

# DuraFire <u>HEI Distributor</u> P/N's 72230 & 72231 <u>Installation Instructions</u>

- 1. Mark the number 1 cylinder wire position on the old distributor housing.
- 2. With all the spark plug wires still attached to the old distributor cap in proper order, remove the old cap and move it aside to clear the way for removal of the old distributor.
- 3. Rotate engine so that the rotor tip aligns with the mark made in step 1 above. Mark the location of the vacuum advance canister on the intake manifold or valve cover.
- 4. Disconnect any electrical wiring from the old distributor. Remove the clamp holding the distributor in place and remove the distributor from the engine.
- 5. Remove the distributor cap from your new Moroso Performance DuraFire Distributor and set the rotor tip to the same position as noted on the old one.
- 6. Install the new DuraFire Distributor into the engine, making sure the rotor tip faces the proper position when fully installed. If you have trouble indexing the distributor properly, you may have to rotate the oil pump slightly using a flat blade screwdriver. Align the vacuum advance canister to the mark made in step 3.
- 7. Re-install the hold-down clamp and tighten. Connect any wiring to the ignition box or coil.
- 8. Attach the new DuraFire Distributor Cap and connect the spark plug wires in proper firing order from the old distributor cap.
- 9. Set the timing to your needs. Also, use the following sections for adjusting Mechanical Advance and Vacuum Advance.

## MECHANICAL ADVANCE

1. This Moroso DuraFire Distributor comes with an HEI Advance Curve Kit installed. The lightest tension springs are installed to give you the fastest advance curve as possible. Additional springs are supplied to allow you to set full advance at higher engine speeds. The springs supplied are as follows: Installed - Light tension (copper color)

Additional - Medium tension (silver color)

## Heavy tension (black color)

- 2. To replace springs, first remove distributor cap and rotor.
- 3. Using a spring hook or needle nose pliers, lift one end of the spring to clear the post onto which it is hooked and then unhook the other end. Do the same to the other spring.
- 4. To install springs, reverse the removal procedure and install the rotor and distributor cap.
- 5. To set the timing after changing springs, first remove the vacuum line from the distributor and plug the hose.
- 6. Set the idle speed to approximately 750 rpm.
- 7. Set the initial spark timing to OEM specification or approximately 8 10 BTDC.
- 8. Check total spark timing by reading degreed balancer or timing tape with timing light while engine speed is at or above total spark timing RPM. See graph for timing curves. (Example: if the copper colored springs are installed, total spark timing occurs at approximately 3000 RPM. Check the total timing at 3100 to 3500 RPM.)
- 9. Re-connect the vacuum line to the distributor and adjust idle to your preference.

#### VACUUM ADVANCE

DuraFire Distributor P/N 72230 has an adjustable vacuum advance installed. The instructions in this section refer to the adjustments associated with this feature.

- 1. Bring the engine to operating temperature before making any adjustments.
- 2. Turn off engine. Using 2.5MM Allen Wrench, turn the adjusting screw counter-clockwise until it stops. The adjusting screw is located inside the canister port that connects to the vacuum hose.
- 3. Plug the vacuum hose, start the engine and set your timing 2 degrees advanced from your normal setting.
- 4. Re-connect the vacuum hose and test for spark knock under part throttle and full throttle acceleration.
- 5. Adjust the vacuum advance in small increments, 2-turns at a time in the clockwise direction. Do this until spark knock is heard. Then back out the adjustment screw (counter-clockwise) in 1-turn increments until the spark knock is eliminated.

**NOTE:** After receiving your new distributor turn the advance adjustment screw in until it bottoms. Then, turn the screw counter clockwise (5) full turns. This is the middle adjustment. It can now be turned clockwise (5) full turns and counter clockwise (5) full turns. Any adjustment beyond (5) turns (10) total, counterclockwise, may cause the screw to disengage from the Vacuum Advance Mechanism.

#### HEI ADVANCE CURVE GRAPH

The graph below represents what typical advance curves would look like when different tension springs are installed. Variables of your engine will determine different actual numbers.

