

Throttle plate relation to progression hole: (A) correct; (B) throttle plate is too low; (C) plate is too high. Drawing courtesy Weber.

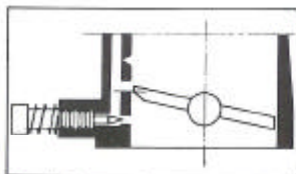
Throttle Plate Location—Some final comments about the progression circuit. All the above is based on the assumption that the throttle plate is correctly located. If the Weber is box-stock, that's a safe assumption. If you or anybody else have had the throttle plates out, however, it's possible that they are not *exactly* where they should be.

Two possible misalignments are shown in the accompanying illustration. Ideally, the progression hole(s) should be uncovered just as the throttle plate begins to move. But in actual practice, the plate may be set too low or high in the bore.

Plate Too Low—If the throttle plate is too low, it must move too far to activate the progression circuit, and there will be an excessively lean point (*flat spot*) in acceleration which no amount of fiddling will entirely solve. Try to reposition the throttle plate to correct this.

This isn't a casual task. The throttle plate screws are *staked* (the ends are deformed) to keep them from vibrating loose and making their way into the engine. They may break off or their threads may strip when you try to loosen them. See page 50 for more details on loosening, removing and restaking the screws and throttle plate alignment.

As a last resort, to correct a too-low throttle plate, the lower edge of the throttle plate can be chamfered with a file to

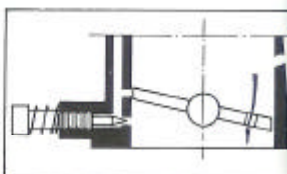


Cure for late-opening progression hole—example B in above drawing: chamfer lower edge of throttle plate. Drawing courtesy Weber.

uncover the progression hole more quickly. *Don't*, under any circumstance, try to bend the throttle plate.

Plate Too High—If the throttle plate is too high, it will always leave some of the progression hole uncovered even when the plate is fully closed. In this case, the idle mixture will be too rich. If repositioning the throttle plate won't solve the condition, a *very* small hole, no larger than 1.5mm (0.06 in.) can be drilled in the throttle plate on the side *opposite* the progression hole. This hole will allow additional air to flow into the engine and correct the over-rich idle mixture. The hole should be enlarged very carefully, in steps, to obtain the right correction.

Only drill the throttle plate if all other tuning efforts fail.



Correction for high throttle plate—example C in above drawing: drill very small hole, no larger than 1.5mm/0.06 in., and carefully enlarge it to obtain correct idle mixture. Drawing courtesy Weber.

IDLE CIRCUIT

The idle circuit is easy to tune, because there's an adjustable needle jet (screw) in it, placed near the base of the carburetor. With the engine at operating temperature, set the idle speed to about 700 rpm. Then slowly back out the idle mixture richness screw until the engine speed starts to drop off. Slowly turn in the screw until the engine has reached its highest idle speed. That's all there is to it.

Older carburetors have an idle mixture richness screw with a fairly sharp taper—in idle quality. Modern idle mixture screws have a more shallow taper (are more pointed), so whole turns are required to make a perceptible change in mixture richness.

Very small engines using Webers