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Form No. 106222

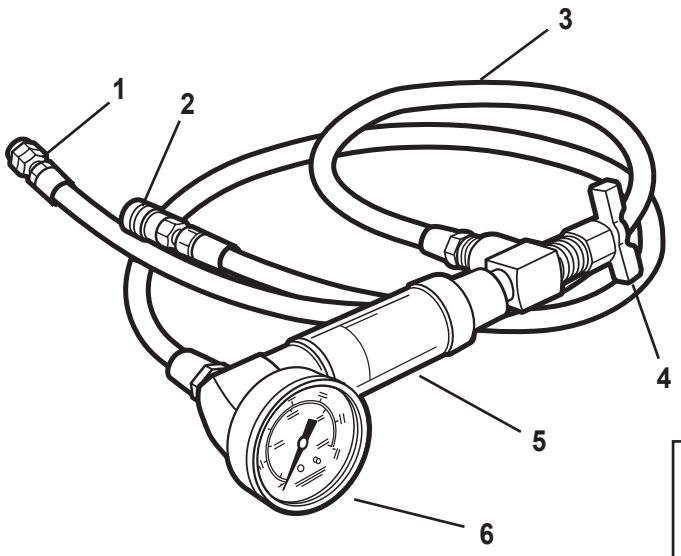
Parts List & Operating Instructions for: **5079**

Truck Power Steering System Analyzer

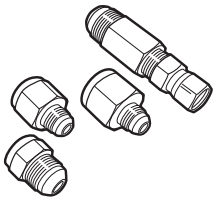
This analyzer is used when the power steering system is operating erratically, or there is insufficient power assist, and neither the pump nor gear has been damaged in such a way to contaminate the fluid in the steering system.

CAUTION: Contaminated power steering system fluid may cause permanent damage to the analyzer. If there is a possibility of burned fluid, or metal filings in the fluid, purge the system before connecting the analyzer.

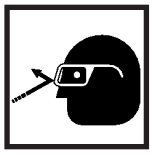
Parts List



Item No.	Part No.	No Req'd	Description
1	**206231**	1	Quick-Plug Coupler
2	**16793**	1	Quick-Socket Coupler
3	**J26487-4A**	2	Hose
4	**207058**	1	Needle Valve
5	**302625**	1	Flow Meter
6	**302623**	1	Pressure Gauge
	Parts Included but Not Shown		
	308344	1	Carrying Case
	J26487-11	1	Gear Adapter
	J26487-12	1	Hose Adapter



Optional Accessory Fitting Kit No. 223018
Works on systems using J.I.C. 37°, 5/8" and 3/4" fittings.



Safety Precautions

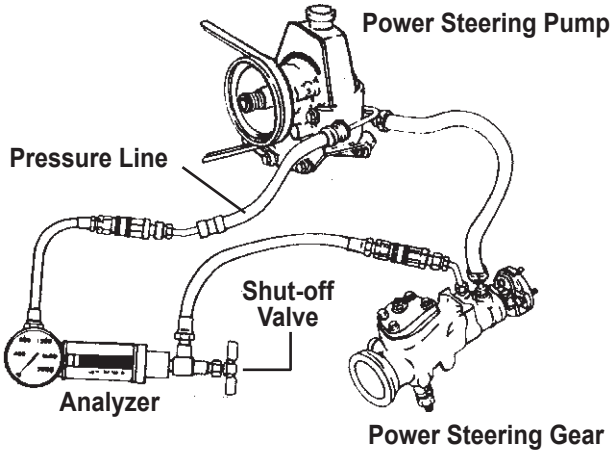
CAUTION: To prevent personal injury,

- **Wear eye protection that meets ANSI Z87.1 and OSHA standards.**
- **Do NOT touch the power steering system analyzer during the test procedure — the analyzer gets very hot during testing.**

Issue Date: Rev C July 28, 2016

Setup

1. To connect the analyzer to the steering system, disconnect the pressure line from the connector at the power steering gear.
2. Thread the adapters to the connector, and to the pressure line.
3. Connect the analyzer to the adapters, and tighten both connections. **Note:** Connect the analyzer line (at the shut-off valve end) to the steering gear end of the power steering system.
4. Fully open the shut-off valve, and start the engine.
5. Purge air from the system by steering to full left-turn position, and then full right-turn position, several times.



6. Shut the engine OFF, and check connections for leaks.
7. Check for the correct fluid level at the reservoir, and add or remove fluid as needed.
8. Check for air in the system: Start the engine; partially close the shut-off valve; and view the pressure gauge. If the gauge needle vibration is excessive, too much air remains in the system; repeat Steps 4-6.
9. Install a thermometer in the power steering pump reservoir, and connect the tachometer to the engine.

Power Steering System Test Procedure

Test Power Steering System Back Pressure

1. Fully open the analyzer shut-off valve.
2. Place the vehicle's front wheels in the straight-ahead position, the transmission in neutral, and engage the parking brake.
3. Refer to the vehicle service manual, and start and run the engine at the specified high RPM.
4. When the correct fluid temperature is reached, record flow and pressure.

Test the Pump for Minimum Efficiency Flow

1. Refer to the vehicle service manual, and decrease engine speed to the specified low RPM.
2. Build pressure by slowly closing the shut-off valve.
3. If flow is below the value specified in the service manual, repair or replace the pump.

Test the Pump Relief Valve

1. Refer to the vehicle service manual, and run the engine at low RPM as specified.
2. Completely close, then partially open, the shut-off valve three times. **CAUTION: To prevent damage to the pump and/or gear, do NOT hold the valve closed for more than five seconds.**
3. If pressure is **below or above** the value specified in the service manual, clean or replace the relief valve.

Test Internal Gear Leakage

1. Fully open the analyzer shut-off valve.
2. Refer to the vehicle service manual, and run the engine at the specified RPM.
3. Record pressure and flow at full-right-turn and full-left-turn positions. **CAUTION: To prevent damage to the pump, do NOT hold the wheel at a full-turn position for more than five seconds.**

- If the recorded pressure is not within spec below the specified range, clean or replace the relief valve.
- If the recorded pressure is above the specified flow value, excessive internal leakage is occurring. Refer to the vehicle service manual for the correct procedure.

Internal leakage is usually the result of a bad seal, but it could also be caused by a badly scored housing. Inspect and replace all seals **before** replacing a suspected housing. Take another flow meter reading after eliminating seals as the cause of excessive internal leakage, and then replace the housing, if necessary.