

INSTALLATION INSTRUCTIONS

MSD Coil-Near-Plug Smart Coil Kit

PN 8289-KIT / PN 82893-KIT

ONLINE PRODUCT REGISTRATION: Register your MSD product online and you'll be entered in our monthly 8.5mm Super Conductor Spark Plug Wire give-away! Registering your product will help if there is ever a warranty issue with your product and helps the MSD R&D team create new products that you ask for! Go to www.msperformance.com/registration.

IMPORTANT: Read the instructions before attempting the installation.

Parts Included, PN 8289-KIT:

8 - Coils
1 - Connector Harness

Parts Included, PN 82893-KIT:

8 - Coils
1 - Connector Harness

WARNING: During installation, disconnect the battery cables. When disconnecting the battery, always remove the Negative cable first and install it last.

This kit is designed for 8 cylinder engines, it contains two terminated harnesses and 8 coils. The coils are designed with a universal bolt mounting pattern, compatible with LS-style passenger car coil mounts, such as the ones on Holley's LS valve covers. One end of the harnesses will plug into the smart coils while the other end is terminated with a 7-pin metripak connector, and three loose 12 gauge wires. The connector plugs into the Holley Universal Coil-On-Plug harness (PN 558-307, not included), Holley LSx main harnesses, and factory GM LSx harnesses. The layout is similar to factory GM coil harnesses with additional length for coil mounting flexibility.

INSTALLATION

- The coil connectors are marked to accommodate different engine types (GM/Others with 1-3-5-7 and 2-4-6-8 cylinder banks and Ford with 1-2-3-4 and 5-6-7-8 cylinder banks). Install on corresponding cylinders. The 7 pin metripak connectors are labeled "GM EVEN" and "GM ODD". The "GM EVEN" plugs into the "DIS CONNECTOR EVEN" on the 558-307 harness (not included) or "IGNITION EVEN" on Holley LSx main harnesses. The "GM ODD" goes into corresponding "ODD" connectors on these harnesses.
- 12 gauge BROWN ground wire - This ground must go to the cylinder head that the coil is discharging to. This connection should be independent from other grounds. Do not connect to grounds that do not have a solid ground path to the battery. If wire needs to be extended, use 10-12 gauge wire and appropriate connectors.
- 12 gauge BLACK ground wire - This is a high current ground that should go to the battery or to a ground stud that is directly connected to the battery. This connection should be independent of other grounds and as close to the battery as possible. If wire needs to be extended, use 10-12 gauge wire and appropriate connectors.
- 12 gauge RED power wire - Do not connect directly to the battery. Install with fused relay(s) as described:
 - A) 5 milliseconds of dwell or less can be wired with a single fused 40A relay for 8 coils
 - B) Over 5 milliseconds of dwell should use a single fused 70A+ relay for 8 coils or two 40A relays with 4 coils on each.

COIL CONNECTORS

- Pin A - Coil Trigger - Connect to individual ECU EST Outputs. EST A goes to cylinder 1, EST B to cylinder 2, etc.
- Pin B - Coil Trigger Ground (Black w/ white tracer) - These wires can all be tied together and go to Pin B14 "EST Ground Output".
- Pin C - Ground to Cylinder Head (Brown) - This ground MUST go to the cylinder head that the coil is discharging to. It is recommended to tie each cylinder bank together. No other grounds should be connected to this point. Must be only ground at this location.
- Pin D - Battery Ground (Black) - This is a high current ground that should go to the battery or to a ground stud that is directly connected to the battery. Do not ground on sheet metal or any weak grounds.
- Pin E - High current switched +12 Volt Power (Red) - Do not connect directly to the battery. On applications with 5 milliseconds of dwell or less, it is recommended to install a fused 40 Amp relay source to power all 8 coils. On applications with dwell over 5 milliseconds, it is recommended to use a single fused 70+ Amp relay for 8 coils, or two 40 Amp relays with 4 coils on each relay.

METRIPAK CONNECTOR

For information on the metripak connector pinouts refer to the instructions of the EFI system or harness being used. Wiring instructions for Holley's EFI systems and harnesses are also available online at www.holley.com.

COIL SPECIFICATIONS

- Peak Voltage -
50,000 Volts @ 7.0 milliseconds,
42,000 Volts @ 5.0 milliseconds
(Figure 1).
- Peak Power Output -
190 millijoules @ 7.0 milliseconds,
132 millijoules @ 5.0 milliseconds
(Figure 2).
- Maximum Battery Voltage - 17.0 Volts

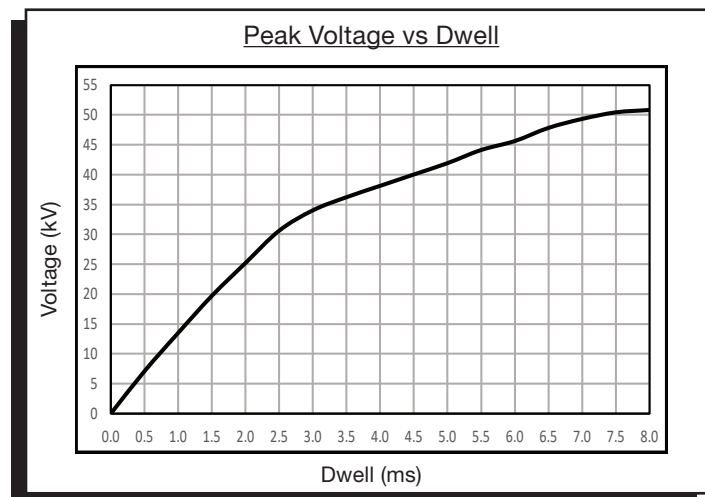


Figure 1 Peak Voltage Graph.

DWELL SETTING

Note: In order to determine the correct dwell setting, first determine your engines HP per cubic inch. To do this divide the engines horsepower by engine displacement in cubic inches. Once determined, follow the dwell setting recommendations below.

- For street cars below 1.5 HP per cubic inch, dwell should be set to 4.0 milliseconds.
- For cars that exceed 1.5 HP per cubic inch, dwell should be set to 4.5 milliseconds.
- For long duration racing, such as road racing or off-road, dwell can be set to 5.0 milliseconds.
- For short duration racing, such as drag racing, dwell can be set to 7.0 milliseconds.

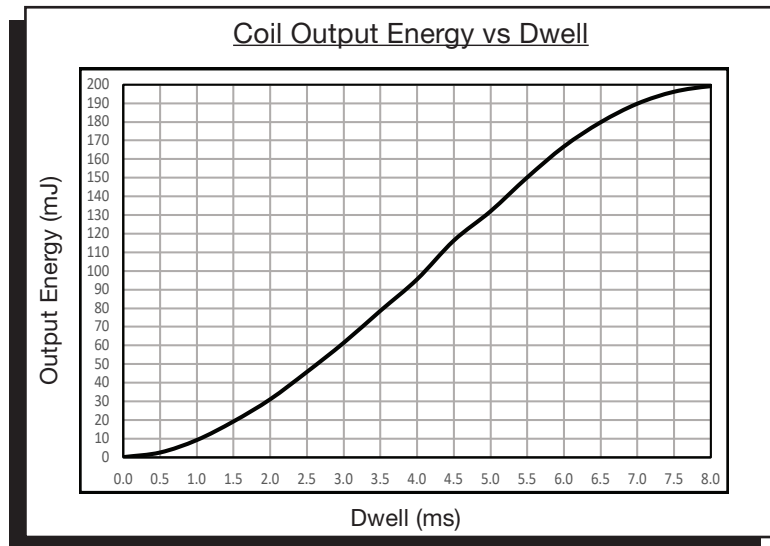


Figure 2 Energy Output Graph.

Service

In case of malfunction, this MSD component will be repaired free of charge according to the terms of the warranty. When returning MSD components for warranty service, **Proof of Purchase** must be supplied for verification. After the warranty period has expired, repair service is based on a minimum and maximum fee.

All returns must have a Return Material Authorization (RMA) number issued to them before being returned. To obtain an RMA number please contact MSD Customer Service at 1 (888) MSD-7859 or visit our website at www.msdpower.com/rma to automatically obtain a number and shipping information.

When returning the unit for repair, leave all wires at the length in which you have them installed. Be sure to include a detailed account of any problems experienced, and what components and accessories are installed on the vehicle. The repaired unit will be returned as soon as possible using Ground shipping methods (ground shipping is covered by warranty). For more information, call MSD at (888) 258-3835. MSD technicians are available from 7:00 a.m. to 5:00 p.m. Monday - Friday (mountain time).

Limited Warranty

MSD warrants this product to be free from defects in material and workmanship under its intended normal use*, when properly installed and purchased from an authorized MSD dealer, for a period of one year from the date of the original purchase. This warranty is void for any products purchased through auction websites. If found to be defective as mentioned above, it will be repaired or replaced at the option of MSD. Any item that is covered under this warranty will be returned free of charge using Ground shipping methods.

This shall constitute the sole remedy of the purchaser and the sole liability of MSD. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representation whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall MSD or its suppliers be liable for special or consequential damages.

*Intended normal use means that this item is being used as was originally intended and for the original application as sold by MSD. Any modifications to this item or if it is used on an application other than what MSD markets the product, the warranty will be void. It is the sole responsibility of the customer to determine that this item will work for the application they are intending. MSD will accept no liability for custom applications.