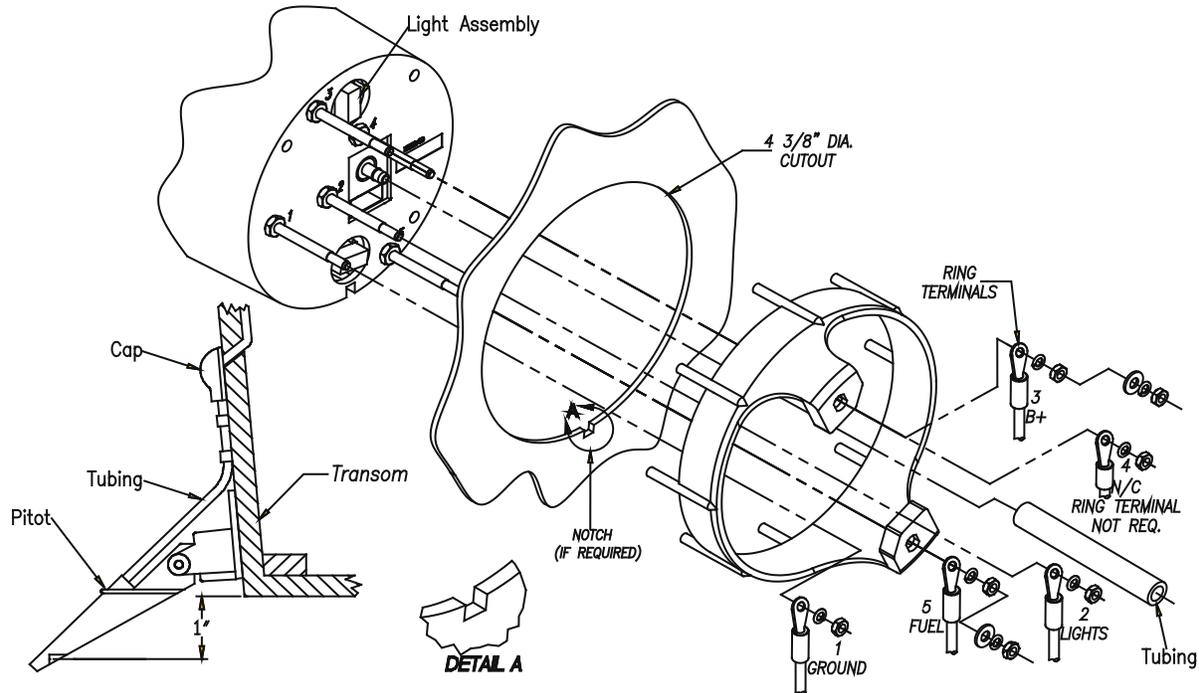


## Installation Instructions 3-in-1 Gauge, 5" SI Mechanical Speedometer, Fuel, Volts

**CAUTION:** Disconnect the battery during installation. Tighten nuts on the back clamp only slightly more than you can tighten with your fingers. Six inch-pounds of torque are sufficient. Over tightening may result in damage to the instrument and may void your warranty. Gasket cement or other adhesive are not required to secure tubing to fittings.



1. Be certain to use stranded, insulated wire not lighter than 18AWG that is approved for marine use. It is recommended that ring type, terminals be used on all connections to the instrument.
2. Locate / install the pitot tube assembly on the transom in a vertical position, 6" away from the prop blade tips. The intake hole must also be 1-1/2" min below the bottom of the hull. Don't place behind rudder or keel, as this will affect its accuracy.
3. Locate a convenient place above the water line to bring the tubing through. Drill a 1/4" hole at this location and pull the tubing through. Use a marine sealer on the cap plate and draw the plate tight against the transom using the screws provided. Press the tubing fully onto the male fitting on pitot assembly.
4. Run the tubing along the inside of the boat's gunwale. Avoid sharp turns, crimping, kinking, or other forces that may reduce the inside diameter of the tubing. Fasten the tubing at regular intervals with small plastic clips supplied (again be careful to not pinch the tubing). A slight downward slope from bow to stern will help avoid trapping water. Do not coil any excess tubing, as it should be cut to the desired length.
5. Cut a 4-3/8" diameter hole in the dash and mount the speedometer with the back clamp supplied. If required, cut a .175" wide by .115" deep notch to accept the key on the case. See detail above.
6. After the speedometer dash installation, cut tubing with some slack and press male fitting on the back of the speedometer.
7. Connect a wire to the stud marked "1"(ground) and secure with a nut and lockwasher. Connect opposite end to boats electrical ground, generally available in several locations near the instrument panel.
8. Connect a wire to the stud marked "2"(lighting) and secure with a nut and lockwasher. Connect opposite end to positive "+" side of the boats instrument lightong panel. No additional ground required.
9. Connect a wire to the stud marked "3"(B+) and secure with a nut and lockwasher. Connect opposite end to a 12VDC curcuit that is activated by the ignition switch. (NOTE: Stud marked "4" is NOT Connected)
10. Connect a wire to the stud marked "5"(fuel send) and secure with a nut and lockwasher. Connect opposite end to the stud on the sensing unit and secure with lockwasher.

**CAUTION:** Ensure wire insulation is not in danger of melting from engine exhaust heat or interfering with moving mechanical parts when connecting sensors. Reconnect the battery.

**NOTE:** To change light bulb, twist out black socket assembly one-eighth turn counterclockwise until it pops out. Bulb pulls straight out of assembly. It is a GE No. 194 instrument lamp. (See diagram above for connections)