

iX™ Pay Secure Payment

# INSTALLATION

iX Pay (U.S.) Retrofit  
Kit for Tokheim Premier B  
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:**

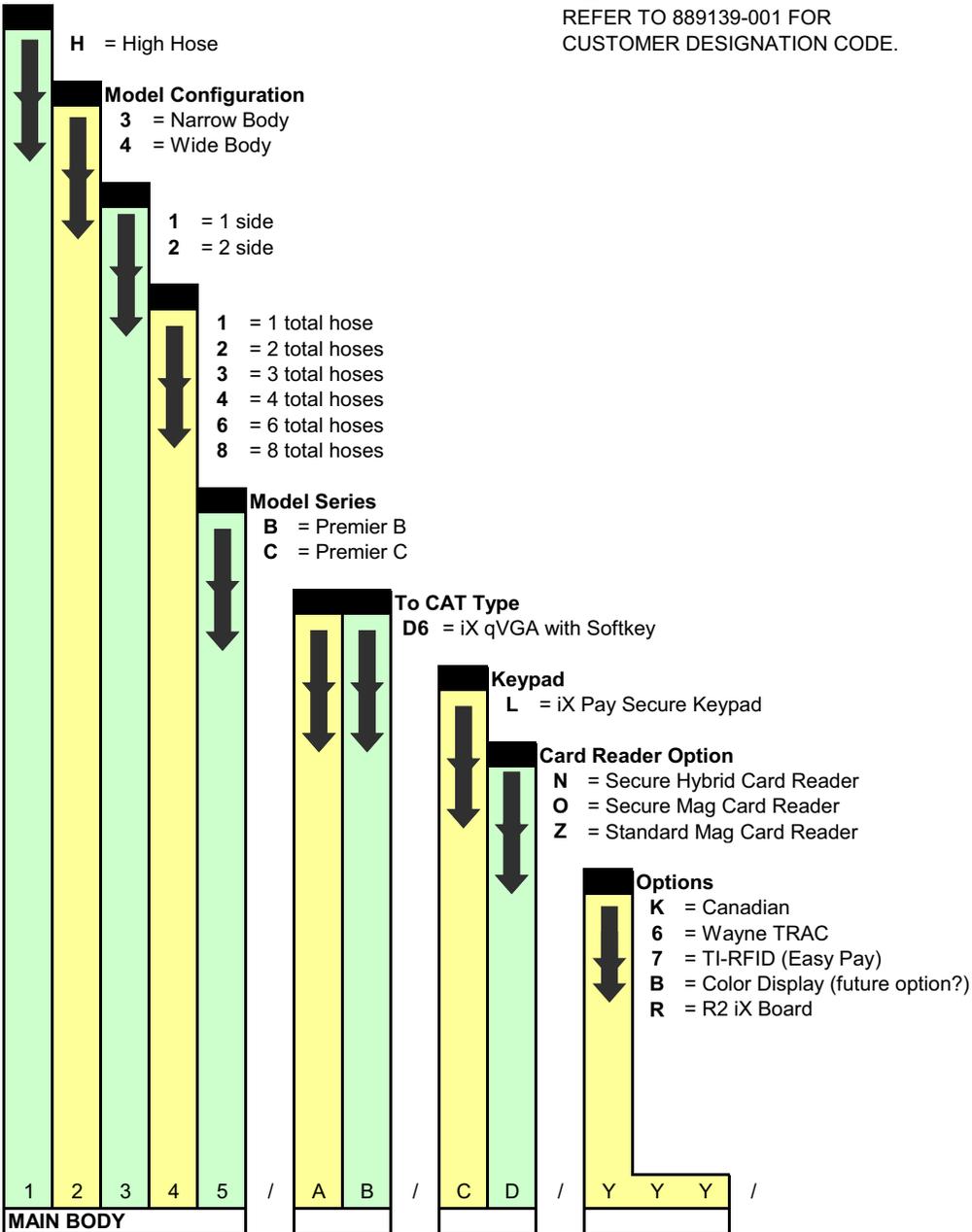
Important information to consider, otherwise, improper installation and/or damage to components may occur.

Secure Payment (SPM) (U.S.) Kits  
for Tokheim Premier B  
Narrow Body Dispensers

# Installation

Premier 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 Kit in Tokheim Premier B (Narrow Body) dispensers. The kits will be configured at the time of order based on the type of dispenser to be retrofitted as defined by the Kit Model Designation Chart on the previous page. The kit part numbers (model numbers) will be in the format 12345/AB/CD/YYY as defined by the chart. This manual applies to kit models x3xxB/ where 3 represents narrow body and B represents Premier B.

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.

## 1.2 Tools Required

Wire strippers	Crimp tool
Metal file	Non-sparking hole punch
Allen wrenches	Socket 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)*.

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**SEE PARTS LIST FOR QUANTITIES SUPPLIED**

**FIGURE 1 PREMIER B NARROW BODY PARTS.**



Non-sparking hole punch. Shown here for example only.  
 Not provided in kit.  
 See Tools Required

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

**Table 1 Parts Included in the Narrow Kit**

Part Number	Description	Qty for Dual Sided	Qty for Single Sided	Item No.
WU001604	iX Pay Secure Payment Door/Bezel ass'y	2	1	1
WU002020-0001	iX Bracket	2	1	2
WU001031	Secure iX Board Assembly (Blue)	2	1	3 part of item 2
WU003096	Secure iX R2 Board Assembly (Red)	2	1	3 part of item 2
887223-001	DC Distribution Board	1	1	4 part of item 2
882505-002	#6 Nylon Standoffs	13	8	5 part of item 2
6005901	#6 Screws 3/8	3	2	6 part of item 2
892369-002	Y Power cable - DC Dist to ea iX Board	1	1	7
WU002265-0001	Power cable - Tok Power Supply to DC Dist	1	1	8
WU002090-0001	Annunciator Y Cable	1	1	9
886495-001	Annunciator	1	1	10
WU002266-0001	Cable Data Link (RS485) - short splice cable	1	1	11
WU002091-0001	Cable Data Link (RS485) - long Y cable	1	1	12
4050401	Crimp Wire Connectors	2	2	13
001-916486-	Cable Ties	10	5	14
000-918210-	1/4-20 Nut	8	4	15
000-131445-	Nylon Washer/Spacer	4	2	16
000-913632-	#10 Star Washer for gold gnd strap	2	1	17 not shown
WU002069-0001	Top Cover Bracket/Frame	1	1	18
WU002008-0001	Extension Door Enclosure	2	1	19
69-55392	1/4-20 Sheet Metal Screw	8	4	20
001-132708	1/4-20 Alum Washer for sheet metal screws	4	2	21 not shown
WU002583-0001	Template for punching holes	1	1	22
000-940044-001	Installation Manual	1	1	23 not shown



Printer  
Door

Graphics  
Display/Keypad  
Door

Sales Display Door

**Premier B Narrow Body Head Before Installation of 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.**  
Turn off power to dispenser at circuit breaker inside the building before starting this procedure.

### 2.1 Installation Instructions For Tokheim Premier B Narrow Body

A typical Premier B Narrow Body Head Before Installation of Kit is shown on the previous page.

1. Turn power off at the circuit breaker.
2. Unlock printer door, disconnect cables, and remove and discard printer door. Fig 2.
3. Release latch at top of graphics display/keypad door and slide out to gain access to cables. Disconnect cables, remove and discard door. Fig 3.
4. Pull latch at the top of sales display door, lower and remove door.
5. Loosen (2) screws at the top of sales display and lower display. Fig 4.
6. Disconnect AC cable at J8 on AC Power Dist board. Fig 5.
7. Remove (2) clips and remove small striking plate at top of graphics display/keypad door frame and at top of printer door frame. Discard all the parts. Fig 6.
8. A. Remove gasket between printer door frame and display/keypad door frame.  
See Fig 7 and Fig 8.  
B. Use a non-sparking hole punch to cut across bottom and then top of the existing bracket, and remove the section of bracket.  
Ensure that metal punches are carefully removed and none are allowed to enter the electronic head.
9. Use a metal file to file down the sharp edges on the remaining sheet metal bracket. See Fig 9. Be sure to use a cloth or other material to capture and remove metal filings from the electronic head.
10. Using the metal template provided, align the two holes at right end of template with the two holes on the head frame, then mark the location for one new hole at top left end of template and one new hole at bottom left end of template. Fig 10.
11. Using the hole punch, punch the two holes as marked above for mounting the new SPM secure payment door.

12. Disconnect cables as necessary from the DPT board, then remove the DPT bracket by removing the (4) screws. Save screws. Fig 11.
13. With the exception of step 6, repeat steps 2 - 12 on opposite side.
14. Untie wrap and discard all cables that were disconnected from the DPTs and all cables disconnected from the printer doors, including cables to J16 and J17 on motherboard Fig 12 and cable to J3 on the DC Power Supply Fig 13. (Do not remove the RS-485 cables.)
15. IF BLUE BOARD - Install (1) iX Bracket onto the bottom rails in the head reusing (2) of the existing screws saved from the old bracket or using (2) new 1/4-20 sheet metal screws (69-55392).

Note: The iX bracket **without** the DC Dist board will be installed closest to the existing power supply. Fig 14.

IF R2 (RED) BOARD - Install (1) iX Bracket onto the bottom rails in the head reusing (2) of the existing screws saved from the old bracket or using (2) new 1/4-20 sheet metal screws (69-55392).

16. **FOR BLUE BOARD ONLY** - Repeat above step 15 on opposite side.
17. Place the Top Cover Frame (WU002069-0001) on top of the electronics head. Fig 14.
18. Install the Extension Door Frame (WU002008-0001) onto the left side of the head chassis and secure the frame to the chassis with (4) 1/4-20 Nuts (000-918210-) on back of the frame. Fig 15.
19. Secure the top cover frame to the extension door frame using (2) 1/4-20 Sheet Metal Screws (69-55392) and (2) 1/4-20 Washers (001-132708).
20. Install (2) new Nylon Washers (000-131445-) on the lower pin on the extension door frame.
21. Install (1) SPM Secure Payment Door assembly (WU001604) onto the extension door frame placing the bottom of SPM door onto the ad panel pin first, then fold back gasket in upper right corner and insert upper pin. Fig 16. Return gasket to its original position.
22. On the SPM assembly, for Clamshell printers, verify that the bottom jumper is removed for 115K baud rate operation, and then from the SPM assembly, connect the cables as follows:
  - A. Secure gold-colored ground strap to the inside chassis using (1) #10 Washer 000-913632 and the existing nut on chassis.

B. IF BLUE BOARD - QVGA Cable (888798-004) to the iX board J20 (Port 1).

IF R2 (RED) BOARD - QVGA cable (888798-004) to the iX board J24 for Side A and J23 for Side B.

C. IF BLUE BOARD - USB cable (892139-003) to the "USB 1" connector on the iX Board.

IF R2 (RED) BOARD - USB cable (892139-003) to iX Board J27 for Side A and J28 for Side B.

D. Printer power cable to the 6-pin Printer #1 connector on the DC Dist board.

E. SPM 2-pin Power cable (890680-003) to any of the 2-pin connectors on the DC Dist board.

23. Repeat above Steps 18 - 22 on opposite side.

24. IF BLUE BOARD - Connect Y-jumper Power Cable (892369-002) to any of the spare 2-pin connectors on the 24V DC Dist Board and to both iX boards (6-pin Power). The longer side of the Y-cable is routed to the iX board furthest from the DC Dist board.

IF R2 (RED) BOARD - Connect Y-jumper Power Cable (892369-002) to any of the spare 2-pin connectors on the 24V DC Dist Board and to iX board J11 (6-pin Power).

25. Connect DC Power cable (WU002265-000) to J3 on the Power supply and to J1 on the DC Dist board.

26. IF BLUE BOARD - Connect RS485 Y cable (WU002091-0001) to iX board (J19) and connect the other end to the new (WU002266-0001) RS485 short cable.

IF R2 (RED) BOARD - Connect RS485 Y cable (WU002091-0001) to both iX boards (J17 Port #3) and connect the other end to the new (WU002266-0001) RS485 short cable

27. Locate the existing RS485 3-pin connector (Green, Brown and Orange wires) shown in Fig 17. Cut these wires from the connector and discard connector.

Strip the Brown and Orange wires.

Use Crimp Connectors (4050401) and crimp the Brown wire to the WU002266-0001 Brown wire and crimp the Orange wire to the WU002266-0001 Violet wire. Tape the end of the unused Green wire.

(RS485+) Brown wire to Brown wire.

(RS485-) Orange wire to Violet wire.

28. Install the new Annunciator (886495-001) onto the iX bracket by removing the ring from top of annunciator, placing the annunciator through the opening in the bracket and securing in place by reinstalling the ring.
29. IF BLUE BOARD - Connect Annunciator Y cable (WU002090-0001) to the Annunciator and to both iX boards J18 Annunciator connector located in the lower center of the board.  
  
IF R2 (RED) BOARD - Connect Annunciator Y cable (WU002090-0001) to the Annunciator and to iX board J5 Annunciator connector located in the lower center of the board.
30. Bundle all cables where possible, using Cable Ties (001-916486-). Ensure all cables are routed away from sharp edges and are clear of any doors.
31. Reconnect AC power to the AC Dist board J8.
32. Close display and re-secure with two screws. Replace display cover and secure in place with latch. Close and lock SPM door. See completed side installation Fig18 . Repeat this step on opposite side.
33. Turn circuit breaker on to the dispenser.
34. Follow the procedures in the SPM Startup manual (940014) to test and place the SPM into operation. Verify SPM and dispenser operation.

Note: Printer should be set to 115K Baud Rate. If printer does not print configuration report, check jumpers on back of the Clamshell printer. The top jumper should be across the two pins and the bottom jumper moved to the left (not across the pins).

Note: See service memo SM09-02 for Verifone POS settings.



FIGURE 2

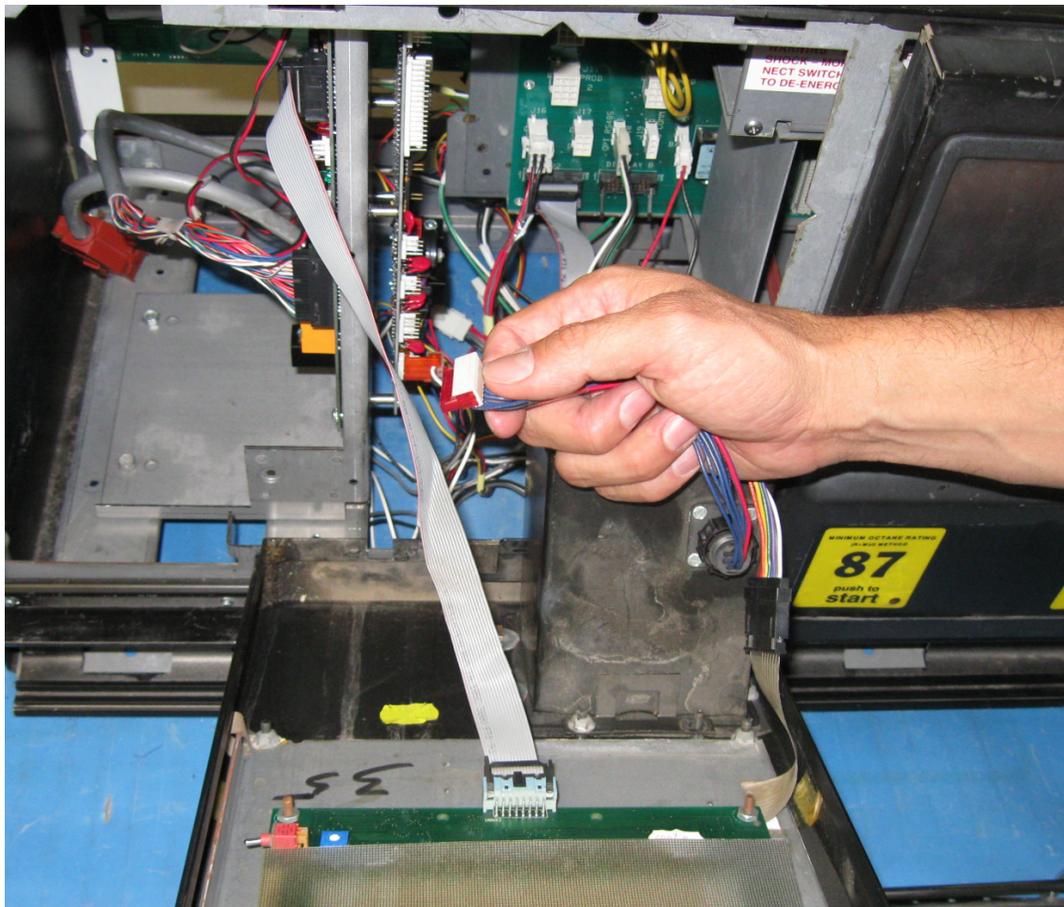
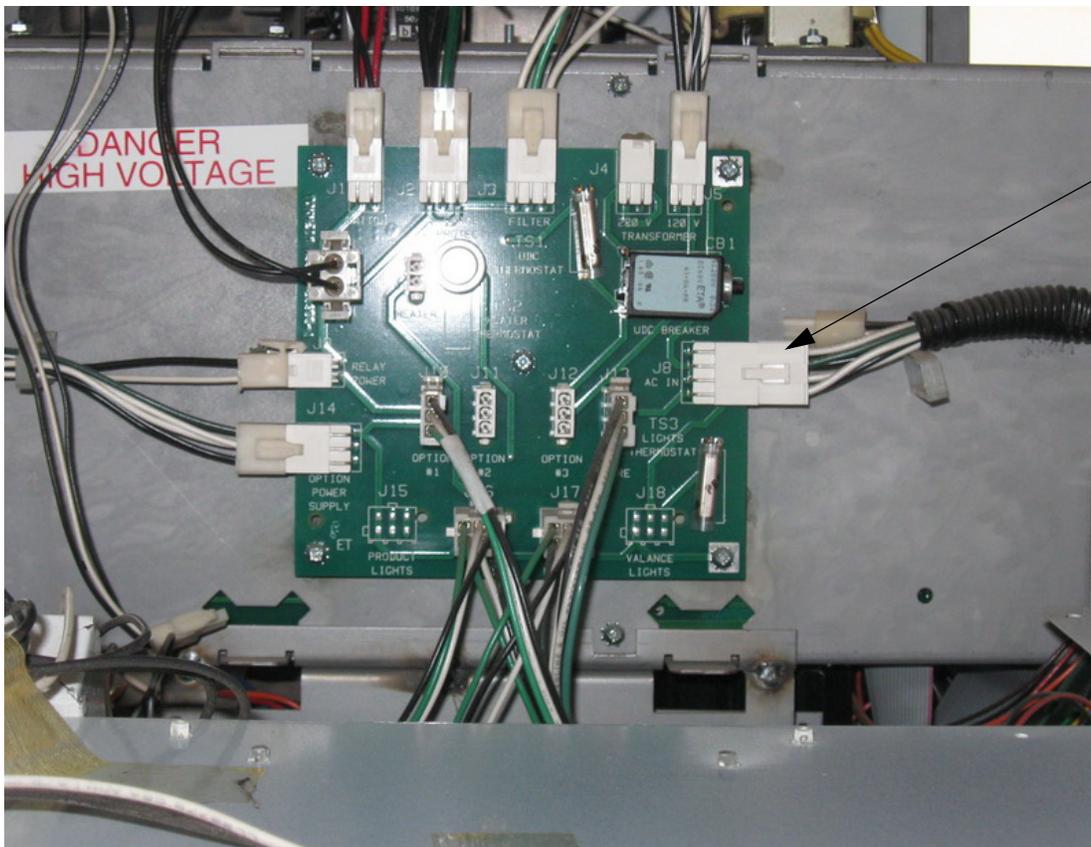


FIGURE 3



FIGURE 4



J8  
AC IN

FIGURE 5



FIGURE 6

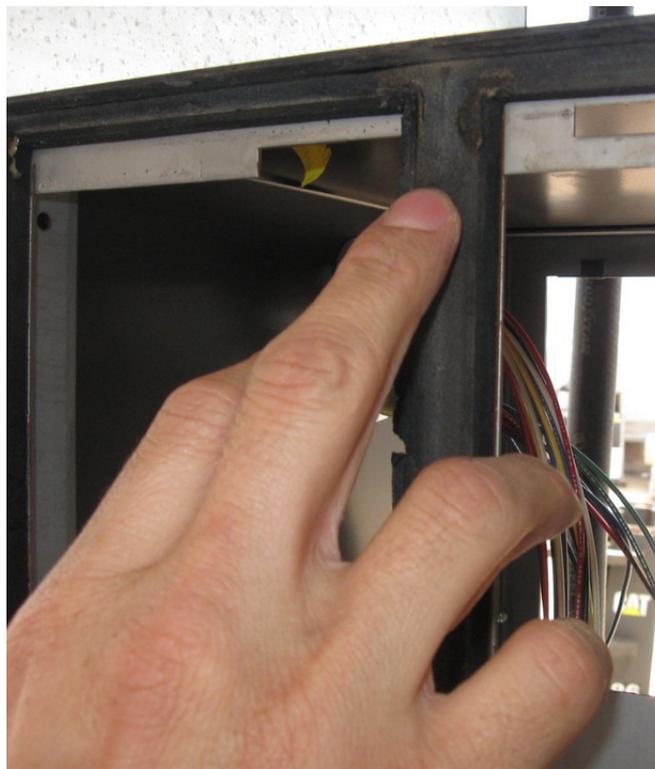


FIGURE 7



FIGURE 8

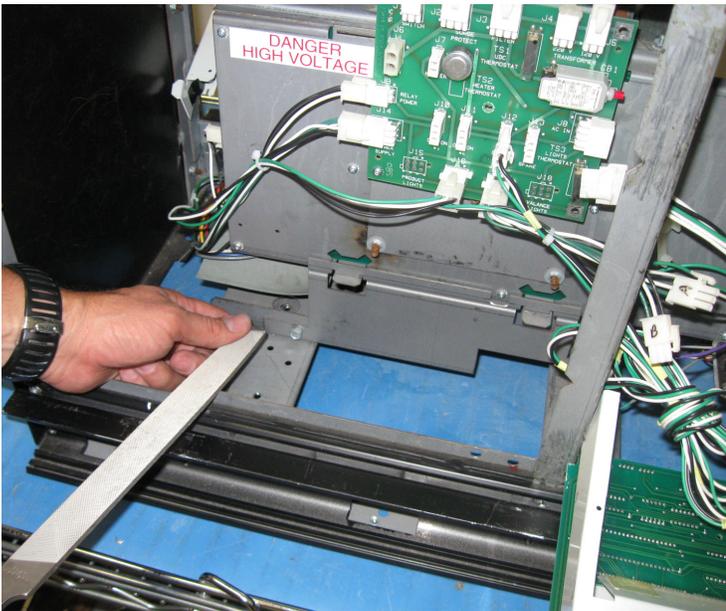


FIGURE 9

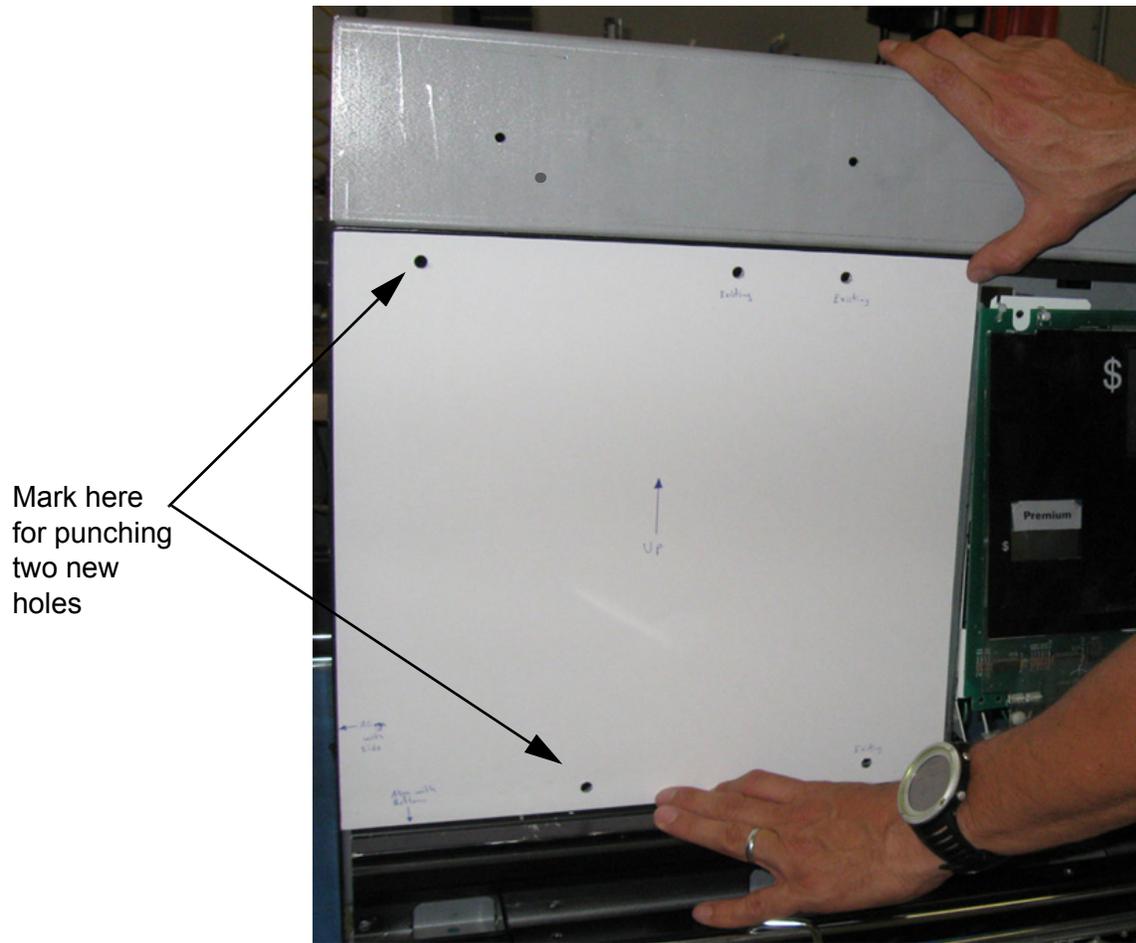


FIGURE 10

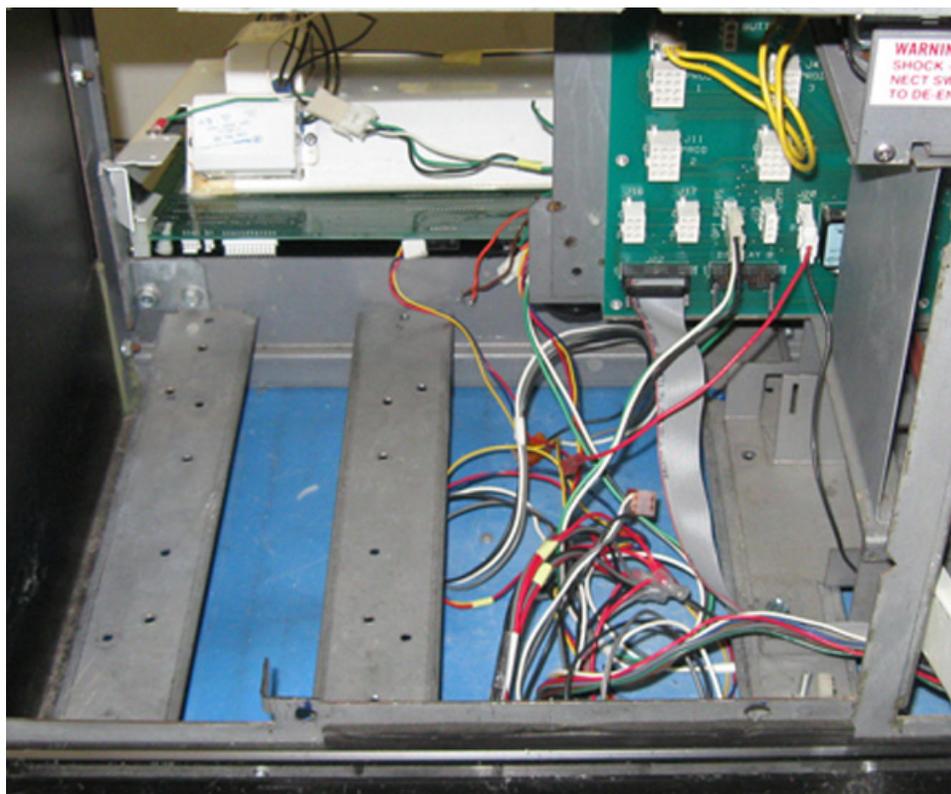
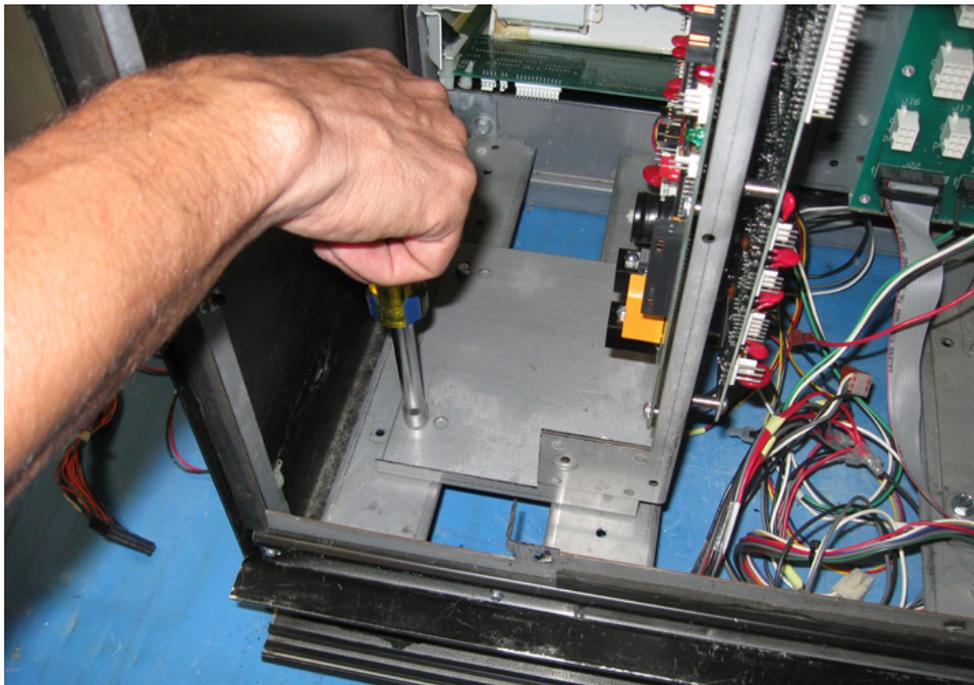


FIGURE 11

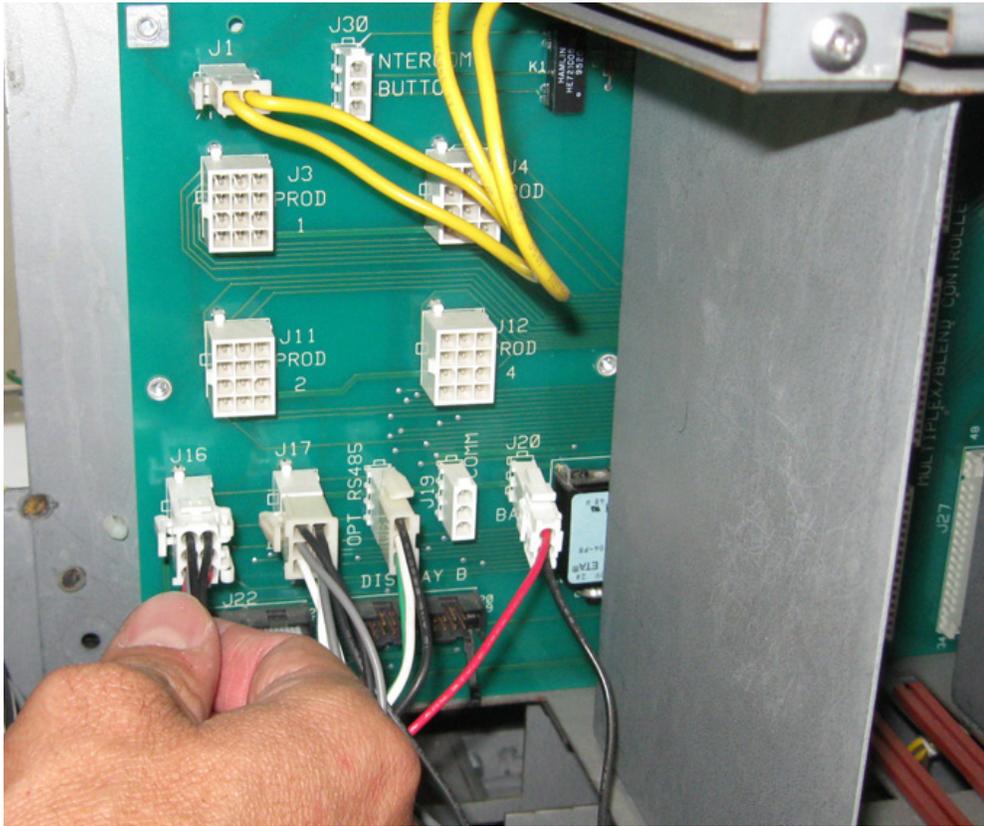


FIGURE 12

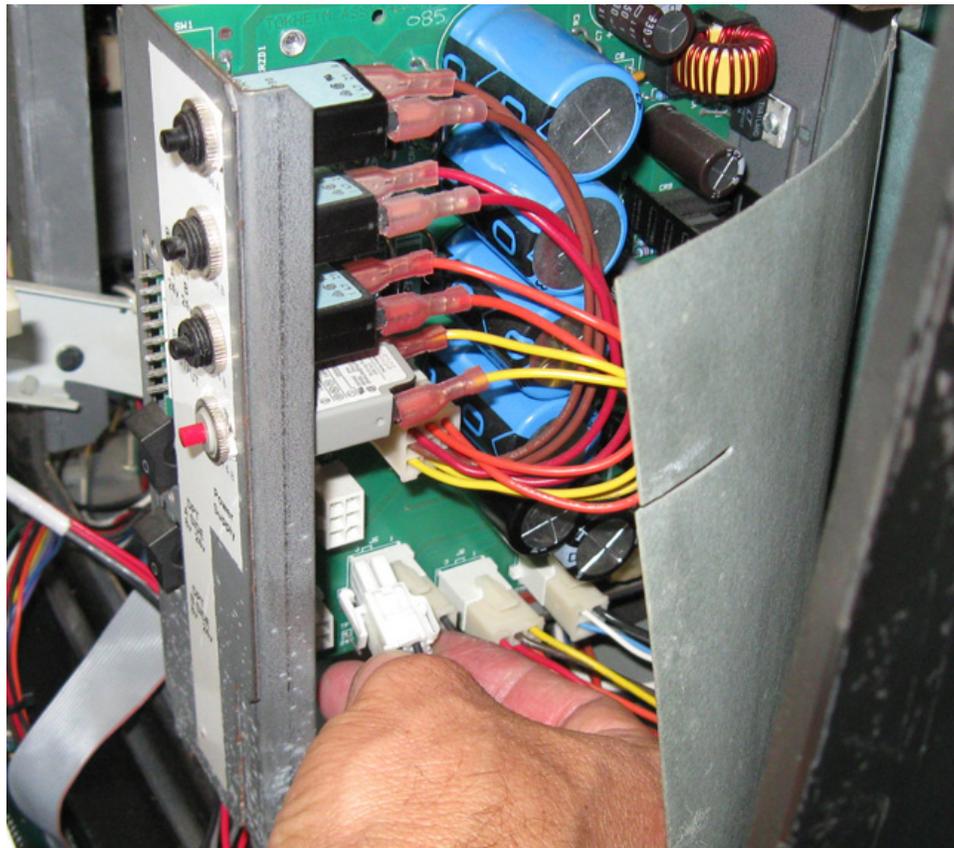


FIGURE 13

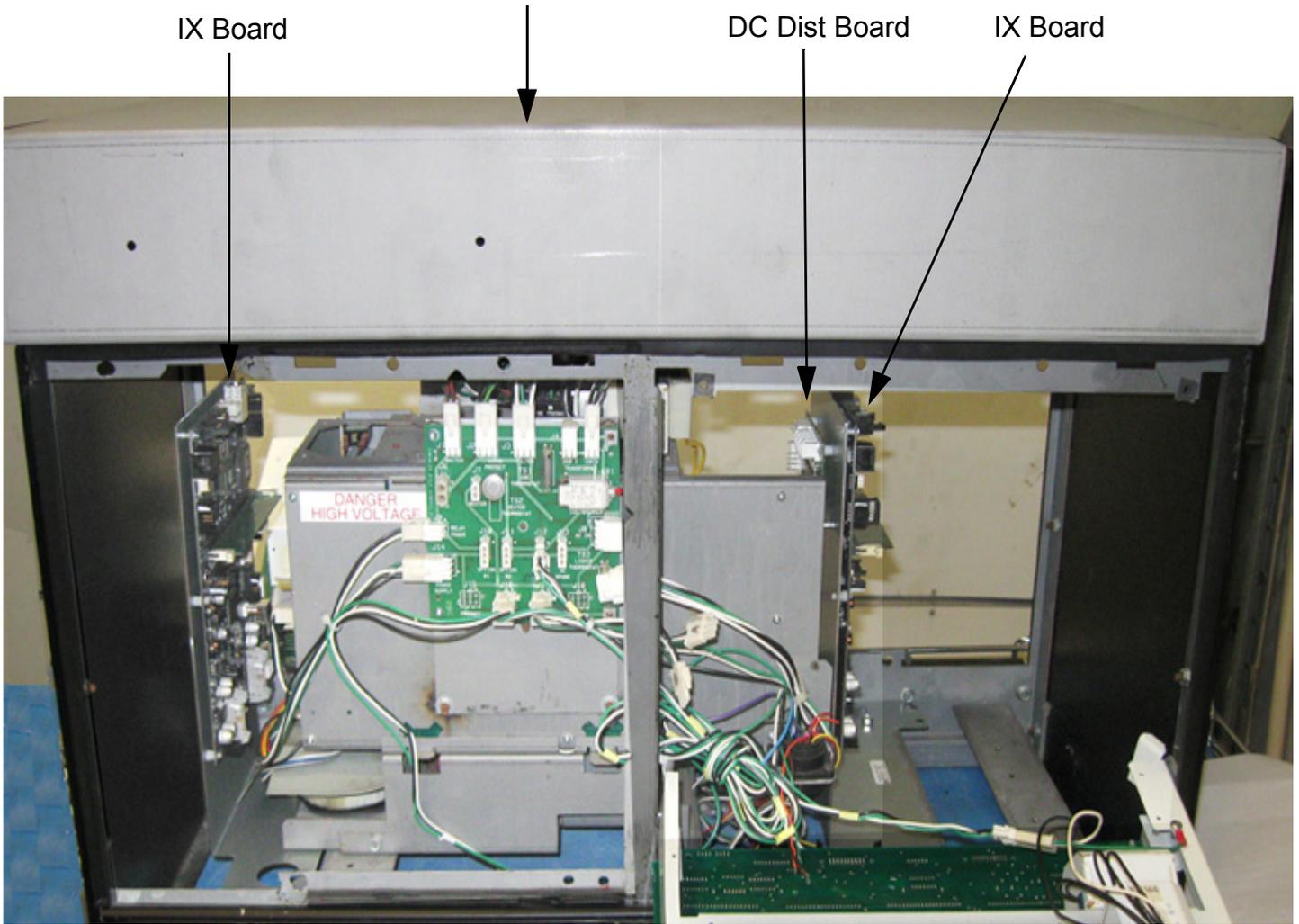


FIGURE 14

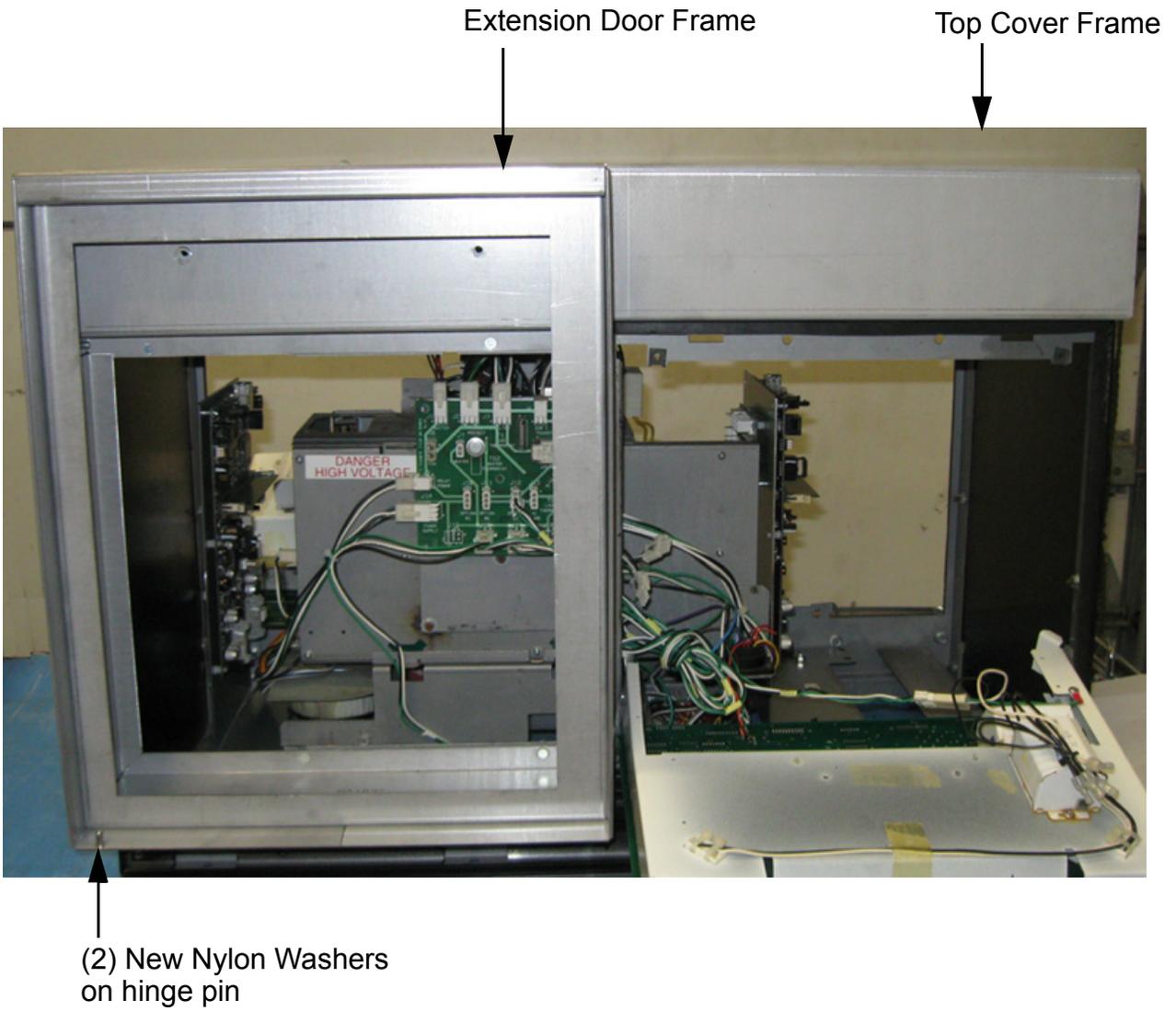


FIGURE 15



FIGURE 16

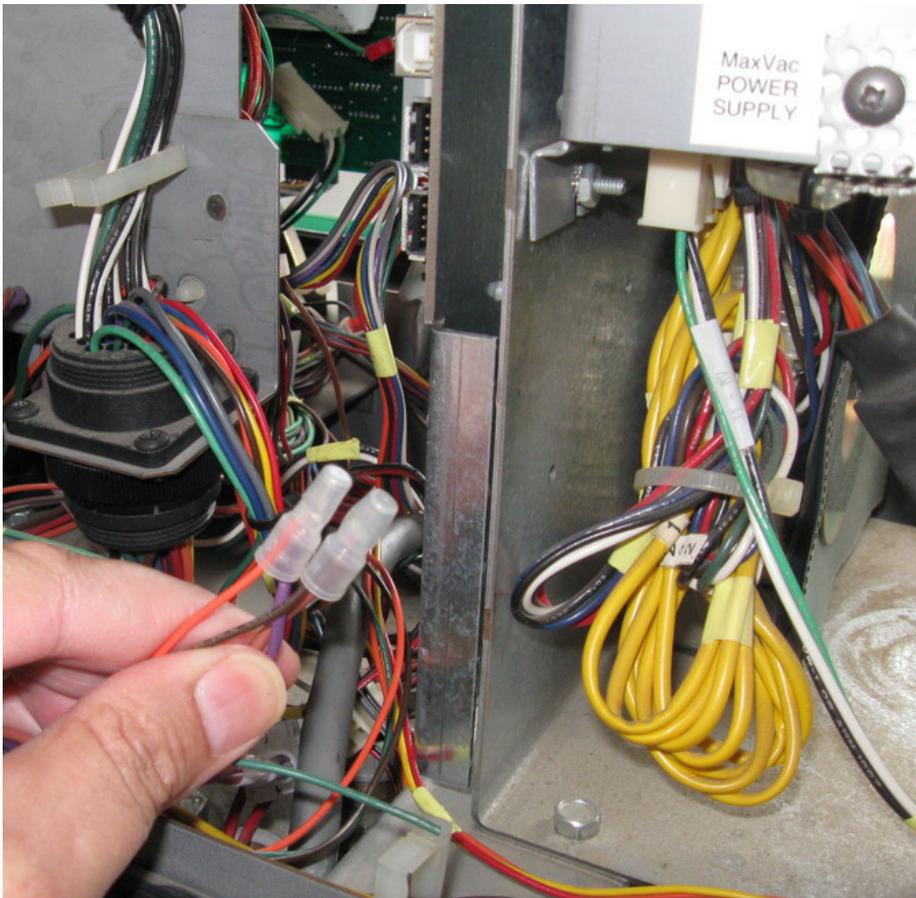
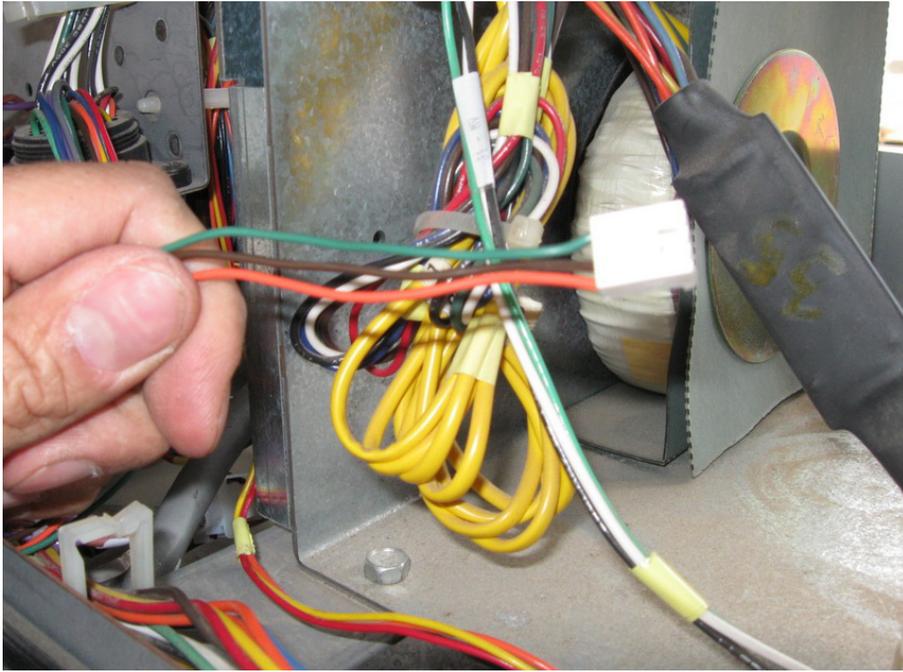


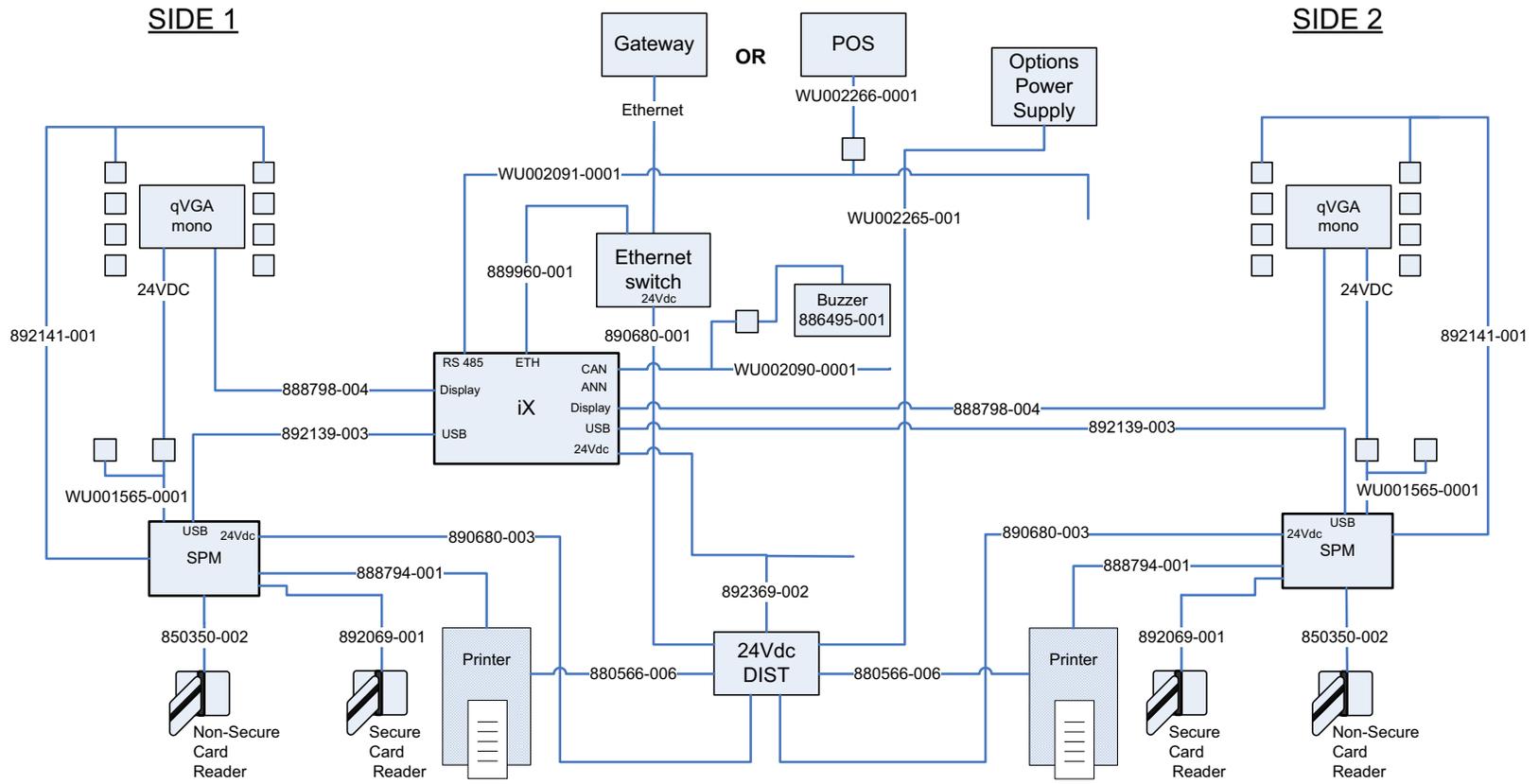
FIGURE 17



FIGURE 18  
Premier B Narrow Body Head After Completed Kit Installation



### Tokheim Premier B & C SPM Retrofit Wiring Diagram for R2



# INSTALLATION MANUAL

## iX Pay Retrofit Kits Premier B Narrow Body Dispensers

Written by S. G. Martin

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