

**Installation and Adjustment of Stromberg Model OE-1 Carburetor
and Equipment for Franklin Cars**

The Stromberg Model OE-1 Carburetor Equipment for Franklin cars consists of the following material:

Carburetor—With Air Horn
Carburetor Flange Gaskets
Accelerator Spring
Air Cleaner Extension
Elbow
Air Cleaner Extension At-
tachment Screws
Attaching Stud Bolts and
Nuts
Ball Joint
Ball Joint Lock Washer
Dash Choker Control
Two Throttle Rods

This carburetor is one of the newest forms of the Plain Tube type, so-called because, having no air valves or metering needles, both the air passages and gasoline jet are of fixed size for all engine speeds.

This model has been particularly developed for the use of low grade gasoline fuels and contains the following special features:

A gasoline feed above the throttle, with separate adjustment, for idling the engine; an "accelerating well," which gives an extra supply of fuel just for a moment as the throttle is opened; and an "economizer," which permits the carburetor to operate on a very lean and economical mixture at the closed throttle positions of average driving but automatically shifts to the needed richer setting when the full power of the engine is called for.

ADJUSTMENTS

The **Idling Mixture** and closed throttle running up to about eight miles per hour are controlled by the knurled button, or Idle Adjustment Screw "A." This operates on the air, so that screwing it in, clockwise, gives a richer mixture, outward a leaner one.

When engine is idling properly there should be a steady hiss in the carburetor. If there is a weak cylinder or a manifold leak the hiss may be unsteady. For an engine to idle steadily on present fuel the spark plug gap must not be less than .022.

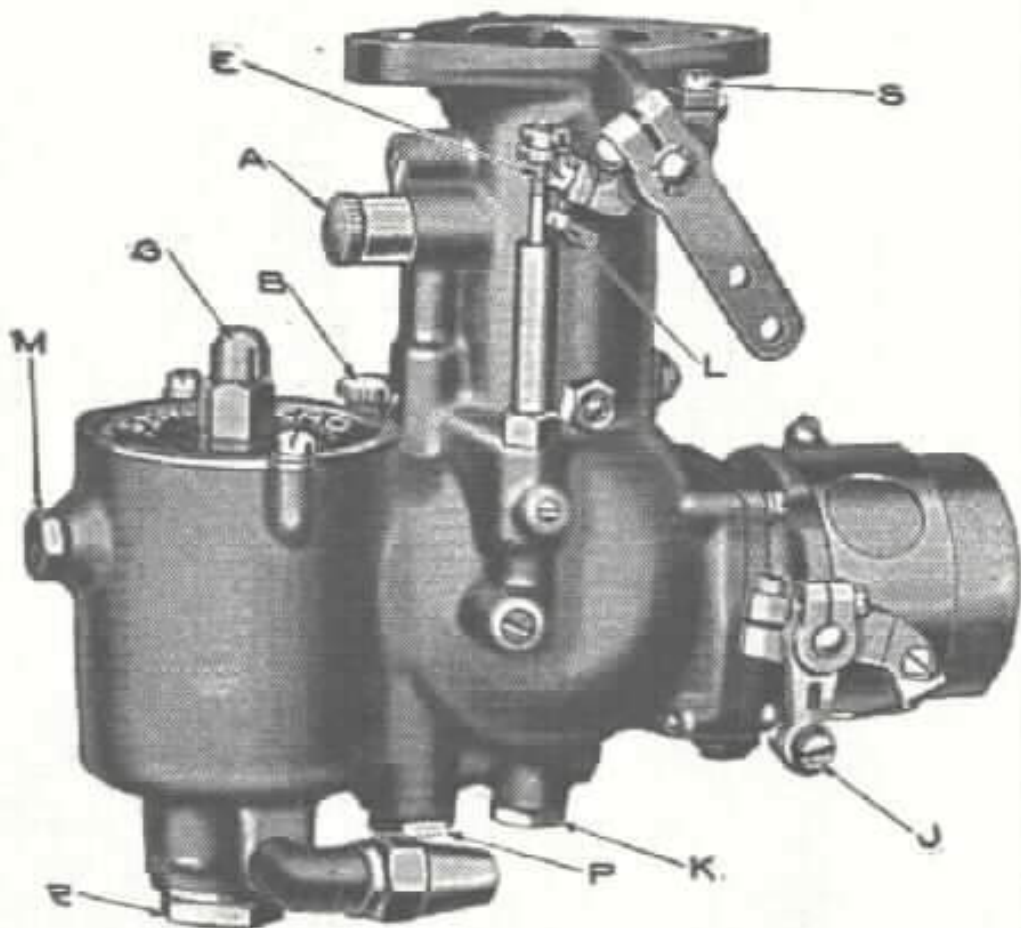
If, after adjusting the Low Speed Needle as above described, the engine idles too fast, turn the small Throttle Stop Screw "L" to the left or counter clockwise until the proper idling speed is reached. If engine idles too slow and stops, turn screw "L" to the right or clockwise until proper speed is reached.

The **High Speed** and main driving adjustment are regulated by the High Speed Needle "B." Turning down, clockwise, gives less gasoline; up, counter-clockwise, more.

The following is a good way to obtain an exact adjustment: Advance spark lever to normal driving position; set throttle lever on steering wheel to a position which will give about twenty-five miles per hour speed on a smooth road; then adjust High Speed Needle to the minimum opening that will give smooth running, and the maximum engine speed for that throttle opening; this should give a good average adjustment. Several notches less opening may give best economy for continuous driving or touring; and one notch more may be best for short runs in cold weather, when the engine does not get up to normal heat.

The **Economizer Device "E"** operates to automatically lean out the mixture at speeds from ten to forty-five miles per hour. The Economizer Needle is properly set at time carburetor is installed on the motor and no adjustment is needed.

IN ALL CASES the adjustments should be made when the Motometer shows a temperature of higher than 140 degrees, and the richer adjustment necessary for a cold engine obtained by using the driving control.



USE OF CHOKE CONTROL

For starting and warming up with the present-day fuel, it is absolutely necessary to use the choke control until the proper operating temperature is attained. Ordinarily the engine will start readily with the control closed one-half to three-quarters of the way. In very cold weather it may be necessary to pull the control up all the way, but this should be done only for an instant, as this cuts off all the air and delivers raw gasoline only. In starting with electric starter, the throttle should be nearly closed, or better still, it may be successively opened part way and closed while the starter turns the engine over. Never keep this control up more than a moment at a time.

For hand cranking Choke Control should be only one-half to three-quarters up and throttle should be just barely open. In cold weather Choke Control can be pulled all the way up with the throttle barely open, for two or three turns of the crank, then the Choke Control should be set at one-half or three-quarters open and the crank given several more turns when the engine should start.

When the engine is cold it is best not to open the throttle so far that the engine misfires, as this is a frequent cause of sooted spark plugs and gasoline (really kerosene) in the crank case.

SEASON OR COLD AIR ADJUSTMENT

In the warm months of the year the engine will show more power and run cooler with the cold air shutter open; in cold weather this shutter should be closed to feed the carburetor warm air only.

FLOAT LEVEL ADJUSTMENT

The proper float level with engine not running is one inch from the top surface of float chamber casting or just even with the bottom of hole in which plug "M" is inserted. Should the level be more than one-sixteenth of an inch higher or lower than bottom of hole the float needle should be readjusted. Remove Valve Cap "G" and upper end of float needle stem will be seen. If level is too high loosen lock nut, hold needle sleeve from turning by putting small wrench on flat sides and screw needle down clockwise one turn which should lower level about three thirty-seconds of an inch, if too low, a full turn of needle upward will raise level same distance.

CAUTIONS

If engine, after running, suddenly ceases to perform properly, look over carburetor connections, etc., but do not start to change the adjustments until other causes of trouble have been investigated. Carburetor adjustments should only be necessitated by changes in fuel or seasonal changes in weather. There are many other things on the engine subject to derangement besides the carburetor. Ninety per cent of the so-called carburetor trouble is due to fouled spark plugs, spark plug or ignition breaker points improperly spaced, intake manifold leaks, or lack of compression in the cylinders, due to valves not seating tightly.

If engine regularly refuses to start, see whether valve operated by choker closes securely; and always be sure that it is fully open, and the control all the way down, for normal driving.

To find whether gasoline is feeding to the carburetor, remove nut "G" and feel if needle plunger inside is all the way down. If up, gasoline is not reaching the float chamber. Gasoline can also be seen when plug "M" is removed.

The present low grade gasolines contain a large percentage of kerosene elements which do not evaporate in the intake manifold but remain in liquid form; after shutting off the engine, particularly in cold weather, this kerosene which has been held in the intake manifold, will drain back out of the carburetor. This is unavoidable and should not be taken as an indication that the carburetor is "flooding" or "leaking." These gasolines sometimes contain heavy lubricating oil components which creep up the walls of the carburetor and spread over the outside surface; the only remedy for this is the purchase of a better grade of fuel.

The internal specifications of the carburetor and the adjustments given above have been selected for the use of gasoline 56 to 60 degrees Baume, with end boiling point 400 to 450 degrees Fahrenheit. Information regarding the adjustments for very light high grade gasolines or benzol mixtures may be obtained at the Stromberg Carburetor Service Stations in the sections of the country where these fuels are sold.

INSTRUCTIONS FOR ORDERING PARTS

From the Parts Price List on page 2, the name of the part and price of same may be obtained. Give the correct names of the parts wanted, and also the Model and Serial Number of the carburetor on which the parts are to be used. These numbers appear on the side of the carburetor in a panel, thus: OE-1—2507551.

If you will follow these directions, your order will be properly filled from your first letter, and you will save yourself much delay and inconvenience.

There are located in all the principal cities of the country, sales branches, distributors and service stations, each equipped to install and repair these instruments and to render prompt and courteous service to all users of Stromberg Carburetors.

