

- No. 2, Resistance) to magneto frame.
9. Attach second lead of tester to primary ground terminal of magneto.
  10. With magneto stop bracket loose, slowly advance magneto until points break, as indicated by tester used.
  11. Hold magneto at this position.
  12. Adjust and lock magneto stop bracket to contact crankcase at this point. (Figure 3)
  13. Recheck setting by actuating magneto with throttle control lever on side of bottom cowl.

### E. Adjusting Carburetor Throttle Pickup Plate

Adjust carburetor throttle pickup plate position with .015" feeler gauge to obtain 1/64" clearance between second pickup pin and No. 2 lever or carburetor cluster when magneto is against the stop in full advance position. (Figure 4) (Note: Be sure that throttle moves freely throughout range and both throttle shutters close fully at idle position.)

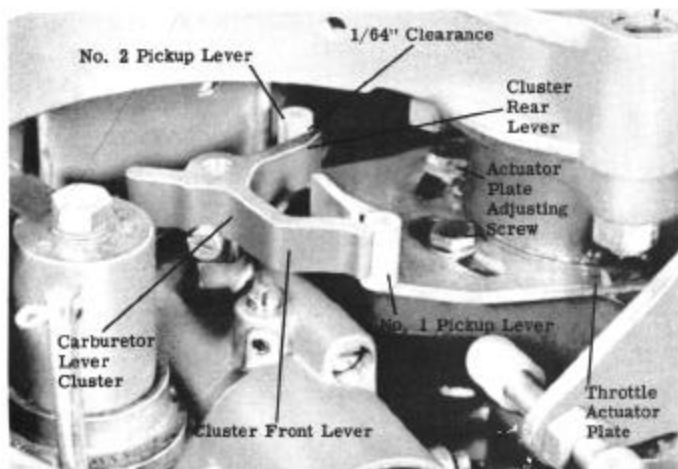


Figure 4. Carburetor Throttle Pickup Plate Adjustment

### F. Full Throttle Stop Adjustment Screw

Set full throttle stop adjustment screw to allow 1/64" free movement of cluster lever in clockwise direction when throttle is held against its full throttle stop. (Figure 5) Push cluster lever with finger. (Note: If timing stop is readjusted, Paragraph D, preceding, must be repeated.)

## II. Carburetor Adjustment

Before starting engine, turn low speed needles of each carburetor in until they seat lightly; then back out 7/8 turn. This will allow engine to start, and you then can make final adjustments, following.

### A. High Speed Adjustment

All Merc 400-300, Mark 58-58A and later 55A-35A carburetors have fixed high speed jets. The standard jet, installed at the factory, is recommended for operation from sea level to 2500 or 4000 ft. elevation. If engine is operated above

2500 or 4000 ft., select and install correct jets from chart below. (Note that jet aperture decreases .002" as elevation increases.) Use Jet Installation Tool (91-29795).

It is recommended that propeller be removed, and test propeller (48-26976) be installed. Engine then should turn at 5500-5600 RPM at full throttle in test tank or on back of boat. (Note: For high speed adjustment of early Mark 55A-35A, see Page 49, Paragraph II, Item A.)

Engine Model	Jet Sizes for Elevations						
	Up to 4000'	4000-7000'	7000-10000'	Up to 2500'	2500-5000'	5000-7500'	7500-10000'
Merc 500-450	.059"	.057"	.055"				
Merc 400	.061"	.059"	.057"				
Merc 350-300	.055"	.053"	.051"				
Mark 58-58A				.063"	.061"	.059"	.057"
Mark 55A-35A				.063"	.061"	.059"	.057"

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

No change in spark advance is recommended for elevation operation. Propellers of lower pitch should be used at high elevations to allow proper engine RPM.

### B. Low Speed (Idle) Adjustment

Make idle adjustment after high speed adjustment is completed.

1. Turn all idle needles 7/8 open and adjust for maximum RPM with distributor retarded to give about 600 RPM.
2. Run engine at idle speed while in forward gear.
3. Turn low speed mixture adjusting needle counterclockwise until engine starts to "load up" or fire unevenly due to over-rich mixture.
4. Slowly turn needle clockwise until cylinders fire evenly and engine picks up speed. Do not

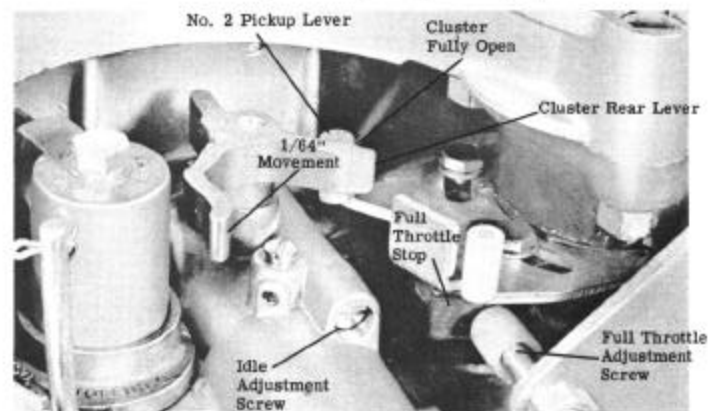


Figure 5. Full Throttle Stop Adjustment

adjust leaner than necessary to obtain reasonably smooth idling.

(Note: When in doubt, it is preferable to have mixture set slightly rich rather than too lean. Idle cannot be adjusted while in "Neutral" or engine will sputter and stop when shifted in "Forward" because of "no load" condition while adjusting.)