

**GENERAL:** These instructions apply to both late and early model engines. Early model engines require a carburetor flange kit, an external scavenge tube and a flame arrestor adapter ring. These items can be ordered separately from our online catalog at [moyermarine.com](http://moyermarine.com): (FCAR\_13.2\_166), (FCAR\_13\_60.0), and (FCAR\_08\_59). (see figures on back page)

### REMOVAL OF OLD CARBURETOR:

- 1) Remove the flame arrestor housing, and disconnect the fuel line, throttle and choke cables.
- 2) Remove the scavenge tube between the manifold and bottom of the carburetor intake throat. Then remove the 90 degree brass fitting from the bottom of the intake throat and install it into the same location on the bottom of the intake throat of the new carburetor.
- 3) Unbolt the old carburetor from the manifold and remove.

### PRELIMINARY ADJUSTMENTS OF NEW CARBURETOR:

The only adjustments to consider on the new carburetor itself are the idle mixture screw on top of the carburetor, and the idle RPM set screw which is part of the throttle arm assembly (figure 1).

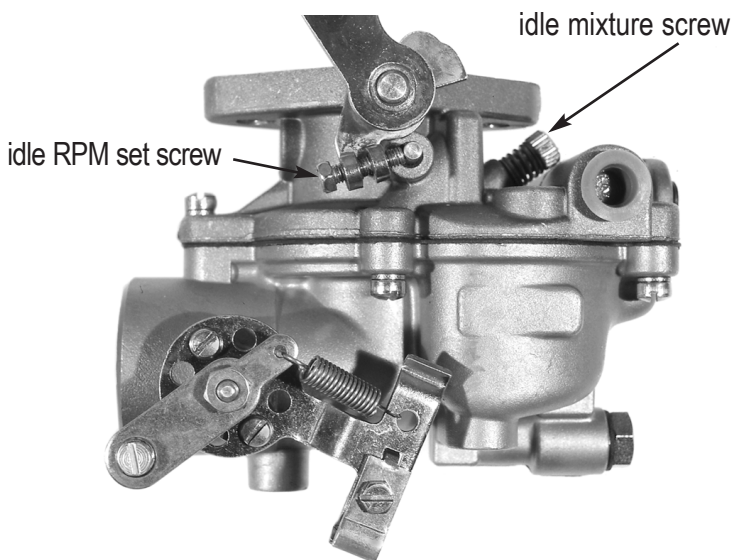


figure 1

A good beginning setting for the idle mixture screw is approximately one to one and a half turns back off of its seat. You can make a preliminary check of the idle RPM setting by looking down into the throat of the carburetor from above as you slowly close the throttle valve (figure 2).

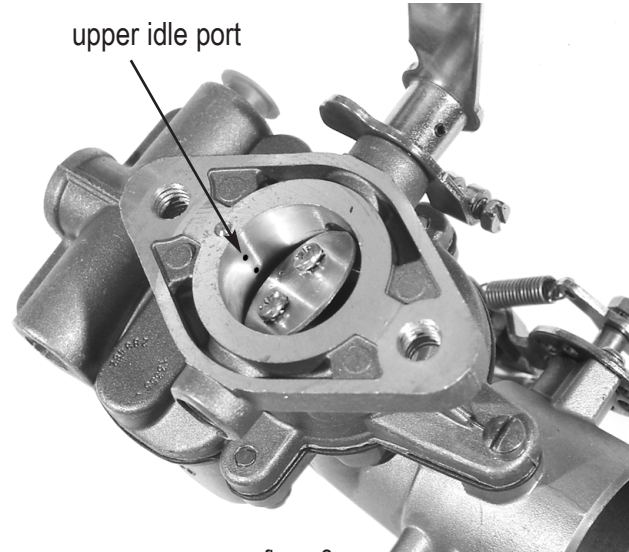


figure 2

As you reach the idle stop, you should see the throttle valve (the disk itself) stop just short of closing the throat completely. In the proper idle position, you should see only the upper of the two idle ports above the throttle valve.

### INSTALLATION OF NEW CARBURETOR:

- 1) Attach the carburetor to the manifold flange using the same bolts as were used with the original carburetor.

**NOTE 1:** If installing this carburetor on an early model engine, install the two studs from the spacer kit into the carburetor flange at this time. Then slide the spacer over the studs and install the carburetor onto the manifold. Be sure to use a gasket on each side of the spacer, and install the spacer so that the open 1/8" pipe threaded hole faces outward (away from the block). The brass 1/8" pipe plug should be securely installed in the hole facing the block.

2) Re-connect the fuel line, throttle, and choke cables. When connecting the choke cable, be certain that the cable works very freely, and that when the cable is pulled in the cockpit, the choke valve closes completely within the intake throat of the carburetor. The throttle cable can usually be replaced exactly as it was removed, without any additional adjustment.

3) Reinstall the scavenge tube between the 1/8" pipe threaded hole in the front of the manifold and the 90 degree fitting previously installed in the bottom of the intake throat of the new carburetor.

**NOTE 3:** On early model installations, install the new scavenge tube between 1/8" pipe threaded opening on the front of the previously installed spacer, and the 1/8" pipe threaded opening in the bottom of the intake throat of the new carburetor. It usually works best to install the 90 degree elbow in the spacer so that it faces down and forward slightly (toward the flywheel), and the elbow in intake throat of the carburetor facing away from the block. The scavenge tube can then be bent carefully to connect the two elbows.

#### FINAL ADJUSTMENTS:

1) After starting and warming up the engine, the idle mixture screw should be turned a small amount in both directions to arrive at the smoothest idle; and the RPM set-screw set at approximately 800 RPM. If you do not have a tachometer, set the idle RPM high enough so that the engine has no tendency to falter or stop when bringing the throttle to idle.

**NOTE 2:** When adjusting the idle RPM set screw, be certain that the throttle cable is long enough so that the throttle arm can continue to reach the idle stop as the set screw is being adjusted. If the travel of the throttle cable is too short, the end of the set screw will no longer reach the idle stop coming out from the body of the carburetor, and the cable itself (and not the idle set screw) will determine the idle RPM. In this case, idle RPM will usually be erratic.

2) The final step is to reinstall the flame arrestor. If the flame arrestor element has not been cleaned recently, remove it from the housing and clean it with carburetor cleaner as necessary to remove any crud which would restrict air flow. After the element is clean, a small amount of engine oil can be applied to the flame arrestor element to assist in trapping any airborne dirt that would otherwise be drawn through the grill work of the arrestor.

**NOTE 3:** When installing this carburetor on an early model engine, use the adapter ring to install the early model flame arrestor.



carburetor flange kit



flame arrestor adapter ring



external scavenge tube