



SAFETY INSTALLATION, SETUP & INSTALLATION SECTION

**Manufactured by
SandenVendo America INC.
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Dallas, TX 75238-1335
(800) 344-7216
Fax: (800)541-5684
Web: www.vendoco.com**

A COMMITMENT TO SAFETY

SandenVendo America, Inc. is committed to safety in every aspect of our product design. SandenVendo America, Inc. is committed to alerting every user to the possible dangers involved in improper handling or maintenance of our equipment. The servicing of any electrical or mechanical device involves **potential hazards**, both to those servicing the equipment and to users of the equipment. These hazards can arise because of improper maintenance techniques. The purpose of this manual is to alert everyone servicing SandenVendo America, Inc. equipment of potentially hazardous areas, and to provide **basic safety guidelines** for proper maintenance.

This manual contains various **warnings** that should be carefully read to minimize the risk of personal injury to service personnel. This manual also contains service information to insure that proper methods are followed to avoid damaging the vendor or making it unsafe. It is also important to understand these **warnings** are not exhaustive. SandenVendo America, Inc. could not possibly know, evaluate, or advise of all of the conceivable ways in which service might be done or predict all of the possible hazardous results. The safety precautions outlined in this manual provide the basis for an effective safety program. Use these precautions, along with the service manual, when installing or servicing the vendor.

We strongly recommend a similar commitment to safety by every servicing organization. Only **properly-trained personnel should have access to the interior of the machine**. This will minimize the potential hazards that are inherent in electrical and mechanical devices. SandenVendo America, Inc. has no control over the machine once it leaves its premises. It is the owner or lessor's responsibility to maintain the vendor in a safe condition. See Section I of this manual for proper installation procedures and refer to the appropriate service manual for recommended maintenance procedures. If you have any questions, please contact the Technical Services Department of the SandenVendo America, Inc. office nearest you.

SAFETY RULES

- **Place and store unit inside. Outdoor use or storage voids warranty and can result in an unsafe condition**
- Read the Safety Manual before installation or service.
- Test for proper grounding before installing to reduce the risk of electrical shock and fire.
- Disconnect power cord from wall outlet before servicing.
- Use only fully-trained service technicians for Power- On servicing.
- Remove any product prior to moving a vendor.
- Use adequate equipment when moving a vendor.
- Always wear eye protection, and protect your hands, face, and body when working near the refrigeration system.
- Use only authorized replacement parts.
- Be aware of inherent dangers in rocking or tipping a vending machine.

SECTION I: VENDOR SETUP & INSTALLATION

- A. Vendors are large, bulky machines of significant size and weight. Improper handling can result in injury. When moving a vendor, carefully plan the route to be taken and the people and equipment required to accomplish the task safely.
- B. Remove all tape, shipping sealant, and Styrofoam from the vendor. Loosen any shipping devices used to secure interior parts during shipping. Remove the wooden shipping boards attached to the vendor base by the vendor leveling screws. Make certain the leveling screws are in place and functional.
- C. Position the vendor on a flat smooth surface 3 to 4 inches (7.6 cm to 10.2 cm) from a well-constructed wall.

IMPORTANT: *The vendor requires 3 inches (7.6 cm) of air space from the wall to ensure proper air circulation to cool the refrigeration unit.*

- D. Adjust the leveling screws to compensate for any irregularities on the floor surface. Ideally, no adjustment will be necessary and the leveling legs will be flush with the bottom of the vendor. A spirit level is a useful aid to level the vendor. When the outer door is open, it will remain stationary if the vendor is properly leveled. Vendors must be level to ensure proper operation and to maintain stability characteristics. Do not add legs to the vendor. **The leveling legs shall not raise the vendor more than 1 1/8 inch (2.5 cm) above the ground.**
- E. Check the manufacturer's nameplate on the left or right side of the vendor's outer door to verify the main power supply requirements of the vendor. Be sure the main power supply matches the requirements of the vendor. To ensure safe operation, plug the vendor only into a properly grounded outlet.
DO NOT USE EXTENSION CORDS.
DO NOT USE PLUG ADAPTORS.
- F. Recommended voltage specs = 115V ± 10%
- G. Dedicated 15A service required for 1 machine.
- H. Power outlet must be properly polarized and grounded.

NOTE: Any power supply variance more than ± 10% may cause the vendor to malfunction.

SECTION I: VENDOR SETUP & INSTALLATION (CONTINUED)



IF THE ABOVE CONDITIONS ARE NOT MET FOR THE GIVEN OUTLET TYPE, CONTACT A LICENSED ELECTRICIAN AND HAVE THE NECESSARY CORRECTIONS MADE.

NOTE: Refer to the appropriate parts and service manual available online @ www.vendoco.com for detailed instructions, operating principles, and recommended maintenance intervals and procedures.

SECTION I: VENDOR SETUP & INSTALLATION (CONTINUED)

Set up Procedure

Note: Do not plug in the vendor until
Step 5

1	Unwrap the machine
2	Remove all the tie wraps and packaging material
3	Level machine as needed - See leveling instructions
4	Confirm the trays fully seated in the base
5	Power on the machine
Display will read-Memory operation, Data Transfer in Process This is the process of communication between the Vending Machine Controller(VMC) and Delivery Mechanism Controller (DMC)	
6	Close the door –The machine will start initialization. The catcher will perform a product drop movement The product catcher will move up and scan for each shelf location - then move towards the right side of the machine and then will move to the left side at position (bottom hinge side)
	CAUTION: Do not open the door while the elevator is in motion as this would cause the elevator to free fall
8	The display should read "Ice cold Beverages!! Please Make a Selection"
9	Open the door – load the machine
10*	Set the machine to free vend
11	Test vend to check the vendor is working properly
12*	Set Price for all selection

*Refer to Programming Manual

Loading Instructions

Please note: To ensure freshness of the product - do not load from the front of the vendor. GGFV has FIFO product loading capability

1	Lift and pull the front of the tray assembly.
2	Push and lock the product pushers to the back of the tray.
3	Load the products into the tray.
4	Once the products are loaded - push the tray back in its position – The product pushers will automatically snap back behind the last product For proper vending – Please make sure the products are not leaning forward or sitting up on tray front. Do not activate the product pusher when the columns are empty (damage will occur)
5	Check the tray is fully seated on the front support bar.
6	To ensure the product pusher is engaged - Gently push the front product inward to check for resistance
7	Check to confirm all products are resting on tray bottom (behind the tray product retaining hooks)

Loading selection # 50, 51 , 52 :

Push and hold the product delivery port flap open until the product catcher moves towards the right side of the vendor to clear the loading zone for 50, 51 and 52.

Load the shelves as indicated by Step 1 – 7

Close the door.

The catcher will move to home position

Products Specification – General Guidelines

Products* (PET, glass bottles, cans):

Height range:	3 in – 9.25 in (76mm - 235mm)
Diameter range:	1.7 in – 3 in (43mm - 76mm)
Weight range:	6.5oz – 23oz (185g - 653g)

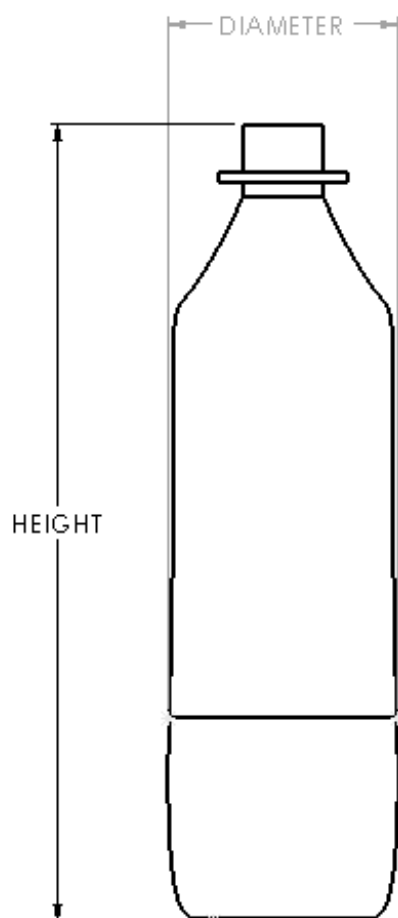
Carton packs* (Aseptic package):

Height range:	3.3 in – 5.3 in (85mm - 134mm)
Width range:	2 in – 2.6 in (52mm - 67mm)
Depth range:	1.6 in – 1.8 in (40mm - 47mm)
Weight range:	7.5oz – 14oz (213g - 400g)

*Note: Due to variability of package design, material & weight, performance may vary.

Testing of odd shaped, size products should be done to determine acceptability. Continued.

*For tall/unstable bottles, we recommend using side spacers to keep bottles from leaning sideways (Please see below)



SPACERS SPECIFICATION		
BOTTLE DIAMETER	BOTTLE HEIGHT	SIDE SPACER
< 2.4"	8.5" – 9.25"	1252577
2.4"<D<2.8"		1254502

SECTION II: MAINTENANCE REQUIREMENT

- 1- Remove Trays and clean bottom slider (Every Six months or when spills occur)
(Note: dirty slider can prevent bottles from advancing)
- 2- Apply grease into the side partitions and pushers (Every Six months or as needed).
- 3- Clean the X-rail from any debris or syrup along the ribbon cable guide (When spills occur)
- 4- Vacuum the Condenser fins and clean the base from any dust (Every 3 months or as needed)
- 5- Check all harnesses in the drawer assembly are intact (Every 6 months)
- 6- Check Bucket motor switch/bucket base for any syrup or debris (Every 3 months or as needed)

SECTION III: ELECTRICAL HAZARDS

GENERAL

SandenVendo America, Inc. vending machines are provided with the appropriate power supply setting for your area.

The power sources mentioned are standard for both household and commercial lighting and appliances. However, careless or improper handling of electrical circuits can result in injury or death. Anyone installing, repairing, loading, opening, or otherwise servicing a vending machine should be alerted to this point. Apply all of the normal precautions observed in handling electrical circuits, such as:

- Unplug the vendor before servicing or clearing product jams.
- Replace electrical cords if there is any evidence of fraying or other damage.
- Keep all protective covers and ground wires in place.
- Plug equipment into outlets that are properly grounded and polarized, and protected with fuses or circuit breakers.
- All electrical connections must be dry and free of moisture before applying power.
- Replace Fuses with same type.
- Refrigeration servicing to be performed by qualified personnel only.

A. Grounding Systems

SandenVendo America, Inc. vending machines are provided with the appropriate service cord for the power supply in your area. The service cord will connect to the matching electrical outlet. Always ensure that the outlet to be used is properly grounded before plugging in the vendor.



The electrical grounding system also includes the bonding of all metal components within the vendor. This involves a system of bonding wires identified by green or green and yellow marking. The system uses serrated head screws, lock washers, and star washers to ensure the electrical connection between parts. Maintenance of vending equipment may involve disassembly. Include the above items when reassembling, even if the vending machine may appear to function normally without them. Omitting any of these items can compromise a link in the grounding system.

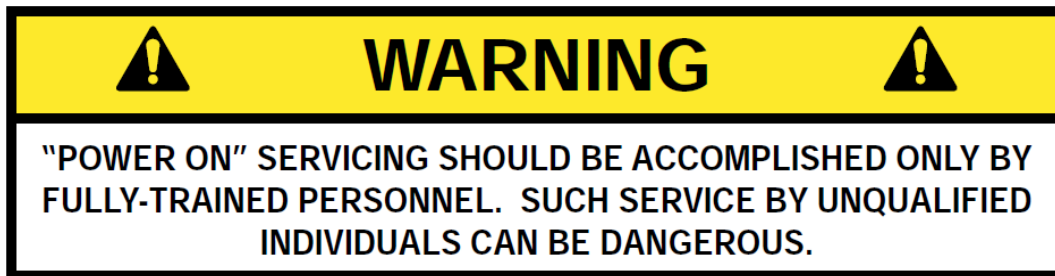
SECTION III: ELECTRICAL HAZARDS (CONTINUED)

B. Servicing with “Power Off”

For maximum safety, unplug the service cord from the wall outlet before opening the vendor door. This will remove power from the equipment and avoid electrical and mechanical hazards. Service personnel should remain aware of possible hazards from hot components even though electrical power is off.

C. Servicing with “Power On”

Some service situations may require access with the power on. Power on servicing should be performed **only by fully-qualified service technicians**. Particular caution is required in servicing assemblies that combine electrical power and mechanical movement. Sudden movement (to escape mechanical action) can result in contact with live circuits and vice versa. It is therefore doubly important to maintain maximum clearances from both moving parts and live circuits when servicing.



Power to lighting and refrigeration system is shut off automatically by the electronic controller when the outer door is opened. However, it is strongly recommended that servicing the lighting system or the refrigeration system only be performed after unplugging the vendor power cord, or by turning the power switch off (See Figure 1).

NOTE: For power-on servicing of the vendor's lighting system, turn lighting power on by accessing the Lights test function of the electronic controller, or by pulling the door switch forward to the override position.

Caution:

After the door switch is pulled forward or door closed, the elevator will move automatically as part of the homing routine.

Always make sure the path of the elevator and the rail is clear before closing the door or pulling the door switch forward.

Caution: Do not open the door while the elevator is moving.

For power-on servicing of the vendor's refrigeration system, turn refrigeration power on by accessing the Compressor test function of the electronic controller, or by pulling the door switch forward to the override position. Note that there will be a delay of 3 minutes before the compressor is energized.

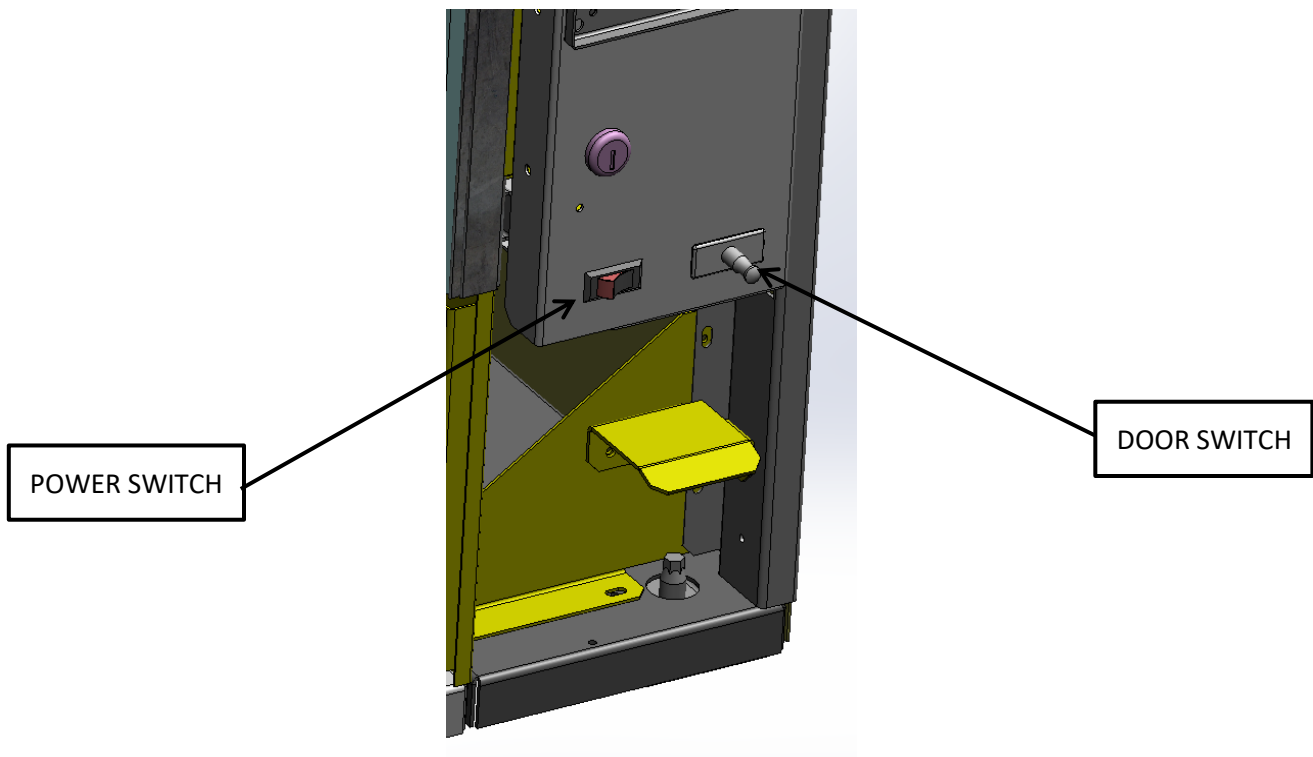


FIGURE 1

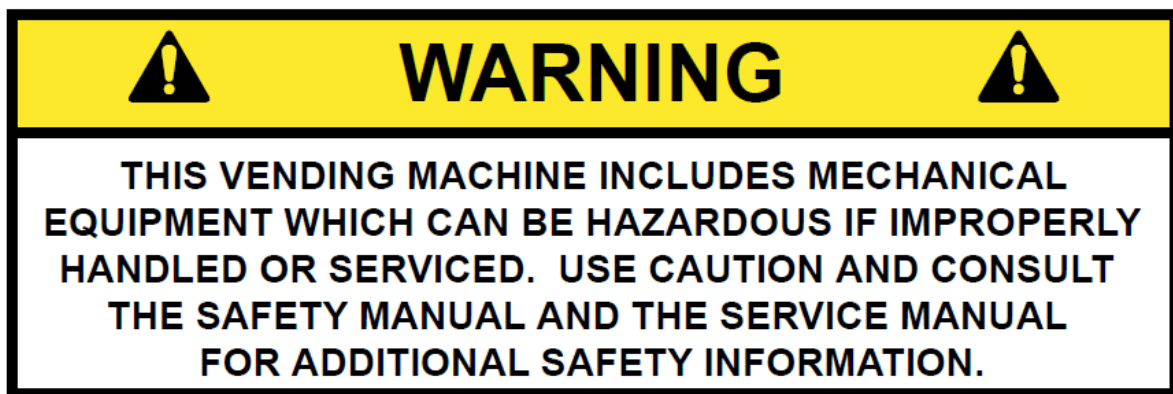
SECTION IV: MECHANICAL HAZARDS

A. Servicing of Moving Parts and Assemblies

When servicing assemblies involving moving parts, **use extreme caution!!** Keep fingers, hands, loose clothing, hair, tools, or any foreign material clear of entrapment.

As noted before under the electrical hazards section, Power On servicing should **only** be performed by qualified personnel. Refer to and heed the warnings noted in the electrical hazards section. These warnings refer to the potential hazards associated with electrical power and moving parts. Always maintain maximum clearances from electrical and moving parts.

Always install protective covers and guards when reassembling equipment.



SECTION V: REFRIGERATION HAZARDS

GENERAL

Refrigeration systems involve both electrical power and mechanical action. These systems may present any of the potential dangers shown in the sections on electrical and mechanical hazards contained in this manual. See Sections II and III for further information.

A. Compressed Refrigerant

Refrigeration systems involve the compression and evaporation of gases. The pressures contained represent a potential hazard if suddenly released in confined areas. Caution is required when performing maintenance tests or repairs. All testing of sealed refrigeration systems must be done by trained personnel who are familiar with the systems and pressures involved.

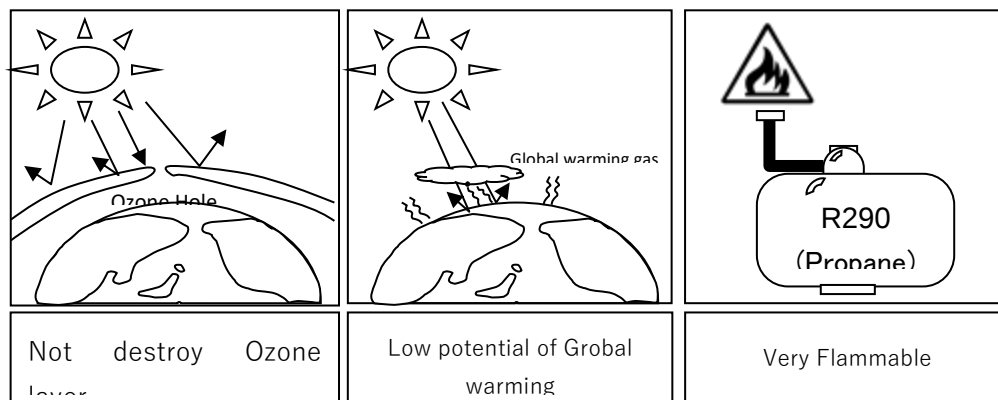
B. Physical Protection

The accidental release of refrigerant gases can result in physical injuries. Always wear protective glasses and protect your hands, face, and body when working near the refrigeration system.



R290 REFRIGERANT (PROPANE)

For units that use R290 refrigerant, please use additional caution as described below.



Refrigerant	R290 (Propane)
Ozone Destructive Potential	0
Global Warming Potential	3
Permission Concentration	1,000 ppm
Operating pressure	180 psig (1.2 MPa)

DANGER:

Risk of fire or explosion. Flammable refrigerant used. Use extreme caution when handling, moving unit as to not increase risk of damage to refrigerant tubing or increasing the risk of a leak.

Caution:

**The refrigeration unit contains R290 (Propane). Only a service technician that has been trained with the operation of R290 (Propane) should service the refrigeration system, so as to minimize the risk of possible ignition due to incorrect parts or improper service.
Components parts shall be replaced with like components.**

Notice:

Vending machines using R290 (Propane) refrigerant shall not be intended for use in lobbies or locations of egress, such as a hallway or public corridor.

SECTION VI: TEMPERATURE HAZARDS

GENERAL

Maintenance personnel should be alerted to the potential hazards from hot metal surfaces. High temperatures may be present throughout the refrigeration system even though electrical power has been removed.

SECTION VII: SUBSTITUTIONS AND MODIFICATIONS

GENERAL

Unauthorized changes or the substitution of unauthorized parts can compromise the equipment designs. This can result in unsafe conditions for either the service personnel or the equipment users. Always refer to the appropriate parts and service manual for replacement parts and maintenance instructions. If questions arise, contact the Technical Services Department of the SandenVendo America, Inc. office in your area.

When servicing the vending machine, always reassemble all components to their original location and position. Maintain the correct routing for tubing, electrical wiring, etc. Replace all clamps, brackets, and guides to their original locations. Replace all tubing, sleeving, insulating material, and protective covers to their original condition.

	WARNING	
VENDO EQUIPMENT HAS BEEN PROVIDED WITH APPROPRIATE PROTECTIVE DEVICES TO PROTECT AGAINST THE POSSIBILITY OF OVERHEATING AND FIRE AS A RESULT OF EQUIPMENT OR COMPONENT FAILURES. SUBSTITUTION, MODIFICATION, OR BYPASSING OF SUCH PROTECTIVE DEVICES CAN CREATE DANGEROUS CONDITIONS. PROTECTIVE CIRCUITS SHOULD NEVER BE BYPASSED, AND FAILED PROTECTIVE DEVICES MUST BE REPLACED ONLY WITH FACTORY-AUTHORIZED PARTS.		

A. Service Cord Replacement

SandenVendo America, Inc. vending machines are furnished with unique power supply cords. If replacement becomes necessary, consult the appropriate parts and service manual and order the correct replacement cord for the model of vending machine in question. Do not use substitute replacement cords. Only authorized service personnel with appropriate training should replace the vending machine service cord. If a question should arise concerning which service cord to order, contact the Technical Services Department of the SandenVendo America, Inc. office in your area.

SECTION VIII: CONSUMER SAFETY WARNING

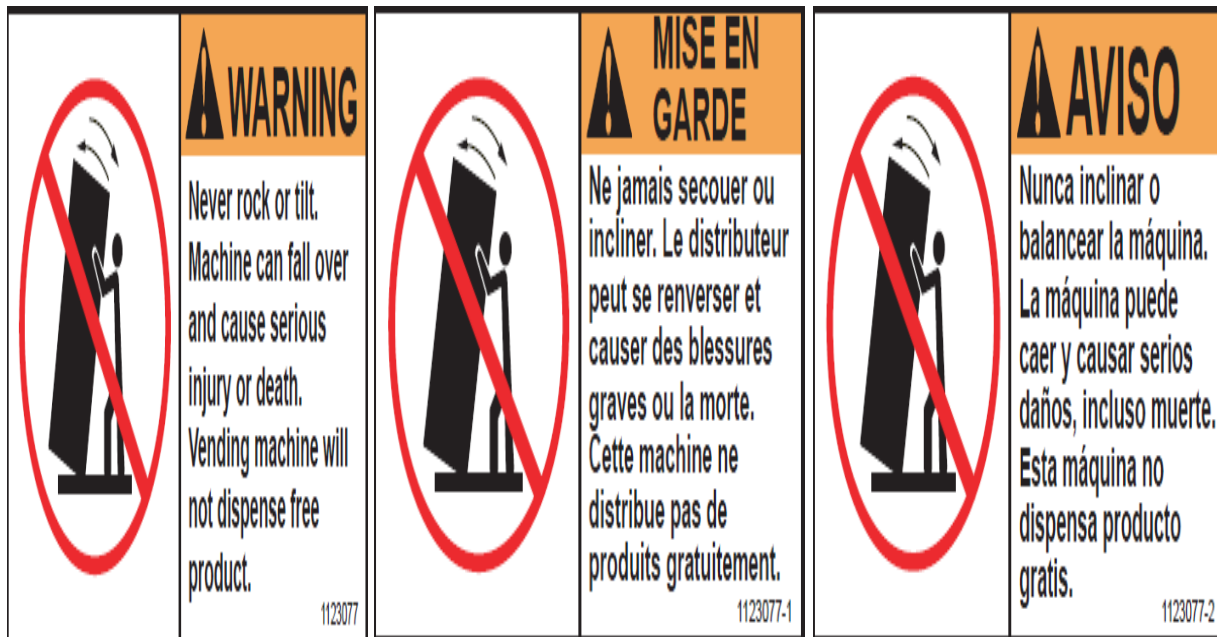


GENERAL

There have been incidents, including fatalities, when vending machines have been vandalized by being pulled over in an attempt to obtain free product or money.

To warn of the danger involved in tipping, shaking, or rocking the vending machine, a decal has been designed to be affixed to vending machines. (One such decal is applied on the vending machine.) SandenVendo America, Inc. will supply sufficient decals to be placed on all machines, on request. If you have any questions, contact the Technical Services Department of the SandenVendo America, Inc. office in your area.

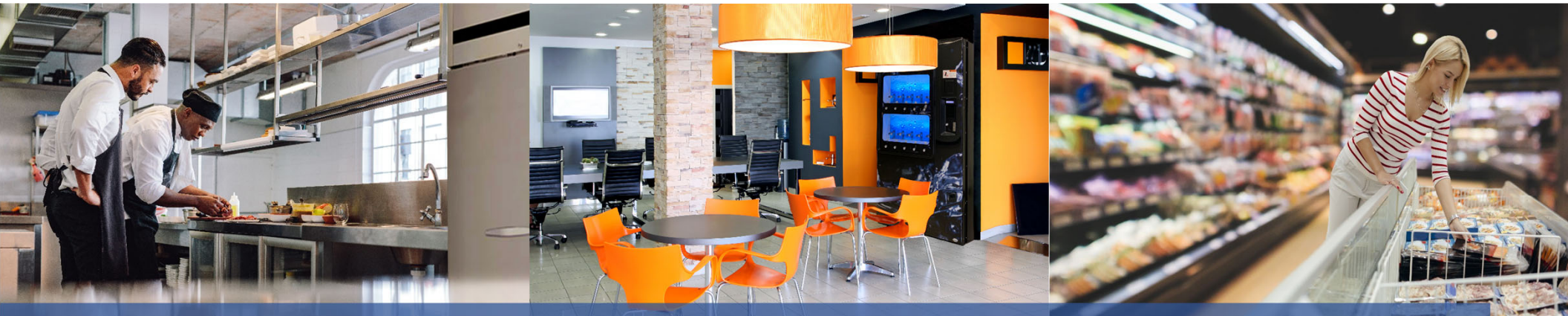
THE FOLLOWING DECAL SHOULD BE PLACED IN A POSITION ON THE VENDOR CONTROL PANEL AT EYE LEVEL



ENGLISH

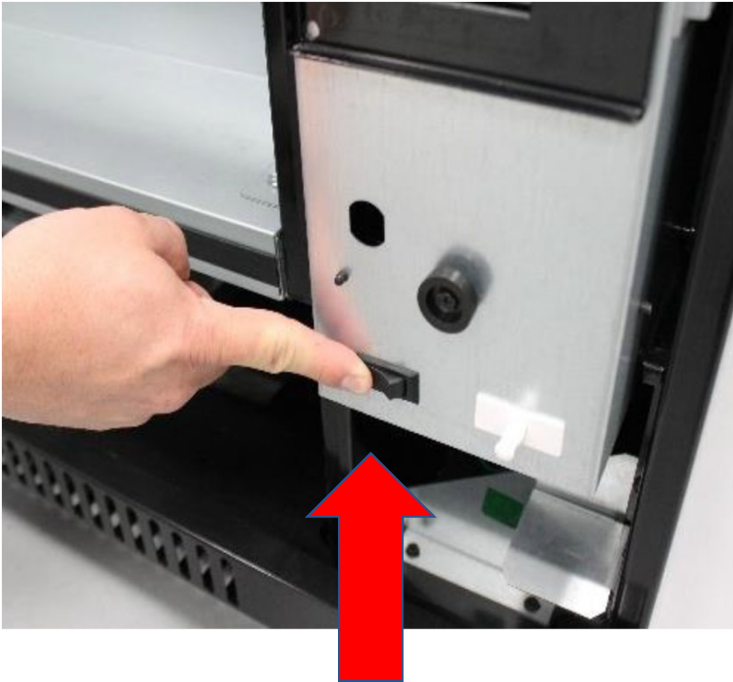
FRENCH

SPANISH



SandenVendo GGFV (GF9) Setup

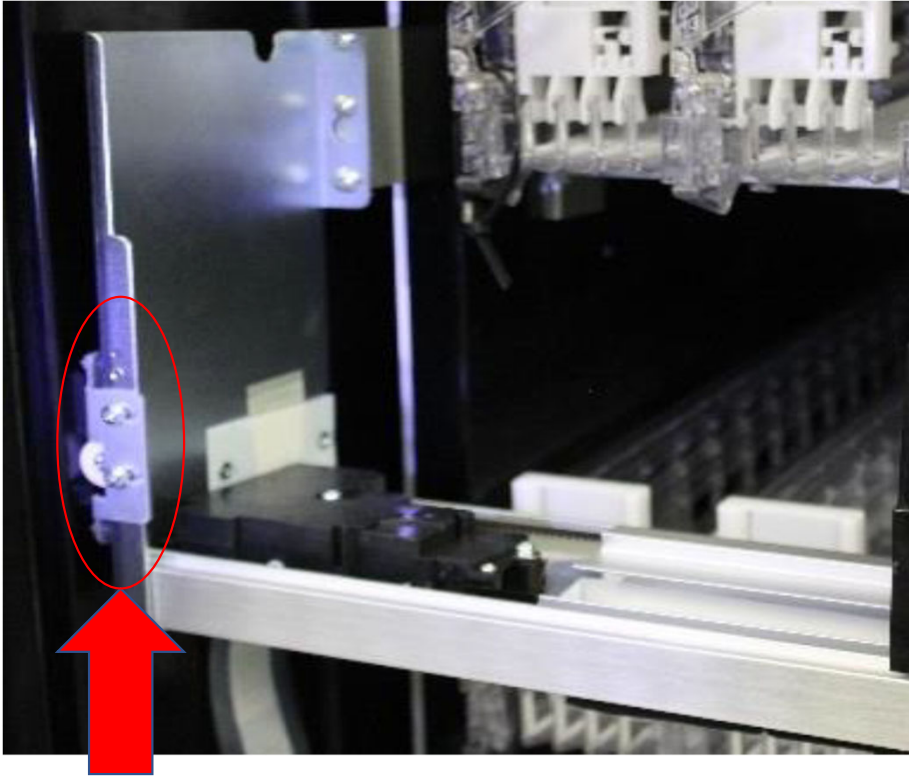
Roller Bracket Adjustment



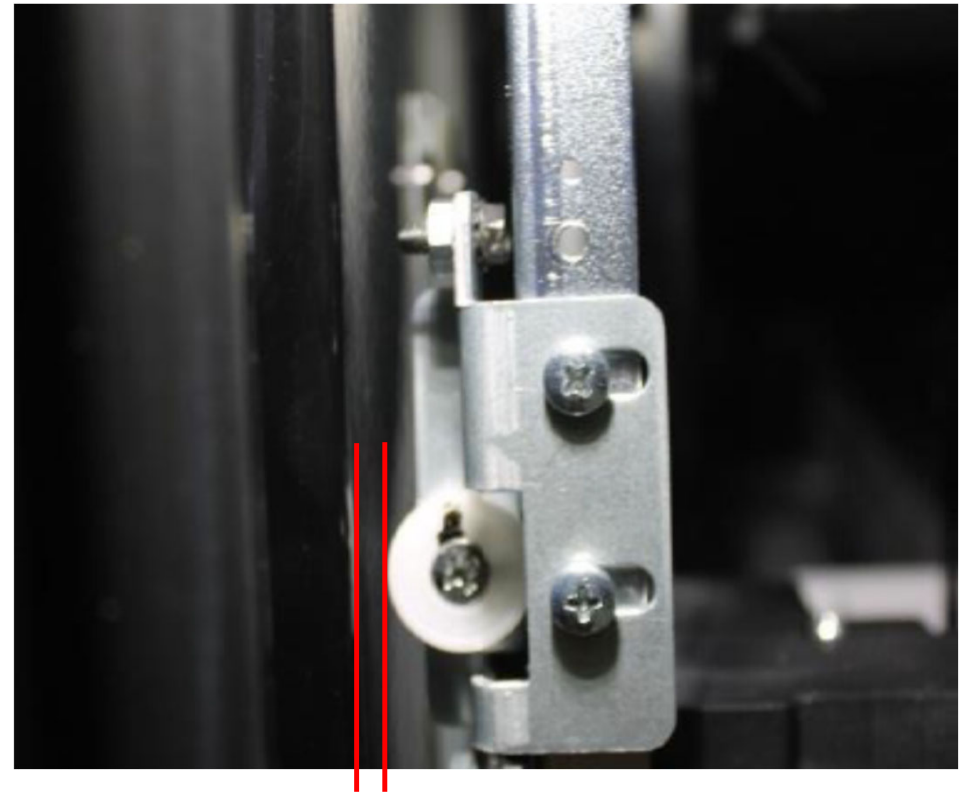
Remove power from the machine using the rocker switch located at the bottom of the drawer assembly



Lift the x-rail above the 43-45 tray. Pull out the tray and rest the rail on it. This will align the rail with the flap door assy.



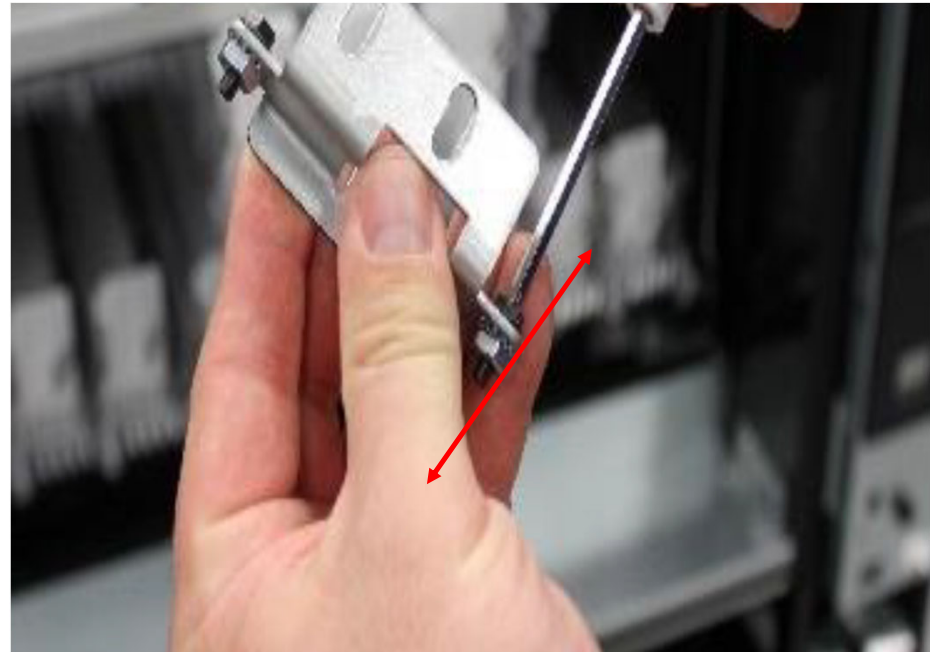
Locate the Roller Bracket Assembly on the left end of the X- Rail



Note the gap between the roller and the left wall. This gap will reduce the ability of the catcher to release product into the bucket assembly.



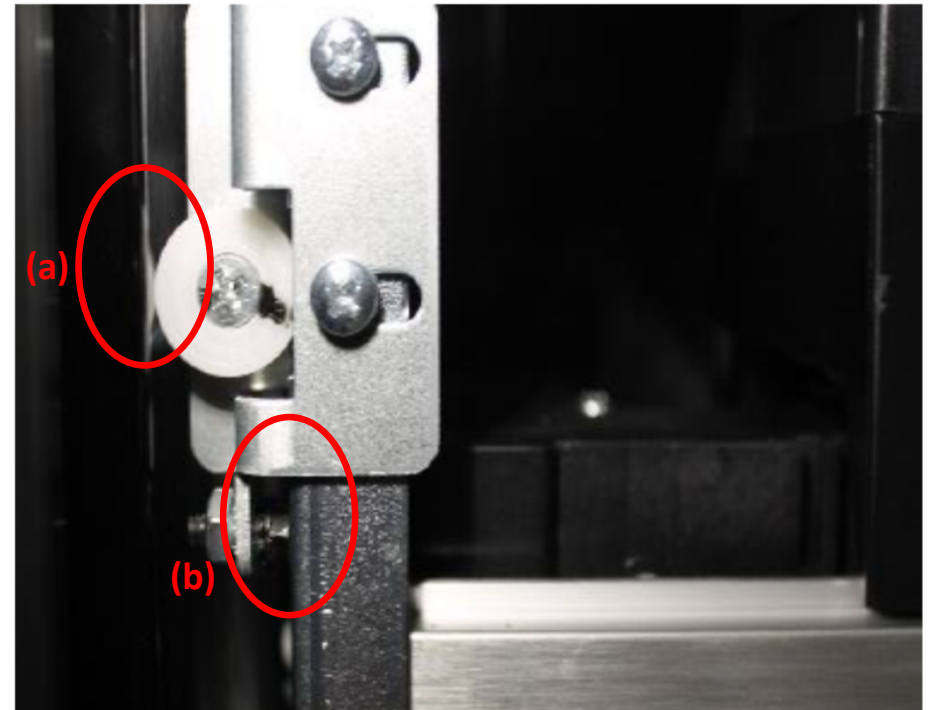
Remove the bracket assembly using the 2 phillips screws. *Note that the upper screw has 1 washer and the lower has 2 washers.* They need to go back to their original positions.



Use the black adjuster screws to move adjust the bracket until (a) the roller **barely touches** the left wall AND (b) the heads of the adjuster screws touch the left rail bracket.



Reinstall the bracket to test the fit. **YOU SHOULD NOT HAVE TO FLEX THE RAIL TO INSTALL THE ROLLER BRACKET.**



- (a) The roller should be BARELY touching the left wall AND
- (b) both adjuster screws should be evenly adjusted to touch the xrail bracket.

If you have any questions, please contact

Micheal Collins (214) 532-3138
SandenVendo America - Regional Manager

Contact SandenVendo America today:

www.vendoco.com

800-344-7216





The SandenVendo Company
10710 Sanden Drive, Dallas, TX 75238

**TECHNICAL SERVICES
ADVISORY MEMO**

To: Technical Support

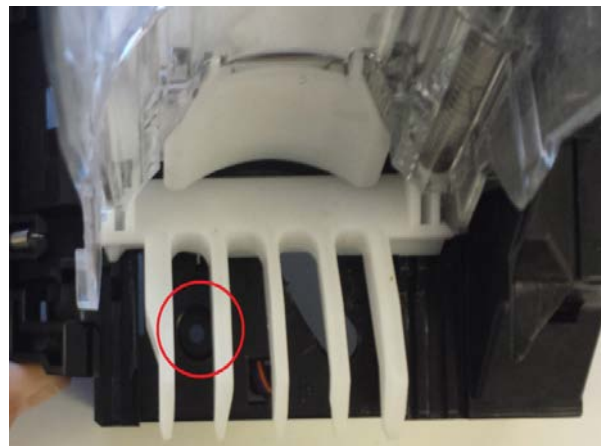
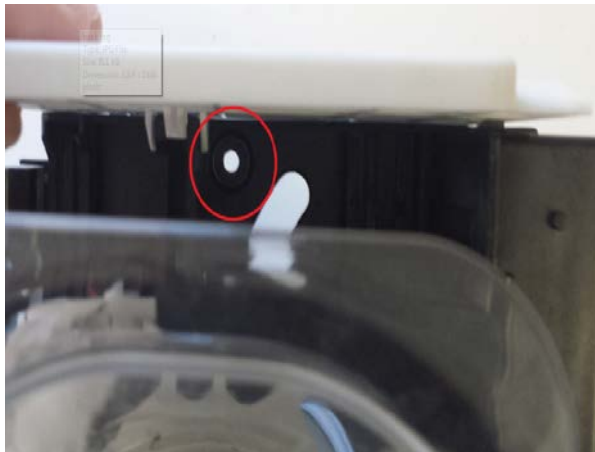
From: Engineering

Date: 1-13-16

Subject: Prevent from replacing the catcher assembly in case of a broken clip.

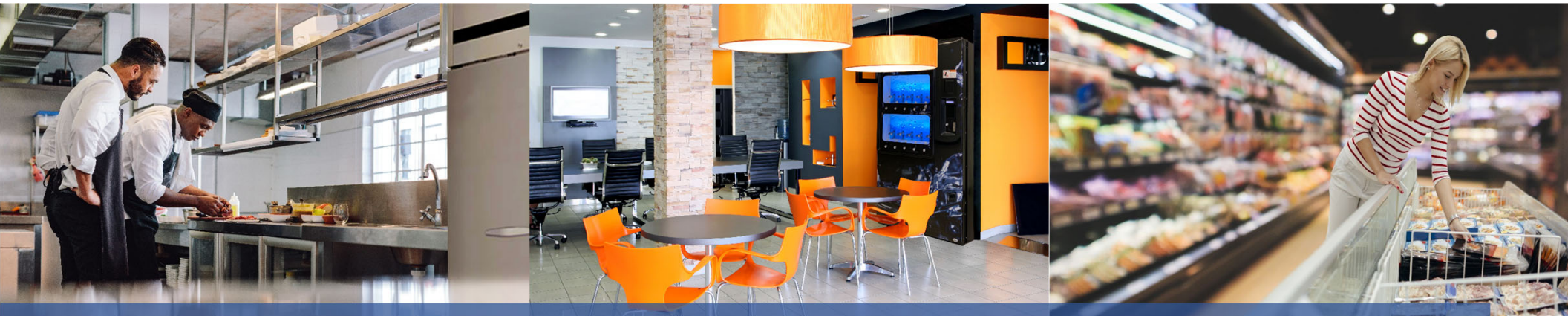
Remarks: ☒ For Your Review

This Technical service memo is based from an ECR (#3480) submitted by Bruce Arnold in regards to the catcher clip. We generated this Technical memo to prevent a catcher replacement out in the field due to a broken clip. In case of a broken front clip, please use 2X #8 screws (P/N V801475) from the top section to secure the catcher against the X-carriage (Please see location holes circle in red below).



If you need further information or assistance please call Sanden Vendo Technical Service at 800-344-7216 ext 9935

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SandenVendo GGFV (GF9) Setup

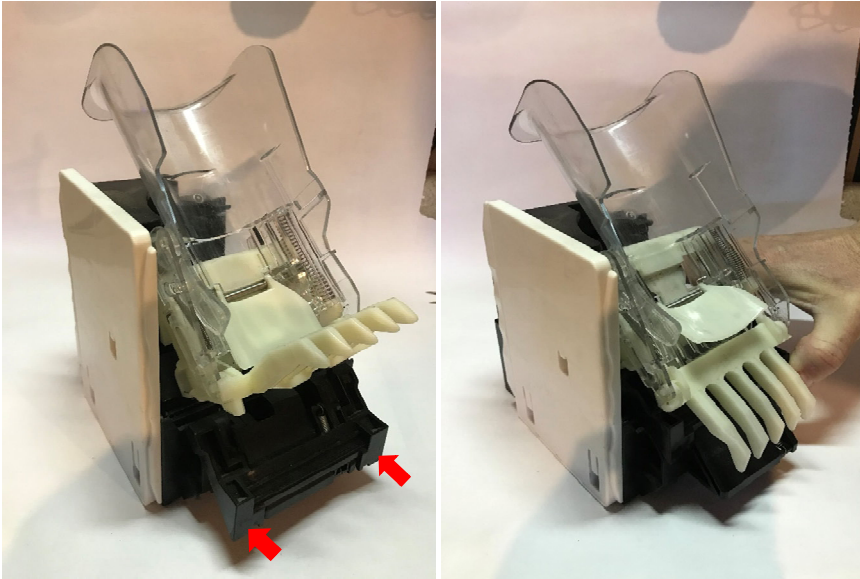
Hard Stop Adjustment

Flap door eyelet and hard stop assembly

Locate the flap area and Hard Stop Assembly located in the right side wall just above and behind the hopper bucket.

Note also the y rail cover highlighted. This will be used for a measurement.





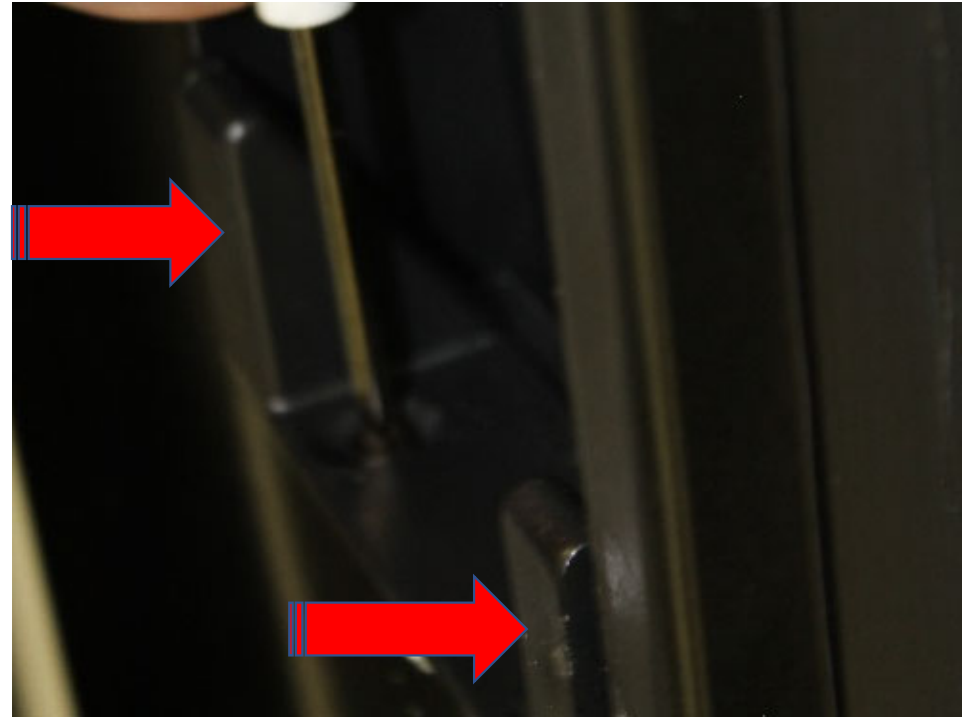
The catcher trigger engages the hard stop to drop the forks and release the product while engaging the vend assist or “kicker”.



Locate the Hard Stop Assembly in the flap area. Note the two faces that engage the catcher assembly to release the forks and drop product into the hopper bucket.



Using a square or other flat surface as a guide, measure the distance from the y rail cover to each face of the hard stop. The distance should fall between $1 \frac{7}{8}$ " and 2". Not to exceed 2".



Loosen the hard stop mounting screws, adjust to meet the required measurement and retighten. Ensure that the hard stop is adjusted evenly front to back for a clean release when the catcher engages the hard stop.



Once adjusted, the measurement for each face on the hard stop assembly will be between 1 7/8" and 2". Above is showing 2"

If you have any questions, please contact

Micheal Collins (214) 532-3138
SandenVendo America - Regional Manager

Contact SandenVendo America today:

www.vendoco.com

800-344-7216





The SandenVendo Company
10710 Sanden Drive, Dallas, TX 75238

**TECHNICAL SERVICES
ADVISORY MEMO**

To: Technical Support

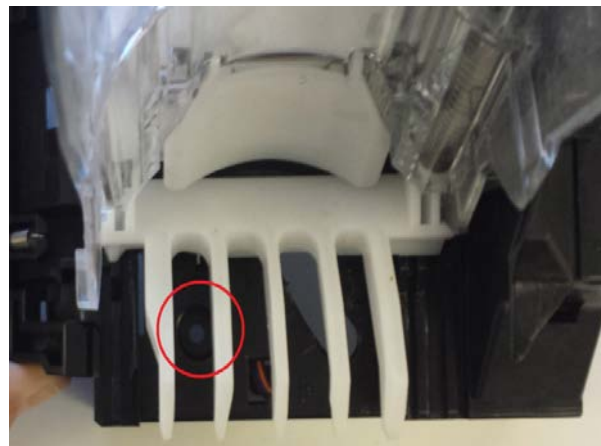
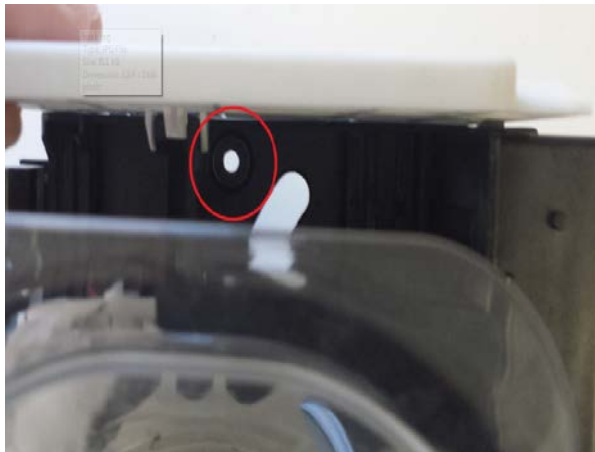
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SandenVendo America
10710 Sanden Dr. Dallas TX 75238
TECHNICAL SERVICES
ADVISORY MEMO

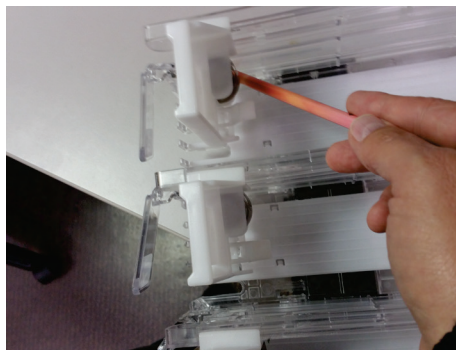
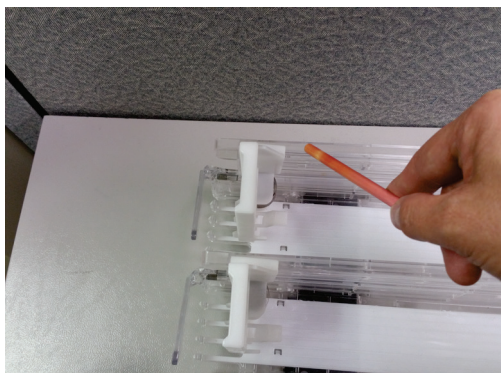
To: Distribution
From: Technical Services
Date: 3/18/2016
Subject: Product Pushers- GGFV Tray assembly.

Remarks: ☒ For Your Review

SandenVendo America has identified a small number of GGFV trays that were not lubricated properly in the manufacturing process. If you find the tray pushers are not advancing correctly, please take the following steps:

1. Remove the tray from the machine and push the product pushers all the way back to their locked position.
2. Using a cotton swab or lubricant brush, apply a light coat of a food grade silicone, or other comparable lubricant on the right side where the pushers slide as shown below. Ensure the application covers the entire length of the tracks, front to back.
3. Return the tray assembly to the machine, reload, and push the tray all the way back into place. The product pusher will automatically unlock, and resume tension.

*Note: The product pusher will automatically release when the tray is pushed back into place. Damage may occur unless there is product in the tray!

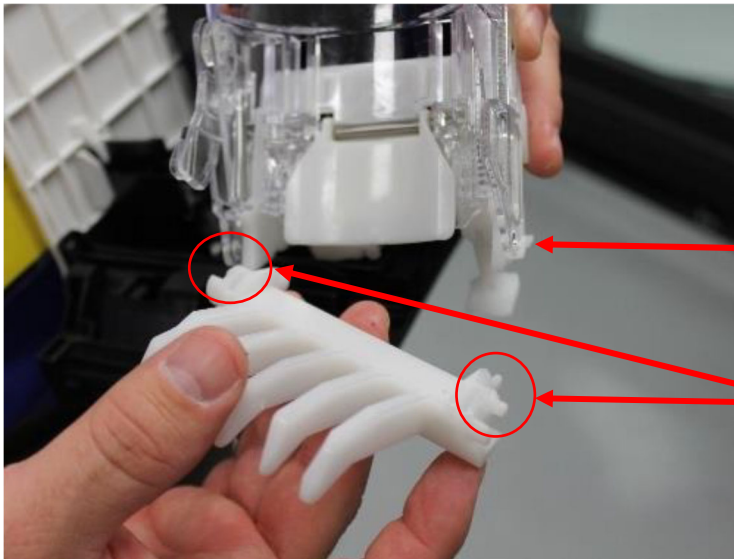
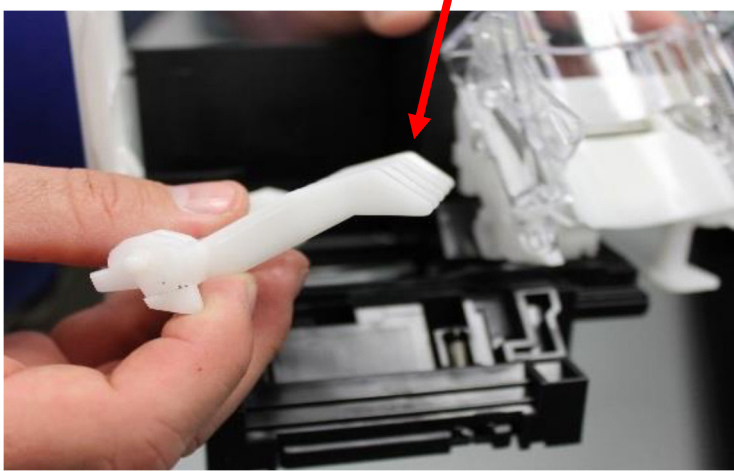


If you have any further questions, please call SVA technical services at 800-344-7216 ext 9935

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Installing Fork assembly – GF9

Note the orientation of the fork assembly (Points turning down)



Receiver holes located on both sides of cup

Studs located on both sides of fork assy