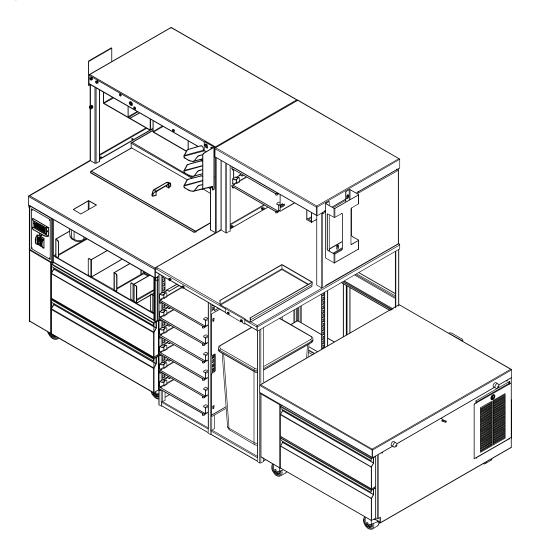


### **Dunkin Donuts Sandwich Station**

# Original Instructions Installation, Operation and Maintenance Manual

This manual is updated as new information and models are released. Visit our website for the latest manual.



**∴** Caution

Read this instruction before operating this equipment.

#### **Safety Notices**

#### **A** Warning

Read this manual thoroughly before operating, installing or performing maintenance on the equipment. Failure to follow instructions in this manual can cause property damage, injury or death.

#### **A** DANGER

Failure to disconnect the power at the main power supply disconnect could result in serious injury or death. The power switch DOES NOT disconnect all incoming power.

#### **A** DANGER

Do not install or operate equipment that has been misused, abused, neglected, damaged, or altered/modified from that of original manufactured specifications.

#### **A** DANGER

All utility connections and fixtures must be maintained in accordance with local and national codes.

#### **A** DANGER

It is the responsibility of the equipment owner to perform a Personal Protective Equipment Hazard Assessment to ensure adequate protection during maintenance procedures.

#### **A** DANGER

The on-site supervisor is responsible for ensuring that operators are made aware of the inherent dangers of operating this equipment.

#### **A** Warning

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by a person responsible for their safety. Do not allow children to play with this appliance.

#### **A** Warning

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance. Never use flammable oil soaked cloths or combustible cleaning solutions, for cleaning.

#### **▲** Warning

This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm. Operation, installation, and servicing of this product could expose you to airborne particles of glasswool or ceramic fibers, crystalline silica, and/or carbon monoxide. Inhalation of airborne particles of glasswool or ceramic fibers is known to the State of California to cause cancer. Inhalation of carbon monoxide is known to the State of California to cause birth defects or other reproductive harm.

#### **A** Warning

Authorized Service Representatives are obligated to follow industry standard safety procedures, including, but not limited to, local/national regulations for disconnection / lock out / tag out procedures for all utilities including electric, gas, water and steam.

#### **A** Warning

DO NOT touch refrigeration lines inside units; some may exceed temperatures of 200°F (93.3°C).

#### **∴** Caution

Maintenance and servicing work, other than cleaning as described in this manual, must be done by an authorized service personnel.

#### **Notice**

Proper installation, care and maintenance are essential for maximum performance and trouble-free operation of your equipment. Visit our website www. wbtkitchencare.com for manual updates, translations, or contact information for service agents in your area.

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## Section 1 General Information

#### **Custom Model Numbers**

Custom Models	Description		
	94" Assembly		
DBAP33P02	33" APOD Station		
DBAPOSP01	27"Toaster Station		
DBAPTS2702	33" Refrigerated Oven Stand		
DBAS33AP	33" Assembler Station		
DBAS40P	40" Assembler Station		
DBCS33AP	Cook Station		
DBES18A	Expediter Station		
DBTS27A	27"Toaster Station		

#### **Serial Number Location**

Serial numbers are located on serial tags.

The Cook Station serial tag is located on side wall of the condensing unit compartment. The condensing unit is located at the rear of the unit.

The Toaster Station serial tag is located on the side wall of the over shelf or the underside of the top shelf.

The Assembler Station serial tag is located on the side wall of the condensing unit compartment. The condensing unit is located at the rear of the unit.

The Expediter Station serial tag in located under the top.

Always have the serial number of your unit available when calling for parts or service.

#### **Warranty Information**

Visit http://www.delfield.com/warranty to:

- Register your product for warranty.
- Verify warranty information.
- View and download a copy of your warranty.

#### **Regulatory Certifications**

Models are certified by:

- National Sanitation Foundation (NSF)
- Underwriters Laboratories (UL)
- Underwriters Laboratories of Canada (CUL)

#### **A** DANGER

Installation must comply with all applicable fire and health codes in your jurisdiction.

#### **A** DANGER

Legs or casters must be installed and the legs or casters must be screwed in completely to prevent bending. When casters are installed the mass of this unit will allow it to move uncontrolled on an inclined surface. These units must be tethered/secured to comply with all applicable codes.

#### **A** DANGER

Use appropriate safety equipment during installation and servicing.

#### **A** DANGER

Do not lift the condensing unit by the refrigerant tubing or other components. These features will not support the condensing unit weight. Injury and unit damage may occur!

#### **A** DANGER

This equipment contains refrigerant charge. Installation of the line sets must be performed by a properly trained and EPA certified refrigeration technician aware of the dangers of dealing with refrigerant charged equipment.

#### **A** Warning

Use a jack to lift the refrigeration unit off the ground just far enough to remove the leg/caster. Place blocking underneath the unit. Do not work underneath a raised unit without proper blocking. Do not lift the unit more than necessary to remove the leg/caster. Lifting the unit too far can make the unit unstable.

#### **A** Warning

Do not damage the refrigeration circuit when installing, maintaining or servicing the unit.

#### **A** Warning

Remove all removable panels before lifting and installing.

#### Location

#### **▲**Warning

Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical conduit or gas lines.

#### **A** Warning

To avoid instability the installation area must be capable of supporting the combined weight of the equipment and product. Additionally the equipment must be level side to side and front to back.

#### **▲**Warning

The unit must be installed in a stable condition with the wheels locked. Locking the casters after installation is the owner's and operator's responsibility.

The location selected for the equipment must meet the following criteria. If any of these criteria are not met, select another location.

- · Units are intended for indoor use only.
- The location MUST be level, stable and capable of supporting the weight of the equipment.
- The location MUST be free from and clear of combustible materials.
- Equipment MUST be level both front to back and side to side.
- · Position the equipment so it will not tip or slide.
- Front casters MUST be locked once positioned.
- Recommended air temperature is 41° 86°F (5° 30°C).
- Proper air supply for ventilation is REQUIRED AND CRITICAL for safe and efficient operation. Refer to Clearance Requirements chart on page 6.
- Do not obstruct the flow of ventilation air. Make sure the air vents of the equipment are not blocked.
- Do not install the equipment directly over a drain.
   Steam rising up out of the drain will adversely affect operation, air circulation, and damage electrical/electronic components.

#### **Weight of Equipment**

Custom Models	Weight
DBAP33P02	495lbs (225kg)
DBAPOSP01	515lbs (233kg)
DBAPTS2702	250lbs (113kg)
DBAS33AP	685lbs (311kg)
DBAS40AP	585lbs (265kg)
DBCS33AP	505lbs (229kg)
DBES18A	159lbs (72kg)
DBTS27A	205lbs (93kg)

#### **Clearance Requirements**

#### **A** DANGER

Minimum clearance requirements are the same for noncombustible locations as for combustible locations. The flooring under the appliance must be made of a noncombustible material.

#### **A** DANGER

Risk of fire/shock. All minimum clearances must be maintained. Do not obstruct vents or openings.

#### **A**Warning

Do not block the supply and return air grills or the air space around the air grills. Keep plastic wrappings, paper, labels, etc. from being airborne and lodging in the grills. Failure to keep the air grills clear will result in unsatisfactory operation of the system.

#### **Notice**

Do not position the air intake vent near steam or heat exhaust of another appliance.

Custom Models	Back	Left Side
DBAP33P02	0"	1" (25mm)
DBAPOSP01	0"	1" (25mm)
DBAPTS2702	0"	0"
DBAS33AP	1" (25mm)	NA
DBAS40AP	1" (25mm)	NA
DBCS33AP	1" (25mm)	1" (25mm)

#### **Dimensions**

Custom Models	Length	Depth	Height
DBAP33P02	33.00"	41.00"	53.50"
	(84cm)	(104cm)	(136cm)
DBAPOSP01	33.00"	41.00"	24"
	(84cm)	(104cm)	(61cm)
DBAPTS2702	27.00"	41.00"	53.50"
	(69cm)	(104cm)	(136cm)
DBAS33AP	33.00" (84cm)	41.00"	68.50"
DBAS33AP Shelf	12.50" (32cm)	(104cm)	(174cm)
DBAS40AP	40.00"	41.00"	64.00"
	(102cm)	(104cm)	(163cm)
DBCS33AP	33.00"	41.00"	53.50"
	(84cm)	(104cm)	(136cm)
DBES18A	18.00"	41.00"	68.50"
	(46cm)	(104cm)	(174cm)
DBTS27A	27.00"	41.00"	49.25"
	(69cm)	(104cm)	(125cm)

#### **Drain Connections**

#### **A**Warning

Moisture collecting from improper drainage can create a slippery surface on the floor and a hazard to employees. It is the owner's responsibility to provide a container or outlet for drainage.

#### **A** Warning

If a refrigerated base does not have a condensate evaporator supplied, you must connect the condensate line to a suitable drain. Otherwise, water will collect on the floor, causing a potentially hazardous situation.

#### **Electrical Service**

#### **A** DANGER

Check all wiring connections, including factory terminals, before operation. Connections can become loose during shipment and installation.

#### **A** DANGER

Units with two power cords must be plugged into individual branch circuits. During movement, cleaning or repair it is necessary to unplug both power cords.

#### **A** DANGER

Copper wire suitable for at least 167°F (75°C) must be used for power connections.

#### **A** Warning

This appliance must be grounded and all field wiring must conform to all applicable local and national codes. Refer to rating plate for proper voltage. It is the responsibility of the end user to provide the disconnect means to satisfy the authority having jurisdiction.

#### **A** Warning

This equipment must be positioned so that the plug is accessible unless other means for disconnection from the power supply (e.g., circuit breaker or disconnect switch) is provided.

#### **Important**

Due to continuous improvements, this information is for reference only. Please refer to the equipment serial plate to verify electrical data. Serial plate information overrides information listed here. All electrical work, including wire routing and grounding, must conform to local, state and national electrical codes. The following precautions must be observed:

- · The equipment must be grounded.
- A separate fuse/circuit breaker must be provided for each unit.
- A qualified electrician must determine proper wire size dependent upon location, materials used and length of run (minimum circuit ampacity can be used to help select the wire size).
- The maximum allowable voltage variation is ±10% of the rated voltage at equipment start-up (when the electrical load is highest).
- Check all green ground screws, cables and wire connections to verify they are tight before start-up.

Units with plugs are supplied with approximately 6ft (183cm) cords.

Custom Models	Amps	HP	Voltage, Cycle, Phase	NEMA Plug
DBAP33P02	4.5	1/4	115,60,1	5-15P
DBAPOSP01	3.8	1/5	115,60,1	5-15P
DBAPTS2702	NA			
DBAS33AP DBAS40AP DBCS33AP	4.5 1/4 115,60,1 5-15P			5-15P
DBES18A DBTS27A	NA			

#### **Tools & Materials Required**

- Phillips head screwdriver
- Rubber mallet
- · Adjustable wrench or US size socket set
- 3/8" wrench
- All mounting hardware is mounted and provided on units.
- Sil-Bond RTV 4500, Aluminium, or equivalent silicone

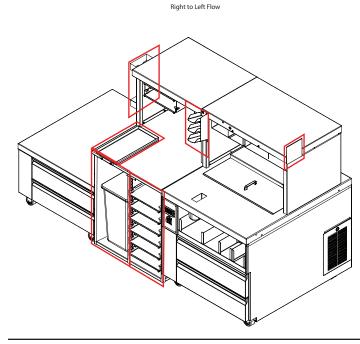
#### 94" SSR Leveling and Connection Installation

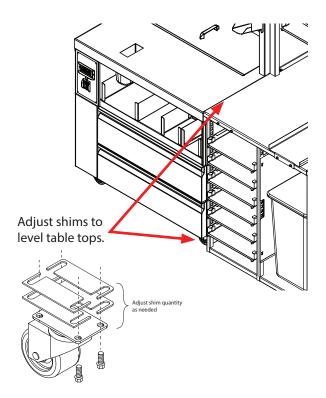
### The following to is the instruction to assembly the 94" station with a right to left flow:

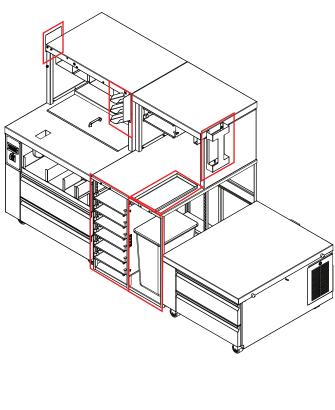
- Uncrate and set in place all paper bins, bottle holders, food box slides, lag screws and lids (found in waste bin), attach crumb catch and install upper structure accessories.
- Units need to be level to allow for connecting each other together. Determine if shims need to be added to first two units. Shims are included with the refrigerated unit. To add shims, loosen bolts holding the casters in place under the unit. Lift the unit and slide in the shims to make units level with each other.
- 3. To secure refrigerated base (BDAP33P00), left to the toaster station, locate connecting screws, and install them from the toaster station into the side of the refrigerated base. Holes are pre-punch (see page 11 for hole location. Pull the unit tight with the screws.)
- 4. Silicone seam with Sil-Bond RTV 4500, aluminum, or equivalent silicone and let dry before use.

#### To change flow to left to right:

- Uncrate units and locate all accessories and set aside. Relocate shoulder bolts on the over shelves for the bottle holder, turbo paper, crumb-catch pan, toaster stand base divider and food box slide/lids to the opposite flow. Items needing to be move are highlighted below
- 2. Move items to the opposite end and then return to the above assembly direction.

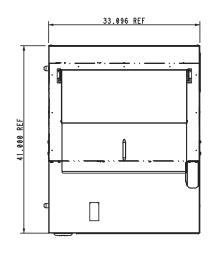


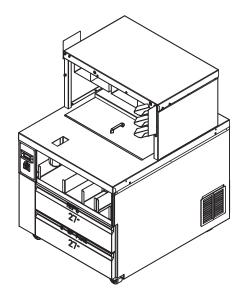


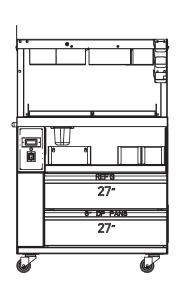


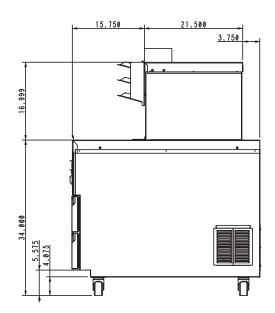
Left to Right Flow

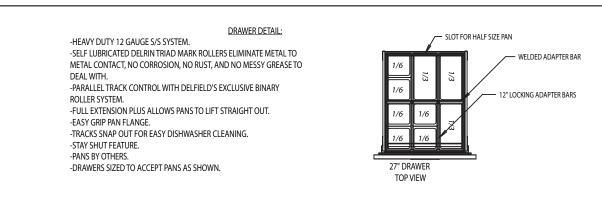
#### 33" APOD Station, DBAP33P02, Installation Instructions







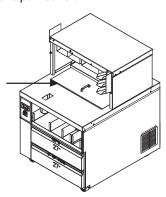




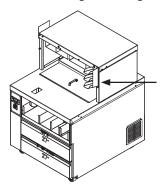
#### 33" APOD Station DBAP33P02

The APOD station needs to be disassembled to pass through a 36" (91cm) door.

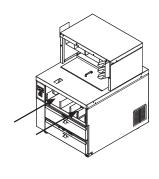
- 1. As you disassemble keep track of parts and hardware.
- 2. Set aside the pan cover.



- 3. Remove the pan cover brackets.
- 4. Remove the bottle holding mounting bracket.



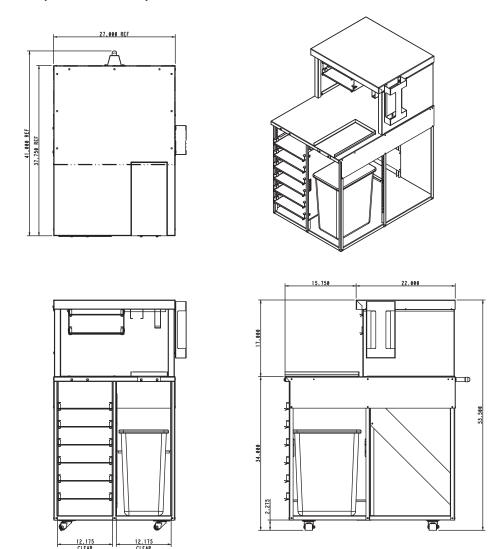
- 5. Remove the screws securing the over shelf to the base. Remove the over shelf.
- 6. Place assembly station in desired location.
- 7. Reassemble.
- 8. DBAS33P00 has three paper bins, two single sections and a double section. At the back of each paper bin are key holes. Place the key holes over the base mounting bolts and push each paper bin down into locked position.

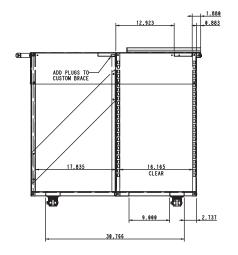




**Paper Bins In Left to Right Flow** 

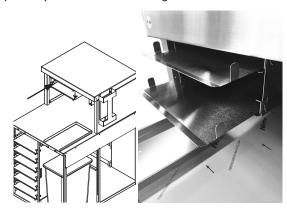
#### 27" Toaster Station, DBAPTS2702, Installation Instructions



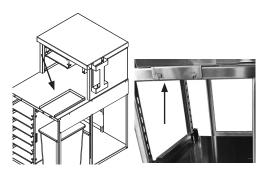


#### **Toaster Station, DBAPTS2702**

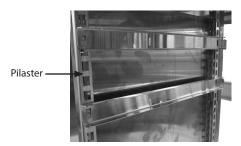
1. Slide two bin tops into the overshelf. The tabs should point up and the beveled edge is the front.



2. Place the toaster tray on the counter with the front bend cutouts over the counter nosing shoulder bolts.



- 3. The toaster station base shelving, brackets and bin tops ship loose, inside the trash bin.
- 4. Determine your station layout. The trash can will always be on the side near the turbo oven.
- Install the channels from the bottom up. Orient the C channels with the stop at the back; notice there are right and left hand channels. Snap the C channels into the pilasters. Rubber mallet recommended for ease of installation.



6. Between each pair of C channels, install a bin top. The tabs should point up and fit into C channel cutouts. The beveled edge of the top is the front.



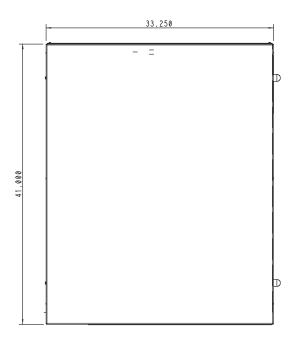
7. Install a bin in between each pair of C channels, pushing up the bin top as you slide the bin in.

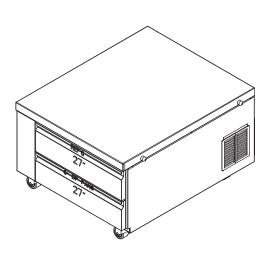


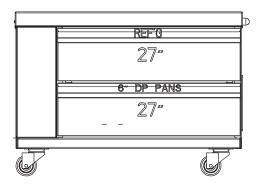
8. Install a panel between the trash can and the food section.

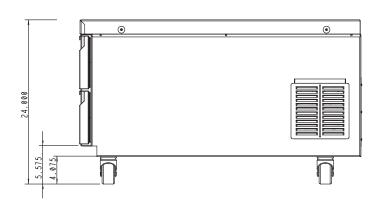


#### 33" Refrigerated Oven Stand, DBAPOSP01, Installation Instructions





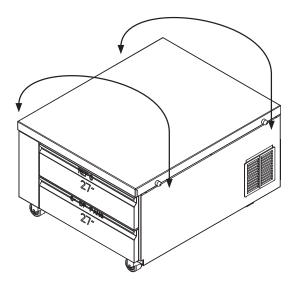




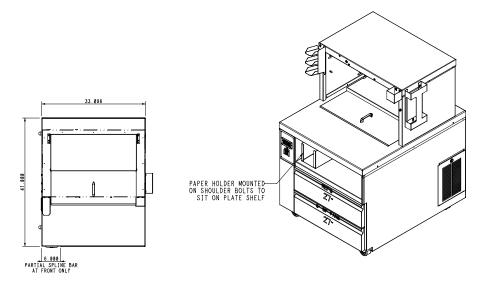
#### 33" Refrigerated Oven Stand DBAPOSP01

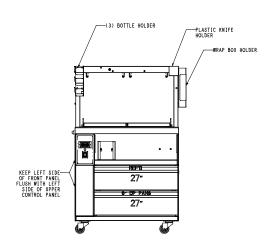
#### **END OF 94" ASSEMBLY INSTRUCTIONS**

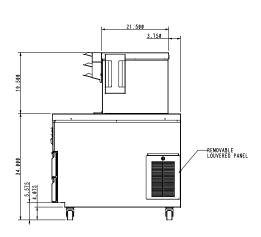
To change the flow of the Oven Stand, remove the (2) bumpers on the end and fasten them to the other end.

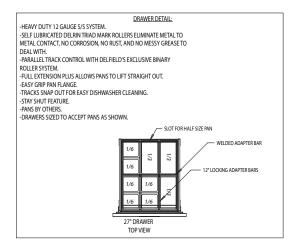


#### **Cook Station, DBCS33AP, Installation Instructions**



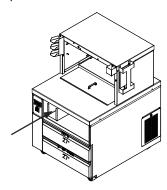




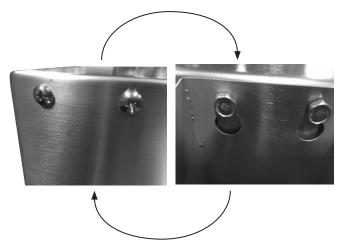


#### Cook Station, DBCS33AP

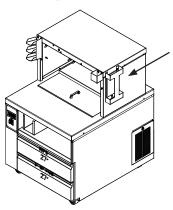
 DBCS33AP has a single section paper bin. At the back of the paper bin are key holes. Place the key holes over the base mounting bolts and push the paper bin down into locked position.



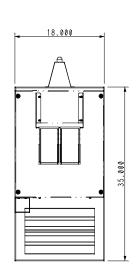
2. The single use plastic knife holder should be installed on the side overshelf nosing. If the mounting bolts are on the wrong side, switch them with the screws on the correct side.

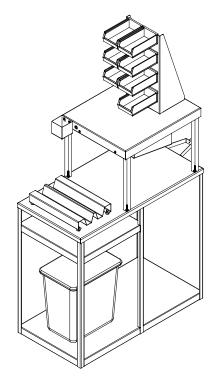


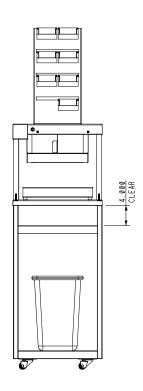
3. Place the knife holder key holes over the overshelf mounting bolts and push it down into locked position.

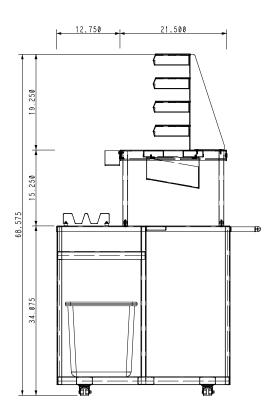


#### **Expediter Station, DBES18A, Installation Instructions**



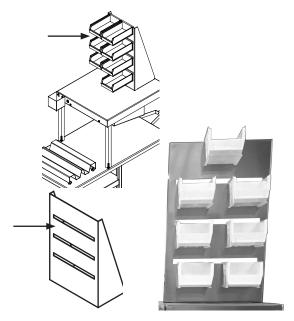




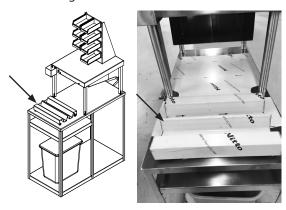


#### **Expediter Station, DBES18A**

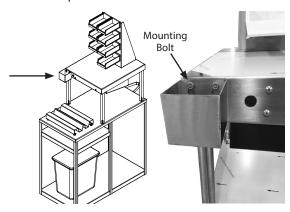
- 1. Mount the U-line bin holder.
- 2. Install the U-line bins into the holder slots.



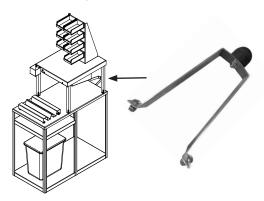
3. Place the bag ribbon on the counter.



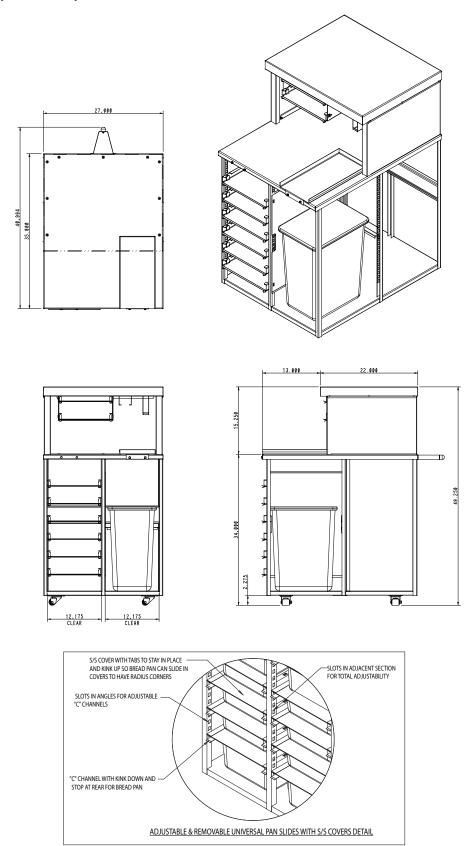
4. The single use plastic knife holder should be installed on the overshelf nosing. Place the knife holder key holes over the overshelf mounting bolts and push it down into locked position.



5. Install rear bumpers.

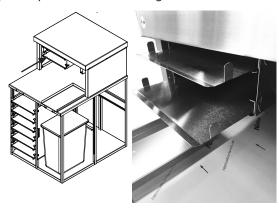


#### **Toaster Station, DBTS27A, Installation Instructions**

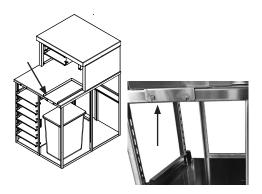


#### **Toaster Station, DBTS27A**

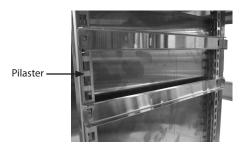
1. Slide two bin tops into the overshelf. The tabs should point up and the beveled edge is the front.



2. Place the toaster tray on the counter with the front bend cutouts over the counter nosing shoulder bolts.



- 3. The toaster station base shelving, brackets and bin tops ship loose, inside the trash bin.
- 4. Determine your station layout. The trash can will always be on the side near the turbo oven.
- Install the channels from the bottom up. Orient the C channels with the stop at the back; notice there are right and left hand channels. Snap the C channels into the pilasters. Rubber mallet recommended for ease of installation.



6. Between each pair of C channels, install a bin top. The tabs should point up and fit into C channel cutouts. The beveled edge of the top is the front.



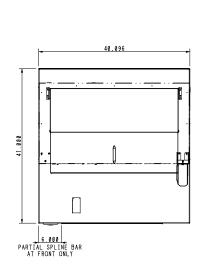
7. Install a bin in between each pair of C channels, pushing up the bin top as you slide the bin in.

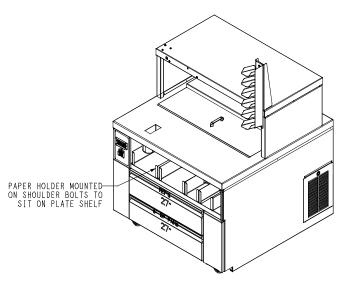


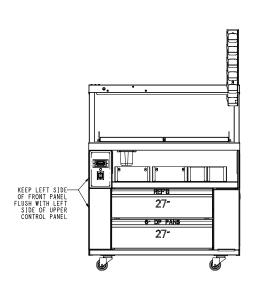
8. Install a panel between the trash can and the food section.

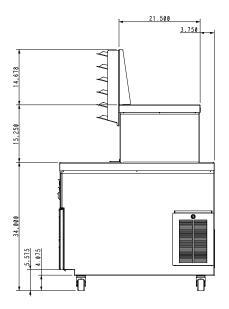


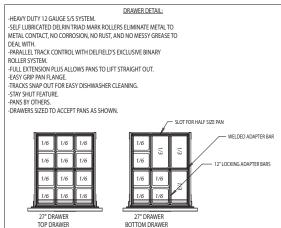
#### **Assembler Station, DBAS40AP, Installation Instructions**







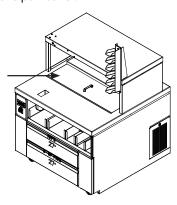




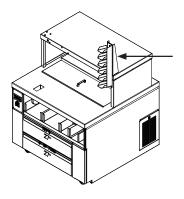
#### **Assembler Station, DBAS40AP**

The assembly station needs to be disassembled to pass through a 36" (91cm) door.

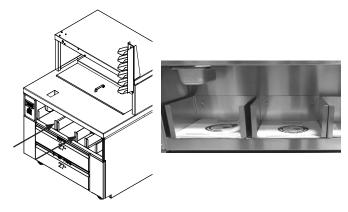
- 1. As you disassemble keep track of parts and hardware.
- 2. Set aside the pan cover.



- 3. Remove the pan cover brackets.
- 4. Remove the bottle holding mounting bracket.

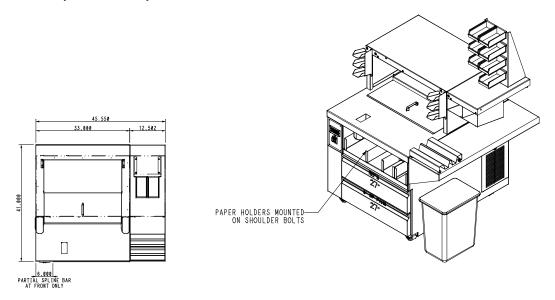


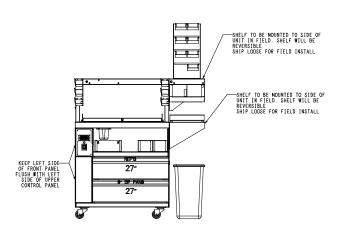
- 5. Remove the screws securing the over shelf to the base. Remove the over shelf.
- 6. Place assembly station in desired location.
- 7. Reassemble.
- 8. DBAS40AP has three paper bins, two single sections and a double section. At the back of each paper bin are key holes. Place the key holes over the base mounting bolts and push each paper bin down into locked position.

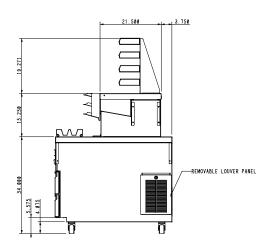


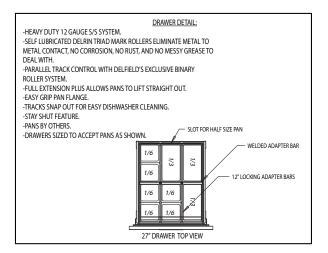
Paper Bins In Left to Right Flow

#### **Assembler Station, DBAS33AP, Installation Instructions**



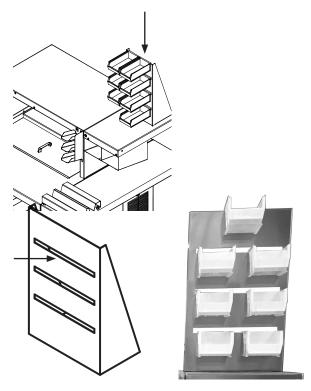




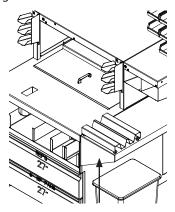


#### **Assembler Station, DBAS33AP**

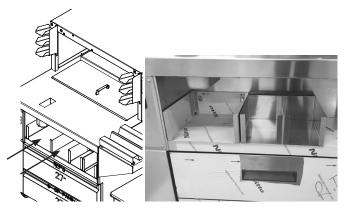
- 1. Mount the U-Line bin holder.
- 2. Install the U-line bins into the holder slots.



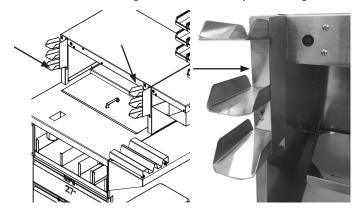
3. Set the bag ribbon on the shelf.



4. DBAS33AP has two paper bins, a single section and a double section. At the back of each paper bin are key holes. Place the key holes over the base mounting bolts and push each paper bin down into locked position.



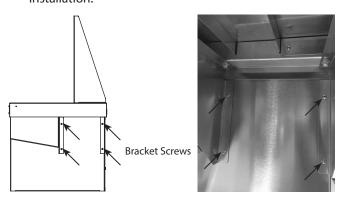
5. DBAS33AP has two bottle holders. Locate the mounting bolts on the overshelf. Orient the bottle holders so the circle of the keyhole is at the bottom. Place the key holes over the mounting bolts and push each bottle holder down into locked position. The bottom mounting thumb screw is adjustable, tighten it.



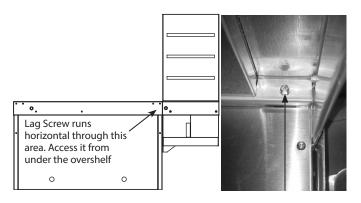
#### **Changing Flow Only, DBAS33AP**

#### 12" Expediter Overshelf Left Side Install

 The expediter overshelf is attached with two brackets and one lag screw. Each bracket has two screws. The lag screw connects the front seam through the DBAS33AP leg channel and overshelf top, expediter overshelf top and leg channel. Remove the screws, save for left side installation.



**Expediter Overshelf Brackets** 

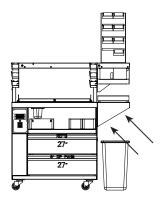


#### **Lag Screw Secures Expediter Overshelf**

- 2. Set down the overshelf upside down.
- 3. Remove the brackets, secured with nuts.
- 4. Spin the brackets 180°. Place the brackets tight against the edge (the edge to be placed against the unit).
- 5. Secure the brackets with the nuts.
- 6. Remove the plastic plugs from the five predrilled holes on the left side of the DBAS33AP where the bracket and lag screws will go.
- 7. Insert the plastic plugs into the right side empty holes where the screws were removed.
- 8. Install the expediter overshelf on the left side of the DBAS33AP. Use the screws removed from right side installation.

#### 12" Expediter Shelf Left Side Install

- 9. Remove the rubber bumper from the left side.
- Remove the expediter shelf via four screws. Keep the screws.



- 11. Install the rubber bumper on the right side.
- 12. Install the shelf on the left side of the unit with the saved four screws. The holes have been predrilled.

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## Section 3 Operation

#### **A** DANGER

Do not operate any appliance with a damaged cord or plug. All repairs must be performed by a qualified service company.

#### **A** DANGER

Never stand on the unit! They are not designed to hold the weight of an adult, and may collapse or tip if misused in this manner.

#### **A** DANGER

Keep power cord AWAY from HEATED surfaces. DO NOT immerse power cord or plug in water. DO NOT let power cord hang over edge of table or counter.

#### **A** Warning

Overloading shelves can damage equipment or cause bodily injury.

#### **A** Warning

The operator of this equipment is solely responsible for ensuring safe holding temperature levels for all food items. Failure to do so could result in unsafe food products for customers.

#### **A** Warning

Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.

#### **A** Warning

Damp or wet hands may stick to cold surfaces.

#### **A** Warning

Do not contact moving parts.

#### **A** Warning

Use caution when handling metal surface edges of all equipment.

#### **A** Warning

All covers and access panels must be in place and properly secured, before operating this equipment.

#### **Notice**

Never use sharp objects or tools to remove ice or frost. Do not use mechanical devices or other means to accelerate the defrosting process.

#### **Notice**

Units with pans should be operated with pans in place. Operating the unit without all pans in place will lower efficiency and may damage the unit.

#### **Notice**

Continuous opening and closing of the drawers will hamper the unit's ability to maintain optimum refrigeration temperature. Top section is not intended for overnight storage. Product and pans should be removed from the unit nightly.

#### **Notice**

Do not place hot pans on/against the blue ABS liner. Do not throw items into the storage area. Failure to follow these recommendations could result in damage to the interior of the cabinet or to the blower coil. Overloading the storage area, restricting the airflow, and continuous opening and closing of the doors and drawers will hamper the unit's ability to maintain operational temperature.

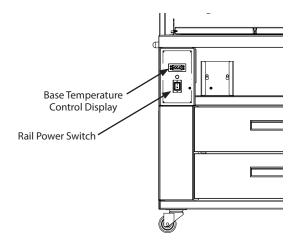
#### Notice

Do not throw items into the storage area. Failure to heed this recommendation could result in damage to the interior of the cabinet or to the blower coil.

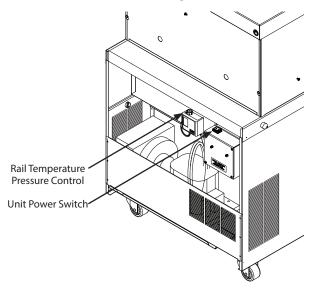
#### **Refrigeration Operation**

Power up the unit by turning ON the unit's power switch. It is located on the back near the condensing unit. Delfield refrigerated bases are designed to maintain an operational temperature of 36°F to 40°F (2°C to 4°C). Temperature in the refrigerated rail opening is 33°F to 41°F (0°C to 5°C) with pans recessed 2" (5.1cm) at 86°F (30°C) ambient room temperature.

Operation Section 3



#### Front View of Refrigerators



**Rear View of Refrigerators** 

#### Refrigerated rail units

Product in the rail should be removed to the refrigerated base at the end of the day. This allows you to turn the rail off, defrost, clean, sanitize and air dry unit daily. Once unit is dried thoroughly, close the cover. Turn the rail on after it dries out so it is ready for early morning use. Pans should not be left in unit overnight. The rail on/off switch is on the front panel; the rail switch shuts off the rail only.

These units are not designed to cool warm food products. Items should be placed in the unit cooled at least to the desired holding temperature, if not slightly colder. Fill pan to 2.0" (5cm) below top of cold pan. In some applications, a gradual warming of product may occur, particularly at the exposed top of the products. Stirring or rotation of the product is necessary to maintain overall temperature.

Warming of food product can occur very quickly outside of the unit. When loading or rotating the product, avoid leaving food items in a non-refrigerated location for any length of time to prevent warming or spoilage. To ensure product quality product must be rotated every four hours. Always place covers on pans when not serving to maintain temperatures.

Air from air vents can affect the temperature in the cold pans. Add deflectors to vents to redirect airflow.

#### **Rail Temperature Pressure Control Settings**

A pressure control controls temperature in the rail and is located in the machine compartment at the backside of the unit. Adjustments should be made in small increments due to the time it takes for the temperature to change. Control adjustments are not covered under warranty and Delfield is not responsible for charges incurred for control adjustments. If there are any questions regarding control adjustments call the KitchenCare service department for further instruction.

#### To raise the temperature:

- 1. Turn the cut-in dial counter clockwise a quarter turn.
- 2. Allow the unit to run for minimum four to six hours before attempting any further adjustments.

#### To lower the temperature:

1. Turn the cut-in dial clockwise a quarter turn.

Allow the unit to run for minimum four to six hours before attempting any further adjustments.

#### **Refrigerator Evaporator Fan Operation**

When the refrigerator is initially powered up or immediately following a power outage the unit will begin cooling after a 3-6 minute delay. During normal operation the evaporator fan pulses independently of the compressor as dictated by the controller as follows:

- 1. During the cooling mode, compressor and evaporator fan run simultaneously.
- 2. During the compressor off mode, evaporator fan pulses three minutes on and three minutes off.
- 3. During an actual defrost event other than the off-cycle defrost, compressor stays off but the evaporator fan runs continuously.

Coolin	Defrost Cycle	
Compressor On	Compressor Off	Compressor Off
Evaporator Fan On	Cycles On 3-Min, Off 3-Min	Evaporator Fan On

Section 3 Operation

#### **Base Temperature Control, ERC112**



#### **AT START UP**

- At initial start-up or anytime power is disconnected, then reconnected to the unit, the control will go into defrost mode.
- 2. The control will enter a DEFROST mode and the display will read dEF. The compressor and condenser fan as well as the evaporator fan will remain off until this initial defrost is complete. This initial defrost cycle may take up to 35 minutes to complete.
- 3. The display will continue to read dEF for an additional 30 minutes while the cooling cycle cools the box to the set temperature.
- 4. Then the digital thermostat will display box temperature.
- The temperature control will cycle the compressor, evaporator fan motor and condenser fan motor to maintain box temperature at the control setting. For more information see "Evaporator Fan Operation" on page 9.

#### **DEFROST MODE**

The temperature control also monitors the evaporator temperature and will turn off the compressor and condenser fan motor when needed to allow accumulated frost on the evaporator to clear. During this defrost cycle, the digital temperature display will read dEF. After the defrost cycle is complete, the temperature control will return to a normal cooling cycle, but the display will continue to read dEF until the evaporator returns to normal cooling temperatures (up to 30 minutes).

The electronic temperature controller monitors evaporator temperature and compressor run time to determine the proper time for a positive defrost cycle. A defrost cycle can occur as often as every 60 minutes under extremely heavy usage. It can last a minimum of 2 minutes. When the controller enters the defrost mode the compressor is shut off and will remain off until the evaporator coil temperature exceeds 41°F (5°C) or the controller reaches a time limit of 75 minutes.

Status	Displayed	<b>4</b> ))	Comments	
Normal (°C)	Temp. [°C]		Unit depends on setting	
Normal (°F)	Temp. [°F]		(parameters in control)	
Show set-point	Temp.			
Set to Defrost	dEF / Temp		Depends on setting (parameters in control or as chosen by upper left button)	
Sensor 1 defect	E01 🔔	Χ	Air sensor	
Sensor 2 defect	E02 🔔	Χ	Coil sensor	
Sensor 3 defect	E03 🔔	Χ	Open	
Sensor 4 defect	E04 🔔	Χ	Open	
High temperature alarm	Hi 🔔	Х	Automatically switching at 2 sec rate	
Low temperature alarm	Lo 🔔	Χ		
Line voltage too high, above 140 volts	uHi 🔔	Х		
Line voltage too low, below 96 volts	uLi 🔔	Х		
Control calls for cooling for more than 24 hours straight	LEA 🔔	X	Time includes defrost. Error will go away if the control cycles off the compressor or if the power is shut off. If error is on a cold pan it could be related to a high ambient temperature or not shutting the rail off nightly.	

♠ All alarms sound for approximately 10 seconds and then are silent for 50 seconds. It will do that for 15 cycles and then remain silent. The alarm code will still be present on the display until the fault clears.

Operation Section 3

NOTE: Code 980 is needed to change setpoint.

#### Press upper or lower right button.

- Display show actual set-point (blinking).
  - If buttons untouched for 3 seconds returns to normal.
- Increase set-point by pressing upper button. Max value depends on parameters in control.
- Decrease set-point by pressing lower button. Min value depends on parameters in control.
  - If buttons untouched for 3 seconds returns to normal and stores new set-point.

#### Press upper left button for 5 seconds.

Start defrost.

#### Press lower left button for 5 seconds.

- Unit goes into stand-by mode.
  - The display will read Off, then a period.
- Press the lower left button again for 5 seconds.
  - The display will read On.
  - The unit will then start up in the defrost mode, and display will read dEF.

#### **Temperature Alarm**

The alarm will sound and flash HI or LO 90 minutes after the unit has reached its alarm temperature point or after any power interruption if the temperature is above or below the alarm set points.

- The high refrigerator temperature point is 50°F (10°C).
- The low refrigerator temperature point is 25°F (-4°C).

### CHANGING SETPOINT WITH REQUIRED PASSCODE ERC112 Control

1. Simultaneously press the up/down arrows for approximately 5 seconds.



2. Screen will temporally flash **PAS** then automatically move to a numeric screen reading **000**.



3. Scroll down to 980.



4. Press the lower left button to enter the passcode into the controller.



Section 3 Operation

5. Screen should flash **PS2** and then automatically move to **tHE** indicating thermostat categories.



6. Press the lower left button to enter into the thermostat category.



7. Screen should read **SEt** indicating the setpoint setting. Press the lower left button to change the setpoint value.



8. Adjust to desired setpoint and press lower left button to enter the new value into the controller.



9. Screen will then read **SEt**. Press the upper left button to exit the thermostat categories and back to the main screen.



10. Screen should read a numeric value.



11. Press the up or down arrow to see the current setpoint. Confirm it matches the values just entered into the controller.



### CHANGING DISPLAY FROM FAHRENHEIT TO CELSIUS ON ERC112 CONTROL

1. Simultaneously hold the up and down arrows for 5 seconds to access menu for password protected parameters.



2. Screen should temporarily flash **PAS** and then move to a numeric screen.



3. Scroll to **187** using the up/down arrows and push the stand-by button (lower left button) to enter.



4. Scroll to *dis* using the up/down arrows and push the stand-by button (lower left button) to enter into the display menu.



5. Scroll to *CFu* using the up/down arrows and push the stand-by button (lower left button) to enter the display unit menu.



**6. -F** should be displayed indicating Fahrenheit. Use the down arrow to change it to **-C** for Celsius and hit the stand-by button (lower left button) to enter the change.



7. Push the defrost button (upper left button) to move out of the display unit menu.



8. Push the defrost button (upper left button) to move out of the display menu and back to the normal display.

NOTE: For steps 7 and 8, display will return back to normal display after 30 seconds of inactivity.



## Section 4 Maintenance

#### **▲** DANGER

It is the responsibility of the equipment owner to perform a Personal Protective Equipment Hazard Assessment to ensure adequate protection during maintenance procedures.

#### **A** DANGER

Failure to disconnect the power at the main power supply disconnect could result in serious injury or death. The power switch DOES NOT disconnect all incoming power.

#### **A** DANGER

Disconnect electric power at the main power disconnect for all equipment being serviced. Observe correct polarity of incoming line voltage. Incorrect polarity can lead to erratic operation.

#### **A** Warning

Never use sharp objects or tools to remove ice or frost. Do not use mechanical devices or other means to accelerate the defrosting process.

#### **▲** Warning

When using cleaning fluids or chemicals, rubber gloves and eye protection (and/or face shield) must be worn.

#### **A** Caution

Maintenance and servicing work other than cleaning as described in this manual must be done by an authorized service personnel.

#### **Notice**

When cleaning interior and exterior of unit, care should be taken to avoid the front power switch and the rear power cord. Keep water and/or cleaning solutions away from these parts.

#### **Notice**

Never use a high-pressure water jet for cleaning or hose down or flood interior or exterior of units with water. Do not use power cleaning equipment, steel wool, scrapers or wire brushes on stainless steel or painted surfaces.

#### Responsibility

You are responsible for maintaining the equipment in accordance with the instructions in this manual. Maintenance procedures are not covered by the warranty.

Maintenance	Daily	Weekly	Monthly	After Prolonged Shutdown	At Start-Up
Interior	X			X	X
Exterior	Х			Х	Х
Drawers		Х		X	X
Drain		X		X	X
Condenser Coil			X	X	X
Casters			Х	X	Х

Maintenance Section 4

#### **Interior Cleaning**

The interior can be cleaned using soap and warm water. If this isn't sufficient, try ammonia and water or a nonabrasive liquid cleaner.

#### PREVENTING BLOWER COIL CORROSION

To help prevent corrosion of the blower coil, store all acidic items, such as pickles and tomatoes, in seal-able containers. Immediately wipe up all spills.

#### **Exterior Cleaning**

#### **Notice**

Never use an acid based cleaning solution on exterior panels! Many food products have an acidic content, which can deteriorate the finish. Be sure to clean the stainless steel surfaces of ALL food products.

Clean the area around the unit as often as necessary to maintain cleanliness and efficient operation. Both the cook and the assembly station have over shelf backs. They need to be raised during cleaning.

Wipe gasket and surfaces with a damp cloth rinsed in water to remove dust and dirt from the outside of the unit. Always rub with the "grain" of the stainless steel to avoid marring the finish. If a greasy residue persists, use a damp cloth rinsed in a mild dish soap and water solution. Wipe dry with a clean, soft cloth.

Never use steel wool or abrasive pads for cleaning. Never use chlorinated, citrus based or abrasive cleaners.

Stainless steel exterior panels have a clear coating that is stain resistant and easy to clean. Products containing abrasives will damage the coating and scratch the panels. Daily cleaning may be followed by an application of stainless steel cleaner which will eliminate water spotting and fingerprints. Early signs of stainless steel breakdown are small pits and cracks. If this has begun, clean thoroughly and start to apply stainless steel cleaners in attempt to restore the steel.

Wipe casters with a damp cloth monthly to prevent corrosion.

#### **DRAIN**

Each unit has a drain located inside the unit that removes the condensation from the evaporator coil and routes it to an external condensate evaporator pan. Each drain can become loose or disconnected during normal use. If you notice water accumulation on the inside of the unit, be sure the drain tube is connected to the evaporator drain pan. If water is collecting underneath the unit, make sure the end of the drain tube is in the condensate evaporator. The leveling of the unit is important as the units are designed to drain properly when level. Be sure all drain lines are free of obstructions.

Section 4 Maintenance

#### **Drawer Maintenance**

#### **Drawer Assembly Cleaning**

The drawer assembly is designed to be cleaned easily. Both drawer and tracks are removable without tools. The drawer tracks are dishwasher safe or can be cleaned in a sink with detergents and a soft bristle brush. Drawers and tracks should be cleaned on a weekly basis.

#### **Remove Drawers**

Pull the drawer box out until it stops. Lift up on the drawer front and pull the drawer box completely out. Using a soft bristle brush, clean the track on the bottom of the drawer box. When finished, it should be wiped clean of all food and debris.

#### **Tracks**

The drawer box assembly must be removed. Pull the drawer tracks out until they hit a stop. Locate blue safety clips towards the back of each drawer track. Blue safety clips have a tab on the top. Push the tab back until it clicks. Lift up and pull the drawer tracks all the way out of the drawer cage. The drawer tracks are dishwasher safe or can be cleaned in a sink with detergents and a soft bristle brush. Drawers and tracks should be cleaned on a weekly basis. Using a soft bristle brush, wash the track making sure each roller is thoroughly cleaned. The drawer cage should be cleaned with a soft bristle brush, removing any food and debris gathered on the bottom ledge. Once it's cleaned thoroughly with a soft bristle brush, wipe remaining debris clean with a soft towel.



Tab on top of blue safety clip

#### Reassembly

Push the drawer tracks into the drawer cage. The blue safety clip must remain pushed towards the back. Lift up and slide the drawer track all the way into the drawer cage. The blue safety clip will lock in place automatically. Once all tracks are replaced, insert the drawer box. Rest the drawer box bottom track on the front track roller. Then push the drawer back in place SLOWLY. When the drawer box is about half way in you will hit a STOP. You must lift the front of the drawer up approximately ½" (1.3cm) to continue inward. Clean tracks as often as possible. The cleaner the tracks are the better they will operate.

#### **Cleaning the Condenser Coil**

In order to maintain proper refrigeration performance, the condenser fins must be cleaned of dust, dirt and grease regularly. It is recommended that this be done monthly. If conditions are such that the condenser is totally blocked in a month, the frequency of cleaning should be increased. Clean the condenser with a vacuum cleaner or stiff brush. If extremely dirty, a commercially available condenser cleaner may be required.

Failure to maintain a clean condenser coil can initially cause high temperatures and excessive run times. Continuous operation with a dirty or clogged condenser coil can result in compressor failure. Neglecting the condenser coil cleaning procedures will void any warranties associated with the compressor and cost to replace the compressor.

# Section 5 Troubleshooting

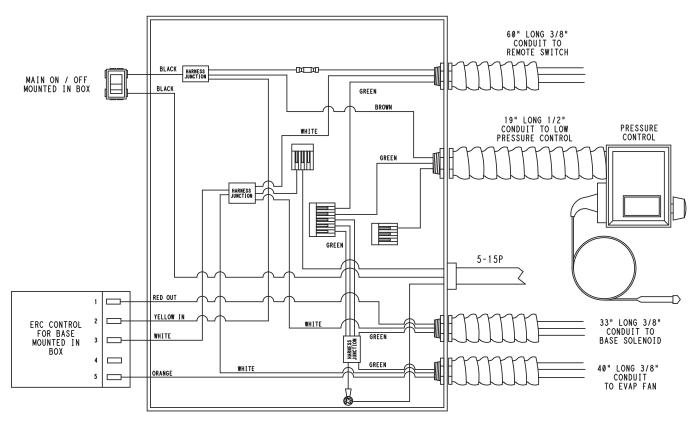
#### **Problem -> Cause -> Correction Chart**

Problem	Cause	Correction
Cabinet not	Fuse blown or circuit breaker tripped.	Replace fuse or reset circuit breaker.
running	Power cord unplugged.	Plug in power cord.
	Thermostat set too high.	Set thermostat to lower temperature.
	Main power switch turned off.	Turn main power switch on.
	Cabinet in defrost cycle. (Freezer models)	Wait for defrost cycle to finish.
Condensing unit runs for	Excessive amount of warm product placed in cabinet.	Allow adequate time for product to cool down.
long periods or continuously	Prolonged drawer openings or drawer(s) ajar.	Make sure drawer(s) are closed when not in use. Avoid prolonged drawer openings.
	Drawer gasket(s) not sealing properly.	Check gasket condition. Adjust drawer or replace gasket if necessary.
	Dirty condenser coil.	Clean the condenser coil.
	Evaporator coil iced over.	Turn unit off and allow coil to defrost. Make sure thermostat is not set too cold. Also, check gasket condition.
Cabinet	Thermostat set too high.	Set thermostat to lower temperature.
temperature is too high	Poor air circulation in cabinet.	Re-arrange product to allow proper air circulation.
Iligii	Exterior thermometer is out of calibration.	Re-calibrate thermometer.
	Excessive amount of warm product placed in cabinet.	Allow adequate time for product to cool down.
	Prolonged drawer openings or drawer(s) ajar.	Make sure drawer(s) are closed when not in use. Avoid prolonged drawer openings.
	Dirty condenser coil.	Clean the condenser coil.
	Evaporator coil iced over.	Turn unit off and allow coil to defrost. Make sure thermostat is not set too cold. Also, check gasket condition.
Cabinet is noisy	Loose part(s).	Locate and tighten loose part(s).
Refrigerator is	Thermostat is set too low.	Set thermostat to higher temperature.
freezing product	Dirty condenser coil.	Clean the condenser coil.
	Not enough cabinet clearance for proper refrigeration system operation.	Move cabinet or make other adjustments to gain proper cabinet clearances.
Compressor will not start	Low voltage to cabinet.	Check and correct incoming voltage to cabinet.

Part Number: Dunkin\_IOM\_A 11/22

## Section 6 Diagrams and Accessories

# Control Schematic DBAS33AP & DBAS40AP, Assembler Stations DBCS33AP, Cook Station



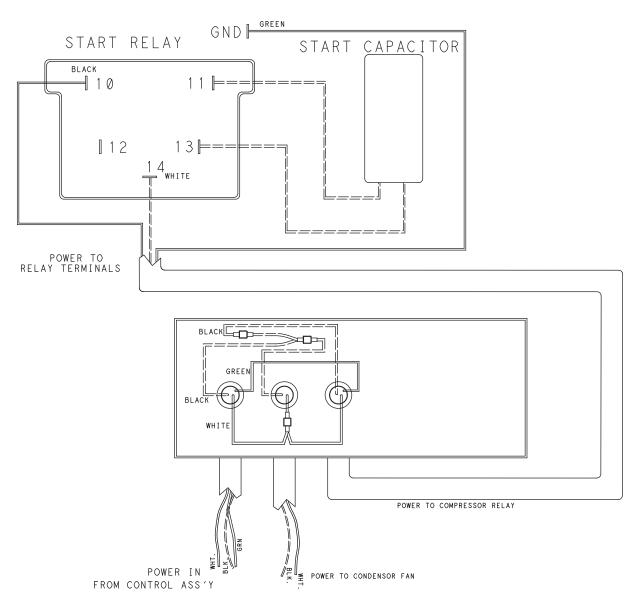
000-SCH-014A

Diagrams and Accessories Section 6

#### **Compressor Schematic**

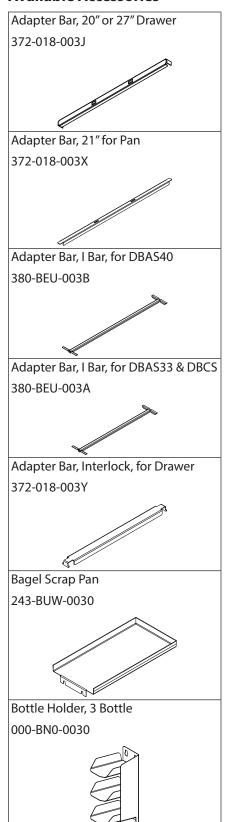
#### **DBAS33P & DBAS40P, Assembler Stations**

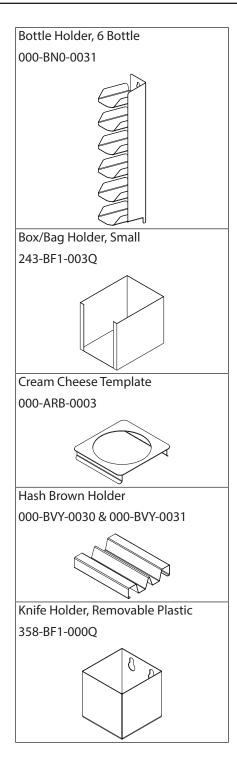
#### **DBCS33P, Cook Station**

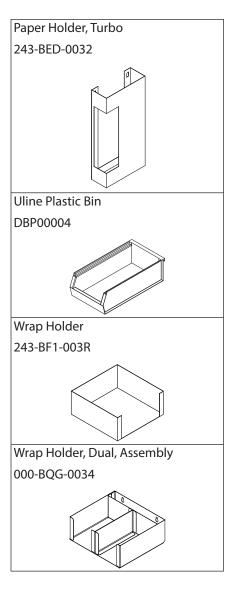


000-SCH-013V

#### **Available Accessories**













Welbilt offers fully-integrated kitchen systems and our products are backed by KitchenCare® aftermarket parts and service. Welbilt's portfolio of award-winning brands includes Cleveland™, Convotherm®, Crem®, Delfield®, fitkitchen®, Frymaster®, Garland®, Kolpak®, Lincoln®, Manitowoc®, Merco®, Merrychef® and Multiplex®.

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