

MSD INSTALLATION INSTRUCTIONS

MSD RPM Activated Switch PN 8950

ONLINE PRODUCT REGISTRATION: Register your MSD product online and you'll be entered in our monthly 8.5mm Super Conductor Spark Plug Wire give-away! 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.

IMPORTANT: Read the instructions before attempting the installation.

Parts Included:

1 - RPM Switch

4 - Self Tapping Screws

4 - Heat-Shrink Caps

Note: RPM Modules must be purchased separately. See the chart on the last page for part numbers.

The RPM Activated Switch can be connected to stock ignition systems or MSD Ignitions. When using a capacitive discharge ignition such as an MSD, **do not** connect the Switch to the coil negative terminal. Damage to the Switch may occur.

The Switch is capable of carrying 1.5 amps. If the circuit you are activating requires more current, an MSD Relay, PN 8960 or 8961 must be used. The MSD RPM Activated Switch is equipped with a "smart driver". This circuit will protect the RPM Switch from damage by monitoring its temperature. If there is an inadvertent short or too much current is drawn through the Switch, the smart driver will sense the increased temperature and shut the Switch off. However, once the temperature drops to a safe point, the smart driver will turn the Switch back on. It will continuously cycle On and Off as the temperature dictates.

If you experience a problem with your Switch not operating, turn the circuit off for a few minutes to cool, then try again. If the circuit activates then shuts off, there may be too much current flow. Check the device's Installation Instructions to find its recommended maximum current.

The RPM Switch has two activation wires. The Yellow wire is Normally Open and will activate a circuit by switching to ground. The Gray wire is Normally Closed to ground and will open the ground circuit at the desired RPM (Figure 1). If no rpm module is installed, the Switch will not activate the circuit.

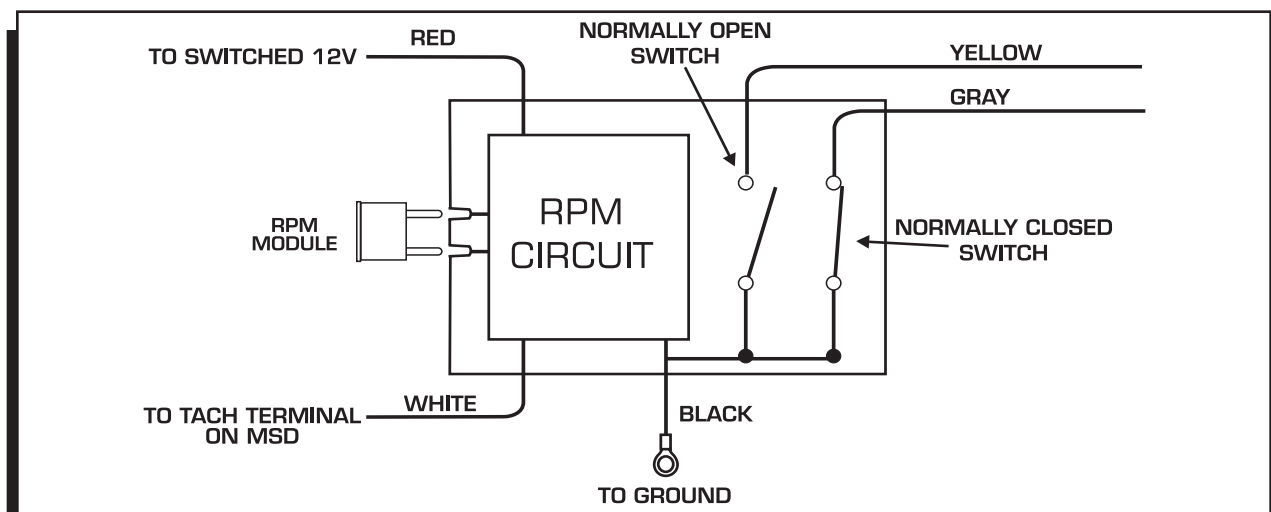


Figure 1 Operation of the RPM Activated Switch.

CYLINDER PROGRAMMING

The Switch is programmed for 8-cylinder applications, however it can be used with 4 or 6-cylinder applications. To program the Switch for different applications, the cylinder select loops must be modified as shown in Figure 2. After cutting a wire loop, seal the wire end with the supplied heat-shrink caps. Use a heat gun or other heat source to shrink the cap for a good seal.

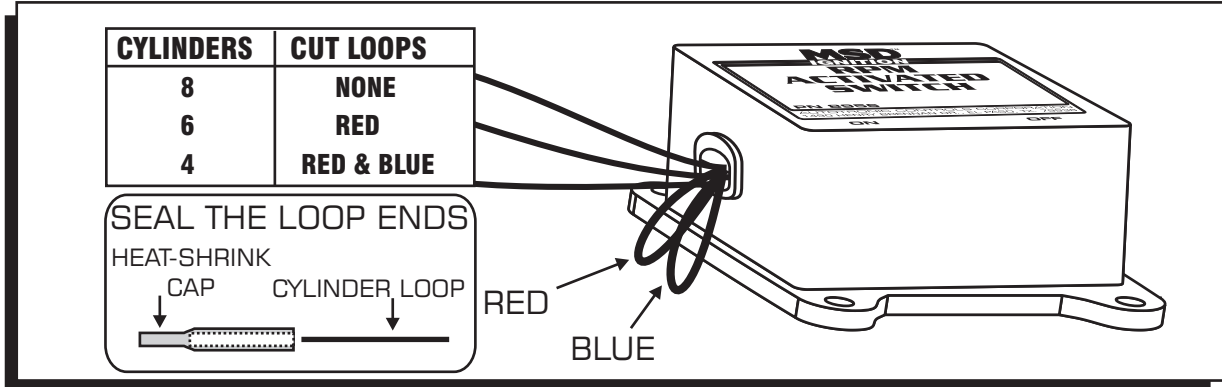


Figure 2 Cylinder Select Loops.

MOUNTING

The Switch may be mounted under the hood as long as it is away from direct engine heat sources. Keep in mind that the rpm modules should be easy to access for changes. The Switch can be mounted with the double-sided tape or with the four self tapping screws supplied. Use the Switch as a template and mark the mounting hole locations. Remove the Switch and drill the holes using a 3/16" drill bit then install the screws.

WIRING

Red	Connects to a switched 12 volt source.
Black	Connects to ground.
White	The rpm input wire. With an MSD Ignition, this connects to the Tach Output terminal. On inductive ignitions, it connects to the coil negative terminal.
Yellow	This is an activation wire and is Normally Open and will switch to ground. It connects to the ground side of the device you plan to activate.
Gray	This is an activation wire and is Normally Closed to ground. It will open the ground path of a circuit.

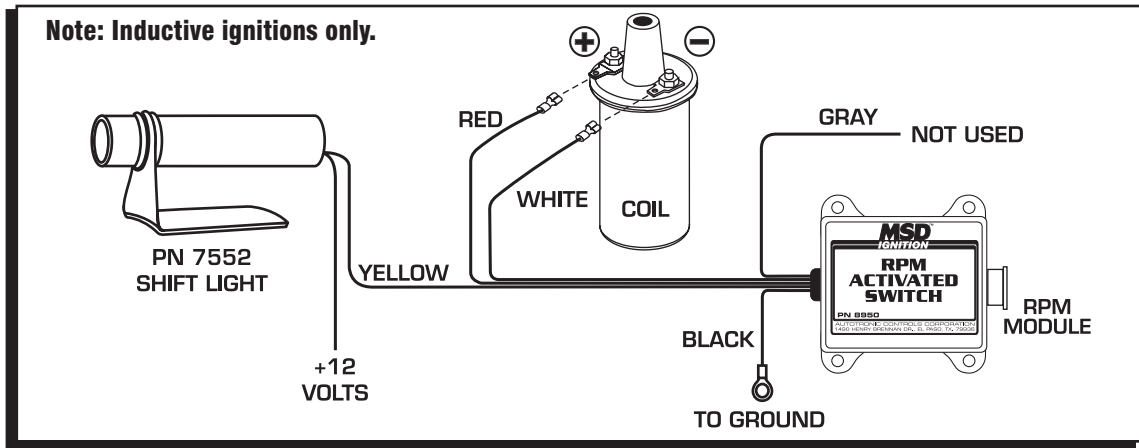


Figure 3 Wiring to an Inductive Ignition System.

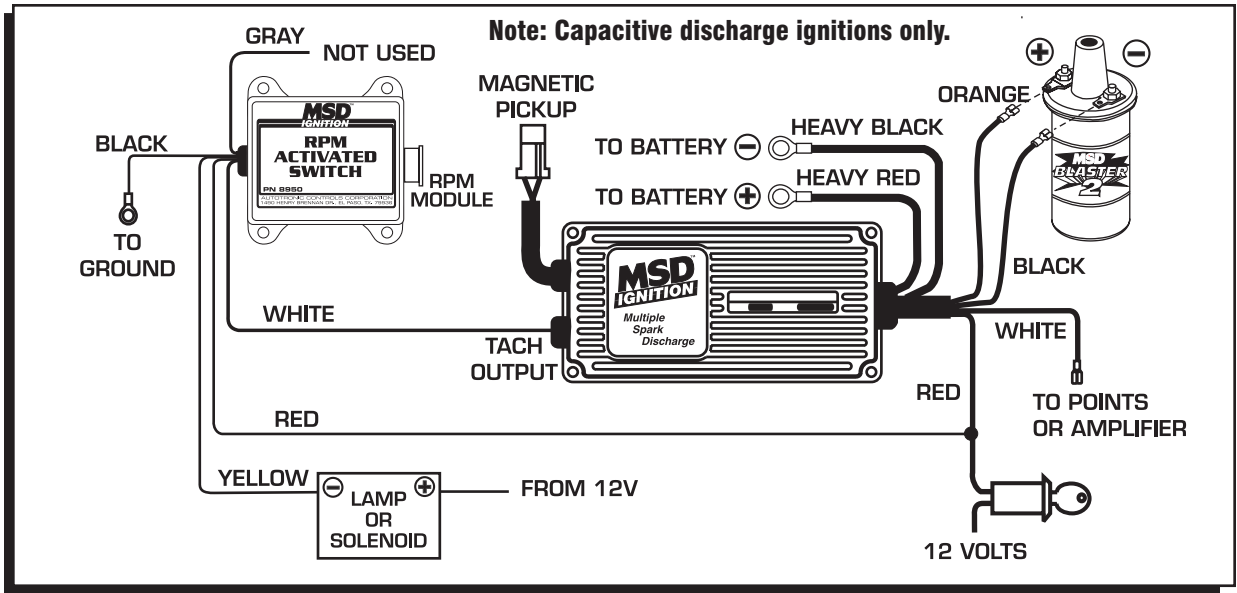


Figure 4 Wiring to an MSD Ignition Control.

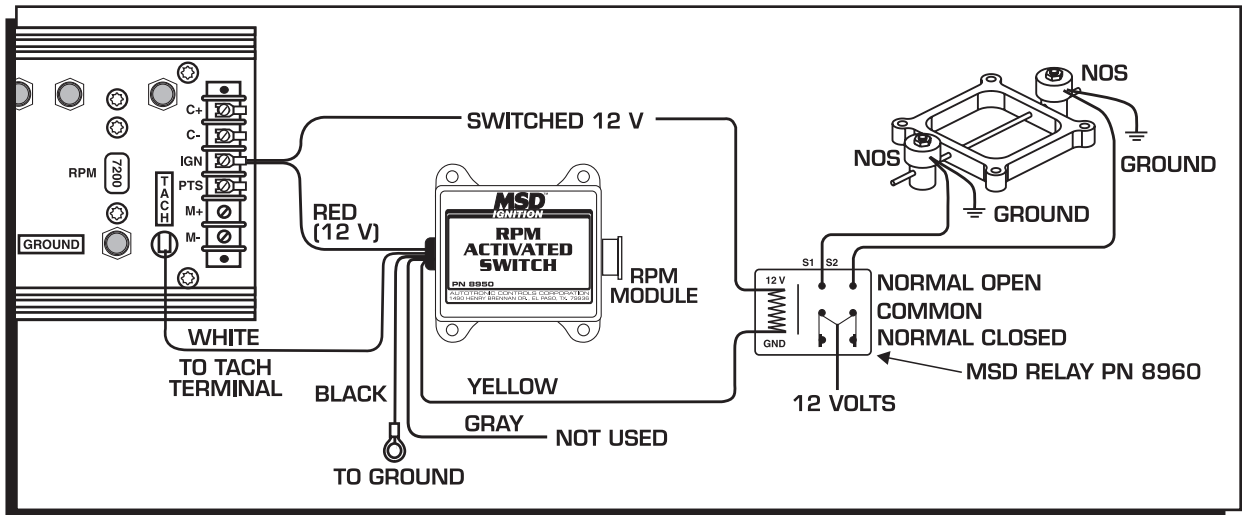


Figure 5 Wiring with an MSD Relay.

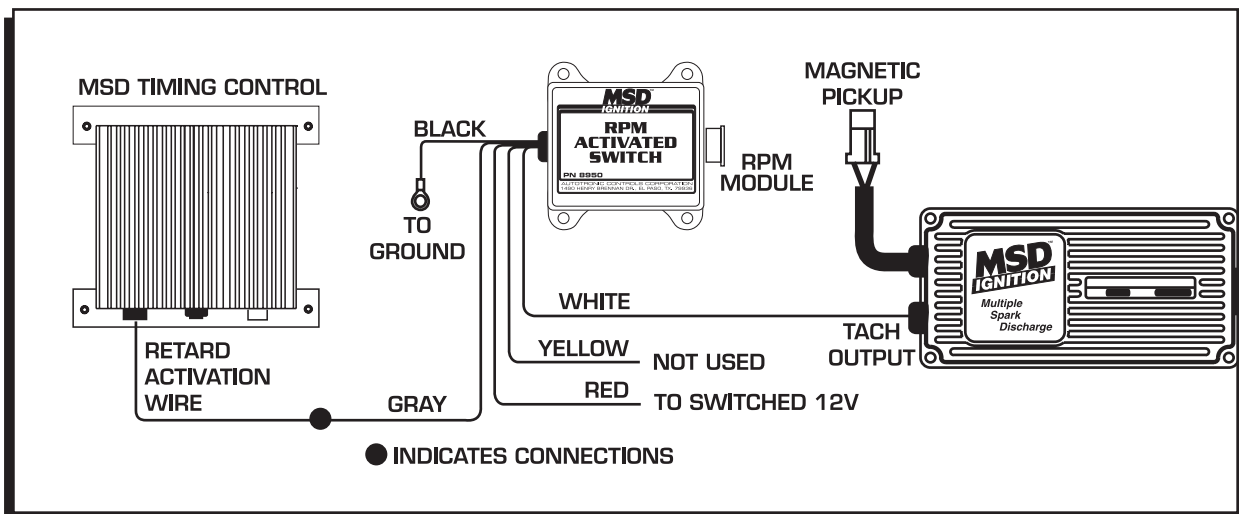


Figure 6 Wiring with an MSD Timing Control Retard.



INSTALLATION INSTRUCTIONS

RPM Module Kits are supplied with five modules in a range of 200 rpm increments. There are even number sets and odd number sets available. Example: PN 8746 includes 5,000, 5,200, 5,400, 5,600, 5,800 modules.

Kit	Even Set	Odd Set
3,000 Kit	PN 8743	87431
4,000 Kit	PN 8744	87441
5,000 Kit	PN 8745	87451
6,000 Kit	PN 8746	87461
7,000 Kit	PN 8747	87471
8,000 Kit	PN 8748	87481
9,000 Kit	PN 8749	87491
10,000 Kit	PN 8750	87501
11,000 Kit	PN 8751	87511

Module Selectors: These Selectors offer 12 different rpm limits at the turn of a knob. Note: Even rpm in 200 rpm increments only.

For rpm settings below 3000 rpm, MSD offers an adjustable Module, PN 8677

RPM	PART NUMBER
3,000 - 5,200	PN 8670
4,600 - 6,800	PN 8671
6,000 - 8,200	PN 8672
7,600 - 9,800	PN 8673
9,000 - 11,200	PN 8674

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 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.