

Accu-Tab® Systems Models 2300/2600 by Axiall Corporation

Installation and Operating Instructions



DANGER:

DO NOT MIX CHEMICALS!

The Accu-Tab® chlorinator is designed for use with Axiall approved tablets only. Do not use Cal-Hypo tablets with stabilized chlorine or bromine products, or other sanitizing chemicals.

Fire or explosion could result.

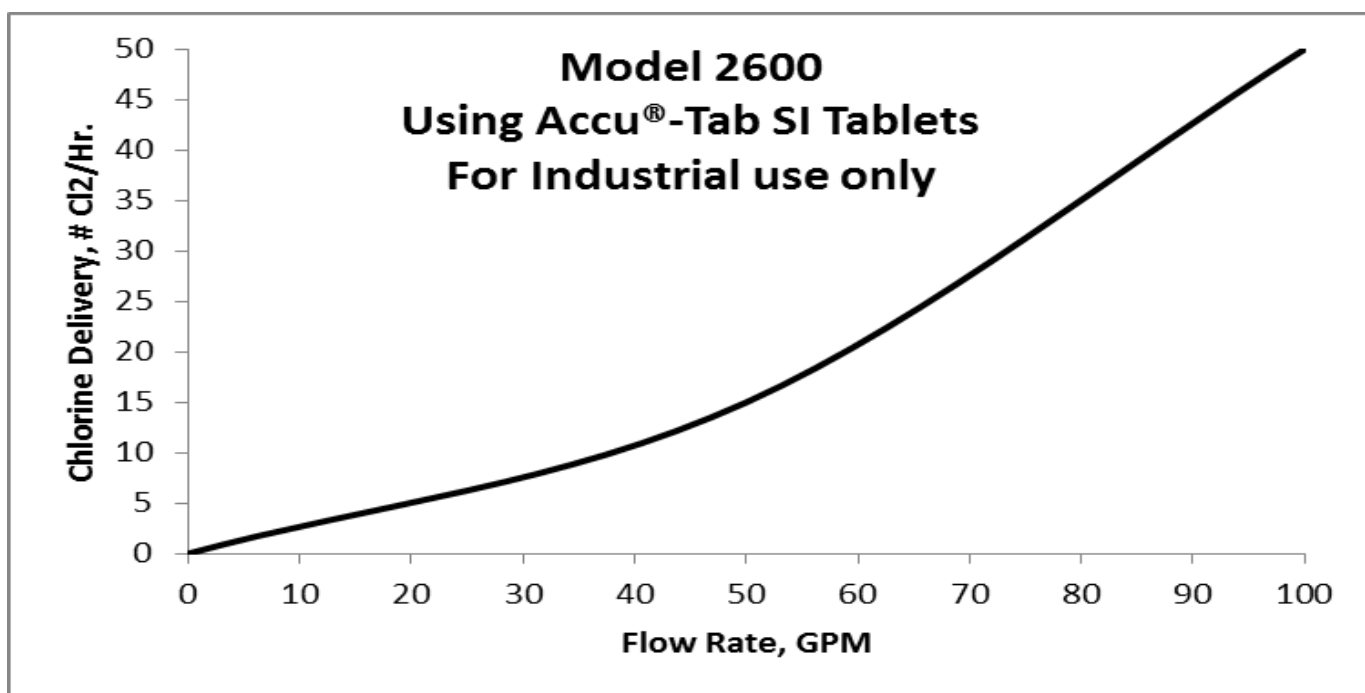
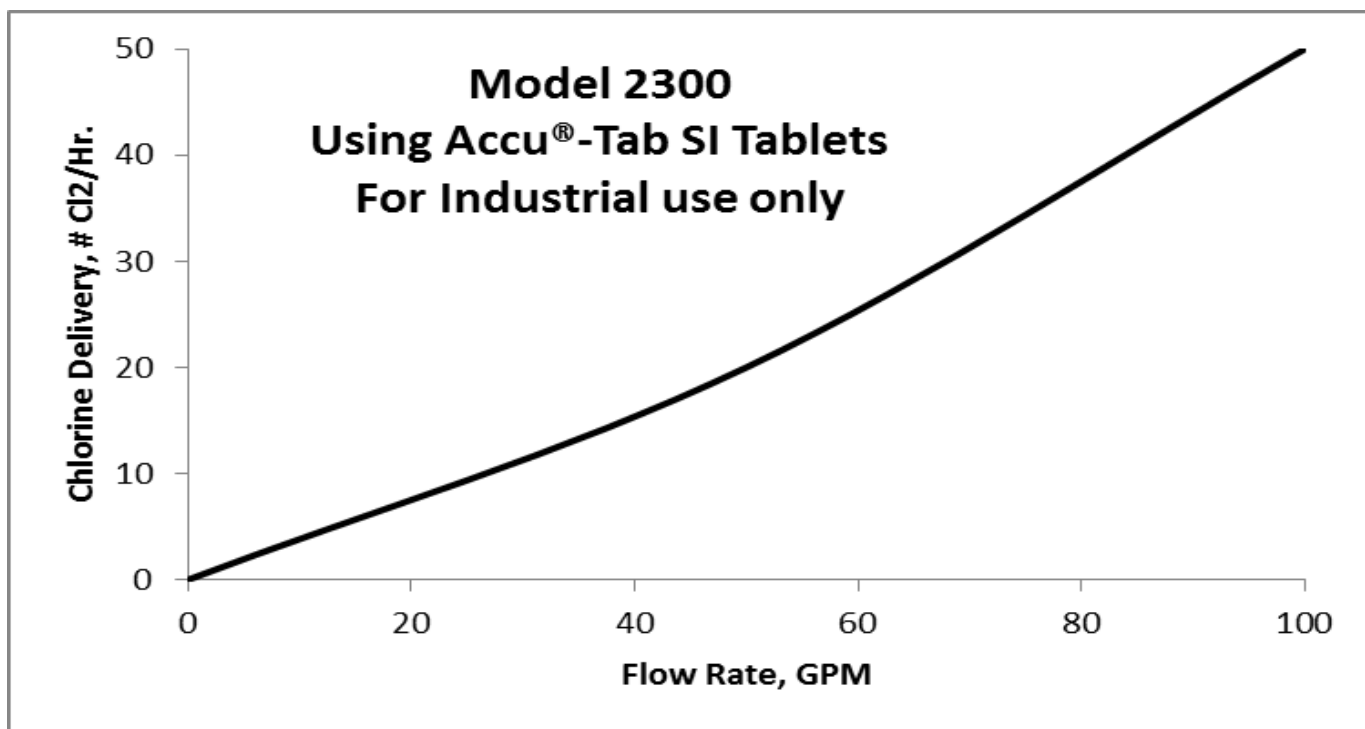
Rev 02/10/21

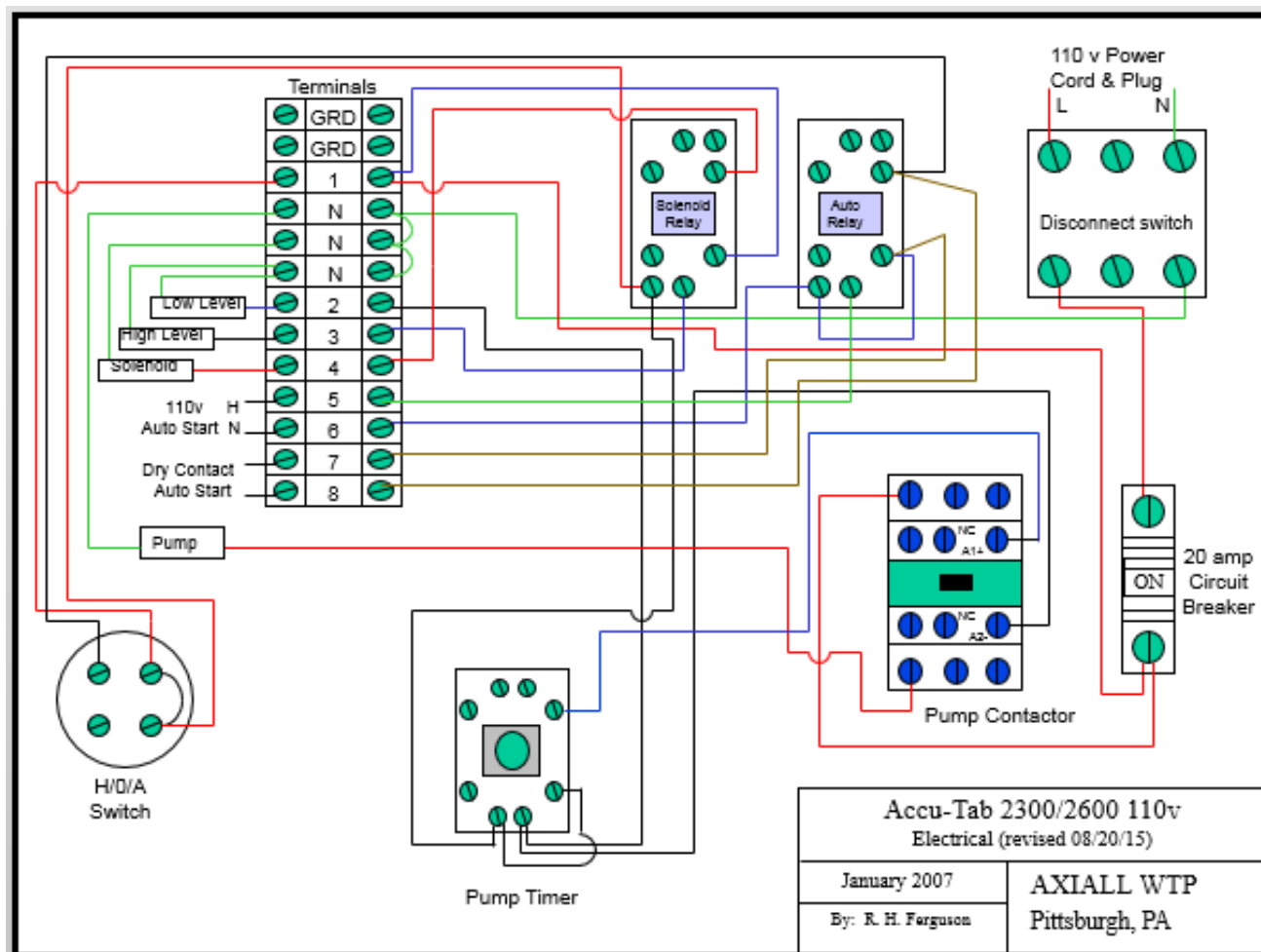
System Description

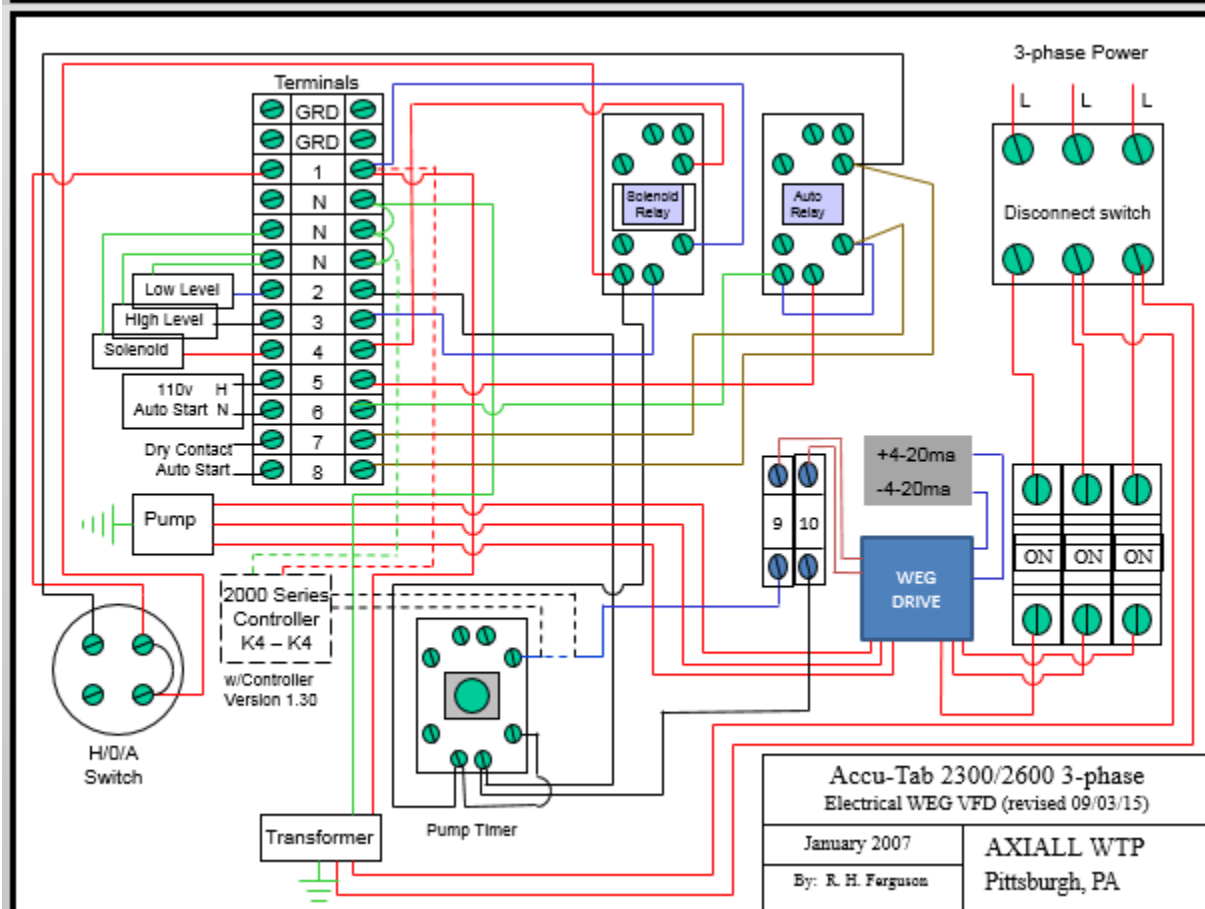
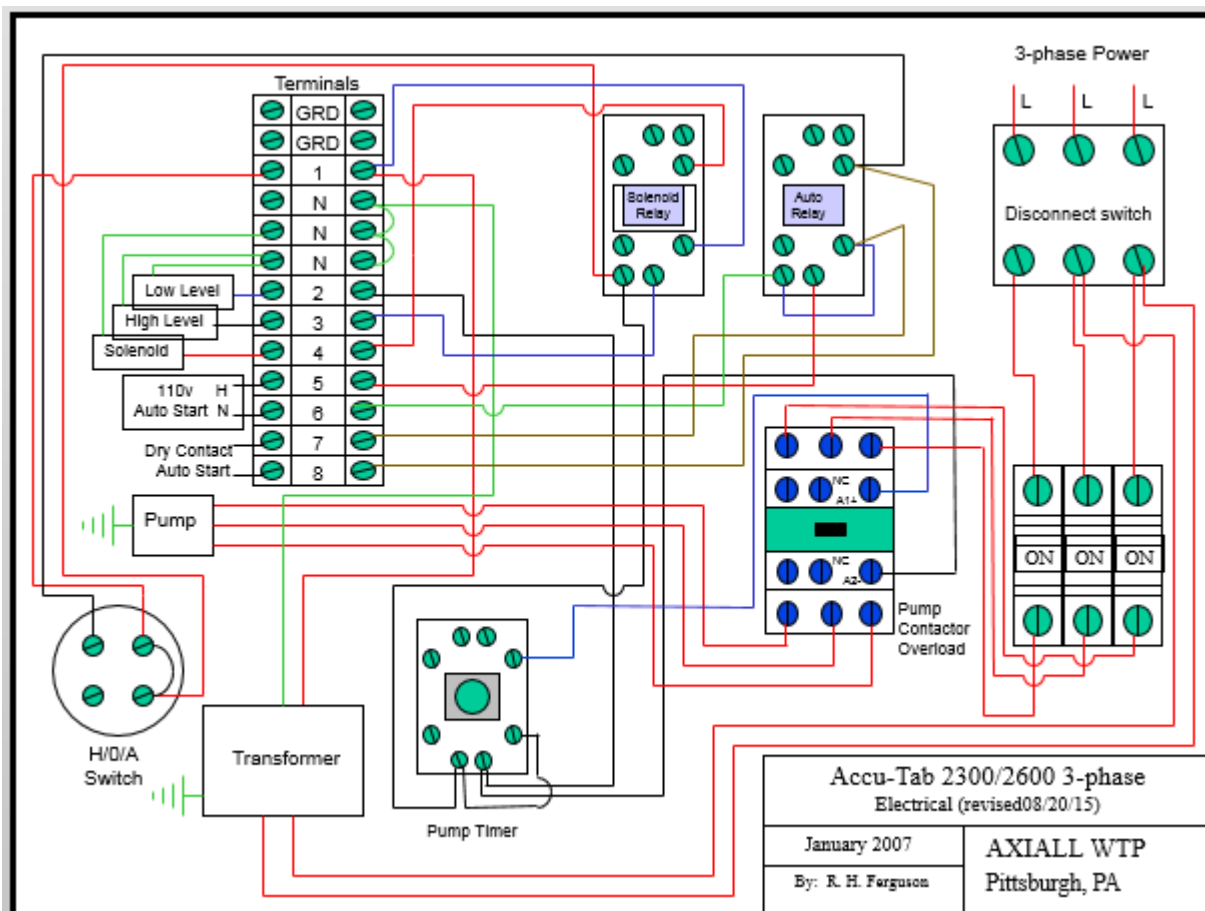
The Accu-Tab® tablet chlorinator system incorporates a patented Axiall chlorinator, which is designed to utilize Axiall's Accu-Tab® SI calcium hypochlorite tablets. The chlorinator is mounted on an aluminum frame. Included in the system is an integrated, level controlled solution tank, which supplies a centrifugal pump. Using a manually adjusted valve and flow meter the amount of water through the chlorinator is controlled. The system can also be controlled using a chemical controller. This results in a constant and predictable rate of chlorine delivery. Additional water is supplied to the solution tank, with float level control, to assure the pump does not run dry. A high level switch will close the solenoid valve preventing tank overflow, and a low level switch will shut down the pump to prevent it from running dry. The feeder is designed for use ONLY with Axiall Accu-Tab® SI tablets to utilize the Axiall erosion feeder technology that erodes only the bottom layer of tablets on the sieve plate, while keeping tablets above the sieve plate dry and ready for use. Tablets other than Axiall Accu-Tab® SI tablets will have different delivery rates, resulting in improper chlorine delivery.

Installation and Start-Up Instructions

1. Uncrate, remove from pallet, and check for damage that may have occurred during shipping.
2. Locate Chlorination System in adequately ventilated area and on level ground. If system is in area subject to standing water, then system should be raised above standing water. Adjust leveling feet as necessary.
3. All systems are tested in full operation at the factory; however fittings may loosen during shipping and some parts are shipped loose. **Before Installing System**, hand tighten all fittings on valves, check valves, and unions.
4. Use 1-1/2" minimum piping on the chlorinator inlet and outlet piping to ensure ample supply of water. Use isolation valves at main system connections. When connecting outlet piping cement the check valve and discharge gate valve, in that order, from the discharge of the pump.
5. Connect the power supply to the disconnect switch as shown on the electrical schematic.
6. Connect the 110v control signal (if used) to terminals #5 and #6, or the Dry Contact signal to terminals #7 and #8..
7. Once the power and water input and output connections are in place, open isolation valves and check for leaks.
8. Place the H/O/A switch to HAND. Solenoid valve will open feeding water to the system.
9. Open the pump prime line valve to allow water to prime the pump.
10. Once the water level in the tank clears the low level switch, the pump will begin to run. Open discharge valve slightly to allow flow out of the system, and close the pump prime line valve. Water will be flowing into the tank with the pump discharging water to the system.
11. Switch system to AUTO and operate system using the controller (if used). If no controller is used, the system will not operate in AUTO - leave the system in the HAND mode.
12. Open the inlet valve and set the flow to the desired flow rate according to the delivery charts on the next several pages.
13. Slowly, and in small increments, continue to open the discharge valve, and adjust inlet valve as necessary to maintain the desired inlet flow.
14. Make incremental changes to the discharge valve until the tank water level drops and stabilizes approximately $\frac{1}{2}$ to $\frac{3}{4}$ tank level. On most systems this will mean the discharge valve is fully open.
15. Turn the system OFF and ON several times, allowing it to operate for several minutes each time. Check all connections for leaks, making sure the delivery pump suction always remains covered with water.
16. To begin chlorinating, remove the chlorinator lid and fill the Chlorinator with Axiall *Accu-Tab*® SI tablets.







Operating and Maintenance Instructions

A. Solution Tank Leveling

(Tank level runs low causing the pump to shut off)

This is caused by the pump moving more water than is fed to the system. This can lead to inconsistent chlorine residuals, and can lead to premature pump motor failure. Follow the procedure to adjust:

1. Slowly, and using small increments, close the pump discharge valve.
2. Make incremental changes to the discharge valve until the tank water level rises and stabilizes, and is approximately at $\frac{1}{2}$ to $\frac{3}{4}$ tank level.

(Tank level runs high causing the solenoid to close)

This is caused by either too high a flow through the chlorinator, or the discharge valve is closed too much. Follow the procedure to adjust:

1. Slowly, and using small increments, open the discharge valve.
2. Make incremental changes to the discharge valve until the tank water level drops and stabilizes, and is approximately at $\frac{1}{2}$ to $\frac{3}{4}$ tank level.
3. If level will not drop, begin reducing the water flow to the chlorinator. If this results in low chlorine residuals, contact Axial Technical Service at 855-934-3570 for assistance.

B. Clean the Check Valve at least every 4-6 months, to remove debris or scale.

C. Disassemble Float Valve and lubricate internals with a silicone based lubricant every 6 months or as needed.

D. Cleaning the chlorination system

Over time, and depending on the water chemical characteristics, some calcium scale may build up in the system. Following procedure to clean:

1. Prepare 2 gallons of weak acid (~5%) solution.
2. Open doors and windows for ventilation.
3. Reduce the tablet volume in the chlorinator by operating the system to deplete the tablets.
4. Physically remove any remaining tablets or pieces of tablets. Store in a safe manner (empty, clean Accu-Tab® SI tablet pail).
5. Operate the system for 30 minutes to flush out all remaining chlorine solution, and hose down inside of chlorinator walls.
6. Shut down the system, and close isolation valve on line feeding the system
7. Pump tank level down to about $\frac{3}{4}$ tank if necessary to prevent system from overflowing while adding cleaning acid
8. Close the discharge isolation valve.
9. Open pump prime line valve.
10. Turn system to HAND to start flow circulation through tank.
11. Very slowly and carefully pour the weak acid solution into chlorinator.
- CAUTION: AS ACID DISSOLVES SCALE, CARBON DIOXIDE WILL BE RELEASED, AND FOAMING WILL OCCUR. IF ANY CHLORINE WAS LEFT IN THE TANK OR CHLORINATOR, CHLORINE GAS MAY ALSO BE RELEASED.**
12. Operate for 10-15 minutes.
13. Open isolation valves on the inlet and discharge to the system, and close the pump prime line valve.
14. Be prepared to handle some acid being discharged to your water system.
15. Operate for 30 minutes to flush system, and thoroughly wash out chlorinator with a hose.

16. Switch off.
17. Inspect for any debris in the chlorinator or tank, and remove if found.
18. Add tablets and restart system to resume chlorination.

Winterizing

- A. Clean chlorination system following instructions above.
- B. Close inlet isolation valve and operate pump until no more water can be pumped out.
- C. Shut system down and close the outlet isolation valve.
- D. Siphon any remaining water from the solution tank.
- E. Remove any debris from the chlorinator or solution tank.
- F. Open the bottom drain on the pump.
- G. Drain water from feed and discharge lines.
- H. Make sure no water remains in the pump, chlorinator, pipe line, or solution tank to prevent freezing over the winter.

Operating Troubleshooting Guide

- I. Tank fills and **continuously overflows** when system shuts down.
 - A. Solenoid has failed
 1. Shut inlet isolation valve to verify that it is the solenoid.
 2. Disassemble the solenoid to check for debris.
 3. Reassemble the solenoid, and open isolation valve.
 4. If overflowing continues, replace solenoid valve.
 - B. Check valve has failed
 1. Shut outlet isolation valve to verify that it is the check valve.
 2. Disassemble the check valve to check for debris or scale.
 3. If scale is present, clean with a dilute acid solution.
 4. Reassemble the check valve, and open the isolation valve.
 5. If overflowing continues, replace check valve.
- II. Tank fills and **overflows slightly**, then stops.
 - A. Level in the solution tank is too high during operation. Refer to "Solution Tank Leveling" in the "Operating and Maintenance Instructions" section of this manual.
- III. Tank continually runs low level/empty, causing pump to shut off.
 - A. Float Valve not operating properly
 1. Remove solution tank lid and verify that float is free to move up/down.
 2. If the float is in the up position, and cannot be freed, replace float valve.
 - B. Inlet solenoid failure
 1. Check flow rate on flow meter.
 2. If no flow, then check for power to solenoid valve.
 3. If no power to valve, check electrical system using electrical schematic.
 4. If power to valve, close inlet isolation valve, disassemble the solenoid and check for debris.
 5. If no debris, then solenoid is faulty.
 6. Replace solenoid valve.
 - C. Improper tank leveling
 1. Refer to "Solution Tank Leveling" in the "Operating and Maintenance Instructions" section of this manual.
- IV. Contact Axiall Technical Service (855-934-3570) for assistance.

CAL-HYPO SYSTEM LIMITED WARRANTY

Axiall, a Westlake Company ("Axiall") warrants (subject to the below conditions) only its title to this water treatment system equipment (the "System") and that the System will be free of defects in materials and workmanship for a period of eighteen (18) months from its original shipment date.

THIS IS THE ONLY REPRESENTATION OR EXPRESS WARRANTY THAT AXIALL MAKES AND ALL OTHER EXPRESS WARRANTIES UNDER STATUTE OR ARISING OTHERWISE IN LAW FROM A COURSE OF DEALING OR USAGE OF TRADE WITH RESPECT TO THE SYSTEM ARE DISCLAIMED. ANY IMPLIED WARRANTIES EXISTING AS A MATTER OF LAW SHALL NOT EXCEED THE DURATION OF THIS LIMITED WARRANTY. IN THE EVENT THE SYSTEM FAILS TO CONFORM TO THIS WARRANTY, AXIALL'S EXCLUSIVE OBLIGATION AND YOUR EXCLUSIVE REMEDY SHALL BE LIMITED TO, AT AXIALL'S OPTION, THE FURNISHING OF NEEDED REPLACEMENT PARTS OR THE FURNISHING OF A NEW SYSTEM (BUT THIS DOES NOT INCLUDE INSTALLATION OR THE COSTS FOR INSTALLATION). EXCEPT AS PROVIDED IN THE IMMEDIATELY PRECEDING SENTENCE, IN NO EVENT WILL AXIALL BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO ANY USE MADE OF THE SYSTEM.

Warranty Conditions. This Limited Warranty shall apply and be effective only if: (i) the System is installed and operated and maintained in accordance with this manual and the instructions accompanying the System; (ii) you, at your cost, promptly return the System or defective part to such location as may be specified by Axiall; and, (iii) only Axiall's Accu-Tab® SI calcium hypochlorite tablets are used in the System. If any of these conditions are not met, this Limited Warranty will not apply and you acknowledge and agree that your purchase of the System will be on an "AS-IS" basis without any warranty of any kind whatsoever having been provided by Axiall.

You assume all responsibility and risk and liability arising from: (i) the unloading, installation, storage, handling and use of the System, including use thereof alone or in combination with other materials; (ii) the improper functioning or failure of unloading, installation, transportation or storage equipment you use, whether furnished or recommended by Axiall or not; and, (iii) the failure to comply with laws, rules and regulations governing storage, unloading, installation, handling, and use of the System. You will indemnify, hold harmless, and defend Axiall from and against any claim, suit, damage, cost, expense, fine, liability, or cause of action whatsoever, including reasonable attorney fees, on account of relating to, or arising out of the use, possession, installation or resale of the System.

This Limited Warranty gives you specific rights, and you also may have other rights, which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.