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INSTALLATION AND OPERATING INSTRUCTIONS FOR MODEL ESP AND ST

1. INSTALL GAUGE ON TANK FLANGES, MAKING SURE TUBE HOLDERS ARE NOT REMOVED OR ALLOWED TO SLIP DOWN DURING INSTALLATION. BOLT GAUGE FLANGES TO MATCHING FLANGES WITH CORRECT SIZE BOLTS FOR FLANGE SIZE USED. TIGHTEN BOLTS ACCORDING TO THE FOLLOWING BOLT TORQUES:

| FLANGE SIZE | <u>TORQUE</u> |
|---------------|---------------|
| 1"-150# | 15 FT- LBS. |
| 1 1/2" – 150# | 20 FT-LBS |
| 2"-150# | 25 FT-LBS. |
| 3"-150# | 40 FT-LBS. |
| 4"-150# | 45 FT-LBS. |

- 2. THE GAUGE SHOULD BE INSTALLED WITH VALVES. ONCE INSTALLED, VALVES MUST BE OPENED SLOWLY SO THAT TEMPERATURE AND PRESSURE CHANGES DO NOT BREAK THE GLASS.
- 3. TO CLEAN GAUGE GLASS, CLOSE VALVES AND OPEN DRAIN PLUGS TO DRAIN EXCESS FLUID OFF. REMOVE ALL BUT ONE OF THE FLANGE BOLTS. LOOSEN THIS FLANGE BOLT AND ROTATE GAUGE SO THAT THE GLASS MAY BE CLEANED OR REPLACED.

GLASS REPLACEMENT FOR ESP/ST LEVEL GAUGES

- 1. REMOVE HARP PINS FROM CLEVIS PINS ON END GAUGE.
- 2. CAREFULLY REMOVE TEFLON TUBE HOLDER INSERT FROM EACH END OF GAUGE.
- 3. REMOVE O-RINGS FROM GLASS AND SLIDE GLASS OUT OF UNIT (FOR UNITS WITH SIGHT TUBE SPLICER, IT WILL BE NECESSARY TO REMOVE ONE OF THE TEFLON SIGHT TUBE HOLDERS IN ORDER TO REMOVE THE GLASS).
- 4. IF UNIT HAS A SIGHT TUBE SPLICER, IT WILL BE NECESSARY TO UNSCREW THE SIGHT TUBE SPLICER ASSEMBLY IN ORDER TO REPLACE THE GLASS.
- 5. SLIDE GLASS BACK INTO UNIT AND REINSTALL O-RINGS (IF UNIT HAS SIGHT TUBE SPLICER RE-ASSEMBLE SPLICER).
- 6. REPLACE TEFLON TUBE HOLDER INSERTS ON BOTH ENDS.
- 7. RE-ALLIGN TUBE HOLDER WITH HOLES IN HOUSING AND INSTALL CLEVIS PIN IN EACH END OF GAUGE AND RE-INSTALL HARP PINS INTO CLEVIS PINS.