MSD IGNITION INSTALLATION INSTRUCTIONS

MSD Extreme Output HEI Kit
PN 8502

Parts Included:

1 - Extreme Output HEI Module, PN 83641
1 - Extreme Output HEI Coil, PN 8220
1 - Extreme Output HEI Cap, 84111
1 - Extreme Output HEI Rotor, 84101
1 - Extreme Output HEI Coil Cover, PN 84022
1 - Rotor Adapter (for use on MSD Distributor, PN 8365, only)
1 - Low Resistance Rotor Bushing and Insulator
1 - Tube of Heat Sink Compound
3 - Mounting Screws and Star Washers
1 - Small Screw Driver

IMPORTANT: If you are installing the Extreme Output HEI Kit in an engine that was equipped with a factory HEI or points type distributor, a relay, MSD PN 8961, will be required.

TRACTION CONTROL DETECTION

The Extreme Output HEI Module has a unique Traction Control Detection (TCD) code built into its microprocessor. This technology carefully monitors and examines the signals of the ignition. If the TCD determines that any signal has been modified in any way, the ignition will be put into a low rpm rev limit mode to immediately slow the car. Before this rev limit is imposed, the TCD goes through a list of cycles and checks to qualify that the trigger has been modified. There is no way to bypass or deactivate the TCD circuitry.

ADJUSTABLE REV LIMITER

The Extreme Output HEI Module also features an adjustable rev limiter. The limit is adjusted through the small rotary dial on the end of the module (Figure 1). This limiter is adjustable from 5,000 - 10,000 rpm. Turning the rotary dial clockwise raises the limit, CCW lowers the rpm limit. It doesn't take much movement for changes so it is recommended to start low and bump the rev limit up a little at a time.

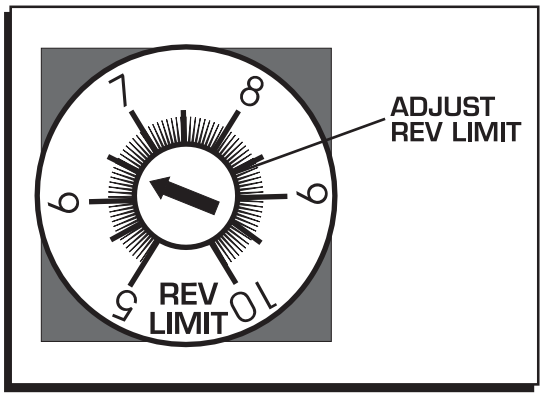

Figure 1 Adjusting the Rev Limiter.

INSTALLATION

1. Remove the cap, rotor and module of the original distributor. Make sure the mechanical advance weights move freely and do not bind. Also ensure that the distributor shaft rotates smooth with no wobble or binding.
2. Apply a liberal coat of the Heat Sink Compound to the aluminum base of the Module and to the rubber insulator. Route the wiring harness out of the housing then locate the three screws and star washers and install the module (Figure 2).

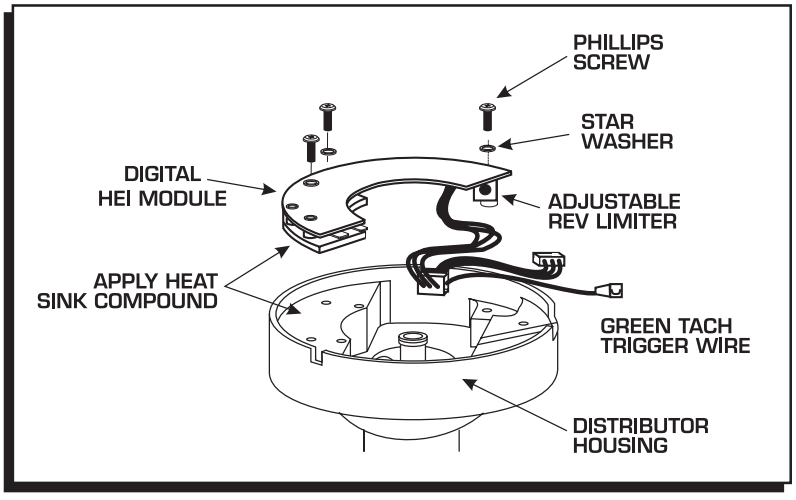

Figure 2 Installing the Module.

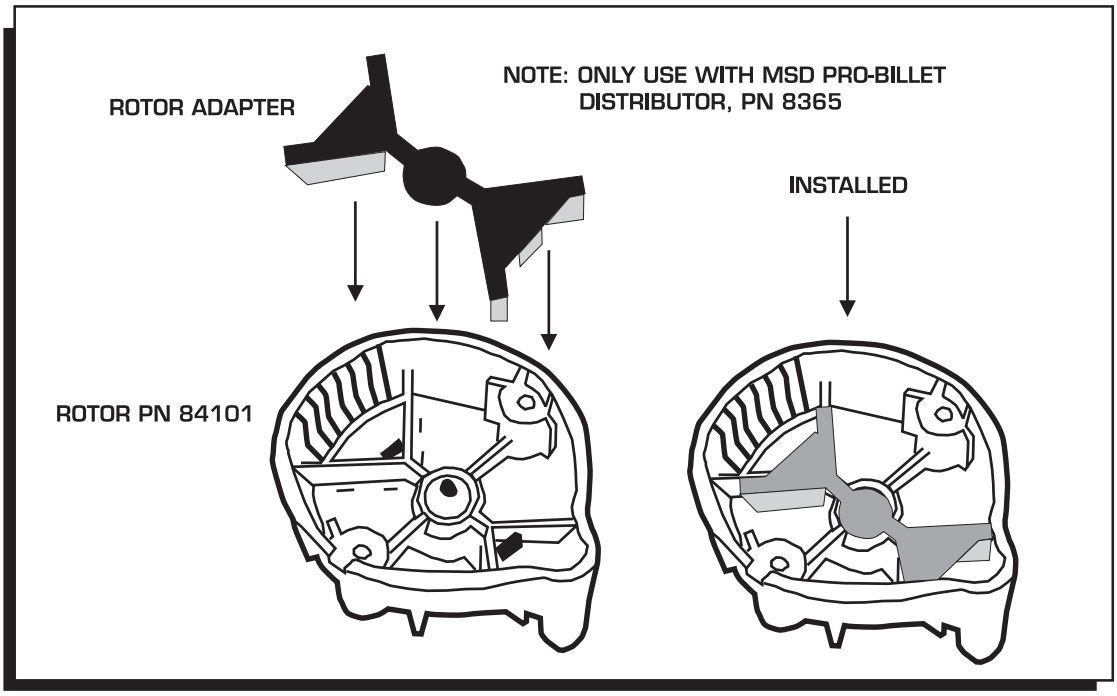

Figure 3 Installing the Rotor Adapter on an MSD PN 8365 HEI Distributor.

3. Install the rotor. If you are using an MSD HEI Pro-Billet Distributor, PN 8365, the supplied Rotor Adapter **must** be installed (Figure 3).

4. Install the cap.

5. Position the supplied Low Resistance Rotor Bushing in place (spring side up) followed by the rubber insulator (Figure 4).

6. Install the Coil in the distributor cap. Route the wires into position (Figure 5). The Red wire goes to the B+/Bat side of the cap as indicated on the Dust Cover. The Yellow wire is the C-/Tach. The Black wire goes in the center position and is Ground.

7. Install the spark plug wires to their respective cap terminals, then install the MSD Dust Cover and its three retaining screws.

8. Connect the HEI Module harness to the Distributor Cap. See the Tachometer Wiring section before connecting your tachometer (Figure 6).

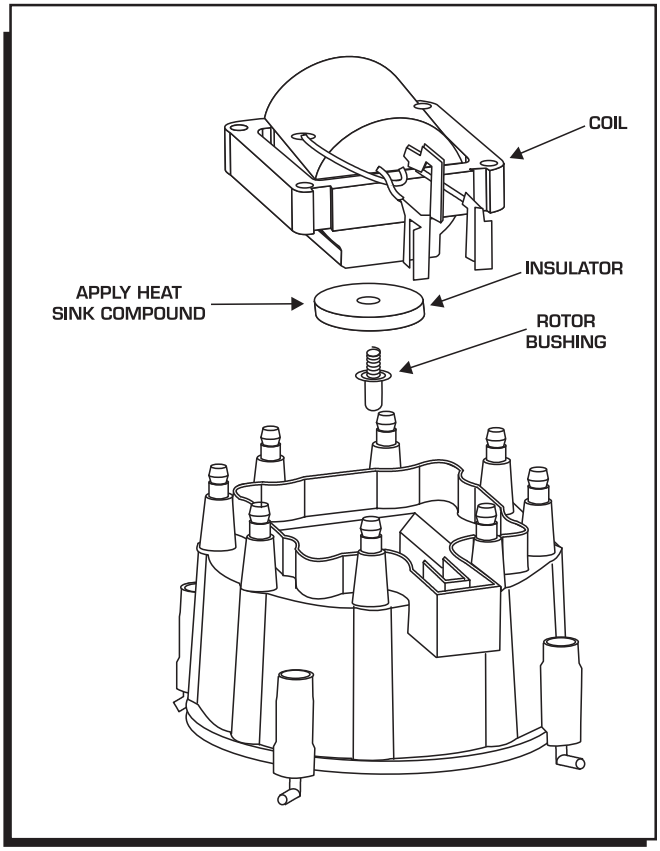

Figure 4 Installing the Coil Rotor Bushing and Insulator.

9. Connect a 12-gauge (minimum gauge) wire to the Bat terminal of the cap to supply the 12 volts to the HEI system.

Note: The stock wiring will not be able to handle the voltage and energy demands of the new module. A relay, such as MSD PN 8961, must be used to handle the high current in order to retain the factory On/Off ignition switch (Figure 6).

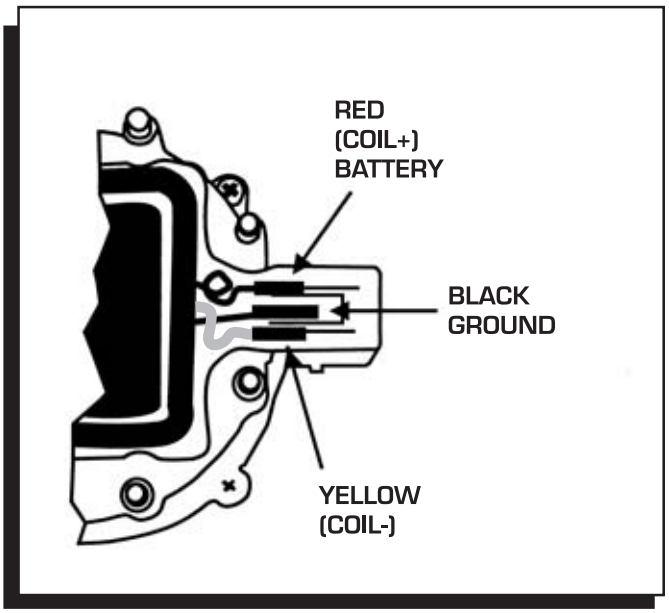

Figure 5 Installing the Coil's Wiring.

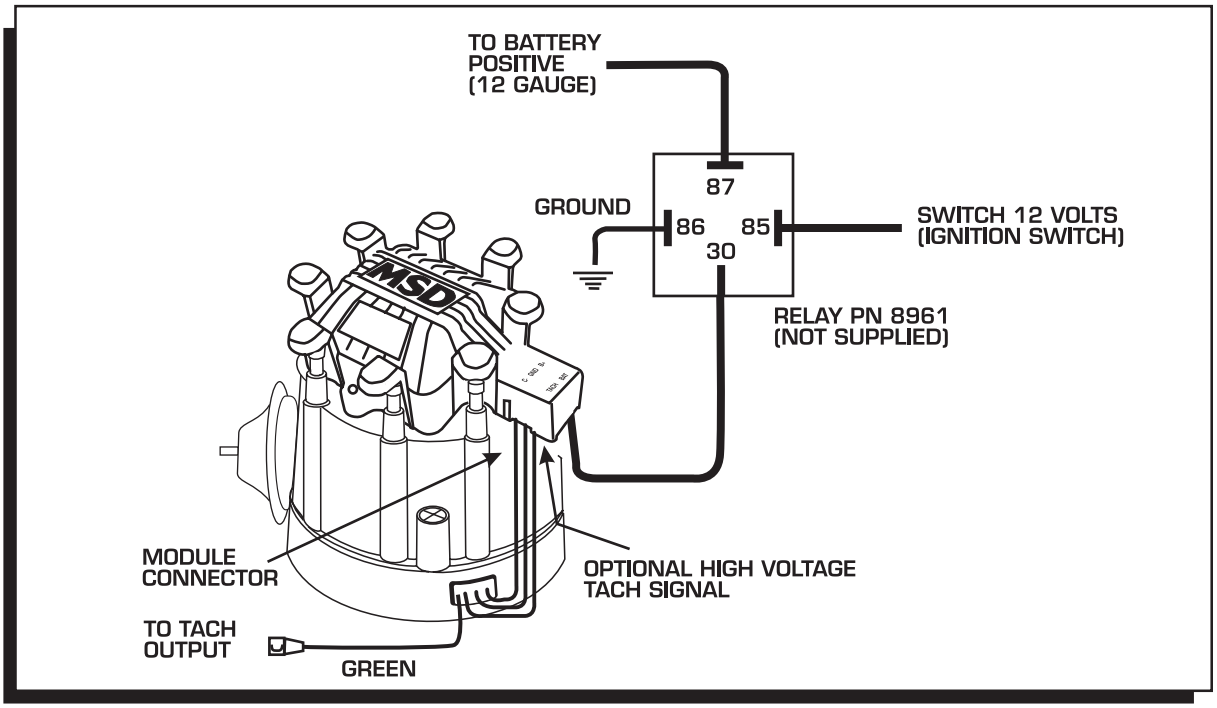

Figure 6 Connecting the Module and Tach Lead.

TACHOMETER INFORMATION

The Extreme Output HEI Module has a Green wire that provides a 12 volt, 20° tachometer signal that will trigger most tachometers. It is recommended to connect this lead to your tach's trigger input wire and check it's operation. If the tach requires a higher voltage signal, connect it to the Tach terminal on the HEI Cap (Coil-). An MSD Tach Adapter, PN 8920, could also be used with the Green wire output to boost the voltage signal.

TECH NOTES

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.