Operating Procedures for the Clay & Bailey Mfg. Co. Overfill Prevention Valve

WARNING

THE 1228 2", 3", AND 4" OP-SERIES VALVES ARE DESIGNED FOR LIQUID TIGHT FILL OPERATION AND MUST BE USED WITH PROPER CONNECTIONS. FAILURE TO PROPERLY CONNECT AND/OR DISCONNECT THE DELIVERY HOSE WILL RESULT IN AN EXTREMELY DANGEROUS SITUATION!

READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE OPERATING THIS DEVICE.

Before filling:

1. Insure that the bypass valve on the transport pump is working properly.
2. Do not exceed 100 psig delivery pressure.
3. Inspect delivery hose and fittings for wear and damage.
4. A dry break coupling or cam-lock type coupling is required for delivery.
5. After hooking up the delivery hose, visually inspect the connections.
6. If any leakage is discovered during or after the delivery, discontinue use and repair or replace.

Warning: Do Not Take the Tank Level by Sticking the Tank Through the Fill Valve!!!
This Could Damage the Valve and Prevent It from Operating Properly!!!

Filling Process:

1. Connect the delivery coupler to the valve fill adaptor.
2. Make sure the nozzle or isolation valve is completely closed.
3. Turn pump on.
4. Slowly open the nozzle or isolation valve.
5. Monitor the tank liquid level at all times during the fill.
6. Observe delivery hose and connections, and listen to the pump for signs that the valve has begun to close.

Please note the following information for the final filling process:

During the filling process, once the tank contents starts to near the safe fill level, the float arm of the overfill protection valve starts to rise. As the float starts to rise, the flow rate through the overfill protection valve commences to be restricted. The degree of restriction to the filling flow rate will increase up to the point of closure of the overfill protection valve.

The tanker driver will experience a reduction in the pumping flow rate when filling the tank, once the tank nears its safe fill level. Once this flow rate is restricted the driver should reduce the pumping rate when filling the last 25% of the tank capacity.

Continuing to pump at the full rate will cause back pressure in the fill line, and it will appear as though the tank cannot be filled any further.

Should the tanker driver experience a significant reduction in the filing rate of the tank as the contents reaches the safe fill level the driver should stop pumping and allow the contents of the tank to settle for 5 or 10 minutes

Turbulence is created within the tank as liquid in being pump into the unit. A slight wave effect can be caused by this filling turbulence. This turbulence can result in the float on the overfill protection valve to flutter as the safe fill level is close to being reached. This fluttering can result in the overfill protection valve. This fluttering can result in the overfill protection valve to close and open, thus resulting in a further restriction to filling the tank.

By allowing the contents of the tank to settle, this overcomes any potential problem caused by turbulence within the tank.

The tanker PTO pump does not have to be run at full speed to ensure a speedy fuel delivery. Increased pressure in the fill tube will only result in problems with filling as the safe fill level is close to being reached. The tanker driver should run the PTO pump as slowly as possible during the final stages of the filling process.

By doing so the tank filling process will be completed without any undue restrictions to the filling speed.

Completion of the filling process

1. When shut off is detected, close the nozzle or isolation valve and shut off the delivery pump.
2. Reopen the nozzle/isolation valve and allow 5 minutes for the pressure in the line to drop.

ATTEMPTING TO DISCONNECT THE COUPLER WITH PRESSURE IN THE LINE COULD RESULT IN THE RELEASE OF PRODUCT!

3. Close the nozzle/isolation valve and slowly disengage the delivery coupling, replace cap.

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