



## Ireland Engineering

-Tii Mechanical Advance Distributor with Electronic Igniter

### --- Installation Instructions

----Disclaimer: We are not responsible for any of your screw-ups. Professional installation recommended. If you have any questions or concerns please call us 626-359-7674 (Mon-Fri 9am-5pm PST)

## Electronic Igniter

The igniter in this distributor is a magnetic switch that replaces conventional points. This greatly reduces maintenance and improves over all performance. However, it does not increase voltage or spark intensity. The igniter can also be used to trigger after market ignition systems like MSD, Jacobs, Mallory etc. If used on these after market systems the igniter must be wired the same as "points" not as a "magnetic" pickup.

**DO NOT** leave the ignition switch on when the engine is not running this is the fastest way to destroy the igniter and coil.

The igniter requires at least 2 ohms of resistance in the coil OR an external ballast resistor to limit the current flow. If you use the factory BMW coil or a Bosch Red coil you must use the external resistor. If you use the Bosch Blue coil you do not need the resistor. The Blue coil has a resistor built inside the case.

The igniter is intended for 12 volt negative ground systems only. Low voltage will disrupt it's function and high voltage (over 14 volts) will over load and damage it.

The igniter has 2 wires. The BLACK wire goes to the negative (-) side of the coil. The RED (or YELLOW) goes to the positive side of the coil. Be careful when wiring the igniter. If the wires are reversed the igniter may be damaged.

## Installing the Distributor

Before removing the old distributor, mark where the rotor is pointing on the distributor body and on the engine. Then remove the old distributor.

Make sure the new distributor has the o-ring (oil seal) on the lower body.

Install the new distributor. You may have to take it in and out a couple times to get the rotor to point in the same general direction as the original one was.

With the rotor on the shaft rotate the distributor so that the rotor points at the same location on the body of the new distributor as it did on the old one.

This location should be good enough to start the engine. Then you must set the timing with a timing light. Timing light should be digital or have a dial to set advance.

You can see the timing marks on the flywheel by looking through the hole in the transmission bell housing near the starter. The flywheel is marked "OT" at top dead center for #1 cylinder. There is also a small ball bearing imbedded in the flywheel at 25 degrees advance. We suggest using white or yellow paint on a pencil eraser to make the timing marks easier to see.

We suggest setting full advance at 32 to 34 degrees by running the engine up to over 3000 rpm. You can then check the advance at idle. It should be 14 to 16 degrees.

### **An Alternate Procedure to fit the Distributor:**

Set the engine at TDC – Remove the valve cover and rotate the engine until both valves are closed on #1 cylinder and the line on the front flange of the cam lines up with the cam journals. While the engine is at TDC it is a good time to mark the fly wheel as discussed above.

You can then install the distributor. We like to set it so the rotor is at about 4 o'clock for #1 cylinder. Check by putting on the cap. Then you can install the plug wires on the cap in the correct firing order (1-3-4-2). The distributor rotates clock wise as viewed from above.