

# 5610 TRANSMISSION / ENGINE OIL PRESSURE KIT INSTRUCTION MANUAL



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# IMPORTANT SAFETY INSTRUCTIONS

## **READ AND FOLLOW ALL INSTRUCTIONS**

# **Safety Guidelines For Testing Transmission/Engine Oil Pressure:**



Always wear proper eye protection: safety goggles.



- <u>Always</u> keep a fire extinguisher suitable for gasoline/electrical/ chemical fires handy.
- Always inspect hose and fittings for dirt, blockage, blisters, or any visible defects before using.
- Always replace the hose assembly if any signs of wear or damage are found.



**DO NOT** repair a damaged hose or fitting. Hose and fitting assemblies are manufacturer pre-matched. Replace entire hose assembly.

**DO NOT** exceed the recommended maximum operating pressure for hose and gauge.

**DO NOT** test if system temperature exceeds normal operating temperature range.

**DO NOT** route hose near hot manifolds or other hot engine parts. Use tie-downs to secure the hose from flexing or contact with moving parts if vehicle is to be tested while being driven.

**DO NOT** overly flex, twist, kink, stretch, squeeze, or **bend** the hose, especially at the fitting connections.

**DO NOT** use hose for testing any fluids other than transmission fluid or motor oil.

**DO NOT** expose hose to ultraviolet light, ozone, salt water, chemicals, or other air and water pollutants that can cause degradation and premature failure.

**DO NOT** use gauges if the glass lens is cracked or broken. Replace gauges if damaged.

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#### **REPAIR PARTS LIST**

P/N	DESCRIPTION	
0031-0462	0-400 PSI GAUGE	
0031-0463	0-100 PSI GAUGE	
0400-3107	GAUGE BOOT	
1000-5159	SWIVEL HOSE ASSEMBLY, 72"	
0180-1484	1/4 -18 NPT FEMALE QUICK CONNECT PLUG	
0180-1485	1/16-27 NPT MALE X 1/8-27 NPT FEMALE ADAPTER	
0180-1494	1/8-27 NPT MALE 2" LONG STRAIGHT ADAPTER	
0180-1486	3/8-18 NPT MALE X 1/8-27 NPT FEMALE ADAPTER	
0180-1488	1/4-18 NPT MALE X 1/8-27 NPT MALE ADAPTER	
0180-1489	1/4-18 NPT MALE X 1/8-27 NPT FEMALE ADAPTER	
0180-1490	1/8-27 NPT FEMALE STRAIGHT ADAPTER	
0180-1487	1/8-27 NPT MALE X 1/8-27 NPT FEMALE ELBOW ADAPTER	
0180-1491	M8 X 1.0 TAPER TO 1/8-27 NPT FEMALE ADAPTER	
0180-1492	M10 X 1.0 TAPER TO 1/8-27 NPT FEMALE ADAPTER	
0180-1483	M12 X 1.75 TAPER TO 1/8-27 NPT FEMALE ADAPTER	
0180-1493	1/8-28 BSPT X 1/8-27 NPT FEMALE ADAPTER	
0400-3108	CARRY CASE	
0001-3902	PART LOCATOR LABEL	
0002-2788	INSTRUCTION MANUAL	



- **Never** lay tools on vehicle battery. You may short the terminals together, causing harm to yourself, the tools, or the battery.
- <u>Never</u> smoke or have open flames near vehicle. Vapors from gasoline and charging batteries are highly flammable and explosive.
- <u>Never</u> leave vehicle unattended while running tests.
- Always check vehicle fluid levels before testing.
- Always operate the vehicle in a well-ventilated area. Do not inhale exhaust gases—they are very poisonous!
- Always turn ignition key OFF when connecting or disconnecting electrical components, unless otherwise instructed.
  - <u>Always</u> keep away from engine cooling fan. On some vehicles, the fan may start up unexpectedly.



- Always keep yourself, tools, and test equipment away from all moving or hot engine parts.
- Always refer to and follow vehicle manufacturer's warnings, cautions, and service procedures.

## **Setup for Testing Transmission Pressure:**

Always refer to the manufacturers' vehicle service or repair manuals for specific information regarding pressure testing values, procedures, and test port locations. Follow all manufacturers' cautions, warnings, and instructions.

#### 1. Testing while driving

Make sure the hose is routed through the vehicle window and not squeezed or pinched in the vehicle hood or door. Take extra care to make sure that the hose is secured away from hot or moving engine parts, and that the hose and gauge do not hinder proper vehicle operation. Never try to read the gauge while driving. Always have an assistant accompany you to take pressure readings.

#### 2. Testing on a dynamometer test stand or hoist

Take extra care to make sure that the hose is secured away from hot or moving engine parts. Refer to and carefully follow all manufacturers' instructions for testing on a dynamometer stand or with wheels suspended.

### 3. Static testing

When static testing, always make sure the vehicle is in **Park** (automatic transmission) or **Neutral** (manual transmission) and that the **parking brake** is firmly set. Block the drive wheels.

# Testing Transmission Pressure or Engine Oil Pressure:



CAUTION: Always avoid contact with hot transmission fluid and motor oil. Hot fluids can cause serious burns.

WARNING: Do not spill or allow hot fluids to leak onto hot vehicle surfaces. Hot fluids in contact with hot surfaces can cause fires, resulting in serious damage or injury.

- 1. Always refer to the manufacturer's vehicle service or repair manual for specific information including: diagnostic test procedures, fluid levels, operating temperatures, and pressure specifications.
- 2. Select the proper gauge for the anticipated pressure range. If pressure range is not known, <u>always</u> start with the 400 psi gauge. When pressure does not exceed 100 psi, you can retest with the 100 psi gauge. Attach gauge to hose. DO NOT over tighten.
- 3. Select the correct adapter for your application (transmission/engine test port) from the set.
- 4. Remove vehicle test port plug and fasten the adapter to the test port. DO NOT over tighten. Soft metal threads can be easily damaged.
- Connect the hose and gauge to the adapter, taking care to route the hose as outlined in SAFETY INSTRUCTIONS.
   Always check for leaks at adapters, connectors, and hose and gauge.
- 6. Start the engine and check for leaks. If leaks are observed, turn off the engine immediately and correct all leaks before proceeding with test.
- 7. Read gauge. If gauge reading reaches maximum reading on 100 psi gauge, turn off the engine immediately and allow engine to cool before disconnecting the hose and gauge. Then repeat the test procedure above, using the 400 psi gauge to test system.
- 8. When pressure test is complete, put vehicle in **Park** (automatic transmission) or **Neutral** (manual transmission), set parking brake as necessary, and turn engine off. Disconnect the hose and gauge. Disconnect the adapter and replace vehicle test port plug. Start the engine and check for leaks at the test port.
- 9. Check fluid level and refill or drain system as necessary.