

iX™ Pay Secure Payment

# INSTALLATION

iX Pay (U.S.) Retrofit Kits  
for 2/Vista Narrow & Wide  
Body Dispensers

AUG09

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:**

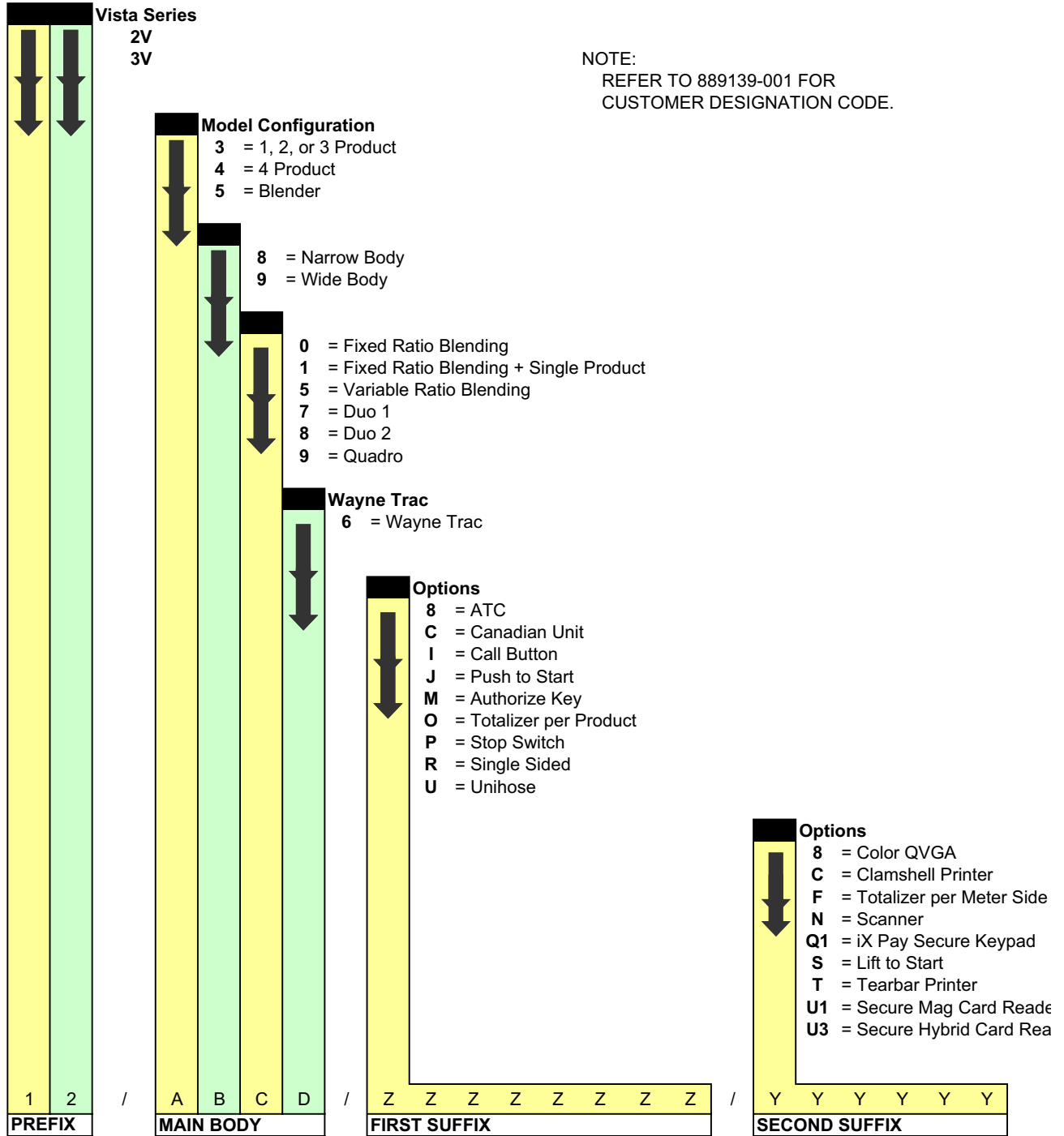
Important information to consider, otherwise, improper installation and/or damage to components may occur.

Secure Payment Kits  
for 2/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 2Vista narrow body and wide body hinged bezel dispensers. 2V kit part numbers (model numbers) are based on the Kit Model Designation Chart on the previous page and take the format 2V/x8xx for narrow body dispensers and 2V/x9xx for wide 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 Figures 1A through 1D are referenced to the list of parts in Table 1.

## 1.2 Tools Required

Socket/ratchet  
Allen wrenches  
Screwdrivers, Nut drivers  
Hole punch tool (none sparking) for Narrow body kit

## 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. ”



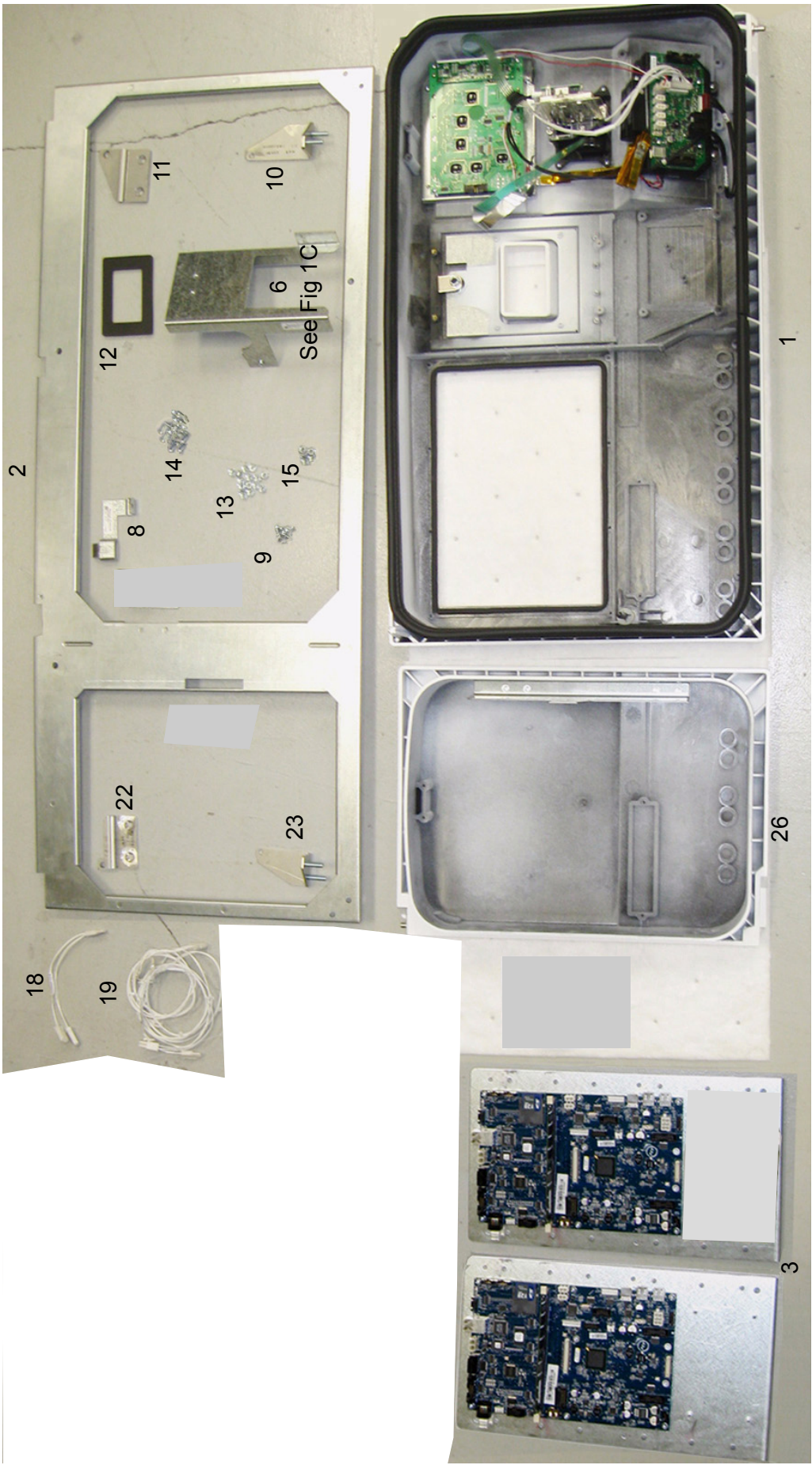
### WARNING

**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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**FIGURE 1A 2V WIDE Body Parts. ADDITIONAL PARTS IN KIT ARE SHOWN IN FIGURE 1D.**



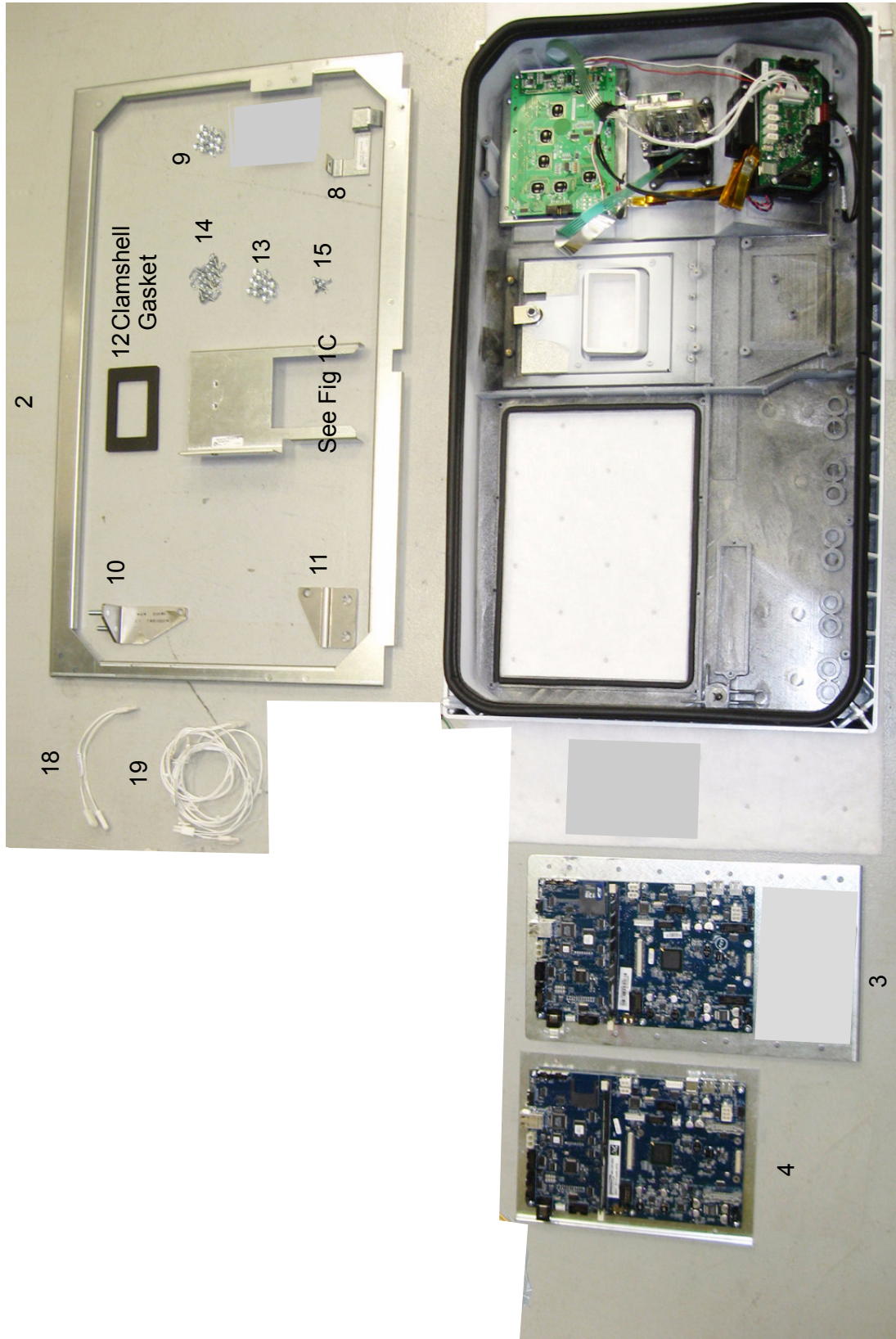
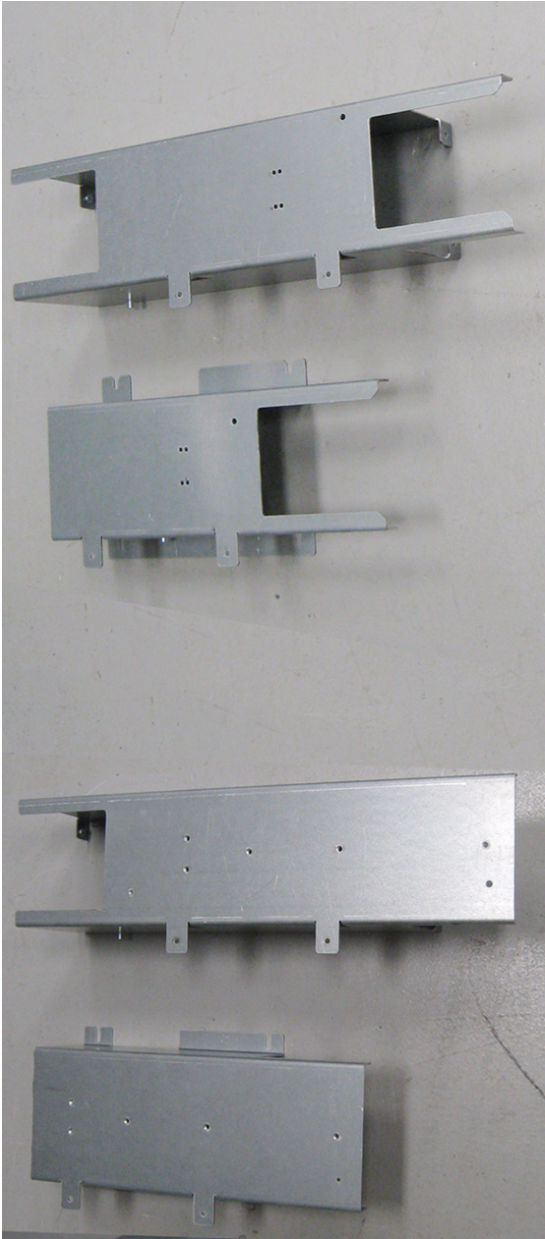


FIGURE 1B 2V NARROW BODY PARTS. ADDITIONAL PARTS IN KIT ARE SHOWN IN FIGURE 1D.



Narrow Body  
WU001573

Wide Body  
WU001571

Narrow Body  
WU001899

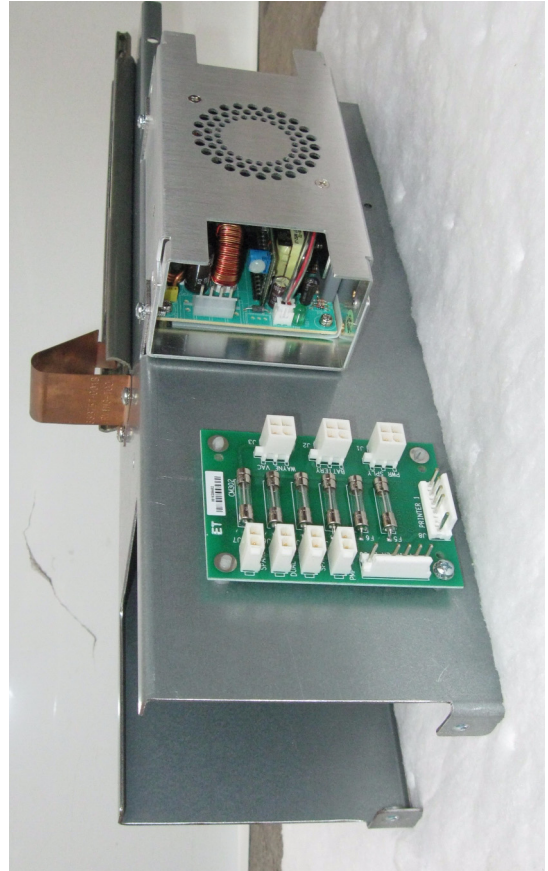
Wide Body  
WU001767

CLAMSHELL\*

TEAR BAR\*

**FIGURE 1C PRINTER BRACKETS (ITEM 6)**

**\*NOTE: THE PRINTER BRACKET FOR DISPENSER SIDE 1 WILL BE PRE-ASSEMBLED WITH THE POWER SUPPLY AND THE DC DISTRIBUTION BOARD AS SHOWN BELOW.**





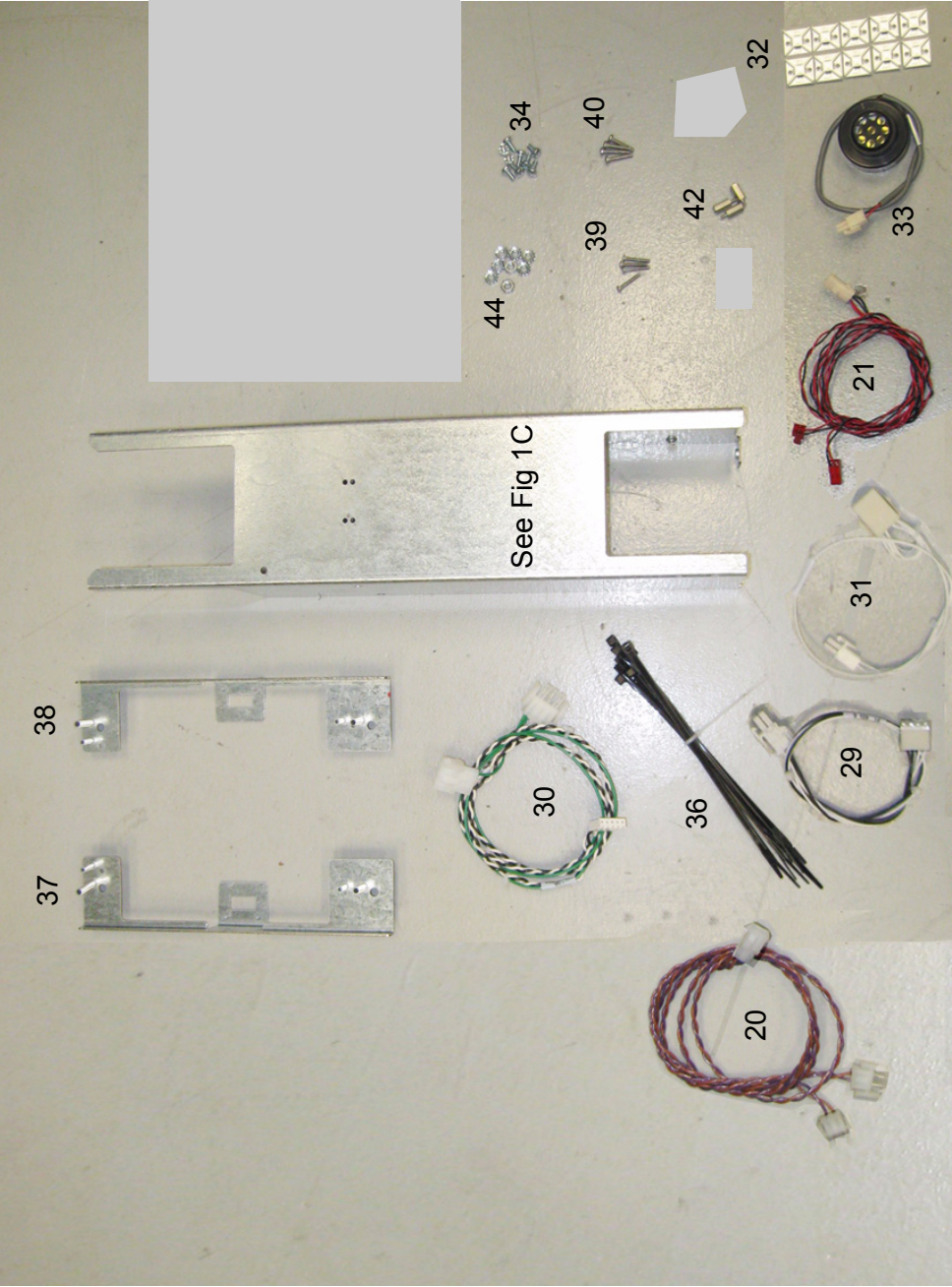


FIGURE 1D ADDITIONAL PARTS IN 2V NARROW AND WIDE BODY KITS

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 2V/x8xx	Kit Qty Dual Sided Wide - for Models 2V/x9xx	Kit Qty Single Sided Narrow - for Models 2V/x8xx	Kit Qty Single Sided Wide - for Models 2V/x9xx	Item No.
WU000544	Main Bezel	2	2	1	1	1
WU001352	Small bezel adapter plate	2		1		2
WU001192	Large bezel adapter plate		2		1	2
WU002340-0001	Large iX bracket	1	2	1	1	3
WU002341-0001	Small iX bracket	1				4
WU001899	Printer Bracket Clam Shell - Narrow Models C in 2nd Suffix	1				6 see Fig 1C
WU002338-0001	Printer Bracket/ Power Supply Assembly Clam Shell - Narrow Models C in 2nd Suffix	1		1		
WU001767	Printer Bracket for Clam Shell - Wide Models C in 2nd Suffix		1			6 see Fig 1C
WU002339-0001	Printer Bracket/ Power Supply Assembly Clam Shell - Wide Models C in 2nd Suffix		1		1	
WU001573	Printer Bracket for Tear Bar - Narrow Models T in 2nd Suffix	1				6 see Fig 1C
WU002335-0001	Printer Bracket/ Power Supply Assembly Tear Bar - Narrow Models T in 2nd Suffix	1		1		
WU001571	Printer Bracket for Tear Bar - Wide Models T in 2nd Suffix	0	1			6 see Fig 1C
WU002337-0001	Printer Bracket/ Power Supply Assembly Tear Bar - Wide Models T in 2nd Suffix		1		1	
WU001503	Bezel ramp	2	2	1	1	8
6019404	#10 Nut	8	8	4	4	9
WU001360	Upper hinge - Left	2	2	1	1	10
WU001362	Lower hinge - Left	2	2	1	1	11
888687-001	Printer seal gasket Clamshell only	2	2	1	1	12
6019403	#8 Nuts	20	20	10	10	13
6005901	#6 Screw 3/8	32	32	16	16	14
000-918935-	8-32, 1/4 for printer copper spring	7	7	4	4	15

Table 1 Parts Included in the Kit

WU001565-0001	Y Jumper cable	2	2	1	1	1	18
892369-002	Y cable DC to ea iX	1	1	1	1	1	19
WU002091-0001	Y cable Data Link (RS485) cable	1	1	1	1	1	20
WU002090-0001	Y Annunicator cable	1	1	1	1	1	21
WU001366	Lower hinge -Right		2		1	1	22
WU001364	Upper hinge -Right		2		1	1	23
WU000972	Right bezel		2		1	1	26
887338-002	Cable power supply to DC Dist	1	1	1	1	1	29
WU001942-0001	Cable power Y	1	1	1	1	1	30
WU001953-0001	Cable PTS Power	2	2	1	1	1	31
5057301	Cable Tie Holder	10	10	5			32
886495-001	Annunicator	1	1	1	1	1	33
6005909	#8 Screw 3/8	30	30	15	15	15	34
000-916486-	Cable Ties	10	10	5	5	5	36
WU001551	Display Adapter Bracket, Left	2	2	1	1	1	37
WU001553	Display Adapter Bracket, Right	2	2	1	1	1	38
882872-015	#4 Screw 1/2	12	12	6	6	6	39
6005903	#6 Screw 3/4	8	8	4	4	4	40
5001901	Metal Standoff	8	8	4	4	4	42
6001902	#8 Screw, Flat 3/4	4	4	4	4	2	43 not shown
000-918210-	1/4-20 Nut	8	12	4	4	6	44 not shown
888352-001	Plastic Rivet (Totalizer)	16	16	8	8	8	45 not shown
000-916760-	#8 x 1/2 Screw	16	16	8	8	8	46 not shown
000-507667-	1/4-20 Screw	8	8	4	4	4	47 not shown
882941-xxx	Softkey Blank Covers	4	4	2	2	2	50 not shown
887047-001	Cable, PTS Cash/Credit Interface	2	2	2	2	2	51 not shown
000-940022-	Installation Manual	1	1	1	1	1	not shown

## 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 2/V Wide Body

1. Turn off power to the dispenser.
2. Unlock and remove the hydraulic cabinet doors.
3.
  - A. Unlock and lower the bezels on both sides of the dispenser.
  - B. Disconnect the Push-to-Start, graphics display and annunciator cables from the bezels, Figure 2.
  - C. Set bezels aside for now for reusing the display glass and bracket.
4. Loosen two flathead screws securing sales display (DEM) to the head frame. The two screws are located above the DEM, Figure 3. Lower the DEM. Repeat on side 2.
5. Disconnect control power and light power inside the electronic head. Figure 4.
6. On the Duplex computer, Figure 5A, disconnect J10 and the AC power connector J3, loosen the two side screws on the DEM, and raise the Duplex computer to gain access to the cash/credit board Figure 5B, then disconnect power connector J3.
7. Starting on side 1:
  - A. Remove existing bezel hinges on the dispenser. (Use 7mm Allen on top and 7/16 hex on bottom nut.) Figure 3. Discard hinges and hardware.
  - B. On the head chassis at the bottom right of sales display, remove left screw and nut securing the EMI filter, Figure 6. Discard nut and screw. The EMI filter will be re-secured later when the bezel adapter plate is installed.
  - C. If totalizers are present, disconnect the totalizer cables and remove and save the totalizers. Discard bracket, screws and cable which goes to the Cash/Credit board.
  - D. Remove and discard drip tray from head chassis if present.
8. Remove CAT board harness and board, Figure 8, as follows:
  - A. Disconnect all cables/harness from Dual CAT board (887448-001) (or Legacy CAT boards 883970-001).
  - B. Remove four Phillips screws and remove board(s). Discard the #8 screws, new ones are provided. Discard/save board as per site scope of work/customer requirements.

- C. Separate printer power cable from the harness. Figure 9.
  - D. At the opposite end of the harness, disconnect the cables from the cash/credit boards J5, the Duplex computer J13 and J14, and the DL/RS485 connector at the vapor barrier potted fitting.
  - E. Discard the harness.
9. A. Disconnect data and power cables from the back of the printer, Figure 10. Discard data cable.
- B. Release the printer latch and remove and save printer.
10. On the existing printer bracket, perform the following:
- A. Remove and save the (4) screws (two each) on front and back of the printer bracket then remove bracket.
  - B. Remove the two screws securing the copper spring (883757-001) to the bracket. Remove and save the spring. Discard the two screws.
  - C. If Tear Bar printer, remove and discard (3) screws on the slide rail, then remove and save slide rail, Figure 11.  
  
If Clamshell printer, remove and save the latch (887650-001) from the printer bracket.
  - D. Discard the printer bracket.
11. Install the copper spring, saved above, onto (1) new (item 6) Printer Bracket using (2) #8x1/4 screws (000-918935-). Note: For side 1 the new bracket includes the Power Supply and the DC Dist boards as shown in Figure 1C.
12. If Tear Bar printer, install the slide rail onto the new printer bracket using (3) #8x1/4 screws (000-918935-).
- If Clamshell printer, install printer latch, saved above, onto the new printer bracket using (2) #4 screws (882872-015).
13. Install the new Printer Bracket reusing the (4) screws saved from the old bracket. Note: Remove ground screw from chassis to mount bracket then re-secure ground underneath bracket screw.
14. Reinstall printer.
- A. Reconnect the existing power cable to back of printer.
  - B. For Clamshell printer only, remove the existing printer gasket from the printer and clean off all gasket residue and install new Printer Gasket (888687-001).



15. Raise and lower the DEM as necessary during the installation of the bezel adapter plate in the following step.
16. Install Bezel Adapter Plate (WU002342-0001) to the head frame using (7) # 8 nuts (6019403) on back of the adapter plate, Figure 12. Use 11/32 Hex nut driver to secure nuts.
17. Install #8 Screw flathead (6001902) through the adapter plate and EMI filter and re-secure with # 8 nut (6019403). If the EMI filter's ground was disconnected here, re-secure it under the nut.
18. Install (1) Bezel Ramp (WU001503) to Adapter plate using (1) #8x3/8 screw (6005909).
19. Install (1) Left Upper Hinge (WU001360) to Adapter plate using (2) 10-32 Nuts (6019404), Figure 13.
20. Install (1) Left Lower Hinge (WU001362) to head chassis using (2) existing 1/4 hardware saved from the old hinges in step 3 or use (2) new screws (000-507667-) and nuts (000-918210-), Figure 14. NOTE: Leave hinge loose so bezel will install easier.
21. Install (1) Right Upper Hinge (WU001364) to Adapter plate using (2) 10-32 Nuts (6019404).
22. Install Right Lower Hinge (WU001366) to head chassis using (2) existing 1/4 hardware saved from the old hinges in step 3 or use (2) new screws (000-507667-) and nuts (000-918210-). NOTE: Leave hinge loose so right bezel will install easier.
23. Install the two iX Brackets (WU002340) inside the electronic head using (4) each #8x3/8 screws (6005909), Figure 16. The second bracket mounts the same on the opposite side column.
24. Lay the new Main Bezel (WU000544) face down on a flat surface. Use protective pads, etc., to ensure that the front of the bezel does not get scratched.
25. On the old bezel, remove the two display glass brackets by removing and discarding the (8) screws. Remove glass, clean and then install the glass and bracket onto the new Main Bezel reusing the hardware. New #8x1/2 screws (916760) are provided as needed.
26. Install Main Bezel onto the dispenser by inserting top bezel hinge pin into the Left Upper Hinge and sliding the bottom bezel pin into the Left Lower Hinge, then tighten the nuts on the lower hinge.  
  
Note: Secure the bezel steel stop cable to head frame to prevent bezel from swinging open to far. This will stop the left side of bezel from scratching against the side column.
27. Install Right Bezel (WU000972) onto dispenser, upper hinge first then lower hinge, and tighten the nuts on the lower hinge.

From the Main Bezel harness, connect the cables as explained in the following steps:

28. Connect Printer Data Cable to the printer. This cable now comes from the SPM board.
29. Connect the QVGA Cable (888798-003) to the iX board J20 (Port 1).
30. Connect the USB Cable (892139-002) to the “USB 1” connector on the iX Board.
31. Connect the following cables:
  - A. Connect (1) new Y Jumper cable (WU001565-0001) to any of the 2-pin connectors on the DC Dist board on the printer bracket.
  - B. Connect the 2-pin end of (1) PTS Power cable (WU001953-0001) to one leg on the above Y Jumper cable and connect the 15-pin end of the cable to the 15-pin connector from the bezel PTS harness (020-048042-HRN).
  - C. From the bezel PTS harness, connect the 15-pint PTS to the existing 15-pin on the DEM frame (cable 887047-001) which connects to cash/credit board (red cable to the cash credit board J4 and connect the white cable to J5). If this cable is not existing, install one from the kit that included as a spare). Route wires under the printer bracket.
32. If installing side 2 parts, perform steps 31B and C above and using the other leg of the Y Jumper cable (WU001565-0001) previously installed at the DC Dist board in step A above.
33. Connect the following cables:
  - A. Connect (1) new Y Jumper cable (WU001565-0001) to any of the 2-pin connectors on the DC Dist board.
  - B. Connect the 2-pin DC power cable (890680-003) coming from the bezel harness to one leg of the above Y Jumper cable.
34. If installing side 2 parts, connect DC power cable (890680-003) coming from the bezel to the other leg of the Y Jumper cable (WU001565-0001) previously installed at DC Dist board in step 33 A above.
35. Secure the SPM ground strap under the lower left nut on the back of the bezel adapter plate.
36. Connect the Y-jumper cable (892369-002) to any of the spare 2-pin connectors on the DC Dist board and to both iX boards (6-pin Power).
37. Connect the Data Link /RS485 Y cable (WU002091-0001) to the RS485 connector from the vapor barrier potted fitting and to both iX boards (J19 Port #3). Route one leg of the Y cable underneath the printer bracket to reach the opposite side.

38. Unscrew the cover on the new Annunciator (886495-001) insert into the hole in printer bracket and resecure cover.
39. Connect Annunciator Y cable (WU002090-0001) to the Annunciator and to both iX boards (J18 Annunciator). Route one leg of the Y cable underneath the printer bracket for opposite side iX.
40. Connect the Power Y jumper cable (WU001942-0001) to J3 on the Cash/Credit board. Reconnect the AC connector previously installed in J3 to the Y cable and connect the opposite end of the Y cable to the 3-pin connector on the new power supply.
41. Connect DC Power Cable (887338-002) to the 4-pin connector on the Power Supply and to the DC Dist board J1(4-pin) connector.
42. Optional Totalizers:
  - A. If there were existing totalizers, remove the totalizers from the bracket saved in step 7C and install the totalizers onto the bezel totalizer bracket, Figure 15. Use new Plastic Rivets (888352-001) as needed. Discard old bracket and screws.
  - B. Connect the totalizer cable (883579-007) supplied with the bezel to the totalizers and to the cash credit board J7.
43. Reconnect control power and light power inside the electronic head.
44. Secure the Duplex computer assembly to the DEM, connect sides 1 and 2 annunciators to J13 and J14 on the Duplex computer and reconnect J10 and AC power J3.
45. Raise DEM and secure in the up position.
46. Perform the following to install the Display Adapter Brackets (WU001551) left and (WU001553) right:
  - A. Loosen the (4) screws holding the sales display dial face, then remove and save dial face.
  - B. Disconnect display cable then remove the (4) screws holding the display board, remove board and set aside.
  - C. Remove and save the (4) screws holding the backlight panel, then set panel aside.
  - D. Remove and save the (2) backlights and remove and save the white backlight dish.

For some models detach the light holder clipped onto the brackets, then skip steps E and F below.

- E. Remove and save the (2) screws holding each of the light holder, discard nuts, save screws.
  - F. Remove and discard the (2) brackets and one each screw holding the light holder.
  - G. Install (4) Metal Standoffs (5001901) onto the existing display bracket.
  - H. Install (1) Display Adapter Bracket, Left (WU001551) on top of the left standoffs reusing the (4) screws save previously.
  - I. Repeat above step for (1) Display Adapter Bracket, Right (WU001553).
  - J. Reinstall the (2) light boxes reusing (4) screws saved above.
  - K. Reinstall the white backlight dish and reinstall the (2) backlights saved above.  
Note: If bulbs are old or burned-out, replace as necessary.
  - L. Reinstall the light panel saved above using (4) #4 Screws 882872-015.
  - M. Reinstall the sales display board saved above using (4) #6 Screws 6005903 and reconnect the cable to upper left side of board.
  - N. Reinstall the dial face saved above onto the sales display board.
47. Bundle and tie wrap all cables where possible, using Holder (5057301) and Cable Ties (001-916486-).
48. Ensure all ground wires inside the head are secured to the chassis.
49. Ensure all cables are inside the head and bezel.
50. Close and lock bezel.
51. If POS does not use the softkeys on the QVGA display (if old TRSM keypad did not have softkeys), cover the keys with 882941-xxx Soft Key Blank Covers.
52. Repeat instruction steps 7, 9-22, 24-30, 32, 34-35, 42 and 45-50 for side 2 of the dispenser.
53. Turn power on to the dispenser.
54. Verify SPM and dispenser operation. Refer to Startup and Service manual 940014 for starting up the SPM.





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

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

#### 3.1 Installation Instructions For 2/V Narrow Body

1. Turn off power to the dispenser.
2. Unlock and remove the hydraulic cabinet doors.
3.
  - A. Unlock and lower the bezels on both sides of the dispenser.
  - B. Disconnect the Push-to-Start, graphics display and annunciator cables from the bezels, Figure 2.
  - C. Set bezels aside for now for reusing the display glass and bracket.
4. Loosen two flathead screws securing sales display (DEM) to the head frame. The two screws are located above the DEM, Figure 3. Lower the DEM. Repeat on side 2.
5. Disconnect control and light power inside the electronic head.
6. On the Duplex computer, Figure 5A, disconnect J10 and the AC power connector J3, loosen the two side screws on the DEM, and raise the Duplex computer to gain access to the cash/credit board Figure 5B, then disconnect power connector J3.
7. Starting on side 1:
  - A. Remove existing bezel hinges on the dispenser. (Use 7mm Allen on top and 7/16 hex on bottom nut.) Figure 3. Discard hinges and hardware.
  - B. On the head chassis at the bottom right of sales display, remove left screw and nut securing the EMI filter, Figure 6. Discard nut and screw. The EMI filter will be re-secured later when the bezel adapter plate is installed.
  - C. If totalizers are present, disconnect the totalizer cables and remove and save the totalizers. Discard bracket, screws and cable which goes to the Cash/Credit board.
  - D. Remove and discard drip tray from head chassis if present.
8. Remove CAT board harness and board, Figure 8, as follows:
  - A. Disconnect all cables/harness from Dual CAT board (887448-001) (or Legacy CAT boards 883970-001).
  - B. Remove four Phillips screws and remove board(s). Discard the #8 screws, new ones are provided. Discard/save board as per site scope of work/customer requirements.

- C. Separate printer power cable from the harness. Figure 9.
  - D. At the opposite end of the harness, disconnect the cables from the cash/credit boards J5, the Duplex computer J13 and J14, and the DL/RS485 connector at the vapor barrier potted fitting.
  - E. Discard the harness.
9. A. Disconnect data and power cables from the back of the printer, Figure 10. Discard data cable.
- B. Release the printer latch (on Clamshell bracket or Tear Bar slide rail) and remove and save printer.
10. On the existing printer bracket, perform the following:
- A. Remove and save the (4) screws (two each) on front and back of the printer bracket then remove bracket.
  - B. Remove and save the copper spring (883757-001) from the printer bracket. Discard the two screws.
  - C. If Tear Bar printer, remove and discard (3) screws on the slide rail, then remove and save slide rail.  
  
If Clamshell printer, remove and save the latch (887650-001) from the printer bracket.
  - D. Discard the printer bracket.
11. Install the copper spring, saved above, onto (1) new (item 6) Printer Bracket using (2) #8x1/4 screws (000-918935-). Note: For side 1 the new bracket includes the Power Supply and the DC Dist boards.
12. If Tear Bar printer, install the slide rail onto the new printer bracket using (3) #8x1/4 screws (000-918935-).  
  
If Clamshell printer, install printer latch, saved above, onto the new printer bracket using (2) #4 screws (882872-015).
13. Install the new Printer Bracket reusing the (4) screws saved from the old bracket. Note: As necessary, remove ground screw from chassis to mount bracket then re-secure ground underneath bracket screw.
14. Raise and resecure the DEM.

15. A. Place Bezel Adapter Plate (WU002343-0001) onto the head frame without securing it and mark down the center of the two holes in upper left corner of the Adapter plate.  
  
B. Remove Adapter plate and use a none sparking hole punch tool to punch two holes at these locations.
16. Raise and lower the DEM as necessary during the installation of the bezel adapter plate in the following step.
17. Install Bezel Adapter plate to the head frame using (5) # 8 nuts (6019403) on back of the adapter plate. Use 11/32 Hex nut driver to secure nuts.
18. Install (1) Bezel Ramp (WU001503) to Adapter plate using (1) #8x3/8 screw (6005909).
19. Install (1) Left Upper Hinge (WU001360) to Adapter plate using (2) 10-32 Nuts (6019404), Figure 13.
20. Install (1) Left Lower Hinge (WU001362) to head chassis using (2) existing 1/4 hardware saved from the old hinges in step 3 or use (2) new screws (000-507667-) and nuts (000-918210-), Figure 14. NOTE: Leave hinge loose so bezel will install easier.
21. A. Install the (side 1) Large iX Bracket (WU002340-0001) inside the electronic head on left inner column using (4) #8x3/8 screws (6005909), see Figure 16.  
  
B. Install the (side 2) Small iX Bracket (WU002341-0001) inside the electronic head on left inner column using (4) #8x3/8 screws (6005909).
22. Reinstall printer.  
  
A. Reconnect the existing power cable to back of printer.  
  
B. For Clamshell printer only, remove the existing printer gasket from the printer and clean off all gasket residue and install new Printer Gasket (888687-001).
23. Lay the new Main Bezel (WU000544) face down on a flat surface. Use protective pads, etc., to ensure that the front of the bezel does not get scratched.
24. On the old bezel, remove the display glass bracket by removing and discarding the (8) screws. Remove glass, clean and then install the glass and bracket onto the new Main Bezel reusing the hardware. New #8x1/2 screws (916760) are provided as needed.
25. Install Main Bezel onto the dispenser by inserting top bezel hinge pin into the Left Upper Hinge and sliding the bottom bezel pin into the Left Lower Hinge, then tighten the nuts on the lower hinge.

Note: Secure the bezel steel stop cable to head frame to prevent bezel from swinging open to far. This will stop the left side of bezel from scratching against the side column.

From the Main Bezel harness, connect the cables as explained in the following steps:

26. Connect Printer Data Cable to the printer. This cable now comes from the SPM board.
27. Connect the QVGA Cable (888798-003) to the iX board J20 (Port 1).
28. Connect the USB Cable (892139-002) to the "USB 1" connector on the iX Board.
29. Connect the following cables:
  - A. Connect (1) new Y Jumper cable (WU001565-0001) to either of the 2-pin connectors on the DC Dist board.
  - B. Connect the 2-pin end of (1) PTS Power cable (WU001953-0001) to one leg on the above Y Jumper cable and connect the 15-pin end of the cable to the 15-pin connector from the bezel PTS harness (020-048042-HRN).
  - C. From the bezel PTS harness, connect the 15-pin PTS to the existing 15-pin on the DEM frame (cable 887047-001) which connects to cash/credit board (red cable to the cash credit board J4 and connect the white cable to J5). If this cable is not existing, install one from the kit that included as a spare). Route wires under the printer bracket..
30. If installing side 2 parts, perform steps 29B and C above and using the other leg of the Y Jumper cable (WU001565-0001) previously installed at the DC Dist board in step A above.
31. Connect the following cables:
  - A. Connect (1) new Y Jumper cable (WU001565-0001) to either of the 2-pin connectors on the DC Dist board.
  - B. Connect the 2-pin DC power cable (890680-003) coming from the bezel harness to one leg of the above Y Jumper cable.
32. If installing side 2 parts, connect DC power cable (890680-003) coming from the bezel to the other leg of the Y Jumper cable (WU001565-0001) previously installed at DC Dist board in step 31 A above.
33. Secure the SPM ground strap under the lower left nut on the back of the bezel adapter plate.

34. Connect new Y-jumper cable (892369-002) to either of the spare 2-pin connectors on the DC Dist board and to both iX boards (6-pin Power).
35. Connect the Data Link /RS485 Y cable (WU002091-0001) to the RS485 connector from the vapor barrier potted fitting and to both iX boards (J19 Port #3).  
Route one leg of the Y cable underneath the printer bracket to reach the opposite side.
36. Unscrew the cover on the new Annunciator (886495-001) insert into the hole in printer bracket and re-secure cover.
37. Connect Annunciator Y cable (WU002090-0001) to the Annunciator and to both iX boards (J18 Annunciator). Route one leg of the Y cable underneath the printer bracket for opposite side iX.
38. Connect the Power Y jumper cable (WU001942-0001) to J3 on the Cash/Credit board. Reconnect the AC connector previously installed in J3 to the Y cable and connect the opposite end of the Y cable to the 3-pin connector on the new power supply.
39. Connect DC Power Cable (887338-002) to the 4-pin connector on the Power Supply and to the DC Dist board J1(4-pin) connector.
40. Optional Totalizers:
  - A. If totalizers were existing, remove the totalizers from the bracket saved in step 7C and install the totalizers onto the bezel totalizer bracket. Use new Plastic Rivets (888352-001) as needed. Discard old bracket and screws.
  - B. Connect the totalizer cable (883579-007) supplied with the bezel harness to the totalizers and to the cash credit board J7.
41. Reconnect control power and light power inside the electronic head.
42. Secure the Duplex computer assembly to the DEM, connect sides 1 and 2 annunciators to J13 and J14 on the Duplex computer and reconnect J10 and AC power J3.
43. Raise DEM and secure in the up position.
44. Perform the following to install the Display Adapter Brackets (WU001551) left and (WU001553) right.
  - A. Loosen the (4) screws holding the sales display dial face, then remove and save dial face.
  - B. Disconnect display cable then remove the (4) screws holding the display board, remove board and set aside.
  - C. Remove and save the (4) screws holding the backlight panel, then set panel aside.



D. Remove and save the (2) backlights and remove and save the white backlight dish.

For some models detach the light holder clipped onto the brackets, then skip steps E and F below.

E. Remove and save the (2) screws holding each of the light holder, discard nuts, save screws.

F. Remove and discard the (2) brackets and one each screw holding the light holder.

G. Install (4) Metal Standoffs (5001901) onto the existing display bracket.

H. Install (1) Display Adapter Bracket, Left (WU001551) on top of the left standoffs reusing the (4) screws save previously.

I. Repeat above step for (1) Display Adapter Bracket, Right (WU001553).

J. Reinstall the (2) light boxes reusing (4) screws saved above.

K. Reinstall the white backlight dish and reinstall the (2) backlights saved above.  
Note: If bulbs are old or burned-out, replace as necessary.

L. Reinstall the light panel saved above using (4) #4 Screws 882872-015.

M. Reinstall the sales display board saved above using (4) #6 Screws 6005903 and reconnect the cable to upper left side of board.

N. Reinstall the dial face saved above onto the sales display board.

45. Bundle and tie wrap all cables where possible, using Holder (5057301) and Cable Ties (001-916486-).

46. Ensure all ground wires inside the head are secured to the chassis.

47. Ensure all cables are inside the head and bezel.

48. Close and lock bezel.

49. If POS does not use the softkeys on the QVGA display (if old TRSM keypad did not have softkeys), cover the keys with 882941-xxx Soft Key Blank Covers.

50. Repeat instruction steps 7, 9-20, 22-28, 30, 32-33, 40 and 43-48 for side 2 of the dispenser.

51. Turn power on to the dispenser.

52. Verify SPM and dispenser operation. Refer to Startup and Service manual 940014 for starting up the SPM.

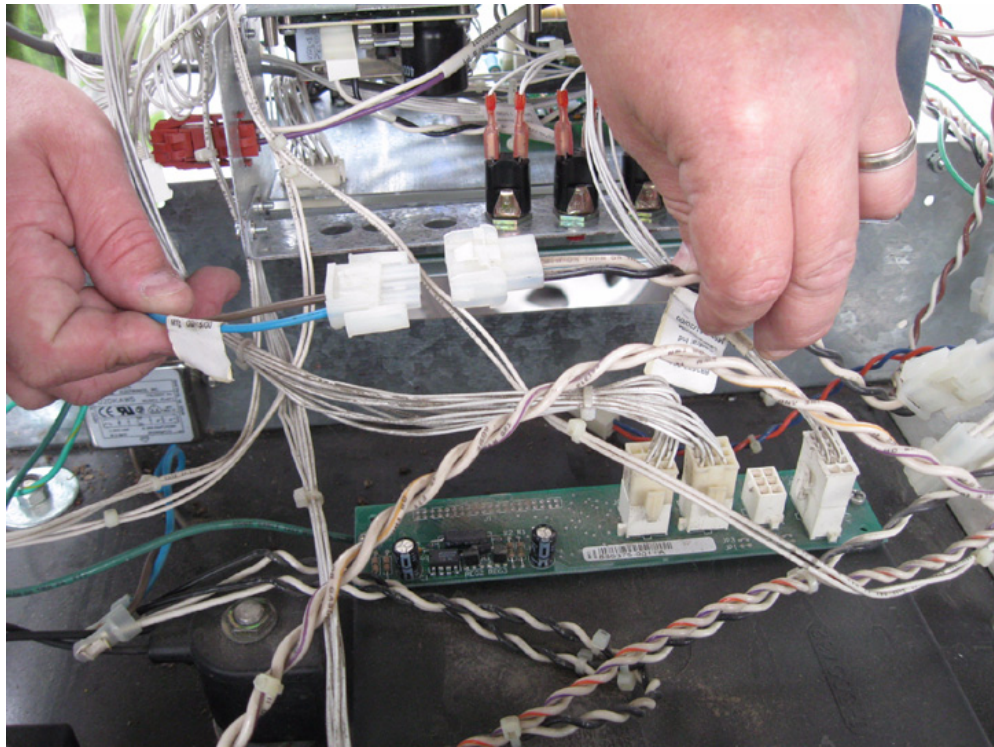
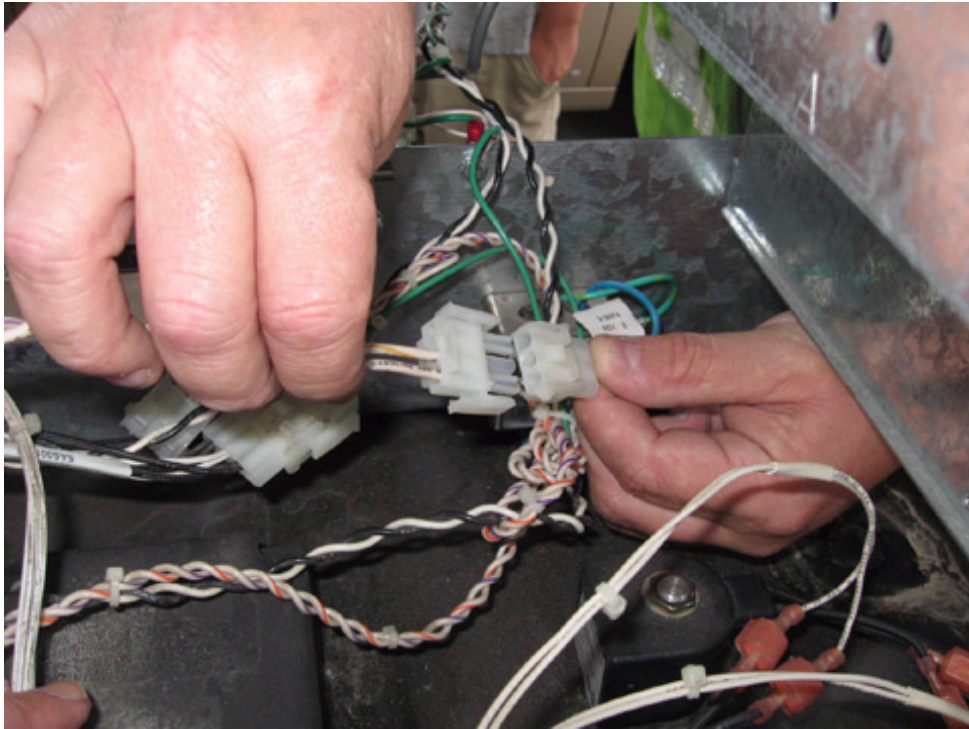




FIGURE 2

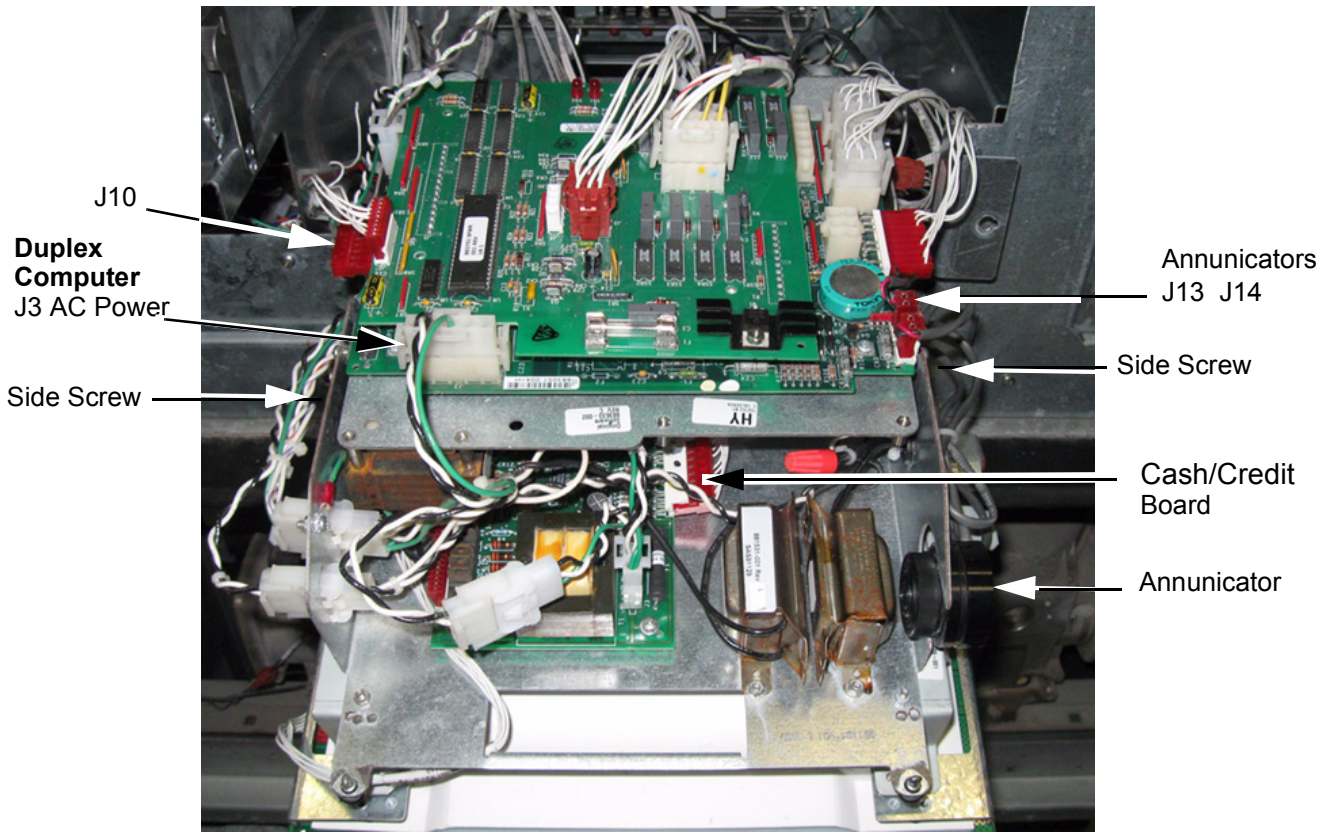


FIGURE 3

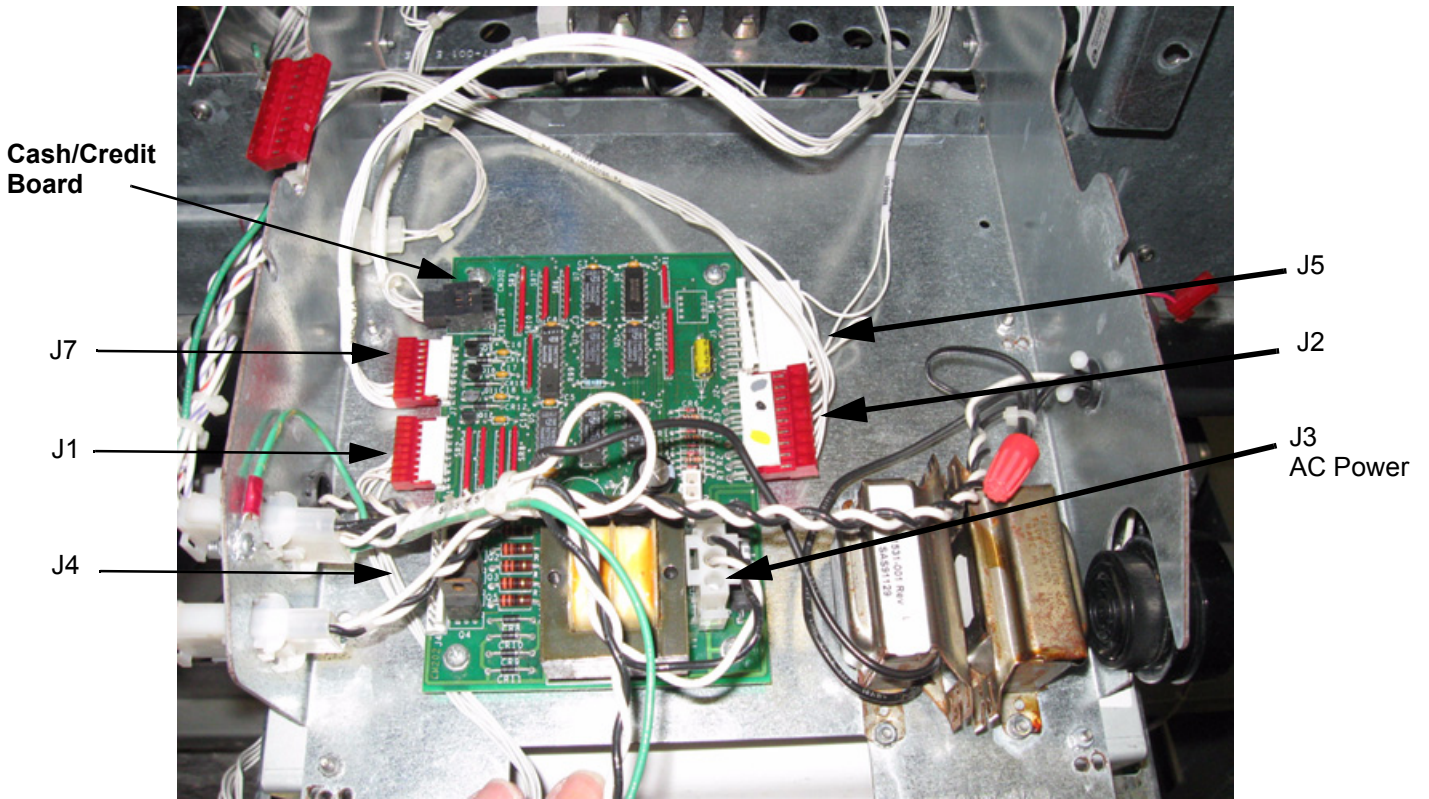


**FIGURE 4**





A



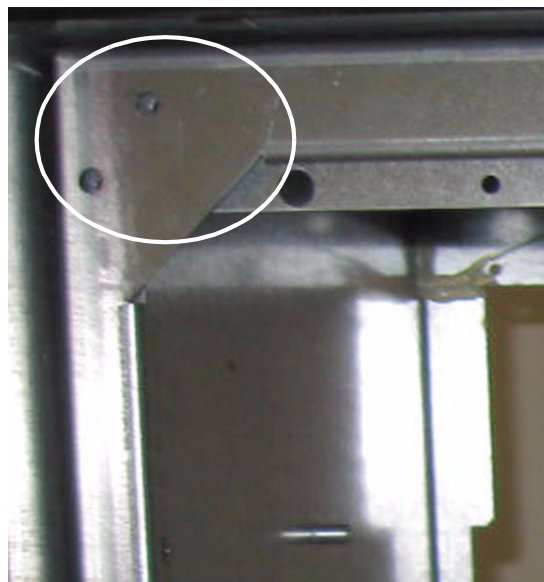
B

FIGURE 5



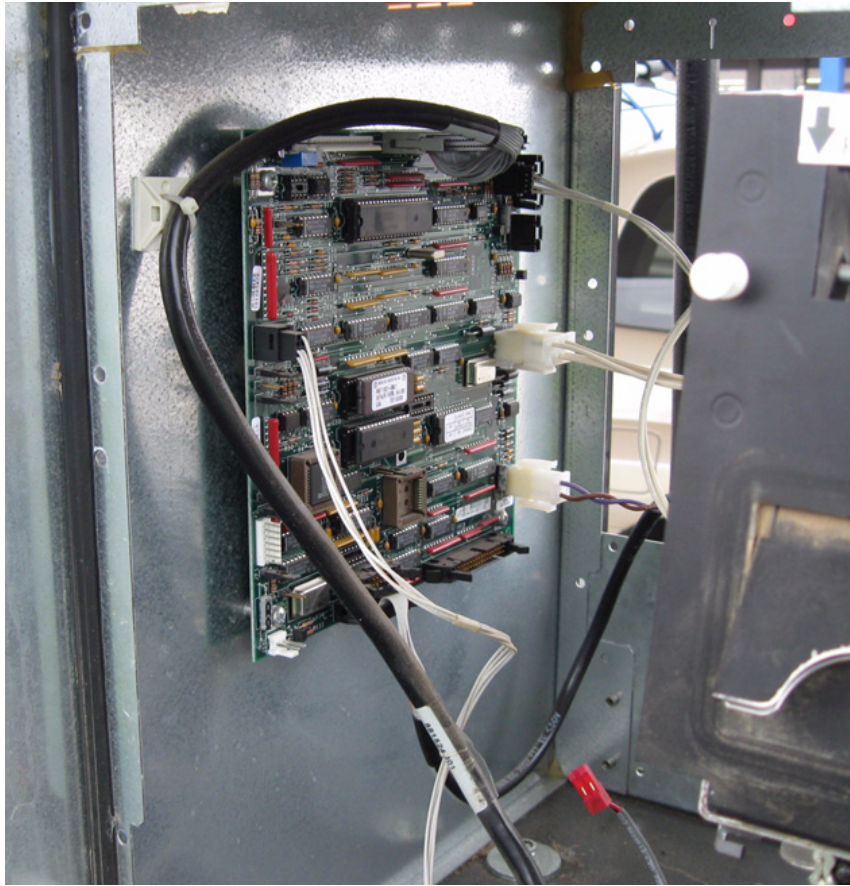
Filter viewed from opposite side. From this view, the screw to be removed is out of view on the right side of filter. The ground wire may be attached to either screw.

**FIGURE 6**



**FIGURE 7 For Narrow Body Kit Instruction Only**



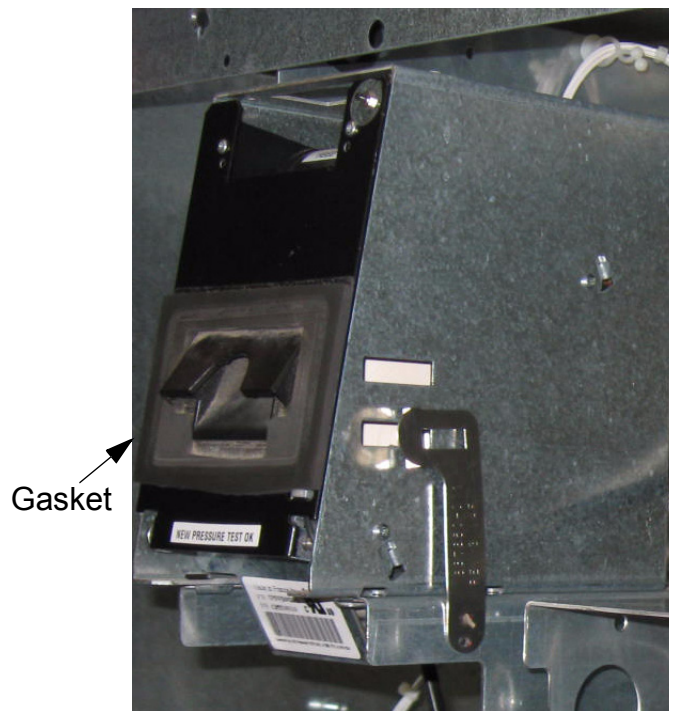
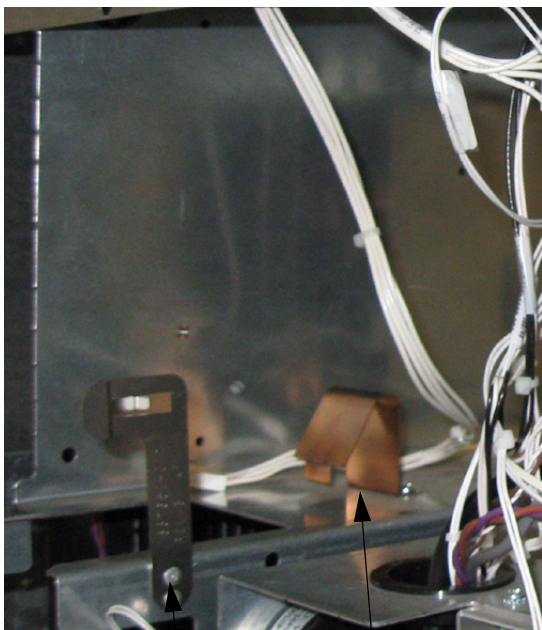
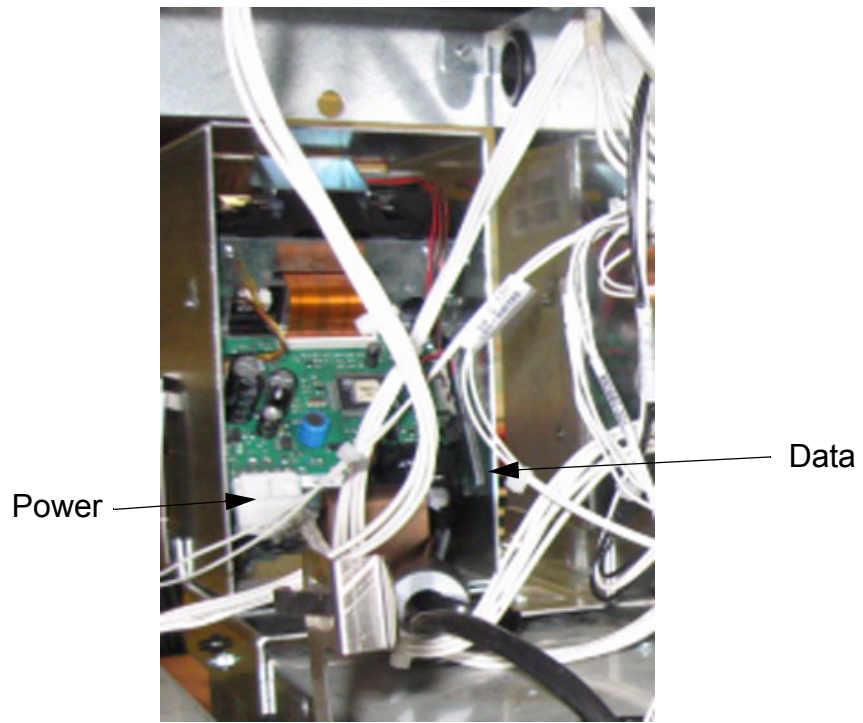


**FIGURE 8**

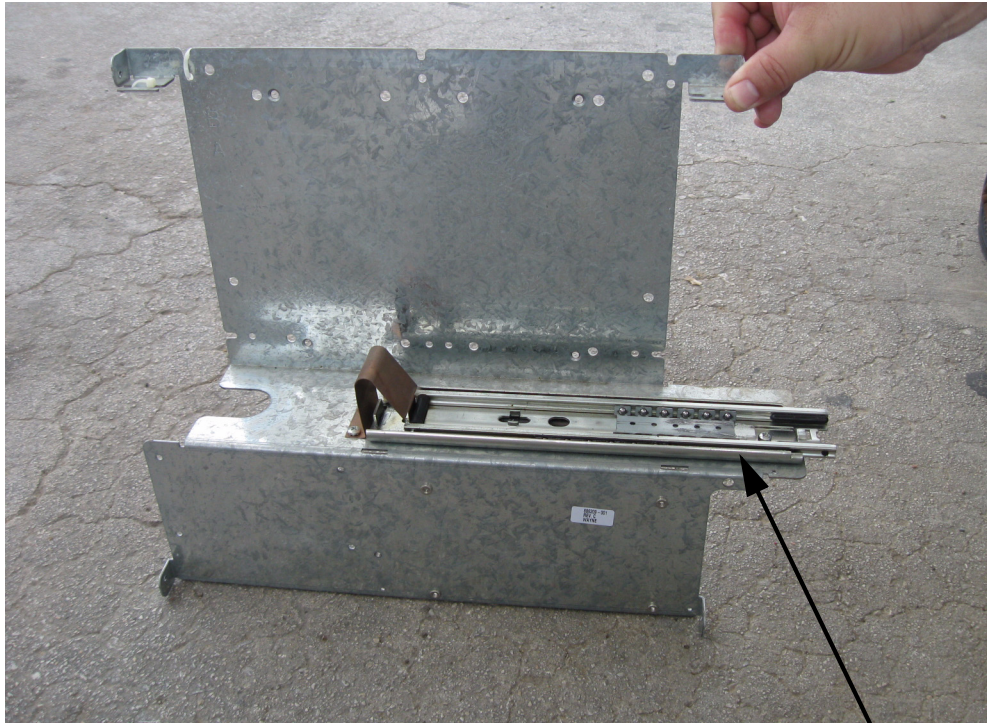


**FIGURE 9**





**FIGURE 10 CLAMSHELL PRINTER SHOWN**



Slide Rail

**FIGURE 11 TEAR BAR PRINTER BRACKET SHOWN**



(7) Nuts to  
Secure Bezel Adpt Plate

Bezel Ramp

EMI Filter Screw

**FIGURE 12**



UPPER  
HINGE



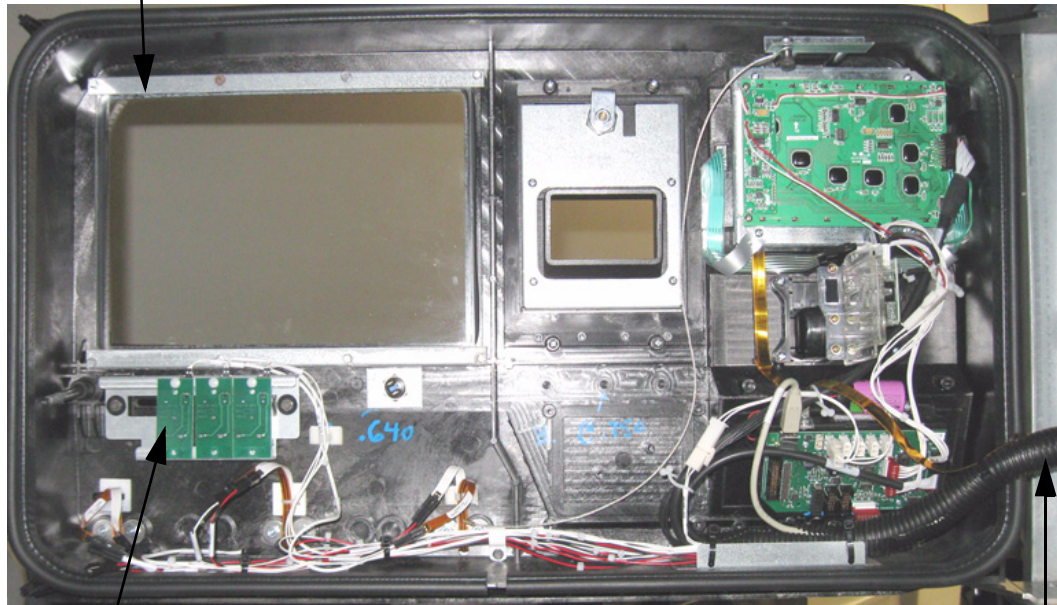
**FIGURE 13**

LOWER  
HINGE



**FIGURE 14**

Display Glass/Bracket



Totalizers on Narrow Body Bezel.  
Totalizers on Wide Body will go  
on the new Right Bezel.

Bezel Harness

**FIGURE 15**



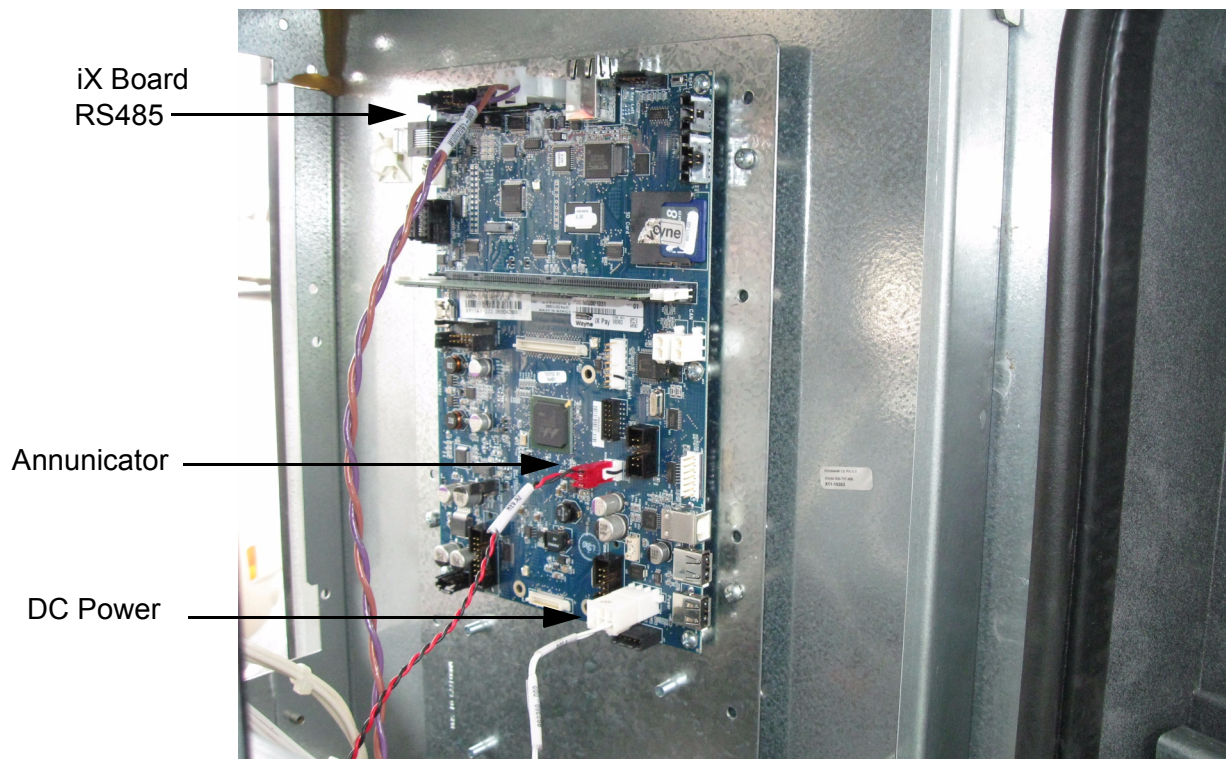
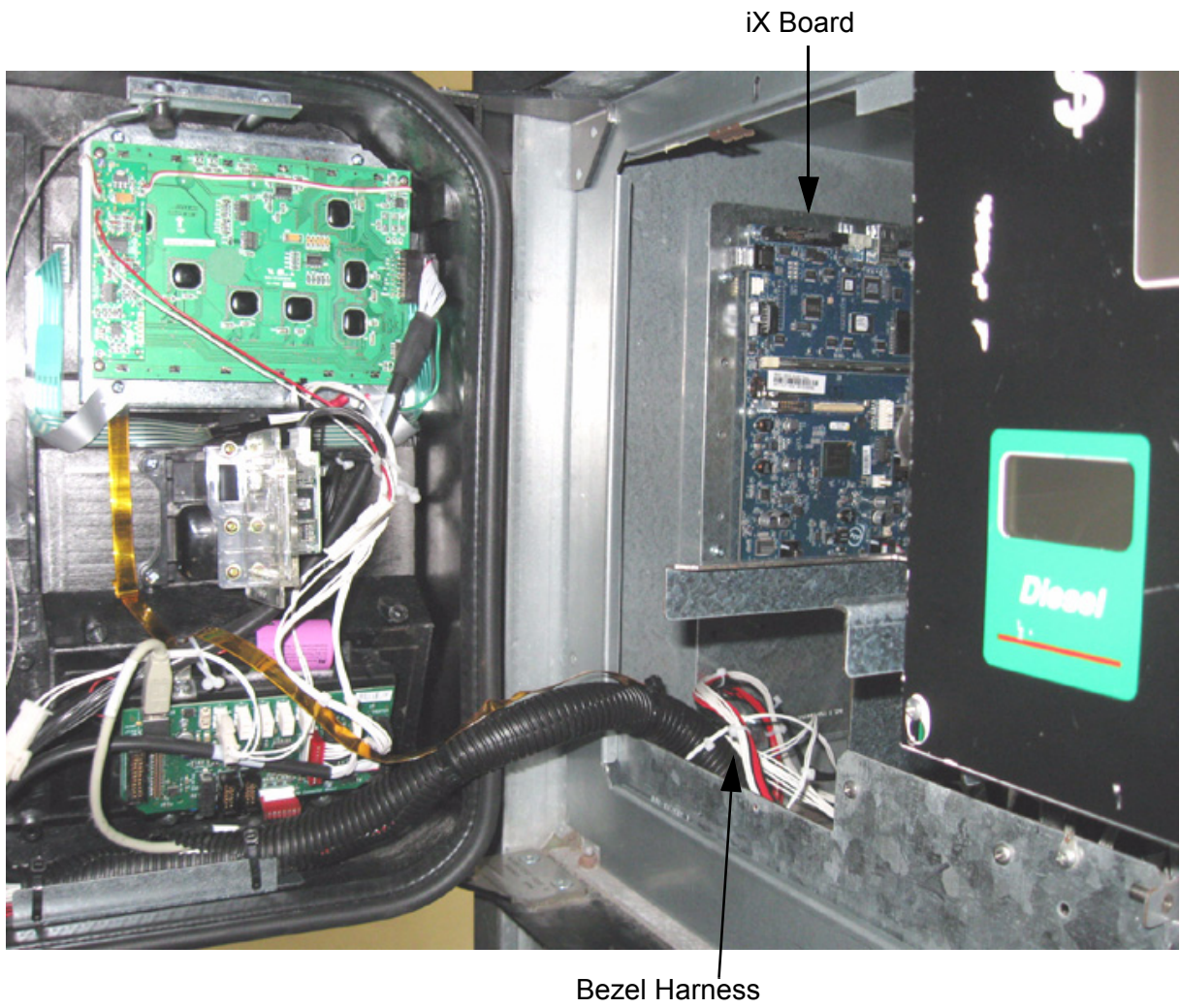


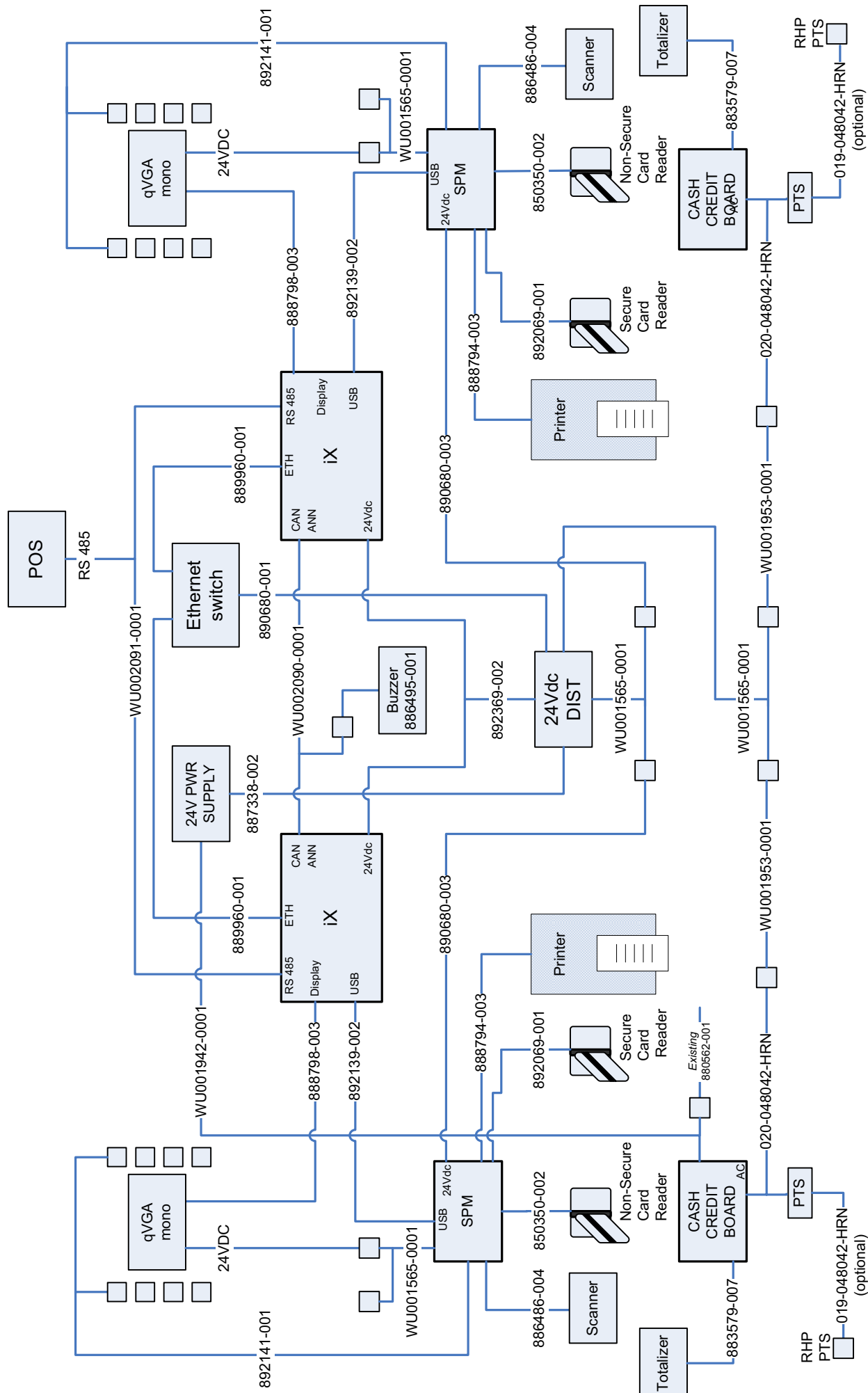
FIGURE 16



# 2 Vista SPM Retrofit Wiring Diagram

SIDE 1

SIDE 2







# INSTALLATION MANUAL

## SPM Retrofit Kits for 2/V Dispensers

Written by S. G. Martin

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