

ABOUT THIS TOOL

The Vacuum Gauge provides an easy and efficient means of checking engine vacuum or testing fuel pump operation.

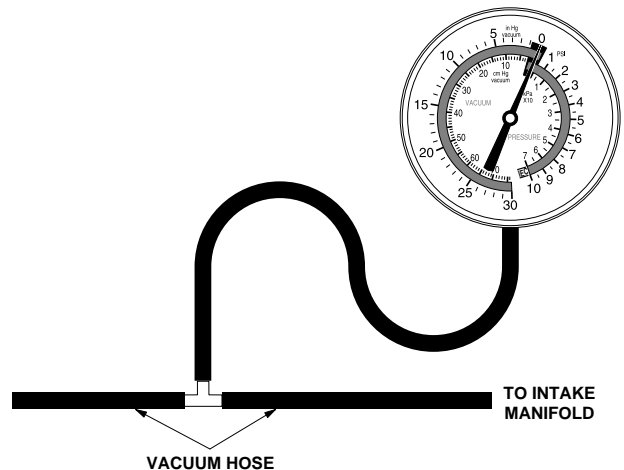
NOTE: This gauge has been calibrated for use at sea level. When using the gauge at altitudes above sea level, you **MUST** correct the gauge indication to its true value at sea level by adding one in. Hg for each 1,000 feet above sea level.

For example: An indication of 19 in. Hg at 2,000 feet above sea level would be adjusted to 21 in. Hg (true value at sea level).

CHECKING VACUUM**Checking Vacuum at Engine Idle**

NOTE: Refer to your vehicle's service manual to obtain the manufacturer's specifications for vacuum.

1. **MAKE SURE** the ignition is off.
2. Locate a vacuum hose which is connected directly to the intake manifold. Disconnect the vacuum hose and connect the gauge in its place.



3. Start engine and idle.
4. Note the value of vacuum and compare this value to the manufacturer's specifications.

If vacuum indication is **LOWER** than specified, check for the following:

- Incorrect ignition timing
- Incorrect valve timing or adjustment
- Incorrect idle mixture screw adjustment
- Worn piston rings (cylinder compression)
- Intake manifold vacuum leaks

If vacuum indication **OSCILLATES SLOWLY**, check for incorrect idle mixture screw adjustment.

If vacuum indication **OSCILLATES RAPIDLY**, check for the following:

- Sticky valve guides
- Burned valve seats
- Leak(s) in the head gasket

Checking Vacuum at High Speed

1. With gauge connected and engine idling as described above, increase engine speed to approximately 2000 RPM.

2. Note the new vacuum value.

If vacuum value at high speed is **LOWER** than value at idle, check for restriction(s) in the exhaust system.

If vacuum indication **OSCILLATES**, check for weak valve springs.

3. Turn off the ignition. Remove the gauge and **RECONNECT THE VACUUM HOSE TO THE INTAKE MANIFOLD.**

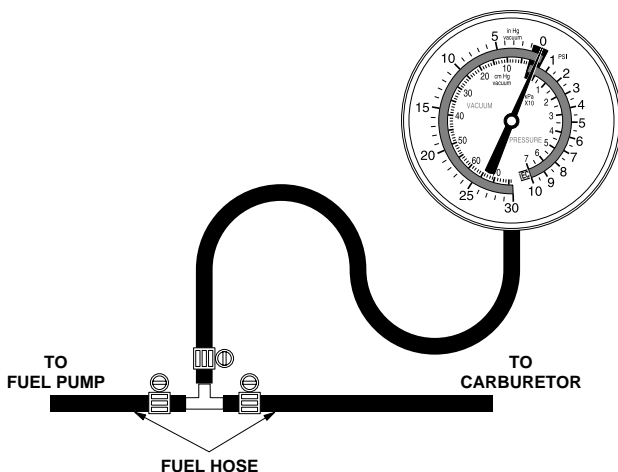
CHECKING FUEL PUMP OPERATION

■ Carbureted vehicles only

WARNING: Please be aware that fuel systems are **HIGHLY FLAMMABLE. DO NOT SMOKE WHILE PERFORMING THIS TEST.** Refer to safety precautions in your vehicle's service manual. Follow ALL required safety precautions to prevent accidents, personal injury and/or damage to your vehicle.

NOTE: Refer to your vehicle's service manual to obtain the manufacturer's specifications for fuel pump pressure.

1. Locate your vehicle's fuel pump. Disconnect the hose between the fuel pump and the carburetor and connect the gauge between the fuel pump and the carburetor. Use clamps on fuel line connections to avoid fuel leaks.



2. Turn the ignition on. Start and idle the engine.
3. Observe the gauge dialface for approximately 15 seconds. Note the fuel pump pressure and compare this value to the manufacturer's specifications.

If fuel pump pressure is **LOWER** than specified, check for the following:

- Restriction(s) in the fuel line
- Defective fuel pump

If fuel pump pressure drops to **LESS THAN HALF ITS MAXIMUM VALUE** in 15 seconds, the fuel pump valves are leaking; replace the fuel pump.

4. Turn off the ignition. Remove the gauge and **RECONNECT THE FUEL HOSE TO THE FUEL PUMP.**

WARRANTY AND SERVICE

The Manufacturer warrants to the original purchaser that this unit is free of defects in materials and workmanship under normal use and maintenance for a period of one (1) year from the date of original purchase. If the unit fails within the one (1) year period, it will be repaired or replaced, at the Manufacturer's option, at no charge, when returned prepaid to the Service Center with Proof of Purchase. Installation labor is not covered under this warranty. The sales receipt may be used for this purpose. This warranty does not apply to damage caused by improper installation, accident, abuse, improper voltage, fire, flood, lightning, or other acts of God, or if the product was altered or repaired by anyone other than the Manufacturer's Service Center. The Manufacturer, under no circumstances shall be liable for any consequential damages for breach of any written warranty of this unit. This warranty gives you specific legal rights, and you may also have rights which vary from state to state. **THIS WARRANTY IS NOT TRANSFERABLE.** For service, send (prepaid) via U.P.S. (if possible) to manufacturer. Allow 3-4 weeks service time. If you have any questions, please contact your local store, distributor or the Manufacturer's Service Center. USA & Canada: (800) 544-4124; All others: (714) 241-6802 (9:00-4:00, Monday-Friday PST); FAX: (714) 432-7910 (24 hr.)