

TIMING, ADJUSTING, TESTING

MERC 1000-850 (90 Cu. In.)

I. IGNITION DATA

Description	1000-850 (90 Cu. In.)
Cylinder Firing Order (Figure 1)	1-4-5-2-3-6
Coil No. 1 Fires Cylinders	1-5-3
Coil No. 2 Fires Cylinders	2-4-6
Firing Sequence	60° Consecutive
Spark Plug, Standard Installation	J4J or AC-K421 §
Spark Plug, Resistor Type *	XJ4J
Spark Plug Gap	.025" (.635mm)
Timing	.222" (32½°) BTDC
Breaker Setting	90° Dwell
Full Throttle RPM Range	4800-5200

§ See Note No. 1 on Page 75. .222" = 5.639mm

* For static elimination on radio or radio-telephone equipped boats.

II. TIMING AND LINKAGE ADJUSTMENT

A. Flywheel, Distributor Pulley and Belt Assembly

1. Rotate flywheel until timing mark (a straight line stamped on upper surface) is in a straight line with center of crankshaft and distributor pulley center. (Figure 2)
2. Position arrow on pulley (not plate) to point at timing mark on flywheel.
3. Install timing belt, plate, cap, washers and screw and tighten to 60 in. lbs. (10.65kg/cm).

B. Distributor Drive Coupling

1. When reassembling distributor, leave distributor cap off to aid in timing engine as described in following instructions.

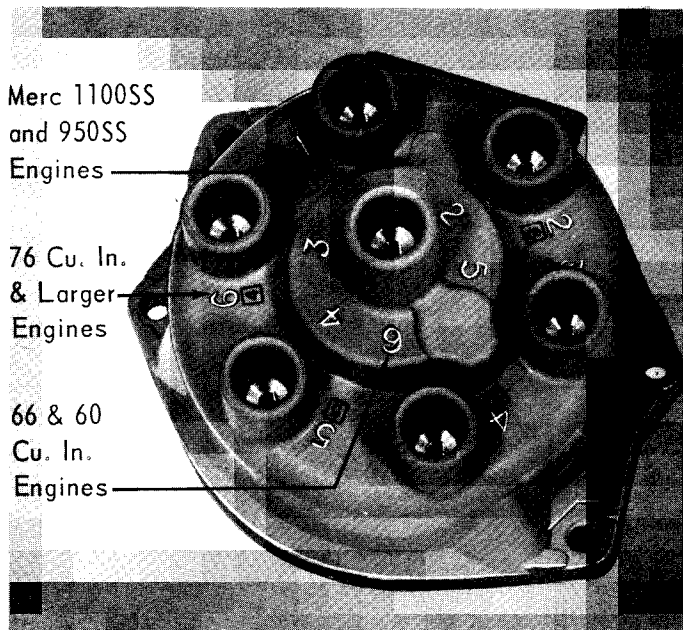


Figure 1. Distributor (Outside Ring of Numbers for 76 Cu. In. [1245.424cm³] and Larger Engines)

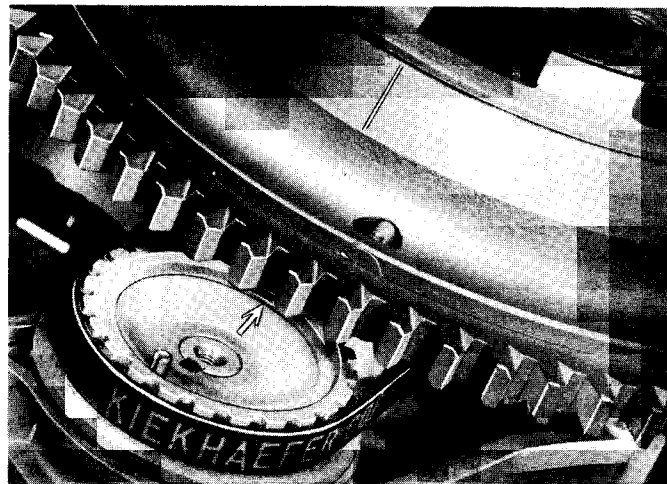
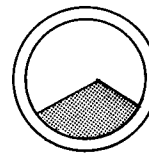


Figure 2. Timing Marks on Flywheel and Pulley

2. When distributor is reassembled to engine, flywheel and distributor pulley should be aligned as explained in Para. "A", preceding. The radius of the tang at drive end of distributor shaft should point forward (direction engine will travel when distributor is bolted in place). (See drawing on left.)

Timing Mark
Tang Face
Forward



3. Secure distributor adaptor with 4 hex head ca screws.

C. Spark Advance Stop Adjustment

1. Position distributor with air vent elbow facin approximately forward.
2. Place No. 3 piston at .222" (5.639mm) (32½°) BTDC (before top dead center) by rotating flywheel in a clockwise (forward) direction from BDC (bottom dead center).
3. Thread Timing Gauge (C-91-32253A1) into No. 3 spark plug hole.
4. Turn flywheel until No. 3 piston strikes Timing Gauge.
5. While turning flywheel, thread Timing Gauge in c out so that piston can "rock" over center sha of gauge, indicating that Timing Gauge is set a top dead center position.
6. Rotate flywheel clockwise ¼ turn.
7. Depress center shaft of Timing Gauge and rotate ¼-turn to seat on tool body shoulder (.222" [5.639mm] BTDC position). *NOTE: Be careful that tool body does not move, or preceding procedure will have to be repeated.*
8. Rotate flywheel clockwise until No. 3 piston strike Timing Gauge center shaft. This is .222" BTDC
9. Connect one test lead of Timing Meter (C-91-22966) or Magneto Analyzer (C-91-25213) (selector switch