

LIGHTING HARNESS INSTALLATION INSTRUCTIONS

Model: R72022



This harness provides the wiring for the power (ignition), dimmer, and ground connections for EV² gauges, and includes a potentiometer for reducing the brightness of the gauge lighting.

-  Disconnect batteries. Do not reconnect battery power until system is fully configured to avoid risk of shock or fire.
Unrolling the harness, you will see that there is a shorter and longer "branch" of bundled wires.

ICON KEY	
	CAUTION
	Tools may be required
	Shown in picture

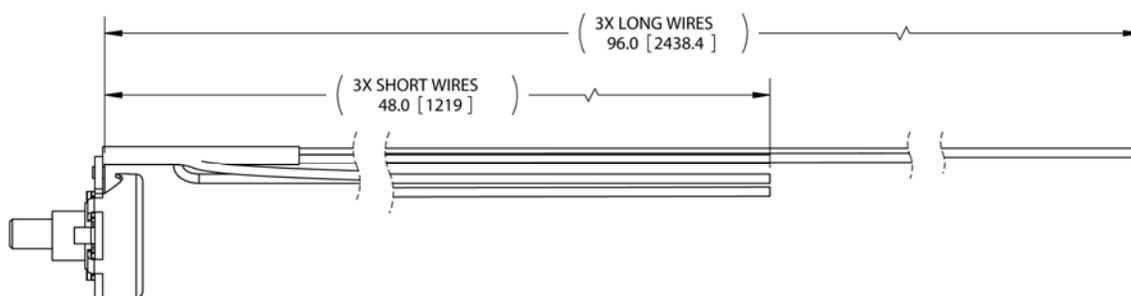


Figure 1. Harness with short and long wires

- If you want the dimmer button to be accessible, find a suitable location on the dash and mount the button (drill a 0.40" hole), otherwise it can be tied up under the dash after your preferred lighting level is set.
- Connect the shorter length of red wire to a vehicle switched ignition circuit, fused with a maximum of 3 amps. If the factory fuse for this circuit is over 3 amps, add an inline 3-amp fuse.
- Connect the shorter length of black wire to a clean ground on the vehicle such as the battery negative terminal or a factory ground bolt.

Form No. IS192 (Rev. A 04/15/2009)

5

The harness dimmer input (orange wire with black stripe) can be connected three ways:

Option A – Dimming with the factory dimmer circuit, but allowing the potentiometer to adjust the EV² gauge brightness below the level of the factory dimmer. In other words, the gauges will still dim when the factory dimmer is turned down, but the gauge potentiometer can turn the gauges down lower. The gauges are normally slightly brighter than factory dash lighting at any given dimmer setting. For this option, connect the orange/black wire to a factory dimmer circuit (one which outputs battery voltage when the dimmer is at full brightness, and reduced voltages at lower lighting levels). This circuit may be found at the back of the headlight switch, or possibly through a fuse in the fuse panel. Check the vehicle wiring diagrams to confirm.

Option B – Dimming independently from the factory dimmer circuit, but still turning on and off with the vehicle lights. The potentiometer knob on this harness will control the brightness of the gauges, but they will still turn off when the vehicle's lights are off. Connect the orange/black wire through an inline fuse (max 3 amps) to a light output from the vehicle's headlight switch. Find a circuit that is powered only when the vehicle's marker/parking lights are on.

Option C - Dimming independently from the factory dimmer circuit, with the gauge lights on any time the vehicle is on. The potentiometer knob on this harness will control the brightness of the gauges, including turning them off, but they will otherwise turn on and off with the vehicle ignition. Connect the orange/black wire to the same ignition circuit as the red wire from step 2.

6

Install the sensor wires for each gauge per the individual gauge instructions.

7

Route the longer length of red and black wires, plus the orange wire, to the first gauge location. If using the ISSPRO wire insertion tool (R72023), follow the instructions with the tool. Otherwise, use a small flat-blade screwdriver. Install the three wires into the insulation displacement connector (orange connector). Carefully lay the wires across the connector cavities, hold the connector steady with a vice or pliers and press the wires into each cavity with the screwdriver. Press initially in the center portion of the wire as it goes into the connector, and then push down on each side of the wire (along the edge of the connector). Each wire must be pushed completely to the bottom of its groove in the connector to ensure a good electrical connection.

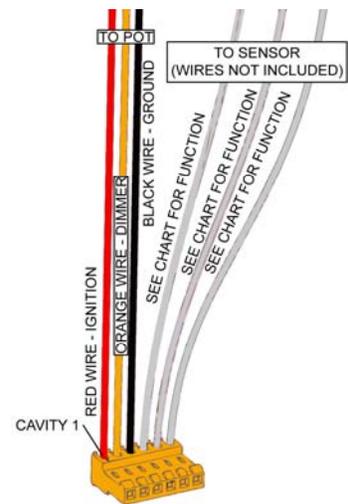


Figure 2. Connector with long wires. See Sensor Wire Pin Out Table below:

8

Route the red, orange and black wires to the next gauge connector in line and repeat step 7 above.

SENSOR WIRE PIN OUT			
GAUGE TYPE	CAVITY 4 FUNCTION	CAVITY 5 FUNCTION	CAVITY 6 FUNCTION
PYROMETER	SENSOR (+)	SENSOR (-)	GROUND
TEMPERATURE	NOT USED	SENSOR	GROUND
PRESSURE	+ 5 VOLTS	SENSOR	GROUND
VOLTMETER	NOT USED	IGNITION	NOT USED
FUEL LEVEL	NOT USED	SENSOR	GROUND