

# 818I Clock Gauge

## Installation & Maintenance Instructions

The 818I Clock Gauge is designed to be used as a float suction arm indicator. The unit, when properly installed, indicates if the floating suction arm is moving up and down with the fluid in the tank. The gauge mounts on top of the tank and is activated by a cable connected to the end of the floating suction arm.



**Failure to follow any or all of the warnings and instructions in this document could result in a hazardous liquid spill, which could result in property damage, environmental contamination, fire, explosion, serious injury or death.**

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## Installation



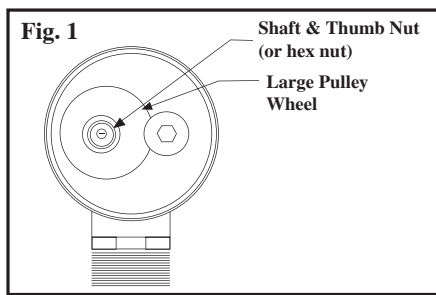
### Warnings

- **Fire Hazard** – Death or serious injury could result from spilled liquids.
- Any modification to this gauge other than those stated in these installation instructions will void the product warranty.
- This device is intended to be used as a liquid level indicator to the operator and should not be the only system in place to prevent a tank from overflowing. It is the sole responsibility of the operator to continuously prevent any spillage regardless of the situation or status of the gauge.
- Install in accordance with all applicable local, state, and federal laws.
- For your safety, it is important to follow local, state, federal and/or OSHA rules that apply to working inside, above, or around the storage tank and piping area. Use all personal protective equipment required for working in the specific environment.
- Tanks could be under pressure. Vapors could be expelled from tank vents, piping, valves or fittings while performing installation. Vapors could catch fire or cause an explosion. **Avoid** sparks, open flame, or hot tools when working on gauge.

### Steps

1. Verify contents of box. You should have received the gauge, installation instructions, and re-order/overflow stickers. Inspect the items for shipping damage. Do not use if damage is found. **DO NOT** pull and release cable like a Yo-Yo. This can cause the spring to unload. **ALWAYS** hold onto cable and move it in a slow steady motion.
2. Locate the opening on the top of the tank where the gauge is to be installed. Preferably the opening should be located directly over the end of the floating suction arm.
3. Once an opening is selected, stick the tank to determine the actual level of liquid in the tank. Record this level as you will need it to set the gauge once it is installed.
4. Manually raise the floating suction arm and attach the cable from the 818I to it.
5. **Slowly** lower the floating suction arm back down onto the liquid. **DO NOT** allow the floating suction arm to free fall into the tank as this will cause the cable to come off of the pulley mechanism and render the gauge inoperable.
6. Apply pipe dope or Teflon tape to the male threads on the gauge. If you have a gauge with female threads, apply the pipe dope or Teflon tape to the male threads of the pipe on the tank. **DO NOT** get pipe dope on the cable of the gauge.
7. Once the floating suction arm is resting on the liquid level thread the gauge into, or onto, the tank fitting. Use a pipe wrench or strap wrench, on the large hex at the bottom of the gauge, to tighten the gauge into, or onto, the tank fitting.
8. Remove the retaining ring and back metal cover from the gauge. Hold the large pulley wheel in place and loosen the nut (See Fig. 1). Insert a small screwdriver into the slot on the end of the shaft. Rotate the shaft with the screwdriver, which will move the gauge hand, until the gauge hand on the clock read as close to the level that you recorded earlier.

**Note:** The 818I utilizes just one hand. As a result each gauge increment represents 1/8 foot.



9. Once you have the hand in the correct position, hold the screwdriver firmly in position and tighten the nut on the shaft.

10. Reinstall the metal back plate and the retaining ring. The retaining ring must snap all the way down into the groove. You may need to use pliers to squeeze the ring into the groove. You will know that the retaining ring is correctly squeezed into place if the ends of the retaining ring do not overlap.

11. Rotate the entire gauge so the face can be read by the operator on the ground.



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## Maintenance

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This gauge should be maintained per applicable codes or at least once each year.



### WARNINGS

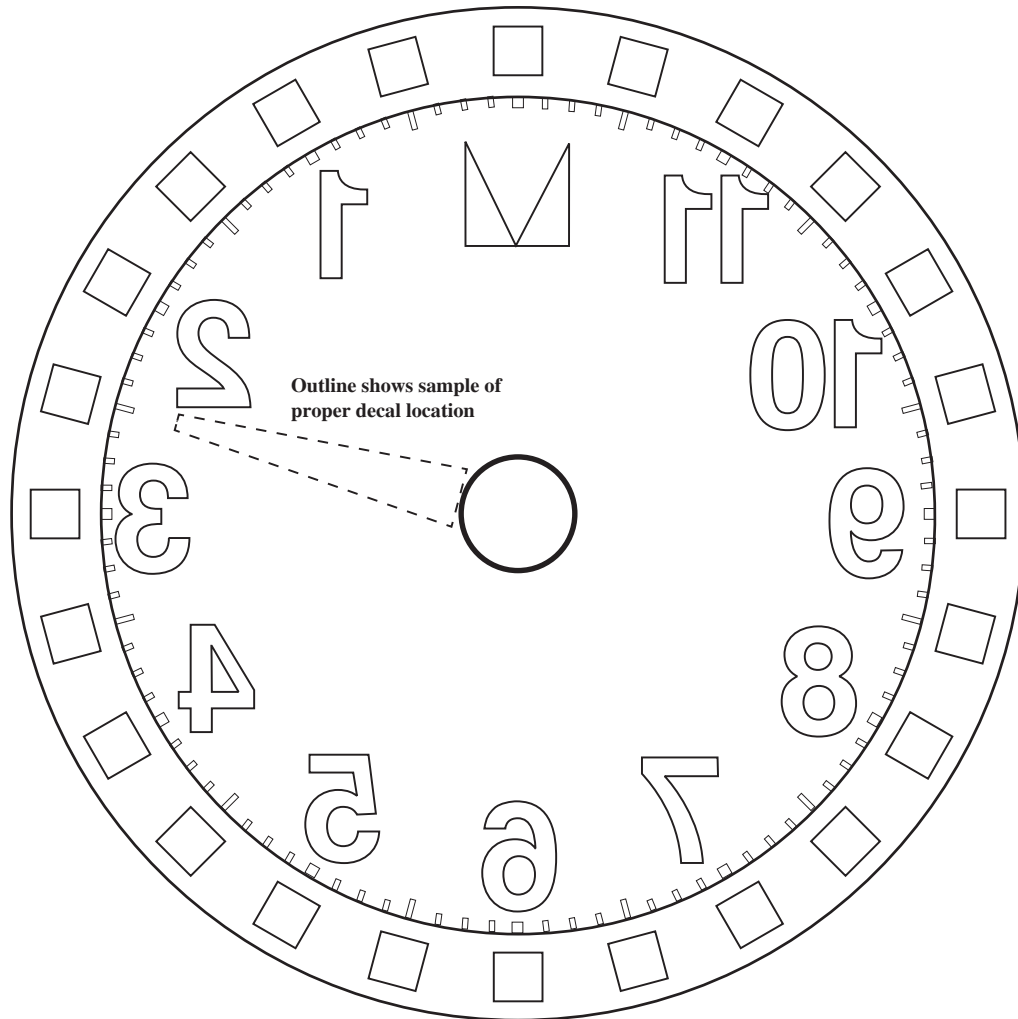
- **Fire Hazard** – Death or serious injury could result from spilled liquids.
- You must be trained to maintain this gauge. Stop now if you have not been trained.
- For your safety, it is important to follow local, state, federal and/or OSHA rules that apply to working inside, above, or around the storage tank and piping area. Use all personal protective equipment required for working in the specific environment.
- Tanks could be under pressure. Vapors could be expelled from tank vents, piping, valves or fittings while performing maintenance. Vapors could catch fire or cause an explosion. Avoid sparks, open flame, or hot tools when working on gauge.

### Steps

1. Visually inspect the gauge for damage or excessive wear. If either is found, replace the gauge.
2. If necessary, clean the clear front cover with a damp cloth.
3. Manually stick the tank to verify gauge readout. If readings do not match, adjust the gauge setting according to the installation instructions.



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### Steps

1. Remove front (clear) lens cover.
2. Place lens onto template aligning outside edge to outside circle.
3. Remove decal backing and place decal on lens as shown on template. Align wide end against inside circle and narrow end pointing toward level you want to indicate. (NOTE: template is set for inside reading out and lettering on decal will read backwards.)
4. Decals represent small hand on clock which indicates feet. If both high level and low level decals are used, make sure each points to the correct level you want to indicate.
5. Reinstall lens cover with decals on the inside. Make sure indicators are in correct location and wording is readable before putting gauge in service.