





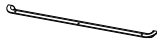
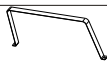

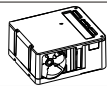






SIMPLE CHILL

INSTALLATION GUIDE

NOTICE

This manual has been prepared to aid in the installation and setup of the SIMPLE CHILL refrigeration unit into a non-refrigerated cabinet. Only qualified personnel familiar with the safety standards set forth by Underwriter's Laboratories, Canadian Standards Association, FCC, and NAMA should attempt to install the SIMPLE CHILL into any new or existing equipment. To maintain the degree of safety and performance built into this unit, it is important that installation and maintenance be performed so as to not alter the original construction or wiring of the unit. All replacement parts must be OEM specified components. All applications of this unit must meet state and local safety codes. Disconnect all power before beginning this conversion.

What's in the kit:

Item #	Qua.	Description	view
1	1	CAP	
2	1	GRILL	
3	1	FILTER	
4	1	VENT	
5	1	DEFLECTOR	
6	3	STRAP	
7	1	STYROFOAM GASKET (TOP)	
8	1	GRS 2100D	
9	1	FOAM GASKET (BOTTOM)	
10	1	POWER CORD	
11	6	1/4x20x1 CARRIAGE BOLT	
12	6	1/4 LOCK WASHER	
13	6	1/4x20 NUT	
14	9	#8x1/2 METAL SCREW	

What you will need:

- 1 Drill
- 1 Jig Saw
(with metal blade)
- 1 Straight Edge
- 1 Tape Measure
- 1 1/4" Drill Bit
- 1 Duct Tape
- 1 Small Step Ladder

Optional Items:

- 2 4x8x1/2 Foam Board
- 1 1/2x1/8 Foam Tape
(approx. 20 ft.)
- 1 Spray Adhesive
- 1 Box Cutter Knife
- 1 Windex
- 1 Cleaning Rags



Installation instructions for Simple Chill Snack Kit

Introduction :

The Simple Chill kit is designed to be a universal refrigeration unit for snack vending machines, coolers, and visualizers. As with all multi-function kits there may be variations from one machine type to the next. Take the time to **read the entire install guide** before you begin to determine if adjustments need to be made for your type of machine. The design concept is simple, blow chilled air over the products, for most applications simply installing the unit on top will get the job done, however, for very hot locations insulating the machine will increase the effectiveness of the system, lower the condensation produced and make the system last much longer. Insulating your machine is easy using any rigid foam board available at your local lumber yard. Simply remove the trays, measure and cut pieces to fit all interior walls and attach with a good spray adhesive or silicone. Be sure to cover any holes from exhaust fans or vents. A closed cell gasket around the door opening is a good idea also.(Figure 1.1) The **more insulation** you have the **less maintenance** you will have. A well insulated machine should run trouble free for many years.

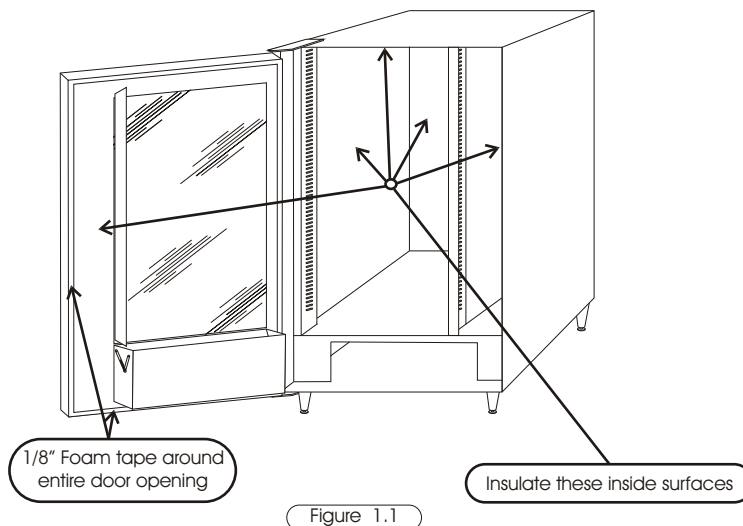
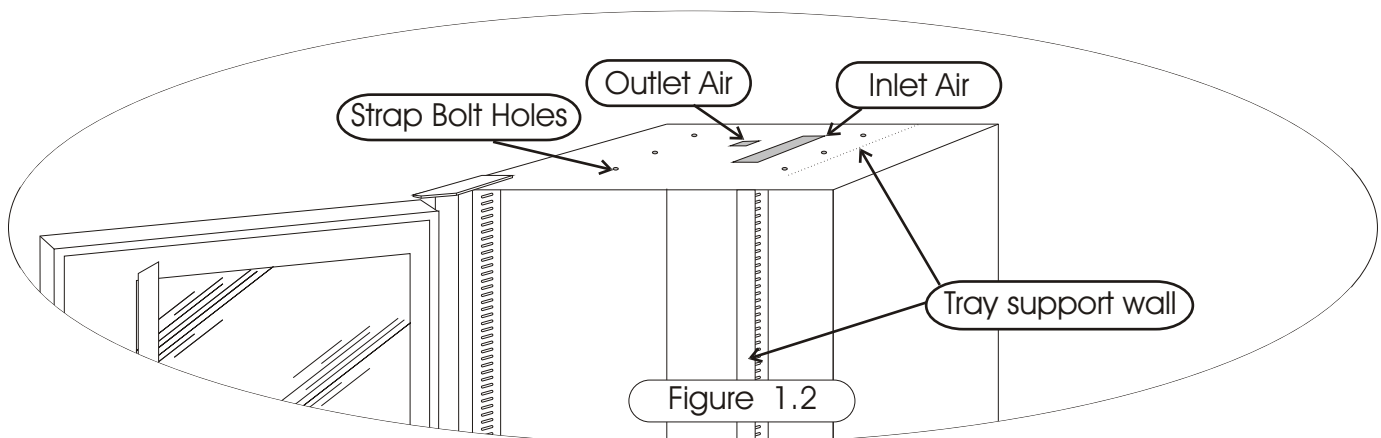
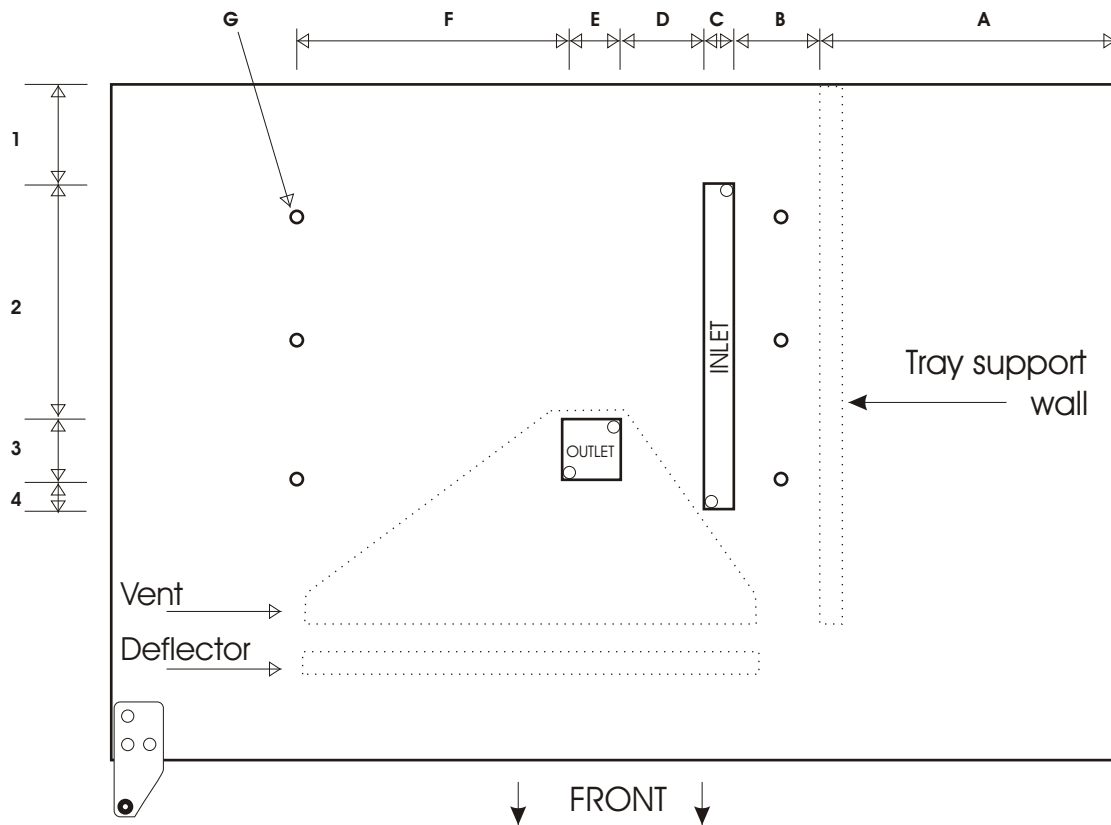


Figure 1.1

Installation:

After you have insulated your machine the rest of the kit can be installed by cutting a few holes in the top of the cabinet (fig. 1.2). All measurements given(fig. 1.3) are for a **USI Model 5700 snack machine**. Measurement "A" & "1" will change depending on machine width, depth and placement of the tray support wall, all other measurements will remain the same for all machines. The goal is to keep the **inlet** and **outlet air holes** on the left side of the tray support wall over the product. The strap bolt holes also need enough clearance from the wall to allow wrench access. On **3 and 4 wide** machines, the inlet and strap holes may need to straddle the support wall.





	A	B	C	D	E	F	G		1	2	3	4	
	8.0"	3 7/8	1 1/2	5 5/8	3.0"	12 5/8	.250		6 1/4	8 5/8	3 1/4	1 5/8	
	OUTLET CUTOUT SIZE				3.0" x 3 1/4"								
	INLET CUTOUT SIZE				13 1/2" x 1 1/2"								

Figure 1.3

Step 1:

Unplug the vendor. Open main door and measure the distance from the right side of the machine to the right side tray support wall. This will become your starting dimension "A" in **Figure 1.3**

Step 2:

On the top of the machine measure and draw a line across the machine 6 1/4" from the back (dim "1") Next draw a line 11 7/8" from the right side of the cabinet (dim "A" + "B") beginning from your first line go 13 1/2" (dim "2" + "3" + "4") toward the front of the machine.. Now Draw a parallel line 1 1/2" to the left of that line. Connect the two lines at the front and you should have a box that measures 13 1/2" x 1 1/2" to cut out for the **inlet air**. Repeat the same procedure for the **outlet air** hole. Before you go to Step 3, place the pre-cut foam pad (Item "9") over your lines and check for proper alignment.

Step 3:

If alignment of holes look good, drill two 1/4" holes in each box (fig 1.3) to insert your saw blade and cut out the inlet and outlet air hole with a jig saw. Deburr any sharp edges and remove any filings.

Step 4:

Set foam pad (Item "9") and GRS 2100D unit (Item "8") on top of the machine, align the inlet and outlet holes on the bottom of the unit to the holes you just cut. (**TIP:** if you tape the foam pad to the GRS 2100D first alignment is easier)

Step 5:

Set the cap (Item "1") over the GRS 2100D and mark the location of the six (6) Strap bolt holes. Remove the Cap and drill six (6) 1/4" (.250) holes

Step 6:

Take provided power cord (Item "10") and attach to GRS 2100D, route the cord around the right side of the unit and out the back. Place 1/2" foam insulation board (Item "7") on top of the GRS 2100D and slide the Cap back over the system take care that the power cord fits between the GRS 2100D and the cap exiting out the back thru the strain relief on the back of the cap.

Step 7:

Place three (3) straps (Item "6") over the cap and secure unit with carriage bolts (Item "11"). Place lock washer and nut (Item "12"+"13") from inside machine and tighten until the cap is flush with the top of the machine

Step 8:

From inside the machine place the vent (Item "4") over the outlet hole to direct the air to the front. Secure the vent with #8 self tapping screws (Item "14"). The vent must be far enough left to avoid covering the inlet air hole. A deflector (Item "5") is also provided to direct the air down the face of the machine to keep the glass from getting to cold. If needed place the deflector 1 to 2 inches in front of the vent and secure with #8 screws.

Step 9:

Set the temperature on the GRS2100D (see chart below) place filter (Item "3") in grill (Item "2") and snap in place by slightly deflecting the sides of the grill, while placing the top pins in their holes and swinging the bottom into place. Release the sides to lock. Reverse this process to replace the filter when needed.

Step 10:

Installation is complete ! Clean up any filings, replace any trays removed and plug in both units. After a three (3) minute startup delay your machine will begin to cool to the set point selected.

Temperature control:

Cabinet temperature is adjusted using a 4 position DIP switch on the control board or thru the MDB interface. Adjust the set point to the desired level using the chart below (Figure 1.5). A 70 degree setting is recommended for chiller snack applications (anything lower may cause excessive condensation on the glass) A temperature Differential of 6 degrees, 2 below set point and 4 above set point is normal.

		SET POINT IN DEGREE'S F											MDB	
		+34	+36	+38	+40	+42	+45	+50	+55	+60	+65	RECOMMENDED +70	+75	MDB
ON *	SWITCH # 1	*		*		*		*		*		*		*
	2	*		*	*				*	*			*	*
	3	*			*	*					*	*	*	*
	4						*	*	*	*	*	*	*	*

Figure 1.5

Startup Procedure:

Due to the unique design of the unit, some components will react differently than expected. Before the unit is plugged in, check all sealing surfaces for a tight fit and that all the holes in the cabinet from the exhaust fans and power lines have been sealed. Check that all straps ,bolts, cords and vents are installed and secured. Double check the temperature setting switches are set to the desired cabinet temperature. **(Note: these switches are only read during startup, changing the switches after power is applied will not affect the cabinet temperature.)** To change the cabinet temperature, turn off the unit, change switches to the desired setting and restart. After the above checks are complete, plug in the unit and observe the indicator LEDs on the power panel. (Figure 1.6) All LEDs will flash in sequence as the controller goes thru it's system checks. After the system check is complete, the compressor will be delayed for 3 minutes before the cooling cycle begins. All components in the GRS unit are individually controlled and may start or stop at any time depending on ambient and cabinet temperatures, this is normal operation and should not be a cause for concern. The indicator LEDs will illuminate as each component is switched on, see Figure 1.6 for the designation of each LED.

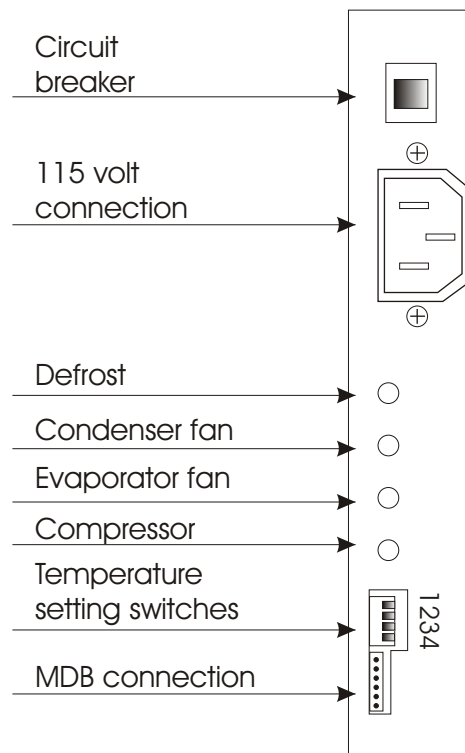


Figure 1.6