



## ***V-Temp* Oil Temperature Gauge Installation Instructions**

Thank you for purchasing our high quality temperature gauge. Your business is greatly appreciated. Please follow the instructions below. Failure to follow the procedure can lead to damage of the oil temperature gauge and/or damage to the electrical system of your motorcycle. If you require additional information, please do not hesitating to contact our technical group at [tech@parts4powertoys.com](mailto:tech@parts4powertoys.com).

### **Step1: Installation Preparation**

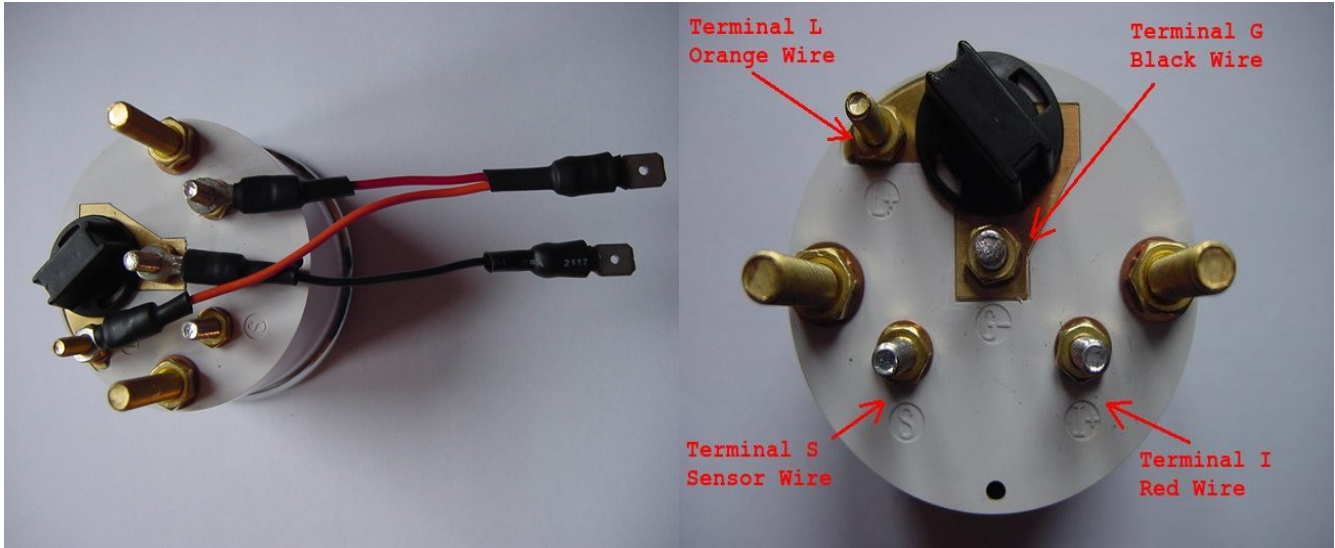
Remove the front fairing as described in the owners manual and/or service manual of your Harley Davidson motorcycle. It is recommended that your motorcycle is held in a vertical position for better access to the front wiring of the motorcycle but is not necessary. Image in Figure A shows what is included in your installation kit. Please ensure that all included parts are available before starting your installation. (See parts list at the end of this document.)



**Figure A**

### **Step 2: Oil temperature wiring installation**

Install the the supplied wires to the gauge as shown in figure B. Install the wire, serrated washer and nut onto each threaded stud. Figure B will show each wire position and location. DO NOT over-tighten each nut or damage can occur to the oil temperature gauge. Tighten until snug. The serrated washers will prevent the nuts from loosening during vibrations.



**Figure B**

### Step3: Oil temperature gauge installation

Remove existing air temperature gauge as per the Harley Davidson service manual. Once the two connectors have been disconnected, the two prong connector will no longer be used. Only the existing three prong connector will be used for the new oil temperature gauge installation (Blue, Orange and Black wire connector). Install the new gauge and rear bracket as shown in figure C. Position the rear mounting bracket on the lower half of the gauge as in the figure C. Use the two large nuts and serrated washers to secure the gauge in place. ***DO NOT*** over-tighten the nuts otherwise damage to the bracket and/or gauge will result. Tighten until snug. Applying some blue thread lock such as “LocTite” is recommended.



**Figure C**

#### Step 4: Oil Sensor Installation

To facilitate the removal of the existing 3/8 inch NTP Allen plug in the oil pan, warm-up the motorcycle until the oil pan is warm and not hot. This will soften the thread-lock material to easily remove the plug. Have the the new oil sensor threaded into the 3/8 NTP supplied brass adapter by hand. Do not tighten them yet but only hand tight. Have it ready to install when removing the old plug. Since there is existing oil in the pan, you will have to switch the old plug and install the new sensor without loosing too much oil. You can remove the oil in the pan but it is not necessary. Only an ounce or two will be lost. Once installed, tighten the sensor until snug and tighten to 10 ft-lbs only. When tightening the sensor, the 3/8 adapter will seat in place as you tighten the sensor. **DO NOT over tighten** or damage to oil pan will occur. **DO NOT** add threading material as these are tapered threads and self sealing. Sensor body is the electrical ground for the gauge. In the event there is oil sweating around the sensor, tighten the sensor another 1/8 turn. Wipe and recheck after a few days, Clean around the plug with mineral spirits to remove any oil and wipe clean.



Figure D

#### Step 5: Oil Sensor Wire Installation

Run the sensor wire from the oil pan sensor along the frame and attach with the supplied large tie wraps. The sensor wire is specifically designed to be flexible. It is made of a high quality heat resistant rubber material and will ensure that vibrations will not damage the wire. Take care to run the wire as to not rest onto any sharp edges. It is recommended that you run the wire underneath the gas tank within the wiring channel to the front of the motorcycle fairing. The terminal ends are a different size so please make sure that you run the appropriate end to the sensor terminal (large terminal to oil sensor). Install the washer, sensor wire terminal, lock washer and nut onto the sensor terminal. Once snug to the point that the post begins to turn, this is enough tightness. Install the other end of the sensor wire to the terminal marked S as shown in Figure B. Tighten until snug with the supplied serrated washer and nut. **DO NOT** over tighten. A small amount of blue thread lock can be added to ensure that the nut does not vibrate loose, but this step is optional. The serrated washer should be adequate

## Step 6: Oil Temperature Gauge Wiring Installation

Install the Red/Orange and Black push on terminal plugs from the oil temperature gauge to the existing three wire connector (Figure E). Install the Red/Orange wire into the connector with the existing orange wire. Install the back wire terminal from the oil temperature gauge to the existing black wire in the three pronged connector. The existing blue wire is not used. It is highly recommended to add a small amount of black silicone to the connector mating area to prevent the push-in terminals from working themselves loose during vibration. Ensure the terminals are not loose and are well seated into the existing three prong connector. You should feel slight resistance when inserting the push in terminals.

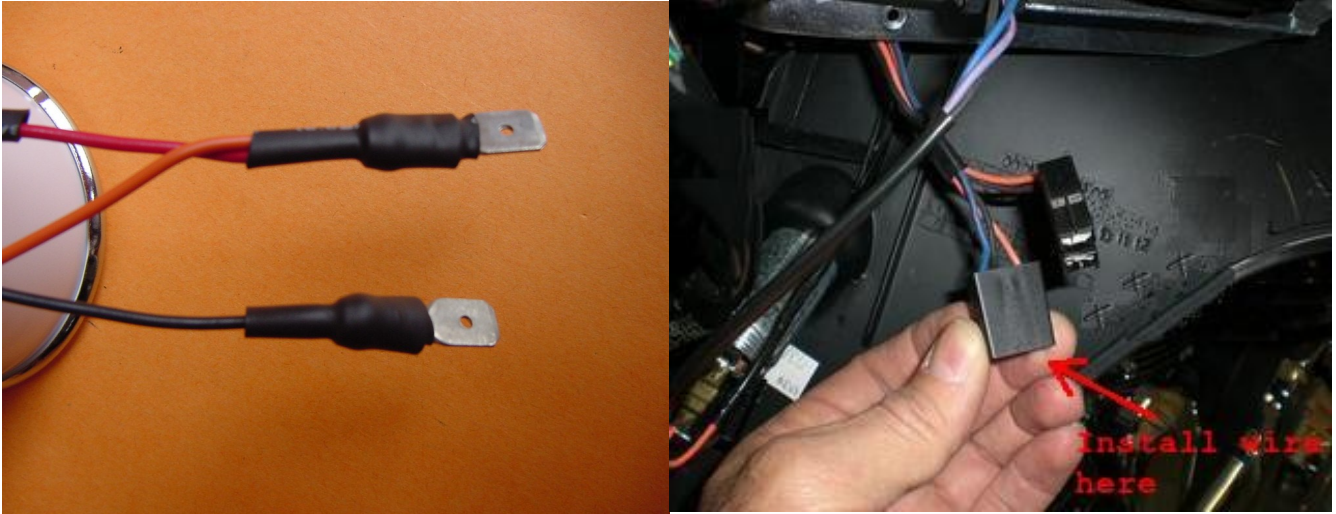


Figure E

## Step 7: End of Installation

Securely tie wrap all loose wires and ensure that everything is well secured and no sharp edges can damage the wires. Turn the ignition on and make sure that the amber back light is visible. Also double check that the back light bulb is securely installed and twist tight as to not work itself loose. See Figure F. Adding a small amount of silicone to the bulb housing is recommended.

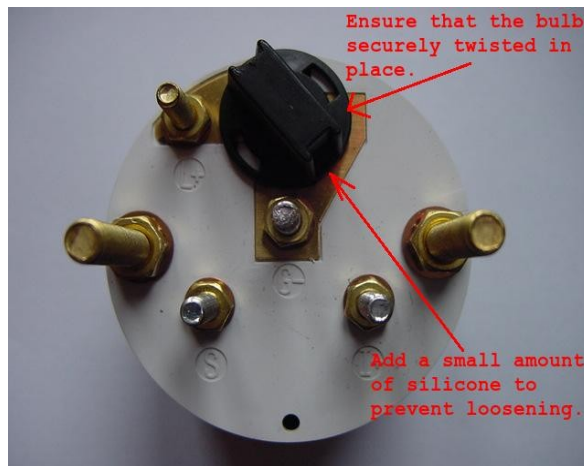


Figure F