NEX-GEN 20.0 and 20.0R

Installation, Operation, and Maintenance Manual

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Note: This manual is subject to change at any time based on system improvements, design changes, authorized modifications or new information. Please consult ChlorKing for the latest revision.

Manufacturer:
ChlorKing Inc
6767 Peachtree Industrial Blvd.
Norcross, GA 30092
1-800-536-8180

SECTION 1
DESCRIPTION

1.1 GENERAL INFORMATION

The NEX-GEN system is an on-site sodium hypochlorite generator designed for commercial swimming pool applications. The NEX-GEN is capable of producing up to 24 pounds of equivalent chlorine per day. The system manufactures bleach continuously from a salt concentration of 5000ppm to 7000ppm and uses the water from the pool as a raw material. This unique feature eliminates issues with high TDS levels and requires less salt as raw material than traditional methods. The NEX-GEN is designed for commercial service and can be run 24 hours a day or controlled by any pool controller. "R" models are reverse polarity for reduced maintenance. The basic components of the NEX-GEN are outlined below.

1.2 PRINCIPALS OF OPERATION

Production Tank Assembly

The production tank assembly consists of a polyethylene tank, an external electrolytic cell, a circulation pump and heat exchanger. Pool water from the pool return line is fed into the production tank. The circulation pump circulates water through the electrolytic cell and heat exchanger. The water in the tank is maintained between 5000-ppm and 7000-ppm salt concentration. The electrolytic cell produces a 1666-ppm to 2500-ppm sodium hypochlorite solution. The sodium hypochlorite flows to the pool at flow rates from .32-gpm to 1.2-gpm. The flow rate through the tank dictate the amount of sodium hypochlorite produced. Sodium hypochlorite can be produced from up to 24lbs of equivalent chlorine. The sodium hypochlorite flows to the pool for use in disinfection. The heat exchanger has fresh pool water pumped through the coils to maintain tank temperatures of no more than 10 degrees F above the pool water.

Dilution Fan

Electrochemical production of sodium hypochlorite produces hydrogen as a byproduct. The dilution fan pumps fresh air into the production tank to dilute the hydrogen and force it out the vent. The vent must be vented to outside atmosphere.

Saturated Salt Feeder

The saturated salt feeder supplies the production tank with a constant supply of salt to produce sodium hypochlorite. Salt is used at the rate of 2 pounds per pound of equivalent chlorine produced or 3 pounds per pound of equivalent chlorine produced depending on production quantity selected. The saturated salt feeder is filled manually. Salt is pumped using standard peristaltic chemical feed pumps.

Chemical Metering

Chemical metering is accomplished using a venturi. The flow through the venturi is adjusted to provide the flow rate necessary to deliver the rated production of chlorine to the pool.

Power Supply and Control Box

The power supply provides the current to the electrolytic cell to produce the rated amount of sodium hypochlorite. The power supply houses all the safety features to prevent system operation in the event of a malfunction.

1.3 GENERAL SPECIFICATIONS

Sodium hypochlorite production:

NEX-GEN 20 - Up to 24 pounds per day at 7000ppm
NEX-GEN 20R – Up to 24 pounds per day at 7000ppm

Maximum pool return line pressure:

25 PSI including plumbing to and from the venturi injector

Electrical requirements:

NEX-GEN 20 and 20R

240 volt single phase connection @ 40 amps and 60Hz
120 volt connection to a chemical feed controller or 120 volt outlet @1 amp

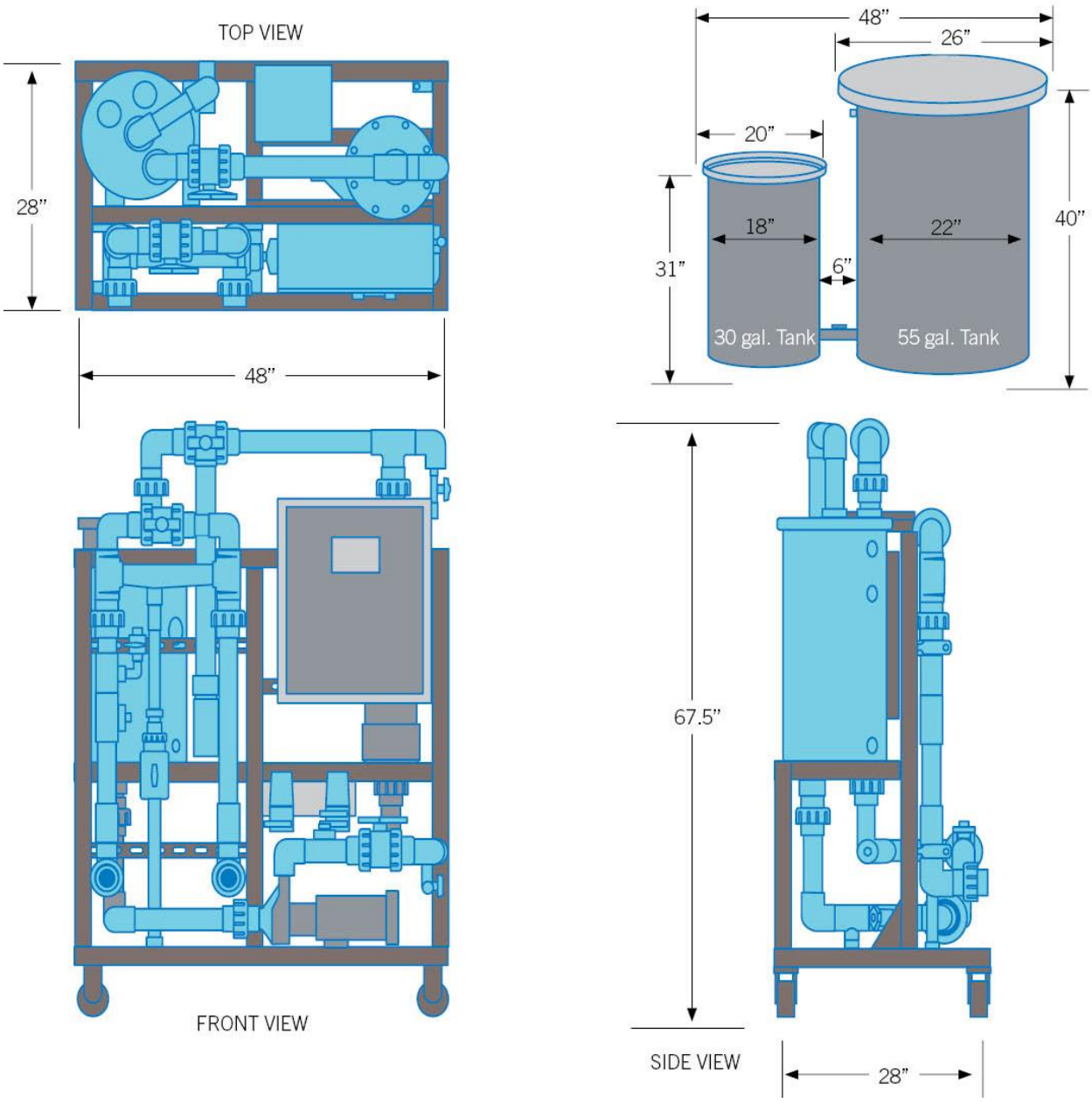
Fusing

Power Supply NEX-GEN 20 – 40 amp RK5 class fuse
Circulation Pump – 10 amp internal circuit breaker
Chemical Metering / Control – 12 amp internal circuit breaker

Sizing guidelines

Chlorinator sizing must comply with local codes. Please contact your local health department for specific requirements or contact your local ChlorKing representative for assistance.

DIMENSIONS


TOP VIEW
28"
48"
FRONT VIEW
48"
26"
20"
18"
22"
40"
31"
6"
30 gal. Tank
55 gal. Tank
67.5"
SIDE VIEW
28"

SECTION 2
INSTALLATION

2.1 UNPACKING

Units are shipped from the factory. In the event of damages during shipping, it is the responsibility of the customer to notify the carrier immediately and to file a damage claim. Open the crate carefully and examine all material inside.

2.2 STORAGE

When storing units, use the original packaging and store under a shelter to protect the contents from weather.

2.3 SAFETY CONSIDERATIONS

IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS

SAVE THESE INSTRUCTIONS

WHEN INSTALLING, OPERATING, AND MAINTAINING THIS EQUIPMENT, KEEP SAFETY CONSIDERATIONS FOREMOST. USE PROPER TOOLS, PROTECTIVE CLOTHING, AND EYE PROTECTION WHEN WORKING ON OR INSTALLING THE EQUIPMENT. FOLLOW THE INSTRUCTIONS IN THIS MANUAL AND TAKE ANY ADDITIONAL SAFETY MEASURES APPROPRIATE. BE EXTREMELY CAREFUL IN THE PRESENCE OF HAZARDOUS SUBSTANCES.

THE PERSONNEL RESPONSIBLE FOR INSTALLATION, OPERATION, AND MAINTENANCE OF THIS EQUIPMENT MUST BE FULLY FAMILIAR WITH THE CONTENTS OF THIS MANUAL.

ANY SERVICING OF THIS EQUIPMENT MUST BE DONE WITH THE UNIT FULLY OFF AND DISCONNECTED FROM THE POWER SOURCE AND ALL PRESSURE BLED FROM THE LIQUID LINES.

WARNING

- **CHLORKING® SYSTEMS ARE INTENDED TO BE INSTALLED ACCORDING TO ALL LOCAL AND NATIONAL REGULATIONS.**
- **CONNECT THE EQUIPMENT ASSEMBLY TO A CIRCUIT PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER.**

- **ONLY A CERTIFIED TECHNICIAN MAY INSTALL AND SERVICE THE CHLORKING® NEX-GEN SYSTEM.**
- **MODIFYING THE CHLORKING® NEX-GEN SYSTEM IN ANY WAY MAY CAUSE BODILY INJURY AND WILL VOID THE WARRANTY.**
- **DO NOT ALLOW CHILDREN OR ANYONE NOT CAPABLE TO OPERATE THE CHLORKING® NEX-GEN SYSTEM.**
- **ONLY REPLACE COMPONENTS WITH THOSE SPECIFIED BY THE MANUFACTURER.**
- **WHEN INSTALLING THE SYSTEM, ENSURE THAT POWER IS LINKED TO THE MAIN PUMP POWER SOURCE FOR THE POOL TO ENSURE THAT THE CHLORKING® NEX-GEN SYSTEM NEVER OPERATES WHEN THE PUMPS ARE OFF.**
- **ALL BOXES ON THE CHLORKING® NEX-GEN SYSTEM CONTAIN HIGH VOLTAGE COMPONENTS. NEVER OPEN ANY BOX WHILE THE POWER IS ON.**
- **THE SYSTEM HAS THE POTENTIAL TO RELEASE HIGH DOSES OF CHORINE. USE CAUTION WHEN HANDLING, SERVICING, OR OPERATING THE EQUIPMENT.**
- **DO NOT ENERGIZE OR OPERATE THE SYSTEM IF THE CELL HOUSING IS DAMAGED OR IMPROPERLY ASSEMBLED.**
- **THE MOUNTING LOCATION OF THE UNIT MUST BE AT LEAST 1.5 METERS FROM THE POOL.**

CONSERVEZ CES INSTRUCTIONS

LORS DE L'INSTALLATION, DE FONCTIONNEMENT ET L'ENTRETIEN DE CET ÉQUIPEMENT, GARDEZ LES CONSIDÉRATIONS SUR LA SÉCURITÉ AVANT TOUT. UTILISER DES OUTILS APPROPRIÉS, DES VÊTEMENTS DE PROTECTION ET LUNETTES DE PROTECTION LORSQU'ILS TRAVAILLENT SUR OU À L'INSTALLATION. SUIVEZ LES INSTRUCTIONS DE CE MANUEL ET PREND LES MESURES DE SÉCURITÉ SUPPLÉMENTAIRES APPROPRIÉES. SOYEZ VIGILANTS EN PRÉSENCE DE SUBSTANCES DANGEREUSES.

LE PERSONNEL CHARGÉ DE L'INSTALLATION, DE FONCTIONNEMENT ET D'ENTRETIEN DE CE MATÉRIEL DOIT ÊTRE PARFAITEMENT FAMILIARISÉ AVEC LE CONTENU DE CE MANUEL.

AUCUNE OPÉRATION DE MAINTENANCE DE CET ÉQUIPEMENT DOIT ÊTRE FAITE AVEC L'UNITÉ ENTIÈREMENT ÉTEINT ET DÉBRANCHÉE DE L'ÉLECTRICITÉ ET TOUTE LA PRESSION SAIGNÉ À PARTIR DES LIGNES DE LIQUIDES.

MISE EN GARDE

- **CHLORKING ® SYSTEMES SONT DESTINES A ETRE INSTALLES SELON TOUS LES REGLEMENTS LOCAUX ET NATIONAUX.**
- **CONNECTER LE MONTAGE DE L'ÉQUIPEMENT SUR UN CIRCUIT PROTÉGÉ PAR UN DISJONCTEUR DE FUITE À LA TERRE.**
- **SEUL UN TECHNICIEN CERTIFIE PEUT INSTALLER ET ENTRETENIR LE SYSTEME CHLORKING ® NEX-GEN.**
- **MODIFIANT LA CHLORKING ® NEX-GEN SYSTEME EN QUELQUE SORTE PEUT CAUSER DES LESIONS CORPORELLES ET LA GARANTIE ANNULATION.**
- **N'AUTORISENT PAS LES ENFANTS OU N'IMPORTE QUI PAS CAPABLE D'ALIMENTER LE SYSTEME CHLORKING ® NEX-GEN.**
- **REMPLACEZ UNIQUEMENT LES COMPOSANTS AVEC CELLES SPÉCIFIÉES PAR LE FABRICANT.**
- **LORSQUE VOUS INSTALLEZ LE SYSTEME, S'ASSURER QUE LA PUISSANCE EST LIEE A LA SOURCE D'ALIMENTATION DE POMPE A MAIN POUR LA PISCINE POUR VOUS ASSURER QUE LE SYSTEME DE NEX-GEN CHLORKING ® FONCTIONNE JAMAIS QUAND LES POMPES SONT HORS SERVICE.**
- **TOUTES LES CASES SUR LE SYSTEME CHLORKING ® NEX-GEN CONTIENNENT DES COMPOSANTS HAUTE TENSION. NE JAMAIS OUVRIR N'IMPORTE QUELLE BOÎTE TANDIS QUE L'APPAREIL EST ALLUMÉ.**
- **LE SYSTÈME A LA POSSIBILITÉ DE LIBÉRER DES DOSES ÉLEVÉES DE CHLORE. SOYEZ PRUDENT LORS DE MANIPULATION, ENTRETIEN OU FONCTIONNEMENT DE L'ÉQUIPEMENT.**
- **NE PAS METTRE SOUS TENSION OU FAIRE FONCTIONNER LE SYSTÈME SI LE BOÎTIER DE LA CELLULE EST ENDOMMAGÉ OU MAL ASSEMBLÉ.**
- **L'EMPLACEMENT DE MONTAGE DE L'UNITÉ DOIT ÊTRE D'AU MOINS 1,5 MÈTRES DE LA PISCINE.**

2.4 PLAN AHEAD

Almost every pump room encountered is different. It is imperative to have prior knowledge of the facility in which the unit is to be installed and to evaluate what type of tools, wall anchors, etc. will be needed to make the installation as problem free as possible.

2.5 ADDITIONAL PARTS REQUIRED FOR INSTALLATION

½ inch polypropylene or polyethylene tubing
¼ inch polypropylene or polyethylene tubing
PVC tubing in 2 inch or PVC pipe in 2 inch
PVC 90's, 45's, couplings and saddles or adapters for the return line size encountered
2 inch PVC pipe, 90's, 45's and couplings for the hydrogen vent
Anchors and mounting hardware
Container specified for muriatic acid solutions

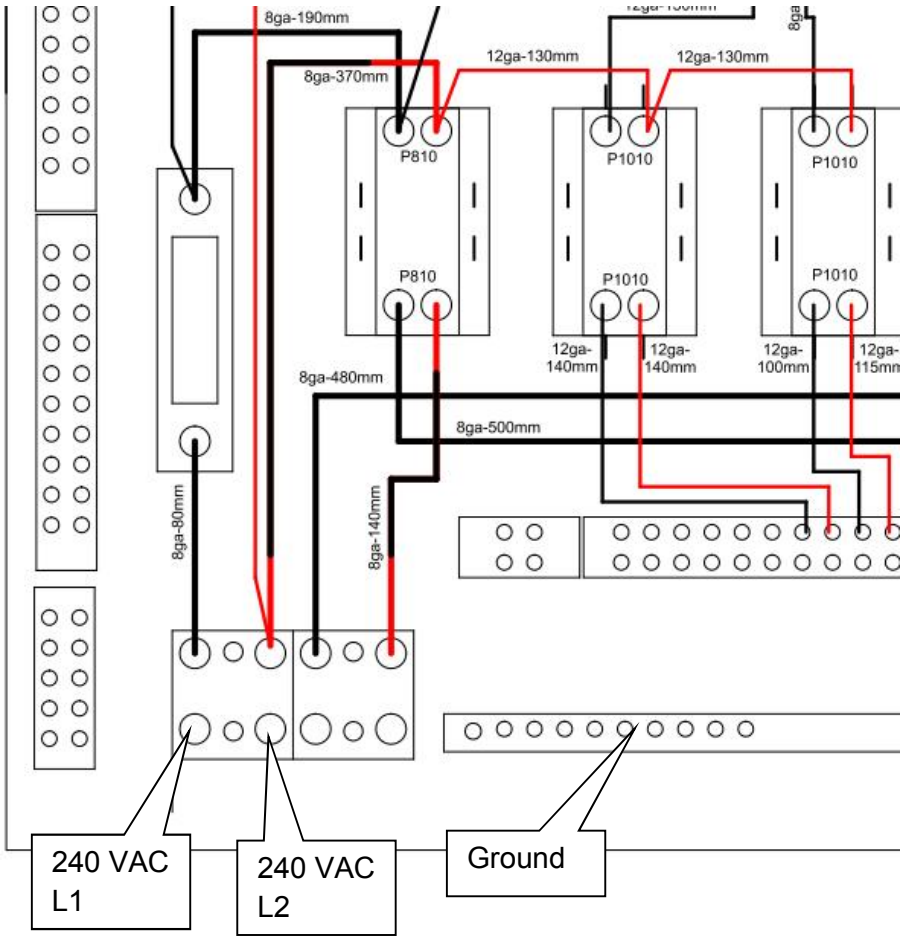
2.6 POWER SUPPLY ELECTRICAL CONNECTIONS

WARNING

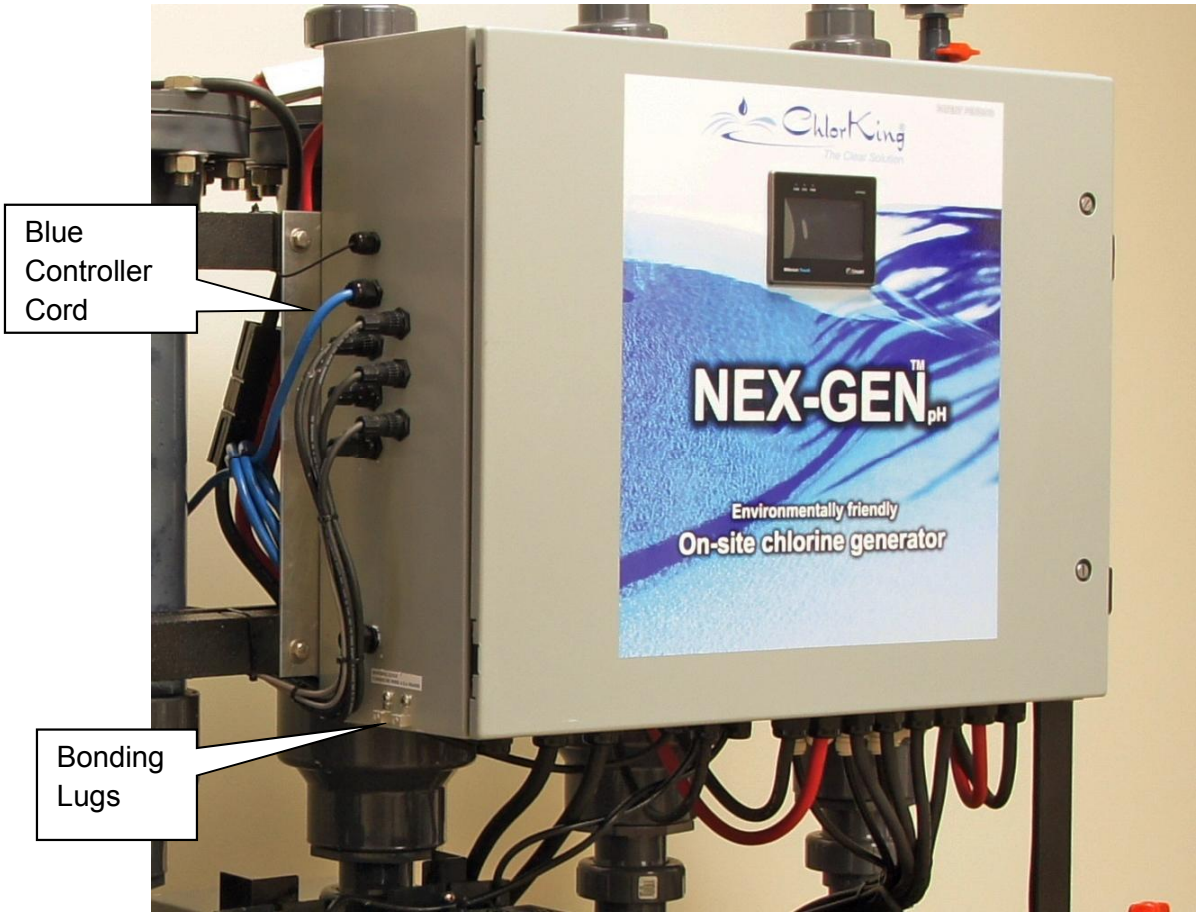
DO NOT FORGET TO CONNECT THE EARTH TERMINALS AND THE EQUIPMENT BONDING WIRE. THE ELECTRICAL SUPPLY MUST MATCH THE SYSTEM RATED CURRENT. ENSURE THAT POWER IS LINKED TO THE MAIN PUMP POWER SOURCE FOR THE POOL TO ENSURE THAT YOUR CHLORKING® NEX-GEN SYSTEM NEVER OPERATES WHEN THE POOL PUMPS ARE OFF.

For ease of service it is recommended that a manual disconnect be installed between the electrical service and the NEX-GEN system.

Connect the electrical supply from the pool equipment room to the connections marked 240 VAC L1 and 240 VAC L2 and ground. Ensure that the electrical service is protected by a circuit interrupter and is rated for the model NEX-GEN that is installed.



Connect the blue control cord to a chemical feed controller or for manual operation, into a 120V electrical outlet protected by a ground fault circuit interrupter.



2.7 BONDING

Connect a minimum 8awg bonding wire to the bonding lug on the bottom of the electrical enclosure.

2.8 PLUMBING CONNECTIONS

PLUMBING THE CHEMICAL METERING VENTURI

It is important that the Chemical Metering Venturi is plumbed correctly or the system will not function properly and the warranty will be void.

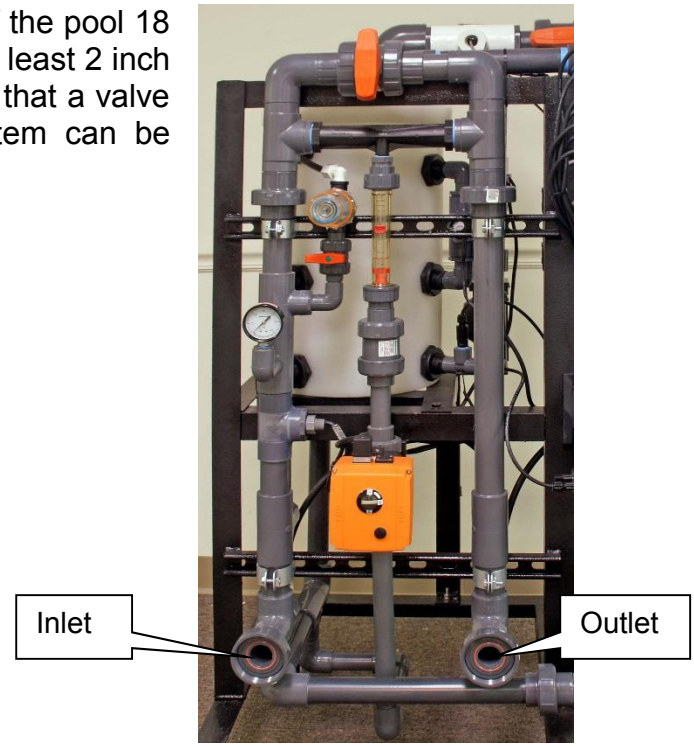
The chemical metering venturi injector requires a pressure differential across the venturi to achieve the rated chemical flow. A booster pump is needed to ensure the required pressure differential is achieved. The NEX-GEN will provide 100% of the rated output with a maximum of 25 PSI at the venturi outlet. Install the booster pump in the supply line to the venturi. Consult ChlorKing for booster pump sizing.

The booster pump is powered by the NEX-GEN and must be installed within 10 feet of the NEX-GEN skid to ensure the electrical connection will reach the pump. The pump wiring is located on the bottom side of the enclosure. Wire the booster pump to the NEXGEN with the cable provided and to the pump according to the instructions on the pump for 208/240 VAC connections. The NEXGEN ships with a 12amp breaker for a 1HP pump. Larger pumps will require changing the breaker. Contact ChlorKing for breaker sizing.

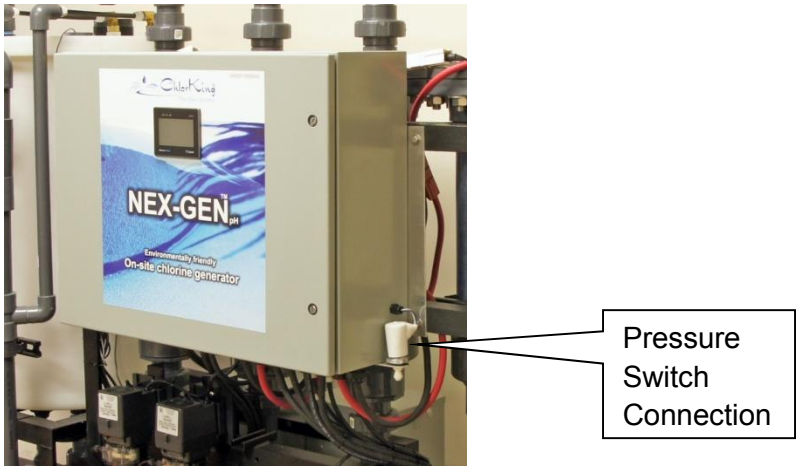
Plumb the inlet of the venturi to the booster pump which is connected to the return line of the pool after all other pool components such as heaters etc. Use at least 2 inch PVC pipe for this connection. It is recommended that a valve be installed at this connection so that the system can be isolated from the pool.

Plumb the outlet of the venturi to the return line of the pool 18 inches after the inlet plumbing connection. Use at least 2 inch PVC pipe for this connection. It is recommended that a valve be installed at this connection so that the system can be isolated from the pool.

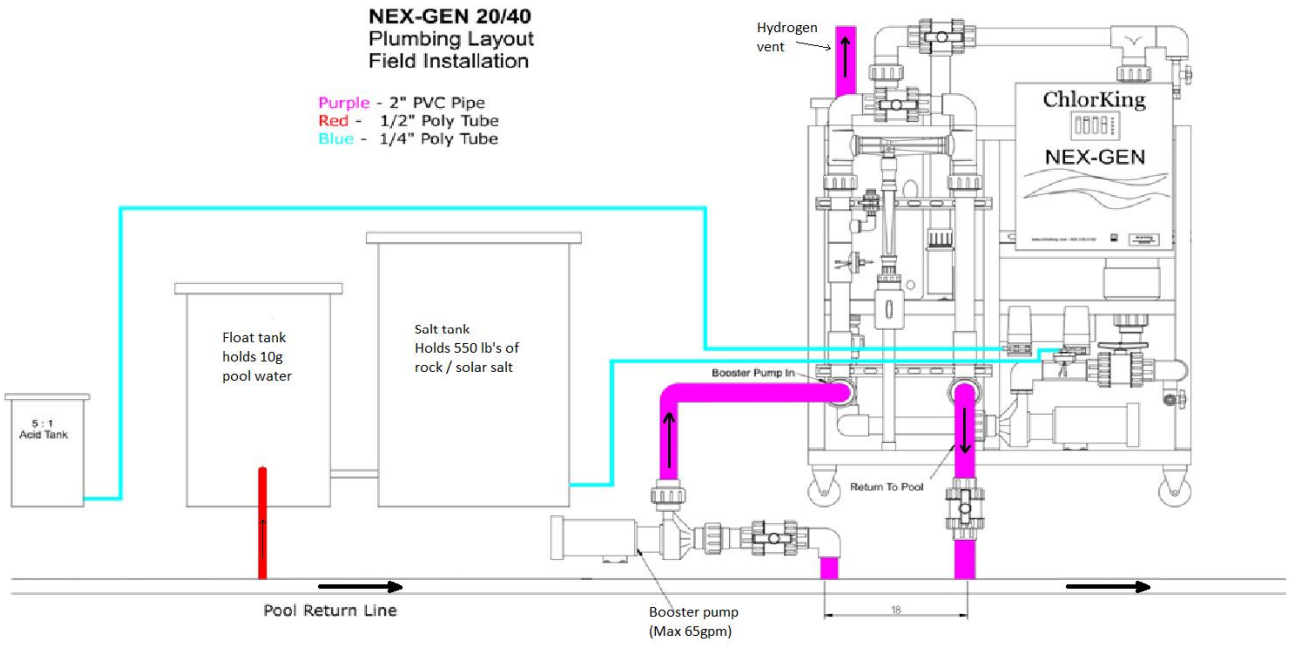
Size Booster Pump based on return line pressure	
Return Line Pressure	**Pump Horsepower**
5 PS!	½ HP
7 PSI	1 HP
12 PSI	2 HP
30 PSI	3 HP



PLUMBING THE PRESSURE SWITCH

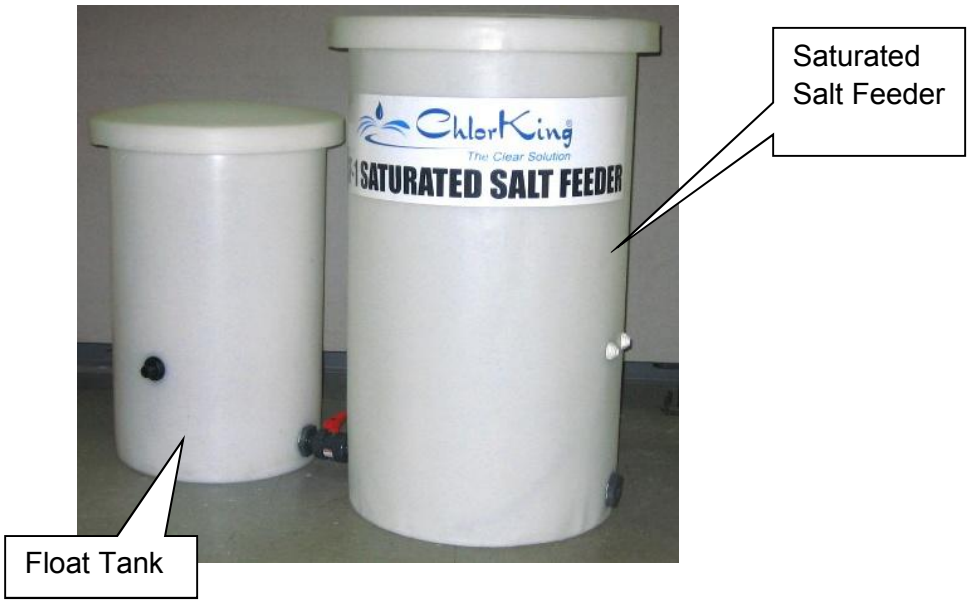


Connect the pressure switch to the return line with ¼ tubing and the ¼ inch valve supplied. The pressure connection should provide a minimum of 5 psi when the pool pump is on and pressure should be less than 3 psi when the pool pumps are off. Contact ChlorKing for installations that do not meet these specifications.

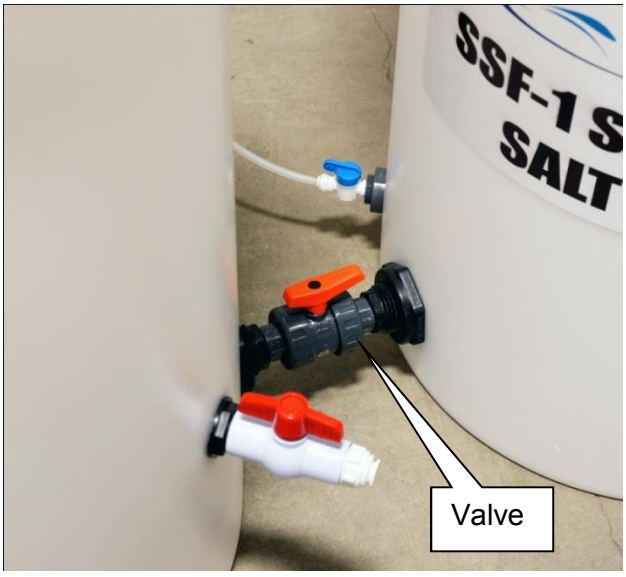


2.9 SATURATED SALT FEEDER INSTALLATION

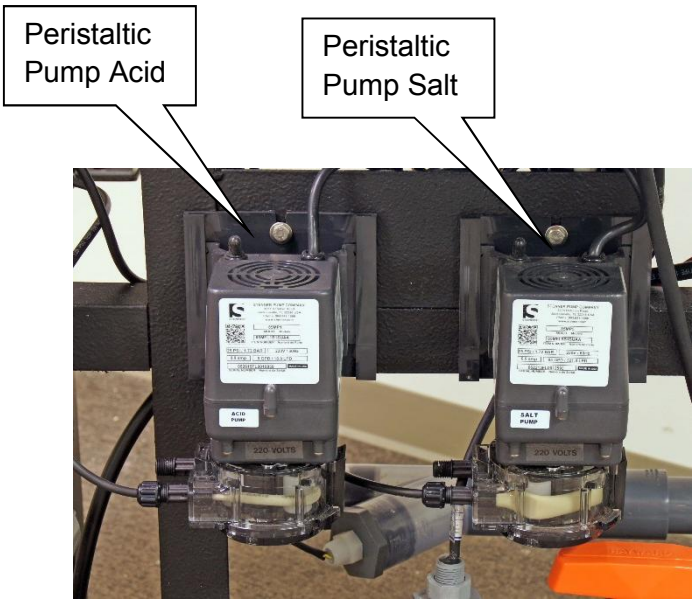
Place the Saturated Salt Feeder tanks in an easy to access location. The large tank will need access for adding salt on a continuous basis.



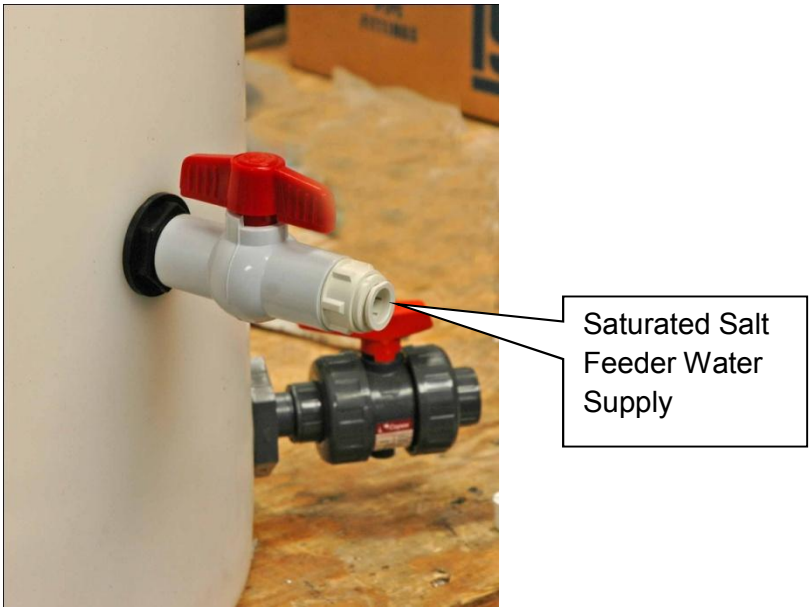
Install the Stenner Pump pickup in the large 55 gallon Saturated Salt tank. Connect the Saturated Salt Feeder tank to the float tank with the supplied valve.



Plumb the peristaltic pump suction line with the #5 hoses to the salt outlet on the Saturated Salt Feeder with the 1/4 tubing supplied with the peristaltic pump. The salt outlet on the Saturated Salt Feeder is a small blue and white valve located at the bottom of the salt feeder.



Plumb the Saturated Salt Feeder water supply to the pool return line using ½ inch tubing and the valve supplied with the salt feeder.



2.10 PREPARING THE pH NEUTRAL SYSTEM

Before use, remove the pH probe from the top of the production tank and remove the cover from the end of the pH probe. Re-install the probe.

Plumb the suction port of the peristaltic pump with the #1 hose to a container (not supplied with the NEX-GEN) specified for muriatic acid solutions.

WARNING

Read all cautions and directions provided with the muriatic acid used. Always add acid to water. Use only with adequate ventilation. If strong odor is noticed, STOP, ventilation is inadequate. Leave area immediately. If the work area is not well ventilated you MUST use a properly fitted and maintained NIOSH approved respirator for acid fumes.

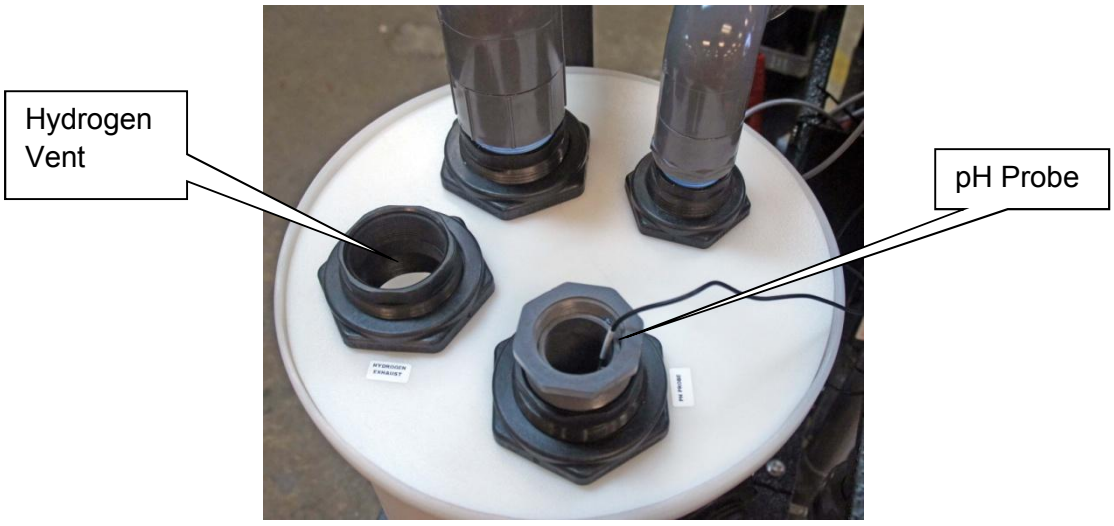
For best results fill the acid tank with a 1 to 1 water / muriatic acid solution.

2.11 PLUMBING THE HYDROGEN VENT

WARNING

FAILURE TO PLUMB THE HYDROGEN VENT TO OUTSIDE ATMOSPHERE MAY RESULT IN DAMAGE TO EQUIPMENT OR PERSONS. ALWAYS VENT THE SYSTEM AWAY FROM SPARK OR FLAME

Hydrogen vent pipes must be rigid plastic (PVC) and installed in a continuous upward gradient of at least 1/8 inch per foot. The pipe must be vented to outside atmosphere. Use a minimum of 2 inch pipe for the vent. The vent pipe should not be longer than 100 feet. (Consult ChlorKing if longer runs are required). Keep the opening clear and protected from water or debris with the use of a hood or bend.



SECTION 3
OPERATION

3.1 START-UP PROCEDURES AND CHECKS

Check that all components are mounted securely. Check that all plumbing is secure and tight. Check that all plumbing and electrical connections are connected in the proper place.

Ensure that all system isolation valves installed during installation are open.

Fill the Saturated Salt Feeder with pure rock or pellet salt. **Do Not Use Granular Salt.** Open both Saturated Salt Feeder valves.

Fill the muriatic acid container with a 50% water to 50% muriatic acid solution.

Turn on any breakers or disconnect boxes used for circuit protection.

Ensure the blue cord is connected to a chemical feed controller and the controller is calling for feed, or that the blue cord is plugged into a live outlet.

The NEX-GEN will go through a series of startup steps and automatically start generating chlorine.

If the NEX-GEN does not start automatically, see the Troubleshooting Guide.

3.2 ADJUSTING CHLORINE OUTPUT

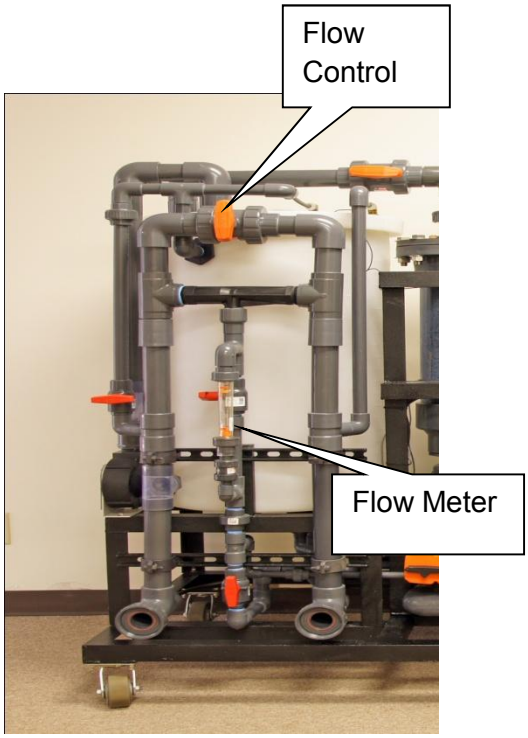
Adjust the flow through the flow meter for the following production rates:

1.2 GPM = 24 pounds of chlorine production per day
.88 GPM = 19.6 pounds of chlorine production per day
.72 GPM = 21.2 pounds of chlorine production per day
.32 GPM = 18.4 pounds of chlorine production per day

NOTE

The maximum production rate of 24.0 pounds is achieved at 7000 ppm salt concentration and 1.2 GPM.

Adjustments in excess of 1.2 gallons per minute will not produce more chlorine. Adjustments in excess of 1.2 gallons per minute will only consume excess salt.



3.3 TOUCH SCREEN ICON EXPLANATIONS

This icon is displayed if the system is turned off.

This icon is displayed if the system is waiting for a signal from an external controller.

This icon is displayed if cell cleaning mode has been selected. This icon will be displayed until the cell cleaning process is complete.

This icon indicates a failure during the acid wash sequence for cell maintenance.

Press this icon to clear the fault described above.

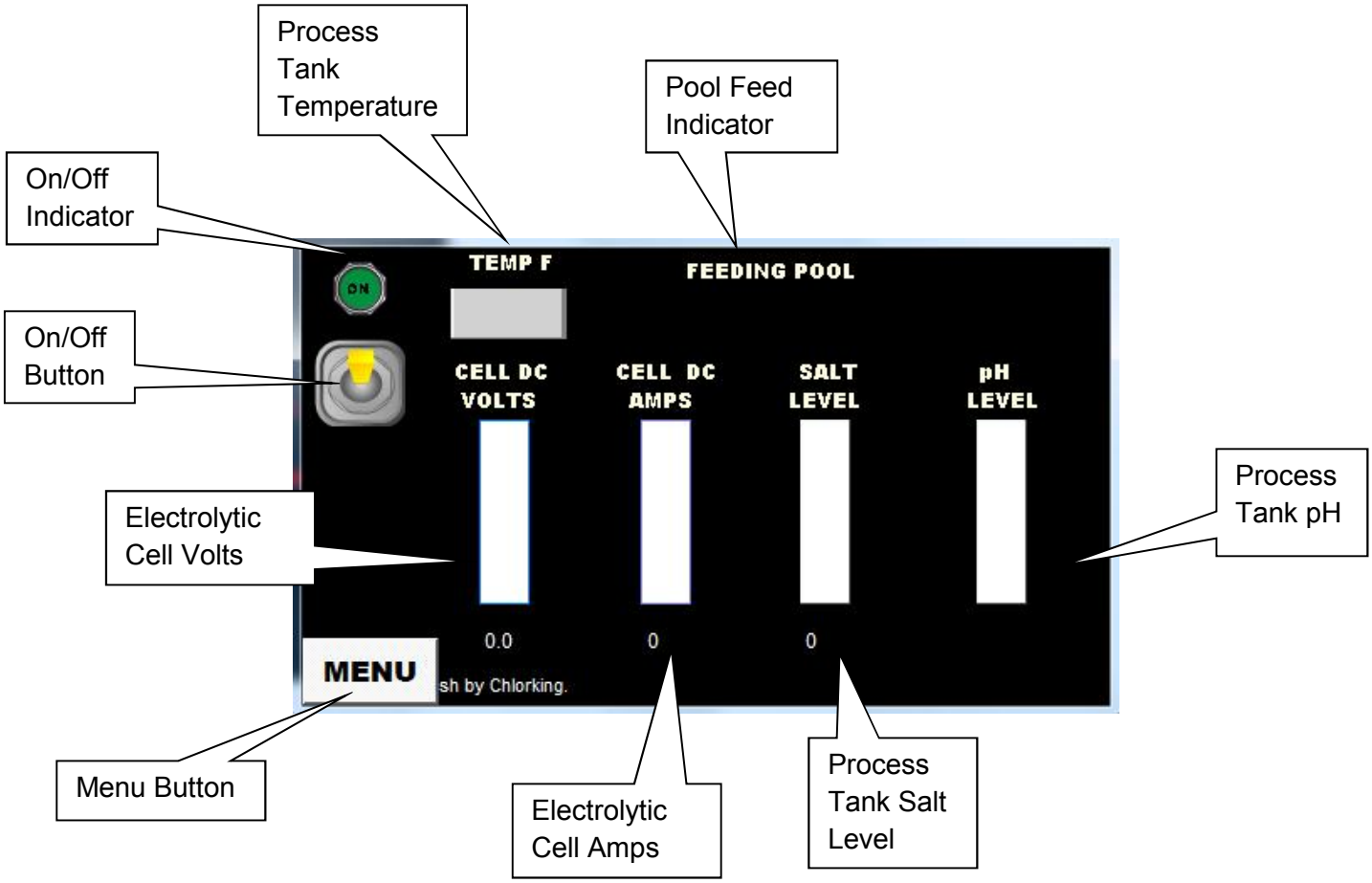
This icon indicates that acid is being pumped during the cell cleaning cycle.

Faults are accompanied by a beeping sound. If this icon is visible, pressing it will stop the beeping sound.

3.4 USING THE TOUCHSCREEN

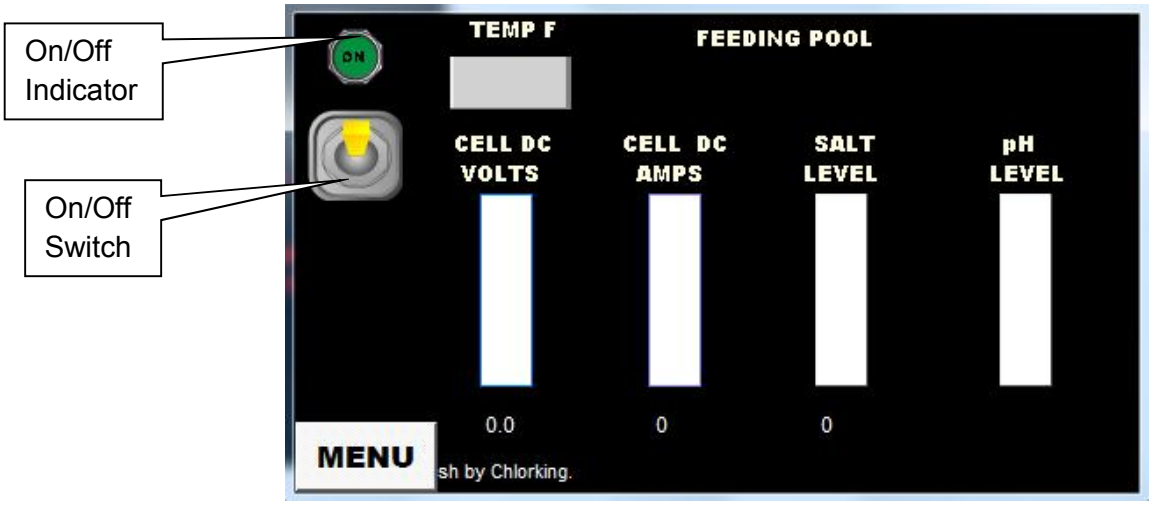
Home Screen

Below is the HOME screen that will be displayed any time the NEX-GEN is operating normally.



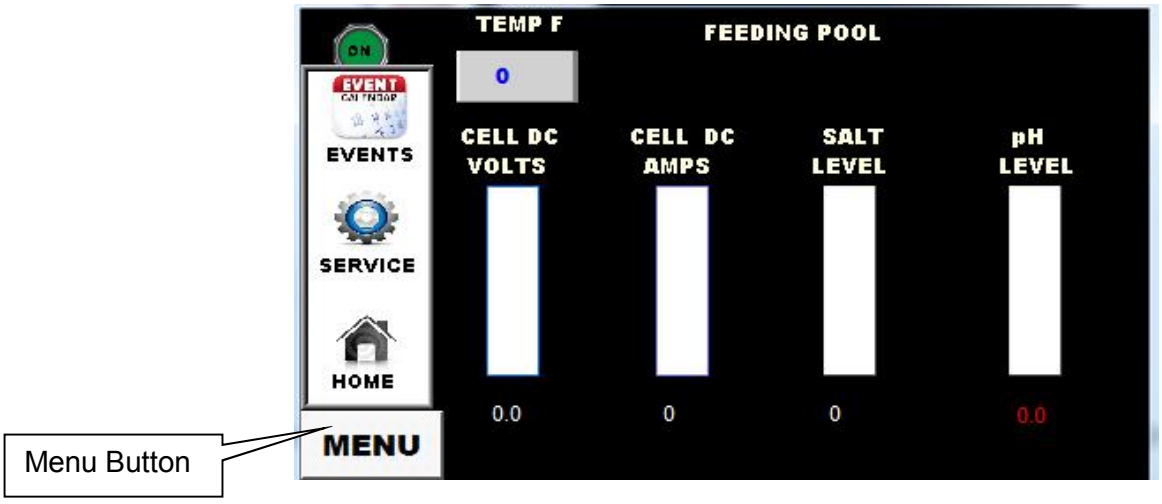
Turning the NEX-GEN On or Off

To turn the system on or off, press and hold the ON/OFF button until the desired ON/OFF indicator is displayed. The NEX-GEN may take several minutes to completely turn on or off.



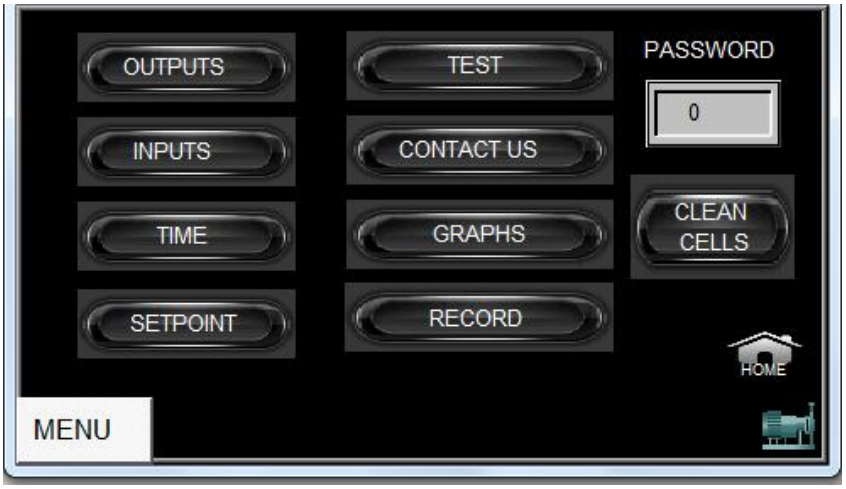
The Menu

Press the MENU button to access the HOME, SERVICE and EVENTS buttons.



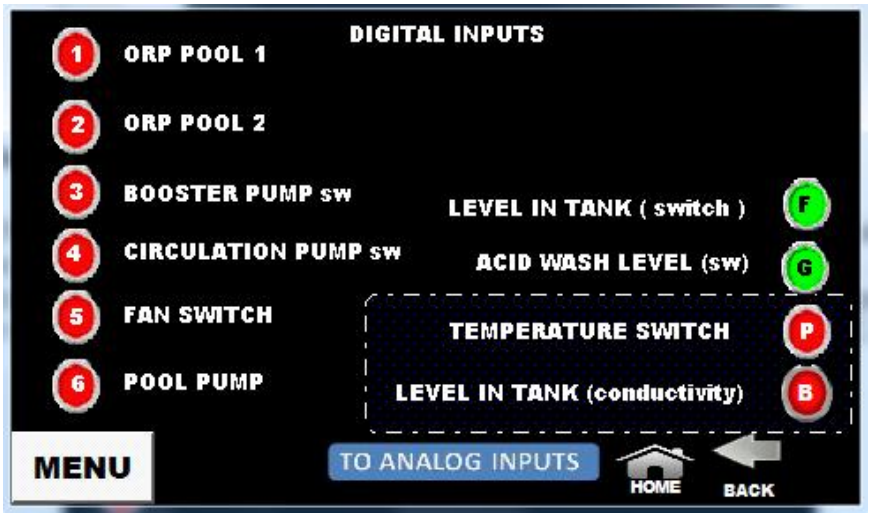
The Service Screen

Press MENU then SERVICE to access the SERVICE screen. The service screen has the option to view the current state of the system OUTPUTS, the current state of the system INPUTS, to manually TEST system outputs, to view or set system SETPOINTS, and to view recorded data.



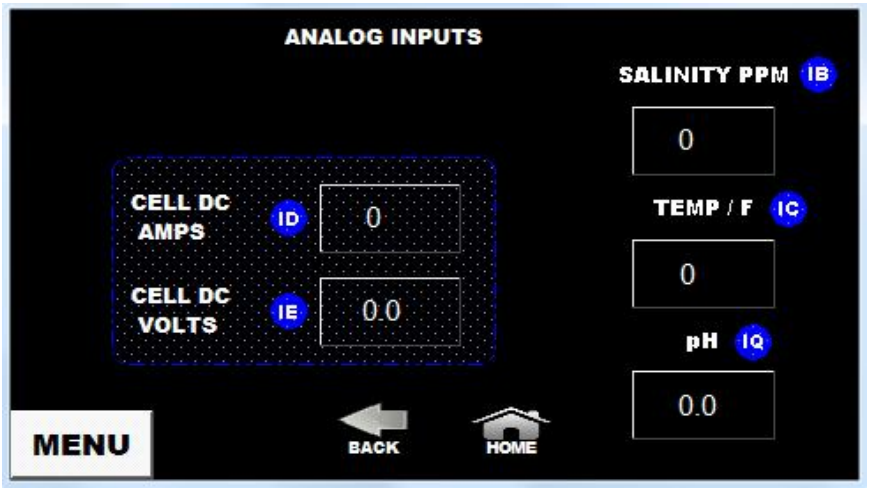
View System Digital Inputs

Press MENU then SERVICE then INPUTS to display the current state of all digital inputs. An active input is indicated by the GREEN dot next to the input name. A check mark indicates the parameter is OK. A RED dot indicates an inactive input. The number or letter inside of the dot indicates the actual input number on the PLC.



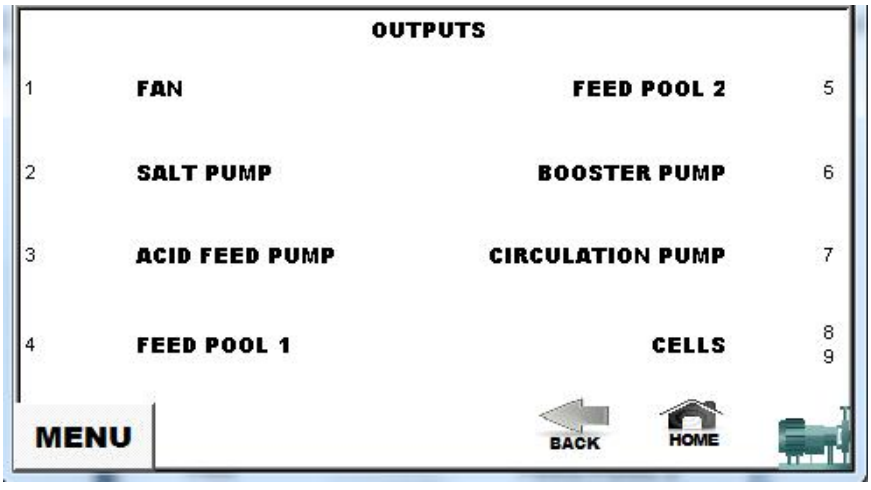
View System Analog Inputs

Press MENU then SERVICE then INPUTS then ANALOG INPUTS to display the current value of all analog inputs. The letters inside of the dot indicates the actual input number on the PLC.



View System Outputs

Press MENU then SERVICE then OUTPUTS to display the current state of all outputs. An active output is indicated by an icon next to the output name. The number next to the output indicates the actual output number on the PLC.

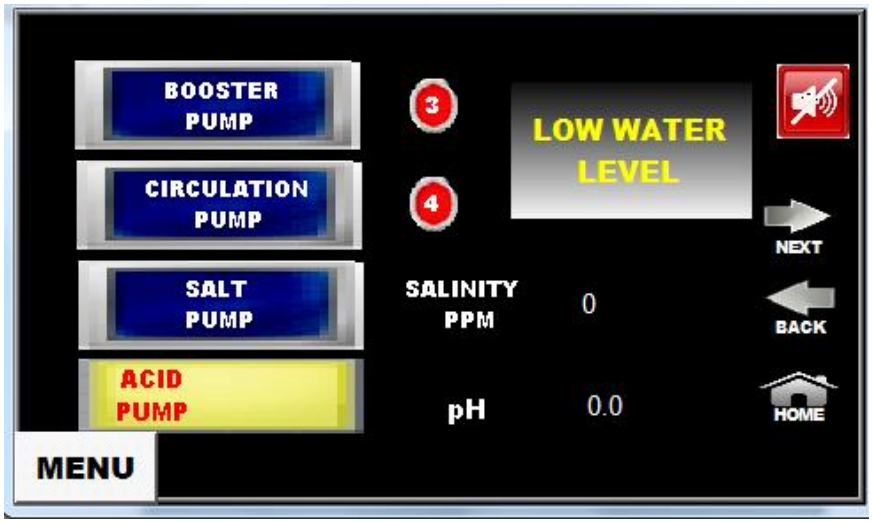


System Tests

Note: Selecting the TEST screen will turn the NEX-GEN system off.

Press MENU then SERVICE then TEST to view the test screen. Press NEXT for the second TEST screen. The following components can be manually operated for testing from these screens.

Booster Pump and Booster Pump Flow Switch
Circulation Pump and Circulation Pump Flow Switch
Salt Pump and Salt Sensor Reaction
pH Pump and pH Reaction (Press for 2 seconds)
Acid Wash Pump (Press for 2 seconds)
Hydrogen Vent Blower and Flow Switch
Feed Valve 1
Feed Valve 2 (ORP 2 must be active for this test)



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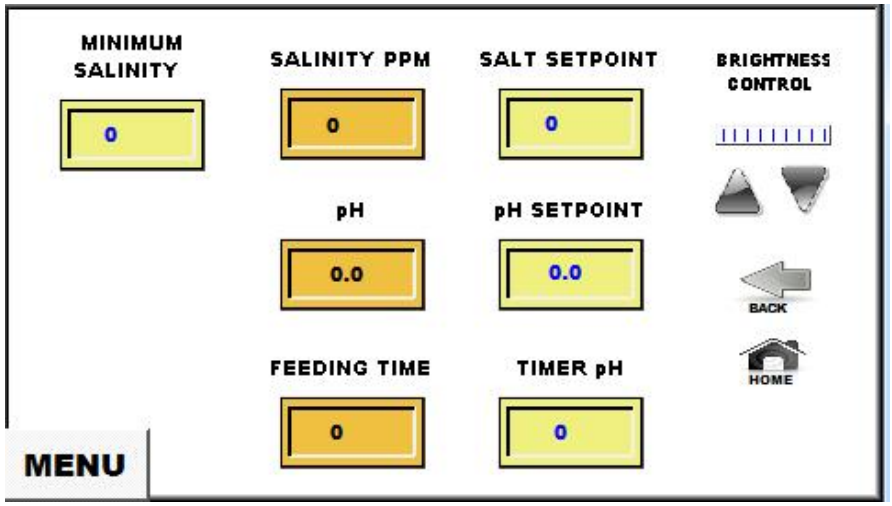
Viewing or Changing Set-points

Press MENU then SERVICE then SETPOINT to access the set-point screen. From this screen the SALT SETPOINT, PH SETPOINT, ACID FEED TIME, and MINIMUM SALINITY can be adjusted. The factory default is 5000 for salt, 7.4 for pH, and 60 seconds for feed time.

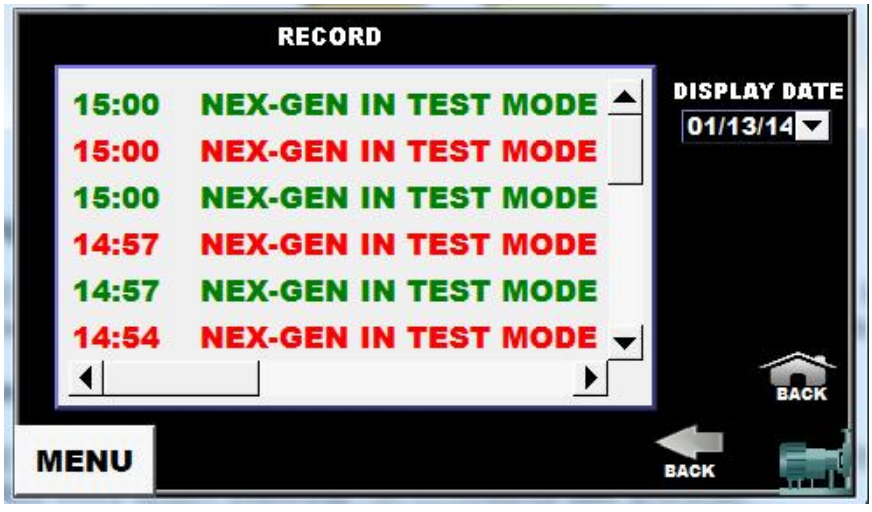


Adjusting pH Feed Times

Press MENU then SERVICE then SETPOINT to access the set-point screen. From this screen the PH FEED TIME can be adjusted. The factory default is 60 seconds.

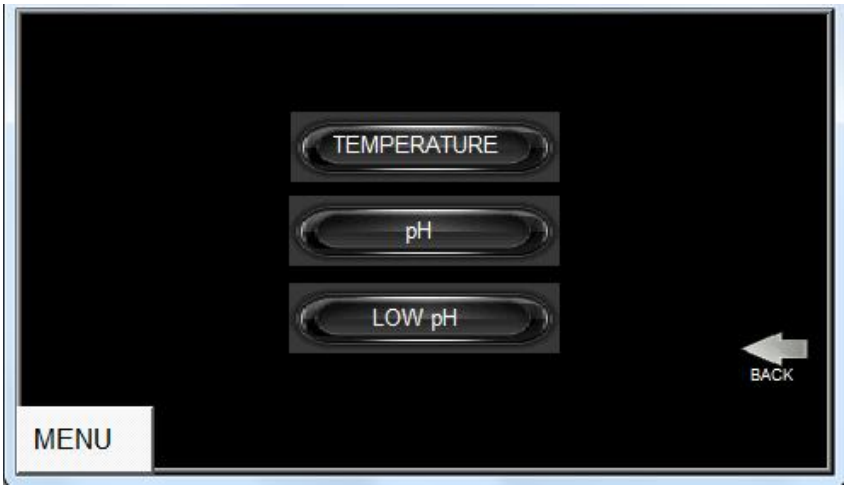
Accessing the Recorded Event Log

Press MENU then SERVICE then RECORD to access the event log screen. The event log will store every system event that has occurred by date and order.



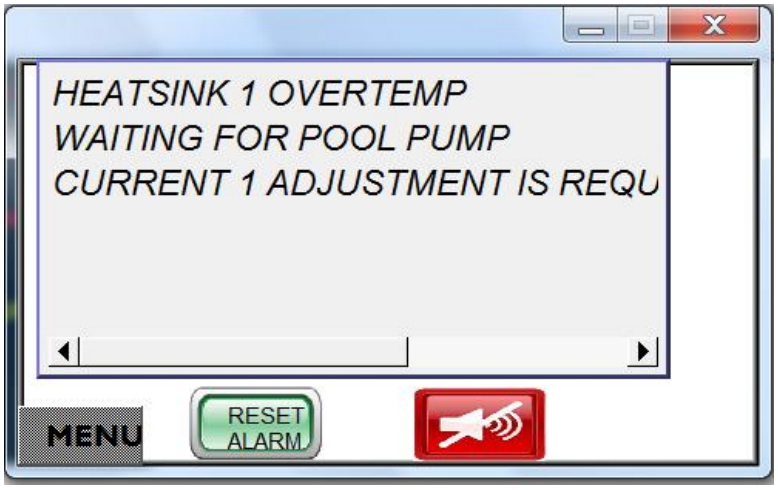
Accessing Graphs

Press MENU then SERVICE then GRAPHS to access the graphs screen. From this screen process temperature, process pH, and low pH can be seen over history.



Accessing the Current Event Log

Press MENU then EVENTS to access the current event log. This screen lists current events or faults. This screen will also activate automatically whenever a fault occurs. A current fault is displayed in black. Pressing the red ACKNOWLEDGE ALL EVENTS button and then the RESET ALARM button will reset all alarms.



SECTION 4
MAINTENANCE

4.1 ROUTINE MAINTENANCE

Daily

Confirm system operation with a visual inspection. Check the salt concentration on the display. Check the amps as displayed on the gauge. Check the flow through the flow meter.

Weekly

Clean the electrode stacks each week or as needed based on the presence of calcium buildup.

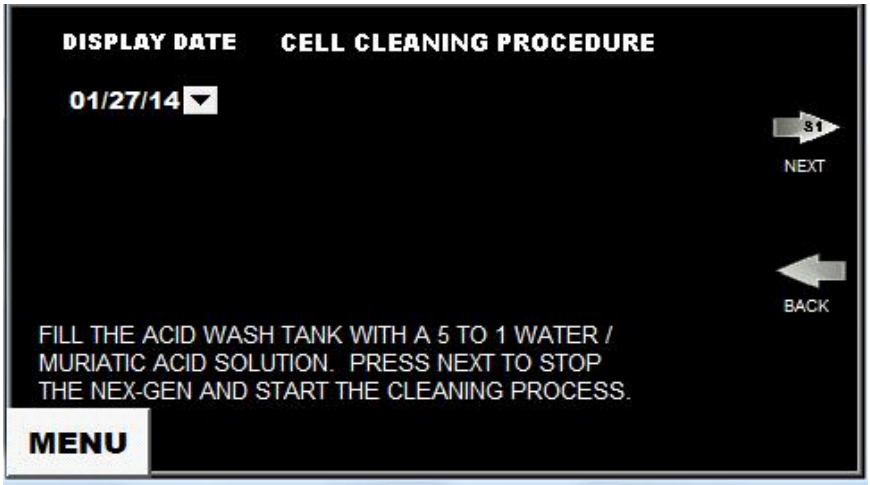
Check the salt in Saturated Salt Feeder and fill as needed.

Monthly

Check the system filter (if installed), production tank filter (if installed), and dilution fan screen and clean as necessary.

4.2 CELL CLEANING PROCEDURE

Press MENU then SERVICE then CLEAN CELLS to access step by step instructions for cleaning the cells.



WARNING

Read all cautions and directions provided with the muriatic acid used. Always add acid to water. Use only with adequate ventilation. If strong odor is noticed, STOP, ventilation is inadequate. Leave area immediately. If the work area is not well ventilated you MUST use a properly fitted and maintained NIOSH approved respirator for acid fumes.

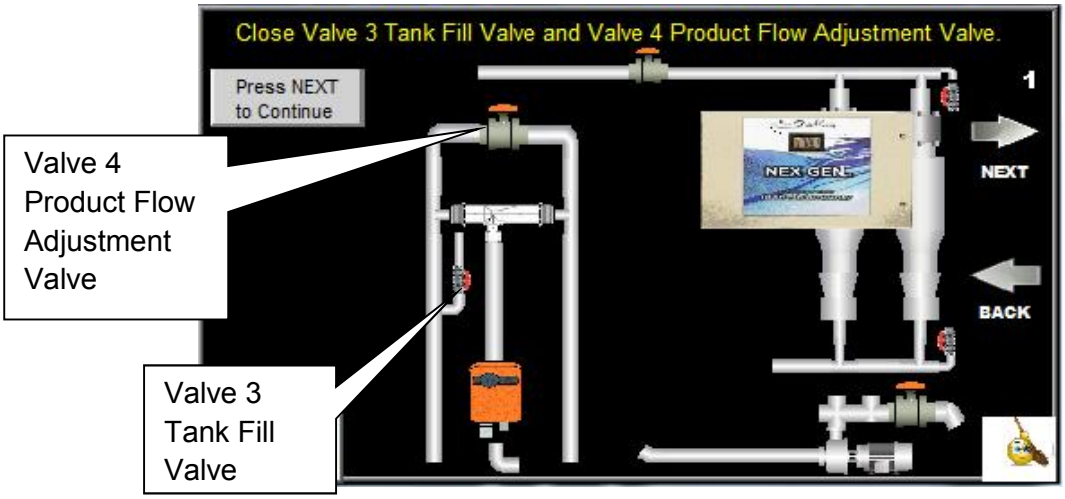
Fill the acid wash tank with a 5 to 1 water / muriatic acid solution.

Press NEXT to continue.

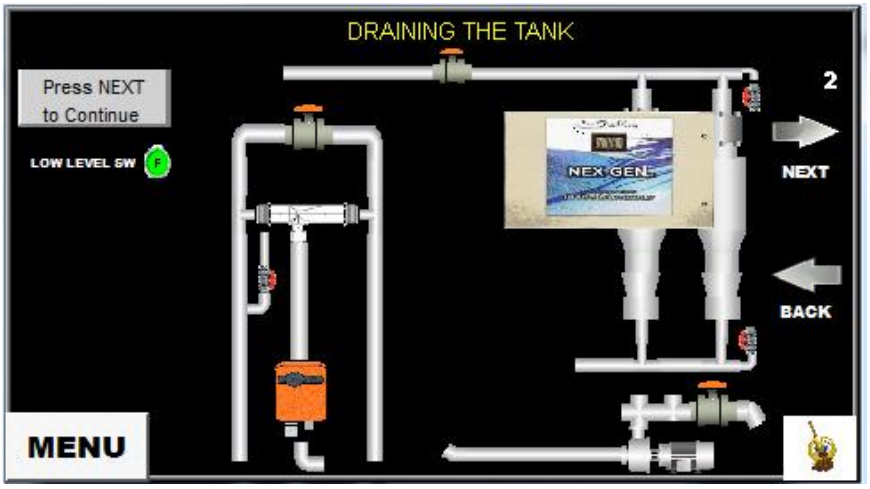
All valves on the NEX-GEN are clearly marked with valve tags. The valves to be adjusted in each step will be flashing on the screen.

STEP 1 – Close the Tank Fill Valve marked 3. Close the Product Flow Adjustment Valve marked 4. This will allow the tank to drain for cleaning.

Press NEXT to continue.

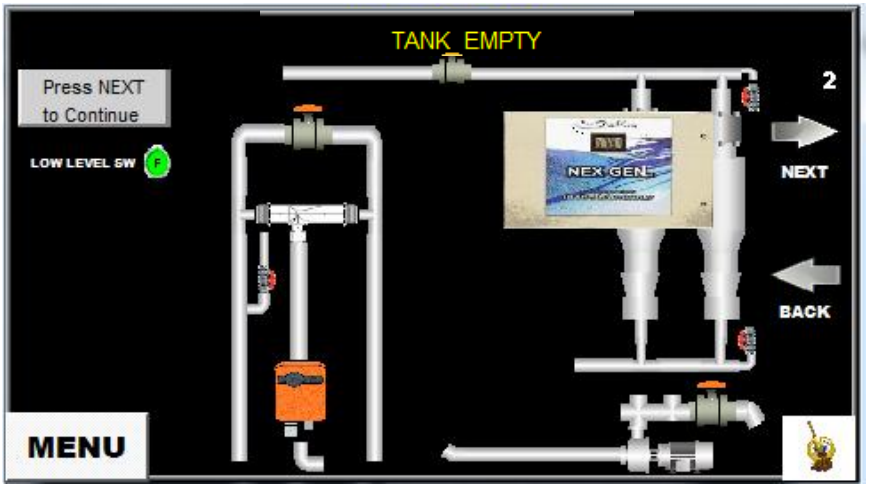


STEP 2 – During this step the booster pump will start and the product tank will empty. When the tank is empty the GREEN Low Level Sw will turn RED.



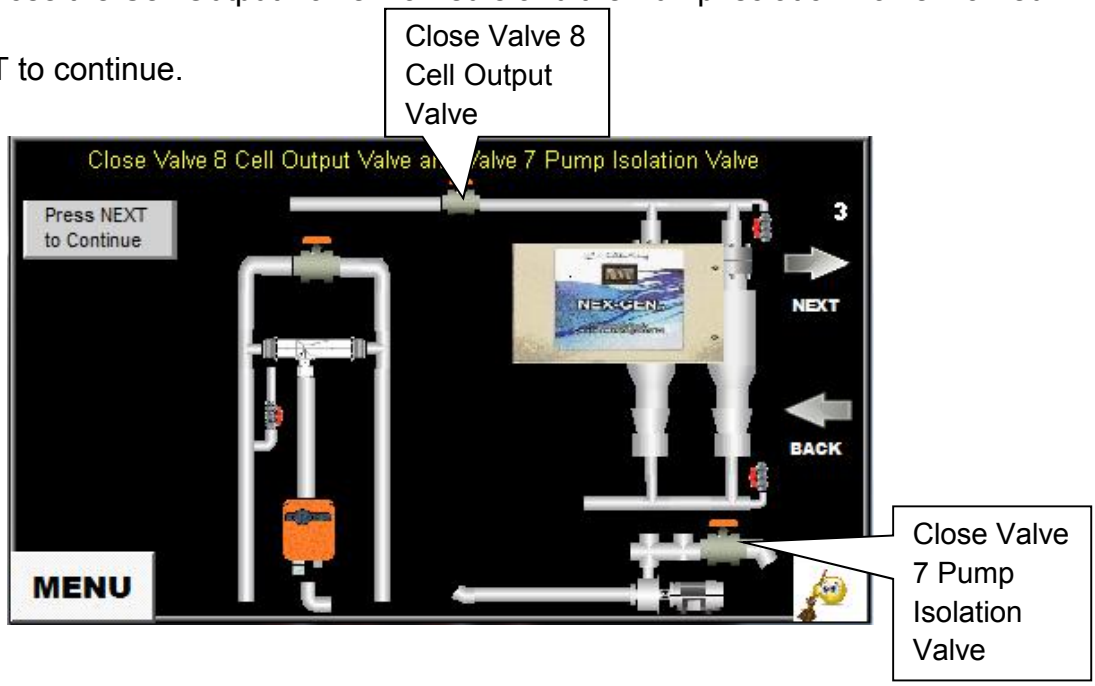
When the tank has emptied the TANK EMPTY will be displayed.

Press NEXT to continue.



STEP 3 – Close the Cell Output Valve marked 8 and the Pump Isolation Valve marked 7.

Press NEXT to continue.

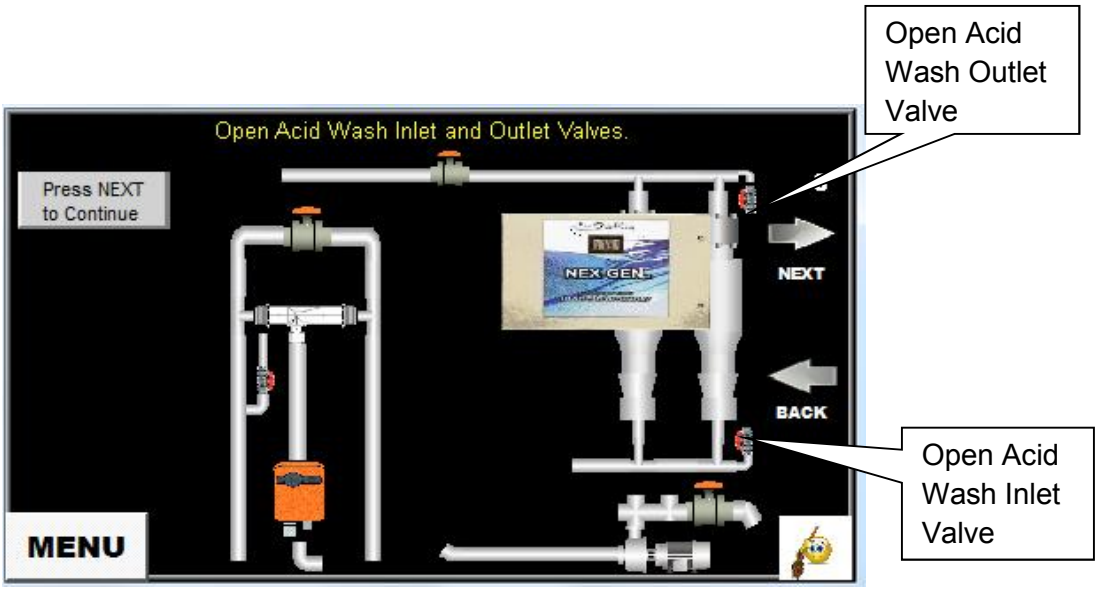


STEP 4 – Connect Acid Wash Inlet Coupling to the Acid Wash Inlet Valve colored White. Connect Acid Wash Outlet Coupling to the Acid Wash Outlet Valve colored Gray.

Press NEXT to continue.

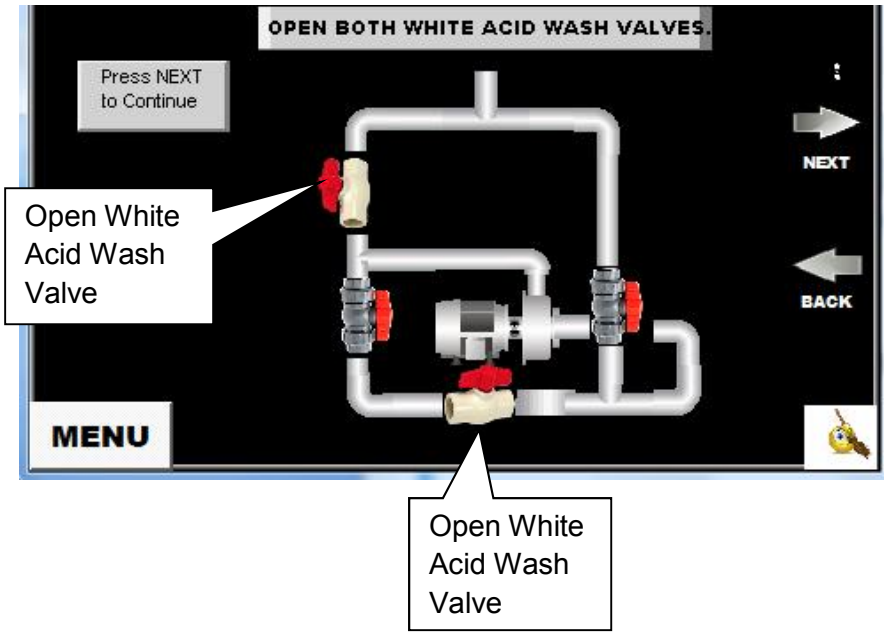
STEP 5 – Open the Acid Wash Inlet and Outlet Valves.

Press NEXT to continue.



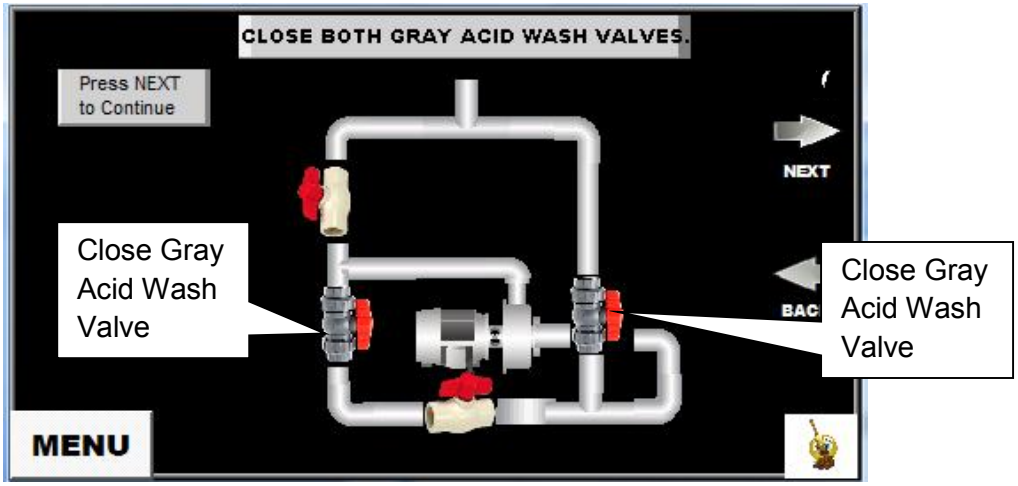
STEP 6 – Open both White Acid Wash Valves on the Acid Wash assembly.

Press NEXT to continue.



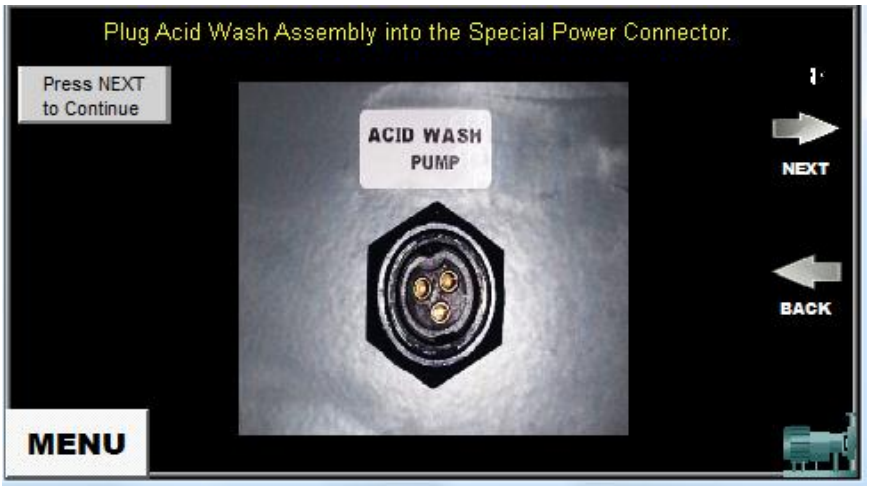
STEP 7 – Close both Gray Acid Wash Valves on the Acid Wash assembly.

Press NEXT to continue.



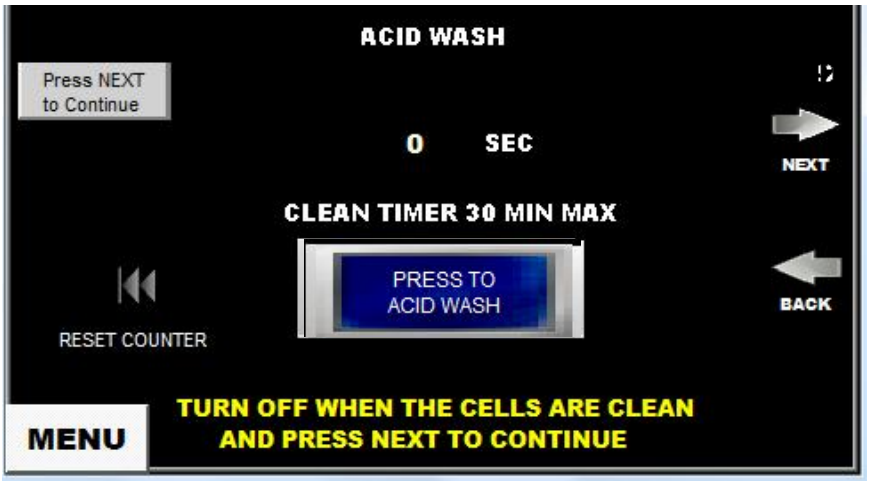
STEP 8 – Plug the Acid Wash Assembly into the Special Power Connector and turn on the Acid Wash Pump on the skid.

Press NEXT to continue.



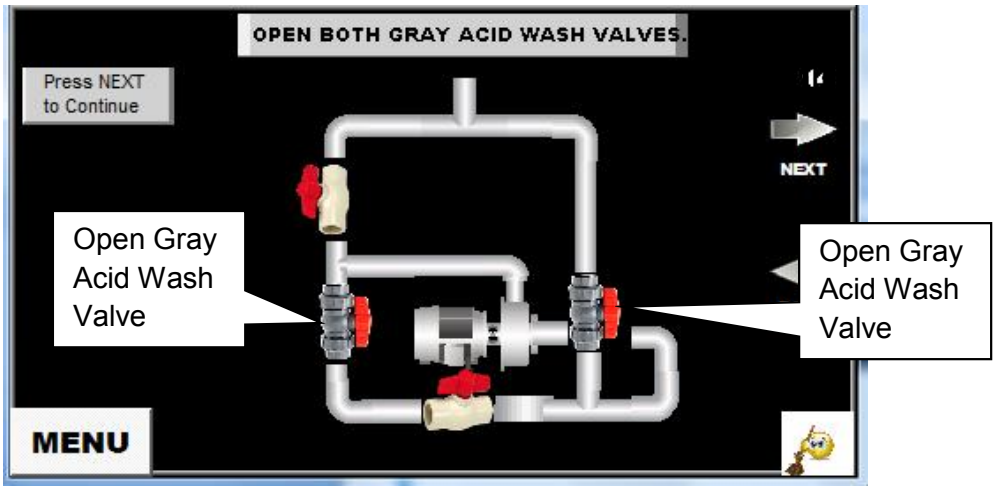
STEP 9 – Press the blue “Press to Acid Wash” button. The Acid Wash assembly will begin to fill the NEXGEN with muriatic acid and circulate the acid through the cells for as long as 30 minutes. If the cells are clean before the 30 minute time interval has expired, press the blue Acid Wash button to stop the process.

Press NEXT to continue.



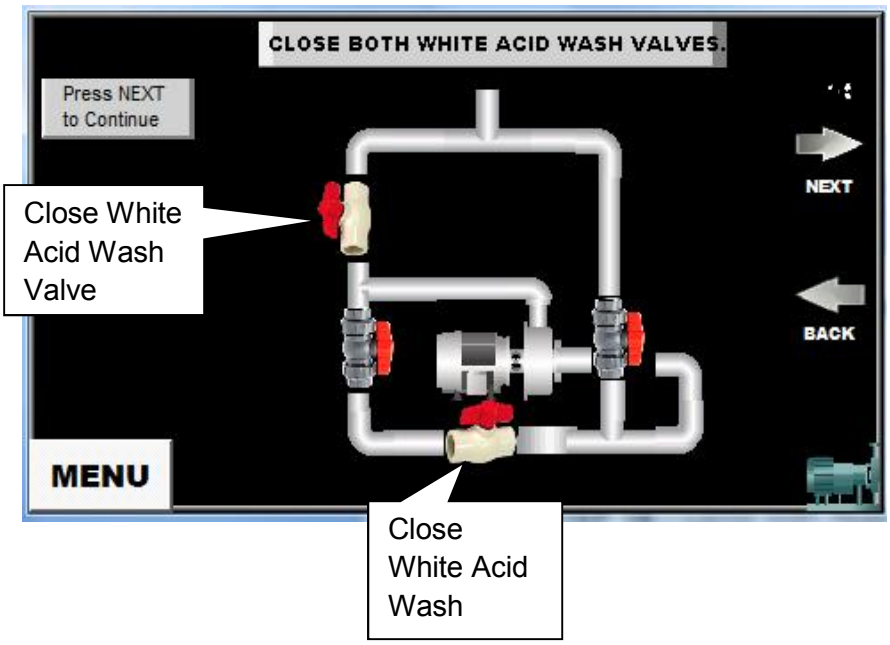
STEP 10– Open both Gray Acid Wash Valves on the Acid Wash assembly.

Press NEXT to continue.



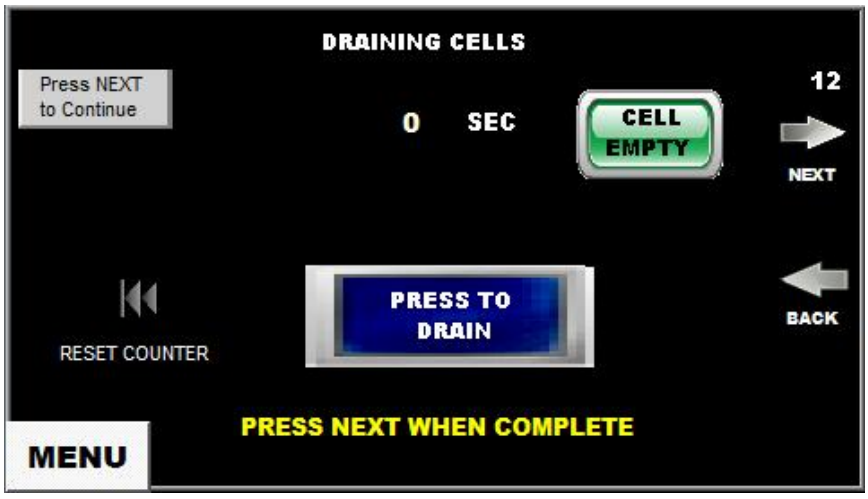
STEP 11 – Close both White Acid Wash Valves on the Acid Wash assembly.

Press NEXT to continue.



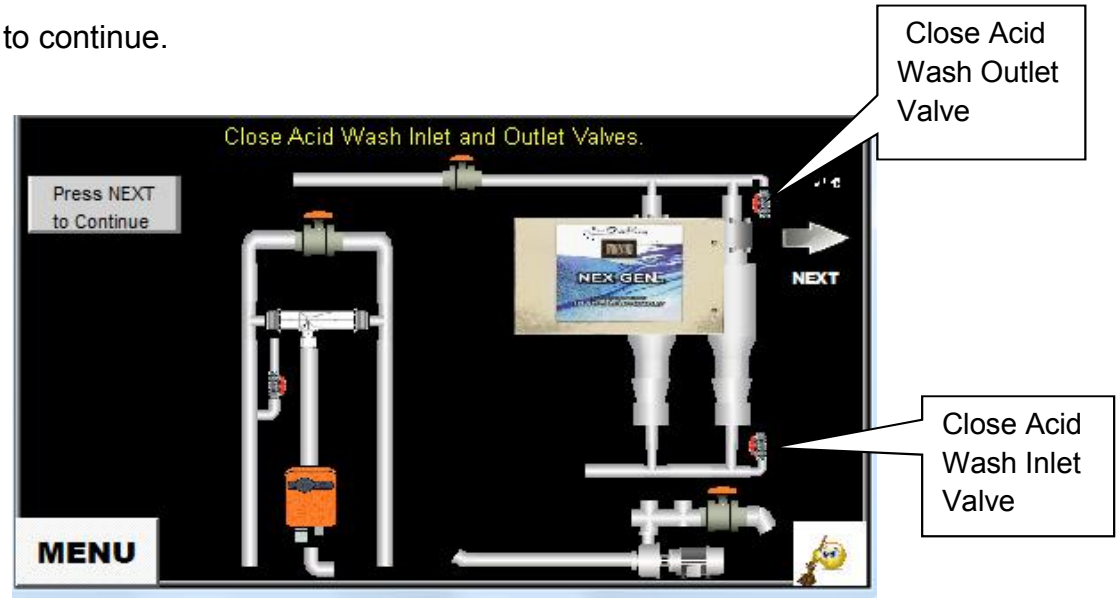
STEP 12 – Press the blue "Press to Drain" button. The Acid Wash assembly will begin to drain the muriatic acid from the NEXGEN. When the draining is complete, CELL EMPTY will be displayed.

Press NEXT to continue.



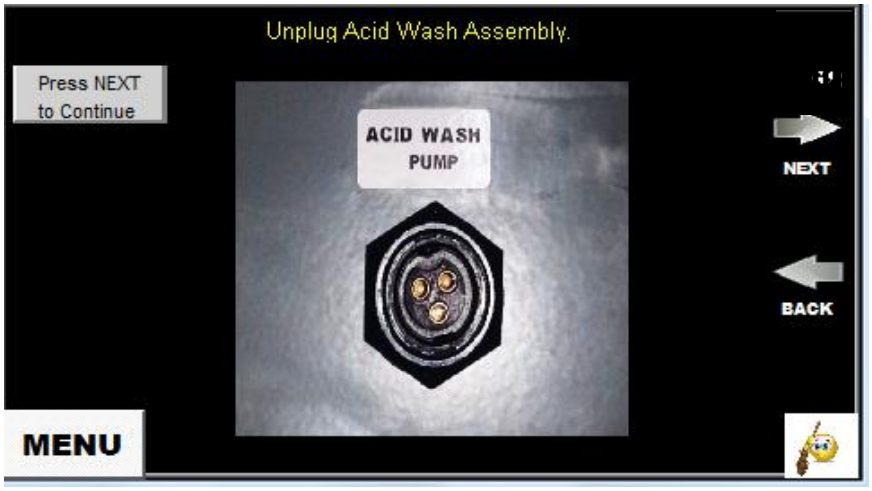
STEP 14 – Close the Acid Wash Inlet and Outlet Valves.

Press NEXT to continue.



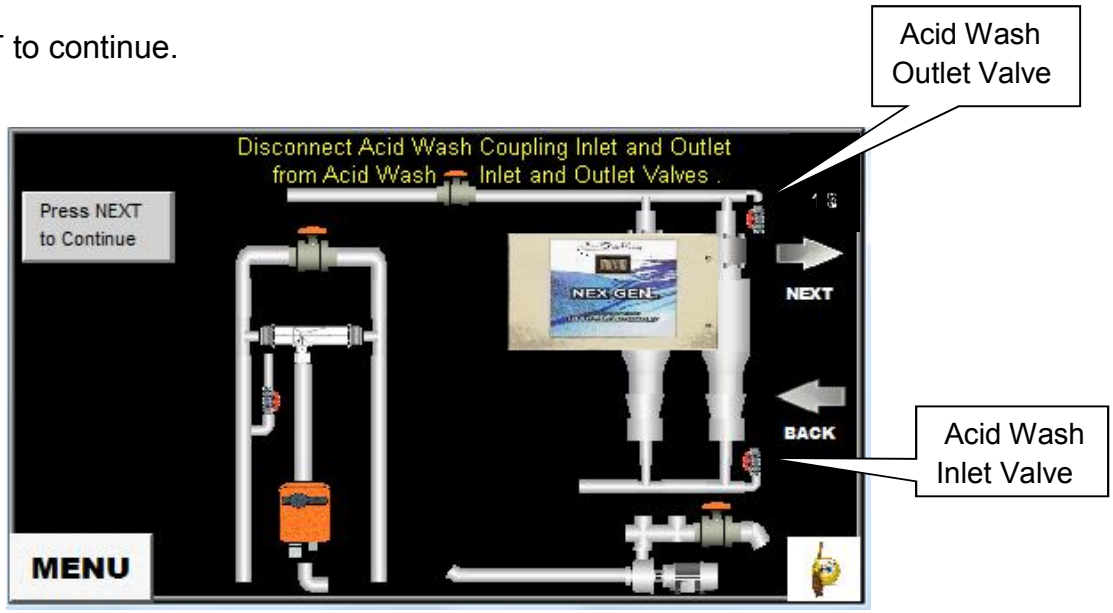
STEP 15 – Unplug the Acid Wash Assembly from the Special Power Connector.

Press NEXT to continue.



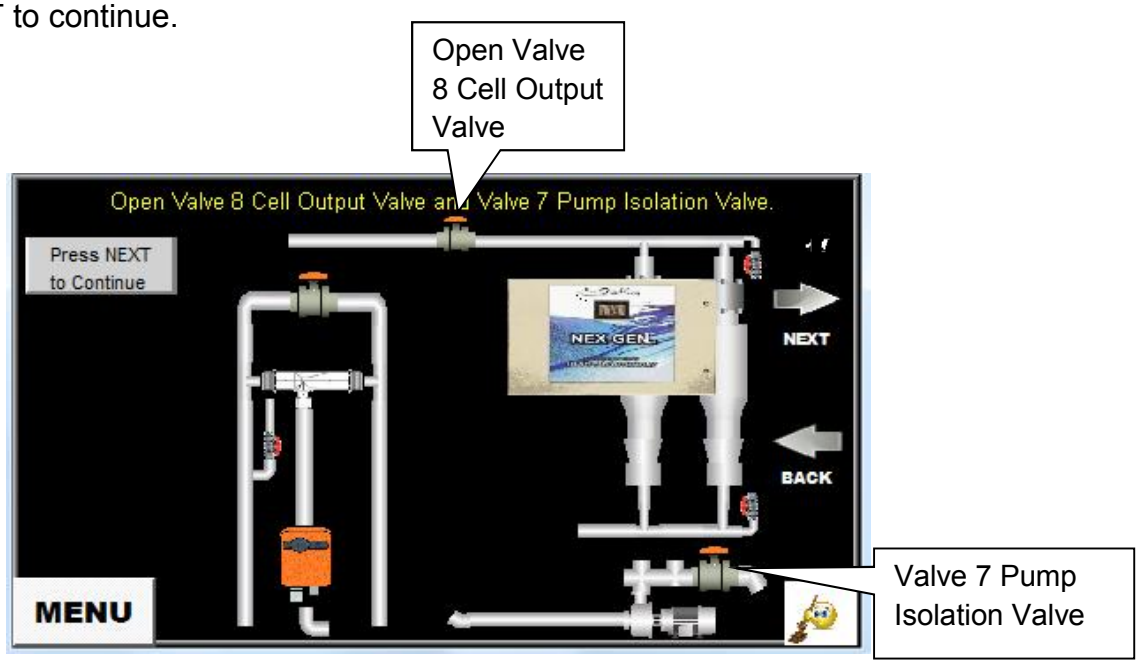
STEP 16 – Disconnect Acid Wash Coupling Inlet and Outlet from the Acid Wash Inlet and Outlet Valves.

Press NEXT to continue.



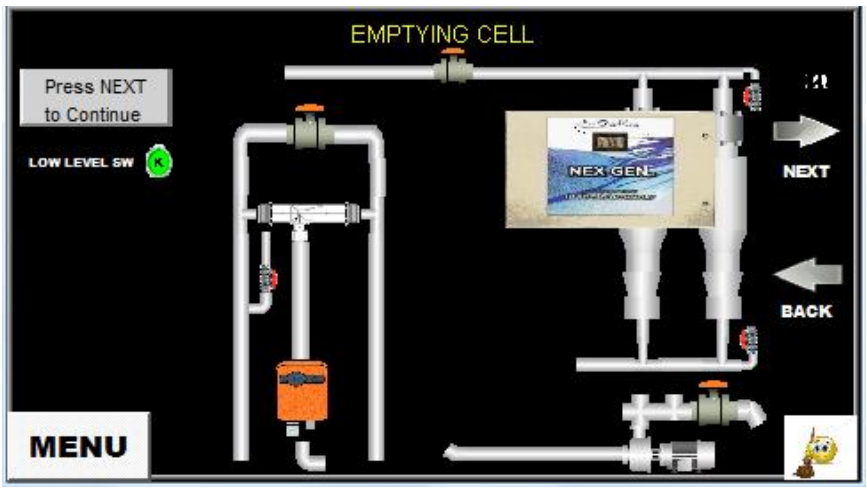
STEP 17 – Open Cell Output Valve marked 8 and the Pump Isolation Valve marked 7.

Press NEXT to continue.



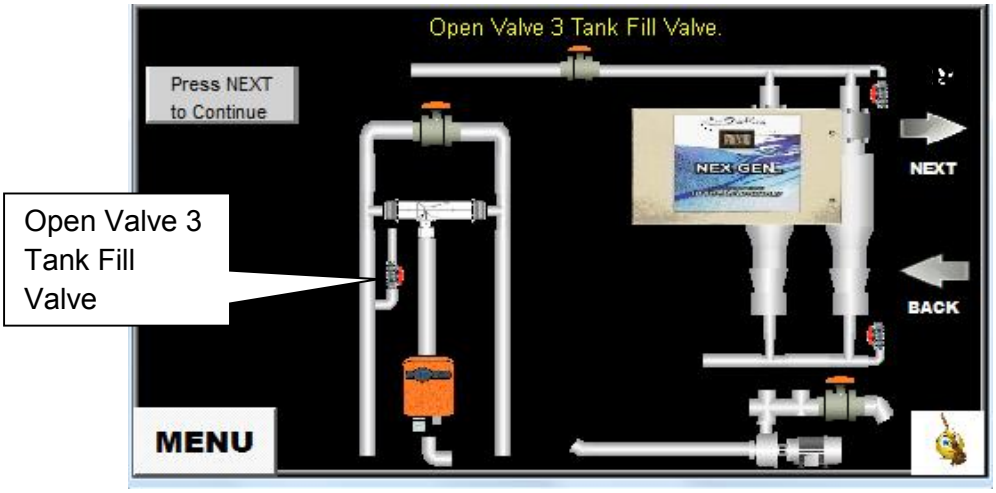
STEP 18 – This step will empty any remaining acid from the cells. When the process is complete CELL EMPTY will be displayed.

Press NEXT to continue.



STEP 19 – Open Valve 3 the Tank Fill Valve.

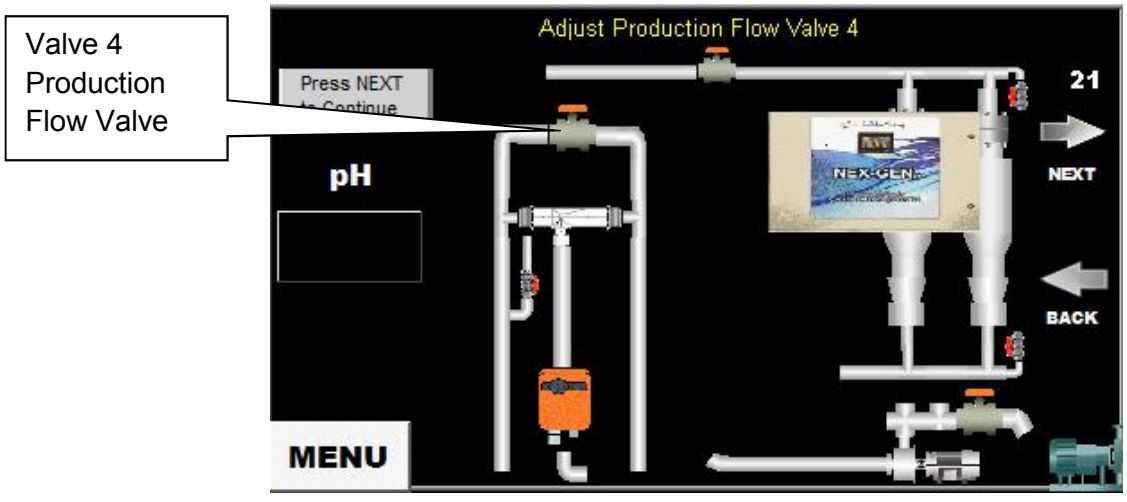
Press NEXT to continue.



STEP 20 – This step will fill and flush the system. Once filling and flushing is complete, the current system pH will be displayed and you will be prompted to press NEXT to continue.

STEP 21 – Adjust the Production Flow Valve marked 4 to the desired flow rate outlined in Section 3.2 on page 17.

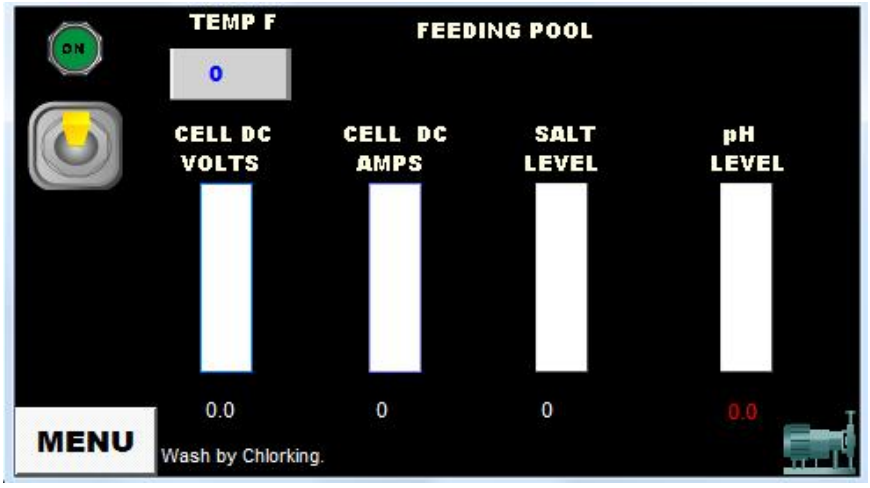
Press NEXT to continue.



STEP 22 – Cell cleaning is finished.

Press NEXT to continue.

The home screen will be displayed. The NEX-GEN will start automatically. The startup process will include automatic adjustment of the pH and salt concentration in the production tank. Once this process is complete the NEX-GEN will resume normal operation.



SECTION 5
WARRANTY INFORMATION

The ChlorKing® NEX-GEN system carries a limited 3-year warranty

1. 3-year warranty on assembly of electrical components and production tank.
2. 1 year on all electrical items.
3. 2 years pro-rated monthly, on titanium electrodes. (Year 1 is warranted fully, thereafter pro-rated warranty applies, applicable over the full 2-year period. Applicable on electrode stacks where full price has been paid.)

- **ChlorKing®** advises that titanium electrodes will have to be replaced approximately every 15,000 hours of operating time.

- **ChlorKing®** warranties will not be honored should it be shown that the operating and maintenance procedures have not been followed, particularly with regard to the cleaning frequency program.

- **ChlorKing®** warranties of the titanium electrodes will not be honored if the system is operated in water temperatures lower than 59 degrees F.

- During the warranty period the customer shall return the defective component, freight prepaid, accompanied by the original invoice or proof of purchase, and **ChlorKing®** shall at its sole discretion elect to repair or replace the defective component and return it to the customer, freight pre-paid.

ChlorKing® accepts no responsibility other than to repair or replace a defective component, and this warranty specifically excludes product failure due to accidental damage, abuse, misuse, and negligence, damage due to non-compliance of the operating manual or unauthorized alterations or modifications to the system. **ChlorKing®** accepts no responsibility and is not liable for any extended warranties or variations to this warranty offered by re-sellers of **ChlorKing®** systems.