

2012 - Mazda6 - Steering

POWER STEERING FLUID INSPECTION

Fluid Level Inspection

1. Inspect the power steering fluid level.
 - Add fluid to the specified level as necessary.
Power steering fluid type
 - Mazda Genuine ATF M-V or equivalent (e.g. Dexron®II)
 - Power steering fluid capacity (approx. quantity)**
 - MZR 2.5: 0.78 L {0.82 US qt, 0.69 Imp qt}
 - MZI 3.7 V6: 1.11 L {1.17 US qt, 0.98 Imp qt}

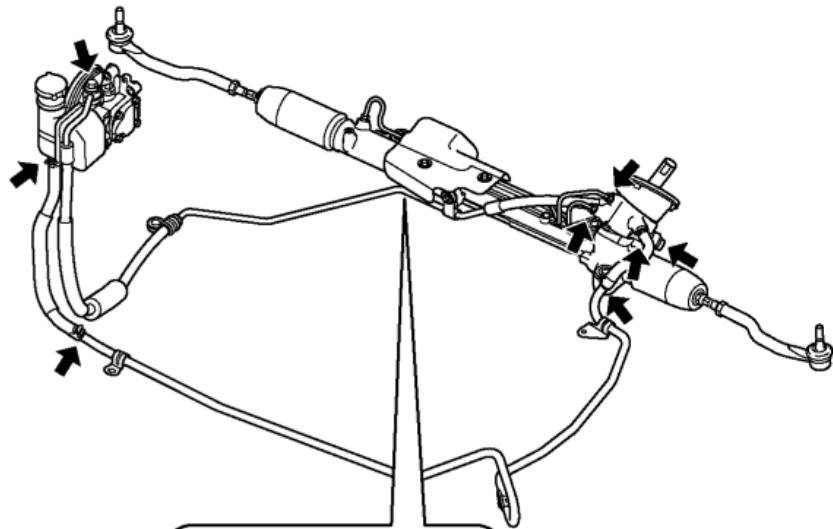
Fluid Leakage Inspection

1. Start the engine and let it idle.
2. Turn the steering wheel fully to the left and right to apply fluid pressure.

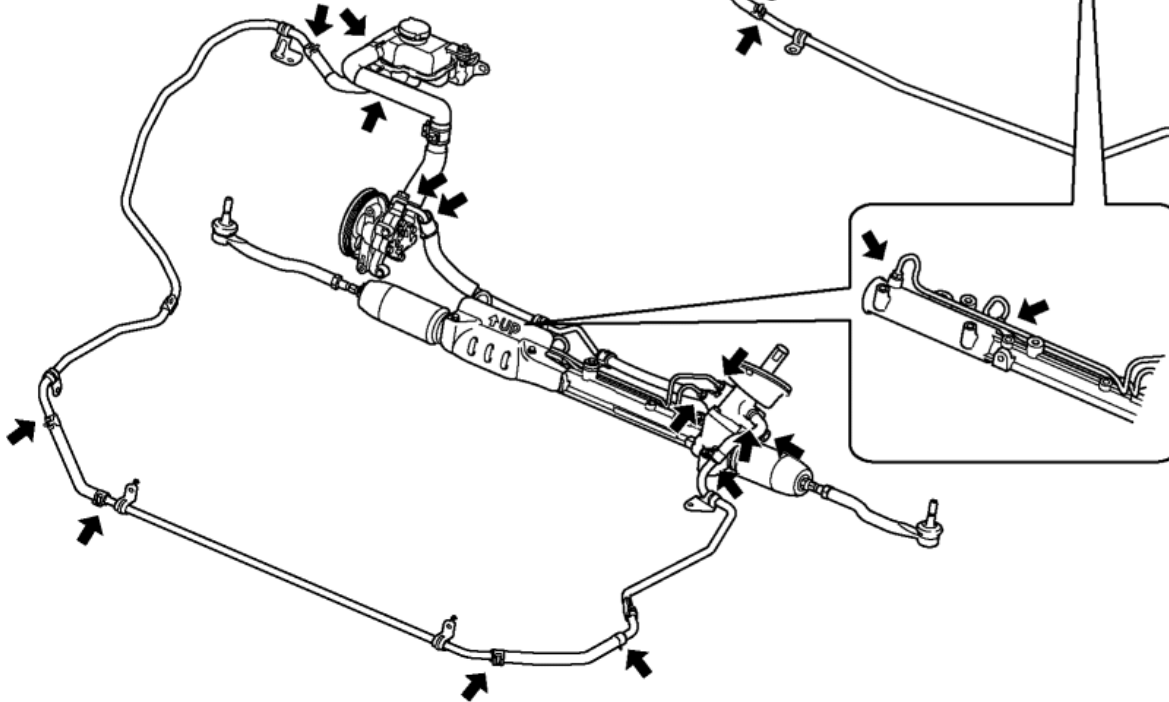
CAUTION:

- If the steering wheel is kept in the fully turned position for more than 5 seconds, the fluid temperature will rise excessively and adversely affect the oil pump.
3. Inspect for fluid leakage.

MZR 2.5



MZI 3.7 V6



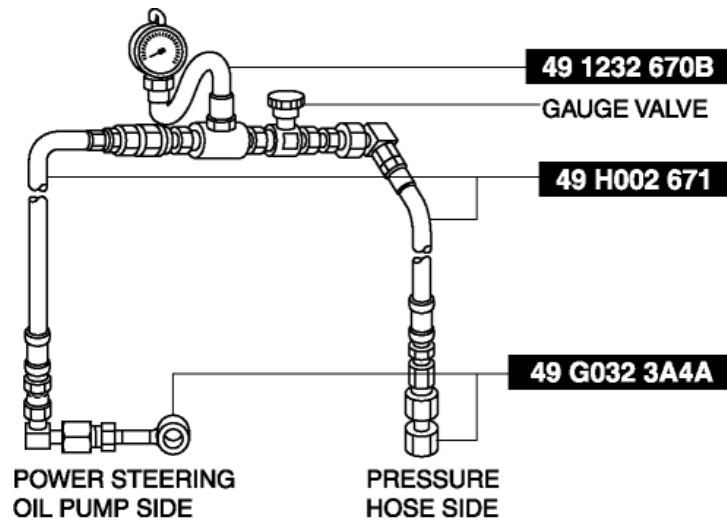
- If fluid leakage is found, replace related pipe or hose. (See [POWER STEERING FLUID LINE COMPONENT REMOVAL/ INSTALLATION \[MZR 2.5\]](#).) (See [POWER STEERING FLUID LINE COMPONENT REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)

NOTE:

- The points where fluid leakage may occur are indicated in the figure.

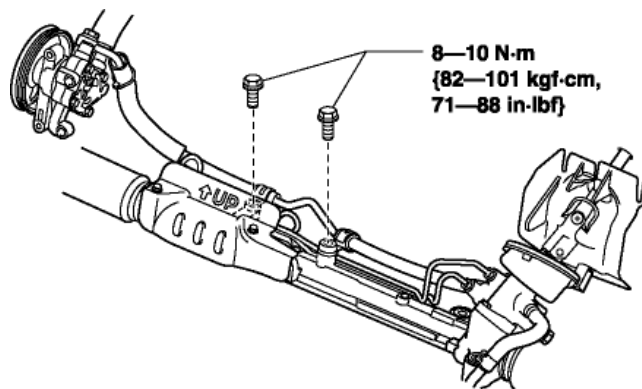
Fluid Pressure Inspection

1. Assemble the **SSTs** as shown in the figure.

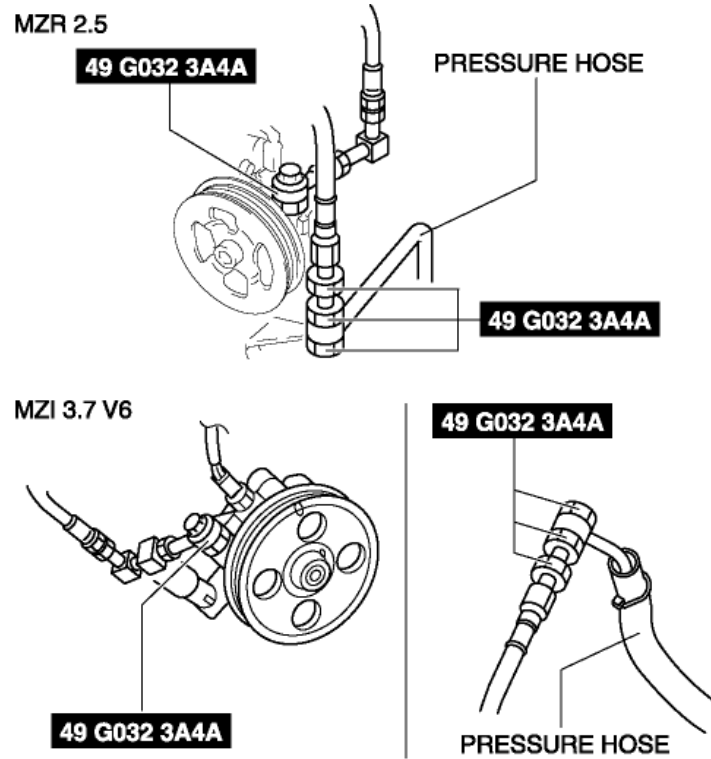


2. For the vehicles with MZI 3.7 V6, remove the following parts.

- Windshield wiper arm (See [WINDSHIELD WIPER ARM AND BLADE REMOVAL/ INSTALLATION.](#))
- Cowl grille (See [COWL GRILLE REMOVAL/ INSTALLATION.](#))
- Windshield wiper motor (See [WINDSHIELD WIPER MOTOR REMOVAL/ INSTALLATION.](#))
- Cowl panel (See [COWL PANEL REMOVAL/ INSTALLATION.](#))
- Bolts shown in the figure



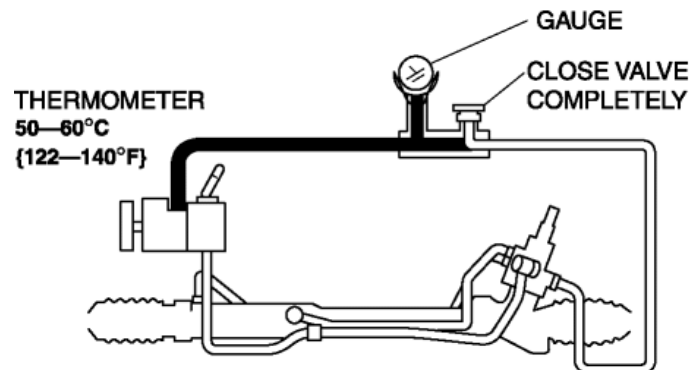
3. Disconnect the pressure hose from the power steering oil pump, and connect the SSTs.



Tightening torque

- 38—51 N·m {3.9—5.2 kgf·m, 29—37 ft·lbf}

4. Bleed the air from the system. (See [AIR BLEEDING](#).)
5. Open the gauge valve fully.
6. Start the engine and turn the steering wheel fully left and right to raise the fluid temperature to 50—60 °C { 122—140 °F} .
7. Close the gauge valve completely.



8. Increase the engine speed to 1,000—1,500 rpm and measure the fluid pressure generated by the oil pump.
 - If the pressure is not within the specification, repair or replace the oil pump component.

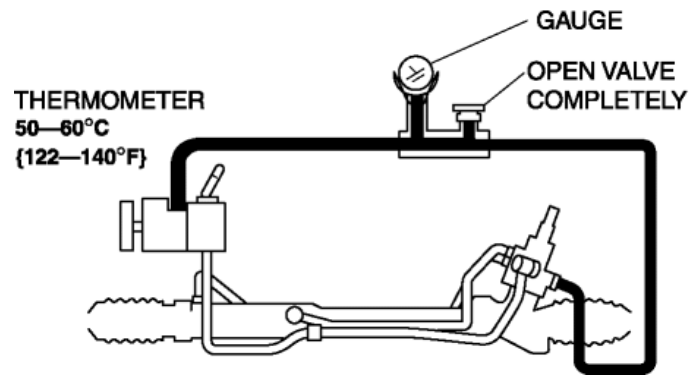
CAUTION:

- If the valve is left closed for more than 5 seconds, the fluid temperature will rise excessively and adversely affect the oil pump.

Oil pump fluid pressure

- MZR 2.5: 8.33—8.82 MPa {85.0—89.9 kgf/cm², 1209—1279 psi}
- MZI 3.7 V6: 8.51—9.29 MPa {86.8—94.7 kgf/cm², 1235—1347 psi}

9. Open the gauge valve fully and increase the engine speed to 1,000—1,500 rpm .



10. Turn the steering wheel fully to the left and right, then measure the fluid pressure generated at the gear housing.
 - If the pressure is not within the specification, repair or replace the steering gear component.

CAUTION:

- If the steering wheel is kept in the fully turned position for more than 5 seconds, the fluid temperature will rise excessively and adversely affect the oil pump.

Gear housing fluid pressure

- MZR 2.5: 8.33—8.82 MPa {85.0—89.9 kgf/cm², 1209—1279 psi}
- MZI 3.7 V6: 8.80—9.29 MPa {90.0—94.7 kgf/cm², 1277—1342 psi}

11. Remove the **SSTs**. Install and tighten the pressure hose to the specified torque.

Tightening torque

- 38—51 N·m {3.9—5.2 kgf·m, 29—37 ft·lbf}

12. Bleed the air from the system. (See [AIR BLEEDING](#).)

2012 - Mazda6 - Steering

POWER STEERING FLUID INSPECTION

Fluid Level Inspection

1. Inspect the power steering fluid level.
 - Add fluid to the specified level as necessary.
Power steering fluid type
 - Mazda Genuine ATF M-V or equivalent (e.g. Dexron®II)**Power steering fluid capacity (approx. quantity)**
 - MZR 2.5: 0.78 L {0.82 US qt, 0.69 Imp qt}
 - MZI 3.7 V6: 1.11 L {1.17 US qt, 0.98 Imp qt}

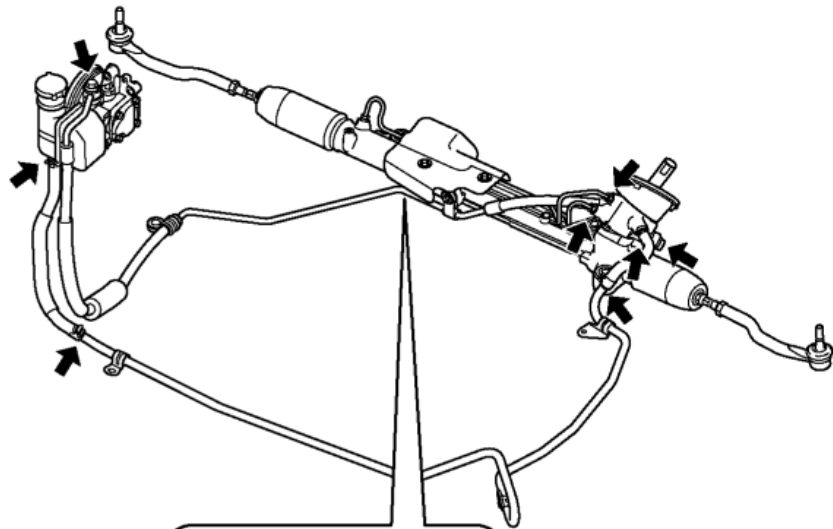
Fluid Leakage Inspection

1. Start the engine and let it idle.
2. Turn the steering wheel fully to the left and right to apply fluid pressure.

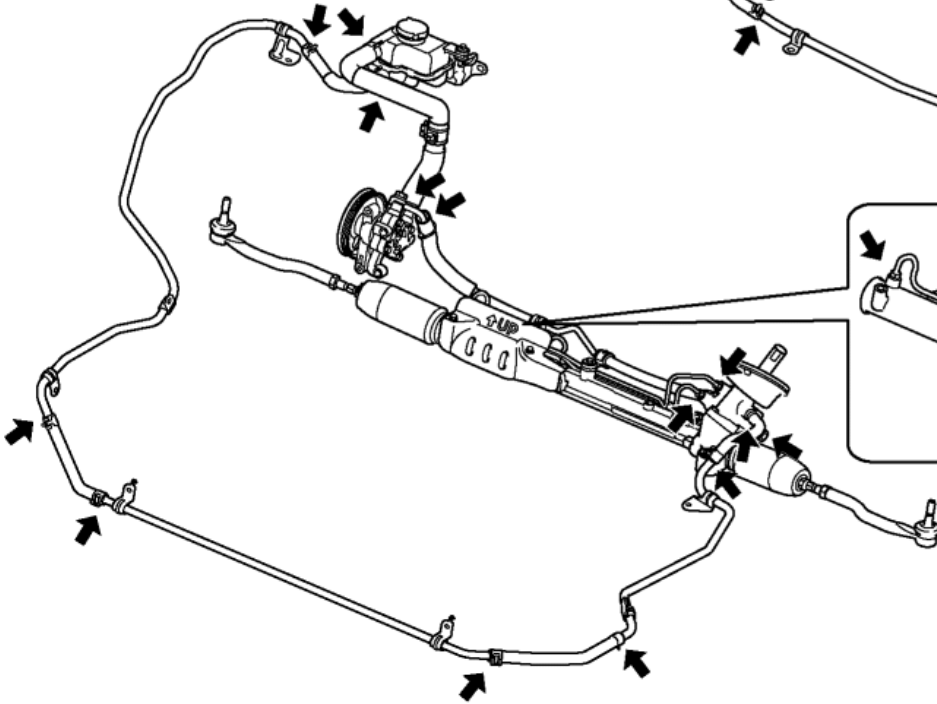
CAUTION:

- If the steering wheel is kept in the fully turned position for more than 5 seconds, the fluid temperature will rise excessively and adversely affect the oil pump.
3. Inspect for fluid leakage.

MZR 2.5



MZI 3.7 V6



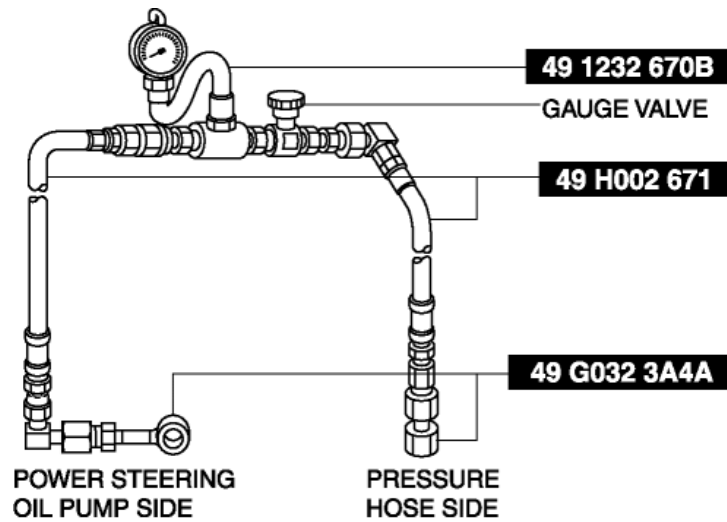
- If fluid leakage is found, replace related pipe or hose. (See [POWER STEERING FLUID LINE COMPONENT REMOVAL/ INSTALLATION \[MZR 2.5\]](#).) (See [POWER STEERING FLUID LINE COMPONENT REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)

NOTE:

- The points where fluid leakage may occur are indicated in the figure.

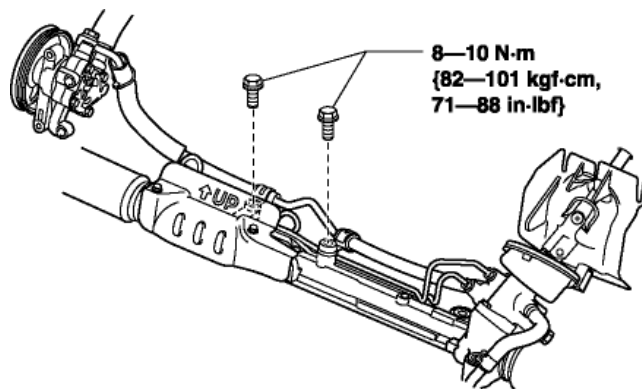
Fluid Pressure Inspection

1. Assemble the **SSTs** as shown in the figure.

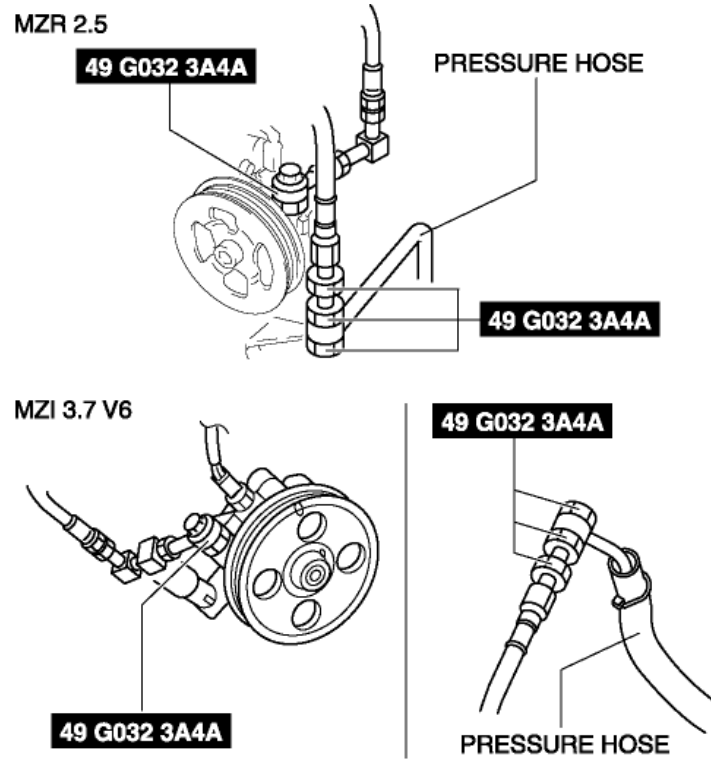


2. For the vehicles with MZI 3.7 V6, remove the following parts.

- Windshield wiper arm (See [WINDSHIELD WIPER ARM AND BLADE REMOVAL/ INSTALLATION.](#))
- Cowl grille (See [COWL GRILLE REMOVAL/ INSTALLATION.](#))
- Windshield wiper motor (See [WINDSHIELD WIPER MOTOR REMOVAL/ INSTALLATION.](#))
- Cowl panel (See [COWL PANEL REMOVAL/ INSTALLATION.](#))
- Bolts shown in the figure



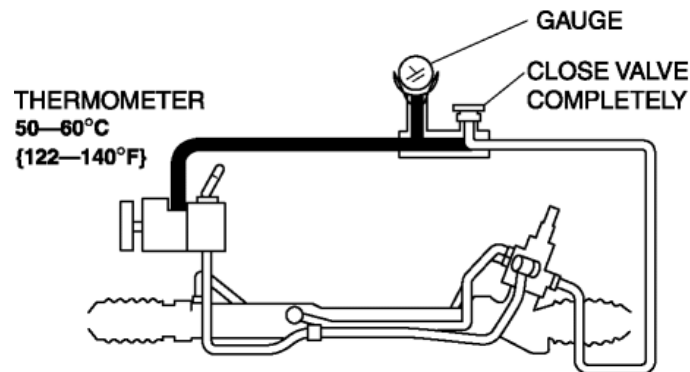
3. Disconnect the pressure hose from the power steering oil pump, and connect the SSTs.



Tightening torque

- 38—51 N·m {3.9—5.2 kgf·m, 29—37 ft·lbf}

4. Bleed the air from the system. (See [AIR BLEEDING](#).)
5. Open the gauge valve fully.
6. Start the engine and turn the steering wheel fully left and right to raise the fluid temperature to 50—60 °C { 122—140 °F} .
7. Close the gauge valve completely.



8. Increase the engine speed to 1,000—1,500 rpm and measure the fluid pressure generated by the oil pump.
 - If the pressure is not within the specification, repair or replace the oil pump component.

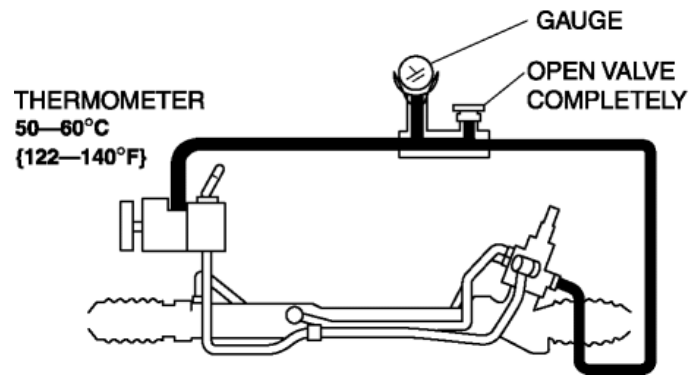
CAUTION:

- If the valve is left closed for more than 5 seconds, the fluid temperature will rise excessively and adversely affect the oil pump.

Oil pump fluid pressure

- MZR 2.5: 8.33—8.82 MPa {85.0—89.9 kgf/cm², 1209—1279 psi}
- MZI 3.7 V6: 8.51—9.29 MPa {86.8—94.7 kgf/cm², 1235—1347 psi}

9. Open the gauge valve fully and increase the engine speed to 1,000—1,500 rpm .



10. Turn the steering wheel fully to the left and right, then measure the fluid pressure generated at the gear housing.
 - If the pressure is not within the specification, repair or replace the steering gear component.

CAUTION:

- If the steering wheel is kept in the fully turned position for more than 5 seconds, the fluid temperature will rise excessively and adversely affect the oil pump.

Gear housing fluid pressure

- MZR 2.5: 8.33—8.82 MPa {85.0—89.9 kgf/cm², 1209—1279 psi}
- MZI 3.7 V6: 8.80—9.29 MPa {90.0—94.7 kgf/cm², 1277—1342 psi}

11. Remove the **SSTs**. Install and tighten the pressure hose to the specified torque.

Tightening torque

- 38—51 N·m {3.9—5.2 kgf·m, 29—37 ft·lbf}

12. Bleed the air from the system. (See [AIR BLEEDING](#).)