

J2 TECHNICAL ARTICLE

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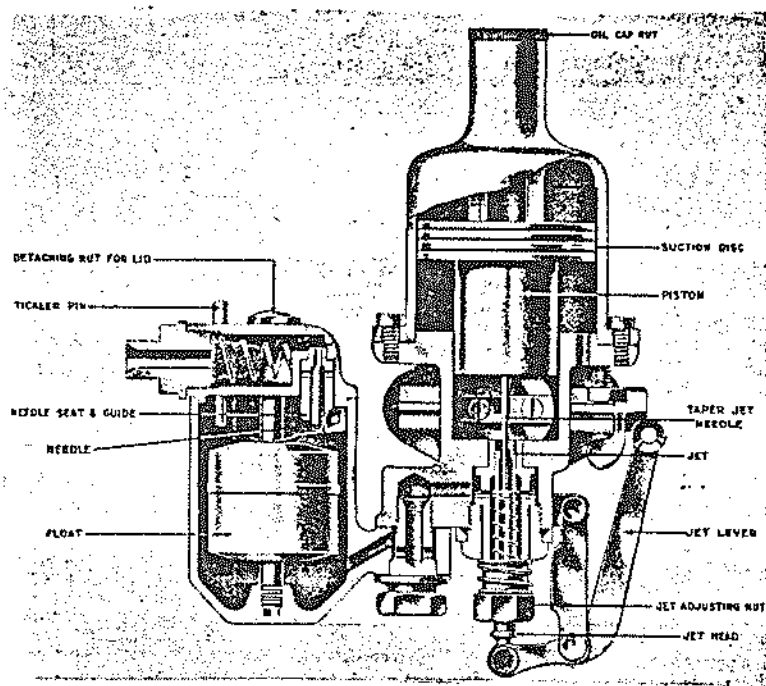
From Octagon Heaven

Source: Blower's Manual

S,U, CARBURETTORS

Since I might have confused someone with article No.37, I will try to provide details on the J2 carburetors.

"The carburettor of the J2 was the same unit with was fitted to the L, P, N, K, KN, TA, TB, and 1½ and 2.6 liter models" (Per Blower) The section view of it below is looking at it from the engine side. Note that it is very similar in function to the later TC, TD, and TF unit.



Sectional view of carburettor as fitted to L, J, P, N, K, KN, TA, TB, 1½ Litre and 2.6 Litre models.

The major difference is in the size of this unit compared to the 1½" later carburetors. The air intake opening on the J2 carb is only 7/8".

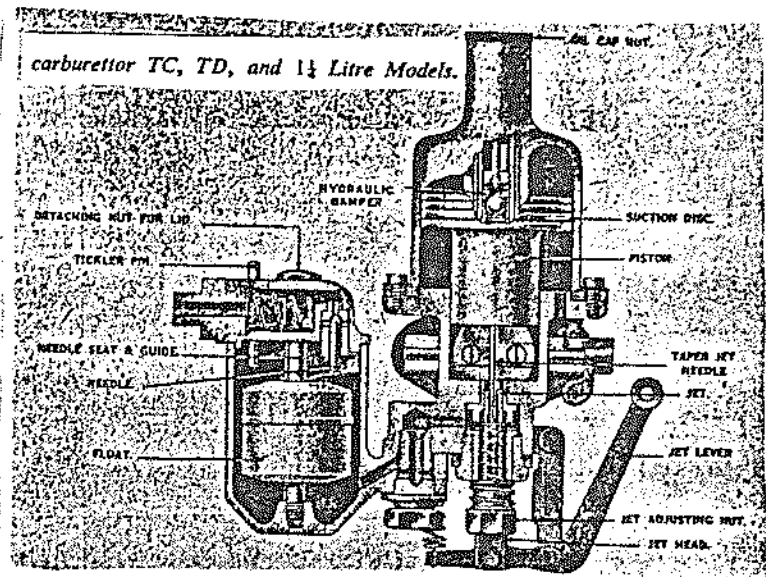
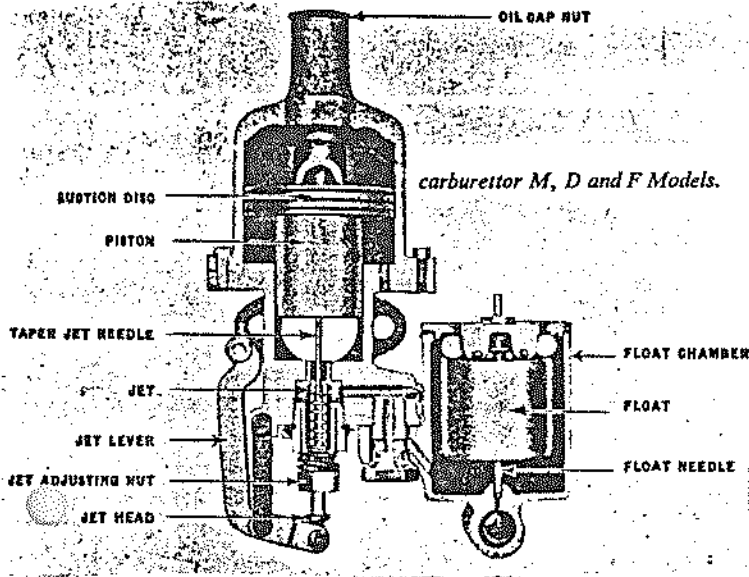
While it has been said that the air cleaners used on the TC and TD's were just to keep out rocks and birds the J2 did not have any air cleaner at all!

In looking at the air clear oh modern cars, we all know that there has to be a lot of dust and dirt particals entering the engine. This is another reason for my suggestion to change oil frequently, for some of the material is goingt to get on the walls of the cylinde and into the oil.

The J2 carburettor was different from that on the M, D, and F which is oictured on page 2, along with that of the later T series unit.

If I might quote Blower----"The function of the carburettor is as follow The level of the petrol in the float chamber is controled by the float lifting the needle lever and consequently, the needle onto its seating. This shuts off the petrol supply at a predetermined level. There is a mesh filter situated at the top of the float chamber."

(Over)



Blower goes on ----"The jet is free to move until the jet head aduts against the jet adhusting nut. At the top end of the jet is an accuratel calibrated hole in which the jet needle moves. The jet needle is held in the cardurettor piston by means of a grub screw."

"On the engine side of the piston and jet assembly is the throttle valve whivh is controled by the accelerator pedal. When the accelerator pedal is depressed and the throttle valve opened, the suction created by the engine pistons draws the mixture into the combustion chambers wher it is ignited."

The top of the carburettor piston is formed into what is termed the suction disc which is an accurate fit in its housing. When the trottle valve is opened, engine suction, which is transferred to the piston housing, causes the piston and needle to rise. Tis movement is in protortion to the speed of the engine. This means that the size of the choke and the position of the needle is varied automatically to correct mixture at all engine speeds."

In summary to Blower's very good discription, the S.U. Carburettor is a very simple system:

- 1) The predetermined level of gas in the float chamber keeps fuel at the top of the jet in the carburettor throat.
- 2) The amount of fuel which is mixed with the incoming air is determined by the speed of the air moving through the carburettor. (a law in physics which says a vacumm is created when air passes over a small port in a tube)



- (b the size of the jet opening which is determined by:
- the choke adjustment
 - the position of the piston and needle which is effected by the speed of the air and vacumm created in the suction disc.