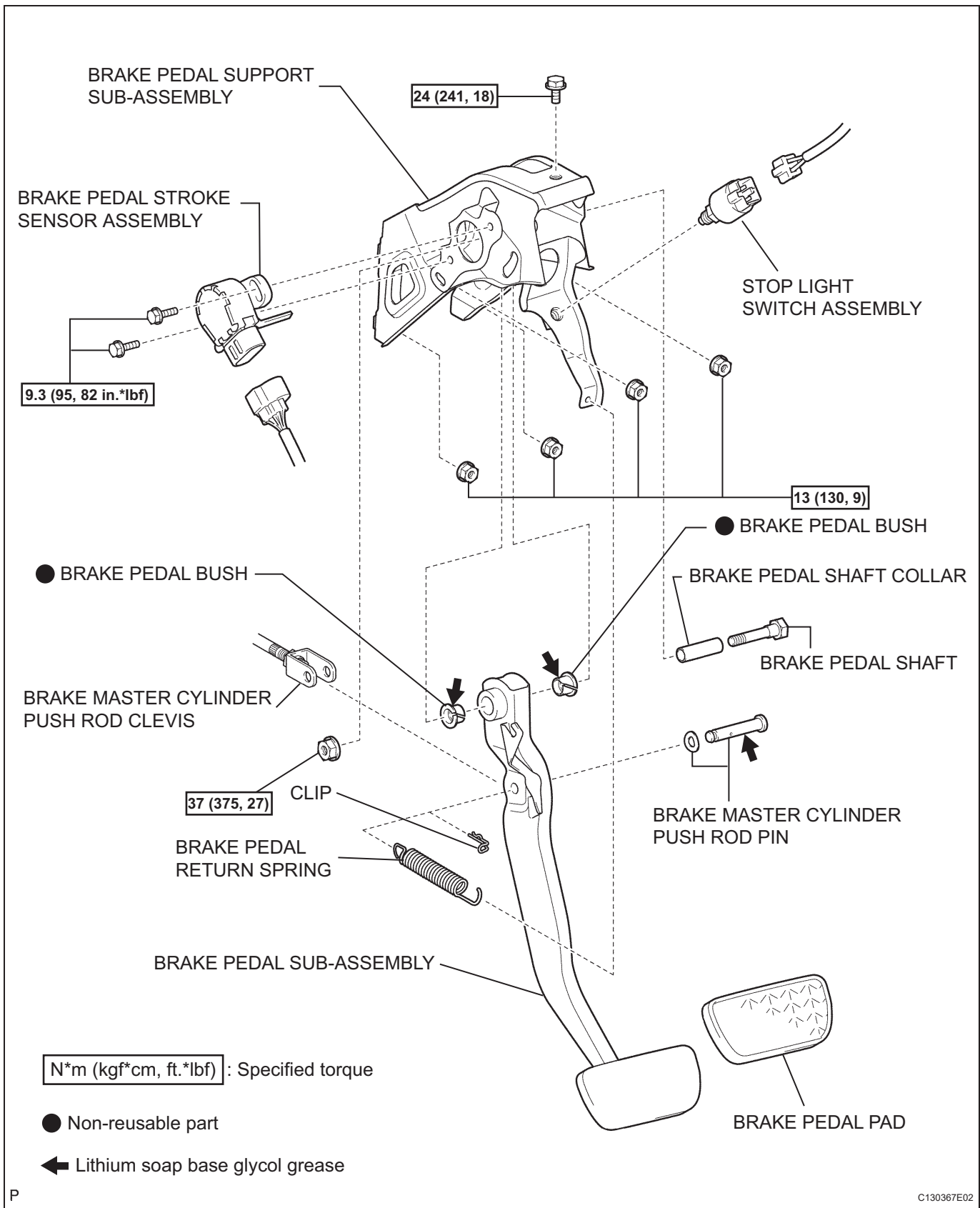


BRAKE PEDAL

COMPONENTS



REMOVAL

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. **REMOVE INSTRUMENT PANEL SUB-ASSEMBLY**

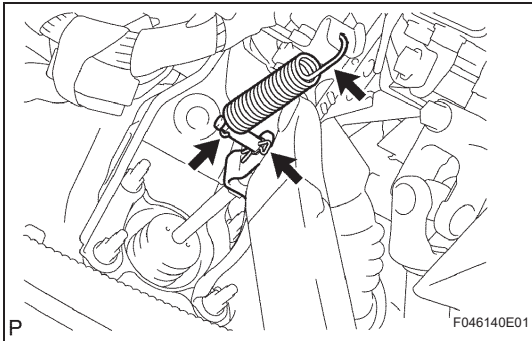
- (a) Remove the instrument panel (see page [IP-5](#)).

HINT:

Refer to the procedures from the removal of the No. 1 instrument panel register assembly up until the removal of the instrument panel sub-assembly.

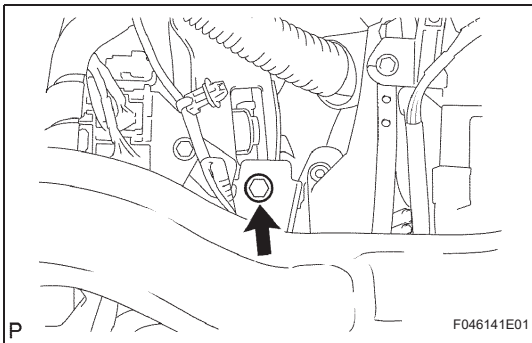
3. **REMOVE MASTER CYLINDER PUSH ROD CLEVIS**

- (a) Remove the brake pedal return spring.
- (b) Remove the clip and brake master cylinder push rod pin.
- (c) Separate the push rod clevis from the brake pedal.

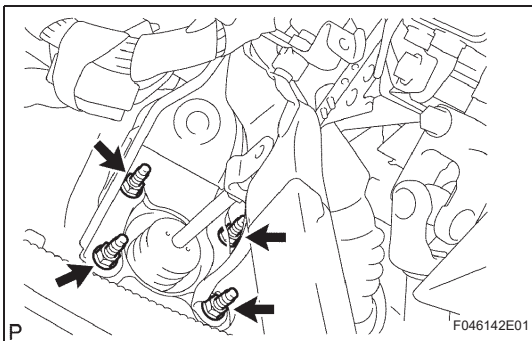


4. **REMOVE BRAKE PEDAL SUPPORT SUB-ASSEMBLY**

- (a) Disconnect the connector from the stop light switch.
- (b) Disconnect the connector from the brake pedal stroke sensor.
- (c) Remove the bolt from the instrument panel upper panel side.



- (d) Remove the 4 nuts and the brake pedal support.

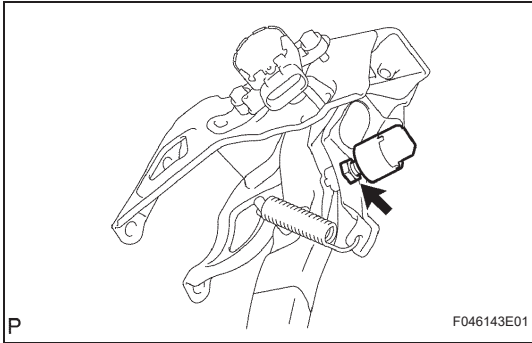


DISASSEMBLY

1. REMOVE BRAKE PEDAL PAD

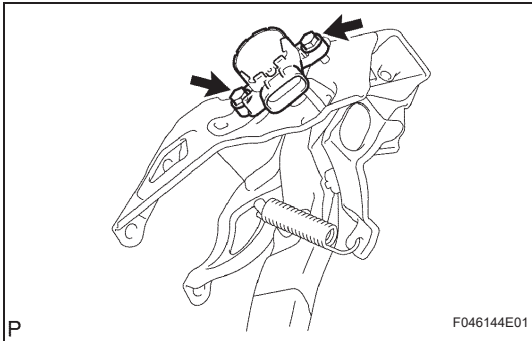
2. REMOVE STOP LIGHT SWITCH ASSEMBLY

- (a) Loosen the stop light switch lock nut and remove the stop light switch from the brake pedal support.



3. REMOVE BRAKE PEDAL STROKE SENSOR ASSEMBLY

- (a) Remove the 2 bolts and brake pedal stroke sensor from the brake pedal support.



4. REMOVE BRAKE PEDAL SUB-ASSEMBLY

- (a) Remove the nut from the brake pedal shaft.
- (b) Remove the brake pedal shaft and separate the brake pedal from the brake pedal support.
- (c) Remove the 2 brake pedal bushes from the brake pedal.
- (d) Remove the brake pedal shaft collar from the brake pedal shaft.

ADJUSTMENT

1. CHECK AND ADJUST BRAKE PEDAL HEIGHT

NOTICE:

Pull up the floor carpet and dash panel insulator, and then check and adjust the brake pedal height.

- (a) Remove the lower instrument panel finish panel (see page [IP-6](#)).

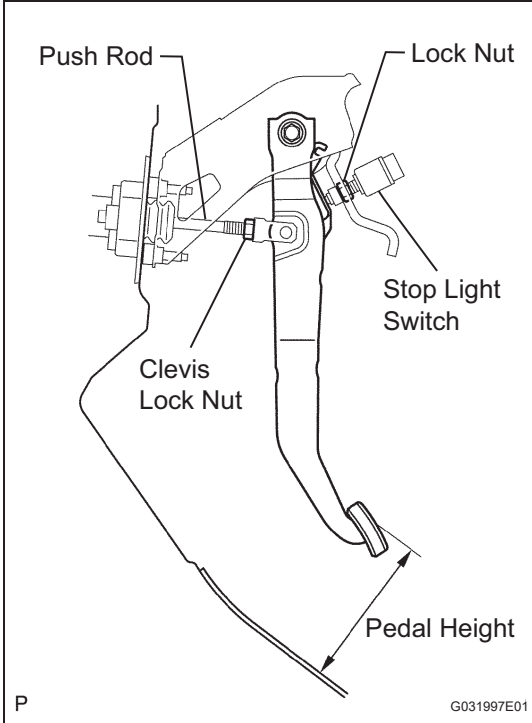
- (b) Inspect brake pedal height.

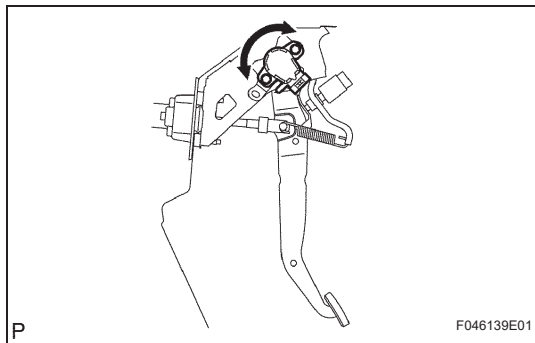
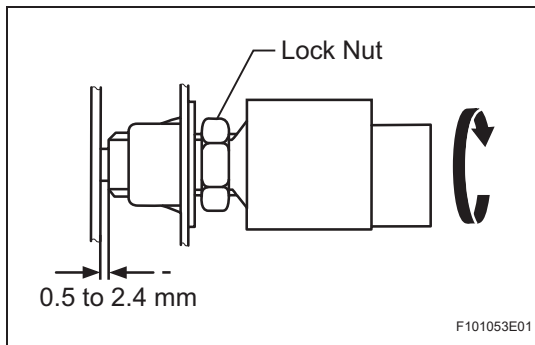
**Pedal height from the top of the asphalt sheet:
138 to 148 mm (5.433 to 5.827 in.)**

- (c) Adjust brake pedal height.

- (1) Disconnect the connector from the stop light switch.
- (2) Loosen the stop light switch lock nut. Turn the switch in order to give the pedal some free play.
- (3) Loosen the clevis lock nut. Turn the push rod and adjust the pedal height.
- (4) Tighten the clevis lock nut.

Torque: 26 N*m (265 kgf*cm, 19 ft.*lbf)





- (5) Turn the stop light switch so that the clearance between its thread portion tip and the area where the pedal makes contact is between 0.5 to 2.4 mm (0.020 to 0.095 in.). Tighten the lock nut.

Torque: 26 N*m (265 kgf*cm, 19 ft.*lbf)

- (6) Connect the connector to the stop light switch.
- (7) Connect the intelligent tester to the DLC3.
- (8) Loosen the stroke sensor set bolts.

- (9) Turn the power switch ON (IG). Read the stroke sensor 1 value displayed on the data monitor using the intelligent tester. Slowly turn the stroke sensor to the right and left to adjust it to the standard value.

Standard voltage:

0.8 to 1.2 V

- (10) Tighten the stroke sensor set bolts.

Torque: 9.3 N*m (95 kgf*cm, 82 in.*lbf)

CAUTION:

Do not depress the brake pedal after the power switch turns ON (IG).

- (11) Carry out system initialization (see page [BC-19](#)).
- (d) Install lower instrument panel finish panel (see page [IP-13](#)).

2. CHECK BRAKE PEDAL FREE PLAY

- (a) Depress the brake pedal several times strongly after the engine stops.
- (b) Check the brake pedal free play.

Standard pedal free play:

0.5 to 4 mm (0.02 to 0.16 in.)

If incorrect, proceed to the following step.

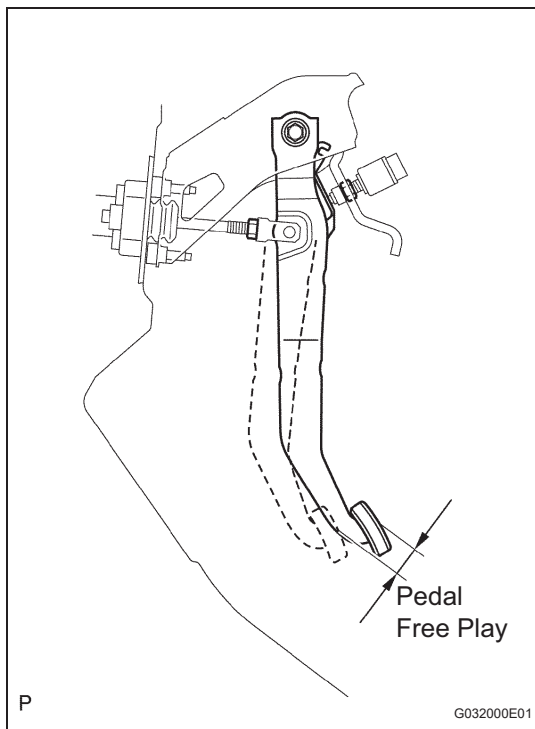
- (1) Check the stop light switch clearance.

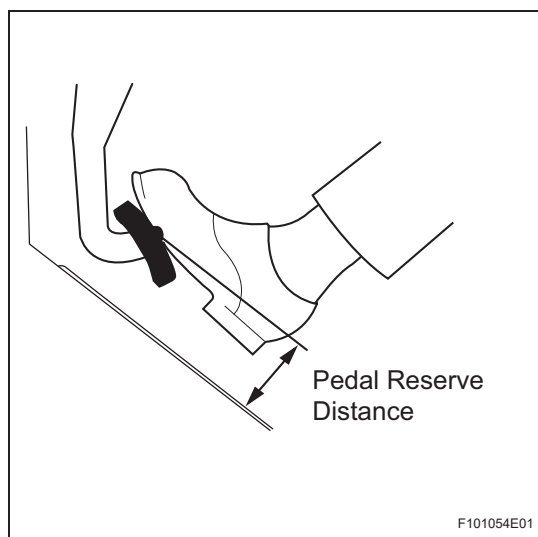
Standard stop light switch clearance:

0.5 to 2.4 mm (0.020 to 0.095 in.)

If the clearance is OK, then troubleshoot the brake system.

If incorrect, adjust the stop light switch clearance.





3. CHECK BRAKE PEDAL RESERVE DISTANCE

- (a) Release the parking brake pedal.
- (b) With engine running, depress the pedal and measure the pedal reserve distance, as shown in the illustration.

Standard pedal reserve distance (from the top of the asphalt sheet):

196 N (20 kgf, 44.1 lbf): More than 104 mm (4.1 in.)

NOTICE:

Pull up the floor carpet and dash panel insulator, and then check the brake pedal reserve distance.

If incorrect, troubleshoot the brake system.

REASSEMBLY

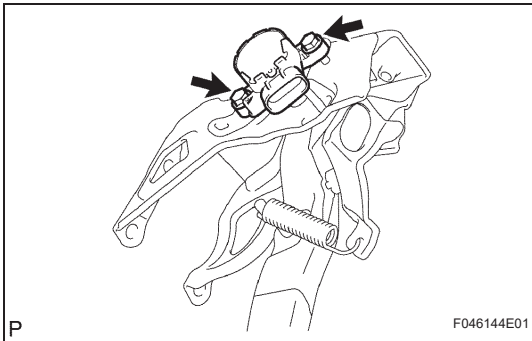
1. INSTALL BRAKE PEDAL SUB-ASSEMBLY

- Apply lithium soap base glycol grease to 2 new brake pedal bushes. Install the brake pedal bushes to the brake pedal.
- Install the brake pedal shaft collar to the brake pedal shaft.
- Install the brake pedal to the brake pedal support with the brake pedal shaft and nut.

Torque: 37 N*m (375 kgf*cm, 27 ft.*lbf)

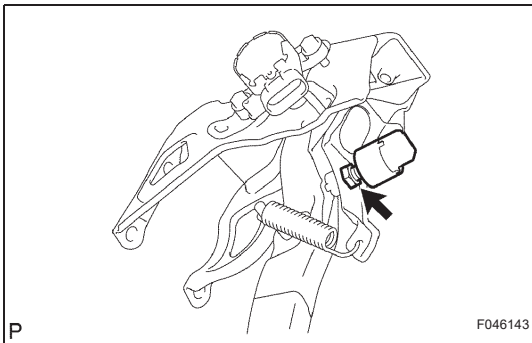
2. INSTALL BRAKE PEDAL STROKE SENSOR ASSEMBLY

- Install the brake pedal stroke sensor to the brake pedal support with the 2 bolts.
- HINT:**
Tighten the bolts when checking and adjusting the brake pedal height.



3. INSTALL STOP LIGHT SWITCH ASSEMBLY

- Turn the stop light switch clockwise and install it to the brake pedal support.
- HINT:**
Tighten the lock nut when checking and adjusting the brake pedal height.

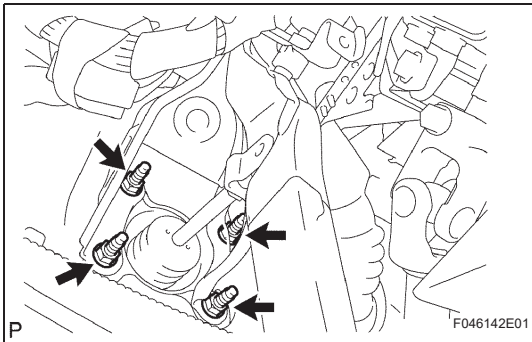


4. INSTALL BRAKE PEDAL PAD

INSTALLATION

1. INSTALL BRAKE PEDAL SUPPORT SUB-ASSEMBLY

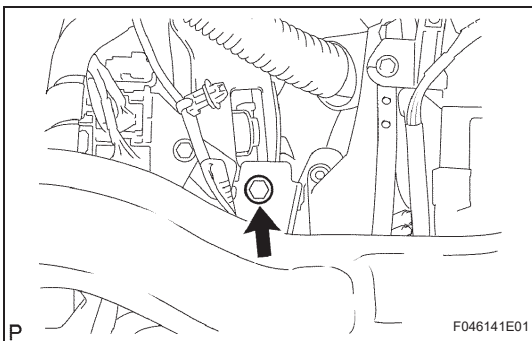
- Install the brake pedal support with the 4 nuts.
- Torque: 13 N*m (130 kgf*cm, 9 ft.*lbf)**

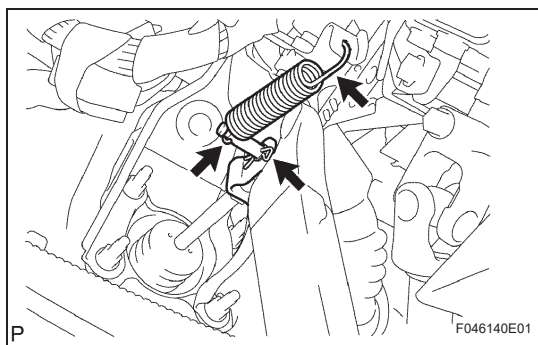


- Install the brake pedal support to the instrument panel side with the bolt.

Torque: 24 N*m (241 kgf*cm, 18 ft.*lbf)

- Connect the connector to the stop light switch.
- Connect the connector to the brake pedal stroke sensor.



**2. INSTALL MASTER CYLINDER PUSH ROD CLEVIS**

- (a) Apply lithium soap base glycol grease to the circumference of the brake master cylinder push rod pin.
- (b) Install the push rod clevis to the brake pedal with the brake master cylinder push rod pin.
- (c) Install the clip and brake pedal return spring.

3. INSTALL INSTRUMENT PANEL SUB-ASSEMBLY

- (a) Install the instrument panel (see page [IP-11](#)).

HINT:

Refer to the procedures from the installation of the instrument panel sub-assembly up until the installation of the No 1. instrument panel register assembly.

4. CHECK AND ADJUST BRAKE PEDAL HEIGHT (See page [BR-22](#))**5. CHECK BRAKE PEDAL FREE PLAY (See page [BR-23](#))****6. CHECK BRAKE PEDAL RESERVE DISTANCE (See page [BR-24](#))****7. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL****8. PERFORM INITIALIZATION**

- (a) Perform initialization (see page [IN-32](#)).

NOTICE:

Certain systems need to be initialized after disconnecting and reconnecting the cable from the negative (-) battery terminal.