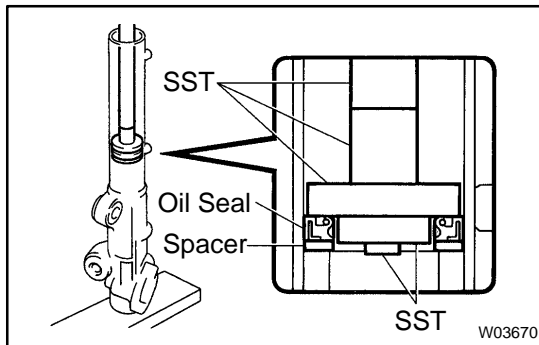


REASSEMBLY

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-42](#))**



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 (09951-00330, 09951-00490, 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.**

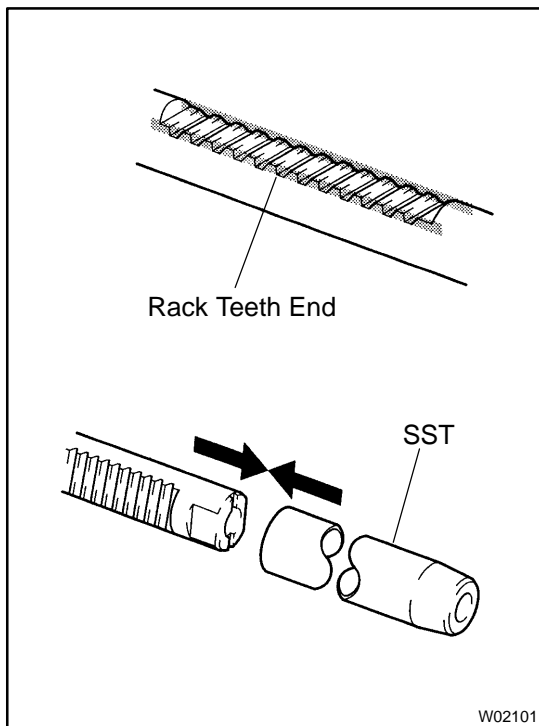
3. INSTALL STEERING RACK

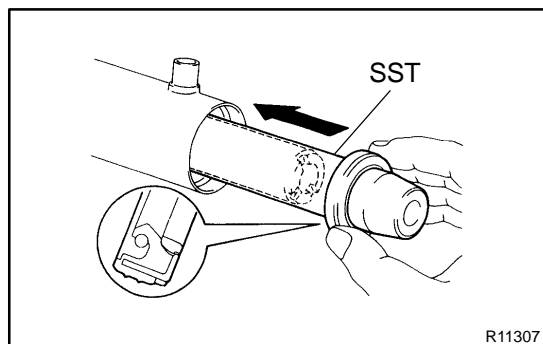
- (a) Install SST to the rack.
SST 09631-00350

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.
SST 09631-00350





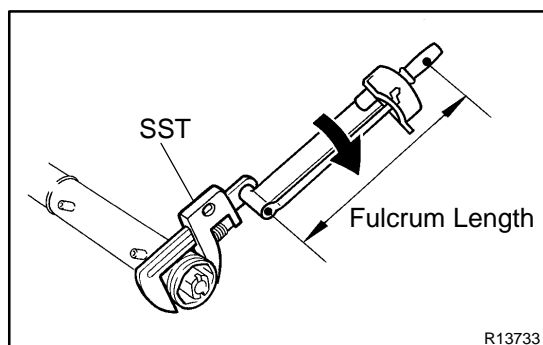
4. INSTALL OIL SEAL

- (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 tilting.

NOTICE:

Make sure that the oil seal is installed facing in the correct direction.

- (e) Remove the SST.
SST 09631-00350



5. INSTALL CYLINDER END STOPPER

- (a) Coat a new O-ring with power steering fluid, and install it to the cylinder end stopper.
- (b) Using SST, install the cylinder end stopper.
SST 09922-10010

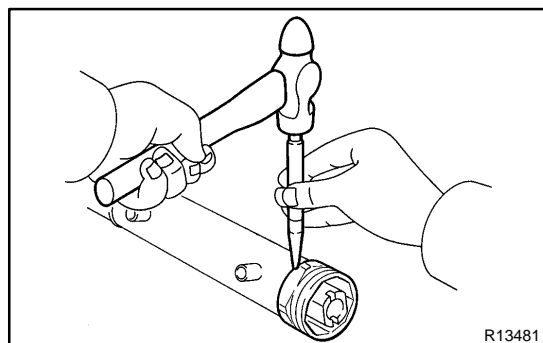
Torque: 58 N·m (590 kgf-cm, 43 ft-lbf)

NOTICE:

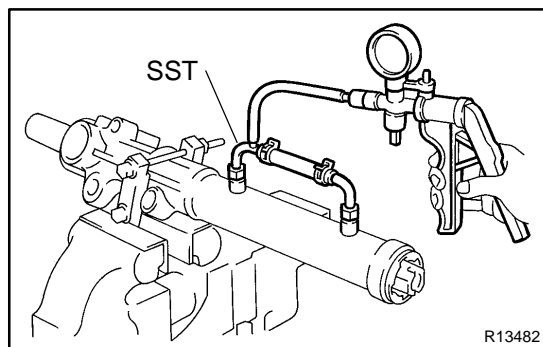
Use SST 09922-10010 in the direction shown in the illustration.

HINT:

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

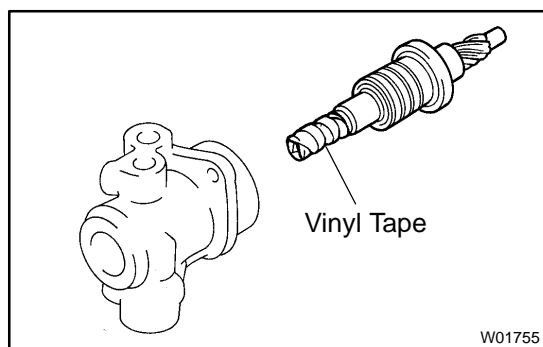


- (c) Using a punch and a hammer, stake the rack housing.



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.

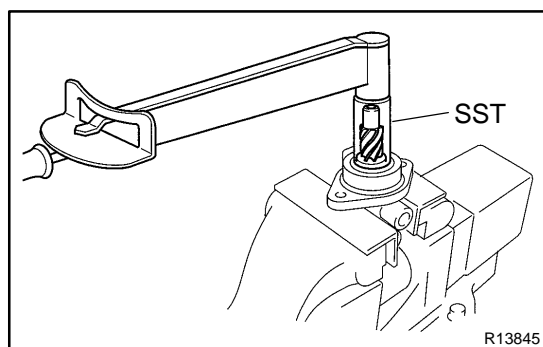


7. INSTALL CONTROL VALVE ASSEMBLY

- 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.

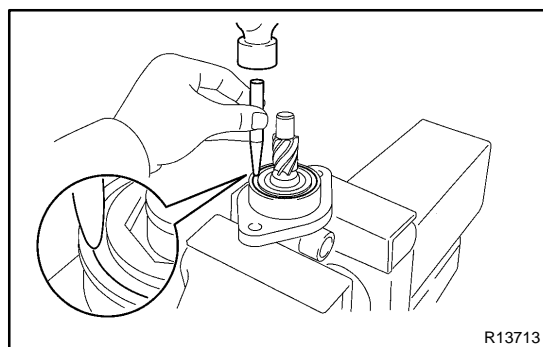


- Coat a new O-ring with power steering fluid, and install it to the bearing guide nut.
- Using SST, install the bearing guide nut.
SST 09631-20060

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

NOTICE:

Be careful not to damage the oil seal lip.



- Using a punch, stake the bearing guide 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 control valve housing and rack housing, and install the control valve housing with the control valve assembly to the rack housing.
- Install the 2 bolts.

Torque: 18 N·m (180 kgf-cm, 13 ft-lbf)

9. INSTALL DUST COVER

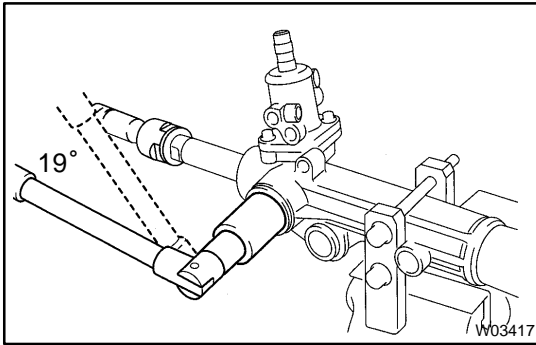
10. INSTALL RACK GUIDE, RACK GUIDE SPRING AND RACK GUIDE SPRING CAP

- Install the rack guide and rack guide spring.
- Apply sealant to 2 or 3 threads of the rack guide spring cap.

Sealant:

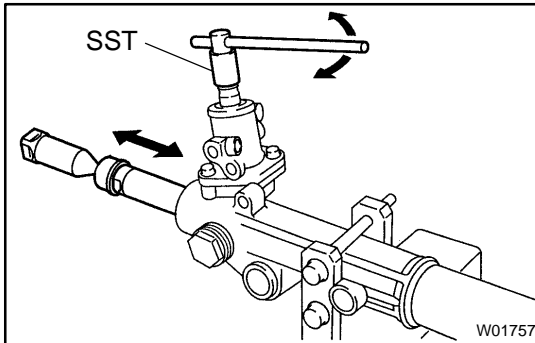
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- Temporarily install the rack guide spring cap.

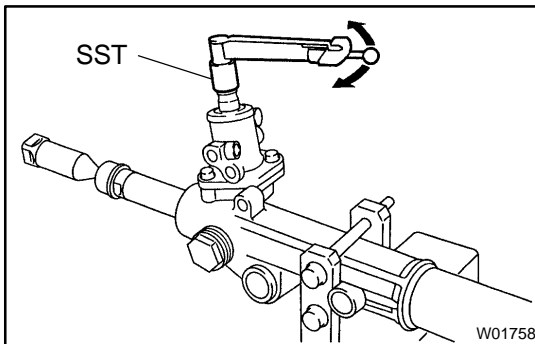


11. ADJUST TOTAL PRELOAD

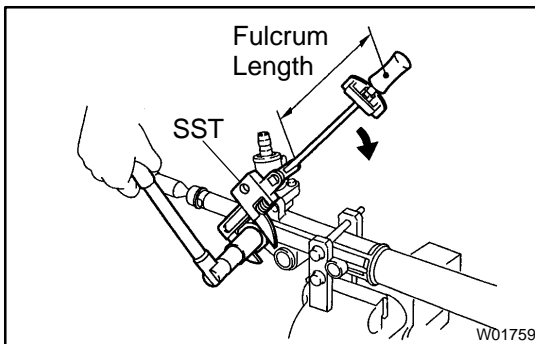
- To prevent the steering rack teeth from damaging the oil seal lip, temporarily install the RH and LH rack ends.
- Torque the rack guide spring cap.
Torque: 25 N·m (250 kgf-cm, 18 ft-lbf)
- Return the cap 19°.



- Using SST, turn the control valve shaft right and left 1 or 2 times.
SST 09616-0001 1
- 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 09616-0001 1
Preload (turning):
0.5 - 1.7 N·m (4.7 - 17.2 kgf-cm, 4.1 - 14.9 in.-lbf)



12. INSTALL RACK GUIDE SPRING CAP LOCK NUT

- Apply sealant to 2 or 3 threads of the lock nut.
Sealant:
Part No.08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent
- Temporarily install the lock nut.
- Holding the rack guide spring cap rotating, and using SST, torque the lock nut.
SST 09922-10010
Torque: 51 N·m (520 kgf-cm, 38 ft-lbf)

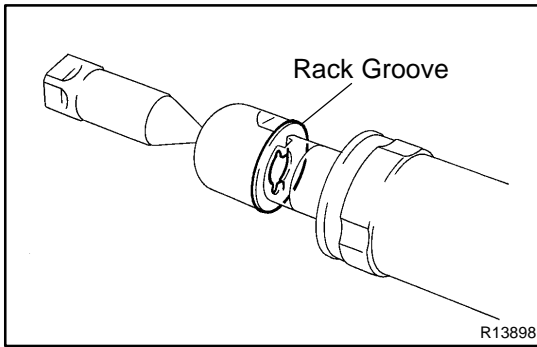
NOTICE:

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.).

- Recheck the total preload.
Preload (turning):
0.5 - 1.7 N·m (4.7 - 17.2 kgf-cm, 4.1 - 14.9 in.-lbf)
- Remove the RH and LH rack ends.

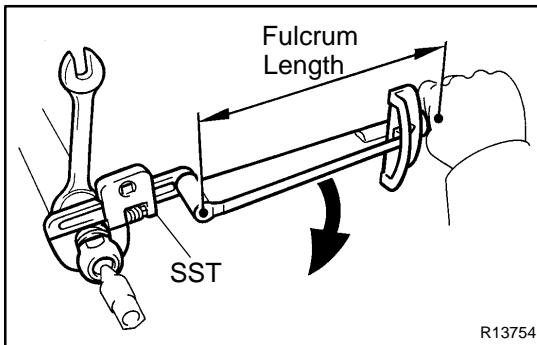


13. INSTALL RH AND LH CLAW WASHERS AND RACK ENDS

- (a) Install a new claw 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

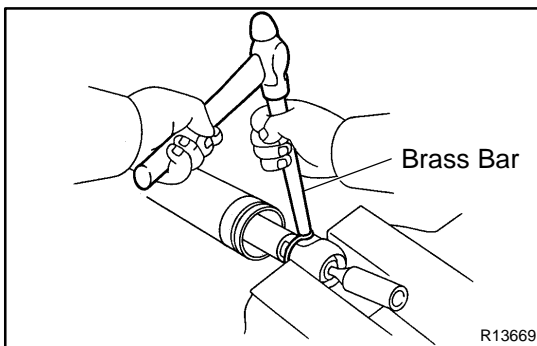
Torque: 76 N·m (770 kgf-cm, 56 ft-lbf)

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.).

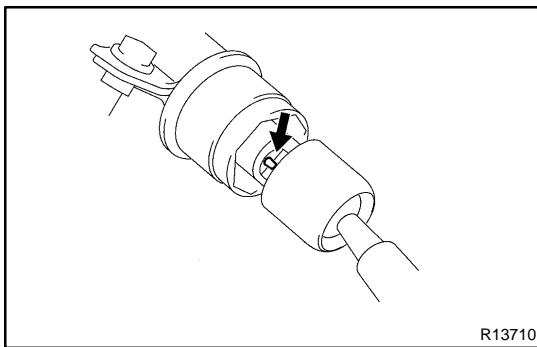


- (c) Using a brass bar and a hammer, stake the washer.

NOTICE:

Avoid any impact on the rack.

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



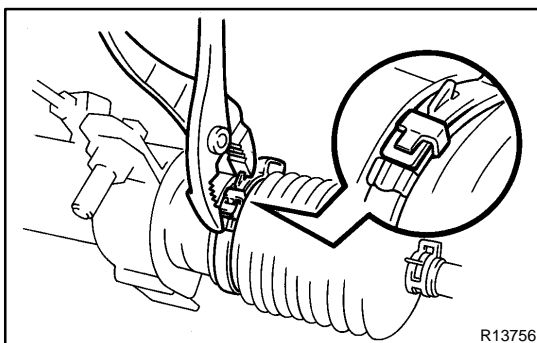
14. INSTALL RH AND LH RACK BOOTS, CLAMPS AND CLIPS

- (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) Set a new clamp to the groove of the rack boot.

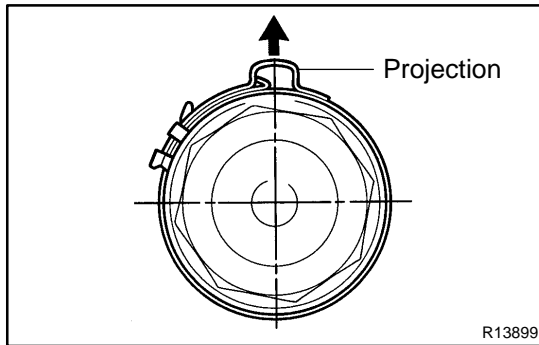


- (c) Install the boot, clip and a new clamp.

NOTICE:

Be careful not to damage or twist the boot.

- (d) Tighten a new clamp, as shown in the illustration.

**HINT:**

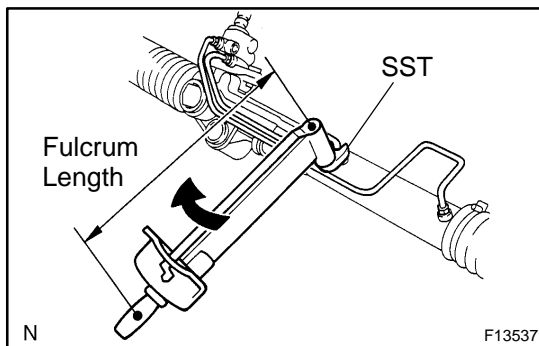
Face the projection to upper side of the vehicle.

- (e) Install the clip to the rack boot.
- (f) Employ the same manner described above to the other side.

15. 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-5](#)).

Torque: 55 N·m (560 kgf-cm, 41 ft-lbf)

**16. INSTALL 2 TURN PRESSURE TUBES**

- (a) Install 4 new union seats to the rack housing and control valve housing.
- (b) Using SST, install the 2 turn pressure tubes.
SST 09023-38200

Torque: 23 N·m (230 kgf-cm, 17 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.