

Figure 10. Throttle Stop Adjustments

VIII. THROTTLE STOP ADJUSTMENTS ON BOTTOM COWL

A. Forward Stop Adjustment

1. With engine running at full throttle, loosen forward stop block and move bottom cowl lever to allow full carburetor throttle shutter opening (not merely full distributor advance).
2. Do not allow throttle shutters to act as a stop or the carburetor cluster to hit carburetor filter bowl.
3. Tighten stop block in bottom cowl so that any forcing of lever will not spring carburetor linkage. (Figure 10)

B. Reverse Stop Adjustment

1. With stop block in bottom cowl loose and engine running in reverse, move bottom cowl lever to obtain 3000 RPM.
2. Then tighten stop block against lever in bottom cowl to limit further movement of lever. (Figure 10) (*Note: Reverse RPM can be decreased on lighter boats.*)

IX. CARBURETOR ADJUSTMENTS

A. High Speed Adjustment

1. Merc 800 carburetors have fixed high speed jets. The standard jet, installed at the factory, is recommended for operation from sea level to 4000 ft. elevation.
2. If engine is operated above 4000 ft., select and install correct jets from chart below (aperture decreases .002" as elevation increases each 3000 ft.).
3. Before changing jets, check engine out unless previous tests indicate exact jet size.

Model	*Up to 4000'	4000-7000'	7000-10000'
Merc 800 Jet Size	.065"	.063"	.061"

* Standard Jet -- factory equipped.

Jet size recommendations are intended as a guide (like a propeller chart). Try size larger or smaller if in doubt.

4. No change in spark advance is recommended for elevation operation.

5. Propellers of lower pitch should be used at high elevations to allow proper engine RPM.
6. The engine can be tested in a test tank with the propeller or the Test Wheel (48-30589).

B. Idle Adjustment Screws

1. Idle adjustment screws also have been adjusted at the factory.
2. If readjustment is necessary, it can be done with the Test Wheel or a regular propeller in the test tank or on the boat.
3. Start with all idle needles 1 turn open and adjust for maximum RPM with distributor retarded to give about 600-to-700 RPM.
4. Warm engine before attempting adjustment.
5. With engine running at idling speed while in forward gear, turn low speed mixture adjusting needle counterclockwise until affected cylinders start to "load up" or fire unevenly due to over-rich mixture. (Figure 11)
6. Then slowly turn needle clockwise until cylinders fire evenly and engine picks up speed.
7. Continue turning clockwise until too lean a mixture is obtained and engine slows down and misfires.
8. Set adjustment screw half way between rich and lean (approx. 1 turn). Do not adjust leaner than necessary to attain reasonable smooth idling. When in doubt, it is preferable to have mixture set slightly rich rather than too lean.

X. REMOTE CONTROL ADJUSTMENTS

A. Attaching Cables to Engine

1. Adjust brass barrel so that it is 3/8" to 1/2" from end of brass sleeve on engine end of control cable. (Figure 10)
2. Install cable to engine with barrel in this position.
3. Adjust forward limit screw in control station (Figure 12) until engine throttle lever touches front throttle stop on bottom cowl. *Note: Purpose of forward limit in control box is to provide a positive stop for handle to prevent overloading cable and attaching fittings.*

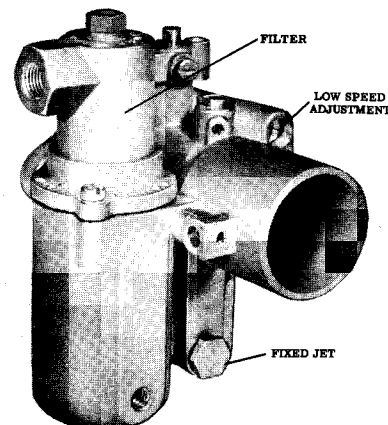


Figure 11. Idle Adjustment Screw