

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

## **MSD GMR Pickup PN 8918/PN 89181**

### **Parts Included:**

- 1 - Giant Magneto-resistive Pickup, PN 8918/PN 89181
- 2 - Washers
- 1 - Brass Screw
- 1 - Parts Bag

The MSD GMR pickup can be used with inductive or capacitive ignition types to provide an rpm signal of 30% duration when the ignition coil fires. Two washers are provided with the pickup and must be installed in one of two positions depending on the type of ignition driving the coil.

**Note:** For late model applications, it is recommended to have a wiring schematic of the vehicle's ignition system.

### **CAPACITIVE DISCHARGE IGNITIONS**

For a CD Ignition such as an MSD, the two washers should be installed under the metal tab to provide a small air gap between the metal tab and the pickup sensor (Figure 1). Refer to note on Figure 2 for RPM Device programming.

### **INDUCTIVE COIL PER CYLINDER IGNITION**

For an inductive ignition (mostly stock applications) the metal tabs must make contact, therefore no washer is required. There should be no air gap between the metal tab and the pickup sensor (Figure 2). Refer to note on Figure 3 for RPM Device programming.

### **DISTRIBUTORLESS COIL PACKS**

On distributorless applications, the GMR pickup must be installed on the primary lead going to one of the coils. If the pickup is installed on the main ignition +12v wire feeding more than one coil, the pickup may not operate correctly at high speeds because of overlapping coil dwell current failing to fall to zero current between coil operating cycles (Figure 3). Refer to note on Figure 3 for RPM Device programming.

### **DIESEL INJECTOR**

The GMR Pickup can easily be clipped to power fed wire of a Diesel Injector to provide a tach signal. On a diesel, the washer must be installed under the screw head on top of the metal tab so there is no air gap between the metal tab and the pickup sensor (Figure 4).

**Note:** If the GMR Pickup is attached directly to the individual injector the RPM device that is being used must be programmed for single cylinder application. If the GMR Pickup is attached to the main 12 volt feed to the injector harness, the RPM device must be programmed for 4, 6 or 8 cylinder depending on application.

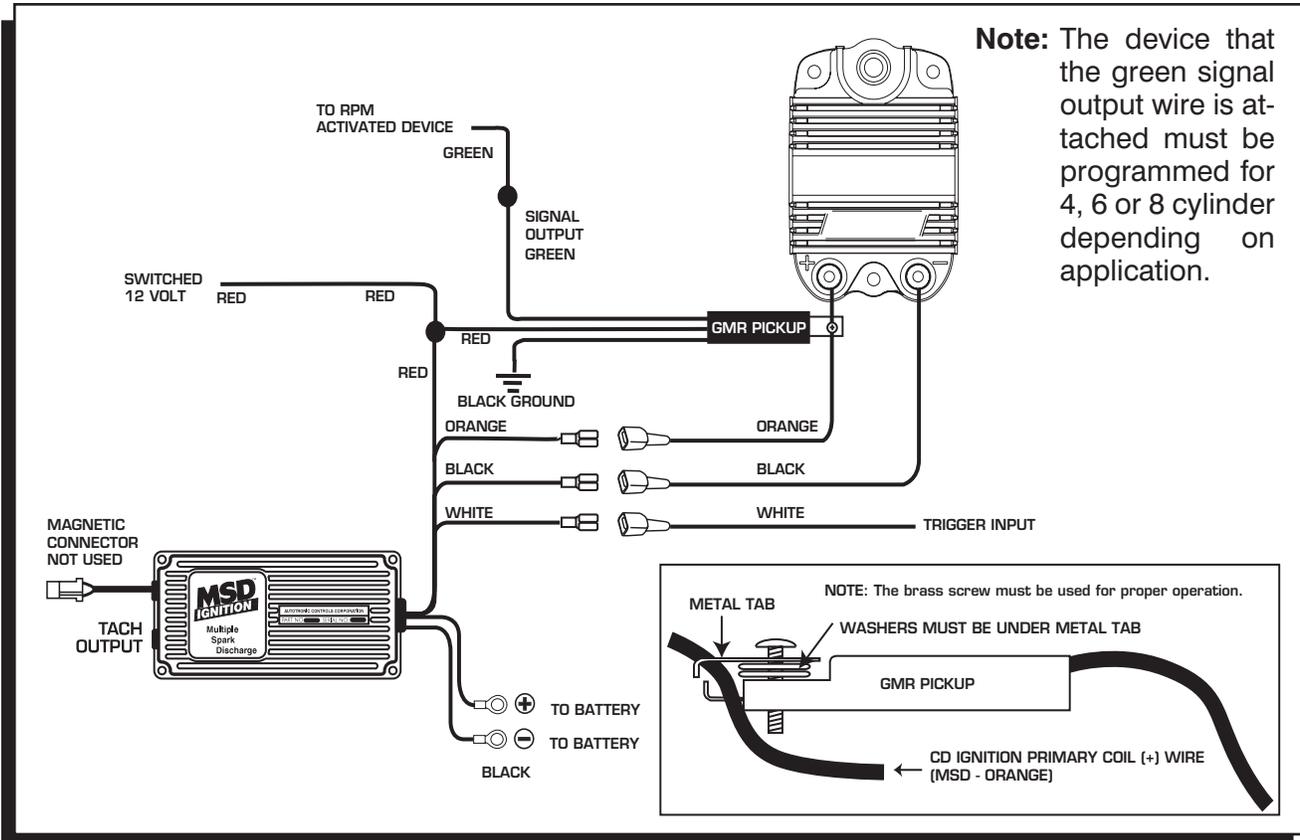


Figure 1 Installation with a Capacitive Discharge Ignition Control.

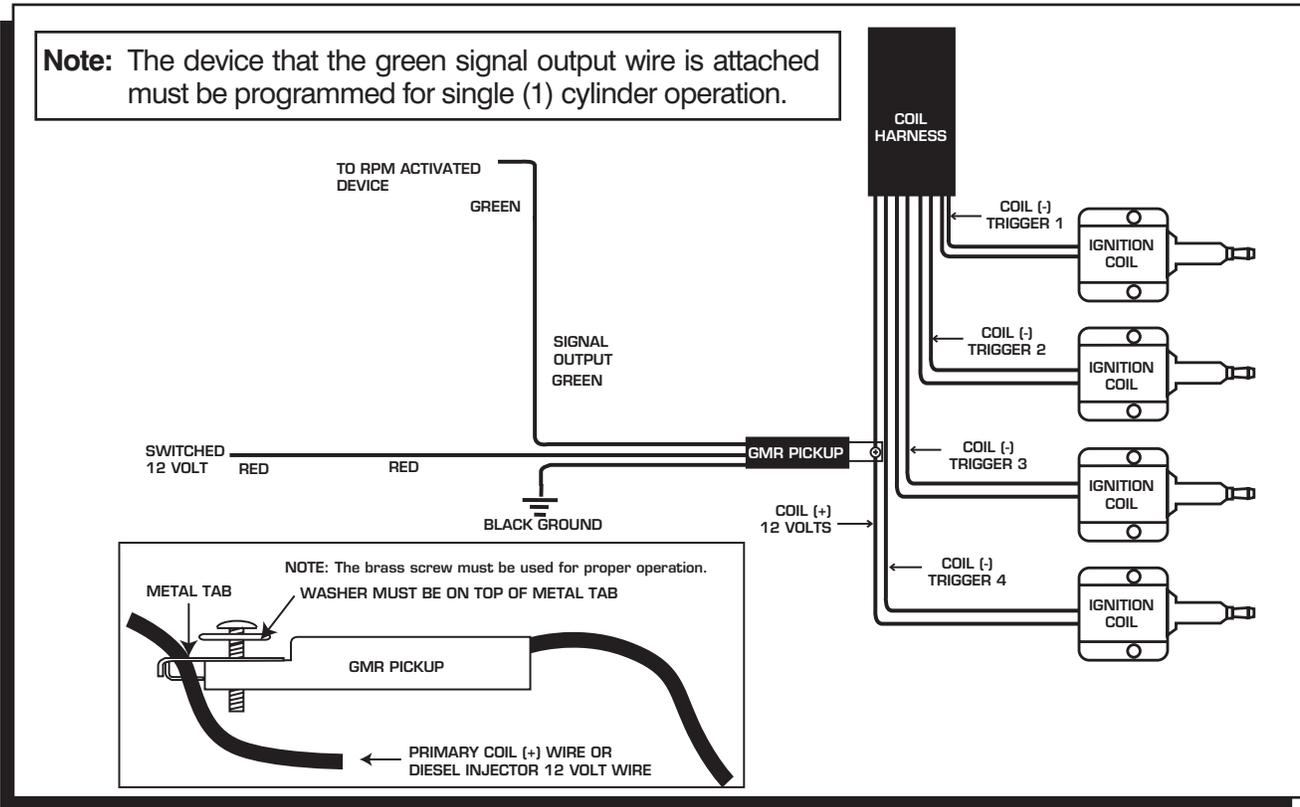


Figure 2 Installation on an Inductive Ignition System.

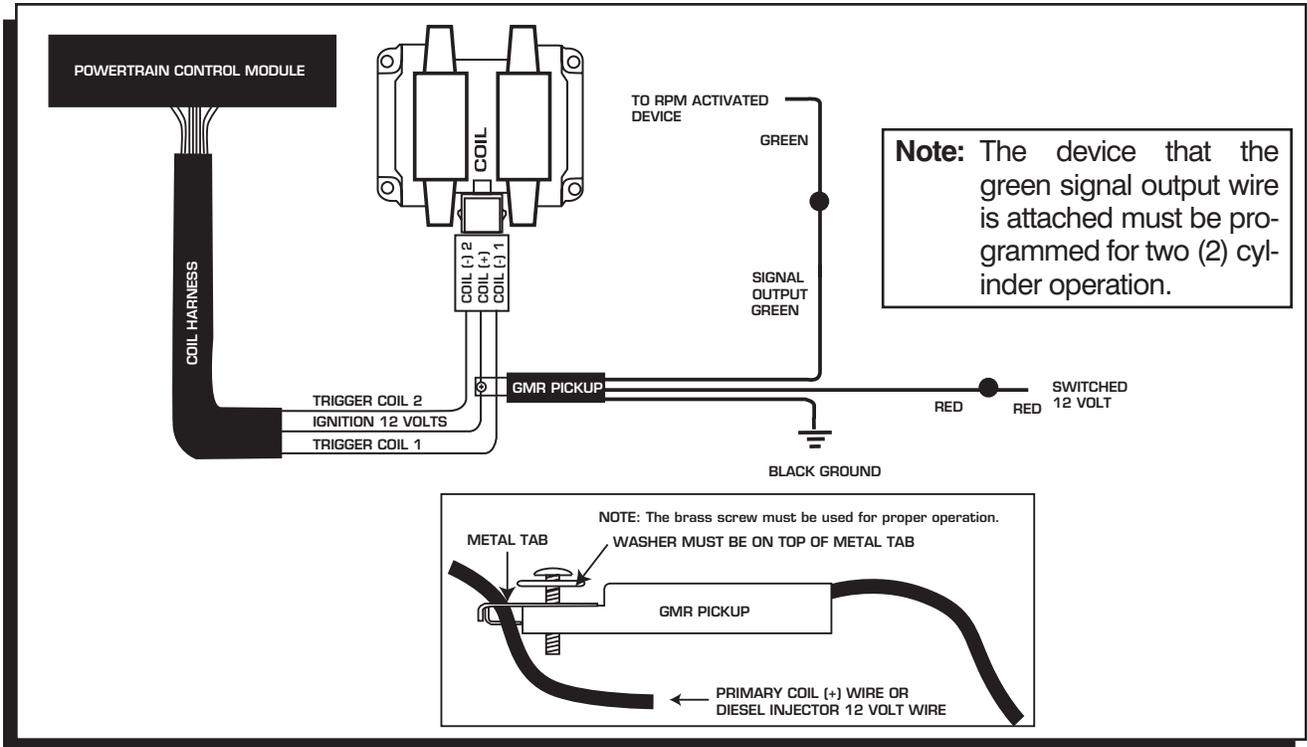


Figure 3 Installation on a Distributorless Coil Pack.

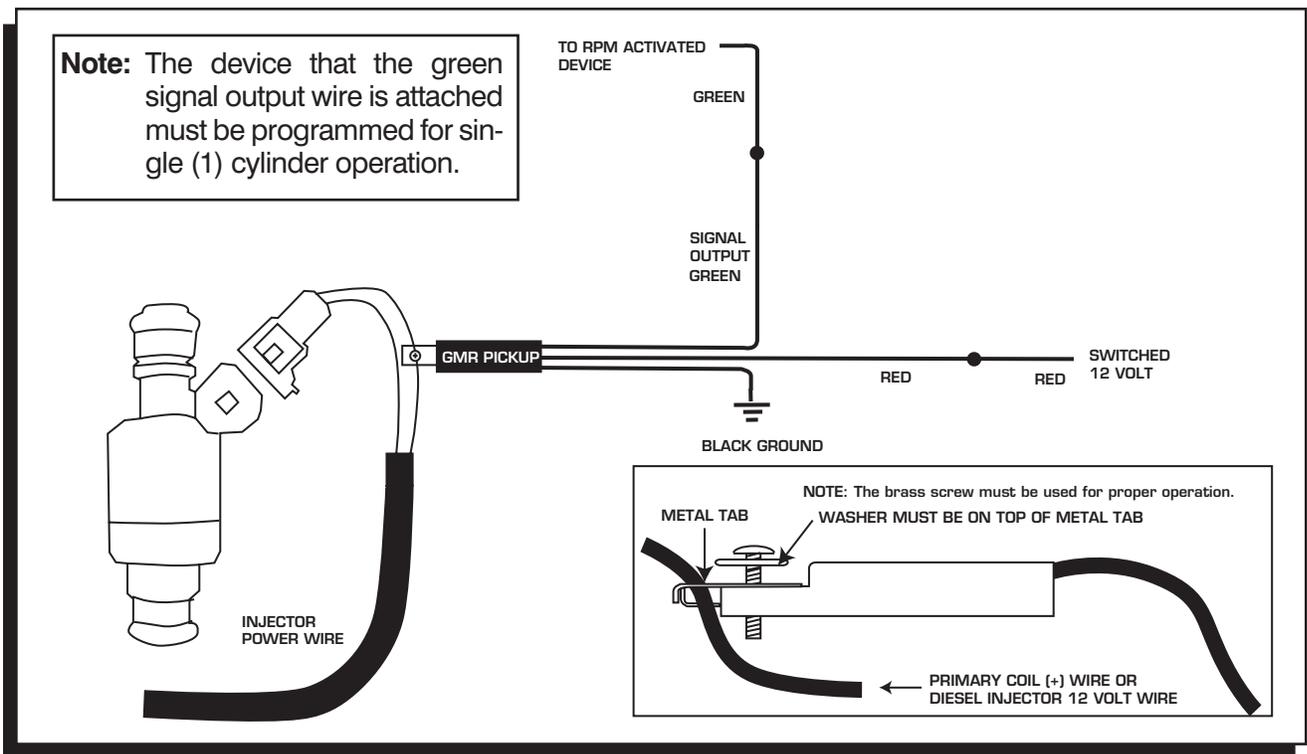


Figure 4 Installation to a Diesel Injector.

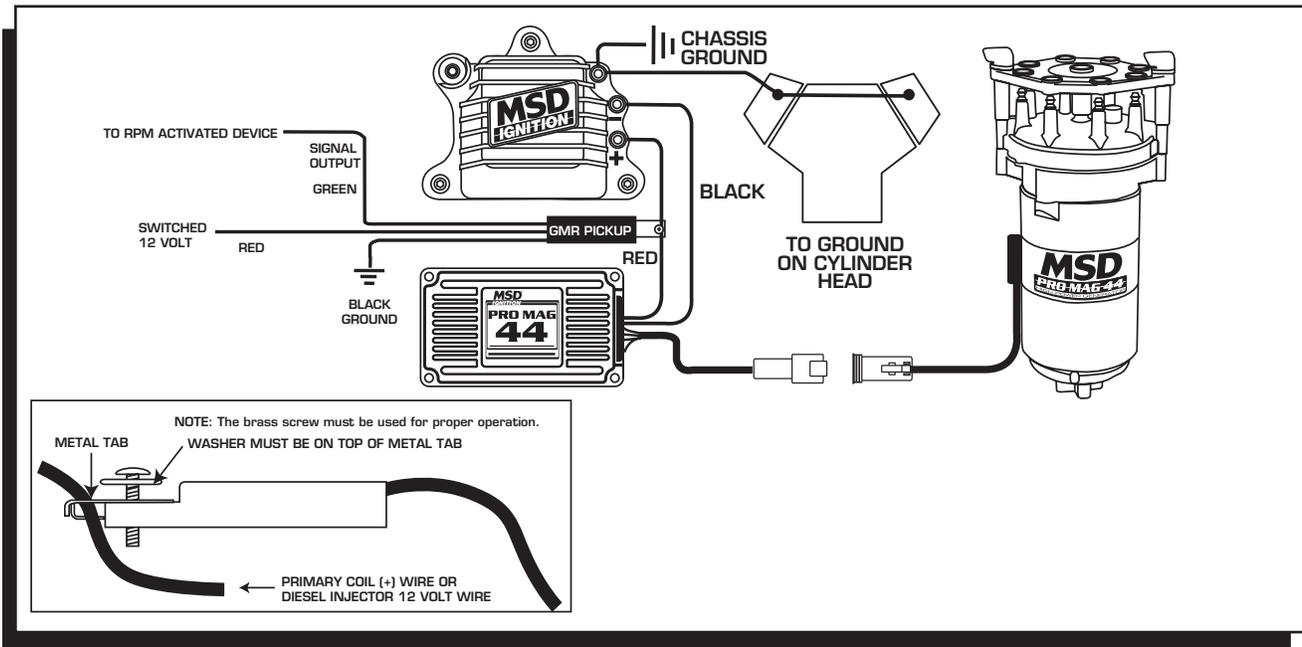


Figure 5 GMR to PN 8963 Shift Light on Pro Mag 44 Electronic Points Box.

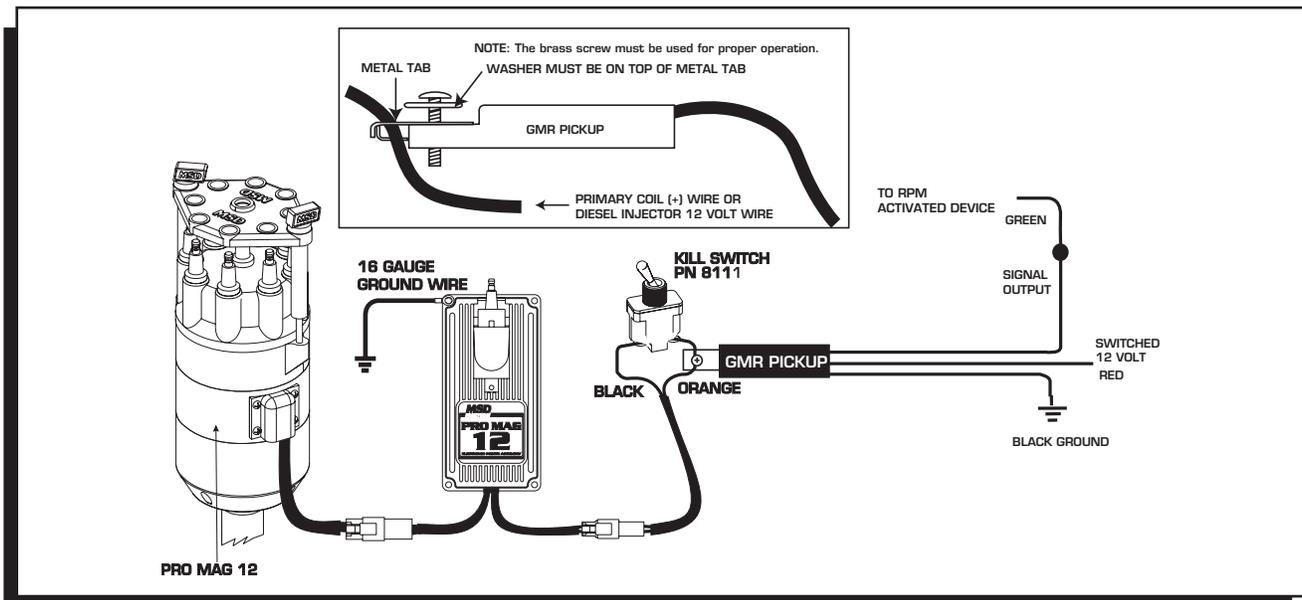


Figure 6 Wiring the 12 Amp Pro Mag with GMR and PN 8963 Shift Light.

## Limited Warranty

MSD IGNITION 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 MSD Ignition. 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 MSD Ignition be liable for special or consequential damages.