

# Longacre® SMI™ Weatherproof Stepper Motor Gauges



Racing Products

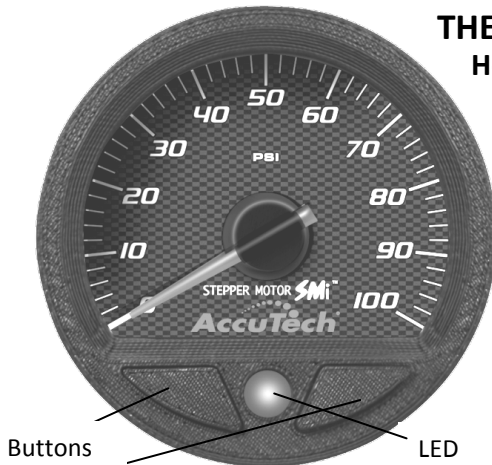
Monroe, WA · 360 453 2030 · www.longacracing.com

- **Brown wire:** To ignition switch so power to gauge will be shut off when ignition is off.
- **Red wire:** To ignition switch or other source so power is always on, regardless of ignition switch. This allows the pointer to always return to 0 when shut off.
- **Black wire:** Connect to ground. (This connection is important – many problems are caused by poor ground.)  
Use only on 12 or 16 volt systems with negative ground.

We recommend you add a connector when wiring. The gauge wires are sealed into the gauge case.

## THESE GAUGES ARE REASONABLY WEATHER RESISTANT.

However it is a good idea to cover them if car interior is to be washed down, especially pressure washed.



Buttons

LED

To set warning light points hold both buttons on lower front of gauge for 5 seconds. Red LED will come on steady. This is the first set-point. Use the buttons to raise or lower this set-point as shown by the pointer. When you get the setting you want stop pushing the buttons. After 5 seconds of no button being pushed the Red LED will start to flash. This is the second set-point. Adjust as above. After 5 seconds of no button being pushed the gauge will resume normal function. (Oil pressure only – there is a third set-point. Here the Red LED continues to flash and the gauge backlight flashes also. Set as above.)

**REMOTE WARNING LITE:** The Oil Pressure gauge (#46540 & 46541) and 0-100 psi Fuel Pressure (#46538) have two additional wires coming from the harness. They **operate an optional 12 volt external warning light** (not incl.) that can be mounted on the left side of the dash or as preferred. Wire colors are brown and green (no polarity). This external light should be limited to 200mA draw.

Mount the gauge into a 2.60" hole (do not make oversize) and clamp in place with included "U" clamp. Nuts use a 5/16" wrench or nut driver and are self-locking. **DO NOT OVERTIGHTEN.**

Pressure sensors are mounted on the motor – no hot oil or fuel in the driver's compartment for safety. Pressure sensors can be mounted on the firewall and connected to the motor with a braided steel line. Use **Longacre** #43540 – complete kit with 24" braided line.

- **Oil / Fuel pressure: Sensor** is connected to the motor in the usual place (see above). There is enough wire to connect to motors with the sensor mounted at the front. If longer wire is needed (marine, etc.) splicing is acceptable. Make solid connections.
- **Water / Oil temperature: Sensor** must be mounted on the motor in the usual place. It installs directly into a mechanical gauge style manifold fitting (also incl.). If longer wire is needed (marine, etc.) splicing is acceptable. Make solid connections.
- There is no separate sensor for the volt gauge.

## WARNING:

These gauges are reasonably heat resistant but may be damaged by excessive radiant heat from the exhaust system if you mount your panel directly into the firewall so that the gauges and wiring are exposed to the engine compartment. **YOU MUST BUILD A SHIELD** to protect them from radiant exhaust heat.

**These gauges are reasonably weatherproof but do not pressure wash.**