

INSTALLATION

Security Switch Kits
P/N 892760-001 Bezel &
P/N 892761-001 Hydraulics
Ovation and Vista
Dispensers

February 2009



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.

1 INTRODUCTION

This manual provides instructions for installing the Bezel and Hydraulics Cabinet Security Switch Kits for Ovation and 3/Vista model dispensers. For Ovation dispensers, the kit part numbers are 892760-001 for the bezels and 892761-001 for the hydraulics cabinet. For 3/V dispensers, the kit part numbers are 892760-002 for the bezels and 892761-002 for the hydraulics cabinet.

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

Service Laptop

iGEM pump software (version 52 or higher required)

servTerm (version 5.7.1 or higher required)

Channel locks (for HYD kits)

Hex socket and ratchet (for HYD kits)

Allen wrenches (for HYD kits)

Phillips head screwdriver

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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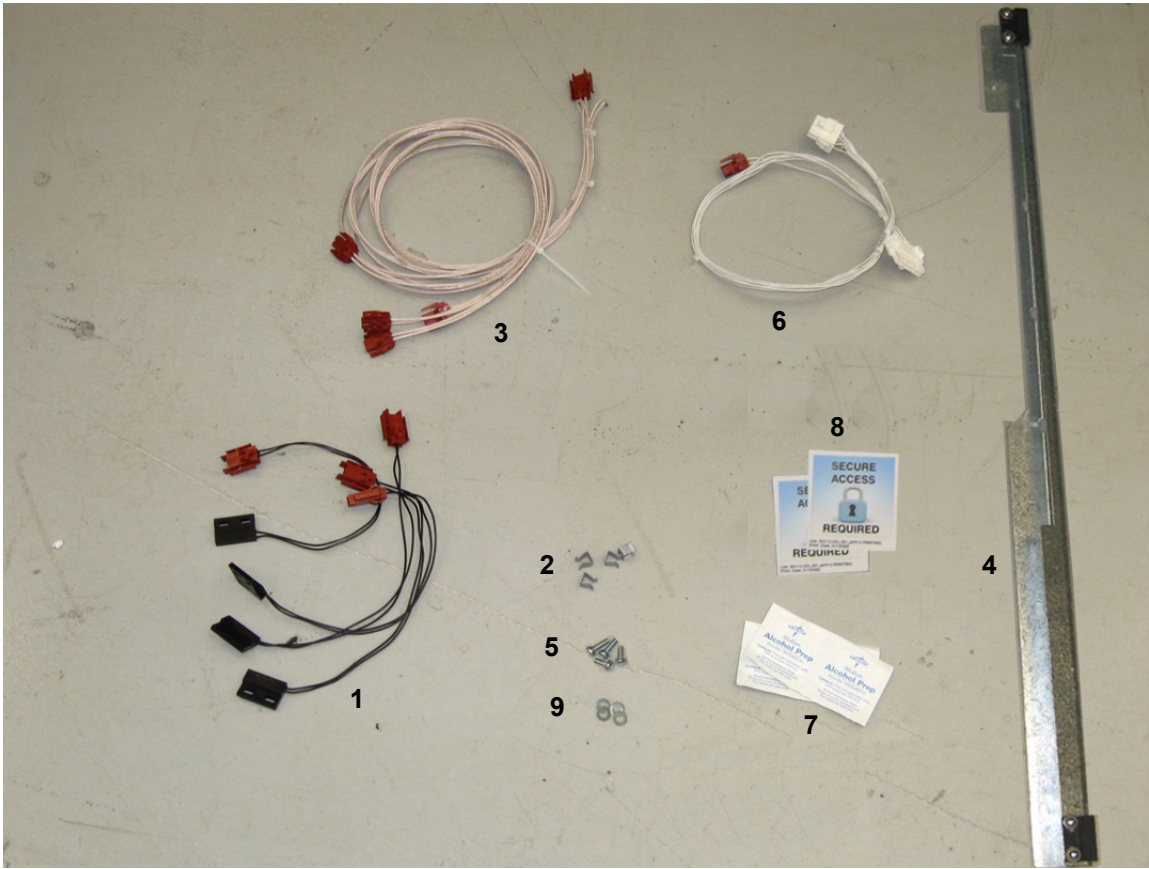


FIGURE 2-1 OVATION BEZEL KIT

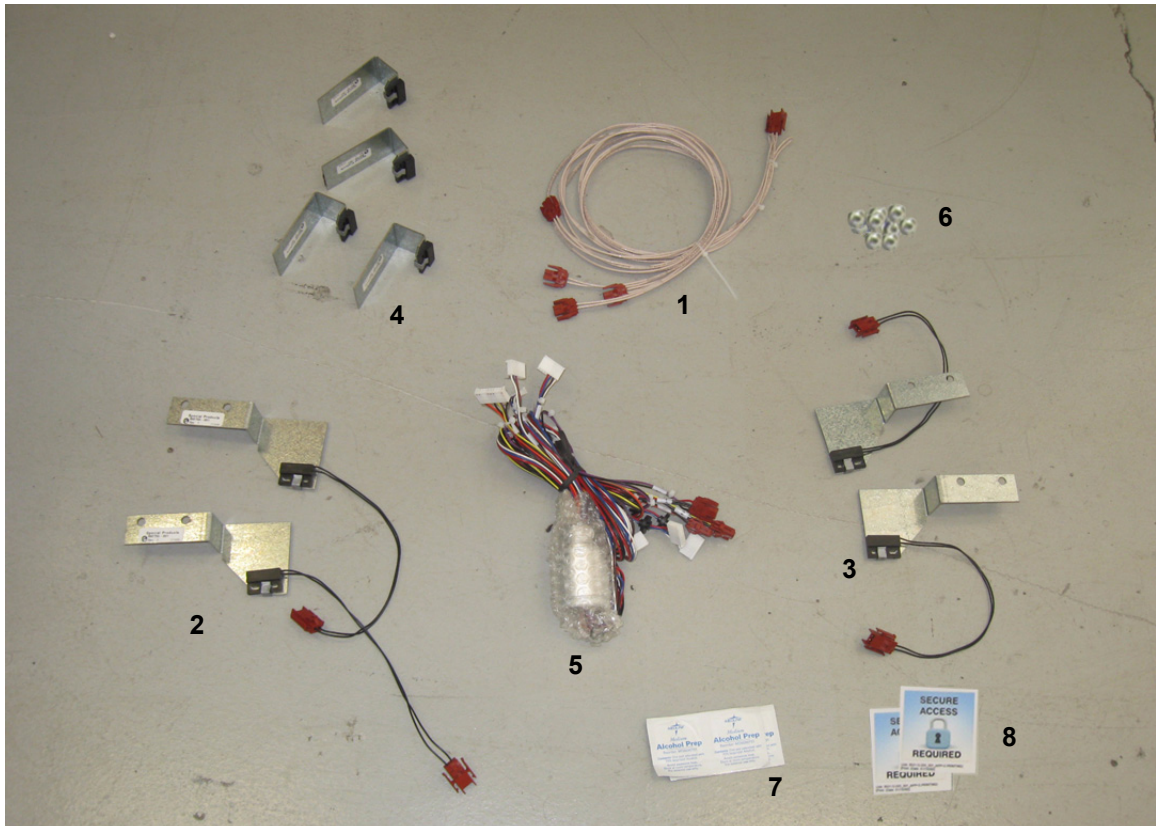


FIGURE 2-2 OVATION HYDRAULICS KIT

2 INSTALLATION - OVATION

Before beginning the installation, adhere to the safety precautions listed in Section 1.3.

2.1 Parts Required

The parts and quantities listed in below are included in the kits.

892760-001 KIT, OVATION BEZEL SECURITY SWITCHES SEE FIGURE 2-1

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>ITEM NO.</u>
001-201917-	Switch	4	1
000-918913	Retainer Clip	4	2
892754-001	Harness, Security Switches	1	3
892824-001	Bracket, with Magnet, Ovation Bezel	2	4
6005902	Screw 6-32x1/2	4	5
887339-101	Harness, ISB to iGEM	1	6
892794-001	Alcohol Wipes	2	7
892112-025	Decal, Secure Access	2	8
6011002	Washer, for use on older bezels	4	9
000-940020-	Installation Instructions	1	10 not shown

892761-001 KIT, OVATION HYD CABINET SECURITY SWITCHES SEE FIGURE 2-2

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>ITEM NO.</u>
001-201917-	Switch		part of item 2&3
000-918913	Retainer Clip		part of item 2&3
892754-001	Harness, Security Switches	1	1
892755-001	Bracket, Security Switch, Ovat Hyd Chassis Left	2	2
892755-002	Bracket, Security Switch, Ovat Hyd Chassis Right	2	3
892759-001	Bracket, Security Magnet, Ovat Hydraulic Door	4	4
101-301176-HRN	Harness/Potted Fitting, Nozzle Boot, Ovation	1	5
000-918210-	Lock Nut	8	6
892794-001	Alcohol Wipes	2	7
892112-025	Decal, Secure Access	1	8
000-940020-	Installation Instructions	1	9 not shown

2.2 Ovation Bezel Security Switches, 892760-001 Kit

The following instructions are for installing the security switch kit for Ovation dispenser bezels.

1. Turn off AC power to the dispenser at the circuit breaker.
2. Open upper doors (Bezels) on both sides of dispenser.
3. Disconnect and remove the wire harness between ISB J7 to iGEM J4.
4. Connect the new (item 6) Wire Harness between ISB J7 to iGEM J4.
5. Connect the new (item 3) Wire Harness to the iGEM connector on the item 6 harness and, for now, lay the other ends of the harness in the head; these will connect to the security switches.
6. Install pre-assembled Bezel Bracket/magnets as follows; see Figure 2-3 for older style bezels and Figure 2-4 for newer style bezels.
 - A. Remove and discard the existing screw in the two locations identified in Figure 2-3 or Figure 2-4 as applicable.
 - B. Install (item 4) Bracket onto bezel as shown and, on older bezels, secure using (item 9) Washer and (item 5) Screw in each location, or, on newer bezels, secure with only the (item 5) Screw in each location.
7. Install security switches for side 1 as follows; see Figure 2-5.
 - A. Use (item 7) Alcohol Wipe to clean area on chassis where upper and lower switches will be located.
 - B. Remove tape backing and install (1) (item 1) Switch to upper part of chassis at the point of the angle on the chassis and then secure switch with (1) (item 2) Retainer clip.
 - C. Remove tape backing and install (1) (item 1) Switch to lower part of chassis flush with the top of the existing screw on chassis and then secure switch with (1) (item 2) Retainer clip.
 - D. Connect the switches to either of the connectors in the wire harness item 3.
 - E. Secure switch wires/wire harness to chassis.
8. Repeat Steps 6 and 7 for side 2 of dispenser.
9. Ensure all wires are inside, then close and lock side 2 bezel.
10. Apply one (item 8) Secure Access Decal to the inside of the column near the serial number label, or apply one Secure Access Decal to each bezel as applicable per customer.

11. Connect laptop to iGem computer and power up dispenser.
12. Using Servterm version 5.7.1 or higher, get a Data Dump from the iGEM computer.
13. A) Via servTerm, load iGEM pump software rev 52.00 or higher.
B) Reload dispenser template.
C) Reset customer/dispenser specific function settings.
14. Disconnect laptop.
15. Ensure all wires are inside, then close and lock side 1 bezel.
16. Using the IR remote perform the following steps:
 - A. Access iGEM maintenance mode.
 - B. Go to Function 34.01 switch test.
 - C. Verify that switch “1n4” is closed. (The sales display should read 1n4.)
Note: If the display does not read 1n4, the bezel(s) may not be closed completely, or one of the security switches may be faulty.
17. Complete all the above steps for all dispensers before proceeding with the next step.

Note: How the security feature is enabled is predetermined by the customer prior to start-up .

Step 18 below uses Function 56.00 to arm the door security sensors and require a One Shot password from the Help Desk in the future to disarm/reset a breached door.

Step 18 can also be performed in the same manner using Function 56.01 to arm the door security sensors and require only a local iGEM Maintenance mode password in the future to disarm/reset a breached door. As always, local iGEM maintenance mode passwords can be set in Function 33.
18. Using the IR remote perform the following steps for each dispenser:
 - A. Press 5. The display will show “Func”.
 - B. Enter 56. The display will show “Sub”
 - C. Enter 00. The display will show “5600xxxxxxx. This is the Challenge code. (The first four digits are always the function and sub-funtion.)

- D. Call the Dresser Wayne Help Desk and give them the challenge code. They will then give you the Response code (One Shot) that is required to activate the security feature. Keep the Help desk on the line for repeating Step 18 for each dispenser.

Note: If 2 minutes expire before completing steps D and E, the display returns to the operation idle prompt. At this point, simply go back through the above steps and *use the same response code*. Note: Once the code is entered in step E below (which gives access to Function 56), a new code from the Help Desk would be required to re-access this function.

- E. With the challenge code still showing on the display, press Enter on the IR remote. The display shows *Pass 1*. Enter the Response code numbers and then press Enter. The display shows *Pass 2*. Enter the Response code numbers and then press Enter.
- F. Go to Function 56.00, change 0 to 1, then go to Function 00 and enter 3 to save and exit.
This has enabled the security switch, and, in *1 minute*, the switch will be armed; pressing Enter during the one minute period will display "Secure OFF".
- G. After the one minute, Press Enter. The display will show "Secure ON".

The procedure is now complete. The bezel should not be opened.

Note: Opening the door anytime after this point will constitute a security breach. At the time a breach occurs, annunciator will sound a constant alarm tone and the display will show "Closed". A new response code will be required to access function 56 (which clears the breach).

19. Run test sales to verify dispenser operation.

This completes the installation.

Note: The above Step 18 uses either Function 56.00 set to 1 (or Function 56.01 set to 1) to arm the door sensors. The sensors can be disarmed by setting the function from 1 back to 0 using the same procedure.

2.3 Ovation Hydraulics Cabinet Security Switches, 892761-001 Kit

The following instructions are for installing the security switch kit for Ovation dispenser lower doors.

1. Turn off AC power to the dispenser at the circuit breaker.
2. Remove lower doors and open upper doors/bezels.
3. Disconnect cables from J1 and J7 on top of the ISB. Cables will be reconnected later.
4. Remove and save the (2) 5/16" Hex screws securing the ISB. Lift ISB and disconnect potted fitting/wire harness cables from the bottom. Set ISB aside for now.
5. Remove nozzle boot(s) and disconnect nozzle switch wires. Repeat on opposite side of dispenser. (Use long 5/32" Allen on boot screws and note the position of the screws).
6. Disconnect cables from all WIP pulsers.
7. Using channel locks, loosen and remove the nut securing the potted fitting to the vapor barrier and remove the potted fitting/wire harness. Save washers and nut.
8. A) Install new (item 5) potted fitting/wire harness reusing one washer above and one below the vapor barrier and secure to vapor barrier reusing the nut.
B) Connect cables to the bottom of the ISB.
C) Re-secure ISB to vapor barrier reusing the hardware.
D) Reconnect cables to J1 and J7 on top of the ISB.
E) Connect WIP pulser wires.
F) Connect nozzle boot switch wires and reinstall nozzle boots.
9. Attach pre-assembled Bracket/Switch (item 2) 892755-001 (left) to the two screws on the left side lower chassis as shown in Figures 2-6, 2-7. Secure with (item 6) Lock Nuts.
10. Attach pre-assembled Bracket/switch (item 3) 892755-002 (right) to the two screws on the right lower chassis as shown in Figure 2-8. Secure with (item 6) Lock Nuts.
11. Install the (item 1) Security Switch Harness as follows:

Connect the single connector end of the harness to the mating connector on potted/fitting harness. Connect either two of the connectors on the opposite end of the harness to the two security switches.

12. Install (2) of the pre-assembled (item 4) 892759-001 Bracket/Magnets as follows: see Figure 2-9.
 - A. Use (item 7) Wipes to clean area on lower door where brackets will be located.
 - B. Remove tape from backside of bracket and install on the lower door (flush against the top of door and against the inside of retaining screw) as shown.
13. Reinstall and lock the door.
14. Repeat these instructions for the opposite side of dispenser.
15. Apply the (item 8) Secure Access Decal to the inside of the column near the model/serial number label.
16. Close both bezel doors.
17. Turn on power to the dispenser.
18. Run test sales to verify dispenser operation.

VISTA KITS

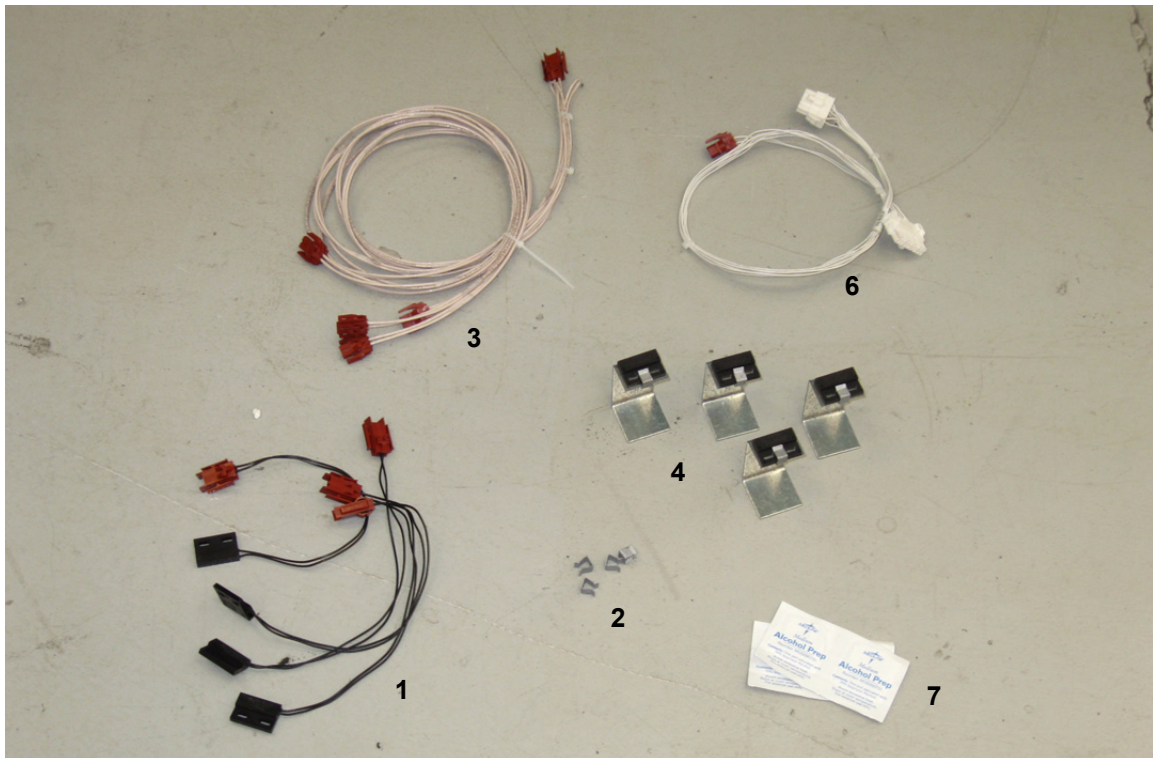


FIGURE 3-1 VISTA BEZEL KIT

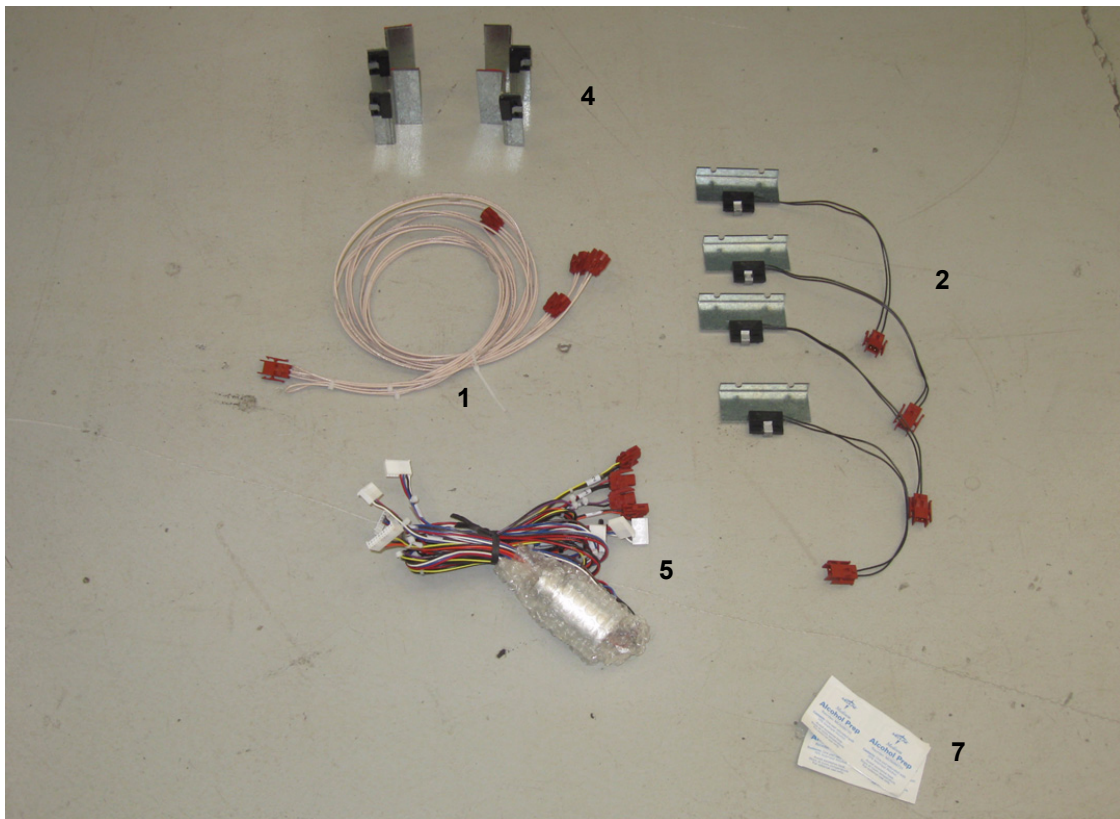


FIGURE 3-2 VISTA HYDRAULICS KIT

3 INSTALLATION - VISTA

Before beginning the installation, adhere to the safety precautions listed in Section 1.3.

3.1 Parts Required

The parts and quantities listed in below are included in the kits.

892760-002 KIT, VISTA BEZEL SECURITY SWITCHES

SEE FIGURE 3-1

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>ITEM NO.</u>
001-201917-	Switch	4	1
000-918913	Retainer Clip	4	2
892754-001	Harness, Security Switches	1	3
892752-001	Bracket, Security Magnet, Vista Bezel	4	4
887339-101	Harness, ISB to iGEM	1	6
892794-001	Alcohol Wipes	2	7
892112-025	Decal, Secure Access	1	8 not shown
000-940020-	Installation Instructions	1	9 not shown

892761-002 KIT, VISTA HYD CABINET SECURITY SWITCHES

SEE FIGURE 3-2

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>ITEM NO.</u>
001-201917-	Switch		part of item 2
000-918913	Retainer Clip		part of item 2
892754-001	Harness, Security Switches	1	1
892756-001	Bracket, Security Switch, Vista Hyd Chassis	4	2
892758-001	Bracket, Security Magnet, Vista Hyd Door	4	4
004-302140-HRN	Harnal/Potted Fitting, Nozzle Boot, Vista	1	5
892794-001	Alcohol Wipes	2	7
892112-025	Decal, Secure Access	1	8 not shown
000-940020-	Installation Instructions	1	9 not shown

3.2 Vista Bezel Security Switches, 892760-002 Kit

The following instructions are for installing the security switch kit for Vista dispenser bezels.

1. Turn off AC power to the dispenser at the circuit breaker.
2. Open bezel on side 1.
3. Disconnect and remove the wire harness between ISB J7 to iGEM J4.
4. Connect the new (item 6) Wire Harness between ISB J7 to iGEM J4.
5. Connect the new (item 3) Wire Harness to the iGEM connector on the item 6 harness and, for now, lay the other ends of the harness in the head; these will connect to the security switches.
6. Install security switches as follows:
 - A. Install (2) (item 1) Switches to upper part of head chassis and secure switch with (1) (item 2) Retainer clip. See Figure 3-3 left, Figure 3-4 right side 1, and Figure 3-5 and Figure 3-6 side 2.
 - B. Connect the switches to either of the connectors in the wire harness item 3.
7. Install pre-assembled (item 4) Bezel Brackets/magnets as follows; see Figure 3-7 and 3-8.
 - A. Use (item 7) Wipes to clean area on bezel where brackets will be located.
 - B. Remove the double-sided tape from the bracket and install bracket onto bezel up against the boss on the bezel, as shown.
8. Repeat Steps 6 and 7 for side 2 of dispenser, then close and lock side 2 bezel.
9. Apply the (item 8) Secure Access Decal to the inside of the column sheath.
10. Connect laptop to iGem computer and power up dispenser.
11. Using Servterm version 5.7.1 or higher, get a Data Dump from the iGEM computer.
12. Via servTerm, load iGEM pump software rev 52.00 or higher and reload dispenser template.
13. Disconnect laptop and close and lock side 1 bezel.
14. Using the IR remote perform the following steps:

- A. Access iGEM maintenance mode.
 - B. Go to Function 34.01 switch test.
 - C. Verify that switch “1n4” is closed. (The sales display should read 1n4.)
Note: If the display does not read 1n4, the bezel(s) may not be closed completely, or one of the security switches may be faulty.
15. Complete all the above steps for all dispensers before proceeding with the next step.

Note: How the security feature is enabled is predetermined by the customer prior to start-up .

Step 16 below uses Function 56.00 to arm the door security sensors and require a One Shot password from the Help Desk in the future to disarm/reset a breached door.

Step 16 can also be performed in the same manner using Function 56.01 to arm the door security sensors and require only a local iGEM Maintenance mode password in the future to disarm/reset a breached door. As always, local iGEM maintenance mode passwords can be set in Function 33.

16. Using the IR remote perform the following steps for each dispenser:
- A. Press 5. The display will show “Func”.
 - B. Enter 56. The display will show “Sub”
 - C. Enter 00. The display will show “5600xxxxxxxx. This is the Challenge code. (The first four digits are always the function and sub-funtion.)
 - D. Call the Dresser Wayne Help Desk and give them the challenge code. They will then give you the Response code (One Shot) that is required to activate the security feature. Keep the Help desk on the line for repeating Step 18 for each dispenser.

Note: If 2 minutes expire before completing steps D and E, the display returns to the operation idle prompt. At this point, simply go back through the above steps and *use the same response code*. Note: Once the code is entered in step E below (which gives access to Function 56), a new code from the Help Desk would be required to re-access this function.

- E. With the challenge code still showing on the display, press Enter on the IR remote. The display shows *Pass 1*. Enter the Response code numbers and then press Enter. The display shows *Pass 2*. Enter the Response code numbers and then press Enter.
- F. Go to Function 56.00, change 0 to 1, then go to Function 00 and enter 3 to save and exit.
This has enabled the security switch, and, in *1 minute*, the switch will be armed; pressing Enter during the one minute period will display “Secure OFF”.
- G. After the one minute, Press Enter. The display will show “Secure ON”.

The procedure is now complete. The bezel should not be opened.

Note: Opening the door anytime after this point will constitute a security breach. At the time a breach occurs, annunciator will sound a constant alarm tone and the display will show “Closed”. A new response code will be required to access function 56 (which clears the breach).

17. Run test sales to verify dispenser operation.

This completes the installation.

Note: The above Step 16 uses either Function 56.00 set to 1 (or Function 56.01 set to 1) to arm the door sensors. The sensors can be disarmed by setting the function from 1 back to 0 using the same procedure.

3.3 Vista Hydraulics Cabinet Security Switches, 892761-002 Kit

The following instructions are for installing the security switch kit for Vista dispenser lower doors.

1. Turn off AC power to the dispenser at the circuit breaker.
2. Remove lower doors and open/remove upper bezels.
3. Remove/save the two screws securing the ISB. Lift ISB and disconnect potted fitting/wire harness cables from the bottom. Set ISB aside for now.
4. In the hydraulics cabinet, disconnect nozzle switch wires. Repeat on side 2 of dispenser.
5. Disconnect cables from all WIP pulsers.
6. Using channel locks, loosen and remove the nut securing the potted fitting to the vapor barrier and remove the potted fitting/wire harness. Save washers and nut.
7. A) Install new (item 5) potted fitting/wire harness reusing one washer above and one below the vapor barrier and secure to vapor barrier reusing the nut.
B) Connect cables to the bottom of the ISB.
C) Re-secure ISB to vapor barrier reusing the screws.
D) Connect WIP pulser wires.
E) Connect nozzle boot switch wires.
8. Loosen screw on the left side lower chassis shown in Figure 3-9, and slide the pre-assembled Bracket/Switch (item 2) 892756-001 under the screw and secure.
9. Loosen screw on the right side lower chassis shown in Figure 3-10, and slide the pre-assembled Bracket/Switch (item 2) 892756-001 under the screw and secure.
10. Install the (item 1) Security Switch Harness as follows:

Connect the single connector end of the harness to the mating connector on potted/fitting harness. Connect either two of the connectors on the opposite end of the harness to the two security switches.

11. Install (2) of the pre-assembled (item 4) 892758-001 Bracket/Magnets as follows: see Figure 3-11, narrow door shown; use same locations on wide door.
 - A. Use (item 7) Wipes to clean area on lower door where brackets will be located.
 - B. Remove tape from backside of bracket and install on the lower door (flush against the bottom and side edges as shown).
12. Reinstall and lock the lower door.
13. Repeat these instructions for the opposite side of dispenser.
14. Apply the (item 8) Secure Access Decal to the inside of the column near the serial no. label.
15. Close and lock both bezels.
16. Turn on power to the dispenser.
17. Run test sales to verify dispenser operation.

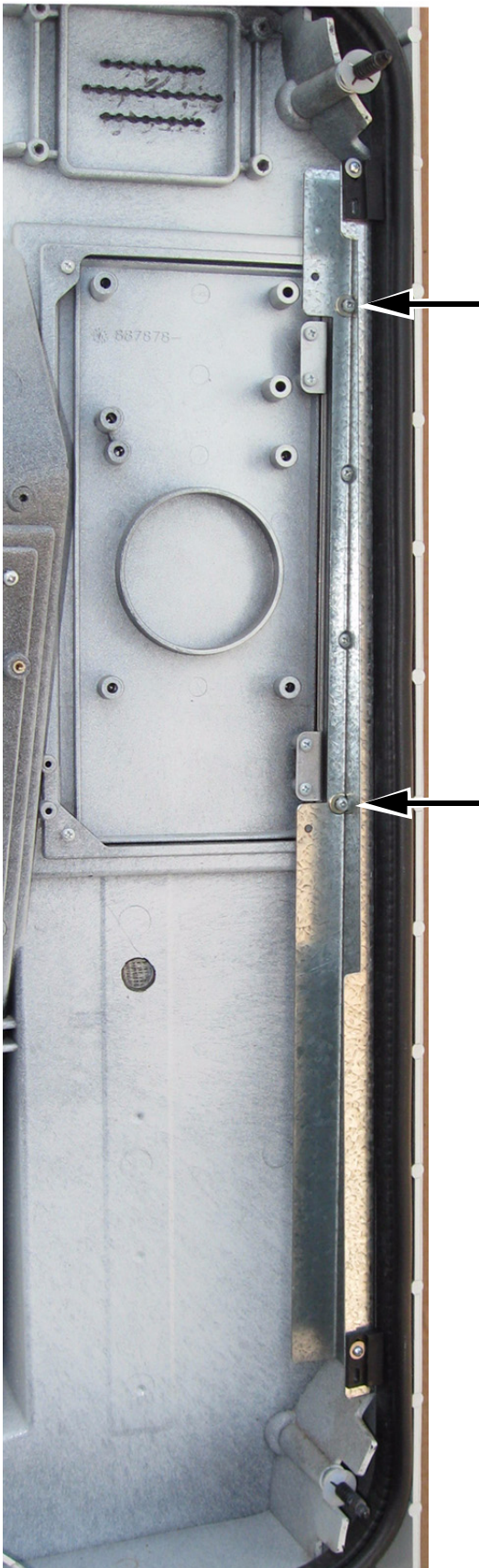


FIGURE 2-3 OLDER STYLE BEZEL
Install Bracket using **new washer & new screw**
in the two locations shown (towards inside of bracket).

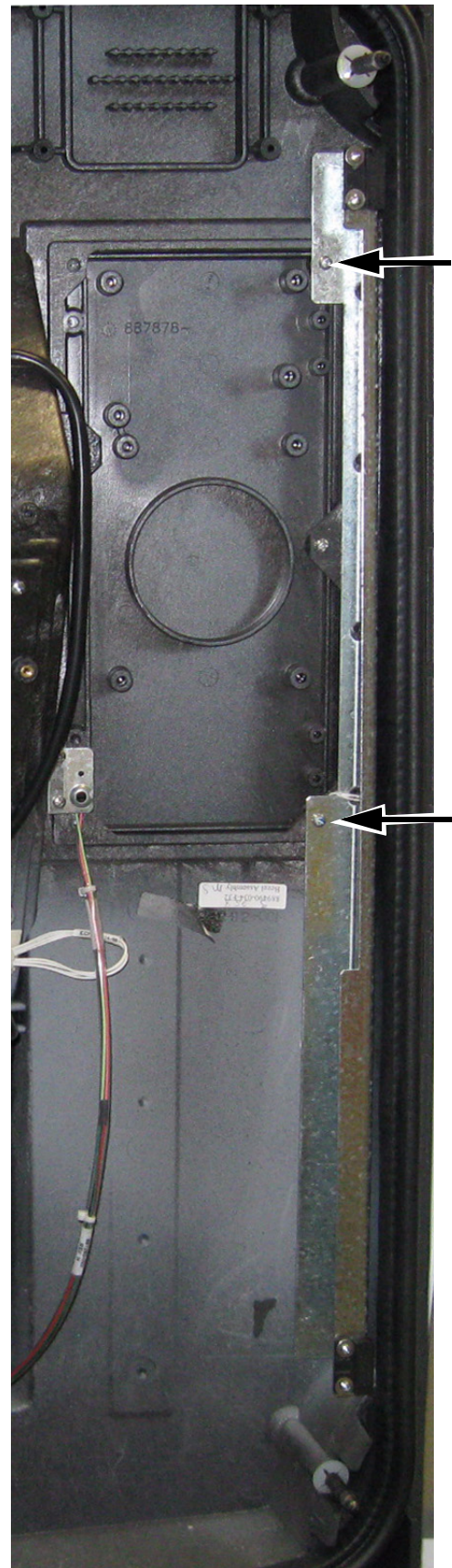


FIGURE 2-4 NEWER STYLE BEZEL
Install Bracket using **new screw** in the two
locations shown, (towards outer edge of bracket).

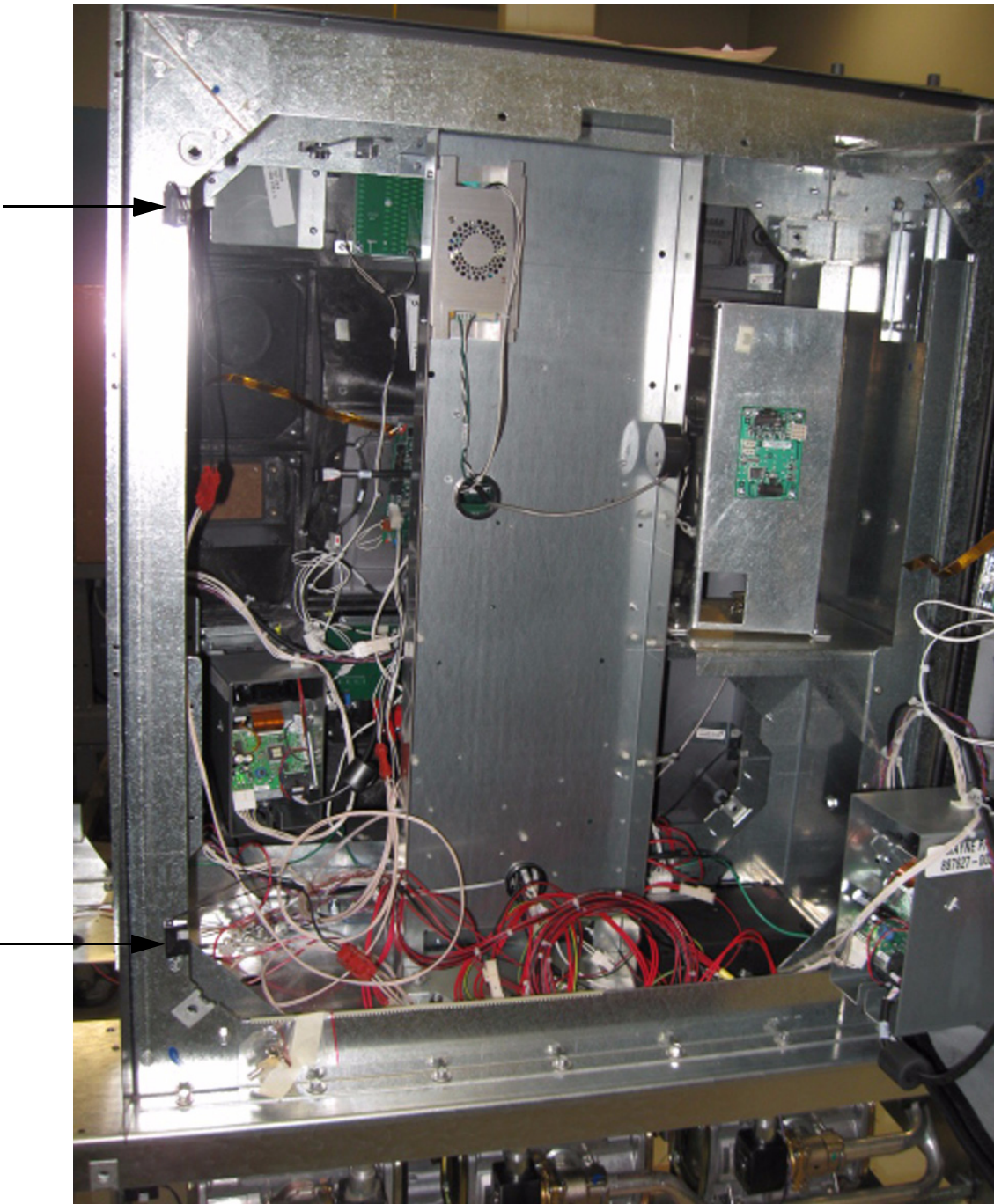


FIGURE 2-5

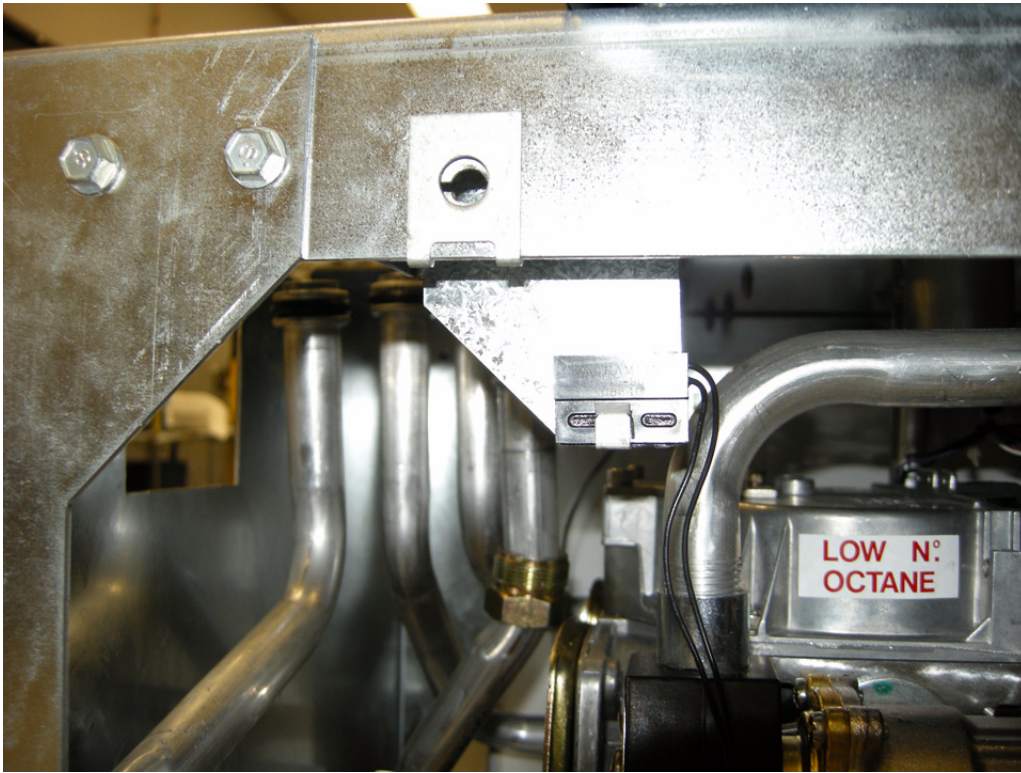


FIGURE 2-6



FIGURE 2-7

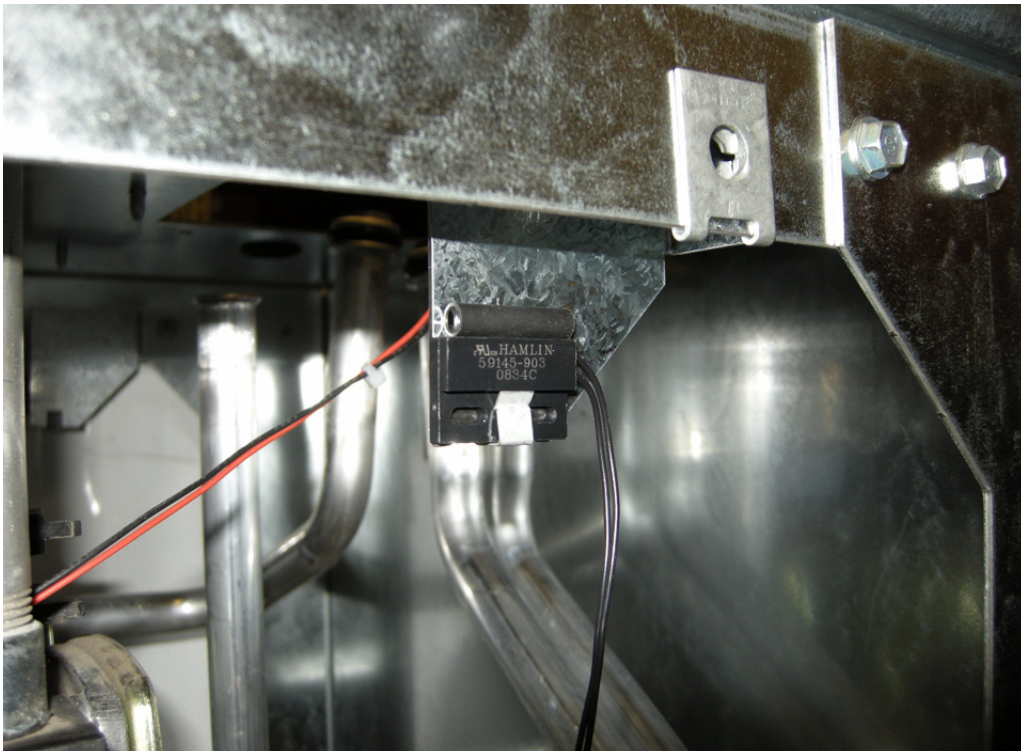


FIGURE 2-8



FIGURE 2-9

VISTA

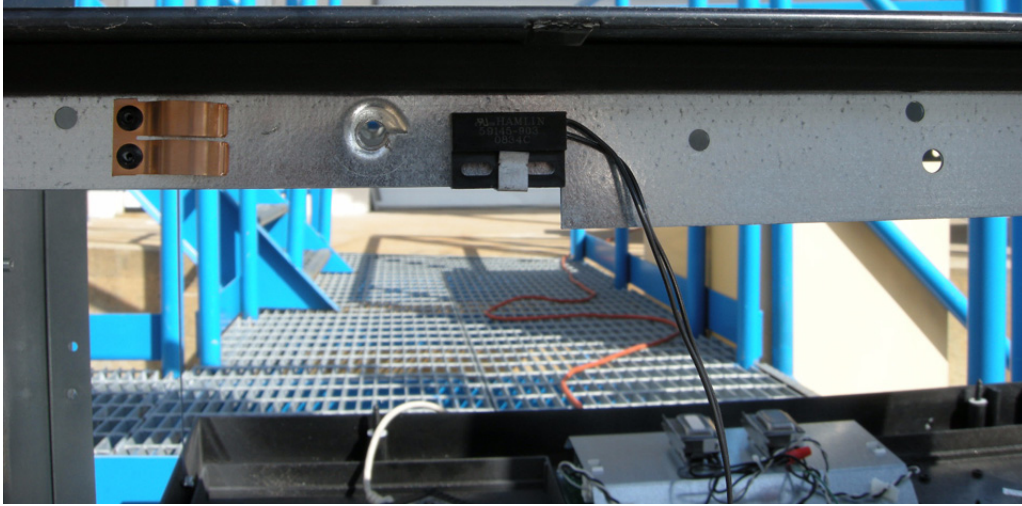


FIGURE 3-3

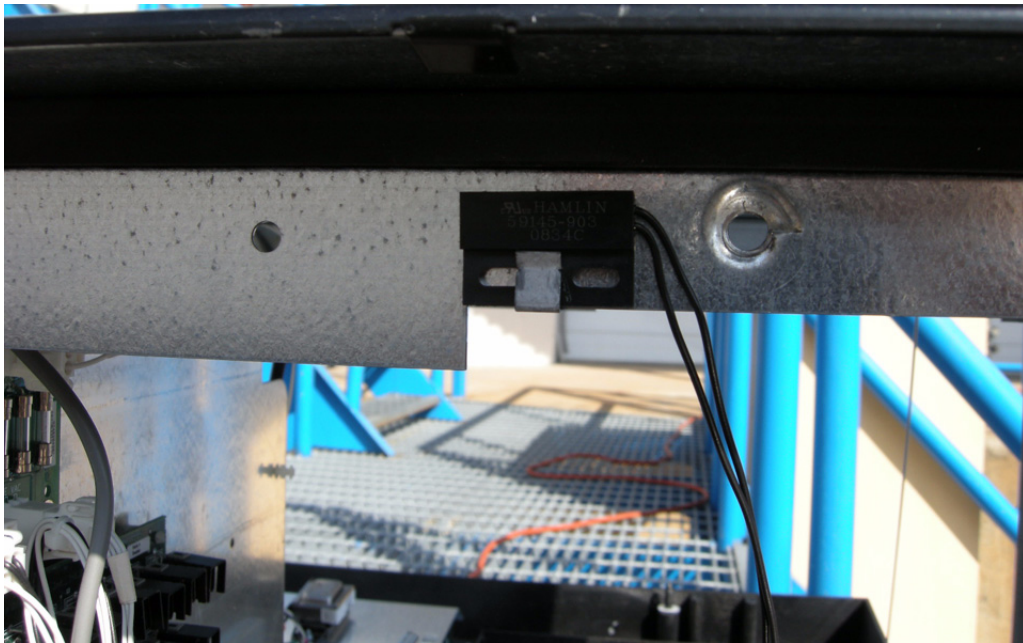


FIGURE 3-4

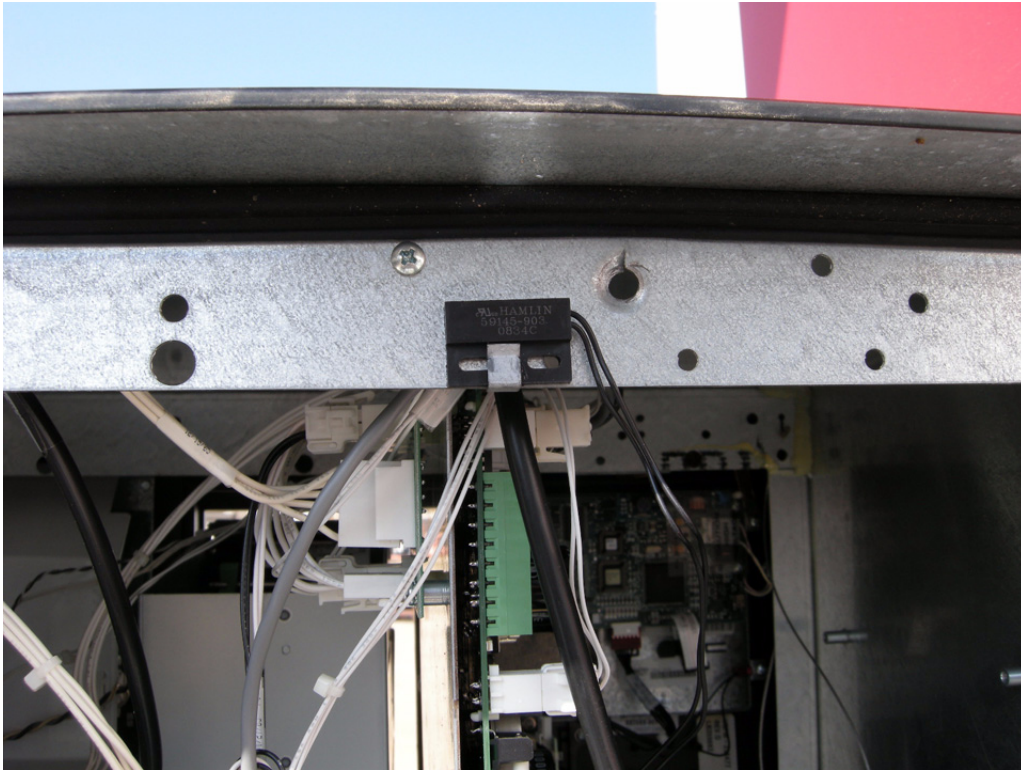


FIGURE 3-5

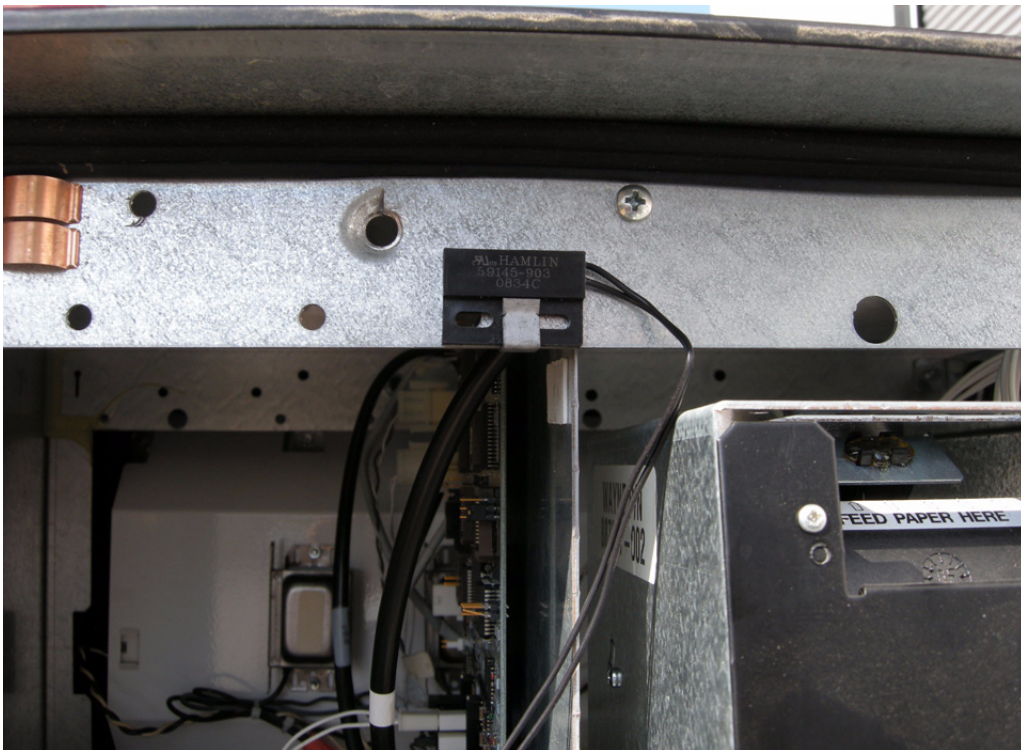


FIGURE 3-6

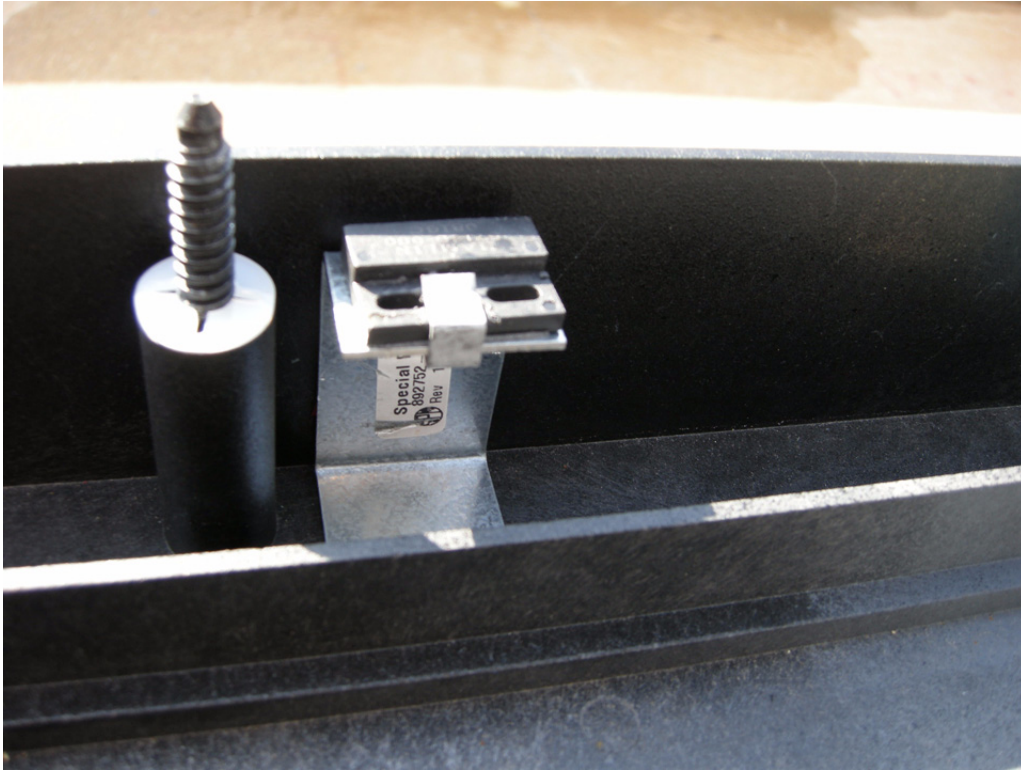


FIGURE 3-7

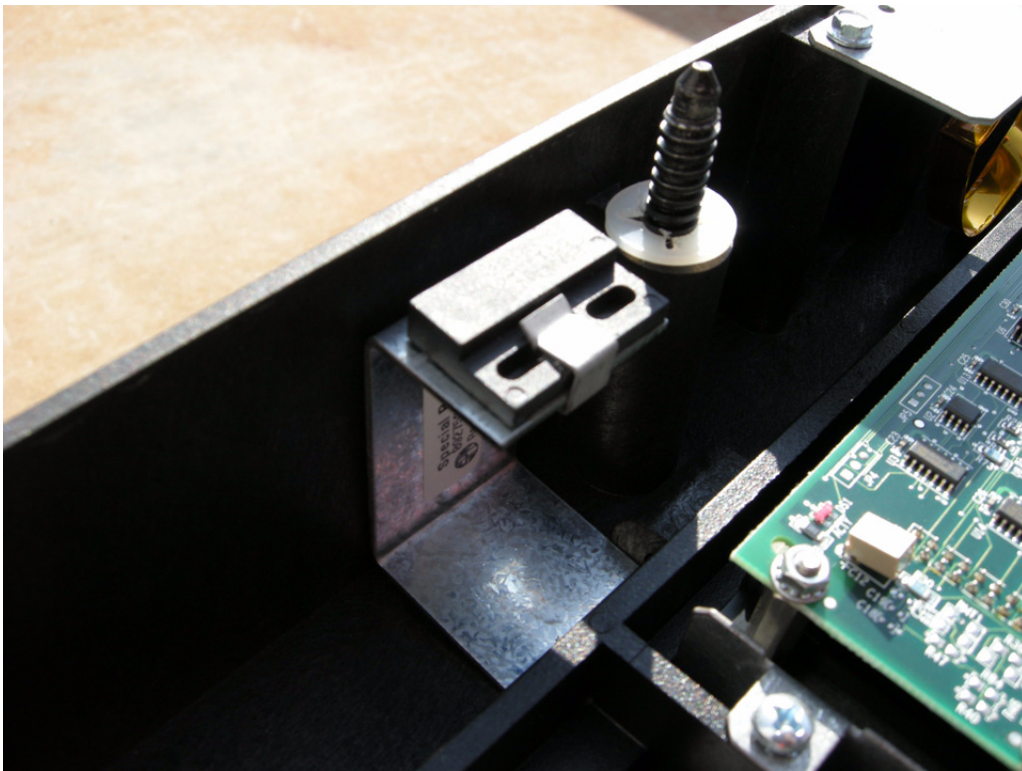


FIGURE 3-8



FIGURE 3-9



FIGURE 3-10



FIGURE 3-11

INSTALLATION MANUAL

Security Switch Kits

Written by S. G. Martin

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Page design uses Arial Fonts

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**Dresser Wayne, Dresser, Inc., is located at 3814 Jarrett Way, Austin TX 78728.
Wayne's general telephone number is (512)-388-8311.**

NOTE: "This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense."

