

## MSD Digital HEI Kit PN 8501

### Parts Included:

1 - Digital HEI Module, PN 83647  
1 - HEI Coil, PN 8225  
1 - HEI Cap, 84111  
1 - HEI Rotor, 84101  
1 - HEI Coil Cover, PN 84022

1 - Low Resistance Rotor Bushing and Insulator (assembled)  
1 - Tube of Heat Sink Compound  
1 - Small Screw Driver  
1 - Gray Tach Wire

## INSTALLATION

1. Remove the cap, rotor and module of the original distributor. Make sure the weights of the mechanical advance 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 and position the short black wire to ground with one of the mounting screws (Figure 1).
3. Install the rotor. If you are using an MSD HEI Pro-Billet Distributor, PN 8365, the supplied Rotor Adapter **must** be installed (Figure 2).

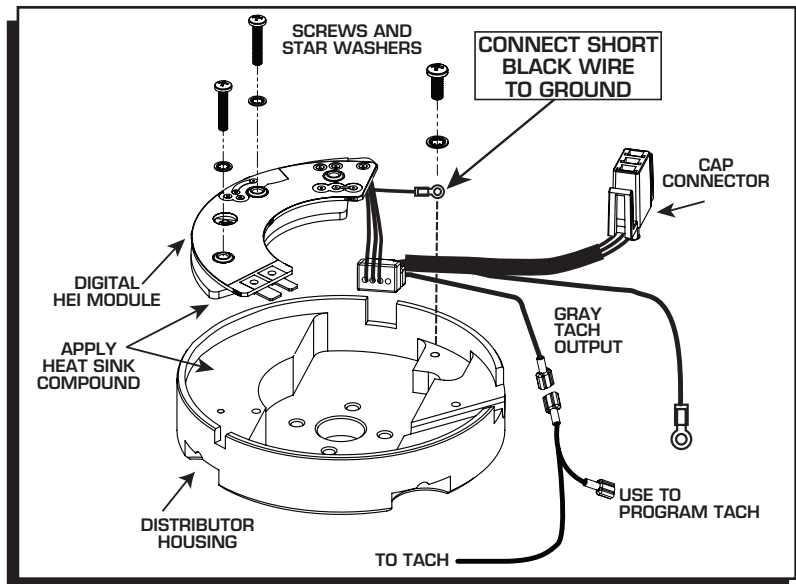


Figure 1 Installing the Module.

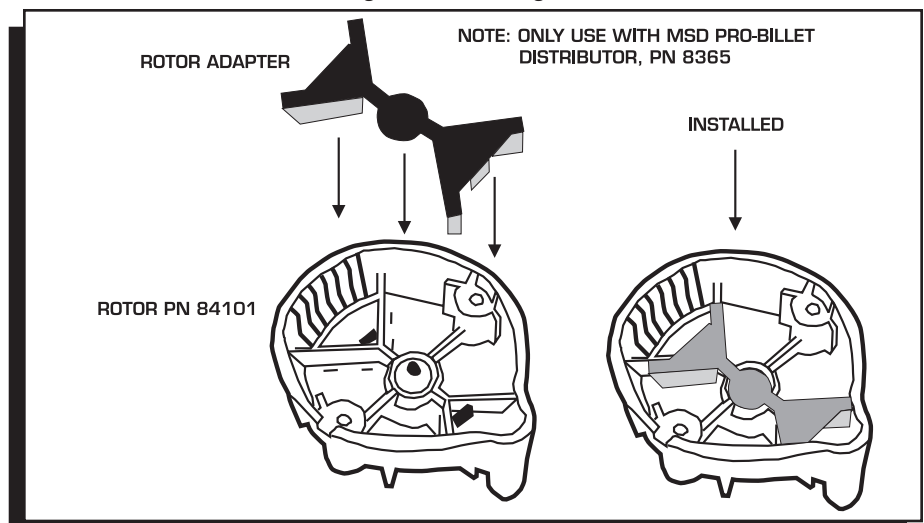


Figure 2 Installing the Rotor Adapter on an MSD PN 8365 HEI Distributor.

4. Install the cap and coil assembly (Figure 4).
5. Install the spark plug wires to their respective cap terminals, then install the MSD Dust Cover and its three retaining screws.
6. Connect the HEI Module harness to the Distributor Cap. See the Tachometer Wiring section before connecting your tachometer (Figure 5).
7. Connect a 14-gauge (minimum gauge) wire to the "BAT" terminal of the cap to supply the 12 volts to the HEI system (Figure 5).

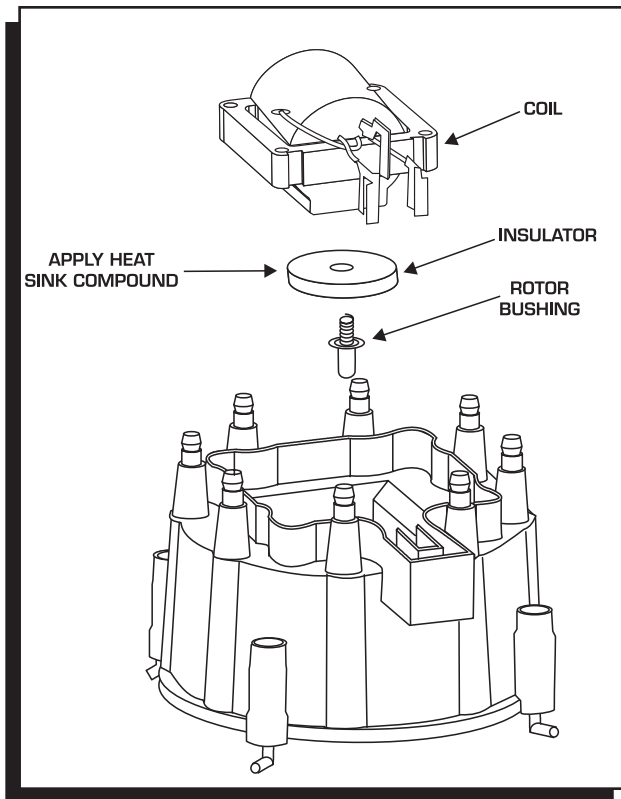


Figure 3 The Coil, Rotor Bushing and Insulator.

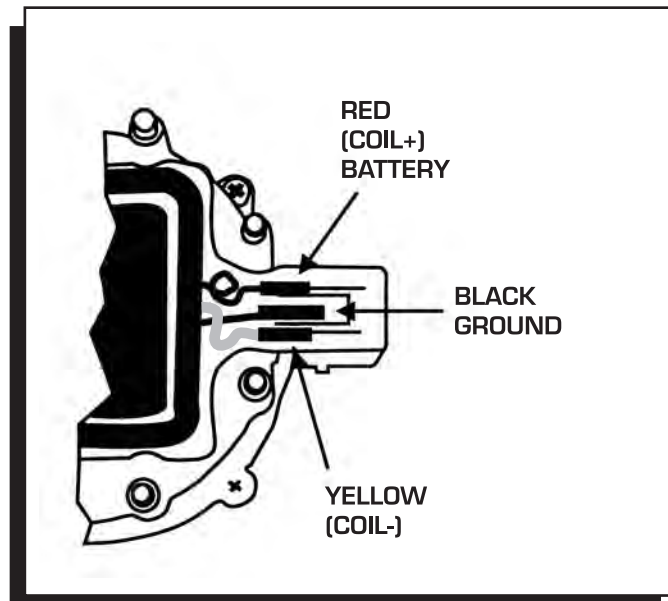


Figure 4 Installing the Coil's Wiring.

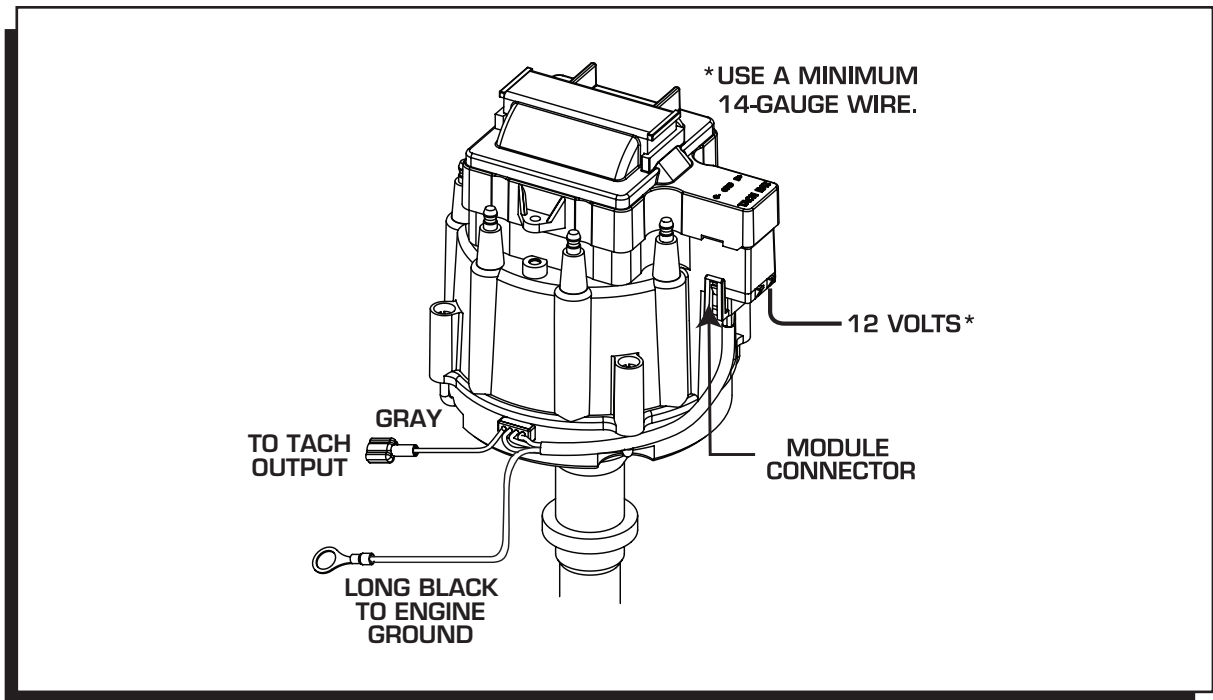


Figure 5 Connecting the Module and Tach Lead.

**TACHOMETER INFORMATION**

The Digital HEI Module has a Gray wire that provides a 12 volt square wave, 20° tachometer signal that will trigger most tachometers. It is recommended to connect this lead to your tach’s trigger input wire and check its operation. If the tach requires a higher voltage signal, connect its input wire to the Tach terminal on the HEI Cap (Coil-/Tach). Note that the rpm limiter is extremely accurate and due to the variety of tachometers available, there may be differences in the displayed rpm.

**PROGRAMMING THE REV LIMIT**

A tachometer is required to set the rev limit. The limit is programmed by running the engine at half the desired rpm, then momentarily grounding the Gray tach output wire from the MSD. A Gray jumper wire is supplied to connect to the tach with another tee-splice coming off to use for programming. A switch may also be installed to ease adjustments of the limiter (Figure 6). The default rpm limit is 10,000 rpm and the limit is adjustable from 2,000 - over 10,000 rpm.

1. Start the engine and bring the rpm to half the desired rev limit (for a 6,000 rpm limit, raise the rpm to 3,000).
2. While holding the rpm steady, short the Gray tach wire to ground for approximately one second. Note that the tach will go to zero while grounded.
3. The tach will now display the programmed rev limit amount for two seconds. If this value does not register on the tach, repeat the procedure and try a different ground source.
4. To confirm the rev limit value, turn the ignition key to the On position (without cranking the engine). The rev limit value will be displayed for two seconds on the tachometer.

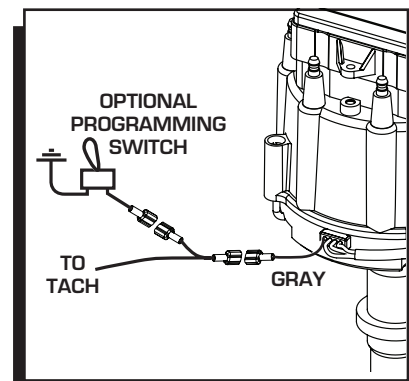


Figure 6

**Note:** This rpm confirmation only displays when the HEI Gray wire is being used to trigger the tachometer.