

CARTER CARBURETOR -- MARK 20H AND 55H

Disassembly

1. Remove carburetor from engine.
2. Remove high speed adjusting needle, packing nut and packing.
NOTE: Scribe a mark on body and bowl for alignment in reassembly.
3. Remove bowl nut, gasket and bowl.
4. Remove float pin, float, spring, needle and needle seat.
5. Check float for dents, leaks and wear on float lip or in float pin holes.
6. Remove bowl ring gasket and idle adjustment screw and spring.

7. Detach high speed discharge nozzle. (*Note: Do not remove low speed jet tube.*)
8. Remove throttle valve screws, valve and shaft and lever assembly.
9. Clean all parts with solvent. Soak in carburetor or carbon remover solution if extremely dirty, being certain that all gum accumulation is removed from bore, especially where throttle valve sets in casting.
10. Blow out all passages with compressed air. Replace all worn or damaged parts. Always use new gaskets.

Reassembly

1. Install throttle shaft and valve. Valve must be installed with trademark "C" on side toward idle port when viewing from flange side. Always use new screws.
2. With valve screws loose and throttle lever set-screw backed out, seat valve by tapping lightly with a small screwdriver. Hold in place while tightening screws.
3. Install nozzle, being sure that it seats in casting.
4. Install needle seat, spring, needle, float and float pin.
5. Set float level with carburetor casting inverted, float resting lightly against needle in its seat. There should be $3/32$ " clearance on Mark 20H (no clearance on Mark 55H) between outer surface of casting and free end of float (side opposite needle seat). Adjust by bending lip of float. (Figure 8)
6. Attach bowl ring gasket, bowl (line up scribe marks), bowl nut gasket and bowl nut and tighten securely.
7. Install high speed adjusting needle, packing nut and new packing.

8. Turn needle in until it just seats in body, then turn back out $1\frac{1}{2}$ turns.

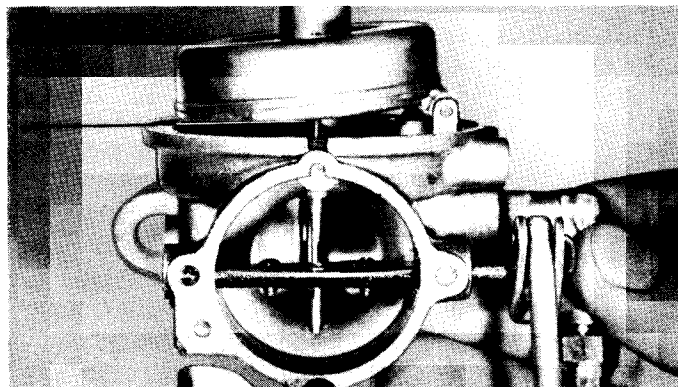


Figure 8. Adjusting Carburetor Float Level, Mark 55H

Miscellaneous Service

A. Carburetor Return Spring and Clip for Mark 20H

Throttle shutter on Mark 20H carburetor has easier return to closed position, if it is equipped with a throttle return spring, by twisting the idle screw end of the spring same as on the opposite end where it is attached to the throttle shaft lever. (Figure 9) Replace the washer on idle adjustment screw with clip.

A new carburetor inlet needle and seat (1398-1174) is used as a replacement on the Mark 20H carburetor. It gives more satisfactory operation at high speed, thus preventing the foaming condition previously experienced on some motors. (Figure 10)

B. New Style Inlet Needle and Seat, Mark 20H

Installation of the new inlet needle and seat necessitates cutting off a portion of the float tang (Figure

9. Install idle adjusting screw finger tight, then back out approximately $1\frac{1}{4}$ turns. Do not use pliers or screwdriver, as it may damage idle screw.
10. Install carburetor on engine and make idle and high speed adjustments as necessary.

11) or replacement with a new style float (1398-1172). (Figure 10)

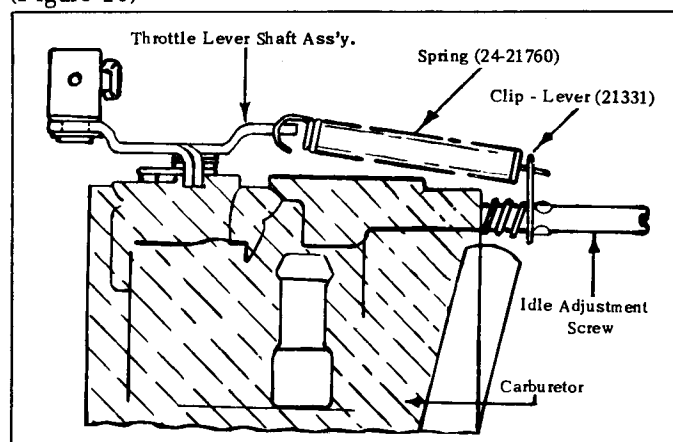


Figure 9. Spring and Clip for Mark 20H