

CARBURETOR INFORMATION

RENNER'S CORNER

Source: <http://www.rennerscorner.com/carburetor-information.html>



MODEL A INTAKE MANIFOLD PORT MATCHING

Necessary when installing a Model B Zenith carburetor on your Model A.

The Model A intake is 1.18" diameter and the B is 1.30" diameter.

The step in diameters will have a negative effect on air/fuel flow.

Make the transition smooth by port matching the intake to the B diameter.

It is not necessary to bore or chamfer all the way to the Y to get most of the gain in power.

If you think that's necessary then buy a Model B manifold and get on with it !

AIR CLEANER USE CAN RUIN YOUR ENGINE !!!

NOT AN OPINION BUT A FACT !!!

**ALL CARBURETORS RELEASED BY FORD
FOR USE ON THE MODEL A AND B ENGINES
HAD THE FLOAT BOWLS EXTERNALLY VENTED.**

**BELOW IS A DOCUMENT RELEASED BY ZENITH
WARNING OF THE NEGATIVE AFFECTS OF USING AN AIR CLEANER
ON EARLY FORD VEHICLES WITH EXTERNALLY VENTED FLOAT BOWLS.**

**THE USE OF AN AIR CLEANER OF ANY TYPE WILL NEGATIVELY
AFFECT THE AIR TO FUEL RATIOS AS THE FILTER GET DIRTY.**

**EVEN WITH THE PROPER JETTING THE CARBURETOR
WILL END UP BEING VERY RICH !**

**THE EXCESSIVE FUEL GOING IN THE ENGINE
WILL END UP DOING MUCH MORE DAMAGE THAN THE DUST
IN THE AIR BY WASHING THE OIL FROM THE CYLINDER WALLS.
THESE CARBURETORS WERE NOT DESIGNED FOR AIR CLEANER USE!!!**

**TO ALLOW THE USE OF AN AIR CLEANER
THE BOWL VENT MUST BE PLUGGED AND RELOCATED
TO THE INSIDE OF THE CARBURETOR NEAR THE CHOKE PLATE AREA SO
THAT THE ENGINE CAN ONLY GET ITS AIR FROM ONE SOURCE.**

THIS IS CALLED A PRESSURE BALANCING CIRCUIT.

**IT WOULD TAKE A LIFETIME TO WEAR OUT AN ENGINE
WITH THE DUST THAT'S ON OUR ROADS TODAY.**

ZENITH CARBURETOR COMPANY

SUBSIDIARY OF BENDIX AVIATION CORP.



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DETROIT, MICHIGAN



FEATURES OF CONSTRUCTION

Air Cleaner and Air Filter Restriction

Many air filters, now used on most gasoline engine carburetors, accumulate some or all of the dirt they separate from the incoming air. As this dirt builds up it has an action similar to closing the strangler valve. Both cause restriction and this increases the suction on the carburetor jets. Very little increase in suction is sufficient to create a mixture so rich that it will not only seriously impair engine operation but

will also dilute the oil and cause as much wear as dirt.

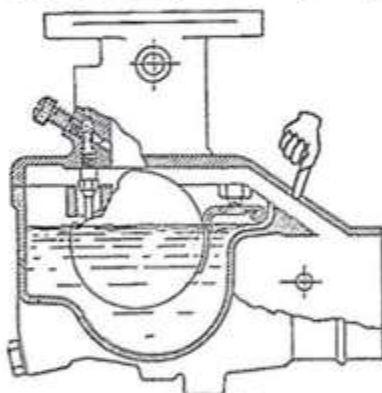


Figure 12

This is overcome in the Zenith Universal Carburetor by venting the fuel bowl from the air intake instead of the open air. So the strangler valve will actually "choke" for cold starting, it is located between

the air duct and the carburetor barrel.

In the ordinary carburetor atmospheric pressure always exists in the fuel bowl, regardless of air intake restriction. In the Zenith Universal whatever pressure exists in the air intake also exists in the fuel bowl. In other words, these pressures are "balanced," and if the air intake is restricted, causing a lower pressure therein, the fuel bowl pressure will be equally reduced. In this way no additional fuel will be forced from the jets, the mixture ratios will remain normal and fuel consumption will be only very slightly increased.

Zenith Carburetor Company, Detroit, Michigan, March 1937