



INSTALLATION INSTRUCTIONS

ULTRA OPTI-SPARK II DISTRIBUTOR P/N 59125 ULTRA OPTI-SPARK II CAP & ROTOR KIT P/N 8136

GENERAL

First make sure your vehicle is equipped with an Opti-Spark II type (pin drive – with positive vent system) distributor. It is not necessary to remove the distributor from the engine to determine if it is an Opti-Spark II or not. Simply look for the intake manifold vacuum hose line and air intake hose line running to the distributor. The older Opti-Spark I distributors are not vented and do not have these hose connections. If the distributor is removed from the engine, the Opti-Spark II unit will have a non-splined pin shaft.

REMOVING/INSTALLING NEW OPTI-SPARK II DISTRIBUTOR

NOTE: It is best to have a vehicle service manual for detailed reference on removal and installation of sensor and accessories.

1. Disconnect the negative side of the battery.
2. Drain coolant from cooling system.
3. Disconnect the mass air flow (MAF) and the intake air temperature (IAT) sensors. Next, remove the air intake elbow.
4. Remove upper radiator hose.
5. Remove serpentine belt. Remove the belt tensioner.
6. If necessary remove the cooling fans.
7. Remove the crankshaft pulley. **Note:** a balancer removal tool may be required.
8. Position the crankshaft hub as in Figure 4
9. Disconnect and remove the air pump wires and hose's then remove the air pump.
10. Remove the air pump mounting bracket.
11. Disconnect the coolant temperature sensor (ECT) wire harness from the water pump.
12. Remove the lower radiator and heater hoses from the water pump.
13. Remove the water pump.
14. Be sure to mark the location of the spark plug wires and then remove.
15. Remove vacuum lines and wire harness and coil wire from existing Opt-Spark II.

16. Remove the 3 bolts holding the Opti-Spark II to the engine.
17. Once the old distributor is removed, make sure that both the old pin shaft drive seals are still in place on the pin shaft drive assembly on the back side of the distributor. If not, remove the seals from inside the end of the cam shaft.
18. **Important: DO NOT** lube Opti-Spark hub or timing cover seal, the seal is Teflon and **MUST** be installed dry or it will leak oil.
19. When installing the ACCEL Ultra Opti-Spark II, be sure to use the correct index on the pin drive shaft. See Figures 1 & 2. This index is the only location that the dowel pin on the camshaft properly seats into.
20. **Note:** You will notice that if the correct index is not used that the distributor will not seat properly and rock against the engine see Figure 3.

DO NOT tighten the bolts down. Remove the ACCEL Ultra Opti-Spark II and reinstall using the correct index. Refer to Figures 1 & 2.

21. **DO NOT force the electrical connector in.** If you have difficulties seating the connector remove the connector and check the pins in the Opti-spark. If they are bent you can use a long flat blade screwdriver and gently straighten the pins.
22. Reinstall accessories and sensors in reverse order to complete installation.

NOTE: It is best to have a vehicle service manual for detailed reference on removal and installation of sensor and accessories.

REMOVING/INSTALLING NEW OPTI-SPARK II CAP & ROTOR

Refer to the REMOVING/INSTALLING NEW OPTI-SPARK II DISTRIBUTOR

1. Instructions above or a vehicle service manual for instructions to provide access to the Opt-Spark II distributor. **Note:** it is very easy to change the cap and rotor with the Opti-spark unit on a work bench. It can be done in the vehicle but will be very difficult.

2. Remove the 4 distributor cap retaining screws using an E4 Reverse Torx socket.
3. Carefully remove the distributor cap.
4. Remove the two rotor retaining screws using a T-8 Torx socket and carefully remove the rotor. Make sure the Stainless Steel trigger wheel is properly located on the alignment pin.
5. Install the new rotor by first aligning the locator pin on the bottom of the rotor with the mating hole in the distributor hub assembly. Install the two new rotor retaining screws and tighten to 6in/lbs to torque.
6. Make sure the new top seal is positioned correctly on the cover assembly. The notch seats over top of the electrical connector area.
7. Install the new distributor cap. Install the four new distributor cap screws and tighten to 24in/lbs.
8. Reinstall the spark plug and coil leads along with the vacuum line onto the distributor cap. Reinstall the wire harness connector to the distributor.
9. Reinstall accessories and sensors in reverse order to complete installation.



FIGURE 1

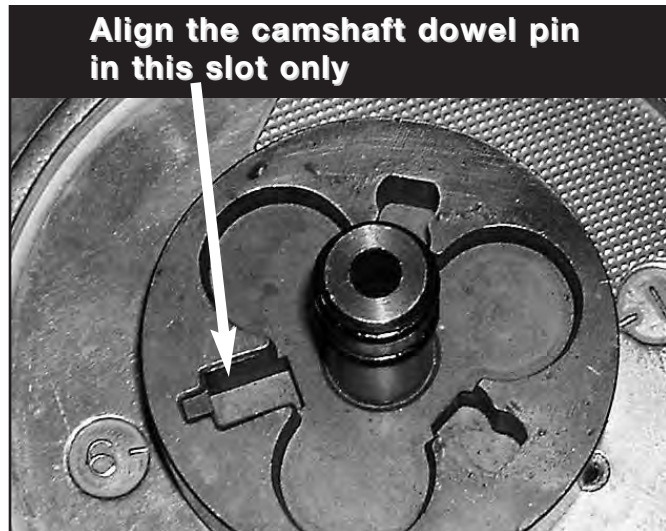


FIGURE 2



FIGURE 3



FIGURE 4