

MANUAL INSTALLATION CONVERSION KIT SPIRE 4.1 TO 4.2

SAFETY OVERVIEW

- Read and follow **ALL SAFETY INSTRUCTIONS** in this manual and any warning/caution labels on the unit (decals, labels or laminated cards).
- Read and understand **ALL** applicable **OSHA** (Occupational Safety and Health Administration) safety regulations before operating this unit.

SAFETY ALERT SYMBOL



This is the safety alert symbol. When you see this in the manual or on the unit, be alert to the potential of personal injury or damage to the unit.

Types of Alerts

 DANGER:	Indicates an immediate hazardous situation which if not avoided WILL result in serious injury, death or equipment damage.
 WARNING:	Indicates a potentially hazardous situation which, if not avoided, COULD result in serious injury, death, or equipment damage.
 CAUTION:	Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury or equipment damage.

SAFETY TIPS

- Carefully read and follow all safety messages in this manual and safety signs on the unit.
- Keep safety signs in good condition and replace missing or damaged items.
- Learn how to operate the unit and how to use the controls.
- Do not let anyone operate the unit without proper training. This appliance is not intended for use by very young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
- Keep your unit in proper working condition and do not allow unauthorized modifications to the unit.

SAFETY INSTRUCTIONS

WARNING:

Before starting installation, read and understand all safety label and warnings on the machine. Also review and understand all safety instructions in the owners, installation and service manuals.

Failure to comply could result in serious injury, death or damage to the equipment.

QUALIFIED SERVICE PERSONNEL

WARNING:

Only trained and certified electrical, plumbing and refrigeration technicians should service this unit.

All wiring and plumbing must conform to national and local codes. **Failure to comply could result in serious injury, death or equipment damage.**

SAFETY PRECAUTIONS

WARNING:

Disconnect power to the unit before servicing. Follow all lock out/tag out procedures established by the user. Verify all power is off to the unit before performing any work. **Failure to comply could result in serious injury, death or damage to the equipment.**

CAUTION:

Always be sure to keep the area around the unit clean and free of clutter. **Failure to keep this area clean may result in injury or equipment damage.**

CAUTION:

Note the following: This unit is not designed for use in outdoor locations. The appliance must be placed in a horizontal position. The appliance is not suitable for installation in an area where a water jet would be used.

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TOOLS REQUIRED:

Description
#2 Phillips Screwdriver
Utility Knife or side-cutting pliers
Flat Head Screwdriver
11/32" nut driver or equivalent

INSTALLATION INSTRUCTION:

1. Shut Down unit per proper shutdown procedure
2. Unplug unit from its AC Power source.

<p>WARNING</p>	<p>Only trained and certified electrical, plumbing and refrigeration technicians should service this unit.</p> <p>All wiring and plumbing must conform to National and Local Codes. Failure to comply could result in serious injury, death or equipment damage.</p>
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3. Locate power cord inside unit next to the valves and add ferrite supplied on the power cord at approximate location shown.



Figure 1

4. Open door and remove translucent door service panel and discard of properly.

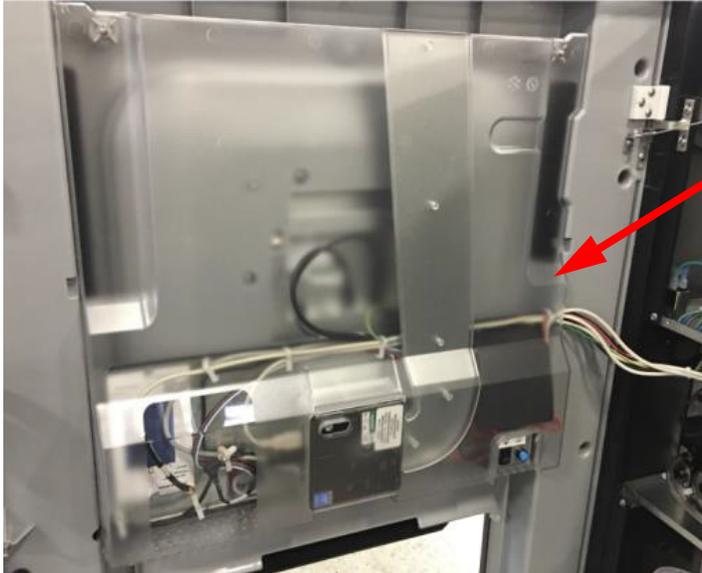
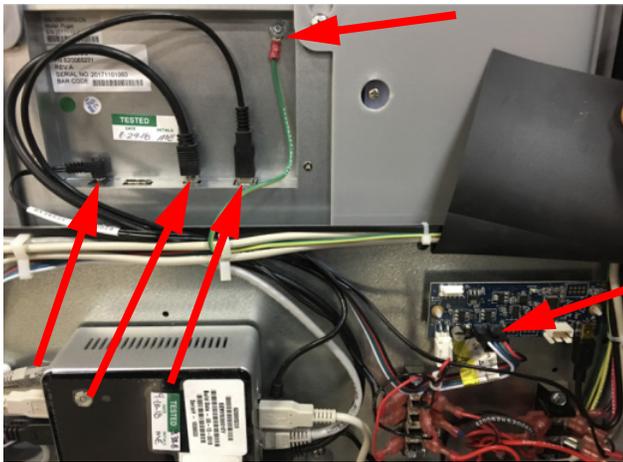


Figure 2

5. Unplug all connections to display, this includes the cove lighting to the LX3 board.



cove lighting harness

Figure 3

6. Remove ebox cover saving the (2) screws. Discard ebox cover.

7. Unplug all cables/harnesses from MFV board, remove and properly discard MFV board, install new MFV board supplied with the kit and reinstall previously removed cables/harnesses.

8. Remove wire bundle from the (2) most far right wire clips.

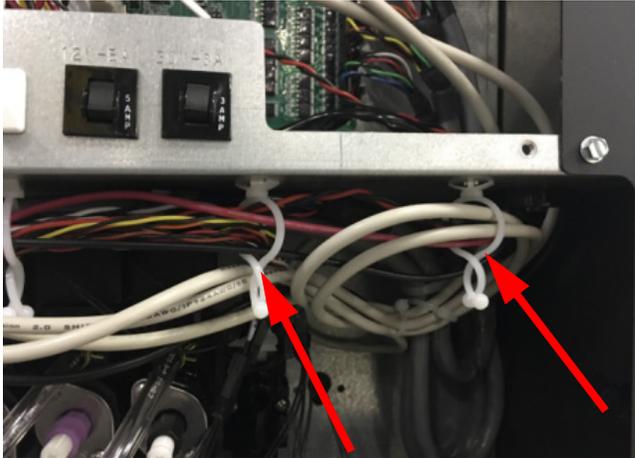


Figure 4

9. From the same wire bundle, remove the (2) USB cables that feed the MFV board, USB hub and the (1) antenna cable that goes to the rear of the unit.
10. Carefully remove/clip off the (2) far most right wire clips from step 8 and discard.
11. Insert circuit breaker into the mounting bracket supplied.
12. Insert new circuit breaker bracket into the (2) holes where the wire clips used to be. Use (2) #8-32 nuts to secure the bracket to the unit. **(DO NOT OVERTIGHTEN)**

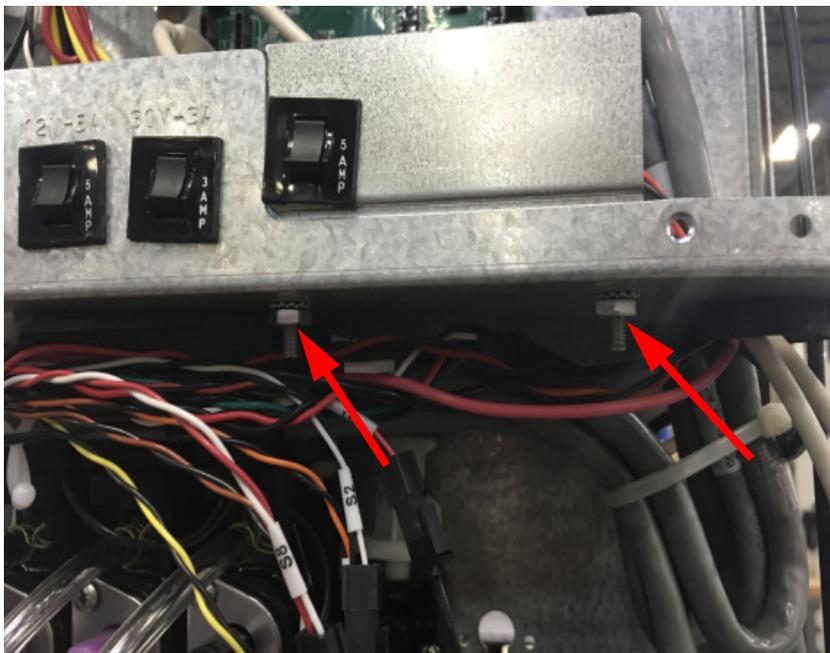


Figure 5

13. Install (2) new cable clip supplied with kit to the mounting studs of the circuits breaker with (1) #8-32 nut on each stud as shown. **(DO NOT OVERTIGHTEN)**

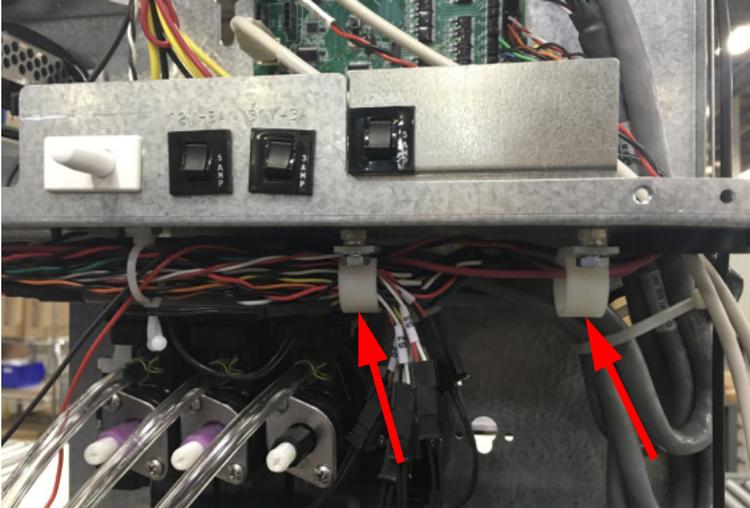


Figure 6

14. Wire new circuit breaker with supplied harness, one end goes to the 12VDC Power supply (red to V+, black to V-)....the other gets routed to the door with the (2) USB Cables and (1) antenna cable. Refer to new wiring diagram supplied with kit for reference.

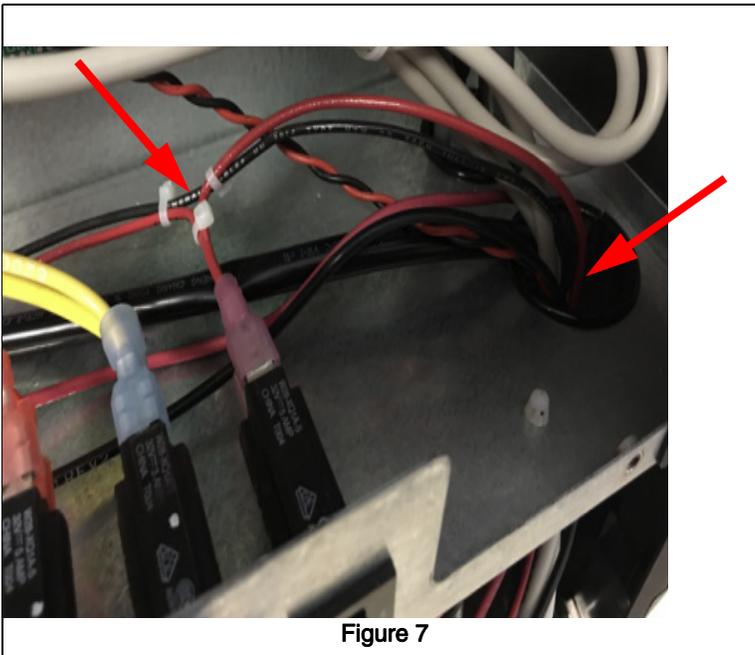


Figure 7

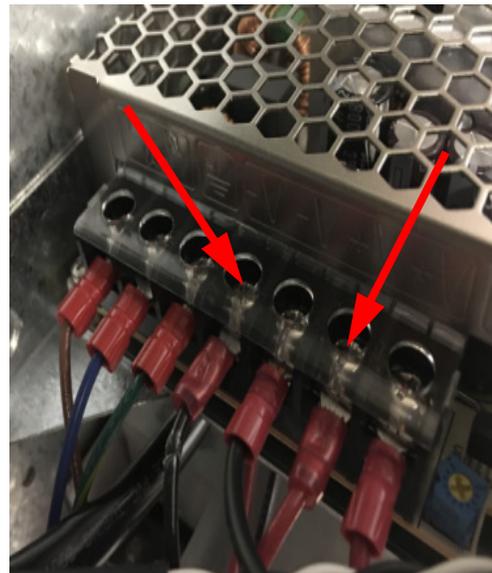


Figure 8

15. Bundle wires thru wire clips shown on step 11 except the (2) USB cables, (1) antenna cable and display/cove lighting harnesses.

16. Using the supplied wire ties, secure the (2) USB cables, (1) antenna cable and display/cove lighting harnesses from the main wire bundle downward approx. 1.5" to 2". Make sure all wires/cables are cleanly bundled and secured.

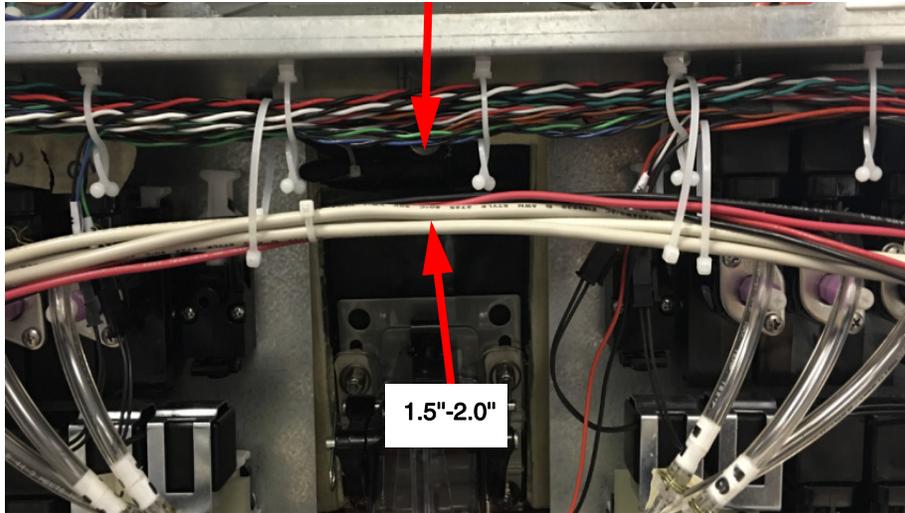


Figure 9

17. Remove the NUC mounting panel assembly from the door by loosen the (2) top screws and removing the (2) bottom screws, discard bottom screws. Lift the panel assembly up and out, this panel assembly can be discarded. Remove the (2) top screws and save.



Figure 10

18. Remove the display assembly from the door by loosening the 'A' screws and removing and saving the 'B' screws.

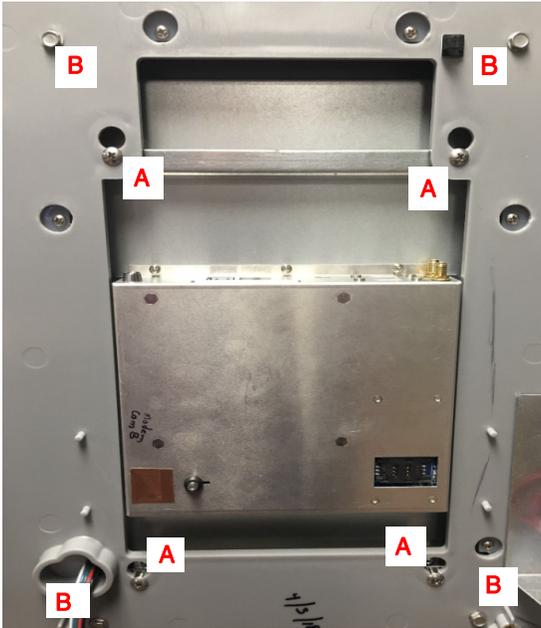


Figure 11

19. Carefully lift up and out the display assembly from the door. Place display assembly on a protected table top, glass side down to get ready to remove lens/lighting.

20. Remove and save the (6) 'C' screws, lift up the lens / lighting and place aside and then remove the (3) white reflectors. The old display can now be disposed of per local, state or national recycling laws for electronic equipment.

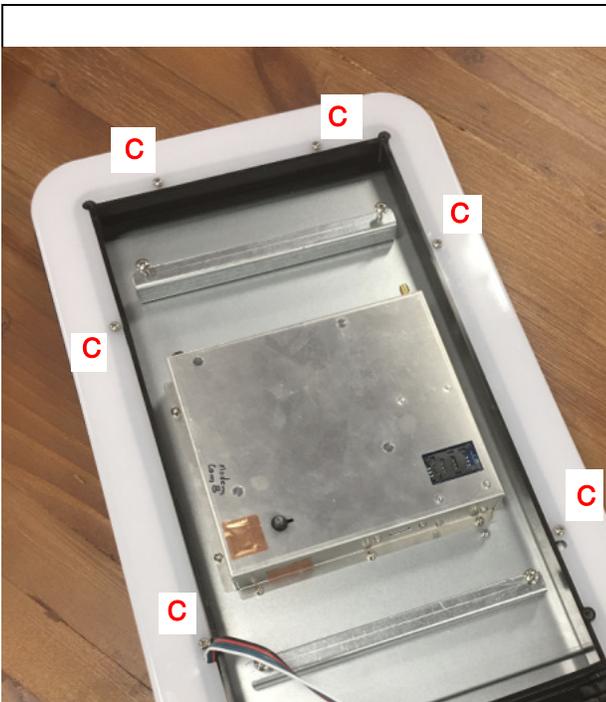


Figure 12



Figure 13

21. Reassemble the reflectors and lens / lighting into the new display assembly supplied in the kit. **Do not overtighten the screws that mount the lens / lighting, these should be hand tight only.** Make sure the lighting harness is routed thru the lens opening as shown below.



Figure 14

22. Mount new display assembly onto door key slots. Reinstall 'B' screws from step 18. Tighten all (8) screws hand tight only. **(DO NOT OVERTIGHTEN)**

23. Clean back of door with mild detergent or alcohol wipe to prepare the surface for the adhesive tape. Remove tape backing from new LX3 mounting bracket (backside of bracket) and install bracket using (2) screws from step 17. Firmly push bracket, where tape is located, into door for best tape adhesion.

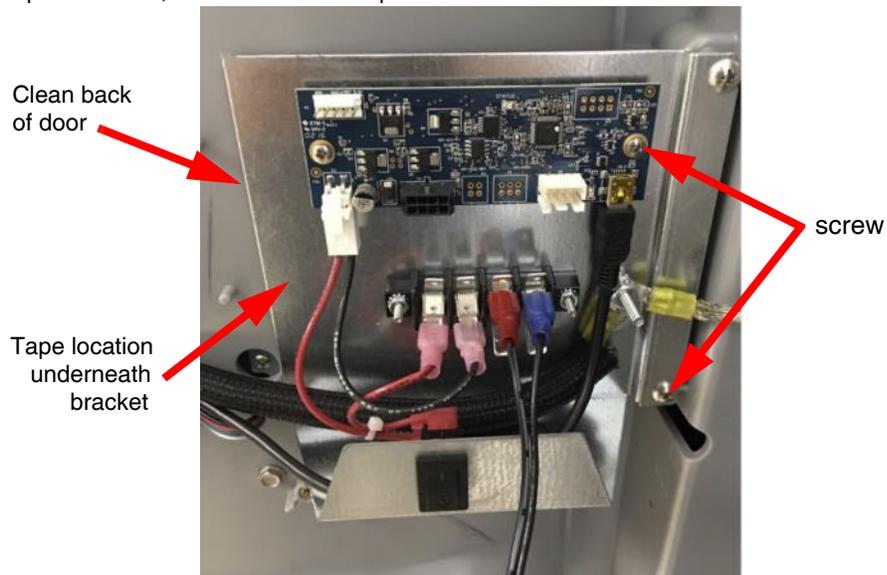


Figure 15

24. Install the display power harness from ebox at 'Z' and the cove lighting harness from the 3rd circuit breaker at 'Y' onto the terminal block. Note the wire colors and their locations installed on the terminal block.

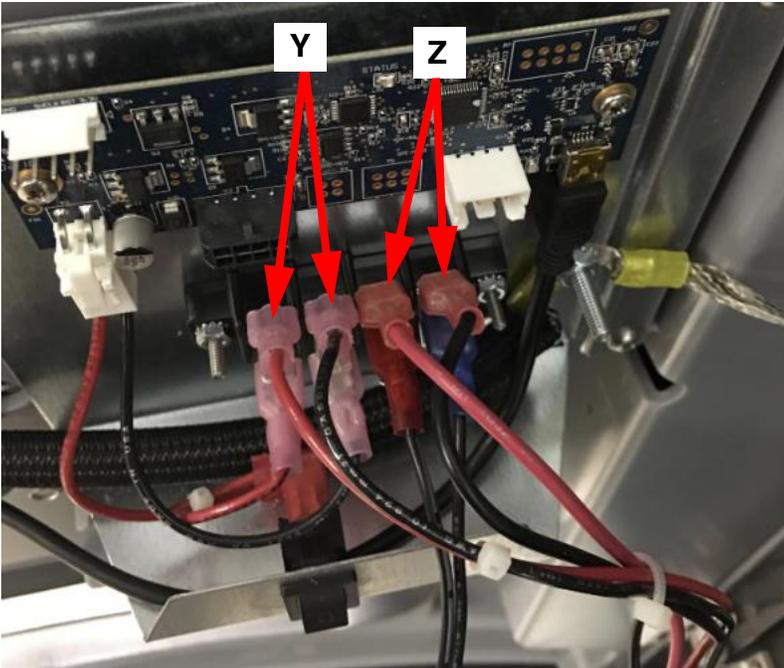


Figure 16

25. Attach ground bond jumper from LX3 mounting plate to display using 8-32 nut supplied.



Figure 17

26. Route and attach the 2nd ground bond jumper from LX3 mounting plate to the ebox ground using 8-32 nut supplied as shown.

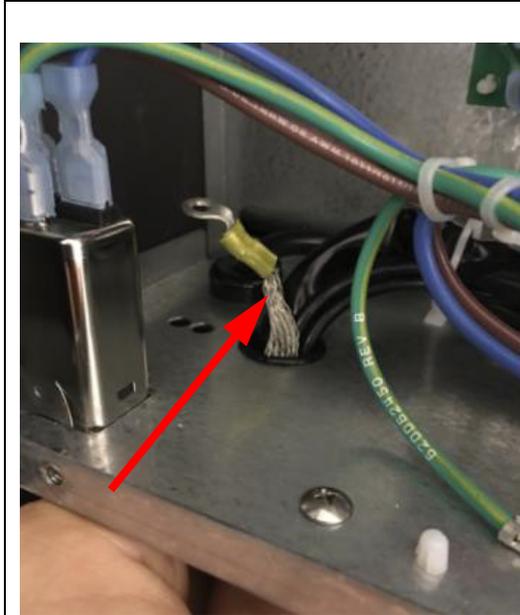


Figure 18

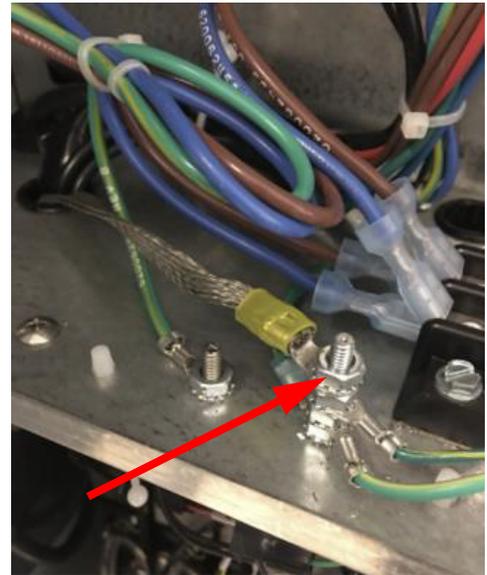


Figure 19

27. Install the (2) adhesive backed LTE antennas, on each side inside the inner door pockets (Figure 20). Use the supplied clips, to secure the antenna cables in place. Be sure the clips ‘snap’ close and that the surfaces on which the antenna and clips are mounting to are clean and free of dirt, oils or foreign matter.



Install inside of inner door pockets.

Antenna cable path

Attach antenna cable her Door lock side antenna-MAIN

Hinge side Antenna- AUX



Figure 20

28. The 'old' modem antenna cable left behind (Figure 20.1) can be coiled up and secured the door service panel or inside the main unit. be sure this cable does not interfere with any other component or unit operation.

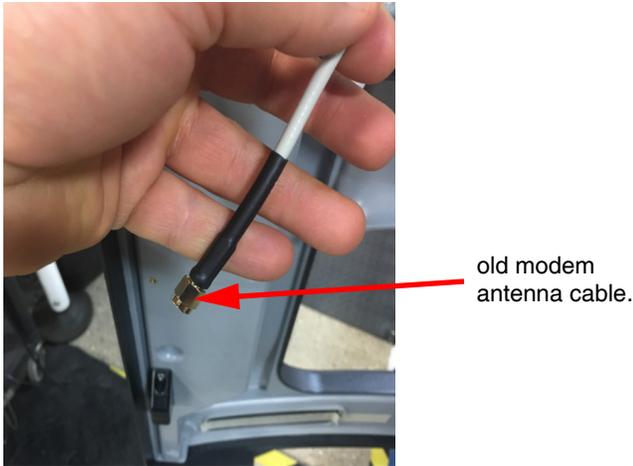


Figure 20.1

29. Route new ADA cable

- a) Remove ADA access cover and disconnect connection shown below.
- b) Coil up upper half of ADA cable so it's out of the way.
- c) Route new cable supplied in the kit down thru the opening until it reaches the ADA board. Carefully pull thru, place over the ADA board and loop down to ADA board connection and pull into the board.
- d) Add ferrite supplied in kit to upper half of new ADA cable (3) times thru ferrite at approx. 3" from the cable end. Close ferrite and be sure a 'snap' is heard to confirm closure.
- e) Old ADA cable can be left as in the unused state. Tape both ends of cable with electrical tape to prevent future use.

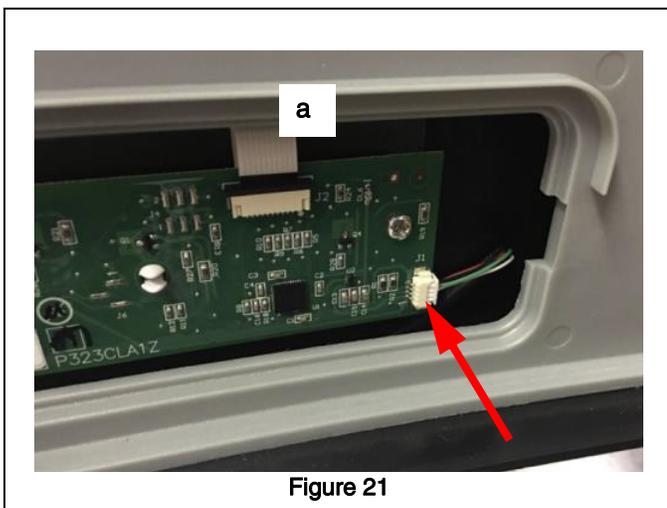


Figure 21

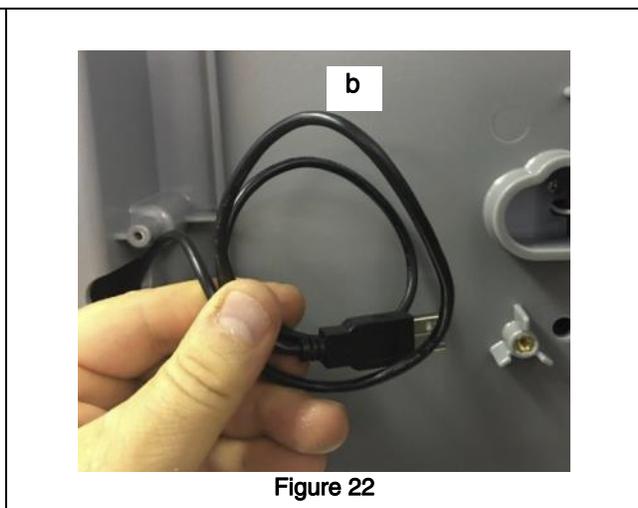


Figure 22

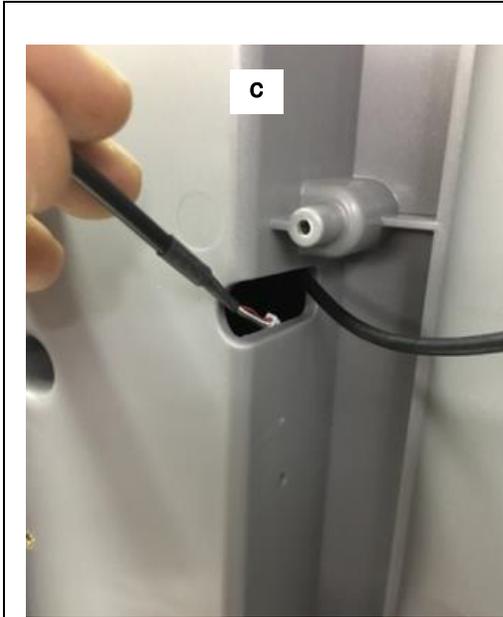


Figure 23

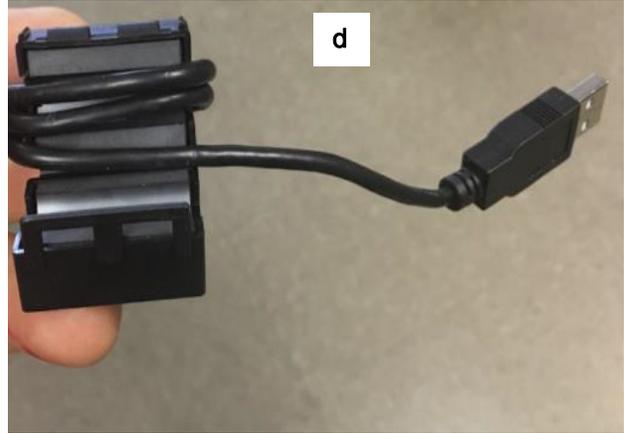


Figure 24

30. Make all the following final connections to the display.

- Power plug.(from terminal block on Lx3 mounting plate)
- USB cable from MFV.
- USB cable from unit.
- Antenna cable from unit.
- ADA USB cable.

Make sure all cables are neatly bundled and wired tied together so that there is no interference with panels or door opening / closure.

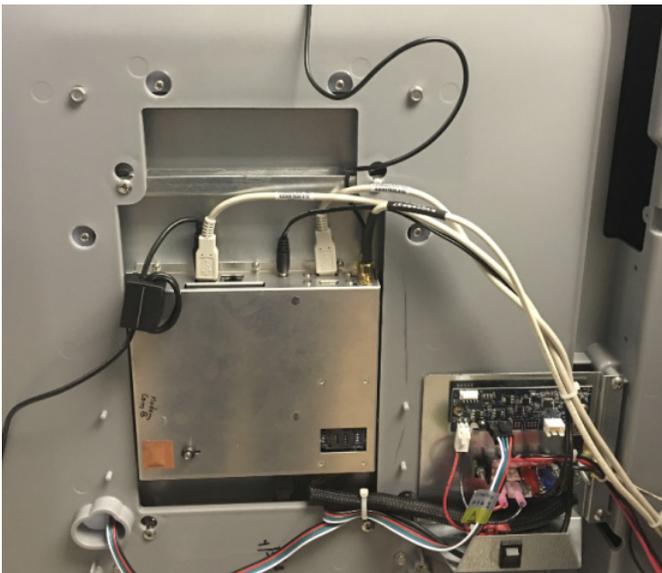


Figure 25

31. Install new door service panel (fasteners are attached to panel) and ebox cover with screws saved from step 6.

NOTE: The wires and cables from door exit thru panel opening. Make sure the door opens / closes properly and that wires are not being pinched.



Figure 26

32. Add new wiring diagram supplied in kit pouch located on back of the ebox cover.

33. Close door and power up unit and check for proper operation.