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Because every industry has a leader

IST Custom Bike Wiring Harness

DISCLAIMER:

S&S parts are designed for high performance, off road, racing applications and are intended for the very experienced rider only. The installation of S&S parts may void or adversely effect your factory warranty. In addition such installation and use may violate certain federal, state, and local laws, rules and ordinances as well as other laws when used on motor vehicles used on public highways, especially in states where pollution laws may apply. Always check federal, state, and local laws before modifying your motorcycle. It is the sole and exclusive responsibility of the user to determine the suitability of the product for his or her use, and the user shall assume all legal, personal injury risk and liability and all other obligations, duties, and risks associated therewith.

The words Harley®, Harley-Davidson®, H-D®, Sportster®, Evolution®, and all H-D part numbers and model designations are used in reference only. S&S Cycle is not associated with Harley-Davidson, Inc.

SAFE INSTALLATION AND OPERATION RULES:

Before installing your new S&S part it is your responsibility to read and follow the installation and maintenance procedures in these instructions and follow the basic rules below for your personal safety.

● Gasoline is extremely flammable and explosive under certain conditions and toxic when inhaled. Do not smoke. Perform installation in a well ventilated area away from open flames or sparks.

● If motorcycle has been running, wait until engine and exhaust pipes have cooled down to avoid getting burned before performing any installation steps.

● Before performing any installation steps disconnect battery to eliminate potential sparks and inadvertent engagement of starter while working on electrical components.

● Read instructions thoroughly and carefully so all procedures are completely understood before performing any installation steps. Contact S&S with any questions you may have if any steps are unclear or any abnormalities occur during installation or operation of motorcycle with a S&S part on it.

● Consult an appropriate service manual for your motorcycle for correct disassembly and reassembly procedures for any parts that need to be removed to facilitate installation.

● Use good judgement when performing installation and operating motorcycle. Good judgement begins with a clear head. Don't let alcohol, drugs or fatigue impair your judgement. Start installation when you are fresh.

● Be sure all federal, state and local laws are obeyed with the installation.

● For optimum performance and safety and to minimize potential damage to carb or other components, use all mounting hardware that is provided and follow all installation instructions.

● Motorcycle exhaust fumes are toxic and poisonous and must not be inhaled. Run motorcycle in a well ventilated area where fumes can dissipate.

IMPORTANT NOTICE:

Statements in this instruction sheet preceded by the following words are of special significance.

⚠ **WARNING**

Means there is the possibility of injury to yourself or others.

⚠ **CAUTION**

Means there is the possibility of damage to the part or motorcycle.

NOTE

Other information of particular importance has been placed in italic type.

S&S recommends you take special notice of these items.

WARRANTY:

All S&S parts are guaranteed to the original purchaser to be free of manufacturing defects in materials and workmanship for a period of twelve (12) months from the date of purchase. Merchandise that fails to conform to these conditions will be repaired or replaced at S&S's option if the parts are returned to us by the purchaser within the 12 month warranty period or within 10 days thereafter.

In the event warranty service is required, the original purchaser must call or write S&S immediately with the problem. Some problems can be rectified by a telephone call and need no further course of action.

A part that is suspect of being defective must not be replaced by a Dealer without prior authorization from S&S. If it is deemed necessary for S&S to make an evaluation to determine whether the part was defective, a return authorization number must be obtained from S&S. The parts must be packaged properly so as to not cause further damage and be returned prepaid to S&S with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem, how the part was used and the circumstances at the time of failure. If after an evaluation has been made by S&S and the part was found to be defective, repair, replacement or refund will be granted.

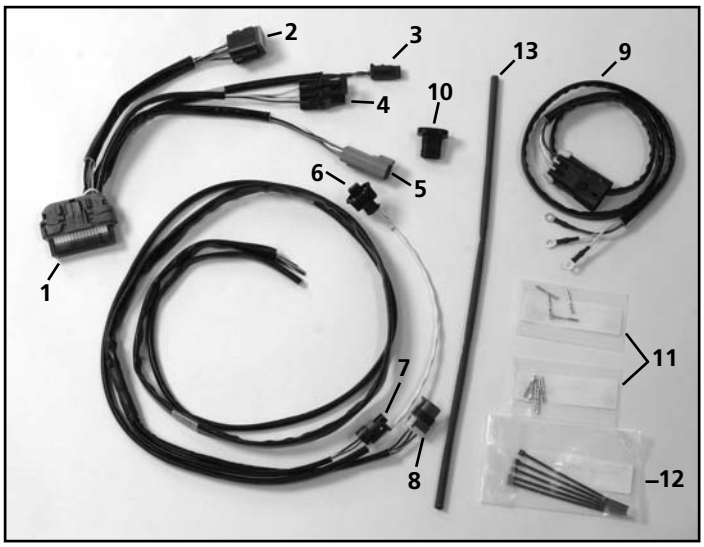
ADDITIONAL WARRANTY PROVISIONS:

(1) S&S shall have no obligation in the event an S&S part is modified by any other person or organization.

(2) S&S shall have no obligation if an S&S part becomes defective in whole or in part as a result of improper installation, improper maintenance, improper use, abnormal operation, or any other misuse or mistreatment of the S&S part.

(3) S&S shall not be liable for any consequential or incidental damages resulting from the failure of an S&S part, the breach of any warranties, the failure to deliver, delay in delivery, delivery in non-conforming condition, or for any other breach of contract or duty between S&S and a customer.

(4) S&S parts are designed exclusively for use in Harley-Davidson® and other American v-twin motorcycles. S&S shall have no warranty or liability obligation if an S&S part is used in any other application.



Picture 1- Complete Harness Assembly

1- Wiring Harness Adapter
2- Main Motorcycle Harness
3- Crank Position Sensor
4- Coil Harness
5- Data Link Connector
6- Knock Sensor
7- Head Temperature Sensor
8- Manifold Absolute Pressure (MAP) Sensor
9- Coil Harness Power Adapter
10- Data Link Plug
11- Connector Pins
12- Wire Ties
13- Shrink Tubing

The IST Custom Wiring Harness was designed to allow you to tailor the sensor leads to your exact application. The installation process is the same as detailed in the main instruction sheet for your model of engine, but the leads for the Knock Sensor, Head Temperature Sensor and Manifold Absolute Pressure (MAP) Sensor are longer and not cut to length.

1. Follow the standard IST instructions for mounting the sensors and module.
2. Test route the extended wiring harnesses to confirm their proper length. Be sure that they will not be in contact with any hot or moving parts.
3. Once you are satisfied with the fit and length of the wires, cut them with an appropriate cutter.
4. Use a Harley-Davidson® Packard-style crimper (or equivalent) to install the pins on the wires.

Wiring Harness Adapter Connections

Knock Sensor

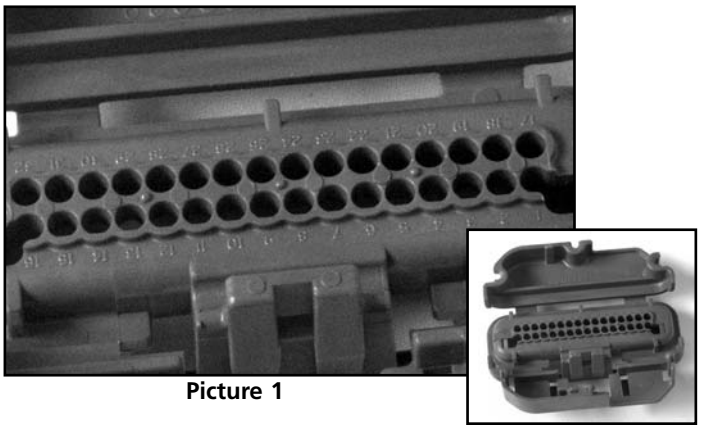
1. The knock sensor wires are sheathed in a protective outer jacket with a braided shield. Carefully slice the outer coating open approximately 1.5-inches to reveal the braided shield. DO NOT REMOVE THE ENTIRE SHEATH AND UNBRAID THE WIRES—THEY MUST BE BRAIDED TOGETHER FOR PROPER OPERATION.
2. Crimp the supplied pins on the stripped wires.
3. After you attach the pins, insert the solid white wire in pin position 31. The white and blue wire connects to pin position 30.

Temperature Sensor

1. There are two wires to connect for the temperature sensor. The black and white wire gets a pin attached and connects to position 29. Connect the pin to the pink and yellow wire and install it in position 15.

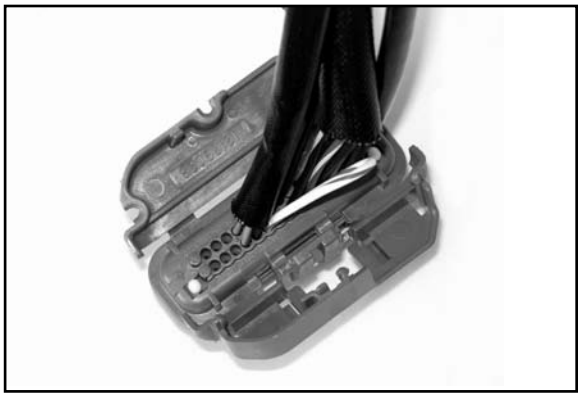
MAP Sensor

1. Attach the pin to the violet and white wire and install it in position 13. Next, put a pin on the red and white wire and install it in position 14.



Picture 1

The Wiring Harness Adapter has clearly marked pin positions.



Picture 2

As you can see, the Knock, Temperature and Map Sensor positions are easy to find.