COOKING WITH THE IDF

BY JEFF HOLIFIELD

Unquestionably, the most popular line of performance carburetors used on VW's venerable boxer engine come from "Weber Carburettor" of Bologna, Italy. Over the last three decades, various Weber designs have been installed on air-cooled engines. By far and away, the dual-throat IDF series has proven to be the most popular with professional VW performance tuners, as well as home hobbyists.

Used in single and dual carburetor applications, the Italian-designed IDF is a true work of art, and is currently available in 40mm, 44mm, and 48mm bore sizes. In addition to the three basic sizes, the IDF offers an incredible amount of flexibility, thanks to changeable main jets, idle jets, air correction jets, accelerator pump jets, emulsion tubes, and venturis. The seemingly endless combination of parts allow the Weber IDF carburetor to be tuned to just about any performance engine combination.

For all its adjustments, there is one limitation of the IDF carburetor which is not easy to overcome. Once dual carburetors are installed and tuned to a particular engine combination, there has not been a cost-effective means to increase horsepower from further modification. Traditionally, if you wanted more power from carburetion alone, you would have to step up to the next size larger IDF (i.e., from 40mm to 44mm). In today's market, that represents a major investment (somewhere in the neighborhood of $600).

Five years ago, CB Performance (559/733-8222) of Farmersville, California, created an "Update Kit" that proved to be a solution to this shortcoming. A simple bolt-in modification, the update increased the airflow through the carb, and thus the horsepower potential. Problem being, the modification only worked on dual-throat Dellorto DRLA carburetors.

Though similar in design, CB Performance just couldn't get the Dellorto DRLA update kit to work on the Weber IDF carburetor as the Weber body casting was just too different. The project was shelved, that is, until a few months ago when one of CB's designers came up with an all new design for the IDF carb. Within weeks, a prototype IDF Update Kit was installed and it worked beautifully.

Now in production, the IDF Update Kit replaces the Weber auxiliary venturi and main venturi with CB Performance's new, single venturi and a horizontal discharge tube. The new venturi has a significantly larger ID than the stock unit, and allows a higher flow of air through the carburetor for increased performance.

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The installation of CB's IDF update kit is straight forward, and easily accomplished with the carburetors still mounted on the engine. Nevertheless, if it was our engine, we would remove the carbs just to make sure nothing gets into the combustion chamber by accident. ABOVE and CENTER, remove the jet stacks, linkage, and carburetor top. Note the float is attached to the top ... do not set the top down on the float, turn it upside down. ABOVE RIGHT, remove the accelerator pump jets, and the lower copper gasket.

ABOVE, removing the auxiliary venturi (a.k.a. boost venturi) is often easier said than done, particularly on older carburetors. If fickle, turn the carb on its side, open the butterfly, and with the help of an appropriately sized wood dowel, lightly tap out the booster. ABOVE CENTER and RIGHT, loosen the lock nut, and remove the set screw holding the main venturi in place. Remove the venturi.

ABOVE, working with the parts supplied in the IDF Update Kit, select one horizontal discharge tube, and one CB Performance venturi. With the perforations facing downward, slide the discharge tube into the venturi. ABOVE CENTER, take a sealing O-ring, and push over the end of the tube. ABOVE RIGHT, slide the venturi assembly into the IDF body, making sure the O-ring is located toward the center of the carb. Note the location of the clearance cut for the pump jet, and the small dimple (arrow) for the set screw.

Repeat the above procedure for the bore of the IDF. Note the horizontal discharge tube will need to be slipped in from the opposite side as the first one for the O-ring, clearance-cut, and set screw dimple to be properly located. ABOVE LEFT, install the venturi set screw with a screw driver, and tighten with a wrench. ABOVE CENTER, install the accelerator pump jet with its lower copper gasket. ABOVE RIGHT, add top (with float and base gasket) and lightly tighten screws in a criss-cross pattern.