1. **Remove the old distributor and install the new one** using a 10mm combination open/box-end wrench. Do not fully tighten, to allow the distributor to still be rotated by hand. Connect red ignition wire to coil (+) terminal, and the black ignition wire to coil (-) terminal (Note: Polarity very important). Remove distributor cap.

2. **Find Top Dead Center (TDC)** on No. 1 Cylinder by disconnecting the battery’s negative terminal, and removing the right, front spark plug (farthest away from you while facing the engine), and placing a plastic drinking straw or long screwdriver, etc., horizontally, through the spark plug hole to touch the top of the piston. While holding the straw, rotate the crankshaft pulley clockwise (by turning the 19mm nut on the end of the generator) to the point where the piston is at the top of its travel (straw pushed out). Now “rock” the crankshaft pulley back-and-forth to fine-tune TDC.

   **NOTE:** The distributor rotor must be pointing to the No. 1 cylinder spark plug lead. If not, rotate the engine through 180 degrees and repeat the step, or rotate the distributor cap leads. Firing order is 1-4-3-2, clockwise.

3. **Mark the flywheel** with white paint or make a small V with a triangular file into the rim of the crankshaft pulley. The marks should be made by aligning this template so that zero is at the top of the pulley where the crankcase split line is located. Mark the pulley at the 0, 7.5, and 30 degree points.

4. **Replace the spark plug, distributor cap and reconnect the battery.** Connect a stroboscopic timing light to No.1 cylinder spark plug lead. Turn on ignition switch. Point the timing light at your eye and rotate the distributor, a few degrees at a time, left or right, until the light flashes. Start the engine.

   **NOTE:** If the engine does not start, rotate the distributor a few degrees at a time until it does start.

5. **Allow the engine to reach operating temperature** (until auto-choke butterfly valve is fully open).

6. **At idle, rotate the distributor to adjust timing to 7.5 degrees Before Top Dead Center (BTDC).** Increase RPM to 3,500+ and re-adjust the timing to 30 degrees BTDC.

7. **Turn off the engine,** tighten the 10mm nut on the distributor.

8. **Re-start the engine** and verify that when the engine speed is above 3,500 RPM that the timing does not go above 30-32 degrees BTDC. Adjust, if necessary.

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**Tools Required:**

- Stroboscopic timing light
- 19mm wrench/spanner/socket
- 10mm combination open/box-end wrench or ring spanner
- Spark plug socket, ratchet and extension
- 12mm or 13mm wrench for battery terminals
- Small rod (screwdriver with 100+mm shaft or plastic soda/drinking straw)

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