## WATER/OIL TEMPERATURE GAUGE INSTRUCTIONS

**Warning:** If your car is microprocessor (computer) controlled or has an electric cooling fan, refer to the section in the installation instructions titled "<u>Microprocessor Controlled Engines</u>."

Temperature gauges measure the temperature 6. of any liquid their sender tip is submerged in. An electrical temperature gauge is simpler and more versatile for installation than a mechanical gauge but is not quite as fast to respond to temperature changes.

## PRECAUTIONS

- A temperature gauge requires that its sender tip have a circulating flow around it to give an accurate reading. For this reason, a T-fitting cannot be used because it has no circulation therefore the original warning light sender cannot be operated off the same location. An additional location may be available on the cylinder head, intake manifold, or thermostat housing but caution should be used in that these locations may have different average temperatures than the original warning light sender location.
- Do not over tighten the fittings or sender, particularly for mechanical gauges. The threads are designed to strip before the engine component can be damaged. The fittings use tapered self-sealing threads and do not require extreme force to seal properly.
- Do not use sealing tapes or compounds on electrical senders as this will disturb their grounding connection to the engine resulting in false low readings.
- 4. Take caution when uncoiling and routing the mechanical gauge's capillary tubing that you do not bend it too sharply or flex it too often. Any break in the inner tube will make the gauge nonrepairable. A replacement service is available only at the factory service center.
- Always install the adapter fitting into the engine first and then tighten the captive fitting (Diagram 1) on the capillary tube to avoid twisting the tubing.

 Never install the captive fitting on the capillary tube directly into the engine without an adapter, as a proper seal will not be formed.

## INSTALLATION

Note: If you are planning to use both an oil temperature gauge and an an oil pressure gauge, some modifications may be necessary as there is only one available hole for both senders. Since the temperature gauge cannot use a T-fitting, we suggest that you install the oil temperature sender into the oil pressure warning light sender location in the engine block. Then obtain an adapter (which we do not manufacture) used for oil coolers which will give you an additional outlet for oil pressure.

## FOR MECHANICAL GAUGES:

- Drain the fluid level in the system to below the sender's mounting location which is normally the factory's warning light sender location.
- 2. Route the capillary tubing through the mounting



hole for the gauge and then through the firewall, protecting the tubing from rough edges. Form at least one 3" or larger loop of tubing as it comes through the firewall and route the remainder to the sender mounting locations.