READ COMPLETELY BEFORE ATTEMPTING INSTALLATION

WARNING: Improper installation or misuse 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. Consumers are not qualified to perform the installation described below.

IS THE GAUGE RIGHT FOR YOUR APPLICATION?

Gauges should only be installed in applications recommended by the manufacturer. Verify that the gauge is the proper gauge for your application prior to attempting installation.

The float may or may not have a counterbalance depending on the intended application. Applications for light specific gravity liquids or large tanks normally require counterbalancing of the float.

The gauge, mounting gasket and mounting adapter (if applicable) must be constructed of materials compatible with the liquid to be measured and the service environment. The float, mounting bolts and head must be adequately rated for your specific pressure and temperature service.

IS THE GAUGE THE PROPER SIZE?

As a general rule, the float pivot point should be on the horizontal centerline of the tank when installed. The float length dimension (measured from the float pivot point to the end of the float) should be proportional to the inside tank height and is usually slightly less than \( \frac{3}{4} \) of the vertical inside height of the tank.

Gauges can be constructed for side, top or angle mounting but must be installed in the position for which they are constructed. Hold the gauge by the support (see Figure A) in the intended mounting attitude and operate the float to see if it is correct for your application (see Figure B).

CAUTION: Improper gauge or dial selection or application may result in inaccurate readings. Release of tank contents as well as damage to equipment and safety hazard may result if tank is overfilled. Fuel exhaustion may occur if tank contents are less than indicated. LP Gas & NH₃ gauge dials require an appropriate temperature chart.

WARNING: Determine and install the appropriate gauge & gasket based on system requirements. The gasket type supplied may not be suitable for all applications and for those applications other gasket materials may be available. The information contained herein is intended for guideline use only and the suitability of any part for a particular application must be determined by the user prior to installation. Improper gasket selection or application may result in seal failure, subsequent release of tank contents and serious injury and or property damage.

WARNING: This gauge is not a substitute for a fixed liquid level gauge or weight measurement device, which may be required for filling. This document is not instructions for tank filling.

GAUGE REMOVAL WARNING: Should it appear necessary, to remove the gauge from the tank, do not attempt removal unless under competent supervision with all due precautions taken against the hazards of released liquid or high pressure and/or flammable gas.

HAZARDS: A hazard of fire or explosion may exist if proper methods are not used when removing or installing the gasket. Replace gasket if gauge head is removed. Do not reuse gasket. When reinstalling gauge, align head for proper orientation of the float inside tank.

Support
Float Pivot
Head
Counter Balance (if required)

Vertical support, top mount
Inclined support, angle mount
Horizontal support, Side or end mount

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

The Measure of Excellence
**MS-501/502 Jr. & Sr. Bolted Gauge Installation**

**Installation***

A. Gauges are normally fastened to tank using a mounting adapter which has previously been welded or otherwise installed into the tank or it’s fittings. Check adapter for correct dimensions and finish, see dimensions below. Check color stripe on O.D. of gasket for material.

**BLUE STRIPE** = NEOPRENE. Order Senior part # 0015-00836 or Junior part # 0015-00835 recommended for anhydrous ammonia and specific refrigerant applications.

**CAUTION: Adjustable gauges are NOT intended for ammonia service.**

**GREEN OR BROWN STRIPE** = VITON. Order Senior part # 0015-00415 or Junior part # 0015-00039.

**WHITE GASKET** = TEFLOW. Order Senior part # 0015-00401 or Junior part # 0015-00405.

**SPIRAL WOUND TEFLOW AND STAINLESS STEEL.** Order Senior part # 0015-00462.

**CAUTION:** Do not over torque. Do not re-torque later unless leaking. Over tightening may cause damage to head and gasket.

<table>
<thead>
<tr>
<th>BOLT SIZE</th>
<th>DRY TORQUE</th>
<th>GASKET TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4-28</td>
<td>35 In. Lb. [4 Nm]</td>
<td>BUNA, NEOPRENE, VITON, TEFLOW</td>
</tr>
<tr>
<td>5/16-24</td>
<td>100 In. Lb. [11 Nm]</td>
<td>BUNA, NEOPRENE, VITON, TEFLOW</td>
</tr>
<tr>
<td>5/16-24</td>
<td>135 In. Lb. [15 Nm]</td>
<td>SPIRAL WOUND GASKET (used with stainless steel head and special mounting screws)</td>
</tr>
<tr>
<td>5/16-24</td>
<td>125 In. Lb. [14 Nm]</td>
<td>NEOPRENE, NARROW, YELLOW STRIPE (Refrigerant Applications)</td>
</tr>
<tr>
<td>5/16-24</td>
<td>125 In. Lb. [14 Nm]</td>
<td>BUNA-N, NARROW, WHITE STRIPE (Refrigerant Applications)</td>
</tr>
</tbody>
</table>

*Materials and specifications are subject to change without notice. Pressure ratings subject to change due to temperature and other environmental considerations.

**NOTES:**


2. Drill 5.5 MM (.216 —.221) DIA X .75 .06 Cyl. Depth. Tap .250—28 UNF -2B X .50 .06 Full Thread Depth TYP. 4 Places.

3. Tapped Holes To Be .1 To Face Within 90°

4. Gasket Recess To Be With Bore Within .030 T.I.R.

5. Tapped Holes To Be With Gasket Recess Within .025 T.I.R.


7. For SR. Industrial Gauges Using 0015—00079 Or Similar Flat Gasket, Delete .062 x 2.093 Gasket Recess.