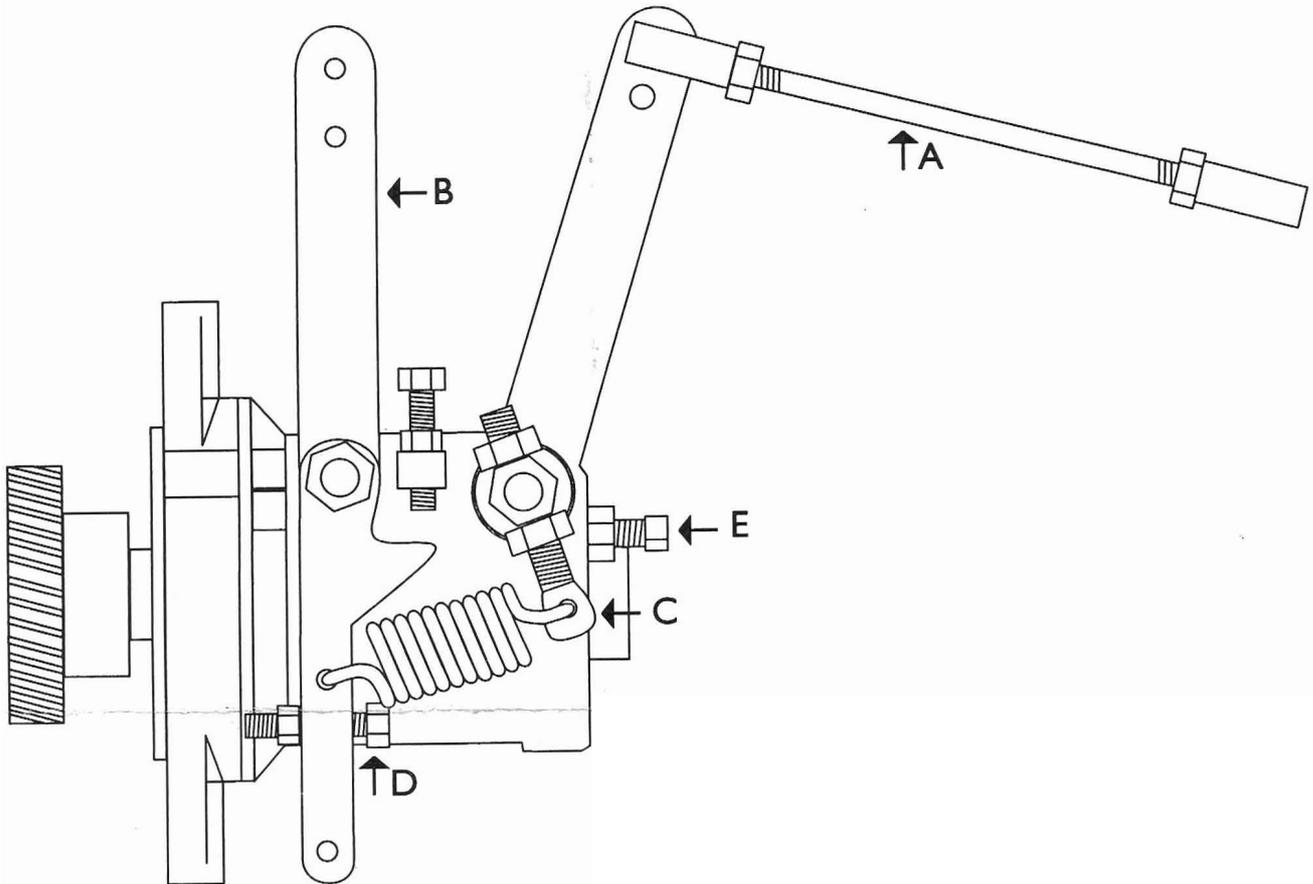


HW68031E Governor

Adjusting and Trouble-Shooting the Governor



Adjusting the Governor

1. Move the Speed Lever (B) to put spring tension on governor and adjust Throttle Rod (A) to give about 1/16 inch clearance between carburetor lever and wide-open stop on carburetor. Remove spring tension with Lever (B).
2. Start engine and allow to warm up to normal operating temperature.
3. Move Speed Lever (B) to increase engine speed to desired range.
4. Check engine under a load. If the drop in speed between Load and No-load is too much, adjust Screw (C) to move spring closer to hexagonal hub, re-adjust Speed Lever (B) to get the desired speed, and recheck engine under a load. Repeat this procedure as required until desired speed and regulation is reached.
5. To stabilize the engine, or to increase the drop in speed between Load and No-load, adjust Screw (C) to move the spring away from the hexagonal hub, re-

- adjust Speed Lever (B) to get the desired speed, and recheck engine under a load. Repeat this procedure until desired speed and regulation is reached.
6. Adjust High-Speed Top Screw (D) as required.
 7. If the engine Hunts at maximum speed, no-load condition, turn Surge Screw (E) clockwise into governor until hunting just stops and tighten locknut. Caution: Do not turn screw (E) in far enough to increase engine speed.

Trouble Shooting the Governor

Full Load Surge (A)

1. Shorten Throttle rod two or three turns at the rod-end ball joint.
2. Check for extra rich or extra lean fuel/air mixture at the carburetor.
3. Look for air leaks caused by a loose intake manifold.
4. Look for loose or worn linkage between the governor and the carburetor.

5. Look for engine parts or wires rubbing against governor linkage.

No-Load Surge (E)

1. Adjust the Surge Screw located on back of the governor housing. Turn this screw clockwise into the governor until the engine speed stabilizes. Tighten the locknut securely. *Important-Do not turn the surge screw into the housing any further, or attempt to adjust this screw when the engine is under a load; the engine speed may run away when the load is removed.*

Partial Load Surge

1. Shorten the throttle rod two or three turns at the rod-end ball joint.
2. Look for worn flyweights in the governor.

Governor Unresponsive to Changing Loads

1. Incorrectly adjusted Throttle linkage.
2. Engine parts (wires) rubbing on the throttle linkage.
3. Surge Screw (E) turned too far into governor body.
4. Worn or broken governor flyweights.
5. Damaged flyweight carrier.

Engine Dies Under Load

1. Incorrectly adjusted throttle linkages.
2. Lengthen Throttle rod (A) two, three, or more turns at the rod-end ball joint.
3. Check engine timing.
4. Look for excessive friction in the throttle linkage at governor and at carburetor.
5. The load may be more than the engine can handle at wide-open throttle.

Engine Overspeeds When Load is Removed

1. Back off Surge Screw (E) one or two turns.
2. Shorten Throttle rod (A) two or three turns at the rod-end ball joint.

Governor Does Not Reset at Load or No-Load Point

1. Carburetor throttle may be sticking due to carbon or fuel deposits.
2. Worn ball joints on the throttle linkage.
3. Worn governor flyweights.

Noisy Governor Operation

1. Governor main bearing worn.
2. Governor flyweights worn or broken.
3. Governor thrust sleeve and bearing worn.
4. Governor main shaft bent.

Excessive Governor Vibration

1. Governor pulley or main shaft bent or damaged.
2. Governor flyweights worn or broken.