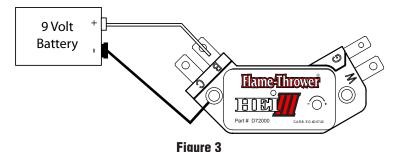
#### **REV LIMITER SETTING PROCEDURE**

NOTE: The Module has an adjustable rev limit, that is set with the dial potentiometer. This will require a small phillips screwdriver. The potentiometer has a total range of approximately 3/4 of a turn.

- 1. Remove distributor cap and rotor.
- 2. In order to set the rev limiter, the module must have 12V power, but the car must not be running. This can be done with the module in the car, by turning the key "ON" (engine off). Or it can be done with the module out of the car, by providing 9V or 12V to the terminal labeled "B", and attaching a ground to the mounting hole on the side of the module. See Figure 3.



3. Once power is supplied to the module, you have to get it into programming mode. To do that, you have to turn the potentiometer completely clockwise, then turn it completely counterclockwise. Once you do this, the existing rev limit is cleared, and the module is in the rev limit programming mode. The LED will flash a pattern of 1 long flash, followed by a short flash, then "off" for two seconds. It will repeat the pattern continuously. This means the rev limiter is disabled. The rev limit range is 4000-9000 RPM. To set the limit higher turn the potentiometer clockwise. The LED will blink the RPM it is set at, followed by a 2 second pause, with the following pattern.

| LED Blink Pattern   | Rev Limit             |
|---|-----------------------|
| 1 long followed by 1 short  | No Rev Limit          |
| X long followed by Y short  | X thousand, Y hundred |
| X long followed by a 2 second pulse   | X thousand            |
| Example: 5 Long (X) pulses followed by 2 short (Y) pulses will be 5200 RPM rev limit. |                       |

 Once you have selected the rev limit you want, and have verified that it blinks the right number of times, you must remove the power, or turn the ignition switch "off" and finish with the installation.

NOTE: Leaving the Rev-Limit dial in the full counterclockwise position disables the Rev-Limiter.

## **REV-LIMITER SPECIFICATIONS**

| Settings        | RPM'S |
|-----------------|-------|
| Minimum         | 4000  |
| Maximum         | 9000  |
| Factory Setting | 5500  |

#### LIMITED WARRANTY

PerTronix, LLC. warrants to the original Purchaser of its Flame-Thrower Race HEI-III Tune-up Kit that the product shall be free from defects in material and workmanship (normal wear and tear excluded) for a period of 12 months from the date of purchase.

If within the period of the foregoing warranty PerTronix finds, after inspection, that the product or any component thereof is defective, PerTronix will, at its option, repair such products or component or replace them with identical or similar parts PROVIDED that within such period Purchaser:

- 1. Promptly notifies PerTronix, in writing, of such defects.
- 2. Delivers the defective product or component to PerTronix (Attn: Warranty) with proof of purchase date; and
- 3. Has installed and used the product in a normal and proper manner, consistent with PerTronix printed instructions

THE FOREGOING LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THE FURNISHING OF A REPAIR OR REPLACEMENT COMPONENT OR COMPONENTS SHALL CONSTITUTE THE SOLE REMEDY OF PURCHASER AND THE SOLE LIABILITY OF PERTONIX WHETHER ON WARRANTY, CONTRACT OR FOR NEGLIGENCE, AND IN NO EVENT WILL PERTONIX BE LIABLE FOR MONEY DAMAGES WHETHER DIRECT OR CONSEQUENTIAL.



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# RACE HEI-III TUNE UP KIT INSTALLATION INSTRUCTIONS



## **GENERAL INFORMATION**

- See our website (www.pertronix.com) for latest product information.
- 2. For Racing use only.
- IMPORTANT: Read all instructions before starting installation.
- 4. WARNING!!! DO NOT USE WITH SOLID CORE IGNITION WIRES.
- 5. The HEI-III is not compatible as a trigger for other electronic boxes.
- 6. The HEI-III Rev-Limiter is preset at 5500 RPM's. The rev limiter can be user set to a minimum 4000 and a maximum 9000 RPM's.
- 7. All external resistors must be removed to achieve optimum performance from the HEI-III ignition system.
- 8. The HEI-III is compatible with coils that have a minimum of 0.32 ohms of primary resistance.

## **INSTALLATION**

- 1. Installation of the module can be done with the distributor on the car, or the distributor removed. It is easier to access components if you remove the distributor from the engine.
- 2. Check the base timing, and record that value.
- 3. Disconnect the battery negative terminal. Then disconnect power and tach from HEI distributor.
- 4. Disconnect the 3 wire plug between the distributor and cap.
- 5. Remove distributor cap and rotor.
- 6. Disconnect the pickup coil wiring harness from the module.
- 7. Remove mounting screws retaining HEI module and capacitor.
- 8. Remove HEI module, harness, and capacitor from distributor.
- 9. Clean the distributor housing, and module mounting position.
- 10. Apply a light layer of the included heat sink compound to the bottom of the HEI-III module.
- 11. Connect the new capacitor and wiring harness to the HEI-III module.

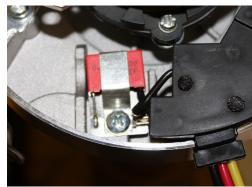
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- 12. Install the HEI-III module and harness into the distributor housing. The 2 plastic pins on the bottom of the module should fit into the holes on the distributor. Re-install mounting screws on the HEI-III module and make sure they are tight. NOTE: The module is grounded through these, so these MUST be installed for the HEI -III to work correctly.
- 13. Using the original screw, Install the capacitor & ground wire to the distributor housing. Note: The capacitor can be squeezed while tightening the retaining screw, it's normal, tighten the screw all the way (See Figure 1). Make sure that the wire is not crushed.

WARNING - Ensure that the noise filter capacitor & ground wire is correctly mounted. Make sure that the capacitor retaining screw is tight. FAILURE TO DO SO COULD RESULT IN DAMAGE TO THE HEI-III MODULE.





- 14. Re-install the pickup coil wiring harness to the HEI-III module.
- 15. The rev limiter is preset to 5500 rpm's from the factory. to verify this, OR to change/disable the rev limiter, go to the "REV-LIMITER SETTING PROCEDURE" section.
- 16. Reinstall distributor rotor and cap.
- 17. Connect the distributor harness, power, and optional tach wires to the distributor cap.
- 18. Reconnect the negative battery cable.
- 19. Using timing light, recheck your initial timing.

## ADVANCE SPRING AND WEIGHT INSTALLATION

- 1. Remove the advance springs from the mechanical advance assembly.
- 2. Notice the positioning of the mechanical advance weights.
- 3. Remove the E-clips center plate and weights from the advance plate.
- 4. Install the appropriate Teflon bushing onto the mechanical advance pins.
- 5. Install the new advance weight and center plate in the same configuration as the original (See Illustration).
- 6. Re-install the E-clips on to the advance pins.
- 7. Choose the advance springs that best suits the application from the chart (See Figure 2).

8. Install the appropriate springs onto the advance pins.

R.P.M. Spring 500 1000 2000 3000 4000 5000 6000 Copper 19° 24° 24° 24° 24° 12° 19° Silver 16° 21° 24° 14° 17° 10° 20° 21° Natural Crankshaft Degrees

Figure 2



**Counter Clockwise** 



Clockwise

# **TROUBLESHOOTING**

into the distributor cap.

10. Re-connect the battery (-) terminal.

the distributor cap.

proper order.

the port.

remove it from distributor.

the original mounting screws.

TIGHTEN THE TEFLON SCREWS.

1. Make sure the distributor is getting 12 volts, and that it is grounded properly through the hold down bracket to the engine block.

VACUUM ADVANCE LOCKOUT INSTALLATION

1. Disconnect the vacuum hose at the advance cannister. Trace

2. Remove the screws retaining the vacuum advance and

3. Install the vacuum advance lockout, secure in place using

4. Install the new rotor. **NOTE:** If the vehicle is used for high

R.P.M. operation, replace the metallic screws with the

provided Teflon screws and washers. DO NOT OVER

6. Use the provided screws to fasten the new coil dust cover to

7. Move the spark plug wires off the old distributor cap to the

8. Plug the distributor wire harness and the vehicle harness

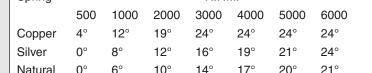
9. Verify that all connections are correct and tight.

new cap, one at a time. Make sure that the wires stay in the

5. Install the new distributor cap on distributor housing.

the hose back ti its source and remove the hose then plug

- 2. Double check that both HEI module screws are securely fastened to the distributor. NOTE: For proper operation the HEI-III module must be grounded properly to the housing.
- 3. Verify that the HEI-III module is getting power by trying to set the rev limit (See Rev-Limiter Setting Procedure). If the LED's are blinking, the module is getting power.
- 4. You can try swapping out the Race HEI Coil and HEI-III module for a standard HEI coil and standard HEI module. If the problem persists with the standard module, the problem is likely not related to the module, but to something else in the system.



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