

DISTRIBUTOR INSTALLATION GUIDE

IMPORTANT: You are urged to refer to a suitable service manual for detailed removal and installation procedures before attempting to make repairs. If you do not have such a manual or lack the experience, you should seek the services of a qualified technician. Read all instructions before beginning work. Although distributor replacement is not difficult, you must proceed carefully. **IMPROPER DISTRIBUTOR INSTALLATION CAN CAUSE SEVERE ENGINE DAMAGE!**

REMOVING THE ORIGINAL DISTRIBUTOR

1. Disconnect the ground cable from the battery. If the vehicle has a manual transmission, place the gearshift in neutral and chock the wheels. This prevents the crankshaft from being accidentally turned and the distributor mounting reference lost if someone pushes or leans against the vehicle.

NOTE: Disconnecting the battery ground cable may erase pre-programmed electronic memories (such as radio presets, ECM driveability patterns and codes). Take necessary precautions to retain these settings.

2. Remove or relocate engine parts, such as air cleaners, that block access to the distributor.
3. Disconnect distributor electrical connectors. Label the connectors to make installation of the unit easier. Also disconnect the vacuum hose(s) from the distributor vacuum control if so equipped.
4. Remove the hold-down clips or screws holding the cap to the distributor.

5. Remove the distributor cap with spark plug wires attached, and set aside.
6. Thoroughly clean the engine area around the distributor housing so that position reference marks can be made and easily seen.
7. Note the position of the rotor on the distributor. Examine the distributor housing for existing reference marks that align with the tip of the rotor. If there is no reference mark, scribe one on the housing with a suitable tool. This reference mark is important and must be accurate for proper installation of the distributor!
8. Scribe a second reference mark between the distributor housing and the engine or other assembly to show mounting position.

IMPORTANT! DO NOT crank the engine during the replacement procedure. If the engine is accidentally cranked, or it is removed before reference marks are made, or if the engine is out of time for any reason, you must follow the procedure at the end of this instruction sheet for finding top dead center (TDC) of #1 cylinder's compression stroke.

9. Remove distributor hold-down nut/bolt and clamp.
10. If necessary, rotate the shaft and rotor a little to disengage the distributor gear from the camshaft gear in the engine. Scribe a second rotor-to- housing reference line when the gears disengage and remove the distributor.

NOTE: If the distributor is hard to remove, spray penetrating oil down the side of the distributor neck and work it back and forth until it is free.

11. Lift the distributor out of the engine. Remove distributor-to-block gasket or seal ring if so equipped.
12. Remove the distributor from the carton and compare it to the unit being replaced. Using a mounting boss or other component feature as a reference, transfer the reference mark(s) from the old distributor housing to the identical location on the unit housing.

INSTALLING THE DISTRIBUTOR

1. Clean the distributor mounting surface on the engine. This insures a good ground, and is necessary for proper operation of electronic distributors.
2. Install the distributor mounting gasket/seal ring supplied with the unit if so equipped.
3. Slide the distributor into the engine, lining up the scribed mark on the housing with the matching mark on the engine.

NOTE: If necessary, rotate the distributor a little to help the distributor gear/coupling mesh with the crankshaft gear/overhead cam. When fully seated, the rotor should line up with the first rotor reference mark scribed on the distributor housing.

4. Install distributor hold-down clamp and bolt, or attaching unit. Do not tighten the bolt or nut until the timing is checked and adjusted.
5. Install the distributor cap if removed from the unit and secure it with hold-down clips or screws. Transfer spark coil wires to the cap. Check plug and coil wires for proper seating and position.

6. Connect distributor to vehicle harness or wiring (refer to the vehicle service manual if necessary to ensure proper connections).
 7. Reconnect vacuum hose(s) and electrical connectors to distributor.
 8. Reconnect the battery ground cable. Adjust ignition timing using the procedure detailed in the manufacturer's service manual.
 9. Tighten the distributor hold-down bolt to the manufacturer's specification (refer to service manual).
 10. Reinstall any engine components moved during the installation procedure.
6. Finish installation by completing steps 5 thru 10 of **INSTALLING THE DISTRIBUTOR.**

FINDING TOP DEAD CENTER (TDC), NO. 1 CYLINDER

1. Remove the spark plug from number one cylinder. See the manufacturer's service manual for the location of number one cylinder on the engine.
2. If the distributor is installed, remove the coil wire from the cap and ground it.
3. Remove the spark plug and hold your thumb over the number one cylinder spark plug hole.
4. Crank the engine over in short bursts until you feel compression at the spark plug hole. Continue cranking slowly until the "TDC" or "0" mark on the timing scale lines up with the timing pointer.
5. Insert the distributor into the engine so the rotor points to the spot where the number one plug wire will be when the cap is installed. Be sure the distributor is installed in a position that allows a reasonable amount of rotation for spark timing adjustment.

TROUBLESHOOTING CHART PROBLEM	CAUSE AND POSSIBLE SOLUTION						
	Distributor Cap Not Properly Seated	Distributor Installed Backward	Distributor Control Wiring Loose or Corroded	Ignition Timing Incorrect	Ignition Wires Defective or Connected in Wrong Firing Order	Spark Advance System Faulty	Vacuum Hoses Leaking or Disconnected
Vehicle Will Not Start	X	X	X				
Vehicle Backfires but Doesn't Start	X			X	X		
Vehicle Runs Rough or Misfires at High Speed					X	X	X
Excessive Fuel Consumption				X		X	
Intermittent Operation			X				
Oil Leak at Distributor	X						
Vehicle Detonates (Pings)				X			