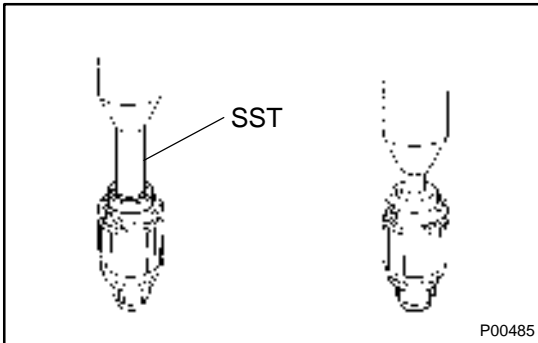


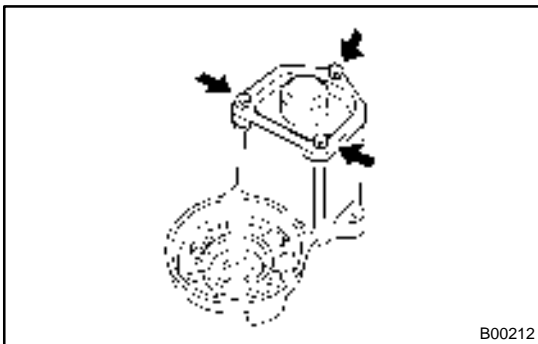
REPLACEMENT

1. REPLACE BEARINGS

- (a) Using SST, remove the bearing.
SST 09286-46011

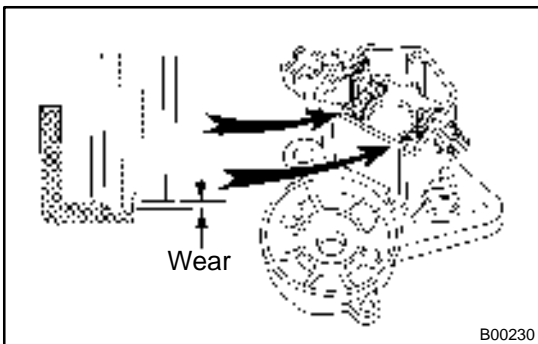


- (b) Using SST and a press, press in a new front bearing.
SST 09820-00030
- (c) Using a press, press in a new rear bearing.



2. REPLACE MAGNETIC SWITCH TERMINAL KIT PARTS

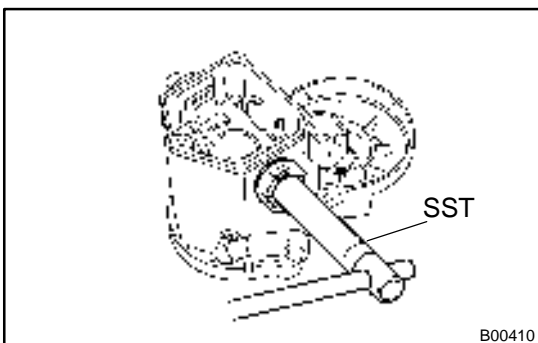
- (a) Remove the 3 bolts, end cover, gasket and plunger.



- (b) Using vernier calipers, measure the contact plate for depth of wear.

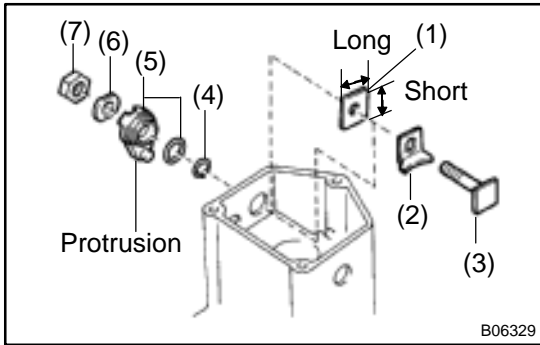
Maximum wear: 0.9 mm (0.035 in.)

If the depth of wear is greater than the maximum, replace the contact plate.



- (c) Remove the terminal kit parts.
- (1) Using SST, loosen the terminal nuts.
SST 09810-38140
- (2) Terminal C:
Remove the terminal nut, wave washer, terminal insulator (outside), O-ring, terminal bolt, contact plate and terminal insulator (inside).

- (3) Terminal 30:
Remove the terminal nut, wave washer, terminal insulator (outside), packing, O-ring, terminal bolt, contact plate, and terminal insulator (inside).



- (d) Temporarily install a new terminal 30 kit parts.
 - (1) Install a terminal insulator (inside).
 - (2) Install a contact plate.
 - (3) Install a terminal bolt.
 - (4) Install a O-ring.
 - (5) Install a packing and terminal insulator (outside). Install the packing to the terminal insulator, and install them.

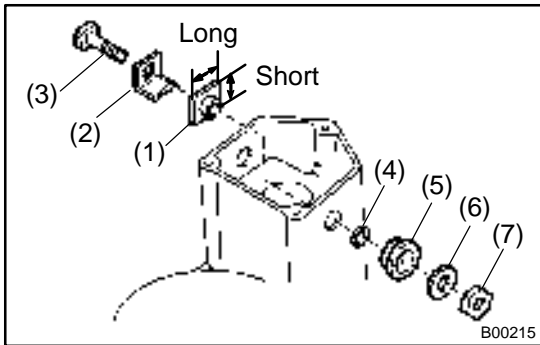
HINT:

Match the protrusion of the insulator with the indentation of the housing.

- (6) Install a wave washer.
- (7) Install a terminal nut.

NOTICE:

Be careful to install the terminal insulator in the correct direction.

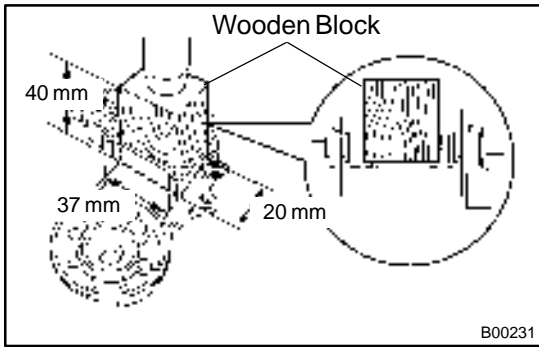


- (e) Temporarily install new terminal C kit parts.
 - (1) Install a terminal insulator (inside).
 - (2) Install a contact plate.
 - (3) Install a terminal bolt.
 - (4) Install a O-ring.
 - (5) Install a terminal insulator (outside).
 - (6) Install a wave washer.
 - (7) Install a terminal nut.

NOTICE:

Be careful to install the terminal insulator (inside) in the correct direction.

- (f) Temporarily tighten the terminal nuts.



- (g) Tighten terminal nut.
 - (1) Put a wooden block on the contact plate and press it down with a hand press.

Dimensions of wooden block:
20 x 37 x 40 mm (0.79 x 1.46 x 1.57 in.)

Press force:
981 N (100 kgf, 221 lbf)

NOTICE:

Check the diameter of the hand press ram. Then calculate the gauge pressure of the press when 981 N (100 kgf, 221 lbf) of force is applied.

Gauge pressure:

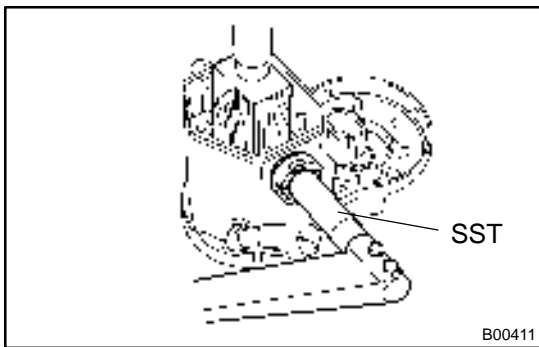
$$(\text{kgf/cm}^2) = \frac{100 \text{ kgf}}{\left(\frac{\text{Ram diameter (cm)}}{2}\right)^2 \times 3.14(\pi)}$$

$$(\text{psi}) = \frac{221 \text{ lbf}}{\left(\frac{\text{Ram diameter (in.)}}{2}\right)^2 \times 3.14 (\pi)}$$

(kpa) = (kgf/cm²) x 98.1

(kpa) = (psi) x 6.9

If the contact plate is not pressed down with the specified pressure, the contact plate may tilt due to coil deformation or the tightening of the nut.

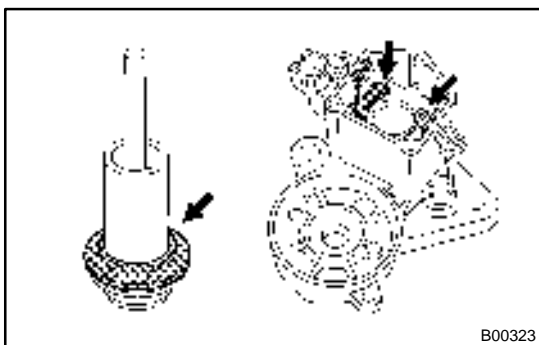


- (2) Using SST, tighten the nuts to the specified torque.
 SST 09810-38140

Torque: 17 N·m (170 kgf·cm, 12 ft·lbf)

NOTICE:

If the nut is over tightened, it may cause cracks on the inside of the insulator.



- (h) Clean contact surfaces of contact plate and plunger. Clean the contact surfaces of the remaining contact plate and plunger with a dry shop rag.

- (i) Reinstall magnetic switch end cover. Install the plunger, new gasket, end cover with the 3 bolts.
Torque: 2.5 N·m (26 kgf·cm, 23 in·lbf)