G. Reverse Cam Adjustment

Before placing engine in test tank, adjust reverse cam by actuating self-locking nut on inside bottom cowl underneath lower carburetor. Adjustment of this nut secures reverse locking assembly over the tilt pin. Care should be taken not to tighten nut down too far so that reverse locking assembly will not be too tight on tilt pin, thus imparing reverse throttling.

H. Forward Stop Block

With engine shut off, loosen forward stop block and move bottom cowl lever to give full carburetor throttle shutter opening (not merely full distributor advance.) Tighten stop block in bottom cowl so that any forcing of lever will not spring carburetor linkage. (See Figure 10.)

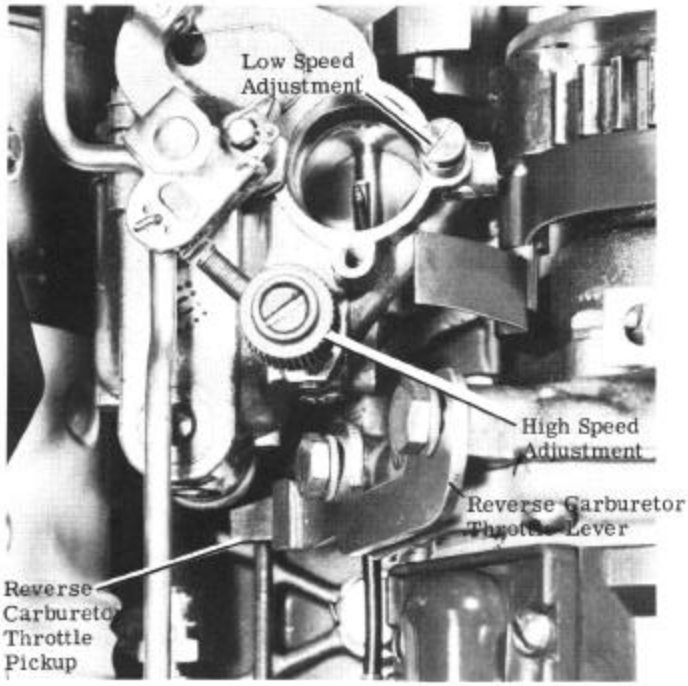

Figure 8

NOTE: All adjustments given here are made with carburetor adjustment propeller.

I. Reverse Lock Link

Adjust reverse lock link so that top cam has risen completely, and link has a minimum 1/32" clearance or free movement at full reverse RPM. (Bottom cowl lever is positioned to give 600-to-800 RPM in reverse.) (See Figure 9.) This will prevent engine from kicking up in case of improper initial adjustment.

J. Reverse Throttle Pickup

With reverse throttle pickup bracket loose, move bottom cowl lever to near back of slot and start engine in reverse direction. Advance distributor (reverse direction) to get 1000 RPM. Set bracket to pick up reverse throttle lever and tighten in place. (See Figure 8.)

K. Maximum Reverse RPM

With stop lock loose and engine running in reverse, move bottom cowl lever to get desired maximum reverse RPM (about 4000) and tighten stop block against lever in bottom cowl to limit further movement of lever. (See Figure 10.) *NOTE: The reverse RPM should be decreased on lighter boats.*

II. CARBURETOR ADJUSTMENT

A. High Speed Adjustment -- Mark 75

The high speed needles of the Mark 75 carburetors have been adjusted carefully at the factory and should not require readjustment if engine will be operated at an altitude of less than 2500 ft. If engine is operated at altitudes above 2500 ft. or, if for some reason, the high speed needles must be adjusted, it is recommended that the propeller be removed and the carburetor adjusting propeller (48-26575) be installed. Engine will then turn about 5200-5400 RPM at full throttle in the test tank or 5000 RPM on the back of a boat. This will permit the accurate adjustment of carburetors for maximum engine RPM. (Use Tachometer 91-28014.) *Note: When using carburetor adjusting propeller in test tank, it will be necessary to install a spray deflector plate.*

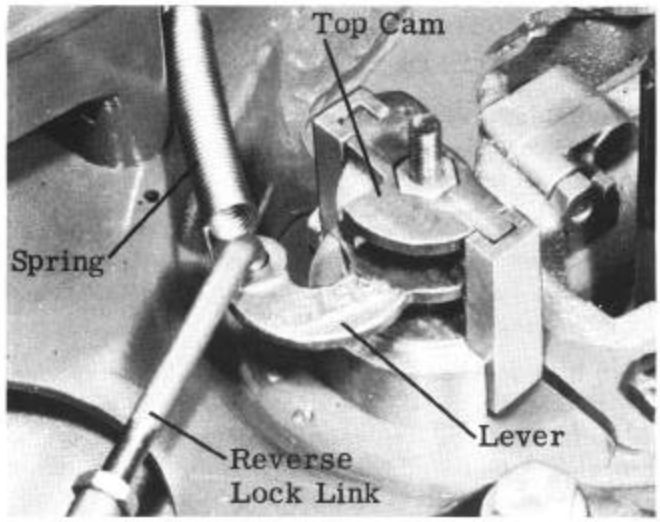

Figure 9

For high speed adjustment of the Mark 75, warm motor up thoroughly and set choke in open position (down). While operating motor at wide open throttle, slowly turn high speed mixture adjusting needle counter-clockwise until corresponding bank of cylinders starts to "four-cycle", and motor begins to slow down. (See Figure 8.) Then turn high speed mixture adjusting needle clockwise through range where cylinders fire normally to the point where motor again slows down, indicating that mixture is becoming too lean. Determine this critical "leaning out" point as accurately as possible and back adjusting needle out one-half turn from that point. When in doubt, it is better to set mixture slightly rich rather than too lean, because an excessively lean mixture will cause overheating and loss of power. Sustained full throttle operation with an excessively-lean mixture may cause severe engine damage.