

## INSPECTION

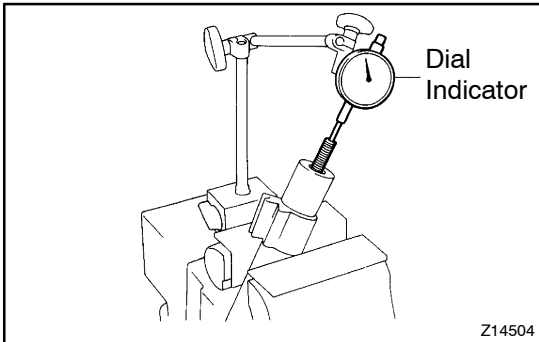
### NOTICE:

When using a vise, do not overtighten it.

#### 1. INSPECT BALL CLEARANCE

Using a dial indicator, check the ball clearance. Move the power piston nut up and down.

**Maximum clearance: 0.15 mm (0.0059 in.)**



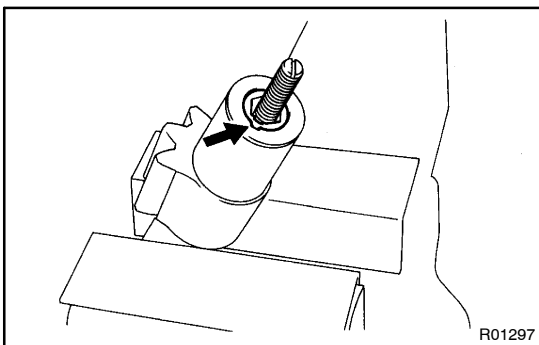
#### 2. INSPECT SECTOR SHAFT ADJUSTING SCREW THRUST CLEARANCE

Using a dial indicator, measure the thrust clearance.

**Standard clearance:**

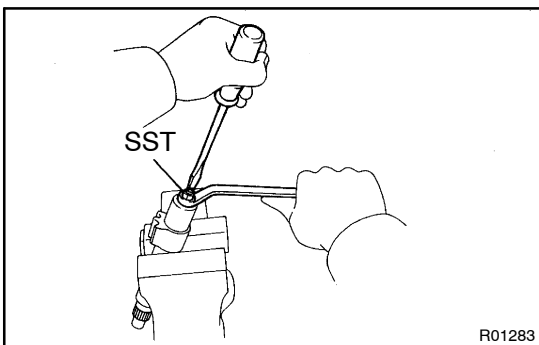
**0.03 – 0.05 mm (0.0012 – 0.0020 in.)**

**Maximum clearance: 0.05 mm (0.0020 in.)**



#### 3. IF NECESSARY, ADJUST SECTOR SHAFT ADJUSTING SCREW THRUST CLEARANCE

(a) Using a chisel and hammer, unstack the lock nut.



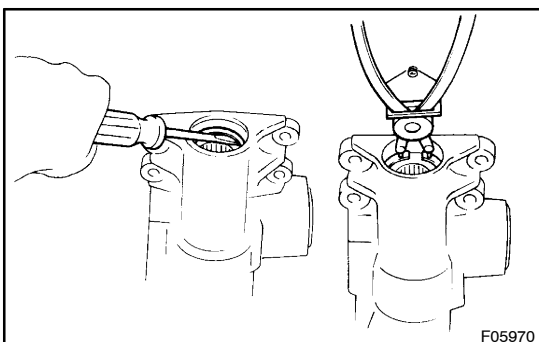
(b) Using SST, remove the lock nut.

SST 09630-00014 (09631-00051)

(c) Using a screwdriver, adjust the adjusting screw for the correct thrust clearance.

(d) Tighten a new lock nut.

(e) Stake the lock nut.

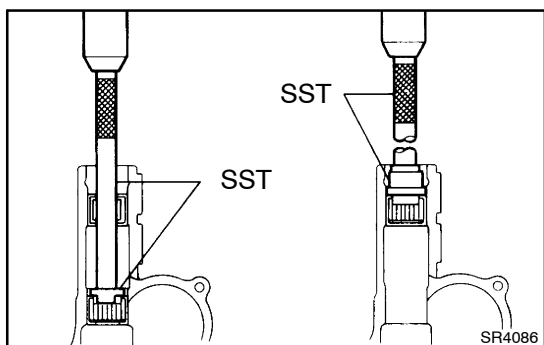


#### 4. IF NECESSARY, REPLACE 2 NEEDLE ROLLER BEARINGS

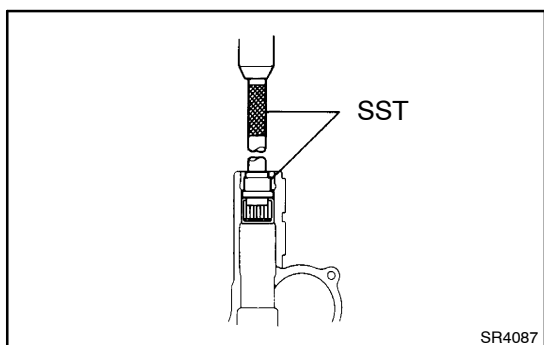
(a) Using a screwdriver, pry out the oil seal from the gear housing.

(b) Using snap ring pliers, remove the snap ring from the gear housing.

(c) Remove the spacer, teflon ring and O-ring from the gear housing.



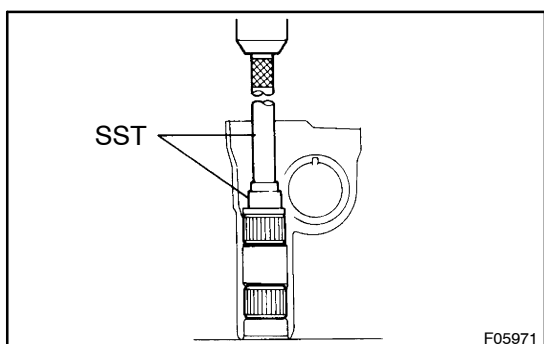
- (d) Using SST, press out the upper bearing from the gear housing.  
SST 09630 -00014 (0963 1-00071),  
09950-70010 (0995 1-07360)
- (e) Using SST, press out the lower bearing from the gear housing.  
SST 09630 -00014 (0963 1-00091),  
09950-70010 (0995 1-07200)



- (f) Coat a new bearing with molybdenum disulfide lithium base grease.
- (g) Using SST, press in the lower bearing.  
SST 09630 -00014 (0963 1-00091),  
09950-70010 (0995 1-07200)

**HINT:**

Install the lower bearing so that it is positioned 23.1 mm (0.909 in.) away from the gear housing inner end surface.

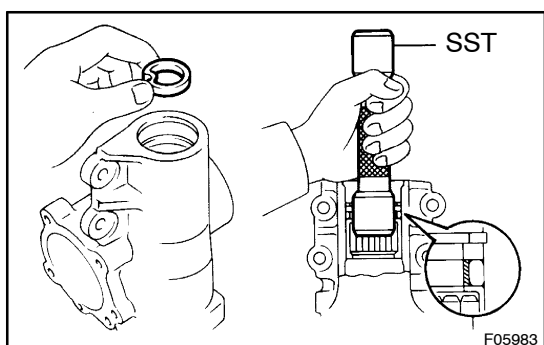


- (h) Coat a new bearing with molybdenum disulfide lithium base grease.
- (i) Using SST, press in the upper bearing.  
SST 09630 -00014 (0963 1-00091),  
09950-70010 (0995 1-07360)

**HINT:**

The bearing's top end should be installed so that it aligns with the gear housing end surface.

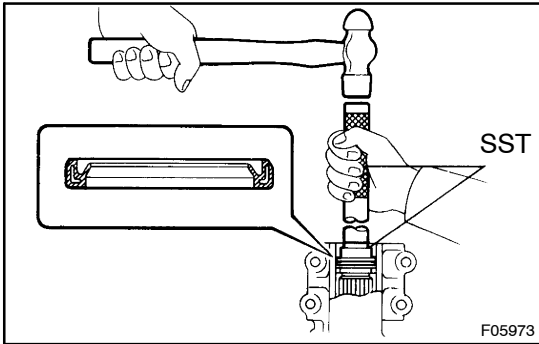
- (j) Coat a new O-ring and spacer with power steering fluid and install them to the gear housing.
- (k) Using snap ring pliers, install a new snap ring.



- (l) Form a new teflon ring into a heart shape and install it by hand.
- (m) Using SST, install the teflon ring.  
SST 09630 -00014 (0963 1-00121)

**NOTICE:**

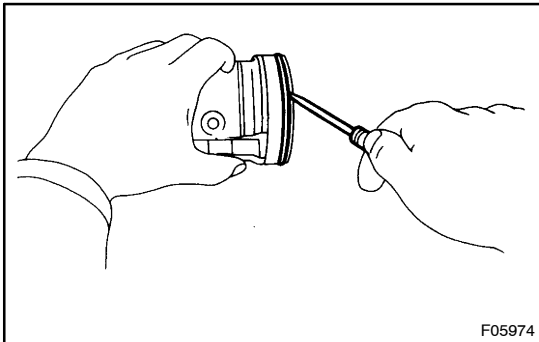
The teflon ring must be squeezed before inserting the sector shaft or damage will result.



- (n) Coat a new oil seal lip with power steering fluid.
- (o) Using SST, drive the oil seal into the gear housing.  
SST 09630 – 00014 (0963 1–00091),  
09950–70010 (0995 1–07200)

**NOTICE:**

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



### 5. IF NECESSARY, REPLACE TEFLON RING AND 2 O – RINGS

- (a) Using a screwdriver, remove the teflon ring and 2 O – rings from the worm gear valve body assembly.

**NOTICE:**

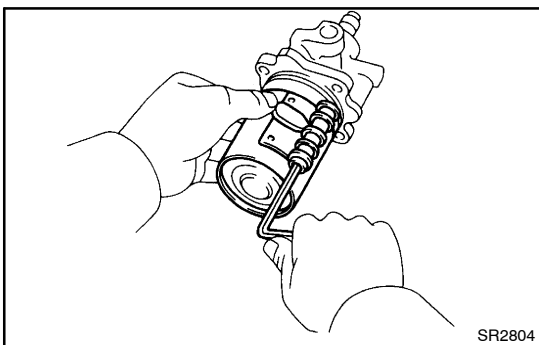
**Be careful not to damage the worm gear valve body assembly.**

- (b) Coat 2 new O – rings with power steering fluid and install them.

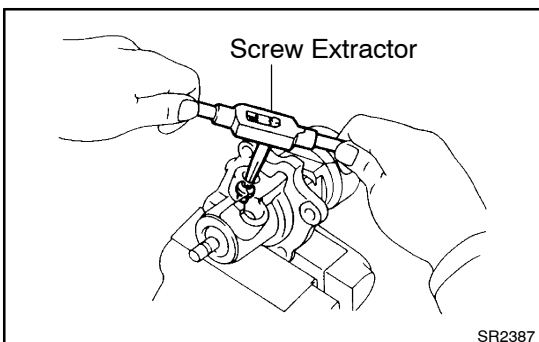
- (c) Expand a new teflon ring with your fingers.

**NOTICE:**

**Be careful not to overexpand the teflon ring.**

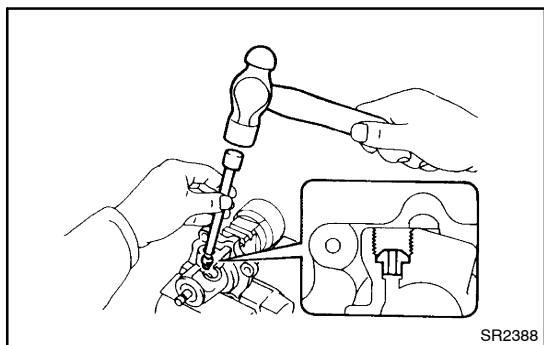


- (d) Install the teflon ring.
- (e) Coat the teflon ring with power steering fluid and settle it down with a piston ring compressor for 5 – 7 minutes.



### 6. IF NECESSARY, REPLACE 2 UNION SEATS

- (a) Using a screw extractor, remove the 2 union seats from the worm gear valve body assembly.



- (b) Using a hammer and an extension bar, tap in 2 new union seats.

**NOTICE:**

**Before installing the union seat, remove dust sticking to the worm gear valve body assembly.**