

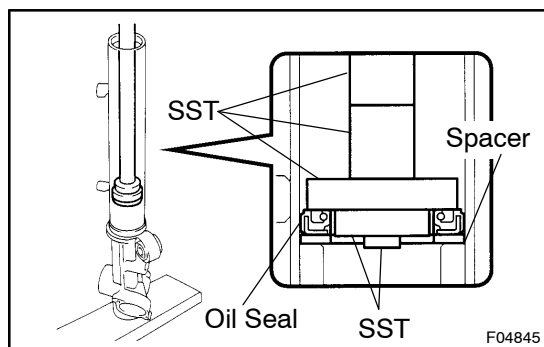
REASSEMBLY

NOTICE:

When using a vise, do not overtighten it.

1. **COAT WITH POWER STEERING FLUID OR MOLYBDENUM DISULFIDE LITHIUM BASE GREASE**

(See page [SR-34](#))

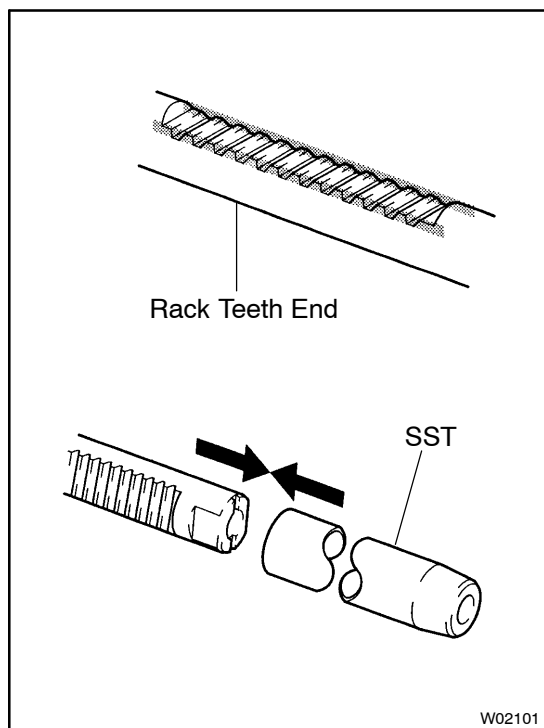


2. **INSTALL SPACER AND OIL SEAL**

- (a) Coat a new oil seal lip with power steering fluid.
- (b) Using SST, press in the oil seal and spacer.

SST 09951-60010 (09951-00350, 09951-00550, 09952-06010), 09950-70010 (09951-07360)

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



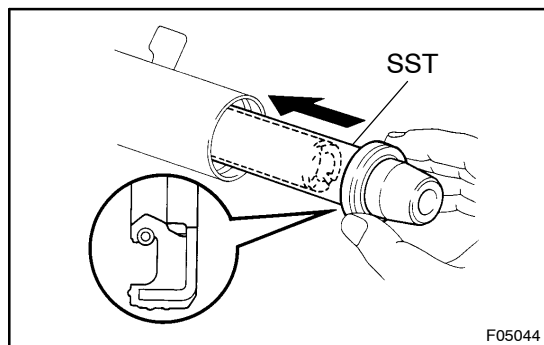
3. **INSTALL STEERING RACK**

- (a) Install SST to the rack.
SST 09631-00350

HINT:

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

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



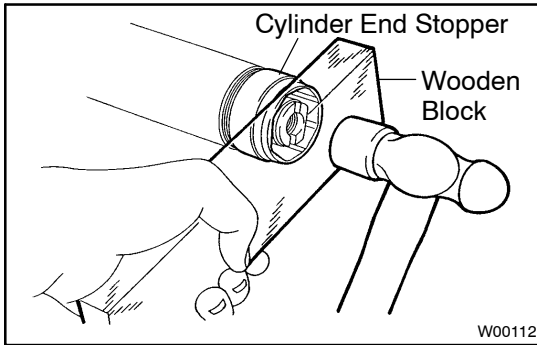
4. **INSTALL OIL SEAL**

- (a) Install SST to the steering rack opposite end.
SST 09631-00350
- (b) Coat SST with power steering fluid.
- (c) Coat a new oil seal lip with power steering fluid.
- (d) Install the oil seal by pushing it onto the SST without tilt-ing.

NOTICE:

Make sure to install the oil seal facing the correct direction.

- (e) Remove the SST.

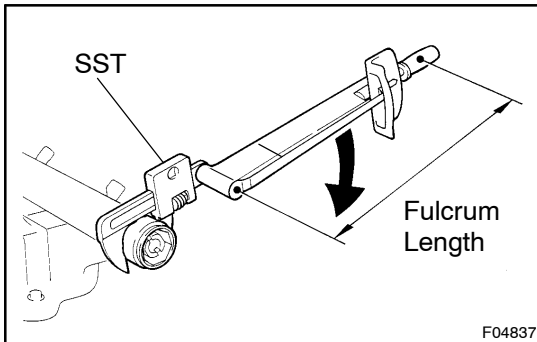


5. INSTALL SPACER AND CYLINDER END STOPPER

- Install the spacer.
- Coat a new O-ring with power steering fluid, and install it to the stopper.
- Using a wooden block and hammer, drive in the stopper until it is tightly installed.

NOTICE:

Be careful not to damage the O-ring.



- Using SST, torque the stopper.

SST 09922-10010

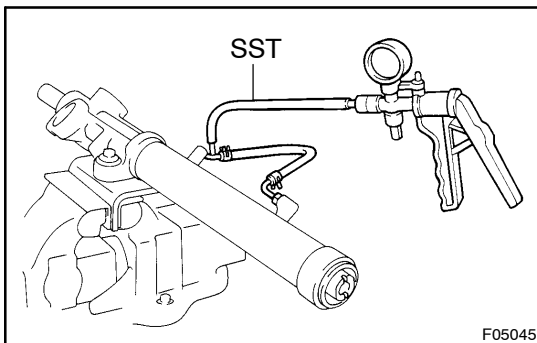
Torque: 66 N·m (677 kgf·cm, 49 ft·lbf)

NOTICE:

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

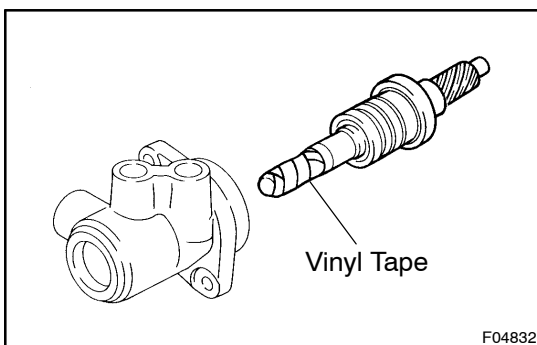
HINT:

Use a torque wrench with a fulcrum length of 345 mm (13.58 in.).



6. AIR TIGHTNESS TEST

- Install SST to the unions of 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 change in the vacuum, check the installation of the oil seals.

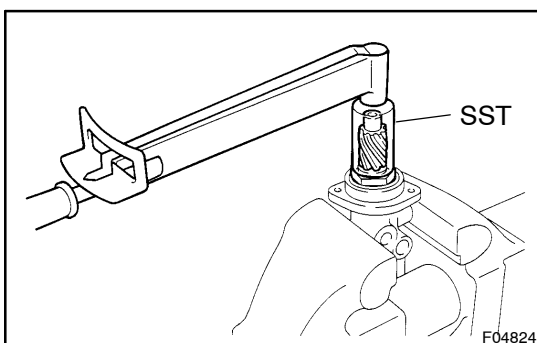


7. INSTALL CONTROL VALVE ASSEMBLY

- Coat the teflon rings with power steering fluid.
- To prevent oil seal lip damage, wind vinyl tape on the serrated part of the control valve shaft.
- Push the valve assembly into the control valve housing.

NOTICE:

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



- Coat a new O-ring with power steering fluid, and install it to the bearing guide nut.

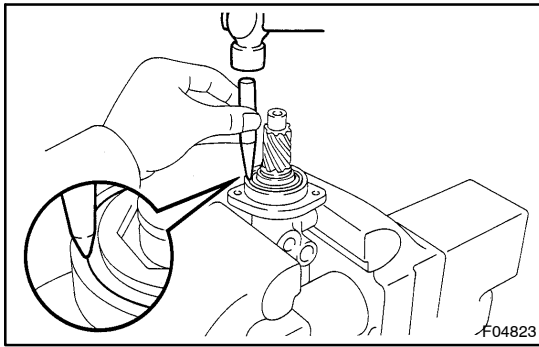
- Using SST, torque the nut.

SST 09631-20060

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

NOTICE:

Be careful not to damage the oil seal lip.



- (f) Using a punch, stake the nut.

8. INSTALL CONTROL VALVE HOUSING WITH CONTROL VALVE ASSEMBLY

- Coat a new O-ring with power steering fluid, and install it to the valve housing.
- Align the matchmarks on the valve housing and rack housing, and install the valve housing with the valve assembly to the rack housing.
- Torque the 2 bolts.

Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

9. INSTALL DUST COVER

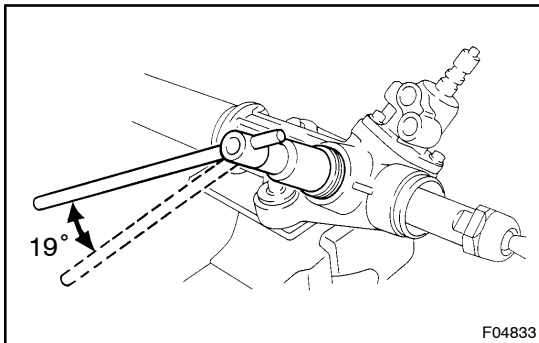
10. INSTALL RACK GUIDE SUB-ASSEMBLY, RACK GUIDE SPRING AND RACK GUIDE SPRING CAP

- Apply sealant to 2 or 3 threads of the cap.

Sealant:

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

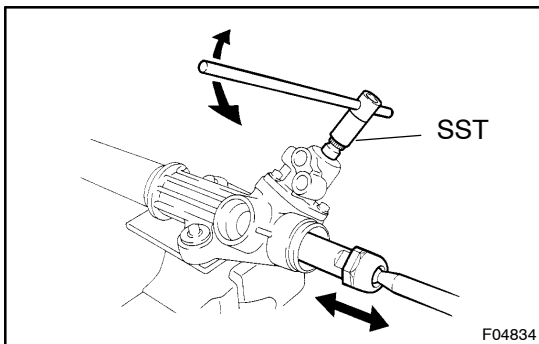
- Temporarily install the cap.



11. ADJUST TOTAL PRELOAD

- To prevent the steering rack teeth from damaging the oil seal lip, temporarily install the RH and LH rack ends.
- Torque the rack guide spring cap.
- Return the cap 19°.

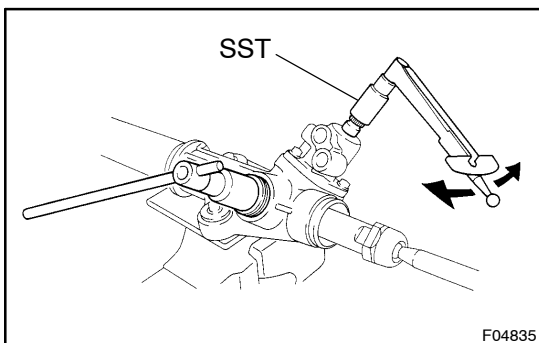
Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)



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

SST 09616-00010

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

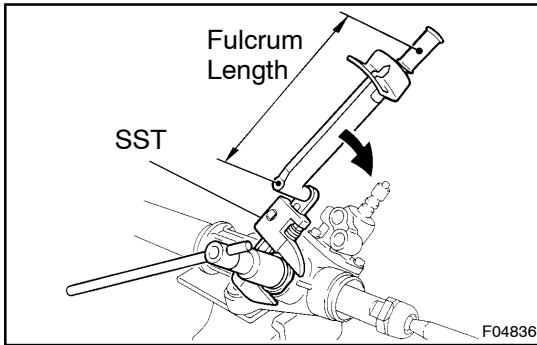


- Using SST and a torque wrench, tighten the cap until the preload is within specification.

SST 09616-00010

Preload (turning):

1.3 -1.8 N·m (13.3-18.4 kgf·cm, 11.5-16.0 in.·lbf)

**12. INSTALL RACK GUIDE SPRING CAP LOCK NUT**

- (a) Apply sealant to 2 or 3 threads of the nut.

Sealant:

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

- (b) Holding the rack guide spring cap rotating, and using SST, torque the nut.

SST 09922-10010

Torque: 51 N·m (521 kgf·cm, 38 ft·lbf)

NOTICE:

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

HINT:

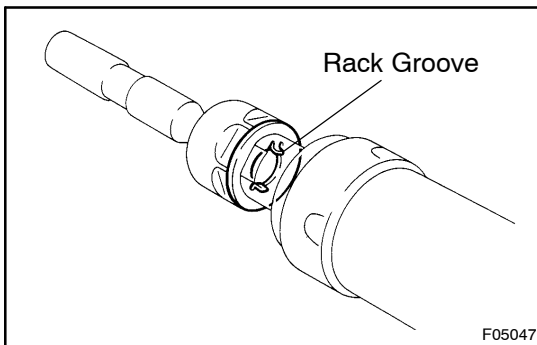
Use a torque wrench with a fulcrum length of 345 mm (13.58 in.).

- (c) Recheck the total preload.

Preload (turning):

1.3 -1.8 N·m (13.3-18.4 kgf·cm, 11.5-16.0 in.·lbf)

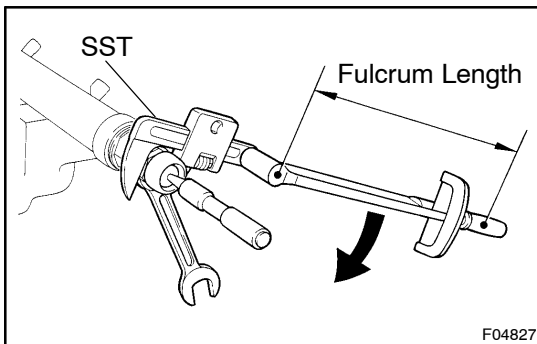
- (d) Remove the RH and LH rack ends.

**13. INSTALL RH AND LH CLAW WASHERS AND RACK ENDS**

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

HINT:

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



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

SST 09922-10010

Torque: 76 N·m (770 kgf·cm, 56 ft·lbf)

NOTICE:

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

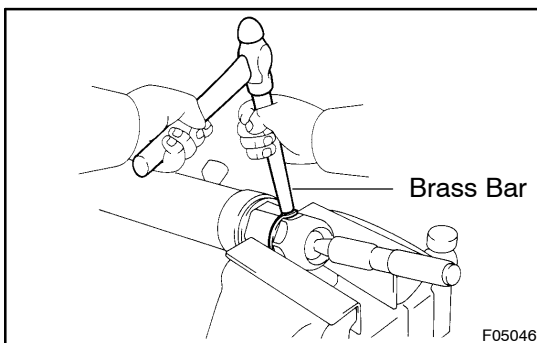
HINT:

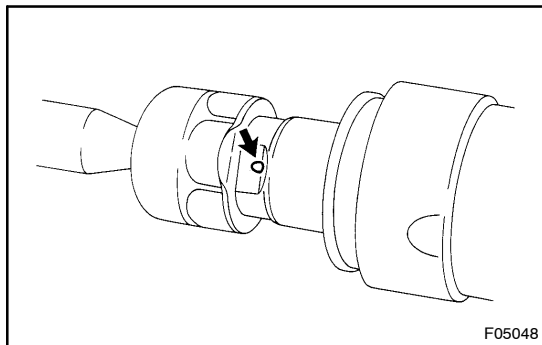
Use a torque wrench with a fulcrum length of 345 mm (13.58 in.).

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

NOTICE:

Avoid any impact to the rack.



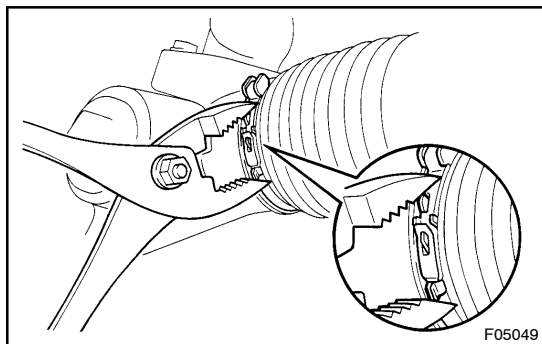


14. INSTALL RH AND LH RACK BOOTS, CLAMPS AND CLIPS

(a) Ensure that the tube hole is not clogged with grease.

HINT:

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



(b) Install the boot.

NOTICE:

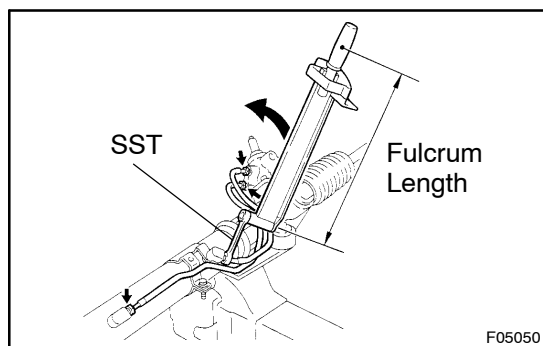
Be careful not to damage or twist the boot.

(c) Using pliers tighten a new clamp, as shown in the illustration.

15. INSTALL TUBE SUPPORT RETAINER

Torque the bolt.

Torque: 19 N·m (195 kgf·cm, 14 ft·lbf)



16. INSTALL 2 TURN PRESSURE TUBES

Using SST, install the tube.

SST 09633-00020

Torque: 20 N·m (203 kgf·cm, 15 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.