



OmniLogic®

# Troubleshooting Guide Residential



TSG-OL150c

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# Safety Precautions



## High Voltage Electrocution Hazard

Hazardous voltage can shock, burn, cause serious injury and or death. To reduce the risk of electrocution and or electric shock hazards:

- Only qualified technicians should remove the panel
- Replace damaged wiring immediately
- Insure panel is properly grounded and bonded

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# OmniLogic: Overview

- The OmniLogic is an internet and App ready, intuitive, modular automation system.
- This elite automation system features a USB backup and upgrade option. The USB feature allows customers and servicers to backup existing configurations as well as upgrade the system with the latest revision in minutes.
- With touch screen technology the MSP or display allows users to navigate through screens and commands in virtually any lighting condition.
- Each OmniLogic base unit supports up to 10 relays, 8 valves, 8 heaters, and 8 sensors. It also supports up to 25 themes (groups) and 50 favorites.

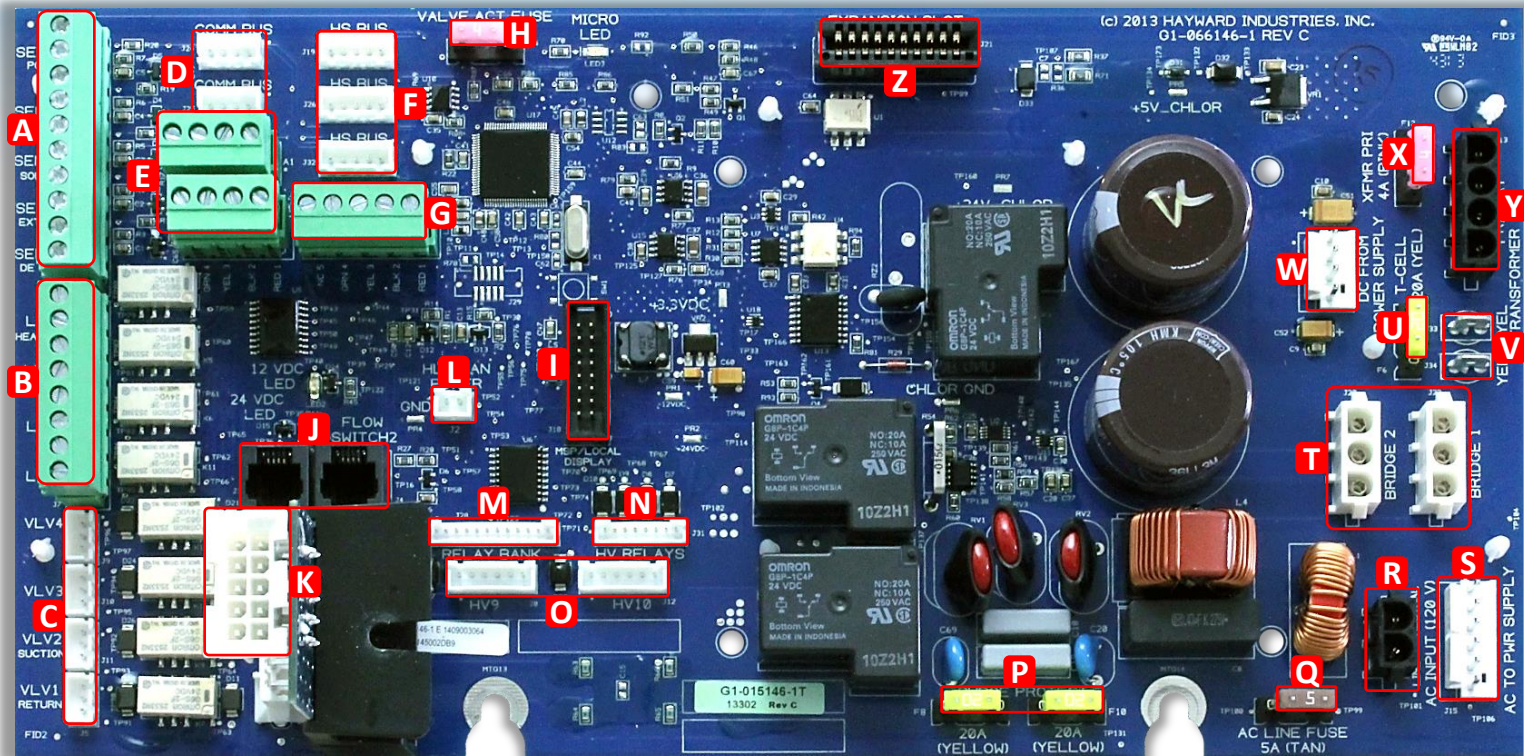


# OmniLogic: Terminology

Term	Description
MSP	Main System Processor (display)
MPP	Main Panel Processor (main board)
MP	Main Panel (enclosure)
PSU	Power Supply Unit (PWR Supply)
I/O	Input / Output Expansion Card
HVR	High Voltage Relay
LVR	Low Voltage Relay
LVA	Low Voltage Actuator
RB	Relay Bank



# OmniLogic: Main PCB Layout (MP)



<b>A</b> Sensor Blocks (SENS 1-4)	<b>J</b> Flow Switches (FLOW 1-2)	<b>S</b> 120VAC to Power Supply
<b>B</b> Low Voltage Relays (LVR 1-4)	<b>K</b> Turbo Cell (CHLR1)	<b>T</b> Rectifier Input/output AC to DC (Cell)
<b>C</b> Valve Actuators (VLV 1-4)	<b>L</b> WiFi Antenna LAN Power	<b>U</b> 20A Fuse (Protects Cell Circuit)
<b>D</b> (2) 4-wire Comm Bus	<b>M</b> Relay Bank (HVR 5-8)	<b>V</b> Transformer Output 24VAC (Cell Circuit)
<b>E</b> (2) RS485 Comm	<b>N</b> High Voltage Relay (HVR 1-4)	<b>W</b> DC (from Power Supply (Board Function))
<b>F</b> (3) High Speed Buses	<b>O</b> High Voltage Relay (HVR 9+10)	<b>X</b> 4A Fuse (Transformer + Cell Circuit)
<b>G</b> (1) High Speed Terminal Block	<b>P</b> (2) 20A Fuse (Surge Protection)	<b>Y</b> Transformer Input 120VAC (Cell Circuit)
<b>H</b> 4A Fuse (Valve Actuators)	<b>Q</b> (1) 5A Fuse (Prevents Overdraw)	<b>Z</b> I/O Expansion (For I/O Expansion Card)
<b>I</b> MSP Port (Local Display)	<b>R</b> 120VAC input (from Breaker)	





OmniLogic®

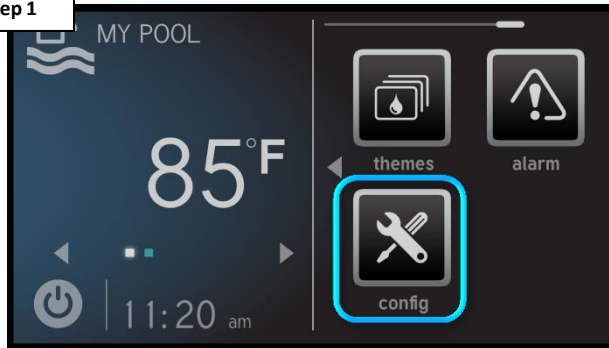
**How To:**



# How To: Back-Up Configuration

*Use the steps provided to backup a configuration. These steps aid firmware upgrades, MSP changes, and corrupted configurations.*

Step 1



On the right of the dashboard locate and tap the “config” icon.

Step 2



Select the “backup config” option (third down on the left most column).

Step 3



Select “Backup to USB”, after inserting a USB drive, then press the check mark.

Step 4



Once the backup is confirmed press the check mark to finalize.



# How To: Download Firmware

To download the latest firmware to a USB drive go to [www.hayward.com](http://www.hayward.com)  
Support Center > Automation > OmniLogic > Firmware Updates

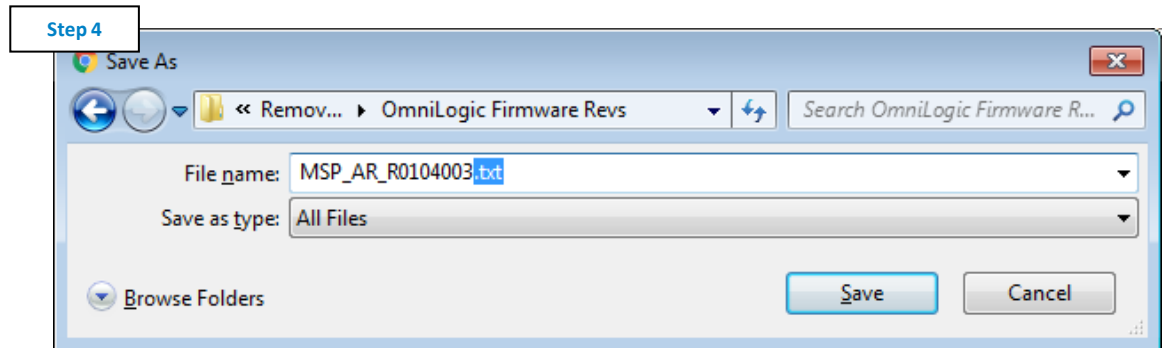
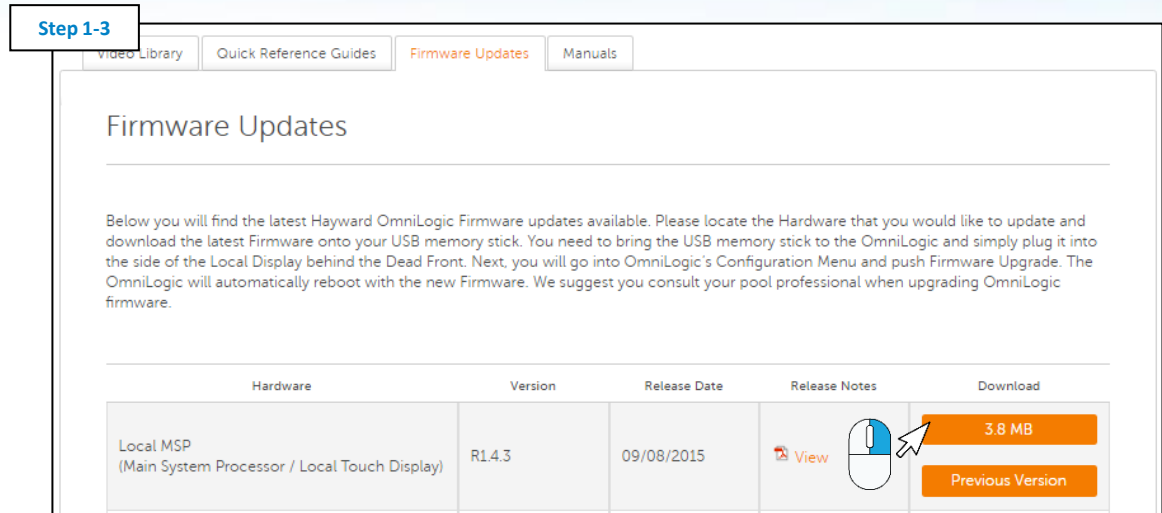
**Step 1:** Right click on the link of the file you wish to download.

**Step 2:** Within the options menu select "Save link as..."

(**Note:** USB drive must already be connected to your computer).

**Step 3:** From the "Save As" window navigate to the desired USB drive.  
(**Note:** please make sure to select the root directory of the USB drive).

**Step 4:** Before saving, change the "Save as type" to "All Files" AND remove the ".txt" file extension that automatically appears. Then click on "Save" button.  
(**Note:** failing to remove the .txt file extension will result in an unreadable firmware upgrade file).



# How To: Upgrade Firmware

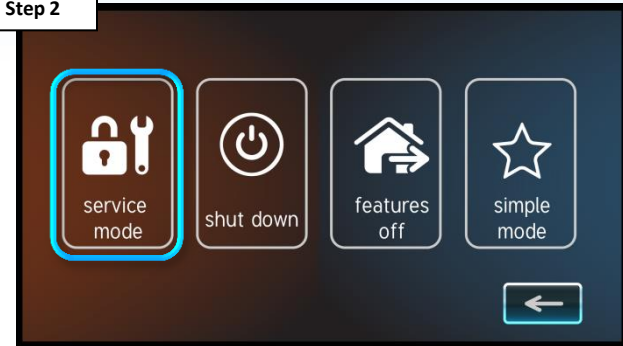
*Insert the USB drive into the side of the MSP and follow the steps provided below:*

Step 1



Press the power button.

Step 2



Select "service mode".

Step 3



Tap the "Upgrade" icon.

Step 4

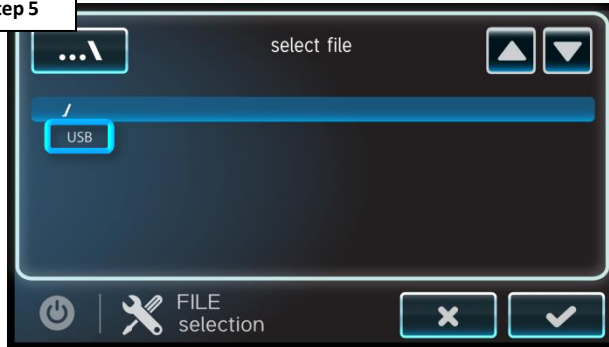


Tap device to upgrade then check mark.

# How To: Upgrade Firmware (cont.)

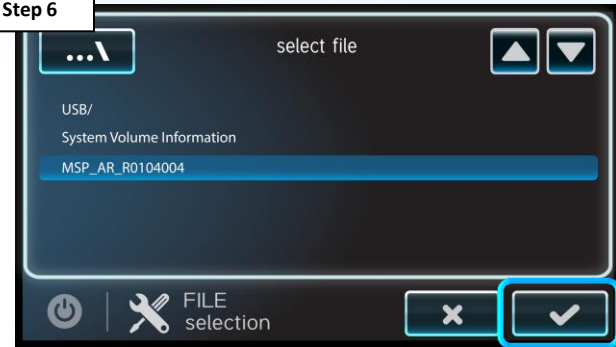
*NOTE: Make sure all devices are up to the latest firmware revision.*

Step 5



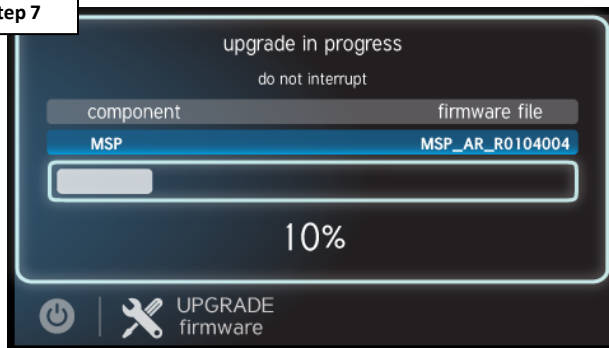
Select storage method (USB).

Step 6



Select latest file (downloaded from web).

Step 7



Press check mark to start the upgrade process  
(**DO NOT** power off while in process).

Step 8



Press check mark when complete (100%),  
system will reboot.



# How To: Clear DDT

*The DDT (device discovery table) holds a list of all the smart devices the MSP talks to. Sometimes this table needs to be removed to refresh communications.*

Step 1



On the right of the dashboard locate and tap the “config” icon.

Step 2



Once in config, press the right arrow once and tap on “shell command”.

Step 3



Tap anywhere on the screen to advance past the warning screen.

Step 4

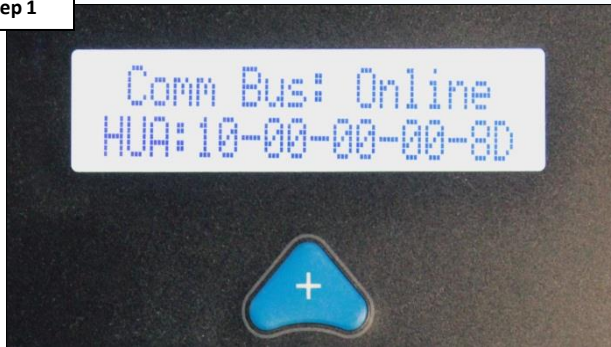


Locate and tap on “RemoveDDT” AND power cycle the OmniLogic.

# How To: Clear DDT – Post Action

*After removing a DDT it may be necessary to reassign HUAs when multiple smart components of the same type are being used (for example multiple EcoStar pumps).*

Step 1



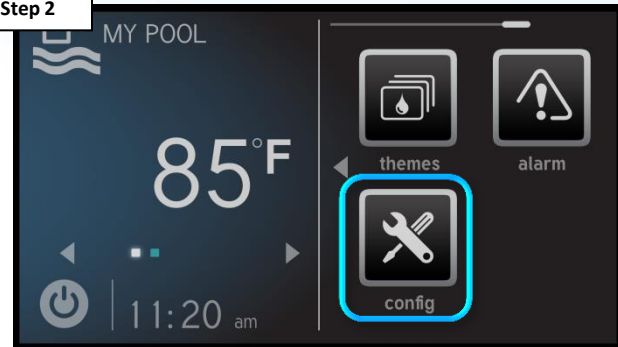
Power up smart components and record HUAs for each (with descriptions).

Step 3



Select "system info" icon and record the msp id (top), then press back arrow.

Step 2



On the right of the dashboard locate and tap the "config" icon.

Step 4

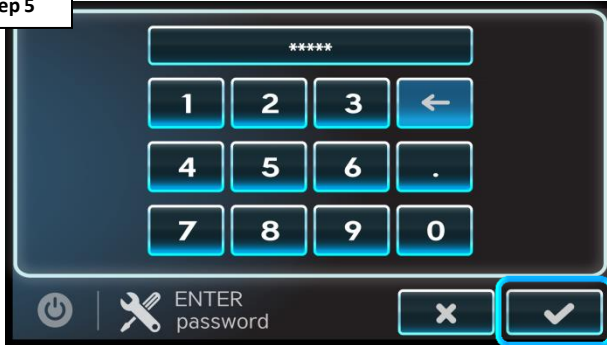


Select the "config wizard" option (the first option in top left).

# How To: Clear DDT – Post Action (cont.)

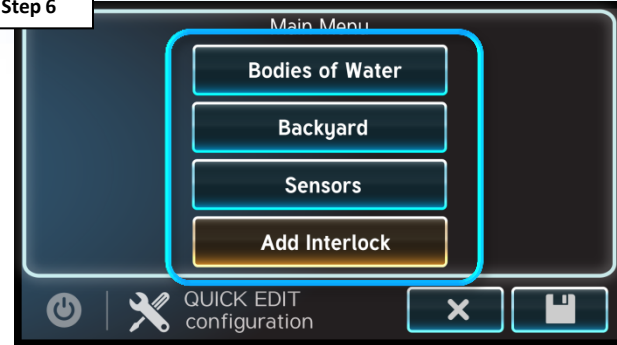
*The MSP ID is not only used to register the OmniLogic through the web but it is also required to modify an existing configuration.*

Step 5



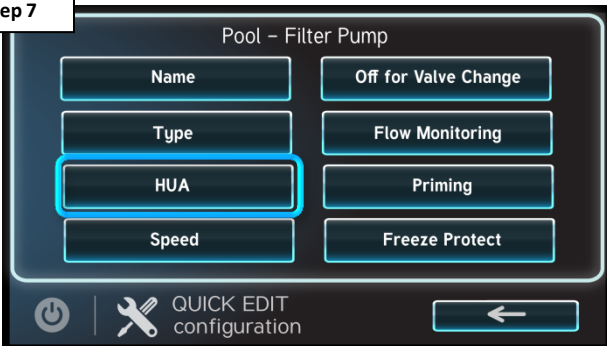
Enter recorded “msp id” number and press the check mark.

Step 6



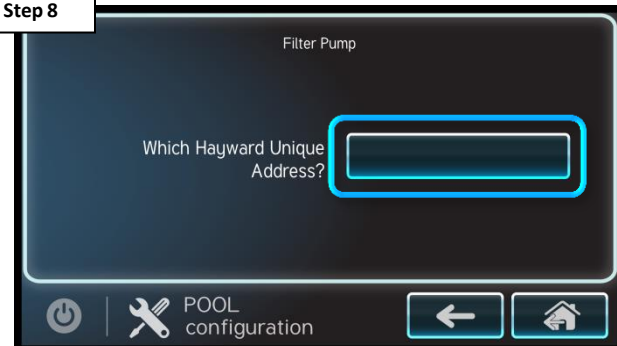
Tap on “config wizard”, select edit>quick (if applicable). Next, select site of device.

Step 7



Tap on device type, then tap HUA.

Step 8



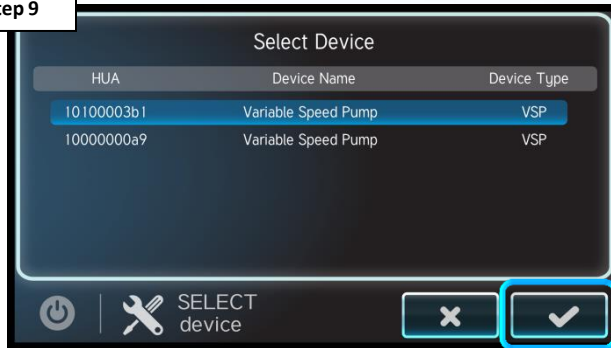
Select the HUA status window to add.



# How To: Clear DDT – Post Action (cont.)

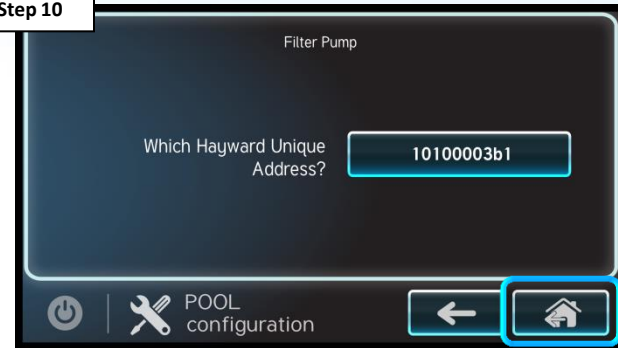
*Repeat steps 6 – 10 for all smart devices that are not already captured in the system configuration. Once complete, save the configuration (Step 11).*

Step 9



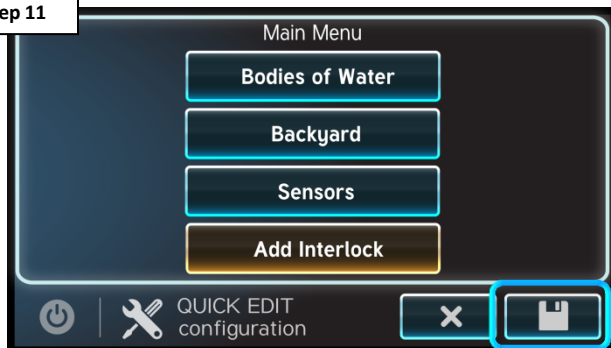
Select the appropriate HUA and press the check mark.

Step 10



Once correct, press home icon (main menu) or back arrow (back one screen).

Step 11



Repeat steps 6-10 for all smart devices and then press the save icon.

Step 12



After saving the changes made under edit, the system will reboot.

# How To: Connect to Wi-Fi

*The following identifies how to connect to a Wi-Fi signal. Only follow these steps if using an HLWLAN (Wi-Fi) antenna.*

Step 1



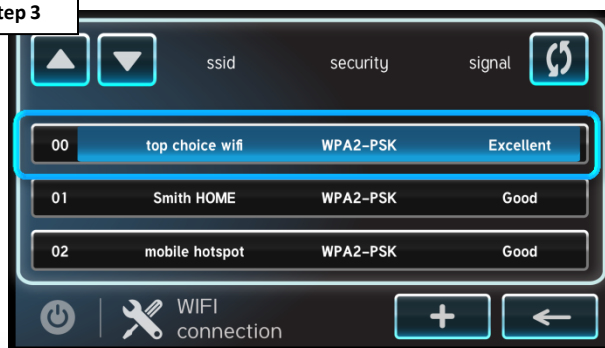
On the right of the dashboard locate and tap the “config” icon.

Step 2



Press the “wifi bridge” option on the right side of the screen.

Step 3



Select the desired network name or SSID to attempt connection.

Step 4



Enter the network password, followed by the check mark to complete.

***NOTE: The network password IS CASE SENSITIVE. To confirm connection, go to Config>Network and verify IP addresses appear under the dynamic tab.***

# How To: Verify Web Server Information

*The following identifies how to access Web Server information. If the IP addresses and Port #s are incorrect, registration and/or remote operation will not be possible.*

Step 1



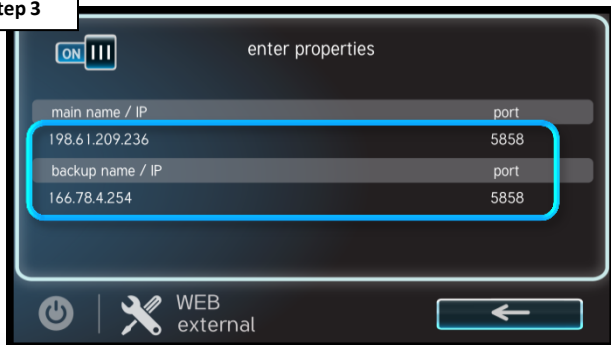
On the right of the dashboard locate and tap the “config” icon.

Step 2



Press the “web server” option on the right side of the screen.

Step 3



Verify that the main IP address is: 198.61.209.236 and backup: 166.78.4.254.

Step 4



To change, select the IP address, enter new value, and select check to save.



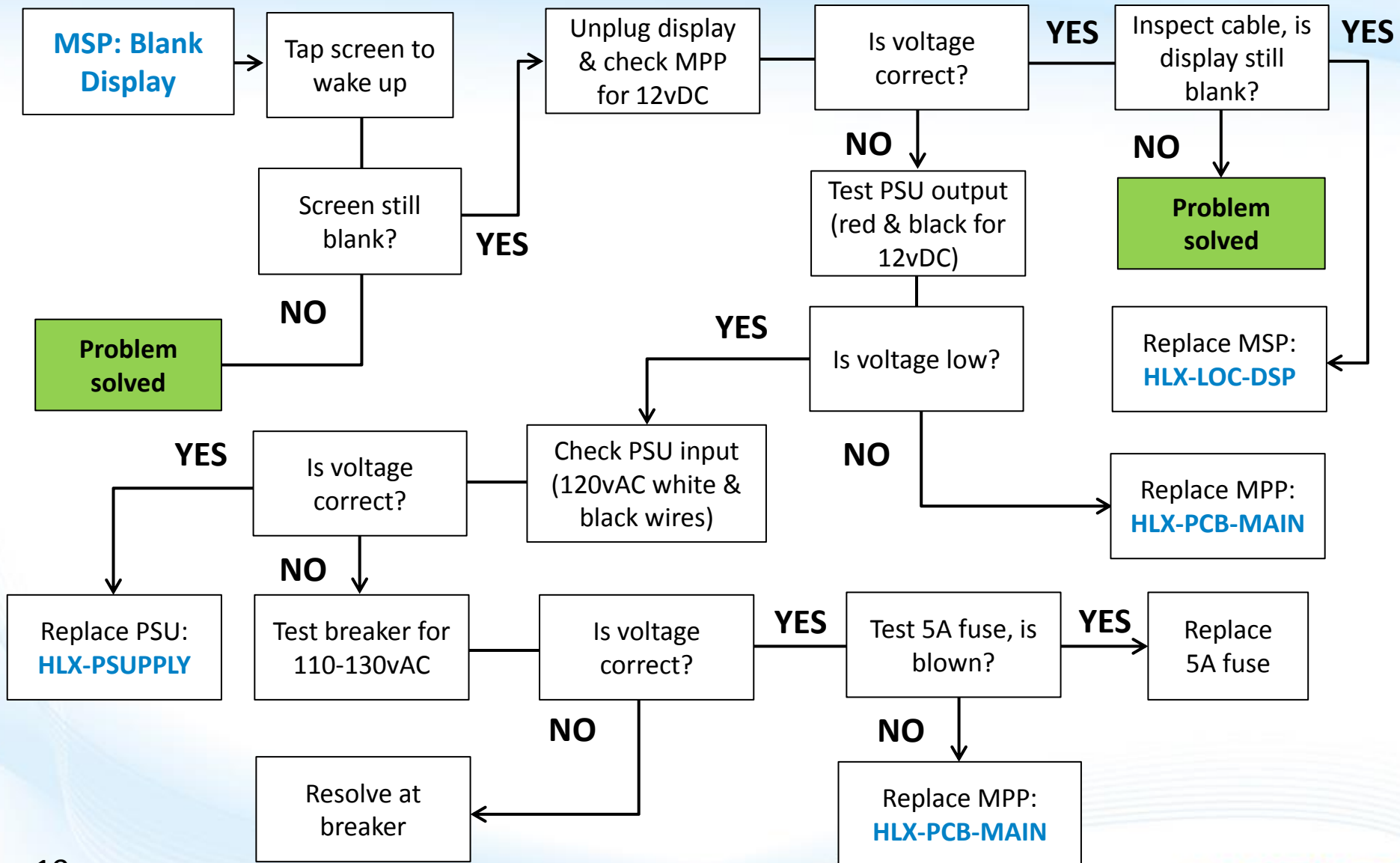


# OmniLogic®

## Troubleshooting



# 1. MSP: Blank Display



# 1. MSP: Blank Display

*The MSP display runs off of 12VDC. Verify the breaker, powering the OmniLogic MPP, is not tripped.*

Tap on the screen

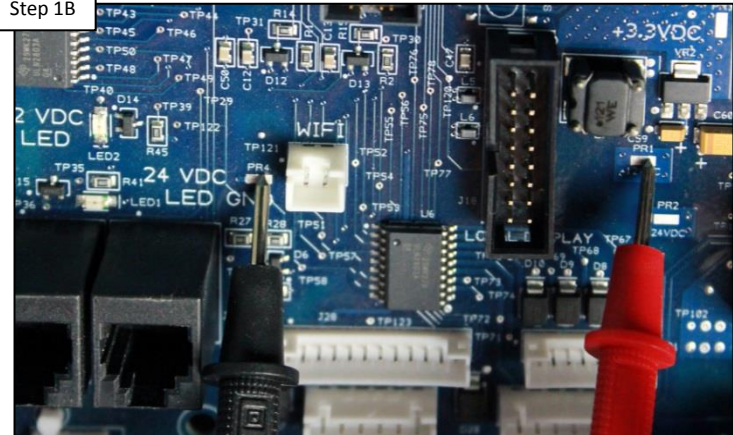
Step 1A



Tap on the screen in an attempt to wake the display from a system shutdown. Make sure glare is not the culprit. IF tapping does not change the display state, go to step 1B.

Test for 12vDC

Step 1B



Unplug MSP and check between the 12vDC and GND solder points. IF correct, check cable connections and plug back in. IF still blank, replace MSP ([HLX-LOC-DSP](#)). IF low/no voltage go to step 1C.

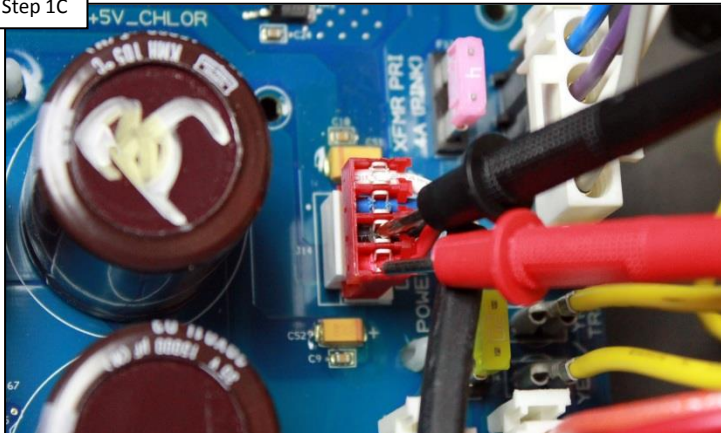


# 1. MSP: Blank Display (cont.)

*The power supply (located in the lower right portion of the cabinet) converts 120vAC to 12vDC and 24VDC.*

## Test PSU output

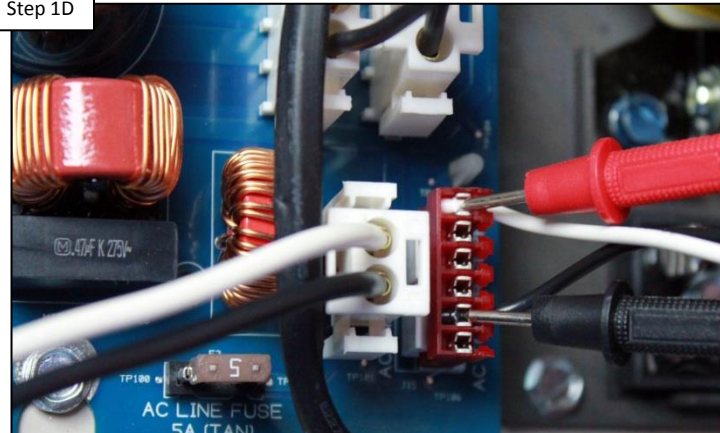
Step 1C



Test between the red and black wires of the power supply output for 12vDC. IF no/low go to step 1D. IF correct, replace MPP (HLX-PCB-MAIN).

## Test PSU input

Step 1D



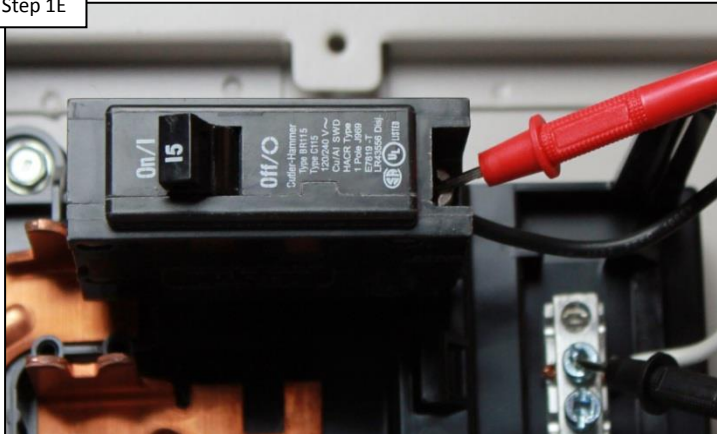
Test between the black and white wires for 120vAC. IF no/low, go to 1E. IF correct, replace power supply (HLX-PSUPPLY).

# 1. MSP: Blank Display (cont.)

*The MPP should be supplied with 120vAC, if power is less than 110, the incoming power should be resolved.*

## Test MPP input

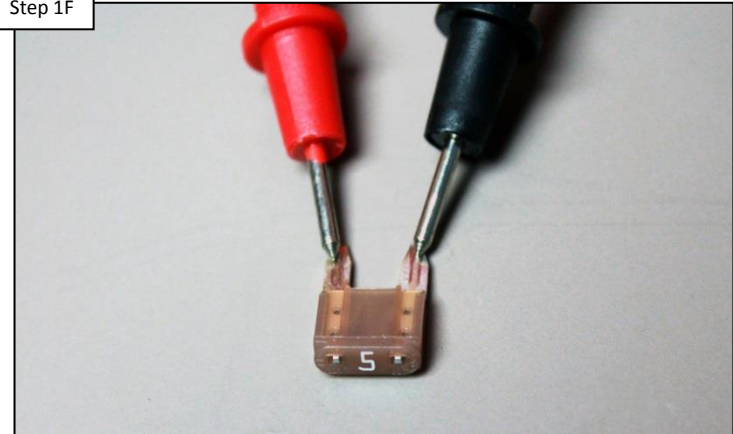
Step 1E



Test power from the breaker to the MPP for 110-130vAC. IF correct, go to step 1F. IF not, resolve at breaker.

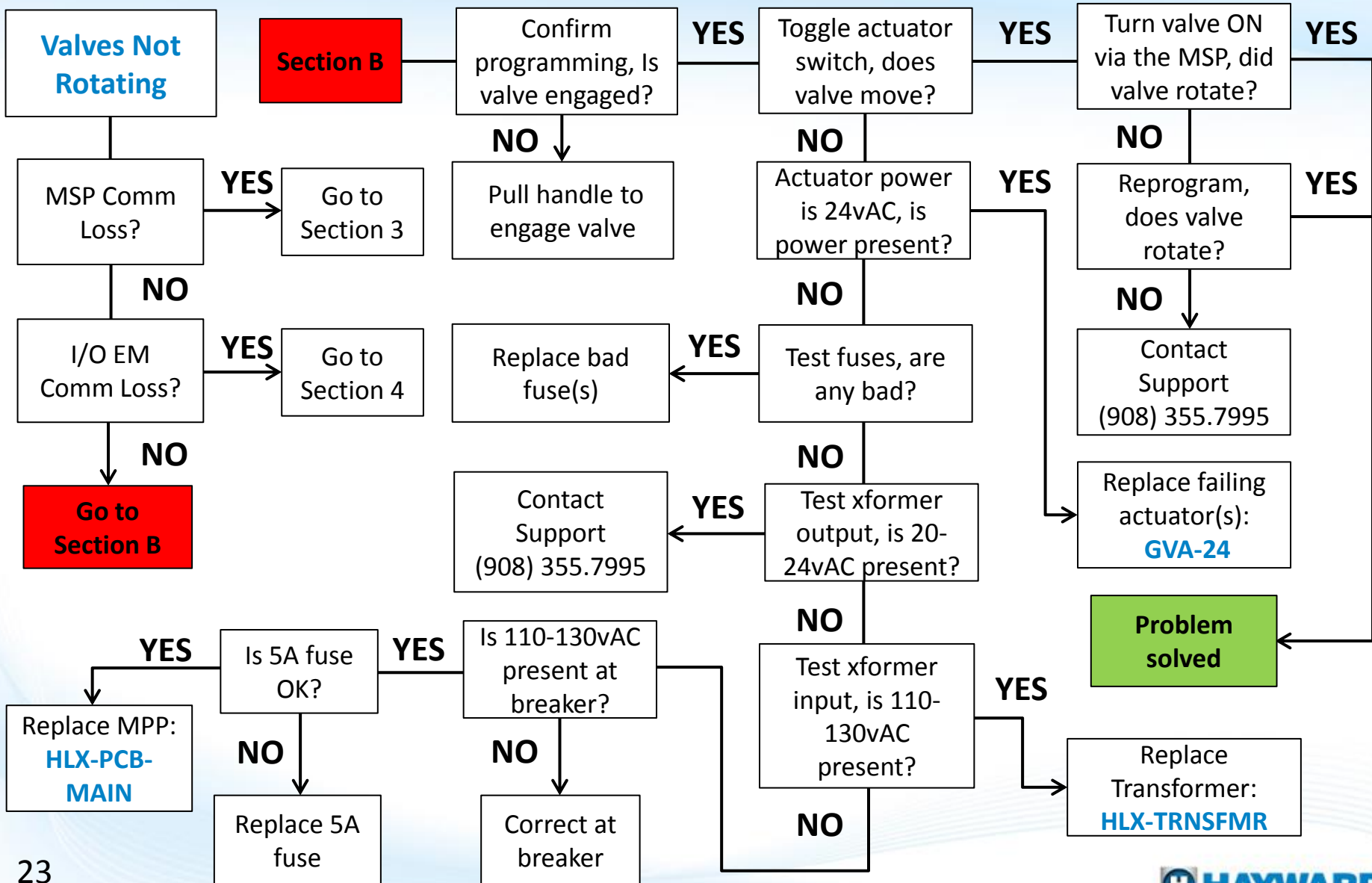
## Test fuses

Step 1F



Inspect 5amp fuse and check for continuity. IF bad, replace the fuse. IF fuse is not compromised replace MPP ([HLX-PCB-MAIN](#)).

## 2. Valves Not Rotating



## 2. Valves Not Rotating

*Comm Loss Alarms can prevent equipment, such as valve actuators, from functioning. The alarms icon is located on the right side of the MSP dashboard. Before proceeding, verify whether or not a Comm Loss Alarm appears.*

Check MSP for any Comm Loss Alarms



On the MSP select the “alarm” icon (on right side of the screen). IF an MPP Comm Loss appears go to section 3, IF an I/O EM Comm Loss alarm appears, go to section 4. IF no Comm Loss alarms appear, go to 2B.



## 2. Valves Not Rotating (cont.)

*The valve actuator circuit is linked to the MPP input power circuit and does not rely on the PSU for power.*

### Confirm programming

Step 2B



**Make sure all valve actuators are correctly programmed. Power is only supplied to the circuit if actuators are configured. IF programming is confirmed, go to step 2C.**

### Verify shaft is engaged

Step 2C



**Verify the actuator shaft is engaged (as shown above). IF the valve moves freely, when rotating the handle, pull up on the handle to engage, IF engaged, proceed to step 2D.**

## 2. Valves Not Rotating (cont.)

*NOTE: GVA-24s come factory preset with toggle switches in the OFF position. For the valve actuator to rotate based on supplied power, the switch will have to be moved to the ON1 or ON2 position (which will depend on the installation).*

### Check actuator toggle

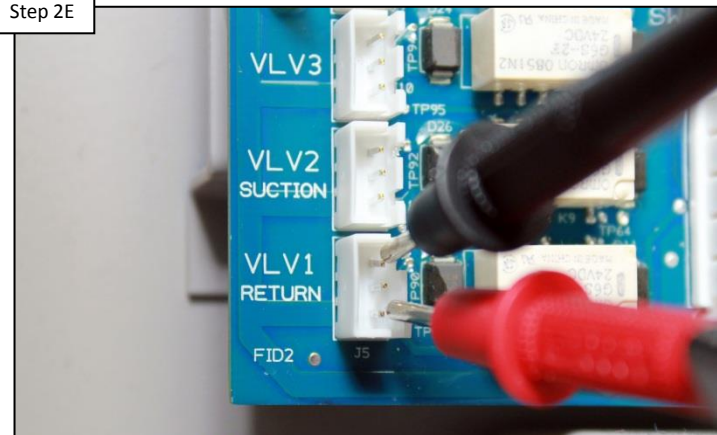
Step 2D



Locate toggle switch (bottom of actuator). Verify switch is either in ON1 or ON2 positions. Toggle the switch between ON1/ON2, IF actuator does not move, go to step 2E, otherwise go to 2J.

### Check ACT power

Step 2E



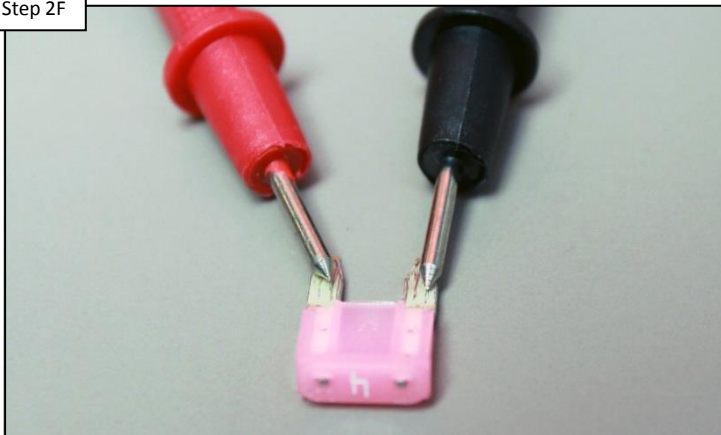
Measure 20-24vAC between pin 1-3 or 2-3 (depending on expected valve position). IF no/low voltage is present, go to step 2F. IF correct, replace actuators that fail to rotate ([GVA-24](#)).

## 2. Valves Not Rotating (cont.)

*NOTE: There are two 4amp fuses (pink) and one 20amp fuse (yellow) on the MPP. The one 4A located in the top left protects the actuator circuit, the 4A in the top right protects the transformer, and the 20A (yellow) protects the transformer output.*

### Check (2x) 4amp & 20a fuses

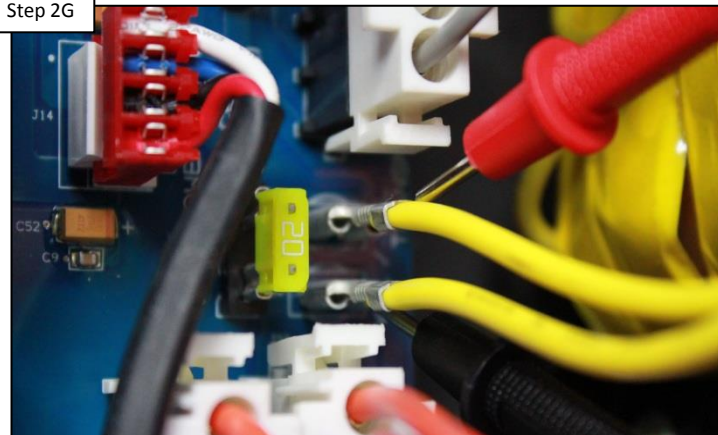
Step 2F



Inspect and test all 4A fuses & the 20A fuse located near the transformer. IF any of the fuses are bad, replace them. IF good, go to step 2G.

### Test transformer output

Step 2G



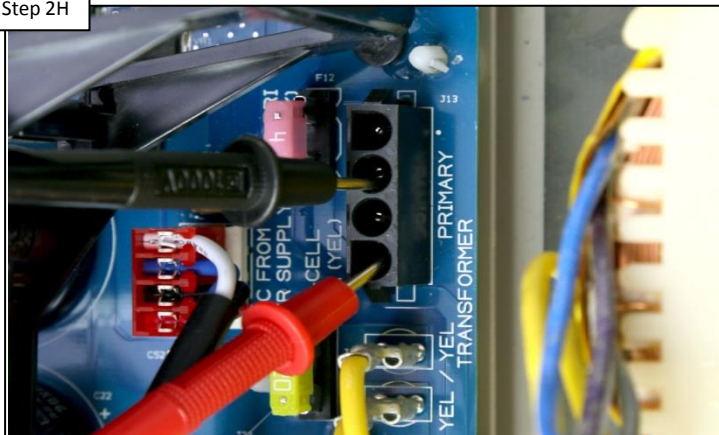
Test between the two yellow wires for 20-24vAC. IF low or no voltage, go to 2H. IF correct, Contact Support (908) 355.7995.

## 2. Valves Not Rotating (cont.)

*NOTE: The transformer converts 120vAC into 24vAC for not only salt chlorination but also for actuator circuit power.*

### Test transformer input

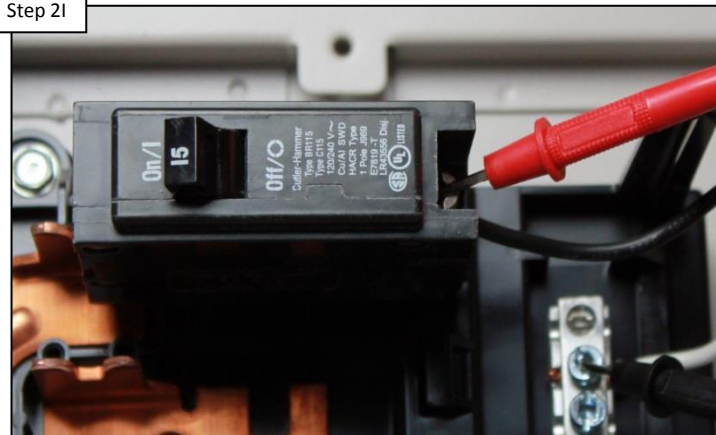
Step 2H



Unplug transformer primary wires and test for 120vAC between pins, 1 & 3 and 120vAC between pins 2 & 4. IF voltage is present, replace transformer ([HLX-TRNSFMR](#)). IF not, go to 2I.

### Check MPP power

Step 2I



Test the MPP input power for 110-130vAC off the breaker. IF no/low resolve at breaker. IF voltage is correct, check 5amp AC fuse. IF fuse is OK, replace MPP ([HLX-PCB-MAIN](#)).



## 2. Valves Not Rotating (cont.)

*If the valve(s) in question is related to the suction/return valves, toggle between Bodies of Water; if related to an option valve, engage that feature through MSP.*

### Turn on Valve (MSP)

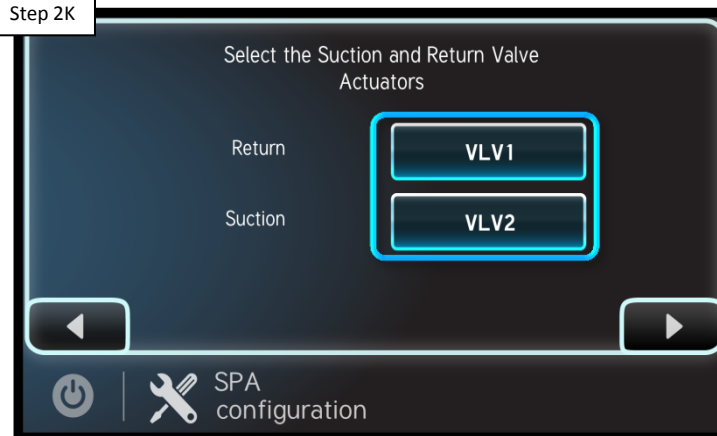
Step 2J



Activate valve using the MSP in service mode. IF the valve rotates then the problem is solved. IF the valve still does not rotate, go to step 2K.

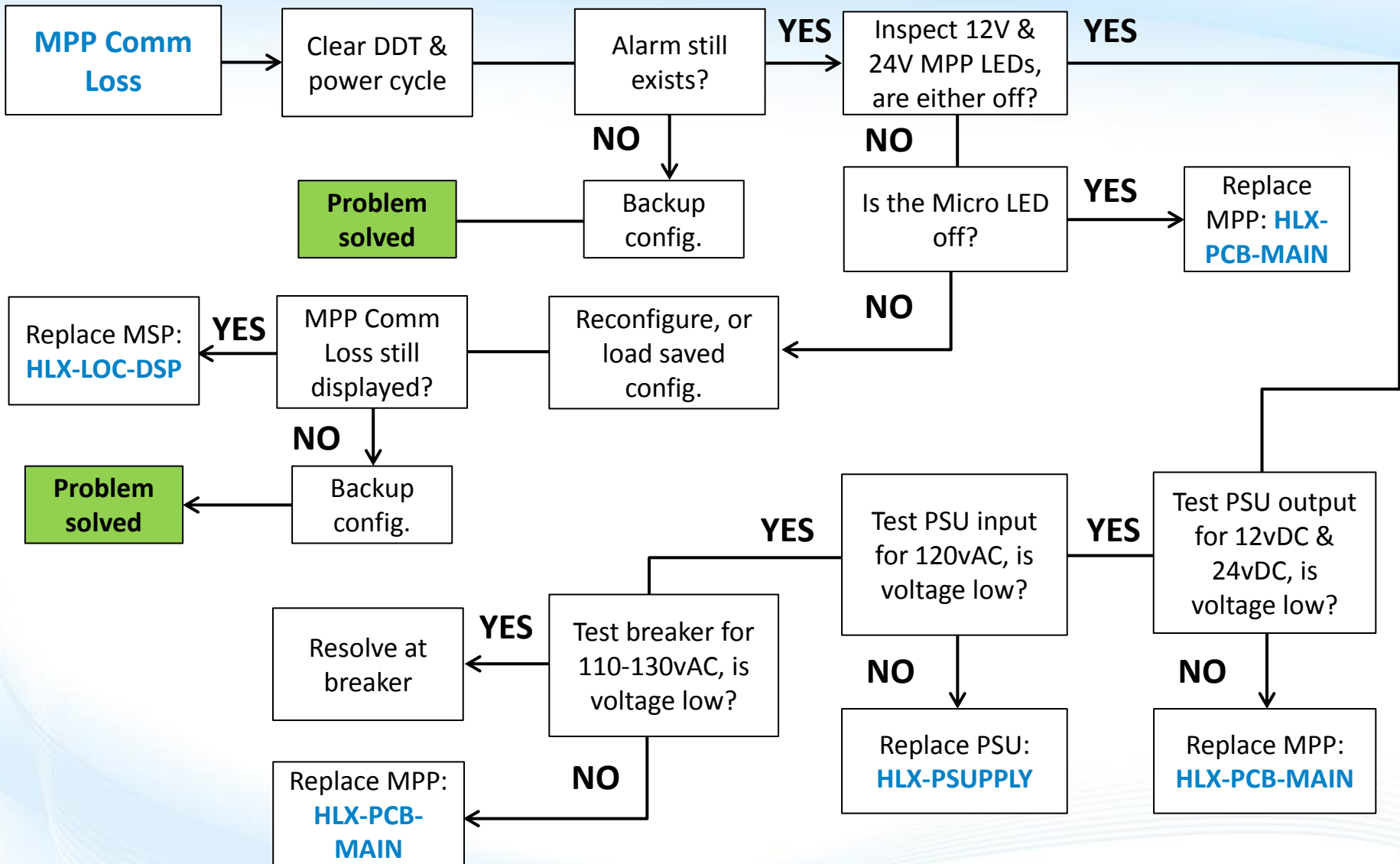
### Reprogram valve(s)

Step 2K



Reprogram the valve(s) & retest. IF the valve(s) rotate, problem is solved. IF not, Contact Technical Support (908) 355.7995.

### 3. Alarms: MPP – Comm Loss



### 3. Alarms: MPP – Comm Loss

*A “MPP - COMM LOSS” will occur when the MSP (display) is unable to communicate with the MPP (main panel processor).*

#### Remove DDT & power cycle

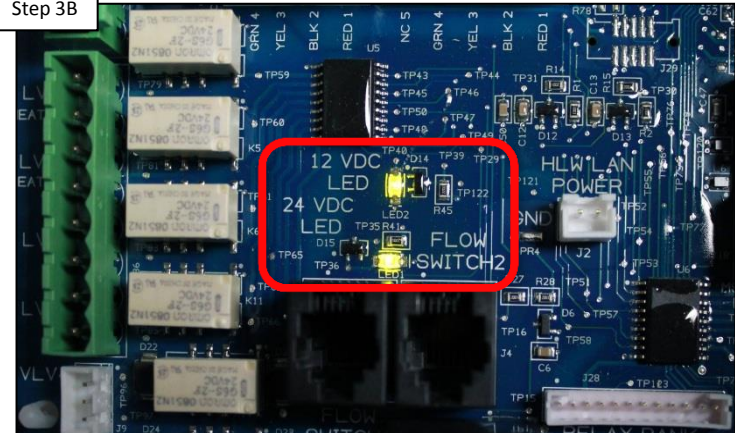
Step 3A



Follow steps to remove DDT ([pg. 12-15](#)). IF after programming is reestablished, the problem still persists go to step 3B. IF problem is corrected backup configuration ([pg. 8](#)).

#### Check MPP power LEDs

Step 3B



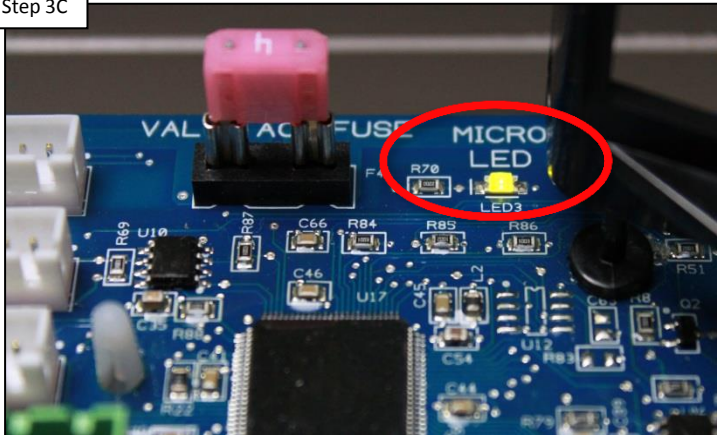
Inspect both the 12v and 24v LEDs. IF either LED is not on solid green, then go to step 3E to diagnose power supply. IF both LEDs are on solid, proceed to step 3C located on the next page.

### 3. Alarms: MPP – Comm Loss (cont.)

*The Micro LED should turn ON for 6 seconds then OFF for 6. If LED is ON for 1 second and OFF for 6 then a “MPP – COMM ERROR” will be present.*

#### Inspect Micro LED

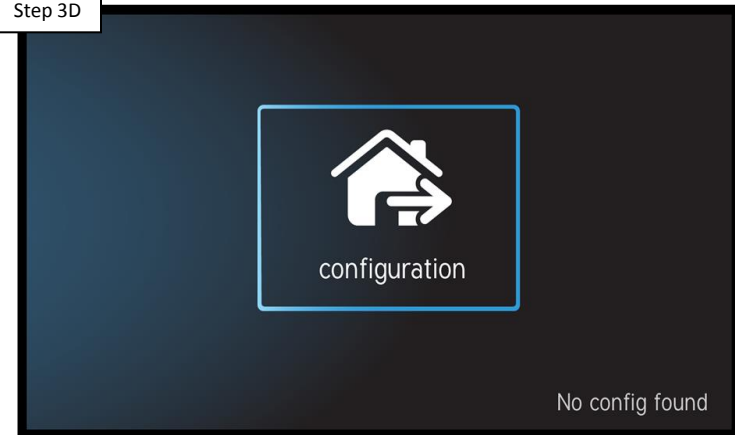
Step 3C



Inspect the Micro LED. IF the LED is always off, then replace the MPP ([HLX-PCB-MAIN](#)). IF the LED is behaving normally (combination of ON & OFF, every 6 seconds), proceed to step 3D.

#### Reconfigure OmniLogic

Step 3D



Either delete the configuration, power cycle, & reconfigure; OR load a backed up configuration. IF the problem still persists, replace the MSP ([HLX-LOC-DSP](#)).

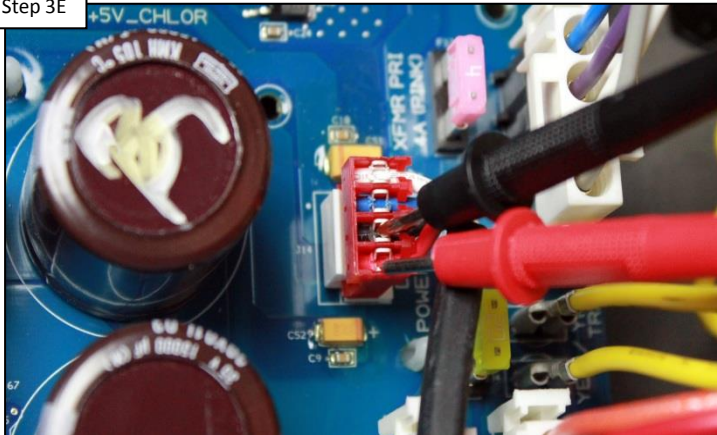


### 3. Alarms: MPP – Comm Loss (cont.)

*The 12vDC circuit drives communication and the 24vDC circuit drives relay activation. The incoming power, power supply, and fuses all impact those circuits.*

#### Check PSU output

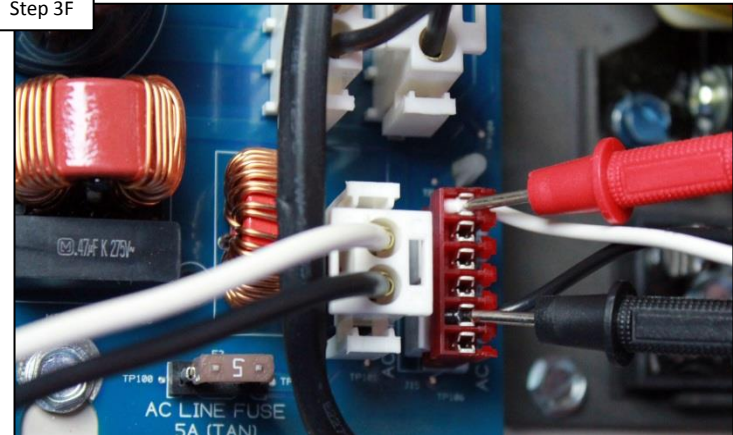
Step 3E



Check for 12vDC between the black and red (bottom two) wires and 24vDC between blue and white (top two). IF voltage is correct, replace MPP (**HLX-PCB-MAIN**). IF low/no voltage, go to 3F.

#### Check PSU input

Step 3F



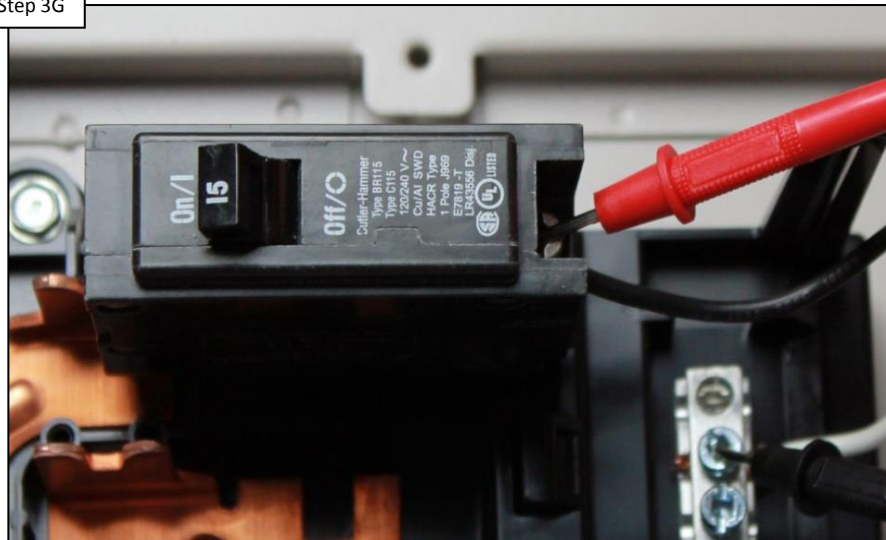
Check for 120vAC between the black and white wires of the "AC TO PWR SUPPLY". IF no/low voltage, go to step 3G. IF voltage is correct, replace the PSU (**HLX-PSUPPLY**).

### 3. Alarms: MPP – Comm Loss (cont.)

*When checking MPP power, verify the circuit breaker is not tripped. If tripped the system will not be receiving power.*

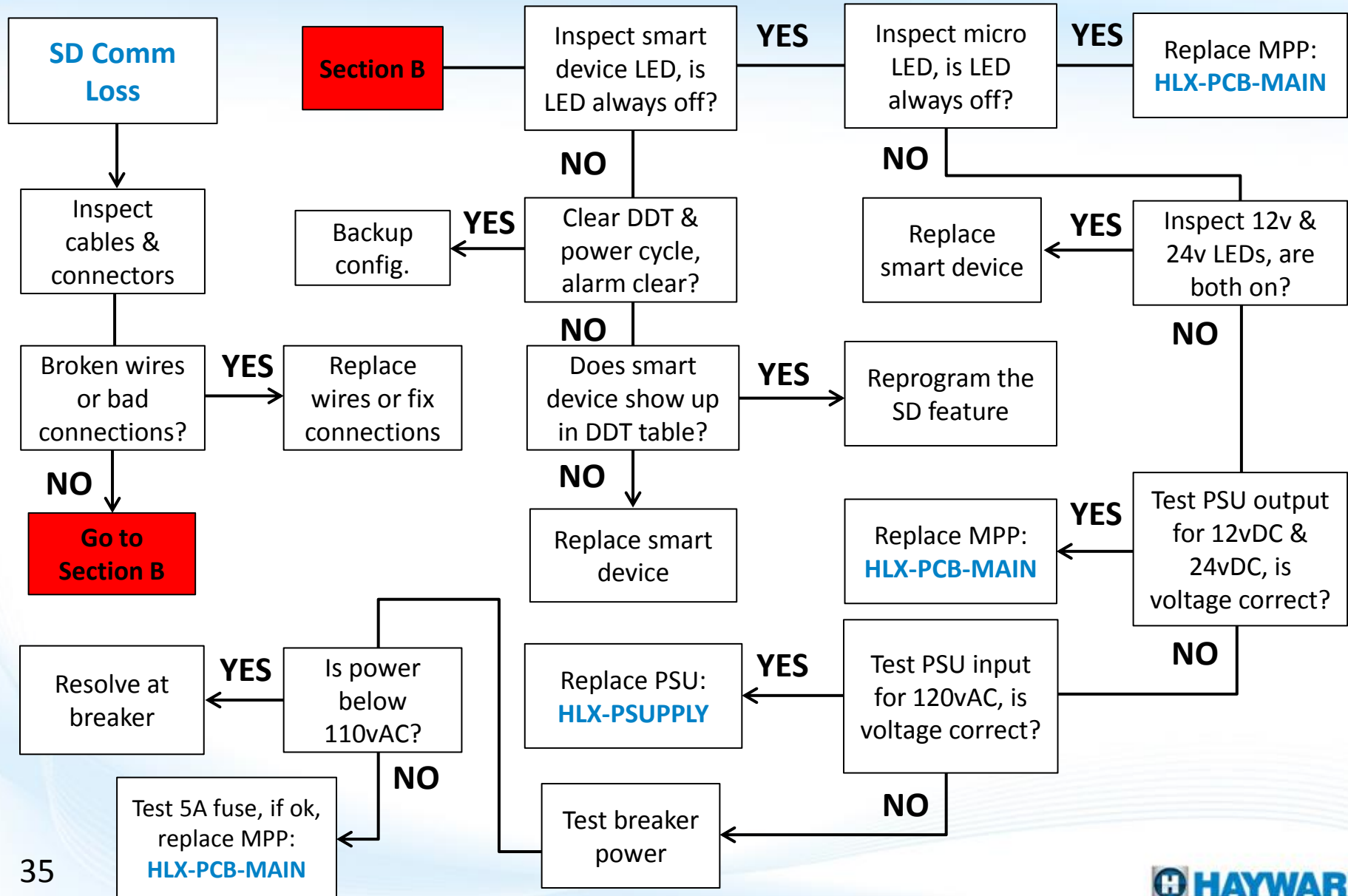
Check MPP power

Step 3G



Check for 110-130vAC off of the breaker. IF low voltage, correct power source/breaker. IF voltage is correct, check 5 amp fuse. IF fuse is good, replace MPP ([HLX-PCB-MAIN](#)).

## 4. Alarms: Smart Device Comm Loss



## 4. Alarms: Smart Device - Comm Loss

*Each smart component, when not communicating, will generate its own specific alarm. The following table outlines the possible messages that may appear.*

Alarm (Device Displaying Alarm)	Component Description
CSM – Comm Loss (MSP)	Chemistry Sensing Module
EcoStar – Comm Loss (MSP)	EcoStar
EPP – Comm Loss	Expansion Panel
I/O EM – Comm Loss (MSP)	I/O Expansion Module
RB – Comm Loss (MSP)	Relay Bank
TriStar – Comm Loss (MSP)	TriStar
WDT – Comm Loss (Remote)	Wired Display Terminal
WT – Comm Loss (Remote)	Wireless Display Terminal

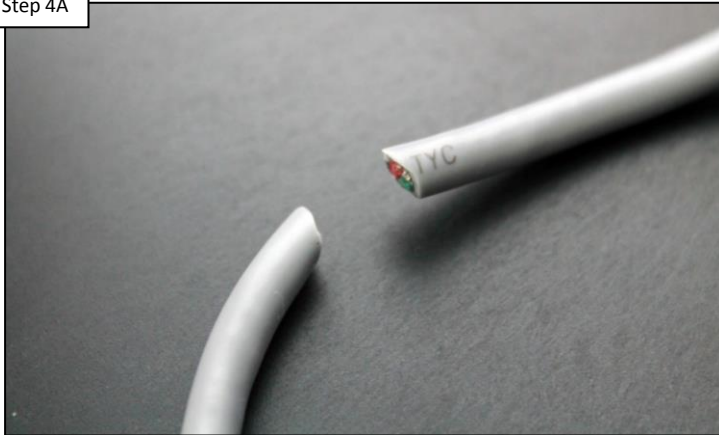


## 4. Alarms: Smart Device - Comm Loss (cont.)

*For those smart devices that need to be wired for communication, verify wiring matches instructions found in the owner's manual. Also check plug connections.*

### Check cable/connection

Step 4A



**Inspect all comm lines & connections. IF no breaks exist and/or connections are correct, go to step 4B. IF comm wiring/connections are broken/incorrect, replace wire and/or correct connections and retest.**

### Verify LED status

Step 4B

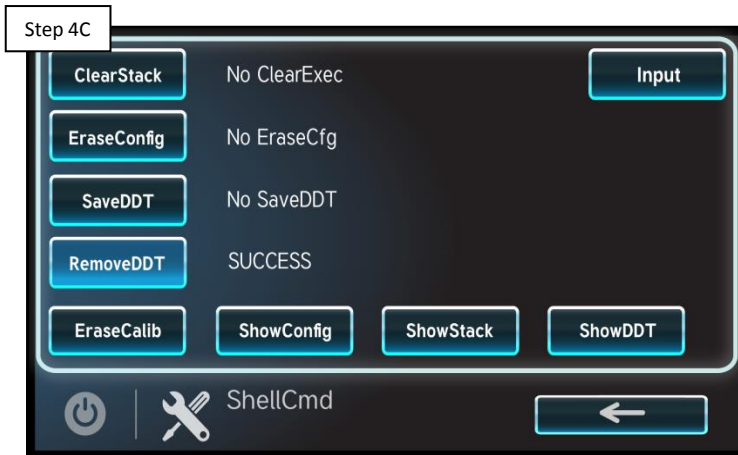


**Most smart devices will have an LED indicator. Verify the LED is illuminated. IF LED is OFF, go to step 4E. IF LED cycles between ON/OFF or device does not have a LED, go to step 4C.**

## 4. Alarms: Smart Device - Comm Loss (cont.)

*The DDT or Device Discovery Table keeps track of all the devices embedded with an HUA as long as the smart device is powered and communicating.*

### Remove DDT & power cycle



Follow steps to remove DDT ([pg. 12-15](#)). IF after programming is reestablished the problem still persists, go to step 4D. IF problem is corrected, backup configuration ([pg. 9](#)).

### Inspect HUA(s) under System Info



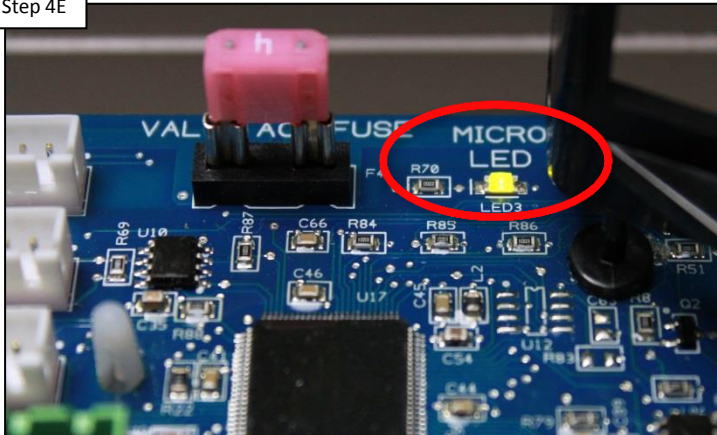
Attempt to locate device's HUA in the OmniLogic. To locate, go to config > system info. IF the smart device is not expressed, replace the smart device. IF shown, reprogram the feature related to the smart device.

## 4. Alarms: Smart Device - Comm Loss (cont.)

*The 12vDC circuit drives communication and the 24vDC circuit drives relay activation.  
The incoming power, power supply, and fuses all impact those circuits.*

Inspect Micro LED

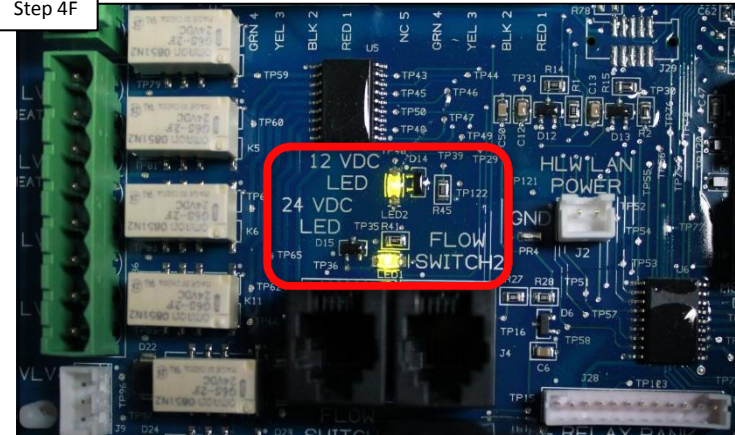
Step 4E



Inspect the Micro LED. IF the LED is always OFF, then replace the MPP (HLX-PCB-MAIN). IF the LED is behaving normally (combination of ON & OFF, every 6 seconds), proceed to step 4F.

Check MPP power LEDs

Step 4F



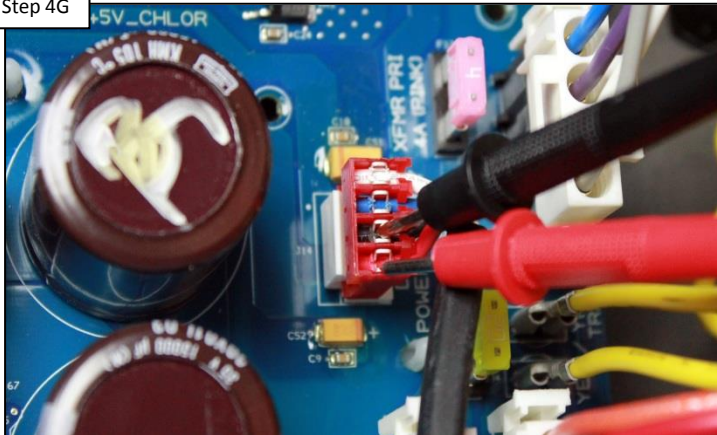
Inspect the 12v and 24v LEDs. IF either LED does NOT remain ON solid green, then go to step 4G to investigate the power supply. IF both LEDs are on solid, replace the smart device.

## 4. Alarms: Smart Device - Comm Loss (cont.)

*The 12vDC circuit drives communication and the 24vDC circuit drives relay activation.  
The incoming power, power supply, and fuses all impact those circuits.*

### Check PSU output

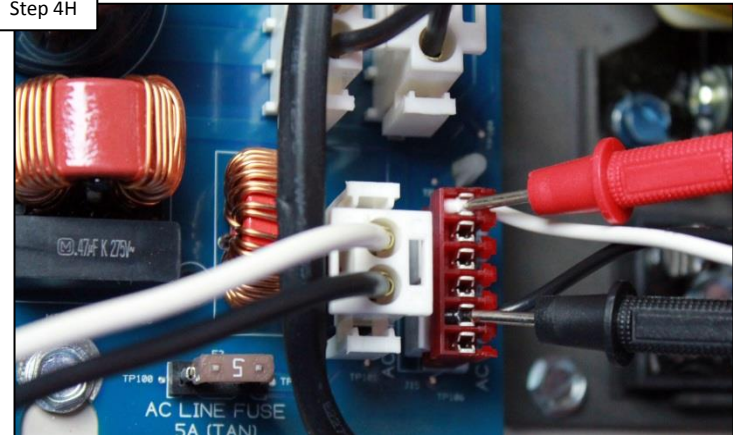
Step 4G



Check for 12vDC between the black and red (bottom two) wires and 24vDC between blue and white (top two). IF voltage is correct, replace MPP (**HLX-PCB-MAIN**). IF low/no voltage, go to 4H.

### Check PSU input

Step 4H



Check for 120vAC between the black & white wires of the "AC TO PWR SUPPLY". IF no/low voltage, go to step 4I. IF voltage is correct, replace the PSU (**HLX-PSUPPLY**).

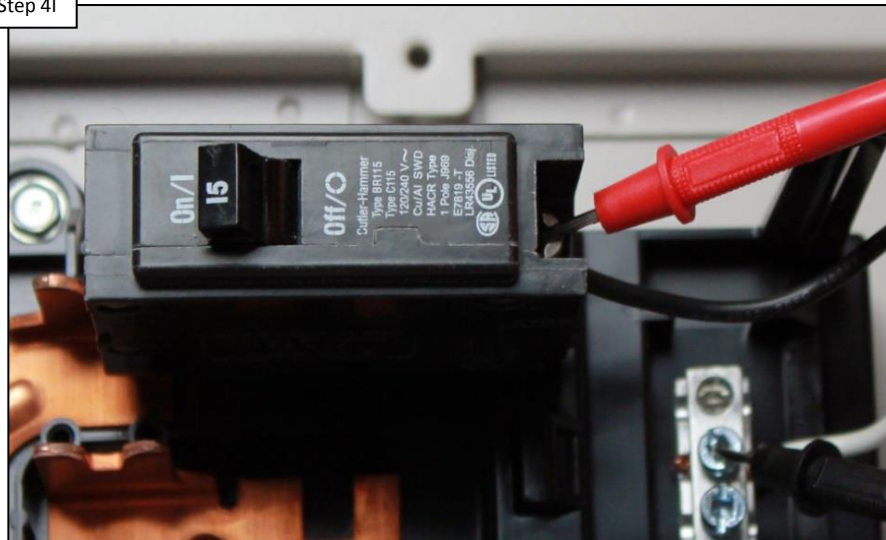


## 4. Alarms: Smart Device - Comm Loss (cont.)

*NOTE: The OmniLogic MPP should never be supplied more than 120vAC. The subpanel is designed for 240vAC, 125amp max.*

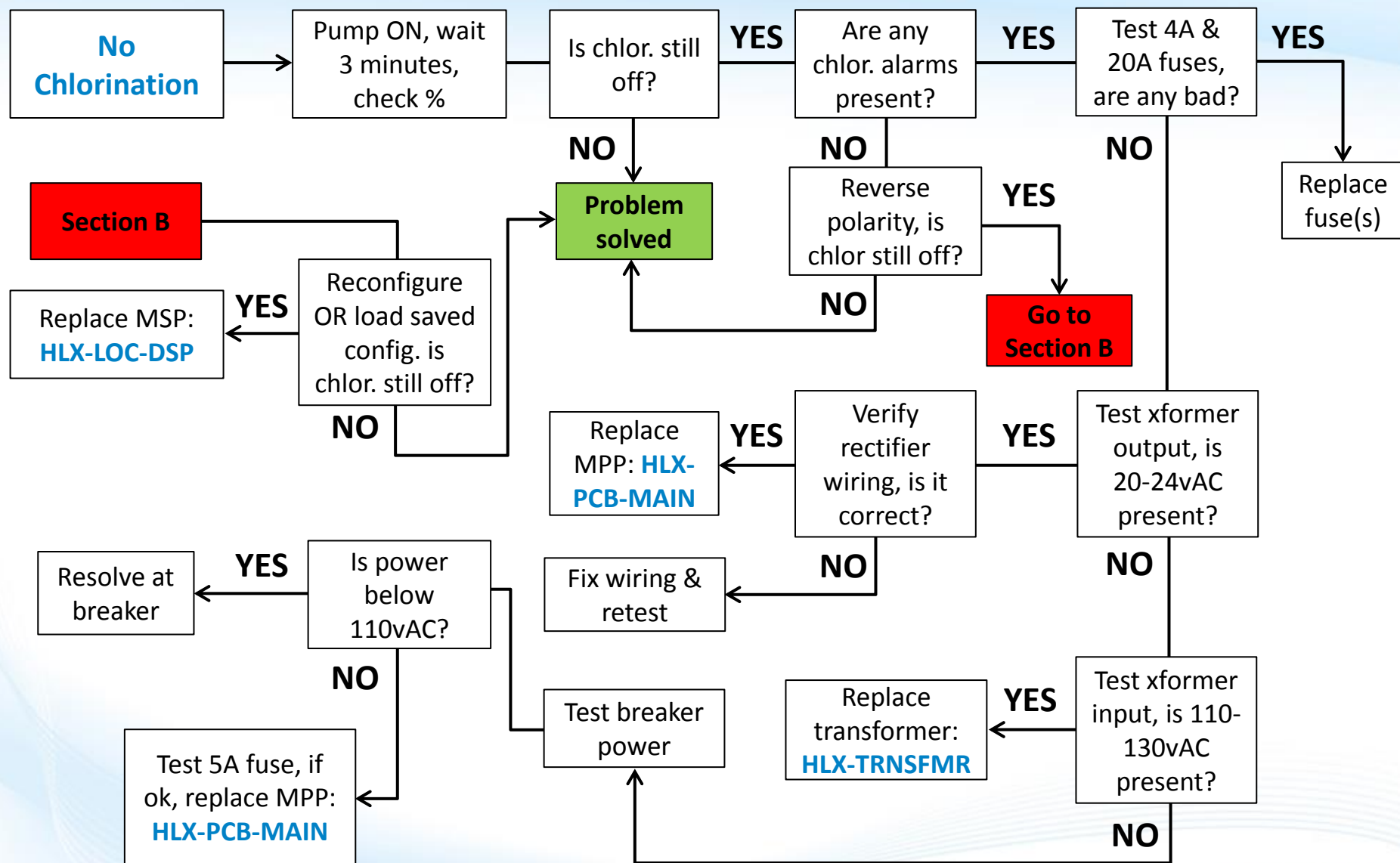
Check MPP power

Step 41



Check for 110-130vAC off of the breaker. IF low voltage, correct power source/breaker. IF voltage is correct, check 5 amp fuse. IF fuse is good, replace MPP ([HLX-PCB-MAIN](#)).

# 5. Salt Chlorinator Not Detected



## 5. Salt Chlorinator Not Detected

*NOTE: To chlorinate the pump must be on and primed, solar must not be in operation, flow must be detected, the water temperature must be above 50 degrees, and the salt level must be between 2700-3400ppm.*

Activate pump and check the Chlorinator %

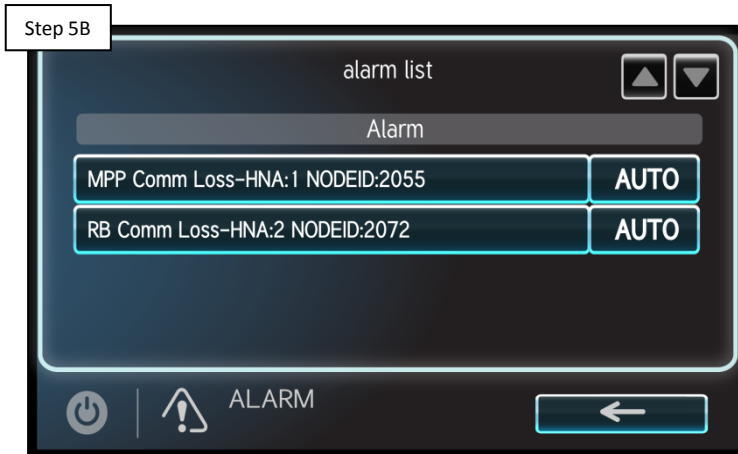


Engage the pump for a specific Body of Water, wait three minutes, and verify the chlorinator percentage is above 0. Finally, confirm the chlorinator is in the ON position. IF cell readings still are not present go to step 5B.

## 5. Salt Chlorinator Not Detected (cont.)

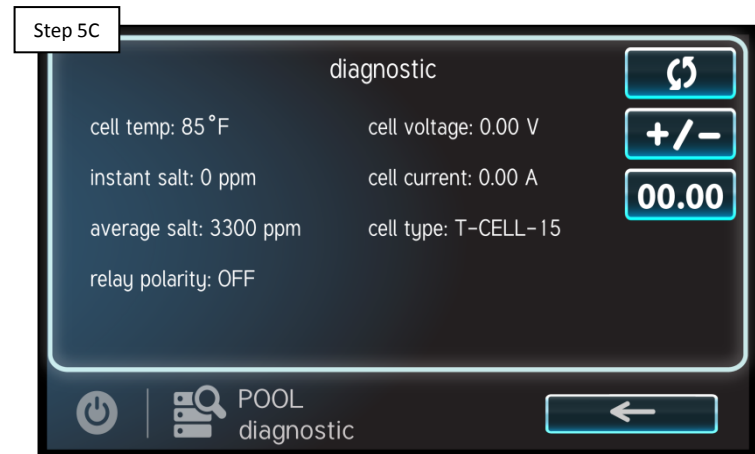
*NOTE: If the system is reporting a "CHLOR relay K1 or K2 stuck open" then there may be a problem with the 20amp - chlorinator fuse, 4amp - transformer fuse, the transformer, or the rectifiers.*

### Check for alarms



Under dashboard, select the alarm icon. IF no alarms related to flow, cell, or cell power appear, then go to step 5C. IF alarms are present go to 5E.

### Reverse polarity



Under chlorination, use list icon and press reversal button to change polarity. IF readings (including cell temp) are missing, go to step 5D.

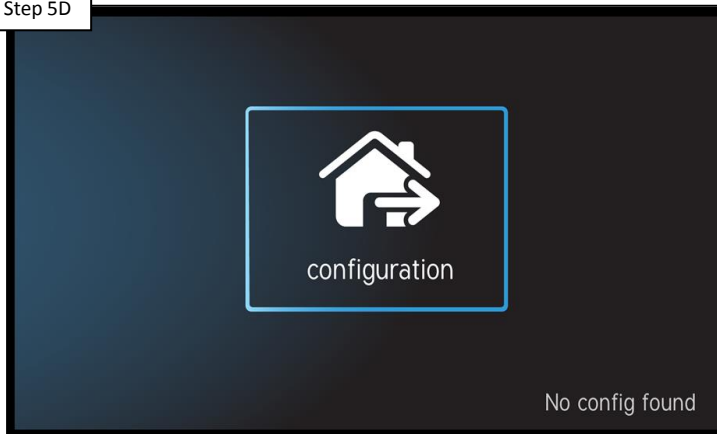


## 5. Salt Chlorinator Not Detected (cont.)

*NOTE: “T-CELL Cable/Sensor Open” implies that the cell cord is cut or the cell is not properly plugged into the board. Verify cell cable is plugged in snugly.*

### Reconfigure OmniLogic

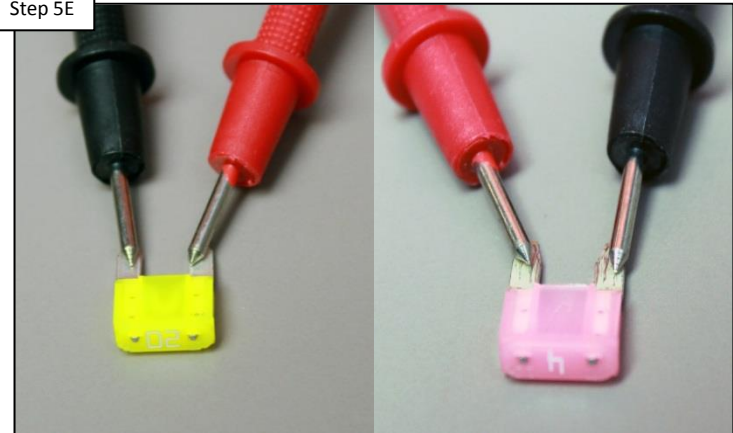
Step 5D



Either delete config., power cycle, & reconfigure (verifying chlorinator is programmed); OR load a backed up config. that includes the chlorinator. IF problem persists, replace MSP ([HLX-LOC-DSP](#)).

### Test 4amp & 20amp fuses

Step 5E



Test the 4amp transformer fuse AND the 20amp chlorinator fuse. IF either fuse has failed replace it/them and retest. IF fuses are fine, proceed to step 5F to test the transformer.

## 5. Salt Chlorinator Not Detected (cont.)

*Test the transformer output (2) yellow wires for 24vAC. Each wire when measured against ground should deliver about 12vAC.*

### Test transformer output

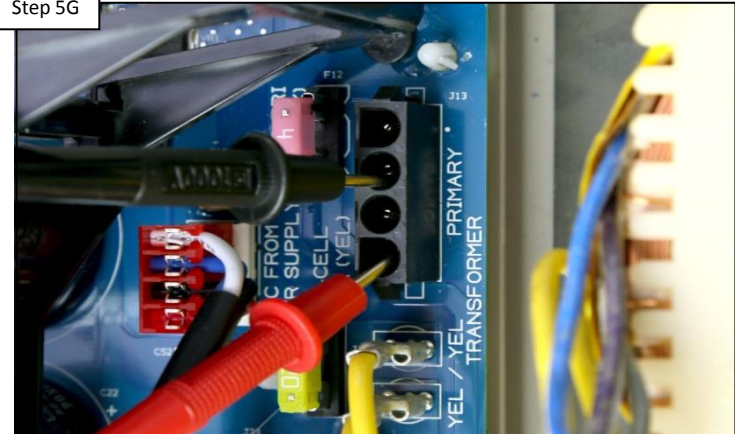
Step 5F



Measure 24vAC between the two yellow wires. IF voltage is good, check rectifier wiring. IF rectifier wiring is correct, replace the MPP ([HLX-PCB-MAIN](#)). IF no/low voltage, go to step 5G.

### Test transformer input

Step 5G



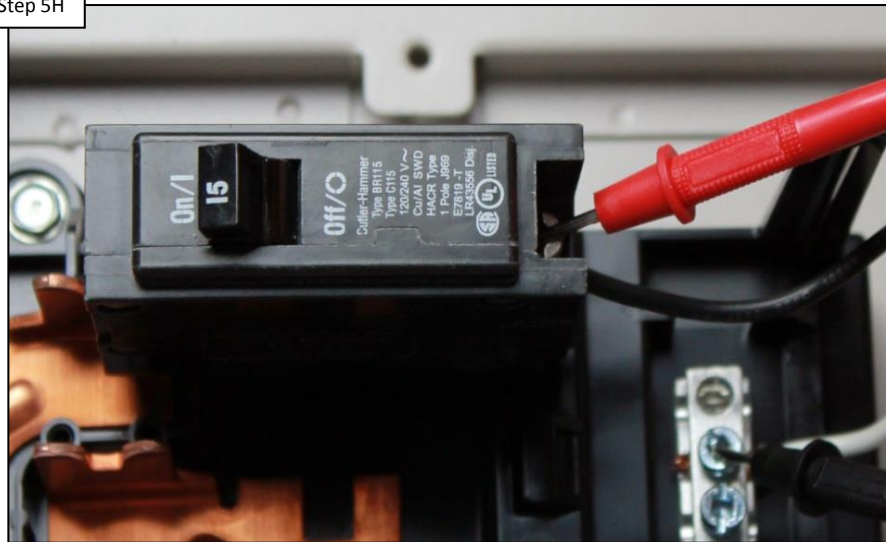
Unplug transformer primary wires and test for 120vAC between pins, 1 & 3 and 120vAC between pins 2 & 4. IF correct, replace transformer ([HLX-TRNSFMR](#)). IF no/low voltage, proceed to step 5H.

## 5. Salt Chlorinator Not Detected (cont.)

*NOTE: If the power supplied to the MPP is under 110vAC, then the chlorinator circuit will be affected.*

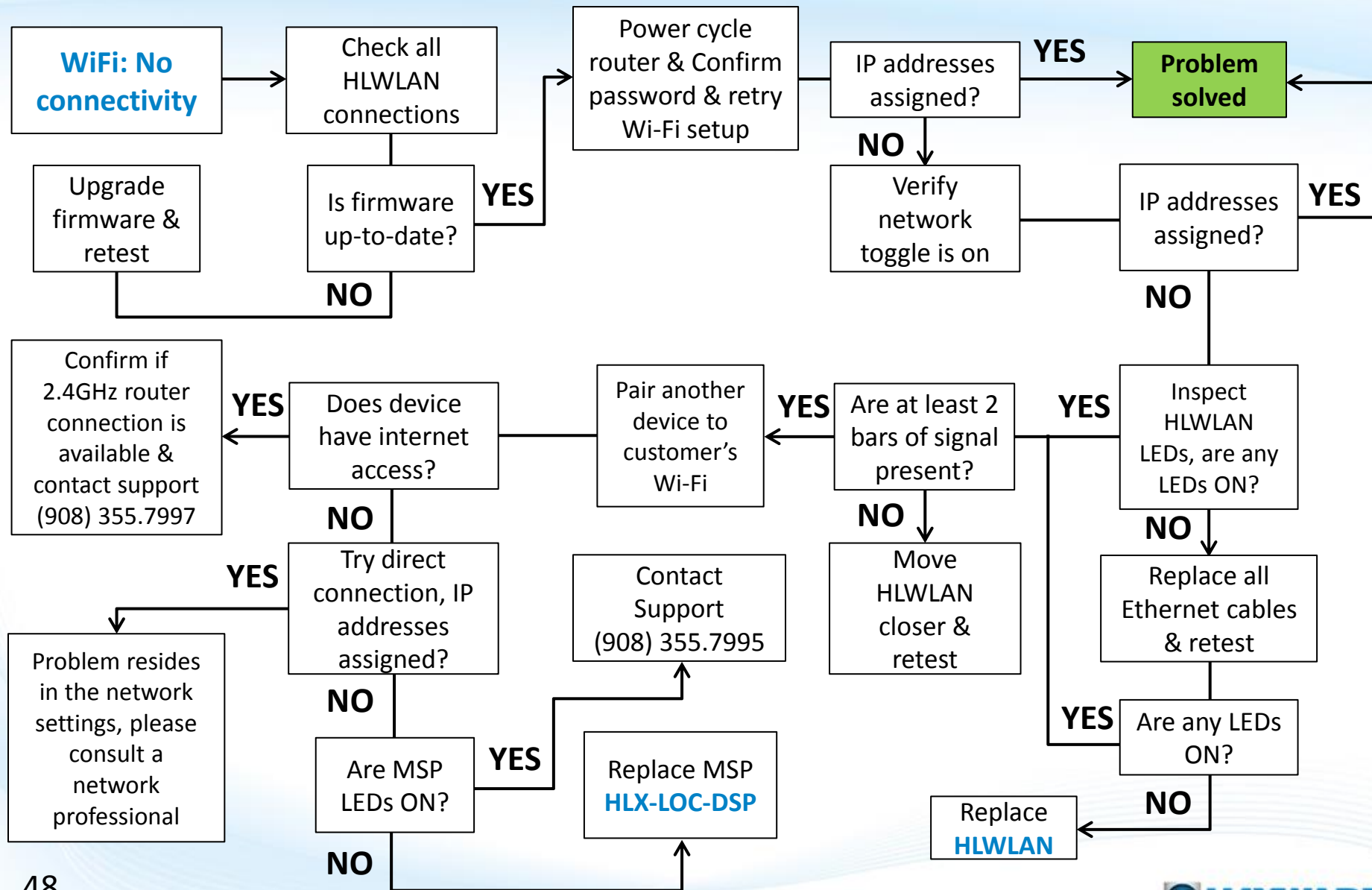
Test MPP power at the breaker

Step 5H



Check for 120vAC off of the breaker. IF low voltage is present, correct at the power source/breaker. IF voltage is correct, check 5 amp fuse. IF fuse is blown, replace it; otherwise, replace MPP ([HLX-PCB-MAIN](#)).

## 6. Wi-Fi: No Connection/IP Address



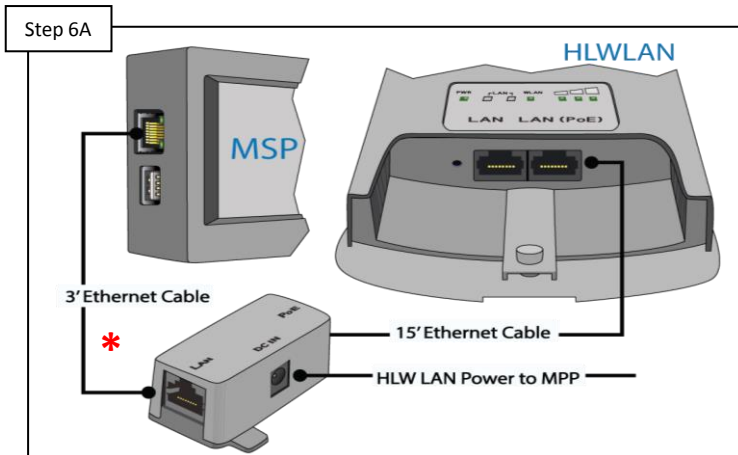


## 6. Wi-Fi: No Connection/IP Address

*NOTE: These steps are only applicable when using the HLWLAN or Wi-Fi bridge antenna. For best results, first make sure firmware is updated to the latest rev.*

***Passwords ARE case sensitive.***

### Wi-Fi bridge connections



Verify all Wi-Fi bridge connections match diagram. Verify MSP firmware is updated ([pg. 10-11](#)). Finally, verify network password by connecting another Wi-Fi compatible device. Power cycle router & go to 6B.

### Wi-Fi bridge setup



Under the config icon, locate and select "Wi-Fi bridge". First confirm, then select the customer's network name from the list, refresh as needed. Type in the network password & press the check mark, then go to step 6C.

***\*NOTE: DO NOT connect the MSP to the PoE port (located on the Wi-Fi power adaptor). The MSP MUST be connected to the LAN port. Failure to do so will prevent pairing and may even cause damage to hardware.***

## 6. Wi-Fi: No Connection/IP Address (cont.)

*NOTE: Most networks are configured for dynamic (the router assigns IP addresses to devices that with correct credentials). Static networks require the device to have the IP address programmed in prior to connecting.*

### Check for IP addresses

Step 6C



Under config. select the “network” icon. Verify the toggle switch is ON and system is set to either dynamic or static (depending on network). IF IP addresses appear verify web server ([pg. 17](#)). IF no IP addresses appear go to step 6D.

### Verify WLAN & signal strength

Step 6D



Behind Wi-Fi bridge antenna. IF no LEDs are on, replace cables. IF LEDs never appear, replace bridge ([HLWLAN](#)). IF LEDs show 2nd bar or less, move antenna closer to Wi-Fi router. IF antenna shows a flashing WLAN LED, go to step 6E.

## 6. Wi-Fi: No Connection/IP Address (cont.)

The HLWLAN works off of the 2.4GHz band ONLY. It is recommended to move all newer indoor devices to the 5GHz band when possible, this will free up possible congestion.

### Pair a Wi-Fi compatible device

Step 6E



Using a phone or another Wi-Fi compatible device, connect to network using correct password. IF device does not connect, go to step 6F. IF device connects, verify the router has 2.4GHz broadcast and contact tech support (908) 355.7995.

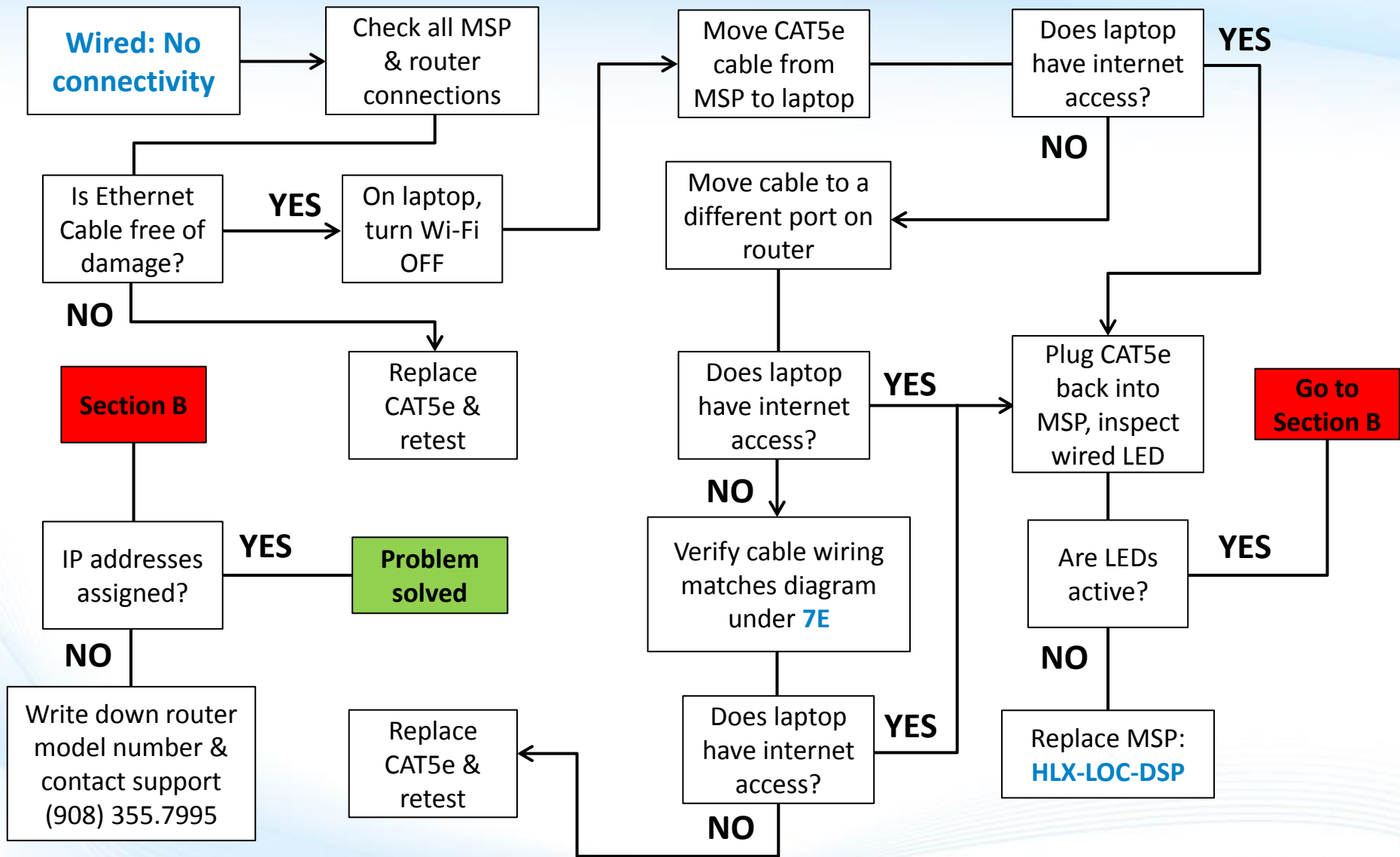
### Direct Ethernet test

Step 6F



Try connecting the MSP directly to the router. IF IP addresses are assigned, the problem resides in the Wi-Fi network. Inspect connection, IF LEDs do not appear where the Ethernet cable plugs in, then the cable is bad or the MSP requires replacing ([HLX-LOC-DSP](#)).

# 7. Wired: No Connection/IP Address



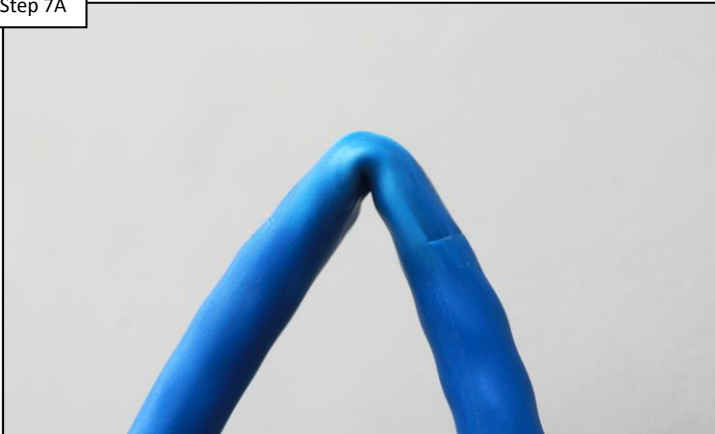


# 7. Wired: No Connection/IP Address

**NOTE:** The Ethernet cable that is provided from the home router to the OmniLogic should not exceed 300' and should be run in low voltage conduit only. Make sure the MSP is updated to the latest firmware ([pg. 9-11](#)).

## Inspect connections

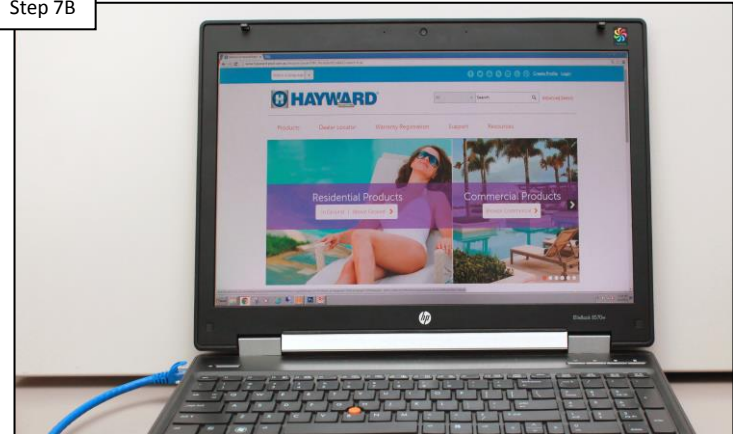
Step 7A



Verify the Ethernet cable is plugged in snugly in both the MSP and router. Visually inspect the cable. IF damaged, replace it. IF cable is not damaged, proceed to step 7B.

## Laptop computer check

Step 7B



With Wi-Fi disabled, unplug the Ethernet cable (from MSP) & plug it into a laptop. IF computer has internet access, proceed to step 7C. IF the laptop does not have internet access, go to 7D.

# 7. Wired: No Connection/IP Address (cont.)

**NOTE:** Most routers have an activity and link LED for each port. Verify whether these LEDs are active once the cable is plugged in.

MSP LEDs

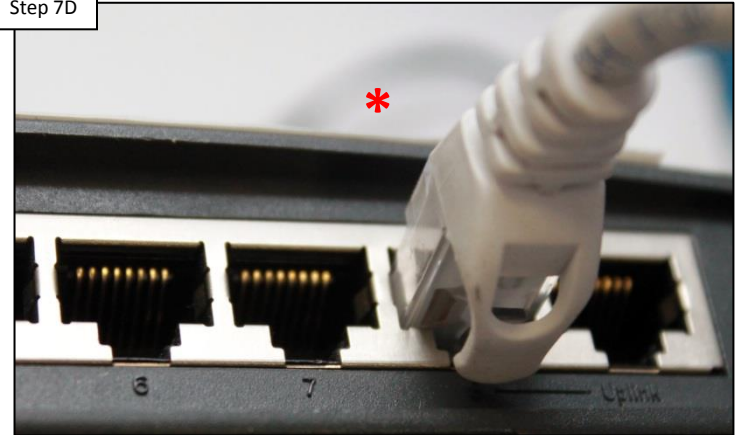
Step 7C



Plug the Ethernet cable back into the MSP and verify if LEDs are active. IF LEDs are active, then verify the router is not blocking MSP. IF LEDs are not active, replace MSP ([HLX-LOC-DSP](#)).

Change port on router

Step 7D



Move the Ethernet to a different port on the home router and confirm connection LEDs appear on router. IF after changing router ports, IP addresses still don't appear go to 7E.

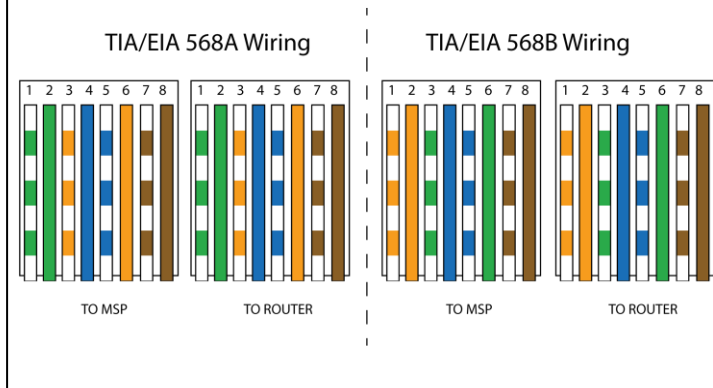
***\*NOTE: DO NOT connect the Ethernet cable to a PoE port on the router. If unsure which ports, if any, are classified as PoE ports, please contact the router manufacturer.***

# 7. Wired: No Connection/IP Address (cont.)

The cable configuration is a standard through put CAT5e. The Ethernet cable should be in low voltage conduit ONLY.

## Check/change cable

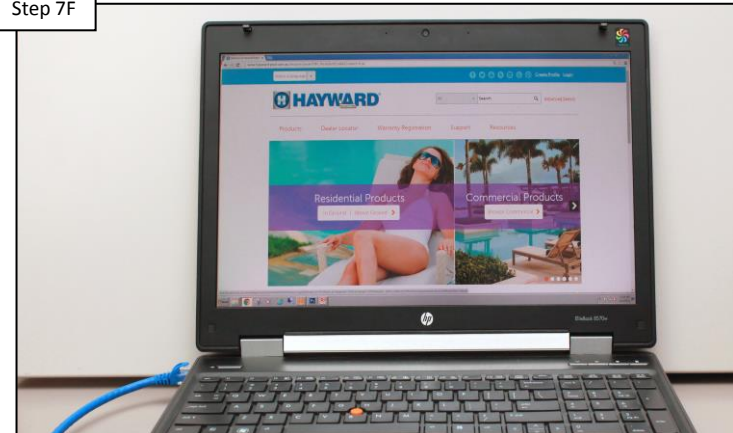
Step 7E



Confirm the cable configuration matches either of the two configuration shown above. IF the cable does not pass, replace the cable. IF okay, go to step 7F.

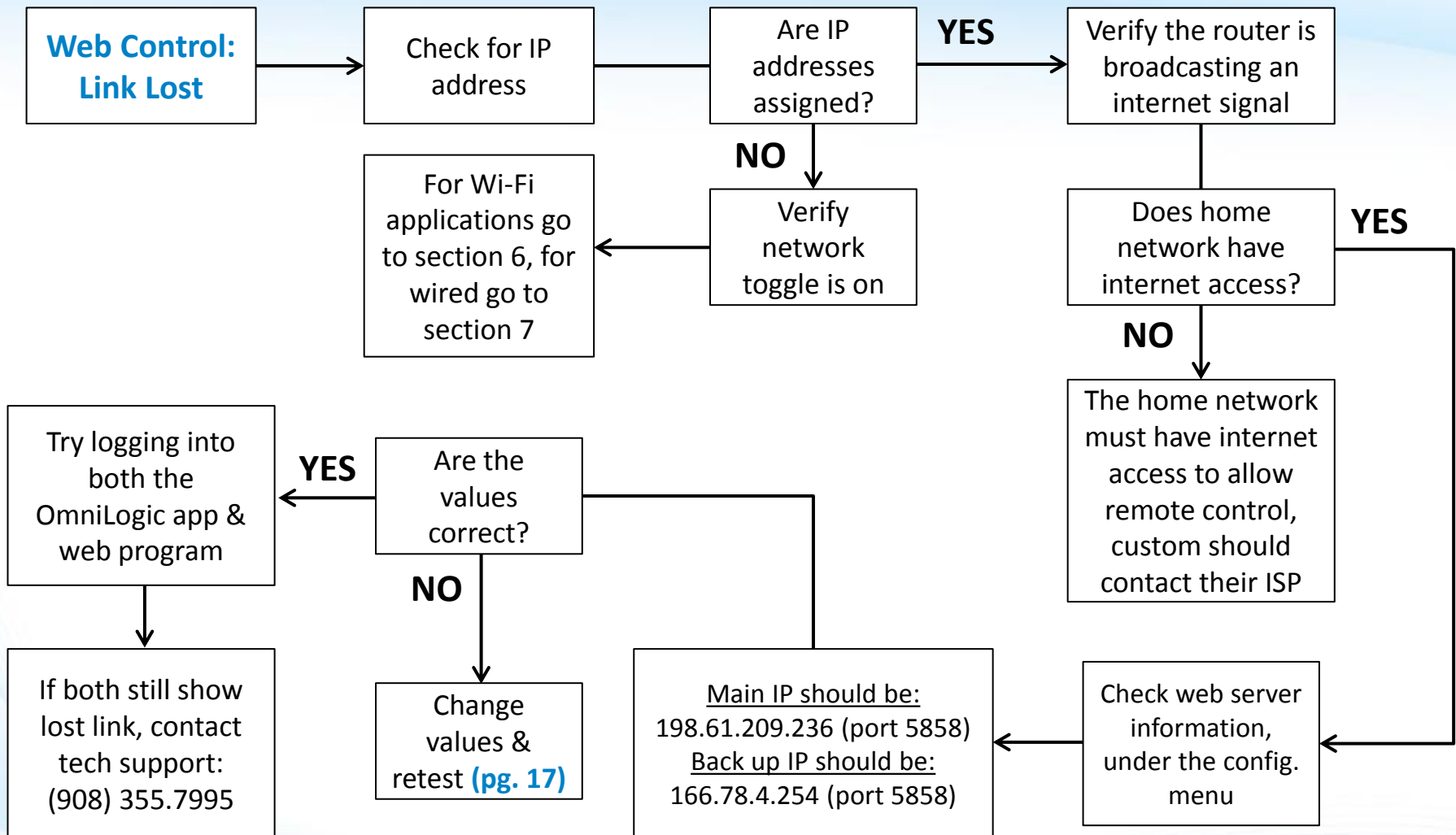
## Repeat laptop check

Step 7F



IF computer now has internet access, plug Ethernet into MSP. IF still no internet access, then look into home network, service may be down, IP conflict, or blocking.

## 8. Web Control: Link Lost





# 8. Web Control: Link Lost

**NOTE:** Lost link indicates that the OmniLogic cannot reach the Web Server; due to either a problem with the customer's internet service, lost connection between the router and MSP, the web server is down, or the web server IP is incorrect.

## Check for IP addresses

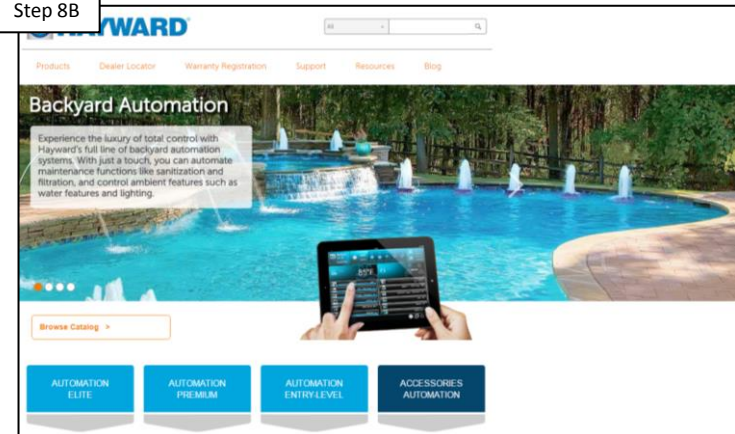
Step 8A



Under config. select the “network” icon. Verify the toggle switch is ON and system is set to either dynamic or static (depending on network). IF IP addresses appear go to 8B. IF they do not appear, go to step 8D.

## Internet access onsite

Step 8B



Make sure the router, supplying the OmniLogic with an IP address, has internet access. IF the Internet service is down, then the system cannot communicate with the web server. IF internet service is up, go to step 8C.

## 8. Web Control: Link Lost (cont.)

**Note:** In order for the OmniLogic to properly communicate with the web server, the IP addresses must be confirmed under config>web server.

### Verify web server

Step 8C

The screenshot shows a dark-themed web interface with a title bar that says "enter properties". Below the title bar, there are two input fields for "main name / IP" and "port", and another two for "backup name / IP" and "port". The values entered are 198.61.209.236, 5858, 166.78.4.254, and 5858. At the bottom, there is a navigation bar with a power button, a wrench icon, the text "WEB external", and a back arrow button.

main name / IP	port
198.61.209.236	5858
backup name / IP	port
166.78.4.254	5858

Make sure system is pointing to the correct web server (pg. 17). Then try logging into both [www.haywardomnilogic.com](http://www.haywardomnilogic.com) as well as the app. IF both the web & app produce the same results contact tech support (908) 355.7995.

### Wi-Fi or Wired Network

Step 8D

**Wi-Fi** go to [Section 6](#)

**Wired** go to [Section 7](#)

The following steps have been covered in the previous sections. IF the customer is using a HLWLAN, go to the beginning of section 6. IF the customer is running a wired configuration, then go to the beginning of section 7.

# Reading Serial Numbers

3K11284-123456

**3**K11284 = Standard Warranty Term

3**K**11284 = Product Family

3K**1**1284 = Year of Manufacture

3K11**284** = Day of Manufacture

123456 = Manufacturing ID