

# Perry

A division of

*Conley* Precision Engines, Inc.

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## ABOUT YOUR PERRY CARBURETOR

Your engine runs on a fuel and air mixture. The ratio of fuel to air determines how rich or lean the engine runs. The amount of fuel and air determines how fast or slow the engine runs. The idle speed screw raises or lowers the idle speed. The idle mixture disc regulates the idle mixture. A clockwise movement, of the disc leans the mixture and a counter-clockwise movement enriches the mixture. The idle mixture disc is very sensitive so only move it a small increment at a time.

### INSTALLATION

Insert the carburetor into the throat of the engine. Hold it firmly against the "O" ring while tightening. Adjust the exhaust baffle so that it is firmly closed when the carburetor barrel is closed.

Note: when the barrel is closed there should be a 1/32" gap between the barrel hole and the body. This can be readjusted with the idle speed adjustment screw. When the carburetor is properly installed, break the set on the "O" rings in the idle mixture disc by turning the disc about a quarter turn each way with a screwdriver. Now set the reference slot on the center reference mark.

### ADJUSTING FOR HIGH AND IDLE SPEED

Close the needle valve completely and then open one full turn. Make sure the barrel is fully open. Prime the engine and start. (Note: Due to the design of the carburetor, the fuel is very free flowing.) Don't overchoke. Adjust the needle valve for a slightly rich two-cycle as you would for normal flight. Now, throttle down and listen carefully. If the engine gradually speeds up and dies, it is too lean. Rotate the idle mixture disc a very small amount counter-clockwise to richen the mixture. (Note: Use a small screwdriver in the reference slot of the idle mixture disc to rotate it while the engine is running.) If the engine runs slower and slower and quits, it is too rich. Rotate the idle mixture disc clockwise to lean the idle setting. (Note: The idle mixture disc need only be moved a few thousandths of an inch at a time to obtain the idle setting.) Once the idle mixture is adjusted, the "O" ring seals will take a set and it will remain at that setting virtually indefinitely.

A final test is to hold the nose of the airplane up then down. If it quits in the up position, it is too lean and if it quits in the down position, it is too rich. (Note: Most engines will idle very near the center reference mark.)

You may further reduce the idle speed by cutting down the amount of air (closing the carburetor barrel). This is done by turning the idle speed screw counter-clockwise.

### CARE AND CLEANING

To dis-assemble the carburetor for cleaning, remove the needle valve and retaining clip. The idle mixture disc can now be removed by working it back and forth and pulling firmly. The carburetor barrel need not be removed so as not to disturb the throttle linkage. Do not remove the "O" rings from the idle mixture disc as they are subject to damage during removal. If treated properly they will last the life of the carburetor.

