CONTACT SURFACE OF BODY**

**2. CLEAN REMOVED GLASS**




**3. REPLACE STOPPERS**

**4. POSITION GLASS**

**5. CLEAN CONTACT SURFACE OF GLASS**

**6. INSTALL DAM**

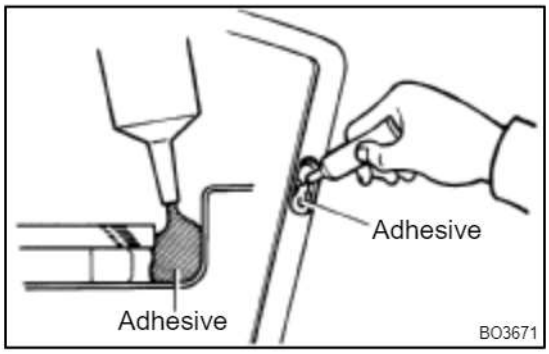
Install the dam with double–stick tape as show in the illustration.

**NOTICE:**

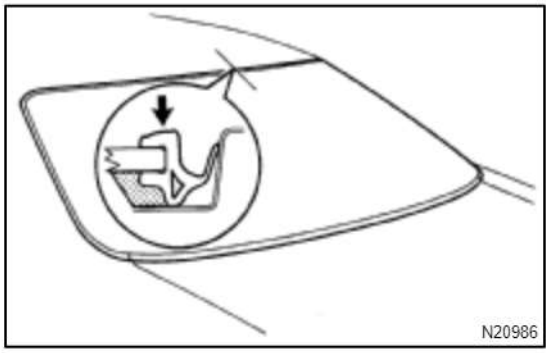
**Do not touch the glass face after cleaning it.**

**7. COAT CONTACT SURFACE OF BODY WITH PRIMER "M"**

**8. COAT CONTACT SURFACE OF GLASS WITH PRIMER "G"**




**9. APPLY ADHESIVE AT MOULDING INSTALLATION AREA**




**10. INSTALL BACK WINDOW MOULDING**

Place the moulding onto the body and tap it by hand.

**11. APPLY ADHESIVE**

**12. INSTALL GLASS**

**13. INSPECT FOR LEAKS AND REPAIR**

**14. CONNECT DEFOGGER CONNECTORS**

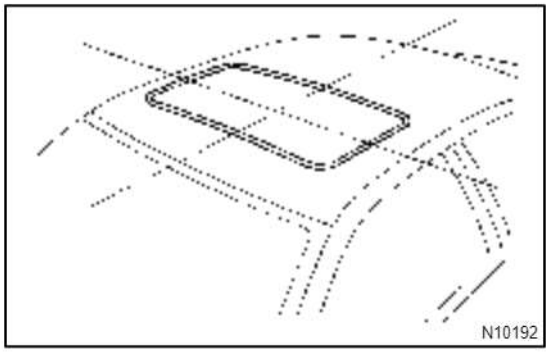
**15. INSTALL THESE PARTS:**

(a) Rear side of roof headlining

(b) Assist grips

(c) Package tray trim

(d) Room partition trims
(e) Seat belt lower side bolts
**Torque: 42 N·m (420 kgf·cm, 31 ft·lbf)**
(f) High–mounted stop light
(g) Roof side inner garnish
(h) Rear seatbacks and seat cushion
**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**




# SLIDING ROOF (TMC Made)

BO0M1-01

## ON–VEHICLE INSPECTION

### INSPECT SLIDING ROOF GLASS ALIGNMENT

(a) Start the engine and check the operation time of the sliding roof.
**Operation time:**
**Approx. 6 secs.**

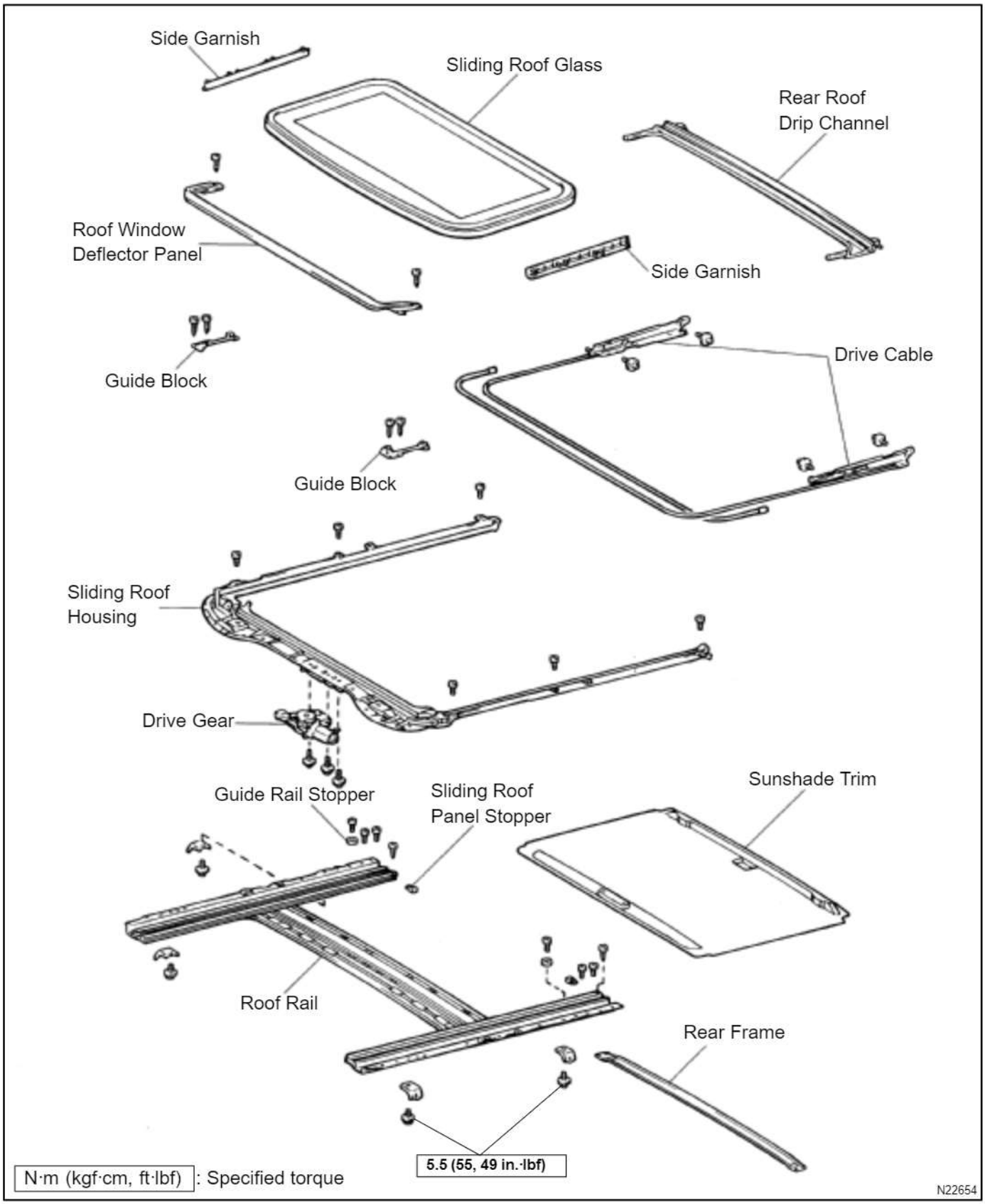
(b) Check for abnormal noise or binding during operation.

(c) With the sliding roof fully closed, check for water leakage.

(d) Check for a difference in level between the sliding roof weatherstrip and roof panel.
**Except rear end:**
**0 ± 1.5 mm (0 ± 0.059 in.)**
**Rear end:**
**0 + 1.5 mm (0 + 0.059 in.)**
**0 – 1.0 mm (0 – 0.039 in.)**

BO0M2-01

# COMPONENTS



BO0M3-01

# REMOVAL

**1. REMOVE ROOF HEADLINING**
**(See page BO–83)**

**2. REMOVE SIDE GARNISH**

Using a screwdriver, remove the garnishes.

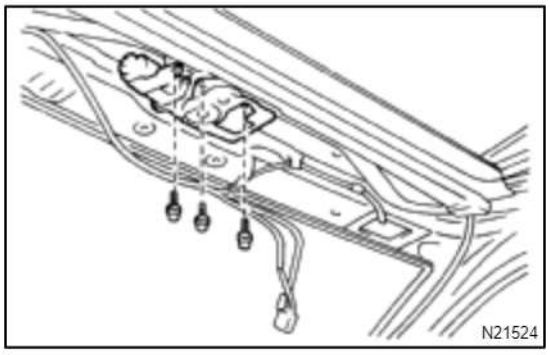
HINT:

Tape the screwdriver tip before use.

**3. REMOVE SLIDING ROOF GLASS ASSEMBLY**

(a) Using a torx wrench, remove the 4 screws.

(b) Pull the glass upward to remove it.



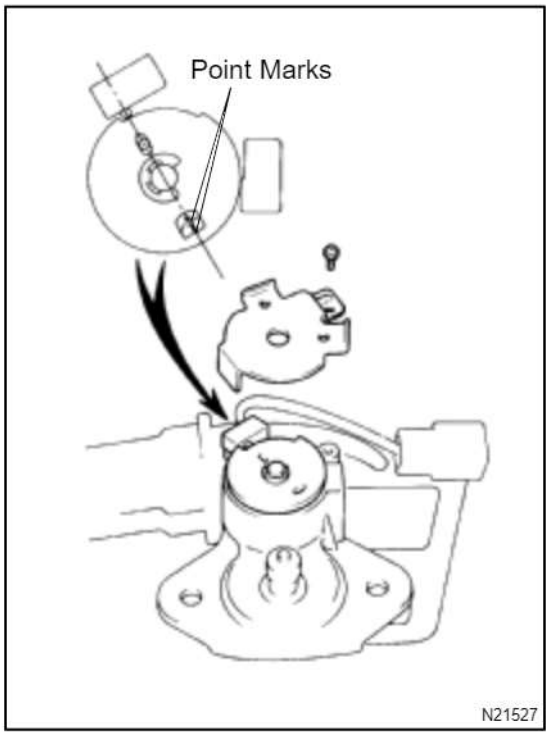

**4. REMOVE DRIVE GEAR**

**NOTICE:**

**Remove the drive gear with the sliding roof is full closed.**

(a) Disconnect the connector.

(b) Remove the 3 bolts and drive gear.




(c) Remove the screw and cam plate cover.

(d) Turn the drive gear to align the point marks as shown in the illustration.

(e) Install the cam plate cover and screw.

**NOTICE:**

**At the time of installation, please refer to the following item. If the sliding roof position and drive gear full close position is not matched, the sliding roof does not operate normally.**

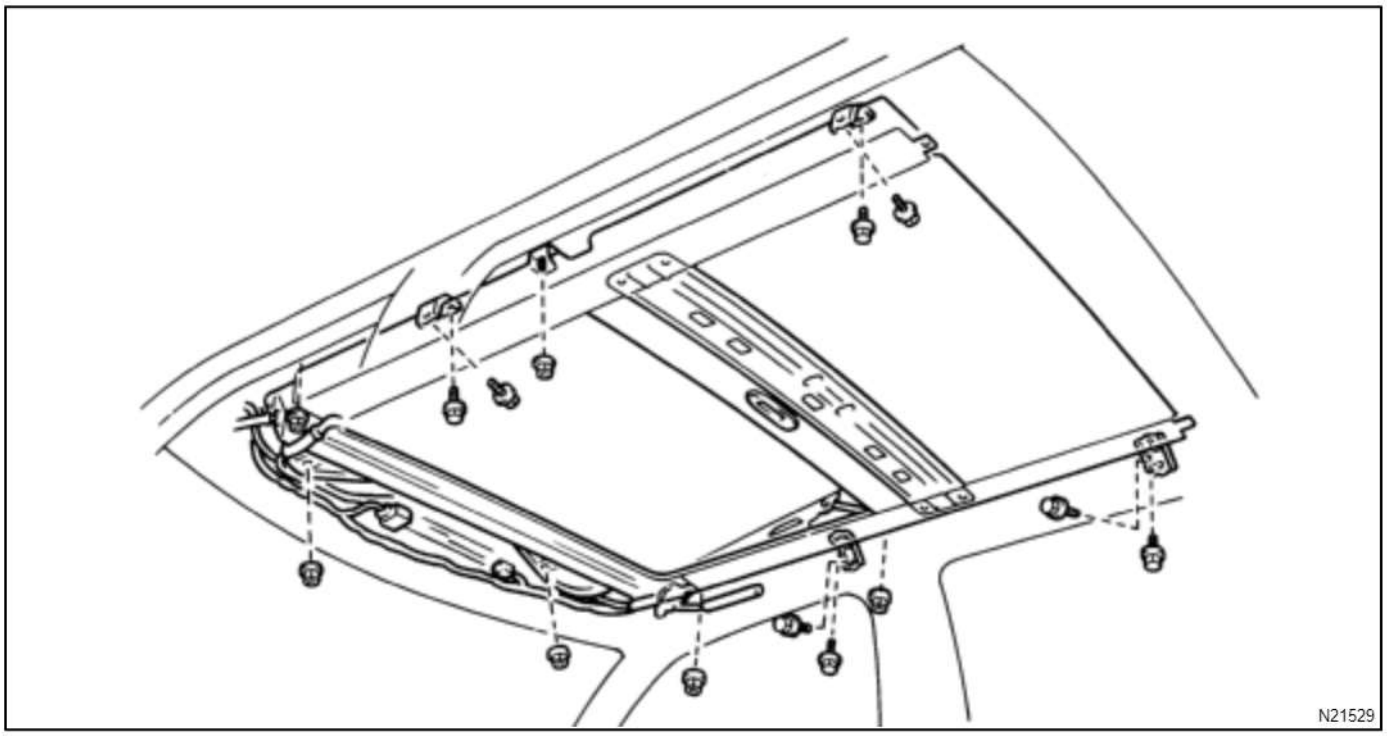
**5. REMOVE SLIDING ROOF HOUSING**

(a) Disconnect the 4 drain hoses from the housing.

(b) Remove the 8 bolts and 4 brackets.

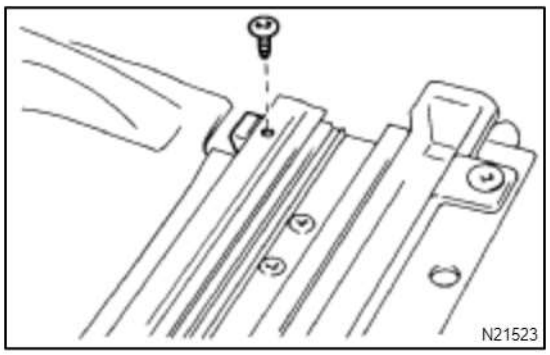
**Torque: 5.5 N·m (55 kgf·cm, 49 in.·lbf)**

(c) Remove the 6 nuts, then remove the housing as shown on the following page.



BO0M4-01

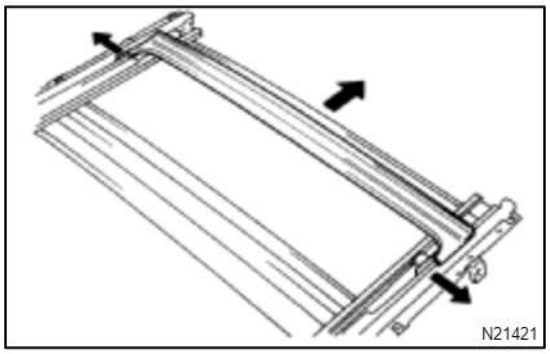
# DISASSEMBLY




**1. REMOVE SLIDING ROOF PANEL STOPPER**

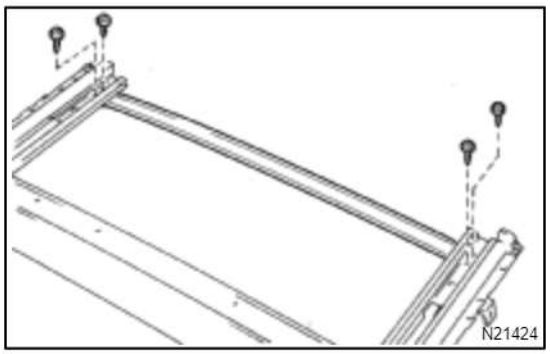
Remove the 2 screws and 2 stoppers.

**2. REMOVE SUNSHADE TRIM**



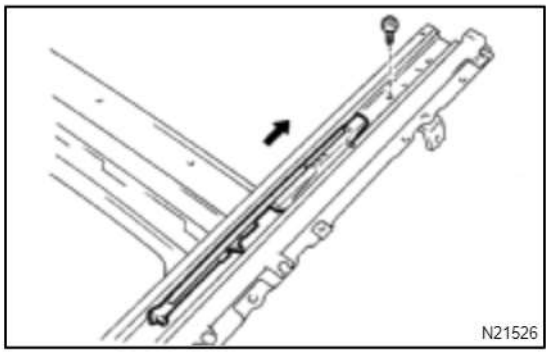

**3. REMOVE REAR ROOF DRIP CHANNEL**

Remove the rear roof drip channel as shown in the illustration.




**4. REMOVE REAR FRAME**

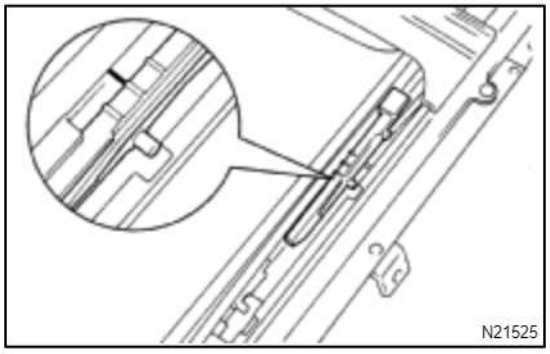
Remove the 4 screws and rear frame.




**5. REMOVE DRIVE CABLE**

(a) Remove the screw and guide rail stopper.

(b) Slide the drive cable rearward, then remove it.

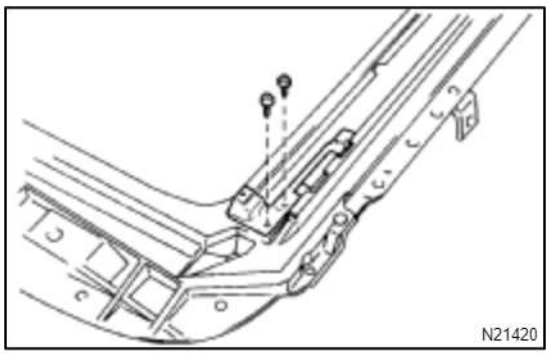



HINT:

At the time of reassembly, please refer to the following items.

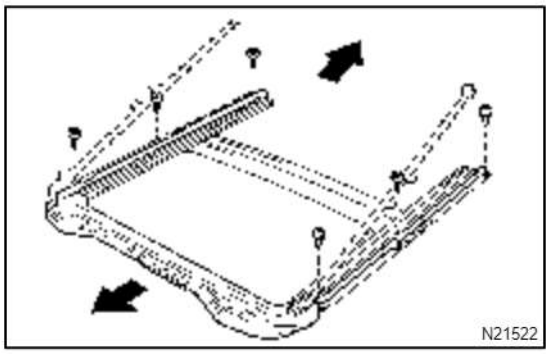
- Adjust the drive cable to a closed and tilted down position.
- Slide the cable forward or backward to align the 2 marks as shown.
- Slide the cable to the forefront with your hand.

**6. REMOVE ROOF WINDOW DEFLECTOR PANEL**




### 7. REMOVE GUIDE BLOCK

Remove the 2 screws and guide block.

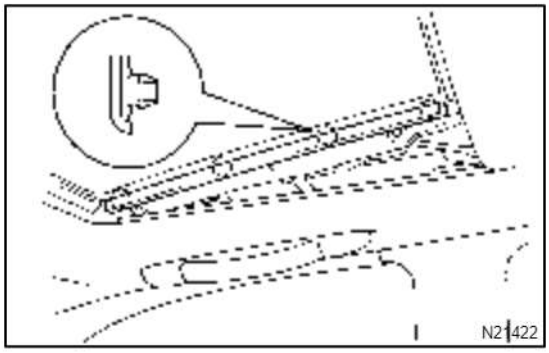



### 8. REMOVE SLIDING ROOF HOUSING

Remove the 6 screws and sliding roof housing.

BO0M5–01

# ADJUSTMENT

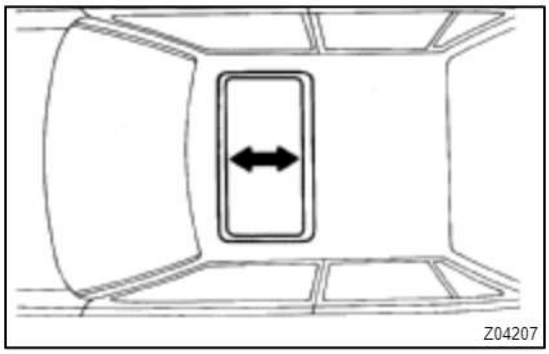



## 1. REMOVE SIDE GARNISH

Before making adjustments, using a screwdriver, remove the side garnishes.

HINT:

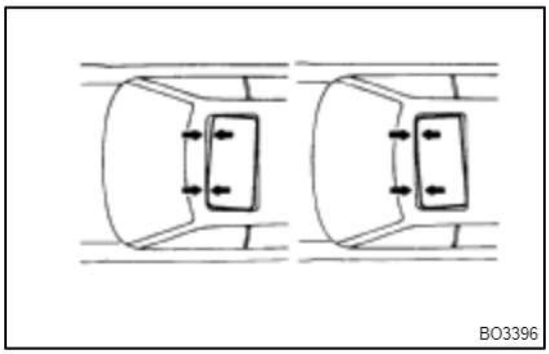
- Tape the screwdriver tip before use.
- After adjustment, reinstall the side garnishes.




## 2. TO ADJUST FORWARD OR REARWARD

(a) Using a torx wrench, loosening the sliding roof glass installation screws.

(b) Adjust the sliding roof glass forward and rearward.

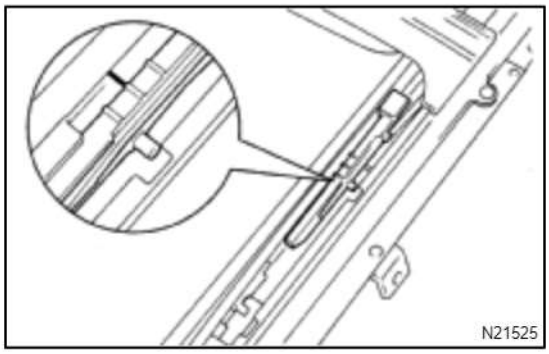



## 3. TO ADJUST CLEARANCE (Difference in left and right clearance)

(a) When the front or rear alignment is not correct, remove the drive gear and sliding roof glass, then adjust the drive rail.

**NOTICE:**

**Remove the drive gear with sliding roof is full closed.**




(b) Adjust by slide the cable forward or rearward to align the 2 marks as shown.

(c) Install the drive gear and sliding roof glass.

BO0M6–01

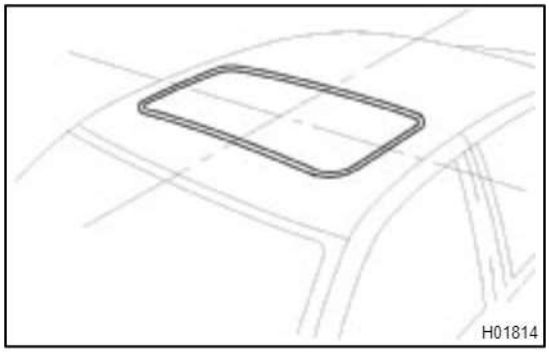
# REASSEMBLY

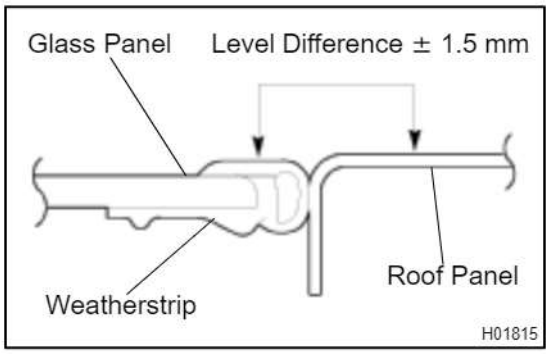
**Reassembly is in the reverse order of disassembly (See page BO–57).**

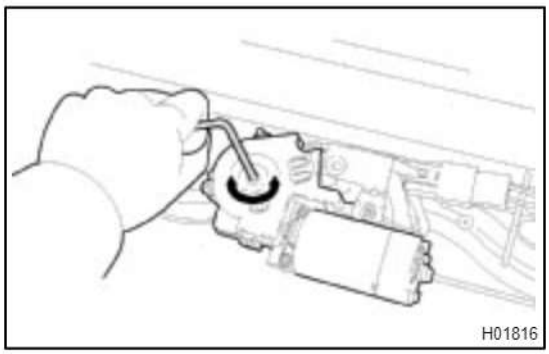
BO0M7--01

# INSTALLATION

**Installation is in the reverse order of removal (See page BO–55).**




# SLIDING ROOF (TMMK Made)

BO0LU-01

## ON–VEHICLE INSPECTION

### INSPECT SLIDING ROOF GLASS ALIGNMENT

(a) Start the engine and check the operation time of the sliding roof.

**Operation time:**

**Approximately 6 sec.**

(b) Check for abnormal noise or binding during operation.

(c) Check for water leakage with the sliding roof fully closed.

(d) Check the alignment between the sliding roof weatherstrip and the roof panel.

**All sides:**

**0 ± 1.5 mm (0 ± 0.059 in.)**

HINT:

At the time of installation, please refer to the following item.

To align the glass to the roof surface, loosen the 4 screws, then adjust and retighten.

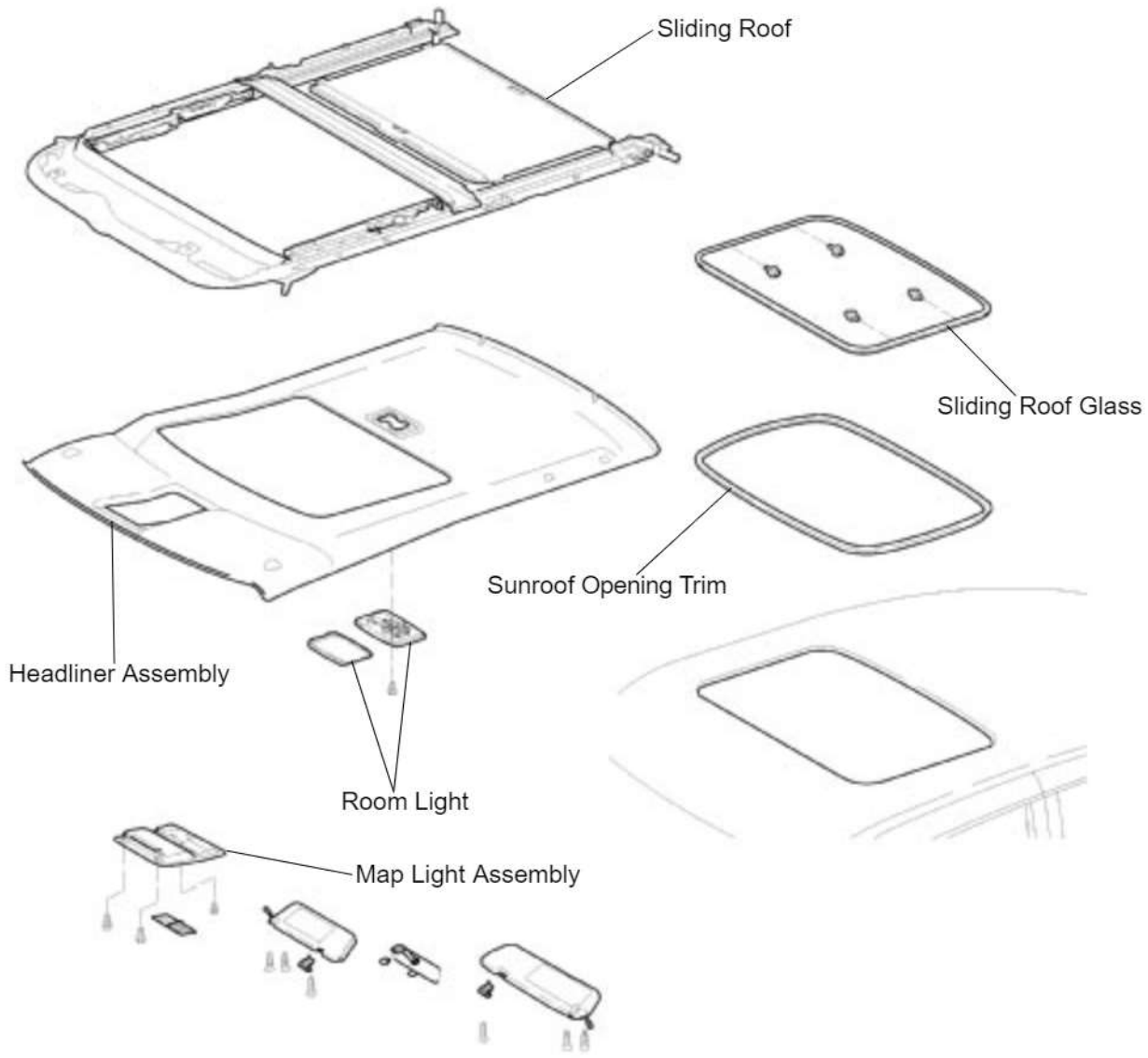
If the sliding roof does not operate:

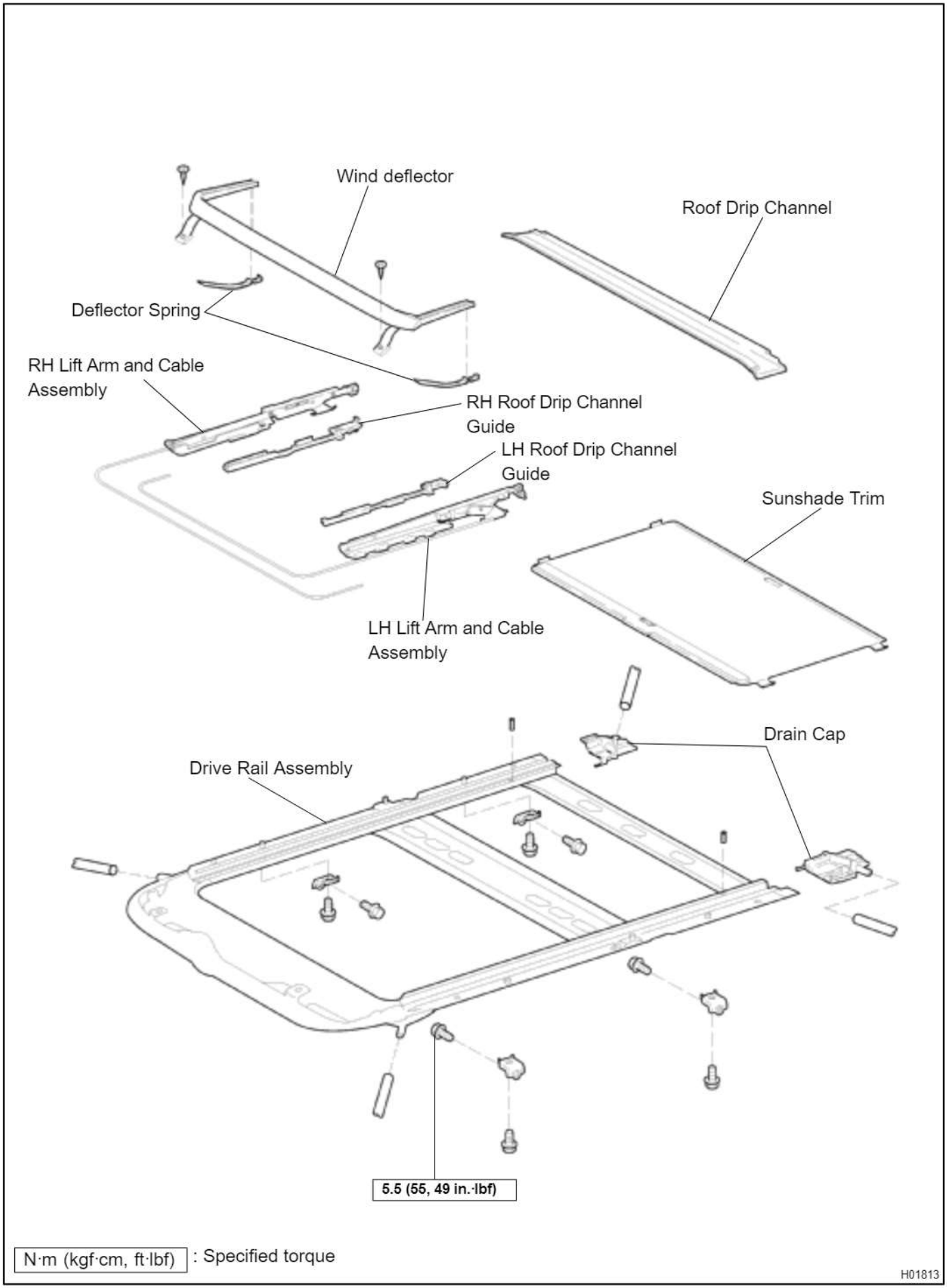
(e) Remove the map light assembly.

(f) Manually operate the sliding roof by inserting a hex wrench into the motor to turn the drive shaft.

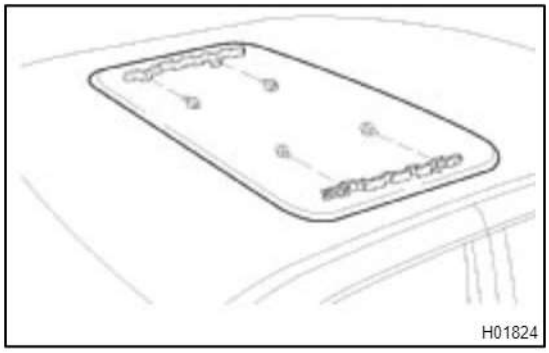
BO0LV-01

# COMPONENTS




Wind deflector
Roof Drip Channel
Deflector Spring
RH Lift Arm and Cable Assembly
RH Roof Drip Channel Guide
LH Roof Drip Channel Guide
Sunshade Trim
LH Lift Arm and Cable Assembly
Drain Cap
Drive Rail Assembly
5.5 (55, 49 in.·lbf)
N·m (kgf·cm, ft·lbf) : Specified torque
H01813

BO0LW-01


H01824

# REMOVAL

**1. REMOVE ROOF HEADLINING**
**(See page BO–83)**

**2. REMOVE SIDE GARNISHES**

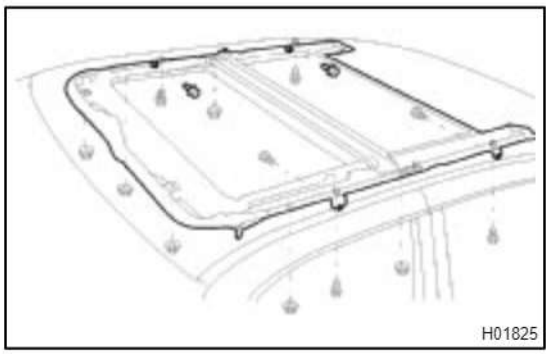
HINT:
At the time of installation, please refer to the following item.
Soak the garnishes in water to soften them before assembly.

**3. REMOVE GLASS PANEL ASSEMBLY**

(a) Remove the 4 glass panel adjustment screws.

HINT:
At the time of installation, please refer to the following item.
Adjust the height of the glass panel, then tighten the 4 screws.

(b) Pull the glass upward to remove it.


H01825

**4. REMOVE SLIDING ROOF ASSEMBLY**

(a) Remove the 4 drain hoses from the sliding roof assembly.

(b) Remove the 8 bolts and 4 brackets.
**Torque: 5.5 N·m (55 kgf·cm, 49 in.·lbf)**

(c) Remove the 6 nuts and the sliding roof assembly.

BO0LX-01

# DISASSEMBLY

## 1. REMOVE SLIDING ROOF HOUSING DRAIN CAP

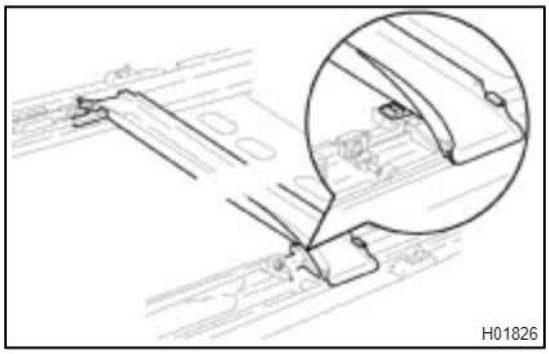
Pull the drain cap rearward to remove it.

HINT:

At the time of reassembly, please refer to the following item.

Apply seal packing to the drain cap.

**Seal packing:**
**Part No.1 08826 – 00090 or equivalent**




## 2. REMOVE REAR ROOF DRIP CHANNEL

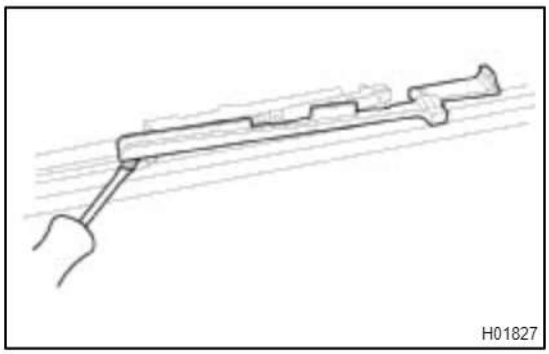
Unclip the roof drip channel from the roof drip channel guide.

HINT:

At the time of reassembly, please refer to the following item.

Aligh the rear roof drip channel to the roof drip channel guide hook.

## 3. REMOVE SUNSHADE TRIM



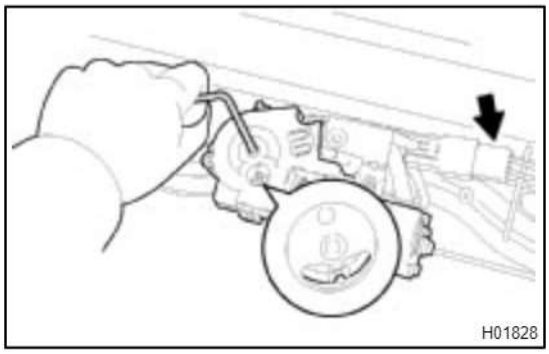

## 4. REMOVE LH AND RH ROOF DRIP CHANNEL GUIDE

(a) Using a screwdriver, remove the guide from the lift arm assembly.

HINT:

Tape the screwdriver tip before using.

(b) Slide the guide out of the side rail.




## 5. REMOVE DRIVE GEAR ASSEMBLY

(a) Use a hex wrench to align the gear pointer with the housing pointer.

(b) Disconnect the harness connector.

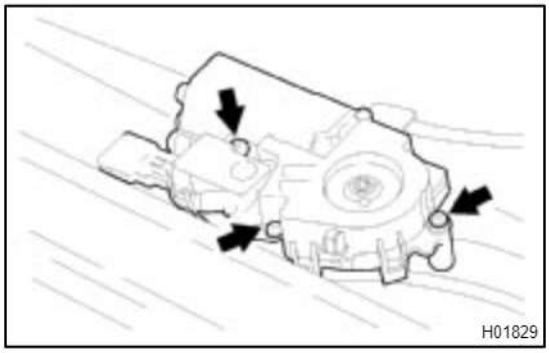
(c) Remove the 3 screws and the drive gear assembly.

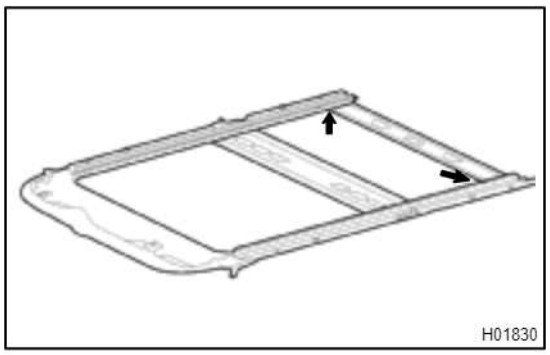
HINT:

At the time of reassembly, please refer to the following item.

Aligh the drive gear assembly during reassembly.

(See page BO–68).






**6. REMOVE LH AND RH SIDING ROOF LIFT ARM AND CABLE ASSEMBLIES**

(a) Using a drill, cut the flange portion of the stop pin (rivet) from each side rail.

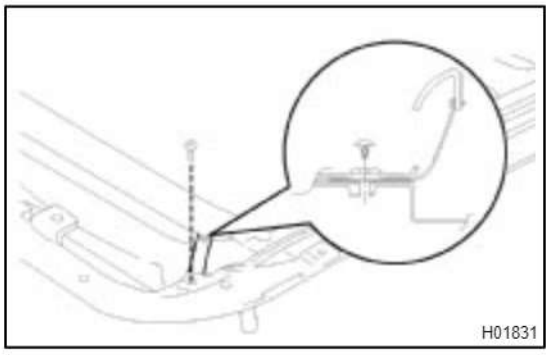
HINT:

At the time of reassembly, please refer to the following item.

Use two new rivets.

(b) Slide the LH sliding roof lift arm and drive cable from its side rail.

(c) Slide the RH sliding roof lift arm and drive cable from its side rail.



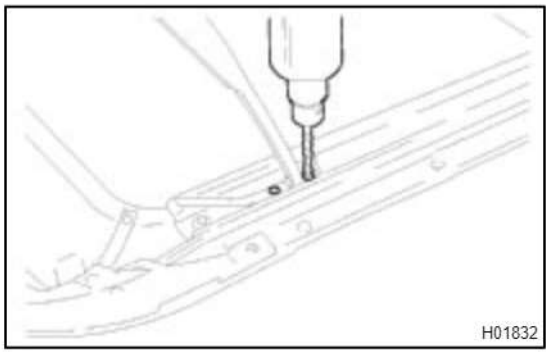

**7. REMOVE WIND DEFLECTOR**

(a) Remove the 2 screws from the front rail assembly.

HINT:

At the time of reassembly, please refer to the following item.

Insert the strap into the front rail assembly as shown.




(b) Using a drill, cut the flange portion of the 4 rivets.

**NOTICE:**

**Be careful not to damage the side rail (rivet) holes when drilling.**

HINT:

At the time of reassembly, please refer to the following item.

Use 4 new special sealing type rivets.

**Part No. 09884–26003**

(c) Remove the deflector and spring assembly.

(d) Remove the spring from the deflector.

BO0LY-01

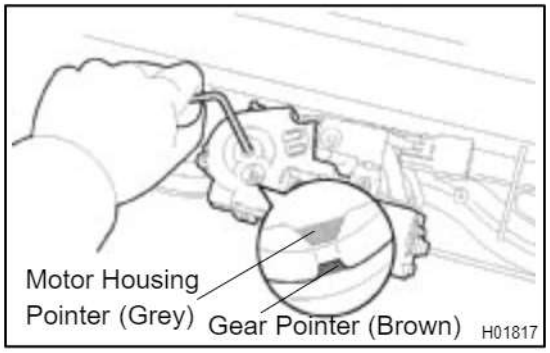
# ADJUSTMENT

## 1. ALIGN THE MOTOR TO "O" POSITION

**NOTICE:**

**The "O" position is the same as the sliding roof "flush " position (sliding roof closed).**

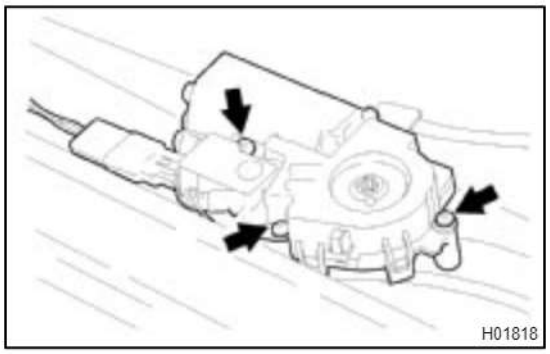
Use the vehicle sliding roof switch or a hex wrench to align the gear pointer with the motor housing pointer as shown.




**NOTICE:**

**Use only the sliding roof switch to electrically operate the motor or sliding roof. Do not use any other electrical source to power the motor. If the sliding roof switch (under vehicle power) is not available, use a hex wrench to align the motor pointers.**

## 2. REMOVE DRIVE GEAR ASSEMBLY




## 3. REMOVE GLASS PANEL

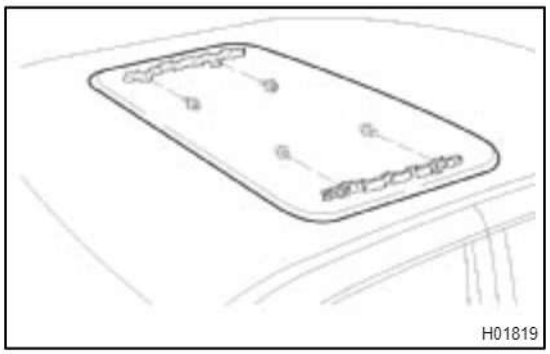
(a) Remove the 4 glass panels adjustment screws.

HINT:

At the time of installation, please refer to the following item.

Adjust the height of the glass panel, then tighten the 4 screws.

(b) Pull the glass upward to remove it.




## 4. ALIGN SLIDING ROOF COMPONENTS

(a) Verify the hook appears as shown.

(b) Align the cable arm hole with the lift arm hole.

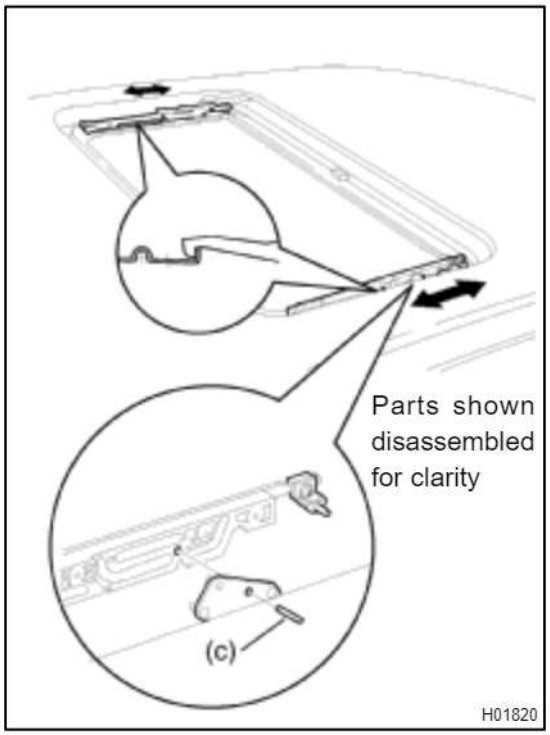
HINT:

Using a screwdriver, move the LH and RH cable assemblies forward and backward to align the holes in the cable arm and lifter arm.

(c) Temporarily insert a 3 mm (0.12 in.) pin through the alignment holes in the cable arm and lifter arm.

HINT:

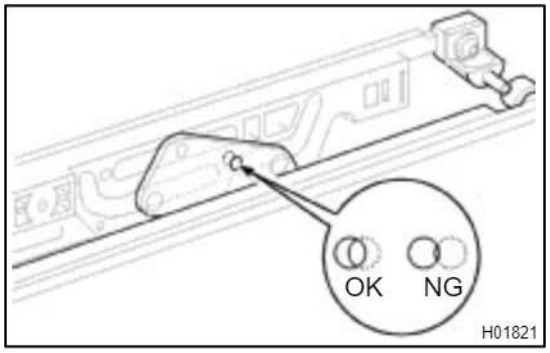
Verify the cam block alignment hole is aligned with the lift arm alignment hole. Misalignment at this point will result in a malfunction of the sliding roof mechanism.




## 5. REINSTALL DRIVE GEAR ASSEMBLY

HINT:

Before reinstalling the drive gear assembly, double check the alignment of the gear pointers.




**6. VERIFY CORRECT INSTALLATION TIMING**

(a) Cycle the unit once (vent position closed, slide open, slide completely closed).

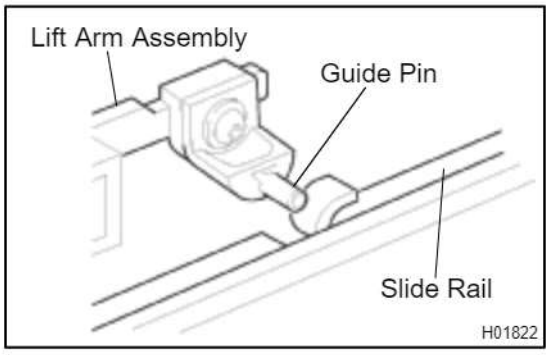
HINT:

After cycling the unit closed from the slide open position, verify the alignment holes in the cable arm and cam block are aligned and the motor pointers are in the "O" position.

The timing of the sliding roof is okay if the holes are within 1/2 a diameter of each other as shown when closed from the "side open" position.

**NOTICE:**

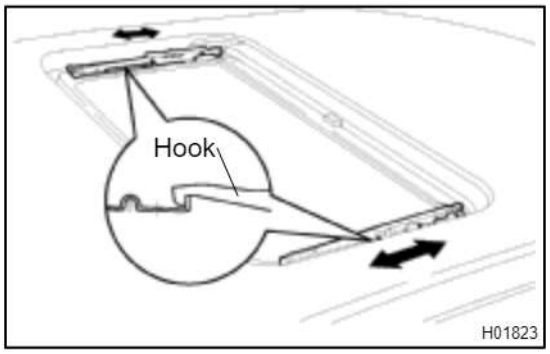
**The holes will normally not align when moving the sliding roof from the vent open position to the closed position.**




(b) There should be a slight interference between the guide pin and the curved "lead–in" of the side rail. Confirm by cycling the unit. A clicking sound from the hook indicates the adjustment is incorrect.

If the guide pin has been disturbed, readjust as follows:

(1) Loosen the screw and adjust the pin so there is a slight interference.
(2) Tighten the screw and cycle the unit.
(3) Confirm the hook smoothly engages the wind deflector spring.
(4) Repeat if necessary.




**7. REINSTALL GLASS PANEL**

BO0LZ-01

# REASSEMBLY

**Reassembly is in the reverse order of disassembly (See page BO–66).**

BO0M0-01

# INSTALLATION

**Installation is in the reverse order of removal (See page BO–65).**

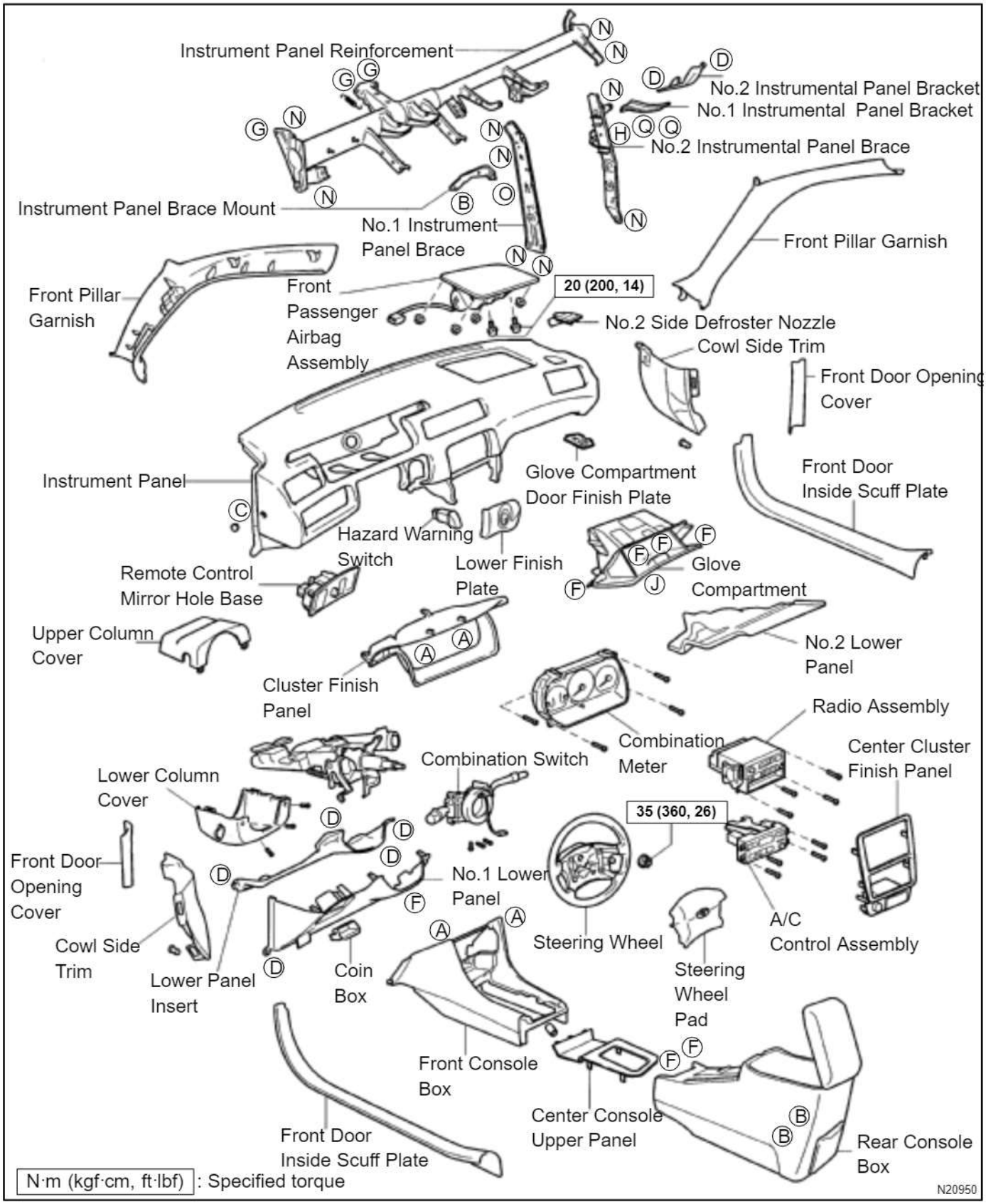
**NOTICE:**

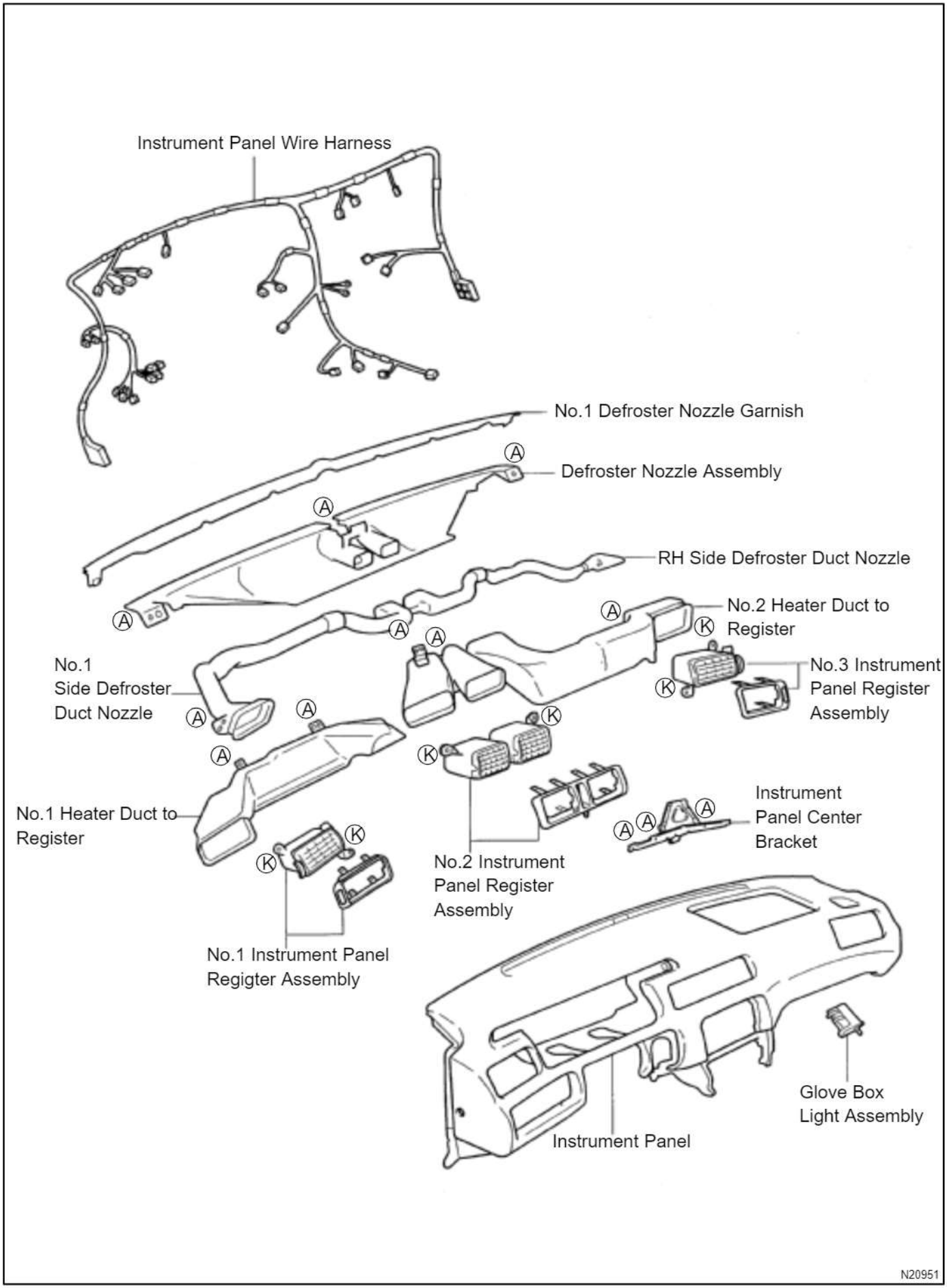
**Check and adjust the sliding roof after installation (See page BO–62).**

# INSTRUMENT PANEL

## COMPONENTS

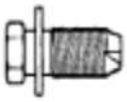
BO0MB-01




Instrument Panel Wire Harness
No.1 Defroster Nozzle Garnish
Defroster Nozzle Assembly
RH Side Defroster Duct Nozzle
No.2 Heater Duct to Register
No.3 Instrument Panel Register Assembly
No.1 Side Defroster Duct Nozzle
No.1 Heater Duct to Register
Instrument Panel Center Bracket
No.2 Instrument Panel Register Assembly
No.1 Instrument Panel Regigter Assembly
Glove Box Light Assembly
Instrument Panel
N20951

HINT:
Screw shapes and size are indicated in the table below. The code (”A”–”P”) correspond to those indicated on the previous page.

mm (in.)

| Code | Shape | Size | Code | Shape | Size | Code | Shape | Size |
|---|---|---|---|---|---|---|---|---|
| A |  | ø = 5.2 (0.21)<br>L = 16 (0.63) | B |  | ø = 6.0 (0.24)<br>L = 16 (0.63) | C |  | ø = 6.0 (0.24)<br>L = 20 (0.79) |
| D |  | ø = 6.0 (0.24)<br>L = 20 (0.79) | E |  | ø = 5.0 (0.20)<br>L = 10 (0.39) | F |  | ø = 5.2 (0.21)<br>L = 20 (0.79) |
| G |  | ø = 8.0 (0.31)<br>L = 22 (0.87) | H |  | ø = 6.0 (0.24)<br>L = 20 (0.79) | I |  | ø = 6.0 (0.24)<br>L = 20 (0.79) |
| J |  | ø = 6.0 (0.24)<br>L = 18 (0.79) | K |  | ø = 5.0 (0.20)<br>L = 14 (0.55) | L |  | ø = 5.0 (0.20)<br>L = 12 (0.47) |
| M |  | ø = 8.0 (0.31)<br>L = 18 (0.17) | N |  | 8 x 1.25 | O |  | 6 x 1.00 |
| P |  | 6 x 1.00 | | | | | | |

H01983

BO0MC-01

# REMOVAL

**1. REMOVE THESE PARTS:**

HINT:

Tape a screwdriver tip before use.

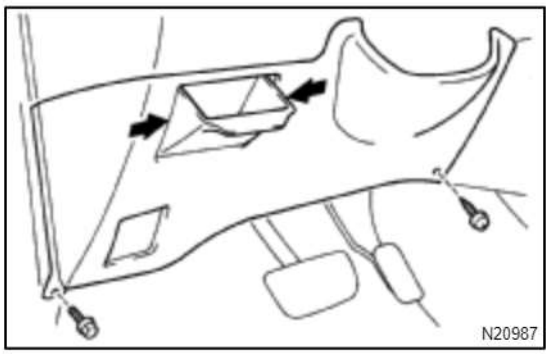
(a) Front door inside scuff plates
(b) Cowl side trims
(c) Front pillar garnishes
(d) Front door opening covers
(e) Lower finish plate

**2. REMOVE STEERING WHEEL**
**(See page SR–11)**

**3. REMOVE STEERING COLUMN COVERS**

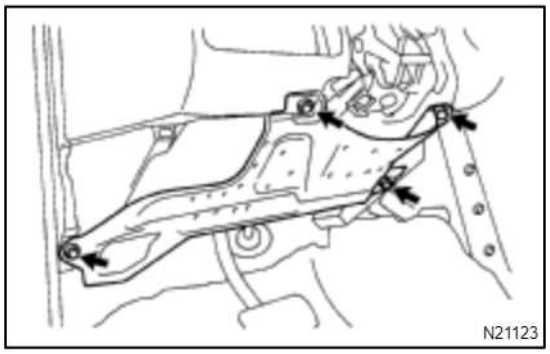
(a) Remove the steering tilt handle.
(b) Remove the 3 screws, then the upper and lower column covers.

**4. REMOVE COMBINATION SWITCH**




**5. REMOVE No.1 LOWER PANEL**

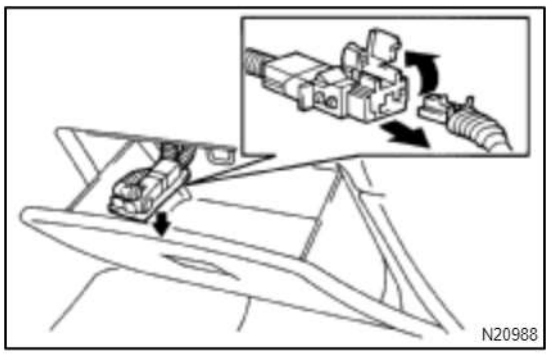
(a) Remove the 2 screws and hood lock release lever.
(b) Press on the sides of the coin box while pulling the coin box outward, and remove the coin box.
(c) Remove the screw, bolt and the No.1 lower panel.




**6. REMOVE LOWER PANEL INSERT**

(a) Remove the 2 screws holding the DLC3 to the LH lower panel.
(b) Remove the 4 bolts, and the panel.

**7. REMOVE No.2 LOWER COVER**




**8. REMOVE GLOVE COMPARTMENT ASSEMBLY**

(a) Using a screwdriver, remove the glove compartment door finish plate to the glove compartment box inside.

**NOTICE:**

**When handling the airbag connector, be careful not to damage the airbag wire harness.**

HINT:

Tape the screwdriver tip before use.

(b) Pull up and disconnect the airbag connector.

(c) Remove the 4 screws, bolt and glove compartment assembly.

**9. REMOVE CENTER CONSOLE UPPER PANEL**

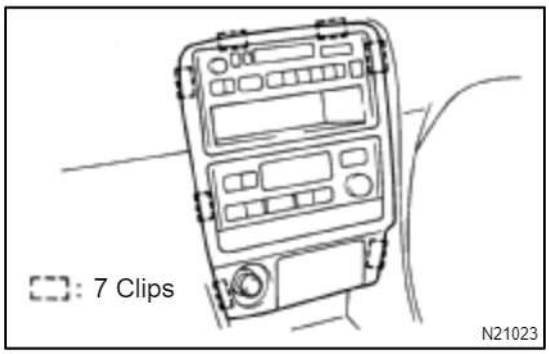
Using a screwdriver, remove the panel, then disconnect the connector.

HINT:

Tape the screwdriver tip before use.

**10. REMOVE REAR CONSOLE BOX**

Remove the 2 bolts, 2 screws and the console box.




**11. REMOVE CENTER CLUSTER FINISH PANEL**

Using a screwdriver, remove the panel, then disconnect the connector.

HINT:

Tape the screwdriver tip before using.

**12. REMOVE FRONT CONSOLE BOX**

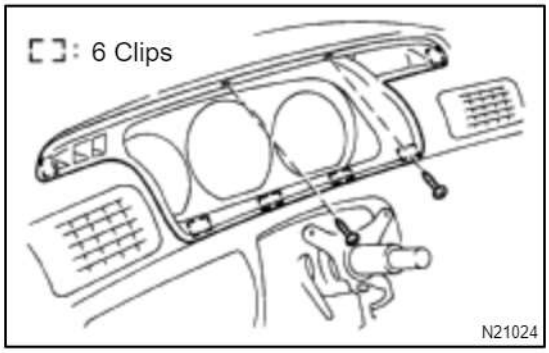
Remove the 2 screws and the front console box.

**13. REMOVE RADIO ASSEMBLY**

**14. REMOVE A/C CONTROL ASSEMBLY**

**(See page AC–82)**

**15. REMOVE HAZARD WARNING SWITCH**




**16. REMOVE CLUSTER FINISH PANEL**

(a) Remove the 2 screws.

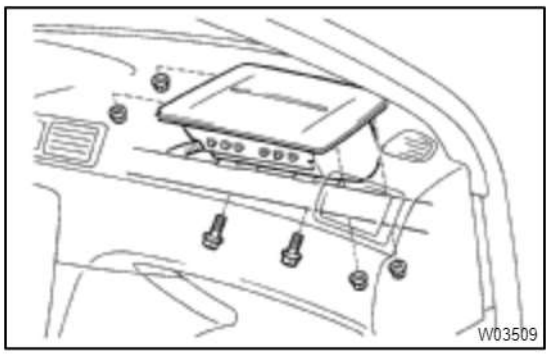
(b) Using a screwdriver, remove the panel.

HINT:

Tape the screwdriver tip before use.

**17. REMOVE COMBINATION METER**

**18. REMOVE REMOTE CONTROL MIRROR HOLE BASE**




**19. REMOVE FRONT PASSENGER AIRBAG ASSEMBLY (See page RS–28)**

Remove the 2 bolts, 4 nuts and the front passenger airbag assembly.

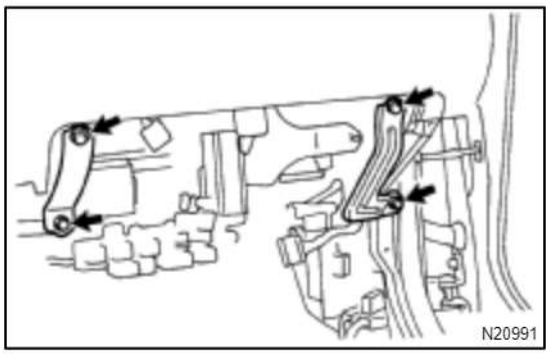
**Torque:**
**Bolt: 20 N·m (200 kgf·cm, 14 ft·lbf)**

**CAUTION:**

- **Store the front passenger airbag door facing upward (never downward).**
- **Never disassemble the front passenger airbag assembly.**

**NOTICE:**

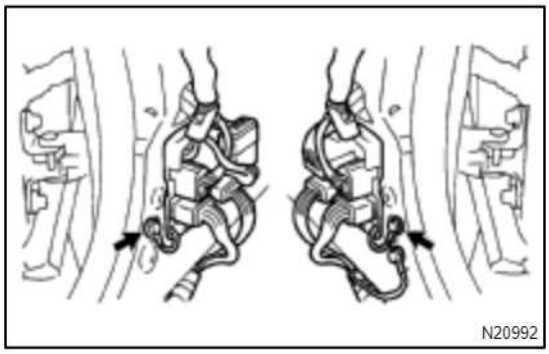
**The 2 bolts to the instrument panel have been anti–rust treated. After removing the front passenger airbag assembly, always replace the bolts and nuts with new ones.**




**20. REMOVE No.1 AND No.2 INSTRUMENT PANEL BRACKETS**

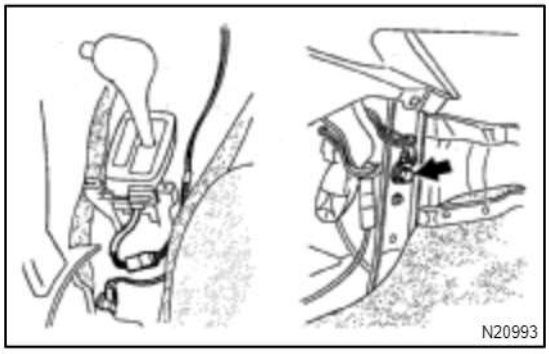
Remove the 4 bolts and the No.1 and No.2 panel brackets.

**21. REMOVE NO.2 SIDE DEFROSTER NOZZLE**

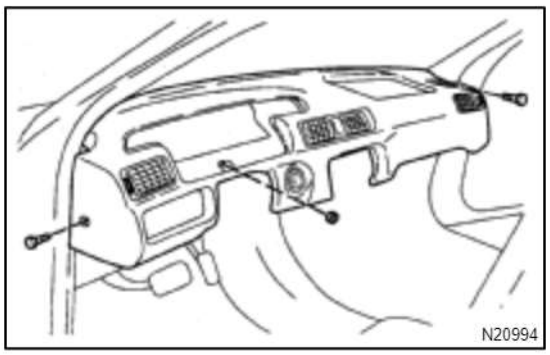



**22. REMOVE INSTRUMENT PANEL ASSEMBLY**

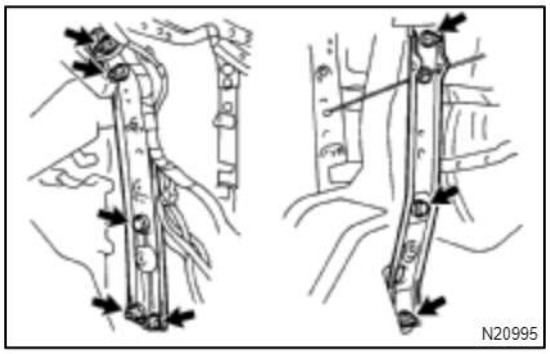
(a) Disconnect the connectors from the LH and RH connector holders.
(b) Remove the bolts holding the ground wire to the body.
(c) Remove the connector holder from the body.




(d) Disconnect the connectors.
(e) Remove the bolt holding the ground wire to the No.2 instrument panel brace.

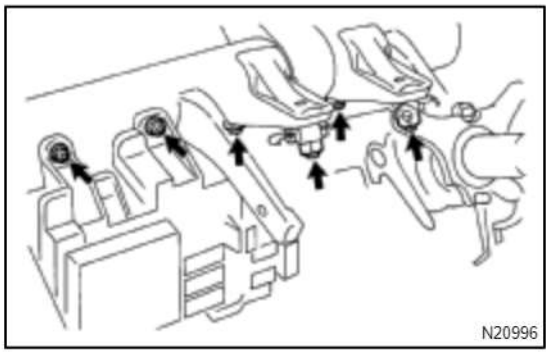



(f) Remove the bolt, nut, screw and the instrument panel assembly.



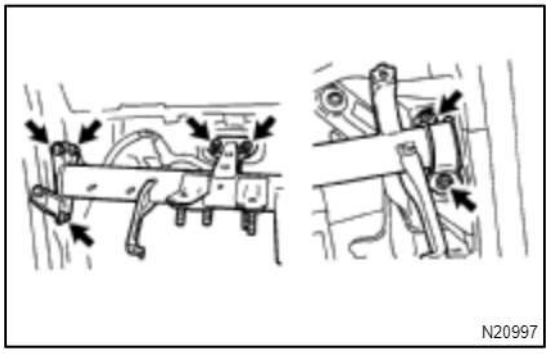

**23. REMOVE INSTRUMENT PANEL BRACES**

(a) Remove the wire brackets and connector.
(b) Remove the bolt and connector from the No.1 instrument panel brace.
(c) w/ Wireless Control:
Remove the nut and the wireless control unit from the No.1 instrument panel brace.
(d) Remove the nut holding the radio antenna to the No.2 instrument panel brace.
(e) Remove a nut and brace mount bracket.
(f) Remove the 6 nuts, 2 bolts and No.1 and No.2 instrument panel braces.




**24. REMOVE INSTRUMENT PANEL REINFORCEMENT**

(a) Remove the connectors from the steering column tube.
(b) Remove the 4 wire brackets and connectors.
(c) Remove the 2 nuts and bolt holding the No.1 Junction Box (J/B) to the reinforcement.
(d) Remove the 4 nuts and the steering column from the reinforcement.
(e) Remove the brake pedal spring from the reinforcement and brake pedal.



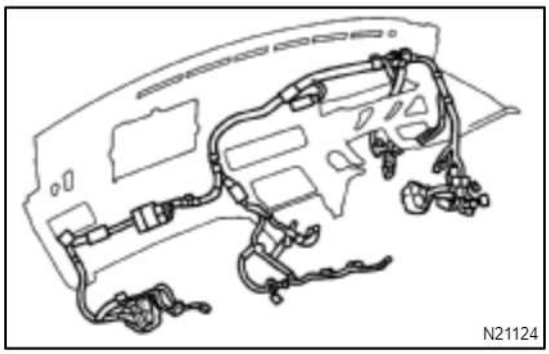

(f) Remove the 4 nuts, 3 bolts and the reinforcement.

BO0MD-01

# DISASSEMBLY

**1. REMOVE THESE PARTS:**

(a) No.1 defroster nozzle garnish
(b) No.1 defroster nozzle
(c) RH side defroster duct nozzle
(d) No.1 side defroster duct nozzle
(e) No.1 heater duct to register
(f) No.2 heater duct to register
(g) No.2 register assembly
(h) No.3 register assembly
(i) No.1 register assembly




**2. REMOVE INSTRUMENT PANEL WIRE HARNESS**

Remove the 2 brackets, 8 clips and wire harness.

**3. REMOVE INSTRUMENT PANEL CENTER BRACKET**

**4. REMOVE THESE PARTS:**

(a) Clock unit
(b) Glove box light assembly

BO0ME-01

# REASSEMBLY

**Reassembly is in the reverse order of disassembly (See page BO–79).**

BO0MF-01

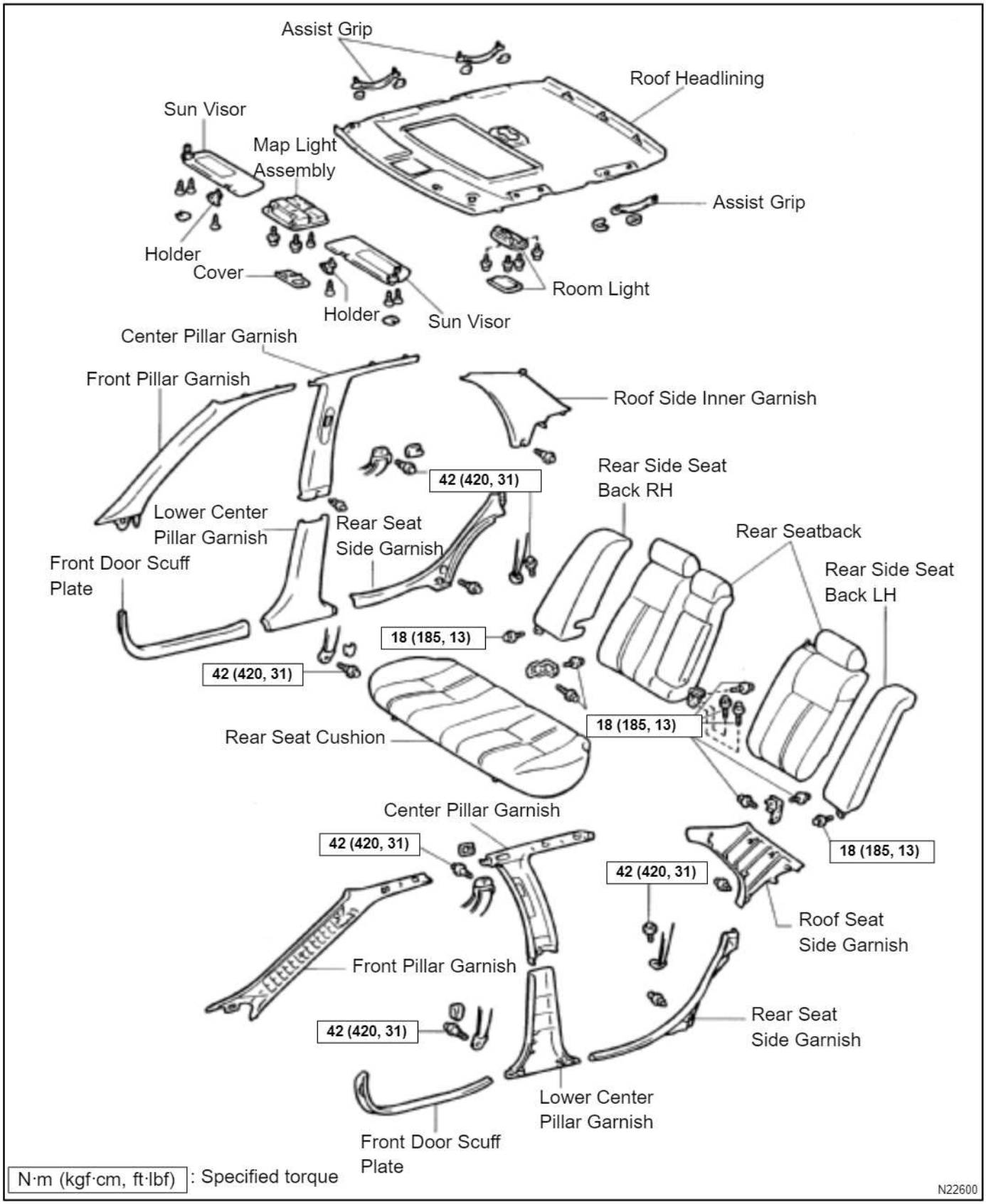
# INSTALLATION

**Reassembly is in the reverse order of removal (See page BO–75).**

# ROOF HEADLINING

BO0MG--01

## COMPONENTS



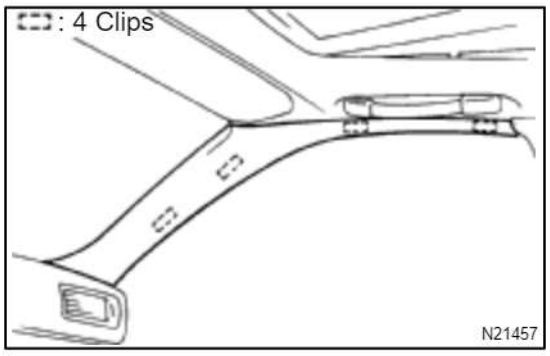
BO0MH-01

# REMOVAL

**1. REMOVE THESE PARTS:**

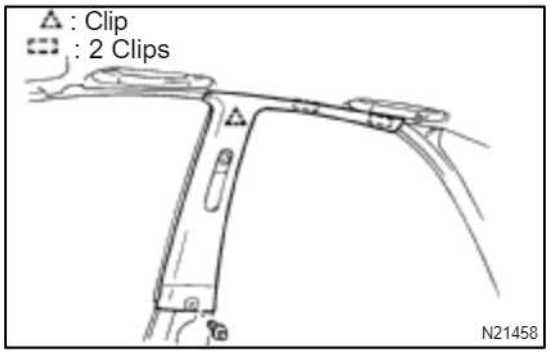
(a) Rear seat cushion
(b) Rear seatback and rear side seatbacks
(c) Front door scuff plates
(d) Front seat belt shoulder anchor bolts
(e) Sun visor and holders
(f) Assist grips
(g) Front pillar garnishes
(h) Rear door scuff plates
(i) Lower center pillar garnishes

**2. REMOVE ROOF SIDE INNER GARNISH**
**(See page BO–28)**



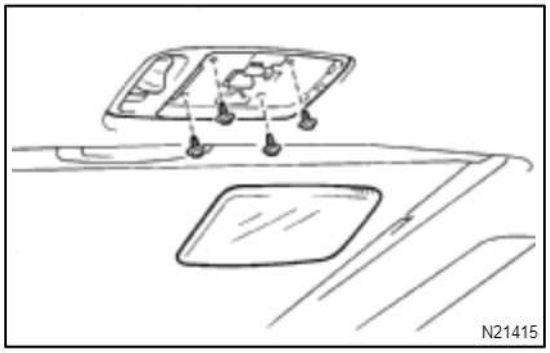

**3. REMOVE FRONT PILLAR GARNISH**

(a) Pry out clips by your hand.
(b) Pull the garnish upward to remove it.




**4. REMOVE CENTER PILLAR GARNISH**

(a) Remove the clip.
(b) Pry off the garnish.




**5. REMOVE ROOM LIGHT**

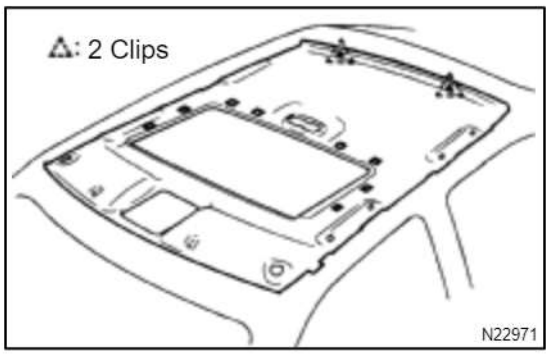
(a) Using a screwdriver, remove the room light cover.

HINT:

Tape the screwdriver tip before use.

(b) Remove the 4 screws, then disconnect the connector.

**6. REMOVE MAP LIGHT ASSEMBLY**




**7. REMOVE ROOF HEADLINING**

(a) Remove the 2 clips from the roof panel rear end.
(b) Remove the headlining.
(c) Bring out the headlining.

BO0MI–01

# INSTALLATION

**Installation is in the reverse order of removal (See page BO–83).**

BO0MI–01

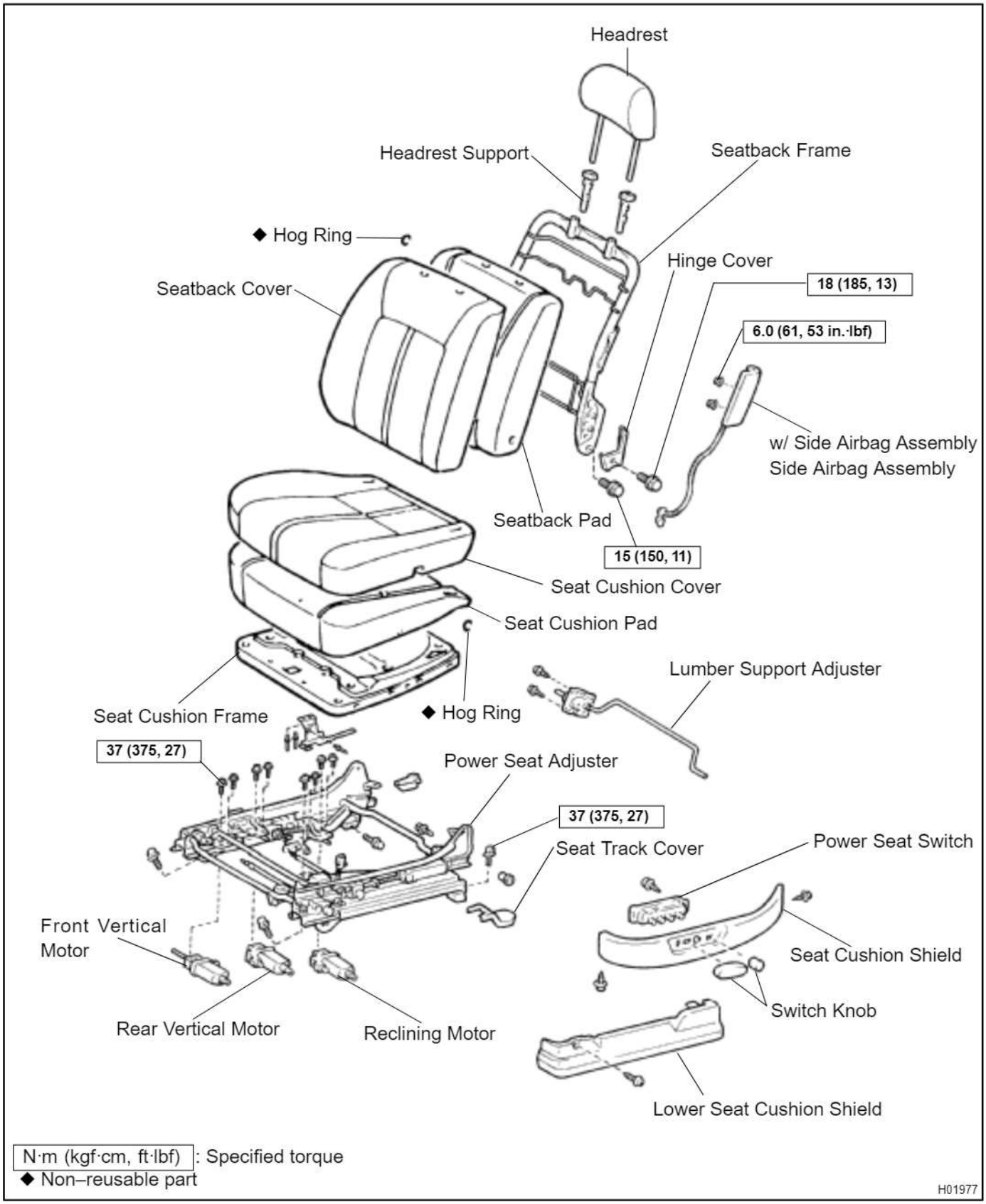
# INSTALLATION

**Installation is in the reverse order of removal (See page BO–83).**

# FRONT SEAT (Power Seat for TMC Made)

BO0MJ--01

## COMPONENTS



BO0MK-01

# REMOVAL

## REMOVE FRONT SEAT

(a) Using a screwdriver, remove the seat track covers.

HINT:

Tape the screwdriver tip before use.

(b) Remove the 4 bolts.

(c) Disconnect the connector.

(d) Remove the front seat.

**NOTICE:**

**Be careful not to damage the body.**

BO0ML-01

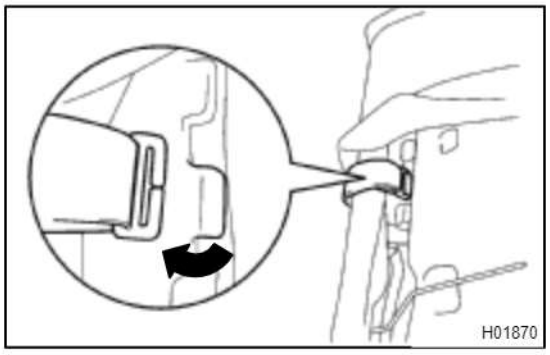
# DISASSEMBLY

**1. REMOVE THESE PARTS:**

(a) Headrest
(b) Switch knobs
(c) Seat cushion shield
(d) Lower seat cushion shield
(e) Power seat switch

**2. REMOVE SEATBACK ASSEMBLY**

(a) Remove the 3 clips of the side airbag wire harness from the seat cushion frame.
(b) Remove the 4 bolts and seatback assembly.




**3. REMOVE SEATBACK COVER**

(a) Remove the hog rings and hooks.
(b) Remove the hook as shown in the illustration.
(c) Remove the headrest supports.
(d) Remove the hog rings and seatback frame from seatback cover with pad.
(e) Remove the hog rings and seatback cover from seatback pad.

**4. REMOVE SIDE AIRBAG ASSEMBLY**

Remove the 1 clip of side airbag wire harness, 2 nuts and side airbag assembly from the seatback frame.

**CAUTION:**

- **Do not store the side airbag assembly with the airbag deployment direction facing down.**
- **Never disassemble the side airbag assembly.**

**5. REMOVE LUMBER SUPPORT ADJUSTER**

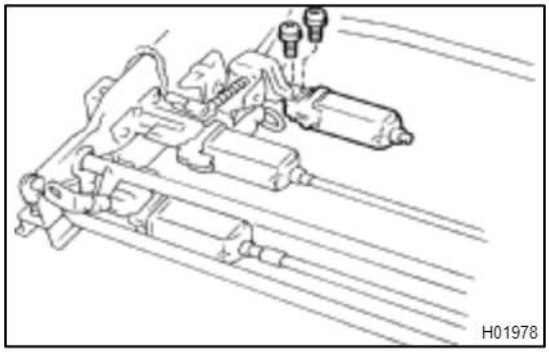
Remove the 2 screws and lumber support adjuster.

**6. REMOVE SEAT CUSHION ASSEMBLY**

Remove the 4 bolts and seat cushion assembly.

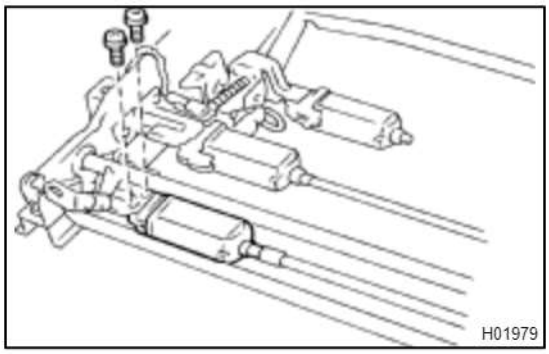
**7. REMOVE SEAT CUSHION COVER**

(a) Remove the 2 clips, hook and seat cushion frame from seat cushion cover with pad.
(b) Remove the hog rings and seat cushion cover from the seat cushion pad.




**8. REMOVE REAR VERTICAL MOTOR**

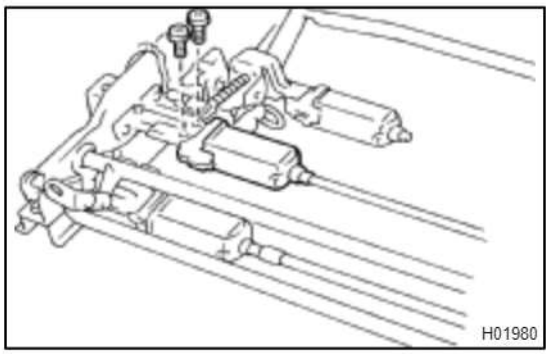
Remove the 2 screws and front vertical motor.




**9. REMOVE SLIDE MOTOR**

(a) Remove the 2 screws.

(b) Disconnect the No.1 drive cable, then remove the slide motor.



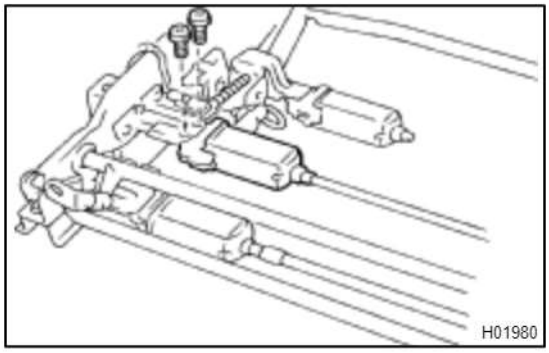

**10. REMOVE RECLINING MOTOR**

(a) Remove the 2 screws.

(b) Disconnect the No.2 drive cable, then remove the reclining motor.

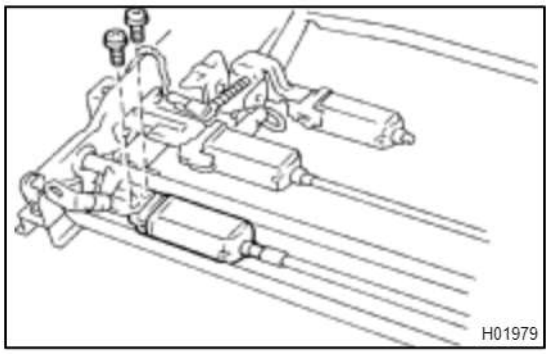
BO0MM-01

# REASSEMBLY



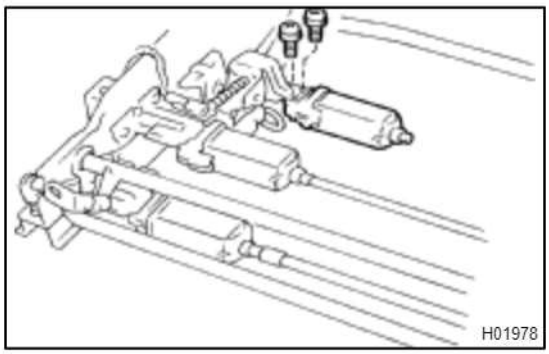

### 1. INSTALL RECLINING MOTOR

Connect the No.2 drive cable, then install the reclining motor with 2 screws.




### 2. INSTALL SLIDE MOTOR

Connect the No.1 drive cable, then install the slide motor with 2 screws.




### 3. INSTALL REAR VERTICAL MOTOR

Install the front vertical motor with 2 screws.

### 4. INSTALL LOWER SEAT CUSHION SHIELD

### 5. INSTALL SEAT CUSHION COVER

(a) Install the seat cushion cover with new hog rings to seat cushion pad.

(b) Install the seat cushion cover with pad to the seat cushion frame with hook and 2 clips.

HINT:

Install the hog rings to prevent wrinkles as least as possible.

### 6. INSTALL SEAT CUSHION ASSEMBLY

Install the seat cushion assembly with 4 bolts.

### 7. INSTALL SIDE AIRBAG ASSEMBLY

Install the side airbag assembly with 2 new nuts and 1 clip of side airbag wire harness to the seatback frame.

**Torque: 6.0 N·m (61 N·m, 53 in.·lbf)**

**NOTICE:**

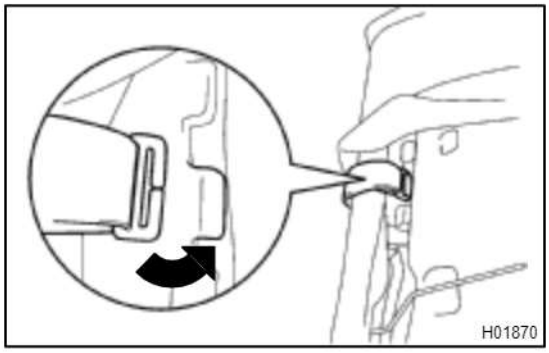
- **Make sure that the side airbag assembly is installed to the specified torque.**
- **If the side airbag assembly has been dropped, or there are cracks, dents or other defects in the case or connector, replace the side airbag assembly with a new one.**

### 8. INSTALL SEATBACK COVER

(a) Install the seatback cover with new hog rings to the seatback pad.

(b) Install the seatback cover with pad to the seatback frame with new hog rings.

(c) Install the headrest supports.




(d) Hang the hook onto the seatback frame.

**CAUTION:**

**Take care to hung the hook securely. Otherwise the seat cover slides, it might cause incorrect deploying.**

**9. INSTALL SEATBACK ASSEMBLY**

(a) Install the seatback assembly with 4 bolts.

(b) Install the 2 clips of the side airbag wire harness to the seat cushion frame.

(c) Install a new hog rings and 7 hooks.

HINT:

Install the hog rings to prevent wrinkles as least as possible.

**10. INSTALL THESE PARTS:**

(a) Power seat switch

(b) Lower Seat cushion shield

(c) Seat cushion shield

(d) Switch knobs

(e) Headrest

BO0MN-01

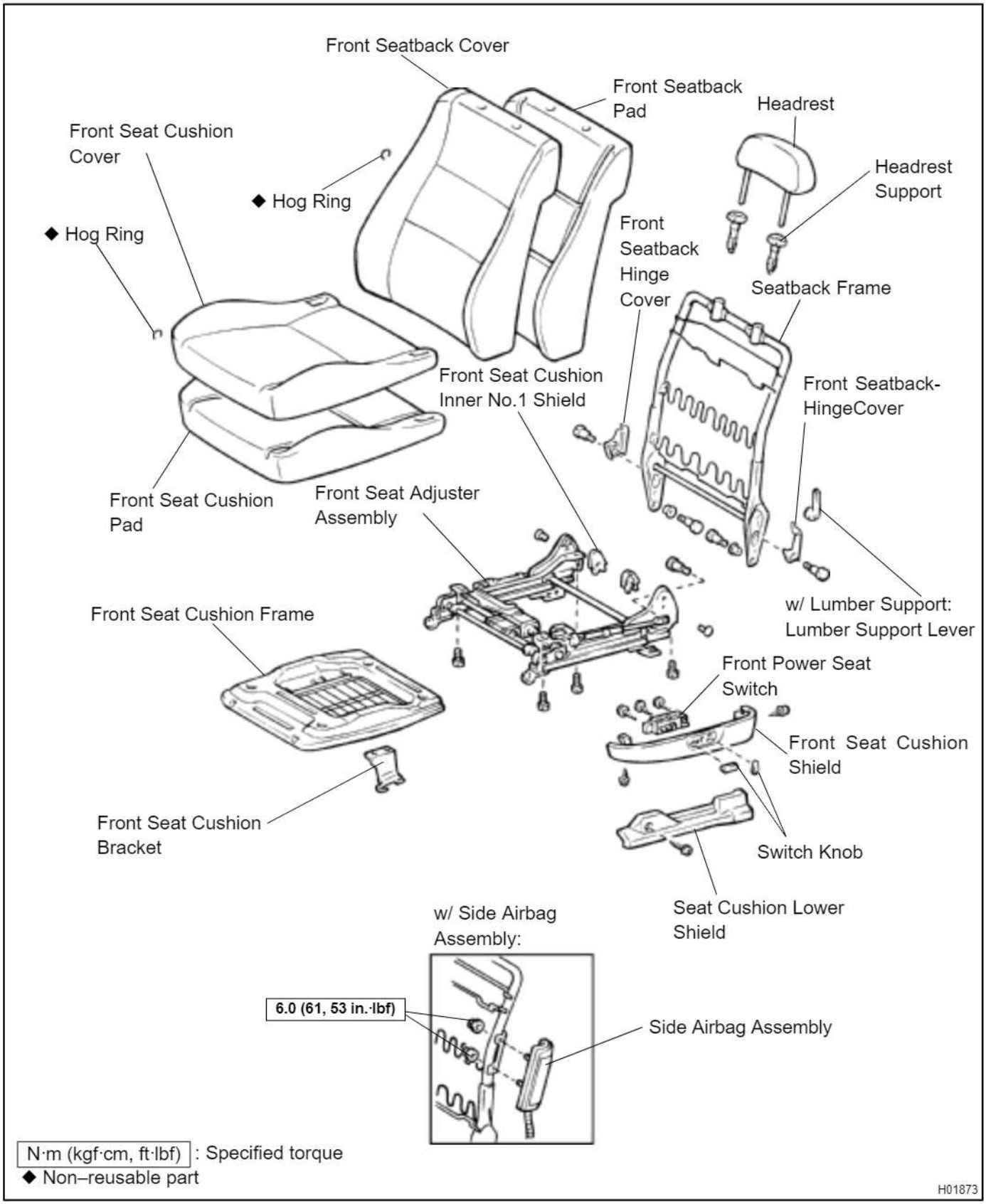
# INSTALLATION

**Installation is in the reverse order of removal (See page BO–87).**

# FRONT SEAT (Power Seat for TMMK Made)

## COMPONENTS

BO0MU-01



BO0MV-01

# REMOVAL

## REMOVE FRONT SEAT

(a) Using a screwdriver, remove the seat track covers.

HINT:

Tape the screwdriver tip before use.

(b) Remove the 4 bolts.

(c) w/ Side Airbag Assembly:
Disconnect the connector.

(d) Disconnect the front power seat connector.

(e) Remove the front seat.

**NOTICE:**

**Be careful not to damage the body.**

BO0MW-01

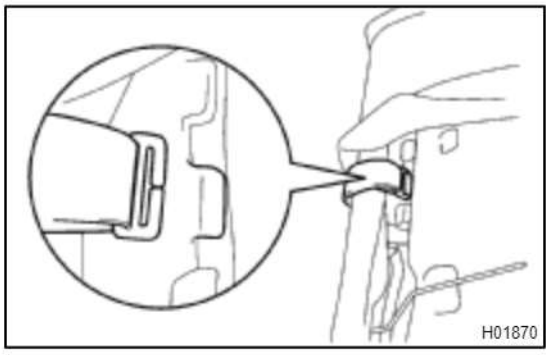
# DISASSEMBLY

**1. REMOVE THESE PARTS:**

(a) Switch knob
(b) Front seat cushion shield
(c) Front power seat switch
(d) Seat cushion lower shield
(e) w/ Lumber Support:
Lumber support lever
(f) Headrest
(g) Front seat inner belt

**2. REMOVE SEATBACK ASSEMBLY**

(a) w/ Side Airbag Assembly:
Remove the side airbag wire harness after removing clips.
(b) Remove the hog rings.
(c) Remove the bolts and front seatback hinge cover.
(d) Remove the seatback assembly.




**3. REMOVE SEATBACK COVER**

(a) w/ Side Airbag Assembly:
Remove the hook from the seatback frame.
(b) Remove the headrest supports.
(c) Remove the seatback frame from the seatback cover with pad.
(d) Remove the seatback cover from the seatback pad.

**4. w/ Side Airbag Assembly:**
**REMOVE SIDE AIRBAG ASSEMBLY**

Remove the 2 nuts and side airbag assembly from the seatback frame.

**CAUTION:**

- **Do not store the side airbag assembly with the airbag deployment direction facing down.**
- **Never disassemble the side airbag assembly.**

**5. REMOVE SEAT CUSHION ASSEMBLY**

Remove the 4 bolts and seat cushion assembly from the seat adjuster.

**6. REMOVE SEAT CUSHION COVER**

(a) Remove the seat cushion frame.
(b) Remove the seat cushion cover from the seat cushion pad.

**7. REMOVE THESE PARTS:**

(a) Front seat cushion inner No.1 shield
(b) Front seat cushion bracket
(c) Front seat cushion inner shield

BO0MX-01

# REASSEMBLY

**1. INSTALL THESE PARTS:**

(a) Front seat cushion inner shield
(b) Front seat cushion bracket
(c) Front seat cushion inner No.1 shield

**2. INSTALL SEAT CUSHION COVER**

(a) Install the seat cushion cover to seat cushion pad.
(b) Install the seat cushion cover with pad to the seat cushion frame.

**3. INSTALL SEAT CUSHION ASSEMBLY**

Install the seat cushion assembly with 4 bolts to the seat adjuster.

HINT:

Tighten the 4 bolts temporarily, then from the bolts on the rear side tighten completely.

**4. w/ Side Airbag Assembly:**
**INSTALL SIDE AIRBAG ASSEMBLY**

Install the side airbag assembly with 2 nuts to the seatback frame.

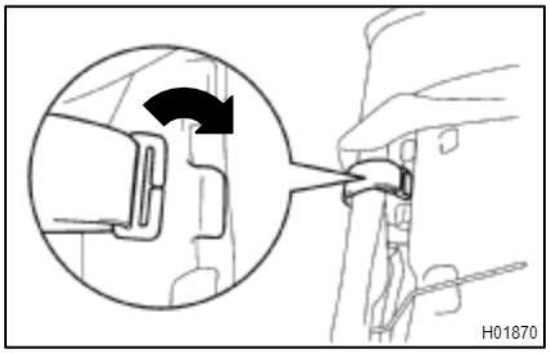
**Torque: 6.0 N·m (61 kgf·cm, 53 in.·lbf)**

**NOTICE:**

- **Make sure that the side airbag assembly is installed to the specified torque.**
- **If the side airbag assembly has been dropped, or there are cracks, dents or other defects in the case or connector, replace the side airbag assembly with a new one.**
- **When installing the side airbag assembly, take care is not pinched between other parts.**

**5. INSTALL SEATBACK COVER**

(a) Install the seatback cover to the seatback pad.
(b) Install the seatback cover with pad to the seatback frame.
(c) Install the headrest supports.




(d) w/ Side Airbag Assembly:
Hang the hook on to the seatback frame.

**CAUTION:**

**Take care to hung the hook securely. Otherwise the seat cove slides, it might cause incorrect deploying.**

**6. INSTALL SEATBACK ASSEMBLY**

(a) Install the seatback assembly with 4 bolts.

HINT:

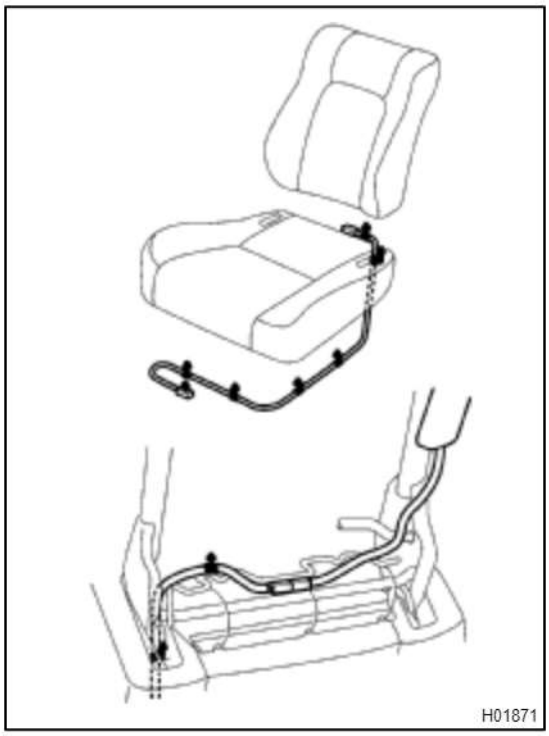
Tighten the 4 bolts temporarily, then from the bolt on the front right side tighten completely.

(b) Install Front Seatback hinge cover with bolts.

(c) Install a new hog rings.

HINT:

Install the hog rings to prevent wrinkles as least as possible.




(d) w/ Side Airbag Assembly:
Securely fix the side airbag wire harness to seat cushion by clips.

**7. INSTALL THESE PARTS:**

(a) Front seat inner belt

(b) Headrest

(c) w/ Lumber Support:
Lumber support lever

(d) Seat cushion lower shield

(e) Front power seat switch

(f) Front seat cushion shield

(g) Switch knob

BO0MY–01

# INSTALLATION

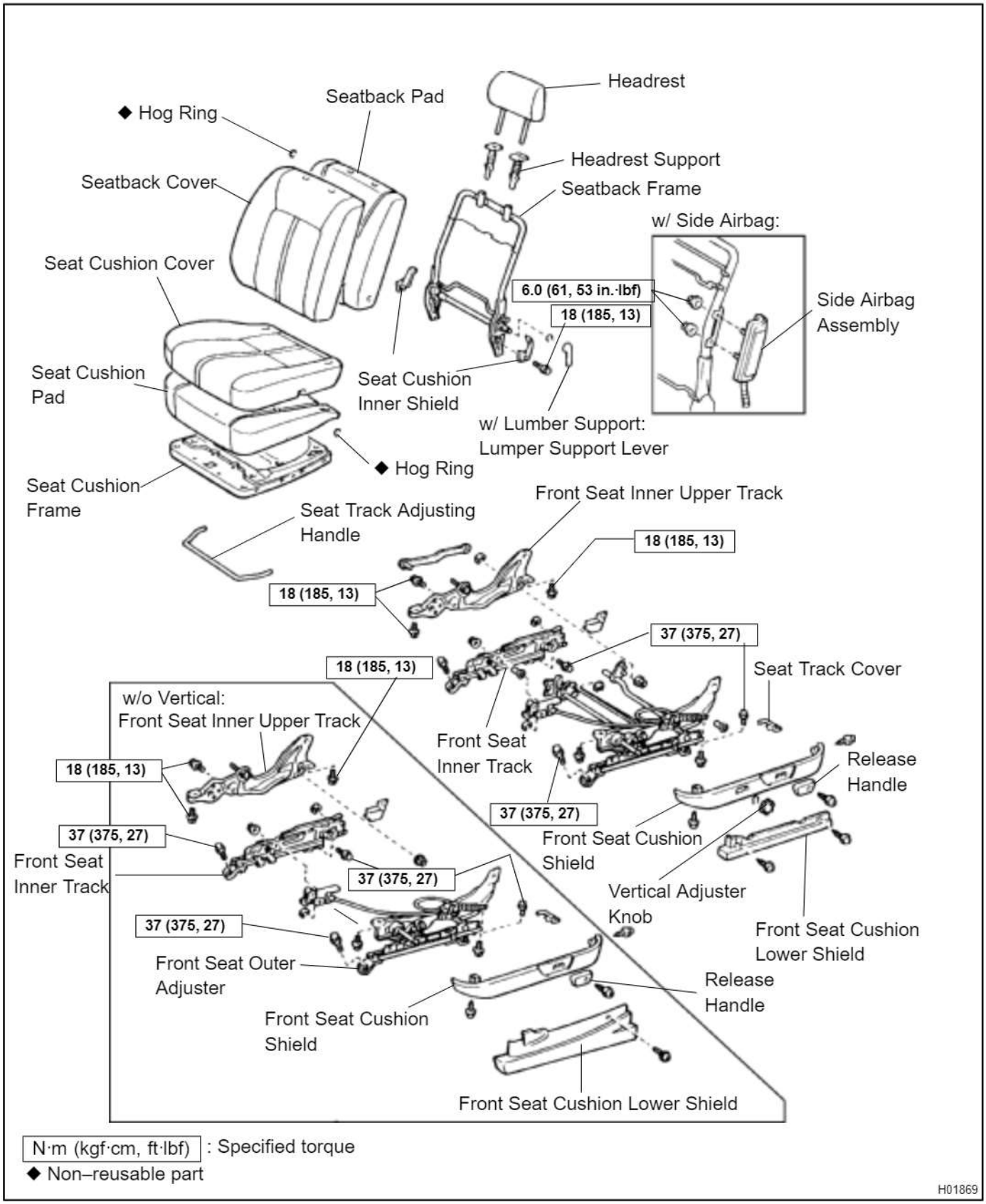
## INSTALL FRONT SEAT

(a) Mount the seat to the vehicle.
(b) w/ Side Airbag:
Connect the connector.
(c) Connect the front power seat connector.
(d) Tighten the bolts on the rear side temporarily, from the bolt on the inner side tighten completely.
(e) Slide the seat to the most rear position to install the bolts on the front side.

# FRONT SEAT (Manual Seat for TMC Made)

BO0MZ-01

## COMPONENTS



BO0N0-01

# REMOVAL

## REMOVE FRONT SEAT

(a) Using a screwdriver, remove the seat track outer cover.

HINT:

Tape the screwdriver tip before use.

(b) Remove the 4 bolts.

(c) w/ Side Airbag Assembly:
Disconnect the connector.

(d) Remove the front seat.

**NOTICE:**

**Be careful not to damage the body.**

BO0N1-01

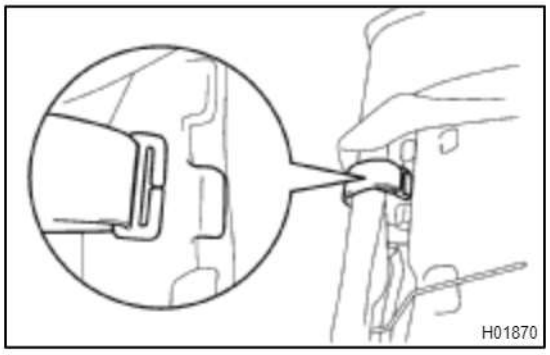
# DISASSEMBLY

**1. REMOVE THESE PARTS:**

(a) Release handle
(b) Front seat cushion shield
(c) Vertical Seat Adjuster:
Vertical adjuster knob
(d) Front seat cushion lower shield
(e) Seat cushion inner shield
(f) w/ Lumber Support:
Lumber support lever
(g) Headrest
(h) Front seat inner belt

**2. REMOVE SEATBACK ASSEMBLY**

(a) w/ Side Airbag Assembly:
Remove the side airbag wire harness after removing clips.
(b) Remove the bolts and seatback assembly.




**3. REMOVE SEATBACK COVER**

(a) Remove the hog rings.
(b) w/ Side Airbag Assembly:
Remove the hook from the seatback frame.
(c) Remove the headrest supports.
(d) Remove the seatback frame from the seatback cover with pad.
(e) Remove the seatback cover from the seatback pad.

**4. w/ Side Airbag Assembly:**
**REMOVE SIDE AIRBAG ASSEMBLY**

Remove the 1 clip of side airbag wire harness, 2 nuts and side airbag assembly from the seatback frame.

**CAUTION:**

- **Do not store the side airbag assembly with the airbag deployment direction facing down.**
- **Never disassemble the side airbag assembly.**

**5. REMOVE SEAT CUSHION ASSEMBLY**

Remove the 4 bolts and seat cushion assembly from the seat adjuster.

**6. REMOVE SEAT CUSHION COVER**

(a) Remove the seat cushion frame.
(b) Remove the seat cushion cover from the seat cushion pad.

**7. REMOVE SEAT TRACK ADJUSTING HANDLE**

Remove the seat track handle.

**8. REMOVE FRONT SEAT OUTER ADJUSTER**

Remove the E ring and front seat outer adjuster from the front seat inner truck with upper track.

BO0N2-01

# INSPECTION

## INSPECT RECLINING LOCK POSITION AND SLIDING LOCK POSITION SLIPPING OFF

(a) When reclining the seat, inspect that the outer and inner tracks are released at the same time.

HINT:

When the reclining lock positions slip off, disassemble the seat to adjust the position.

(b) When sliding the seat, inspect that the outer and inner tracks are locked at the same time.

HINT:

When sliding lock positions slip off, loosen the bolts to adjust the position.

BO0N3-01

# REASSEMBLY

**1. Vertical Seat Adjuster:**
**INSTALL FRONT SEAT OUTER ADJUSTER**

Install front seat outer adjuster to front seat inner adjuster with E ring, nuts and bolts.

**2. w/o Vertical Seat Adjuster:**
**INSTALL FRONT SEAT OUTER AND INNER ADJUSTER**

Install the adjusters to the seat cushion frame.

**3. INSTALL SEAT TRACK ADJUSTING HANDLE**

Install the seat track adjusting handle.

**4. Vertical Seat Adjuster:**
**INSTALL SEAT CUSHION COVER**

(a) Install the seat cushion cover to seat cushion pad.
(b) Install the seat cushion cover with pad to the seat cushion frame.

**5. INSTALL SEAT CUSHION ASSEMBLY**

Install the seat cushion assembly with 4 bolts to the seat adjuster.

HINT:
Tighten the 4 bolts temporarily, then from the bolts on the rear side tighten completely.

**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**

**6. w/ Side Airbag Assembly:**
**INSTALL SIDE AIRBAG ASSEMBLY**

Install the side airbag assembly with new 2 nuts to the seatback frame.

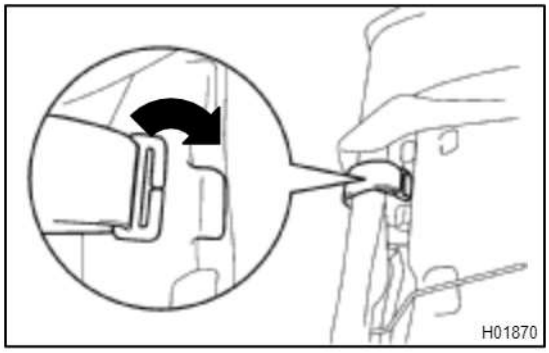
**Torque: 6.0 N·m (61 kgf·cm, 53 in.·lbf)**

**NOTICE:**

- **Make sure that the side airbag assembly is installed to the specified torque.**
- **If the side airbag assembly has been dropped, or there are cracks, dents or other defects in the case or connector, replace the side airbag assembly with a new one.**
- **When installing the side airbag assembly, take care is not pinched between other parts.**

**7. INSTALL SEATBACK COVER**

(a) Install the seatback cover to the seatback pad.
(b) Install the seatback cover with pad to the seatback frame.
(c) Install the headrest supports.




(d) w/ Side Airbag Assembly:
Hang the hook on to the seatback frame.

**CAUTION:**
**Take care to hung the hook securely. Otherwise the seat cover slides, it might cause incorrect deploying.**

**8. INSTALL SEATBACK ASSEMBLY**

(a) Install the seatback assembly with bolts.
**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**

(b) Install new hog rings.

HINT:
Install the hog rings to prevent wrinkles as least as possible.

(c) w/ Side Airbag Assembly:
Securely fix the side airbag wire harness to seat cushion and seatback by clips.

**9. INSTALL THESE PARTS:**

(a) Front seat inner belt
(b) Headrest
(c) Lumber support lever
(d) Seat cushion inner shield
(e) Front seat cushion shield
(f) Vertical Seat Adjuster:
Vertical adjuster knob
(g) Front seat cushion lower shield
(h) Release handle

BO0N4-01

# INSTALLATION

## INSTALL FRONT SEAT

(a) Slide the front seat to the most front position.

**NOTICE:**

**Make sure that seat adjuster locks.**

(b) Without holding the seat track handle, mount the seat to the vehicle.

HINT:

If holding the seat track handle, the adjusted most front positions slip off.

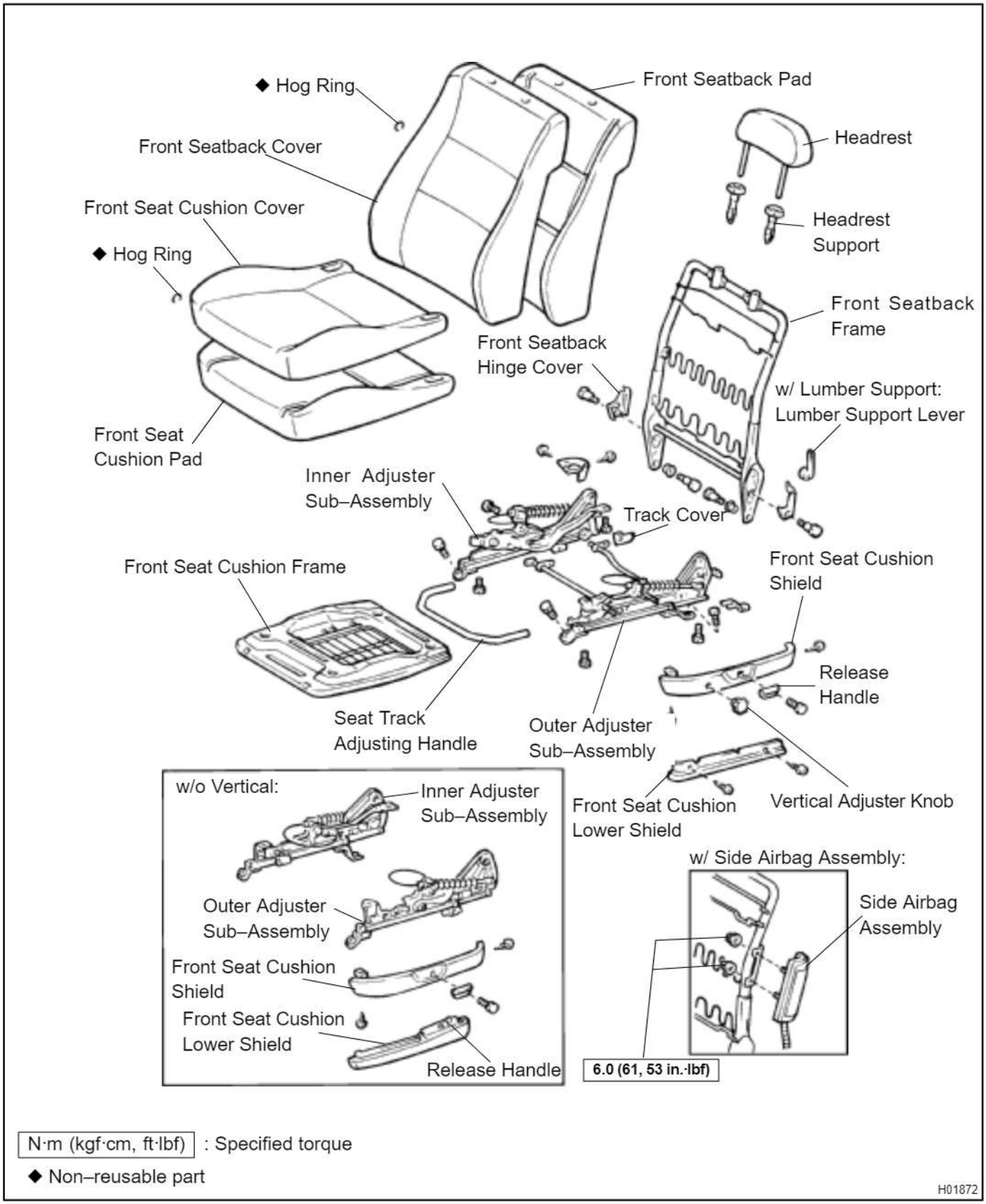
(c) Tighten the bolts on the rear side temporarily, from the bolt on the inner side tighten completely.
**Torque: 37 N·m (375 kgf·cm, 27 ft·lbf)**

(d) Slide the seat to the most rear position to install the bolts on the front side.
**Torque: 37 N·m (375 kgf·cm, 27 ft·lbf)**

# FRONT SEAT (Manual Seat for TMMK Made)

## COMPONENTS

BO0MO–01




N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non–reusable part

H01872

BO0MP-01

# REMOVAL

## REMOVE FRONT SEAT

(a) Using a screwdriver, remove the seat track covers.

HINT:

Tape the screwdriver tip before use.

(b) Remove the 4 bolts.

(c) w/ Side Airbag Assembly:
Disconnect the connector.

(d) Remove the front seat.

**NOTICE:**

**Be careful not to damage the body.**

BO0MQ–01

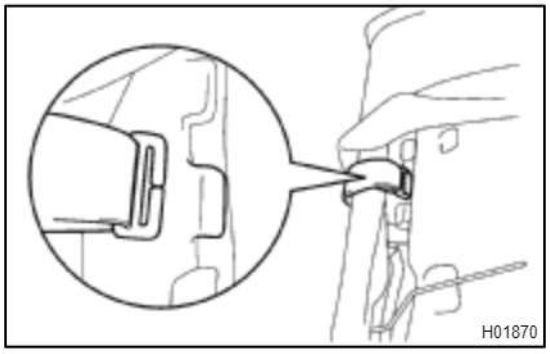
# DISASSEMBLY

**1. REMOVE THESE PARTS:**

(a) Release handle
(b) Front seat cushion shield
(c) Vertical Seat Adjuster:
Vertical adjuster knob
(d) Front seat cushion lower shield
(e) Front seatback hinge cover.
(f) w/ Lumber Support:
Lumber support lever
(g) Headrest
(h) Front seat inner belt

**2. REMOVE SEATBACK ASSEMBLY**

(a) w/ Side Airbag Assembly:
Remove the side airbag wire harness after removing clips.
(b) Remove the hog rings.
(c) Remove the bolts and seatback assembly.




**3. REMOVE SEATBACK COVER**

(a) w/ Side Airbag Assembly:
Remove the hook from the seatback frame.
(b) Remove the headrest supports.
(c) Remove the seatback frame from the seatback cover with pad.
(d) Remove the seatback cover from the seatback pad.

**4. w/ Side Airbag Assembly:**
**REMOVE SIDE AIRBAG ASSEMBLY**

Remove the 2 nuts and side airbag assembly from the seatback frame.

**CAUTION:**

- **Do not store the side airbag assembly with the airbag deployment direction facing down.**
- **Never disassemble the side airbag assembly.**

**5. REMOVE SEAT CUSHION ASSEMBLY**

Remove the 4 bolts and seat cushion assembly from the seat adjuster.

**6. REMOVE SEAT CUSHION COVER**

(a) Remove the seat cushion frame.
(b) Remove the seat cushion cover from the seat cushion pad.

**7. REMOVE RECLINING CONNECTING PIPE**

Remove the reclining connecting pipe.

**8. REMOVE SEAT TRACK ADJUSTING HANDLE**

Remove the seat track adjusting handle.

**9. REMOVE OUTER ADJUSTER SUB–ASSEMBLY**

Remove the outer adjuster sub–assembly from the inner adjuster sub–assembly.

BO0MR-01

# INSPECTION

## INSPECT RECLINING LOCK POSITION AND SLIDING LOCK POSITION SLIPPING OFF

(a) When reclining the seat, inspect that the outer and inner tracks are released at the same time.

HINT:

When the reclining lock positions slip off, disassemble the seat to adjust the position.

(b) When sliding the seat, inspect that the outer and inner tracks are locked at the same time.

HINT:

When sliding lock positions slip off, loosen the bolts to adjust the position.

BO0MS–01

# REASSEMBLY

**1. INSTALL OUTER ADJUSTER SUB–ASSEMBLY**

Install the outer adjuster sub–assembly to the inner adjuster sub–assembly.

**2. INSTALL SEAT ADJUSTING HANDLE**

Install the seat track adjusting handle.

**3. INSTALL RECLINING CONNECTING PIPE**

(a) Adjust the reclining lock positions of the seat adjusters.
(b) Slide the seat adjusters to the most front position.
(c) Place the adjusters on a spacer to adjust the seat rails in parallel and install the connecting pipe.

HINT:

When installing the connecting pipe with raising up the adjusters, the lock positions adjusted in 3–(a) step slip off, lock error will occur.

**4. INSTALL SEAT CUSHION COVER**

(a) Install the seat cushion cover to seat cushion pad.
(b) Install the seat cushion cover with pad to the seat cushion frame.

**5. INSTALL SEAT CUSHION ASSEMBLY**

Install the seat cushion assembly with 4 bolts to the seat adjuster.

HINT:

Tighten the 4 bolts temporarily, then from the bolts on the rear side tighten completely.

**6. w/ Side Airbag Assembly:**
**INSTALL SIDE AIRBAG ASSEMBLY**

Install the side airbag assembly with 2 nuts to the seatback frame.

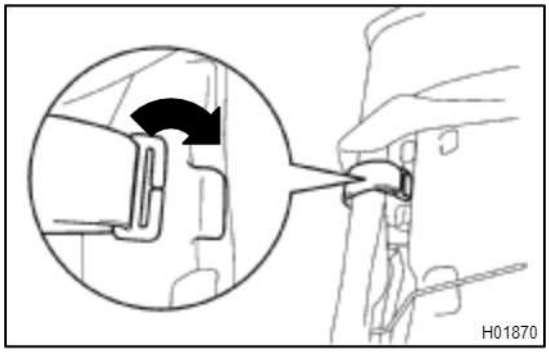
**Torque: 6.0 N·m (61 kgf·cm, 53 in.·lbf)**

**NOTICE:**

- **Make sure that the side airbag assembly is installed to the specified torque.**
- **If the side airbag assembly has been dropped, or there are cracks, dents or other defects in the case or connector, replace the side airbag assembly with a new one.**
- **When installing the side airbag assembly, take care is not pinched between other parts.**

**7. INSTALL SEATBACK COVER**

(a) Install the seatback cover to the seatback pad.
(b) Install the seatback cover with pad to the seatback frame.
(c) Install the headrest supports.




(d) w/ Side Airbag Assembly:
Hang the hook on to the seatback frame.

**CAUTION:**
**Take care to hung the hook securely. Otherwise the seat cover slides, it might cause incorrect deploying.**

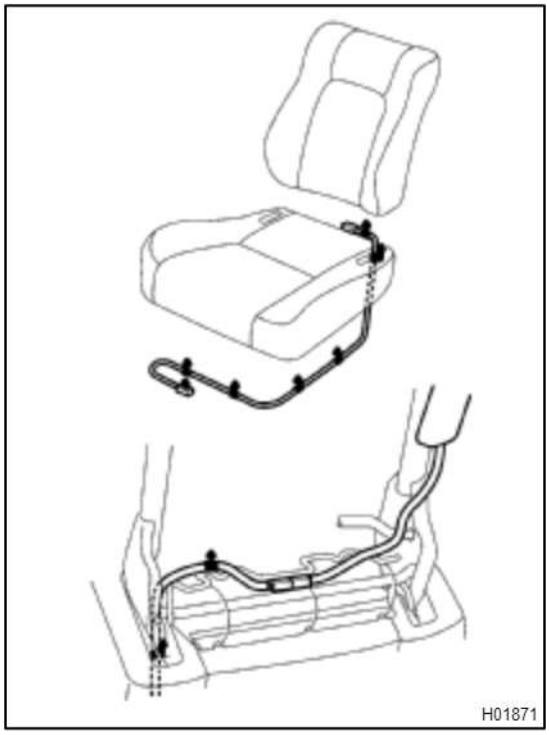
**8. INSTALL SEATBACK ASSEMBLY**

(a) Install the seatback assembly with 4 bolts.

HINT:
Tighten the 4 bolts temporarily, then from the bolt on the front right side tighten completely.

(b) Install a new hog rings.

HINT:
Install the hog rings to prevent wrinkles as least as possible.




(c) w/ Side Airbag Assembly:
Securely fix the side airbag wire harness to seat cushion by clips.

**9. INSTALL THESE PARTS:**

(a) Front seat inner belt
(b) Headrest
(c) w/ Lumber Support:
Lumber support lever
(d) Front seatback hinge cover
(e) Front seat cushion lower shield
(f) Vertical Seat Adjuster:
Vertical adjuster knob
(g) Front seat cushion shield
(h) Release handle

BO0MT-01

# INSTALLATION

## INSTALL FRONT SEAT

(a) Slide the front seat to the most front position.

**NOTICE:**

**Make sure that seat adjuster locks.**

(b) Without holding the seat track handle, mount the seat to the vehicle.

HINT:

If holding the seat track handle, the adjusted most front positions slip off.

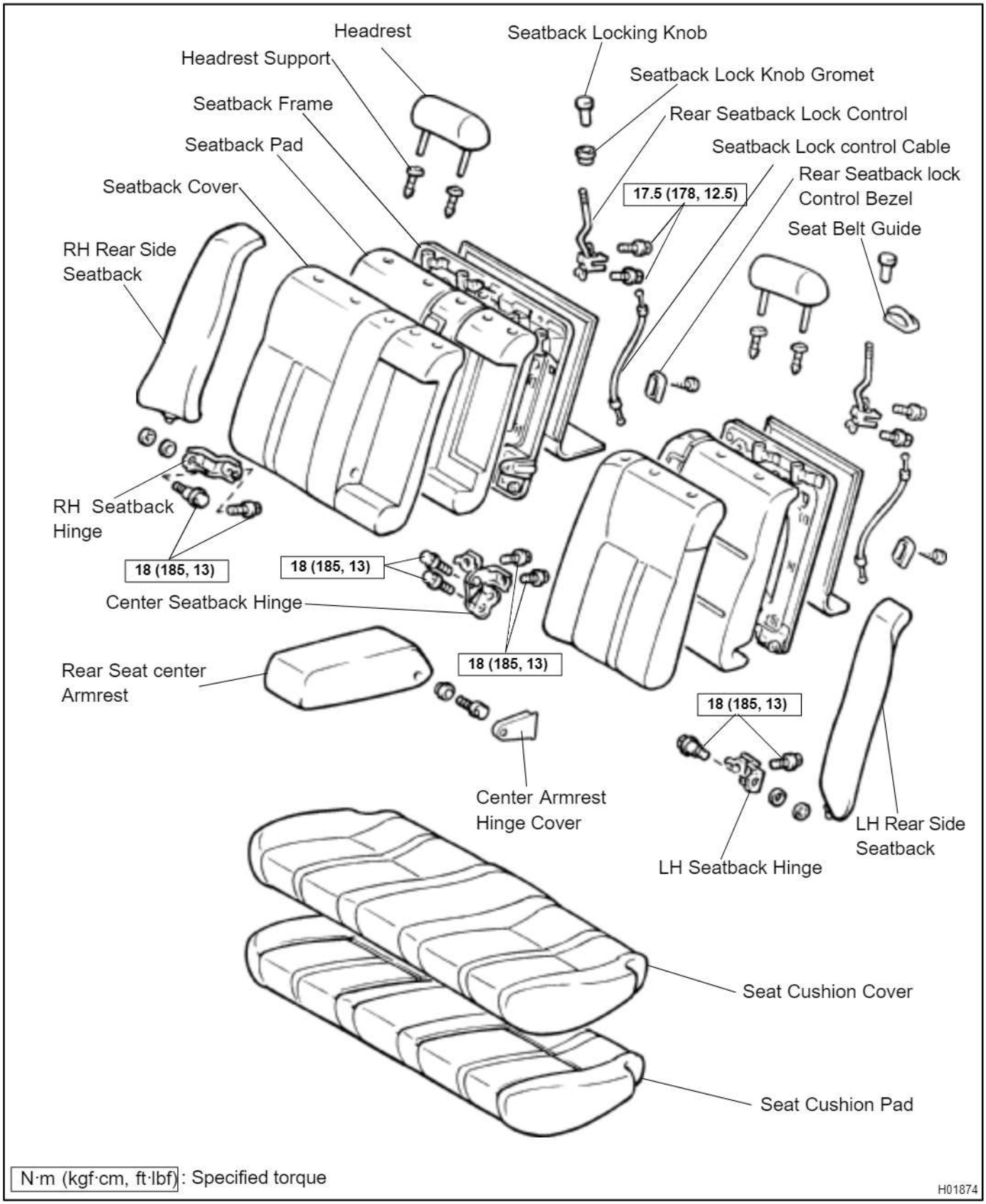
(c) Tighten the bolts on the rear side temporarily, from the bolt on the inner side tighten completely.

(d) Slide the seat to the most rear position to install the bolts on the front side.

# REAR SEAT (TMC Made)

## COMPONENTS

BO0NA-01



BO0NB-01

# REMOVAL

**1. REMOVE LH SEATBACK ASSEMBLY**

(a) Release lock to lean the seat back to front.
(b) Remove the clips.
(c) Remove the 2 bolts and LH seatback assembly.

**2. REMOVE RH SEAT BACK ASSEMBLY**

(a) Release lock to lean the seatback to front.
(b) Remove the clips.
(c) Remove the 2 bolts and RH seatback assembly.

**3. REMOVE SEAT CUSHION ASSEMBLY**

(a) Remove the seat cushion assembly.

HINT:

Remove the rear seat inner with center belt from seat cushion slit to remove the seat cushion.

(b) Remove the 2 lock hooks.

**4. REMOVE LH AND RH REAR SIDE SEATBACK**

(a) Remove the bolt and LH rear side seatback.
(b) Remove the bolt and RH rear side seatback.

**5. REMOVE SEATBACK HINGE**

(a) Remove the bolts and LH seatback hinge and RH seatback hinge.
(b) Remove the 2 bolts and center seatback hinge.

**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**

BO0NC-01

# DISASSEMBLY

**1. REMOVE SEAT CUSHION COVER**

Remove the hog rings and seat cushion cover from the seat cushion pad.

**2. REMOVE THESE PARTS:**

HINT:

Remove the clips to turn over the seatback cover before performing the following steps.

(a) Headrest
(b) Rear seatback lock control Bezel.
(c) Rear seatback Board
(d) Headrest supports
(e) Seatback locking knob
(f) Seatback lock knob Gromet
(g) Rear seat center armrest

**3. REMOVE SEATBACK COVER**

(a) Remove the hog rings and seatback frame from the seatback cover with pad.
(b) Remove the hog rings and seatback cover from the seatback pad.

**4. REMOVE SEATBACK LOCK**

(a) Remove the rear seatback lock control cable.
(b) Remove the 2 bolts and rear seatback lock control.
**Torque: 17.5 N·m (178 kgf·cm, 12.5 ft·lbf)**

BO0ND-01

# REASSEMBLY

**Reassembly is in the reverse order of disassembly (See page BO–115).**

BO0NE-01

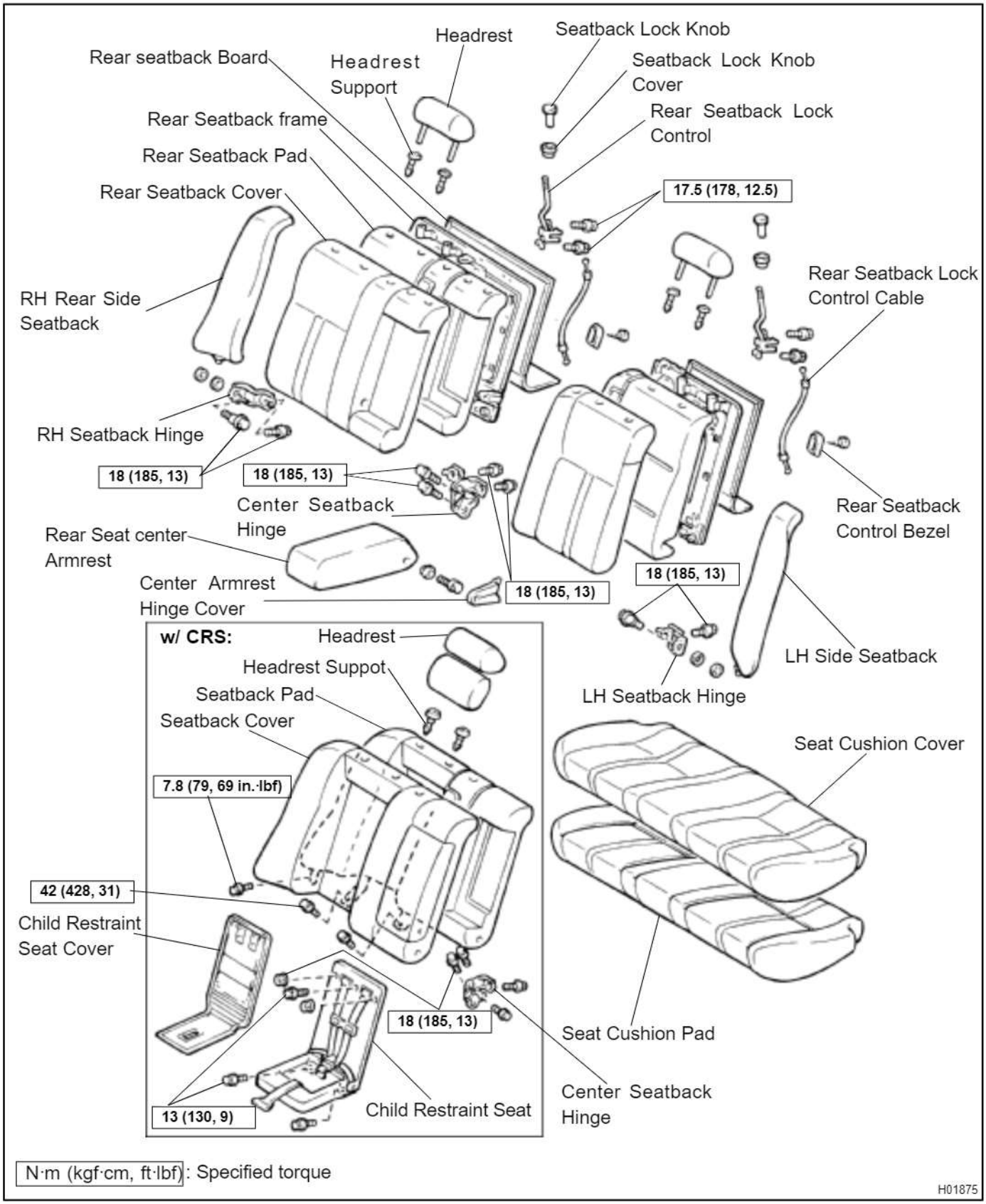
# INSTALLATION

**Installation is in the reverse order of removal (See page BO–114).**

# REAR SEAT (TMMK Made)

## COMPONENTS

BO0N5-01



BO0N6-01

# REMOVAL

**1. REMOVE SEAT CUSHION ASSEMBLY**

(a) Remove the seat cushion assembly.

HINT:

Remove the rear seat inner with center belt from seat cushion slit to remove the seat cushion.

(b) Remove the 2 lock hooks.

**2. REMOVE LH SEATBACK ASSEMBLY**

(a) Release lock to lean the seatback to front.

(b) Remove the 2 bolts and LH seatback assembly.

**3. w/ CRS:**

**REMOVE CHILD RESTRAINT SEAT**

(a) Remove child restraint seat cover.

(b) Remove the 3 bolts and 2 nuts.

**Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)**

(c) Remove the child restraint seat.

**4. w/o CRS:**

**REMOVE RH SEATBACK ASSEMBLY**

(a) Release lock to lean the seatback to front.

(b) Remove the clips.

(c) Remove the bolts and RH seatback assembly.

**5. w/ CRS:**

**REMOVE RH SEATBACK ASSEMBLY**

(a) Remove the 3 bolts.

**Torque:**
**RH bolt: 7.8 N·m (80 kgf·cm, 69 in.·lbf)**
**Center bolt: 42 N·m (428 kgf·cm, 31 ft·lbf)**

(b) Remove the RH seatback assembly.

**6. REMOVE LH AND RH REAR SIDE SEATBACK**

(a) Remove the bolt and LH rear side seatback.

(b) Remove the bolt and RH rear side seatback.

**7. REMOVE SEATBACK HINGE**

(a) Remove the bolt and LH seatback hinge.

(b) Remove the 2 bolts and center seatback hinge.

**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**

(c) w/o CRS:

Remove the bolt and RH seatback hinge.

**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**

BO0N7-01

# DISASSEMBLY

**1. REMOVE SEAT CUSHION COVER**

Remove the hog rings and seat cushion cover from the seat cushion pad.

**2. REMOVE THESE PARTS:**

HINT:

Remove the clips to turn over the seatback cover before performing the following steps.

(a) Headrest
(b) Rear seatback control Bezel
(c) Headrest supports
(d) Seatback lock knob
(e) Seatback lock knob cover
(f) Rear seat center armrest

**3. REMOVE SEATBACK COVER**

(a) Remove the hog rings and seatback frame from the seatback cover with pad.
(b) Remove the hog rings and seatback cover from the satback pad.

**4. REMOVE SEATBACK LOCK**

(a) Remove the rear seatback lock control cable.
(b) Remove the 2 bolts and rear seatback lock control.
**Torque: 17.5 N·m (178 kgf·cm, 12.5 ft·lbf)**

BO0N8-01

# REASSEMBLY

**Reassembly is in the reverse order of disasssembly (See page BO–120).**

BO0N9-01

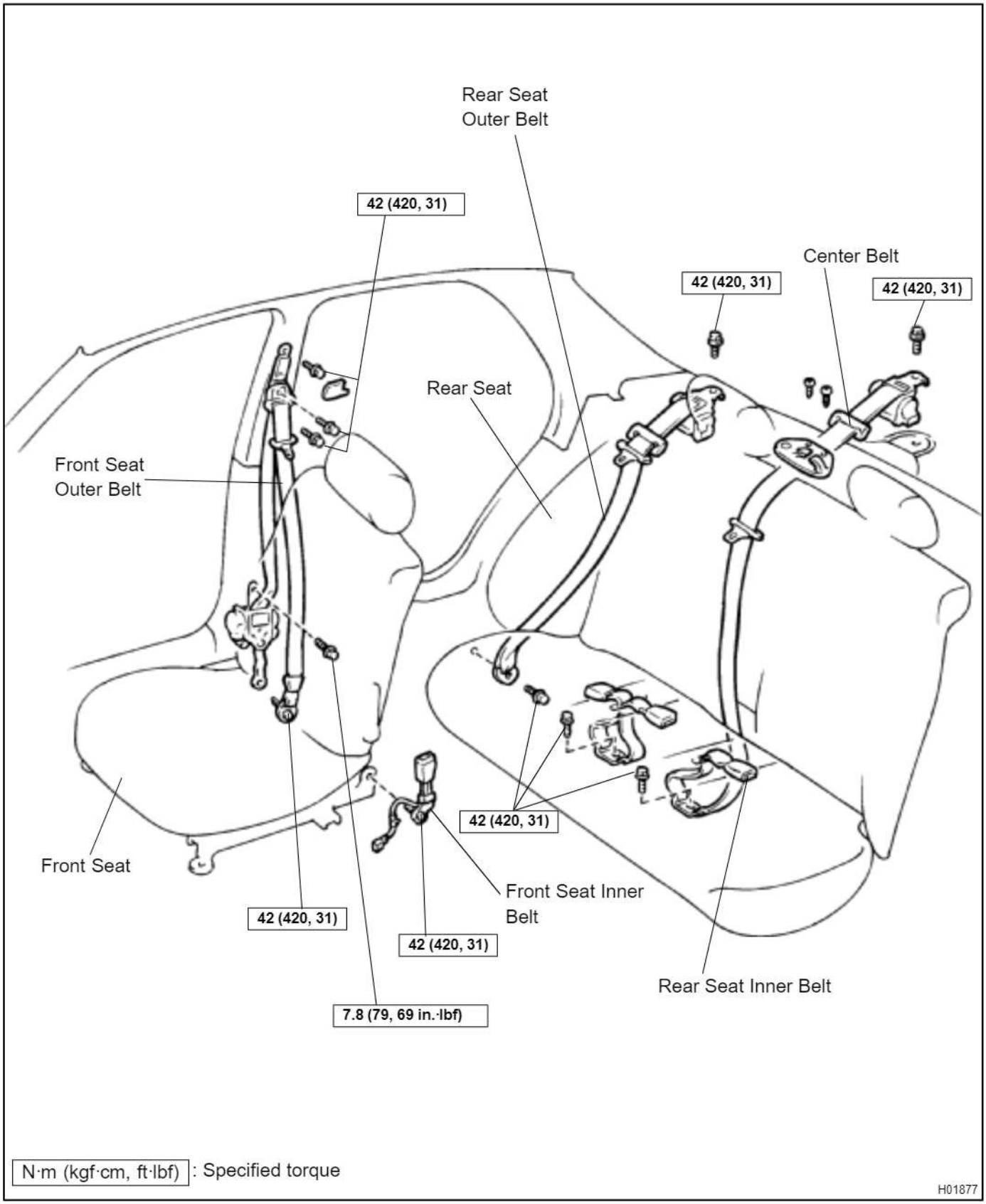
# INSTALLATION

**Installation is in the reverse order of removal (See page BO–119).**

# SEAT BELT

## COMPONENTS

BO0NF-01



BO0NG-01

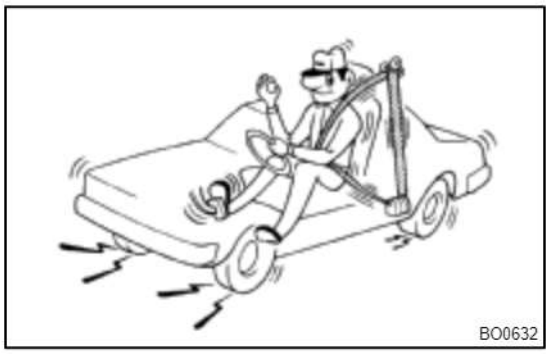
# INSPECTION

**CAUTION:**

**Replace the seat belt assembly (outer belt, inner belt, bolts, nuts or sill–bar) if it has been used in a severe impact. The entire assembly should be replaced even if damage is not obvious.**

**1. All Seat Belt:**
**RUNNING TEST (IN SAFE AREA)**

(a) Fasten the front seat belts.


BO0632

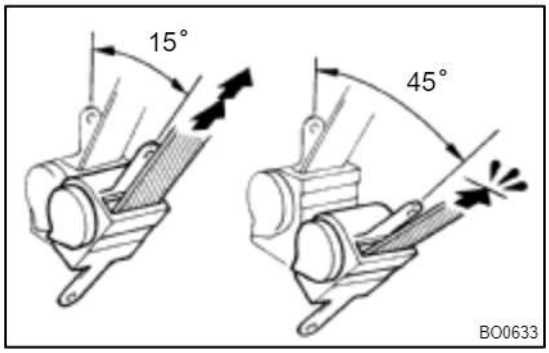
(b) Drive the car at 10 mph (16 km/h) and slam on the brakes. Check that the belt locks and cannot be extended at this time.

HINT:

Conduct this test in a safe area. If the belt does not lock, remove the belt mechanism assembly and conduct the following static check. Also, whenever installing a new belt assembly, verify the proper operation before installation.

**2. Driver's Seat Belt (ELR):**
**STATIC TEST**

(a) Make sure that the belt locks when pulled out quickly.
(b) Remove the locking retractor assembly.
(c) Tilt the retractor slowly.



BO0633

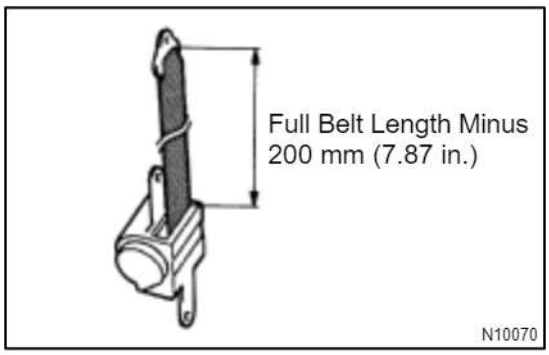
(d) Make sure that the belt can be pulled out at a tilt of 15 degrees or less, and cannot be pulled out over 45 degrees of tilt.

If a problem is found, replace the assembly.

**3. Front RH Seat Belt and Rear Seat Belt (ALR/ELR):**
**STATIC TEST**

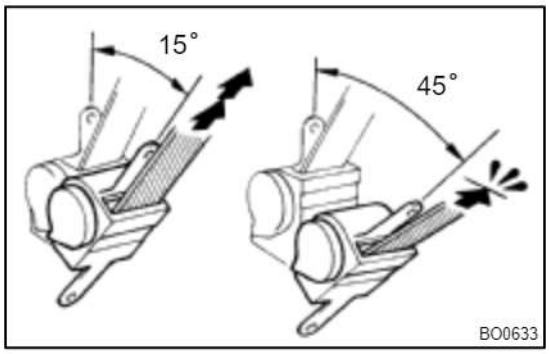
(a) Make sure that the belt locks when pulled out quickly.
(b) Remove the locking retractor assembly.
(c) Pull out the whole belt and measure the length of the whole belt.
Then retract the belt slightly and pull it out again
(d) Make sure that the belt cannot be extended further.

If a problem is found, replace the assembly.




(e) Retract the whole belt, then pull out the belt until 200 mm (7.87 in.) of belt remains retracted.

(f) Tilt the retractor slowly.




(g) Make sure that the belt can be pulled out at a tilt of 15 degrees or less, and cannot be pulled out at over 45 degrees of tilt.

If a problem is found, replace the assembly.

# SEAT BELT PRETENSIONER

BO0NH-01

## REMOVAL

**NOTICE:**

- **If the wiring connector of the supplemental restraint system is disconnected with the ignition switch at ON or ACC, diagnostic trouble codes will be recorded.**
- **Never use SRS parts from another vehicle. When replacing parts, replace them with new parts.**

**1. REMOVE THESE PARTS:**

(a) Front door scuff plate

(b) Center pillar lower garnish

**2. REMOVE FRONT SEAT OUTER BELT**

**CAUTION:**

**Never disassemble the front seat outer belt.**

**NOTICE:**

**When removing the front outer seat belt, take care not to pull the seat belt pretensioner wire harness.**

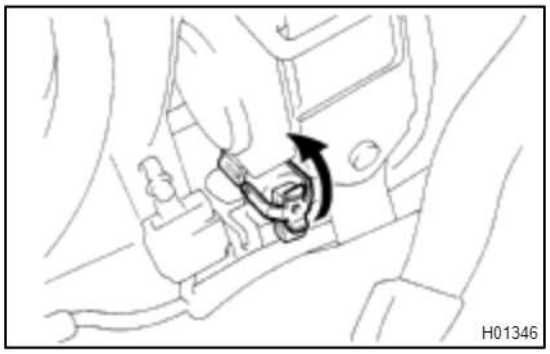
(a) Remove the bolts and floor anchor.

(b) Using a screwdriver, remove the anchor caps.

HINT:

Tape the screwdriver tip before use.

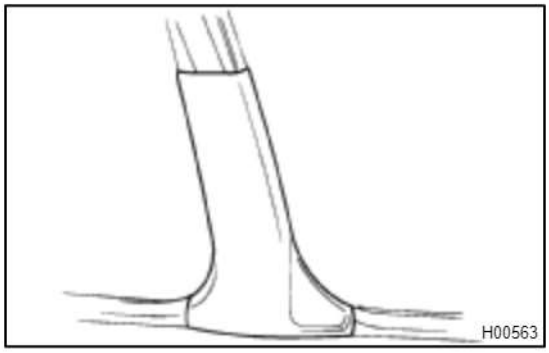
(c) Remove the bolt and shoulder anchor.




(d) Disconnect the pretensioner connector as shown in the illustration.

(e) Remove the 2 bolts and front seat outer belt.

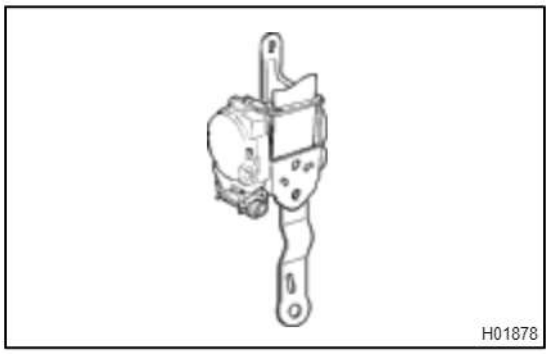
BO0NI-01




# INSPECTION

## 1. PRETENSIONER IS NOT ACTIVATED

(a) Perform a diagnostic system check.
(See page DI–626)




(b) Perform a visual check which includes the following items with the front seat outer belt removed from the vehicle.
- Check for cuts and cracks in, or marked discoloration of the center pillar lower garnish.
- Check for cuts and cracks in wire harnesses, and for chipping in connectors.
- Check for deformation of the center pillar.

**CAUTION:**
**For removal and installation of the front seat outer belt, see page BO–123.**
**Be sure to follow the correct procedure.**

## 2. PRETENSIONER IS ACTIVATED

(a) Perform a diagnostic system check.
(See page DI–626)

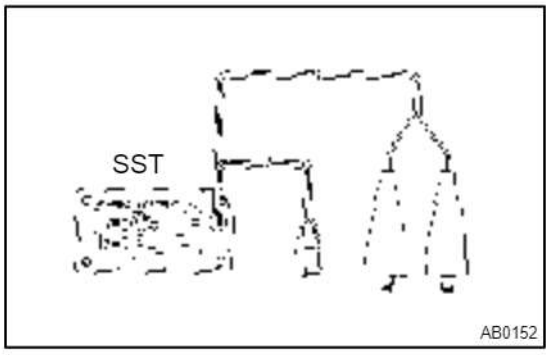
(b) Perform a visual check which includes the following items with the front seat outer belt removed from the vehicle.
- Check for deformation of the center pillar.
- Check for damage on the connector and wire harness.

BO0NJ–01

# DISPOSAL

HINT:

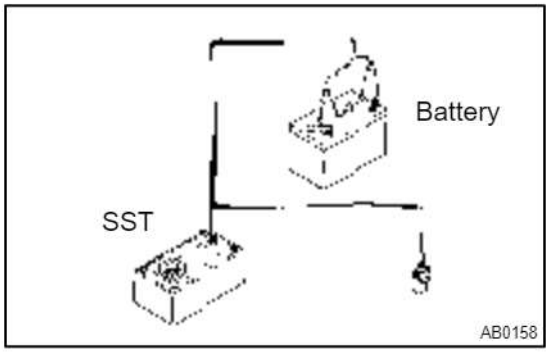
When scrapping vehicles equipped with a supplemental restraint system or disposing of a front seat outer belt (with seat belt pretensioner) always first activate the seat belt pretensioner in accordance with the procedure described below. If any abnormality occurs with the seat belt pretensioner operation, contact the SERVICE DEPT. of the DISTRIBUTOR. when disposing of a front seat outer belt (with seat belt pretensioner) deployed in a collision, follow the same procedure given in step 1–(d) in "DISPOSAL".




**CAUTION:**

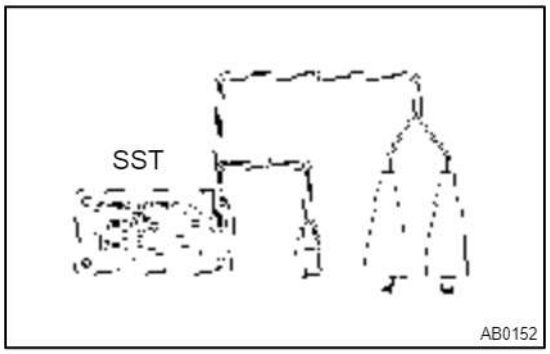
- **Never dispose of front seat outer belt which has an undeployed pretensioner.**
- **The seat belt pretensioner produces a sizeable exploding sound when it deploys, so perform the operation out–of–door and where it will not create a nuisance to nearby residents.**
- **When deploying the seat belt pretensioner, always use the specified SST. (SRS Airbag Deployment Tool) Perform the operation in a place away from electrical noise.**

  SST 09082–00700, 09082–00740
- **When deploying a front seat outer belt (with seat belt pretensioner), perform the operation from at least 10 m (33 ft) away from the front seat outer belt.**
- **Use gloves and safety glasses when handling a front seat outer belt with operated pretensioner.**
- **Always wash your hands with water after completing the operation.**
- **Do not apply water, etc. to a front seat outer belt with operated pretensioner.**




## 1. SEAT BELT PRETENSIONER DEPLOYMENT WHEN SCRAPPING VEHICLE

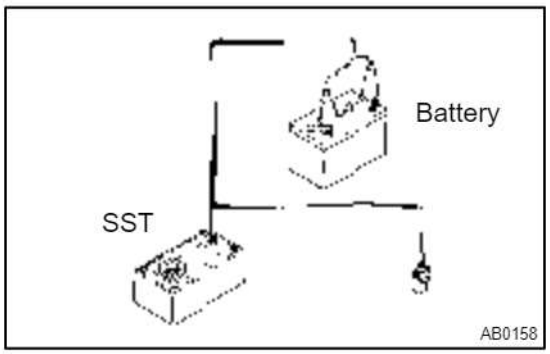
HINT:
Have a battery ready as the power source to deploy the airbag.




(a) Check functioning of SST

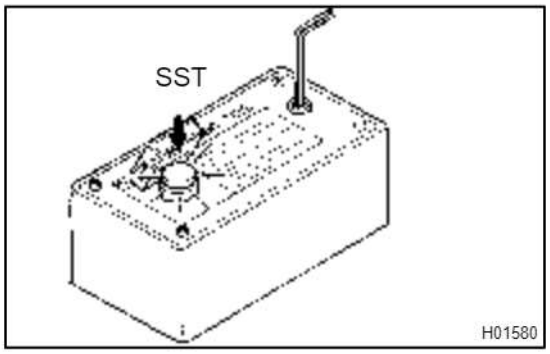
**CAUTION:**
**When deploying the seat belt pretensioner, always use the specified SST: SRS Airbag Deployment Tool.**

SST 09082–00700, 09082–00740




(1) Connect the SST to battery.
Connect the red clip of the SST to the battery positive (+) terminal and the black clip to the battery negative (–) terminal.

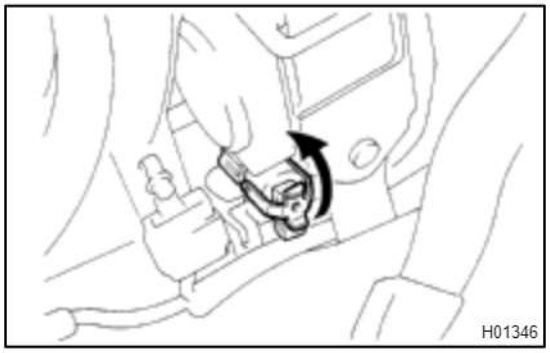
HINT:
Do not connect the yellow connector which will be connected with the seat belt pretensioner.



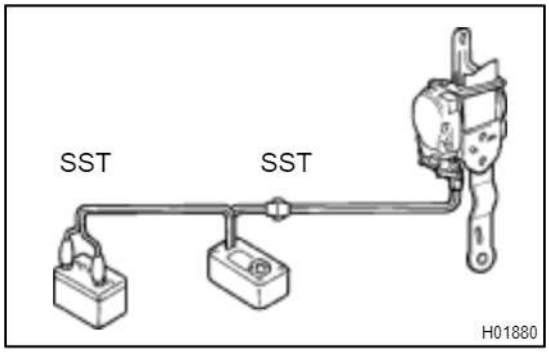

(2) Check functioning of SST
Press the SST activation switch, and check the LED of the SST activation switch lights up.

**CAUTION:**
**If the LED lights up when the activation switch is not being pressed, SST malfunction is probable, so definitely do not use the SST.**

(b) Install the SST.
(1) Remove the front door scuff plate.
(2) Remove the center pillar lower garnish.
(3) Disconnect the pretensioner connector as shown in the illustration.
(4) Buckle the front seat belt and check that there is no looseness and slack in the front seat inner belt and front seat outer belt.




SST 09082–00700, 09082–00740

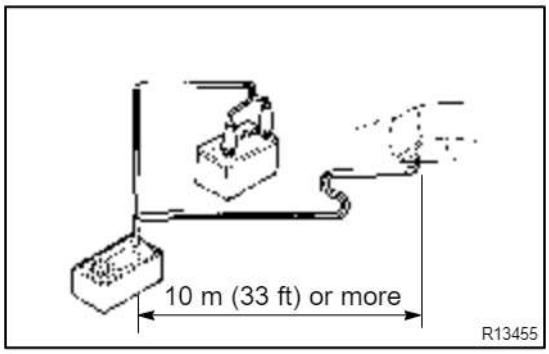



(5) Connect the 2 SST, then connect them to the seat belt pretensioner.

SST 09082–00700, 09082–00740

**NOTICE:**

**To avoid damaging the SST connector and wire harness, do not lock the secondary lock of secondary lock of the twin lock.**




(6) Move the SST to at least 10mm (33 ft) from the front of the vehicle.

(7) Close all the doors and windows of the vehicle.

**NOTICE:**

**Take care not to damage the SST wire harness.**

(8) Connect the SST red clip the battery positive (–) terminal and the black clip to the negative (+) terminal.

(c) Deploy the airbag.

(1) Confirm that no one is inside the vehicle or within 10 m (33 ft) area around of the vehicle.

(2) Press the SST activation switch and activate the seat belt pretensioner.

HINT:

The seat belt pretensioner operates simultaneously as the LED of the SST activation switch light up.

(d) Disposal of front seat outer belt (with seat belt pretensioner).

**CAUTION:**

- **The front seat outer belt is very hot when the seat belt pretensioner is deployed, so leave it alone for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front seat outer belt with deployed seat belt pretensioner.**
- **Always wash your hands with water after completing the operation.**
- **Do not apply water, etc. to a front seat outer belt with deployed seat belt pretensioner.**

  When scrapping a vehicle, activate the seat belt pretensioner and scrap the vehicle with operated front seat outer belt still installed.

**2. DEPLOYMENT WHEN DISPOSING OF FRONT SEAT OUTER BELT ONLY**

**NOTICE:**

- **When disposing of the front seat outer belt (with seat belt pretensioner) only, never use the customer's vehicle to deploy the seat belt pretensioner.**
- **Be sure to following the procedure given below when deploying the seat belt pretensioner.**

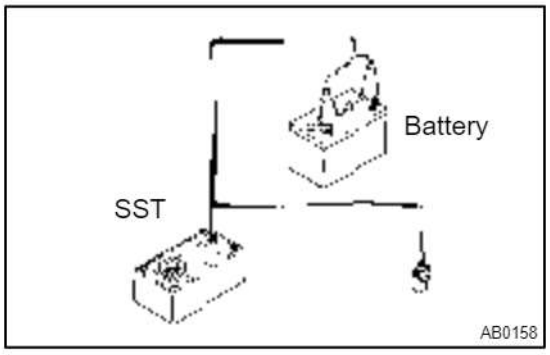
HINT:

Have a battery ready as the power source when deploying the seat belt pretensioner.

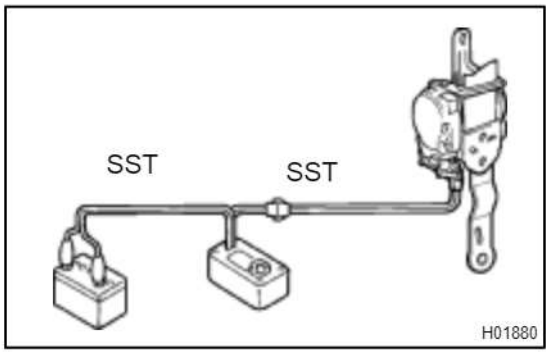
(a) Remove the front seat outer belt
(See page BO–123)

HINT:

Cut the belt near the seat belt retractor.



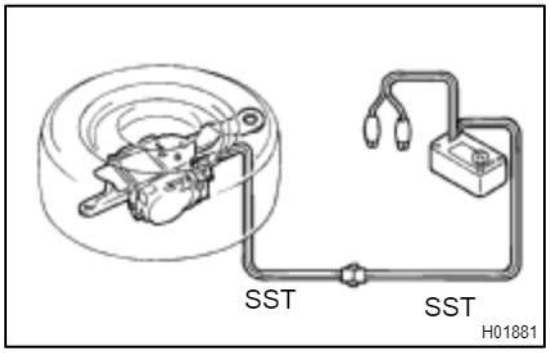

(b) Check functioning of SST.
(See step 1–(a))
SST 09082–00700, 09082–00740




(c) Install the SST.
(1) Connect the 2 SST, then connect them to the seat belt pretensioner.
SST 09082–00700, 09082–00740

**NOTICE:**

**To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.**




(2) Locate the front seat outer belt on the ground and cover it by the disc wheel with tire.

**NOTICE:**

**Place the front seat outer belt shown in the illustration.**

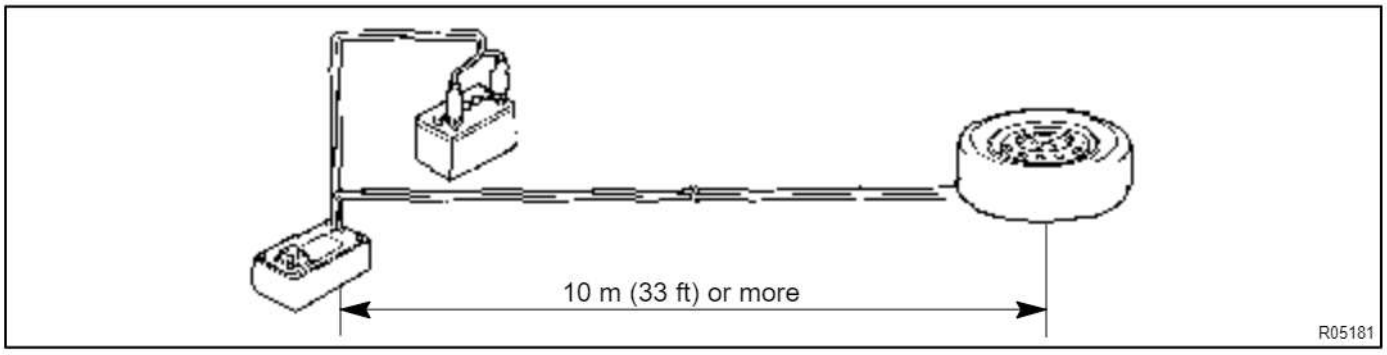
(3) Move the SST to as least 10 m (33 ft) from the disc wheel.

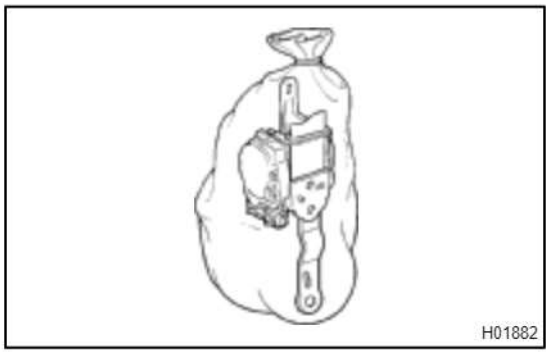
**NOTICE:**

**Take care not to damage the SST wire harness.**

(d) Deploy the seat belt pretensioner.
  (1) Connect the SST red clip to the battery positive (+) terminal and black clip to the battery negative (–) terminal.
  (2) Check that no one is within 10 m (33 ft) area around of the disc wheel.
  (3) Press the SST activation switch and activate the seat belt pretensioner.

HINT:
The seat belt pretensioner operates simultaneously as the LED of the SST activation switch lights up.




(e) Disposal of front seat outer belt (with seat belt pretensioner).

**CAUTION:**
- **The front seat outer belt is very hot when the seat belt pretensioner is deployed, so leave it alone for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front seat outer belt with deployed seat belt pretensioner.**
- **Always wash your hands with water after completing the operation.**
- **Do not apply water, etc. to a front seat outer belt with deployed seat belt pretensioner.**
  (1) Remove the disc wheel and SST.
  (2) Place the front seat outer belt in a vinyl bag, tie the end tightly and dispose of in it the same way as other general parts.

BO0NK-01

# REPLACEMENT

## REPLACE REQUIREMENTS

In the following cases, replace the seat belt pretensioner.

- If the seat belt pretensioner has been activated.
- If the seat belt pretensioner has been found to be faulty in troubleshooting.
- If the front seat outer belt has been found to be faulty during the check in items 1–(b) or 2–(b).
- If the front seat outer belt has been dropped.

**CAUTION:**

**For removal and installation of the seat belt pretensioner, see page BO–126 and BO–134.**
**Be sure to follow the correct procedure.**

BO0NL-01

# INSTALLATION

**NOTICE:**

**Never use seat belt pretensioner from another vehicle. When replace parts, replace them with new parts.**

**1. INSTALL FRONT SEAT OUTER BELT**

(a) Install the front seat belt parts by following the reverse order of removal and torque the following bolts.

(1) Front seat outer belt retractor

**Torque: 7.8 N·m (80 kgf·cm, 69 in.·lbf)**

(2) Seat belt shoulder anchor

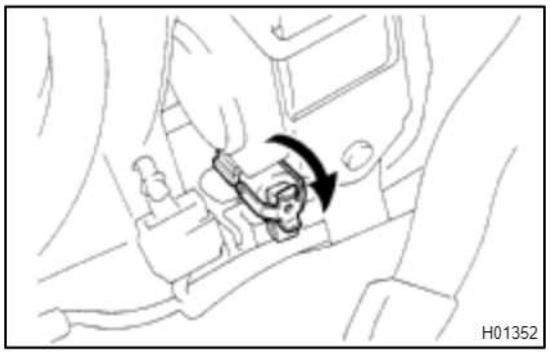
**Torque: 42 N·m (430 kgf·cm, 31 ft·lbf)**

(3) Seat belt floor anchor

**Torque: 42 N·m (430 kgf·cm, 31 ft·lbf)**

**NOTICE:**

- **Make sure that the front seat outer belt is installed with the specified torque.**
- **If the front seat outer belt has been dropped, or there are cracks, dents or other defects in the case or connector, replace the front seat outer belt with a new one.**
- **When installing the front seat outer belt, take care that the wiring does not interfere with other parts and is not pinched between other parts.**




(b) Connect the pretensioner connector as shown in the illustration.

(c) w/ Seat Belt Warning:
Connect the retractor switch connector.

**2. INSTALL THESE PARTS:**

(a) Center pillar lower garnish

(b) Front door scuff plate

# TROUBLESHOOTING

BE16T-01

## PROBLEM SYMPTOMS TABLE

### COMBINATION METER
### METER, GAUGES AND ILLUMINATION:

| Symptom | Suspect Area | See page |
|---|---|---|
| Tachometer, Fuel Gauge and Engine Coolant Temperature Gauge do not operate. | 1. GAUGE Fuse (I/P J/B No.1)<br>2. Meter Circuit Plate<br>3. Wire Harness | –<br>BE–4<br>– |
| Fuel Gauge does not operate or abnormal operation. | 1. Fuel Receiver Gauge<br>2. Fuel Temperature Sensor (For Delivery Pipe)<br>3. Fuel Temperature Sensor (For Fuel Tank)<br>4. Fuel Pressure Sensor (For Delivery Pipe)<br>5. Fuel Pressure Sensor (For Fuel Pipe)<br>6. ECM<br>7. Meter Circuit Plate<br>8. Wire Harness | BE–5<br>SF–36<br>SF–40<br>SF–42<br>SF–45<br>–<br>BE–4<br>– |
| Engine Coolant Temperature Gauge does not operate or abnormal operation | 1. Engine Coolant Temperature Receiver Gauge<br>2. Engine Coolant Temperature Sender Gauge<br>3. Meter Circuit Plate<br>4. Wire Harness | BE–5<br>BE–5<br>BE–4<br>– |
| All illumination lights do not light up. | 1. TAIL Fuse (I/P J/B No.1)<br>2. Light Control Rheostat<br>3. Wire Harness | –<br>BE–54*<br>– |
| Only one illumination light does not light up. | 1. Bulb<br>2. Wire Harness | –<br>– |

### COMBINATION METER
### WARNING LIGHTS:

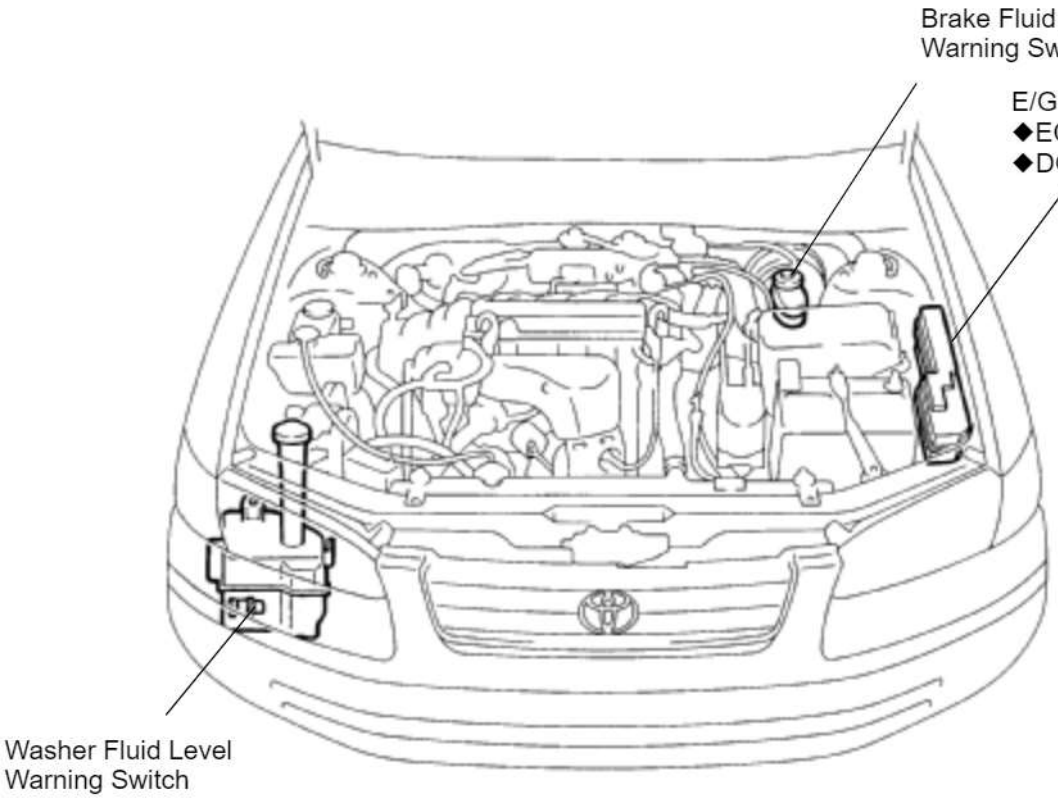
| Symptom | Suspect Area | See page |
|---|---|---|
| Warning lights do not light up. (Except Discharge, Open Door and SRS) | 1. GAUGE Fuse (I/P J/B No.1)<br>2. Meter Circuit Plate<br>3. Wire Harness | –<br>BE–4<br>– |
| Low Oil Pressure warning light does not light up. | 1. Bulb<br>2. Low Oil Pressure Warning Switch<br>3. Meter Circuit Plate<br>4. Wire Harness | –<br>BE–5<br>BE–4<br>– |
| Fuel Level warning light does not light up. | 1. Bulb<br>2. Fuel Temperature Sensor (For Delivery Pipe)<br>3. Fuel Temperature Sensor (For Fuel Tank)<br>4. Fuel Pressure Sensor (For Delivery Pipe)<br>5. Fuel Pressure Sensor (For Fuel Pipe)<br>6. ECM<br>7. Meter Circuit Plate<br>8. Wire Harness | –<br>SF–36<br>SF–40<br>SF–42<br>SF–45<br>–<br>BE–4<br>– |

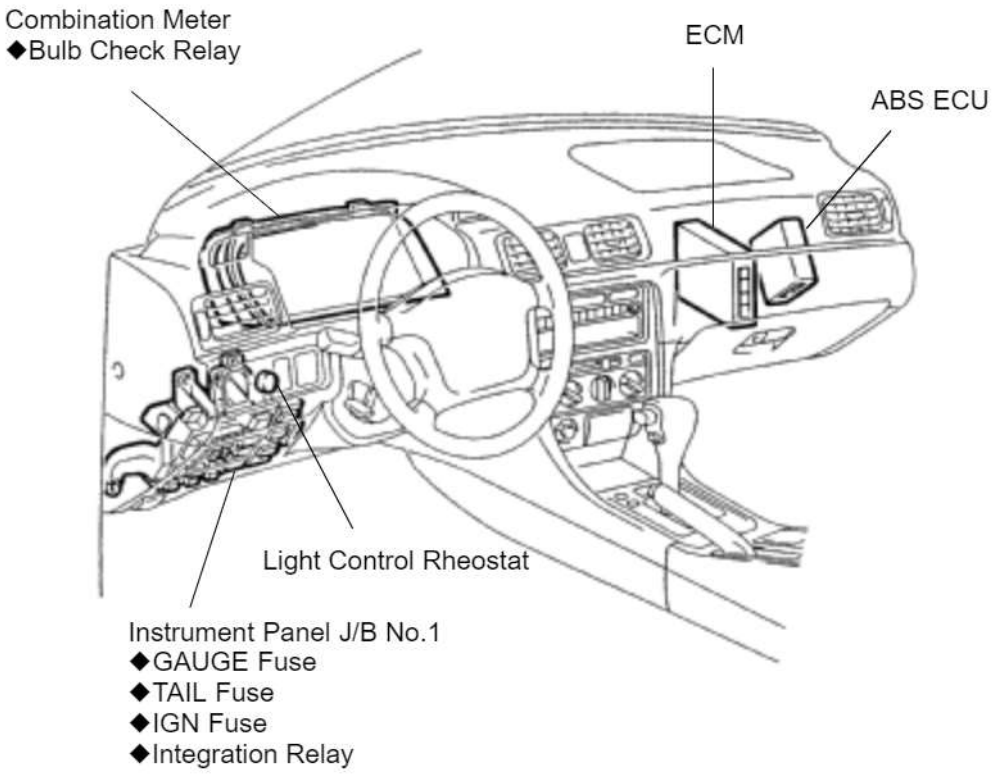
*: See Pub. No. RM654U

# COMBINATION METER

BE0AI-04

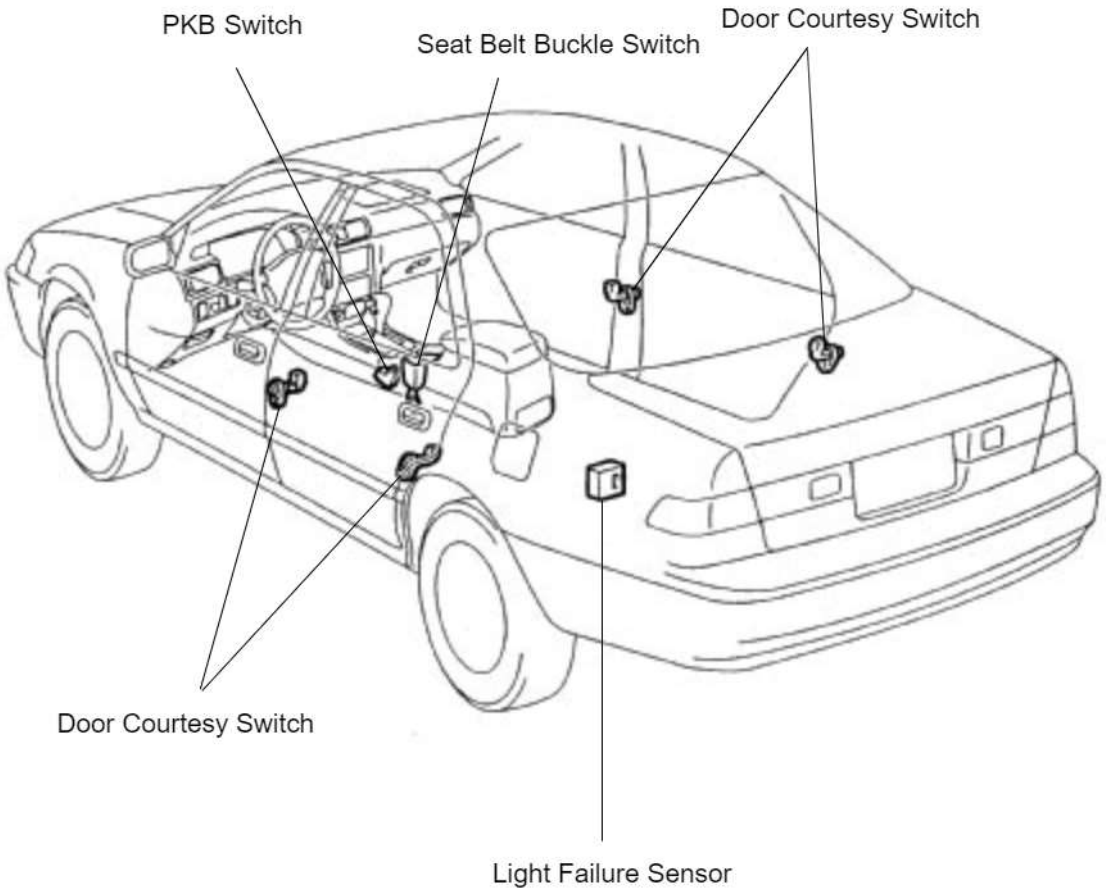
## LOCATION

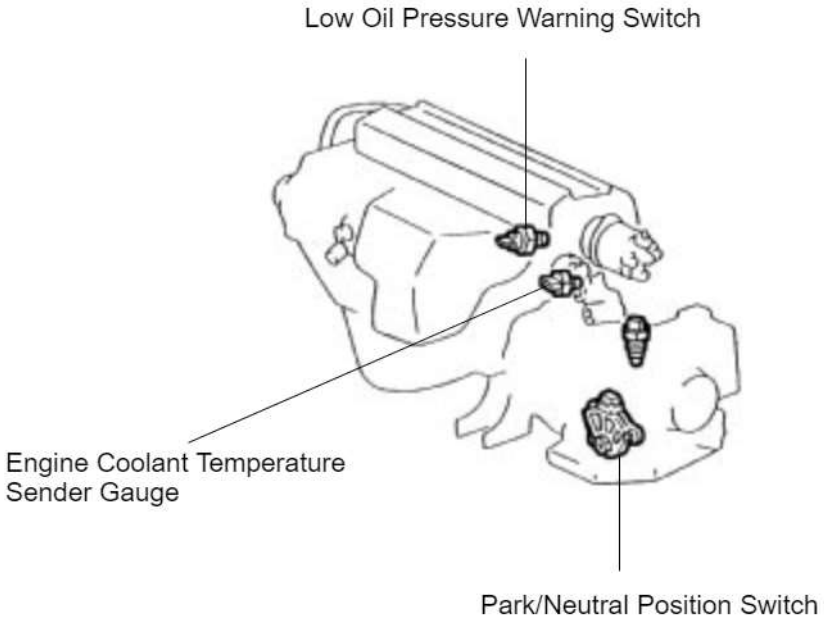



N

I08447


PKB Switch
Seat Belt Buckle Switch
Door Courtesy Switch
Door Courtesy Switch
Light Failure Sensor

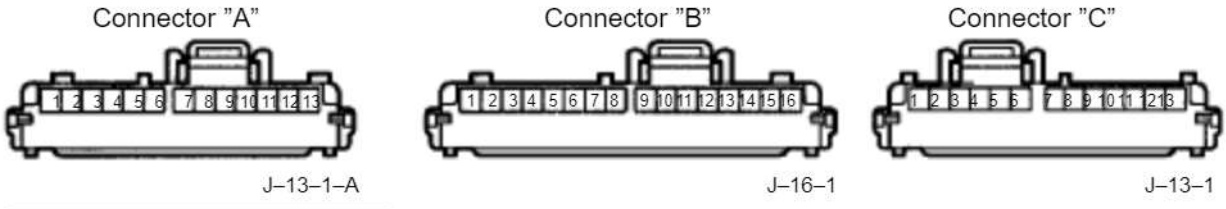

Low Oil Pressure Warning Switch
Engine Coolant Temperature
Sender Gauge
Park/Neutral Position Switch

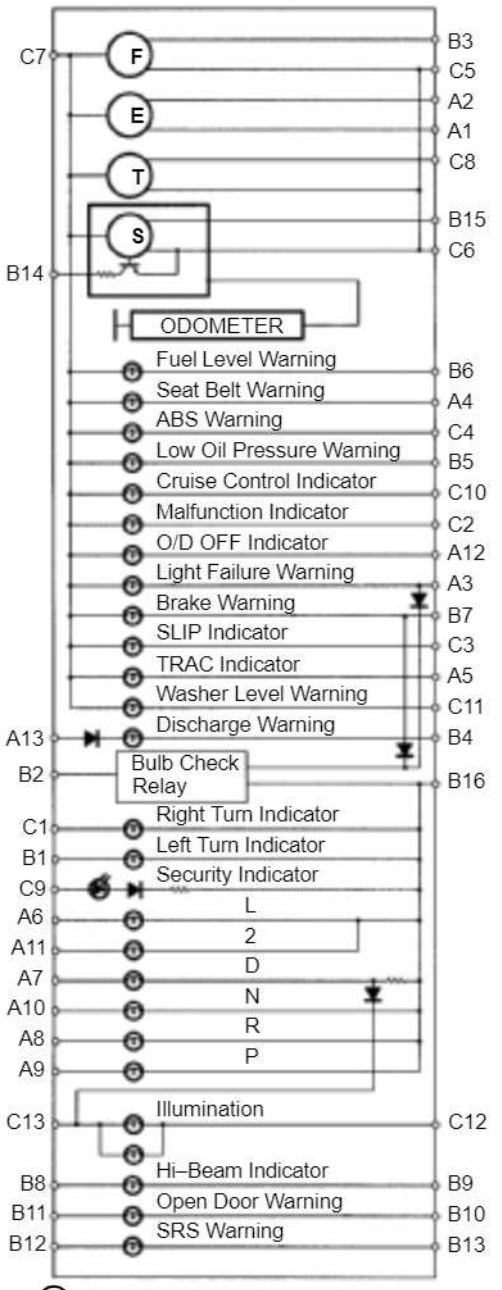
N

I08448

BE0AJ-04

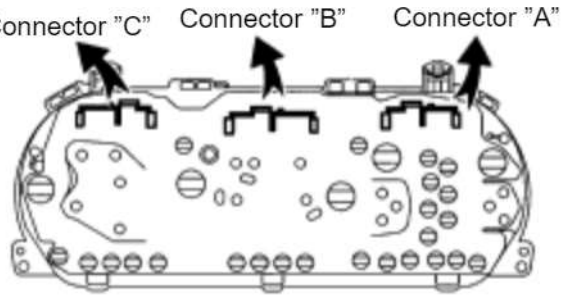
# CIRCUIT




Ⓕ : Fuel Gauge
Ⓔ : Engine Coolant Temperature Sender Gauge
Ⓣ : Tachometer
Ⓢ : Speedometer

N20107 N20108

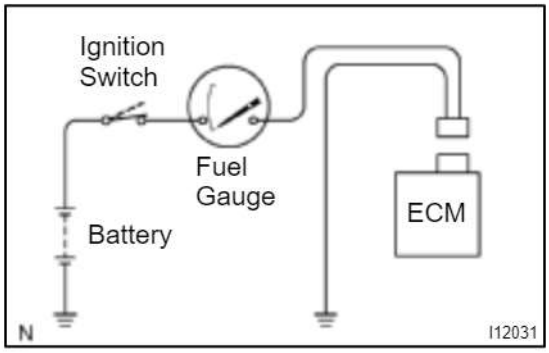



| No. | | Wire Harness Side |
|---|---|---|
| A | 1 | Engine coolant temperature sender gauge |
| | 2 | Ground |
| | 3 | Light failure sensor |
| | 4 | Integration relay |
| | 5 | Traction ECU |
| | 6 | Park/neutral position switch (A/T) |
| | 7 | Park/neutral position switch (A/T) |
| | 8 | Park/neutral position switch (A/T) |
| | 9 | Park/neutral position switch (A/T) |
| | 10 | Park/neutral position switch (A/T) |
| | 11 | Park/neutral position switch (A/T) |
| | 12 | O/D OFF switch (A/T) |
| | 13 | IGN fuse |
| B | 1 | Turn signal switch |
| | 2 | ST relay |
| | 3 | ECM |
| | 4 | Generator |
| | 5 | Oil pressure switch |
| | 6 | ECM |
| | 7 | Parking brake switch and brake fluid level warning switch |
| | 8 | Headlight dimmer switch |
| | 9 | Headlight dimmer switch |
| | 10 | Door courtesy switch |
| | 11 | DOME fuse |
| | 12 | ECU–B fuse |
| | 13 | Airbag sensor assembly |
| | 14 | ECM |
| | 15 | No.1 Vehicle speed sensor |
| | 16 | Ground |
| C | 1 | Turn signal switch |
| | 2 | ECM |
| | 3 | Traction ECU |
| | 4 | ABS ECU |
| | 5 | Ground |
| | 6 | No.1 Vehicle speed sensor |
| | 7 | GAUGE fuse |
| | 8 | Igniter |
| | 9 | Security ECU |
| | 10 | Cruise control ECU |
| | 11 | Washer fluid level warning switch |
| | 12 | Light control rheostat |
| | 13 | TAIL fuse |

Z18937

BE16U-01

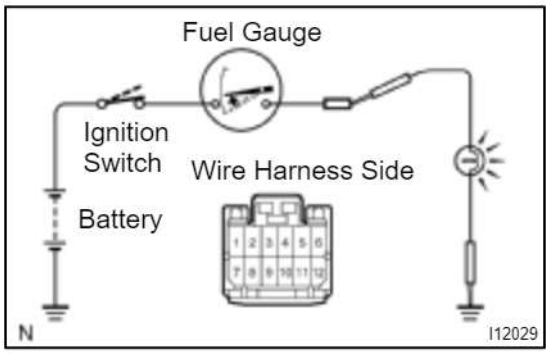
# INSPECTION




## 1. INSPECT FUEL RECEIVER GAUGE OPERATION

(a) Disconnect the connector from the ECM.

(b) Turn the ignition switch ON, check that the receiver gauge needle indicates EMPTY.



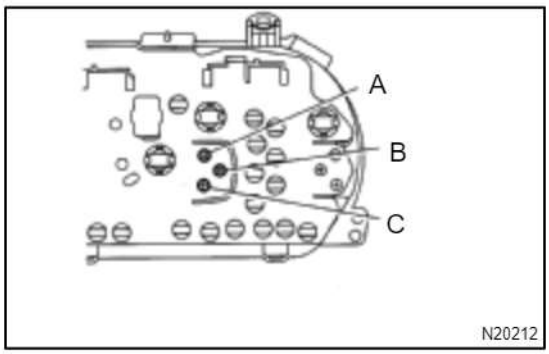

(c) Connect terminals 2 on the wire harness side connector through a 3.4–W test bulb.

(d) Turn the ignition switch ON, check that the bulb lights up and the receiver gauge needle moves towards the full side.

HINT:

Because of the silicon oil in the gauge, it will take a short time for needle to stabilize.

If operation is not as specified, inspect the receiver gauge resistance.




## 2. INSPECT FUEL RECEIVER GAUGE RESISTANCE

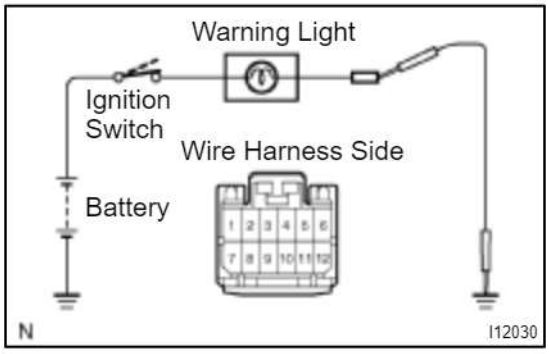
Measure the resistance between terminals.

| Tester connection | Resistance (Ω) |
|---|---|
| A – B | Approx. 270.1 |
| A – C | Approx. 141.3 |
| B – C | Approx. 128.8 |

If resistance value is not as specified, replace the receiver gauge.

## 3. INSPECT FUEL SENDER GAUGE RESISTANCE

**(See page SF–36)**




## 4. INSPECT FUEL LEVEL WARNING LIGHT

(a) Disconnect the connector from the sender gauge.

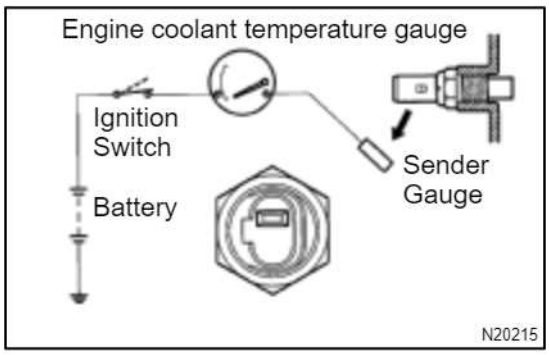
(b) Connect terminals 8 on the wire harness side connector.

(c) Turn the ignition switch ON, check that the warning light lights up.

If the warning light does not light up, test the bulb or inspect wire harness.

## 5. INSPECT FUEL LEVEL WARNING SWITCH

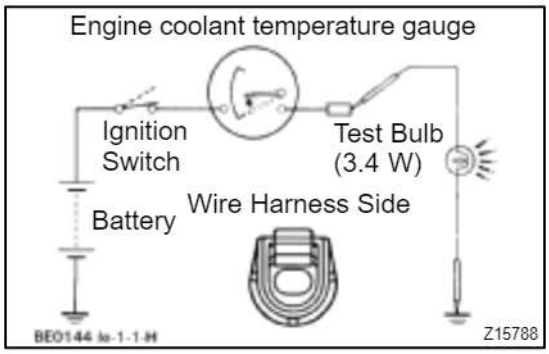
**(See page SF–40)**




**6. INSPECT ENGINE COOLANT TEMPERATURE RECEIVER GAUGE OPERATION**

(a) Disconnect the connector from the sender gauge.

(b) Turn the ignition switch ON and check that the receiver gauge needle indicates COOL.



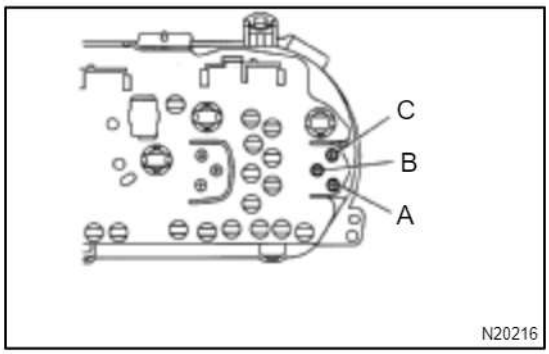

(c) Ground terminal on the wire harness side connector through a 3.4–W test bulb.

(d) Turn the ignition switch ON, and check that the bulb lights up and the receiver gauge needle moves to the hot side.

If operation is as specified, replace the sender gauge.

Then, recheck the system.

If operation is not as specified, measure the receiver gauge resistance.




**7. INSPECT ENGINE COOLANT TEMPERATURE RECEIVER GAUGE RESISTANCE**

Measure the resistance between terminals.

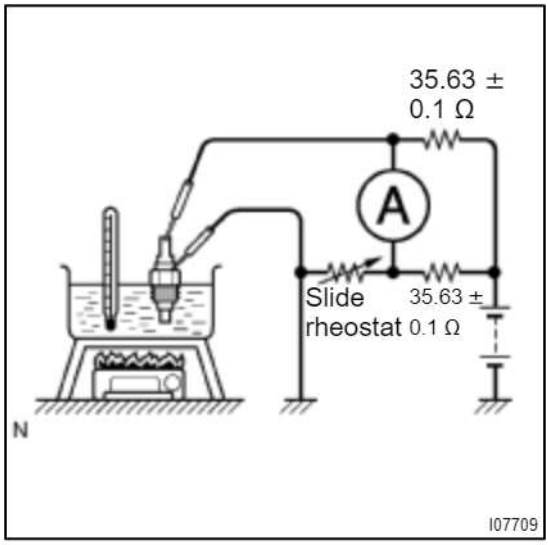
| Tester connection | Resistance (Ω) * |
|---|---|
| A – B | Approx. 175.7 |
| A – C | Approx. 54.0 |
| B – C | Approx. 229.7 |

*: This circuit includes the diode.

HINT:

Connect the test leads so that the current from the ohmmeter can flow according to the above order.

If resistance value is not as specified, replace the receiver gauge.

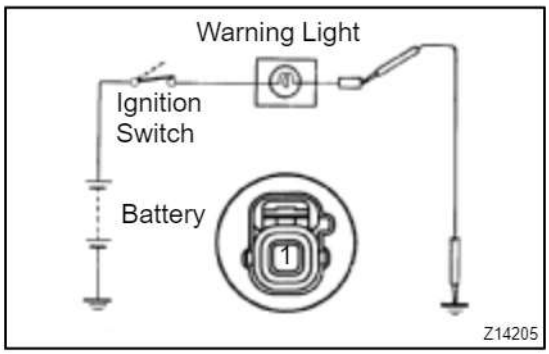



## 8. INSPECT ENGINE COOLANT TEMPERATURE SENDER GAUGE RESISTANCE

Connect the wire harness as shown in the illustration, and adjust the ammeter pointer to indicate "0" using the slide rheostat, then read the rheostat indication.

| Temperature °C (°F) | Resistance (Ω) |
|---|---|
| 50 (122.0) | 160 – 240 |
| 120 (248.0) | 17.1 – 21.2 |

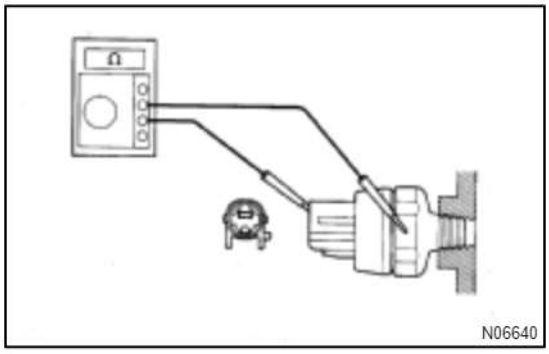
If resistance value is not as specified, replace the engine coolant temperature sender gauge.




## 9. INSPECT LOW OIL PRESSURE WARNING LIGHT

(a) Disconnect the connector from the warning switch and ground terminal on the wire harness side connector.
(b) Turn the ignition switch ON and check that the warning light lights up.

If the warning light does not light up, test the bulb.




## 10. INSPECT LOW OIL PRESSURE SWITCH

(a) Disconnect the connector from the switch.
(b) Check that continuity exists between terminal and ground with the engine stopped.
(c) Check that no continuity exists between terminal and ground with the engine running.

HINT:

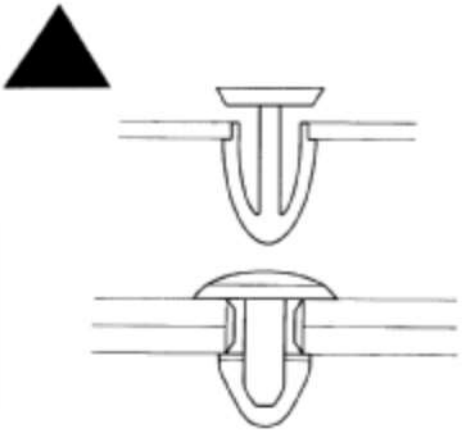
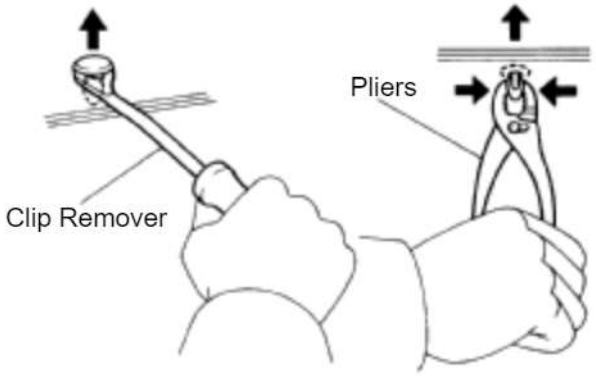
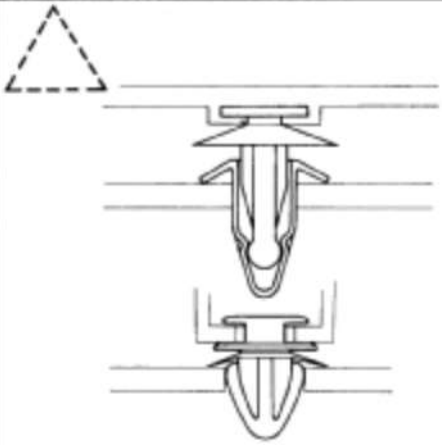
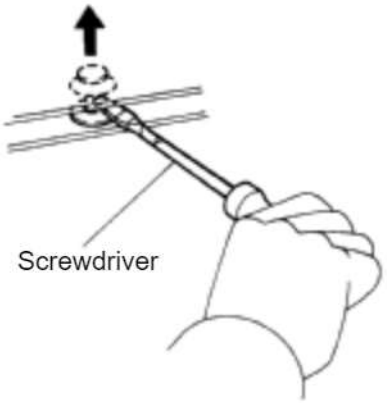
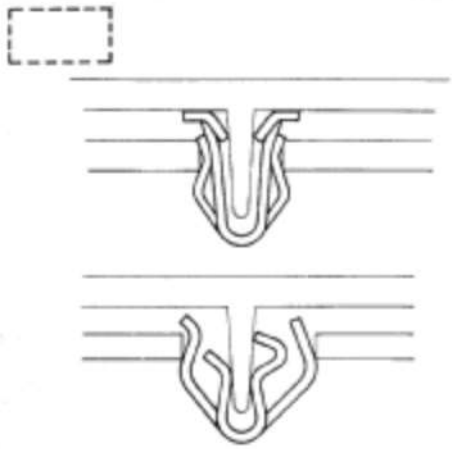
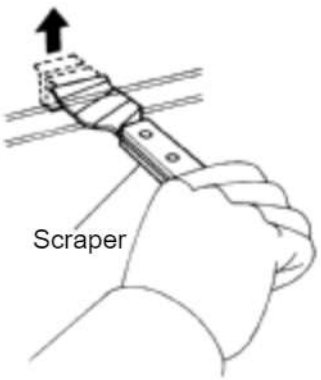
Oil pressure should be over 24.5 kPa (0.25 kgf/cm$^2$, 3.55 psi).
If operation is not as specified, replace the switch.

# CLIP

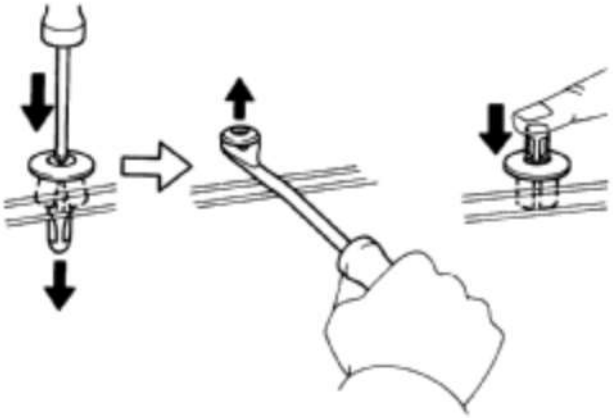
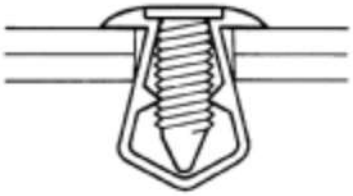
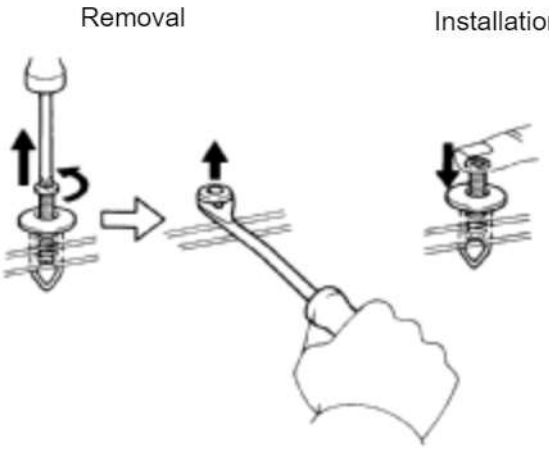
## REPLACEMENT

BO2DL-01

The removal and installation methods of typical clips used in body parts are shown in the table below.
HINT:
If the clip is damaged during the operation, always replace it with a new clip.

| Shape (Example) | Removal/Installation |
|---|---|
|  |  |
|  |  |
|  |  |

V00005

| Shape (Example) | Removal/Installation |
| --- | --- |
|  |  |
|  |  |

V00012

# SRS AIRBAG

## PRECAUTION

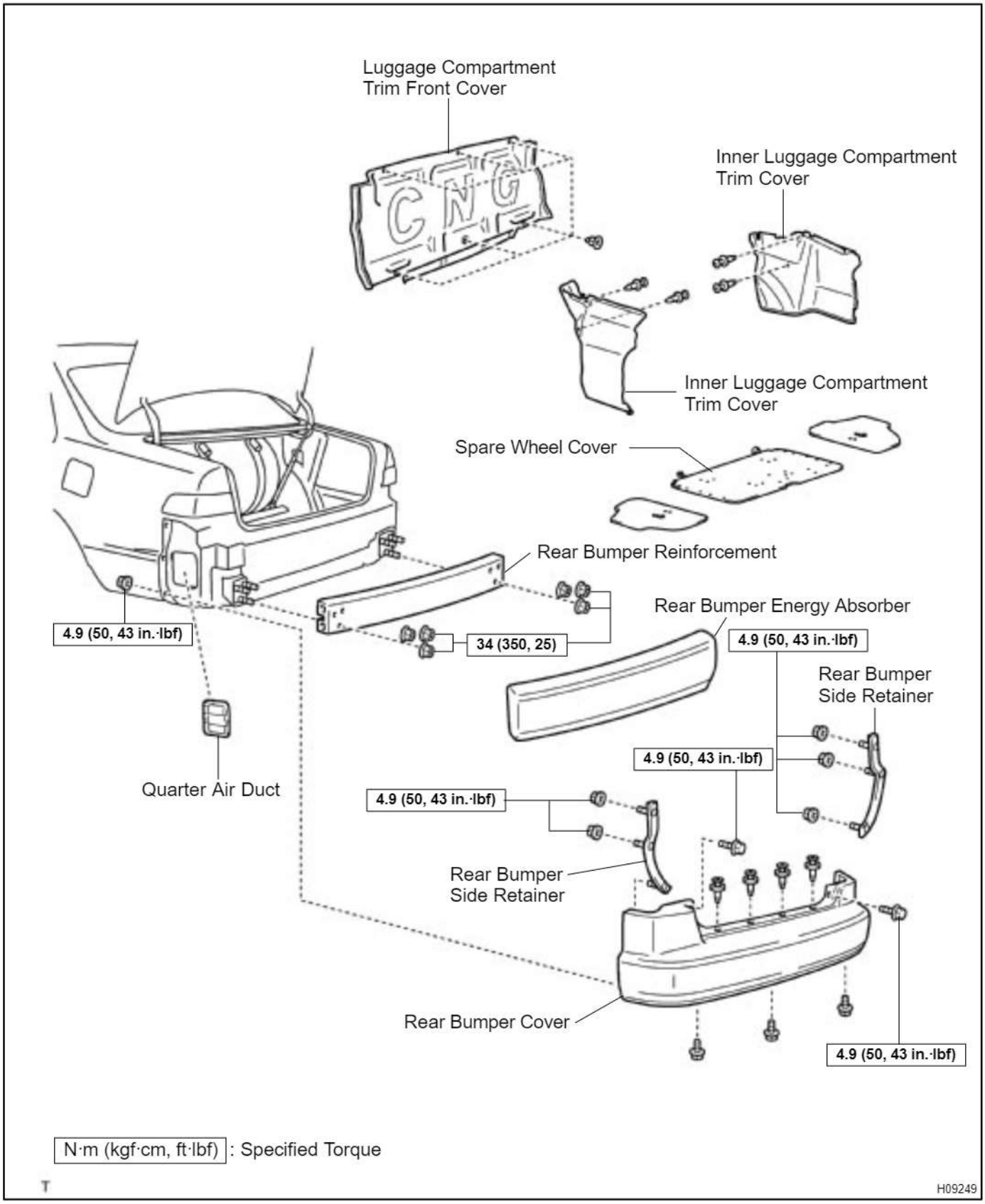
BO2DM-01

The CAMRY CNG is equipped with SRS (Supplemental Restraint System) such as the driver airbag, front passenger airbag and seat belt pretensioner. Failure to carry out service operation in the correct sequence could cause the SRS to unexpectedly deploy during servicing, possibly leading to a serious accident. Before servicing (including removal or installation of parts, inspection or replacement), be sure to read the precautionary notices in the RS section (See Pub. No. RM654U).

# REAR BUMPER

## COMPONENTS

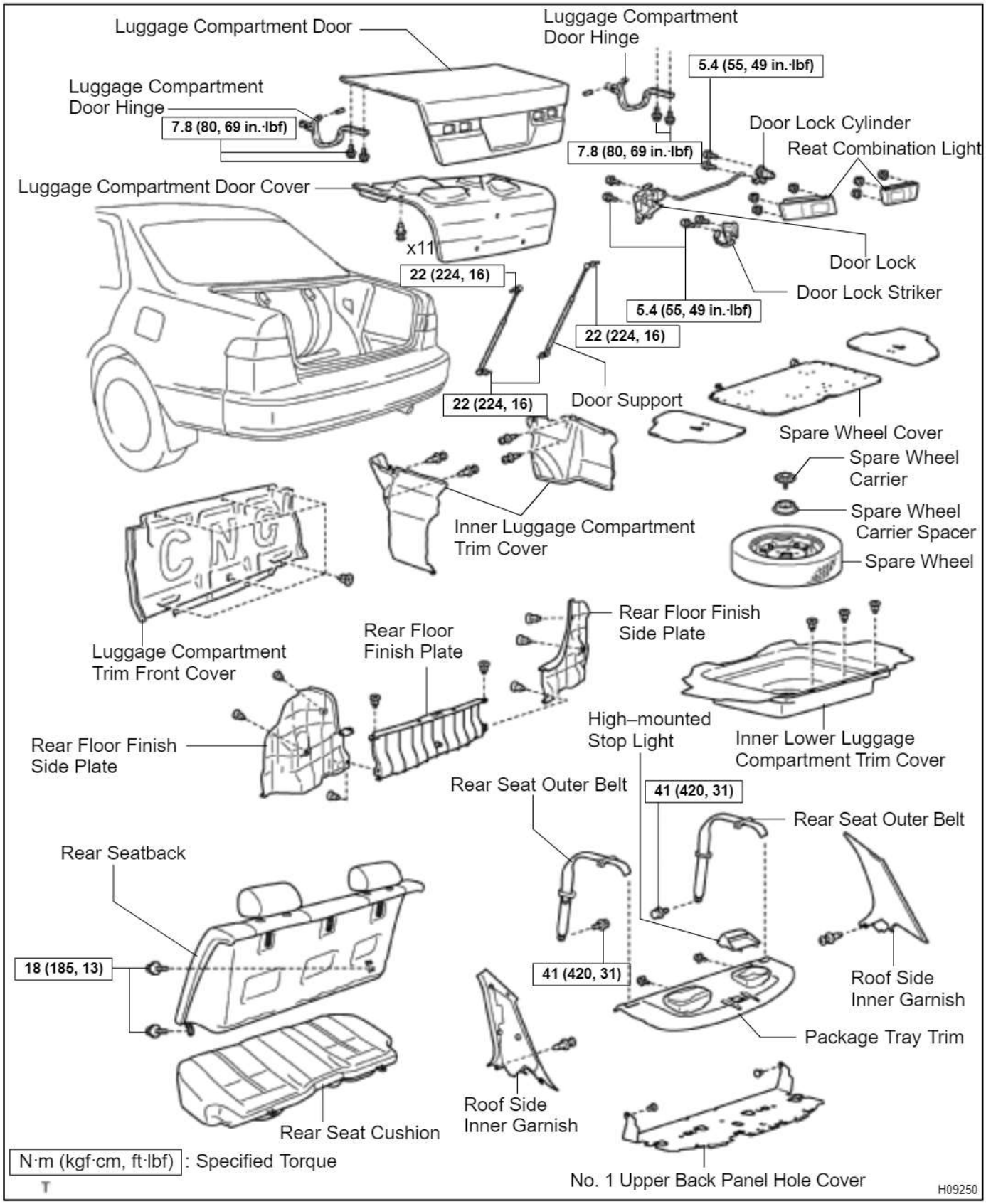
BO2DN-01



# LUGGAGE COMPARTMENT DOOR AND HINGE

## COMPONENTS

BO2DO-02



BO2DP-01

# REMOVAL

**1. REMOVE LUGGAGE COMPARTMENT DOOR COVER**

Remove the 11 clips and luggage compartment door cover.

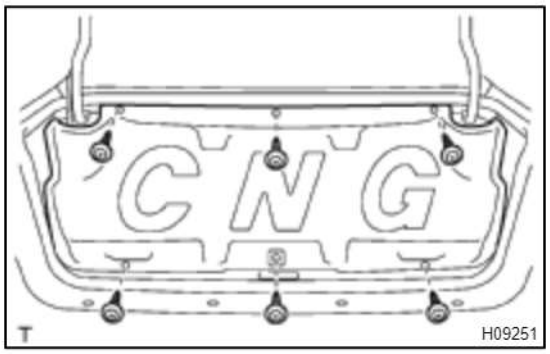
**2. REMOVE LUGGAGE COMPARTMENT DOOR**

(a) Disconnect the connectors.

(b) Using a clip remover, disconnect the clamps.

(c) Remove the 4 bolts and door.

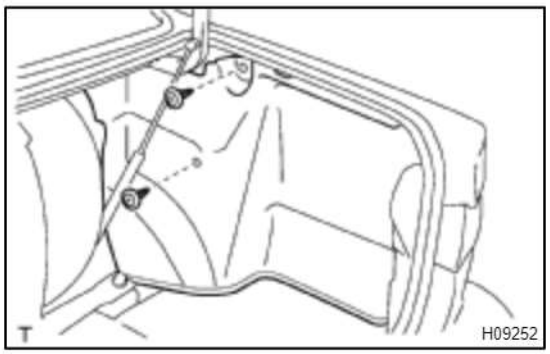
**Torque: 7.8 N·m (80 kgf·cm, 69 in.·lbf)**




**3. REMOVE LUGGAGE COMPARTMENT TRIM FRONT COVER**

Using a clip remover, remove the 6 clips and luggage compartment trim front cover.

**4. REMOVE SPARE WHEEL COVER**




**5. REMOVE INNER LUGGAGE COMPARTMENT TRIM COVER**

(a) Using a clip remover, remove the 2 clips and inner luggage compartment trim cover.

(b) Employ the same manner described above to the other side.

**6. REMOVE REAR FLOOR FINISH SIDE PLATES**

Using a clip remover, remove the 6 clips and 2 rear floor finish side plates.

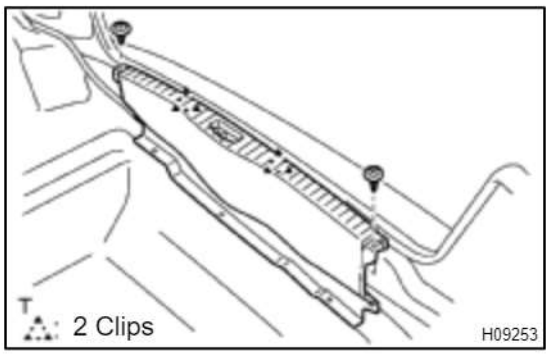
**7. REMOVE INNER LOWER LUGGAGE COMPARTMENT TRIM COVER**

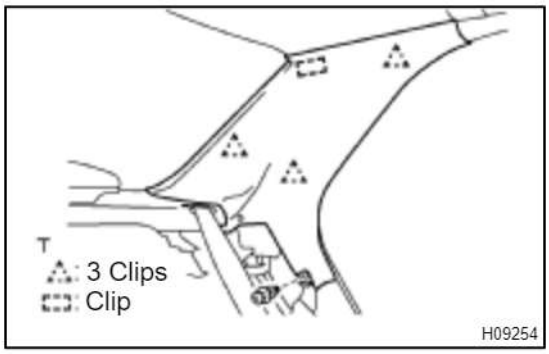
(a) Remove the spare wheel carrier, spare wheel carrier spacer and spare wheel.

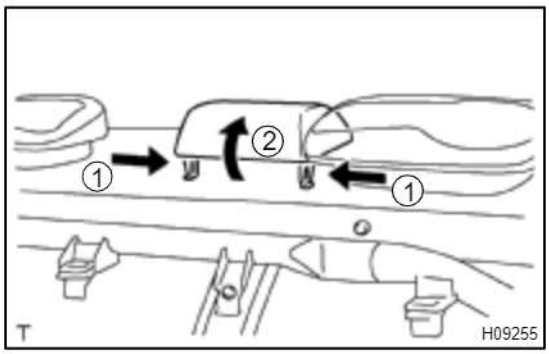
(b) Using a clip remover, remove the 3 clips and inner lower luggage compartment trim cover.

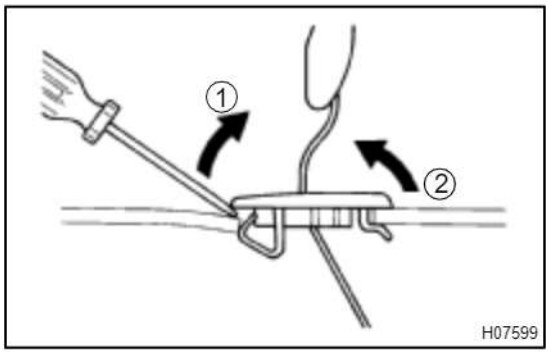
HINT:

Tape the screwdriver tip before use.




**8. REMOVE REAR FLOOR FINISH PLATE**

(a) Using a clip remover, remove the 2 clips.

HINT:

Tape the screwdriver tip before use.

(b) Insert a screwdriver between the rear floor finish plate and body to pry out the rear floor finish plate.

HINT:

Tape the screwdriver tip before use.

**9. REMOVE REAR SEAT CUSHION AND SEATBACK (See page BO–22)**

**10. REMOVE ROOF SIDE INNER GARNISH**

(a) Using a clip remover, remove the clip.

(b) Insert a screwdriver between the roof side inner garnish and body to pry it out.

HINT:

Tape the screwdriver tip before use.

(c) Employ the same manner described above to the other side.

**11. REMOVE HIGH–MOUNTED STOP LIGHT**

Remove the high–mounted stop light as shown in the illustration, then disconnect the connector.

**12. REMOVE PACKAGE TRAY TRIM**

(a) Remove the bolts and rear seat outer belt floor anchors.
**Torque: 41 N·m (420 kgf·cm, 31 ft·lbf)**

(b) Using a screwdriver, remove the seat belt bezels from the package tray trim.

HINT:

Tape the screwdriver tip before use.

(c) Using a hexagon wrench, remove the 2 hexagon screws.

(d) Remove the package tray trim, then disconnect the connectors.

HINT:

Remove the package tray trim through out the rear seat outer belt floor anchors from the hole in the package tray trim.

**13. REMOVE NO. 1 UPPER BACK PANEL HOLE COVER**

Remove the 2 clips and No. 1 upper back panel hole cover.

**14. REMOVE LUGGAGE COMPARTMENT DOOR SUPPORTS**

Remove the 4 bolts and luggage compartment door support.
**Torque: 22 N·m (224 kgf·cm, 16 ft·lbf)**

**15. REMOVE LUGGAGE COMPARTMENT DOOR HINGES**

Remove the pins and luggage compartment door hinges.

BO2DQ-01

# DISASSEMBLY

**1. REMOVE DOOR LOCK**

(a) Disconnect the control link.

(b) Remove the 2 bolts and door lock.

**Torque: 5.4 N·m (55 kgf·cm, 49 in.·lbf)**

**2. REMOVE REAR COMBINATION LIGHTS**

(a) Disconnect the connectors.

(b) Remove the 6 nuts and rear combination lights.

**3. REMOVE DOOR LOCK CYLINDER**

Remove the 2 bolts and door lock cylinder.

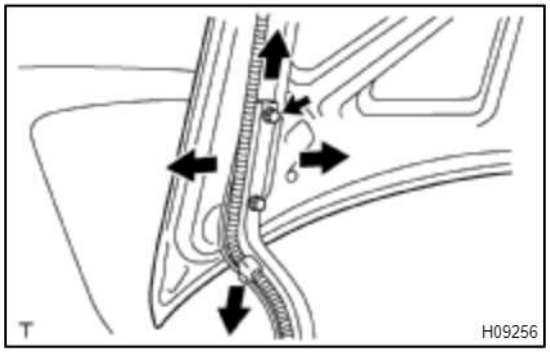
**Torque: 5.4 N·m (55 kgf·cm, 49 in.·lbf)**

BO2DR-01

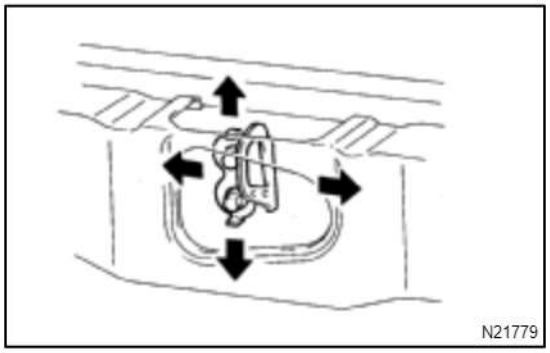
# ADJUSTMENT

## 1. ADJUST LUGGAGE COMPARTMENT DOOR

(a) Remove the 11 clips and luggage compartment door cover.




(b) Loosen the bolts to adjust the lggage compartment door in forward/rearward and left/right directions.
(c) Tighten the loosened bolts again.
**Torque: 7.8 N·m (80 kgf·cm, 69 in.·lbf)**
(d) Increase or decrease the number of washers between the hinge and door panel to adjust vertical direction.




## 2. ADJUST DOOR LOCK STRIKER

(a) Remove the rear floor finish side plates.
(b) Remove the rear floor finish plate.
(c) Loosen the 2 lock striker set bolts.
(d) Using a hammer and brass bar, tap the striker to adjust it.
(e) Tighten the loosened bolts again.
**Torque: 5.4 N·m (55 kgf·cm, 49 in.·lbf)**

BO2DS-01

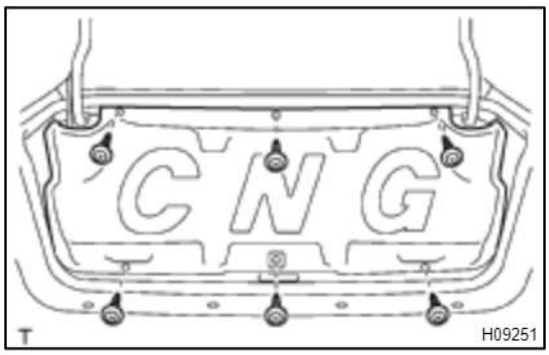
# REASSEMBLY

**Reassembly is in the reverse order of disassembly (See page BO–8).**

BO2DT-01

# INSTALLATION

**Installation is in the reverse order of removal (See page BO–6).**




# LUGGAGE COMPARTMENT DOOR SUPPORT

BO2DU-01

## REPLACEMENT

**1. REMOVE LUGGAGE COMPARTMENT TRIM FRONT COVER**

Using a clip remover, remove the 6 clips and luggage compartment trim front cover.

HINT:

Tape the screwdriver tip before use.

**2. REMOVE LUGGAGE COMPARTMENT DOOR SUPPORT**

(a) Remove the 2 bolts and luggage compartment door support from the luggage compartment door panel.

HINT:

While supporting the door with your hand, remove the support.

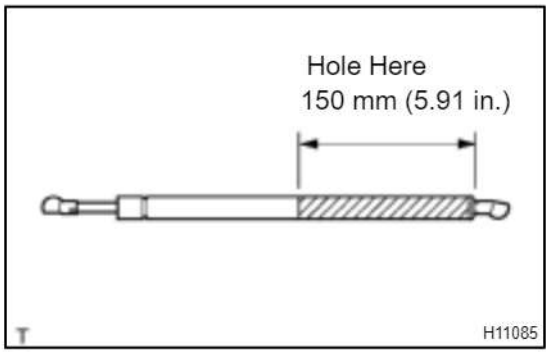
(b) Remove the 2 bolts and support from the body.

**3. IF NECESSARY, REPLACE LUGGAGE COMPARTMENT DOOR SUPPORT**

**NOTICE:**

**When handling the luggage compartment door support.**

- **Do not disassemble the luggage compartment door support because the cylinder is filled with pressurized gas.**




- **If the luggage compartment door support is to be replaced, drill a 2.0 – 3.0 mm (0.079 – 0.118 in.) hole in the bottom of the luggage compartment door support as shown in the illustration to completely release the high–pressure gas before disposing of it.**
- **When drilling, chips may fly out so work carefully.**
- **The gas is colorless, odorless and non–toxic.**
- **When working, handle the luggage compartment door support carefully. Never score or scratch the exposed part of the piston rod, and never allow paint or oil to get on it.**
- **Do not turn the piston rod and cylinder with the luggage compartment door support fully extended.**

**4. INSTALL LUGGAGE COMPARTMENT DOOR SUPPORT**

(a) Install the bolt and luggage compartment door support to the body.

**Torque: 22 N·m (224 kgf·cm, 16 ft·lbf)**

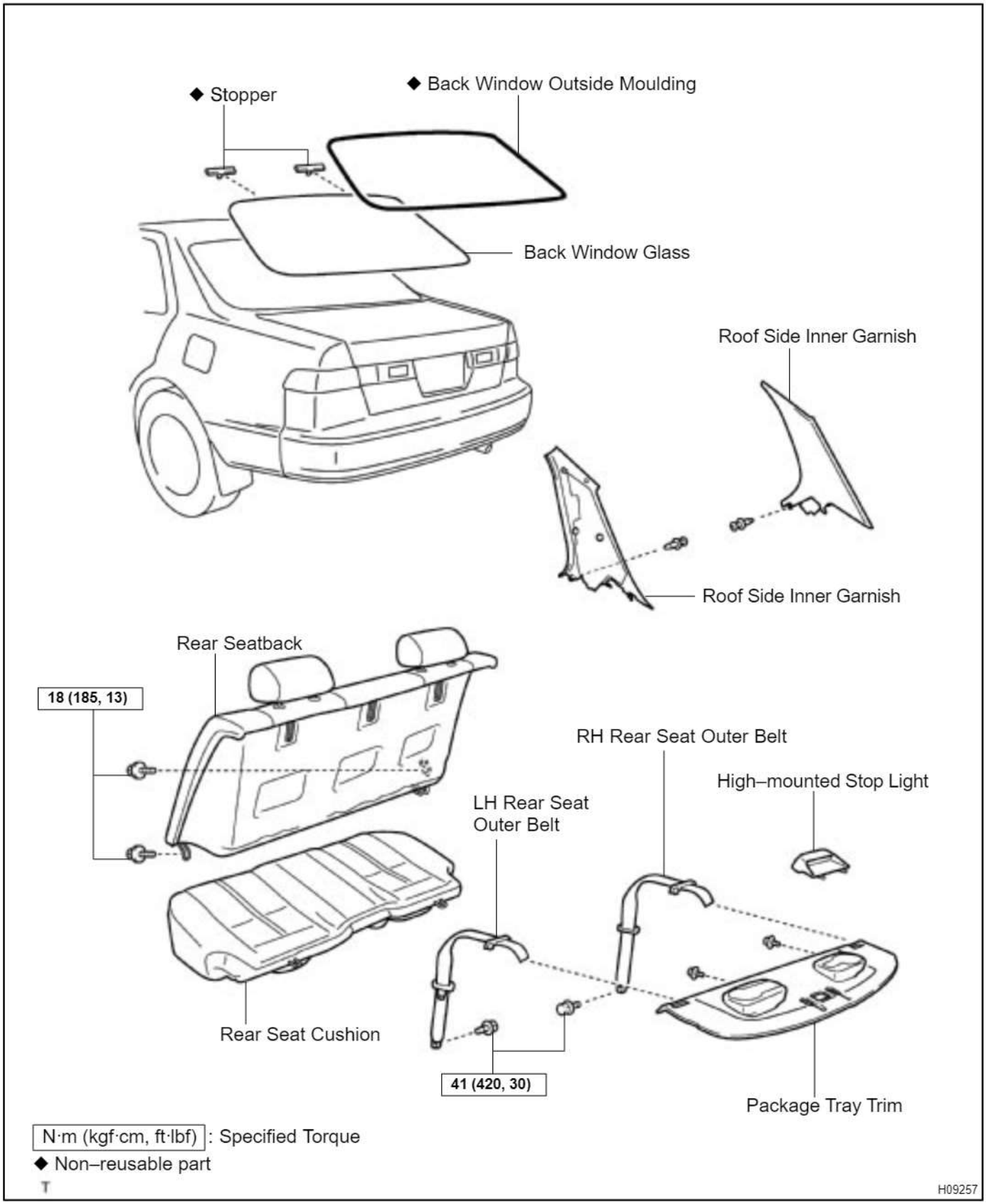
(b) Install the 2 bolts and luggage compartment door support to the luggage compartment door panel.
**Torque: 22 N·m (224 kgf·cm, 16 ft·lbf)**

**5. INSTALL LUGGAGE COMPARTMENT TRIM FRONT COVER**

# BACK WINDOW GLASS

## COMPONENTS

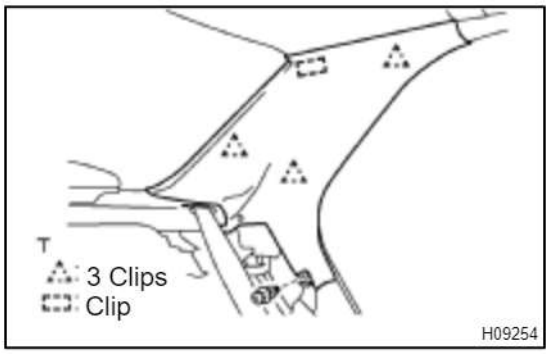
BO2E2-01



BO2E3-01

# REMOVAL

**1. REMOVE REAR SEAT CUSHION AND SEATBACK**
**(See page BO–22)**




**2. REMOVE ROOF SIDE INNER GARNISH**

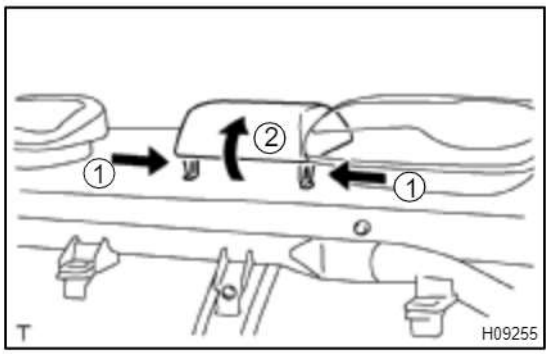
(a) Using a clip remover, remove the clip.

(b) Insert a screwdriver between the roof side inner garnish and body to pry it out.

HINT:

Tape the screwdriver tip before use.

(c) Employ the same manner described above to the other side.

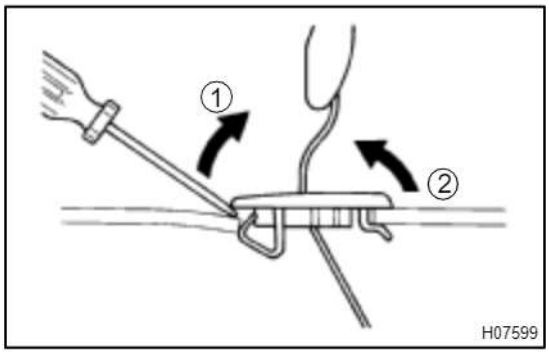



**3. REMOVE HIGH–MOUNTED STOP LIGHT**

Remove the high–mounted stop light as shown in the illustration, then disconnect the connector.

**4. REMOVE PACKAGE TRAY TRIM**

(a) Remove the bolts and rear seat belt floor anchors.




(b) Using a screwdriver, remove the seat belt bezels from the package tray trim.

HINT:

Tape the screwdriver tip before use.

(c) Using a hexagon wrench, remove the 2 hexagon screws.

(d) Remove the package tray trim, then disconnect the connectors.

HINT:

Remove the package tray trim through out the rear seat outer belt floor anchors from the hole in the package tray trim.

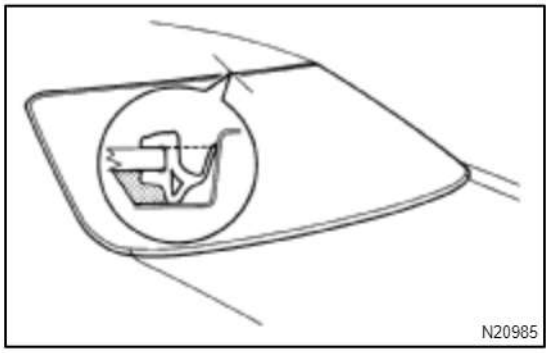
**5. REMOVE BACK WINDOW OUTSIDE MOULDING**

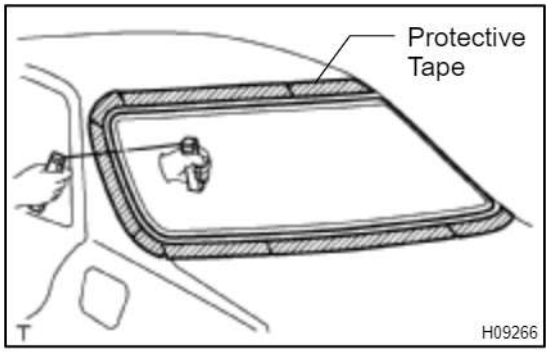
(a) Using a knife, cut off the moulding as shown in the illustration.

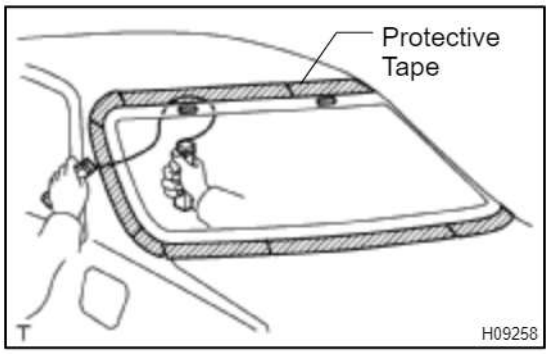
**NOTICE:**

**Do not damage the body with the knife.**

(b) Remove the remaining moulding.






**6. REMOVE BACK WINDOW GLASS**

(a) Disconnect the connector.

(b) Push piano wire through from the interior.

(c) Tie both wire ends to wooden blocks or similar objects.

HINT:

Apply protective tape to the outer surface to keep the surface from being scratched.

**NOTICE:**

**When separating the glass, take care not to damage the paint and exterior.**

(d) Cut the adhesive by pulling the piano wire with leaving the adhesive where the stoppers are.

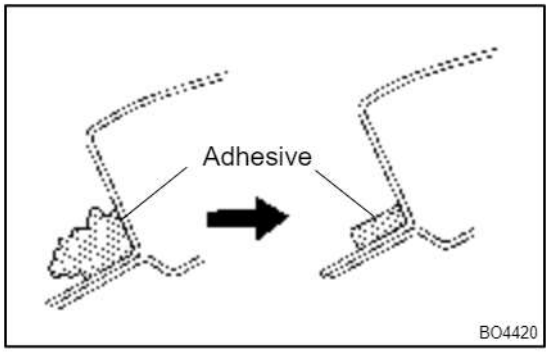
**NOTICE:**

**Leave as much of the adhesive on the body as possible when cutting off the glass.**

(e) Remove the glass.

BO2E4-01

# INSTALLATION




## 1. CLEAN AND SHAPE CONTACT SURFACE OF BODY

(a) Using a knife, cut away any rough areas on the body.

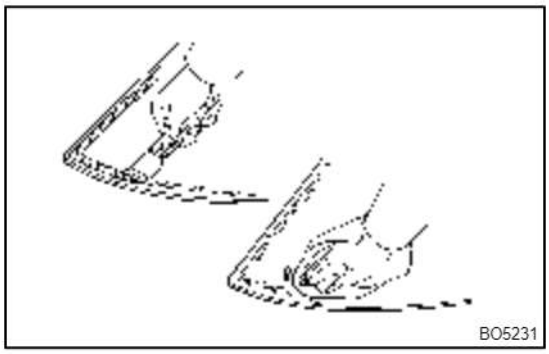
HINT:

Leave as much of the adhesive on the body as possible.

(b) Clean the cutting surface of the adhesive with a piece of shop rag saturated in cleaner.

HINT:

Even if all the adhesive has been removed, clean the body.




## 2. CLEAN REMOVED GLASS

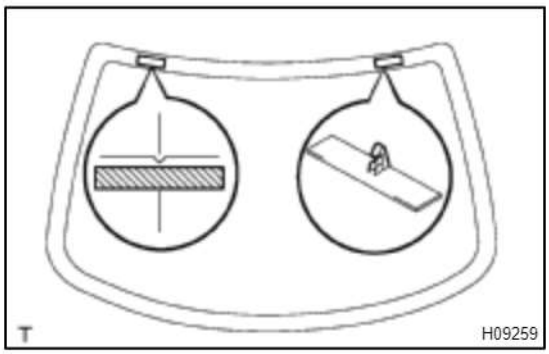
(a) Remove the damaged stoppers.

(b) Using a scraper, remove the adhesive sticking to the glass.

(c) Clean the glass with cleaner.

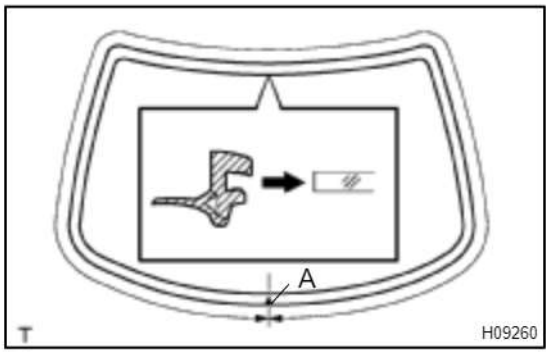
**NOTICE:**

- **Be careful not to damage the glass.**
- **Do not touch the glass face after cleaning it.**




## 3. INSTALL NEW STOPPERS

Attach new stoppers to the ceramic notch areas on the glass to set stoppers.

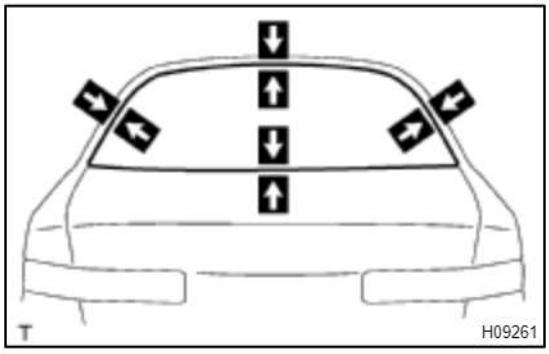



## 4. INSTALL NEW BACK WINDOW OUTSIDE MOULDING

Install a new back window outside moulding to the glass as shown in the illustration.

HINT:

- Install the back window outside moulding from the center of glass at the lower side of vehicle mark A indicates the ceramic notch for moulding installation.
- When installing the back window outside moulding, do not stretch it.



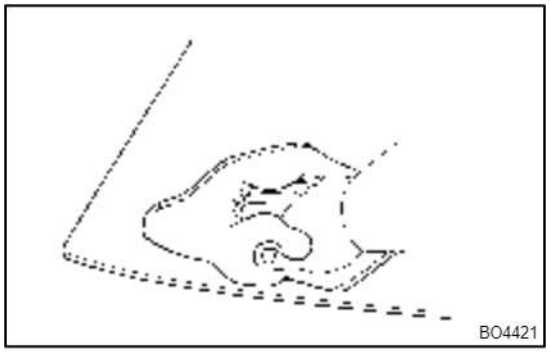

## 5. POSITION GLASS

(a) Place the glass in the correct position.

(b) Check that all contacting parts of the glass rim are perfectly even.

(c) Place reference marks on the glass and body.

(d) Remove the glass.

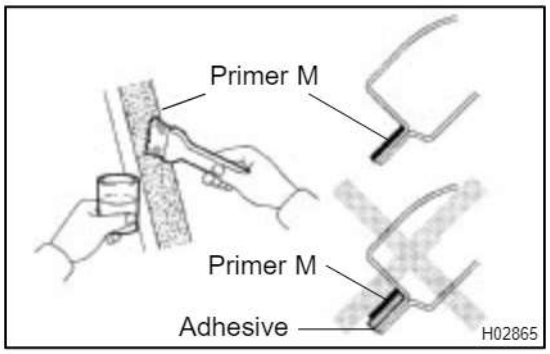



### 6. CLEAN CONTACT SURFACE OF GLASS

Using a cleaner, clean the contact surface which is black–colored area around the entire glass rim.

**NOTICE:**

**Do not touch the glass surface after cleaning it.**

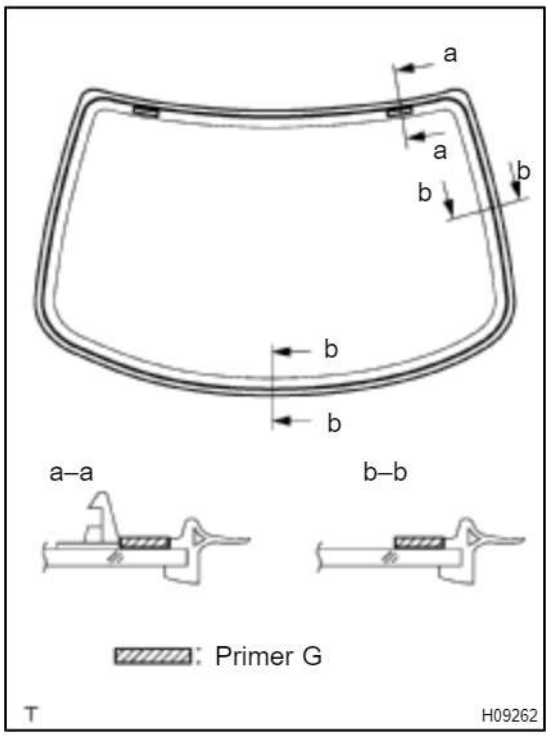



### 7. COAT CONTACT SURFACE OF BODY WITH PRIMER "M"

Using a brush, coat Primer M to the exposed part of body on the vehicle side.

**NOTICE:**

- **Let the coated primer dry for 3 minutes or more.**
- **Do not coat Primer M to the adhesive.**
- **Do not keep any of the opened Primer M for later use.**



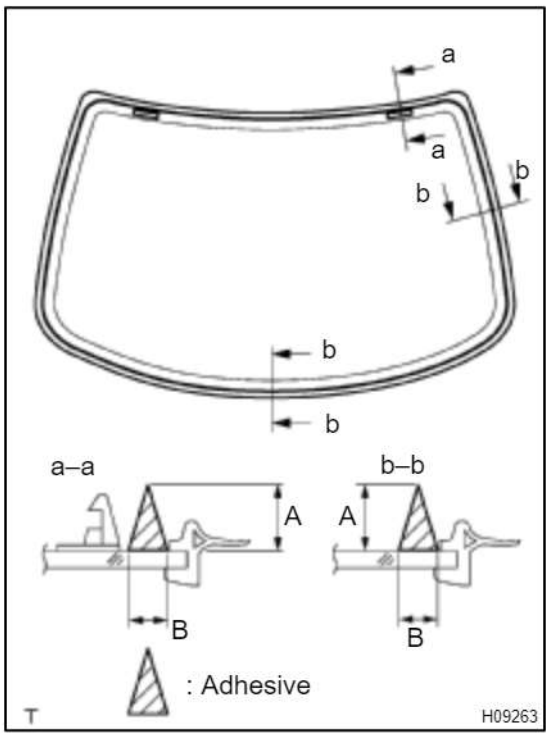

### 8. COAT CONTACT SURFACE OF GLASS WITH PRIMER "G"

(a) Using a brush or sponge, coat the contact surface with Primer G as shown in the illustration.

(b) When the primer is coated wrongly to the area other than the specified, wipe it off with a clean shop rag before primer dries.

**NOTICE:**

- **Let the primer coating dry for 3 minutes or more.**
- **Do not keep any of the opened Primer G for later use.**



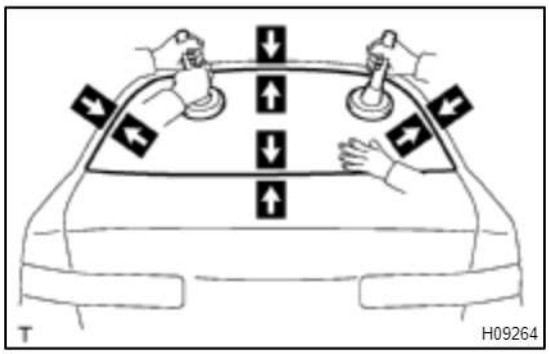

**9. APPLY ADHESIVE**

(a) Cut off the tip of the cartridge nozzle.
**Part No. 08850–00801 or equivalent**

HINT:
After cutting off the tip, use all adhesive within the time described in the table below.

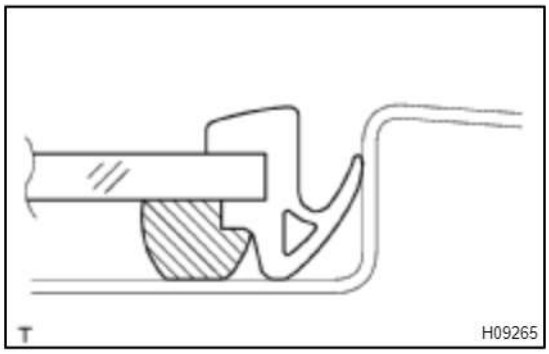
| Temperature | Tackfree time |
|---|---|
| 35 °C (95 °F) | 15 minutes |
| 20 °C (68 °F) | 100 minutes |
| 5 °C (41 °F) | 8 hour |

(b) Load the cartridge into the sealer gun.
(c) Apply adhesive to the glass as shown in the illustration.
**A: 12.0 mm (0.472 in.)**
**B: 8.0 mm (0.315 in.)**




**10. INSTALL GLASS**

(a) Position the glass so that the reference marks are lined up, and press in gently along the rim.




HINT:
Confirm that the moulding is attached to the body panel as shown in the illustration.

(b) Hold the back window glass in place securely with a protective tape or equivalent until the adhesive hardens.

**NOTICE:**
**Take care not to drive the vehicle during the time described in the table below.**

| Temperature | Minimum time prior to driving the vehicle |
|---|---|
| 35 °C (95 °F) | 1.5 hours |
| 20 °C (68 °F) | 5 hours |
| 5 °C (41 °F) | 24 hours |

**11. INSPECT FOR LEAK AND REPAIR**

(a) Conduct a leak test after the hardening time has elapsed.
(b) Seal any leak with sealant.
**Part No. 08833–00030 or equivalent**

**12. INSTALL REAR SIDE OF ROOF HEADLINING**

Install the rear side of roof headlining with the 2 clips.

**13. INSTALL ASSIST GRIPS**

**14. INSTALL PACKAGE TRAY TRIM**

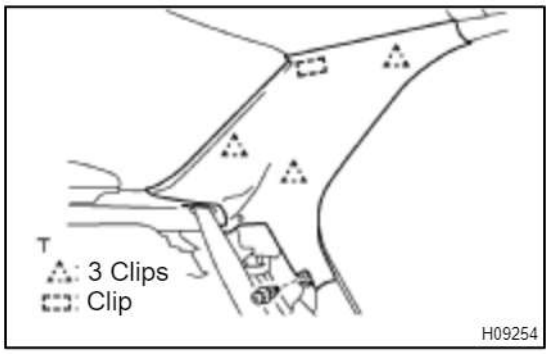
(a) Connect the connectors.

(b) Install the package tray trim with the 2 screws.

HINT:

Before installing the package tray trim pass the rear seat outer belt floor anchor through the hole in the package tray trim.

**15. INSTALL HIGH–MOUNTED STOP LIGHT**




**16. INSTALL ROOF SIDE INNER GARNISH**

(a) Install the roof side inner garnish with clip.

(b) Employ the same manner described above to the other side.

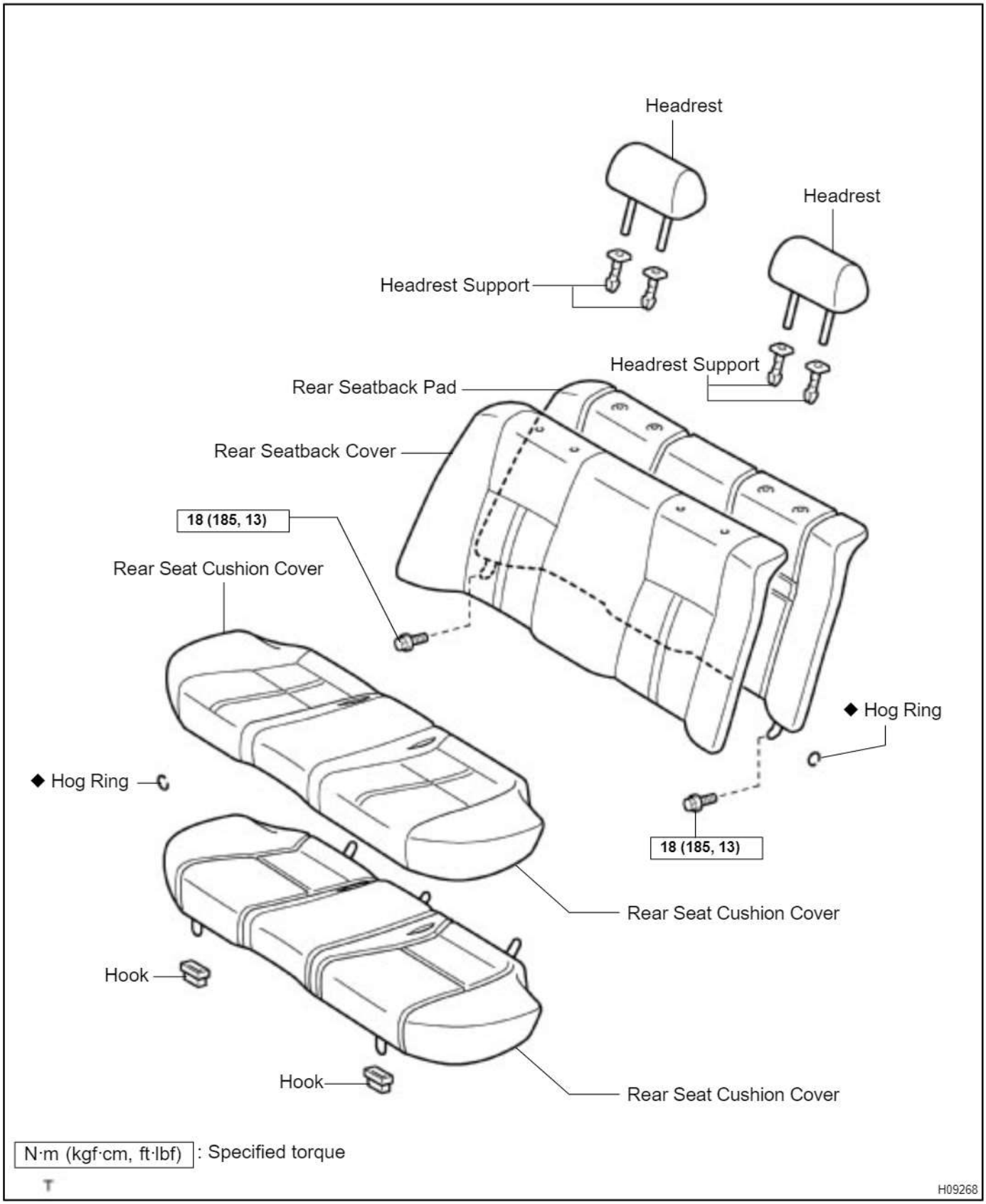
**17. INSTALL REAR SEAT CUSHION AND SEATBACK**

**(See page BO–25)**

# REAR SEAT

## COMPONENTS

BO2DV-02



BO2DW-01

# REMOVAL

## 1. REMOVE REAR SEAT CUSHION ASSEMBLY

Pull up the front part of seat cushion assembly to remove the rear seat cushion assembly.

HINT:

When removing the rear seat cushion assembly, pass the rear seat inner with center belt through the hole on the seatback.

## 2. REMOVE REAR SEATBACK ASSEMBLY

(a) Remove the 3 bolts.

**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**

HINT:

At the time of reassembly, please refer to the following item. When installing hog rings, take care to prevent wrinkles as little as possible.

(b) Pull up the seatback assembly to remove it.

BO2DX-01

# DISASSEMBLY

### 1. REMOVE HEADRESTS AND HEADREST SUPPORTS

### 2. REMOVE SEATBACK COVER

Remove the hog rings and seatback cover from the seatback pad.

### 3. REMOVE SEAT CUSHION COVER

Remove the hog rings and seat cushion cover from the seat cushion pad.

BO2DY-01

# REASSEMBLY

**Reassembly is in the reverse order of disassembly (See page BO–23).**

BO2DZ-02

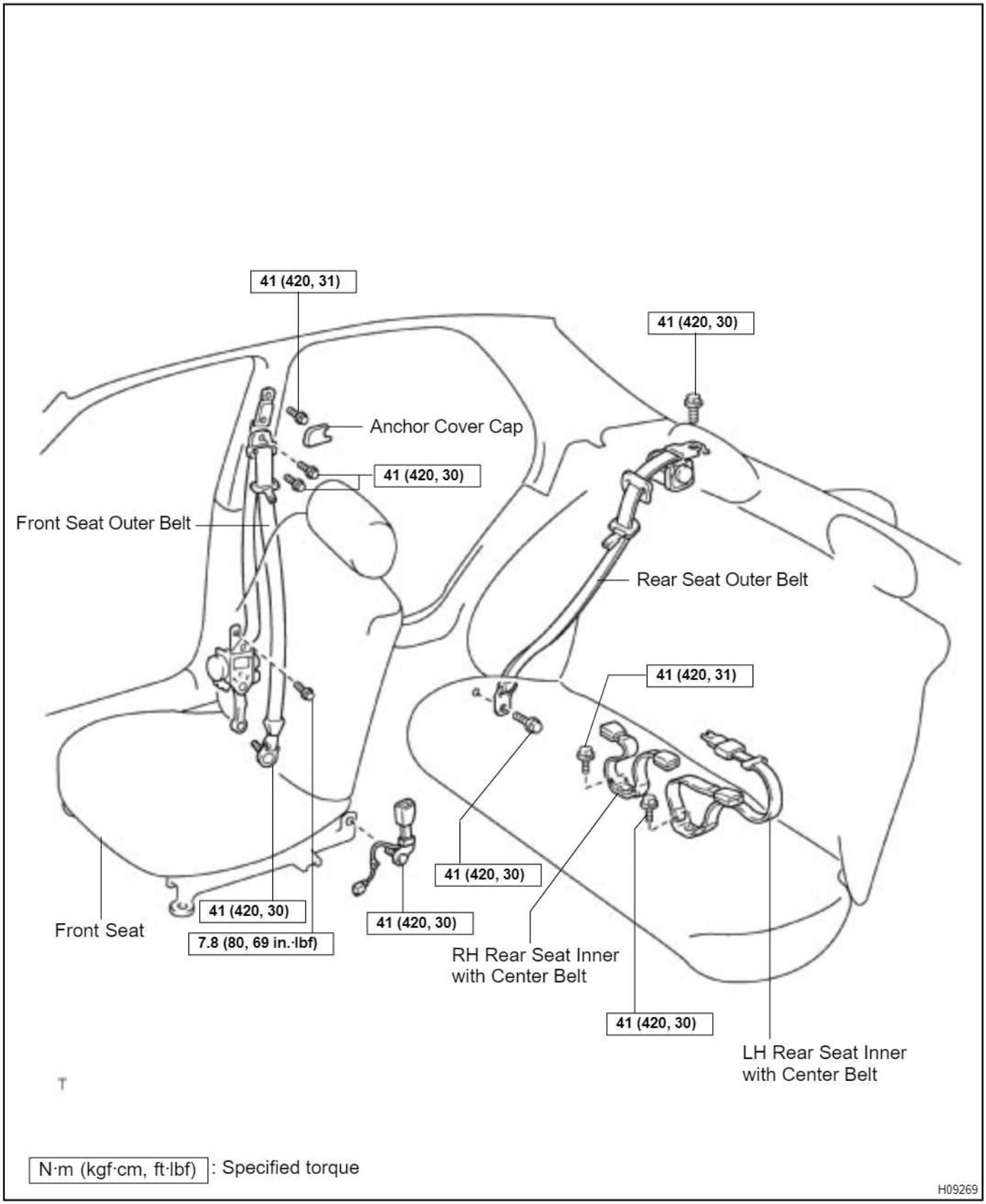
# INSTALLATION

**Installation is in the reverse order of removal (See page BO–22).**

# SEAT BELT

## COMPONENTS

BO2E0-01



BO2E1-01

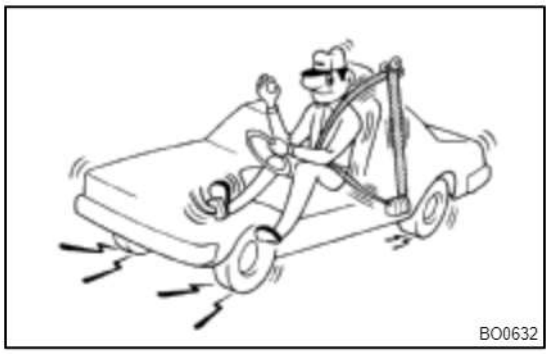
# INSPECTION

**CAUTION:**

**Replace the seat belt assembly (Outer belt, inner belt, bolts, nuts or sill–bar) if it has been used in a severe impact. The entire assembly should be replaced even if damage is not obvious.**

**1. All seat belt:**
**RUNNING TEST IN SAFE AREA**

(a) Fasten the front seat belts.



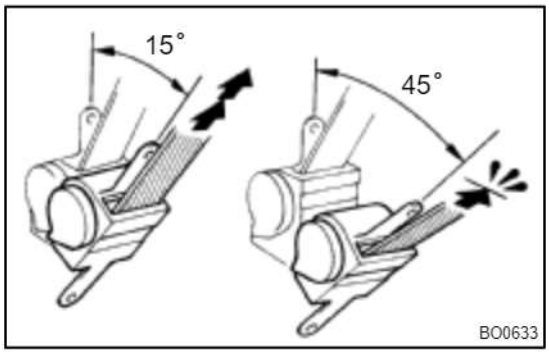

(b) Drive the car at 10 m/h (16 km/h) and slam on the brakes. Check that the belt locks and cannot be extended at this time.

HINT:

Conduct this test in a safe area. If the belt does not lock, remove the belt mechanism assembly and conduct the following static check. Also whenever installing a new belt assembly, verify the proper operation before installation.

**2. Driver's seat belt (ELR):**
**STATIC TEST**

(a) Make sure that the belt locks when pulled out quickly.
(b) Remove the locking retractor assembly.
(c) Tilt the retractor slowly.



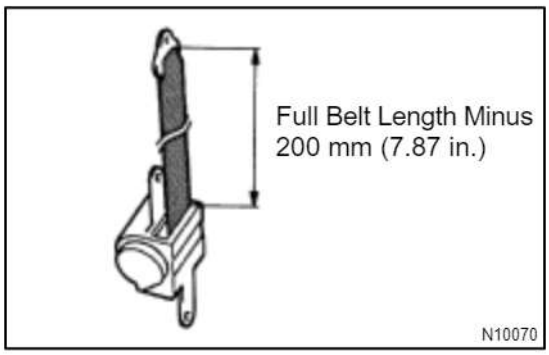

(d) Make sure that the belt can be pulled out at a tilt of 15 degrees or less, and cannot be pulled out over 45 degrees of tilt.

If a problem is found, replace the assembly.

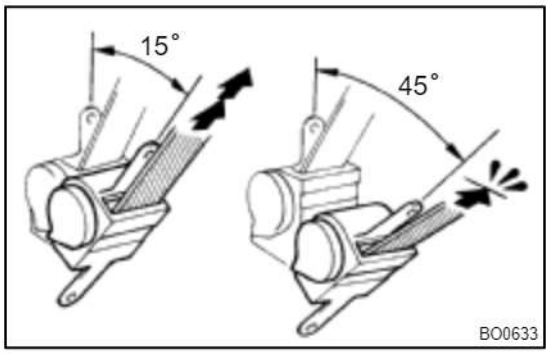
**3. Except driver's seat belt (ALR/ELR):**
**STATIC TEST**

(a) Make sure that the belt locks when pulled out quickly.
(b) Remove the locking retractor assembly.
(c) Pull out the whole belt and measure the length of the whole belt. Then retract the belt slightly and pull it out again.
(d) Make sure that the belt cannot be extended further.

If a problem is found, replace the assembly.

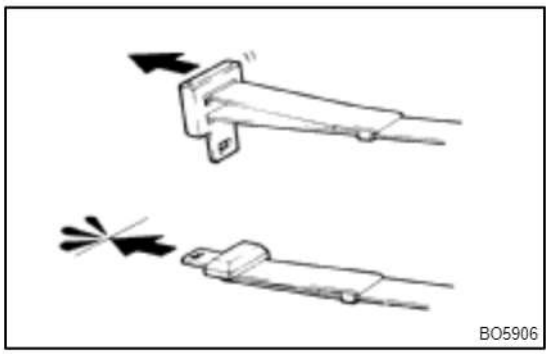



(e) Retract the whole belt, then pull out the belt until 200 mm (7.87 in.) of belt remains retracted.
(f) Tilt the belt slowly.




(g) Make sure that the belt can be pulled out at a tilt of 15 degrees or less, and cannot be pulled out at over 45 degrees of tilt.

If a problem is found, replace the assembly.




**4. Manual type:**
**TESTING**

(a) Adjust the belt to the proper length.
(b) Apply a firm load to the belt.
(c) Make sure that the belt is not extended.