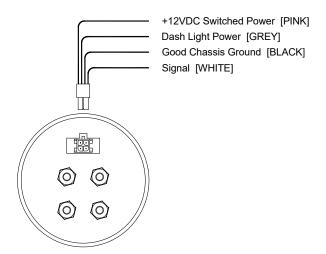
2 ⁵/₈" Short Sweep Gauge Installation

- 1) Make sure you have sufficient clearance (3") behind the panel where you intend to mount the gauge.
- 2) If necessary, cut a 2.625" hole in the dash panel at the desired location.
- 3) Fit the mounting bracket over the mounting studs located on the back of the gauge. The legs of the bracket may be shortened if required.

2 ⁵/₈" Short Sweep Gauge Wiring

- 1) Always disconnect the ground lead from the vehicle battery before wiring any gauge.
- 2) Connect the sender to the White wire of the gauge harness.
 - a. <u>Volt gauge</u>: No sender is required. **DO NOT connect anything to the White signal wire! Doing so will damage the gauge!**
 - b. <u>Water Temperature gauge:</u> Connect the top terminal of a Classic Instruments temperature sender to the White wire of the gauge harness.
 - c. <u>Oil Pressure gauge</u>: Connect the top terminal of a Classic Instruments oil pressure sender to the White wire of the gauge harness.
 - d. <u>Fuel gauge</u>: Connect the top terminal of a Classic Instruments fuel sender (or signal terminal of an OEM fuel sender if matching gauge was ordered) to the White wire of the gauge harness.
 - e. <u>Transmission Temperature gauge</u>: Connect the top terminal of a Classic Instruments transmission temperature sender to the White wire of the gauge harness.
 - f. <u>Oil Temperature gauge</u>: Connect the top terminal of a Classic Instruments oil temperature sender to the White wire of the gauge harness.
- 3) Connect a good ground to the **Black** wire of the gauge harness.
- 4) Connect a switched +12VDC power source to the **Pink** wire of the gauge harness.
- 5) Connect dash light power to the **Grey** wire of the gauge harness.

2 5/8" Short Sweep Gauge Wiring



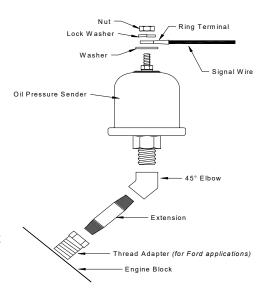
Oil Pressure Sender Installation

(Part No. SN52)

- 1) Disconnect battery before installation.
- 2) Only install Classic Instruments sending units when the engine is COLD.
- 3) DO NOT use Teflon tape on the threads. These threads are slightly tapered and designed to be self-sealing. The sender uses the threads for its ground connection and sealant may cause a poor ground causing inaccurate readings

GM Installation: The correct location on most GM V8-engines to install the oil pressure sender is under the distributor housing at the rear of the block.

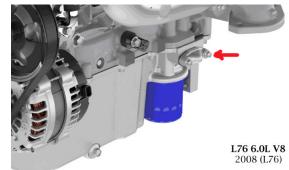
Use the 2 piece bushing kit provided to allow the sender to be mounted at a 45-degree angle pointing towards the driver's knees. This allows the sender to clear the back of the intake manifold, the underside of the distributor housing and also the firewall.



GM Installation – Big Block Engines: We do NOT recommend installing Classic Instrument's oil pressure sender in the opening located just above the oil filter on some big block GM engines. This location may not be a full-pressure passage but instead a "by-pass" oil passageway. Installing our pressure sender at this location may result in some strange low-pressure readings under certain driving conditions. This does not indicate a defective instrument or sender! It simply means you need to move the sender to the correct location.

GM Installation – LS Engines: Install the sender in the oil bypass housing located just above the oil filter. The housing will need to be drilled and tapped to 1/8"NPT.

FORD Installation: Install the Classic Instrument's oil pressure sender in the Ford V-8 block using the brass bushing kit (all three pieces) provided. These bushings allow the pressure sender to be installed between the motor mount and stock fuel pump. Ford also manufactures a pressure sender extension and if your engine has one of these in place, our brass bushing kit will not be required.

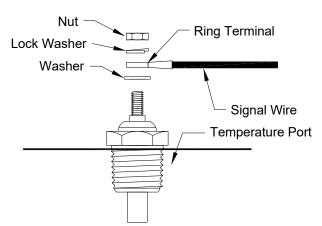


LS1 Oil Bypass Housing

Temperature Sender Installation

(Part No. SN12mm, SN22, SN23, SN24 & SN25)

- 1) Disconnect battery before making any connections.
- 2) Install the Classic Instrument's temperature sending unit only when the engine is COLD!
- 3) DO NOT use Teflon tape on the threads. These threads are slightly tapered and designed to be selfsealing. The sender uses the threads for its ground connection and sealant may cause a poor ground causing inaccurate readings
- 4) Install the temperature sender into the proper port. <u>Note:</u> Installing the sender in the engine cylinder head may cause inaccurate temperature readings.*
 - On GM "LS" engines, the temperature sender mounts on the passenger side of the engine under the rear cylinder. A 12mm thread sender [SN12mm] is available to fit this location.



5) Connect a wire from the top terminal of the temperature sender to the White wire of the temperature gauge.

Notice: Avoid installing the temperature sender into the head of a late-model GMC engine. Even though the stock GMC sender may have been installed there, this opening is too close to the exhaust header and will most likely cause an improper reading.

Optional: VW Oil Temperature Sensor Kit [SN28A]

An available VW-type oil temperature sensor kit includes sender, metric adapter plug and VW sealing gasket. Install without modification into the oil pressure relief plug opening found on most air-cooled 1960's-type (flat-four air-cooled) VW engines. *Not for installation in the oil-drain plug opening!*

Most VW experts agree the oil pressure relief plug opening in the engine block behind the rear cylinder on the driver's side (U.S. left-hand drive) is a better choice for oil temperature sensor location than installing in the dipstick tube or in the oil pan drain opening.

Optional: Oil Pan Temperature Sensor [SN21]

A special sender is available to monitor the temperature of the engine oil in the oil pan. This sender replaces the stock drain plug (1/2 - 20 thread) on most GM and Ford engines.

Transmission Temperature Sensor

Classic Instruments recommends monitoring the transmission fluid temperature from the transmission pan. You may need to drill and mount a weld-in bung in your pan to install the temperature sender.

In-line transmission temperature manifolds are also available for mounting the temperature sender. However, some transmission companies have stated you may get higher than normal readings if an in-line manifold is used. Transmission fluid temperature should be kept under 210 degrees. At 230 degrees, the fluid breaks down and the clutches start to glaze resulting in transmission failure.