KIRK ENGINES, INC.

The following instructions are for the installation of the 6 volt, positive ground PointSaver™ ignition module.

Please note – The PointSaver™ is constructed of the highest available quality of solid-state components. It is over-designed for high reliability and durability in service. However, **it can be ruined in an instant** if wiring is incorrectly attached during installation! It is important that these directions are followed explicitly.

Refer to the attached wiring diagram and follow these step-by-step instructions.

1) Disconnect the positive ground lead of the battery.

2) Be certain that the breaker points are in serviceable condition. **It is highly recommended that new breaker points and spark plug be installed for optimal performance.** Use the factory recommended settings for point gap and spark plug gap. New points sets are sometimes preserved with light oil. Clean thoroughly with brake cleaner or lacquer thinner before installing.

3) Disconnect the condenser from the positive (+) coil-to-breaker points circuit. Use of a condenser is not required with this system. You may elect to keep condenser mounted on engine for switching back to conventional ignition if the need arises.

4) Remove the breaker point lead wire from the positive (+) terminal of the coil and from the mounting stud on the distributor.

5) PointSaver™ is designed to operate with the stock engine ignition coil. If the coil is a replacement, check resistance across the positive (+) and negative (-) terminals. Resistance should be between 1.2 to 2 ohms.

6) Find a convenient and suitable mounting point on the vehicle for PointSaver™. Areas exposed to excessive heat, vibration, or dampness should be avoided.

7) Secure PointSaver™ module with two (2) suitable fasteners (not included). Never mount using only one screw – vibration will cause case tab to fatigue fail. This type of failure is not covered under the warranty.

8) Connect the RED lead wire ring terminal of the module to the positive (+) terminal of the coil.

9) Connect the BLACK lead wire ring terminal of the module to the breaker point terminal on the distributor.

10) Connect the GREEN lead wire ring terminal of the module to any convenient ground, preferably on the engine. A ¼ inch diameter ring terminal is provided.

11) Connect the positive lead of the battery.

12) Start the engine and verify normal operation.

Note: Some wire length alterations may be required for your application. Adding longer leads is permissible as long as a similar gage and grade of wire insulation is used. Always solder wire splices and insulate with heat shrink sleeves.

The following instructions apply to setting ignition timing with PointSaver ™ ignition module equipped with LED static timing light.

1) Remove spark plug(s) from cylinder head (this allows easier rotation of engine by hand).

2) Remove distributor cap or breaker point cover. Set point gap to manufacturers recommended setting. Rotate the engine in proper rotational direction by hand to align the crankshaft timing marks.

3) Turn ignition switch to the on (run) position.

4) Loosen the distributor hold down screw. With a clear view of the LED timing light on PointSaver™ module, move the distributor to the points closed and points just-open positions. When points are open, LED will be lighted; with points closed, LED will be off. Note: If LED glows dimly when points are closed, this indicates poor ground, usually caused by contamination on the point contact surfaces. Clean points thoroughly with brake cleaner or lacquer thinner.

5) With points closed and LED off, rotate distributor slowly to open points while watching the LED. The location where the LED just turns on is where the points "break". This is the spot where ignition is considered "timed". Tighten distributor hold down screw.

6) Rotate engine back and forth a few degrees by hand. LED function should be coincident with timing marks aligning. If timing marks and LED function do not coincide, repeat steps 6 and 7.

7) Turn ignition switch to the off position.

8) Refit breaker point cover or distributor cap. Install spark plug(s).

9) Start the engine and verify normal operation.

Troubleshooting Ignition System Problems

Engine runs erratically or misses

a) Old points pitted or oxidized. Clean points or install new set.
b) Poor ground. Clean paint from under ring terminal on green ground lead.
c) Condenser still attached to points circuit. Disconnect condenser.
d) Spark plug incorrectly gapped. Set gap to engine manufacturer's specifications.
e) Wrong heat range spark plug(s). Check engine manual – replace plug(s).

Engine will not run

a) Check for spark at plug(s). Remove spark plug(s) and crank engine. Spark should be bright blue with a "snap" sound.
b) Check for proper voltage at coil. Measure across positive (+) terminal to ground to verify 6 volts minimum.
c) Points contaminated. Clean contacts with brake cleaner or lacquer thinner. Note: LED will be completely off when points are closed and making proper ground contact. If LED glows dimly, clean points.
d) Points not contacting. Points out of adjustment. Readjust gap. Check for spark at plug(s). Repeat timing procedure as stated above.
e) Loose connections. Check and secure all wire connections including splices on wire extensions. Make certain ground is secure.
f) Bad ignition coil. If all the above checks indicate normal functioning, chances are that the coil has failed from vibration. Replace.

Legal Stuff – Kirk Engines, Inc. warrants its Products to be free from defects in workmanship and materials at time of sale. Kirk Engines, Inc. offers Products that are installed by individual owners on their respective equipment. Therefore, Kirk Engines, Inc. cannot be held responsible for damage or loss of equipment due to faulty installation of Products, or use of said Products outside the scope and intent of their application.

We are interested in hearing your comments or suggestions from use of PointSaver™. Please direct your e-mail responses to dkirk@milwpc.com or write to us at our company address.

6V Positive Ground *PointSaver* ™ Wiring Diagram