Johnson/Evinrude

Prestolite Battery Ignitions with Pickup Sensors

1968-1972 100, 115 and 125 HP Battery-Powered Models (With 113-8362 Power Pack)

DUE TO THE CONSTRUCTION OF THE BATTERIES, DO NOT USE AUTOMOTIVE, MAINTAINENCE FREE OR LOW MAINTAINENCE BATTERIES FOR THIS APPLICATION! OVERCHARGING CAN CAUSE SEVERE DAMAGE TO THE IGNITION MODULE.

(NOTE) All clipper modules, surge suppressors and safety circuits should be removed. After removing, the ignition wire (Red or Purple) must be connected directly to the ignition switch terminal (providing 12V from ignition switch).

1. Clean all battery connections and engine grounds.
2. Check wiring as follows:

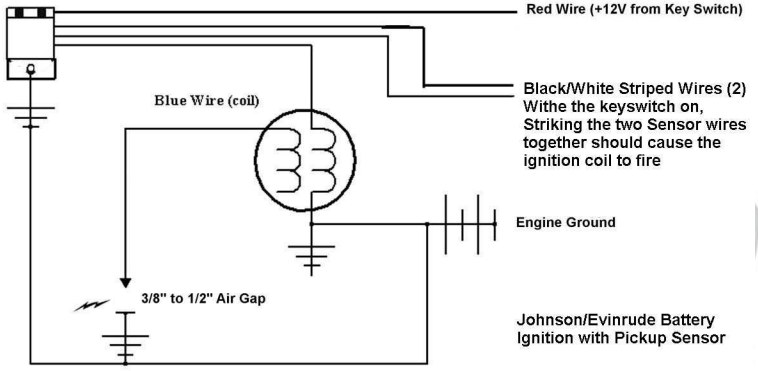
Except 1967

Pack Wire Color	Function
Red or Purple	12V from key switch
Blue	Positive to ignition coil
Black/White (2)	To trigger sensor
Black	Engine Ground
Green/Black*	Anti-reverse Spring

* (1972 models only).

1967

Pack Wire Color	Function
Red or Purple	12V from key switch
Green	Positive to ignition coil
Blue (2)	To trigger sensor
Black	Engine Ground



NO SPARK ON ANY CYLINDER:

1. Connect a spark gap tester to the high tension lead coming from the ignition coil and set it to approximately ½". When you crank the engine over, if it sparks while the spark gap tester is connected to the coil and does not spark through the spark plug wires – there is a problem in the distributor cap, rotor button or spark plug wires.
2. Check the DC voltage present on the Purple (or Red) wire at cranking. It MUST be at least 9.5 volts. If not, there is a problem in the harness, key switch, starter or battery.
3. Check the Anti-reverse spring around the crankshaft. Make sure it is not shorting out the sensor pickup.
4. Check DVA voltage on the Blue (or Green) wire going to the coil while connected, it should be approximately 200 volts at cranking.
5. Disconnect the sensor wires. Turn the ignition switch on and strike the sensor wires together. The unit should spark each time. If it does, this usually means the CD module is good. Check the sensor and sensor air gap.
6. Make sure the triggering ring is the correct one for the type ignition being used. Phase II ignitions require the silver rotor for 1967 models and the Phase II Rotor with wide gaps between the lobes for 1968-1971 engines.

Phase One Rotor

Phase Two Rotor

133-5107

1967 Belt Driven Rotor (must be silver color for Phase II packs)

7. Reset the Phase II Rotor air gap to 0.020 in. If this allows the pack to spark, leave the gap at that setting.

SPARKS OUT OF TIME:

1. 1967 Models- Check the rotor inside the distributor cap. It should be the Silver colored one – NOT the Brass colored one.
2. Connect a spark gap tester to the high-tension leads coming from the distributor cap and set the gap to approximately 7/16". Align the rotor with #1 spark plug wire. Turn the ignition switch on and strike the sensor's wires together. Only the #1 spark plug wire should spark. If any of the other spark plug wires have spark, there is a problem in the distributor cap. Repeat the test for the other cylinders.

MID-RANGE MISS:

1. Check the battery voltage at approximately 3500-RPM, MAXIMUM reading allowable is 16 volts. Over 16 volts will damage the ignition. Check for loose connections or a bad battery.
2. 1968-1972 Models – Check the Rotor. It should be the Phase II. The Phase I can cause this problem.
3. Connect a spark gap tester to the high-tension leads coming from the distributor cap and set the gap to approximately 7/16". Align the rotor with #1 spark plug wire. Turn the ignition switch on and strike the sensor's wires together. Only the #1 spark plug wire should spark. If any of the other spark plug wires have spark, there is a problem in the distributor cap. Repeat the test for the other cylinders.

