548/748 Series Pressure/Vacuum Vents

Installation & Maintenance Instructions

The 548 and 748 Series Pressure Vacuum Vents are designed for use on aboveground storage tanks. If properly sized, installed and maintained these vents allow the tank to "breathe" during filling and dispensing operations.

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.

Installation

Warnings

• **Fire Hazard** – Death or serious injury could result from spilled liquids.
• Install only on shop fabricated atmospheric tanks built and tested in accordance to industry standards such as UL142, NFPA 30 & 30A, and API 650.
• Install in accordance with all applicable local, state, and federal laws.
• 548 and 748 Series vents **must** be properly sized and selected for each specific tank application.
• 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 vents.

Steps

1. Inspect unit for shipping damage. Do not use if damage is found.
2. Check vent openings for foreign matter such as packaging material. Remove any that is found.
3. Apply a fuel resistant, non-hardening, anti-seize sealant to the threads of the riser pipe. Do not use Teflon tape.
4. Thread vent onto riser pipe. Avoid excessive torque which could damage the vent.
5. Mounting piping and connections to the tank must be fabricated so the pressure vacuum vent is in a vertical (plumb) position. If the tank top is sloped or angled, provisions must be made to make sure the vent is oriented in the vertical (plumb) position.

Note: There should be no reduction of pipe size between the storage tank and the 548/748 Series Pressure Vacuum Vent.

Important: Install the included **warning tag** where it will be visible to the operator filling or unloading the tank that is fitted with this vent.

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.

Monthly inspection, and immediate inspection during freezing conditions, by someone familiar with the proper operation of the storage tank vents, is required to insure venting devices are functioning properly before filling or unloading a tank.

WARNINGS

• **Fire Hazard** – Death or serious injury could result from spilled liquids.
• Clogged or restricted vents could cause damage to tanks and piping releasing liquids which could catch fire.
• Dust, debris, freezing rain, freezing condensation or other contaminants could clog or restrict the vents.
• In freezing conditions, inspect the vents immediately before filling or unloading a tank.
• Follow your employer's instructions for making sure vents are not clogged or restricted.
• You must be trained to inspect the vents. **Stop** now if you have not been trained.
• Do **not** fill or unload from a tank unless you are certain that the tank vents will operate correctly.
• 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 vents.

Steps

1. Remove vent from the riser pipe.
2. Inspect pressure hood screen and vacuum cage screen for any dust, debris, snow or ice. Remove all such matter.
3. Replace the screens if they cannot be cleaned. Replacements screens available from Morrison Bros. Co.
4. Remove the three screws on the pressure hood.
5. Remove the hood to expose the pressure poppet.
6. Lift the pressure poppet out of the vent body.
7. Inspect the pressure poppet and seat for damage, corrosion or excessive wear. If any is found, replace the vent.
8. Remove any dust, debris, snow or ice that is found in the pressure poppet and/or pressure seat area.
9. Re-install the pressure poppet and move it up and down several times.
10. Replace the vent if any sticking or binding is found during the movement of the pressure poppet.
11. Re-install the pressure hood and re-install the three (3) pressure hood screws.
12. Remove the vacuum cage by threading it out of the vent body.
13. Lift the vacuum poppet off of the seat.
14. Inspect the vacuum poppet and seat for damage, corrosion or excessive wear. If any are found, replace the vent.
15. Remove any dust, debris, snow or ice that is found in the vacuum poppet and/or vacuum seat area.
16. Move the vacuum poppet up and down several times.
17. Replace the vent if any sticking or binding is found during the moving of the vacuum poppet.
18. Thread the vacuum cage back into the vent body.
19. Inspect the vent warning tag located near the tank fill and offloading area. If the tag is damaged or difficult to read, contact Morrison Bros. Co. at (800) 553-4840 for a free replacement tag.

During maintenance procedure inspect all vent components and surfaces for damage, corrosion or excessive wear. If any is found, replace the vent.

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