

COMMON QUESTIONS AND ANSWERS
(The Lobe Sensor Ignitor II does not use a magnet sleeve)

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

A. Perform Power and Ground Checks. Check all connections to insure that they are tight, and in the proper location. Check all grounds; if a distributor ground wire was removed make sure that it was reattached properly. Make sure that the red Ignitor II wire is supplied with a full 12 volts. The Ignitor II is designed to sense high current levels, and shut off before damage occurs. Check all wires for shorts, correct polarity and that the ignition coil's primary resistance level is acceptable.

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

A. Perform Power and Ground Checks. The Ignitor II may have a "Low Voltage Problem." If the voltage supplied to the red Ignitor II 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. To remedy this condition refer to steps 2-4 of the wiring instructions.

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

A. Perform Power and Ground Checks. Also, to quickly test for a "Low Voltage Problem" or for adequate voltage, remove the Ignitor II red wire from the coil positive terminal. Attach a jumper wire from the battery positive terminal to the Ignitor II red wire. Try to start the vehicle. If the vehicle starts with this test refer to steps 2-4 of the wiring instructions for further information.

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.

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 the connections are tight.

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

A. Yes, the Ignitor II is compatible with most CD boxes in the same respect as points. Use the CD box wiring instructions for point systems and treat the Ignitor II black wire as a point wire. The Ignitor II red wire should be attached to the 12-volt power source.

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

A. The Ignitor II 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. You may also contact our tech line at (909-547-9058)

SPECIFICATIONS & PART NUMBERS:			
PART NUMBER	Ignitor II air gap adjustment	PART NUMBER	Ignitor II air gap adjustment
91168LS	Not Adjustable	9LU-146LS	Not Adjustable
91241LS	0.030" (Min 0.010, Max 0.050)	9LU-241LS	Not Adjustable
91762LS	Not Adjustable	9LU-168LS	Not Adjustable
91763LS	Not Adjustable	9LU-169LS	Not Adjustable
92163LS	Not Adjustable	9MR-148LS	Not Adjustable
92563LS	Not Adjustable		
<ul style="list-style-type: none"> Note: Some hardware kits include a spacer ring, do not use it, it's not needed. Recommended coil primary resistance: 0.45 ohms minimum, 1.0 ohms maximum. The Ignitor II will work with higher resisted coils. 			

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"> Promptly Notifies PerTronix, in writing, of such defects. Delivers the defective products product or component to Pertronix (ATTN: Warranty) with proof of purchase date; and Has installed and used the product in a normal and Proper manner, consistent with Pertronix printed instructions. <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. 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>	



440 E. Arrow Highway, San Dimas, CA. 91773
909-599-5955 www.pertronix.com

Ignitor II[®]

ELECTRONIC IGNITION

12-VOLT NEGATIVE GROUND INSTRUCTIONS

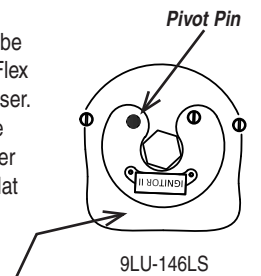
LOBE SENSOR IGNITOR II

GENERAL INFORMATION

- IMPORTANT: Read all instructions before starting installation.
- DO NOT USE WITH SOLID CORE SPARK PLUG WIRES.
- The Lobe sensor Ignitor II 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 II does not require a magnet sleeve to trigger the module.
- The Ignitor II ignition can be used in conjunction with most ignition coils rated at 0.45 ohms or greater.
- All external resistors must be removed to achieve optimum performance from the Ignitor II ignition system.
- The Ignitor II is compatible as a trigger for most electronic boxes.
- See our website (www.pertronix.com) for the latest product information.

IGNITOR INSTALLATION

- 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.
- Install Ignitor II onto breaker plate:
 - PART NUMBER 91168LS & 2163LS, 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: 9LU-146LS, 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 2. Confirm that the Ignitor plate is flat and fits without modifications. Fasten the plate into place using the original point screw.



Condenser location.

9LU-146LS

Figure 2

- PART NUMBERS 9LU-168LS & 9LU-169LS, 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: 9LU-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 9MR-148LS, 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 91762LS, 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.
- 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 2).
- Remove both point wires from grommet, and insert both Ignitor wires in the same manner.
- PART NUMBER 91763LS, 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 92563LS, 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 2). 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.

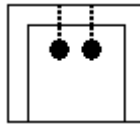


Figure 2

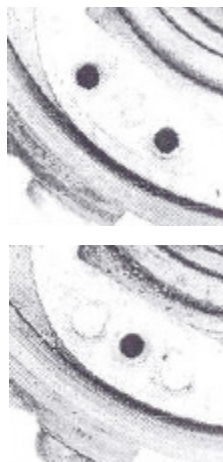


Fig. 3

- PART NUMBER 91241LS, 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.

WIRING INSTRUCTIONS

1. The Ignitor II ignition can be used in conjunction with most ignition coils rated at 0.45 ohms or greater. For optimum performance purchase and install the Flamethrower II high performance coil.
2. Attach the black Ignitor II wire to the negative coil terminal. Attach the red Ignitor II wire to the positive coil terminal. (See Figure 3)

A. Recommended Installation: Many vehicles came equipped with ballast resistor or resistance wire. To achieve optimum performance from the Ignitor II ignition system, we recommend removal of these components.

- 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.

B. Alternative Installation: The Ignitor II can also be installed in applications retaining the ballast resistor or resistance wire.

- Attach the Ignitor II black wire to the negative coil terminal. Attach the Ignitor II red wire to the ignition side of resistance, or any 12 volt ignition power source.

3. Check to insure that the polarity is correct, and that all connections are tight.
4. Re-connect the battery.
5. Perform the Power and Ground tests. Refer to the Power and Ground test procedure.
6. Start the engine and allow it to reach normal operating temperature. Check ignition timing, and adjust to the desired setting.

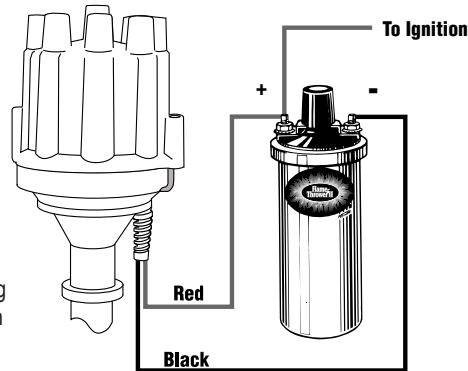


FIGURE 3
(WITHOUT EXTERNAL RESISTOR)

- 7 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.
- 8 Install distributor rotor and cap. Note: Ignitor Kit #9LU-146LS includes a new rotor. Make sure all spark plug wires are securely attached. **Warning! DO NOT USE WITH SOLID CORE SPARK PLUG WIRES.**
- 9 Go to Wiring Instructions.

POWER & 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 TEST		
1. Do not disconnect wires from Ignition coil and place ignition switch in the "off" position.		
2. Connect jumper wire from negative (-) terminal of the coil to a "good" engine ground.		
3. Connect voltmeter red lead to the positive (+) terminal of the coil and the black lead to a "good" engine ground.		
4. Turn "ON" the ignition switch and note voltage reading on the voltmeter. Quickly read the voltage and turn ignition "OFF". Leaving ignition "ON" for an extended period could result in permanent damage to the Ignitor.		
5. SEE CHART BELOW FOR SPECIFICATIONS.		
Note: Low voltage can be caused by poor connections, poor contacts in the ignition switch, ballast resistor, and or a resistance wire in the wiring harness (Factory Installed).		
	Minimum	Maximum
Ignition Switch "ON"	8.0V	N/A
Cranking	8.0V	N/A
Engine Running	N/A	16.0V