

# ERIEZ

GLOBAL LEADER IN SEPARATION TECHNOLOGIES

## Installation, Operation & Maintenance Instructions



## XTREME TO X8-C DIGITAL CONTROL PANEL UPGRADE PROCEDURE

## INTRODUCTION

This guide provides a step-by-step procedure for upgrading from the XTREME digital control panel to the X8-C digital control panel.

If there are any other questions or comments about this manual, please contact Eriez Manufacturing at +1-814-835-6000 or [eriez@eriez.com](mailto:eriez@eriez.com).



### CAUTION

Safety labels must be affixed to this product.  
Should the safety label(s) be damaged, dislodged or removed, contact Eriez for replacement.



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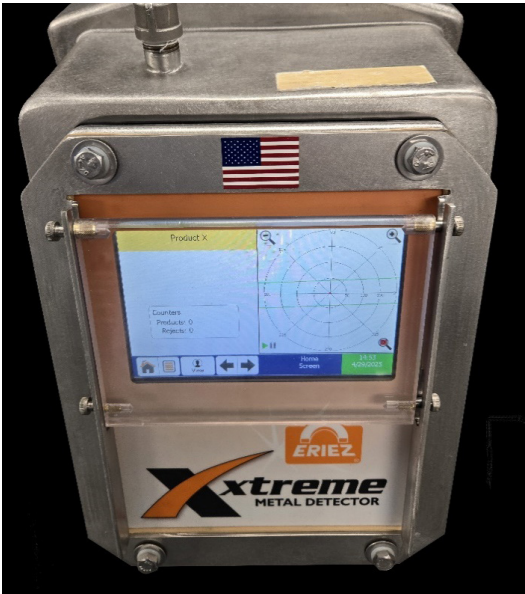
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Follow these steps to obtain a backup file from a functioning Xtreme metal detector:

## Step 1: Backup Current Configuration

A. The metal detector must have power turned on, have a functioning display and USB port.



## The following tools and materials are required for an X8-C control conversion:

X8-C metal detector control - includes mounting hardware, external sealing gasket, USB cable with right angle connection, and an optional impact cover.

USB stick—if current Xtreme control is non-functional, also obtain a backup file from Eriez.

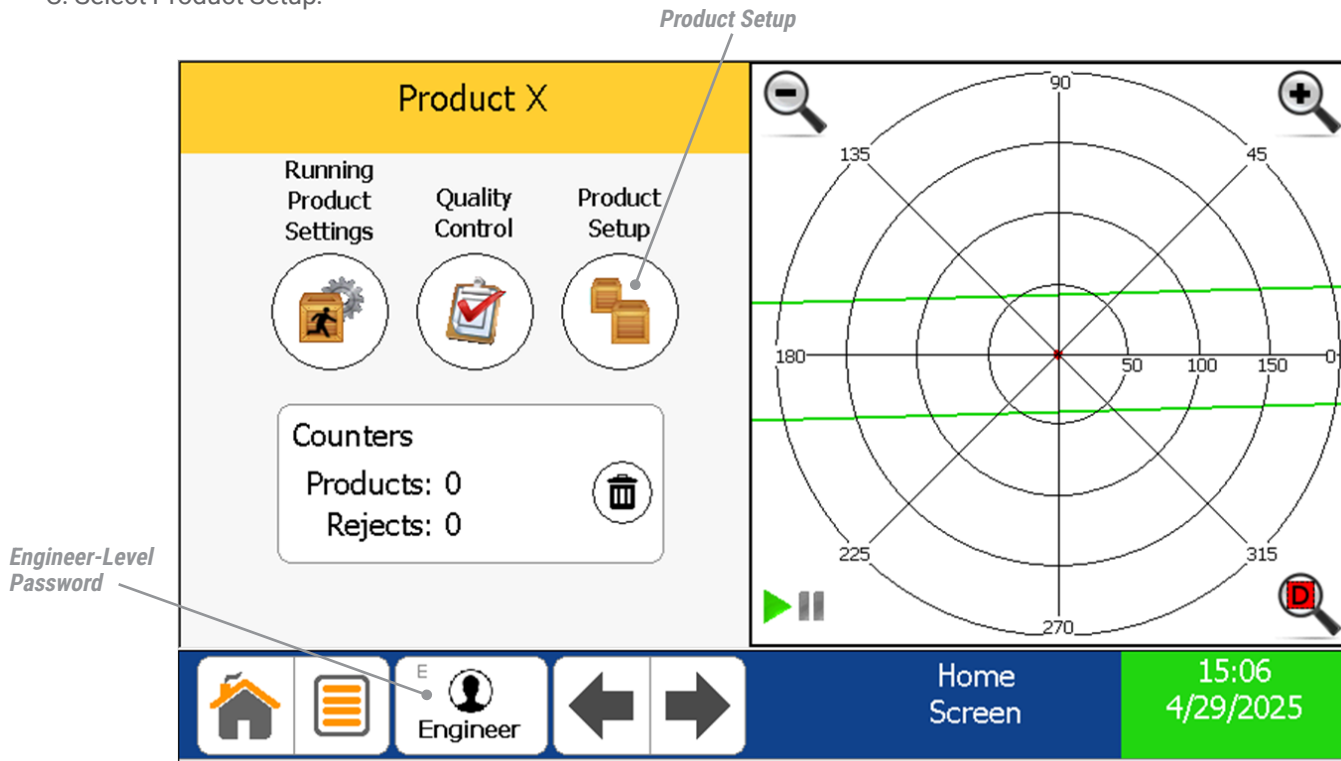
13mm socket wrench for control hardware.

10mm socket wrench or adjustable wrench for ground stud.

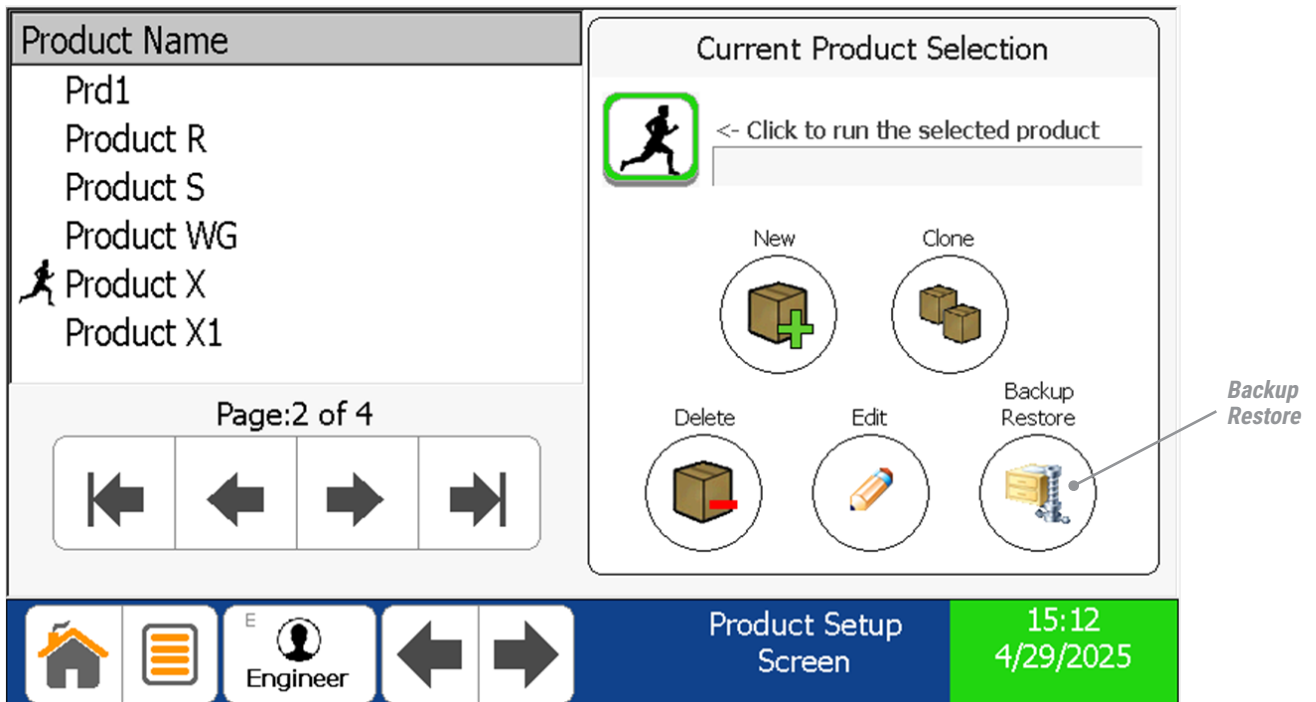


## Step 1 (Continued)

- B. Enter an engineer-level password or higher.
- C. Select Product Setup.

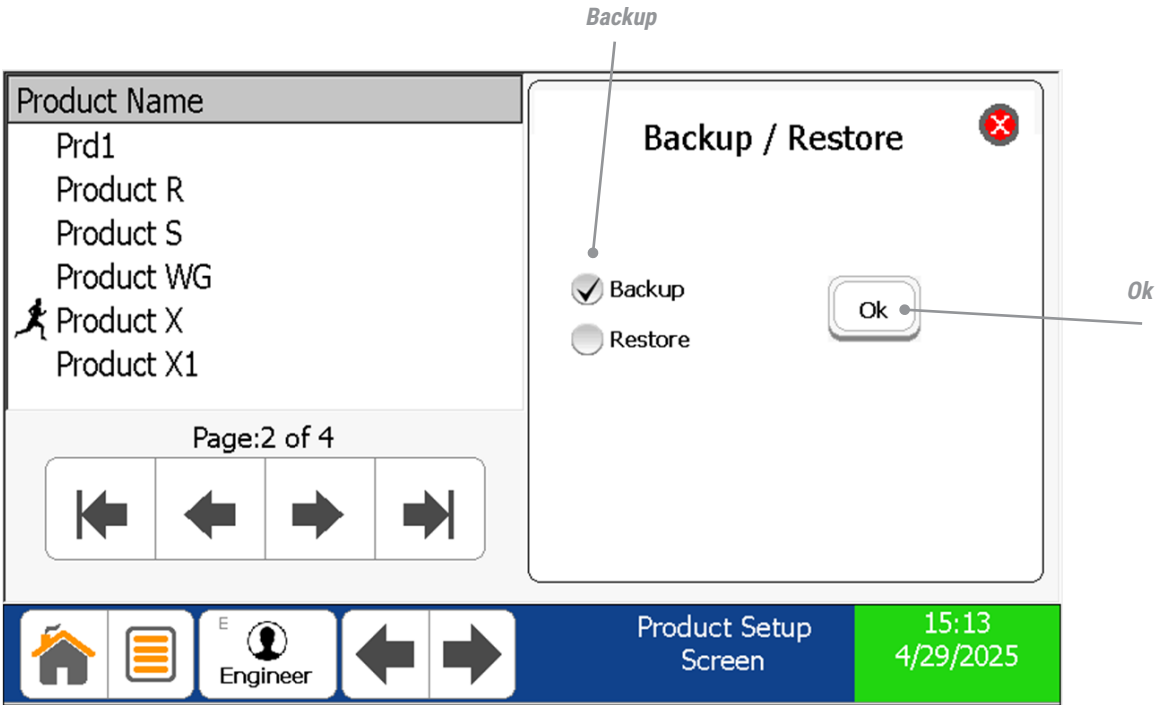


- D. Select Backup Restore.

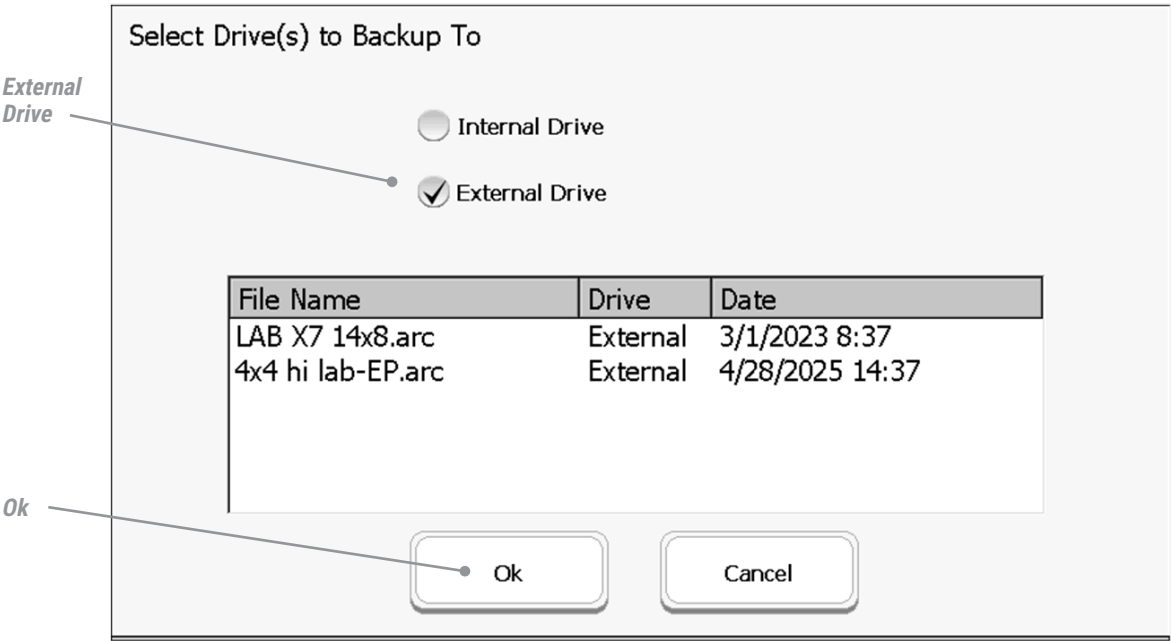


Step 1 (Continued)

- E. Select Backup.
- F. Select Ok.

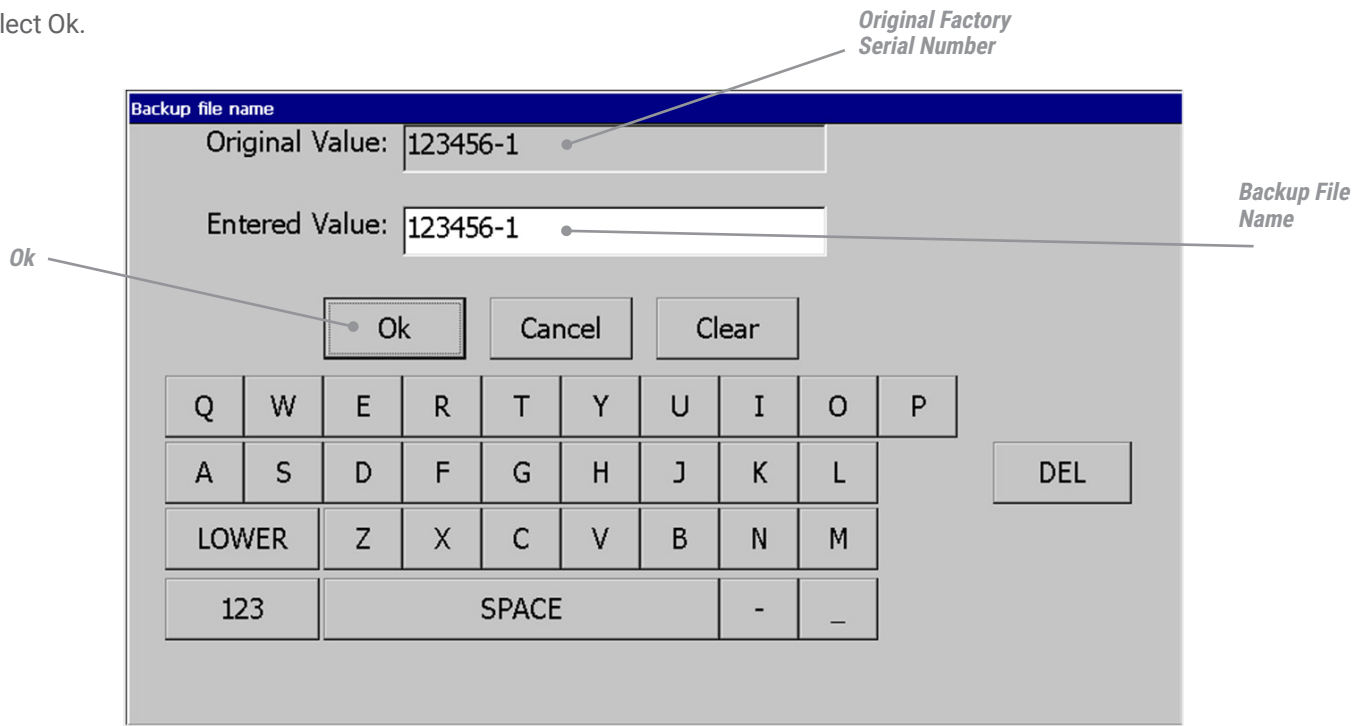


- G. Insert USB drive into USB port on bottom of metal detector control.
- H. Select External Drive.
- I. If the USB Drive is not recognized by the system, the External Drive option will not be available.
- J. Select Ok.



Step 1 (Continued)

- K. The system will display the serial number saved in the factory menu.
- L. Accept this value or create your own value for the backup file name.
- M. Select Ok.



- N. Xtreme Metal Detector system backup is complete.
- O. Select OK to complete system backup and continue.



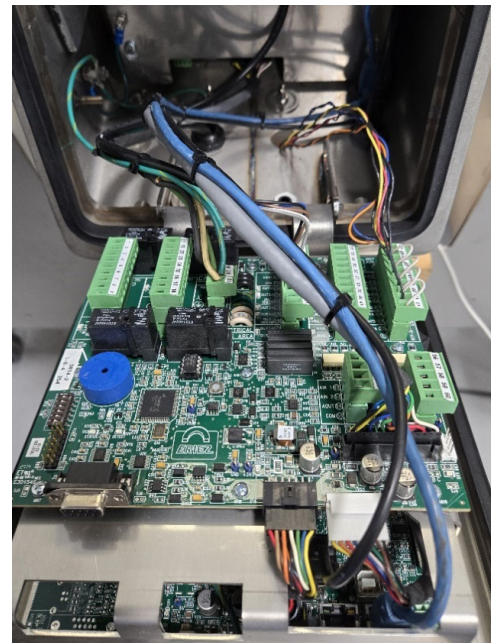
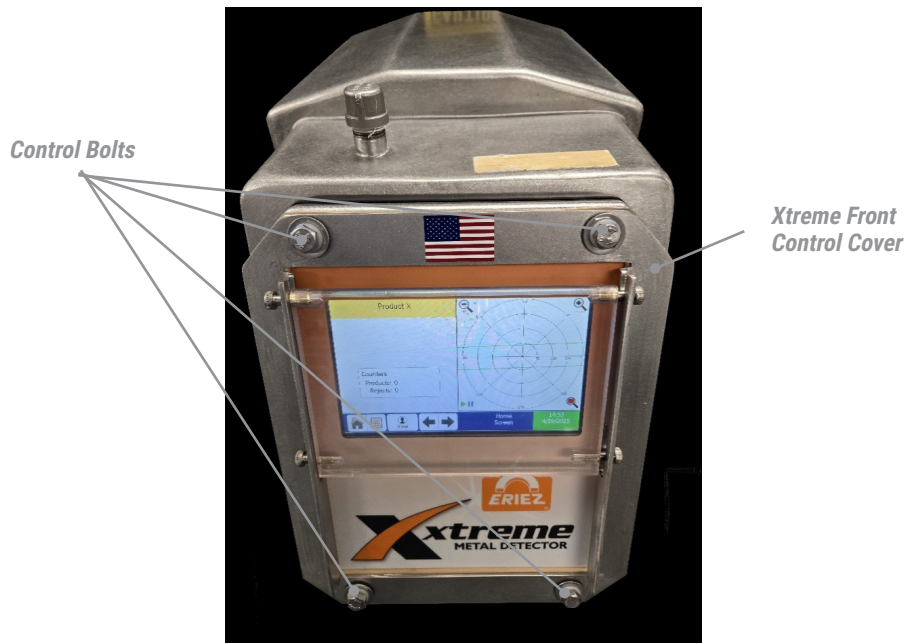


## Step 2: Power Down the Equipment

- A. Remove USB flash drive from bottom of metal detector.
- B. Disconnect power from metal detector.

## Step 3: Remove the Control Panel Cover

- A. Using a 13mm socket, remove 4 control cover bolts in a circular pattern.
- B. Open control cover, exposing wired connections.



## Step 4: Disconnect Wiring

- A. Wired connections may vary between systems.
- B. Unplug all wired Phoenix connectors from control cover. More may be wired than in provided image.
- C. Unplug USB cable, Ethernet cable, and AMOS cable from control. Depending on the application, there maybe more terminal wiring for auxilliary inputs/outputs.



## Step 5: Disconnect Ground Connection

- A. Disconnect control ground wire from control housing grounding stud with a 10mm socket.
- B. Move all disconnected wires into control housing except the control ground wire.



## Step 6: Remove the Xtreme Control Panel

- A. Lift control into a vertical position.
- B. Hold control firmly with both hands.
- C. Twist control left or right to free one of the hinges from the hinge slot.
- D. Lift control vertically to remove it from the control housing.
- E. Xtreme control is now free from control housing.



## Step 7: Install the X8-C Control Panel

- Apply labeling based on drawings 202501818 and 202501819, to maintain ETL compliance.
- All labeling should be included in the conversion kit.
- Replace internal and external Xtreme nameplates with newly provided X8-C nameplates.
- Replace multi-language “read instruction manual hazard” label on outside right side of housing.
- Replace multi-language “hazardous voltage hazard” label on outside left side of housing.
- Replace multi-language “electric shock hazard” label on outside left side of housing.

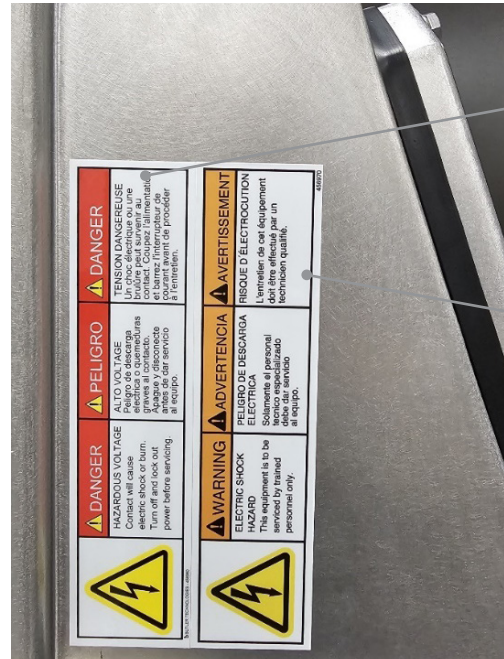
*New External Nameplate*

*New Read Instruction Manual Hazard Label*



*New Electric Shock Hazard Label*

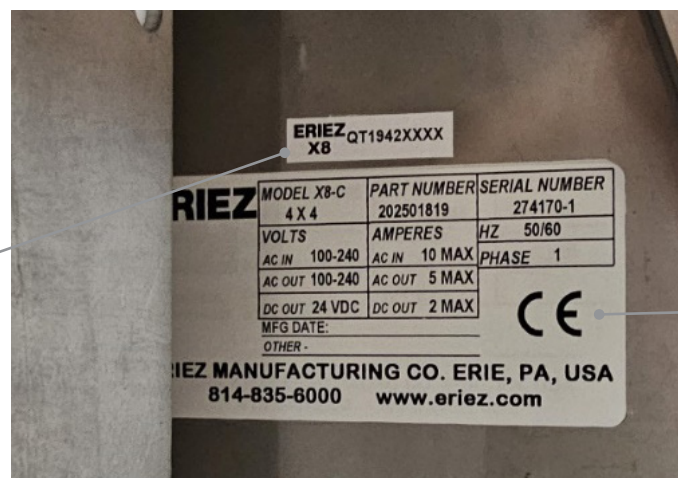
*New Hazard Voltage Hazard Label*



- Add QT distribution license label to the left or right side inside the control housing.
- The existing Windows license label can remain at the inner right side of housing but is not necessary.

*New QT Distribution License Label*

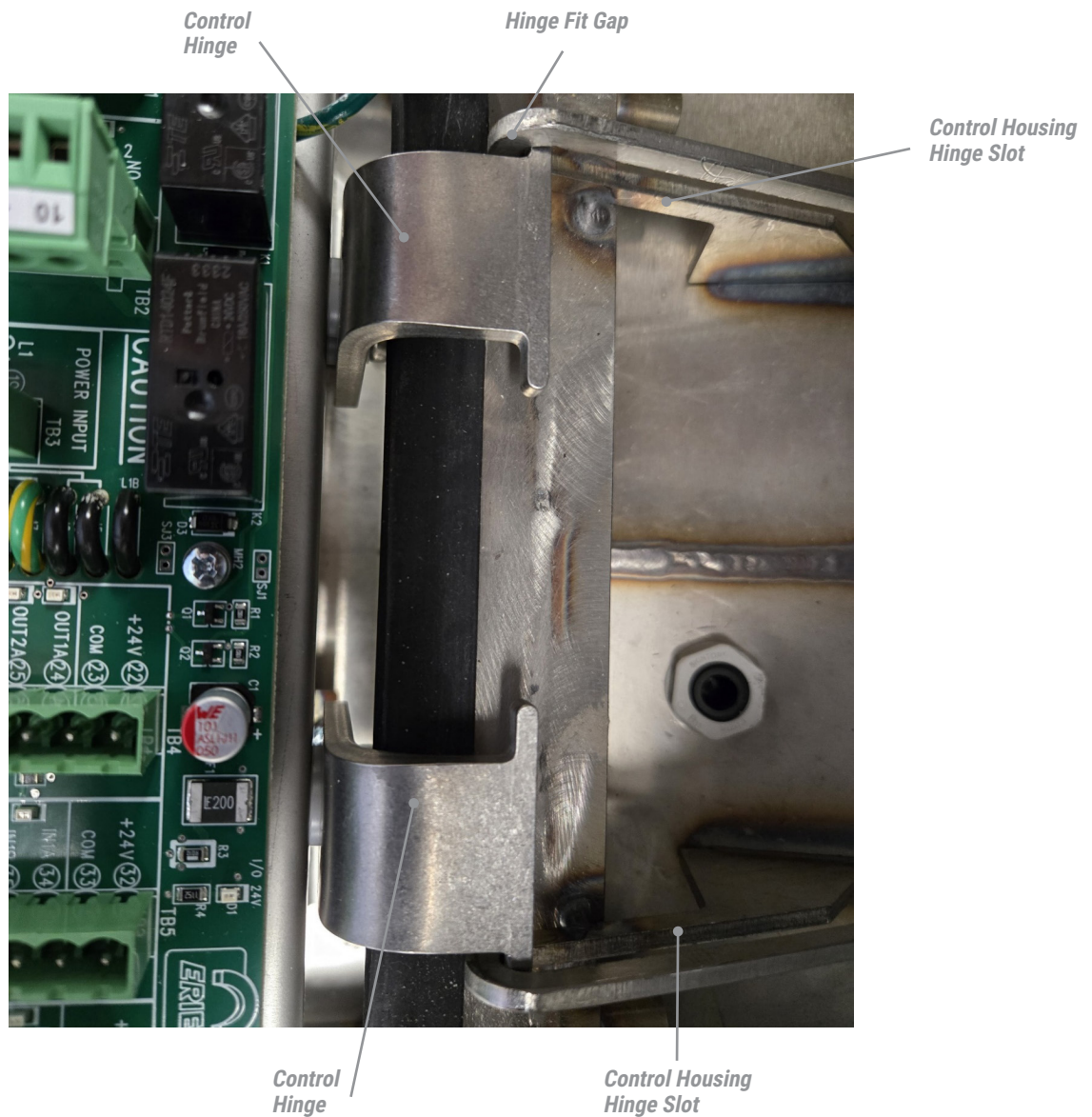
*New Internal Nameplate*





## Step 7 (Continued)

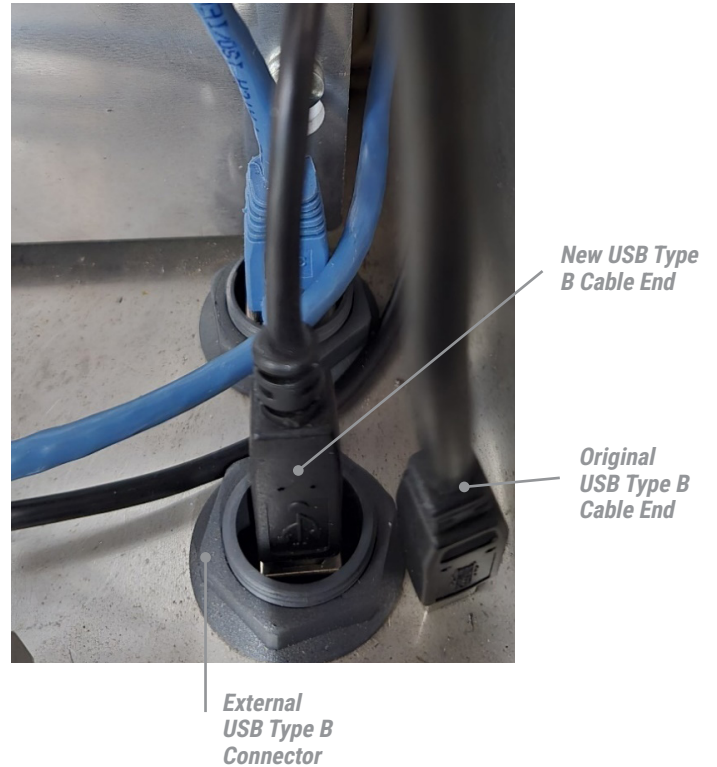
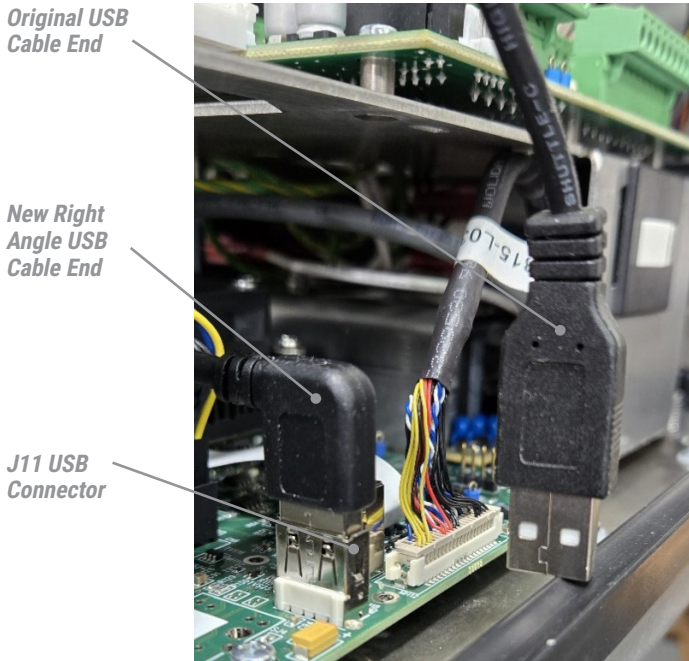
- I. Install new X8-C control in same manner as Xtreme control was removed.
- J. Observe hinge fit - if too loose, remove control, loosen hinge screws and push hinges outward, then retighten hinge screws for a tighter fit between housing hinge slots.



## Step 7 (Continued)

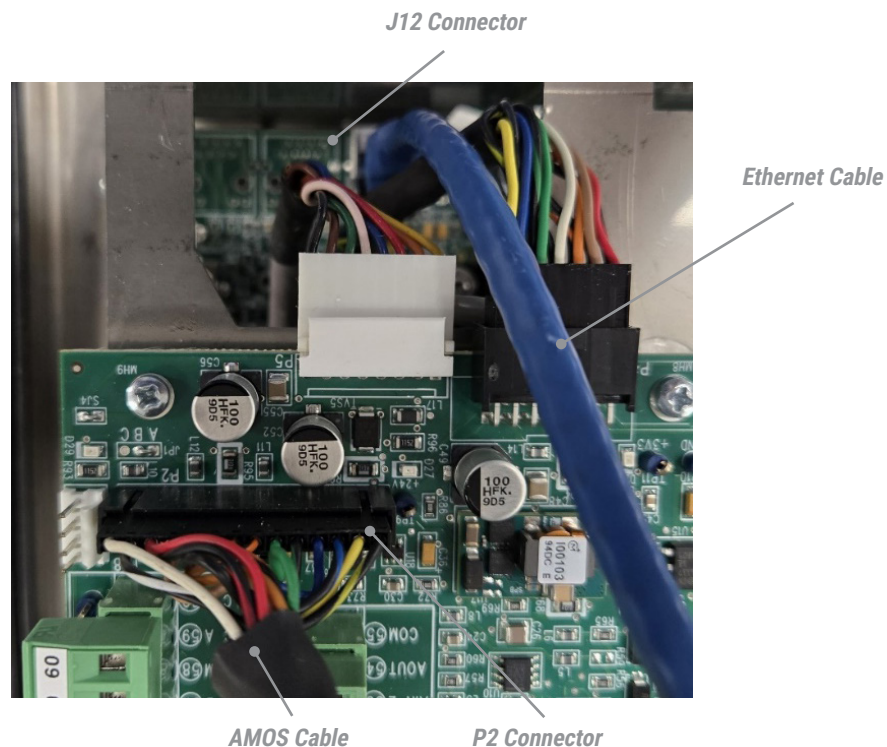
K. Fully remove original USB cable and replace it with provided right angled USB cable.

L. Plug right angled USB type A cable end into I/O P PCB position J11 on control and straight USB type B cable end into external connector on bottom of control housing.



M. Plug AMOS cable into I/O C PCB position P2 on control.

N. Plug Ethernet Cable into I/O P PCB position J12 on control.

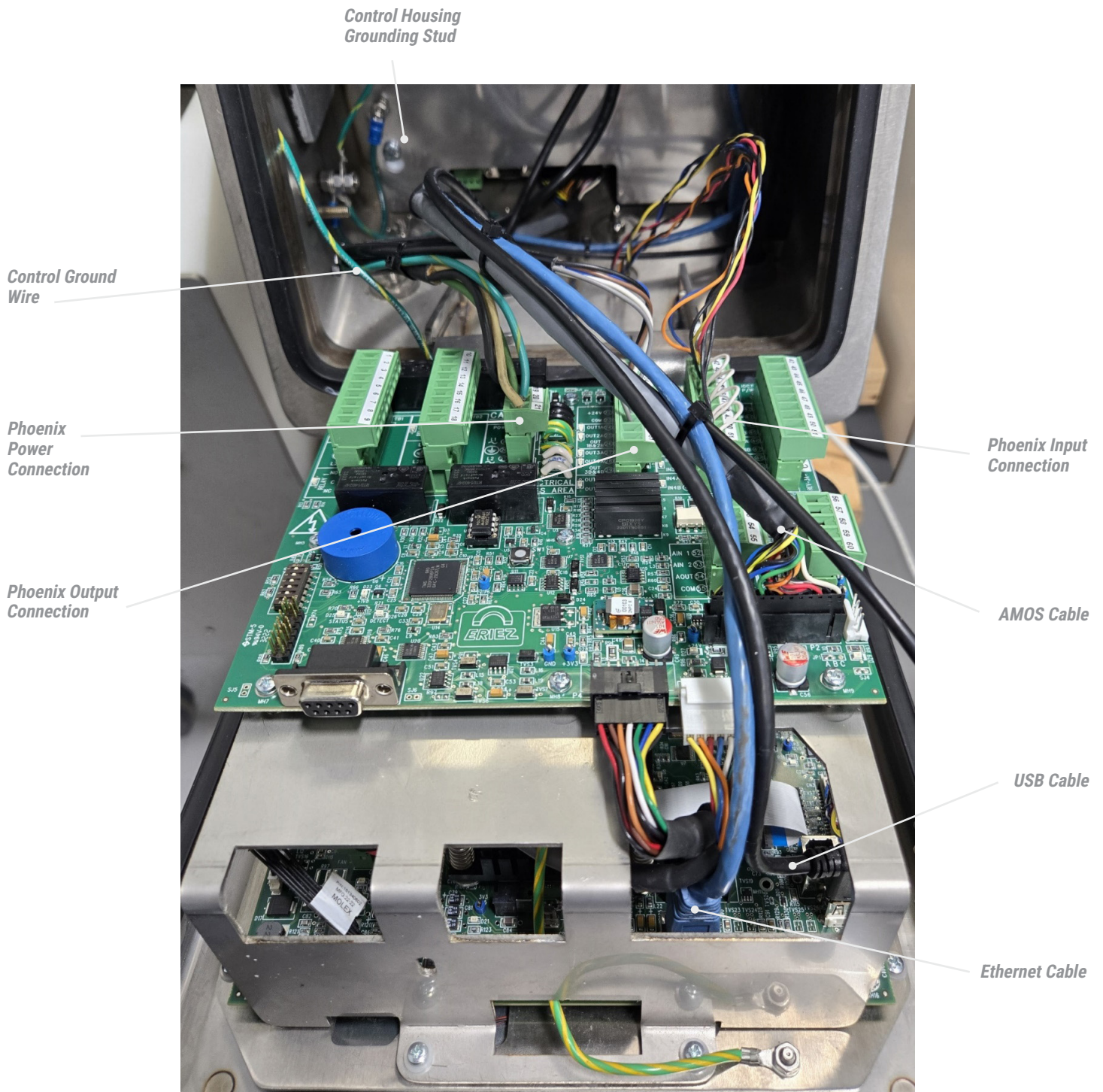




## Step 7 (Continued)

O. Unplug any blank Phoenix connectors positions that are required from control.

P. Plug all old Phoenix connectors into matching numbered connector positions on control.



## Step 8: Secure Ground Connection

- A. Connect control ground wire to control housing grounding stud.
- B. Note proper grounding technique inside control housing.
- C. Ground from customers input power connects directly to control housing as first ground, and must include a star washer and a nut on both sides of grounding wire lug.

## Step 9: Reconnect Wiring

- A. Control mains input ground wire from terminal pin 20 connects as second ground.
- B. Front control plate ground wire connects to secondary control housing grounding stud.
- C. AMOS plate ground wire connects to secondary control housing grounding stud.
- D. Add ground labels if missing.





## Step 10: Power On the Unit

A. Once electrical connections are complete, verify that both control power switches are in the On position. Looking at the control, the right side is the main power switch, and the left side is the Auxiliary power switch for L1B and L2B.



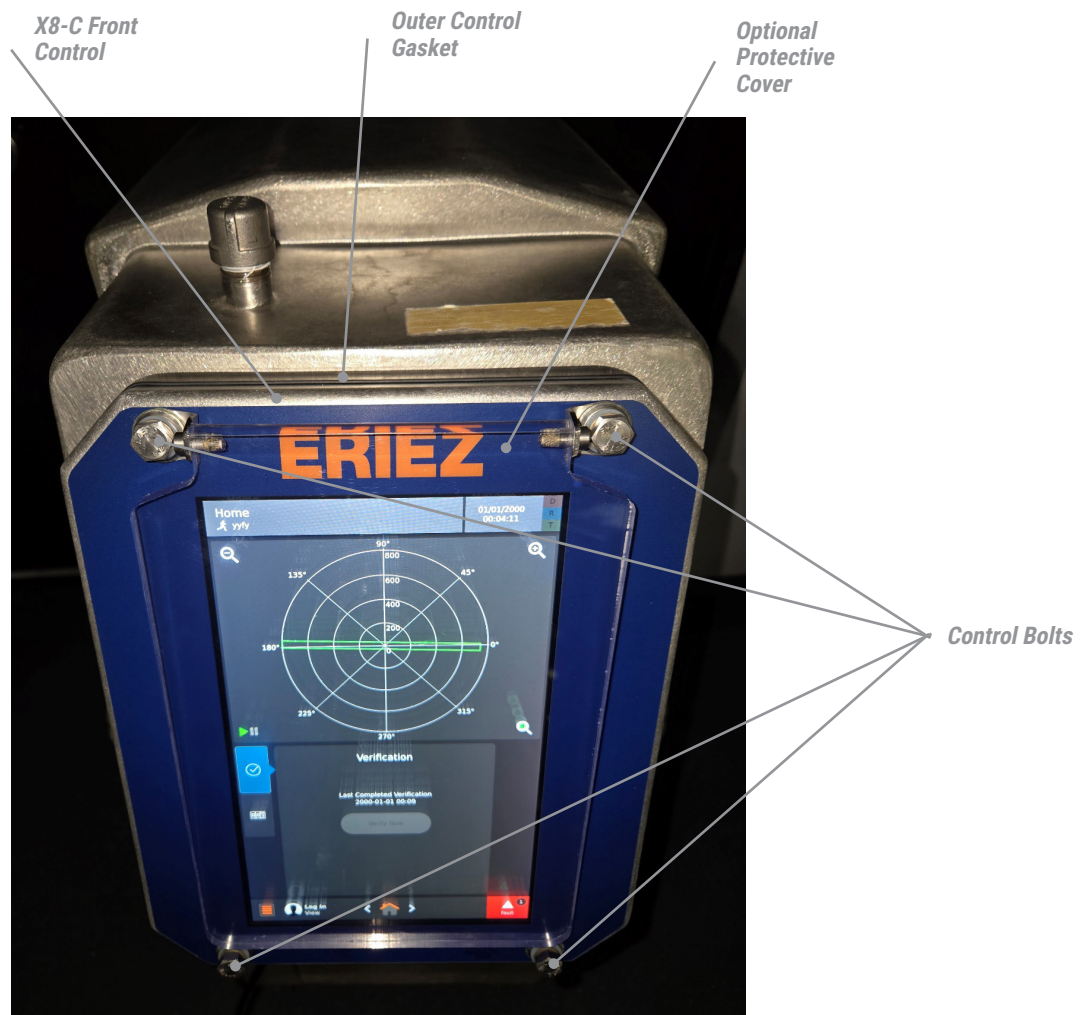
*Main Power  
Switch 'ON'  
Position*

*M8 Bolt With  
Anti-seize on  
Threads*

- B. Verify four M8 control bolt threads are coated with anti-seize lubricant.
- C. Verify control housing gasket and control cover gasket are properly seated on metal work.
- D. Adjust gaskets as needed for proper fit.

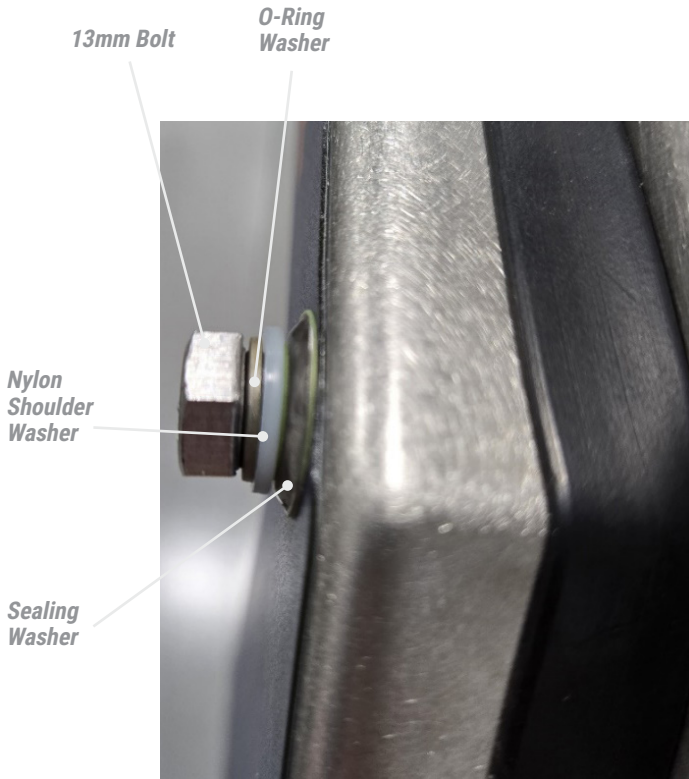
## Step 11: Secure the Control Panel

- A. Lift top of control into vertical position.
- B. Adjust wiring as needed to ensure a low stress impact between the wires and control.
- C. Place control against control housing.
- D. Slightly lift control as needed, to align control bolt holes and start each control bolt by hand.
- E. Tighten each bolt by hand, do not cross thread or force a bolt on. If a bolt does not want to thread on, the bolt hole may need to be cleaned with an M8 tap or have debris removed from blind bolt hole.
- F. Once all four bolts are hand tight, torque down bolts with a 13mm socket in a circular pattern, until each bolt is torqued to at least 20-inch pounds.
- G. Verify outer control gasket is pressed against control housing, on all sides.

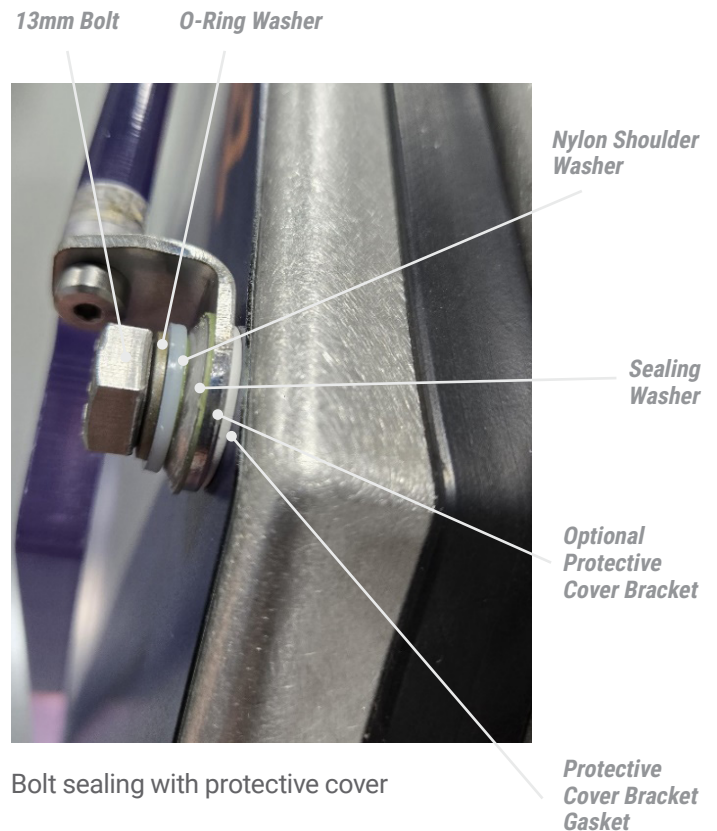


## Step 11 (Continued)

- A. Verify sealing washers under bolt heads are pressed against control front.
- B. If the optional protective cover is used, sealing washers go against protective cover brackets, and rubber gaskets go between front control and protective cover brackets.
- C. Failure to properly install sealing gaskets and mounting bolts may compromise the metal detector washdown integrity.



Bolt sealing without protective cover



Bolt sealing with protective cover

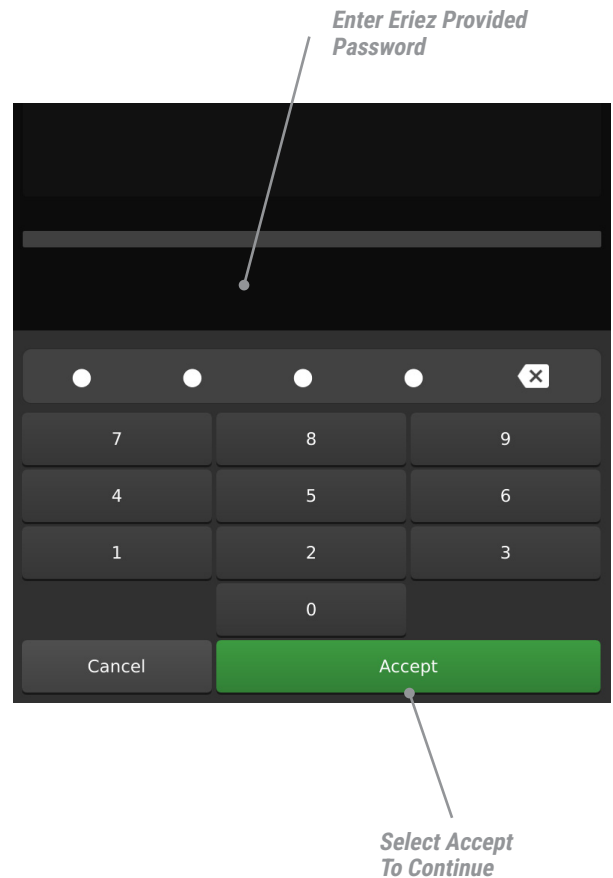
- D. Once the X8-C control cover is secured, power may be applied to the metal detector.
- E. During boot up, an Eriez splash screen should appear, followed by the main program application.
- F. A software update is required; this may take up to 15 minutes to complete.

## Step 12: Insert Firmware USB Drive

- A. Obtain the latest X8.0 software from Eriez.

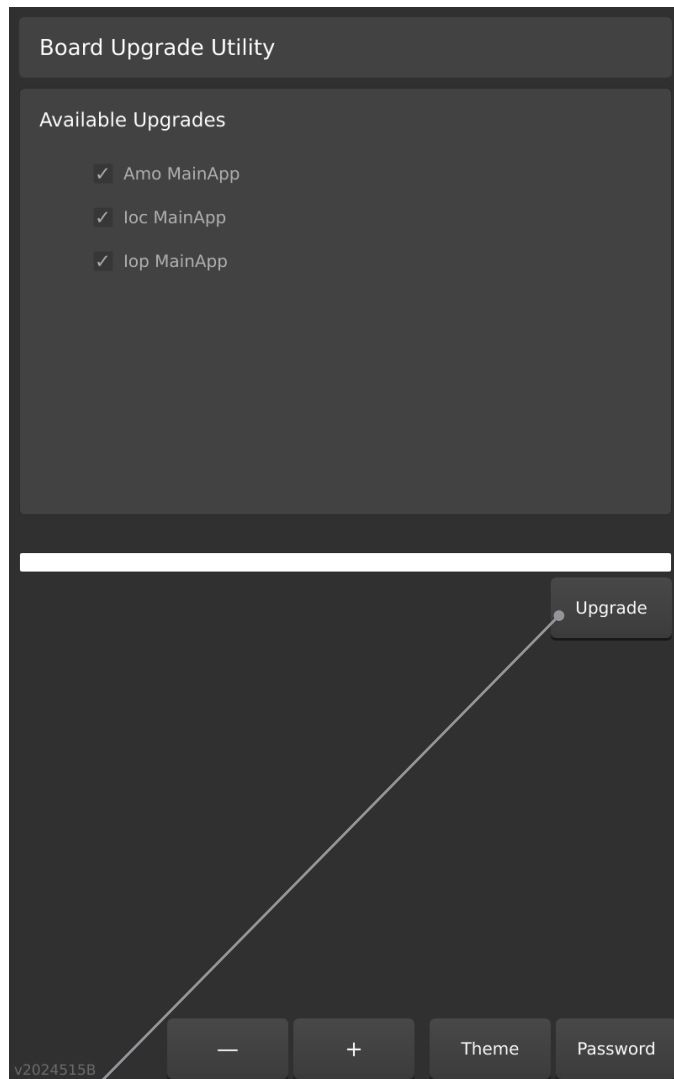
## Step 12 (Continued)

- B. To start the upgrade process, have a USB drive with upgraded software files provided by Eriez.
- C. Insert USB drive into USB port on bottom of metal detector control.
- D. Cycle power to metal detector.
- E. Metal detector will boot into a Board Upgrade Utility page.
- F. If the Board Upgrade Utility page does not appear, verify USB cable connections are correct, and verify Upgrade program files are in the correct folder on the USB drive.
- G. Select Password.
- H. Enter a Eriez provided temporary 3-day password.
- I. Select Accept to continue.

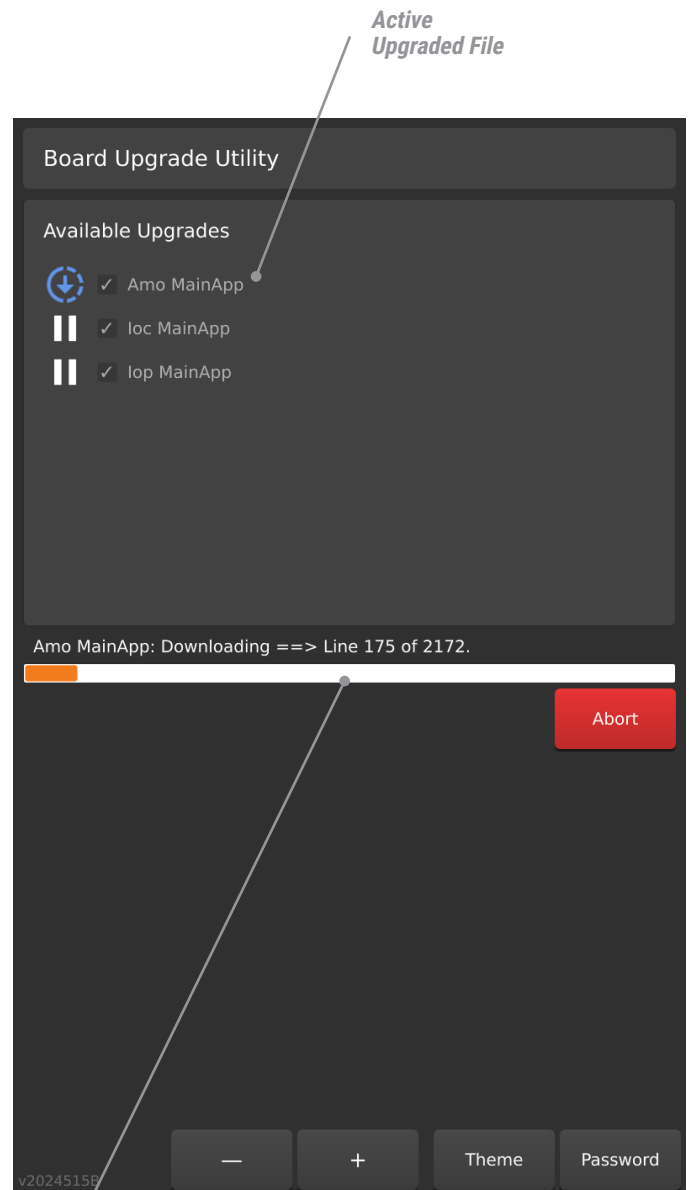


## Step 12 (Continued)

- J. Three available upgrades should be shown.
- K. All three upgrades should be selected for installation.
- L. Select Upgrade.



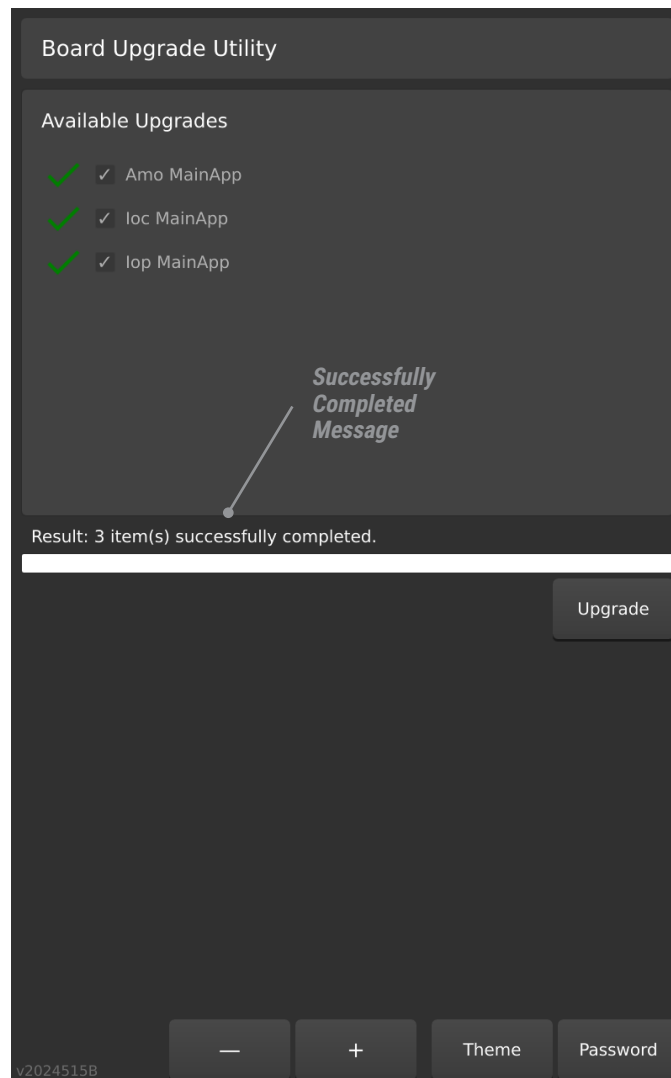
Select Upgrade



Status Bar

## Step 12 (Continued)

- M. Once upgrades are complete, each successful file upgrade will have a green check.
- N. A message will state 3 items were successfully completed.
- O. If any items fail the upgrade process, contact Eriez for assistance.



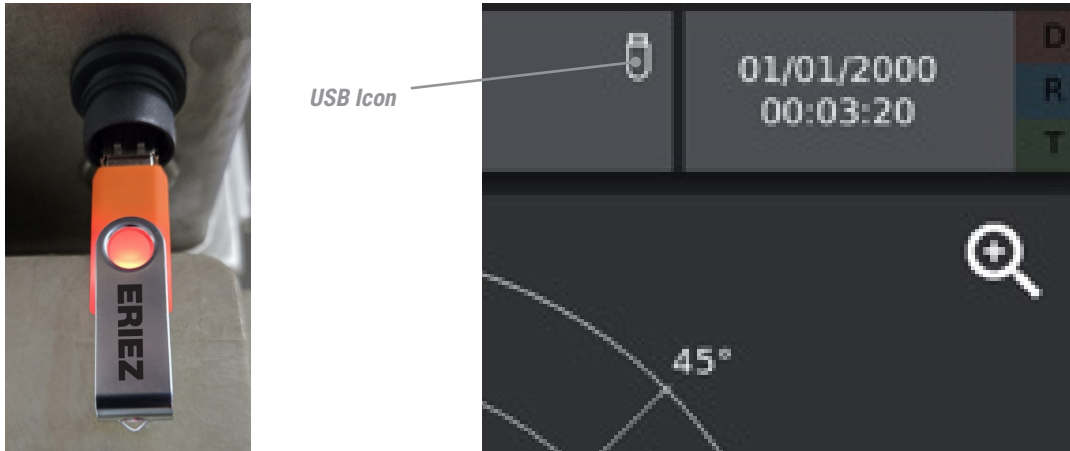
- P. Disconnect power from the metal detector.
- Q. Remove upgrade utility USB drive.

## Step 13: Power On and Initialize

- A. Connect power to the metal detector.
- B. Metal detector will boot up, an Eriez splash screen should appear, followed by the main program application.
- C. The upgrade is now complete.

## Step 13 (Continued)

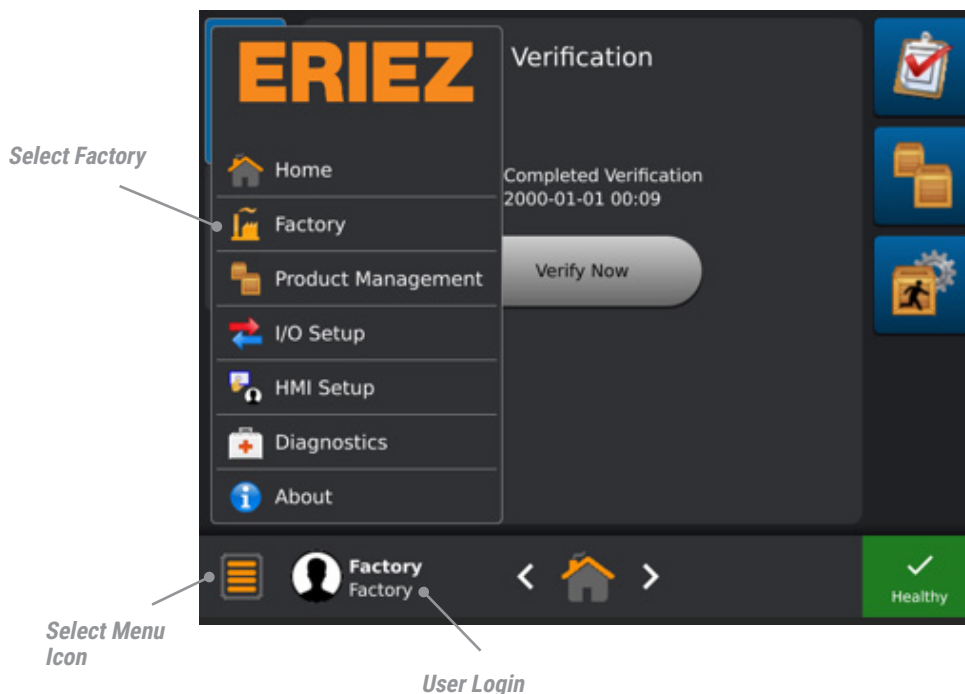
- D. Once the software has been updated, the Xtreme backup file needs to be installed.
- E. With the metal detector turned on, insert USB drive with the Xtreme backup file into USB port on bottom of metal detector control.
- F. A USB icon will appear at the top of the screen next to the date and time.



- G. If the USB icon does not appear, there is either an issue with the USB or the USB connection to the I/O P board on the control. The issue must be resolved to proceed.

## Step 14: Enter Temporary Password

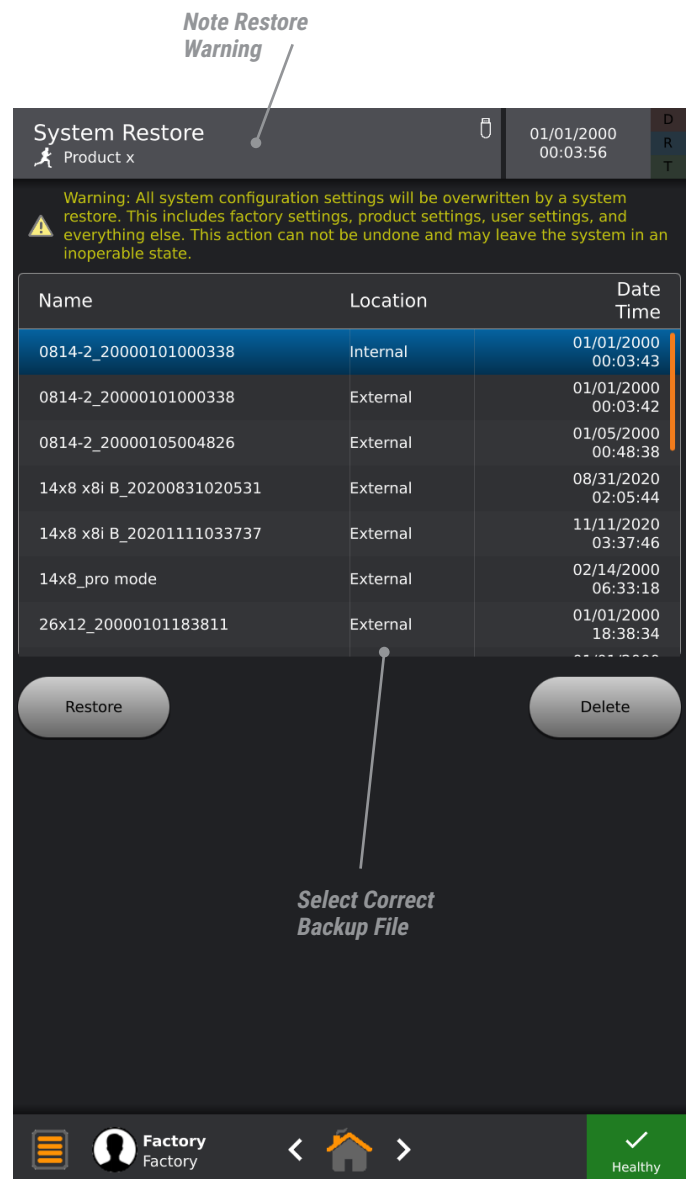
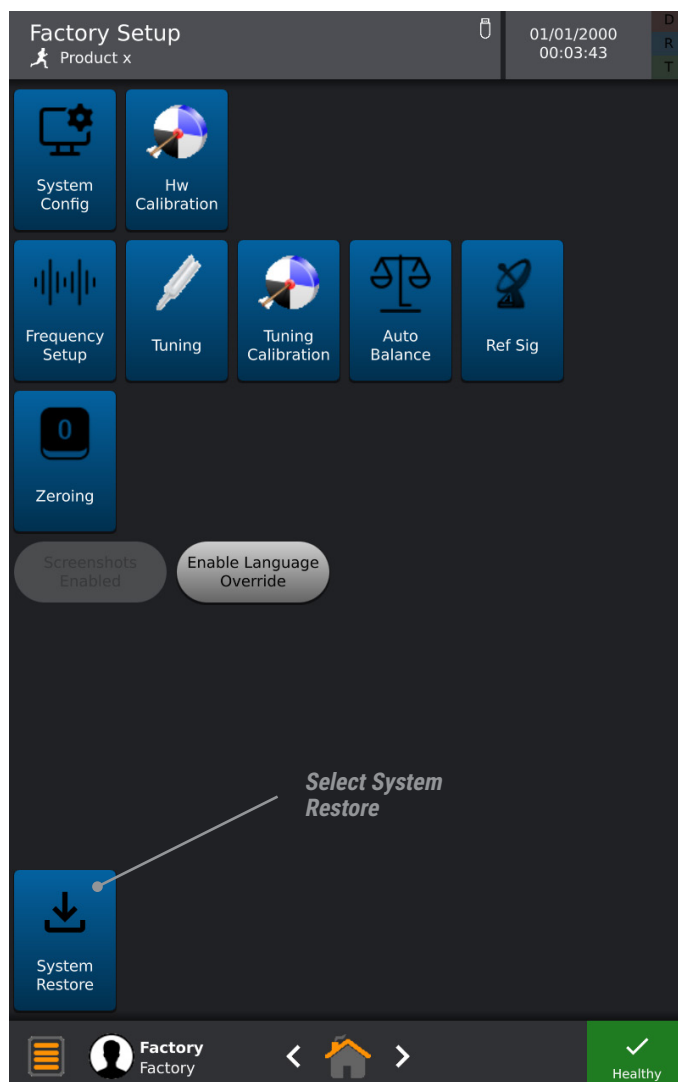
- A. Select user login icon on the bottom left, then log in at factory level, using a 3-day factory level password provided by Eriez.
- B. Select Menu icon in bottom left corner, then Factory from the list.





## Step 14 (Continued)

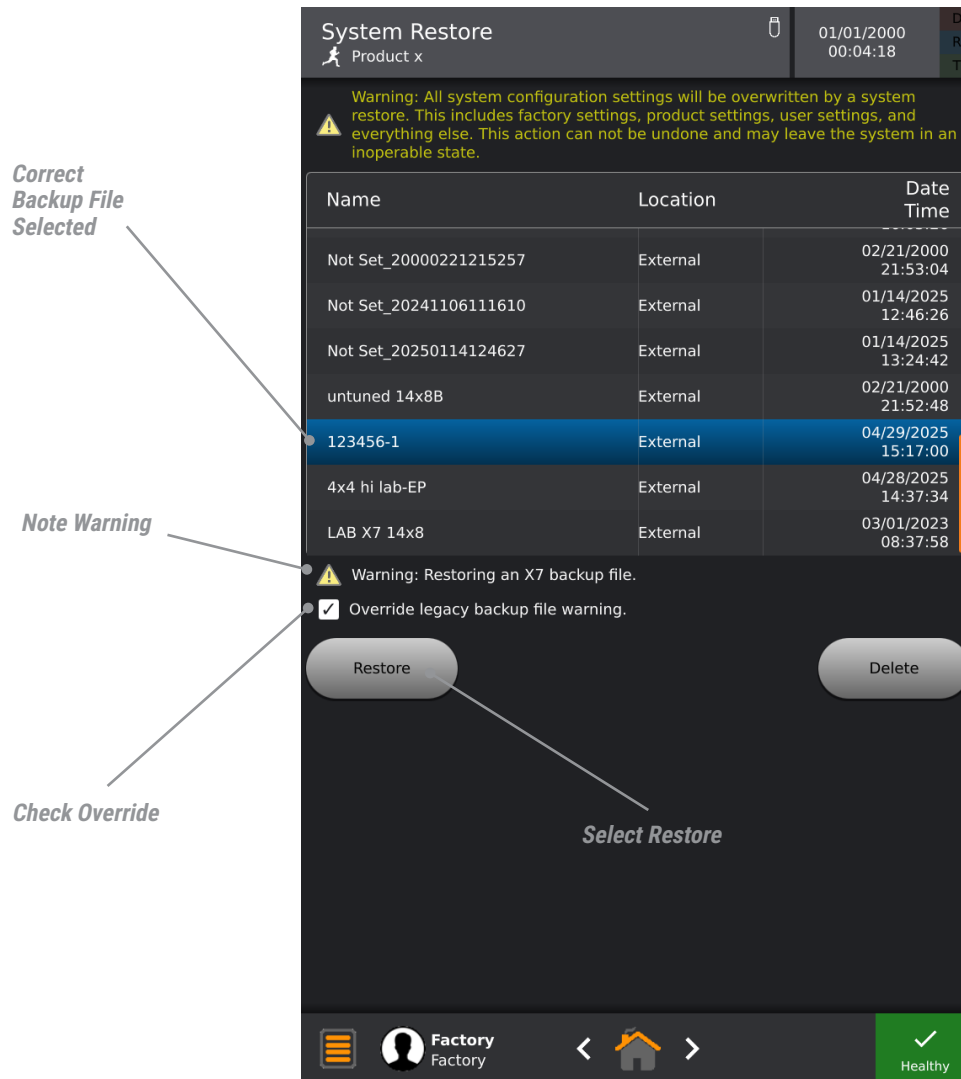
- C. Select System Restore.
- D. Select correct backup file from list if more than one is available.
- E. Typically, the backup file name will match the metal detector serial number.
- F. Note that all system settings including factory, product, and user settings on the X8-C control will be replaced with the Xtreme settings that are on the backup file.





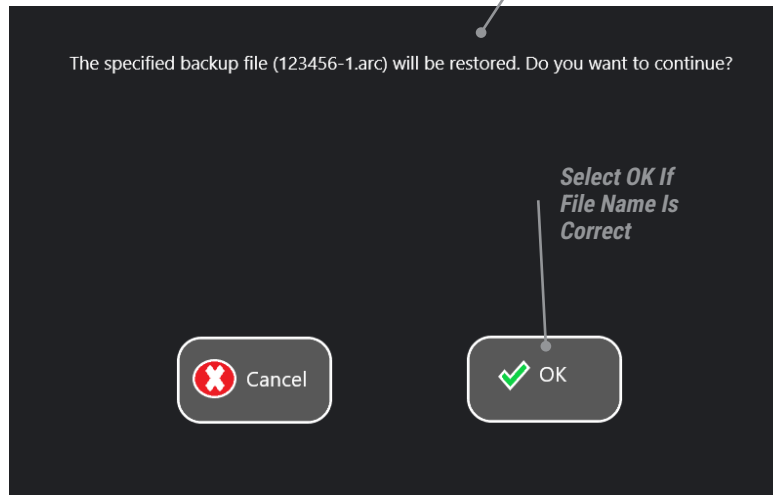
## Step 14: Installing the Backup File

- G. Note warning that an X7 backup file is being restored.
- H. Check 'Override legacy backup file warning'.
- I. Restore button will now be available.
- J. Select Restore.

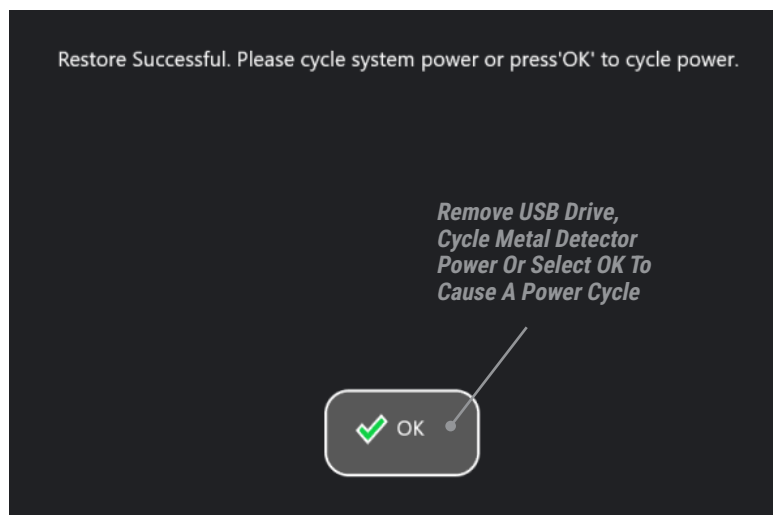


## Step 14: Installing the Backup File

K. If displayed backup file is correct, select OK.



L. Once the backup file has been restored, remove USB drive and cycle power.

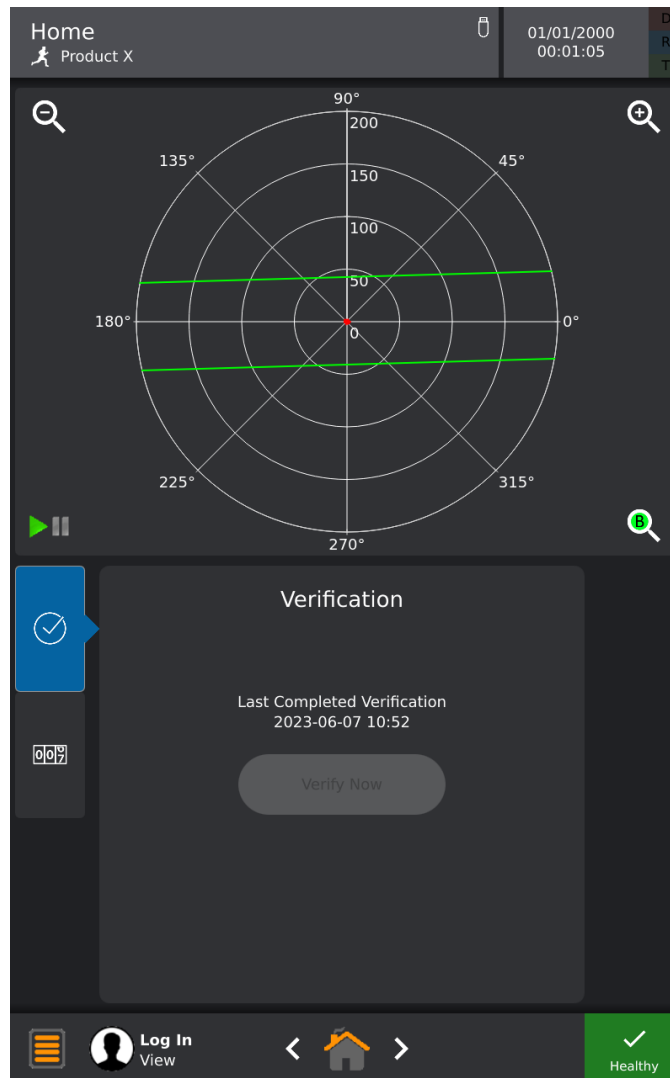


M. Contact Eriez if file restore was not successful.

N. Installation, software upgrade, and system restore are now complete.

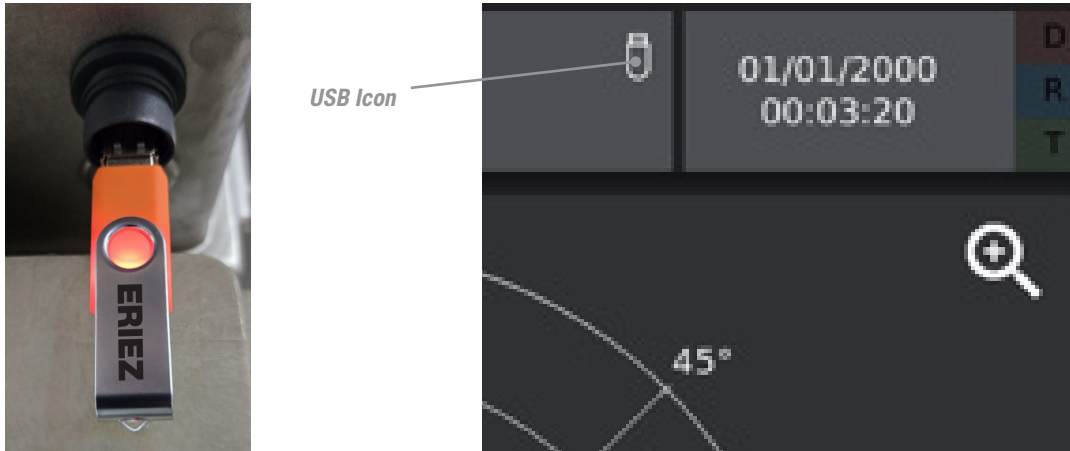
## Step 15: Upload the Backup

A. After the external USB drive has been removed and power has been cycled the following screen should appear.

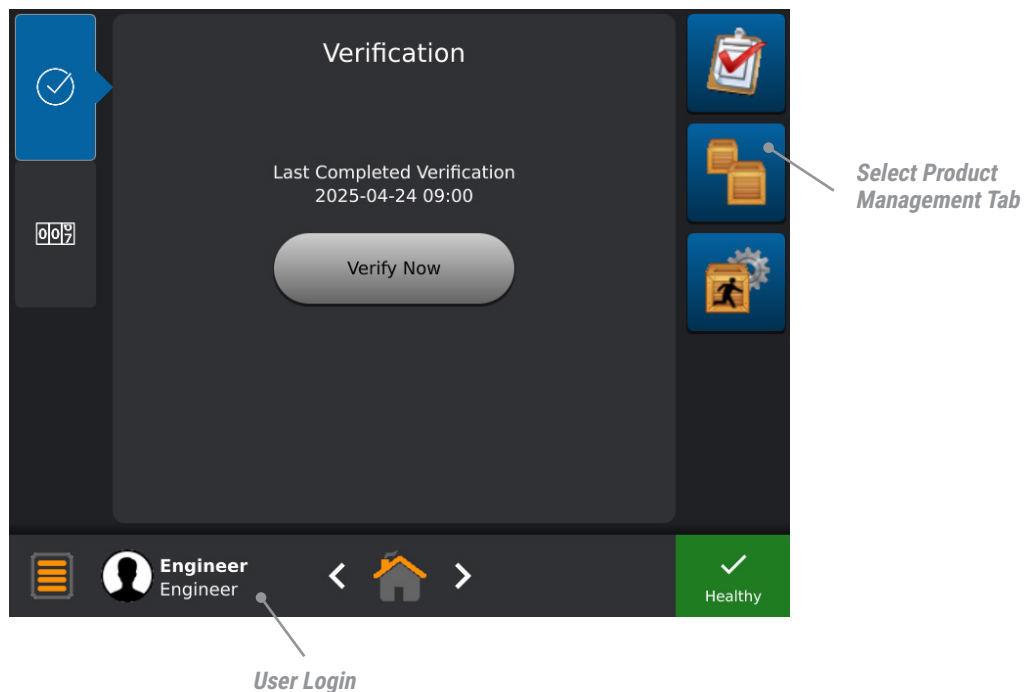


## Step 15 (Continued)

- B. Once the metal detector is set up and any required adjustments are made, make a final backup to be added to the Eriez database for future reference.
- C. With the metal detector turned on, insert USB drive into USB port on bottom of metal detector control.
- D. A USB icon will appear at the top of the screen next to the date and time.

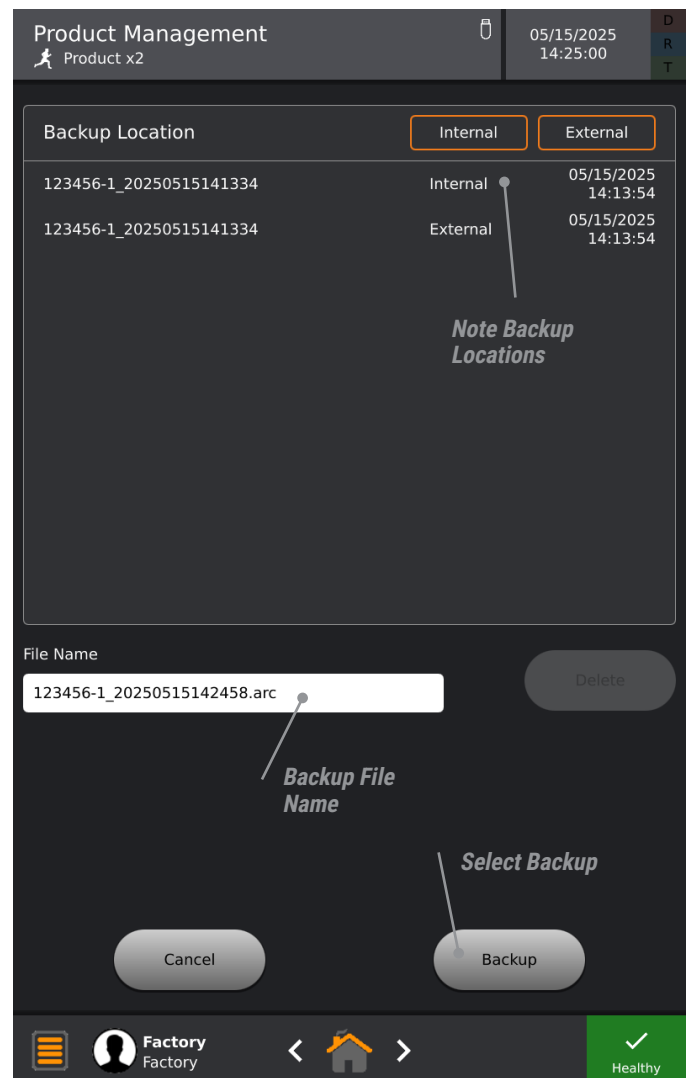
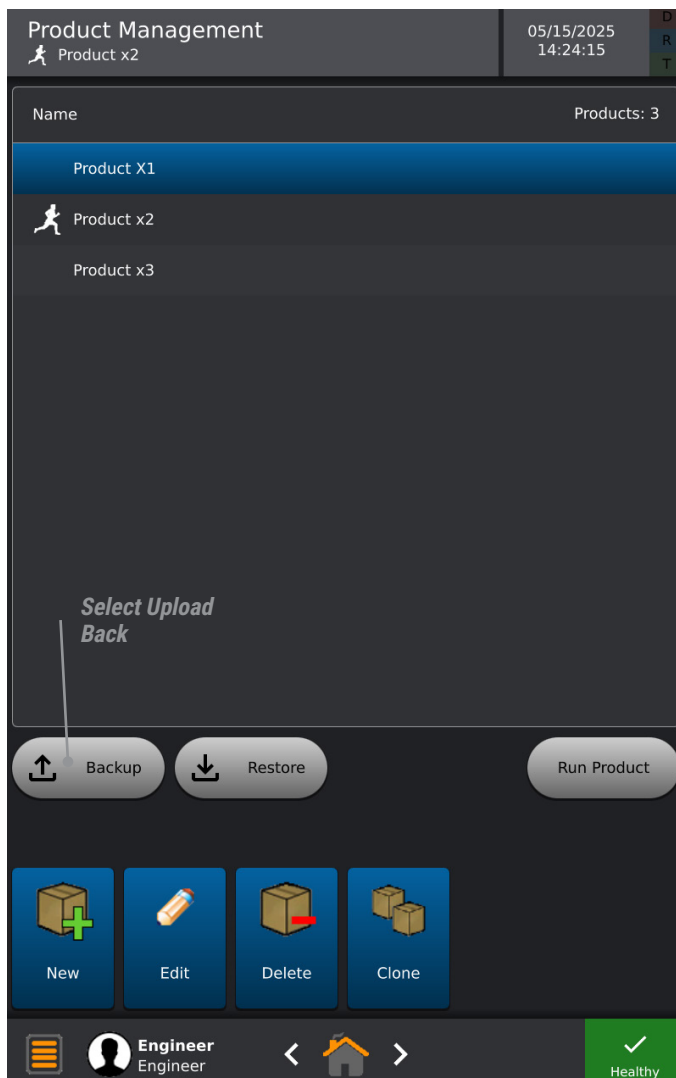


- E. If the USB icon does not appear, there is either an issue with the USB or the USB connection to the I/O P board on the control. The issue must be resolved to proceed. Contact Eriez technical support if needed.
- F. Select User Login, then log in at engineer level or higher.
- G. Select product management tab.



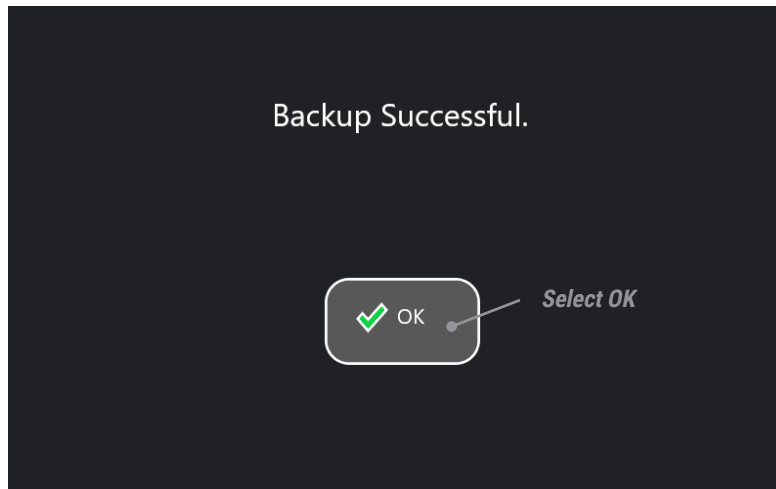
## Step 15 (Continued)

- H. Select upload backup.
- I. File name will autofill with serial number and date code.
- J. File name may be edited or saved as shown.
- K. Note backup locations, select as needed.
- L. The orange border identifies where the backup file will be saved.
- M. Select Backup.



## Step 15 (Continued)

- N. A screen will appear stating backup was successful.
- O. Select OK to continue.



## Step 16: Complete the Setup

- A. Remove USB drive from bottom of metal detector housing.
- B. Secure USB port washdown cover.
- C. Xtreme to X8-C control conversion is now complete.
- D. Send the new X8-C backup file to Eriez for database storage.

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ECP-IOM-31P-072025