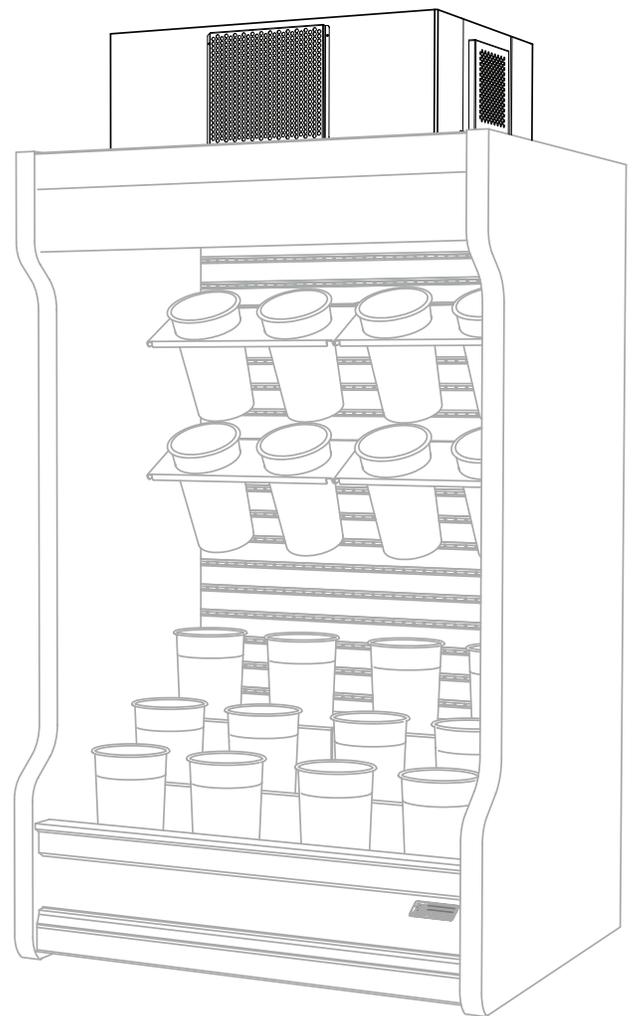
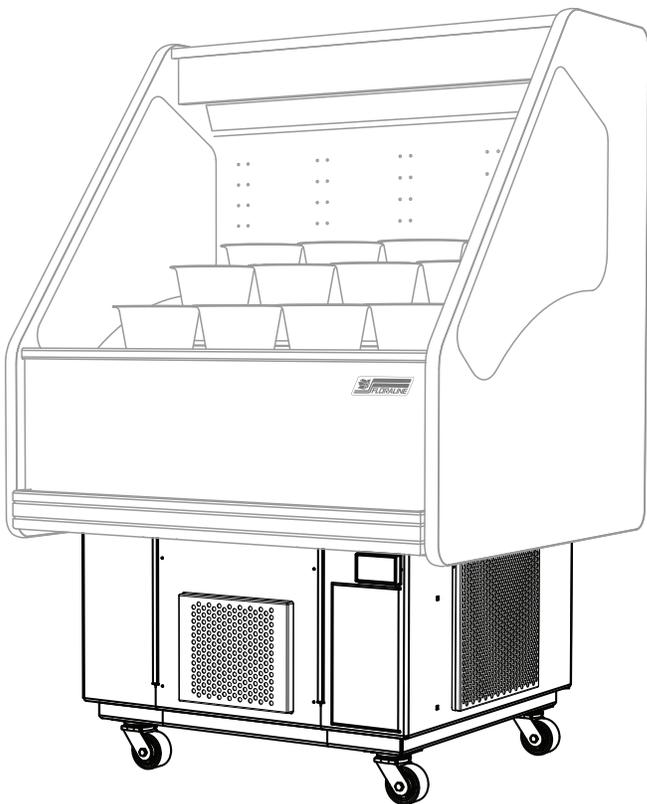


Floraline Maintenance Manual

Self-Contained Refrigerated Floral Fixtures



Floraline Service -1.800.239.3722



This manual covers the routine maintenance of Floraline's Self-Contained Refrigerated Floral cases. These are the specific floral fixtures that contain their own refrigeration unit.

Questions? Contact us at:

Floraline Service

1.800.239.3722 or
info@floraline.com

Receiving Your Shipment:

IMMEDIATELY examine the equipment for shipping damage before and during unloading.

If there is any damage, the carrier should be notified and an inspection requested.

The delivery receipt MUST be noted that the equipment was received damaged.

Take pictures of the damage, especially detailed views such as an impact area that may have caused the damage.

If damage is of a concealed nature, you must contact the carrier as soon as possible or no later than three (3) days following delivery.

Set Up

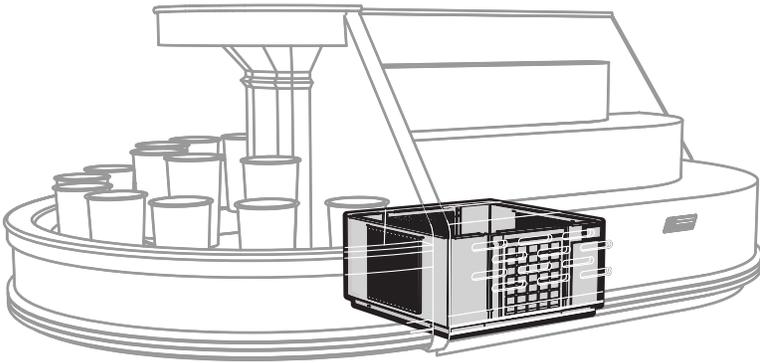
Move the floral fixtures to the permanent install location before removing shipping braces, skids or rollers.

A self-contained floral display includes its own refrigeration unit. The controls for this unit are factory preset. During normal operation the temperature will fluctuate from approximately 35 degrees to 42 degrees. This is the normal cycling of the unit. A 20 minute defrost cycle is also programmed. The defrost cycle occurs three times a day. During defrost the temperature will rise, this is normal.

This document and other resources are available on line at floraline.com.

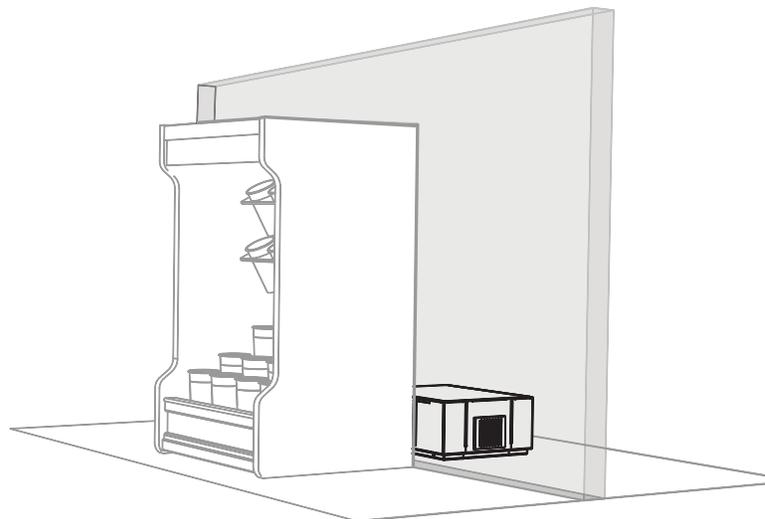
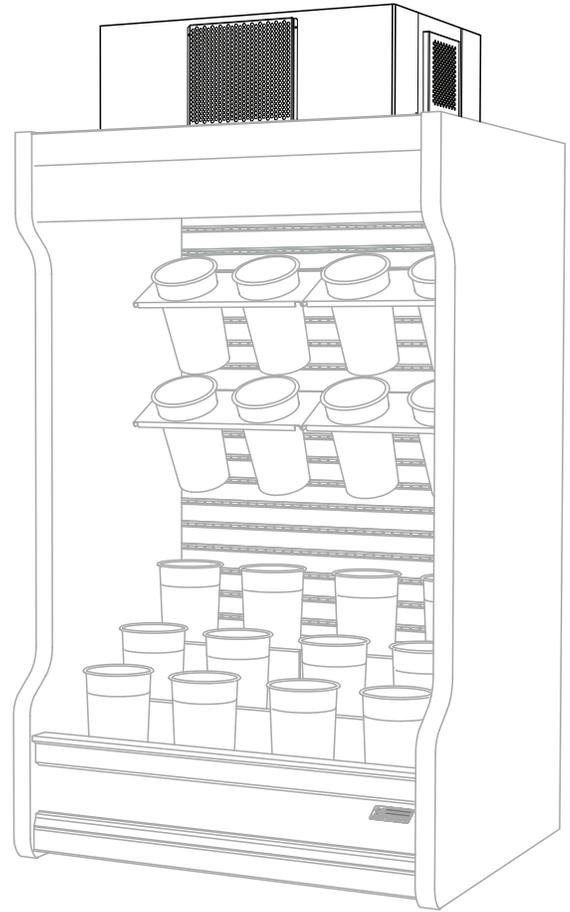
Typical condensing unit locations.

Shown are typical examples of Floraline self-contained cases. Each has a condensing unit that provides the required refrigeration for the case. This unit is housed near the refrigerated floral display envelop. The unit may be located underneath, on top, as part of an included dry display or in an adjacent location to the case but separate from the case structure, (on the other side of a common wall). The shroud protecting the condensing unit will have a grill or air holes to allow adequate cooling through air flow. It is important to keep these areas clean and unobstructed.

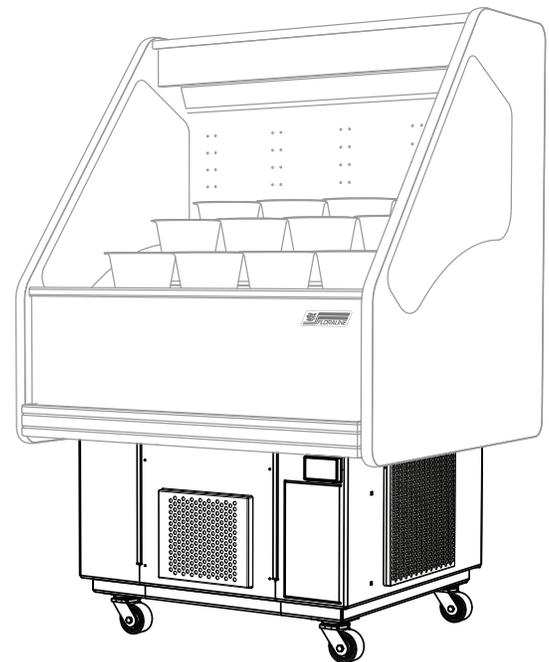


This condensing unit is located in the base of the stepped display.

This condensing unit is located on the top of this display.



This condensing unit is located in a nearby location, on the other side of the wall.



This condensing unit is located in the base of this display.

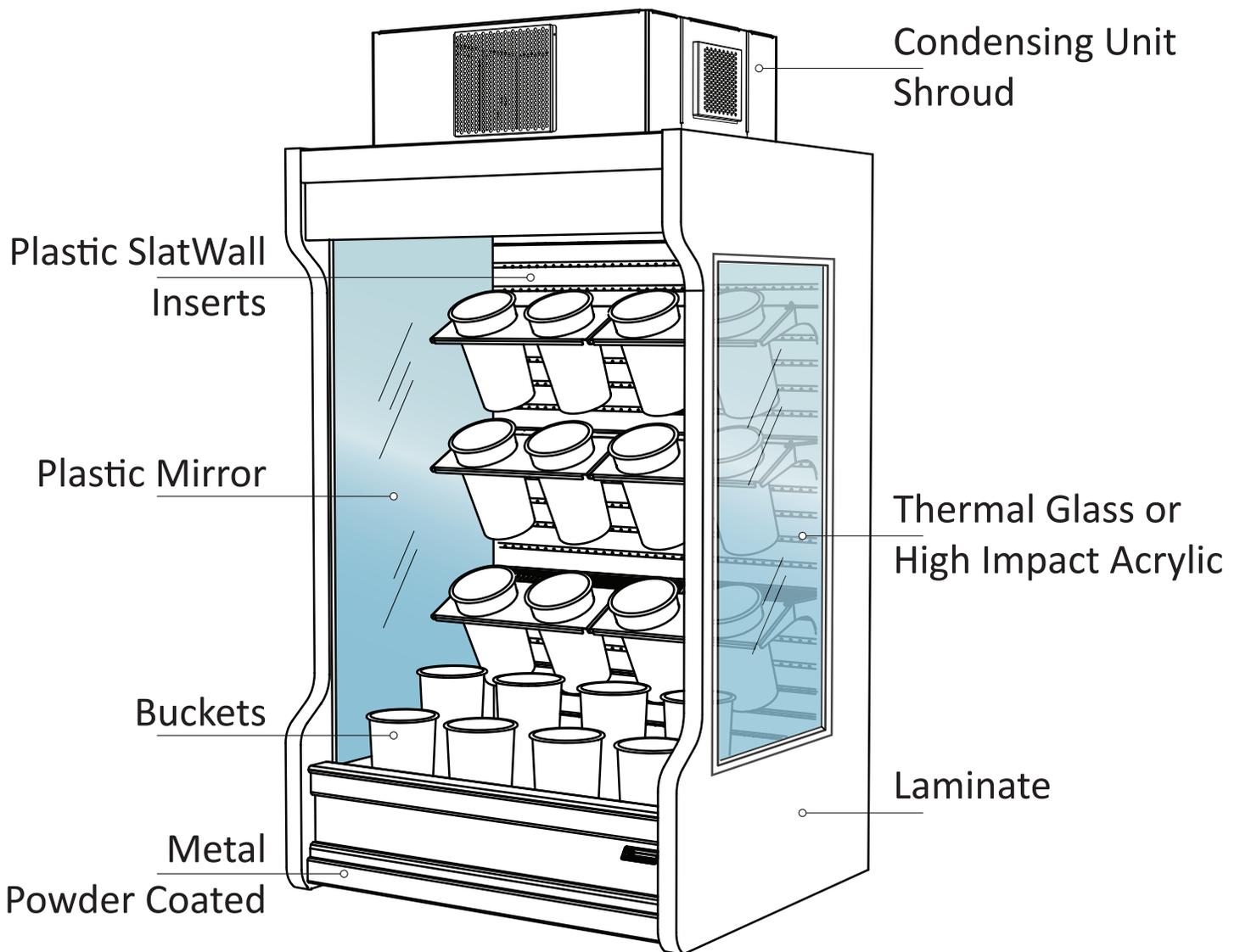
Cleaning Schedule

Routine cleaning is a necessary part of all floral fixture maintenance. This will help to ensure your equipment is operating as specified. Cleanliness is important to floral health and longevity.

Weekly - Sanitize the vases.

Clean the case interior, exterior and the floor underneath.

Monthly - Inspect and clean the condensing unit assembly including filters, coils and the evapoway pan.



This illustration calls out the basic parts of the fixture that are referred to in this manual. Note: a plastic window will usually have a thick single pane and an exposed edge. Our glass windows will be a double pane thermal unit. It is important to determine which type of window your case has for safe cleaning.

EACH WEEK

Cleaning the Vases

A clean vase is critical to minimize bacterial growth and to promote good floral health. Cleaning products especially formulated for use in the floral industry are available from your floral supply house. Please refer to your supplier for help in choosing the correct product.

We recommend cleaning the flower vases each week using a *floral* sanitizing solution. Read and follow the manufacturer's instructions for mixing and the application of their product. Using a clean, soft cotton cloth and sanitizing solution, wipe each vase inside and out to eliminate any residue. Ensure the bucket and cloth are clean and free of dirt or grit as these will cause scratching and bacterial contamination.

Cleaning the Case Surfaces

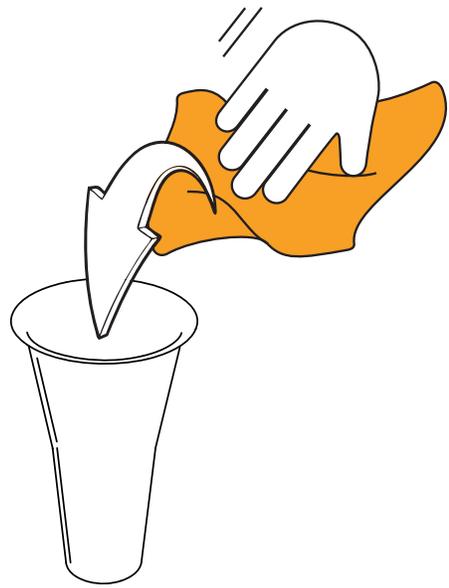
A mild soap and water solution applied with a soft cotton cloth is recommended for the **painted, metal and laminate surfaces** of the display cabinet. Ensure the cleaning bucket and cloth are free of dirt or grit as these will cause scratching. **DO NOT USE CLEANERS THAT CONTAIN AN ABRASIVE MATERIAL.** Using abrasive cleaners will scratch and dull the cabinet's finish. Be sure to rinse any soap residue from the laminate surfaces after cleaning.

Cleaning Mirrored Plastic or Plastic Side Windows

Use a mild soap and a soft cotton cloth to clean any mirrored plastic surfaces. These include: mirrored panels, mirrored slat wall and windows. Never use paper towel or glass cleaning products on these plastics as this will cause scratching.

Cleaning Glass Windows

Cases may contain true glass windows. These are installed on the side panels and are thermal pane glass. Only glass windows may be cleaned with typical window cleaners.

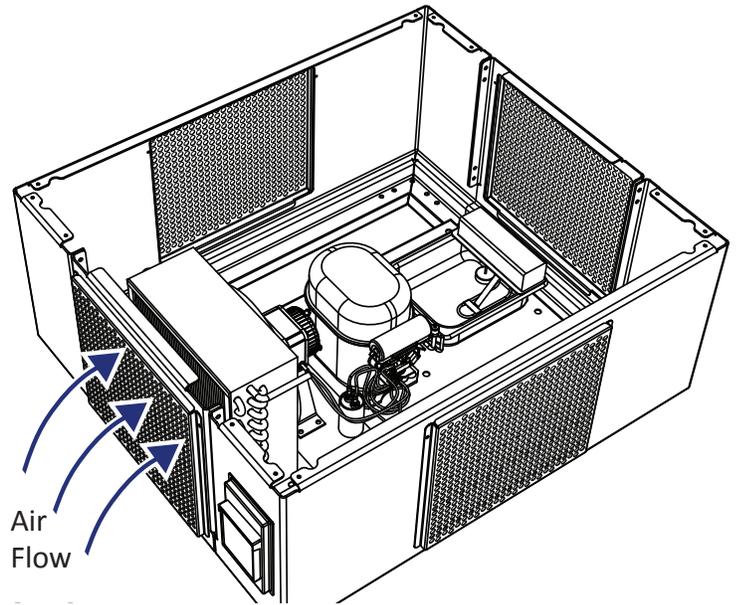


EACH MONTH

Inspect and Clean the Condensing Unit

During normal operation, air is drawn over the coil to provide adequate cooling for the condensing unit. As a result, dirt and dust from the store environment can collect on the coil. Keeping the coil fins clean will maximize the efficiency of your unit.

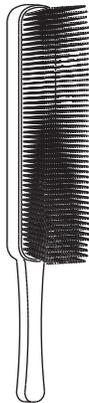
! WARNING!	
	Burn or Electrical Shock Hazard! The controls must be turned Off and the unit must be Cool before service maintenance. Failure to comply may result in burns or electrical shock.



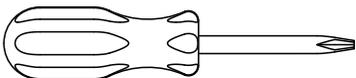
Tools you will need:



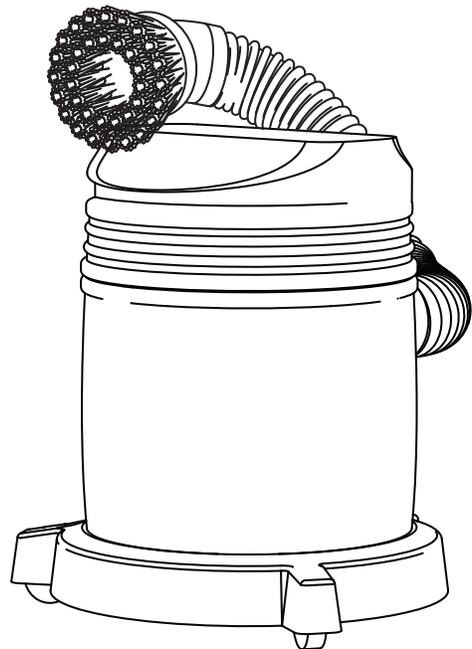
Dust Mask



Stiff Bristled Brush



Phillips Head #2 Screwdriver

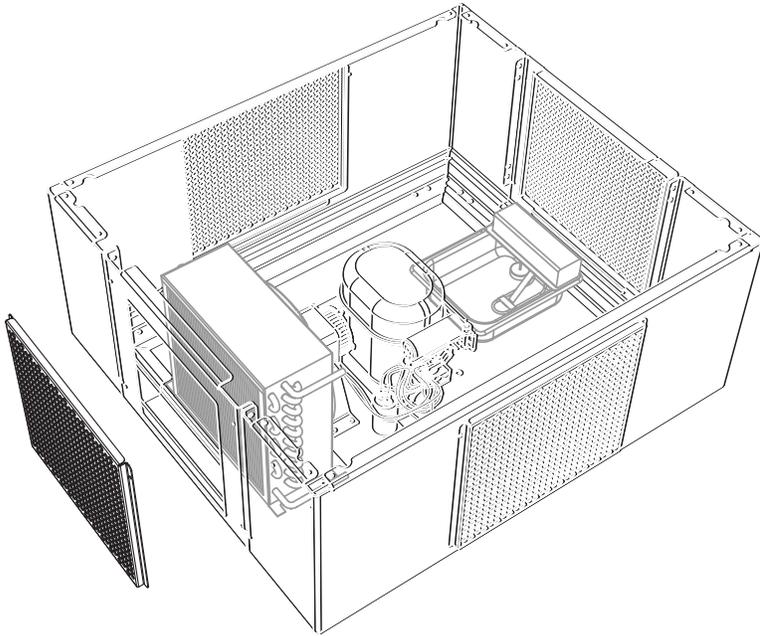


Shop Vacuum with Brush Attachment

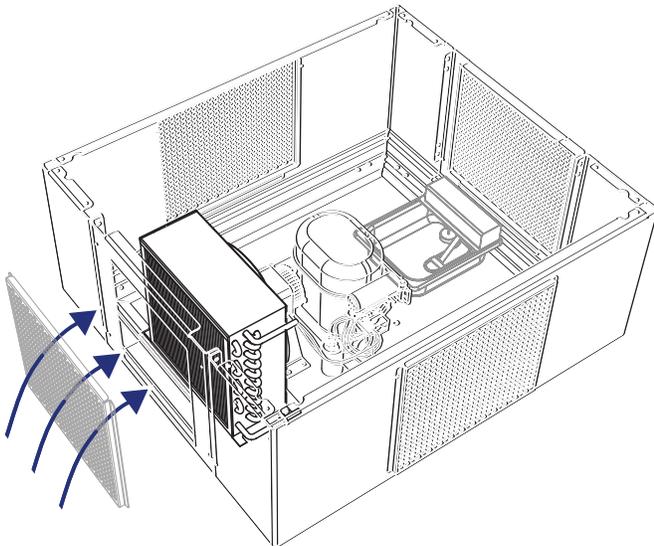
The Condensing Unit is enclosed inside a protecting shroud. In general, you will need to locate the condensing unit and remove the front grill of the shroud to inspect and clean the coil.

Turn the breaker off before removing side panels or working underneath the fixture.

Locate the condensing unit on your particular case. Remove the access panel to inspect the coil. A screwdriver will be needed to remove this panel.



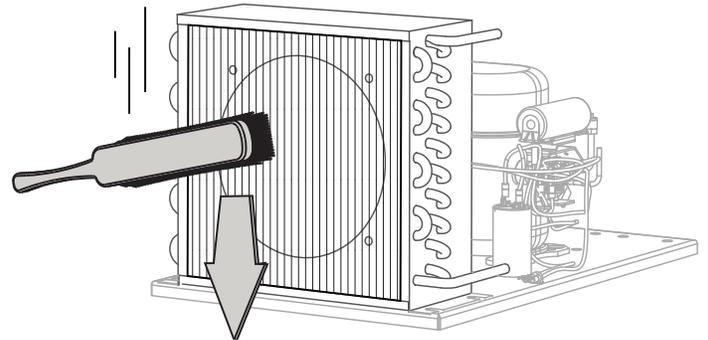
Now that the panel is removed you will see the coil.



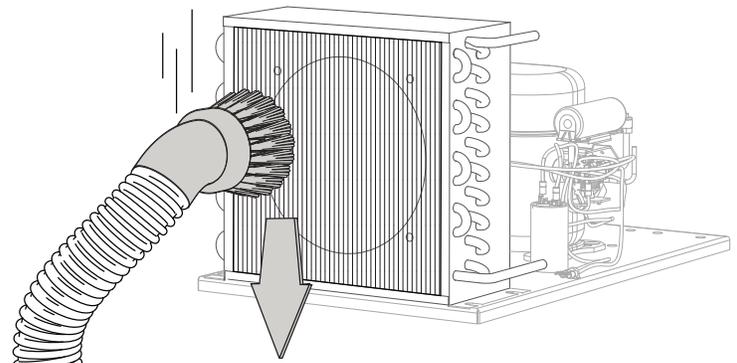
Cooling air enters this area. As a result, dirt and dust can be trapped here. The coil unit is fragile and easily bent. Care must be taken when cleaning.



Cleaning will loosen the accumulated dust. Wear a proper dust mask to avoid breathing air-borne dust.



Always use a downward motion in line with the vertical cooling fins when cleaning. A stiff bristle brush will remove large dust pieces.

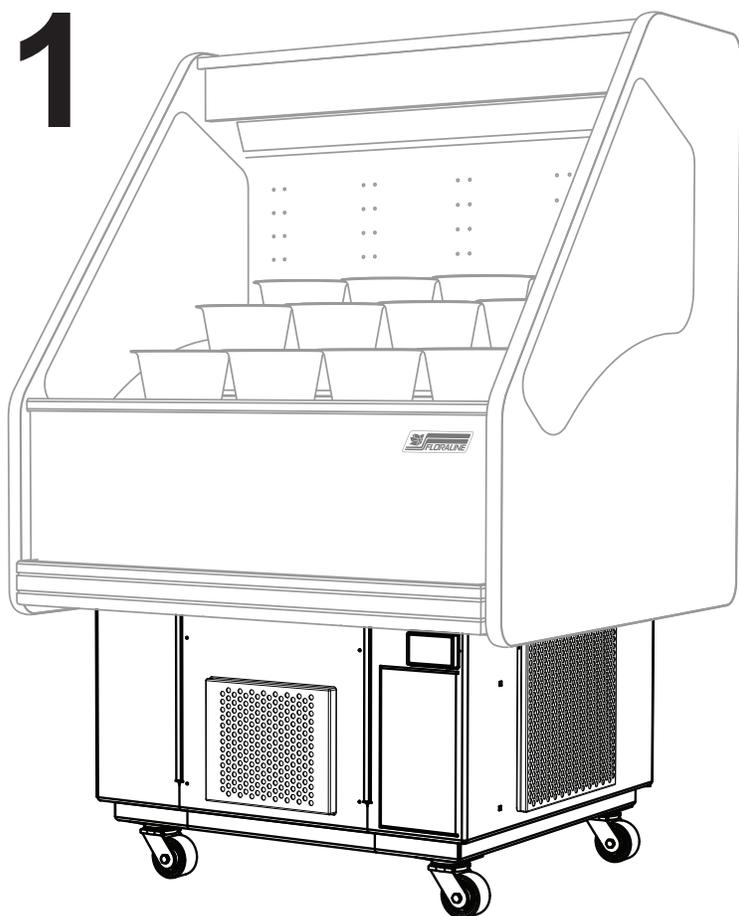


A shop vacuum with a brush attachment is an excellent way to clean the fins. This method helps to reduce air-borne dust.

The coil fins should be clean all the way through so that air flow is not restricted. This will ensure your equipment will operate with proper air cooling.

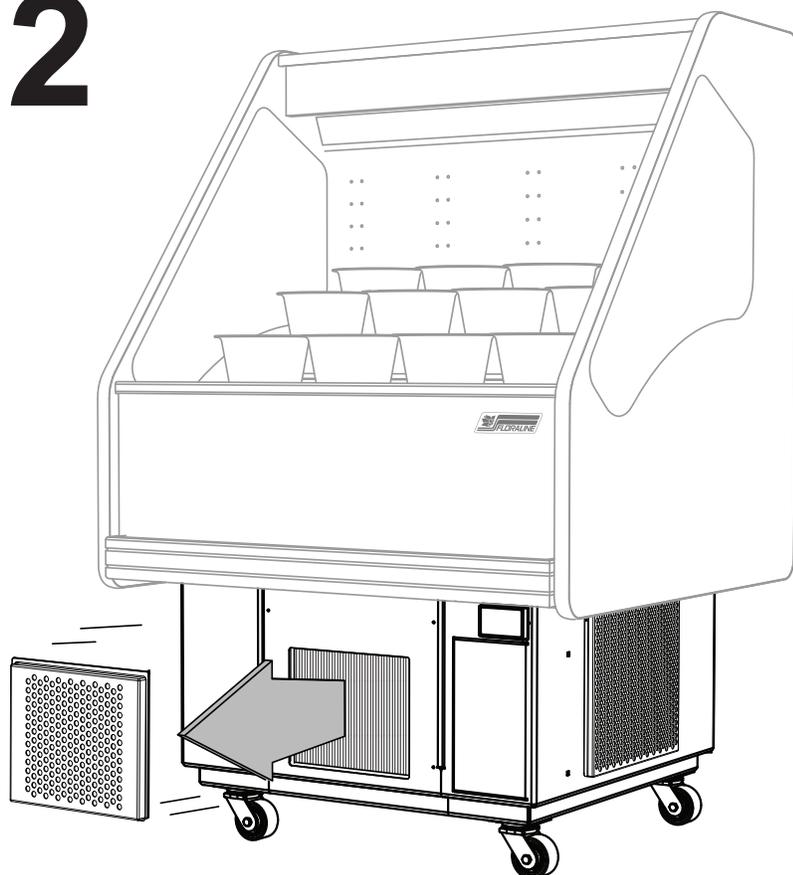
Accessing the Cooling Coil for Cleaning
Units with a simple grill cover.

1



This unit has a simple grill protecting the coil.

2



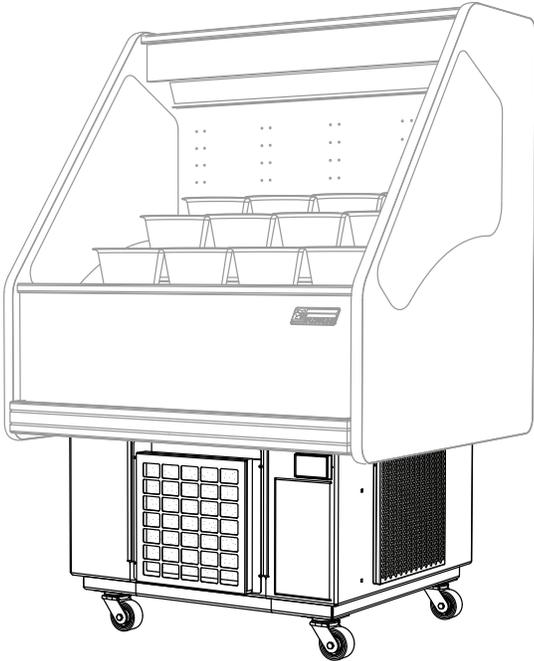
Locate the mounting screws and remove them with a screwdriver. Remove the grill. This will allow direct access to the coil. Clean with care as previously described with a brush or vacuum with brush.

Accessing the Cooling Coil for Cleaning

Units with a box air filter.

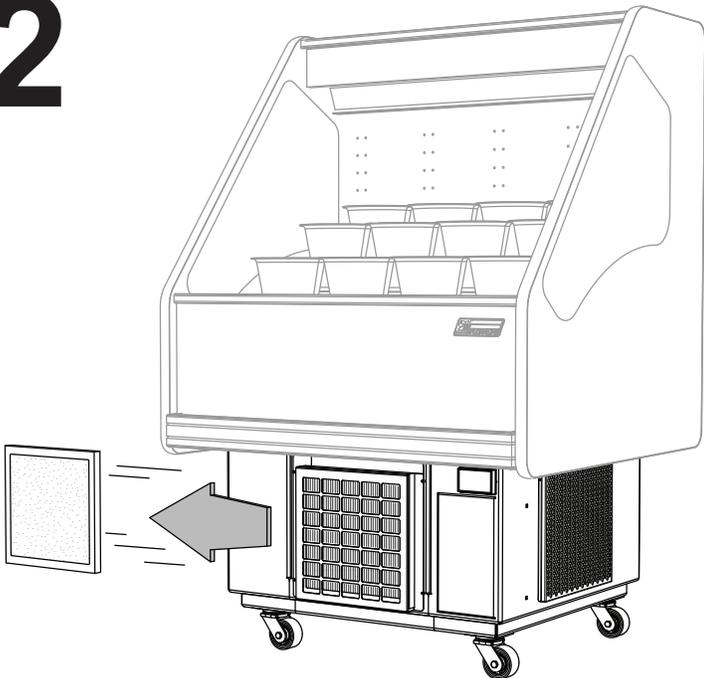
Some units have an air filter installed in front of the coil. This pre-filter will collect the majority of dust before it can settle on the coil. The filter should be inspected monthly for dirt and dust.

1



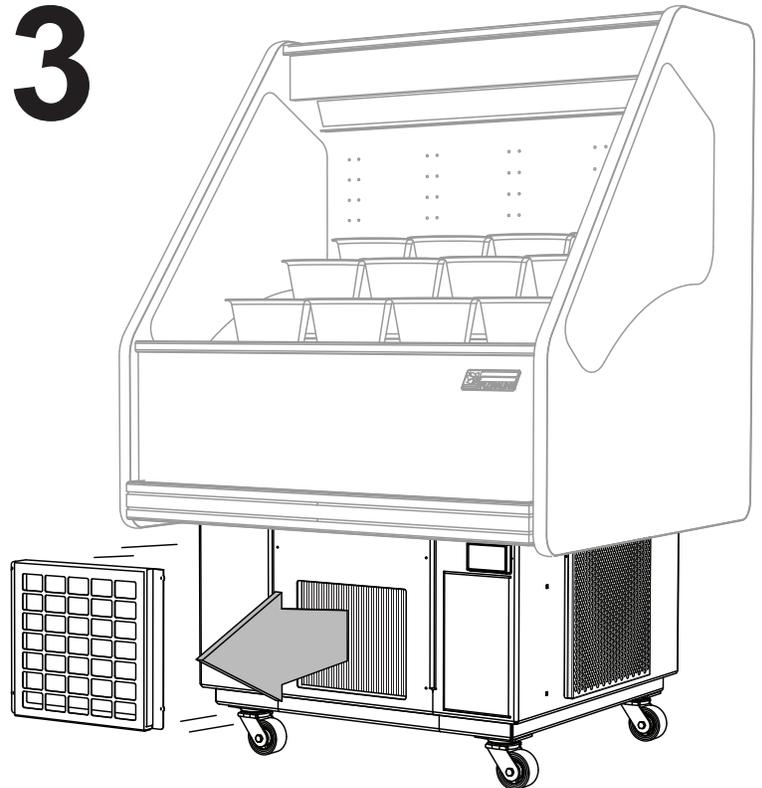
If the filter has collected dirt it must be cleaned or replaced.

2



The filter is removed by sliding it out. No tools are needed. It can then be replaced with the same size filter or the dirt can be vacuumed off of it.

3



Some dust may still collect on the coil. You will need access the coil directly for cleaning. The filter support grill will be in the way. Locate the mounting screws and remove them with a screwdriver. Remove the support grill to access the coil for cleaning. Clean with care as previously described with a brush or vacuum with brush.

Re-assemble the unit and place it back in service.

Evapoway Pan

Your self-contained fixture may also include an evapoway pan. The unit's metal pan will collect water condensation from the case and, through heat, remove this excess water. It is located in line with the coil and fan assembly. The unit is activated when collected water raises the float in the pan. The unit is hot when running and for some time afterwards, use caution.

Your monthly inspection should include observing that this unit is functioning properly. If there is a malfunction water will overflow the pan. You may also see a build up of biofilm or water sediment, this should be cleaned.

Each Month

The water and heating element contained inside the evapoway pan may be hot. Turn off power at the breaker and let any water cool down before performing any cleaning or service.

Check the float travel for "hang-up" or sticking. Routinely check the sensor bar connection. Should the float "hang-up" or stick, the sensor should interrupt power.

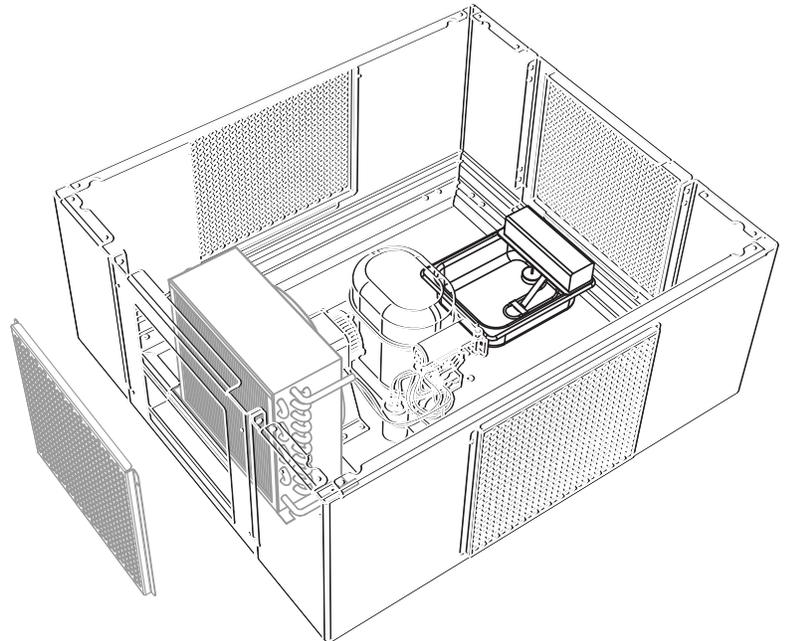
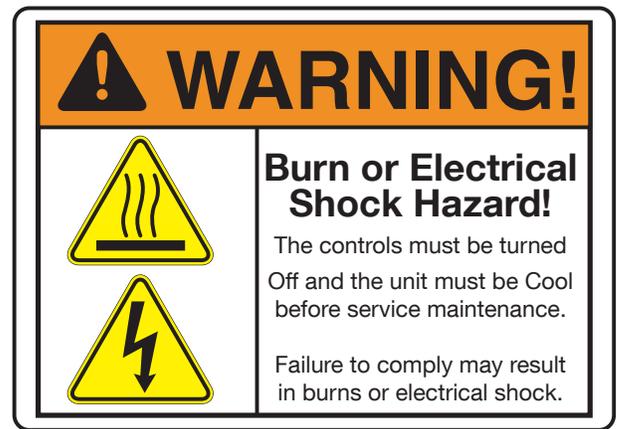
This unit is intended for water dissipation only. **DO NOT ALLOW THE UNIT TO OPERATE DRY.**

Keep the unit pan clean. Periodic maintenance of the unit should be performed monthly. For optimum performance and safety, do not allow fats, grease, dirt, dust, lint, flammable material or cleaning chemicals to accumulate on, inside, or around the unit.

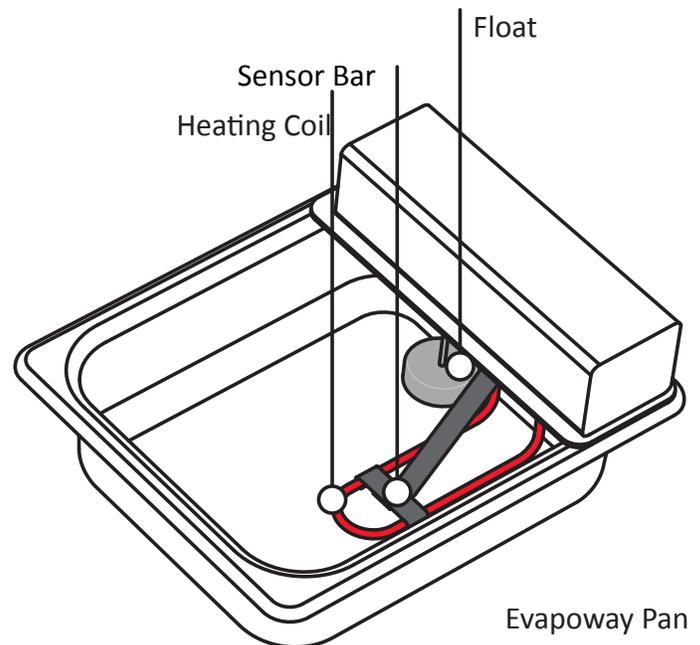
To Clean the Evapoway Water Collection Pan

The pans are made of stainless steel and respond well to cleaning with products made for stainless steel such as BAR KEEPERS FRIEND. You should check and clean the pan at least monthly and keep it free of dust and debris.

The water and heating element contained inside the evapoway pan may be hot. Turn off power at the breaker and let any water cool down before performing any cleaning or service.



The evapoway pan is located near the condensing unit. If your fixture has no external drain an evapoway pan will be included.



Evapoway Pan

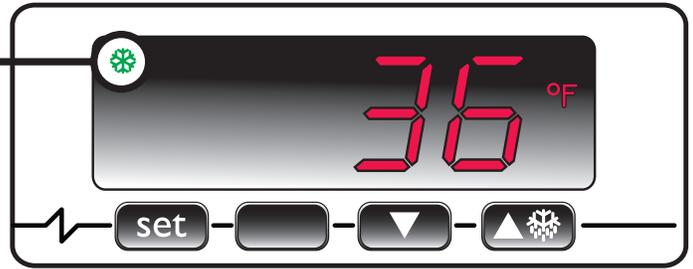
Digital Temperature Controller.

The controller is factory set, normally there is no need to adjust it.

Normal Cooling Operation

The Green symbol displays with the current temperature.

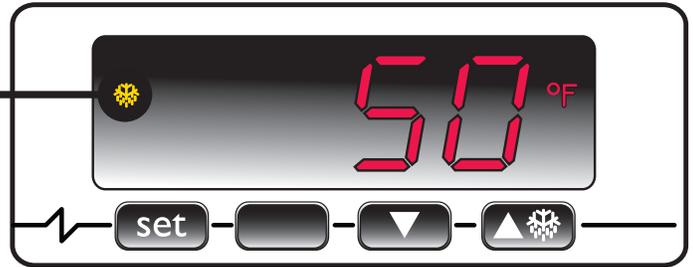
The condensing unit cycles from low to high set points, as a result, there is a temperature range for cooling. This range is normally within 36 - 42°F.



Defrost Operation

The Yellow symbol displays with the current temperature.

The condensing unit has a defrost cycle programmed to run 3 times per day. This cycle last for 20 minutes. You will see the temperature rise above normal for defrosting. The unit will automatically return to normal cooling operation after this cycle.



Alarm

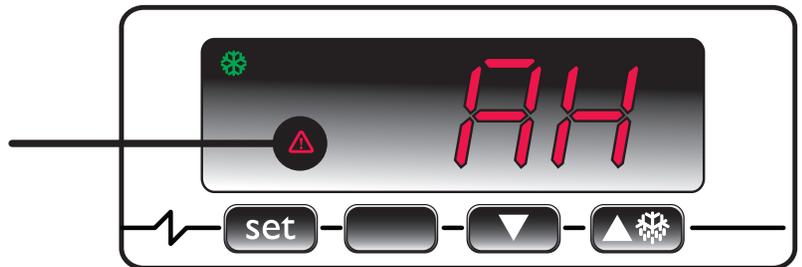
The Red symbol displays and you will hear an alarm.

Silencing the Alarm

1. Press > Any button to silence the alarm.

Make note of the display letter code shown.

Call our technical support at: 1.800.239.3722

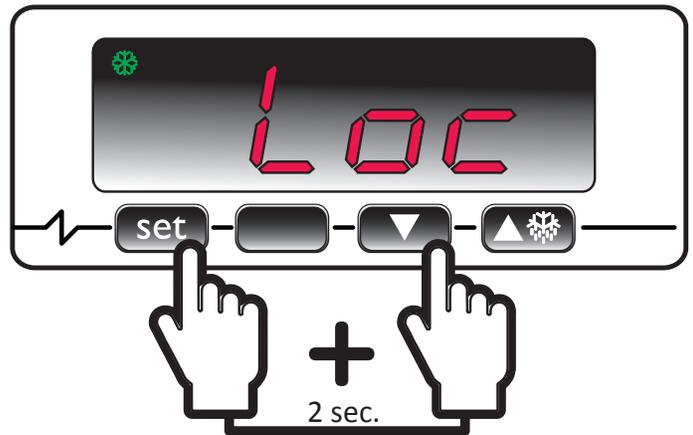


Keypad Lock Out

If needed, it is possible to lock the control panel.

1. Press and Hold > **Set** and the **Down** arrow for 2 seconds

2. The display will show "Loc" for 1 second.

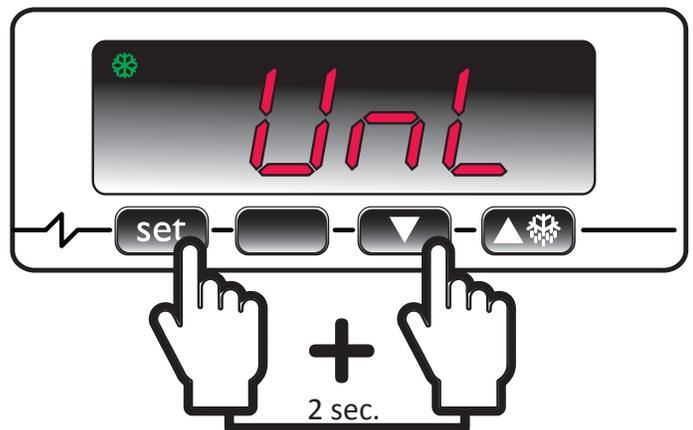


Keypad Unlock

To unlock the control panel.

1. Press and Hold > **Set** and the **Down** arrow for 2 seconds

2. The display will show "UnL" for 1 second.



Care and Cleaning of Air Cooled Condensing Units

Introduction

Proper care is essential to assure good life of condensing units. Dirty or damaged condensers will reduce the efficiency and capacity of the system.

Care must be taken in choosing solutions to be used for cleaning condensers and condensate pans. Chlorinated cleaners and anti-bacterial cleaning agents can be damaging and should be avoided. Caustic and acidic cleaners should be avoided as well. Failure to do so may accelerate component corrosion and ultimately lead to component failure.

Condenser Coils

There are many commercially available condenser coil cleaners on the market. Coil cleaners should be designed to remove build-up on fins and coils. Coils should be thoroughly rinsed of the cleaners once cleaning has been completed. Follow the manufacturer's instruction for proper usage. Preventive maintenance and routine cleaning of coils is important to assure good life.

When cleaning the coil, an absorbent type material should be placed under the area to be cleaned in order to capture most of the cleaning compound, thus minimizing any type of chemical attack.

Condensate Pans

Condensing units with condensate pans and condensate tubes are designed to evaporate condensate water only. Other ingredients introduced into the condensate pan can accelerate pan and/or tube corrosion. As foreign agents are introduced into the condensate pan, condensate water will be evaporated leaving the foreign agent behind. This can lead to a high concentration of the agent and possible corrosion of the tubing and/or base.

Coil cleaning agents must not be allowed to drain into the condensate pan as this may cause damage. Upon completing the coil cleaning, be certain that all residue is removed from the condensate pan.

Only non corrosive cleaners should be used to assure good life of the condensing unit components. No hydrocarbon based cleaners should be used to clean the unit. Bleach solutions must be avoided due to its high corrosive nature.

Under no circumstances should cleaning agent ingredients contain any of the solutions listed below:

Unacceptable solutions are:

- Chlorinated Solvents**
- Bleaches**
- Vinegar**
- Ammonia**
- Anti-Bacterials**
- Salts**

Preventative Maintenance

Maintenance should be performed at regular intervals. Coils should be cleaned at least monthly, possibly more depending on the environment. Condensing units with condensate pans should also be checked and cleaned regularly to prevent damaging build up in the pan.

Safety

Please follow all safety recommendations listed by the manufacturer of the cleaning agent(s), these would include proper clothing, gloves and eye protection.