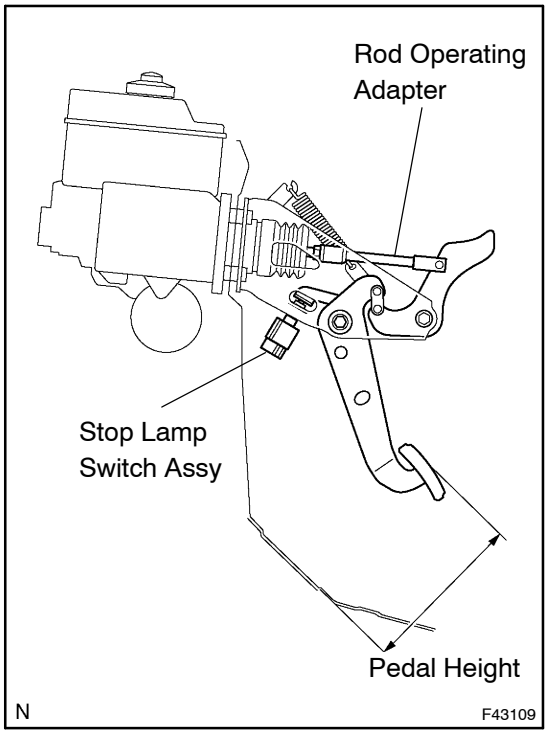
BRAKE PEDAL SUPPORT ASSY

320QB–01

ON–VEHICLE INSPECTION



1. CHECK BRAKE PEDAL HEIGHT

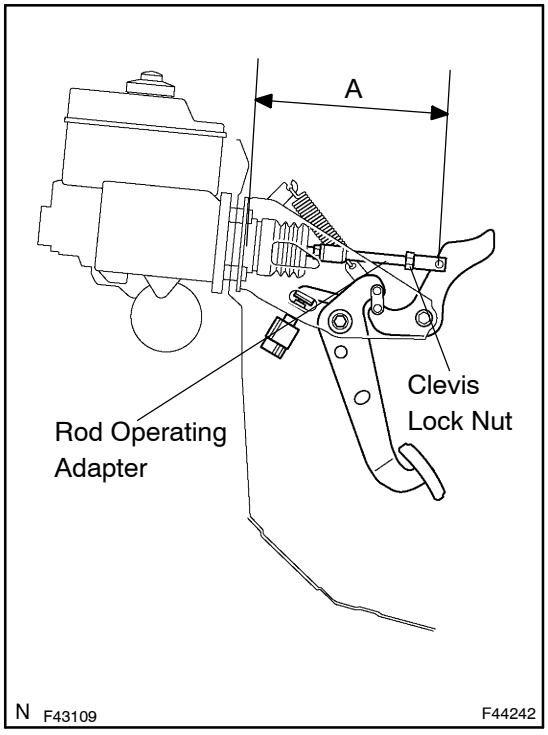
(a) Check brake pedal height.

Pedal height from dash panel:
LHD: 181.6 – 191.6 mm (7.150 – 7.543 in.)
RHD: 180.6 – 190.6 mm (7.110 – 7.504 in.)

NOTICE:

Do not adjust the pedal height. Doing so by changing the push rod length will structurally change the pedal ratio.

If the pedal height is incorrect, adjust the rod operating adapter length.



(b) Adjust the rod operating adapter length.

(1) Remove the clip and clevis pin.
(2) Loosen the clevis lock nut.
(3) Adjust the rod operating adapter length by turning the pedal push rod clevis.

Rod operating adapter length "A":
w/o VSC: 237.0 – 238.0 mm (9.331 – 9.370 in.)
w/ VSC: 220.2 – 221.2 mm (8.669 – 8.709 in.)

(4) Tighten the clevis lock nut.

Torque: 25.5 N·m (260 kgf·cm, 19 ft·lbf)

(5) Install the clip and clevis pin.

If the pedal height is incorrect even if the rod operating adapter is adjusted, check that there is no damage in brake pedal, brake pedal lever, brake pedal bracket and dash panel.

- Even if there is damage, there is no problem if the reserve distance is within the standard value.
- If necessary, replace them.

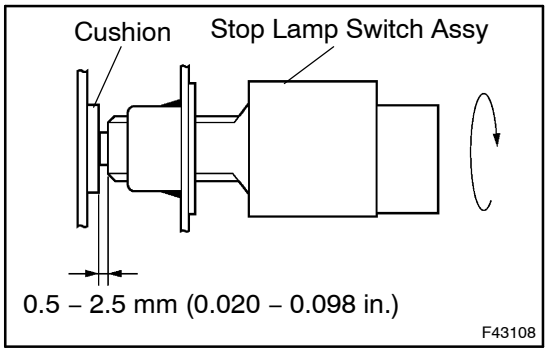
2. CHECK AND ADJUST STOP LAMP SWITCH

HINT:

If the pedal height is incorrect, check and adjust the stop lamp switch clearance.

(a) Disconnect the stop lamp switch assy connector from the stop lamp switch assy.

(b) Turn the stop lamp switch assy counterclockwise and remove the stop lamp switch assy.



(c) Insert the stop lamp switch assy until the body hits the cushion.

NOTICE:

When inserting the stop lamp switch assy, support the pedal from behind so that the pedal is not pushed in.

(d) Make a quarter turn clockwise to install the stop lamp switch assy.

NOTICE:

The turning torque for installing the stop lamp switch assy.

HINT:

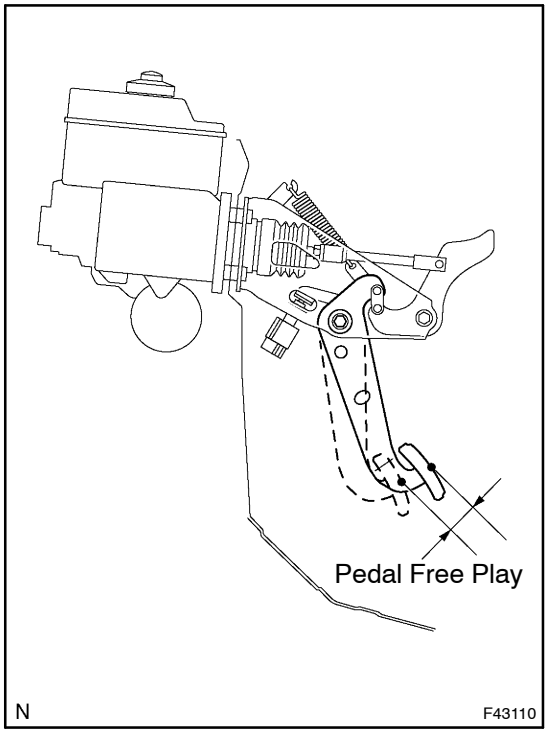
Due to the inverse screw structure, if the stop lamp switch assy is turned clockwise, the stop lamp switch assy moves in the direction to be pulled out.

(e) Connect the stop lamp switch connector to the stop lamp switch assy.

(f) Check the protrusion of the rod.

Protrusion of the rod: 0.5 – 2.5 mm (0.020 – 0.098 in.)

(g) After adjusting the pedal height, check the pedal free play.

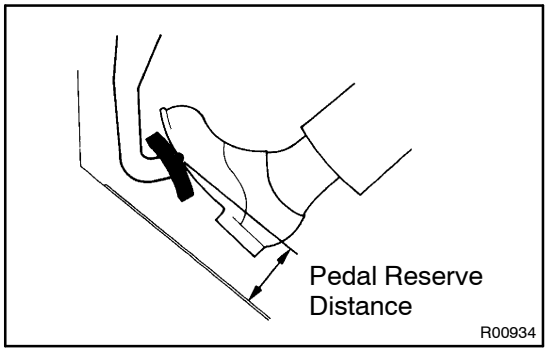


3. CHECK PEDAL FREE PLAY

(a) Stop the engine and depress the brake pedal several times until there is no more vacuum left in the booster.

(b) Push in the pedal until the beginning of the resistance is felt. Measure the distance, as shown.

Pedal free play: 1 – 6 mm (0.04 – 0.24 in.)



4. CHECK PEDAL RESERVE DISTANCE

(a) Release the parking brake pedal.
With engine running, depress the pedal and measure the pedal reserve distance, as shown.
Pedal reserve distance from asphalt sheet at 490 N (50 kgf, 110.2 lbf):
GASOLINE ENGINE TYPE
w/o ABS: More than 55 mm (2.17 in.)
w/ ABS: More than 52 mm (2.05 in.)
w/ VSC: More than 55 mm (2.17 in.)
DIESEL ENGINE TYPE
w/o ABS: More than 44 mm (1.73 in.)
w/ ABS: More than 44 mm (1.73 in.)
w/ VSC: More than 55 mm (2.17 in.)

If incorrect, troubleshoot the brake system.