POWER STEERING FLUID

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**

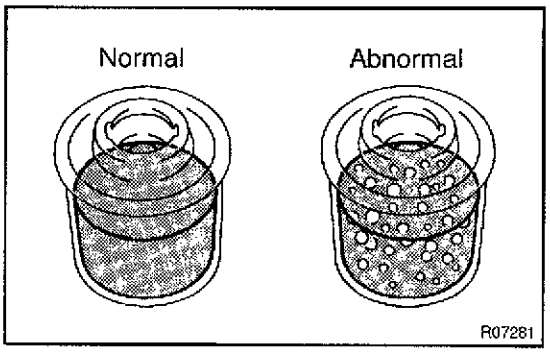
Run the engine at idle for a few minutes.

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**

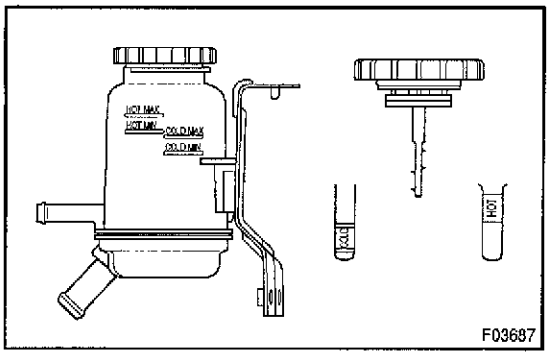
If the system has to be bled twice specifically because of foaming or emulsification, check for fluid leaks in the system.

9. **CHECK FLUID LEVEL**
   (See page SR–6)

SR

SR039-01

INSPECTION



1. CHECK FLUID LEVEL

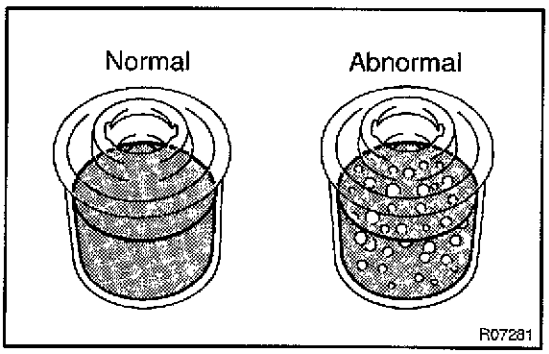
(a) Keep the vehicle level.

(b) With the engine stopped, check the fluid level in the oil reservoir.
If necessary, add fluid.
Fluid: ATF DEXRON® II or III

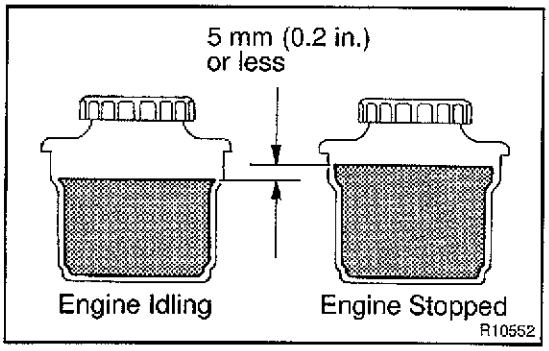
HINT:
Check that the fluid level is within the HOT LEVEL range on the reservoir / reservoir cap dipstick. If the fluid is cold, check that it is within the COLD LEVEL range.

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

(d) Turn the steering wheel from lock to lock several times to boost fluid temperature.
Fluid temperature: 80°C (176°F)



(e) Check for foaming or emulsification.
If there is foaming or emulsification, bleed power steering system.
(See page SR–5)



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

(g) Stop the engine.

(h) Wait a few minutes and remeasure the fluid level in the oil reservoir.
Maximum fluid level rise: 5 mm (0.20 in.)

If a problem is found, bleed power steering system.
(See page SR–5)

(i) Check the fluid level.

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2. CHECK STEERING FLUID PRESSURE

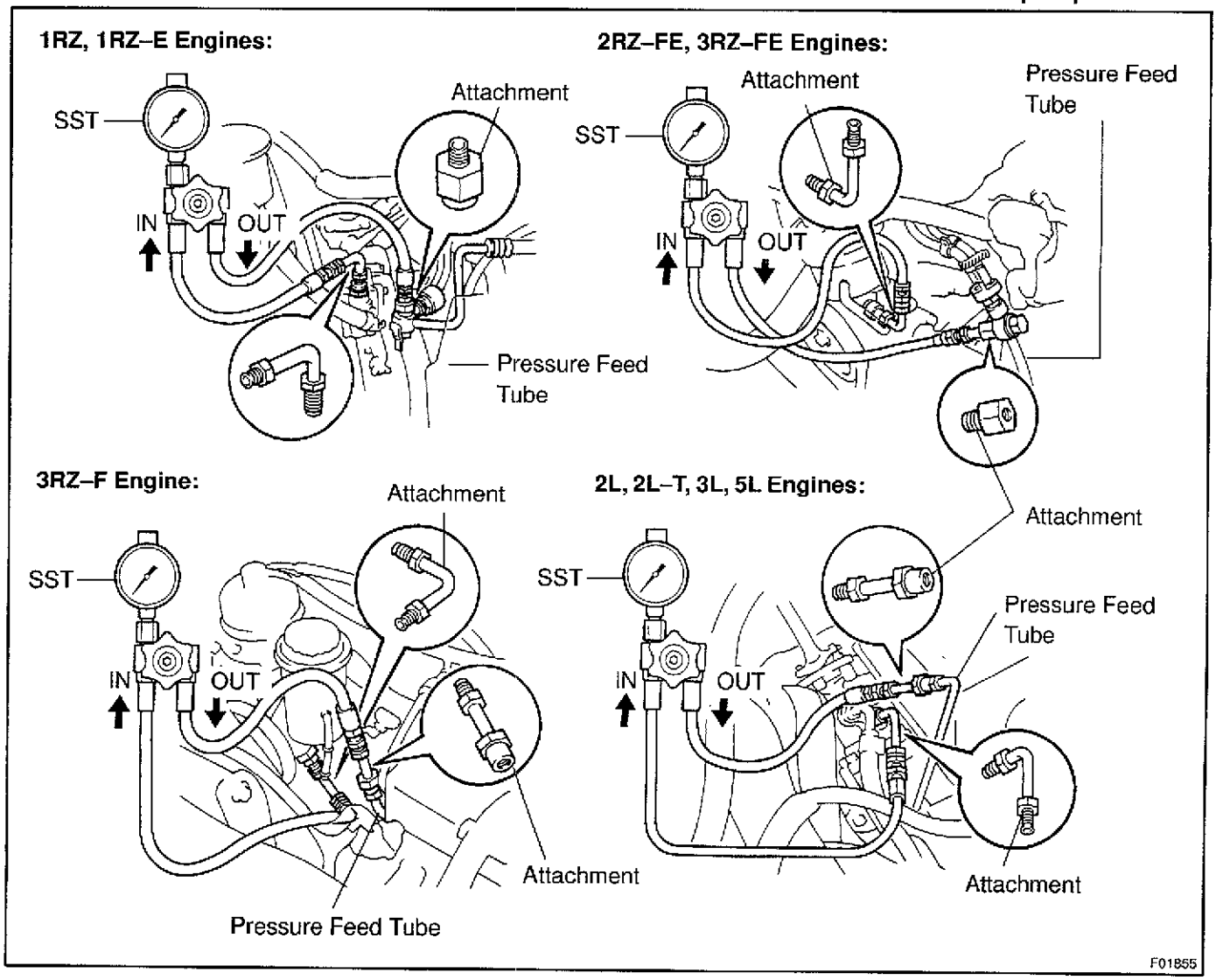
(a) Disconnect the pressure feed tube.
(1RZ, 1RZ–E Engines: See page SR–29)
(2RZ–FE, 3RZ–FE Engines: See page SR–39)
(3RZ–F Engine: See page SR–49)
(2L, 2L–T, 3L LHD Engines: See page SR–59)
(2L. 2L–T, 3L, 5L RHD Engines: See page SR–69)

(b) Connect SST, as shown below.

1RZ, 1RZ–E, 2RZ–FE, 3RZ–FE Engines:
SST 09640–10010 (09641–01010, 09641–01030, 09641–01060)

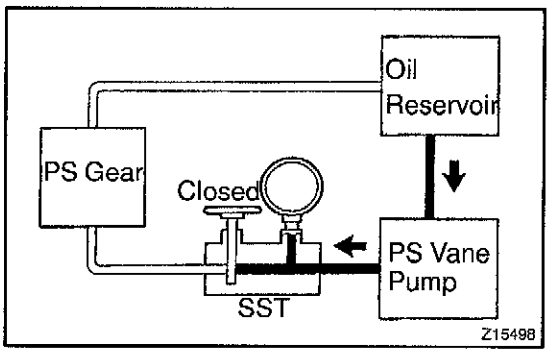
3RZ–F, 2L, 2L–T, 3L, 5L Engines:
SST 09640–10010 (09641–01010, 09641–01020, 09641–01030)

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



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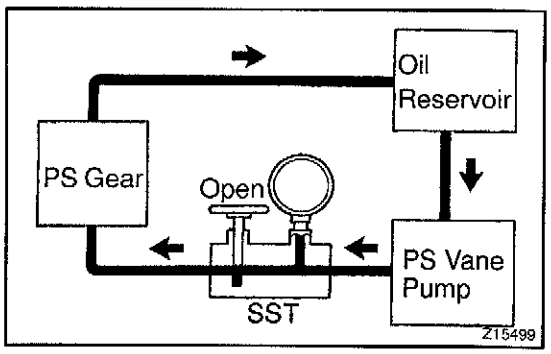
(c) Bleed the power steering system.
(See page SR–5)
(d) Start the engine and run it at idle.
(e) Turn the steering wheel from lock to lock several times to boost fluid temperature.
Fluid temperature: 80 °C (176 °F)



(f) With the engine idling, close the valve of the SST and observe the reading on the SST.
1RZ, 1RZ–E Engines:
Minimum fluid pressure:
7,355 kPa (75 kgf·cm^2, 1,067 psi)
2RZ–FE, 3RZ–FE, 3RZ–F, 2L, 2L–T, 3L, 5L Engines:
Minimum fluid pressure:
8,336 kPa (85 kgf·cm^2, 1,209 psi)

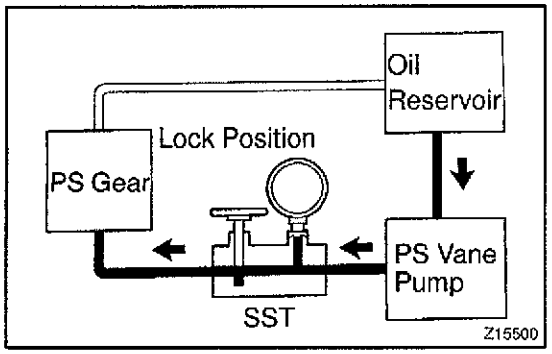
NOTICE:
- **Do not keep the valve closed for more than 10 seconds.**
- **Do not let the fluid temperature become too high.**

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(g) With the engine idling, open the valve fully.
(h) Measure the fluid pressure at engine speeds of 1,000 rpm and 3,000 rpm.
Difference fluid pressure:
490 kPa (5 kgf·cm^2, 71 psi) or less

NOTICE:
Do not turn the steering wheel.



(i) With the engine idling and valve fully opened, turn the steering wheel to full lock.
1RZ, 1RZ–E Engines:
Minimum fluid pressure:
7,355 kPa (75 kgf·cm^2, 1,067 psi)
2RZ–FE, 3RZ–FE, 3RZ–F, 2L, 2L–T, 3L, 5L Engines:
Minimum fluid pressure:
8,336 kPa (85 kgf·cm^2, 1,209 psi)

NOTICE:

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

(j) Disconnect the SST.

(k) Connect the pressure feed tube.
(1RZ, 1RZ–E Engines: See page SR–36)
(2RZ–FE, 3RZ–FE Engines: See page SR–46)
(3RZ–F Engine: See page SR–56)
(2L, 2L–T, 3L LHD Engines: See page SR–56)
(2L. 2L–T, 3L, 5L RHD Engines: See page SR–76)

(l) Bleed the power steering system.
(See page SR–5)