

iX™ Pay Secure Payment

INSTALLATION

iX Pay (U.S.) Retrofit
Kits for 1/Vista Narrow
Body Dispensers

ONLY SPM CERTIFIED TECHNICIANS
SHOULD INSTALL THIS KIT



DANGER

READ THIS MANUAL BEFORE YOU BEGIN

Dispensers have both electricity and a hazardous, flammable and potentially explosive liquid. Failure to follow the below precautions and the Warning and Caution instructions in this manual may result in serious injury. Follow all rules, codes and laws that apply to your area and installation.

SAFETY PRECAUTIONS - INSTALLATION AND MAINTENANCE

Always make sure ALL power to the dispenser is turned OFF before you open the dispenser cabinet for maintenance. Physically lock, restrict access to, or tag the circuit breakers you turn off when servicing the dispenser. Be sure to trip (close) the emergency valve(s) under the dispenser BEFORE beginning maintenance.

Make sure that you know how to turn OFF power to the dispenser and submersible pumps in an emergency. Have all leaks or defects repaired immediately.

EQUIPMENT PRECAUTIONS

Be sure to bleed all air from product lines of remote dispensers and prime suction pumps before dispensing product, otherwise, damage to the equipment may occur. Always use the approved method for lifting the dispenser. Never lift by the nozzle boot, sheet metal, valance, etc., otherwise equipment damage or personal injury may occur.

HOW TO CONTACT WAYNE

Problems with the installation of this kit should be referred to Wayne Technical Support (1-800-926-3737).

INDICATORS AND NOTATIONS



DANGER

Danger indicates a hazard or unsafe practice which, if not avoided, will result in severe injury or possibly death.



WARNING

Warning indicates a hazard or unsafe practice which, if not avoided, may result in severe injury or possibly death.



CAUTION

Caution indicates a hazard or unsafe practice which, if not avoided, may result in minor injury.

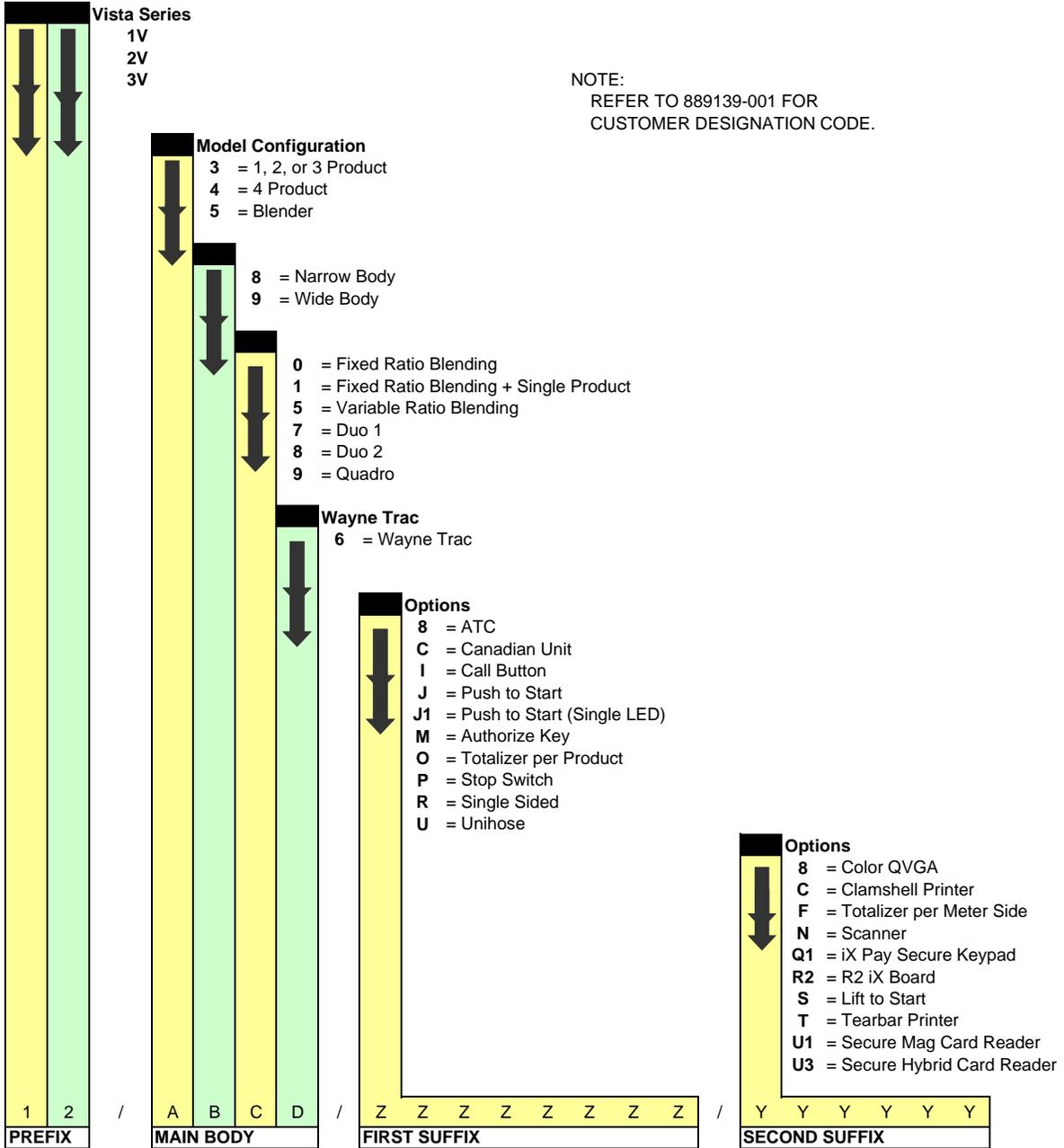
NOTE:

Important information to consider, otherwise, improper installation and/or damage to components may occur.

Secure Payment Kits
for 1/Vista Dispensers (U.S.)

Installation

Vista iX PAY Retrofit Kit
MODEL DESIGNATOR CHART



NOTE:
 REFER TO 889139-001 FOR
 CUSTOMER DESIGNATION CODE.

1 INTRODUCTION

This manual provides instructions for installing the iX™ Pay Secure Payment Retrofit Kits for 1/Vista Narrow Body dispensers. 1V kit part numbers (model numbers) are based on the Kit Model Designation Chart on the previous page and take the format of 1/Vx8xx for narrow body dispensers.

Address questions concerning installation of this kit to Wayne Technical Support at 1-800-926-3737.

1.1 Parts Required

The parts and quantities that are included in each kit are shown on the following pages. Item numbers in Figure 1 are referenced to the list of parts in Table 1.

1.2 Tools Required

Socket/ratchet
Allen wrenches
Screwdrivers, Nut drivers

1.3 Safety Precautions

Before beginning the installation of this kit, block off the work area with safety cones.

NOTE: These retrofit kits may require installation of several wiring and hardware assemblies. Any installation or modification must comply with the requirements of the National Electrical Code (NFPA 70), and NFPA 30 and any other applicable codes.

NFPA 30A states that:

“When maintenance to Class 1 dispensing devices becomes necessary and such maintenance may allow the accidental release or ignition of liquid, the following precautions shall be taken before such maintenance is begun:

- Only persons knowledgeable in performing the required maintenance shall perform the work.
- All electrical power to the dispensing device and pump serving the dispenser shall be shut off at the main electrical disconnect panel.
- The emergency shut-off valve at the dispenser, if installed, shall be closed.
- All vehicle traffic and unauthorized persons shall be prevented from coming within 20 ft.(6 m) of the dispensing device. ”



WARNING

Electric shock hazard! More than one disconnect switch may be required to de-energize the dispenser for maintenance and servicing. Use a voltmeter to make sure ALL circuits in the dispenser are de-energized. Failure to do so may result in serious injury.

Lockout/Tagout requirements of the U. S. Dept. of Labor, Occupational Safety and Health Administration (OSHA) may also apply. Refer to Title 29, Part 1910 of the Code of Federal Regulations (29CFR1910), *Control of Hazardous Energy Source (Lockout/Tagout)*.

1. Reprinted with permission from NFPA 30A-90, *Automotive and Marine Service Station Codes*, Copyright ©1990, National Fire Protection Association, Quincy MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association on the referenced subject, which is represented only by the standard in its entirety.

Prior to installation, inspect the kit and ensure that it contains all the required parts as listed in Table 1.

Table 1 Parts Included in the Kit

Part Number	Description	Kit Qty Dual Sided Narrow - for Models 1/Vx8xx	Kit Qty Single Sided Narrow - for Models 1/Vx8xx	Item No.
	1V Narr SPM Elect Head Assy	1	1	1
891687-001	Printer, DW-10	2	1	2 p/o item 1
889784-001	Printer Gasket	2	1	3 p/o item 2
5057301	Cable Holder	4	2	4
001-916486-	Cable Ties	6	6	5
000-918210-	1/4-20 Nuts	6	6	6
888413-001	1/4-20 Washers	6	6	7 not shown
888352-001	Plastic Rivets	8	4	8
882941-xxx	Soft Key Blank Covers	2	1	9 not shown
888717-002	Octane Labels	1	1	10
000-940060-	Installation Manual	1	1	11



FIGURE 1 PARTS IN THE KIT.

2 INSTALLATION Note: Adhere to the safety precautions listed in Section 1.3

WARNING: DO NOT USE POWER TOOLS WHEN WORKING IN THE HAZARDOUS ZONE.

2.1 Installation Instructions For 1/V Narrow Body

During installation of this kit, the existing electronics head frame enclosure will be removed from the vapor barrier and the new head assembly installed. New DW-10 printers and a new heater/fan are supplied pre-installed. The existing DEMs, EMI filters and totalizers are transferred to the new head enclosure.

1. Turn off power to the dispenser at the circuit breaker.
2. On both sides of dispenser:
 - A. Lower the ad panel, unlock and lower the bezels. Figure 2.
 - B. Disconnect all cables from the bezels. Figure 3.
 - C. Set bezels aside for now for reusing the display glass and bracket.
 - D. If present, remove and discard drip tray from head chassis.
 - E. If totalizers are present, disconnect the cables from totalizers and remove and save the totalizers. Discard bracket and screws.
3. Loosen two flathead screws securing the DEM to the head frame and lower the DEM. The two screws are located above the DEM. Repeat on side 2.
4. Disconnect control power and light power wires coming from the vapor barrier potted fitting.
5. Disconnect all ground wires attached to the head frame. Save the screws and nuts.

Note: When disconnecting cables during the following steps, it is recommended to mark the connectors for easier re-connection - the AC connectors in particular - when the new head is installed.

6. Reference Figure 4 (Side 1) and perform the following:
 - A. On the sides of the DEM, disconnect all cables, AC power and ground wires that go into the head.
 - B. Disconnect the 2-pin cable labeled V-Cap from lower right side of DEM.
 - C. Disconnect all cables from the solenoid drive board.
 - D. Disconnect all cables from the Duplex computer that go into the head, including J14 annunciator cable that goes to side 2 annunciator if present.

E. Mark for reuse the 880565-002 cable that connected to the computer J5. This cable goes over to the cash/credit board J2 on side 2.

If the cable is bundled with the large power harness it can be separated later as the bundled harness can be left attached to the head for now. If it is not part of the bundled harness, remove and save the cable when disconnected from side 2.

F. On the Duplex computer, disconnect C/C cable J4, AC power J3, and annunciator J13 and loosen the two side screws on the DEM. Raise the Duplex computer to gain access to the cash/credit board.

G. Disconnect and discard the long PTS cable 881693-001 that connects to the C/C board J4 and J5. The PTS cable from the new bezel has an adapter cable 887047-001 attached that connects to C/C board J4 and J5.

H. Disconnect and discard totalizer cable if present that connects to J7.

I. Disconnect 5V DC cable that connects to J10.

J. Lower the Duplex computer and secure side screws.

K. Remove DEM and set aside for now.

7. Reference Figure 5 (Side 2) and perform the following:

A. On the sides of the DEM, disconnect all cables, AC power and ground wires that go into the head.

B. Disconnect all cables (white cable harness) from power supply board that go into the head. The harness will be reused for the printers, but it can be removed from the head later.

C. Loosen side screw and raise power supply.

D. Disconnect and save the cable connected to cash/credit board J2 as noted in previous step 6E.

E. Disconnect all other cables from the cash/credit board that go into the head.

F. Lower the power supply and secure side screw.

G. Remove DEM from head frame and set aside for now.

8. Disconnect and mark/label the two AC power connectors from the heater/fan assembly.

9. Remove and save screws/nuts securing the EMI filters to the head chassis. Leave filters on top of the vapor barrier.
10. Cut the cable ties securing the white power harness to the frame then remove and save the harness. The harness is shown in Figure 7 after the head is removed. This will be used for printer power. Cut cable ties and remove and discard the RS-485 cable and any other cables attached to the harness. Since the two power connectors that went to the old CAT boards will not be used, bundle and tape the harness near the unused connectors, Figure 9, then set the harness aside for now.
11. Group and bundle wires from the main potted fitting, and place in center of vapor barrier. Figure 7 shows the wires and cables after the head is removed.
12. Remove and save the (4) screws, as necessary, on inter columns above the head to allow for clearance when lifting the head.
13. Remove and discard (4) hex head nuts and washers on both sides of head frame and lift head frame up and out of the dispenser, Figure 6.
14. Clean top of vapor barrier, Figure 7.
15. Install new head frame enclosure as follows:
 - A. Open all doors on the new bezel. Side 1 of the dispenser is the side with the model/serial number plate at the bottom of the dispenser. Side 1 and side 2 of the new head frame are labeled.
 - B. Matching the sides, install new head frame enclosure onto dispenser studs and secure using (4) nuts (-918210-) and washers (888413-001) on both sides of head frame. Figure 8.
16. Re-install the (4) screws, if removed, on inter columns above the head.
17. Connect the white power cables (saved previously in step 10) to the printers. Figures 9 and 10.
18. Reinstall the EMI filters reusing the hardware saved previously. The filters are installed on the printer bracket as shown in Figure 11.
19. Reinstall DEM/computer on side 1, and reinstall DEM/power supply on side 2. Also, loosen screws on sides of DEM to gain access to bottom of DEM.

Refer to Figures 4 and 5 for connector numbers and descriptions and reconnect wires/cables in the following steps:

20. Locate the AC Y cable (WU002879-0001) on the new pre-installed heater/fan and connect AC connector on side of DEM then connect the existing AC connector (marked/ labeled from the old heater fan) to the Y cable.
21. Reconnect the 2-pin cable labeled V-Cap from lower right side of DEM.
22. Reconnect AC power connectors to the sides of both DEMs, and secure green wire ground to chassis.
23. Connect the white printer power cables to J5 and J6 on power supply board on side 2 DEM, Figure 5.
24. Locate AC Y cable (WU001942-0001) on the new power supply and connect it to the cash credit board J3. (First remove AC cable at J3 connector, connect Y cable and reconnect AC cable to Y cable.)
25. Reconnect cables to computer and solenoid drive board, as shown in Figure 4.
26. Reconnect the 880565-002 cable saved previously to the computer J5 and to side 2 cash/credit board J2.
27. From the bezel, Figure 12, PTS harness/adaptor cable 887047-001, connect the black cable to the cash credit board J4 and connect the white cable to J5. Route wires under the printer bracket and through the bottom to the DEM.
28. If present, install previously saved totalizers on the right bezel bracket using plastic rivets (888352-001) and connect the totalizer cable (883579-007) supplied with the new bezel, to the totalizers and to the cash credit board J7. Route wires into head under the printer bracket and through the bottom to the DEM.
29. Reconnect all ground wires to head frame.
30. IF BLUE BOARD - From the vapor barrier potted fitted, connect the RS485 cable to the RS485 Y connector that goes to both iX boards, Figure 12.

IF R2 (RED) BOARD - From the vapor barrier potted fitted, connect the RS485 cable to the RS485 Y connector that goes to the iX board, Figure 12
31. Reconnect control power and light power inside the electronic head.
32. Bundle and tie wrap all cables where possible, using Holder (5057301) and Cable Ties (001-916486-). Route wires away from sharp edges and ensure cables are not pinched.
33. Ensure all ground wires inside the head are secured to the chassis.

34. Secure the Duplex computer assembly to the DEM, connect sides 1 and 2 annunciators to J13 and J14 on the Duplex computer, reconnect J4 and AC power J3. Unscrew the cover on the existing annunciators insert into the holes (or slots) in printer bracket and resecure cover, Figure 11.
35. Raise DEM and secure in the up position.
36. Ensure all cables are inside the head and clear of bezel doors.
37. Close and lock bezel door on both sides.
38. If POS does not use the softkeys on the QVGA display, cover the keys with 882941-xxx Soft Key Blank Covers.
39. Turn power on to the dispenser.
40. Verify SPM and dispenser operation. Note: Printers should be preset at factory to 115K baud. Refer to Startup and Service manual 940014 for starting up the SPM.

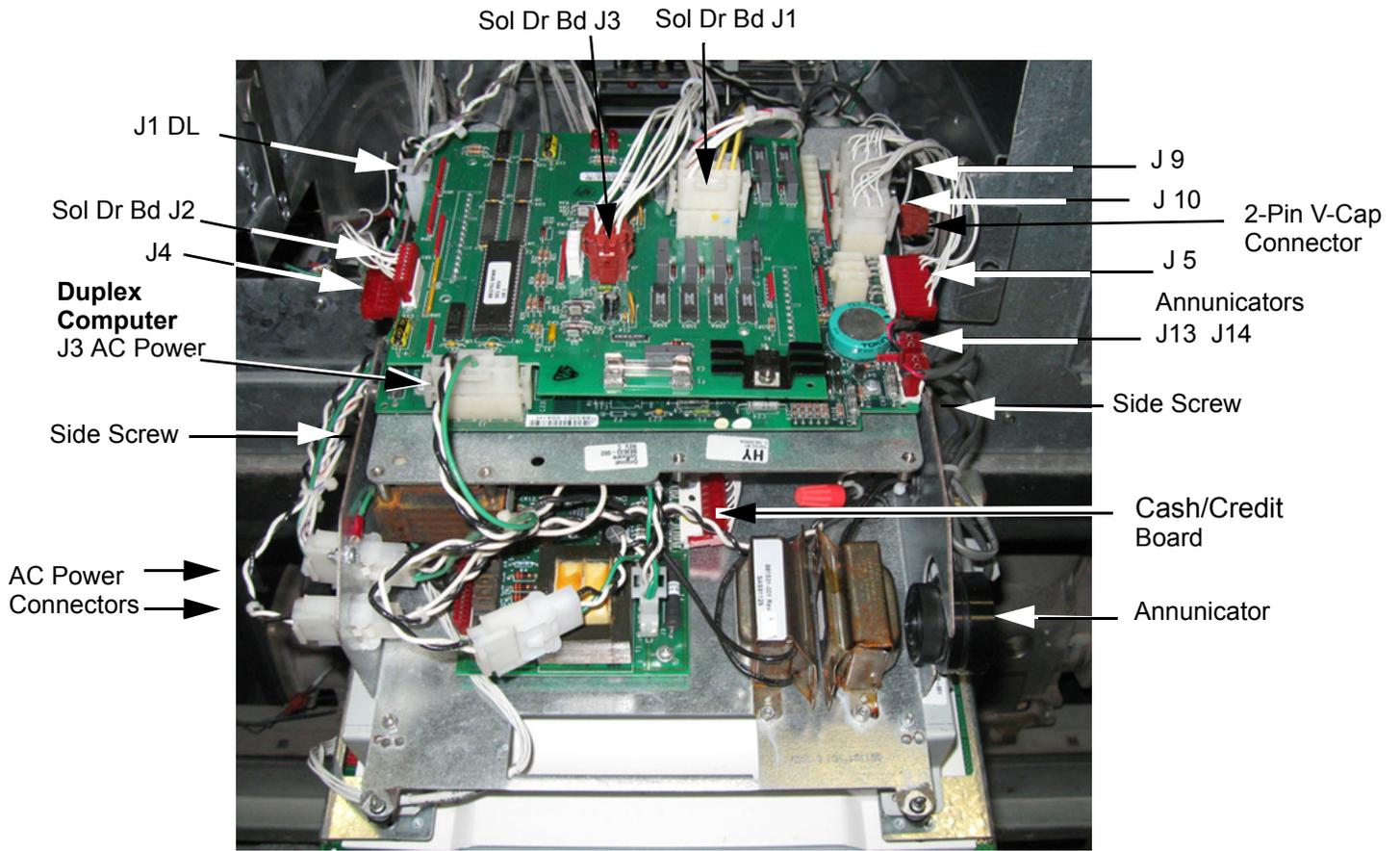


FIGURE 2

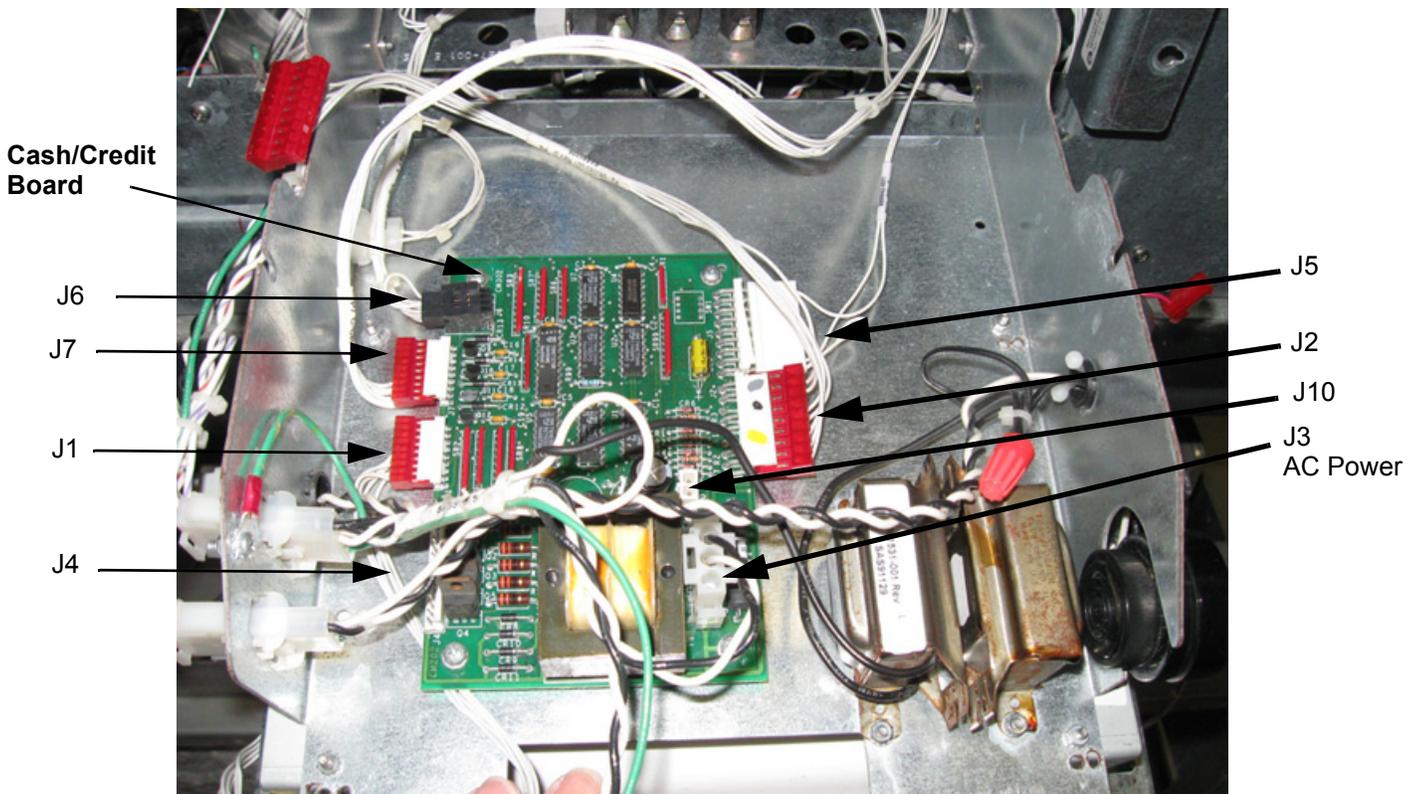


All cables from bezel are removed, including the long PTS cable to the C/c Bd J4 & J5. A new cable is supplied with new bezel.

FIGURE 3



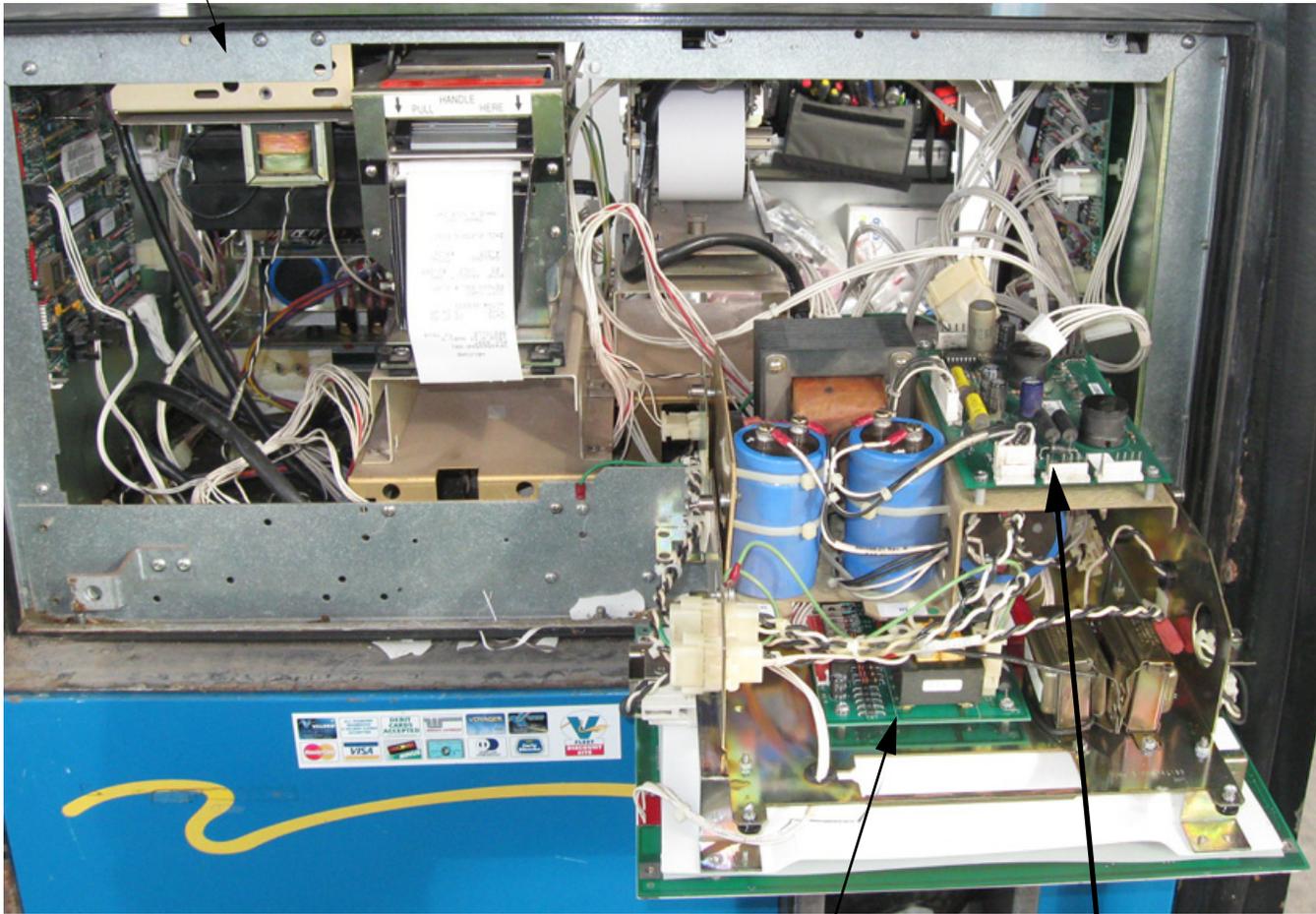
A



B

FIGURE 4 SIDE 1

Heater/Fan Ass'y



Cash/Credit Board

Power Supply Board

FIGURE 5 SIDE 2



FIGURE 6 Remove head

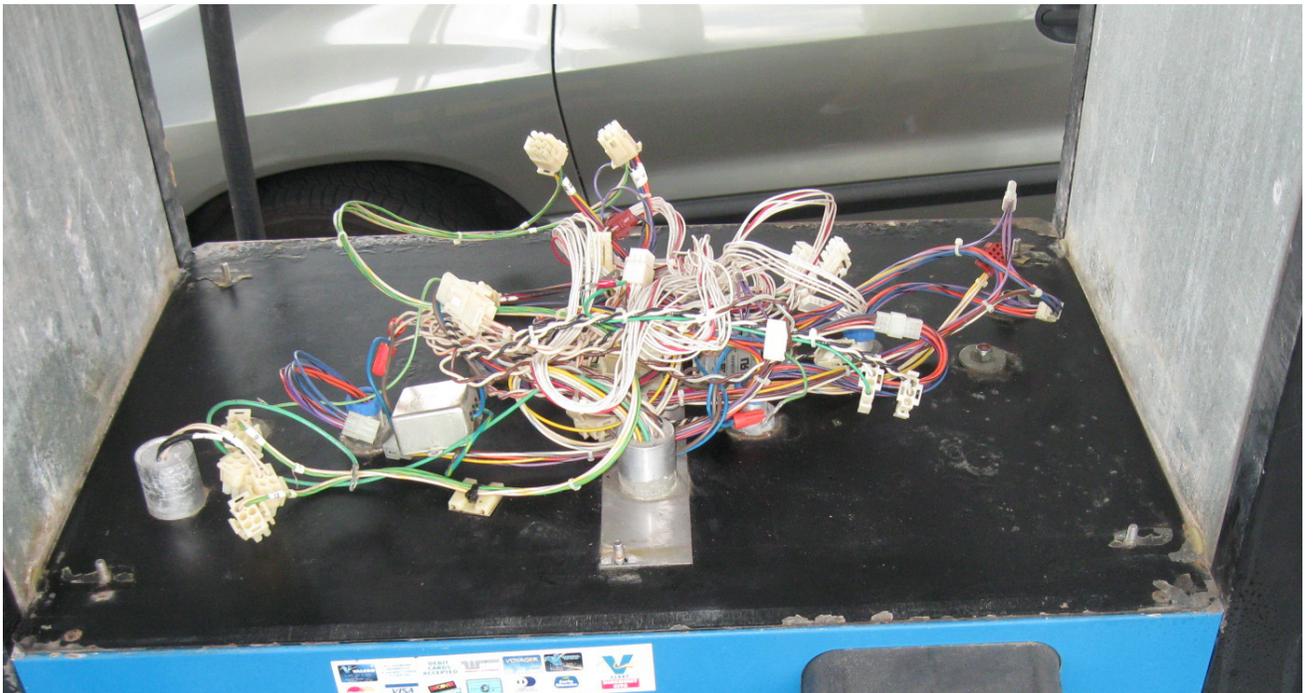


FIGURE 7

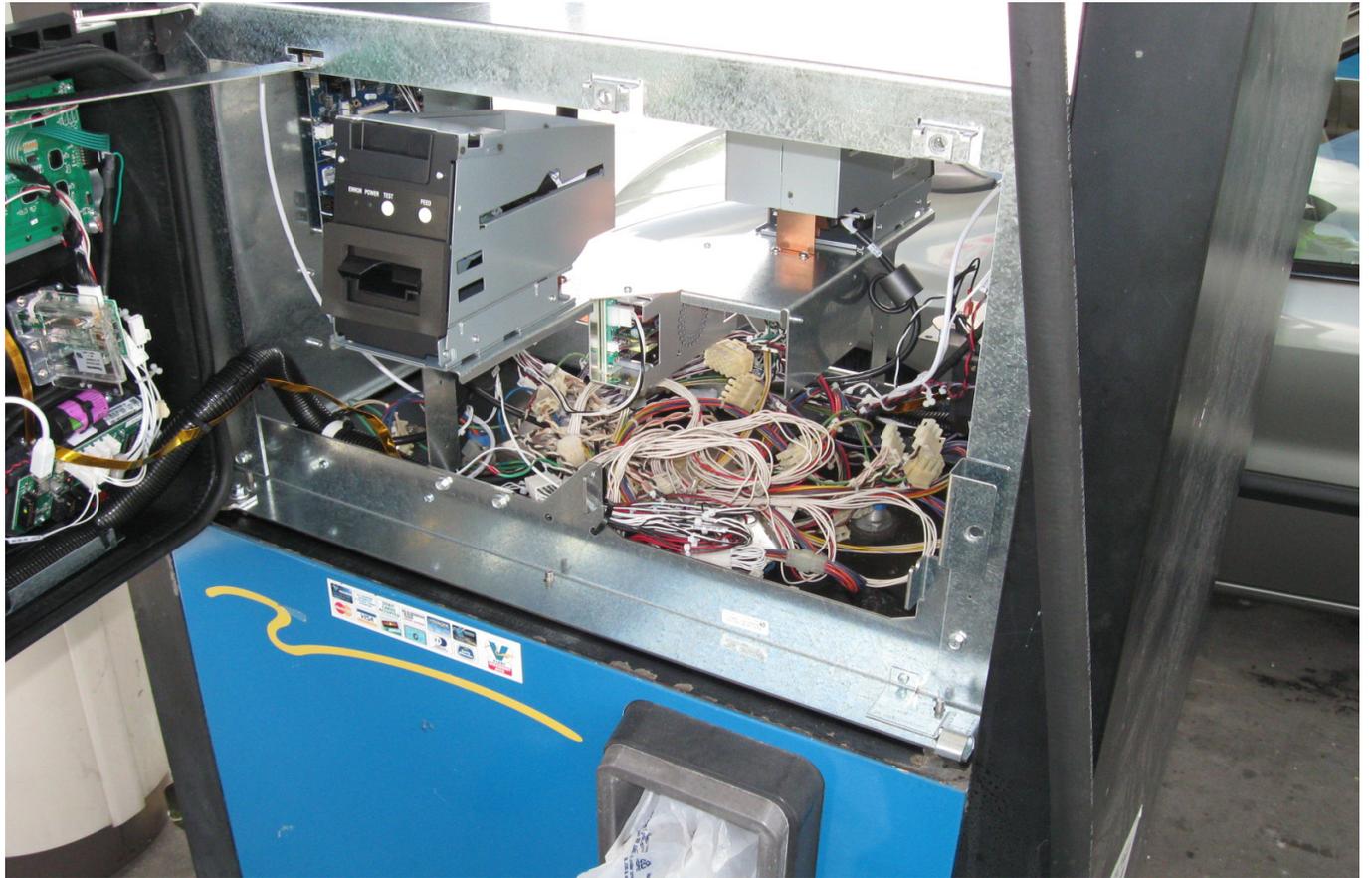


FIGURE 8

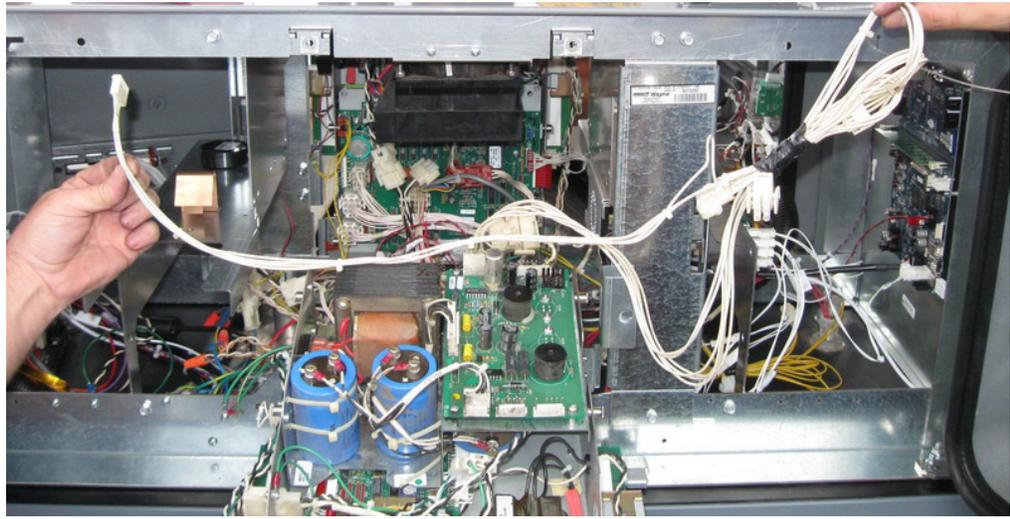
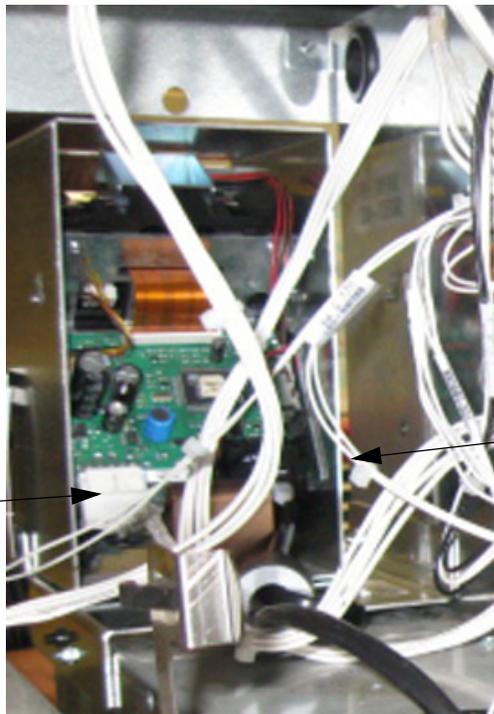


FIGURE 9



Power

Data

Printer

FIGURE 10

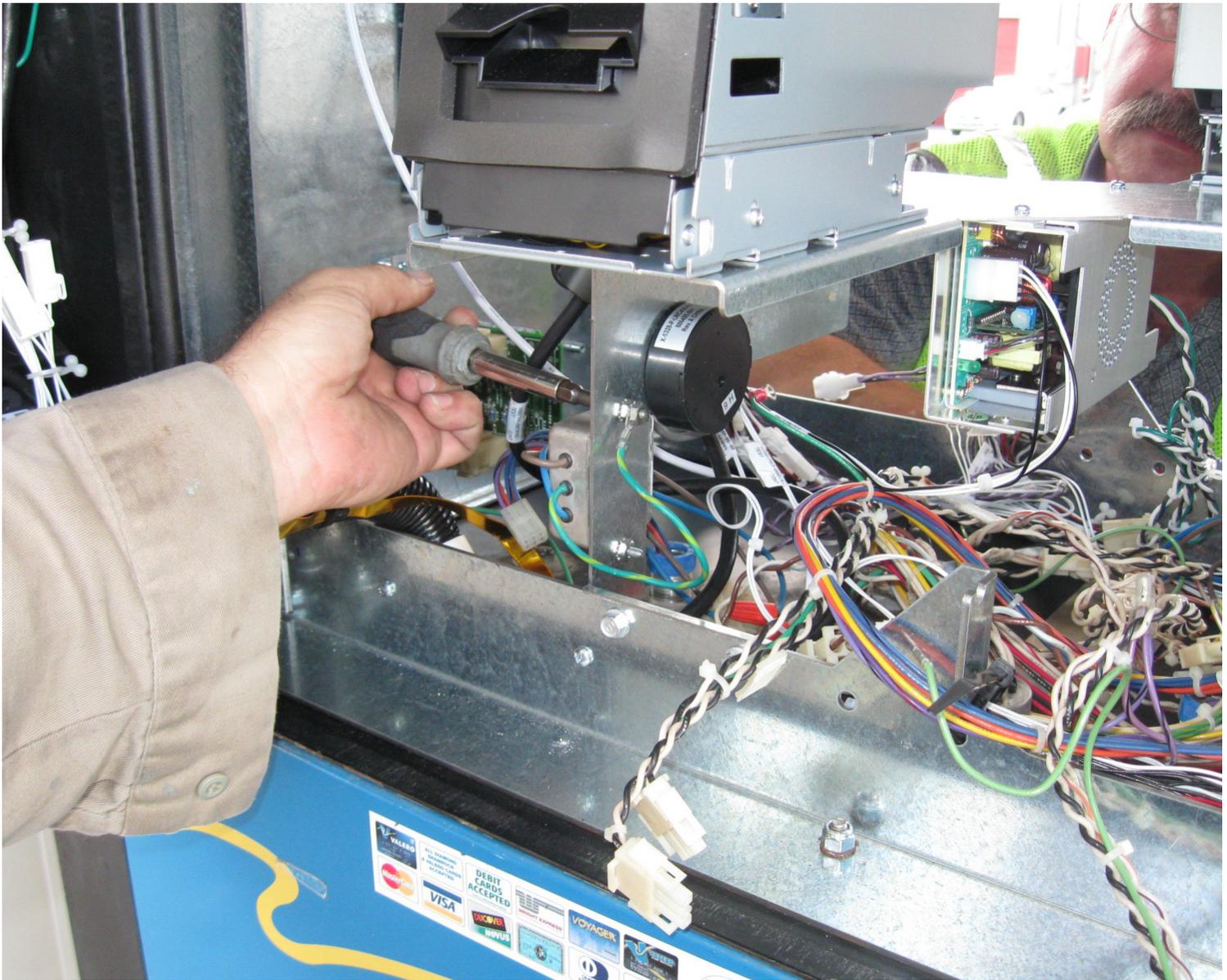
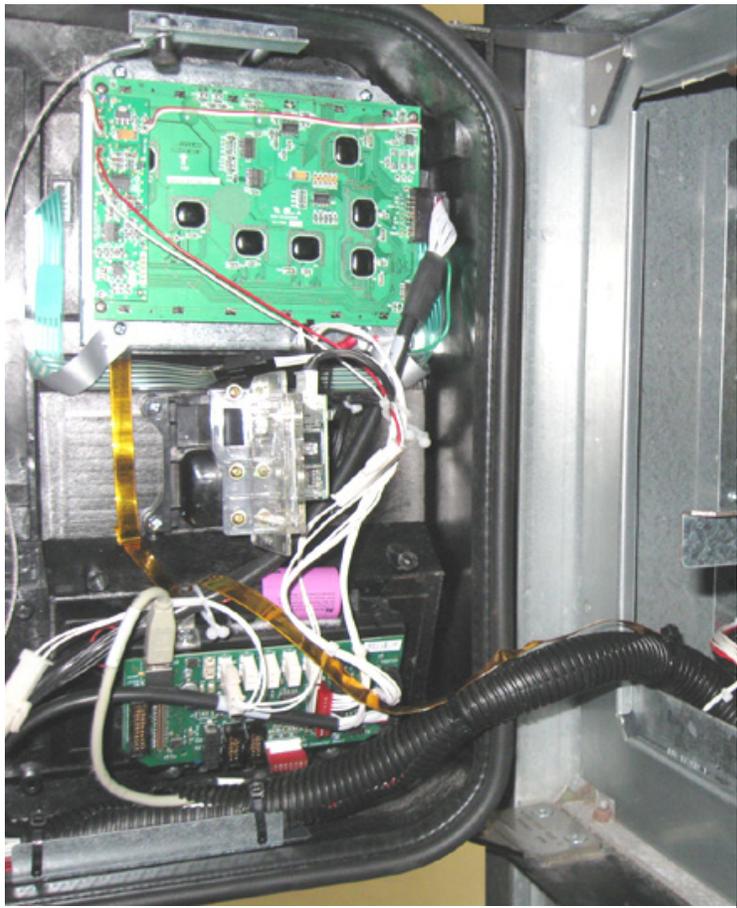
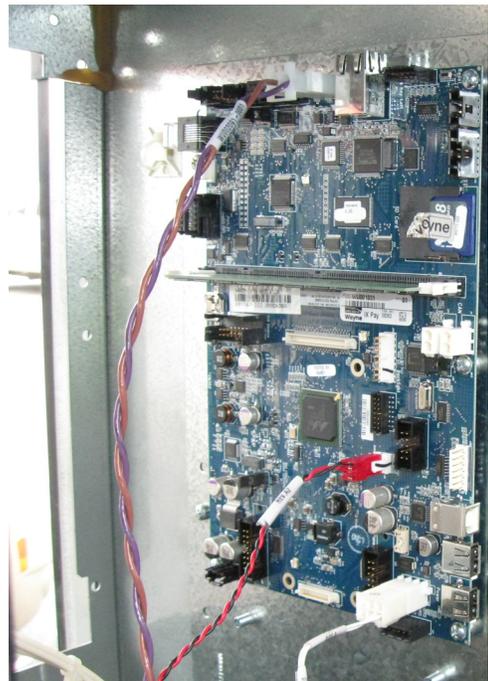


FIGURE 11



Bezel Harness

iX R2 Installed



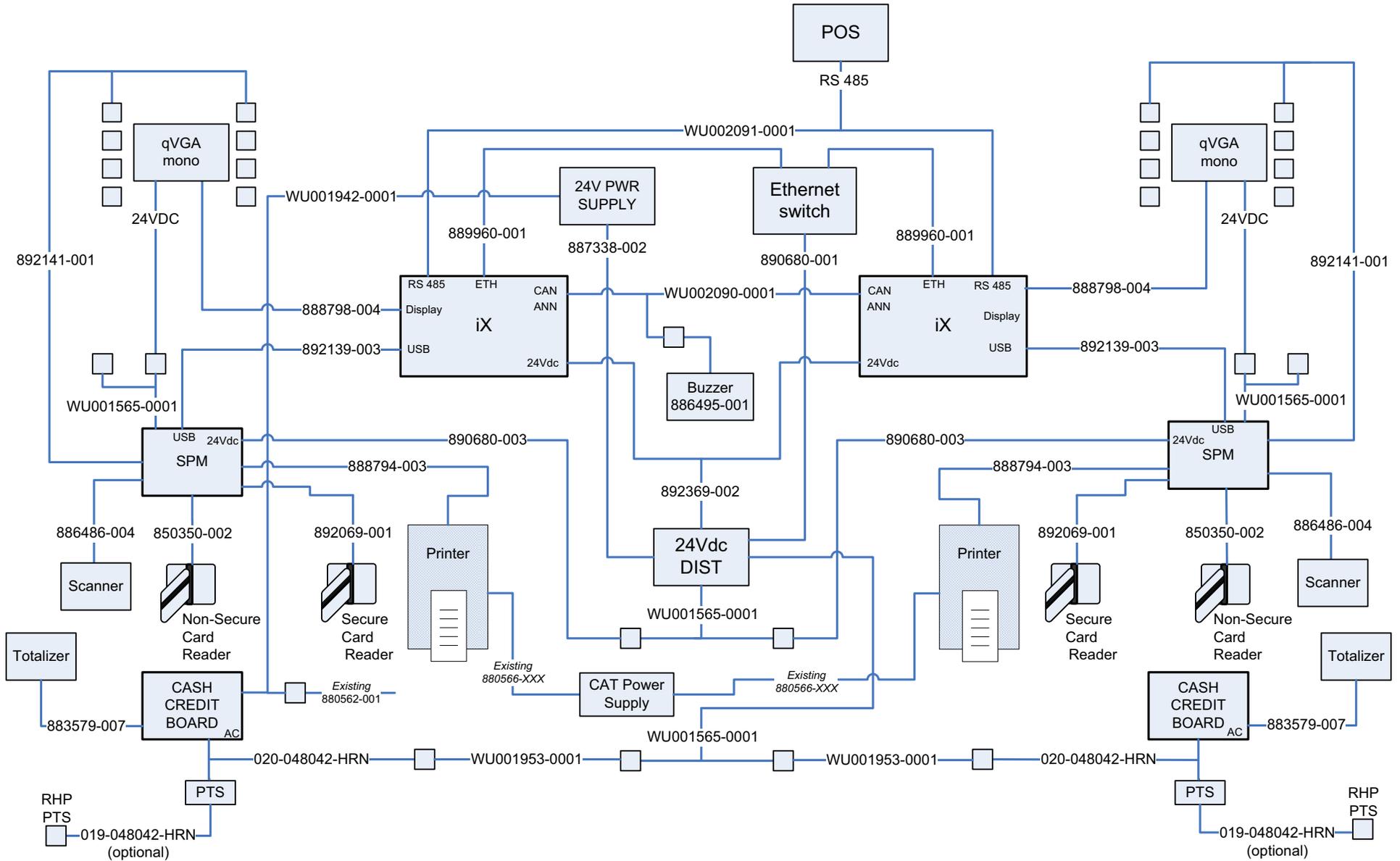
iX Board cables will be pre-installed in the kit

FIGURE 12

1 Vista SPM Retrofit Wiring Diagram

SIDE 1

SIDE 2



INSTALLATION MANUAL

SPM Retrofit Kits for 1/V Dispensers

Written by S. G. Martin

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