

by **PAUTO**Instr. No. 2650-318J

INSTALLATION INSTRUCTIONS 21/16" GAUGES

MODEL 2324, 2325, 2327, 2348, 2349, 2360, 2361, 2362, 2397



Preliminary Steps

- Read instructions thoroughly. The installation of this product requires the expertise of a trained automotive mechanic. Please consult a qualified mechanic if you have not had training in the proper installation of instruments.
- Determine ideal mounting location. Choose a location that will not obstruct visibility or impair driving. Consult your vehicle's repair manual to locate:
 - A. Water temperature port
 - B. 12V ignition switch or fuse box
 - C. Oil pressure port
- Consult your vehicle's manual to determine the best route for tubing to follow. Choose a path free from hazard of moving parts or hot engine components.
- 4. Assemble tools and parts required for installation.
- Disconnect negative (-) battery cable. Do not allow cable to touch battery or any metal.
 - **NOTE:** Disconnecting battery ground may require you to reprogram your radio station and clock after re-connection.
- Hole panel in desired mounting location and use as a template to mark drill holes on the underside of dash.
- Drill holes with an %" drill bit and mount bracket under dash using self-tapping screws and flat washers provided.

- **CAUTION:** Some late model vehicles use electronic sensors in their pressure and temperature senders for engine control functions. Before removing the original senders, we recommend that you contact your Auto Dealer to be sure no critical functions will be disrupted.
- With pressure gauges, it is beneficial to add a T-fitting to install your new gauge and to keep the warning light operational. This allows you to monitor the pressure and still have a warning light to indicate emergency conditions.

Important Assembly Procedures To Follow

- Tighten nuts and lock washer that secure the gauge mounting bracket. Be sure they are not so tight as to bend or distort mounting bracket.
- 2. Electrical Connections
 - Install additional wiring and hardware as shown in diagrams below. Now tighten the outer nut while holding the inner nut. This is the only correct procedure and must be followed to insure safe electrical connections. This applies to both the gauge and sender connections.
- Make sure wires are not rubbing against metal or each other. NOTE: Install gauges when engine is cool.

Oil Pressure

- Drill a %" dia. hole in the firewall. Install a rubber grommet provided in firewall to insulate tubing where it passes through sheet metal.
- 2. Remove existing oil pressure sender. (For computerized vehicles, see caution in Preliminary Steps.) Install ½" NPT adapter with ½₆" open-end wrench in this location using sealing compound on pipe threads. If ½" NPT adapter is needed, install it first with ½₆" open-end wrench. Be sure to hold ½" adapter while tightening ½" NPT tube connector firmly with ½₆" open-end wrench.
- 3. To help prevent leaks, be sure the end of nylon tubing with threads toward end of tube. Next, slide ferrule onto end of tubing, leaving \%" between ferrule and end of tube. Insert end of tubing into the \%" NPT tube connector. Apply pressure to maintain constant bond between end of tubing and inside of connector. Slide ferrule into the adapter and then thread compression nut on next. Tighten compression nut (with \%" open wrench) while holding adapter firm (with \%\" open-end wrench). This should form a tight seal between the end of tubing and the inside of adapter. To make sure it is a snug fit, tug lightly on the nylon tubing to be certain it does not come out.
- Route tubing through small grommet in firewall and cut to meet mounted panel (leave one foot extra length before cutting). Try to avoid potential hazard of moving parts or hot engine components.
- 5. Secure gauge in mounted panel using U-bracket.
- Slide compression nut and ferrule on this end of tubing and tighten in the same manner described in step 3. (Use %6" and %" open-end wrenches.)

See final procedures to complete installation.

Steel Panel

Use teflon sealing tape

on all pipe thread joints

or sealing compound

