



**CAUTION:** Disconnect the battery during installation. Tighten nuts on the backclamp only slightly more than you can tighten with your fingers. Six inch-pounds of torque is sufficient. Overtightening could result in damage to the instrument and may void your warranty.

1. Temperature senders are available from *Faria® Marine Instruments* in 1/8" NPT thread sizes. If your water jacket, oil pan or transmission housing requires a thread diameter larger than 1/8" NPT, a bushing will be required. "T" fittings should NOT be used as these may affect the accuracy of the sender by reducing the temperature signal.

2. Be certain to use stranded, insulated wire, not lighter than 18 gauge, that is approved for marine use. It is recommended that insulated wire terminals, preferably ring type, be used on all connections to the gauge and the sender, except the light which requires a 1/4" female blade terminal.

3. Cut a 2-1/16" diameter hole in the dash and mount the gauge with the backclamp supplied.

4. Connect a wire to the gauge stud marked "S" (signal) and secure with nut and lockwasher. Connect the opposite end to the stud on the sending unit and secure with nut and lockwasher. **CAUTION** -- Be certain wire insulation is not in danger of melting from engine or exhaust heat or interfering with moving mechanical parts.

5. Connect a wire to the gauge stud marked "GND" (ground) and secure with nut and lockwasher. Connect opposite end to the boat's electrical ground, generally available at several locations at or near the instrument panel.

6. Connect a wire to the gauge stud marked "I" (ignition) and secure with nut and lockwasher. Connect opposite end to a 12VDC circuit that is activated by the ignition switch.

7. Connect the blade terminal adjacent to the twist-out light assembly to the positive "+" side of the instrument lighting circuit. No separate ground is required for lighting. Reconnect the battery.

**NOTE:** To change light bulb, twist black socket assembly one-eighth turn counterclockwise until it pops out. Bulb pulls out of socket assembly. It is a GE No. 161 instrument lamp.

# Choosing the Proper Sender

Senders are designated by the following descriptions and must be selected in combinations of one each from A, B, & C.

(For example: Single station, American resistance, Standard ground)

<b>A</b>	Station <sup>a</sup>	Single
		Dual
<b>B</b>	Resistance <sup>b</sup>	American
		European
<b>C</b>	Ground <sup>c</sup>	Standard
		Floating

**Notes:**

- a. Station: It is the sender that is unique in a dual station application. The gauge is the same in either single or dual applications.
- b. Resistance: Choose your sender to electrically match your gauge not just the manufacturer. Some sender manufacturers make both resistance types; and, some instrument manufacturers may use either resistance type depending on the gauge. There is usually no visual way alone to determine the resistance type.
- c. Ground: Standard ground is the most common having battery negative (-) connected directly to the engine block. Sending units may have one (1) terminal (signal). In a floating ground system, the battery negative is not connected to the engine block so merely threading in the sender does not supply ground. Floating ground senders will have two (2) terminals (signal & ground). Both sender terminals may be wired to the appropriate gauge terminal or the sender's ground may be wired directly to the battery negative. A floating ground sender may be used in a standard ground system but not vice versa.

For technical assistance, contact *Faria*<sup>®</sup> Marine Instruments Customer Service between 8:30 a.m. and 5:00 p.m. Eastern time weekdays at (860) 848-9271 or (800) 473-2742.