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owners manual

D.C. POWERED TIMING LIGHT MODEL 161.2158

FOR 12 VOLT IGNITION SYSTEMS

To achieve efficient and economical engine operation, the ignition system must be timed in accordance with the manufacturer's specifications. Since ignition timing is also affected by the dwell angle, it is necessary to use a dwell meter to set the dwell angle to the manufacturer's specification before using the timing light to time the engine.

The information in this manual will serve as a general guide for engine timing.

CONSULT THE OWNER'S MANUAL OF THE VEHICLE BEING TESTED FOR SPECIFIC INFORMATION ON DWELL ANGLE AND ENGINE TIMING.

SEARS, ROEBUCK AND CO. U.S.A. CHICAGO, ILLINOIS 60684

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RULES FOR SAFE OPERATION

- 1. Set the parking brake and place the gear selector lever in Park position on automatic transmissions or in Neutral on manual transmissions.
- 2. Operate the vehicle in a well ventilated area to avoid danger of carbon monoxide poisoning.
- 3. Be careful when testing an operating engine—stay away from the fan blades, drive belts, high

- voltage spark plug wires and hot exhaust manifold.
- 4. Be careful when working near the battery. Do not short the Positive terminal to ground.

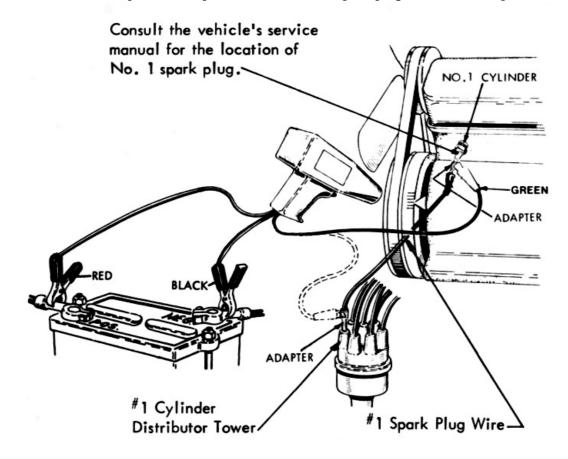
DO NOT LOOK DIRECTLY AT THE LENS OF THE TIMING LIGHT WHEN IT IS OPERATING.

PRELIMINARY

- 1. Consult the vehicle's service manual for instructions regarding vacuum connections and specific timing procedures.
- 2. With the engine stopped, clean the dirt from the timing marks.
- 3. Set the engine idle speed to the vehicle's specification with a tachometer.
- 4. Check the distributor dwell angle and adjust to the manufacturer's specifications, if necessary, before timing the engine.

HOW TO CONNECT

- 1. With the engine off, connect the BLACK clip to the battery NEGATIVE (-) terminal.
- 2. Connect the RED clip to the battery POSITIVE (+) terminal.
- 3. Consult the vehicle's service manual for the location of the spark plug in number 1 cylinder. Disconnect spark plug wire and attach adapter to the spark plug. Connect the spark plug wire to the adapter. Fasten GREEN clip to the adapter.
- 4. Optional hookup: The adapter may be placed in the distributor tower for the number 1 cylinder. Attach the GREEN clip to the adapter and connect the spark plug wire to the adapter.



ENGINE TIMING

- 1. Start the engine and allow it to warm up.
- 2. After the engine is warm, operate it at idling speed or the RPM specified in the vehicle manual.
- 3. Aim the timing light at the timing marks, press the switch to operate the timing light and observe the timing mark. The position of the timing mark must agree with the manufacturer's specification. If it does not, reset the timing as follows:

- 4. Stop the engine. Loosen distributor hold-down device (consult service manual for specific method). Distributor should be just loose enough to permit rotating the distributor body by hand.
- 5. Restart the engine. Slowly turn the distributor in the correct direction in order to line up the timing marks.
- 6. When the specified timing marks are in line, stop the engine and securely tighten the distributor hold-down device.
- 7. Restart the engine and recheck the timing.
- 8. Stop the engine, disconnect the timing light, remove the adapter from No. 1 spark plug or distributor tower and replace the spark plug wire securely.

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