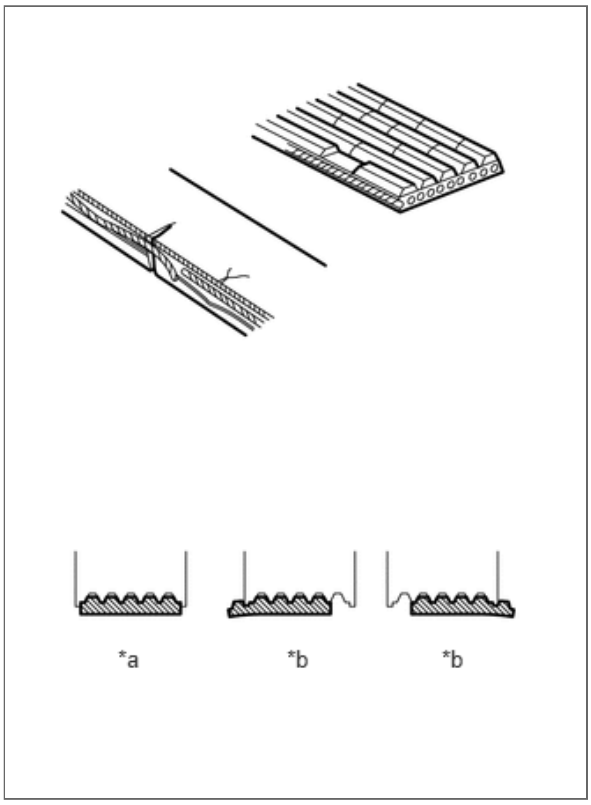
PROCEDURE

1.INSPECT FAN AND GENERATOR V BELT (for 1GR-FE) 16361A

a.



*a	Correct
*b	Incorrect

Visually check the fan and generator V belt for excessive wear, frayed cords, etc.

HINT:

- Cracks on the rib side of a fan and generator V belt are considered acceptable. Replace the fan and generator V belt if there are any missing ribs.
- After installing a fan and generator V belt, check that it fits properly in the ribbed grooves.
- Check with your hand to confirm that the fan and generator V belt has not slipped out of the grooves on the bottom of the pulley.

If any defect is found, replace the fan and generator V belt.

2.BLEED AIR FROM POWER STEERING SYSTEM

a. Check the fluid level.

b. Jack up the front of the vehicle and support it with stands.

c. Turn the steering wheel.

i. With the engine stopped, turn the steering wheel slowly from lock to lock several times.

d. Lower the vehicle.

e. Start the engine.

f. Run the engine at idle for a few minutes.

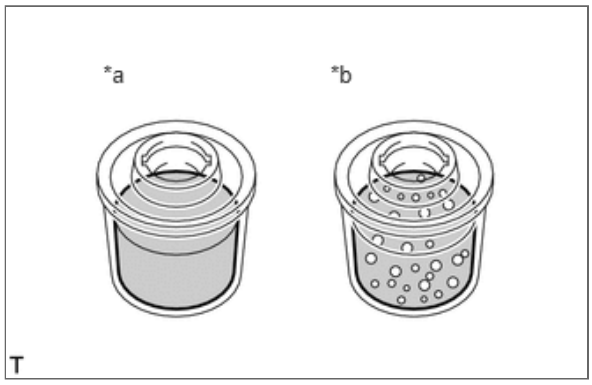
g. Turn the steering wheel.

i. With the engine idling, turn the wheel to the left or right full lock position and keep it there for 2 to 3 seconds, then turn the wheel to the opposite full lock position and keep it there for 2 to 3 seconds.(*1)

ii. Repeat (*1) several times.

h. Stop the engine.

i.



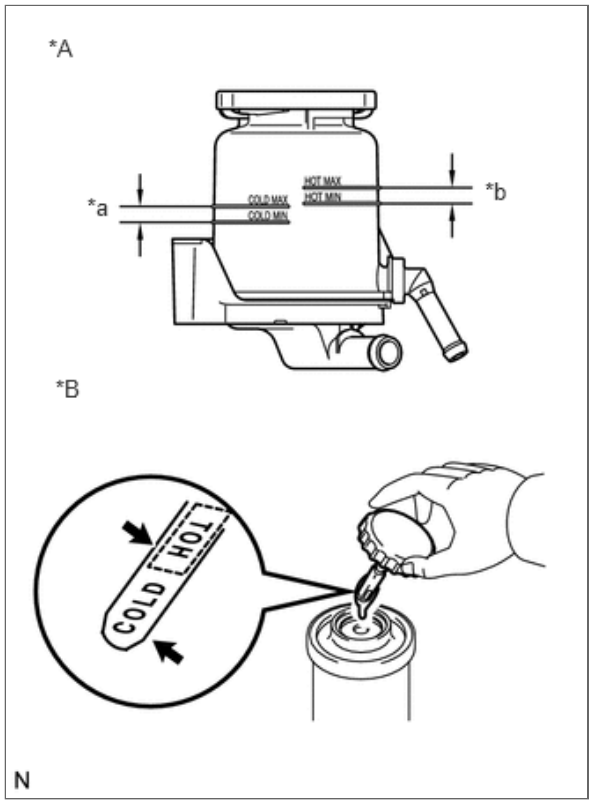
*a	Correct
*b	Incorrect

Check for foaming or emulsification.
If the system has to be bled twice specifically because of foaming or emulsification, check for fluid leaks in the power steering system.

j. Check the fluid level.

3.CHECK POWER STEERING FLUID LEVEL

a.



*A	for 1VD-FTV, 1GR-FE
*B	for 1HZ
*a	COLD Range
*b	HOT Range

Keep the vehicle horizontal.

b. With the engine stopped, check the fluid level in the reservoir.
If necessary, add fluid.

Fluid:
ATF "DEXRON" II or III, or equivalent

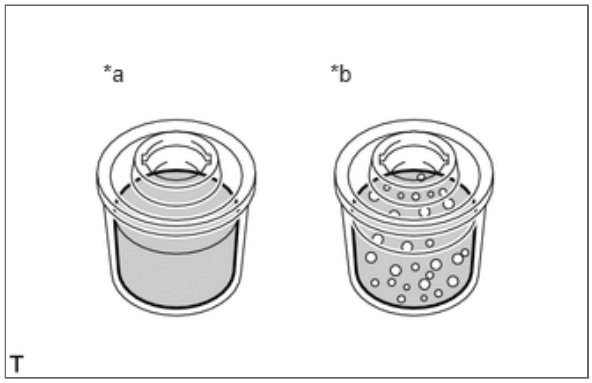
HINT:
If the fluid is hot (over 40°C (104°F)), make sure that the fluid level is within the HOT range. If the fluid is cold, make sure that it is within the COLD range.

c. Start the engine and run it at idle.

d. Turn the steering wheel from lock to lock several times to raise the fluid temperature.

Fluid temperature:
80°C (176°F)

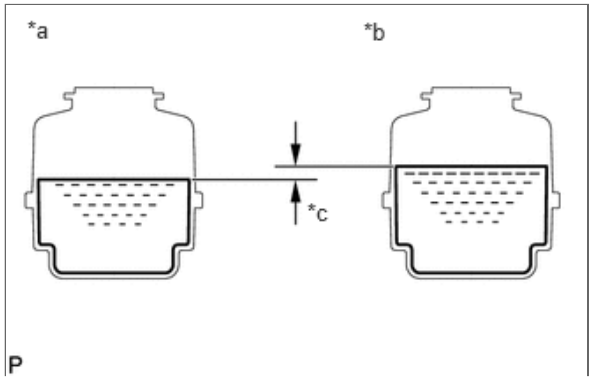
e.



*a	Correct
*b	Incorrect

Check for foaming or emulsification.
If foaming or emulsification is identified, bleed air from the power steering system.

f.



*a	Engine Idling
*b	Engine Stopped
*c	5 mm or less

With the engine idling, measure the fluid level in the reservoir.

g. Stop the engine.

h. Wait a few minutes and remeasure the fluid level in the reservoir.

Maximum fluid level rise:
5.0 mm (0.197 in.)

If the fluid level rise is more than the maximum, bleed air from the power steering system.

i. Check the fluid level.

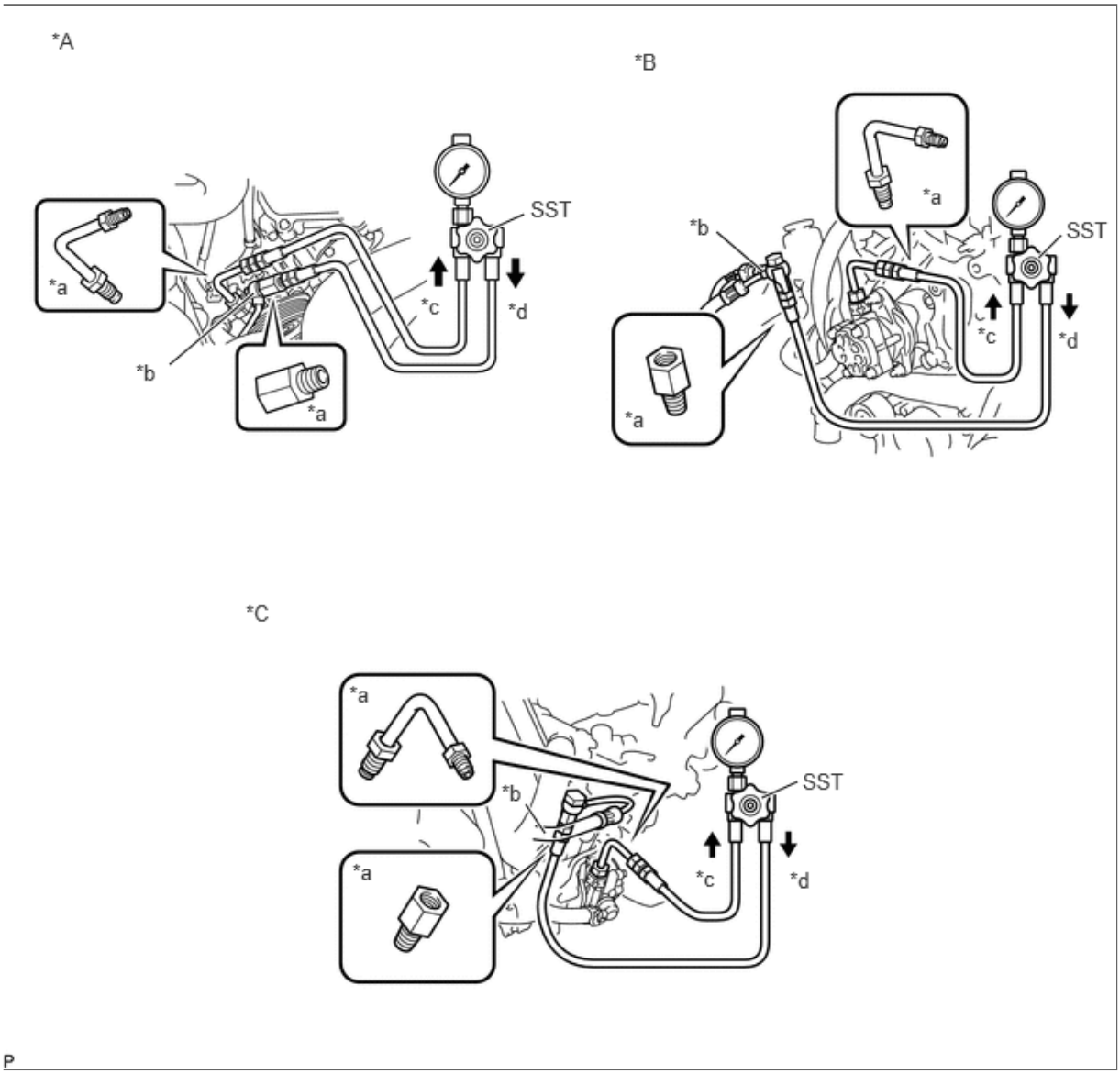
4.CHECK STEERING FLUID PRESSURE

a. Disconnect the pressure feed tube from the vane pump assembly.

b. Connect SST as shown in the illustration below.

SST

09640-10010 (09641-01010, 09641-01030, 09641-01060)



P

*A	for 1GR-FE	*B	for 1VD-FTV
*C	for 1HZ	-	-
*a	Attachment	*b	Pressure Feed Tube
*c	IN	*d	OUT

NOTICE:

Check that the valve of SST is in the open position.

c. Bleed air from the power steering system.

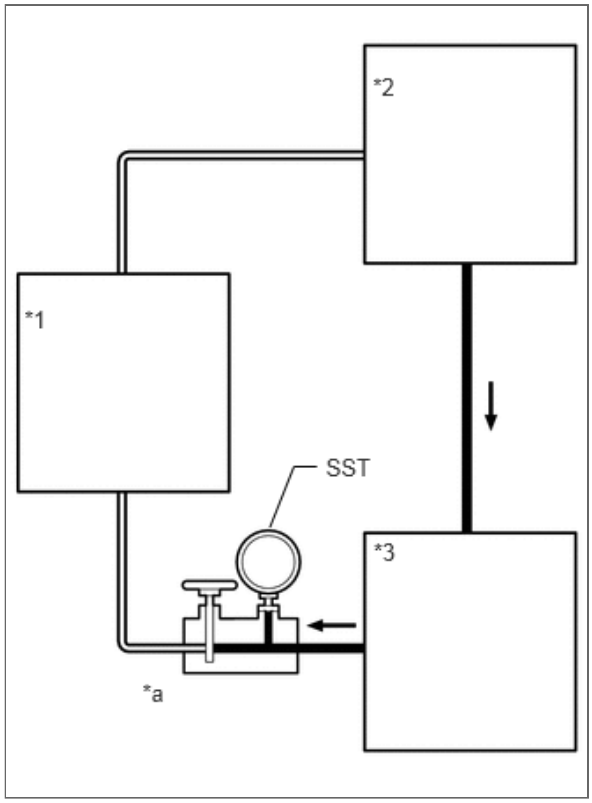
d. Start the engine and run it at idle.

e. Turn the steering wheel from lock to lock several times to raise the fluid temperature.

Fluid temperature:

80°C (176°F)

f.



*1	Power Steering Gear
*2	Power Steering Fluid Reservoir
*3	Power Steering Vane Pump Assembly
*a	Valve Closed

With the engine idling, close the valve of SST and observe the reading on SST.

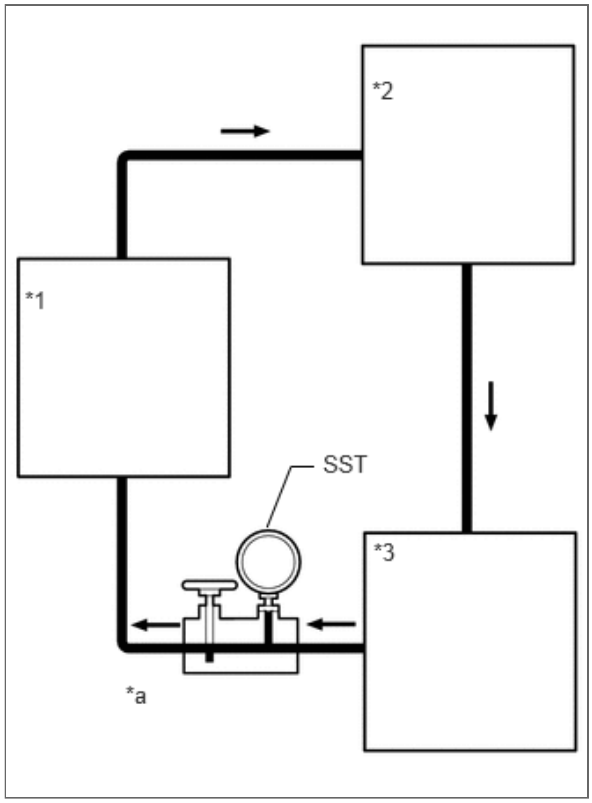
Standard fluid pressure:
for 1GR-FE, 1HZ:
8800 to 9500 kPa (89.8 to 96.8 kgf/cm^2, 1276 to 1377 psi)
for 1VD-FTV:
9300 to 10000 kPa (94.9 to 101.9 kgf/cm^2, 1349 to 1450 psi)

NOTICE:

- Do not keep the valve closed for more than 10 seconds.
- Do not allow the fluid temperature to become too high.

If the pressure is not within the specified range, check for fluid leaks and replace parts as necessary.

g.



*1	Power Steering Gear
*2	Power Steering Fluid Reservoir
*3	Power Steering Vane Pump Assembly
*a	Valve Open

With the engine idling, open the valve fully.

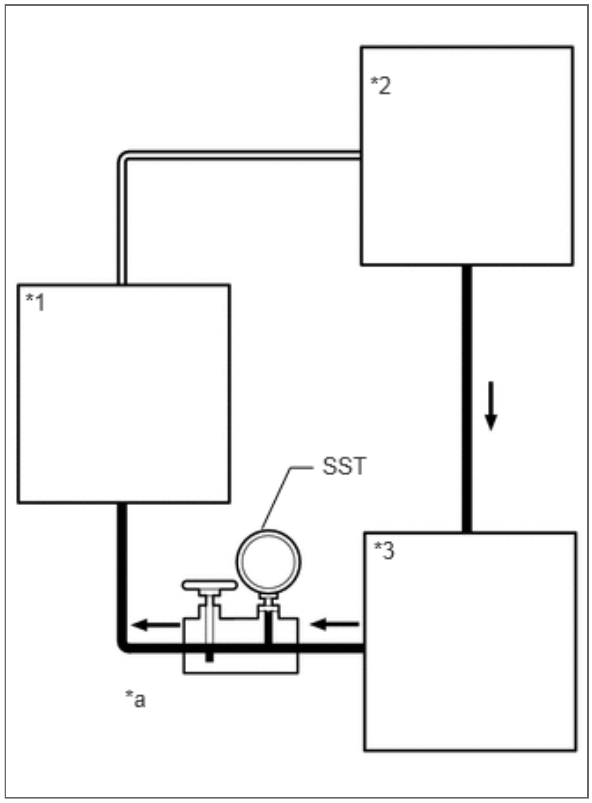
h. Measure the fluid pressure at engine speeds of 1000 rpm and 3000 rpm.

Fluid pressure difference:
490 kPa (5.0 kgf/cm^2, 71 psi) or less

NOTICE:
Do not turn the steering wheel.

If the pressure difference is above the specified range, check for fluid leaks and replace parts as necessary.

i.



*1	Power Steering Gear (Lock Position)
*2	Power Steering Fluid Reservoir
*3	Power Steering Vane Pump Assembly
*a	Valve Open

With the engine idling and the valve fully open, turn the steering wheel left or right to the full lock position. Observe the reading on SST.

Standard fluid pressure:
for 1GR-FE, 1HZ:
8800 to 9500 kPa (89.8 to 96.8 kgf/cm^2, 1276 to 1377 psi)
for 1VD-FTV:
9300 to 10000 kPa (94.9 to 101.9 kgf/cm^2, 1349 to 1450 psi)

NOTICE:

- Do not keep the steering wheel in the full lock position for more than 10 seconds.
- Do not allow the fluid temperature to become too high.

If the pressure is not within the specified range, check for fluid leaks and replace parts as necessary.

j. Disconnect SST.

k. Connect the pressure feed tube to the vane pump assembly.

l. Bleed air from the power steering system.