APPENDIX RA-12

SIGHT GAGES - CLOSED CIRCUIT

TMA SERIES THERMOMETER INSTALLATION INSTRUCTIONS

TMA100 Series

1. Select a reservoir location to drill the access hole that is accessible from inside the reservoir and at a height to provide your most optimal point of use temperature. Verify there is sufficient clearance for the stud and thermometer probe inside the reservoir.
2. Drill a .52 inch (13.1 mm) diameter hole through the tank wall.
3. Remove burrs from the hole to provide a good sealing surface.
4. Verify o-ring is set properly in recess provided on backside of aluminum enclosure.
5. Insert stud of probe assembly through tank wall rotating to desired position of the thermometer face. While maintaining this position, tighten the lock nut by hand until secure.
6. Then use a torque wrench to tighten the lock nut to 60 in-lbs (6.78 N-m). Maintain the orientation of the thermometer by holding the aluminum enclosure during tightening either by hand or if necessary with a wrench.

NOTE: The tank seal is designed to space the aluminum enclosure away from the tank wall. Excessive assembly torque may cause the tank seal to fail prematurely.

TMA200 Series

1. Select a reservoir location to drill and weld a pipe coupling sized to mate with the TMA200 thermometer selected and at a height to provide your most optimal point of use temperature. Verify there is sufficient clearance for the thermometer probe inside the reservoir.
2. Apply an anaerobic thread sealant or pipe dope to the male pipe thread of the adapter. Do not use RTV or Teflon tape as the thread sealant.
3. Assemble the thermometer subassembly into the pipe coupling by hand until firmly secured.
4. Mark one hex flat on the adapter extending the mark onto the coupling surface. This mark will be used to identify the adapter's relative position while further tightening the pipe adapter with a wrench.
5. Use a wrench to further tighten the adapter 1 to 1-1/2 turns beyond figure tight to achieve a leak free joint. Use the mark previously placed on the hex flat to aid in identifying when the correct number of assembly turns has been achieved. Do not apply any torque to the aluminum enclosure protecting the thermometer face.

NOTE: The orientation of the thermometer face cannot be rotated independent from the pipe adapter.