



GENERAL: The vacuum gauge is a standard 2" instrument which requires a mounting hole slightly larger than 2". It's difficult to find a hole saw "just slightly over 2", but in our experience, if you allow a 2" hole saw to wobble a bit as you are drilling the hole, the gauge will fit nicely. In terms of location, if you are planning to use the gauge to set your power, the gauge is best located in the cockpit using the tubing provided in the kit. In cases where the gauge is to be used mostly for periodic reference, it can be very conveniently located in the engine compartment using one of our remote gauge mounting brackets (product number GAUG_08.3_354).

VACUUM CONNECTION: A "T" fitting is provided in the kit to install into the 1/8" pipe threaded hole in late model intake manifolds where the scavenge tube normally attaches. On engines with early model manifolds, the small round "donut-shaped" boss area in the intake manifold just aft of the carburetor mounting flange will need to be drilled and tapped for 1/8" pipe threads. In our dynamometer tests, the scavenge tube makes only a minuscule difference in the vacuum indications when connected (or disconnected).

INTERPRETING GAUGE INDICATIONS: In many cases, deriving the most important information from a vacuum gauge involves the interpretation of how vacuum changes as the throttle is manipulated under various RPM and power conditions. You can review a considerable amount of instructional material on interpreting vacuum gauges on the internet and/or on the Community Forum at moyermarine.com, but here are a few of the more important approximate steady state indications for the Atomic 4:

- 1) Idle: 15"
- 2) Cruising: At 2000 RPM developing 10 HP – 9"
- 3) At wide open throttle: Usually 1" or 2"

Here are a few important dynamic indications:

- 1) Partially blocked exhaust: Vacuum will go to normal at idle when engine is first started, but as RPM increases, the vacuum reading will slowly move to very low readings depending on the degree of restriction (could go to zero in worst cases).
- 2) Improper idle mixture: Vacuum indication will fluctuate between 13" and 18".
- 3) Poorly seating valves: Vacuum will flick downward 2" to 3" from normal for any power setting.

