The present invention relates to carburetor adapters for internal combustion engines, and more particularly to adapters replacing the conventional intake manifold.

The primary object of the invention is to provide an intake manifold replacing adapter for connecting a plurality of carburetors to the cylinders of a multi-cylinder internal combustion engine.

Another object of the invention is to provide an adapter of the class described above which completely covers the intake manifold openings in the engine head, sealing them against air leakage.

A further object of the invention is to provide an intake manifold adapter for engines of the V type wherein a plurality of carburetors are connected to each side of the engine and interconnected for simultaneous operation.

Another object of the invention is to provide a carburetor adapter for internal combustion engines which is inexpensive to manufacture, simple to install and operate, and which gives a smooth even flow of fuel air mixture to all cylinders.

Other objects and advantages will become apparent in the following specification when considered in the light of the attached drawings, in which:

Figure 1 is a top plan view of the invention.

Figure 2 is a fragmentary end elevation of the invention.

Figure 3 is an enlarged fragmentary vertical cross-section taken along the line 3—3 of Figure 2, looking in the direction of the arrows.

Figure 4 is an enlarged fragmentary longitudinal cross-section taken along the lines 4—4 of Figures 1 and 2, looking in the direction of the arrows.

Figure 5 is an enlarged fragmentary transverse cross-section taken along the line 5—5 of Figure 1, looking in the direction of the arrows.

Figure 6 is a plan view of the portion of the head of the internal combustion engine to which the intake manifold is normally attached, illustrating in broken lines the outline of the adapter.

Referring now to the drawings in detail wherein like reference characters indicate like parts throughout the several figures, the reference numeral 10 indicates generally a carburetor adapter for internal combustion engines for attaching a plurality of carburetors thereto.

In conventional internal combustion engines, and particularly those of the V type, the intake manifold has long tortuous passages which make it extremely difficult to feed all of the cylinders of the engine evenly.

Normally, a single multi-throat carburetor is positioned centrally on the intake manifold with the gas passing through the tortuous passages of the intake manifold before reaching the cylinder.

With the present invention, the conventional intake manifold is completely eliminated and the conventional multi-throat single carburetor is replaced with a plurality of relatively simple single carburetors.

The adapter 10, referring particularly to Figures 1 and 2, is illustrated as attached to a V type engine 11. The engine 11 has heads 12 mounted on the opposite banks thereof with each of the heads 12 having a flat surface 13 to which an intake manifold (not shown) is normally attached.

A support member 14 extends longitudinally of the surfaces 13 of the heads 12 and has a flat lower surface 15 positioned against the flat surface 13 of the head 12. The support member 14 is provided with a plurality of bores 16 arranged in aligned relation to threaded bores 17 in the head 12 to receive stud bolts 18 extending therethrough securing the support member 14 to the head 12.

A gasket 19 is positioned between the support member 14 and the head 12 to seal the joint therebetween.

A pair of longitudinally spaced domes 20 are formed on the support member 14 and each of the domes 20 have a size sufficient to cover adjacent intake ports 21, 22 in the head 12, as best seen in Figure 6.

The domes 20 each have a flat horizontal upper surface 23 arranged to fit and support the attaching flange 24 of a carburetor 25. A gasket 26 is engaged between the surface 23 and the flange 24, and the attaching flange 24 is secured to the dome 20 by stud bolts 27 extending therethrough.

Intermediate the domes 20 on each of the supports 14 are upwardly extending control shafts 28 having a transversely extending control shaft 29 journaled therein. The carburetors 25 are each provided with control levers 30 for controlling the flow of fuel therethrough. The pair of carburetors 25 on each support 14 have their control levers 30 connected by links 31.

Crank arms 32 are fixed to the shafts 29 and have a control link 33 adjustably connected to the free end thereof. The opposite end of the control links 33 are connected to one of the levers 30 so that rotation of the control shaft 29 will move all of the control levers 30 simultaneously and equally.

The carburetors 25 on opposite sides of the motor 11 are of the right and left hand control type so that all of the control levers 30 can move in the same direction to produce the same effect in each of the carburetors 25.

Each of the domes 20 on their adjacent inner walls are provided with tubular bosses 34 communicating with the interior of the domes 20. A T 35 is positioned intermediate a pair of bosses 34 in aligned relation therewith, and a second T 35a is similarly arranged between the other pair of tubular bosses 34. The central legs 36, 36a of the T's 35, 35a are arranged in aligned relation and connected by a boss 37 secured thereon by clamps 38. The T's 35, 35a are connected to the tubular bosses 34 by bosses 39 connected by clamps 40.

The connections between the domes 20 balance the vacuum pressures therein, and consequently balance the atmospheric pressures working against the air and fuel passing through the carburetors 25 so that the cylinders are evenly fed with fuel and air.

With the present invention, each pair of adjacent cylinders in the V engine 11 are separately supplied with fuel from an individual carburetor with the carburetors being simultaneously and equally controlled for smooth operation.

Having thus described the preferred embodiment of the invention, it should be understood that numerous structural modifications and adaptations may be resorted to without departing from the scope of the appended claim.

What is claimed is:

A carburetor adapter replacing an intake manifold on a V block engine comprising a pair of spaced support members secured in parallel relation to said engine, a pair of upward extending domes formed in each of said support members with said domes each overlying and communicating with a pair of adjacent intake ports in said engine, a carburetor supported in upright position on and secured...
to each of said domes, a pair of spaced parallel transversely extending conduits extending between and detachably secured to one dome of each pair of domes communicating said domes for equalizing the pressures therein, conduit means extending parallel to said support members connecting said pair of conduits for equalizing the pressures therein, and means simultaneously controlling the carburetors on said domes.

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