



VENDORS EXCHANGE
INTERNATIONAL
Innovation obsessed. Vending driven.

Important Note: Please read all instructions thoroughly before continuing with installation of kit. If you are having problems installing the kit, please call 1-800-321-2311 x123.

WARNING: Prior to installation, turn the power off to the vending machine and unplug it from its power source



Figure 1



Figure 2

- 1) If your machine has a factory Gum & Mint Tray attached to bucket, please remove it.
 - A) This is done by removing the two bolts, one on each side of the bucket (red circle in Figure 1), using a 3/8" nut driver, or socket.
 - B) Disconnect the Gum & Mint Tray harness, which comes out of the cabinet, from the jumper board (red circle in Figure 2). This is located on the tray motor mount at bottom of bucket.



Figure 3

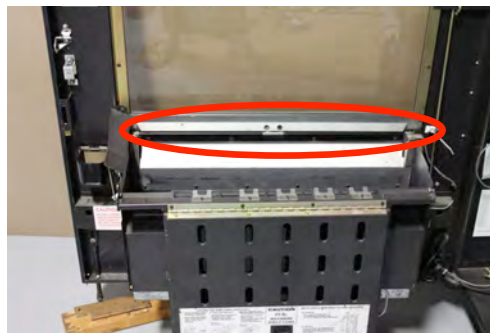


Figure 4

- 2) Remove Vend Bucket.
 - A) First remove the bucket diverter (red circle in Figure 3) located on left side of bucket (looking at inside of door). Use a 1/4" nut driver, or socket, for top screw, and an 11/32" nut driver or socket for two side screws.
 - B) Next remove the bucket guard, located at the top of the vend bucket (red circle in Figure 4). This process includes removing two screws on each side (red circles in Figures 5 and 6).

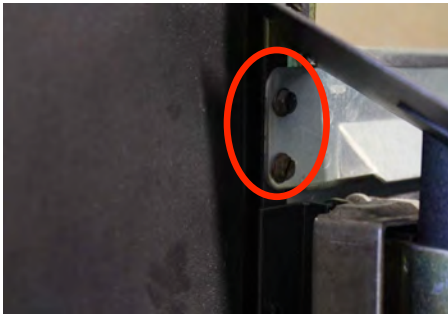


Figure 5



Figure 6

C) Remove the screws holding the vend bucket, to the factory door. Depending on the bucket, there can be as little as two or as many as four screws, on each side, totaling four to eight screws (Figure 7).

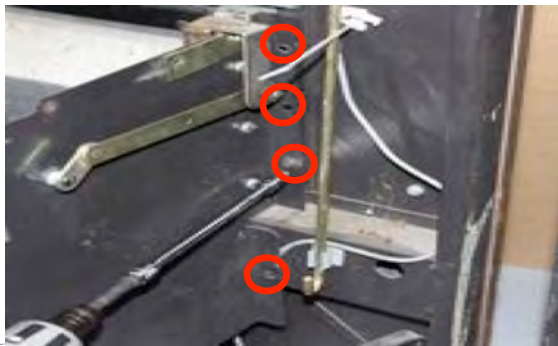


Figure 7



Figure 8

3) Remove Factory Door

A) Remove doorstop from bottom of door, using a 7/16" socket or nut driver (Figure 8).

(You will want to keep this doorstop to reuse on your new Revision Door.)

B) Remove the Top Hinge, from inside of door, using a 7/16" socket; a flat-headed screwdriver might be necessary as well (Figures 9 and 10).



Figure 9



Figure 10

C) Disconnect the bottom hinge. There are two types of hinges:

a. If you door has the lift off style, simply lift up and remove the door. Remove the hinge from the bottom of the door by removing the two screws and nuts using a 7/16" socket and/or flat head screwdriver.

b. If your door has a hinge similar to the top hinge, you will need to remove the two screws and nuts from the bottom of the door using a 7/16" socket and or flat head screwdriver (Figures 11 and 12).

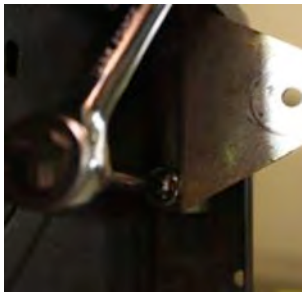


Figure 11



Figure 12

4) Remove Service Door

A) Disconnect Door switch harness from door switch (Figure 13). Disconnect keypad/display harness from control board located on Controller Assembly (Figure 14). This is done by applying pressure away from ribbon harness (Figure 15).



Figure 13



Figure 14



Figure 15

B) Remove the service door by removing the five 1/4" screws securing it to the cabinet (Figure 16).

C) Remove bracket for service door by removing three 1/4" screws (Figure 17).



Figure 16



Figure 17

5) Remove Old Cash Box, Cash Box Bracket, and Coin Chute (Figures 18a and 18b).



Figure 18a

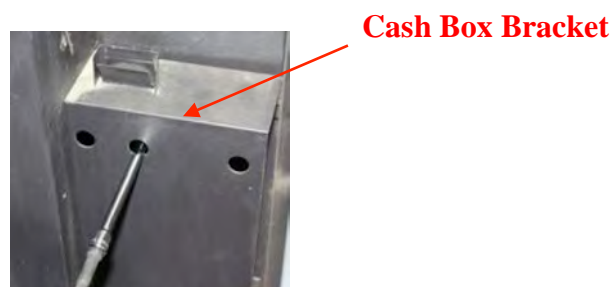


Figure 18b

6) Remove The Three Control Boards From The Controller Assembly.

A) Remove PCB assembly for coin mech and validator interface (Figure 19).

B) Remove Controller Interface (Figure 20).

C) Remove Control Board (Figure 21).

D) Remove green ground wire.

We recommend keeping all wire clips off of The Controller Assembly, to secure new wiring, for a cleaner application.



Figure 19



Figure 20



Figure 21

7) Lock Bar Latches

A) Using a Philips or Flat-head screwdriver (depending on your machine), remove the four screws that hold the two O.E.M. lock bar latches in place (Figure 22). **Keep these screws for reuse on the replacement latches.**



Figure 22

B) Install new replacement lock bar latches, open end up using the screws that you have previously removed from the O.E.M. latches (Figure 23).



Figure 23

- a) These latches are adjustable to ensure proper closing, and locking of the door. It might take multiple attempts to pin point the exact adjustment necessary, due to inconsistency of the cabinets.



Figure 24



Figure 25

8) Installing your NEW Revision Door.

A) Starting with Bottom Bracket:

a) If your machine has the two-part lift off hinge, install the supplied nut plate and hinge to bottom of door. Use the two supplied screws, using a 5/32" hex key (Figure 24/25).

b) If you don't have the two-part hinge, you have to install the screws holding the door on the machine.

Note: Do not tighten screws tight until the door is on the machine and adjusted.

B) Top Bracket:

a) Hold the door so that the holes in the top line up with the hinge holes. Hold the bolt plate on the inside top of the door while inserting and tightening the screws (Figure 26).



Figure 26

Note: Do not tighten screws tight until the door is on the machine and adjusted.

C) Attach support leg to stud on bottom of the door (Figures 27- 27.1) to the point that the leg is an inch above the ground using a 7/16" socket. Attach rubber cap onto support leg.

D) Attach wheel assembly to door using provided self-tapping screws (Figure 27). Adjust assembly to the highest possible position. Final adjustment will be done in a later step



Figure 27



Figure 27.1

9) Installing the Door Stop Arm

- A) Connect the Door Stop Arm before adjusting the door.
- B) Insert the Door Stop Arm through the hole in the left side of the cabinet (Figures 28 and 29).
- C) Insert spacer and screw through the hole in Door Stop Arm (Figure 30), then through the screw hole bottom hinge plate. Hand tighten nut onto bottom of this screw.

Note: Do not make the screws tight until the door is on the machine and adjusted.



Figure 28



Figure 29



Figure 30

Note: The machine must be level on the floor

10) Adjustment: This system allows for adjusting the door in and out as well as left and right for proper alignment.

Note: Make sure before starting, that all 4 door bolts are loose (1 ½ turns from tight). If they are too loose, the door will not shut.

- A) Carefully cut the zip ties that attach the door cabinet harness to the door. Use caution, not to cut the harness. **This must be done before closing the door.**
- B) Place the 3 magnets provided in your kit, on the left side, which is the side with the hinges (Figures 31 and 32). These magnets are used as a spacer. When closing the door, **do not force or slam the door. This may cause damage to the doorframe or lock bar.**
- C) Gently close the door. You may need to shift the door left or right to line it up with the lock bar. Latch the door closed.
- D) Push the door on the left side (hinge side) against the magnets. Tighten the exposed door screw on the top and bottom hinges using a 5/32" hex key.
- E) Very carefully, open the door just far enough to access the second screws on the top and bottom hinges and tighten.
- F) Remove the magnets and check the alignment. Adjust door accordingly by loosening hinge screws. The door can be moved left, right, and in and out. Additional adjustment can be obtained by moving the lock bar latches in and out.
- G) After the door adjustment is completed, final adjustment of the wheel can be made. Loosen the self-tapping screws that secure the assembly. Adjust the wheel so that it barely touches the floor

of the cabinet. Tighten self-tapping screws. Tighten the large Phillips head screw until it touches the door front.



Figure 31

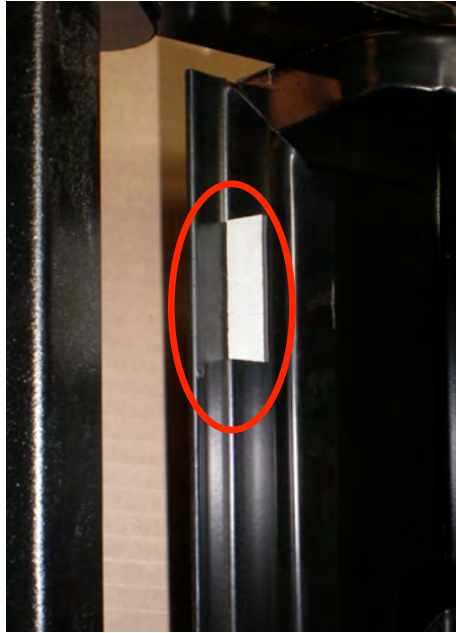


Figure 32



Figure 33

11) Install Wiring Harness

A) Remove all trays from cabinet (Figure 33).

B) Insert main door cabinet harness through top hole in left hand side of machine cabinet (Figure 35). To complete this task, you will, have to remove each pin header (Figure 36). **YOU MUST REMOVE ONE HEADER AND INSERT ONE PLUG AT A TIME**, so you don't confuse a pin header with the inappropriate plug. You must then reinsert the pin header in the appropriate direction.

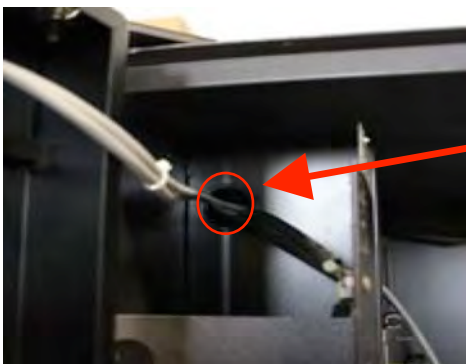


Figure 35

The top hole in the cabinet.

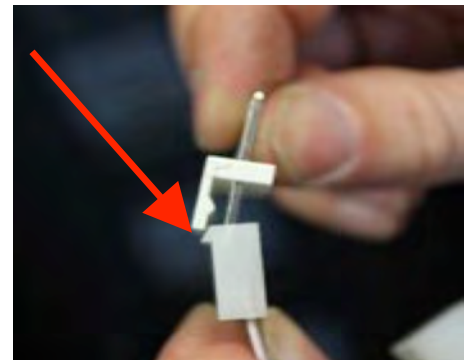


Figure 36

D) Once entire door cabinet harness is inserted through the cabinet hole, and pin headers are reinserted correctly, this harness needs to be mounted to back of cabinet using three VE7373K, self-tapping screws, and three VE4653K, black nylon clamps (Figure 37).

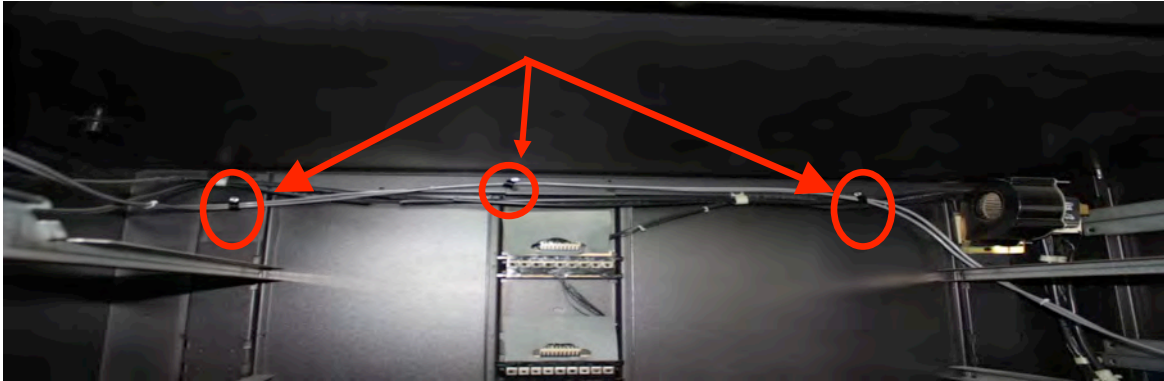


Figure 37

12) Plug Door Cabinet Harness into the Cabinet harness.

A) Attach the five plugs on the door cabinet harness to their corresponding cabinet harness plug. Count the pins coming out of each pin header of the door cabinet harness, and match them to the appropriate plug. This is shown in Figures 38-42.

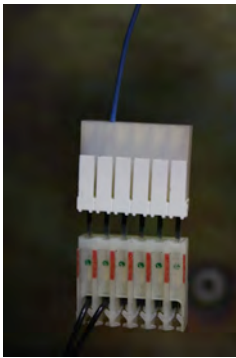


Figure 38



Figure 39



Figure 40

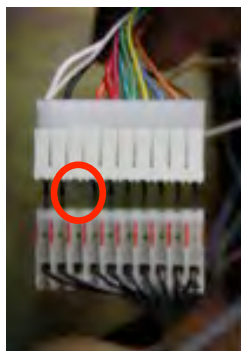


Figure 41

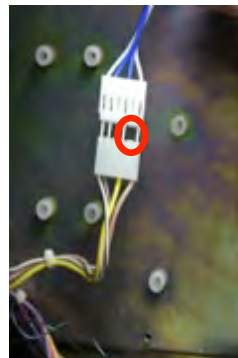


Figure 42

B) The validator harness that is in the cabinet can be removed if desired, since it is not required for use with the Revision Door. It will just present a cleaner look in the machine.

13) Mount Power Supply

A) Using four screws, which should be reused from one of the three boards removed from the Controller Assembly Panel, mount the supplied power supply to the Controller Assembly Panel. This power supply is pre-mounted to a black offset board plate (Figures 43-45). Be sure to place the heat sink facing the bottom of the panel as shown in Figures 44 and 45.



Figure 43

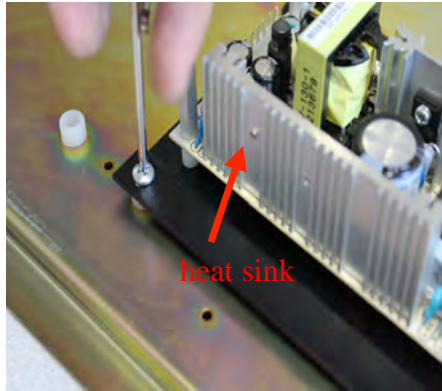


Figure 44



Figure 45

B) Reinstall Controller Assembly Panel back into the cabinet by sliding it back into its appropriate position, in top right of cabinet.

C) Plug the black and red power cable into the left side of the power supply, black cable up, as shown in Figures 46 and 47.



Figure 46



Figure 47



Figure 48

D) Provided in your kit is an additional blue and white power cable. Insert the smaller square plug into the right side of the power supply as shown in Figures 47 and 48. There are two additional plugs on this harness (Figure 49 and 50). The plug end in Figure 50 is not used and does not get plugged into any other harness. The plug with the pin header in Figure 49 connects into the machine power harness, demonstrated in Figure 51.

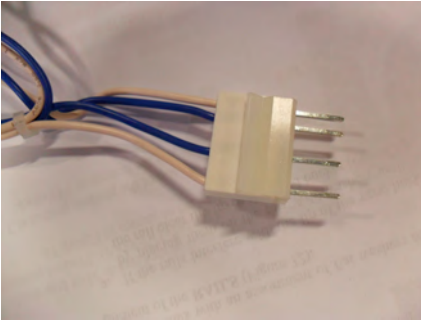


Figure 49

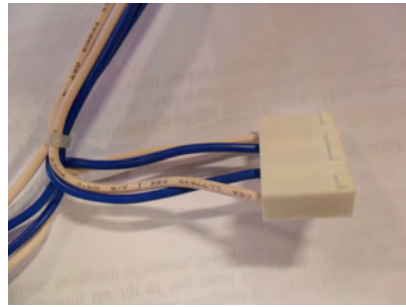


Figure 50



Figure 51

D) Mount provided Power Supply cover to the stand-offs as shown in Figure 48 that are mounted to the power supply board plate using a Phillips screwdriver (Figure 52). Bent side of cover faces the front of machine.

E) Secure all wiring to the Controller Assembly Panel, using the original OEM wire clips saved from a prior step. When proceeding with this step, **do not pull the wiring to tight, leave some additional slack.**



Figure 52

14) Mount Ground Wire Cable

A) Secure one end of the Green Ground Wire Cable to the Revision Door as shown in (figure 54) using a VE7373K, self- tapping screw.

Figure 53 or 54 show the two suggested mounting points for the ground wire to the cabinet.

1. In Figure 53, you will see a pre-drilled hole in the left cabinet support wall. You have option of using this hole to secure your ground wire.
2. In Figure 54, you will see that we just used the self-tapping screw to drill a new hole in the floor of the cabinet.

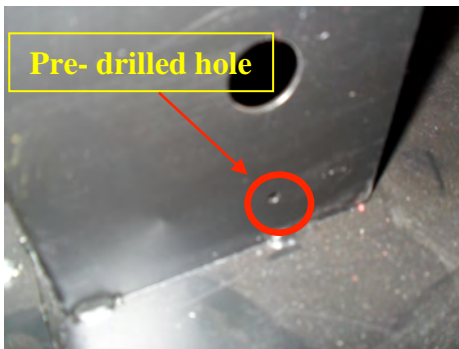


Figure 53

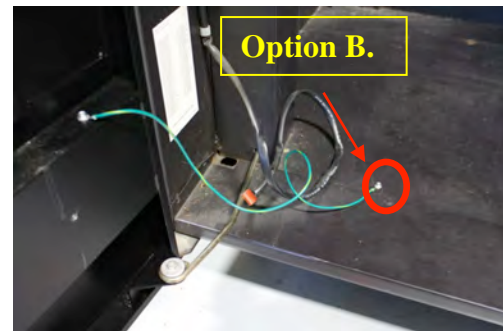


Figure 54

Note: One location is not more ideal than the other. It is up to your discretion, on the choice of these two locations. We have supplied these two options for your convenience.

15) Installing Cash box and cash box bracket.

A) Slide the new cash box bracket into same location that the old one was mounted (Figure 55). Using three VE7373K, self-tapping screws, secure this new bracket into this location (Figure 56). The new mounting holes will not line up with the old ones, which means it's necessary to use the supplied self-drilling screws.



Figure 55



Figure 56

b) The two VE7207 nuts, also located on the cash box bracket, are for adjustment to line the top of the funnel, to the bottom of the coin mech. (Figure 57). This is to assure your coins to fall properly into the cash box. This is due to the wear and tear, and inconsistency of the National 147 cabinets.

c) It is highly recommended that this adjustment be done before mounting the vend bucket. First install your coin mech on the inner wall, close your new Revision door. Reach through the vend bucket opening and raise or lower your funnel to be about a 1/8" from bottom of coin mech.

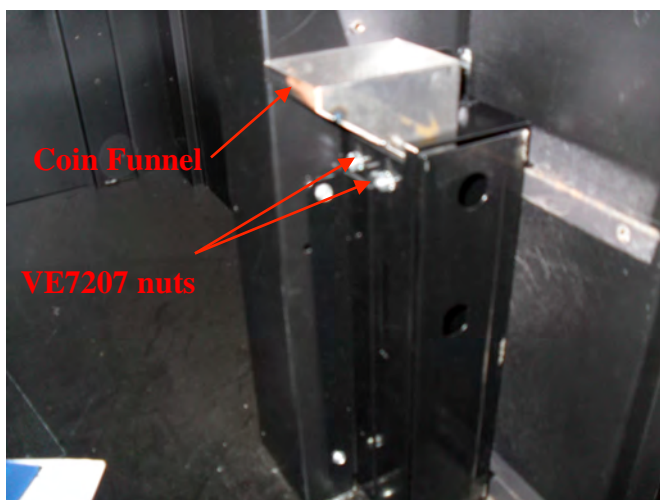


Figure 57



Figure 58

16) Reinstall Product Trays, as seen in Figure 58

A) Insert new 110-168 Item Tabs, to replace A1-G4 selections, to match proper selections through the U.C.B.

- A) If you are using an O.E.M. Gum and Mint Tray, you will need a VE4319 harness supplied in your kit (Figure 60). This harness replaces the jumper board that is normally used on a National 147 Gum and Mint Tray, by using a male-to-male connector that plugs directly into the Gum and Mint Tray harness that comes out of the cabinet. To complete this step, first remove the O.E.M. Gum and Mint Tray harness, and replace it with the new harness provided.
- B) If you are using a new V.E. Gum and Mint Tray for the National 147, you will need a VE8387THK (Figure 60) harness with a male-to-male connector attached. Both harnesses are included in your Rev. Door installation kit, if using VE8387THK, you must remove male to male connector from the VE4319 harness & insert on VE8387THK harness.

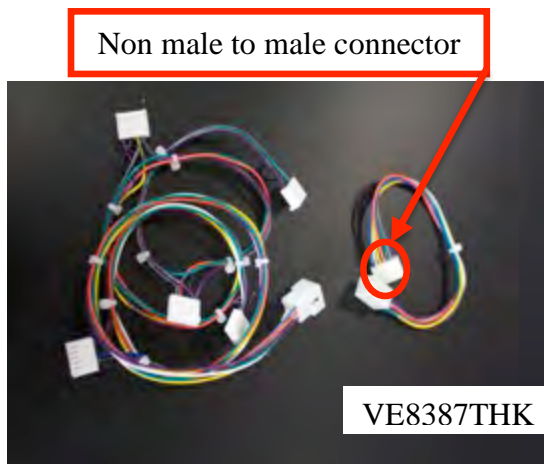


Figure 59

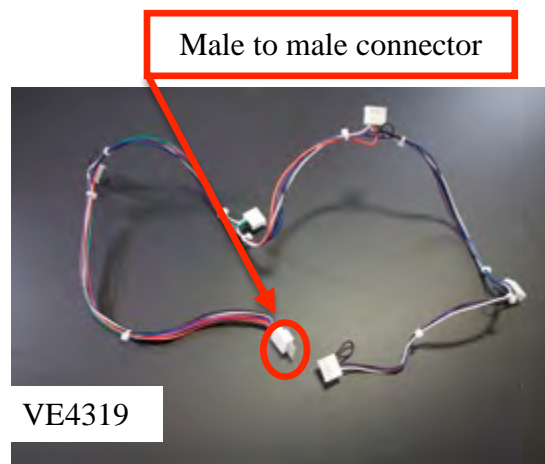


Figure 60

Install your New Bucket Diverters

- a) Looking at the front of the bucket, the rectangular / bent bucket diverter is installed onto the right (cash box) side of the bucket (Figure 61). It is recommended to use the nuts and bolts that held the old diverter on.
- b) Next install your five-sided bucket diverter on the left (hinge) side of the bucket (Figure 63).



Figure 61



Figure 62



Figure 63

C) Install Bucket onto Revision Door.

Note: We recommend two people to complete this Task.

E) If using the O.E.M. Gum and Mint Tray reinstall it onto bucket. Install new gum and mint product selection label provided with your kit.

F) Whether you are using the factory Gum and Mint Tray, or a V.E. Gum and Mint Tray for the National 147, plug your replacement tray motor harness DIRECTLY into the Gum and Mint tray harness coming out of the cabinet (Figure 64).

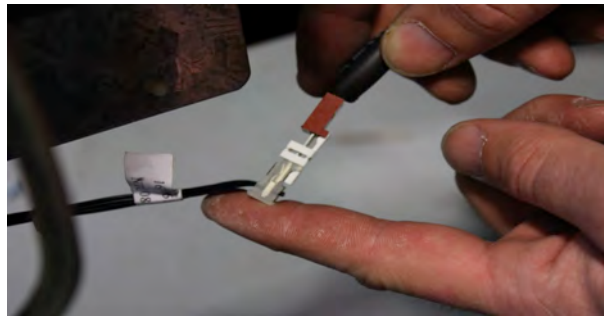


Figure 64

WARNING: Upon installation, evaluate machine for stability and current leakage. Refer to local and federal regulations for permissible limits.

Revised 10/12/2012