

C. Timing – Maximum Spark Advance

Timing adjustment is required. Magneto advance is controlled by adjusting magneto advance stop screw and nut at .275" BTDC for Merc 200-150 and Mark 28-28A and at .235" BTDC for Merc 100. (Figure 4)

To check timing, if in doubt, thread Timing

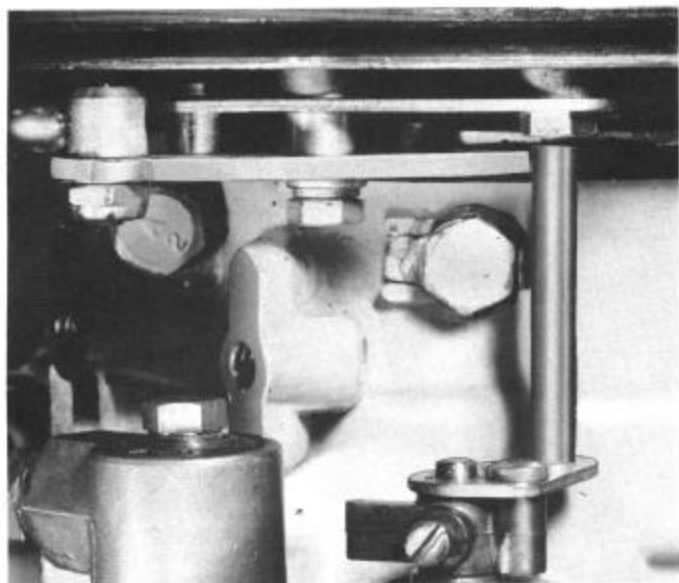


Figure 2. Throttle Control Cam Assembly

Gauge (91-26916A1 for .235" BTDC advance on Merc 100 or 91-30292A1 for .275" BTDC advance on Merc 200-150 and Mark 28-28A) into No. 1 spark plug hole. Turn flywheel until No. 1 piston strikes Timing Gauge. While turning flywheel, thread gauge in or out so that piston can "rock" over center shaft of gauge, indicating that gauge is set at top dead center position. (Figure 5)

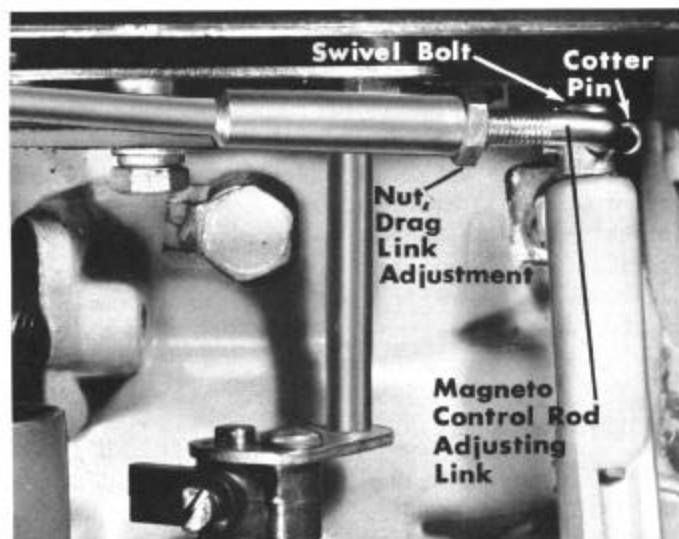


Figure 3. Magneto Control Rod Adjusting Link

Rotate flywheel clockwise $\frac{1}{4}$ -turn, depress center shaft of gauge and rotate $\frac{1}{4}$ -turn to seat on tool body shoulder (.235" or .275" BTDC position, depending upon gauge used). Be careful that tool body does not move, or above procedure must be repeated. Rotate flywheel clockwise until No. 1 piston strikes timing gauge center shaft. This is .235" or .275" BTDC.

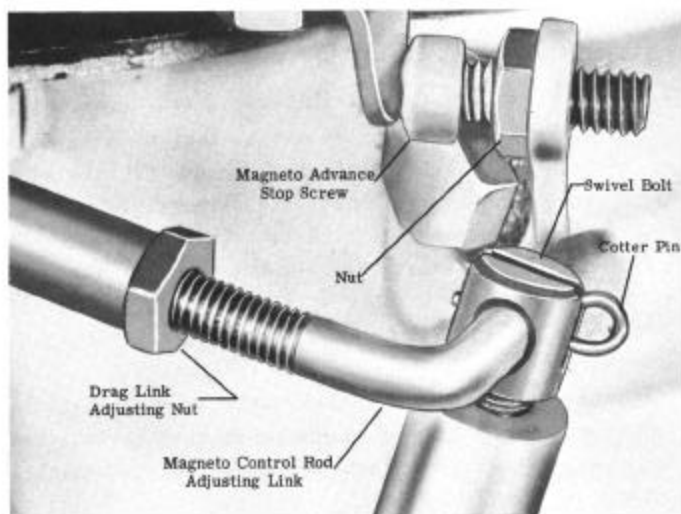


Figure 4. Magneto Advance Stop Screw Adjustment

Now attach one test lead of Timing Meter (91-22966) or Magneto Analyzer (91-25213; selector switch on No. 2, resistance) to magneto frame and second lead of tester to primary terminal No. 1 breaker assembly. With the advance stop screw and nut loose, slowly advance magneto until points break, as indicated by tester used. Hold magneto at this position, adjust stop screw to contact magneto bracket and tighten stop screw locking nut. (Figure 4)

D. Stopping

Engine must be choked to stop, because of fine idling characteristics.

V. Tension Adjustment of Troll Control Lever

The desired tension, or friction, on the troll control lever can be obtained by adjusting the 2 hex head nuts shown in Figure 6. These nuts serve as a tension and are threaded "in" to increase friction, threaded "out" to decrease friction. Both nuts must be adjusted equally to give a flat bearing surface to the internal friction disc.

VI. Troll Lever Setting

The troll lever should be set in the "Run" position for general engine operation in running and shifting. The troll lever is a secondary control to advance or retard the spark and is used for obtaining slower idle RPM than can be had with the throttle handle or remote

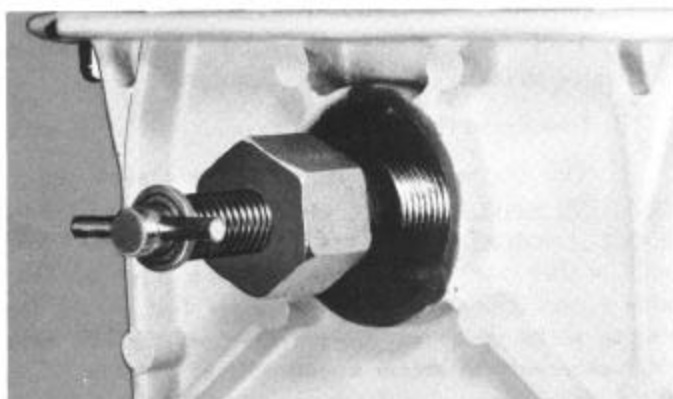


Figure 5. Timing Gauge Installed