

# **MSD** **IGNITION** **INSTALLATION INSTRUCTIONS**

## **MSD Pro-Billet Dual Pickup, Locked-Out Chevrolet V8 Distributor PN 8355**

**Important:** Read these Instructions before attempting the installation.

### **Parts Included:**

1 - Pro-Billet Distributor	1 - Gasket
1 - Rotor, PN 8423	1 - Tube of Gear Lubricant
1 - Distributor Cap, PN 8408	1 - Bronze Gear, +.006", PN 8472
1 - Wire Retainer	2 - O-Rings
2 - 1.5" Self Tapping Screws	

**WARNING:** Before installing the MSD Distributor, disconnect the battery cables. When disconnecting the battery cables, always remove the Negative (-) cable first and install it last.

**Note:** The terminals of this Distributor require spark plug style terminals. You may need to change the terminals and boots of your wires. MSD offers two kits, PN 8849 or PN 8848 that are supplied with nine boots and terminals.

**Note:** If the gear is ever replaced, an MSD Gear is required for replacement due to the .500" diameter shaft. The distributor is supplied with an oversized bronze gear, +0.006", PN 8472.

**Note:** An MSD Ignition Control must be used with each pickup.

### **REPLACEMENT AND OPTIONAL PARTS**

Bronze Gears		Cap, Retainer, Spacer, Rotor Kit	PN 8445
Standard _____	PN 8471	Cap _____	PN 8408
+0.003" _____	PN 84721	Rotor _____	PN 8423
+0.006" _____	PN 8472	Spacer _____	PN 8446
+0.009" _____	PN 84722	Billet Reluctor _____	PN 8415
+0.012" _____	PN 84723	Magnetic Pickup _____	PN 84661
+0.015" _____	PN 84724	Billet Hold-Down Clamp _____	PN 8110
Iron Gears			
+0.006" _____	PN 8531		
Standard _____	PN 8532		

## **ADJUSTING THE SLIP COLLAR**

Before installing the Pro-Billet Distributor, the slip collar adjustment must be set. MSD offers a special tool, the 3-In-1 Distributor Set Up Tool, PN 8599, to make these adjustments accurately. If the tool is not available, follow this procedure.

1. Loosen the slip collar and insert the distributor into the engine until it bottoms out against the oil pump drive.
2. After it bottoms out, raise the distributor 0.010" - 0.030" then slide the slip collar down into position and tighten it.

### **CHECKING GEAR MESH**

It is recommended to check for proper gear mesh between the cam gear and distributor gear. To do this, coat the distributor gear with moly grease and install the distributor. Next, crank the engine over several times. Before pulling the distributor out, make sure the rotor is in the position that lines up with the original removal mark. Then pull the distributor out and inspect the gear pattern shown on the grease. The proper mesh will leave an even pattern in the middle of the gear. Adjust the slip collar to obtain the correct mesh.

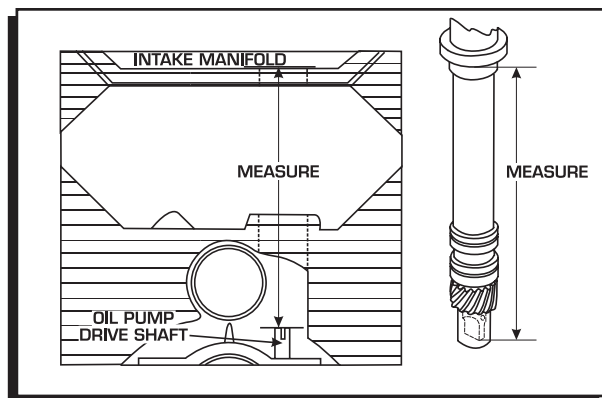
### **Checking the Oil Pump to Distributor Shaft Overlap**

The proper overlap between the distributor shaft and the oil pump shaft is very important. The tongue of the distributor shaft should fit into the groove of the oil pump shaft by at least 1/4". To check this:

1. Measure the distance between the base of the slip collar to the tip of the distributor shaft (Figure 1).
2. Using a straight edge, measure the distance from the intake manifold distributor flange to the top of the oil pump shaft (Figure 1).
3. Take the two measurements and subtract them. The difference is the overlap. There must be at least 1/4" of overlap. If there is not enough clearance or too much clearance, a different oil pump shaft is required.

## **INSTALLATION**

1. Remove the existing distributor cap without disconnecting any of the spark plug wires.
2. With the cap off, crank the engine until the rotor is aimed at a fixed point on the engine or firewall. Note this position by making a mark (Figure 2).
3. Place the distributor cap back on and note which plug wire the rotor is pointing to. **MARK THE SPARK PLUG WIRES** and remove the distributor cap.
4. Disconnect the wiring from the distributor.
5. Loosen the distributor hold down clamp and slide the clamp out of the way.
6. Lift the distributor out of the engine. Note that the rotor rotates as you lift the distributor out. This is due to the helical cut gear and should be taken into consideration when installing the new distributor.



**Figure 1 Measuring Oil Pump Shaft Overlap.**

7. Install the gasket and apply a liberal amount of the supplied lubricant to the distributor gear. (The supplied O-rings can **only** be used if the block has been modified as shown in Figure 3.)
8. Install the distributor making sure that the rotor comes to rest pointing at the fixed mark. If the distributor will not fully seat with the rotor pointing to the marked position, you may need to rotate the oil pump shaft until the rotor lines up and the distributor fully seats.
9. Position and tighten the hold down clamp onto the distributor.
10. Install the distributor cap and spark plug wires one at a time to ensure correct location. A wire retainer is supplied to secure the wires in place. Align the mounting bosses and use the supplied 1.5" self-tapping Phillips screws to hold the the retainer in place.

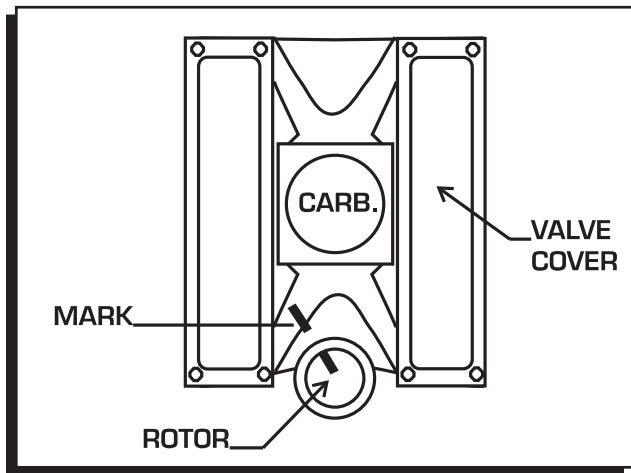


Figure 2 Marking the Rotor Location.

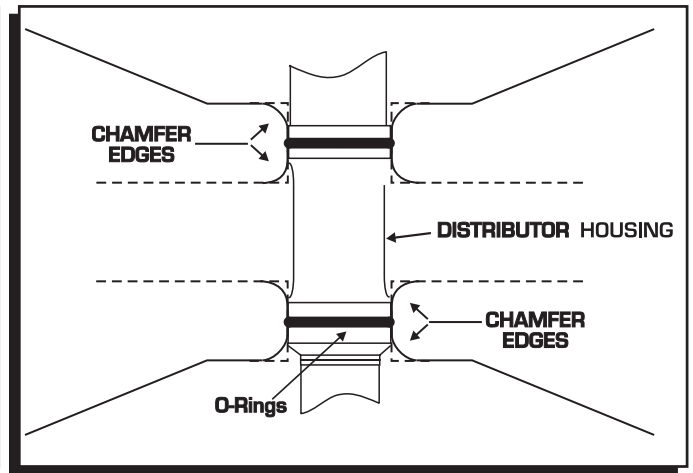


Figure 3 Modified Block for use with O-Rings.

**Bolt-Down Cap Option:** MSD offers an optional kit that allows the cap to be bolted in place as PN 8838.

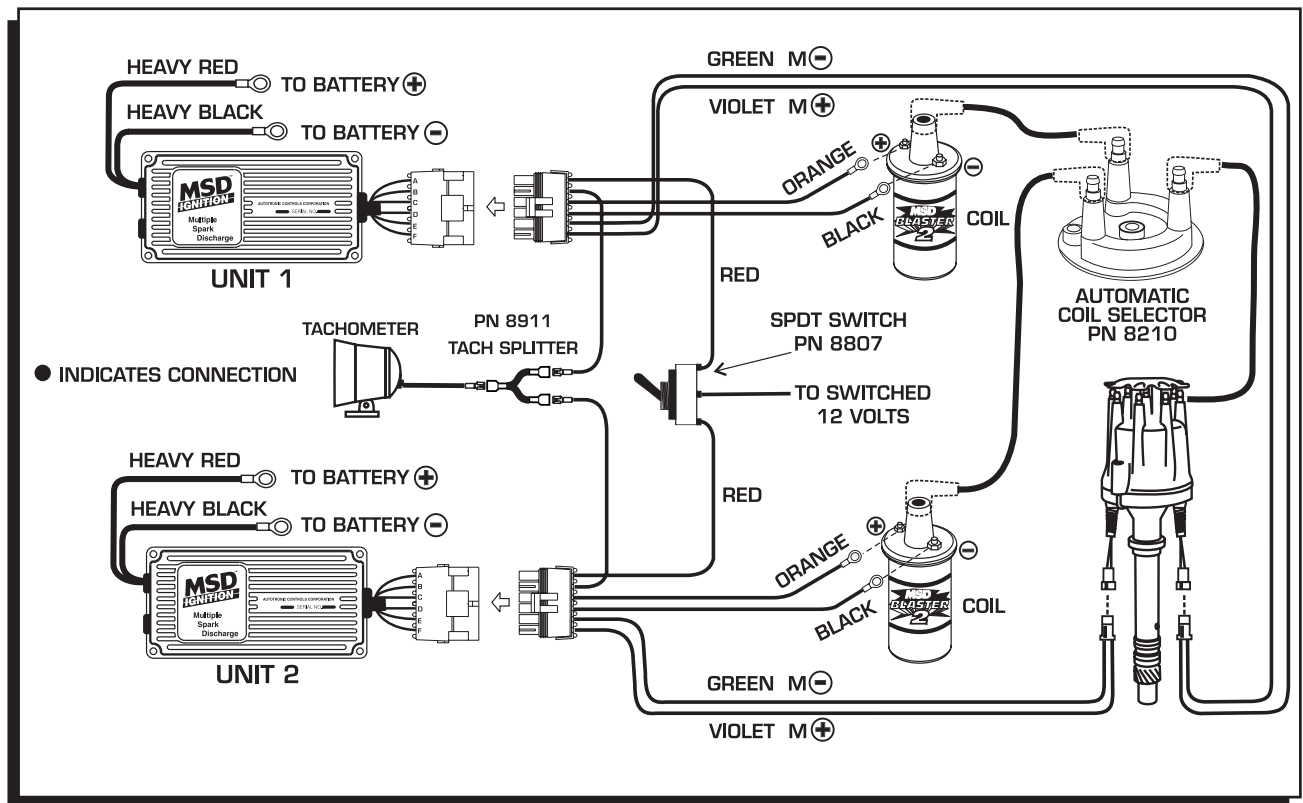
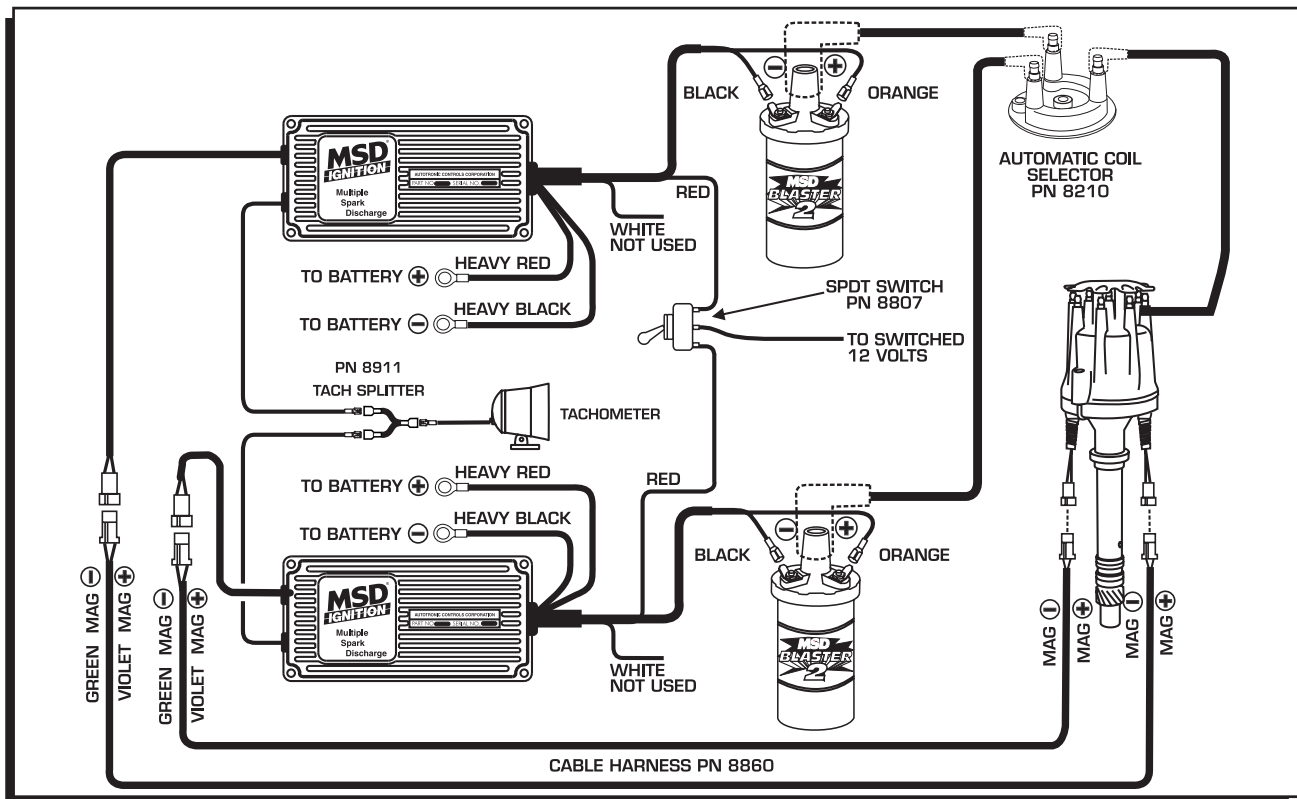


Figure 4 Wiring with MSD 6TN, 6ALN, or 6-HVC Ignition Controls.



**Figure 5 Wiring with MSD 6A Series Ignition Controls.**

### Service

In case of malfunction, this MSD component will be repaired free of charge according to the terms of the warranty. When returning MSD components for service, Proof of Purchase must be supplied for warranty verification. After the warranty period has expired, repair service is charged based on a minimum and maximum charge.

Send the unit prepaid with proof of purchase to the attention of: **Customer Service Department, Autotronic Controls Corporation, 12120 Esther Lama, Suite 114, El Paso, Texas 79936.**

When returning the unit for repair, leave all wires at the length in which you have them installed. Be sure to include a detailed account of any problems experienced, and what components and accessories are installed on the vehicle.

The repaired unit will be returned as soon as possible after receipt, COD for any charges. (Ground shipping is covered by warranty). All units are returned regular UPS unless otherwise noted. For more information, call the MSD Customer Service Line (915) 855-7123. MSD technicians are available from 8:00 a.m. to 5:00 p.m. Monday - Friday (Mountain Time).

### Limited Warranty

Autotronic Controls Corporation warrants MSD Ignition products to be free from defects in material and workmanship under normal use and if properly installed for a period of one year from date of purchase. If found to be defective as mentioned above, it will be replaced or repaired if returned prepaid along with proof of date of purchase. This shall constitute the sole remedy of the purchaser and the sole liability of Autotronic Controls Corporation. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall Autotronic Controls Corporation be liable for special or consequential damages.