MSD HEAT Digital HEI Module
PN 83647

This Module is a performance replacement for GM's 4-Pin HEI Module. It features a programmable rev limiter for overrev protection. The Module will mount in a stock HEI housing (by removing the original condenser assembly) or in MSD's Pro-Billet HEI Distributor, PN 8365. A GM Coil can be used or for maximum performance, use MSD's HEI Coil, PN 8225.

Parts Included:	1 - Gray Tach Wire
1 - HEI Module, PN 83647	2 - Mounting Screws and Star Washers
1 - Tube of Heat Sink Compound	1 - Low Resistance Rotor Bushing, PN 8412

Note: A tachometer is required to program the rev limit.

INSTALLATION

1. Mark the location of the spark plug wires on the cap prior to removal.
2. Remove the cap, rotor, module and condenser (if equipped) from the original distributor.
3. Apply a liberal coat of the Heat Sink Compound to the aluminum base of the Module.
4. Route the wiring harness out of the housing and position the short Black wire to ground with one of the mounting screws (Figure 1).
5. Position the module in the distributor then locate the two screws and star washers to secure the module (Figure 1).
6. Reinstall the rotor and cap.
7. Connect the HEI Module harness to the Distributor Cap followed by the 12 volt (BAT) wire. This wire should be at least 14-gauge (Figure 2).
8. Connect the long black wire to the engine block for a solid ground.
9. See the next page for tachometer and rev limit programming.
10. It is recommended to install the supplied low resistance rotor bushing. This improves the spark transfer from the coil to the rotor tip. Remove the coil cover and coil. Replace the rotor bushing.
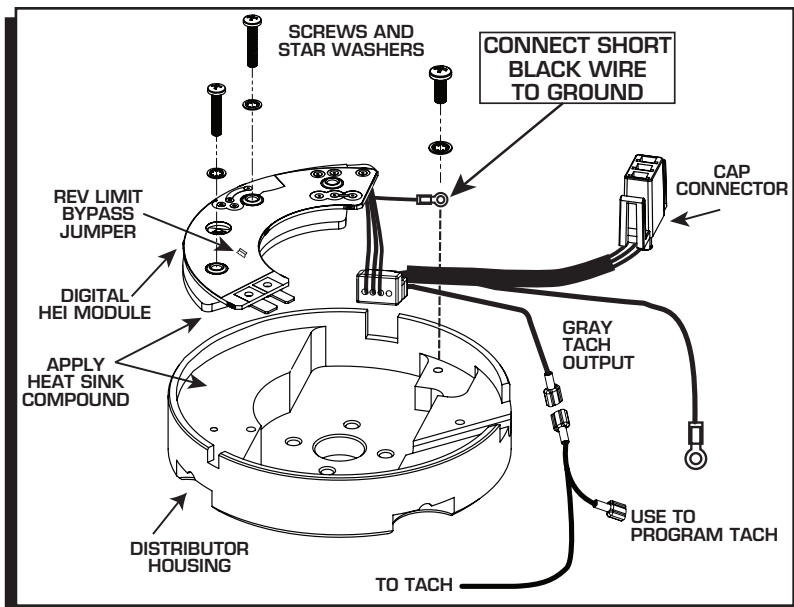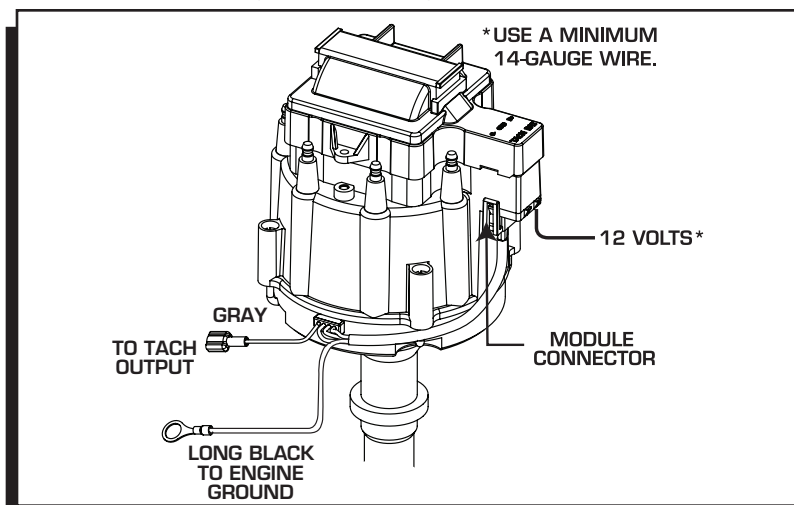

Figure 1 Installing the Module.

Figure 2 Connecting the Module and Tach Lead.

TACHOMETER INFORMATION

The HEAT 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.

No Rev Limit: To disable the rev limit function, cut and remove the jumper shown in Figure 1.

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 3). The default rpm limit is 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 3

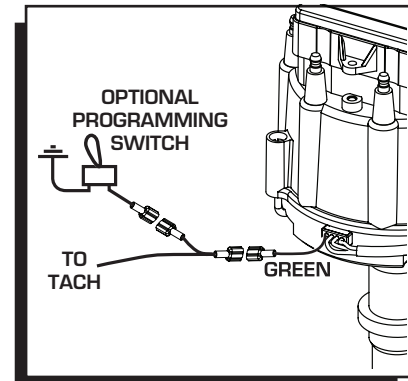**Note:** This rpm confirmation only displays when the HEI Gray wire is being used to trigger the tachometer.