

READ COMPLETELY BEFORE ATTEMPTING INSTALLATION*

WARNING: *Improper installation or use of this product may cause serious injury or property damage. These instructions are prepared to assist tradesmen and others generally familiar with liquid storage tank equipment. Most consumers are not qualified to perform the installation described below. If you have any questions concerning this installation or operation of the sender, contact your local service center or the aircraft manufacturer for assistance.*

TOP AND SIDE MOUNT FUEL SENDERS

Install sender using P/N 13-10017-XXX gasket. Use #10-32 (or equivalent) screws to secure the gauge head to the tank or gauge mounting pad. Torque screws to 20-25 inch lbs. torque. Be sure to torque screws in a crossing pattern to avoid stress on the connecting wire which may negatively impact the fuel sender's calibration. For the most consistent results, torque using calibrated torque application device.

MAINTENANCE AND QUALITY ASSURANCE CONSIDERATIONS

For Quality Assurance applications, installation torque should be controlled at initial installation and application of torque using a calibrated torque device. Regularly verify the calibration and functional condition of the torque application device. Since this is not a metal to metal joint, the torque and screw clamp load will naturally relax as the gasket flows to a normal condition. Do Not use a torque wrench to verify the correct screw installation torque after the initial installation. NEVER re-torque just to restore to 20-25 in. lbs.

CAUTION:

Do not over torque. Do not re-torque later unless leaking. Excessive torque/or re-torquing will warp or distort the sender head. The gasket underneath the sender head that is warped during installation or re-torquing is probably over-compressed or pinched in at least one area. Pinching or over-compression of gaskets can dramatically reduce their service-life and may result in failure (leakage) in service, especially after exposure to temperature and vibration.

GENERAL RECOMMENDATIONS:

For critical applications, installation should be specifically engineered for your application. Use of safety wires on the screw heads is usually recommended.

SENDER ELECTRICAL CONNECTIONS:

Usually the mounting screws ground the head to the tank. However, in some cases it may be necessary to connect the head to a suitable chassis grounding point. System voltage should not be applied to the Sender output terminal or lead. The excitation from the fuel quantity indicator must be current & voltage limited, and incapable of causing ignition of the fuel vapor when the Sender lead wire is shorted to ground. Electrical connections should be made per instructions on Sender drawing. For Senders with output terminal, care must be taken to insure that the bottom nut on the terminal stud is not disturbed when the electrical connection is made. The bottom terminal stud nut torque is factory set to provide the correct terminal stud seal preload.

NUTS ON ELECTRICAL TERMINALS SHOULD BE TIGHTENED AS FOLLOWS

CAUTION: ALWAYS USE BACK-UP WRENCH WHEN TIGHTENING TERMINAL NUTS.

#8- 12 IN. LB.

SENDER REMOVAL WARNING:

Should it appear necessary, for any reason, to remove the gauge from the tank, do not attempt removal unless under competent supervision with all due precautions taken against the hazards of escaping liquid or vapor.