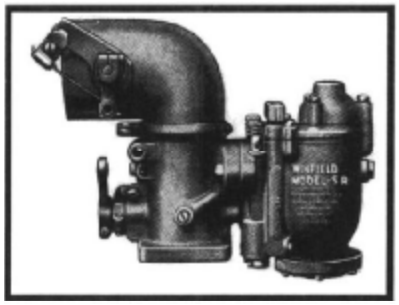
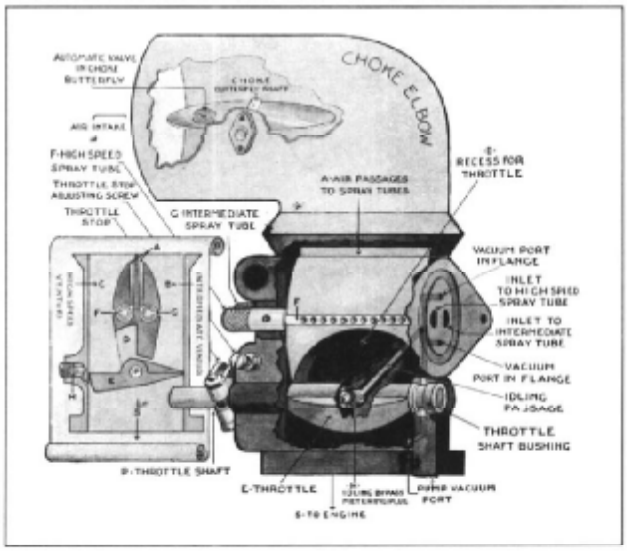
Installing and Adjusting
The Model SR WINFIELD Carburetor

(From an original instruction sheet)

STEP 1
Assemble Carburetor

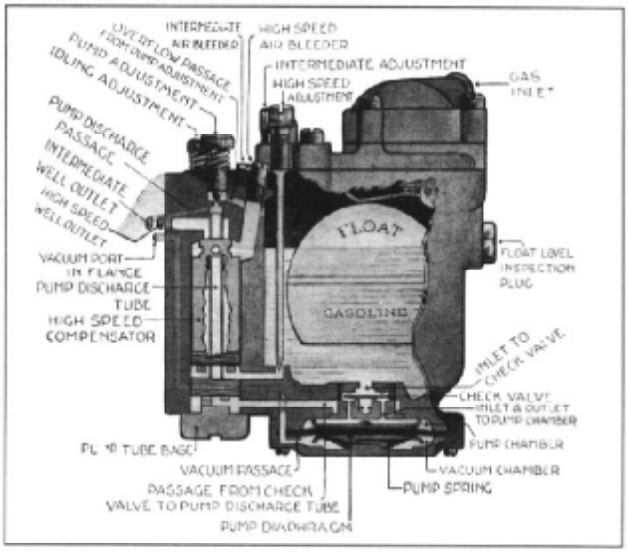


For information on how the carburetor is installed on a specific make of car, consult the Winfield catalog. Bolt adaptor flange to carburetor throttle chamber, using gasket furnished for this purpose. Fasten choke elbow or straight choke to throttle chamber with special retaining clamp furnished. Adjust choke cable holder to proper angle and tighten retaining screws. Put choke lever on choke butterfly shaft. Hold it against stop and move choke butterfly to wide open position. Then tighten choke lever clamp screw. See illustration B. Bolt float bowl to throttle chamber. Use special gasket furnished for this purpose.



STEP 2
Sectional View of Throttle Chamber & Choke Elbow
(Downdraft)

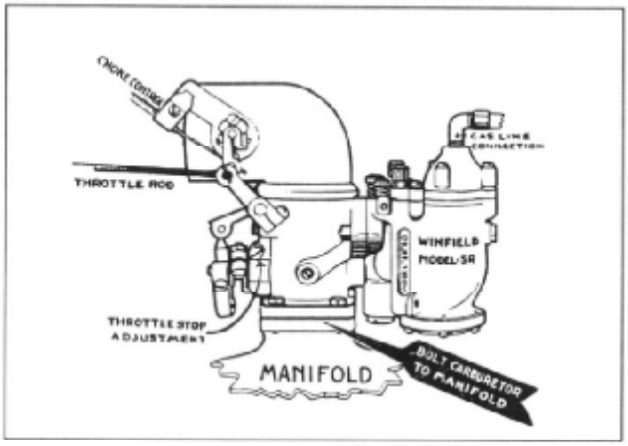
This sectional illustration shows (1) the *Three-Stage Carburetion* System of the Winfield -- Idling, Intermediate, High Speed -- each stage representing the equivalent of a carburetor in itself. (2) The *Spray Tube* System which plays so important a part in distribution, assuring fine fog-like vaporization. (3) The patented Winfield *Throttle* and *Double Venturi* arrangement which brings one and then both Venturis into action.



STEP 3
Sectional View of Float Bowl
(Downdraft)

This sectional illustration pictures the new 1933 Winfield development -- the *Automatic Diaphragm Pump* and also the *Double accelerating Well* System.* The Diaphram Pump adds *New Reserve Power*. For ordinary speed and power requirements the accelerating wells supply all needed accelerating mixture *but* when *quick action, sudden speed* and *emergency power* are demanded the Diaphram acts instantly and automatically.

* If you read the "Facts - How a Winfield works section, you may remember they said "free from pumps and injectors of raw gasoline. Apparently such complications were found necessary as engines became able to run faster.

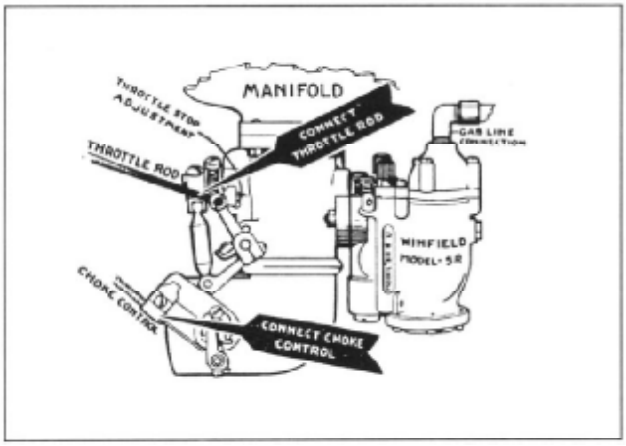


STEP 4

Bolt Carburetor to Manifold

(View of Downdraft Carburetor)

Be sure the manifold flange is clean and flat. Do not forget to use a gasket between flange and carburetor. If a gasket of more than 1/32 inch thickness is used care should be taken in tightening the bolts because the flange can be bent or broken by too much pressure or uneven pressure when it is being tightened.



STEP 5

Connect Throttle Rod and Choke Control

(View of Updraft Carburetor)

Connect throttle rod to throttle lever. Be sure that throttle lever is set at the correct angle in relation to throttle end. See illustration C.

Be sure that throttle opens and closes all the way when operated by foot throttle pedal. Now connect the choke control.

Be sure choke butterfly is wide open when choke control button is pushed in. Also be sure the choke butterfly is fully closed when choke control button is pulled out.

Now connect the gas line.

ADJUSTING THE SR WINFIELD

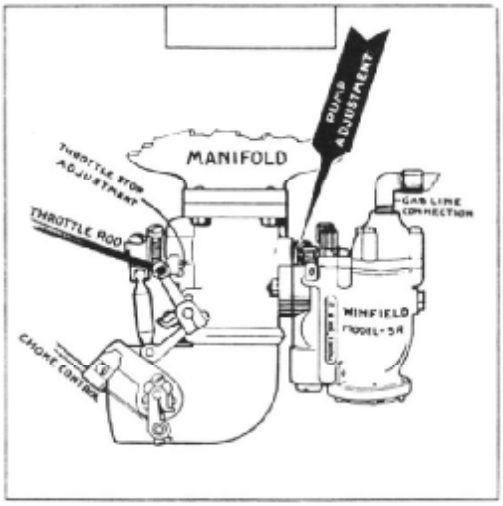
All adjustments on the Model "SR Winfield carburetor are marked for identification. The "idle and "pump adjustments are marked on top of the serrated heads. The intermediate and high speed adjustments are marked on the float chamber cover. All adjustments, excepting the pump adjustment, are made richer by unscrewing or turning to the left (anti-clockwise). The pump adjustment is made richer by turning to the right; the richest adjustment being obtained when it is screwed completely against its seat.

Trial Adjustments

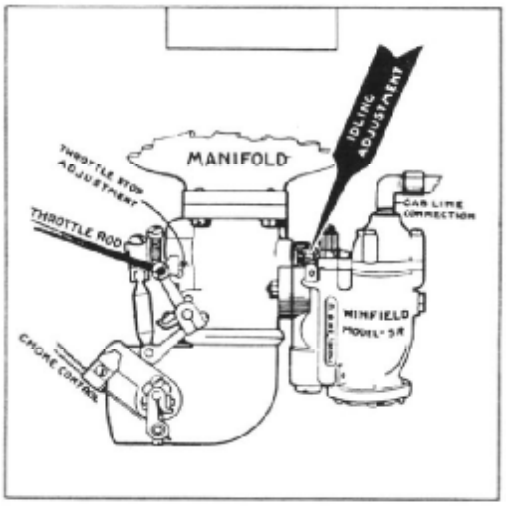
First turn all adjustments (clockwise) against their seats but don t use too much force as it is possible to injure the needle seats. Note -- 16 notches equal a complete turn.

STEP 6

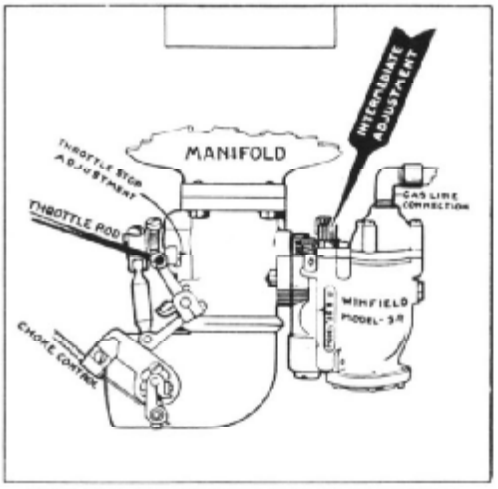
Open Pump Adjustment One Turn (16 notches).



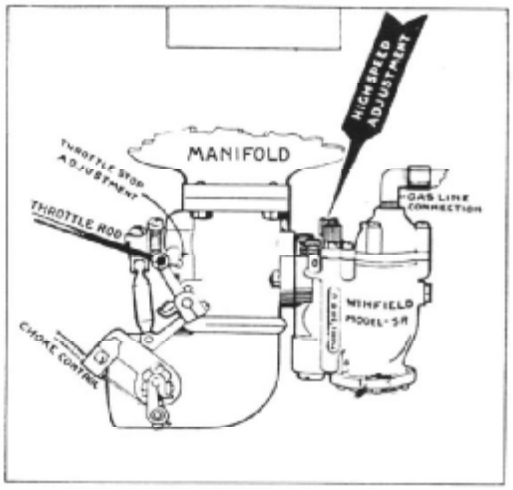
THIS ARROW POINTS TO THE PUMP ADJUSTMENT



THIS ARROW POINTS TO THE IDLING ADJUSTMENT



THIS ARROW POINTS TO THE INTERMEDIATE ADJUSTMENT



THIS ARROW POINTS TO THE HIGH SPEED ADJUSTMENT

STEP 7

Open Idling Adjustment One-half Turn (8 notches).

STEP 8

Open Intermediate Adjustment Two Complete Turns (32 notches).

STEP 9

Open High Speed Adjustment Two and One-half Turns (40 notches).

Now start the engine and warm it up to normal operating temperature for the final adjustments.

STEP 10

Idling Adjustment

Turn the idling adjustment to the leanest setting that will give steady and smooth running. If, after making this adjustment, the engine idles too fast or too slow, adjustment of the throttle stop screw will be necessary.

STEP 11

Throttle Stop Adjustment

(See illus. D) Turing throttle stop screw to the right (clockwise) gives faster idling; turning to the left gives slower idling. After making a change in the idle stop adjustment, idling adjustment should always be rechecked.

STEP 12

Intermediate Adjustment

Be sure intermediate needle is set at trial adjustment of two complete turns or 32 notches. The intermediate adjustment should be made with the spark advanced and with the throttle partially opened. The throttle opening should be just enough to maintain an engine speed of about 2000 RPM s or the equivalent of about 35 to 45 MPH car speed. Without changing the throttle opening, turn the intermediate adjustment to the right (leaner) two notches at a time, until the engine slows down very noticeably. As soon as a marked loss in engine speed is noticed, turn the adjustment to the left two notches (richer) at a time until there is no increase in engine speed, by richening the mixture. When this point is reached turn the adjustment to the right two notches at a time until a slightly perceptible slowing down of the engine is noticed. This is the correct intermediate adjustment.

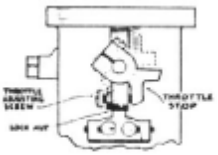


ILLUSTRATION D

STEP 13

High Speed Adjustment

In order to set the high speed adjustment without making a road test, it is necessary to know the setting in notches of the intermediate adjustment. Since the trial setting on the intermediate was two turns (32 notches) this may be easily counted while the final intermediate adjustment is made by remembering the number of notches to the right or left the intermediate is turned, and subtracting or adding this from 32. If this procedure is not followed, the number of notches of opening of the intermediate adjustment will have to be counted after the final intermediate adjustment has been made. Be sure to turn it back to its correct setting.

After determining the setting in notches of the intermediate needle an approximately correct setting for the high speed may be determined from the following table:

4 cyl engines --
4 to 6 notches more than Intermediate.

6 cyl engines --
6 to 12 notches more than Intermediate.

8 cyl engines --

12 to 16 notches more than Intermediate. If possible, the high speed adjustment should be checked by a road test. The leanest adjustment that gives full power and speed should be used.

STEP 14

Accelerating Pump Adjustment

The pump adjustment governs the accelerating mixture. It operates just the reverse of the other three adjustments. Turning to the right gives a richer rather than a leaner mixture. The richest accelerating mixture is obtained when the pump adjustment is screwed completely against its seat. This setting should rarely, if ever, be used. The leanest setting is obtained when the adjustment is open about three complete turns.

The correct setting is usually about one-half to one and one-half complete turns open. The leanest pump adjustment setting that gives positive and smooth acceleration without hesitation or spitting back should be used.

In cold weather a richer pump adjustment may be used to advantage than in hot weather.

STEP 15

Float Level

The float level has been correctly set at the factory and should not require changing. However, it unsatisfactory performance is experienced after all the other adjustments have been properly made, the level should be checked. To do this, first have the car on level ground with engine idling. Then remove the float level inspection plug in front of the float bowl. The gasoline level should be just up to or slightly below the bottom edge of the inspection hole. If the gasoline is too far below the hole or out of sight, the level is too low. If it is above the bottom edge of the hole, it is too high. To change the float level it is necessary to remove the float bowl cover. To raise the float level, bend the float lever upward toward cover. To lower level, bend float lever downward away from cover. Do not make a change of more than l/32 to l/16 at one time. Replace cover, recheck level.

SPECIAL NOTICE -- FLOATS

Because of the great difference in pressure between a gravity fuel feed system and a pump fuel feed system, two types of floats are used in the Model "SR Winfield Carburetor -- one type for gravity and one type for pressure. In order that the floats may be easily distinguished, the gravity float is marked with a G. The pressure float is not marked. All Winfield carburetors are equipped with pressure floats unless otherwise specified with the order or ordered in special package equipments for cars which have gravity or vacuum tank feed. *When the gravity float is used the C float needle seat should be used.* Refer to Instruction Section No. 15 for obtaining the proper float level with either pressure or gravity float.

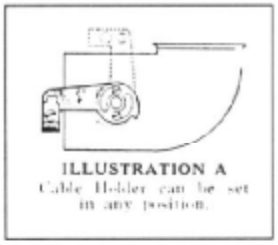


ILLUSTRATION A

Cable Holder can be set in any position.

ILLUSTRATION B

Choke Lever is against stop butterfly is wide open.