8500 Series Gauge Installation
(Black Plastic 4 Bolt Gauge)

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 installation or operation of the sender or gauge, contact Rochester Gauges, Inc. or one of our authorized distributors for assistance.

TOP MOUNTED SENDERS
Install sender or gauge using 0015-00004 BunaN gasket. Use 1/4 - 28 UNF (or equivalent) bolts to secure the gauge head to the tank or gauge mounting pad. Torque bolts to 20 in. lbs. torque. For the most consistent results, torque using calibrated torque application device.

SIDE OR BOTTOM MOUNTED SENDERS
Must not be used on tanks containing flammable liquids. See 8500 Series technical data sheet for intended applications.

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 in. lbs.

CAUTION:
Do not over torque. Do not re-torque later unless leaking.
Excessive torque/or re-torquing will warp or distort the gauge head. The gaskets underneath gauge heads that are warped during installation or re-torquing are 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.

SENDER AND GAUGE 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.

* Materials and specifications are subject to change without notice.

See reverse side for dimensional data, materials of construction, performance, and advice on how to order.

The Measure of Excellence

05/27/2016
MANTENANCE 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 BOLT CLAMP LOAD WILL NATURALLY RELAX AS THE GASKET FLOWS TO A NORMAL CONDITION. DO NOT USE A TORQUE WRENCH TO VERIFY THE CORRECT BOLT INSTALLATION TORQUE AFTER THE INITIAL INSTALLATION. NEVER RE-TOURQUE JUST TO RESTORE TO 20 IN-LBS.

CAUTION: DO NOT OVERTORQUE, DO NOT RE-TOURQUE LATER UNLESS LEAKING. EXCESSIVE TORQUE OR RE-TOURQUING WILL WARP OR DISTORT THE GAUGE HEAD. THE GASKETS UNDERNEATH GAUGE HEADS THAT ARE WARPED DURING INSTALLATION OR RE-TOURQUING ARE 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.

INSTALLATION INSTRUCTIONS FOR GAUGES EQUIPPED WITH PLASTIC HEADS AS USED ON 8500 SERIES.

1. FLAT WASHER IS REQUIRED.
2. TORQUE IN CROSSING PATTERN.
3. OVERTORQUING OR PLACING A LOCK-WASHER AGAINST THE PLASTIC HEAD MAY CAUSE STRESS CRACKING AFTER UNIT IS PUT INTO SERVICE.
4. TORQUE TO APPROXIMATELY 20 IN. LBS.
5. FOR BEST RESULTS USE A CALIBRATED TORQUING DEVICE.

NOTES:
1. DRILL 5.5MM [216/221] DIA. X 3/4" +0/-1/16" CYL. DEPTH. TAP 1/4-28 NF-2 X 1/2" +1/-0 FULL THD DEPTH, TYP. 4 PLC.
2. DRILL LETTER 1.272/2.797 DIA. X 3/4" +0/-1/16" CYL. DEPTH. TAP 5/16-24 NF-2 X 1/2" +1/-0 FULL THD DEPTH, TYP. 4 PLC.
3. TAPPED HOLES TO BE IN, TO FACE WITHIN 1/2".
4. GASKET RECESS TO BE @ TO BORE WITHIN ±0.010 TIR.
5. TAPPED HOLES TO BE @ TO GASKET RECESS WITHIN ±0.025 TIR.