7300 Series Gauge Installation Instructions

READ COMPLETELY BEFORE ATTEMPTING INSTALLATION*

THESE INSTRUCTIONS ARE APPLICABLE WHEN 7300 SERIES ALUMINUM, ZINC OR BRASS HEAD FLOAT GAUGES ARE INSTALLED IN FORGED STEEL, THREADED WELD ADAPTERS. THESE FLOAT GAUGES ARE INTENDED FOR USE WITH \( \frac{3}{8}''-14 \) NPTF ADAPTERS OR \( \frac{3}{8}''-14 \) NPT ADAPTERS.

HEADS FOR 7300 SERIES FLOAT GAUGES ARE SUPPLIED WITH 3/4” NPT THREADS. THE PITCH DIAMETER TOLERANCE IS 1/2” TURN LARGE TO 1/2 TURN SMALL.

THREADED GAUGE HEADS WILL NORMALLY BE COATED WITH EVERSEAL THREAD COMPOUND WHICH IS SUITABLE FOR LP-GAS SERVICE APPLICATIONS.

1. INSPECT ADAPTER THREAD PITCH DIAMETER WITH \( \frac{3}{8}''-14 \) NPTF L1 BASIC NOTCH PLUG GAGE OR \( \frac{3}{8}''-14 \) NPT BASIC NOTCH PLUG GAGE. TYPICAL COMMERCIAL TOLERANCE IS “FLUSH WITH NOTCH TO ONE TURN LARGE OR ONE TURN SMALL”.

2. IF ADAPTER THREADS ARE CORRECT, THEY MAY BE WELDED INTO THE TANK. HOWEVER, STEPS SHOULD BE TAKEN TO MINIMIZE THREAD DISTORTION DUE TO HEAT AND TO SHIELD THREADS FROM WELD SPATTER.

3. AFTER WELDING, REINSPECT ADAPTERS AS DESCRIBED IN STEP ONE. IF THREADS ARE CORRECT AFTER WELDING, PROCEED TO STEP SIX. IF THREADS ARE NO LONGER CORRECT, GO TO STEP FOUR.

4. UNDERSIZE, DISTORTED OR WELD SPATTERED ADAPTER THREADS MUST BE RE-TAPPED WITH \( \frac{3}{8}''-14 \) NPTF OR \( \frac{3}{8}''-14 \) NPT TAP USING THREAD CUTTING OIL. BE CAREFUL NOT TO TAP THREADS TOO DEEP. AFTER TAPPING, CLEAN ADAPTER THREADS OF METAL CHIPS AND EXCESS OIL.

5. REINSPECT ADAPTER THREADS AS DESCRIBED IN STEP ONE. IF THREADS ARE CORRECT, GO TO STEP SIX. IF THREADS ARE STILL UNDERSIZE, GO BACK TO STEP FOUR.

6. IF NOT ALREADY COATED WITH EVERSEAL, APPLY THREAD COMPOUND TO THREADS OF FLOAT GAUGE HEAD. (IT IS PERMISSIBLE TO APPLY SUITABLE LUBRICATING OIL OVER EVERSEAL.)

7. TO PREVENT OR REDUCE GALVANIC CORROSION, EXTERIOR OF THREADED WELD ADAPTER SHOULD BE PAINTED OR POWDER COATED AFTER WELDING INTO TANK.

8. INSTALL FLOAT GAUGE THROUGH THREADED WELD ADAPTER. SCREW IN AT LOW ROTATIONAL SPEED TO PREVENT FLOAT ARM DAMAGE.

9. INSTALL HEAD TO ENGAGE BETWEEN 5 AND 6 THREADS. THEN ROTATE HEAD ENOUGH TO ALIGN DIAL WITH TANK. ENGAGE BETWEEN FIVE AND SEVEN THREADS WITH BETWEEN ONE AND FOUR THREADS VISIBLE AFTER INSTALLATION, MINIMUM TORQUE 70 POUND-FEET.

10. PLASTIC DIALS MAY NOT BE COMPATIBLE WITH SOME CHEMICALS WHICH MAY BE IN COMMON USE ON A TANK LINE. EXAMPLES: RUST INHIBITORS, SOLVENT BASED PAINTS, LUBRICANTS, LEAK CHECK FLUIDS AND CLEANING SOLVENTS, ETC. THE USE OF CHEMICALS WHICH ATTACK PLASTIC ON OR NEAR DIALS CAN RESULT IN DIAL LEAKAGE OR OTHER IMMEDIATE OR LATENT DIAL DAMAGE. CHEMICAL COMPATIBILITY SHOULD BE CHECKED USING FULL STRENGTH CHEMICALS. AFTER 72 HOURS OF IMMERSION, EXAMINE DIALS CAREFULLY FOR EVIDENCE OF CRACKS OR CRAZING.

SEE MS-516 FOR ADDITIONAL INFORMATION

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