# **MSD Modified Honda Distributor Cap** PN 82901, PN 82902, PN 82921 and PN 82922

#### **Parts Included In This Kit:**

1 - Distributor Cap

1 - Coil Wire

1 - Parts Bag

1 - Mini-Stripper-Crimper

1 - Retainer and Screw (Extreme Caps only)

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

Note: The Modified Cap is designed so that you can remove the stock internal coil, and use a higher output external coil. The stock internal coil MUST be removed before the installation of this

cap. Failure to do so will cause damage to the MSD cap.

**Note:** The supplied spark plug style terminals are required with the PN 82902 and PN

82922 caps.

# **INSTALLATION:**

- 1. Mark the location of each plug wire, then remove the wires. Remove the stock distributor cap, rotor and dust cover.
- 2. Locate the coil wires and note their color and location. On the majority of Honda or Acura engines, the Black/Yellow wire is positive. The coil negative wire is generally White/Blue, Blue, Green/Yellow or Green. In some cases, the coil itself is marked negative (-) and positive (+).

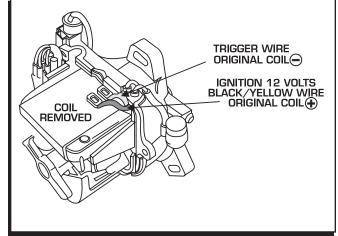


Figure 1 Primary Wiring with the Coil Removed.

Note: If you have a question as to the wires' polarity, use a volt-meter and probe each wire with the ignition key turned to the On position. Coil positive will show 10-12 volts.

- 3. Once you determine the polarity of the coil wires you will need to extend the wires to reach the MSD coil. Cut the factory terminals off and solder to a 14 gauge wire. Seal the soldered joint with shrink sleeve or electrical tape.
- 4. Depending on the model of distributor you have, you may need to drill a hole in the new cap to route the wires out. In some applications the factory rubber seal is thick enough to cut and slide the new wires out.
- 5. Install the rotor, the new cap and then the wires. For Extreme model caps, install the wire retainer with the supplied screw.

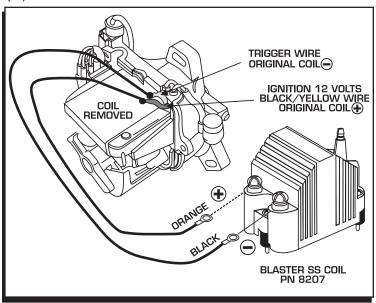


Figure 2 Wiring with a Blaster SS Coil.

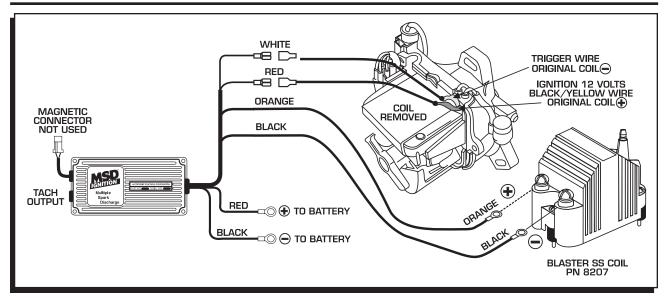


Figure 3 Wiring an MSD SCI Ignition with a Blaster SS Coil.

# **ASSEMBLING THE COIL WIRE**

Once the cap is installed and the coil is wired, you will need to assemble a coil wire. You will need a razor blade and a 4-inch vice.

The Mini-Stripper-Crimper is an all in one spark plug wire stripper and crimp tool. It will work with both MSD 8.5mm Super Conductor and 8mm Heli-Core wires to produce a strong, professional crimp.

#### **TERMINALS**

MSD offers several different terminals with our Universal wire sets. There are two terminal styles used, either a standard style or the Dual Crimp Terminal (Figure 4). The standard design requires stripping more of the wire sleeve because the conductor will be bent under the terminal. The Dual Crimp has specific crimp tabs for the conductor which require needle nose pliers.

## STRIPPING THE WIRE

- Once you've determined which terminals you are working with, position the wire in the corresponding strip guide. There are two holes; one for the 8mm wire and another for the 8.5mm wire.
- There are two stripping positions indicated on the stripping slot, depending on the terminal being used. Slide the wire to the correct position and strip the sleeve by holding a razor blade flush with the strip guide and rotate the wire 360° (Figure 5).
- 3. Remove the wire and twist the cut end of the sleeve off in a counterclockwise direction.

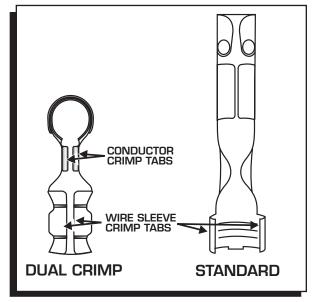


Figure 4 Identifying the Different Style Terminals.

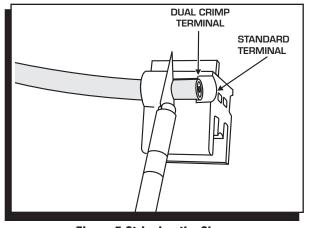


Figure 5 Stripping the Sleeve.

#### CRIMPING

To achieve the strongest crimp possible, it is required to bend the crimp tabs over about 90° using needle nose pliers (Figure 6). Follow the instructions for the terminal you are using.

### STANDARD TERMINALS

- 1. After stripping the sleeve, fold the conductor back along the wire insulation (Figure 7).
- 2. Do not allow the conductor to pull tightly against the insulation. A small gap around the conductor should be present before crimping. Slide the wire into the terminal with the conductor positioned so it is in contact with the bottom of the terminal. Position the wire through until the insulation protrudes about 1/8" beyond the crimp tabs.
- 3. Position the wire and terminal into the "W" groove of the Mini-Stripper Crimper and crimp.

# **DUAL CRIMP TERMINALS**

- 1. After stripping the sleeve, position the wire in the terminal so the insulation protrudes about 1/8" beyond the insulation crimp tabs and the conductor extends about 1/8" past the conductor crimp tabs (Figure 8).
- 2. Position the wire and terminal into the "W" groove of the Mini-Stripper Crimper and follow Steps 4 6 to crimp the terminal to the sleeve.

**Note:** It is normal for the conductor to retract into the insulation slightly as the sleeve crimp is made.

- After the sleeve is crimped, push the conductor between the crimp tabs and use a set of needlenose pliers to crimp them together. DO NOT OVER CRIMP.
- 4. Slide the other part of the Mini-Stripper-Crimper over the wire terminal and lightly press them together (Figure 9).
- 5. Put the assembly into a vise making sure the alignment tabs are on the outside edge of the vise jaws (Figure 9).

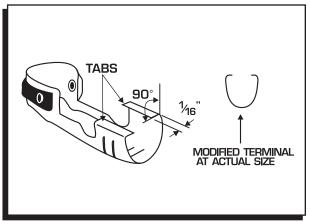


Figure 6 Preparing the Terminals.

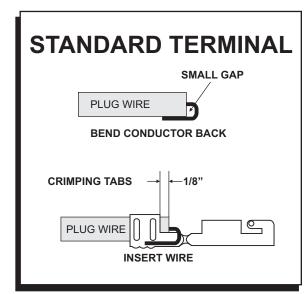


Figure 7 Positioning the Wire in the Terminal.

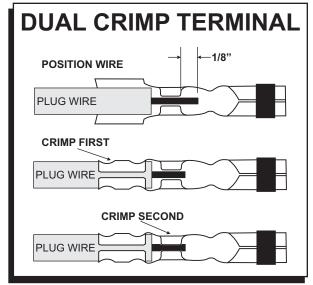


Figure 8 Crimping a Dual Crimp Terminal

Slowly close the vise making sure the tool and terminal stay properly positioned and aligned. Stop applying pressure when the terminal ends have wrapped securely around the sleeve and grip the wire.

**Note:** DO NOT OVER CRIMP! It is possible to tear the sleeve of the wire by excessive pressure on the vise. This will cause a weaker crimp.

7. Back off the vise and remove the wire from the Crimper. Gently tug the terminal and inspect the position of the conductor to make sure the crimp is solid and firm.

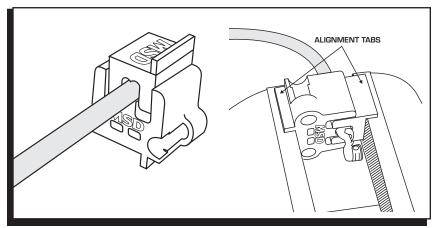


Figure 9 Crimping the Terminal.