

On a given engine, if you assume that all speed and governor adjustments have been tampered with and are now grossly out of adjustment, below is a procedure to get the engine back to the correct settings.

1. Back off both idle adjustment screws far enough so that they are out of the way (black plastic screw at carburetor and screw with black spring under the head on solenoid L-shaped linkage)
2. Loosen governor arm from shaft coming out of top of engine. On 9 & 13hp engines, rotate shaft CCW with governor arm held to the right at WOT (wide open throttle). Make sure governor arm remains straight and not pivoting at the joint in the middle. Re-tighten governor arm to shaft in this extreme position.

Note- For 6.5hp engines rotate the governor shaft CW instead while doing this

3. Governor spring (large silver) should be in the hole on the governor arm closest to the shaft
4. Back out high speed adjustment screw on top of the engine at the small silver lever. A few complete turns will do.
5. Start engine. If it hunts (speed varies up and down), move governor spring to outer hole, if power is too low, move it back in toward the shaft. Note- hunting is unpredictable and sometimes the opposite movement of the spring helps.
6. Engine will probably be running slow. Adjust high speed to 3600rpm by turning in high speed screw on top to increase speed. out to slow down. If engine is still runs too fast, governor arm may still be out of adjustment on shaft or it has moved since tightening. Or there could be an internal governor issue (rare).

Note- If governor arm was over tightened to shaft and has no gap at the end of the arm next to the shaft, the tightening torque will not result in sufficient holding force to shaft. The governor arm must be replaced.

7. Make sure idle linkages on solenoid are not binding and are free to move the full travel. While at it, make sure throttle linkage from carburetor to governor arm moves back and forth freely. (with engine off)
8. Make sure that idle screw, with black spring under the head on the L-shaped lever on the solenoid is backed out far enough to just clear touching the governor arm.
9. Start engine. Turn idle control on after engine has warmed up some. Solenoid should push governor arm and throttle to the left toward carburetor and the black plastic throttle should stop up against black plastic screw. Adjust the idle speed to 2700-2800rpm by adjusting this screw in to increase idle speed, back it out to reduce. If solenoid does not push lever over far enough to touch black plastic screw. the screw with the black spring on the L-shaped solenoid lever can be turned in to make this happen. Both of these screws can be adjusted in or out so that one is not at the extreme of its adjustment length.
10. Cycle idle control switch on and off a few times and check both high speed and idle speed to ensure that they are still correct.