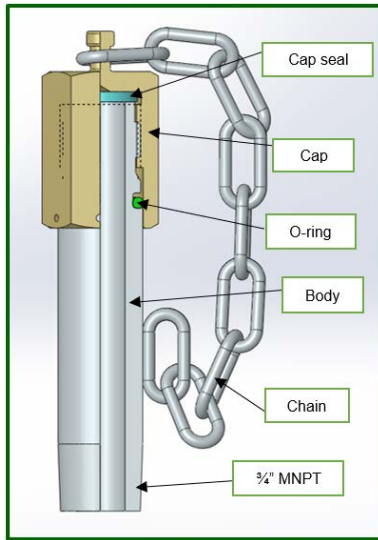


## DISCLAIMER

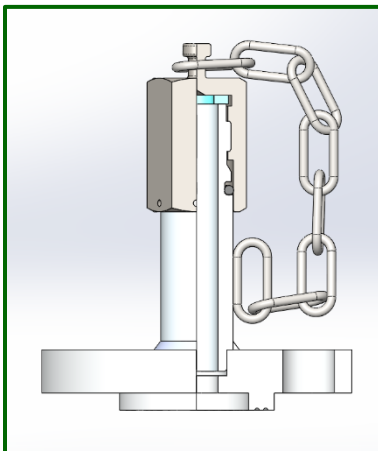
To avoid injury or damage to product only qualified personnel should install, operate or maintain MGM thermometer well fittings. It is imperative that any person working with the fitting uses extreme caution and follows their company's policies while doing so. **Read all of these instructions carefully before proceeding.** All IOM instructions should be saved and reviewed per the company's required training frequency.



*3/4" NPT Thermometer Well Fitting*

### INSTALLATION

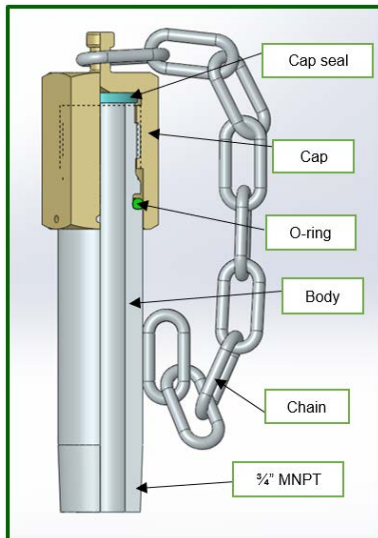
1. Inspect 3/4" NPT thread or flange face for damage before installing to tank car. Threads as well as flange mating surfaces should be free of nicks, dings or deformations. If threads or flange face surfaces appear to be damaged, please contact MGM.
2. Thermometer well fittings should be installed according to the car owner's instruction. This includes gasket material type and torque values.
3. For the 3/4" NPT threaded fitting, apply pipe dope to the thread as per car owner's requirements.
4. MGM thermometer well fittings are constructed of either carbon steel or stainless-steel materials. The stainless steel construction does not require painting. Please avoid painting under the cap of the carbon steel fitting, as this could cause the fitting to leak if there was ever a failure of the thermometer well tube below the fitting.



*Flanged Thermometer Well Fitting*

### OPERATION

1. Remove the cap.
  - a. **NOTE.** *The cap has a vent. A little pressure might build during transit, causing a slight spew of vapor when removing the cap. If after removing the cap there is continuous release of commodity, tighten the cap and follow company protocols: there could be a leak in the thermometer well below the fitting.*
2. Follow the shipper's instruction for checking the temperature of the product.
3. Once step 2 has been completed, inspect fitting, O-ring and cap seal for damage. If there is damage to the fitting, O-ring seal, or cap seal, the thermometer well fitting should be repaired or replaced in kind as per the steps in the Maintenance section that follows.
4. If no damage was found, screw cap back on thermometer well fitting body. Do not bottom out the threads, nor should you torque the threads with a wrench: the O-ring is what seals the cap to the body.



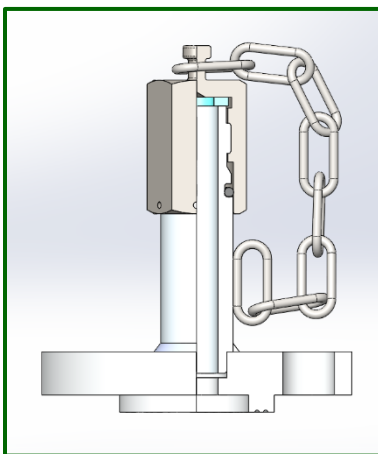
*3/4" NPT Thermometer Well Fitting*

### MAINTENANCE

#### *Disassembly, Inspection and Cleaning*

The Cap seal and O-ring used in MGM thermometer well fittings are specified by the end user. MGM recommends changing the cap seal and O-ring periodically.

1. Secure the thermometer well body in a vise, and take precautions to not damage the threads or flange gasket surfaces.
2. Remove the cap (see diagram).
3. Remove the old O-ring, do not scratch the O-ring surface (see diagram).
4. Remove the cap seal (see diagram).
5. Clean Body and cap in solvent, removing any debris that may have collected on or in the thermometer well fitting parts.
6. Inspect all parts for obvious damage or excessive corrosion. If any part appears to be damaged, please contact MGM for recommendations on how to proceed.



*Flanged Thermometer Well Fitting*

#### *Reassembly*

1. Insert O-ring in O-ring groove.
2. Insert cap seal in top of cap.
3. Screw cap onto body.

#### *Reinstallation*

1. Install the thermometer well fitting to car as per the cars owner's installation instructions.

#### *Leak Test*

If necessary, pressure test the thermometer well fitting to the NDT bubble leak test method as per car owner's requirements. If thermometer well leaks, do not install onto car, contact MGM for troubleshooting or replacement.