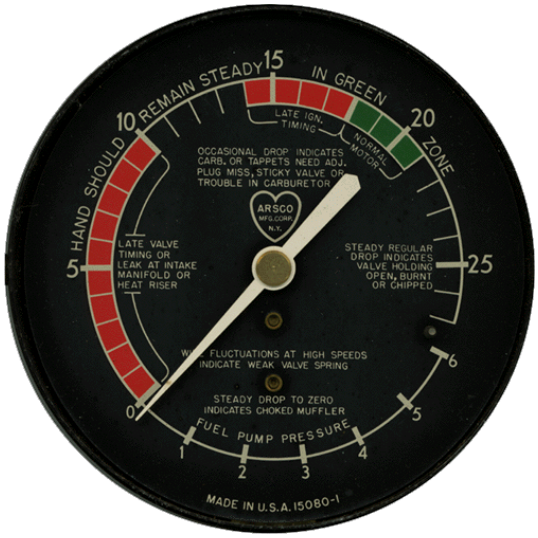
Model A Vacuum Gauge Tuning from ARSCO



One instrument we don't see much anymore is the vacuum gauge. Since most A's have a vacuum wiper this tool is easy to use. The cost is about $25.00 in the store less on line. Here is how to use it.

1. Connect gauge as close to intake as possible.
2. Start engine: Adjust throttle butterfly valve and set the idling adjustment on carburetor to get as smooth an idle as possible. The hand spark must be fully advanced.
3. If engine is in perfect condition, the pointer will remain steady between 18 and 21. (Gauge readings will vary with altitude. At sea level the approximate gauge reading will be 19.5.)

   The vacuum gauge reading will drop approximately 1 inch per each 1,000 feet elevation above sea level to 5,000 feet, will drop approximately 0.9 inch per each 1,000 feet from 5,000 to 10,000 feet, and will drop 0.8 inch per 1,000 feet above 10,000 feet.
4. Gauge will indicate **late ignition timing** when gauge pointer will remain steady between 14 and 18.
5. Gauge will indicate a **sticky valve** whenever that valve comes into operation. To make the test, remove the gauge and inject penetrating oil into manifold for temporary relief.
6. Gauge will indicate a **burnt valve** by a constant drop of the pointer whenever a burnt valve or valves which are holding open come into operation. Insufficient tappet clearance will also be indicated by a constant drop of the pointer.

7. Gauge will indicate **weak valve springs** when the engine is speeded up and the gauge pointer pulsates rapidly. When valves seat properly, the gauge pointer will remain steady between 18 and 21.

8. Gauge will indicate **loose valve stem guides** when gauge pointer pulsates rapidly at idling speed. This rapid pulsation disappears with the increasing speed of the engine.

9. Gauge will indicate a **choked muffler** when engine is speeded up several times in succession and the gauge pointer drops slowly. A clear muffler is indicated by a quick drop to zero.

10. Gauge will indicate **late valve timing** when gauge pointer will remain at approximately 12 and will not indicate a higher reading.

11. Gauge will indicate a **carburetor adjustment is required** when there is a slow drop of the gauge pointer between 17 and 20. Adjust carburetor so that pointer will be almost stationary.

12. For best results, there should be a compression test when using the vacuum gauge. A good compression gauge will indicate whether the compression is perfect or not. Poor compression will result in lower vacuum readings than outlined here.

13. Gauge will indicate **choke test** when ignition switch is in the off position. Close throttle and turn engine over with starting motor. Gauge pointer should rise steadily and quickly to 18 or 21.

If gauge pointer stays around 3 to 6, this may indicate the **failure of the throttle to close**, or that there are air leaks in the intake manifold system.

I have several favorite websites www.fordgarage.com is one of them.

Mike