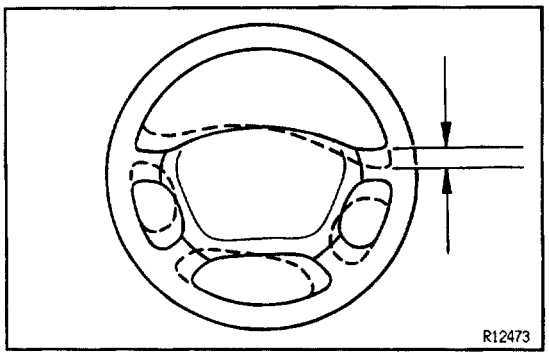
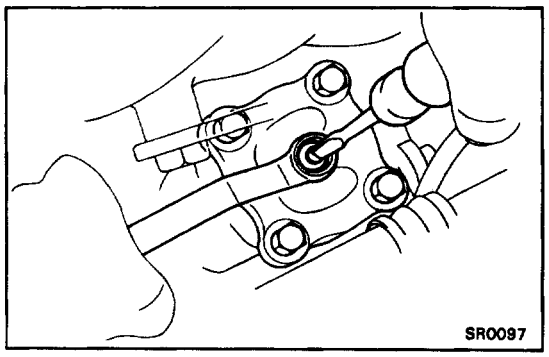




ON–VEHICLE INSPECTION

STEERING WHEEL FREEPLAY CHECK

1. CHECK THAT STEERING WHEEL FREEPLAY IS CORRECT

With the vehicle stopped and tires pointed straight ahead, rock the steering wheel gently back and forth with light finger pressure.

Freeplay should not exceed the maximum.

	Freeplay mm (in.)
Maximum	40 (1.57)

2. POINT WHEELS STRAIGHT AHEAD

3. ADJUST STEERING GEAR

(a) Loosen the lock nut.

(b) Turn the adjusting screw clockwise to decrease wheel freeplay and counterclockwise to increase it.

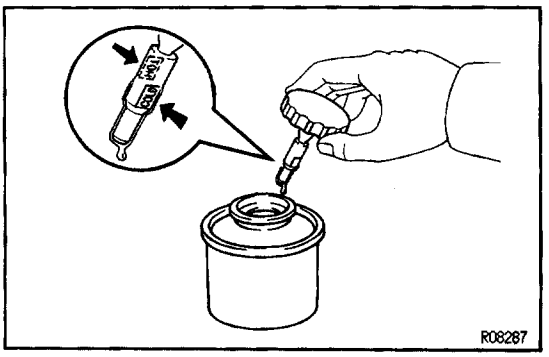
HINT: Turn the adjusting screw in small increments and check the wheel freeplay between each adjustment.

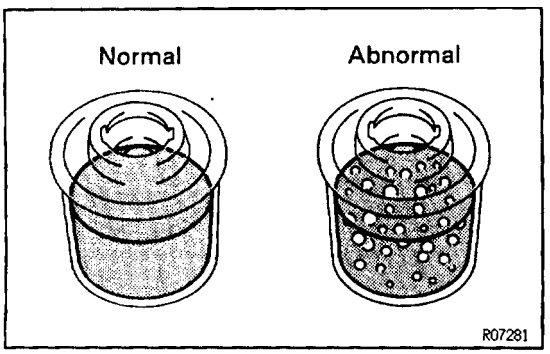
4. CHECK THAT STEERING DOES NOT BIND

Turn the steering wheel half way around in both directions. Check that the freeplay is correct and steering is smooth and without rough spots.

5. HOLD ADJUSTING SCREW AND TIGHTEN LOCK NUT

Torque: 47 N·m (470 kgf·cm, 34 ft·lbf)





FLUID LEVEL CHECK

1. KEEP VEHICLE LEVEL

2. CHECK FLUID LEVEL

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

Fluid: ATF DEXRON II

HINT: Check that the fluid level is within the HOT LEVEL range on the reservoir. If the fluid is cold, check that it is within the COLD LEVEL range.

3. BOOST FLUID TEMPERATURE

(a) Start the engine and run it at idle.

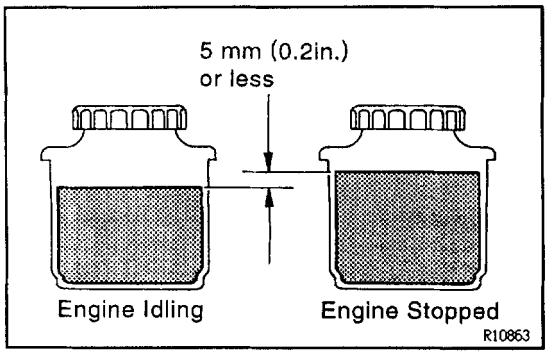
(b) Turn the steering wheel from lock to lock several times to boost fluid temperature.

Fluid temperature: 80°C (176°F)

4. CHECK FOR FOAMING OR EMULSIFICATION

If there is foaming or emulsification, bleed power steering system.

(See page SR–7)



5. CHECK FLUID LEVEL RISE

(a) With the engine idling, measure the fluid level in the oil reservoir.

(b) Stop the engine.

(c) Wait a few minutes and remeasure the fluid level in the reservoir.

	Fluid level rise mm (in.)
Maximum	5 (0.2)

If a problem is found, bleed power steering system. (See page SR–7)

6. CHECK FLUID LEVEL
(See page SR–6)

POWER STEERING FLUID REPLACEMENT

1. JACK UP FRONT OF VEHICLE AND SUPPORT IT WITH STANDS

2. DRAIN FLUID

(a) Disconnect the return hose from the PS vane pump.

(b) Turn the steering wheel from lock to lock.

3. FILL OIL RESERVOIR

(a) Fill oil reservoir with fresh fluid.
Fluid: ATF DEXRON II

(b) Start engine.

(c) After 1 or 2 seconds, fluid will begin to discharge from the return hose.

(d) Stop the engine immediately.
NOTICE: Take care that some fluid remains in the oil reservoir.

(e) Repeat steps (a), (b), (c) and (d) until there is no more air in fluid.

(f) Connect the return hose to the PS vane pump.

4. BLEED POWER STEERING SYSTEM

POWER STEERING SYSTEM BLEEDING

1. CHECK FLUID LEVEL
(See page SR–6)

2. JACK UP FRONT OF VEHICLE AND SUPPORT IT WITH STANDS

3. TURN STEERING WHEEL
With the engine stopped, turn the wheel slowly from lock to lock several times.

4. LOWER VEHICLE

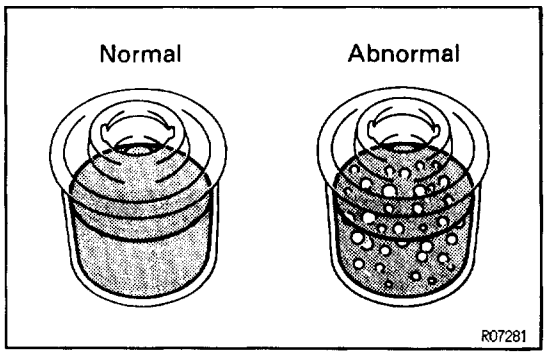
5. START ENGINE
Run the engine at idle for a few minutes.

6. TURN STEERING WHEEL

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

(b) Repeat (a) several times.

7. STOP ENGINE

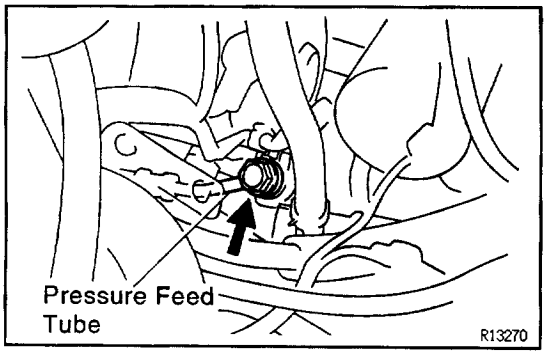


8. CHECK FOR FOAMING OR EMULSIFICATION

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

9. CHECK FLUID LEVEL

(See page SR–6)



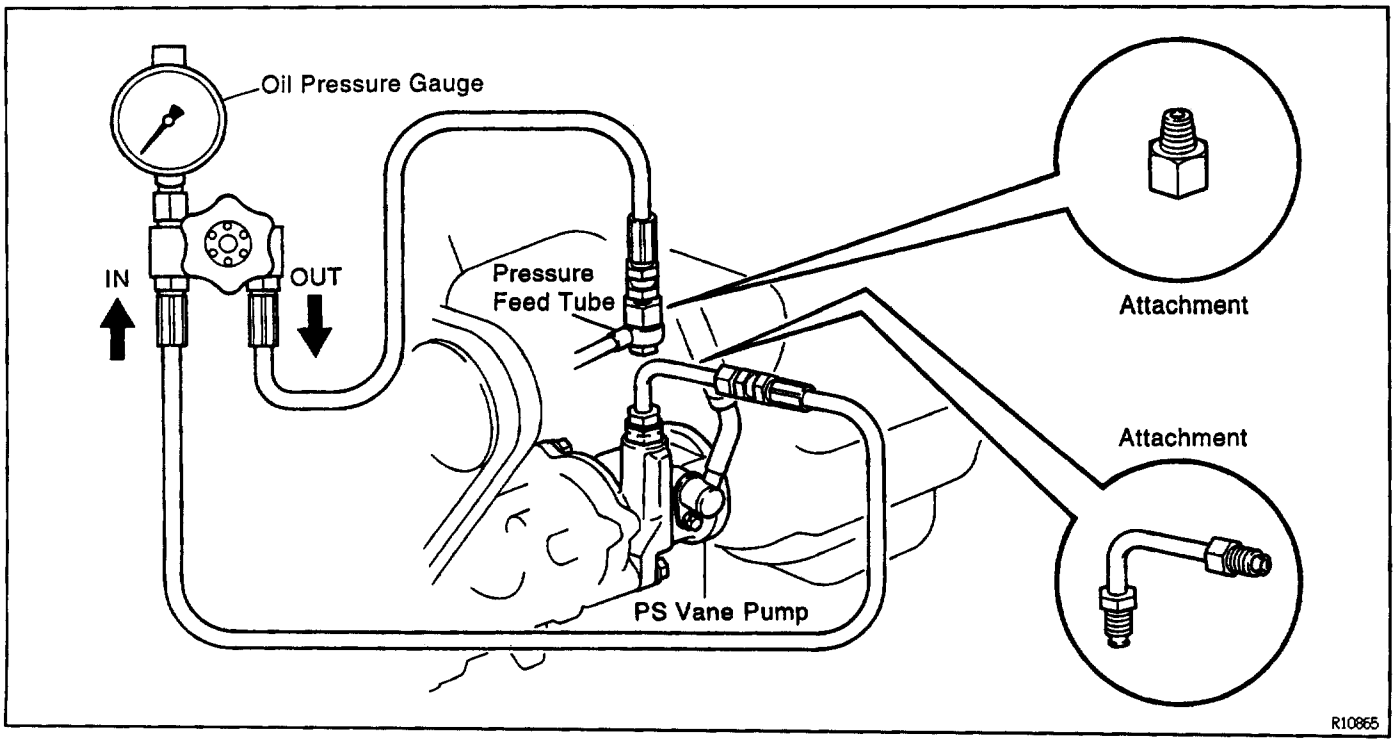
FLUID PRESSURE CHECK

1. CONNECT OIL PRESSURE GAUGE

(a) Using a spanner (24 mm) to hold the pressure port union, remove the union bolt and the 2 gaskets.

(b) Connect the gauge, as shown below.

NOTICE: Check that the valve of the gauge is in the open position.



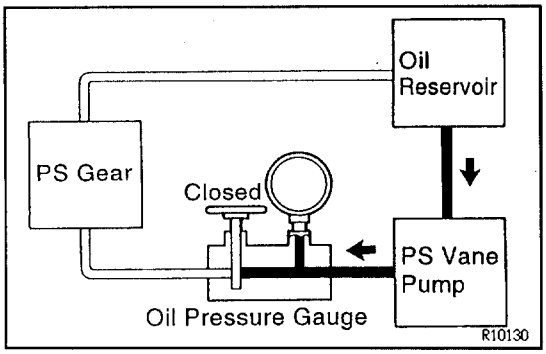
3. BLEED POWER STEERING SYSTEM
(See page SR–7)

4. BOOST FLUID TEMPERATURE

(a) Start the engine and run it at idle.

(b) Turn the steering wheel from lock to lock several times to boost fluid temperature.

Fluid temperature:
80°C (176°F)

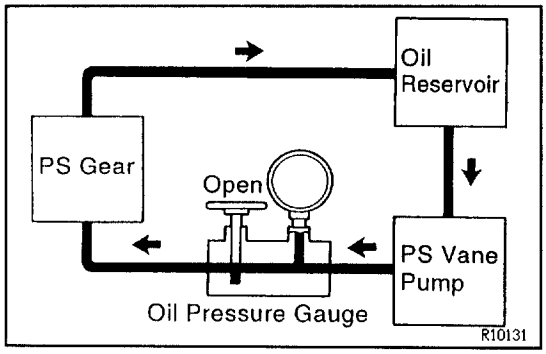


5. CHECK FLUID PRESSURE READING WITH VALVE CLOSED

With the engine idling, close the oil pressure gauge valve and observe the reading on the gauge.

	Fluid pressure kPa (kgf/cm, psi)
Minimum	9,316 (95, 1,351)

NOTICE:
- Do not keep the valve closed for more than 10 seconds.
- Do not let the fluid temperature become too high.



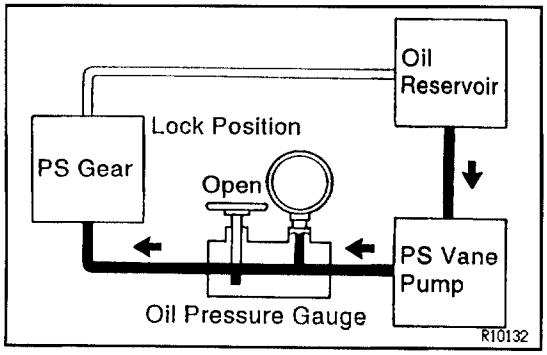
6. CHECK FLUID PRESSURE READING WITH VALVE OPENED

(a) With the engine idling, open the valve fully.

(b) Measure the fluid pressure at engine speeds of 1,000 rpm and 3,000 rpm.

	Fluid pressure kPa (kgf/cm, psi)
Difference	490 (5, 71) or less

NOTICE: Do not turn the steering wheel.



7. CHECK PRESSURE READING WITH STEERING WHEEL TURNED TO FULL LOCK

With the engine idling and valve fully opened, turn the wheel to full lock.

	Fluid pressure kPa (kgf/cm, psi)
Minimum	9,316 (95, 1,351)

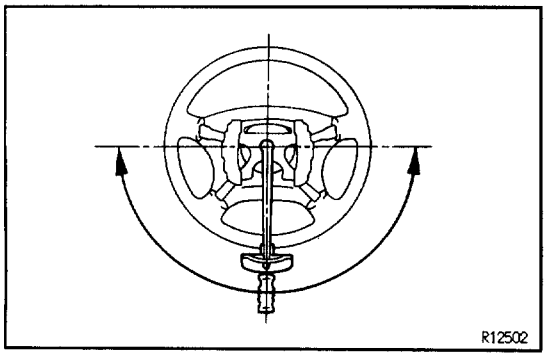
NOTICE:
- Do not maintain lock position for more than 10 seconds.
- Do not let the fluid temperature become too high.

8. DISCONNECT OIL PRESSURE GAUGE

(a) Disconnect the gauge.

(b) Connect the pressure feed tube.
(See page SR–30)

9. BLEED POWER STEERING SYSTEM
(See page SR–7)



STEERING EFFORT MEASUREMENT

1. CENTER STEERING WHEEL

2. MEASURE STEERING EFFORT

(a) Remove the steering wheel pad.
(See page SR–13)

(b) Start the engine and run it at idle.

(c) Measure the steering effort in both directions.
Reference (Maximum):
8.3 N·m (85 kgf·cm, 73 in.·lbf)
HINT: Be sure to consider the tire type, pressure and contact surface before making your diagnosis.

(d) Torque the steering wheel set nut.
Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)

(e) Install the steering wheel pad.
(See page SR–21)