## MECHANICAL TEMPERATURE GAUGE INSTALLATION INSTRUCTIONS

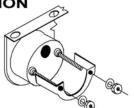


## **1** BEFORE YOU START

- Read instructions completely before installation. WEAR SAFETY GLASSES.
- 2. Install gauges 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 gauges.
  - **NOTE:** It may be necessary to reprogram your radio, clock, etc. after reconnecting the battery.
- Make sure mounting location does not impair visibility or interfere with driving. Also check behind the mounting location for any wiring or components before drilling.
- Refer to your vehicle's service manual for the location of sensor port, vacuum system, and/or charging system.
  - NOTE: Some vehicles use temperature and pressure sensors for engine control functions. Use a T-fitting if necessary when installing gauge sensors.
- When connecting electrical wires, install crimp terminals (purchased separately) and make wire splices as needed.
  - ALWAYS insulate wire splices with electrical tape to prevent shorting.
- 8. Follow all necessary safety procedures for protection.

**2** GAUGE INSTALLATION

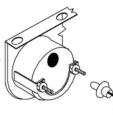
- 2-5/8" gauge mounts in a 2-5/8" diameter hole. Insert gauge through front of PANEL or hole in dashboard.
- Install U-bracket over gauge mounting studs and secure with two brass nuts and flat washers provided. TIGHTEN NUTS FINGER-TIGHT ONLY.



- Hold gauge case and rotate gauge, as needed, until gauge face is positioned properly on front of panel.
- After positioning, tighten mounting nuts securely to prevent gauge movement. DO NOT OVERTIGHTEN NUTS OR U-BRACKET MAY WARP.

## 3 LIGHT INSTALLATION

- Press light socket into the socket hole on the back of the gauge.
  - Splice the free end of each light-socket RED lead wire into an existing lead from any vehicle instrument panel lamp. Insulate the splices with electrical tape to prevent shorting.



- If the dashboard is plastic or insulated from frame ground, or the gauge is panel or cup mounted, solder a wire from the gauge case to a good ground.
- The gauge light is now connected to the lighting circuit controlled by the headlight switch. If the vehicle is so equipped, gauge light brightness will be controlled along with the regular instrument panel lamps.

## **4** OIL/WATER TEMPERATURE CONNECTION

 Determine routing for sensor line. Use an existing firewall grommet, or drill a 7/8" (22mm) diameter hole through firewall to accommodate sensor line. Install a rubber grommet (purchased separately) in hole, or wrap with electrical tape, to protect sensor line from chaffing or other damage.

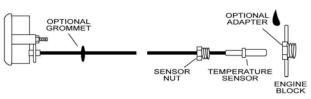
 $\mbox{{\bf NOTE:}}$  The sensor line is under pressure and filled with ether.  $\mbox{{\bf NEVER}}$   $\mbox{{\bf CUT}}$   $\mbox{{\bf THE}}$   $\mbox{{\bf LINE.}}$ 

2. Route temperature sensor through grommet in firewall.

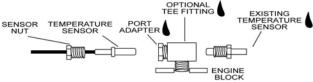
**NOTE:** Use Teflon sealing tape (purchased separately) on noted thread joints to ensure proper sealing.

 Remove existing temperature sensor. Install adapter in sensor hole and tighten securely. Insert temperature sensor in adapter and tighten sensor nut securely. DO NOT ROTATE SENSOR WHILE TIGHTENING NUT OR SENSOR LINE MAY BE DAMAGED.

**WARNING:** Some vehicles use the original temperature sensor for function in addition to the warning light. In these cases, both the gauge sensor and original sensor must be connected using a "T" fitting (purchased separately). See alternate connection diagram.



LUSE TEFLON SEALING TAPE ON NOTED THREAD JOINTS



ALTERNATE CONNECTION DIAGRAM

- Secure sensor line along its route to prevent damage from sharp edges, moving parts, or hot engine components.
- Reconnect negative (-) battery cable. Start and run engine and check gauge installation for leaks. Tighten or reseal joints as needed and retest.

