



# Universal Gauge Cluster Kit Installation Instructions (500885)



**STEP 1:** Install the blade terminals to the back of each of the 4 small gauges. Secure with lock washer and nut. There are specific left, center, and right hand terminals. Install as shown in photo.

**NOTE:** Voltmeter uses the 'GRD' & 'I' terminal locations only.



**STEP 2:** Install appropriate lamp socket pigtails into the gauges. Follow specific instructions for the tachometer and speedometer as there are several different lighting configurations.



**STEP 3:**

Connect the black ground wires from the lamp pigtails to the center ground studs of the smaller gauges as shown.

**NOTE 1:** This picture shows connection of individual light sockets as would appear on Series I gauges. The speedometer and tachometer have separate twist-in light sockets.



**NOTE 2:** This picture shows connection of lighting as would appear on Series II gauges. A separate blade terminal for power and ground exists for the internal lighting. The speedometer and tachometer have a specific lamp terminal within the 8 cavity plug.



**STEP 4:** Drill 4 mounting holes for the LED's, using a 5/32" drill bit, at desired locations. Insert LED's in hole from front of panel.

**NOTE:** The LED housings are a taper fit into the hole. Press the LED housing all the way in to tighten against the instrument panel.



**STEP 5:** Plug in gauge connections using supplied connectors. Plug in connectors in the order shown below. A typical plug-in is shown in the picture.

- |           |                         |
|-----------|-------------------------|
| 1. FUEL   | pink / black / tan      |
| 2. TACH   | pink / black / white    |
| 3. TEMP   | pink / black / dk green |
| 4. OIL    | pink / black / dk blue  |
| 5. VOLT   | pink / black            |
| 6. SPEEDO | pink / black / purple   |



**STEP 6:**

Plug each lamp power wire (white) into the mating connectors on each gray wire (DASH LIGHTS) on the new harness.

**NOTE:**

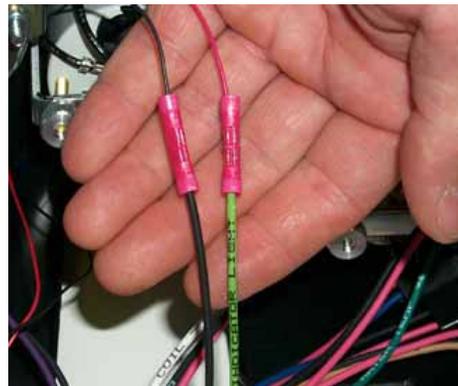
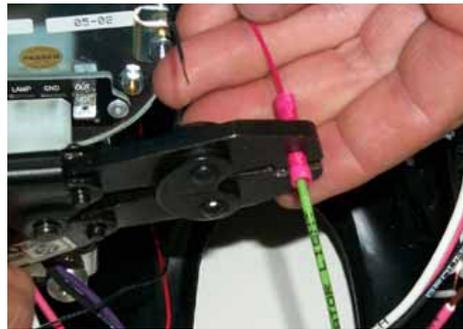
The supplied wiring harness comes with plug-in female terminals for the power and ground terminals of the Series II type 2 1/16 inch and 2 5/8 inch gauges. This is a direct plug into the terminals on the gauge. If you are using Series I gauges, you will have to remove these terminals and connectors and install the male and female disconnect terminals supplied in the kit to connect the individual light sockets. This picture shows this connection type. Please refer to the instruction sheet in the 500928 Gauge Side Wiring sub-kit for a more detailed explanation of the differences in the gauges.



**STEP 7:**

Select an LED lamp from the panel, and attach the appropriate signal lead wire from the harness, as noted below. Each signal wire will attach to the red LED lead wire from the panel. Trim the wires from the harness to the desired length before crimping.

LED color	function	power wire color
blue	hi-beam	light green
green	lh turn	lt blue
green	rh turn	dk blue
red	brake	pink



**STEP 8:**

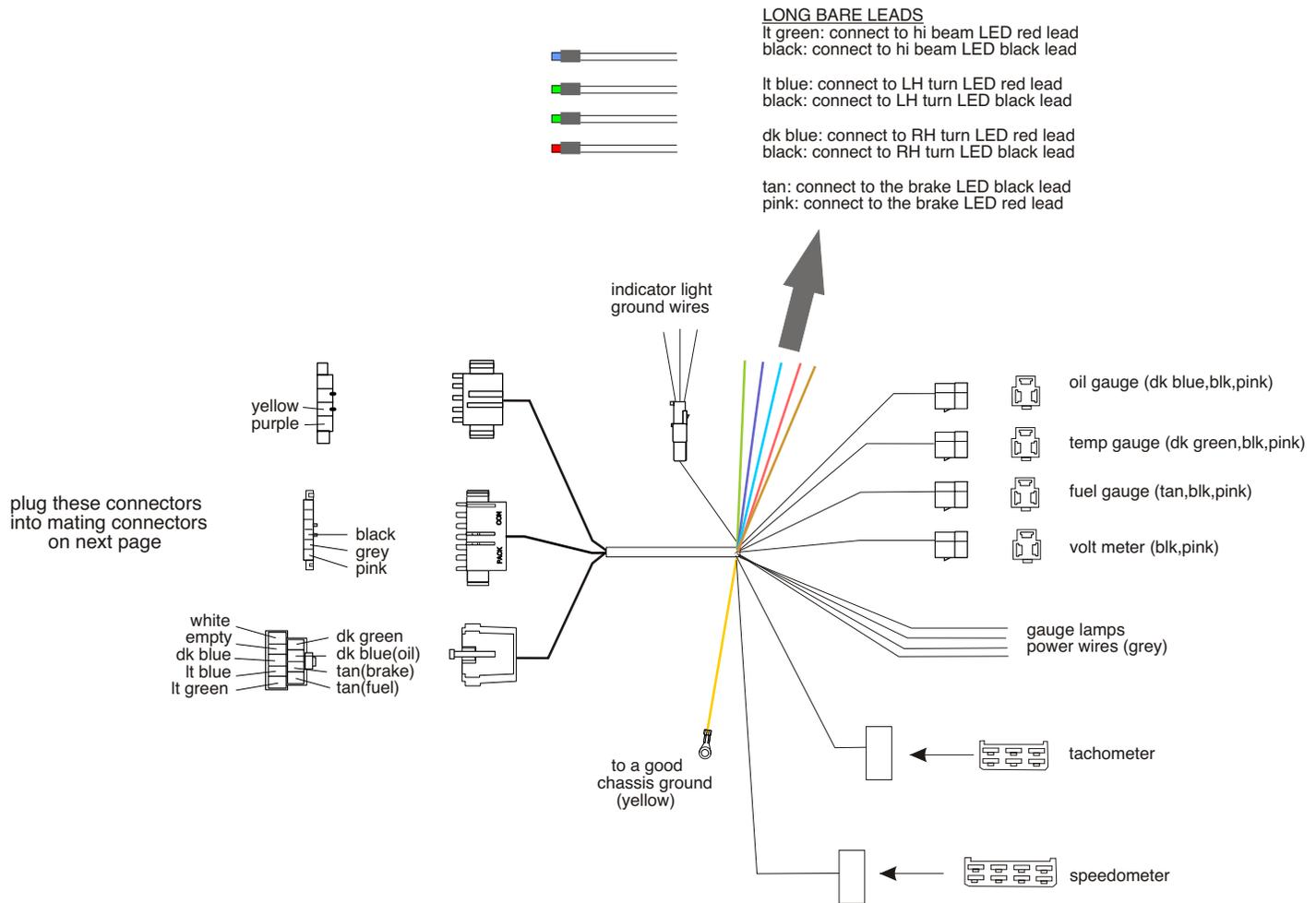
Install butt connectors, as shown, matching the wire function noted above with the proper LED. Trim the wires from the harness to the desired length before crimping.

Match the black wire from each LED lamp with a black ground wire from the harness for all LED lamps except the red brake warning LED.

If you are using the red brake warning LED lamp, remove the factory lamp socket and attach the black lead wire from this LED lamp to the factory brake light ground wire (most commonly a tan wire). As noted above, the red will connect to the factory brake light power wire (most commonly a pink wire).

LED color	function	signal ground wire color
red	brake	tan

STEP 10: Connect your existing instrument cluster wires to the new wiring kit using the supplied connectors. Be sure to maintain color continuity with the gauge side wiring when plugging the wires into our connectors.



STEP 11: FINAL DASH CONNECTIONS

The dash panel you are installing may not be metal. However, there is no built in provision for grounding of the panel. You may be installing original switches such as a headlight switch, wiper switch, ignition switch, or a heater control panel in this new housing. If the original switch was mounted in or through the original metal structure of the dash, grounding would have been established through this metal framework. When the original dash was plastic, special ground straps were made to work behind the switches. There would have been a separate ground wire from these straps to the under dash frame to complete the ground circuit. The new dash housing that you are installing has no provision for these straps and, ultimately, has no provision for grounding of these switches. American Autowire has several separate kits that are designed for grounding of the headlight and wiper switches in these applications. They are as follows:

- 500625 - 1969 Camaro
- 500625 - 1970-78 Camaro
- 500630 - 1964-65 Chevelle
- 500625 - 1968-69 Chevelle
- 500625 - 1969-74 Nova

**Grounding the dash is the most important thing you can do to insure proper operation of the gauges and any panel mounted switches. Therefore, it is your responsibility to wire the ground circuits for everything you install in the dash that is not gauge related.**

**STEP 12 - DASH SIDE CONNECTIONS**

Be sure to maintain color continuity (and wire function) with the mating connectors from the previous page. Using the information below, connect the necessary wires to the connectors shown. If you are using the wires from your existing instrument cluster connector, remove the existing terminals and terminate using the new terminals supplied in the kit. Plug these wires into the new cluster connector maintaining color continuity with the mating connectors from the previous page.

Route the long purple & yellow wires to the transmission Vehicle Speed Sensor (VSS). Be sure to twist the wires as shown! This is necessary to prevent signal interference.

