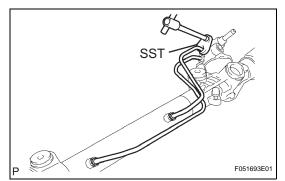


# **DISASSEMBLY**

### 1. REMOVE STEERING GEAR OUTLET RETURN TUBE

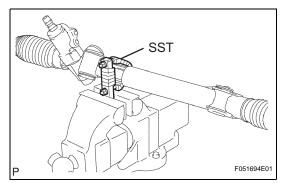
(a) Using SST, remove the return tube.

SST 09023-12701



#### 2. REMOVE STEERING TURN PRESSURE TUBE

- (a) Using SST, remove the 2 pressure tubes. SST 09023-38401
- (b) Remove the 4 O-rings from the pressure tubes.



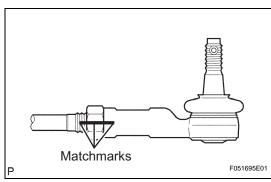
#### 3. FIX POWER STEERING LINK

(a) Using SST, fix the power steering link between aluminium plates in a vise, as shown in the illustration.

SST 09612-00012

NOTICE:

When using a vise, do not over tighten it.



#### 4. REMOVE TIE ROD END SUB-ASSEMBLY LH

- (a) Place matchmarks on the tie rod end, lock nut and rack end.
- (b) Loosen the lock nut and remove the tie rod end and lock nut.



The removal procedure for the RH side is the same as that for the LH side.

## 6. REMOVE STEERING RACK BOOT CLIP

(a) Remove the 2 rack boot clips.

## 7. REMOVE STEERING RACK BOOT NO. 1 CLAMP

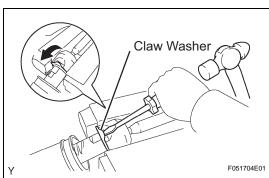
(a) Using pliers, remove the rack boot No. 1 clamp. **NOTICE**:

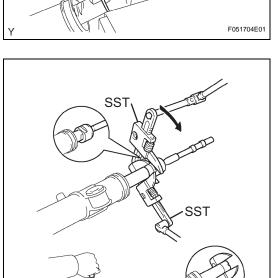
Be careful not to damage the steering rack boot No. 1.

# 8. REMOVE STEERING RACK BOOT NO. 2 CLAMP

The removal procedure for the No. 2 side is the same as that for the No. 1 side.







SST



10. REMOVE STEERING RACK BOOT NO. 2

### 11. REMOVE STEERING RACK END SUB-ASSEMBLY

(a) Using a screwdriver and hammer, unstake the claw washer.

#### NOTICE:

Avoid any impact to the power steering rack.

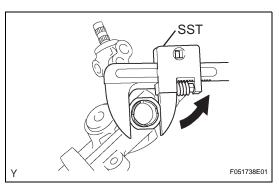
(b) Using 2 SSTs, remove the 2 steering rack ends and 2 claw washers.

SST 09922-10010

#### NOTICE:

- Turn SST 09922-10010 in the direction shown in the illustration.
- · Securely hold the steering rack end with SST.



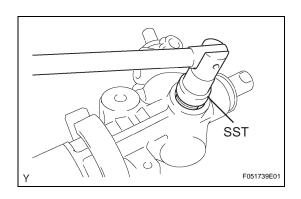


#### 12. REMOVE STEERING GEAR RACK GUIDE

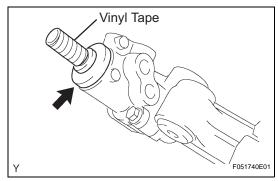
(a) Using SST, remove the rack guide spring cap nut. **SST 09922-10010** 

# NOTICE:

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

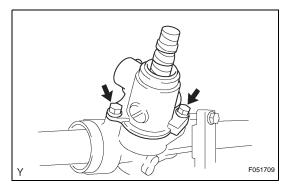


- (b) Using SST, remove the rack guide spring cap. **SST 09631-10021**
- (c) Remove the rack guide spring and rack guide.

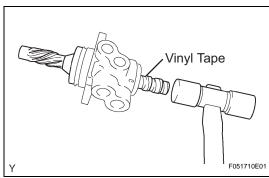


# 13. REMOVE POWER STEERING CONTROL VALVE ASSEMBLY

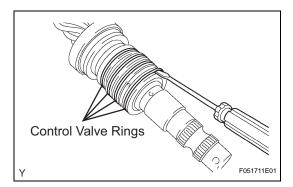
- (a) Wind vinyl tape around the serrated portion of the control valve.
- (b) Remove the dust cover from the control valve housing.



- (c) Remove the 2 bolts and control valve w/ control valve housing.
- (d) Remove the O-ring from the control valve housing.



- (e) To prevent the oil seal lip form getting damaged, wind vinyl tape around the serrated portion of the control valve.
- (f) Using a plastic hammer, remove the control valve from the control valve housing.

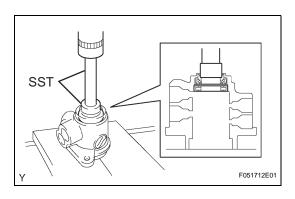


(g) Using a screwdriver, remove the 4 control valve rings.

#### NOTICE:

Be careful not to damage the grooves for the control valve rings.

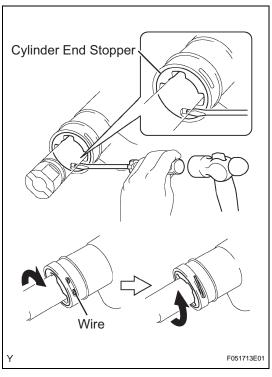




# 14. REMOVE POWER STEERING CONTROL VALVE UPPER OIL SEAL

(a) Using SST and a press, remove the control valve upper bearing and control valve upper oil seal from the control valve housing.

SST 09950-60010 (09951-00250), 09950-70010 (09951-07150)



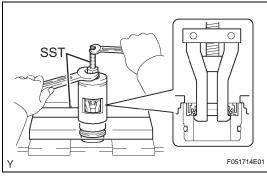
#### 15. REMOVE CYLINDER END STOPPER

- (a) Using a screwdriver and hammer, turn the cylinder end stopper clockwise until the wire end can be seen through the service hole.
- (b) Using a screwdriver and hammer, turn the cylinder end stopper counterclockwise, and remove the wire and cylinder end stopper.

#### 16. REMOVE POWER STEERING RACK

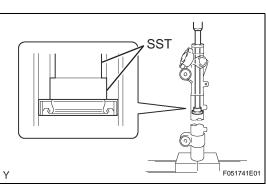
### 17. REMOVE POWER STEERING RACK BUSH

- (a) Remove the rack bush from the power steering rack.
- (b) Using a screwdriver, remove the O-ring from the rack bush.



PS

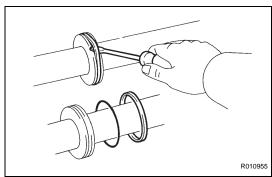
(c) Using SST, remove the rack bush oil seal. SST 09527-21011, 09612-24014 (09613-22011)



# 18. REMOVE POWER STEERING CYLINDER TUBE OIL SEAL

(a) Using SST and a press, remove the cylinder tube oil seal.

SST 09950-60010 (09951-00290), 09950-70010 (09951-07360)



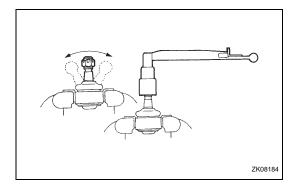


#### 19. REMOVE RACK STEERING PISTON RING

(a) Using a screwdriver, remove the piston ring and Oring.

### **NOTICE:**

Be careful not to damage the groove for the piston ring.

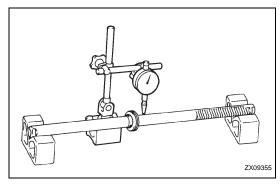


# **INSPECTION**

#### 1. INSPECT TIE ROD END SUB-ASSEMBLY

- (a) Flip the ball joint stud back and forth 5 times as shown in the illustration before installing the nut.
- (b) Using a torque wrench, turn the nut continuously at a rate of 2 to 4 seconds per turn and check the torque reading on the 5th turn.

Torque: 0.83 to 3.43 N\*m (8.5 to 35.0 kgf\*cm, 7.35 to 30.36 in.\*lbf)



#### 2. INSPECT POWER STEERING RACK

(a) Using a dial indicator, check the power steering rack for runout, teeth wear and damage.

### **Maximum runout:**

0.3 mm (0.012 in.)

If necessary, replace the power steering link assembly.

(b) Check the back surface for wear and damage. If necessary, replace the power steering link assembly.

