

TClinic

ENGINE — TUNE-UP — GENERAL

Although it is not absolutely necessary to do the tune-up in any set sequence, there are certain engine operations that must be done in order before satisfactory adjustment of others are done —for example, it does little good to adjust the carbs if the valves are not properly set or the distributor is off. The general tune-up usually proceeds as follows.

- 1. Valve Adjustment (not necessary each time)
- 2. Compression Check (not necessary each time)
- 3. Spark plug Check
- 4. Ignition points and timing
- 5. Carburetor Check
- 6. Road Test

To do this tune-up, a number of special tools are required.

- 1. Feeler gauge
- 2. Spark plug gap gauge (wire type)
- 3. Spark plug wrench $({}^{13}\!/_{16}"$ deep socket)
- 4. Ignition point file get one with a guide
- 5. Compression gauge
- 6. Timing light
- 7. Uni-Syn * Optional used to synchronize multiple carbs. (cost about \$10.00 and well worth it)

The above tools and testing equipment (excluding the Uni-Syn) can be purchased for about \$10 to \$12, and will pay for themselves many times over.

You should also provide yourself with the following frequently used parts—have them on hand before you start your tune-up.

- 1. Box of spark plug gaskets—should be replaced each time a spark plug is removed for inspection, gapping or cleaning.
- 2. Points and condenser—can now be purchased as a complete breaker plate assembly.

- 3. Set of spark plugs, gapped to proper setting.
- 4. Two spare tappet ball pins and lock nuts.
- 5. Valve cover gasket.

These parts can also be incorporated into a handy roadside emergency kit.

One important point to remember is that only an engine in good mechanical condition will tune properly. A tune-up will cause a good engine to run properly, but it will not correct a faulty engine. On the other hand, an engine in good condition will respond to a tune-up and give smoother running, quicker acceleration and improved top end performance.

A more comprehensive and detailed description of the six tune-up steps will follow in the next and subsequent issues of the TClinic.

First printed by the TCMG in 1970

2002 Update

Well the most obvious update to this is the cost of tools. The carb syc tool runs about \$28 now and the cost of the other tools will vary depending on quality but count on tripling the figures mentioned to start with.

Somehow the subsequent articles were not followed up on except for Valve Adjustment #15, and Compression Check #16. Articles on Spark Plug Check, Ignition, Carburetor Check, and Road Test were never written up but, we will put someone on it. Better late than never.

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