

#### IV. Timing -- Maximum Spark Advance

Thread Timing Gauge (91-26916A1) into No. 1 spark plug hole. Turn flywheel until No. 1 piston strikes the timing gauge. While turning flywheel, thread timing gauge in or out so that piston can "rock" over center shaft of gauge, indicating that timing gauge is set at top dead center position. (Figure 6) Rotate flywheel clockwise  $\frac{1}{4}$  turn, depress center shaft of timing gauge and rotate  $\frac{1}{4}$  turn to seat on tool body shoulder (.235" BTDC position). Be careful that tool body does not move, or above procedure will have to be repeated. Rotate flywheel clockwise until No. 1 piston strikes timing gauge center shaft. This is .235" BTDC.

Attach one test lead of Timing Meter (91-22966) or Magneto Analyzer (91-25213, No. 2 scale), "Resistance") second lead of tester to primary ground terminal of magneto. With the cowl rear stop block loose, slowly advance magneto until points break as indicated by tester used. Hold magneto at this position and adjust cowl rear stop block to contact magneto actuating bracket and tighten stop block screw.



Figure 6. Timing Gauge (91-26916A1)

#### V. Remote Control Adjustment

##### A. Throttle Control

Brass cable anchor on engine end of remote control throttle cable must be adjusted by turning so that bottom cowl lever will strike the stop blocks in both forward and reverse before the stroke is used up in remote control box. (Note: On Mark 58-58A-55A-35A, the travel is set on the magneto adaptor limiter stop.) If this adjustment is not made, either full forward throttle operation or full reverse throttle operation will not be obtainable. (Figure 7)

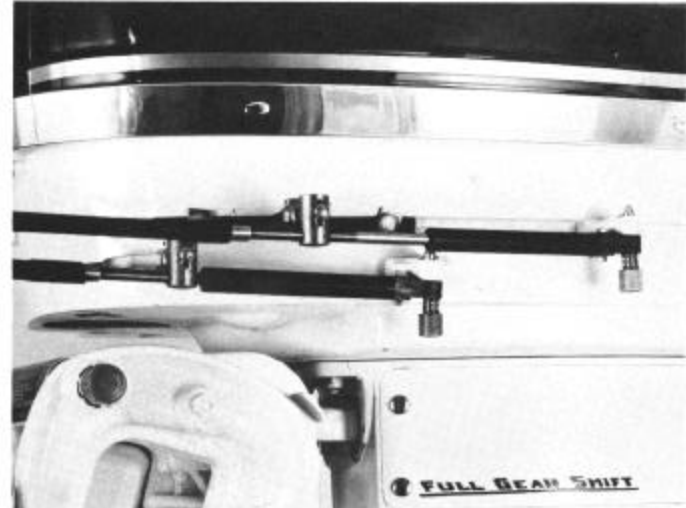


Figure 7. Cable Anchor Adjustment

##### B. Shift Control

Set remote control lever in "Neutral" position in control station. Set shift lever on engine in neutral position, anchor cable to anchor block on rear side of engine with knurled pin and adjust brass cable anchor block on cable to align with clevis yoke on shift lever on engine. Remove cable from anchor block at rear side of engine and attach brass cable anchor block on clevis arm. Re-attach end of control lever to anchor block.