REASSEMBLY

1. INSPECT PRESSURE PORT UNION

If the union seat in the pressure port union is severely damaged, it may cause fluid leakage. In that case, replace the vane pump assembly.

2. INSTALL VANE PUMP HOUSING OIL SEAL

- (a) Coat a new vane pump housing oil seal lip with power steering fluid.
- (b) Using SST and a press, install the vane pump housing oil seal.

SST 09950-60010 (09951-00330), 09950-70010 (09951-07100)

NOTICE:

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

3. INSTALL PUMP BRACKET FRONT

(a) Install the pump bracket front with the bolt. Torque: 43 N*m (438 kgf*cm, 32 ft.*lbf)

4. INSTALL VANE PUMP SHAFT

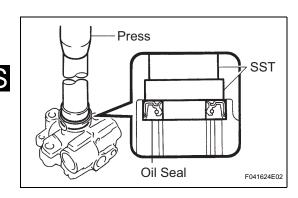
- (a) Coat the busing surface of the vane pump housing front with power steering fluid.
- (b) Gradually insert the vane pump shaft from the pulley side.

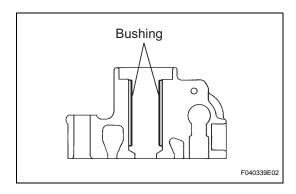
NOTICE:

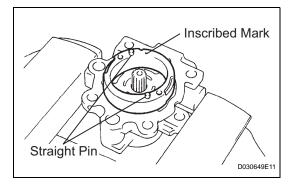
- Do not damage the vane pump housing oil seal lip in the vane pump housing front.
- After installation, check the vane pump housing oil seal lip.

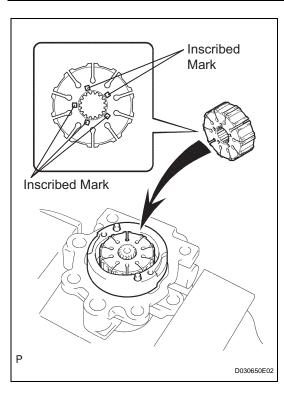
5. INSTALL VANE PUMP CAM RING

(a) Align the holes of the vane pump cam ring with the 2 straight pins, and install the vane pump cam ring with the inscribed mark facing upward.









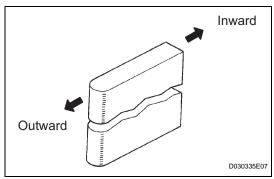
6. INSTALL VANE PUMP ROTOR

(a) Install the vane pump rotor with the inscribed mark facing downward.

NOTICE:

Make sure that the vane pump rotor is installed in the correct direction.

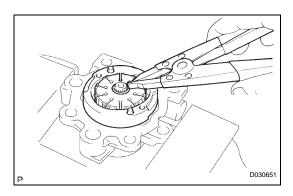




- (b) Coat all 10 vane pump plates with power steering fluid
- (c) Install the vane pump plates with the round end facing outward.

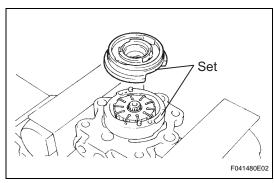
NOTICE:

Make sure that the vane pump plates are installed in the correct direction.



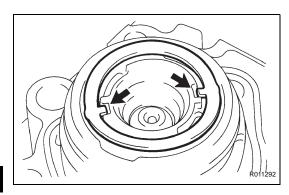
7. INSTALL VANE PUMP SHAFT SNAP RING

(a) Using a snap ring expander, install a new vane pump shaft snap ring onto the vane pump shaft.



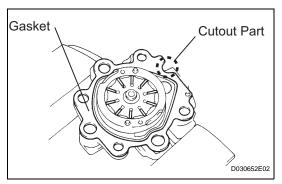
8. INSTALL VANE PUMP SIDE PLATE REAR

(a) Align the groove of the vane pump cam ring with that of the vane pump side plate rear to install.



- (b) Install the wave washer so that its protrusions fit into the slots in the vane pump side plate rear.
- (c) Coat 2 new O-rings with power steering fluid and install them onto the vane pump side plate rear.





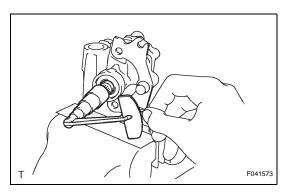
9. INSTALL VANE PUMP HOUSING REAR

(a) Install a new gasket to the vane pump housing front. **NOTICE:**

Make sure that the gasket is installed with the cutout in the correct position.

(b) Install the vane pump housing rear with the 4 bolts.

Torque: 24 N*m (245 kgf*cm, 18 ft.*lbf)



10. MEASURE VANE PUMP ROTATION TORQUE

- (a) Check that the vane pump rotates smoothly without abnormal noise.
- (b) Temporarily install the nut to the vane pump shaft.
- (c) Using a torque wrench, check the vane pump rotating torque.

Torque: Rotating torque

0.27 N*m (2.8 kgf*cm, 2.4 in.*lbf) or less

11. INSTALL VANE PUMP BRACKET REAR

(a) Install the vane pump bracket rear with the 2 bolts. Torque: 43 N*m (438 kgf*cm, 32 ft.*lbf)

12. INSTALL FLOW CONTROL VALVE

- (a) Coat the compression spring with power steering fluid and install it to the vane pump housing front.
- (b) Coat the flow control valve with power steering fluid.
- (c) Install the flow control valve to the vane pump housing front.

NOTICE:

Make sure that the flow control valve is installed correctly.

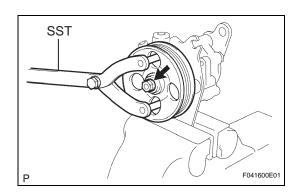
- (d) Coat a new O-ring with power steering fluid and install it to the pressure port union.
- (e) Install the pressure port union to the vane pump housing front.

Torque: 83 N*m (846 kgf*cm, 61 ft.*lbf)

13. INSTALL POWER STEERING SUCTION PORT UNION

- (a) Coat a new O-ring with power steering fluid and install it to the suction port union.
- (b) Install the suction port union with the bolt to the vane pump housing front.

Torque: 13 N*m (133 kgf*cm, 10 ft.*lbf)



14. INSTALL VANE PUMP PULLEY

- (a) Install the vane pump pulley to the vane pump shaft.
- (b) Using SST, keep the vane pump pulley from rotating and install the nut.

SST 09960-10010 (09962-01000, 09963-01000)

Torque: 44 N*m (449 kgf*cm, 32 ft.*lbf)

