

# **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.

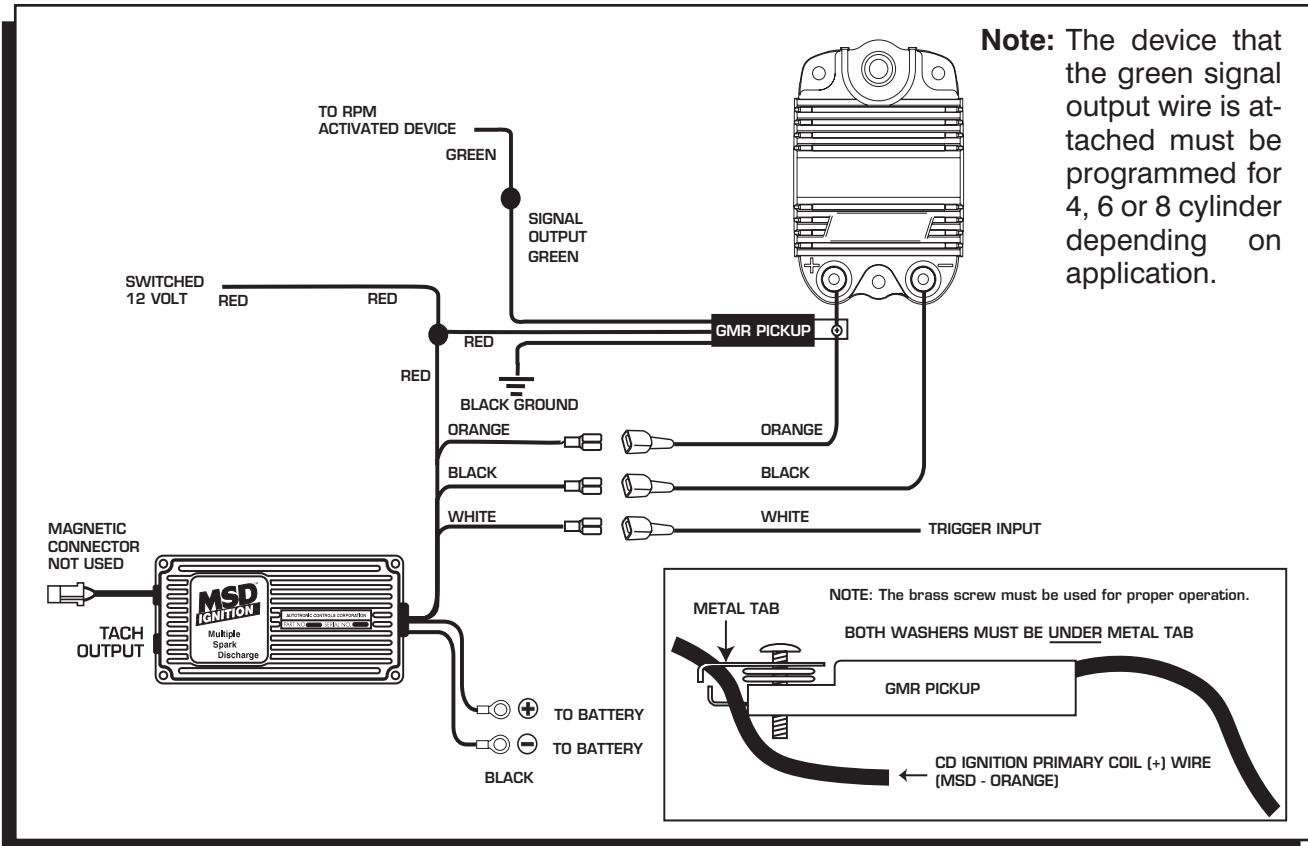
### **DISTRIBUTORLESS COIL PACKS**

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**

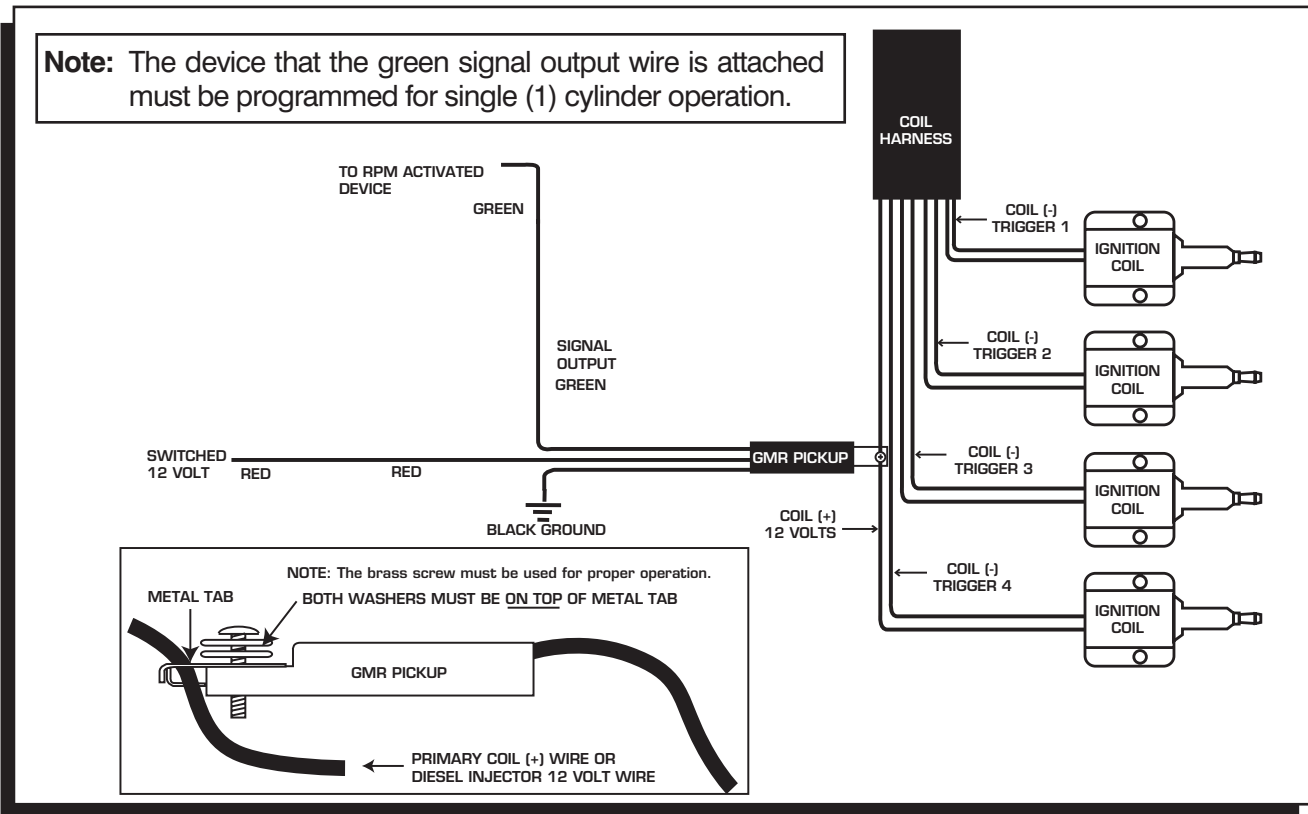
The GMR Pickup can easily be clipped to power fed wire of a Diesel Injector to provide a tach signal. On a diesel, the washer must be installed under the screw head on top of the metal tab so there is no air gap between the metal tab and the pickup sensor (Figure 4).

**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.



**Note:** The device that the green signal output wire is attached must be programmed for 4, 6 or 8 cylinder depending on application.

Figure 1 Installation with a Capacitive Discharge Ignition Control.



**Note:** The device that the green signal output wire is attached must be programmed for single (1) cylinder operation.

Figure 2 Installation on an Inductive Distributorless Ignition System.

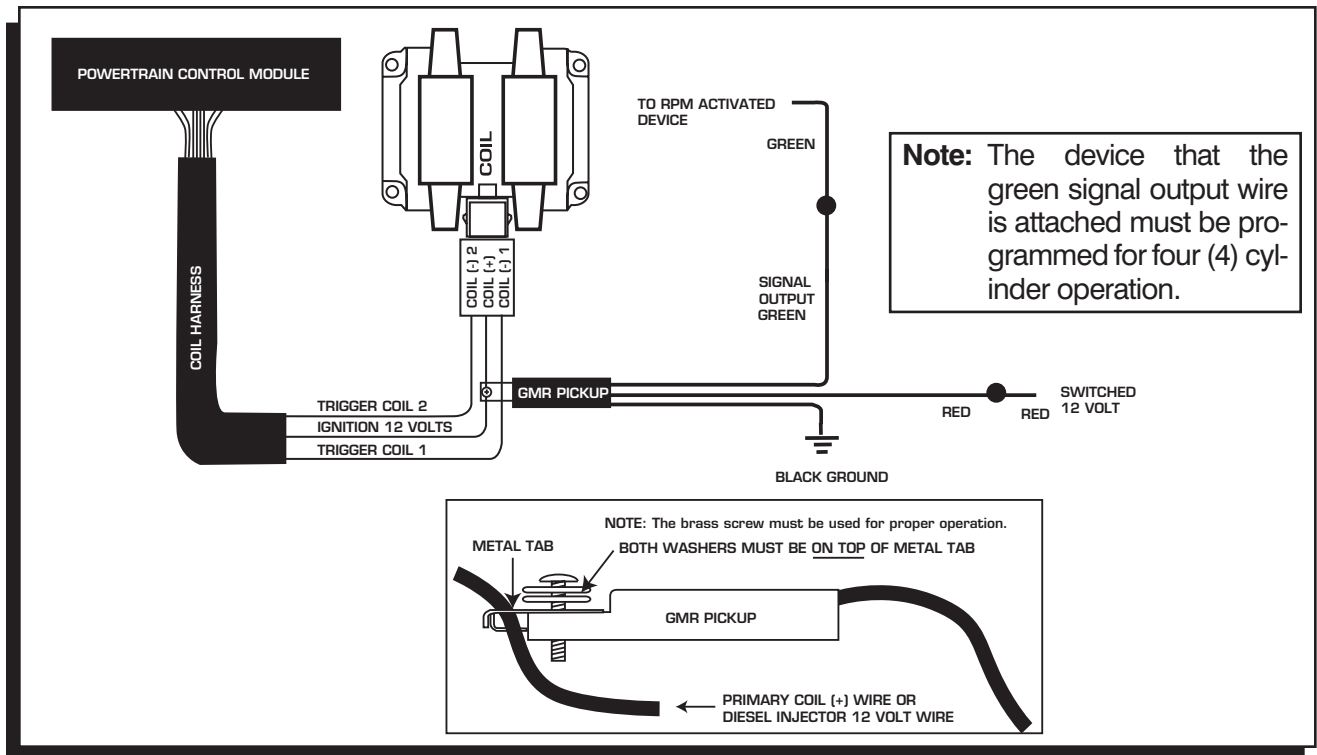


Figure 3 Installation on a Distributorless Coil Pack.

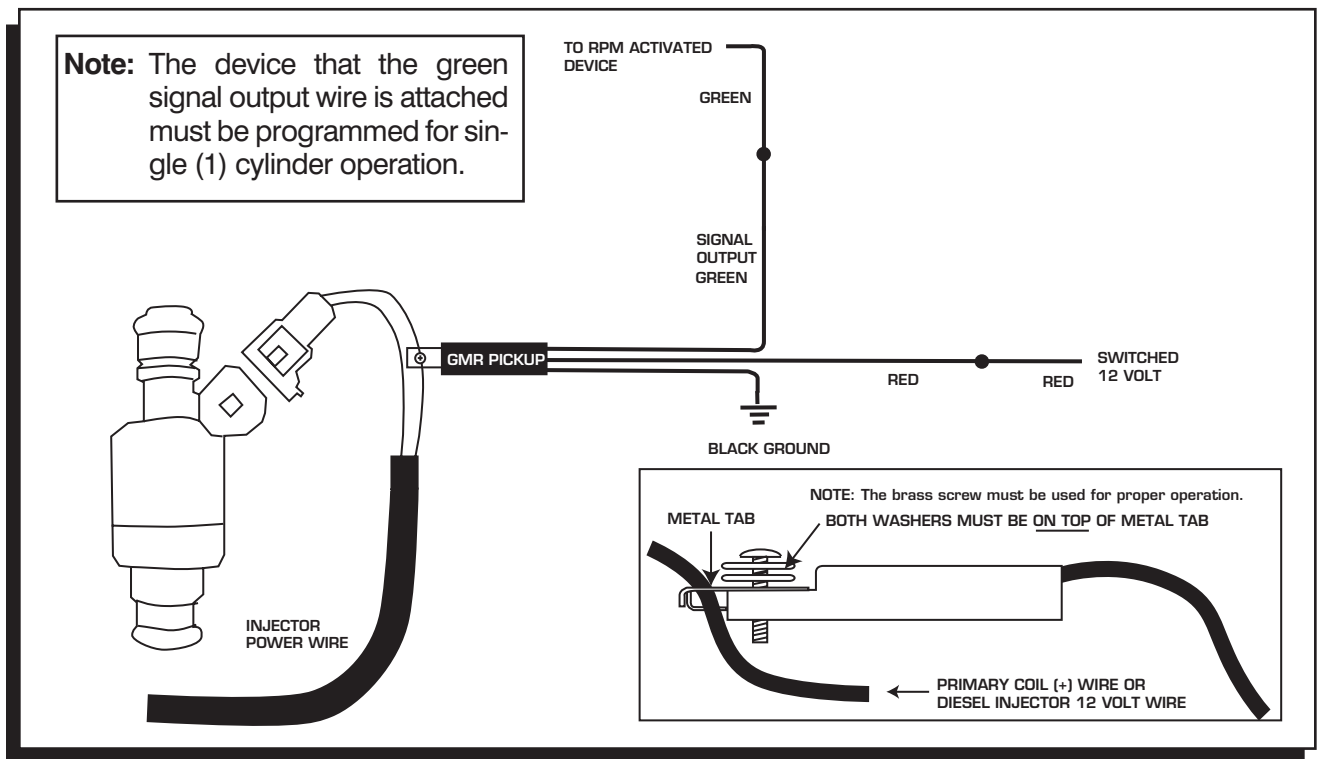


Figure 4 Installation to a Diesel Injector.

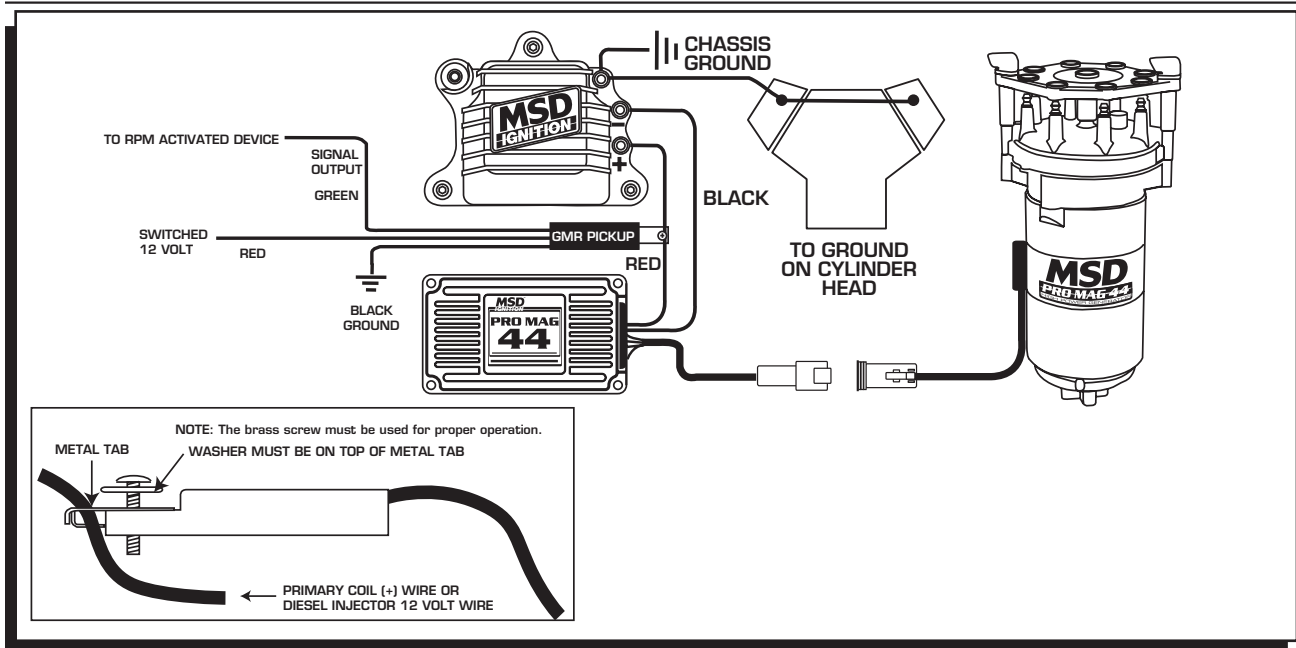


Figure 5 GMR to PN 8963 Shift Light on Pro Mag 44 Electronic Points Box.

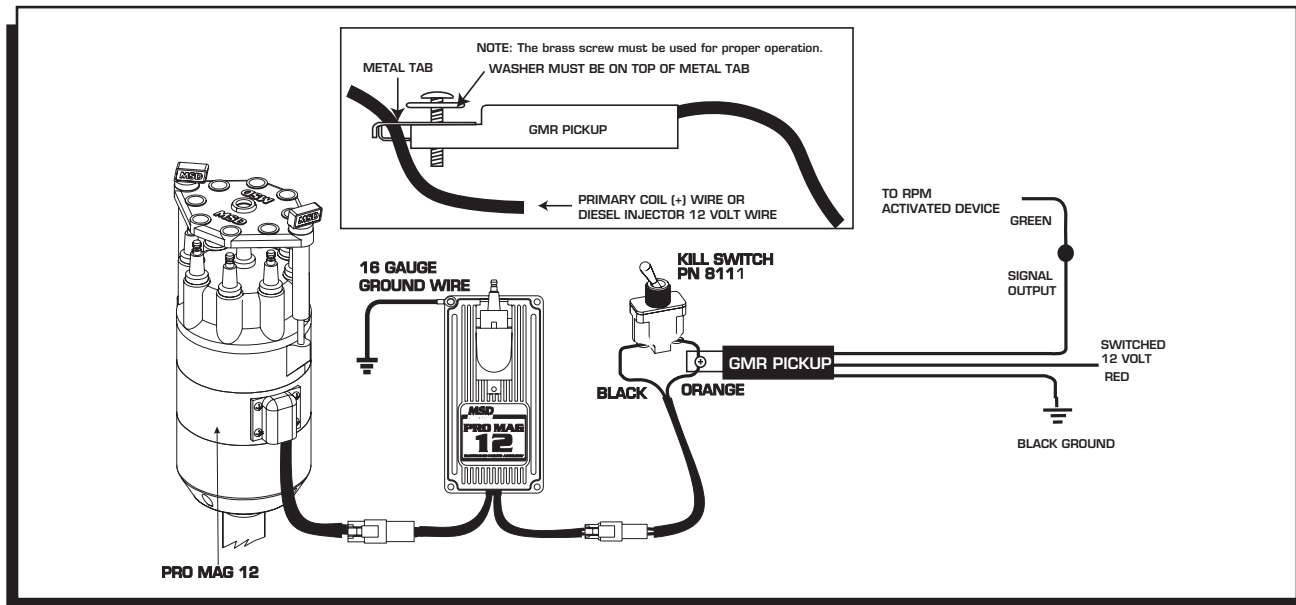


Figure 6 Wiring the 12 Amp Pro Mag with GMR and PN 8963 Shift Light.

## 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.msdisignition.com/rma](http://www.msdisignition.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 Ignition at (915) 855-7123. MSD technicians are available from 7:00 a.m. to 6:00 p.m. Monday - Friday (mountain time).