Installation Instructions 67166 Billet Metering Block

Congratulations on purchasing a **PROFORM®** billet metering block equipped with idle mixture screws. This metering block is designed and intended for use on the primary side of most Holley® performance carburetors without an accelerator pump transfer tube and any Demon® Series carburetors.

Installation is essentially the same procedure as replacing a conventional metering block. There are a couple of features and tuning aspects of this metering block you should become familiar with. At the top of the straight "V" is the idle feed restriction. This screw-in restriction controls the fuel side of the idle and off-idle air/fuel mixture. Your metering block comes with .028" idle feed restrictions. The number 28 will be stamped on the head of these restrictions. An additional pair of restrictions is included to richen the idle mixture, sometimes required with larger carburetors where the original main body is retained. These restrictions are stamped with number 31, to represent .031" restriction diameter.

One additional feature is the power valve channel restrictions are also adjustable. As received, these restrictions are .047" (stamped with # 47). These restrictions determine the amount of fuel enrichment the power valve circuit provides at wide open throttle or when the engine load is sufficient to reduce the manifold vacuum below the rated value of the power valve. The amount or percentage is in proportion to the jet size and normally would not be altered except in special or extreme cases. Another pair of # 53 restrictions are included in the package to richen the wide open throttle fuel curve if desired.

The emulsion holes, the three threaded holes in each of the serpentine slots do not have any restrictions intentionally. The emulsion holes are pre-calibrated and drilled in to the bottom of the well. These pre-calibrated emulsion holes offer improved performance over your original metering block and are adequate for the majority of applications.

In the future should you wish to make the emulsion feature adjustable it is possible to do so by drilling the bottom of all six wells to approximately .050" or 3/64". Remove the main jets and power valve before drilling. Be careful to only drill deep enough to break into the main well. After you have successfully drilled all six holes (three per side), use a quality carburetor cleaner, spray in to the top angle channel (booster discharge port) to dislodge any metal shavings from the drilling process, then use compressed air blow out the main well again from the top (booster discharge port) down. The recommended starting point is with all three emulsion holes being .028".

CAUTION: Do not make drastic emulsion size or power valve channel restriction changes as you can significantly alter the air/fuel ratio and could cause engine damage. It is highly recommended that when experimenting with emulsion and wide open throttle calibration you consult one of the many books available on carburetor modification and use one or more devices that monitors air/fuel ratio throughout the operating RPM range.

Service and calibration parts can be ordered through your performance parts distributor or directly from **Quick Fuel Technology®**, 129 Dishman Lane, Bowling Green, KY 42101,1-270-793-0900. Thank you for purchasing this performance product from **PROFORM®**.