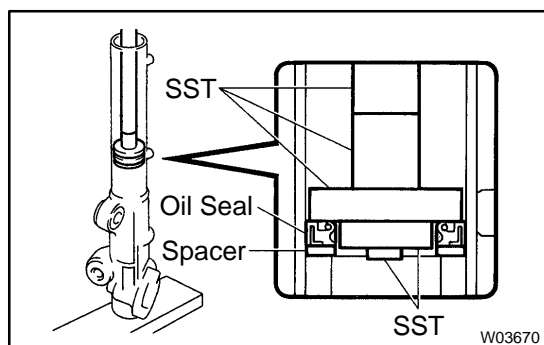


REASSEMBLY

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 pages SR-73)



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), 09951-70010 (09951-07360)

NOTICE:

- 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.

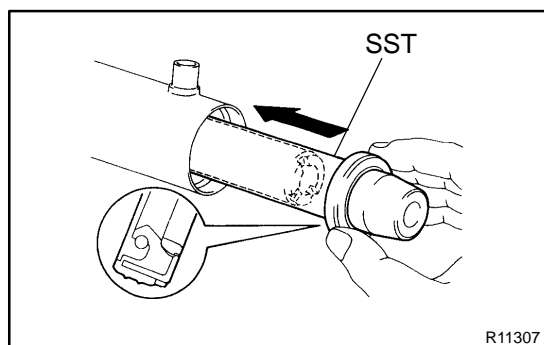
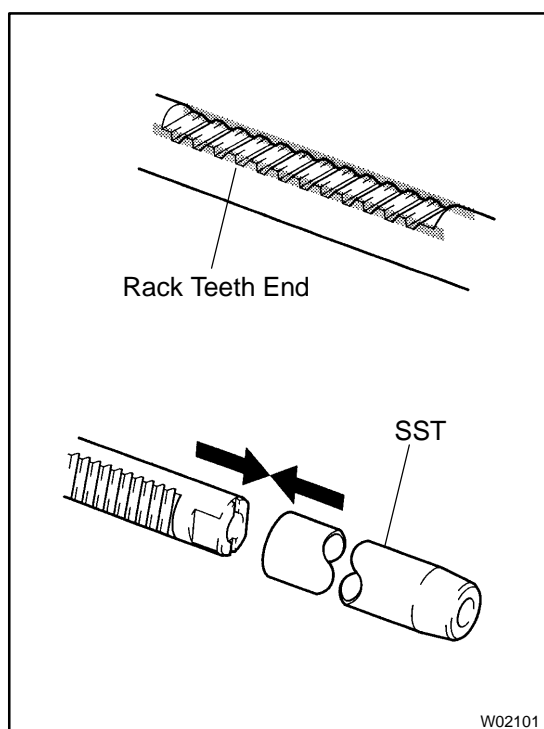
3. INSTALL STEERING RACK

- (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.

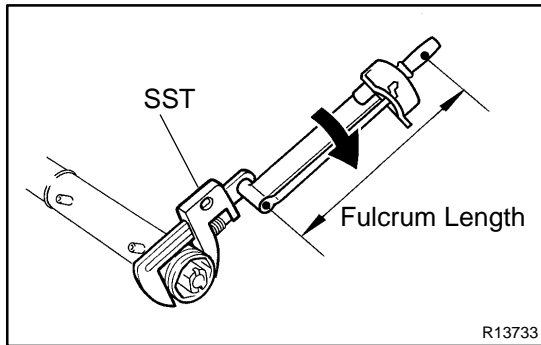


4. INSTALL OIL SEAL

- (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, and install it by pushing it onto the SST without tilting.

NOTICE:

- Make sure to install the oil seal facing the correct direction.**
- (d) Remove the SST.



5. INSTALL CYLINDER END STOPPER

- Coat a new O-ring with power steering fluid, and install it to the cylinder end stopper.
- Using SST, torque the cylinder end stopper.

SST 09922-10010

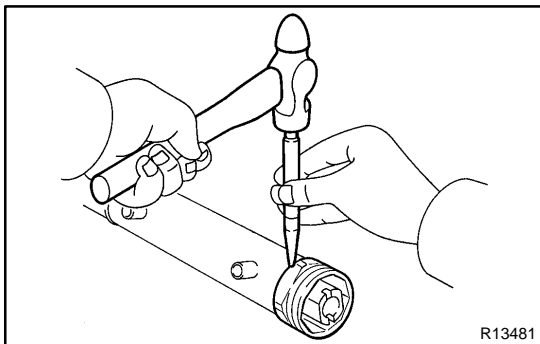
Torque: 59 N·m (597 kgf·cm, 43 ft·lbf)

NOTICE:

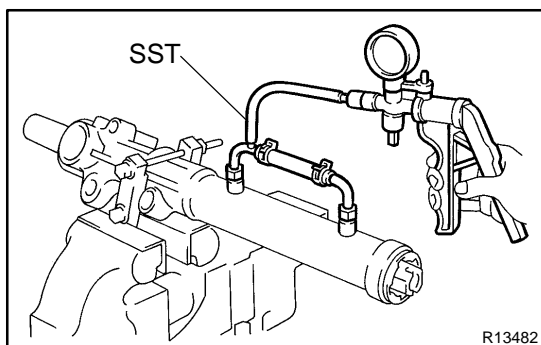
Use SST 09922-10010 in the direction shown in the illustration.

HINT:

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

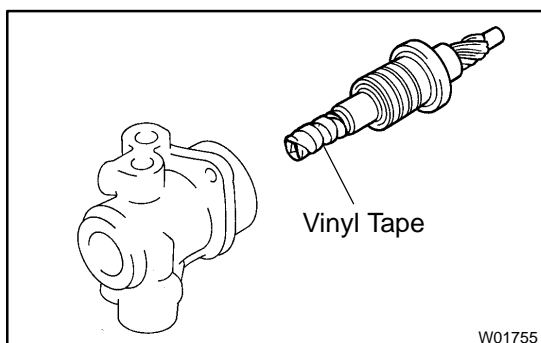


- Using a punch and hammer, stake the rack housing.



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.

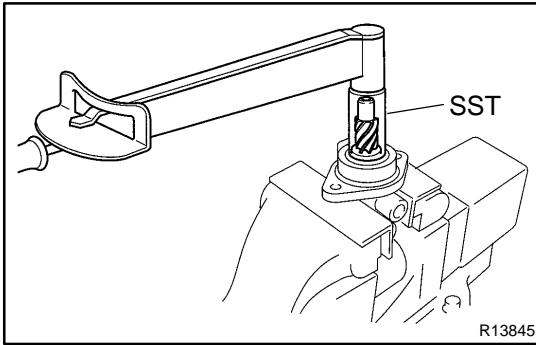


7. INSTALL CONTROL VALVE ASSEMBLY

- 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.
- Install the control valve assembly into the control valve housing.

NOTICE:

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

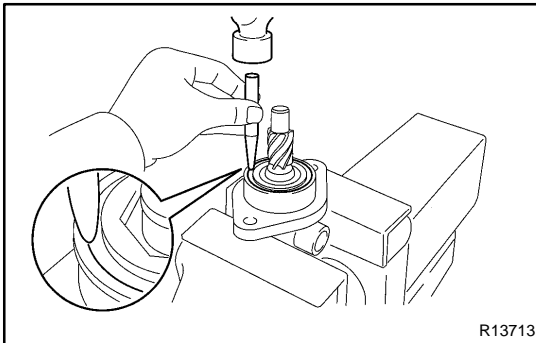


- (d) Coat a new O-ring with power steering fluid, and install it to the bearing guide nut.
- (e) Using SST, install the bearing guide nut.
SST 09631-20060

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

NOTICE:

Be careful not to damage the oil seal lip.



- (f) Using a punch, stake the bearing guide nut.
- 8. INSTALL CONTROL VALVE HOUSING WITH CONTROL VALVE ASSEMBLY**

- (a) Coat a new O-ring with power steering fluid, and install it to the control valve housing.
- (b) 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.
- (c) Install the 2 bolts.

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

9. INSTALL DUST COVER

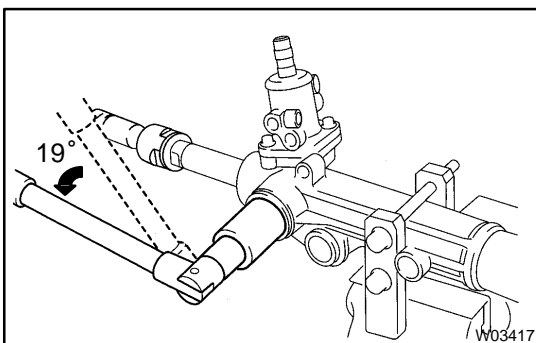
10. INSTALL RACK GUIDE SEAT, RACK GUIDE, RACK GUIDE SPRING AND RACK GUIDE SPRING CAP

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

Sealant:

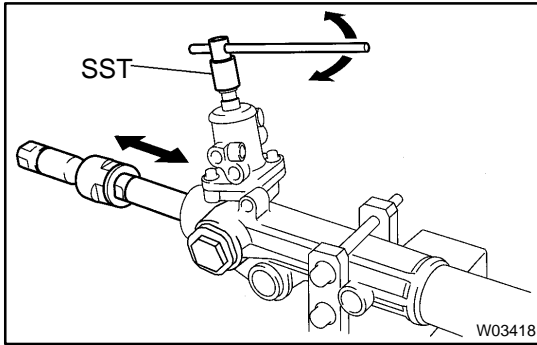
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

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



11. ADJUST TOTAL PRELOAD

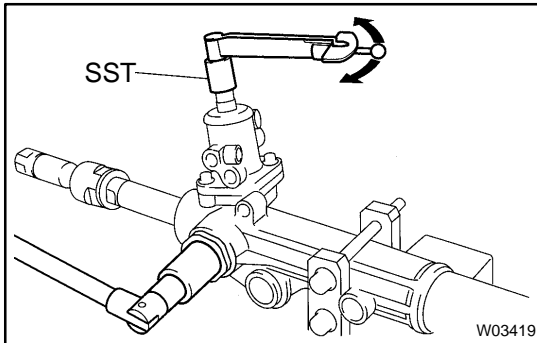
- (a) To prevent the steering rack teeth from damaging the oil seal lip, temporarily install the RH and LH rack ends.
- (b) Torque the rack guide spring cap.
Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)
- (c) Return the cap 19°.



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

SST 09616-00011

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

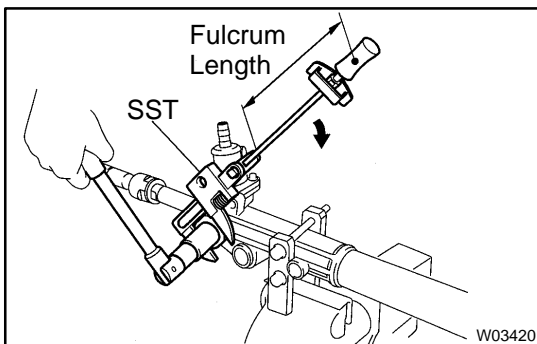


- (f) Using SST and a torque wrench, tighten the cap until the preload is within specification.

SST 09616-00011

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

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

Sealant:

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

- (b) Holding the rack guide spring cap rotating, and using SST, install the lock 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):

0.5 – 1.7 N·m (4.7 – 17.2 kgf·cm, 4.1 – 14.9 in.-lbf)

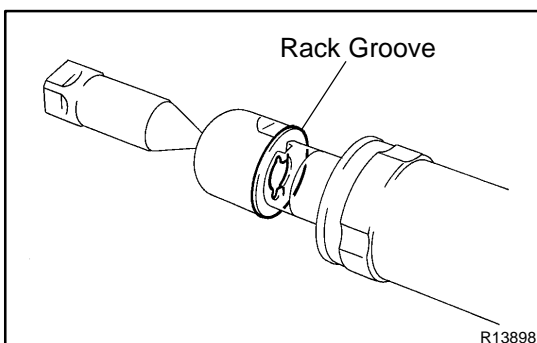
- (d) Remove the RH and LH rack ends.

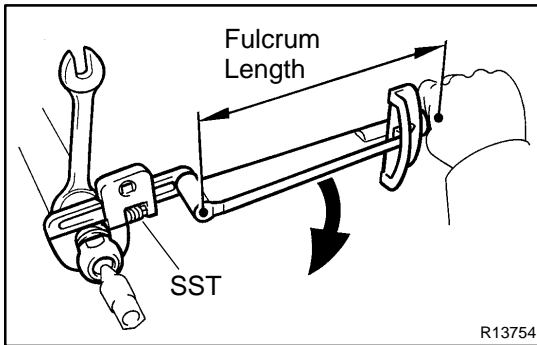
13. INSTALL RH AND LH CLAW WASHERS AND RACK ENDS

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

HINT:

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





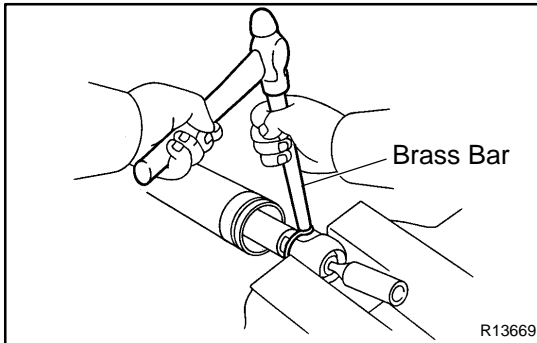
- (b) Using a spanner to hold the steering rack steady, and using SST, torque the rack end.
SST 09922-10010
Torque: 76 N·m (770 kgf·cm, 56 ft·lbf)

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.).

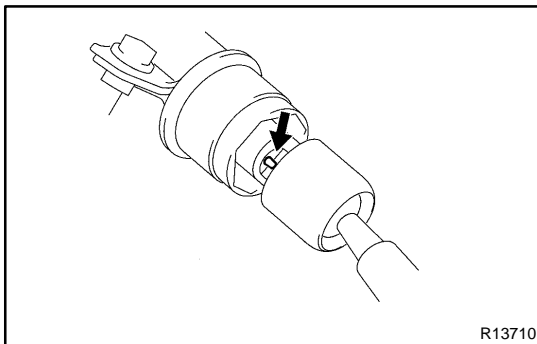


- (c) Using a brass bar and hammer, stake the claw washer.

NOTICE:

Avoid any impact to the rack.

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

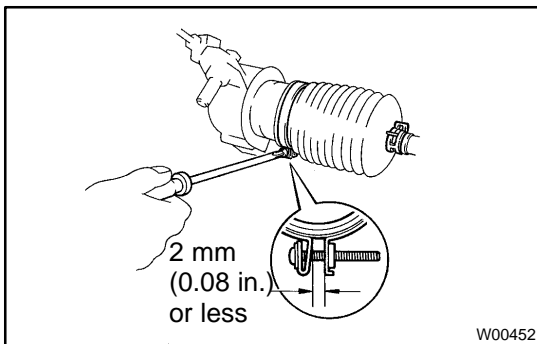


14. INSTALL RH AND LH RACK BOOTS, CLAMPS AND CLIPS

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

HINT:

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



- (b) Install the rack boot, dip and a new damp.

NOTICE:

Be careful not to damage or twist the boot.

- (c) Tighten a new clamp with the screw, as shown in the illustration.

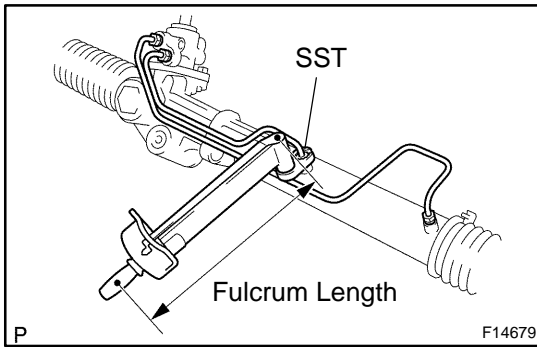
15. INSTALL RH AND LH TIE ROD ENDS AND LOCK NUTS

- (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-10).

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

16. INSTALL 2 TURN PRESSURE TUBES

- (a) Install 2 new union seats to the rack housing.
(b) Install 2 new union seats to the control valve housing.



- (c) Using SST, install the 2 turn pressure tubes.
SST 09023-38200
Torque: 23 N·m (235 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.