

MINNOW CARBURETTORS are Developed and Manufactured by:-

MINNOW-FISH CARBURETTORS LTD

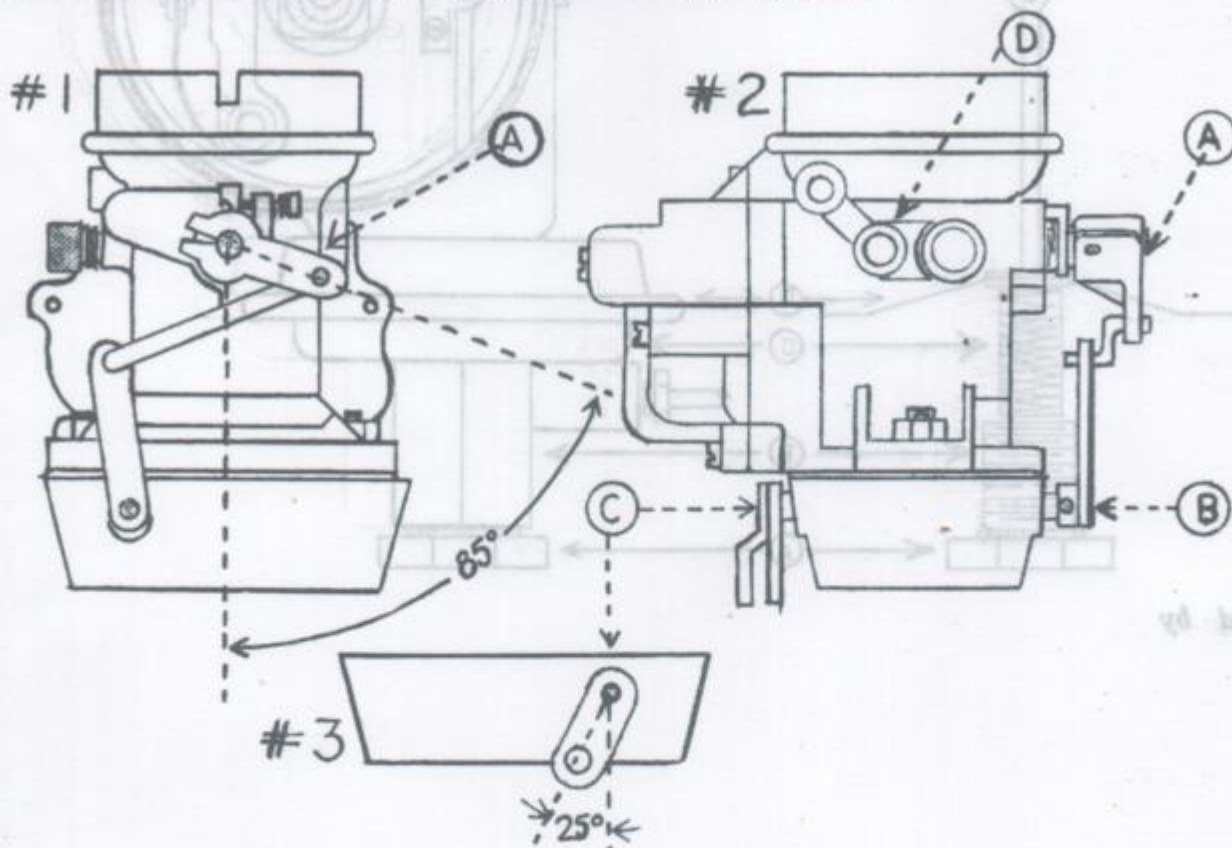


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INSTALLATION INSTRUCTIONS FOR VOLKSWAGEN

1. This carburettor has been tested on an engine dynamometer and will be found to be set slightly on the rich side and will require re-tuning to your own car after road testing to check correct functioning of linkage, etc.
2. The Full Throttle Mixture adjustment must be made according to instructions.
3. The carburettor is secured to the base with the linkage arranged as indicated in sketch *1. The lock screw in lever (A) is loosened and the lever is located at an approximate angle of 45 degrees with the throttle plate closed in idle position. Tighten lever lock screw.
4. The Solex Carburettor throttle lever at full open throttle position is located at an approximate angle of 25 degrees as indicated in sketch *3. Loosen the lock screw in lever (B) in sketch *2, hold throttle lever at full open position, set lever (C) at same angle as Solex carburettor lever in sketch *3, tighten the lever (B) lock screw.
5. Install the Minnow Carburettor and base assembly on the intake manifold with the two bolts or studs supplied. Install accelerator cable and gudgeon in base lever (C). Hold the foot accelerator pedal and lever (C) at full open throttle position. Tighten the gudgeon pin lock screw. Setting the linkage at full open throttle position will prevent any severe strain on carburettor linkage.
6. Distributor vacuum outlet (D) next to knurled idle air bleed screw must be closed with a $\frac{1}{8}$ " pipe plug if unit is full centrifugal advance. Where distributor is vacuum and centrifugally operated the line must be cut and joined to the distributor outlet vacuum line with $\frac{3}{16}$ " I.D. rubber tubing. From late 1960 VWs are fitted with a special vacuum only distributor in which case a special low vacuum model Minnow Carburettor must be used and is marked LV before its serial number and may be recognised by the extra vacuum pick up point on the trailing side of the butterfly. The existing vacuum line should be fitted to the vacuum bayonet fitting (D) on the carburettor beside the knurled idle air bleed screw. The fuel line is joined to fuel stud bayonet with $\frac{1}{4}$ " I.D. neoprene tubing.
7. The air cleaner, carburettor and base must be installed as a complete unit on Bus and Truck installations due to limited clearance.
8. If hesitation is experienced favour the rich side of idle air bleed adjustment.



DISTRIBUTOR VACUUM ADVANCE ADJUSTMENT ON VOLKSWAGEN

Fuel mixture, which is more efficiently vaporised by the Minnow Carburettor metering system, requires a more rapid advance in ignition timing. Where applicable adjustment of the spring loaded diaphragm in the vacuum advance unit must be made to ensure performance and economy with a Minnow Carburettor installation. The adjustment is quickly and easily made by the following procedure.

1. Remove the vacuum unit cylinder plug (A).
2. The limit plug (B) is now exposed. Its purpose is to apply pressure on the vacuum unit diaphragm spring. Spring tension must be relieved to permit a more rapid advance in ignition timing.
3. Remove the distributor cap and hand turn the engine until the distributor contact points are closed. It will be noted that when the distributor plate is turned by hand in a counter-clockwise direction to its full advanced position it will immediately return to full retard position when hand pressure is released. Insert a screwdriver into the vacuum unit cylinder and turn limit plug (B) counter-clockwise to relieve spring tension on the diaphragm. Spring tension has been completely relieved when the distributor plate does not return to fully retarded position after being hand turned to full advanced position.
4. Limit plug (B) is now gradually turned clockwise until a slight tension on the diaphragm spring will return the distributor plate to full retard position when hand pressure to advanced position has been released.
5. Replace the vacuum unit cylinder plug (A).
6. It will be found by road tests that the ignition timing may be advanced as much as 8 degrees before top dead centre. When set with a timing light, 8 degrees is approximately $\frac{1}{2}$ " from timing notch in crankshaft pulley.
7. On late 1960 models and onwards where vacuum only type distributors are used and after connections have been made as detailed on page one the static ignition setting should be set to between $\frac{1}{4}$ to $\frac{1}{8}$ " in advance of the standard mark on the pulley, by timing light. Type of fuel used will have some bearing on final setting and a little trial and error testing may be needed to obtain the best all round performance.

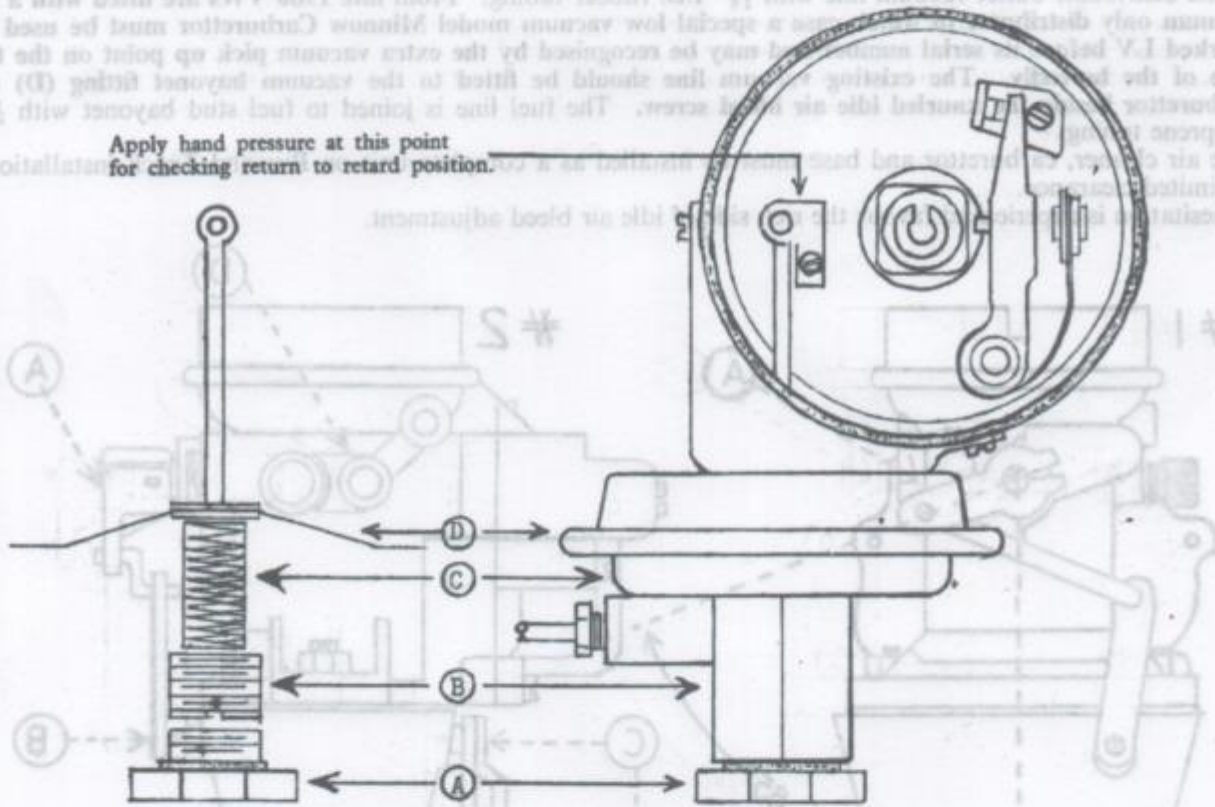
(A) Cylinder Plug.

(B) Limit Plug.

(C) Diaphragm Tension Spring.

(D) Diaphragm.

Apply hand pressure at this point
for checking return to retard position.



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