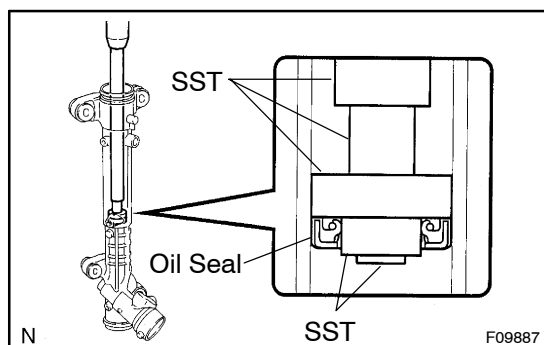


REASSEMBLY

NOTICE:

When using a vise, do not overtighten it.

1. COAT PARTS INDICATED BY ARROWS WITH POWER STEERING FLUID OR MOLYBDENUM DISULFIDE LITHIUM BASE GREASE (See page SR-34)



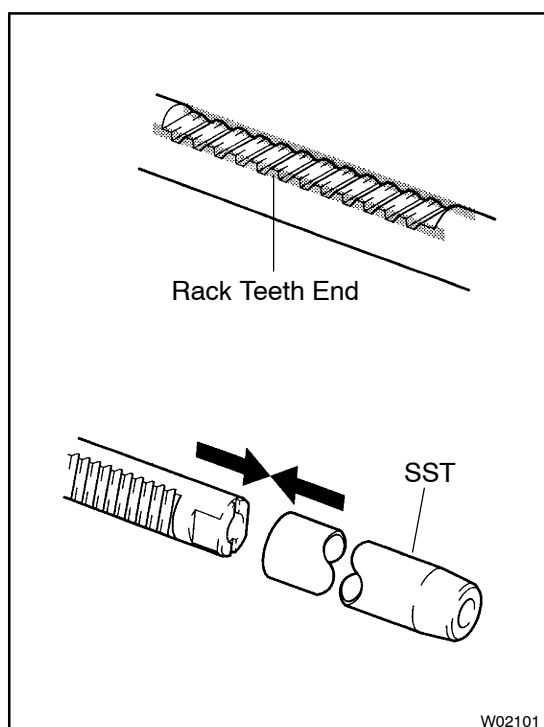
2. INSTALL OIL SEAL

- (a) Coat a new oil seal lip with power steering fluid.
- (b) Install the oil seal to SST, and press them into the rack housing.

SST 09950-60010 (09951-00240, 09951-00400, 09952-06010), 09950-70010 (09951-07360)

NOTICE:

- Make sure that the oil seal is installed facing in the correct direction.
- Take care that the oil seal does not get reversed as you install it.



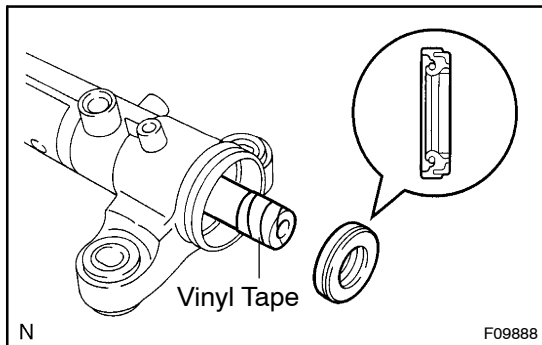
3. INSTALL STEERING RACK

- (a) Install SST to the rack.
SST 09631-20051

HINT:

If necessary, scrape the burrs off the rack teeth end and bur-nish.

- (b) Coat SST with power steering fluid.
- (c) Install the steering rack into the rack housing.
- (d) Remove the SST.
SST 09631-20051



4. INSTALL OIL SEAL

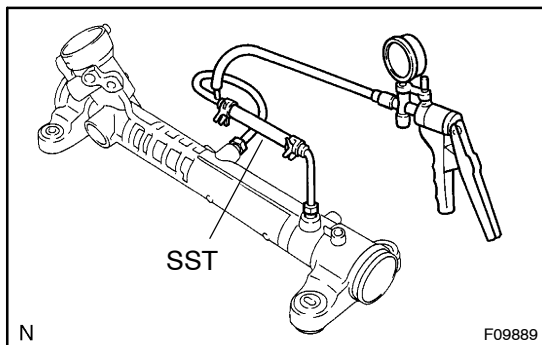
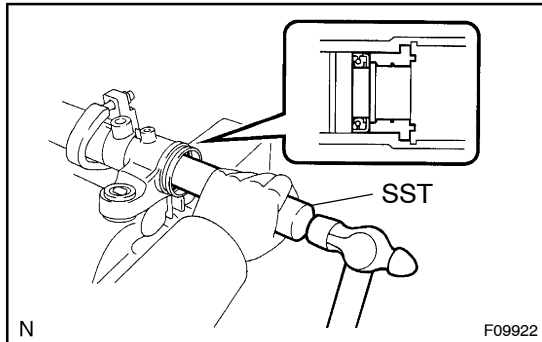
- Coat a new oil seal lip with power steering fluid.
- To prevent oil seal lip damage, wind vinyl tape on the steering rack end, and apply power steering fluid.
- Install the oil seal by pushing it into the rack housing without tilting.

NOTICE:

- Make sure that the oil seal is installed facing in the correct direction.
- Be careful not to damage the oil seal lip.

5. INSTALL CYLINDER END STOPPER

- Using SST and a hammer, drive in the cylinder end stopper.
SST 09612-22011
- Using snap ring pliers, install a new snap ring to the rack housing.



6. AIR TIGHTNESS TEST

- Install SST to the rack housing.
SST 09631-12071
 - Apply 53 kPa (400 mmHg, 15.75 in.Hg) of vacuum for about 30 seconds.
 - Check that there is no change in the vacuum.
- If there is a change in the vacuum, check the installation of the oil seals.

7. INSTALL CONTROL VALVE ASSEMBLY

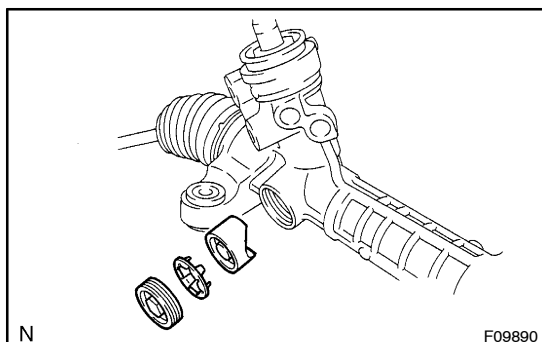
NOTICE:

Be careful not to damage the teflon rings and oil seal lips.

8. INSTALL RACK HOUSING CAP

- Coat a new O-ring with power steering fluid, and install it to the rack housing cap.
- Install the rack housing cap.

Torque: 74 N·m (750 kgf·cm, 54 ft·lbf)



9. INSTALL RACK GUIDE SUB-ASSEMBLY, CONICAL SPRING WASHER AND RACK GUIDE SPRING CAP

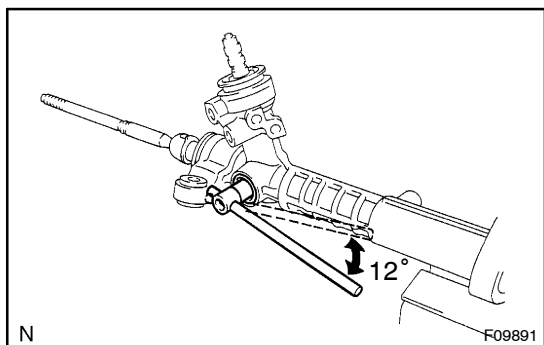
- Install the rack guide sub-assembly and conical spring washer.

- (b) Apply sealant to 2 or 3 threads of the rack guide spring cap.

Sealant:

**Part No. 08833-00080, THREE BOND 1344,
LOCTITE 242 or equivalent**

- (c) Temporarily install the rack guide spring cap.

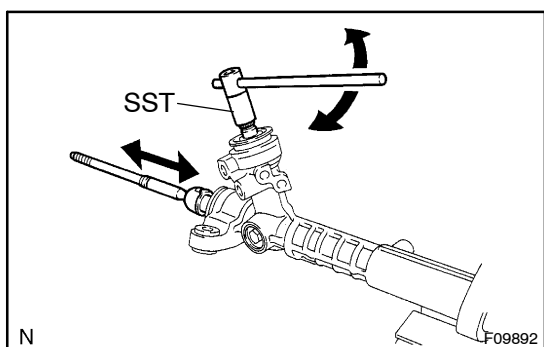
**10. ADJUST TOTAL PRELOAD**

- (a) To prevent the steering rack teeth from damaging the oil seal lip, temporarily install the RH and LH rack ends.

- (b) Torque the rack guide spring cap.

Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)

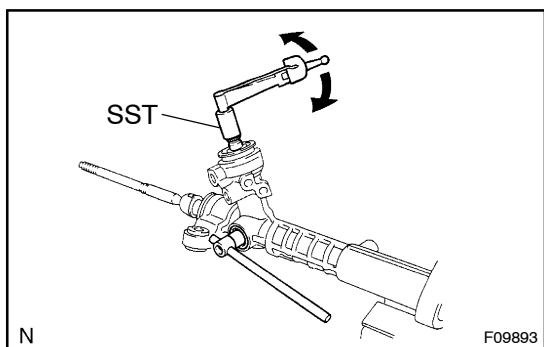
- (c) Return the rack guide spring cap 12°.



- (d) Using SST, turn the control valve shaft right and left 1 or 2 times.

SST 09616-00010

- (e) Loosen the rack guide spring cap until the rack guide spring is not functioning.

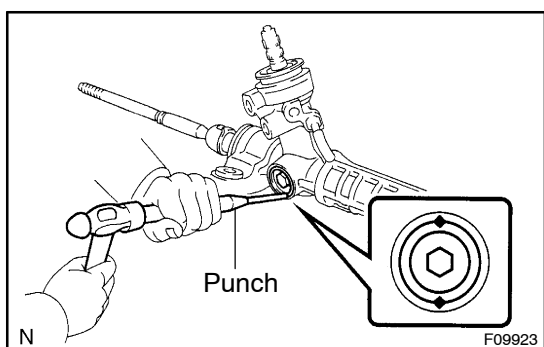


- (f) Using SST and torque wrench, tighten the rack guide spring cap until the preload is within the specification.

SST 09616-00010

Preload (turning):

0.9 - 1.3 N·m (9 - 13 kgf·cm, 8.0 - 11.5 in·lbf)



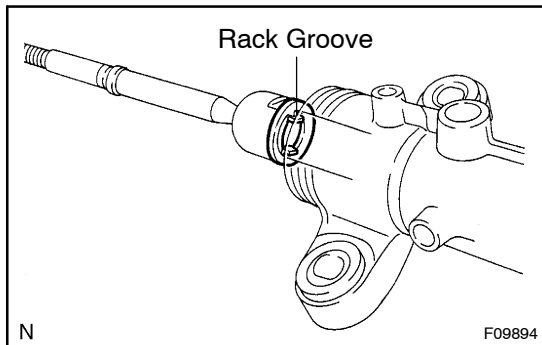
- (g) Using a punch and a hammer, stake 2 parts in opposing positions on the rack guide spring cap.

- (h) Recheck the total preload.

Preload (turning):

0.9 - 1.3 N·m (9 - 13 kgf·cm, 8.0 - 11.5 in·lbf)

- (i) Remove the RH and LH rack ends.

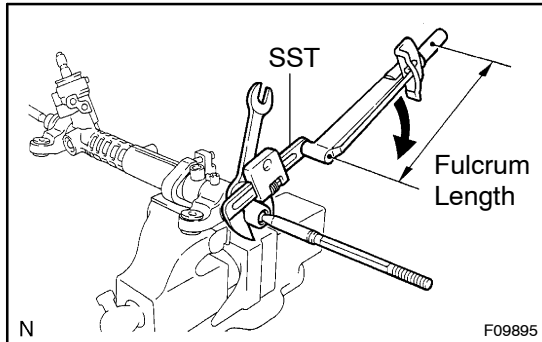


11. INSTALL RH AND LH CLAW WASHERS AND RACK ENDS

- (a) Install a new claw washer, and temporarily install the rack end.

HINT:

Align the claws of the claw washer with the steering rack grooves.



- (b) Using a spanner, hold the steering rack steadily and using SST, torque the rack end.

SST 09922-10010

Torque: 62 N·m (630 kgf·cm, 46 ft·lbf)

NOTICE:

Use SST 09922-10010 in the direction shown in the illustration.

HINT:

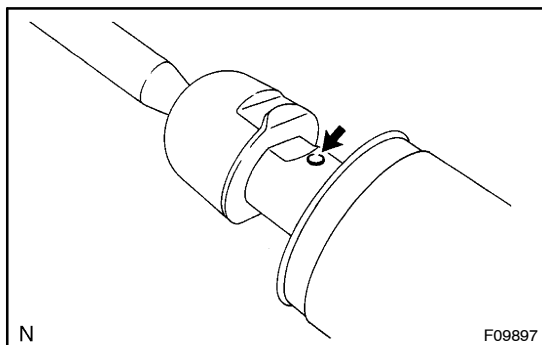
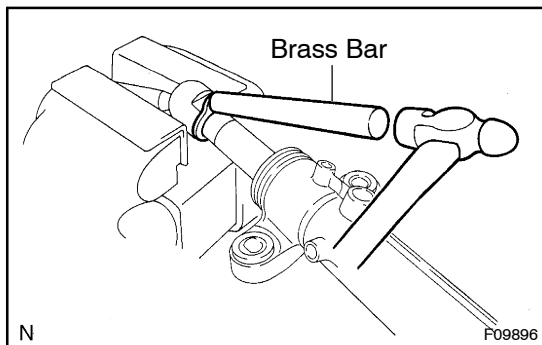
Use a torque wrench with a fulcrum length of 380 mm (14.96 in.).

- (c) Using a brass bar and a hammer, stake the washer.

NOTICE:

Avoid any impact on the steering rack.

- (d) Employ the same manner described above to the other side.



12. INSTALL RH AND LH RACK BOOTS, WIRES AND CLIPS

- (a) Ensure that the steering rack hole is not clogged with grease.

HINT:

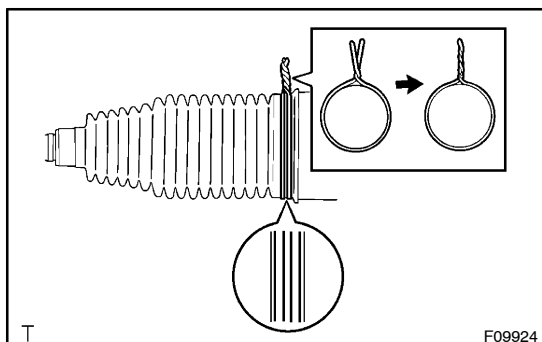
If the hole is clogged, the pressure inside the boot will change after it is assembled and the steering wheel is turned.

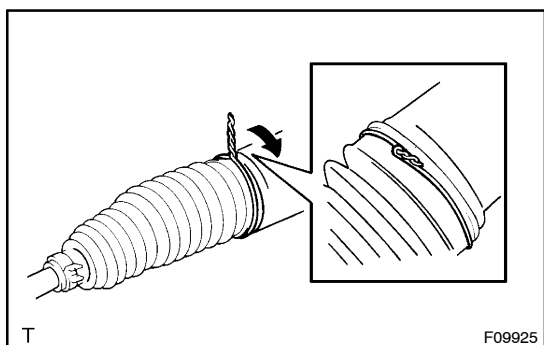
- (b) Install the boot, clip and a new wire.

NOTICE:

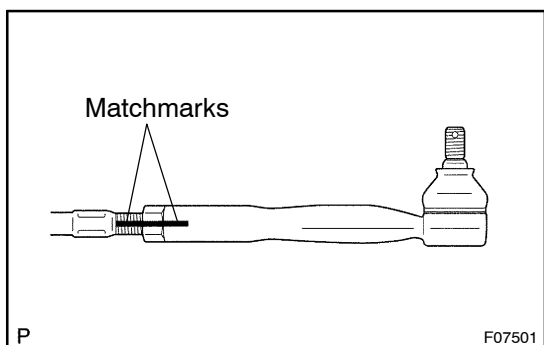
Be careful not to damage or twist the boot.

- (c) After winding and tightening the wire around the circumference of the boot twice, twist it several times, and install it.



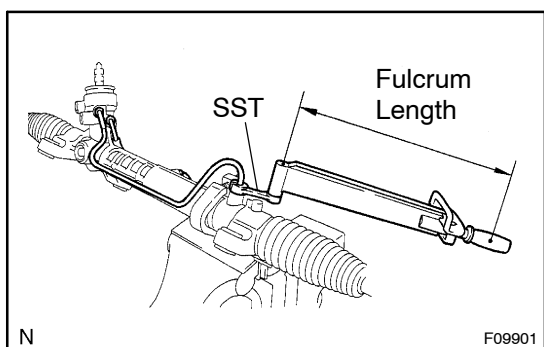


- (d) As shown in the illustration, bend the wire to the circular direction to prevent damage to the boot.
- (e) Employ the same manner described above to the other side.



13. INSTALL RH AND LH TIE ROD ENDS AND LOCK NUTS

- (a) Screw the lock nut and tie rod end onto the rack end until the matchmarks are aligned.
 - (b) After adjusting toe-in, torque the nut ([See page SA-4](#)).
- Torque:** 74 N·m (750 kgf·cm, 54 ft·lbf)
- (c) Employ the same manner described above to the other side.



14. INSTALL 2 TURN PRESSURE TUBES

Using SST, install the 2 turn pressure tubes.

SST 09633-00020

Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)

HINT:

- Use a torque wrench with a fulcrum length of 300 mm (11.81 in.).
- This torque value is effective in case that SST is parallel to a torque wrench.