

Installation Instructions for 2-1/16" Comp II Short Sweep Electric Gauges

Before You Start

Please read the instructions completely before installing.

- **ALWAYS WEAR SAFETY GLASSES.**
- Install gauge only when engine is cool and ignition is off.
- Make sure all necessary tools, materials, and parts are on hand.
- Disconnect negative (-) battery cable before installing gauge.
- 2-1/16" gauge mounts in a 2-1/16" diameter hole.
- Make sure the mounting location does not impair visibility or interfere with driving. Also check behind the mounting location for any wiring or components before drilling.

Wiring

Use 20 AWG stranded or heavier wire for installation. Route wires away from any moving parts and hot engine components. Secure wires firmly along their route. **Cut and seal all unused wire connections.**

Note: As a safety precaution, the RED (Pin 5) and PURPLE (Pin 1) 12V connections should be fused. We recommend using a 1 Amp, 3 AG fast-acting type cartridge fuse.

Note 1: Pointer Zero Function

The Pointer Zero Function connection (Pin 1, Connector 2) can be connected to an always-on 12V power source (i.e. battery) to enable the pointer to return to the left when you turn off the gauge power (Pin 5, Connector 2). If you do not want or need this feature, connect the purple wire (Connector 2, Pin 1) to your switched 12V ignition source so this connection has 12V power when the ignition is ON.

Without always-on 12V power to the Zero Function connection the stepper motor gauge pointer will stay at its last reading when the ignition is turned off. This does not affect the gauge (other than the pointer not returning to the left). When the ignition is turned back on, the gauge will perform its self calibration cycle and operate normally.

Table 1. Wiring Summary

	Color	Pin	Connector	Notes
Pointer Zero Function	Purple	1	2 (5 pin)	Connect to 12V always-on power for pointer zero function. See Note 1.
White Light	White	2	2 (5 pin)	Connect to 12V dash lighting for white backlight.
Ground	Black	3	2 (5 pin)	Connect to a good common ground.
Amber Light	Orange	4	2 (5 pin)	Connect to 12V dash lighting for amber backlight.
Switched 12V Power	Red	5	2 (5 pin)	Connect to 12V ignition circuit so power is ON when ignition is turned on.
Not Used	N/A	1	1 (3-pin)	
Optional Ground	Black	2	1 (3-pin)	Optional common ground wire for sending unit if needed (Optional)
Signal Input from Sender	Green	3	1 (3-pin)	Signal input.

Temperature Signal Input

Connect the sender signal terminal to the gauge signal input (Connector 1, Pin 3, Green Wire). Make sure the gauge and sending unit have a good common ground.

To ensure a good ground you can connect the body of the sending unit to the gauge ground (Connector 2, Pin 2, Black Wire). DO NOT over tighten the sender when installing.

Pressure Signal Input

Connect the G pressure sender terminal to the gauge signal input (Connector 1, Pin 3, Green Wire).

Connect the WK terminal to a common ground (i.e. Connector 1, Pin 2, Black Wire).

Use Teflon sealing compound on temperature and pressure sender threads.

Test temperature and pressure sender connections for leaks. If a leak is detected, determine the cause of the leak and repair. DO NOT operate the vehicle if a leak is detected.

Volts Signal Input

Connect a switched 12V source (i.e. ignition) to the gauge signal input (Pin 3, Connector 1).

Fuel Level Signal Input

Connect the fuel level sender signal output to the gauge signal input (Connector 1, Pin 3, Green Wire). Connect the fuel level sender ground connection to the gauge ground (Connector 2, Pin 2, Black Wire). Many fuel level senders do not have a dedicated ground connection. If your sender does not have a dedicated ground connection, connect the gauge ground to the body of the sending unit.

Make sure that the gauge and sending unit have a good common ground, i.e. ground the gauge and sending unit at the same location.

Fuel Level Gauge Calibration

The fuel level gauge has 3 dip switches in the back of the gauge that determine the fuel level gauge signal input range. Adjust the dip switches as necessary to match your fuel level sender output.

Range (Empty - Full)	1	2	3
0-90 Ohm	ON	OFF	OFF
240-33 Ohm	OFF	ON	OFF
73-10 Ohm	ON	ON	OFF
0-30 Ohm	OFF	OFF	ON
20-150 Ohm	ON	OFF	ON

Do not adjust dip switch 4. It should be left on the OFF position.