

Installation - Engine Not Disturbed

1. Install new gasket on distributor housing.
2. Turn rotor approximately 1/8-turn in a counterclockwise direction past mark previously scratched on distributor housing.
3. Work distributor down into position in engine block with distributor positioned as noted during removal.
4. It may be necessary to move rotor slightly to start gear into mesh with camshaft gear, but rotor should line up with the mark when distributor is down in place. Distributor shaft must enter oil pump shaft for complete installation.
5. Replace and tighten distributor hold-down bolt and clamp. Connect leads. Also install spark plug and coil secondary wires, if removed.
6. Install cap. Refer to "Spark Plug Wires " and install wires.
7. Plug wiring harness into ignition amplifier on distributor housing.
8. Time ignition as outlined under "Ignition Timing."

Installation - Engine Disturbed

CAUTION

If timing chain has been aligned as outlined in Section 3A - "Timing Chain and Sprocket," the No. 4 cylinder is on compression (TDC) and the distributor MUST BE installed with the rotor positioned at the No. 4 post on the distributor cap.

Electrical timing on No. 1 spark plug remains the same as outlined following.

1. Locate No. 1 piston in firing position by either of two methods described below.
 - a. Remove No. 1 spark plug and, with finger on plug hole, crank engine until compression is felt in No. 1 cylinder. Continue cranking until pointer lines up with timing mark on crankshaft pulley, or
 - b. Remove rocker cover and crank engine until No. 1 intake valve closes, continuing to crank slowly until pointer lines up with timing mark on crankshaft pulley.
2. Position distributor to opening in block in normal installed attitude.
3. Position rotor to point toward No. 1 cylinder on cap (with distributor housing held in installed attitude), then turn rotor counterclockwise approximately 1/8-turn more and push distributor down to engage camshaft. It may be necessary to rotate rotor slightly until camshaft engagement is felt.
4. While pressing down firmly on distributor housing, engage starter a few times to make sure oil pump shaft is engaged. Install hold-down clamp and bolt and snug up bolt.
5. Place distributor cap in position and check that rotor lines up with terminal for No. 1 spark plug. Install cap.
6. Refer to "High Tension Leads" and install wires. Refer to "Specifications" for firing order.
7. Time ignition as outlined under "Ignition Timing."

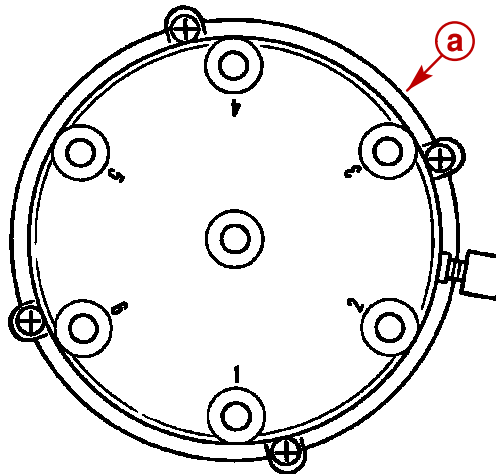
Distributor Cap

Removal

1. Loosen four distributor cap retaining screws.
2. Remove distributor cap.

Inspection

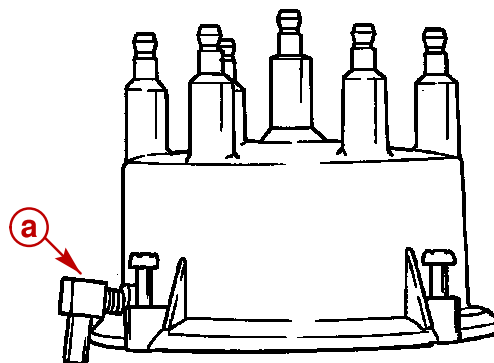
1. Clean cap with warm soap and water and blow off with compressed air.
2. Check cap contact for excessive burning or corrosion. Check center contact for deterioration.
3. Check cap for cracks or carbon tracks using magneto analyzer.
4. Check condition of distributor cap gasket. Replace gasket if damaged or missing.
5. If high tension leads are removed from cap refer to "Spark Plug Wires" in this section and the following illustrations for installation.



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Wiring

a - Alignment Notch



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a - Vent

Rotor/Sensor Wheel

Removal

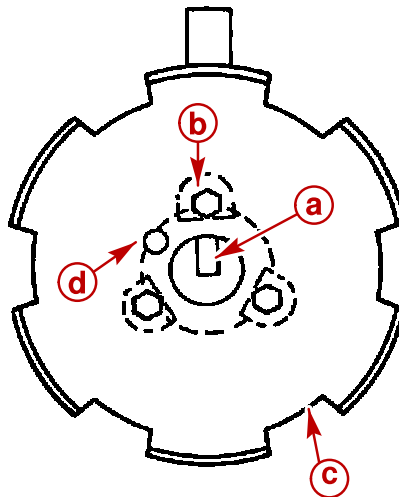
1. Remove distributor rotor/sensor wheel assembly from distributor shaft. Rotor and sensor wheel are secured to the shaft with Loctite. Use two flat blade screwdrivers. The screwdrivers are positioned opposite each other with the blade tips on the underside of the rotor and sensor wheel assembly. Make sure blade tips are toward distributor shaft until they come in contact with shaft. A downward push on both screwdriver handles at the same time will pry off rotor/sensor wheel assembly. The use of torch lamp will also aid in the removal of the rotor/sensor wheel assembly.

⚠ WARNING

Wear protective gloves when handling heated rotor/sensor wheel assembly to avoid severe burns.

Inspection

1. With the rotor/sensor wheel assembly removed, inspect the locating key inside the rotor.
2. The locating key will appear as a clean edged, 1/8 in. (3 mm) wide, sloped ramp at the bottom of the splined hole.

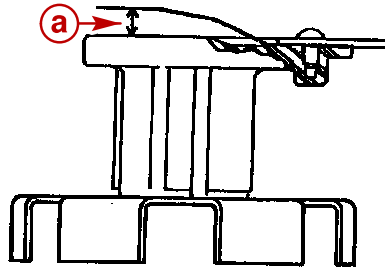


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- a** - Locating Key
- b** - Screws (Hex Head)
- c** - Sensor Wheel
- d** - Locating Pin

3. If there is any doubt if sensor wheel is located properly, lay sensor wheel on top of the figure above with sensor fingers facing up (toward you). Line up three screw holes and locating pin hole on sensor wheel with the figure. If wheel is indexed properly all the fingers on wheel will line up with those in the figure.
4. If there are pieces of material shaved off the key or if it appears to have been damaged by being forced down while misaligned with slot in distributor shaft, the rotor must be replaced.
5. Check rotor for burned or corroded center contact.
6. Check rotor for cracks and carbon tracks using magneto analyzer and instructions supplied with analyzer.

7. If rotor is damaged, replace rotor by removing three hex bolts and separating sensor wheel from rotor. Reinstall sensor wheel to new rotor making sure locating pin on rotor is installed in locating hole in sensor wheel. Tighten three hex bolts securely.
8. Bend carbon brush tang upward slightly until a distance of 1/4 in. (6.4 mm) is obtained between rotor and tang.



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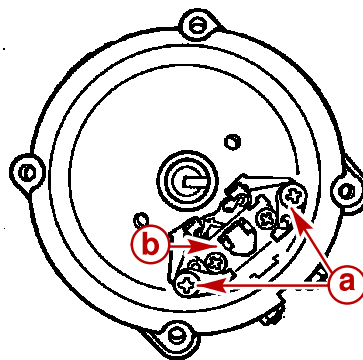
a - 1/4 in. (6.5 mm)

Installation

1. Put 2 drops of Loctite 27131 into the rotor so it lands on the locating key.
2. Put 2 drops of Loctite 27131 in keyway on upper portion of distributor shaft.
3. Immediately install rotor assembly onto distributor shaft. Make sure rotor locating key is aligned with keyway in distributor shaft before pressing rotor all the way down on the shaft, until it stops, with the palm of your hand. Let Loctite cure overnight with distributor in inverted position.
4. The rotor should fit very tight. It may be necessary to heat rotor with torch lamp to properly install. It is important not to let any Loctite run down distributor shaft. Loctite could get into top distributor housing bushing.
5. Reinstall distributor cap on distributor.
6. Install spark plug wires (if removed). Refer to "Spark Plug Wires" in this section.

Sensor Removal

1. Remove rotor and sensor wheel.
2. Remove two screws that hold sensor into distributor housing.
3. Remove sensor from housing.

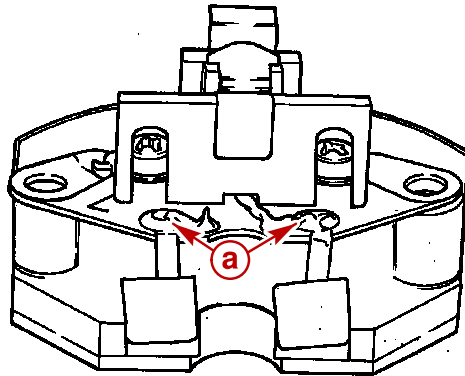


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a - Mounting Screws
b - Sensor Assembly

Inspection

1. Use a magnifying glass and light to inspect the two metal “jumper leads” for cracks. If a crack is found in either metal “jumper lead,” install a new sensor.



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a - Jumper Leads

⚠ CAUTION

Do not use any type of silicone sealer on the inside of the distributor. Most silicone sealers give off an acidic vapor during the curing stage of the sealer. This acid can cause corrosion on the ignition components.

Installation

1. Install sensor into housing and install two retaining screws.
2. Install sensor wheel, rotor and distributor cap.