

# MSD<sup>™</sup> IGNITION INSTALLATION INSTRUCTIONS

## MSD RPM Activated Switch PN 8950

**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.

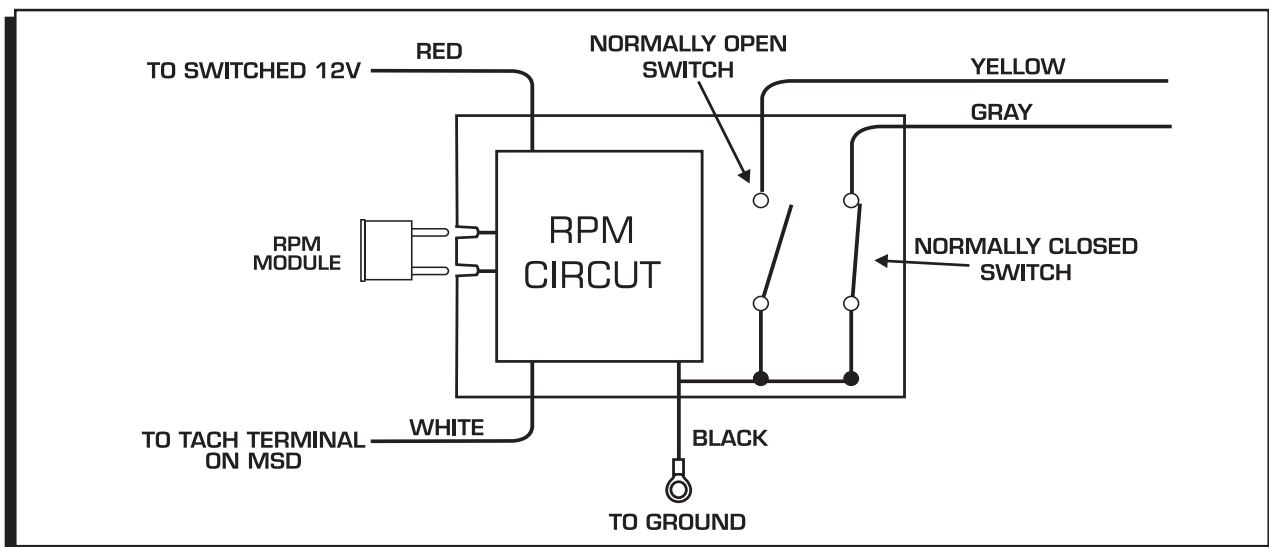


Figure 1 Operation of the RPM Activated Switch.

**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.

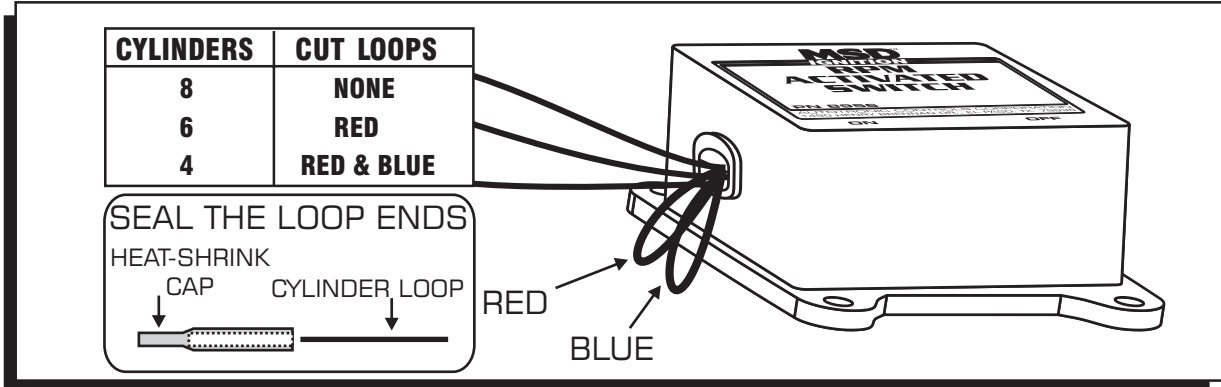


Figure 2 Cylinder Select Loops.

**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**

<b>Red</b>	Connects to a switched 12 volt source.
<b>Black</b>	Connects to ground.
<b>White</b>	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.
<b>Yellow</b>	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.
<b>Gray</b>	This is an activation wire and is Normally Closed to ground. It will open the ground path of a circuit.

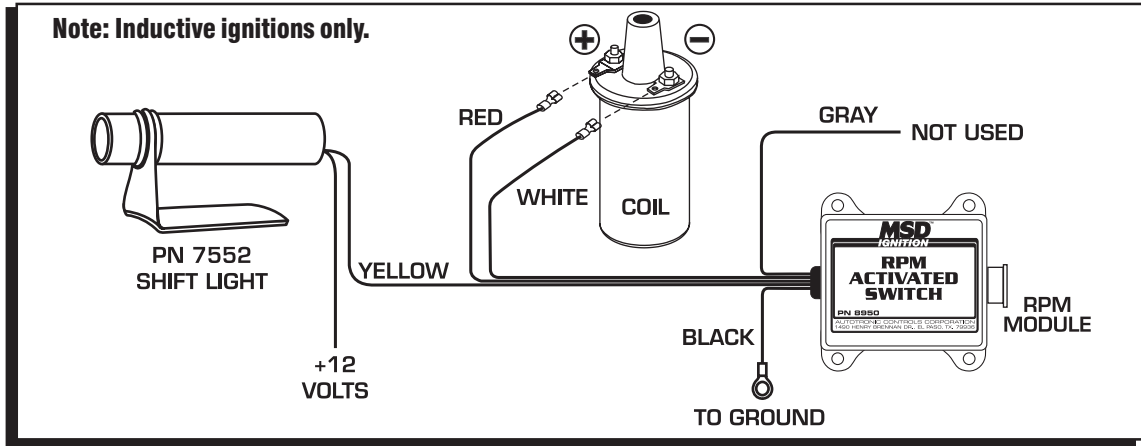


Figure 3 Wiring to an Inductive Ignition System.

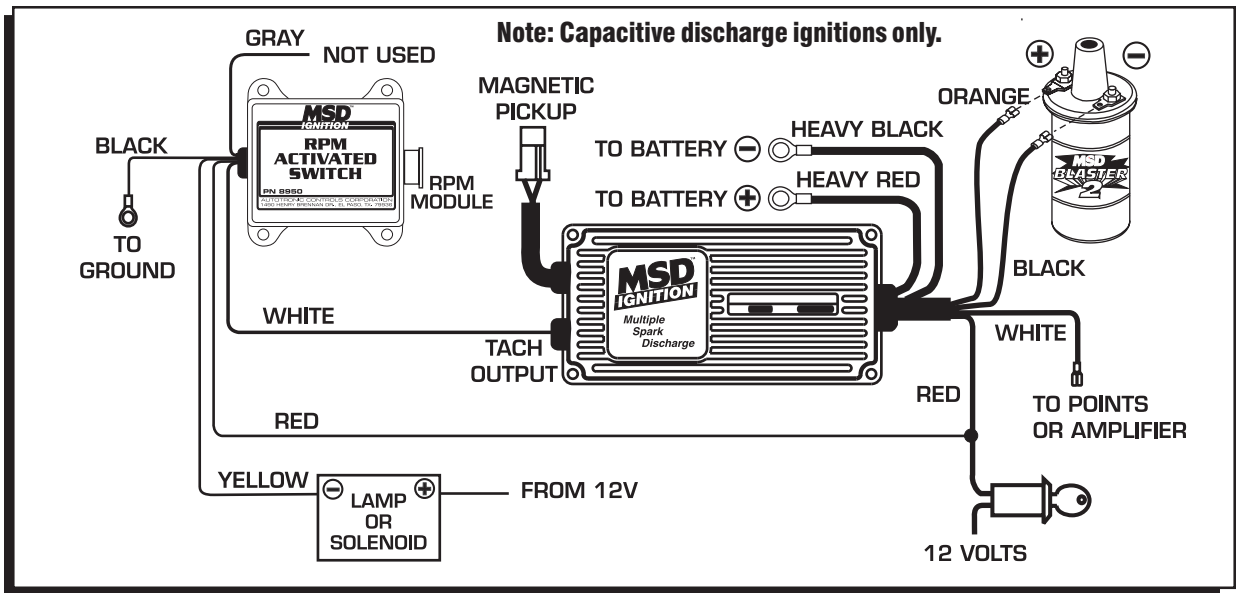


Figure 4 Wiring to an MSD Ignition Control.

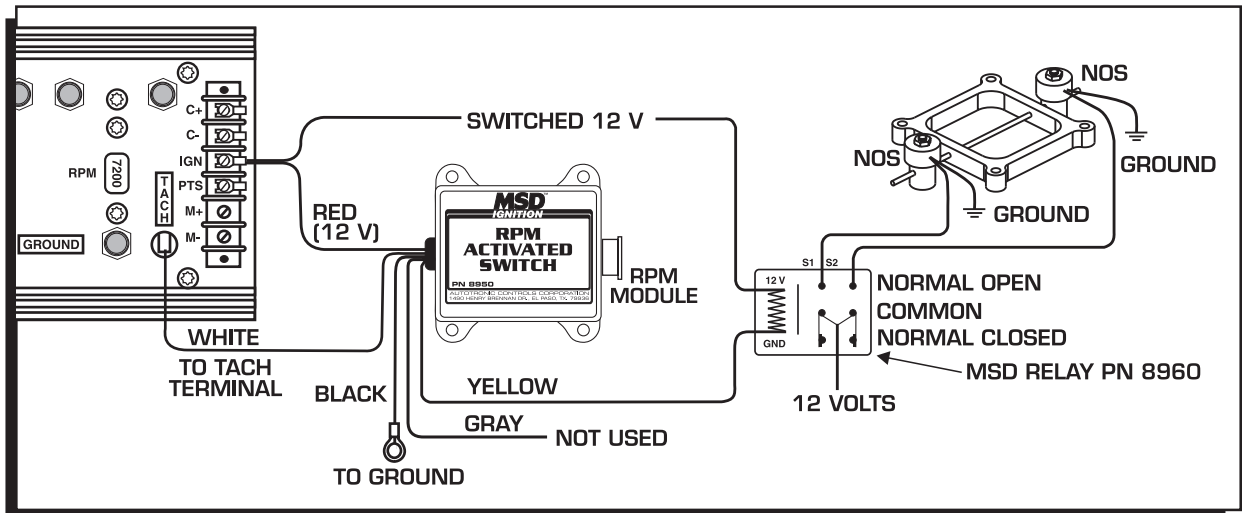


Figure 5 Wiring with an MSD Relay.

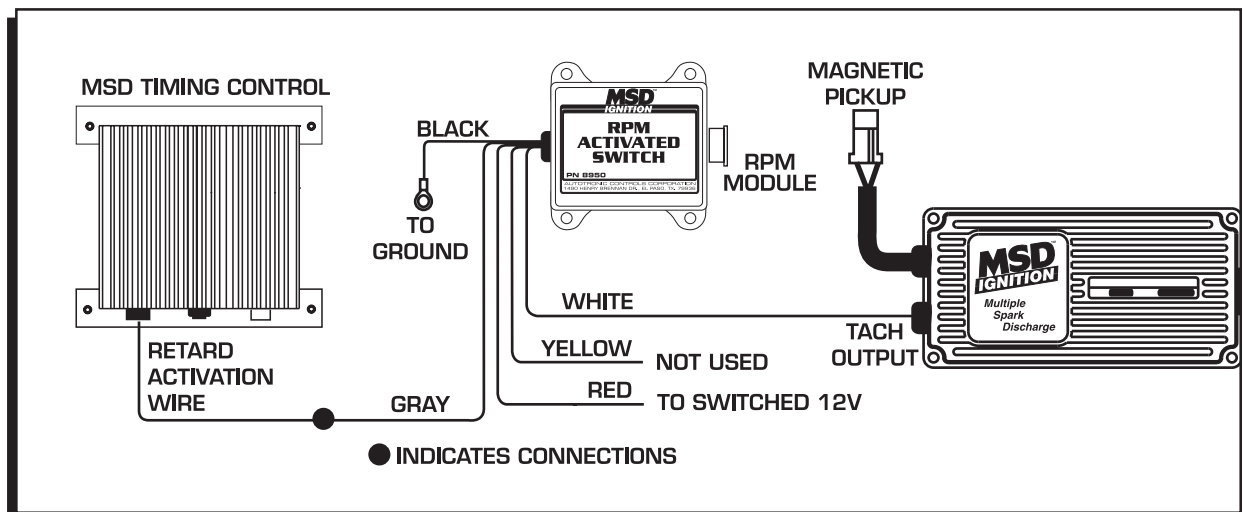


Figure 6 Wiring with an MSD Timing Control Retard.



# 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
12,000 Kit	PN 8752	87521

**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
10,600 - 12,800	PN 8675

## 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.