Addendum to Speed Demon & Mighty Demon Instruction manuals as well as replacement baseplates featuring the new Idle-Eze™

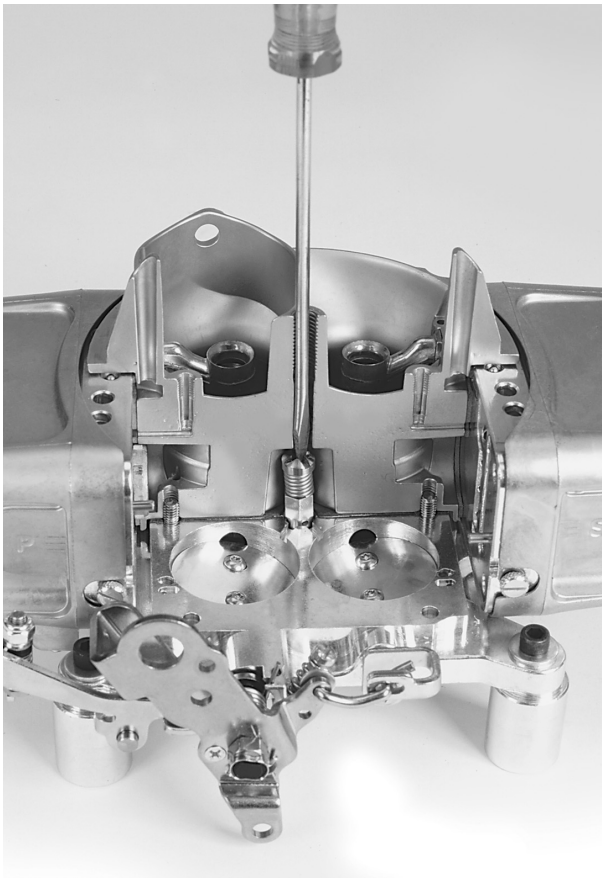
DEMON CARBURETION™

INSTALLATION AND TUNING INSTRUCTIONS

This sheet contains specific information about tuning your carburetor that is not covered in the General Instruction Manual or Tuning Video that was supplied with your carburetor.

NOTE: IF YOU HAVE ANY QUESTIONS ABOUT THE SETUP OR TUNING OF THIS BASEPLATE PLEASE CONTACT THE DEMON CARBURETOR TECHNICAL DEPARTMENT DIRECTLY AT (706) 864-8544 OR ON THE WEB AT www.barrygrant.com

The new Idle-Eze™ baseplate allows you to set your idle speed while maintaining the correct orientation of the butterflies with the transfer slots. This provides better control of the idle-mixture screws, and results in a cleaner idle, crisper throttle response, and quicker tuning.



The new baseplate also helps in overcoming idling difficulties in engines with larger camshafts.

If you're working on a carburetor that already has the Idle-Eze™ baseplate installed please skip down to the Setup & Tuning section. If you're installing the baseplate on your existing carburetor please follow the installation instructions.

Installation Instructions:

Before proceeding with the installation, make sure your new Idle-Eze™ baseplate has the correct size of butterflies for your carburetor. Attempting to use the wrong size of baseplate on a carburetor can raise safety issues (binding linkage) and/or fuel distribution difficulties.

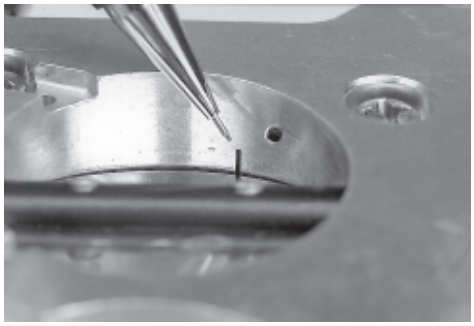
With the carburetor removed, begin by taking off the float bowls, metering blocks, and baseplate. At this point, the carburetor center section (main body) requires modifying by drilling a hole in the bottom of the casting, via the air cleaner stud hole. After your Idle-Eze™ conversion is complete, this will allow you to remove your air cleaner stud, and insert a screwdriver while the carburetor is installed on the engine to control the idle speed. Now, clean out any metal shavings and re-assemble the carburetor. Ensure the baseplate screws are tight (apply a little Loctite to the threads), and that you are using the correct gasket between the baseplate and the main body. Once the carburetor has been re-assembled, and before adjusting the butterflies, make sure the throttling mechanism operates smoothly from idle to the fully open position and back again without the slightest hint of binding.

Setup & Tuning instructions:

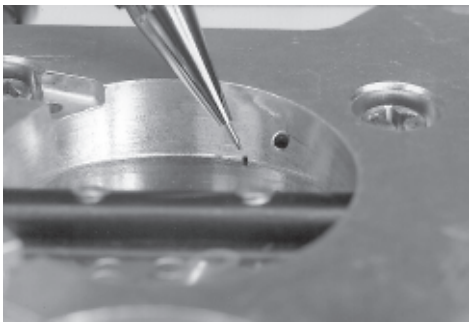
Adjust the butterflies before installing the carburetor on the engine. On engines that idle at 1000 RPM or higher, set both the primary and secondary butterflies open by the same amount.

For further questions, please contact our technical department at (706) 864-8544.

As a starting point (with the carburetor upside down), set the butterflies such that they expose approximately .020" of the transfer slots. The transfer slots are the thin slots milled in the baseplates and are approximately 5/16" in length.



With .020" showing, the transfer slot will give the appearance of a little square situated below the butterflies.



On engines that idle below 1,000 RPM set the primary butterflies open to the .020" (square) as described above, but the secondary butterflies should be set to the bottom of the transfer slot. In other words, at idle speed the secondary transfer slots will not be visible when viewed from the bottom, but any movement of the secondary butterflies will expose the shaft.

The next step is to provisionally set the Idle-Eze™. Insert a screwdriver through the air cleaner stud hole to engage it, and turn the screw clockwise until the screw stops. Now, reverse it counter-clockwise by 1-1/2 turns. This will serve as a good baseline. Install the carburetor on your engine.

Once installed, recheck the smoothness of the carburetor linkage as it operates from the idle position to wide-open throttle, and back without binding or hanging. Also ensure all fuel lines and fittings are tight and in good working order. Your safety depends on this.

Now, the carburetor can be primed and the engine started. Use a screwdriver through the air cleaner stud hole to control the engine's RPM. Once the RPM is set approximately and the engine is running at normal operating temperature, begin to adjust the idle-mixture screws. Adjust the screws either in (leaner) or out (richer) until the engine reaches its optimum idle. Adjustments in small increments of, say, approximately 1/4-of-a-turn at a time is recommended. Once the idle mixture has been set, adjust the Idle-Eze™ by using a screwdriver through the air cleaner stud hole to reach desired RPM. Once satisfied, install the air cleaner stud and air cleaner and make sure its presence doesn't change the idle settings or RPM. If it does, the carburetor will require readjustment so it performs properly with the air cleaner installed. Once it does, you're finished and ready to enjoy your carburetor.