

# **INSTALLATION INSTRUCTIONS**

## **MSD Pro-Billet Chevrolet V8 Distributor PN 85705**

**ONLINE PRODUCT REGISTRATION:** Register your MSD product online. Registering your product will help if there is ever a warranty issue with your product and helps the MSD R&D team create new products that you ask for! Go to [www.msperformance.com/registration](http://www.msperformance.com/registration).

**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 84083	2 - O-Rings
1 - Wire Retainer	1 - Female Weatherpak Connector
2 - 1.5" Self Tapping Screws	1 - Slip Collar, PN 8539
2 - Panhead Phillips 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, MSD Gear (PN 8472) is required for replacement due to the .500" diameter shaft.

**Note:** Weatherpak connector will need to be installed on MSD unit magnetic pickup side.

## **ADJUSTING THE SLIP COLLAR**

Before installing the Pro-Billet Distributor, the slip collar adjustment must be set, follow this procedure.

1. Install the gasket to the housing then 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 intermediate 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 8).
2. Using a straight edge, measure the distance from the intake manifold distributor flange to the top of the oil pump intermediate shaft (Figure 8).
3. Take the two measurements and subtract them. The difference is the overlap. If there is not enough clearance or too much clearance, a different oil pump intermediate shaft is required.

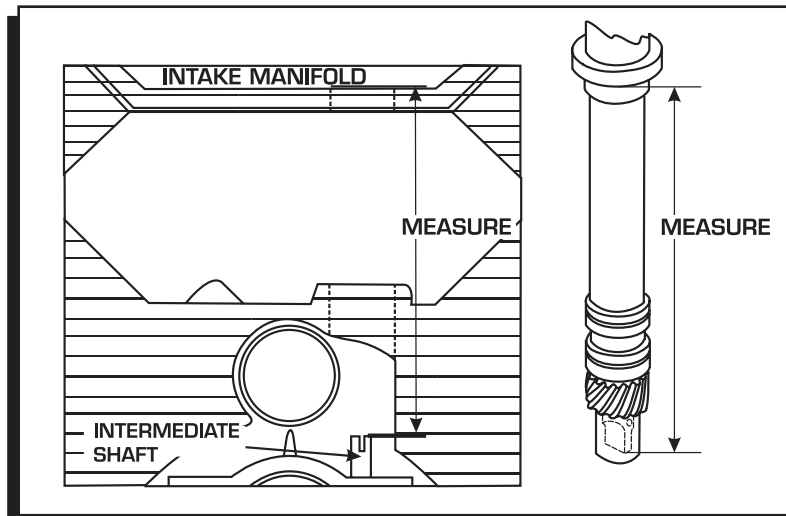


Figure 8 Measuring Oil Pump Shaft Overlap.

### INSTALLING THE DISTRIBUTOR

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 9).
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.
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 10.)
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.

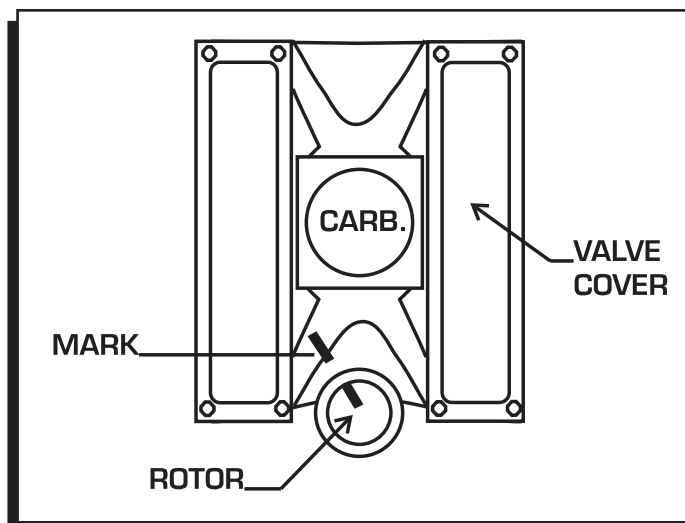


Figure 9 Marking the Rotor Location.

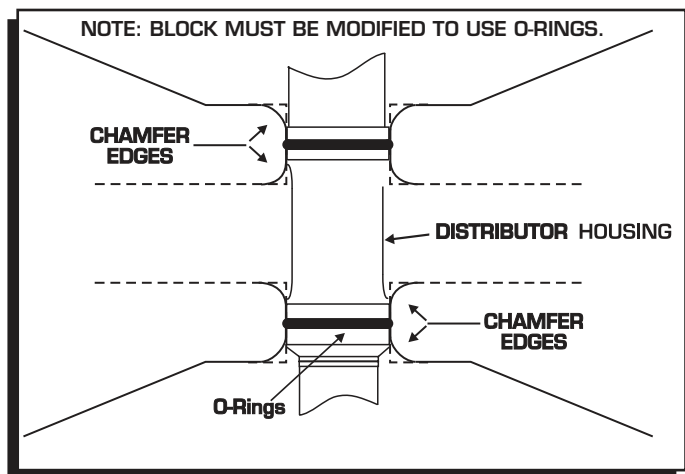


Figure 10 Modified Block for use with O-Rings.

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 retainer in place (Figure 11).

**WARNING:** High voltage is present on the coil terminals. Do not touch the terminals or coil tower when the engine is cranking or running.



Figure 11 Installing the Wire Retainer

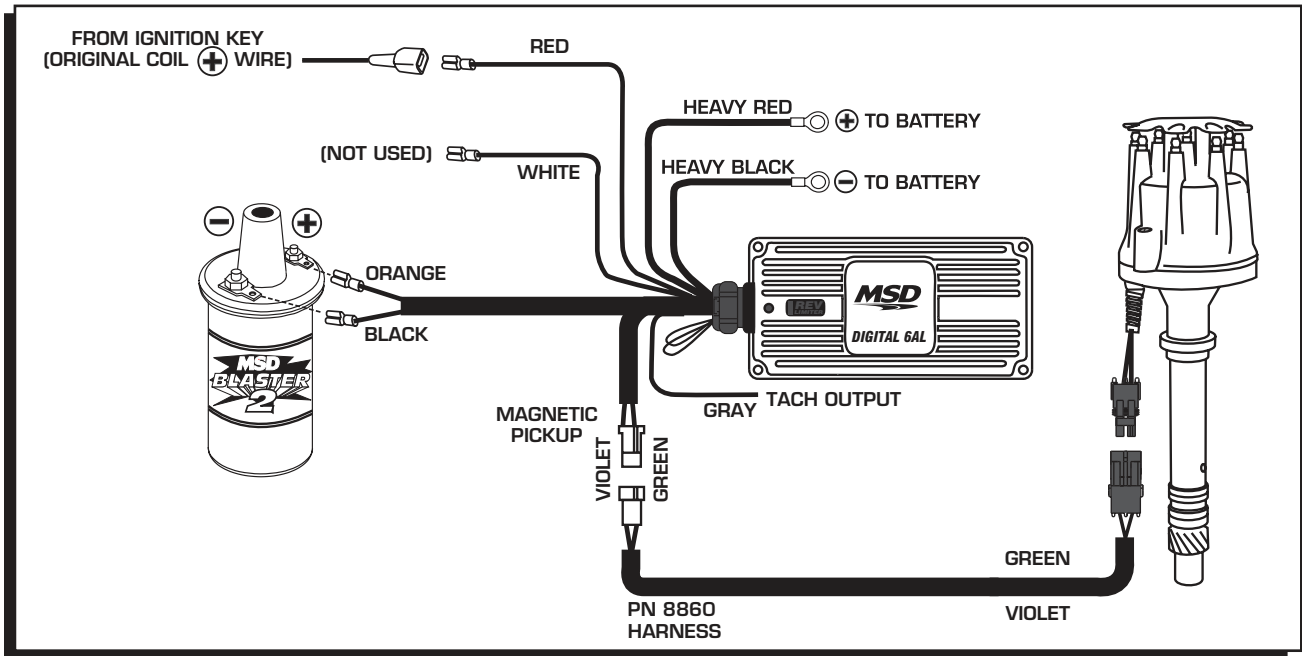


Figure 12 Wiring to an MSD 6-Series Ignition Control.

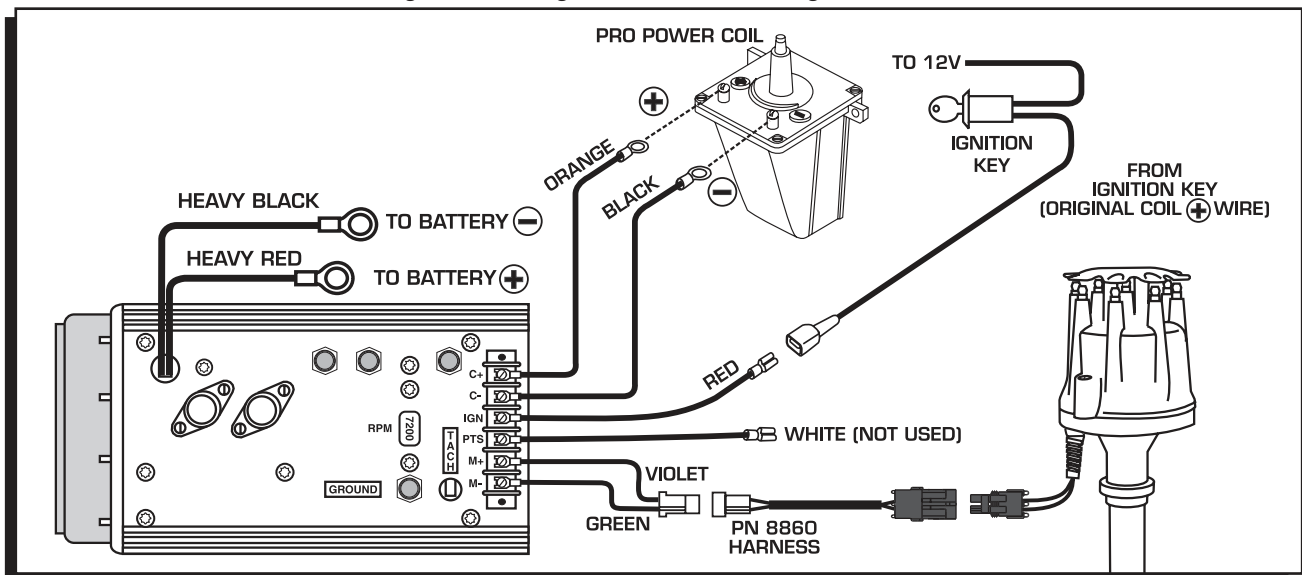


Figure 13 Wiring to an MSD 7-Series Ignition Control.

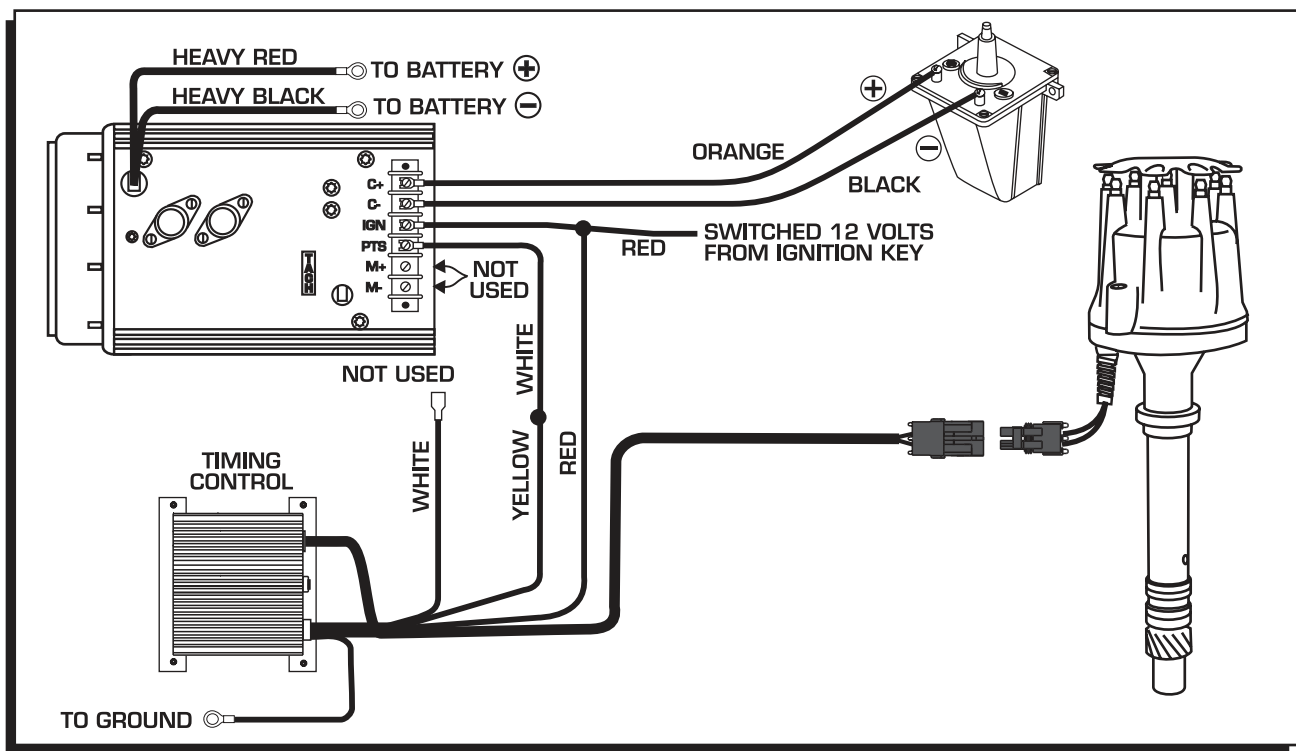


Figure 14 Wiring with an MSD 7-Series Ignition and Timing Control.

### 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 warranty service, **Proof of Purchase** must be supplied for verification. After the warranty period has expired, repair service is based on a minimum and maximum fee.

**All returns must have a Return Material Authorization (RMA) number** issued to them before being returned. To obtain an RMA number please contact MSD Customer Service at 1 (888) MSD-7859 or visit our website at [www.msdpower.com/rma](http://www.msdpower.com/rma) to automatically obtain a number and shipping information.

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 using Ground shipping methods (ground shipping is covered by warranty). For more information, call MSD at (915) 855-7123. MSD technicians are available from 7:00 a.m. to 5:00 p.m. Monday - Friday (mountain time).

### Limited Warranty

MSD warrants this product to be free from defects in material and workmanship under its intended normal use\*, when properly installed and purchased from an authorized MSD dealer, for a period of one year from the date of the original purchase. This warranty is void for any products purchased through auction websites. If found to be defective as mentioned above, it will be repaired or replaced at the option of MSD. Any item that is covered under this warranty will be returned free of charge using Ground shipping methods.

This shall constitute the sole remedy of the purchaser and the sole liability of MSD. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representation whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall MSD or its suppliers be liable for special or consequential damages.

\*Intended normal use means that this item is being used as was originally intended and for the original application as sold by MSD. Any modifications to this item or if it is used on an application other than what MSD markets the product, the warranty will be void. It is the sole responsibility of the customer to determine that this item will work for the application they are intending. MSD will accept no liability for custom applications.