



INSTALLATION INSTRUCTIONS

MSD 10-Plus Ignition Control PN 7505

Important: Read the instructions before attempting the installation.

Parts Included:

1 – MSD 10 PLUS Ignition Control, PN 7502	1 – Coil Harness
1 – MSD 10 PLUS Coil, PN 8208	7 – Wires
1 – Harness, PN 8860	4 – RPM Modules, 3,000, 7,000, 8,000, 9,000
	7 – Vibration Mounts and Hardware

WARNING: During installation, disconnect the battery cables. When disconnecting, always remove the Negative cable first and install it last.

The MSD 10-PLUS Ignition system uses MSD's patented Stacker Ignition technology to combine the best offerings of a Capacitive Discharge ignition with the best features of an Inductive ignition. The CD circuits of the ignition produce very high voltage that is responsible for ionizing the spark plug gap while the Inductive side produces incredible current for a high level of sustained spark across the gap.

The 10-PLUS Coil, PN 8208, is the only coil that can be used with this ignition system. It is specifically designed to handle the CD and Inductive spark characteristics of the 10-Plus.

Note: This Ignition Control, PN 7502, and Coil, PN 8208, cannot be used or mixed with any component from the original MSD 10 Ignition system, PN 7500.

WARNING: High voltage is present on the coil terminals. **DO NOT** touch the coil terminals while the engine is cranking or running.

MOUNTING

The Ignition Control and Coil can be mounted in any position and away from direct engine heat sources. Use the ignition as a template and mark the location of the mounting holes. Remove the unit and drill the holes using a 3/16" bit. Install the supplied vibration mounts in the holes then mount the ignition using the lock washers and nuts.

The Coil should be mounted near the distributor cap to keep the length of the coil wire minimal. Before drilling mounting holes, make sure the wiring harness reaches the Coil.

WIRING

Batt + (Heavy Red)	Power Supply. This connects to the battery positive terminal.
Batt - (Heavy Black)	Ground. Connect to the battery negative terminal or engine ground.
Ignition (Red)	Ignition On/Off. Connects to a switched 12 volt source.
Coil + (Red)	Coil Positive (+). Connects to the coil positive terminal.
Coil - (Blue)	Coil Negative (-). Connects to the coil negative terminal.
Magnetic Pickup	These two terminals connect to an MSD Distributor or Crank Trigger Pickup. If these terminals are used, the Points terminal will not be connected.
Mag + (Violet)	Positive magnetic pickup wire.
Mag - (Green)	Negative magnetic pickup wire.
Points (White)	This is the trigger input terminal for points, amplifiers, an MSD Timing Control or from an aftermarket ECU. If this wire is connected, the magnetic pickup terminals will not be used.
Accessories	
Two Step (Yellow)	This is the Two Step activation terminal. When this terminal is grounded, Module 2 is activated. When not grounded, Module 1 is active.
Kill (Brown)	This terminal can be used as an emergency kill switch. When grounded, the ignition system is turned Off.
Tach (Gray)	This is the tach output terminal. It provides a 12 volt square wave signal that most tachometers and rpm devices will accept.

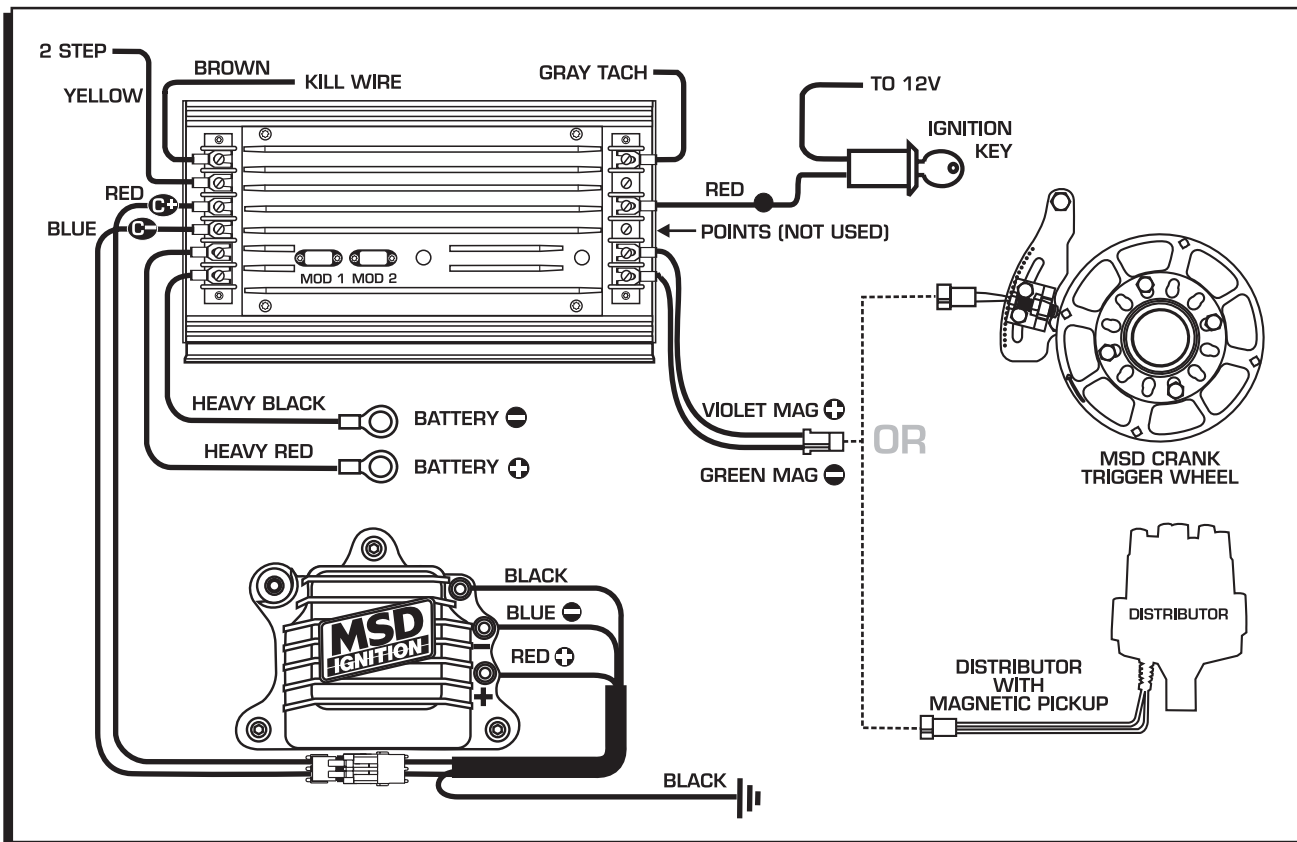


Figure 1 Wiring to a Magnetic Pickup.

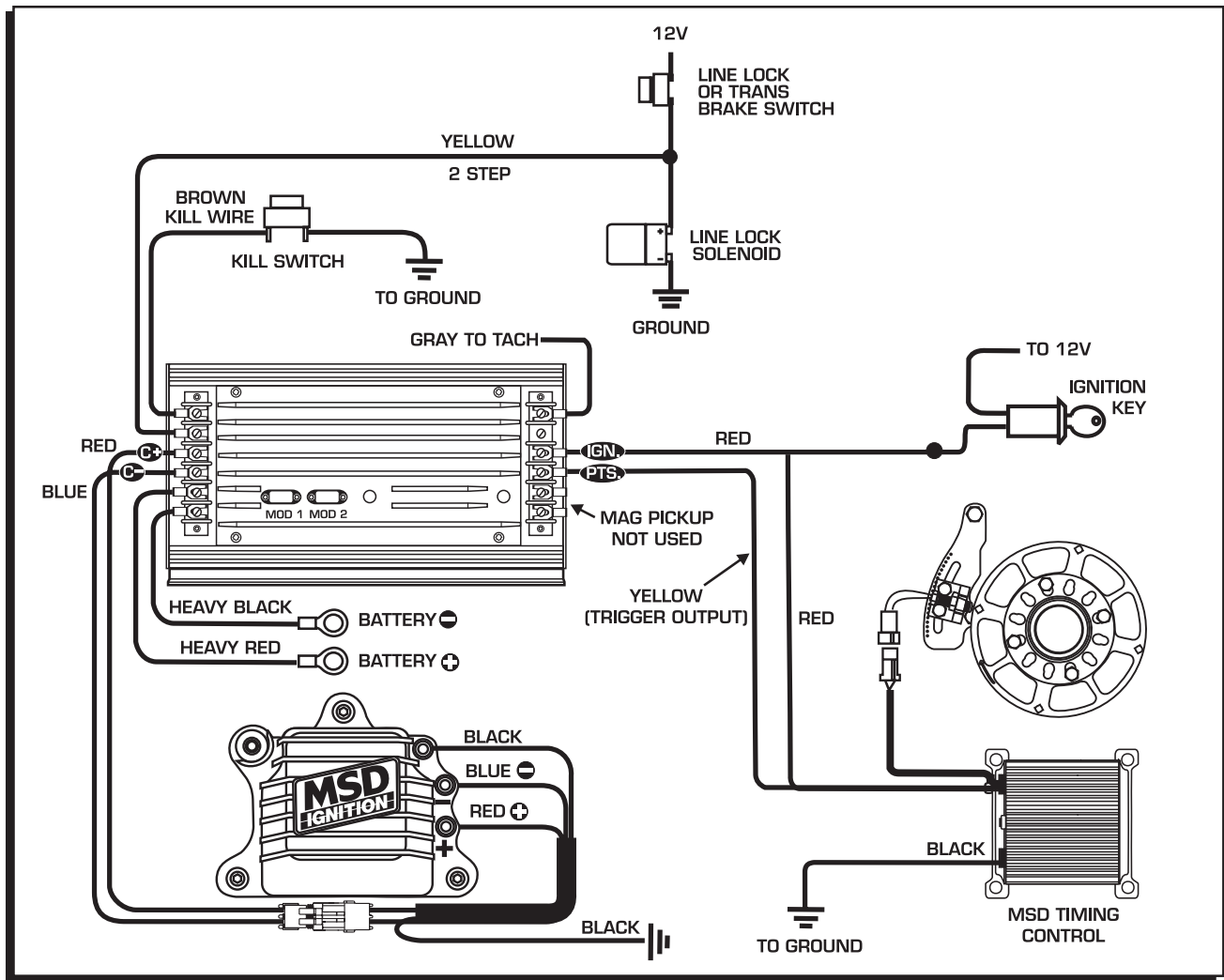


Figure 2 Complete Wiring with a Timing Control.

KILL SWITCH

This feature can be used as an emergency ignition kill or as a momentary kill or as a momentary kill used with air shifters. Use the Brown wire on this circuit. When it is grounded, the ignition is killed.

TWO STEP

The Two Step feature provides two rev limits; one for overrev protection and the other to activate on the starting line for use during the launch.

The Two Step is controlled by the Yellow wire and is connected on the left side terminal strip. When the Yellow wire is grounded, RPM Module 2 is activated. When the ground is removed, Module 1 is active.

For example, to activate a lower limit for the starting line when the line lock or trans brake is applied, splice the MSD's Yellow wire into the wire between the switch and solenoid (Figure 3). The Yellow wire will be grounded through the solenoid wiring until the switch is activated. When the circuit is activated, ground is removed from the Yellow wire which activates Module 1. When the button is released, ground is returned and Module 2 becomes active again.

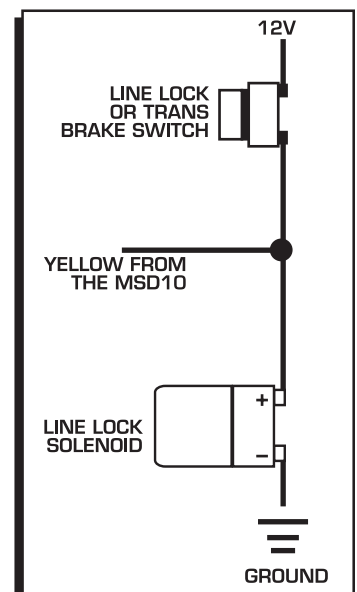


Figure 3 Two Step Wiring.



INSTALLATION INSTRUCTIONS

TROUBLESHOOTING

If the vehicle is not running correctly or fails to start, check all of the wires, connections and battery supply voltage. After checking the wires, perform the following test:

WHEN TRIGGERING WITH THE WHITE WIRE:

1. Turn the ignition Off. Remove the coil wire from the cap and install a spark tester or set the terminal about 1/2" from ground.
2. Disconnect the White wire of the Ignition from the distributor or amplifier.
3. Turn the ignition On. Do not crank the engine.
4. Take the White wire and repeatedly tap it to ground. For safety measures, the wire must contact ground a few times before the ignition will fire. A spark should jump from the coil wire to ground. If there is no spark substitute a different coil and test again. If a spark occurs, the coil was at fault. If there is no spark, the Ignition may be at fault and should be returned to MSD for repair.

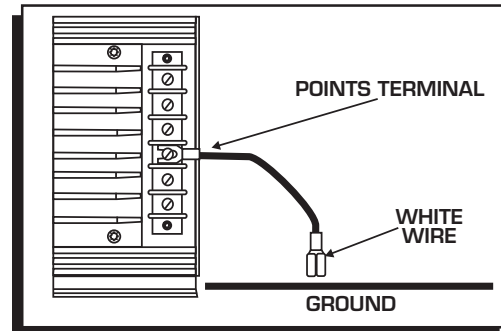


Figure 4 Checking for Spark with the White Wire.

WARNING: High voltage is present on the coil terminals. **DO NOT** touch the coil terminals while the engine is cranking or running.

WHEN TRIGGERING WITH THE MAGNETIC CONNECTOR:

1. Turn the ignition Off. Remove the coil wire from the cap and install a spark tester or set the terminal about 1/2" from ground.
2. Disconnect the magnetic pickup connector from the distributor or crank trigger.
3. Turn the ignition On. Do not crank the engine.
4. Take a short length of bare wire and short and break across the Green and Violet wires of the connector repeatedly. For safety measures, the shorting must occur a few times before the ignition will fire. A spark should jump from the coil wire to ground. If there is no spark substitute a different coil and test again. If a spark occurs, the coil was at fault. If there is no spark, the Ignition may be at fault and should be returned to MSD for repair.

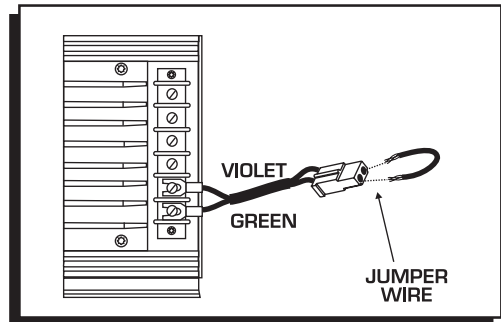


Figure 5 Checking for Spark with Magnetic Pickup.

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.