

# Ignitor<sup>®</sup> III

## ELECTRONIC IGNITION

### 12-VOLT NEGATIVE GROUND INSTRUCTIONS

For Part Number: 7ML-181

#### GENERAL INFORMATION

1. See our website ([www.pertronix.com](http://www.pertronix.com)) for the latest product information.  
**IMPORTANT:** Read all instructions before starting installation.
2. **WARNING!!! DO NOT USE WITH SOLID CORE IGNITION WIRES.**
3. **WARNING!!! Ignitor III is NOT recommended for Marine use.**
4. The Ignitor III may not be compatible as a trigger for other electronic boxes.
5. The Ignitor 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.
6. All external resistors must be removed to achieve optimum performance from the Ignitor III ignition system.

**PRIOR TO INSTALLATION TURN IGNITION SWITCH OFF  
OR DISCONNECT THE BATTERY**

#### IGNITOR III INSTALLATION

**Note: A magnet sleeve is not required and the air gap between the face of the module and the cam is not adjustable.**

1. Remove cap and rotor from distributor. Do not disconnect spark plug wires from cap.
2. Examine cap and rotor for wear or damage. Replace as needed.
3. Disconnect the point wire from the (-) terminal of the Ignition coil.
4. Remove the nuts and washers from the breaker point wire stud and remove the stud.
5. Loosen the two horizontal nuts that retain the breaker plate, and remove the assembly. Do not remove the nuts and screws. **NOTE:** Some Mallory distributors hold the breaker plate in place with two vertical screws. Remove these screws in order to lift out the breaker plate.
6. The Ignitor III does not require any modification to the distributor. Therefore the breaker plate, points, condenser and hardware can be used as backup.
7. Clean all dirt and excess oil from the point cam.
8. Line up the slots in the Ignitor III plate with the mounting screw heads. The cut out should be near the hole in the distributor housing where the lead stud was located.
9. Press down on the Ignitor III plate while tightening the mounting screws and nuts.  
**NOTE:** If the breaker plate was held in place with vertical screws, use the two countersunk notches on the edge of the Ignitor III plate to fasten it. Make sure that the screw heads fit in the notches and are tight.
10. Pull the grommet into place. **NOTE:** Some distributors have undersized openings. Use a lubricant to ease installation. Be careful not to damage the wire or grommet.
11. Check that the plate is centered in the distributor and the module does not contact the point cam. Remove the excess wire from inside the distributor housing by gently pulling the wire through the grommet. Check to insure that the wire does not interfere with any moving parts.

#### LIMITED WARRANTY

PerTronix, Inc. warrants to the original purchaser of its products that the Ignitor III shall be free from defects in material and workmanship for a period of (30) 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 products 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 FORGOING LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING AND IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PURPOSE.

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



440 East Arrow Highway  
San Dimas, CA 91773  
909-599-5955  
[www.pertronix.com](http://www.pertronix.com)

- Install the distributor cap and rotor. Check to insure that all spark plug wires are seated securely in the distributor cap.
- See Wiring Instruction.

## WIRING INSTRUCTIONS

The Ignitor III can be used in conjunction with most ignition coils rated at 0.32 ohms or greater. For optimum performance we recommend our Flame-Thrower III canister style or HC e-core coil.

Many vehicles came equipped with ballast resistors or resistance wires. To achieve optimum performance we recommend removal of these components. Determine the proper wire length, and attach the provided terminals. (Use a wire crimping tool to achieve an adequate connection).

- To remove a ballast resistor, (normally white ceramic blocks 3 to 4 inches long), disconnect all wires on both ends of the ballast resistor. Remove the resistor from the vehicle and splice the disconnected wires together at a single point.
- To remove a resistance wire, trace the coil power wire, which was previously connected to the positive coil terminal, back to the fuse block. Bypass this wire with a 12-gauge copper stranded wire.

- Attach the black Ignitor III wire to the negative coil terminal. (See Figure 1)
- Attach the red Ignitor III wire to the positive coil terminal. (See Figure 1)
- Reconnect battery and make sure all wires are connected.
- The engine can now be started. Let the engine run for a few minutes and then set the timing in the conventional manner.

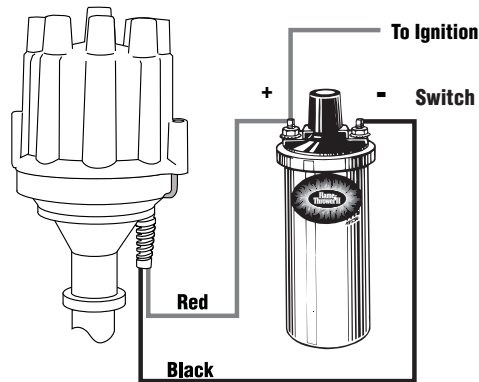


Figure 1

## REV-LIMITER SETTING PROCEDURE

- Remove distributor cap and rotor.
- Turn the ignition key to the 'ON' position. Do not try starting the engine.
- Turn the Rev-Limit dial clockwise until it stops. Turn the dial counterclockwise until it stops. A slow blinking of the LED indicates that the setting procedure has been initialized and that the Rev-Limit can be set.
- Turning the dial clockwise sets the Rev-Limit. After turning the dial, pause and watch the LED for verification of the Rev-Limit setting. Long flashes indicate 1000 RPM's and short flashes indicate 100 RPM's. For example, 6 long flashes followed by 2 short flashes means the Rev-Limit is 6200 RPM's. Continue turning the Rev-Limit dial until the desired Rev-Limit is reached.  
**NOTE: Leaving the Rev-Limit dial in the full counterclockwise position disables the Rev-Limiter.**
- Let the LED sequence thru at least three complete cycles. This verifies the correct setting and prepares the unit for permanent storage of the Rev-Limit.
- Turn the ignition key off, this signifies to the Ignitor III that the Rev-Limit procedure is complete. **Note: The Ignition key MUST be turned off or the engine will not start.**
- Your rev limit is now set and will not change until you go through this procedure again.
- Re-install cap and rotor.

**NOTE:** Setting the rev limit may be done effectively and easily on a bench or table. Connect the module to a 9-volt battery as shown in figure 2. Then follow the setting procedure outlined above.

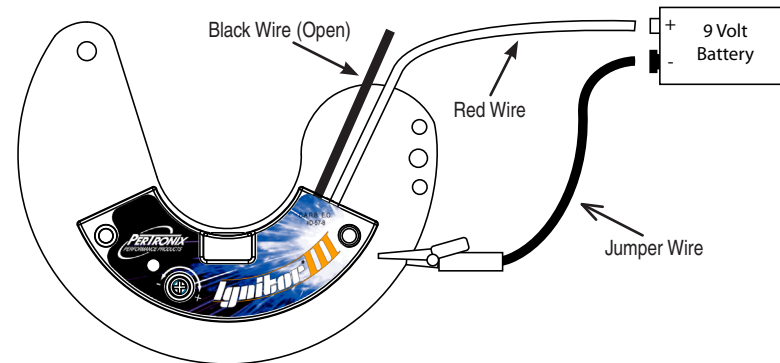


Figure 2

### REV-LIMITER SPECIFICATIONS

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

## COMMON QUESTIONS AND ANSWERS

Q. The engine will not start or runs rough. What is the problem?

A. Check all connections to insure that they are tight, and in the proper location. Visually check and measure all grounds. Remove paint and corrosion from around the distributor hold down bracket. Make sure that the Ignitor III red and black wires are connected properly. The Ignitor III will shut down if the wires are incorrectly attached. The Ignitor III is designed to sense high current levels. Check all wires for shorts, correct polarity and that the ignition coil's primary resistance level is acceptable. For more detailed information log on to [www.pertronix.com](http://www.pertronix.com) or contact the technical department at (909) 599-5955.

Q. The vehicle will start, but then dies. After waiting, it starts. What is wrong?

A. The Ignitor III may have a "Low Voltage Problem." If the voltage supplied to the red distributor wire is insufficient, the system may run for a period of time, and then shut down as the voltage drops due to engine heat. The period may vary from minutes to hours depending on available voltage and wiring condition.

Q. How do I check for a "Low Voltage Problem" or determine if I am getting adequate voltage?

A. To quickly test for a "Low Voltage Problem" or for adequate voltage (**Note: This is only a test and is not intended as a permanent fix**) attach a jumper wire from the positive battery terminal to the positive terminal of the coil. Try to start the vehicle. If the vehicle starts, low voltage is present. **Note: If the engine starts. The engine will not turn off unless the jumper wire is removed from the positive battery terminal.** Check connections and insure all external resistors have been removed. For more detailed information on how to locate the source of the voltage drop log on to [www.pertronix.com](http://www.pertronix.com) or contact the technical department at (909) 599-5955.

Q. How do I check my coil for primary resistance?

A. Remove all wires from the coil. Set the ohmmeter to the lowest scale. Attach one lead of the meter to the positive coil terminal. Attach the other lead to the negative coil terminal. The Ignitor III is compatible with coils having a resistance of 0.32 ohms or greater.

Q. May I modify the length of the wires?

A. Yes, you may cut the wires to any length your application requires. You may also add lengths of wire if needed (20-gauge). Make sure that all wire splices are clean and that the connections are tight and insulated.

Q. Will the Ignitor III work with aftermarket capacitive discharge boxes?

A. **We recommend the Ignitor or Ignitor II as a trigger source for a capacitive discharge box.** For more detailed information log on to [www.pertronix.com](http://www.pertronix.com) or contact the technical department at (909) 599-5955.

Q. Will the electronic shift assist in an OMC boat work with the Ignitor III?

A. The Ignitor III will work with all OMC stern-drive applications, when our "diode fix" is used. If you've purchased a kit that didn't include the "diode fix" diagram, call our tech line.

Q. How can I receive additional help?

A. Check our web site for current trouble shooting tips and up to date technical information. Log on to [www.pertronix.com](http://www.pertronix.com). You may also contact our tech line at (909)599-5955.