# **Sentinel Turn Signal Kit**

# Installation Instructions for Part No. 34491

#### Hardware Included:

- 1 Pair Street LED vent covers
- 1 LED module
- 4 T-taps
- 4 Spade terminals
- 6 Cable ties
- 4 Small screws
- 4 Small washers

Tools Required: Pliers Phillips screwdriver Side cutters Wire crimp tool Multi meter Drill <sup>3</sup>⁄<sub>4</sub>" Drill bit File





**Attention**: The assembly of this product can be complicated and requires good technical understanding. If you are not sure on how to do this or have a vehicle with complex electronics, have a service center perform the installation. PowerMadd accepts no liability for damages caused by improper installation.

Before proceeding familiarize yourself with all the parts contained in the Sentinel Turn Signal kit and the wiring schematic. Reference parts list and schematic. Please note that all parts may not be used depending on application.

# Wiring Diagram:



# Vent Cover Installation

These instructions assume that you have already installed the Sentinel handguards. If not, refer to the specific handguard instructions for installing the handguards.

### Step 1:

Remove the original vent covers from the Sentinel handguards by first unsnapping the bottom three tabs from the inside of each vent cover, then pop the vent cover out from the front side of handguard. Using a side cutter cut the bridge between the inside vent holes then with a razor blade trim the opening just enough to allow room for the LED light wire connector to pass through. **PHOTO 1** 

#### Step 2:

Install the LED light vent cover assembly by carefully feeding the LED light wire through the vent hole that you previously opened up. Take care when handling the LED Vent Cover. **Note:** it is possible for the LED light to become detached. If this happens, simply snap the LED light back into the vent cover. Snap the LED vent cover in place by inserting the top three tabs of the vent cover into the vent holes, next press on the bottom front section to snap the lower three tabs into place. **PHOTO 2** 

**Optional**: With the supplied #4 screw and flat washer, secure the LED light vent cover to the handguard using the two standoffs on the back of the vent cover. Do not over tighten. These screws require only a small amount of torque is required.

Route LED light wires along mounting bracket towards the handlebar. Do not secure at this time.



#### Wiring:

#### Red wire labeled "+"

Find a power wire that is only has power when the key is on. To help find the wire see back probe instructions on page 3. Once you have found the hot wire connect a supplied 3M T-tap onto the hot wire. See T-Tap instructions on page 4. Crimp a spade terminal to the red wire labeled "+". See T-Tap instructions on page 4.

#### Ground wire labeled "ground"

Find a suitable ground wire. Connect a supplied 3M T-tap onto the ground wire. See T-Tap instructions on page 4. Crimp a supplied spade terminal to the black wire labeled "ground".

#### Right turn signal wire labeled "right"

Determine the hot wire for the right turn signal. Once you have found the wire to splice into, connect a supplied 3M T-tap onto the right turn signal wire. See T-Tap instructions on page 4.

Crimp a spade terminal to the wire labeled "right". See T-Tap instructions on page 4

#### Left turn signal wire labeled "left"

Determine the wire for the left turn signal. Once you have found the wire to splice into, connect a supplied 3M T-tap onto the left turn signal wire. See T-Tap instructions on page 4.

Crimp a spade terminal to the wire labeled "left". See T-Tap instructions on page 4

#### Connecting the wires

- Find a safe location to secure the LED control box away from heat sources and impact damage. Best location is behind the headlight. Secure the LED control box using the supplied zip ties.
- Connect the two sets of LED light wires to the two sets of wires coming out of the control box. Reference Wiring Diagram for this section.
- Connect the red wire labeled "+" from the LED control box to the 3M T-tap on your hot wire.
- Connect the black wire labeled "ground" from the LED control box to the ground source.
- Connect the wire labeled "right" to the right turn signal wire
- Connect the wire labeled "left" to the left turn signal wire
- Test your lights using the vehicles ignition switch and turn signal switch.
- Using the supplied zip ties secure all wires.

# **Back Probe Instructions:**

#### How to back-probe to find a 12v power source.

When looking for a power wire to tap into, it is most often easiest to look at the wiring diagram for your specific machine. If that is not available, you can typically back probe or test for voltage on the wires going into your key switch. In order to protect against the elements, electrical connectors typically have rubber insulators where the wire enters into the connector. Our goal is to slip voltmeter probe in between the

insulator and the wire.

**– Disclaimer-** Be careful when dealing with live voltage sources. Grounding battery voltage can lead to harm. For best results and safety, use the appropriate probes for your voltmeter.

Simply insert the voltmeter probe as shown in Photo 6. It will take a little work, but you should feel the probe rest against the bottom of the wire inside the connector. The finished product should look similar to the **Photo 4**.

# **T-Taps Install Instructions:**

- 1. Place wire in open channel of the T Tap.
- 2. Fold T Tap connector body until element contacts wire.
- 3. Crimp T Tap closed with pliers. Find a safe location to secure the LED control box away from heat sources and impact damage. Secure LED control box using supplied zip ties.



