

Ignitor COMMON QUESTIONS AND ANSWERS

Q. A magnet sleeve was not included in the kit, do i need one?  
A. No, the Lobe Sensor Ignitor that is used in this kit does not use a magnet sleeve, it uses the point cam to trigger the module.

Q. What is the first thing I should check if the engine would not start?  
A. Make certain all wires are connected securely to the proper terminals.

Q. The engine will not start or runs rough. Are there any tests I can do?  
A. Yes, remove the black wire from the ignition switch wire. Connect jumper wire from the negative (-) side of battery to the Ignitor black wire. If the engine starts and runs well, you may have high resistance through your Ignition switch. This is just a test. Not intended for permanent installation.

Q. How can I fix a high resistance problem?  
A. High resistance can be caused by an external ballast resistor, resistance wire or in some cases a resisted ignition switch. If the proper coil is used, remove or bypass all external resistors.

Q. Should I remove the starter bypass wire?  
A. No, the starter bypass wire is needed to provide voltage while starting (cranking).

Q. What type of coil do I need?  
A. The ignitor is compatible only with a “points type” coil. Eight cylinder engines require a minimum of 0.6 Ohms of resistance in the primary circuit. Four & six cylinder engines require a minimum of 1.5 Ohms of resistance (primary).

Q. How do I check my coil for resistance?  
A. First you need an ohmmeter. Remove all the wires from the coil. Attach the ohmmeter to both the positive and negative terminals. The reading should be 0.6 Ohms or greater for eight cylinder engines and 1.5 Ohms or greater for four & six cylinder engines. (Your local auto parts store can do this for you if you don’t have an ohmmeter)

Q. What do I do if my coil does not have enough resistance?  
A. You may purchase and install a ballast resistor from your local auto parts store. You may also choose to purchase a Flamethrower 40,000-volt coil, which provides resistance internally. Note: Many vehicles come with resistor wire or a ballast resistor. These applications do not need an additional resistor.

Q. What happens if you leave the ignition switch on when the engine is not running?  
A. This can cause your coil to overheat, which may cause permanent damage to the coil and the ignitor.

Q. May I modify the length of the wires?  
A. Yes, you can cut the wires to any length your application may require. You may also add length of wire if needed (20-gauge wire). Please make sure all wire splice are clean and connections are secure.

Q. How can I get additional help?  
A. Call our tech line (909-547-9058) for any further instructions or questions.

|                                                                                    |            |            |            |
|------------------------------------------------------------------------------------|------------|------------|------------|
| For Part numbers:                                                                  |            |            |            |
| 1168LSP6                                                                           | 1241LSP6   | 1762LSP6   | 1763LSP6   |
| 2163LSP6                                                                           | 2563LSP6   | MR-148LSP6 |            |
| LU-146LSP6                                                                         | LU-168LSP6 | LU-169LSP6 | LU-241LSP6 |
| NOTE: THE LOBE SENDING IGNITOR DOES NOT USE A MAGNET SLEEVE TO TRIGGER THE MODULE. |            |            |            |

| FLAME-THROWER COIL APPLICATIONS                                                                                      |                |           |                    |                                |        |       |
|----------------------------------------------------------------------------------------------------------------------|----------------|-----------|--------------------|--------------------------------|--------|-------|
| Use with:                                                                                                            | System Voltage | Cylinders | Primary Resistance | Recommended Flamethrower Coils |        |       |
|                                                                                                                      |                |           |                    | Black                          | Chrome | Epoxy |
| Ignitor                                                                                                              | 6V             | 4 & 6     | 1.5 ohms           | 40011                          | 40001  | 40111 |
| NOTE: REMOVE OR BYPASS EXTERNAL BALLAST RESISTOR/RESISTANCE WIRE WHEN INSTALLING THE RECOMMENDED FLAME-THROWER COIL. |                |           |                    |                                |        |       |

| LIMITED WARRANTY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Pertronix, Inc. Warrants to the original Purchaser of its solid-state ignition system (product) that the Ignitor, magnet assembly and wiring (components) shall be free from defects in material and workmanship for a period of (30) months from the date of purchase.</p> <p>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:</p> <ol style="list-style-type: none"><li>Promptly Notifies Pertonix, in writing, of such defects.</li><li>Delivers the defective products product or component to Pertronix (ATTN: Warranty) with proof of purchase date; and</li><li>Has installed and used the product in a normal and Proper manner, consistent with Pertronix printed instructions.</li></ol> <p>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.</p> <p>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.</p> |



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GENERAL INFORMATION

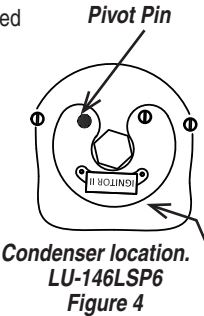
- IMPORTANT:** Read all instructions before starting installation.
- The Lobe sensor Ignitor is designed specifically for the application and distributor numbers that are listed in the application guide. Any modification to this component will void the warranty.
- The Lobe Sensor Ignitor does not require a magnet sleeve to trigger the module.
- The Ignitor is compatible only with a “resisted style” coil. Four and Six cylinder engines require a minimum of 1.5 ohms of primary resistance.
- If your Ignition coil has the proper primary resistance, remove or bypass all external resistors. Note: Do not remove external resistors if the coil primary resistance is lower than specified.
- See our website ([www.pertronix.com](http://www.pertronix.com)) for the latest product information.

DISTRIBUTOR DISASSEMBLY

- PRIOR TO INSTALLATION TURN IGNITION SWITCH OFF OR DISCONNECT THE BATTERY.
- Remove distributor cap and rotor from distributor. Do not disconnect the spark plug wires from the cap. Examine parts for excessive wear. Replace as needed.
- Disconnect the point wire from the negative (-) side of the coil.
- Remove and retain the point wire, point and condenser. Installing the Ignitor does not alter the internal configuration of your distributor. Therefore, the point, condenser and hardware can be used as backup.
- Clean all dirt and excess oil from the breaker plate and point cam.

IGNITOR II INSTALLATION

- PART NUMBER 1168LSP6 & 2163LSP6,** Position the Ignitor plate over the point pivot pin and eccentric adjustment screw, rotate eccentric screw as needed to line up screw hole to breaker plate. Confirm that the Ignitor plate is flat and fits without modifications. Fasten the plate into place using the original point screw.
- No air gap adjustment required.
- PART NUMBERS LU-146LSP6,** The condenser may be soldered to the breaker plate on some distributors. Flex the condenser back and forth to remove the condenser. Position the Ignitor plate over point pivot pin and line up hole on adapter plate to screw hole on the breaker plate. See figure 4. Confirm that the Ignitor plate is flat and fits without modifications. Fasten the plate into place using the original point screw.
- No air gap adjustment required.
- PART NUMBERS LU-168LSP6 & LU-169LSP6,** Adjust the distributor timing micro adjustment to roughly the middle of the travel. Position the Ignitor plate over point pivot pin and line up hole on adapter plate to screw hole on the breaker plate. Confirm that the Ignitor plate is flat and fits without modifications. Fasten the plate into place using the original point screw.
- No air gap adjustment required.



- **PART NUMBER: LU-241LS**, Remove the module from the adapter plate, Position the adapter plate over the point screw holes on the breaker plate. Note: Both point screw holes will be used to secure adapter plate to the breaker plate. Confirm that the Ignitor plate is flat and fits without any modification. Fasten the plate in place using the screws provided. Install the module onto the adapter plate and secure using the nuts and washers provided.
- No air gap adjustment required.
- **PART NUMBER MR-148LSP6**, Remove the screws retaining the breaker plate and remove the complete breaker plate assembly from the distributor housing. Position the Ignitor II plate into distributor housing. Line up cutout on the Ignitor plate to the wire exit hole in the distributor housing. Fasten the plate in place using the original screws.
- No air gap adjustment required.
- **PART NUMBER 1762LSP6**, Position the adapter plate over the point screw holes on the breaker plate. Note: Both point screw holes will be used to secure adapter plate to the breaker plate. Confirm that the Ignitor plate is flat and fits without any modification. Fasten the plate in place using the screws provided.
- No air gap adjustment required.
- The original grommet must be modified for use with the Ignitor. Cut from above each wire down into the grommet, making two parallel cuts. (See figure 5).
- Remove both point wires from grommet, and insert both Ignitor wires in the same manner.
- **PART NUMBER 1763LSP6**, Position the Ignitor plate over point pivot pin and line up hole on adapter plate to screw hole on the breaker plate. Confirm that the Ignitor plate is flat and fits without modifications. Fasten the plate into place using the original point screw.
- No air gap adjustment required.
- **PART NUMBER 2563LSP6**, Position the Ignitor plate over the condenser mounting point of the breaker plate. There are both single and dual screw condenser mounting configurations (See Figure 6). The Ignitor plate fits over both types. Confirm that the Ignitor plate is flat and fits without any modification. Fasten the plate in place using the provided screw or screws. **NOTE: IAP Series distributors require the removal of the point adjustment eccentric screw.**
- No air gap adjustment required.
- Distributor ground wire needs to be re-connected when the Ignitor is installed.
- **CAUTION:** Care must be taken to insure wires do not interfere with moving parts. Use the provided zip tie to secure wires to the original bracket.
- Reuse the original grommet by cutting an exit hole for both wires. Insert the wires through the new hole.
- **PART NUMBER 1241LSP6**, Position the Ignitor plate over the condenser screw hole and one of the point screw holes. Confirm that the Ignitor plate is flat and fits without any modifications. Attach the ground wire to the plate using one of the provided screws. Attach the other end of the ground wire to the perimeter breaker plate screw. Use the provided feeler gauge to set the module to cam air gap. Use the second screw to hold the plate firmly in place. Insert the Ignitor red and black wires through the hole in the base of the distributor housing. Install grommet over the Ignitor wires and into distributor housing.
- No air gap adjustment required.

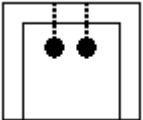


Figure 5

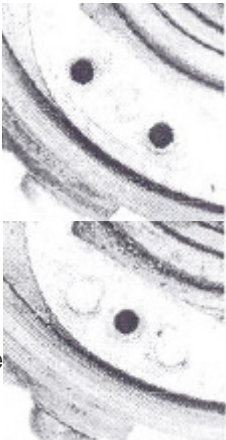


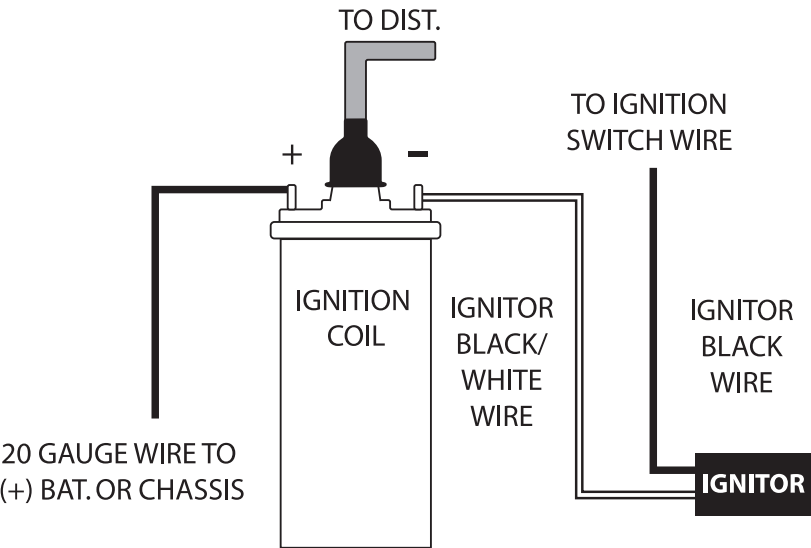
Fig. 6

- 6 **CAUTION:** Care must be taken to insure wires do not interfere with moving parts.
- 7 Install distributor rotor and cap. Note: Ignitor Kit #LU-146LS includes a new rotor. Make sure all spark plug wires are securely attached.
- 8 Go to Wiring Instructions.

### WIRING INSTRUCTIONS

**NOTE: A BALLAST RESISTOR OR RESISTOR WIRE MAY OR MAY NOT BE INCLUDED IN THE ORIGINAL EQUIPMENT.**

1. Remove the ignition switch wire from the negative coil terminal. Connect the black Ignitor wire directly to the ignition switch wire.
2. Connect the Ignitor black/white wire to negative (-) side of the ignition coil.
3. Connect an insulated, AWG 20 copper stranded wire from the positive coil terminal to the positive battery or chassis.
4. The black/white Ignitor wire and the AWG 20 copper wire should be the only wires connected to the coil.
5. Make sure all wires are connected correctly, and reconnect battery.
6. The engine can now be started. Let the engine run for a few minutes and then set the timing in the conventional manner.



### POWER AND GROUND TESTS

It is imperative that the power and grounds be checked as part of the installation procedure. After installing the kit within the distributor and with the distributor in the engine, using a digital multi-meter measure the resistance from the aluminum plate holding the module to battery (-). The net resistance must be less than 0.2 ohms. Set meter to lowest ohms setting. The net resistance is the meter reading minus the resistance of the meter leads. If the net resistance is greater than 0.2 ohms the source of the faulty ground must be found and fixed. Usually the source of the bad ground is easily found by holding one probe on an original location and moving the second probe toward the static probe. Where the resistance drops identifies the source.

|                                                                     |          |
|---------------------------------------------------------------------|----------|
| Maximum resistance from Ignitor plate to battery negative terminal. | 0.2 ohms |
| EXAMPLE:                                                            |          |
| Resistance from Ignitor plate to battery negative (-) terminal.     | 0.4 ohms |
| Resistance of meter leads                                           | 0.2 ohms |
| After subtracting meter lead resistance, your total resistance is:  | 0.2 ohms |

### VOLTAGE TESTS

1. Connect voltmeter red lead to the positive (+) terminal of the coil and the black lead of the voltmeter to the negative (-) terminal of the coil.
2. Crank engine and note voltmeter reading.
3. Connect jumper wire from the negative (-)terminal of the coil to a the negative (-) terminal of the battery.
4. Turn Ignition switch “on” and note voltage reading.
5. SEE CHART BELOW FOR SPECIFICATIONS.
6. IGNITION CIRCUIT TEST: Remove Ignitor black wire from the Ignition wire. Connect the Ignitor black wire to the negative (-) terminal of the coil. Crank engine and see if engine starts. If engine starts, you have too much resistance in the Ignition circuit, repair as necessary. (This test is not a permanent fix).

|                                                                                                                                              | Minimum | Maximum |
|----------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|
| IGNITION SWITCH “ON”. <b>Check wire from positive (+) terminal of the coil to the chassis/engine.</b>                                        | 5.2V    | N/A     |
| CRANKING <b>“Note: Low voltage can be caused by poor connections, bad battery cables, weak battery and or starter current draw too high”</b> | 5.2V    | N/A     |
| Engine Running                                                                                                                               | N/A     | 9.0V    |