ILLUSTRATION
REMOVAL

1. REMOVE UPPER INSTRUMENT PANEL ASSEMBLY

HINT:

Refer to the instructions for Removal of the upper instrument panel assembly.

2. REMOVE NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

3. REMOVE STOP LIGHT SWITCH ASSEMBLY

4. REMOVE STOP LIGHT SWITCH MOUNTING ADJUSTER

5. REMOVE BRAKE PEDAL RETURN SPRING

(a) Remove the brake pedal return spring from the brake pedal support sub-assembly and push rod pin.

6. REMOVE PUSH ROD PIN

(a) Remove the clip and push rod pin to separate the brake pedal sub-assembly from the push rod clevis.

7. SEPARATE DRIVER SIDE JUNCTION BLOCK ASSEMBLY

(a) Remove the bolt and nut, and separate the driver side junction block assembly.
8. REMOVE BRAKE PEDAL SUPPORT ASSEMBLY

(a) Remove the bolt and separate the brake pedal support assembly from the instrument panel reinforcement.

(b) Disengage the clamp and disconnect the connector from the brake pedal stroke sensor assembly.

(c) Remove the 4 nuts and brake pedal support assembly.

(d) Remove the nut from the brake pedal support assembly.
DISASSEMBLY

1. REMOVE BRAKE PEDAL STROKE SENSOR ASSEMBLY

2. REMOVE BRAKE PEDAL SUB-ASSEMBLY

(a) Remove the brake pedal shaft and nut to remove the brake pedal sub-assembly from the brake pedal support sub-assembly.

3. REMOVE BRAKE PEDAL SHAFT COLLAR

(a) Remove the brake pedal shaft collar from the brake pedal sub-assembly.

4. REMOVE BRAKE PEDAL BUSHING

(a) Remove the 2 brake pedal bushings from the brake pedal sub-assembly.

5. REMOVE BRAKE PEDAL PAD
ADJUSTMENT

1. INSPECT AND ADJUST BRAKE PEDAL HEIGHT

(a) Check the brake pedal height.

(1) Turn back the carpet.

(2) Turn back the dash silencer from the slit provided on the dash silencer.

(b) Adjust the brake pedal height.

(1) Remove the stop light switch assembly.

(2) Loosen the clevis lock nut.

(3) Adjust the brake pedal height by turning the push rod.

(4) Tighten the clevis lock nut.

Torque: 26 N·m (260 kgf·cm, 19ft·lb)

(5) Install and adjust the stop light switch assembly.

2. INSPECT AND ADJUST BRAKE PEDAL STROKE SENSOR ASSEMBLY

3. INSPECT BRAKE PEDAL FREE PLAY

(a) Depress the pedal until a slight resistance is felt. Measure the brake
pedal free play as shown in the illustration.

**Text in Illustration**

| *1 | Brake Pedal Free Play |

Pedal free play:

1.0 to 6.0 mm (0.0394 to 0.236 in.)

If the pedal free play is not as specified, check the stop light switch clearance. If the pedal free play is as specified, proceed to the Inspect Brake Pedal Reserve Distance procedure.

### 4. INSPECT BRAKE PEDAL RESERVE DISTANCE

**HINT:**

Measure the distance at the same point used for the brake pedal height inspection.

(a) Release the parking brake pedal.

(b) With the power switch on (READY), depress the brake pedal and measure the pedal reserve distance.

Pedal reserve distance from the floor panel at 196 N (20 kgf, 44.1 lbf):

More than 78.0 mm (3.07 in.)

If the distance is not as specified, troubleshoot the brake system.
REASSEMBLY

1. INSTALL BRAKE PEDAL PAD

2. INSTALL BRAKE PEDAL BUSHING
   (a) Apply lithium soap base glycol grease to 2 new brake pedal bushings.
   (b) Install the 2 brake pedal bushings to the brake pedal sub-assembly.

3. INSTALL BRAKE PEDAL SHAFT COLLAR
   (a) Install the brake pedal shaft collar to the brake pedal sub-assembly.

4. INSTALL BRAKE PEDAL SUB-ASSEMBLY
   (a) Install the brake pedal sub-assembly to the brake pedal support sub-assembly with the brake pedal shaft and nut.

   Torque: 17 N·m (176 kgf·cm, 13ft·lbf)

5. INSTALL BRAKE PEDAL STROKE SENSOR ASSEMBLY
1. INSTALL BRAKE PEDAL SUPPORT ASSEMBLY

(a) Install the nut to the brake pedal support assembly.

(b) Install the brake pedal support assembly with the 4 nuts.

Torque: **13 N·m (130 kgf·cm, 9ft·lbf)**

(c) Engage the clamp and connect the connector to the brake pedal stroke sensor assembly.

(d) Install the brake pedal support assembly to the instrument panel reinforcement with the bolt.

**Text in Illustration**

<table>
<thead>
<tr>
<th>*1</th>
<th>Bolt Width</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Bolt Variation</th>
<th>Bolt Width</th>
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</thead>
<tbody>
<tr>
<td>Bolt A</td>
<td>14 mm (0.551 in.)</td>
</tr>
<tr>
<td>Bolt B</td>
<td>12 mm (0.472 in.)</td>
</tr>
</tbody>
</table>

for Bolt A - Torque: **14 N·m (140 kgf·cm, 10ft·lbf)**
2. INSTALL DRIVER SIDE JUNCTION BLOCK ASSEMBLY

(a) Install the driver side junction block assembly with the bolt and nut.

Torque: **14 N·m (138 kgf·cm, 10ft·lbf)**

3. INSTALL PUSH ROD PIN

(a) Apply lithium soap base glycol grease to the push rod pin and installation hole of the brake pedal sub-assembly.

(b) Install the push rod pin and a new clip to connect the push rod clevis to the brake pedal sub-assembly.

4. INSTALL BRAKE PEDAL RETURN SPRING

for Bolt B - Torque: **24 N·m (241 kgf·cm, 17ft·lbf)**

HINT:

Two types of bolts each with a different torque specification are used.
(a) Install the brake pedal return spring to the brake pedal support sub-assembly and push rod pin.

5. INSTALL STOP LIGHT SWITCH MOUNTING ADJUSTER

6. INSTALL STOP LIGHT SWITCH ASSEMBLY

7. INSTALL UPPER INSTRUMENT PANEL ASSEMBLY

HINT:

Refer to the instructions for Installation of the upper instrument panel assembly.

8. INSPECT AND ADJUST BRAKE PEDAL

HINT:

9. INSTALL NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

10. PERFORM INITIALIZATION AND CALIBRATION OF LINEAR SOLENOID VALVE

HINT:
PRECAUTION

CAUTION:

- While the battery is connected, even if the power switch is off, the brake control system activates when the brake pedal is depressed or the door courtesy switch is turned on. Therefore during servicing of the brake system components, do not depress the brake pedal or open/close the doors while the battery is connected.
- The Techstream must be used when bleeding air. If not used, the air bleeding will be incomplete, which is hazardous and may lead to an accident.

NOTICE:

- Care must be taken to replace each part properly as it could affect the performance of the brake system and result in a driving hazard. Replace the parts with those having the same part number or equivalent.
- It is very important to keep parts and the area clean when repairing the brake system.
- If the vehicle is equipped with a mobile communication system, refer to Precaution in the INTRODUCTION section.
- Care must be taken when using magnets as they could affect the performance of the speed sensors.
- Make sure to disable brake control before disconnecting the brake lines.