

Oil Pressure

1. Drill a 3/8" dia. hole in firewall. Install small rubber grommet in firewall to insulate nylon tubing where it passes through sheet metal.
2. Remove existing oil pressure sender (for computerized vehicles, see warning on pg. 1). Install 1/8" NPT adapter (with 7/16" open-end wrench) in this location using sealing compound on pipe threads. If 1/4" NPT adapter is needed, install it first instead (with 9/16" open-end wrench). Be sure to hold 1/4" NPT adapter while tightening 1/8" NPT adapter firm (with 7/16" open-end wrench).
3. To help prevent leaks, be sure the end of nylon tubing is cut cleanly and straight. Slide compression nut onto tubing with threads toward end of tubing. Slide ferrule onto end of tubing, leaving 3/16" between ferrule and end of tube. Insert end of tubing into 1/8" NPT adapter. Apply pressure to maintain constant bond between end of tubing and inside of adapter. Slide ferrule into the adapter then compression nut. Tighten compression nut (with 3/8" open-end wrench) while holding 1/8" NPT adapter firm (with 7/16" open-end wrench). To make sure it is a snug fit, tug lightly on nylon tubing to make sure it doesn't come out.
4. Route tubing through small grommet in firewall and cut to meet mounted panel (leave one foot of extra length before cutting). Be sure to avoid potential hazard of moving parts or hot engine components.
5. Secure gauge in mounted panel using non-insulated mounting bracket.
6. Slide sealing nut and ferrule on this end of tubing and tighten in the same manner described in Step 4 (use 9/16" and 3/8" open-ended wrenches).

Final Procedures (For All Gauges)

1. Insert light bulb and socket assembly into back of each gauge. Connect all red lighting wires to 12V power source in dash lighting circuit. This allows the gauge lights to be dimmed with normal dash lighting and only used at night. Connect the black wires to good engine ground. (Body frame bolt is a good engine ground.)
2. Reconnect negative (-) battery cable.
3. **For ammeters**, turn on lights when engine is **off**. Ammeter indicator should read negative (-). If it reads positive (+), reverse the red, 10-gauge wires on back of meter. **Before** starting car, double check that all connections are tight. After starting engine, check wiring connections for hot spots. Be prepared to shut off **immediately** if hot spots are detected.
4. Inspect all connections for leaks. Wrap a clean rag around fittings on back of oil pressure gauge and place a pan on floor under them to protect vehicle interior from potential oil leaking. Start engine and run for 30 seconds. Shut engine off and check rag for leaks. If none appear, start engine again and visually check all connections for leaks.

Auto gage®

by **Auto Meter**

2650-252X-10

**INSTALLATION
INSTRUCTIONS**



2⁵/₈" Mechanical 3-Gauge Console

MODEL 2394, 2395

WARNING: 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 automotive dealer to be sure no critical functions will be disrupted.

- **For temperature gauges, Auto Meter temperature manifolds can be plumbed directly into the cooling system in any convenient location. Temperature sensing bulb can then be threaded into the temp. manifold for accurate cooling system temperature readings.**
- **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.**

Preliminary Steps

1. Read instructions thoroughly. Please consult a qualified mechanic if you have not had training on the proper installation of instruments.
2. Consult your vehicle's repair manual to locate:
 - A) oil pressure port,
 - B) 12V ignition switch or fuse box, and
 - C) water temperature port
3. Determine ideal mounting location. Choose a location that will not obstruct visibility or impair driving movement.
4. Determine the best route for tubing to follow. Choose a path free of hazards of moving parts or hot engine components.
5. Assemble tools and parts required for installation.
6. Remove gauges from metal panel. Notice their placement to make reassembly easier.
7. Disconnect negative (-) battery cable.
8. Hold panel in desired mounting location. Use panel as template and mark holes to be drilled for mounting. (For mini consoles, use mounting brackets as templates.)
9. Drill holes with a 9/64" drill bit and attach metal panel with self-tapping screws provided.

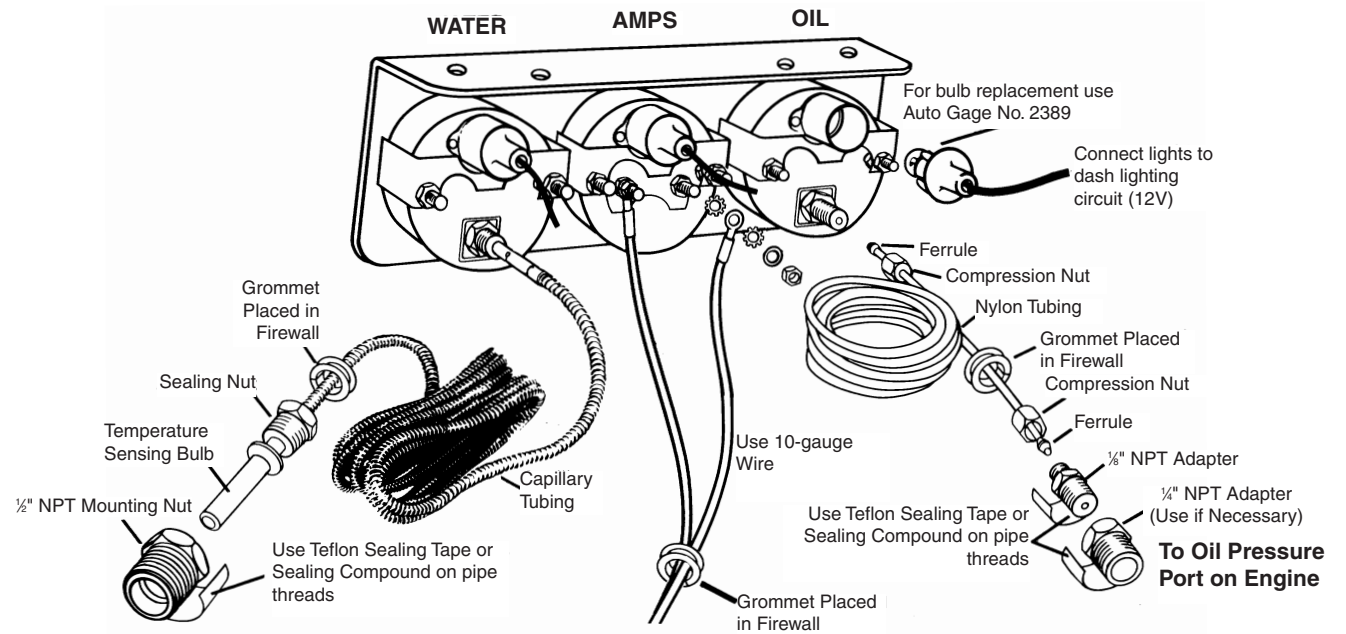
For actual gauge installation, see further instructions inside.

Tools Required

Electric Drill
 Drill Bits: 9/64", 3/8", 7/8" dias.
 Open-End Wrenches: 7/16", 9/16", 3/8", 7/8"
 Standard Screwdriver
 Clean Rag
 Thread Sealing Compound

This product is not valid for race contingency money.

NOTE: For replacement light bulb, order Auto Gage No. 2389



Water Temperature

1. Drain coolant from cooled radiator into a container. *Never drain hot coolant!* Save antifreeze to refill radiator after installation.
2. Drill a 7/8" dia. hole in firewall and route temperature sensing bulb through mounted panel first and then through firewall hole. Slit rubber grommet and position in firewall hole to hold gauge tubing in place.
3. Using sealing compound on threads, insert and tighten mounting nut in the 1/2" NPT port in engine. (Use 7/8" open-end wrench). If port opening is not 1/2" NPT, use the 3/8" adapter provided in kit. Insert temperature sensing bulb into mounting nut and carefully thread the sealing nut into the mounting nut. Be sure to hold the mounting nut securely (with 7/8" open-end wrench) while tightening sealing nut (with 5/8" open-end wrench). Check that tubing is free from hazard of moving parts or hot engine components.
4. Refill radiator with coolant.
5. Secure gauge in mounted panel using non-insulated mounting bracket. **See final procedures to complete installation.**

Note: Whenever removing temp. sensing bulb, loosed sealing nut but **DO NOT** allow mounting nut to rotate. Rotation may break capillary tubing, thus voiding warranty.

Ammeter (Do not use on charging systems capable of greater than 60A) Minimum wire size is 10 gage.

Read **before** installing:

- WARNING**
1. Disconnect negative (-) battery cable.
 2. Verify that the nuts on both meter terminals are tight.
 3. Follow wiring diagram for car system I or II, and connect ammeter as illustrated.

CAUTION

DO NOT CONNECT THE AMMETER ACROSS THE BATTERY.

4. **IMPORTANT:** Terminal lugs must be **BOTH** crimped and soldered to the wire, and star lockwashers must be used on both sides of the terminal lugs.
5. Tighten terminal nuts to compress star lockwashers into the terminal lugs.
6. Verify that **none** of the ammeter connections are to ground.

See final procedures to complete installation.

For Oil Pressure installation see back page.

Hardware must be attached as shown.

