# 718 Liquid Level Gauge

#### Installation, Operation, and Maintenance Instructions

The 718 Liquid Level Gauge is designed to be used to measure liquid level in an aboveground storage tank containing diesel/fuel oil (not intended for use in gasoline). The gauge mounts on top of the tank and is activated by a float connected to a cable.



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.

**NOTE:** The most accurate method to calibrate the tank is with fluid in it. This will take into account variables associated with the float position, the mechanism, and the fluid density.

#### 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 overfilling. 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.
- Use a dampened cloth when cleaning the clear front cover of the gauge to prevent static buildup and discharge.
- In the event of malfunction, contact Morrison Bros. Customer Service.

#### Steps

- 1. Verify contents of box. You should have received the gauge, float, and installation instructions. Inspect the items for shipping damage. **DO NOT** use if damage is found. **DO NOT** pull and release the cable uncontrollably. This can cause damage to the internal mechanism and render the gauge inoperable. **ALWAYS** hold onto cable and allow it to move in a slow steady motion.
- 2. Locate the opening on the top of the tank where the gauge is to be installed. If possible, select a location away from the fill port to avoid excessive turbulence that could affect the float. Also make certain that there are no objects inside the tank, near the selected opening, upon which the float and cable could get tangled.
- 3. Once an opening is selected, measure from the top of the tank opening where the gauge will mount to the bottom of the tank, this is the maximum measurement distance. Record this distance in inches.
- 4. Stick the tank to get the level of the liquid in the tank. This is the liquid level. Record this level in inches.
- 5. Holding the float near the bottom (threads) of the gauge (See Fig. 1), remove the screw from the top of the float using the included hex key wrench. Use caution to avoid damaging the cable with the threads of the screw. Turn the float so the screw threads do not contact the cable.
- 6. Wrap the cable around the float end slot until the tape reading in the window matches the maximum measurement distance you recorded earlier. Adding cable around the slot reduces the inch value on the gauge. One complete wrap equals 2". A half wrap, which is accomplished by moving the screw to the other hole, equals 1". See Fig. 2 or scan the QR code for a video showing how to adjust the gauge. Note: The float is wrapped with approximately 12" of extra cable to accommodate installations with riser pipes. Replace screw to the top of the float. Use caution to avoid damaging the cable with the



Fig. 1

threads of the screw.

- 7. Slowly lower the float into the tank. Guide the cable through your fingers letting the cable slide through slowly. **DO NOT** allow the float to free fall into the tank as this will cause the cable to come off of the pulley mechanism and render the gauge inoperable.
- 8. Once the float is resting on the liquid level (or tank bottom if the tank is empty), hand thread the gauge into, or onto, the tank fitting. Now check the value being displayed matches the previously recorded value.

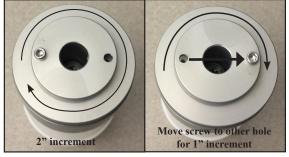


Fig. 2

- If it does, unthread the unit then apply Teflon® tape to the male threads on the gauge. Then, using a large channel lock pliers, tighten the gauge onto the tank fitting.
- If the value does not match, make additional adjustments to the cable length (at the float end). Remove the screw from the top of the float using the included hex key wrench. Use caution to avoid damaging the cable with the threads of the screw. Turn the float so the screw threads do not contact the cable. Wrap the cable around the float end slot until the tape reading in the window matches the maximum measurement distance you recorded earlier. Adding cable around the slot reduces the inch value on the gauge. One complete wrap equals 2". A half wrap, which is accomplished by moving the screw to the other hole, equals 1". See Fig. 2 or scan the QR code for a video showing how to adjust the gauge. Note: The float is wrapped with approximately 12" of extra cable to accommodate installations with riser pipes. Replace screw to the top of the float.



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# **Operation**

# Steps

- 1. To determine the height of fluid in the tank, read the number of inches being displayed.
- 2. The tank manufacturers chart will be required to translate fluid height into fluid volume (gallons).

#### <u>Maintenance</u>

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.
- Use a dampened cloth when cleaning the clear front cover to prevent static buildup and discharge.
- In the event of malfunction, contact Morrison Bros. Customer Service.

### Steps

- 1. Visually inspect the gauge for damage or excessive wear. If either is found replace the gauge.
- 2. If necessary, clean the clear lens with a damp cloth.
- 3. Measure the fluid height and verify the gauge reading. If readings do not match adjust the gauge setting according to the installation instructions.



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