



## Factory Five Racing Electric Gauge Set Installation Instructions



### I. Tools Required:

Mustang Wiring Diagrams  
Wire Stripper/cutter  
Wire Crimper  
Electrical tape  
Teflon Tape  
 $\frac{5}{16}$ " ,  $\frac{1}{2}$ " ,  $\frac{11}{16}$ " ,  $\frac{3}{4}$ " wrenches  
Solder  
Soldering Iron  
 $\frac{1}{8}$ " ,  $\frac{1}{2}$ " ,  $\frac{7}{8}$ " Drill bits

#### Note:

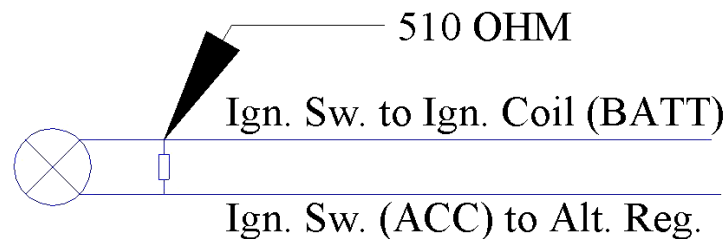
- Cover the dash and mount the gauges before connecting the gauges.
- Using an **87-98** Mustang harness **does not** require the use of the Mustang white instrument pod. However, familiarize yourself with the gray and brown plugs in the wiring harness that originally plugged into the gauge pod. The electrical hook-ups for the gauges referenced in these instructions are the gauge pod plugs. The notation for the wires as written in *Chilton's* are included in bold in the instructions to aid installation. Not using the white pod makes for a cleaner installation giving more room behind the dash for access and other items, such a heater ducts, radios, or other items you may want to install.

- Using a **99-04** Mustang harness **does** require the use of the Mustang gauge pod due to the anti theft features built into the computer. Another option is to flash the computer to remove the anti theft then, the pod is not needed.
- Read the instructions completely before starting the installation.
- See the individual gauge instructions for details on the gauge senders and calibration.

## II. Installation Instructions:

### Battery Charge Indicator

87-98 In order for the battery to charge, solder a 510Ω resistor between the wires on the red light forming an H with the 2 wires.



The 510Ω resistor can be found on the Mustang white gauge pod. Carefully clip the resistor leads leaving them as long as possible. You may want to protect this junction with tape, etc. solder the wires (with resistor soldered together ahead of wire ends).

Note: The **Ign. Sw. to Ign. Coil (BATT)** wire will also be used later to power the gauges so if you are using butt connectors for the connections, you may want to wait to include that wire.

Attach the other ends of the two wires to the gauge pod **Ign. Sw. to Ign. Coil (BATT)** and **Ign. Sw. (ACC) to Alt. Reg.** wires using red connectors. When starting the car, the light will turn on and then go off. The light is part of the charging circuit and MUST be present.

### Water Temperature Gauge

1. 87-95 Remove Ford water temperature gauge sending unit from the lower intake manifold located next to the distributor on the driver's side with an  $\frac{11}{16}$ " wrench.  
96-98 Remove Ford water temperature gauge sending unit from the coolant crossover tube on the driver side.  
99-04 Remove the plug in the block to the rear of the driverside engine mount.
2. Wrap the adapter threads with Teflon tape. Install the new water temp adapter with a  $\frac{3}{4}$ " wrench.
3. Run the gray cable from the gauge to the sending unit.
4. Attach the connector on the sender to the gray cable.

### Oil Pressure Gauge

1. Remove the Ford Oil Pressure sending unit from the driver side of the engine in front of the header with a  $\frac{3}{4}$ " wrench.
2. Wrap the threads with Teflon tape and install the sender in engine.
3. Run the gray cable from the gauge to the sending unit.
4. Attach the ring connectors to the gray cable wires.

5. Attach the connectors to the sending unit, either wire can go to either connector.

### **Tachometer**

87-95 Attach the “Tach output” wire to the Mustang gauge pod (**SW to Ign. Coil (-)**) wire.

96-04 Run the “Tach output” wire over to the computer. Connect the Tach Adapter to the Tach using the instructions provided with the adapter.

### **Volt Gauge**

Attach the yellow positive wire using a butt connector to the power wire feed as described below.

### **Volt Gauge**

Attach the red positive wire using a butt connector to a **constant** 12V+ power source. Attach the black wire to a **Ground** wire or the frame.

### **Speedometer**

87-98 Run the gray cable from the gauge over to the computer and connect the red wire to the wire in pin # 03 (**Vehicle Speed Sensor, +**) the Dark green/white wire.

99-04 Run the gray cable from the gauge over to the computer and connect the red wire to the wire in pin # 68 (**Vehicle Speed Sensor, +**) the white/orange wire.

### **Fuel Level Gauge**

90-93 Attach the red wire in the gray cable to the Mustang gauge pod (**gas tank sending unit**) wire.

99-04 Attach the red wire in the gray cable to the fuel pump/fuel gauge sender (yellow/white) wire going to the gauge pod.

## **Common Wiring Harness Connections**

These gauges have two power distribution cables, one for the gauge power and face lighting and a separate cable for the needle lighting.

### **1. Power wire**

90-93 Attach the red wire from the power distribution cable to the Mustang gauge pod **Ign. Sw. to Ign. Coil (BATT)** wire used earlier for the charge indicator.

96-04 Attach the gauge red wire to the gauge pod **Voltage in Start and Run** (white/light blue) wire.

### **2. Dash lighting**

90-93 Attach the white wire from the power distribution cable and the black with white stripe wire from the needle light cable to Mustang gauge pod (**Warning Lamps Feed**) wire. If after hooking everything up, there are no lights or they are dim, check the Mustang dimmer switch for adjustment. If dimmer switch is not connected, jumper the two brown wires in the connector or jumper the brown wire coming out of headlight switch and connect to the white wire.

96-04 Attach the white wire from the power distribution cable and the black with white stripe wire from the needle light cable to the **Instrument Illumination** (light blue/red) wire going to the gauge pod.

**3. Ground**

87-04 Attach the black wire from both power distribution cables to a **Ground** wire or the frame.