Traulsen & Co., Inc.

Traulsen

Quality Refrigeration

OWNER'S MANUAL

Instructions for the installation, operation, and maintenance of all Blast Chill Models:

Undercounter Model: RBC50
Reach-In Model: RBC100
Roll-In Models: RBC200 & RBC400
Roll-Thru Models: RBC200RT & RBC400RT

This Traulsen unit is built to our highest quality standards. We build our refrigerators, freezers and heated cabinets this way as a matter of pride. This philosophy has made Traulsen the leader in commercial refrigeration since 1938. We thank you for your choice and confidence in Traulsen equipment and we know you will receive many years of utility from this equipment.

All Traulsen units are placed on a permanent record file with the service department. In the event of any future questions you may have, please refer to the model and serial number found on the name tag affixed to the unit. Should you need service, however, call us on our toll free number, 800-825-8220 between 7:30 am and 4:30 pm CST, Monday thru Friday. It is our pleasure to help and assist you in every possible way.

INSTALLER
COMPLETE THE FOLLOWING INFORMATION PRIOR TO UNIT INSTALLATION

INITIAL START DATE:_____ SERIAL NO. _____

MODEL TYPE: _____

COMPANY/INDIVIDUAL NAME: _____

INSTALLER:_____

TABLE OF CONTENTS

I. THE SERIAL TAG

The serial tag is a permanently affixed sticker on which is recorded vital electrical and refrigeration data about your Traulsen product, as well as the model and serial number. This tag is located inside the door on the right interior wall of the cabinet.

READING THE SERIAL TAG

- Serial = The permanent ID# of your Traulsen
- Model = The model # of your Traulsen
- Volts = Voltage
- Hz = Cycle
- PH = Phase
- Total Current = Maximum amp draw
- Minimum Circuit = Minimum circuit ampacity
- Lights = Light wattage
- Heaters
- Refrigerant = Refrigerant type used
- Design Pressure = High & low side operating pressures and refrigerant charge
- Agency Labels = Designates agency listings

Traulsen

FORT WORTH, TX.

SERIAL	MODEL	
VOLTS	Hz	PH

TOTAL CURRENT	AMPS	
MINIMUM CIRCUIT	AMPS	
MAXIMUM OVERCURRENT PROTECTION		AMPS
LIGHTS	WATTS	
HEATERS	AMPS	

REFRIGERANT	TYPE	OZ
DESIGN PRESSURE	HIGH	LOW

REFRIGERANT	TYPE	OZ
DESIGN PRESSURE	HIGH	LOW

SANITATION   370-60294-00 REV (A)

CLASSIFIED
CLASSIFIED TO
NSF #7- 1997

38Y9

AW-03118

II. RECEIPT INSPECTION

All Traulsen products are factory tested for performance and are free from defects when shipped. The utmost care has been taken in crating this product to protect against damage in transit. All interior fittings have been carefully secured and the legs or casters are boxed and strapped inside to prevent damage. Door keys will be attached to the handle with a nylon strip. The handle is protected by an easily removable nylon netting.

You should carefully inspect your Traulsen unit for damage during delivery. If damage is detected, you should save all the crating materials and make note on the carrier's Bill Of Lading describing this. A freight claim should be filed immediately. If damage is subsequently noted during or immediately after installation, contact the respective carrier and file a freight claim. Under no condition may a damaged unit be returned to Traulsen & Co. without first obtaining written permission (return authorization).

III. INSTALLATION

III. a - LOCATION:
Select a proper location for your Traulsen unit, away from extreme heat or cold. Allow enough clearance between the unit and the side wall so that the door (s) may open a minimum of 90°.

III. b - PACKAGING:
All Traulsen units are shipped from the factory bolted to a sturdy wooden pallet and packaged in a durable cardboard container. The carton is attached to the wooden skid with the use of large staples. These should first be removed to avoid scratching the unit when lifting off the crate.

To remove the wooden pallet, first if at all possible, we suggest that the cabinet remain bolted to the pallet during all transportation to the point of final installation. The bolts can then be removed with a 3/4" socket wrench. Avoid laying the unit on its front, side or back for removal of the pallet.

NOTE: Traulsen does not recommend laying the unit down on its front, side or back. However, if you must please be certain to allow the unit to remain in an upright position afterwards for 24 hours before plugging it in so that the compressor oils and refrigerant may settle.

III. c - WIRING DIAGRAM:
Refer to the wiring diagram for any service work performed on the unit. These are located on pages 21 thru 24 of this manual. Should you require a wiring diagram for a non-standard configuration unit, please contact Traulsen Service at (800) 825-8220, and provide the model and serial number of the unit involved.

III. INSTALLATION (continued)

III. d - INSTALLING LEGS OR CASTERS:
6" high stainless steel legs are supplied standard for models RBC50 and RBC100. Casters in lieu of legs are available as an optional accessory for the same models. These are shipped from the factory packed inside a cardboard box which is strapped to one of the shelves (two boxes for model RBC50 which requires either eight legs or casters). Remove the nylon strap and open the box(es), it should contain either four (4) legs or four (4) casters and sixteen (16) bolts.

WARNING: THE CABINET MUST BE BLOCKED AND STABLE BEFORE INSTALLING LEGS OR CASTERS.

To install the legs or casters, first raise and block the unit a minimum of 7" from the floor. For installing legs, thread the legs into the threaded holes on the bottom of the cabinet (see figure 1). Be certain that all legs are tightly secured (legs and casters should be tightened to 300 inch/pounds, max). When the unit is set in its final position, it is important for proper operation that the unit be level. The legs are adjustable for this purpose, turn the bottom of the leg counterclockwise to raise it, clockwise to lower it. Level the unit from front to back as well as side to side in this manner, using a level placed in the bottom of the cabinet.

Fig. 1

Please note that Traulsen units are not designed to be moved while on legs. If the unit requires moving, a pallet jack or forklift should be used to prevent damage. For installing casters, the casters are "plate" type, and require the use of four (4) bolts each to secure them firmly to the cabinet bottom at each corner (see figure 2). The caster bolts are tightened using a 1/2" socket wrench.
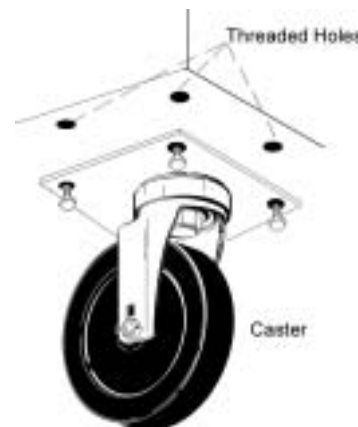

Fig. 2

III. e - CORD & PLUG:

All Traulsen Blast Chill models (except model RBC100 which is supplied with a cord set but no plug) are supplied with a cord & plug attached. It is shipped coiled at the top of the cabinet, secured by a nylon strip. For your safety and protection, all units supplied with a cord and plug include a special three-prong grounding plug on the service cord. Select only a certified electrical outlet with grounding plug for power source. **NOTE: Do not under any circumstances, cut or remove the round grounding prong from the plug, or use an extension cord.**

III. f - ELECTRICAL REQUIREMENTS:

Model RBC50 is normally provided with two (2) grounding type cords with plugs (NEMA 5-15P). Two (2) separate 115/60/1 volt, 20 amp, grounded circuits with receptacle must be provided by a certified electrician to assure proper operation of the equipment.

Model RBC100 is normally provided with a grounding type cord without a plug. A 220/60/1 volt, 4 wire, 20 amp grounded circuit with receptacle should be provided by a certified electrician to assure that the computerized control is not adversely affected by the operation of other equipment.

Models RBC200 and RBC200RT are normally provided with a grounded cordset (NEMA 5-20P). A separate 115/60/1 volt, 20 amp, grounded circuit should be provided by a certified electrician to assure that the computerized control is not adversely affected by the operation of other equipment.

Models RBC400 and RBC400RT are normally provided with two (2) grounded cordsets (NEMA 5-20P). Two (2) separate 115/60/1 volt, 20 amp, grounded circuits should be provided by a certified electrician to assure that the computerized control is not adversely affected by the operation of other equipment.

III. g - PROPER CLEARANCES:

Model RBC50: Make certain that there are no obstructions in front of the louver panels on the left and right front sides of the unit. This will allow for sufficient air flow to the refrigeration system and maintenance access.

Model RBC100: A minimum of 4" clearance on the right side, 6" on the left side and 6" clearance in the rear (see figure 3). This will allow for sufficient air flow to the refrigeration system and maintenance access.

Models RBC200, RBC200RT, RBC400 & RBC400RT: Insure an overhead clearance of 12" and a rear clearance of 4"(see figure 4). This will allow for sufficient air flow to the refrigeration system and maintenance access.
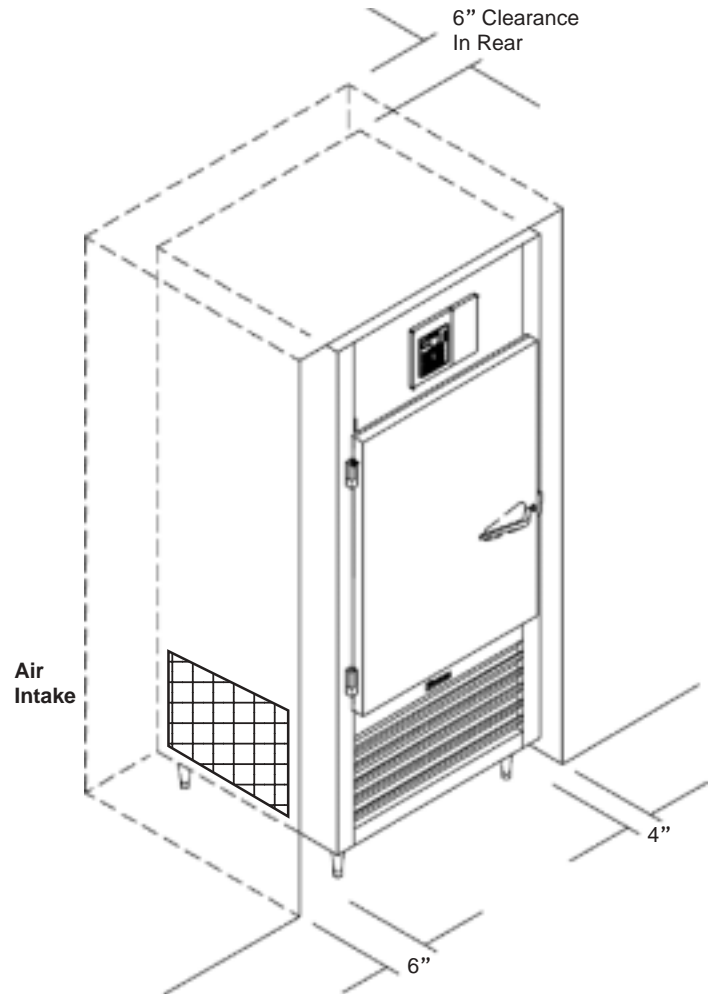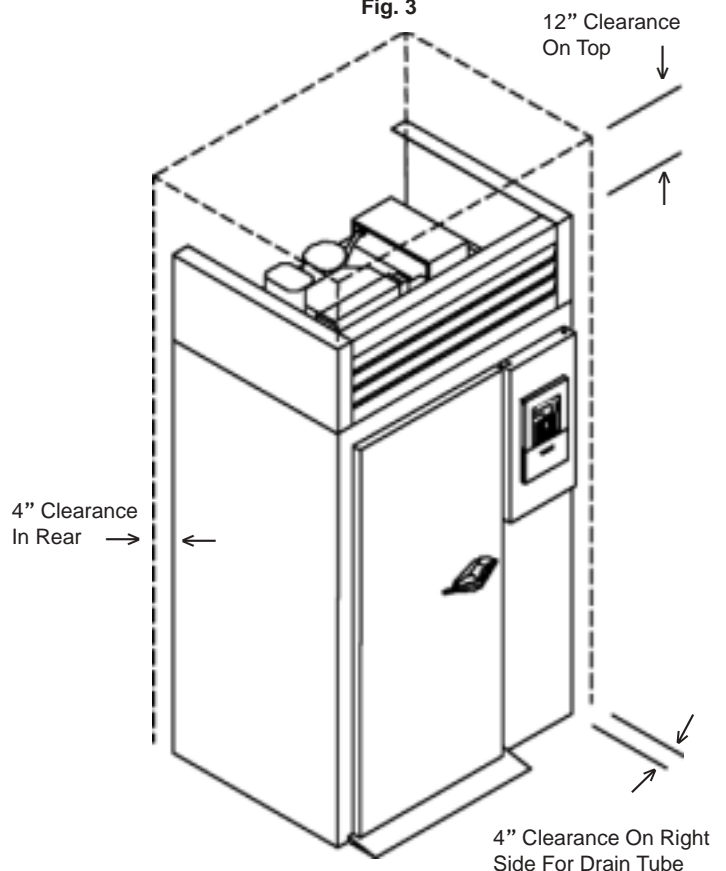

6" Clearance In Rear

Air Intake

4"

6"

Fig. 3

12" Clearance On Top

4" Clearance In Rear

4" Clearance On Right Side For Drain Tube

Fig. 4

III. h - CONDENSATE REMOVAL:

All Traulsen Blast Chill models (except model RBC50) require the use of a floor drain or floor mounted electric condensate evaporator.

Model RBC100 requires a floor drain for condensate removal or the use of a condensate evaporative pan kit (p/n 329-60018-00). The drain port is located at the rear of the unit (see figure 5).

Front Of Unit

Evaporative Pan Kit

Front Of Unit
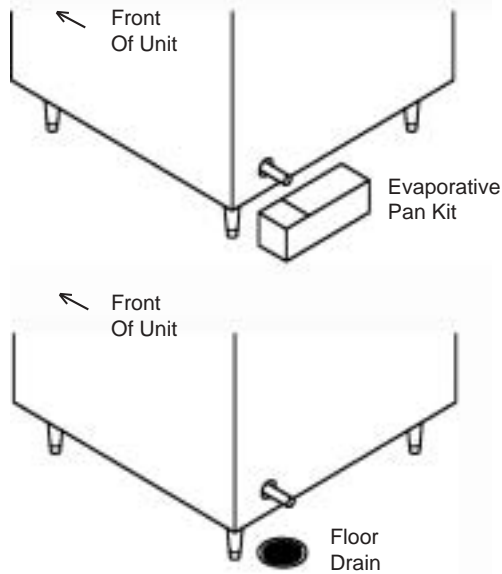
Floor Drain

Models RBC200 and RBC200RT require a floor drain for condensate removal or the use of a condensate evaporative pan kit (p/n 329-60018-00). Two drain ports are provided, located at the right side and rear of the unit. Plug the unused drain port with the male pipe thread plug supplied (see figure 6).
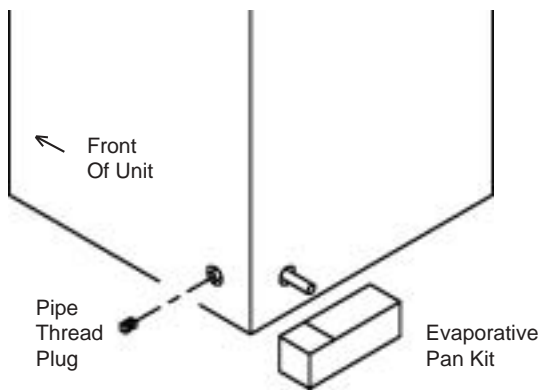
Front Of Unit

Pipe Thread Plug

Evaporative Pan Kit

Fig. 6

Models RBC400 and RBC400RT require a floor drain for condensate removal or the use of a two (2) condensate evaporative pan kits (p/n 329-60018-00). Two drain ports are provided, located at the right side and rear of the unit. Plug the unused drain port with the

III. h - CONDENSATE REMOVAL (cont'd):
plug supplied (see figure 7).

Front Of Unit

For Unit 1 of either 400 lb. capacity model, location of the evaporative pan kit is required at the side drain port location.

For unit 2, on model RBC400 the second pan kit can be placed either at the side or rear drain ports. For model RBC400RT this second pan kit must be placed at the side drain port.

Unit 1 Evaporative Pan Kit for RBC 400 & RBC400RT (REQUIRED)

Unit 2 Evaporative Pan Kit for RBC400 & RBC400RT
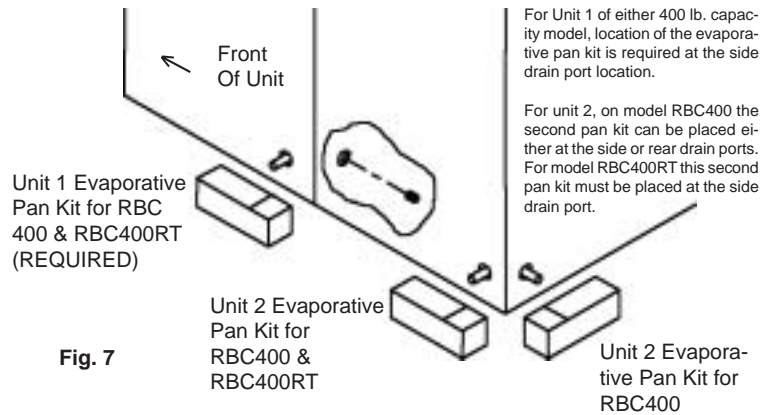
Fig. 7

Unit 2 Evaporative Pan Kit for RBC400

NOTE: Local code should be consulted when plumbing to drain port.

III. i - REMOTE CONDENSING UNIT REQUIREMENTS:
This section applies only to models RBC200, RBC200RT, RBC400 and RBC400RT. A remote condensing unit, operating on R-404A refrigerant, is required for Blast Chill operation on these models (two for RBC400 and RBC400RT). The remote condensing unit(s) should be capable of providing 18,700 BTU/hr @ -10°F suction and 90°F ambient at the evaporator coils of the Blast Chill section.

4 HP air-cooled and 3 HP water-cooled remote condensing units are available from Traulsen as an optional accessory, but please note that these are rated for use only within a 25 foot radius of the cabinet. Increased capacity of the remote condensing unit and line sizing will depend on the length and layout of the connecting piping from the remote condensing unit to the Blast Chill unit. Proper line sizing should be defined by a qualified refrigeration engineer or technician.

III. j - REMOTE UNIT CUT-OUT SETTINGS:
This section applies only to models RBC200, RBC200RT, RBC400 and RBC400RT. The low pressure cut-out of the remote condensing unit should be adjusted to obtain an evaporator coil temperature NO LOWER THAN -15°F. If the length of the connecting piping is 40 feet or less, the condensing unit low pressure cut-out settings will be approximately 15 +/- 2 PSIG cut-out and 25+/- 3 PSIG cut-in.

III. k - SEALING ROLL-IN/ROLL-THRU UNITS:
This section applies only to models RBC200, RBC200RT, RBC400 and RBC400RT. Roll-In and Roll-Thru cabinets set on the floor require the floor area to be flat and level. In addition, after the cabinet is set in place, sealant should be used around the perimeter of the base to comply with National Sanitation Foundation requirements. After sealing the unit, the enclosed ramp should then be installed.

III. I - INSTALLING RBC50 CONTROL PANEL:

Model RBC50 is shipped with the control panel detached, and laid flat, taped to the cabinet top (see figure 8). This must be installed before use. To install:

Remove the packing material and tape holding the control to the top. Remove and retain the six (6) Phillips head screws attaching the control cover to the frame. Also, remove and retain the 14"- 20x1/2" screws found in the cabinet top. Next, position the control frame over the hole in the unit top and attach using 1/4-20x1/2" screws (see figure 9).

NOTE: Ensure that grommet is firmly in place, aligning round hole in bottom of control housing with round hole in unit top.

Inspect paper roll and spindle from rear of control panel before installing panel. Reattach the control cover to the frame using the six (6) Phillips head screws previously removed.

III. m - ATTACHING RBC400 UNITS TOGETHER:

This section applies only to models RBC400 and RBC400RT. First, place the front and rear cabinets in close proximity to each other being careful to align the drain from the front of the rear unit to the drain of the front unit. It will be necessary to level both units together at this time.

The liquid line solenoid and TXV are provided. The temperature control and defrost functions are performed by the blast chill digital control.

Next, using two pipe clamps, pull the units together(see figure 10). Install the covers over the gap formed between the units From inside the cabinets, using the screws provided, install the breaker strips using the strip as a template.

Connect both the probe harness and control harness from unit two (the rear unit) to their dedicated connectors on unit one (see figure 10a). Set #4 DIP switch to the ON position as shown (see figure 10b).
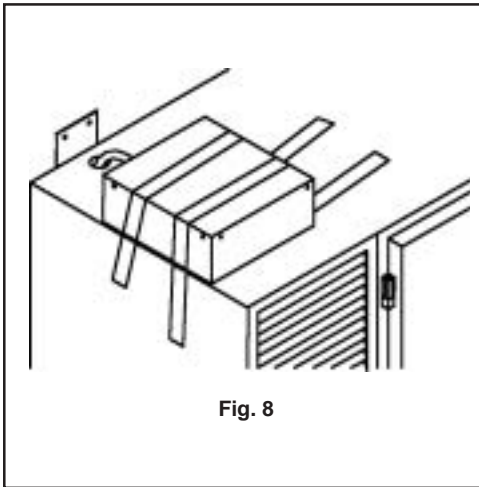
Fig. 8
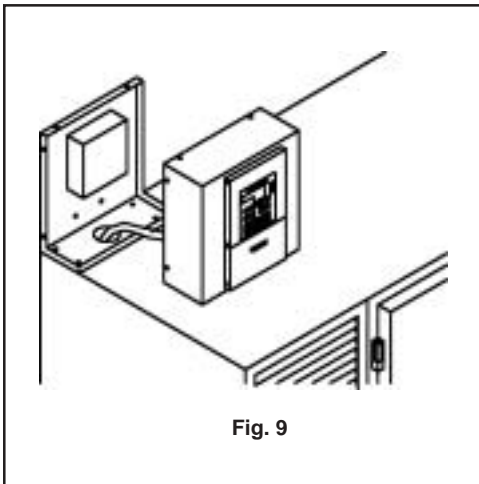
Fig. 9

Fig. 10

USING TWO PIPE CLAMPS, PULL THE TWO UNITS TOGETHER AND USING THE SCREWS PROVIDED. ALIGN THE BREAKER STRIPS AS A TEMPLATE FOR THE SCREW PATTERN INSIDE AND OUTSIDE THE CABINET.

CONTROL BOX LOCATION
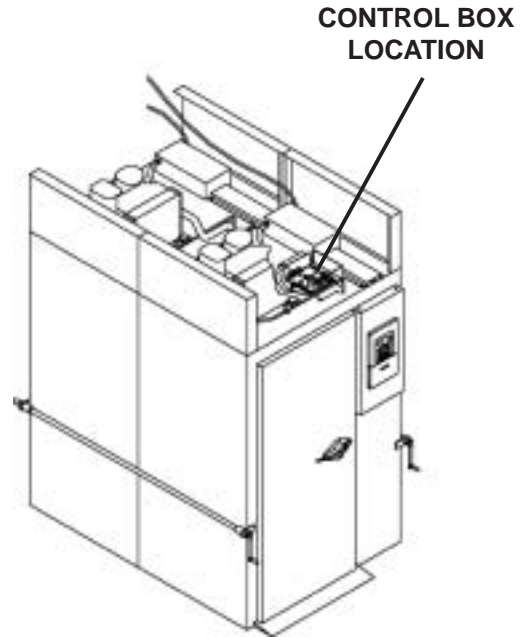
**CONTROL BOX - RBC400
(wiring connections)**

Fig. 10b
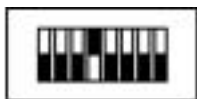
SET #4 DIP SWITCH TO ON POSITION AS SHOWN FOR RBC400 AND RBC400RT.

UNIT 2 PROBE HARNESS CONNECTOR

UNIT 2 CONTROL HARNESS CONNECTOR
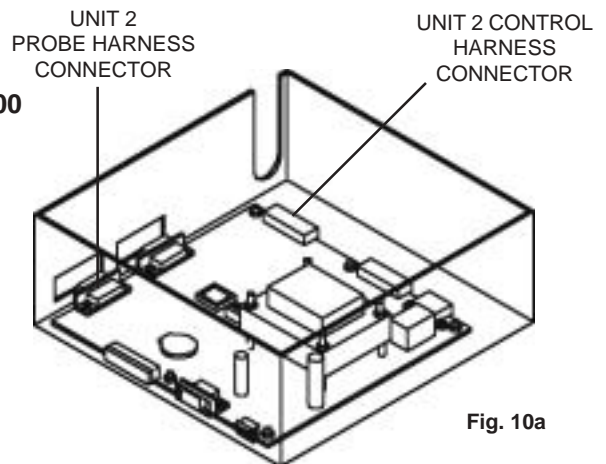
Fig. 10a

IV. CARE & MAINTENANCE

IV. a - CLEANING THE CONDENSER:

The most important thing you can do to insure a long, reliable service life for your Traulsen is to regularly clean the condenser coil. The self-contained condensing unit requires regularly scheduled cleaning to keep the finned condenser clean of lint and dust accumulation. Keeping the condenser clean allows the cabinet to operate more efficiently and use less energy.

To clean the self-contained condenser, first disconnect electrical power to the cabinet and lift up the front louver assembly. To lift this, remove the two thumb screws located on both sides at the bottom of the louver assembly. Once the screws are removed, the panel can be pivoted upwards allowing full access to the front facing condenser (for model RBC50, remove the four Phillips head screws from the front louver panel, and lift-off). Vacuum or brush any dirt, lint or dust from the finned condenser coil, the compressor and other cooling system parts. If significant dirt is clogging the condenser fins, use compressed air to blow this clear. Lower louver assembly and replace thumb screws to hold it in place. For care of the remote condensing unit(s) used for models RBC200, RBC200RT, RBC400 and RBC400RT, consult the manufacturer's product literature.

IV. b - CLEANING THE EXTERIOR:

Exterior stainless steel should be cleaned with warm water, mild soap and a soft cloth. Apply with a dampened cloth and wipe in the direction of the metal grain. Avoid the use of strong detergents and gritty, abrasive cleaners as they may tend to mar and scratch the surface. Do NOT use cleansers containing chlorine, this may promote corrosion of the stainless steel.

Care should also be taken to avoid splashing the unit with water, containing chlorinated cleansers, when mopping the floor around the unit. For stubborn odor spills, use baking soda and water (mixed to a 1 TBSP baking soda to 1 pint water ratio).

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING ANY PARTS OF THE UNIT.

IV. c - CLEANING THE INTERIOR:

For cleaning stainless steel interiors, the use of baking soda as described in section "IV. b" is recommended. Use on breaker strips as well as door gaskets. All interior fittings are removable without tools to facilitate cleaning. A defrost cycle is the ideal time for performing interior cleaning.

IV. d - INSTALLING PRINTER PAPER:

Remove the two (2) thumb screws on either side of the printer cover. Pull the printer cover out and up to expose the printer. Cut a clean edge on the end of a roll of printer paper. Install the printer paper in through

IV. d - INSTALLING PRINTER PAPER (cont'd):

the paper opening with the spindle in the paper roll. Position the paper so it is fed out from the bottom of the roll. Feed the paper into the bottom of the printer enough to start the edge of the paper and press the print button on the key pad (this will draw the paper up through the printer and feed the paper out through the front of the printer).

Feed the printer paper through the slot in the printer cover and position the printer cover in place. Secure the printer cover with the original screws (see figure 11).

Test the printer by pressing the print button and make sure the paper feeds normally and the text is clear.

Printer paper is standard 2-1/4" wide x 100' long "small diameter," Office Depot #451 - 310. Printer ribbon Traulsen service part number SPR-00001-00 is Epson #ERC-09, or Office Depot #626-602.

Fig. 11

2-14" wide x 100' long "small diameter" paper roll
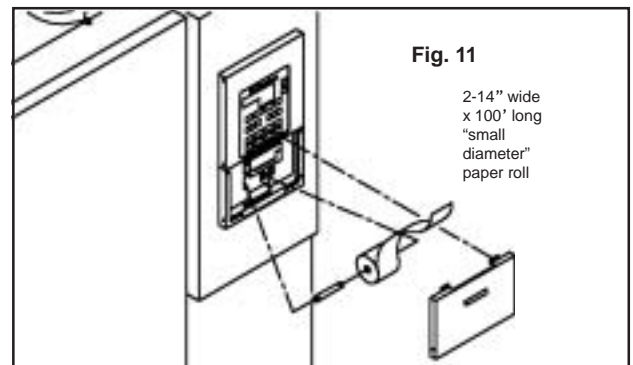
V. OTHER

V. a - SERVICE AGENCY CHECK & START-UP:

After installation and start-up, contact Traulsen's Service Department at (800) 825-8220 to arrange for a "Mechanical Installation and Operation Inspection," which is required by Traulsen to validate the warranty. On-site inspection not required for model RBC50.

V. b - ON-SITE BLAST CHILL TRAINING:

Traulsen offers the operator comprehensive one and two day, on-site training in the proper operation of your Blast Chiller. Contact your authorized Traulsen equipment dealer for more information.

V. c - SERVICE INFORMATION:

Before calling for service, please check the following:

☐ Is the electrical cord plugged in?

☐ Is the fuse OK or circuit breaker on?

If after checking the above items and the unit is still not operating properly, please contact an authorized

V. OTHER

V. c - <u>SERVICE INFORMATION</u> (cont'd):
Traulsen service agent. A complete list of authorized service agents was provided along with your Traulsen unit. If you cannot locate this, you may also obtain the name of a service agent from the Service/Contact page of our website: www.traulsen.com.

If service is not satisfactory, please contact our in-house service department at:

> **Traulsen**
> **4401 Blue Mound Road**
> **Fort Worth, TX 76106**
> **(800) 825-8220**

Traulsen & Co., Inc. reserves the right to change speci-fications or discontinue models without notice.

V. d - <u>DEMONSTRATIONS</u>:
Traulsen sales representatives perform in-service op-erational training for the end-user. Contact the Traulsen Service Department (after completion of the service agency start-up) to arrange this at (800) 825-8220.

V. e - <u>BLAST CHILL VIDEO</u>:
Traulsen supplies each Blast Chiller sold with an op-erational video (VHS format).

V. f - <u>BLAST CHILL DATA COMMUNICATIONS KIT</u>:
To obtain information about downloading batch data to a PC, please contact the factory.

VI. BLAST CHILL OPERATION

VI. a - <u>LOADING FOOD INTO PANS</u>:
The food product to be blast chilled should be placed into metal pans (generally 12" x 20" x 2-1/2") to a <u>DEPTH NOT TO EXCEED 2"</u>. This will assure the fast-est blast chilling cycle. NOTE: Use of deeper pans and/or plastic containers can cause freezing and if product is too thick or deep, the surface will freeze and the center of the product will be insulated, pre-venting proper chilling (see figure 12).

RECOMMENDED	NOT RECOMMENDED
2" Maximum Food Depth	More Than 2" Depth

VI. b - <u>COVERING FOODS</u>:
It is recommended that all food product be covered with plastic wrap or foil for hot foods to minimize mois-ture loss from product during the blast chilling pro

VI. BLAST CHILL OPERATION

VI. b - <u>COVERING FOODS </u>(cont'd):
cess. NOTE: The plastic wrap or foil should be placed directly onto the food surface. DO NOT place a lid over the pan, or stretch the plastic wrap tightly across the rim of the pan. This will create an insulating layer of air above the food surface which will slow the cool-ing of the center of the food, while the outside edges are cooling rapidly due to being in contact with the pan surfaces (see figure 13).

RECOMMENDED	NOT RECOMMENDED
Plastic Wrap In Contact With Food	Solid Lid Over Pan / AIR / Plastic Wrap Stretched Across Food / AIR

Fig. 13

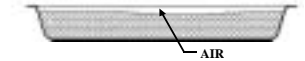**VI. c - <u>GROUPING FOODS TO FORM BATCHES</u>:**
In order to achieve the best utilization of the Blast Chiller Unit, it is possible to group foods with similar cooling properties to form "Batches". This will allow one of the food probes to be inserted into one pan of food product within the "batch" and represent the cooling rate of the entire batch.

Based on our testing, we have found that foods with higher levels of water content will cool much faster than foods that have lower water content. If more than three (3) types of foods are to be blast chilled at the same time, it will be necessary to form one or more batches to make best utilization of the three (3) probes available. Below is a list of guidelines to follow when forming batches.

1) Do not combine hot food and room temperature foods within the same batch, even though they may be similar (i.e. hot tuna casserole and cool tuna salad). This is because it will take longer to cool from cook-ing temperatures to 40°F (5°C) than it will take from 70 °F to 40°F (21°C to 5°C). CAUTION: Coupling hot foods with cold foods run the risk of the cold food remain-ing at dangerous temperatures too long as hot foods cool.

2) The chart on page 8 shows the relative cooling times of various foods compared to water (generally the fast-est to cool). It can also be used as an approximate guideline when forming batches.

3) Sliced meats placed in layers will cool more rapidly than whole meats due to the ratio of surface area to content (volume) allowing for greater heat dissipation.

VI. c - GROUPING FOODS TO FORM BATCHES (cont'd):

FOOD	AVG. COOLING TIME RELATIVE TO WATER	
LASAGNA	+89%	SLOWER
CHILI	+64%	
MASHED POTATOES	+64%	
MEAT LOAF (WHOLE)	+61%	
RICE	+61%	
CREAM OF WHEAT	+60%	
KERNEL CORN	+58%	
SOUP (THICK TYPES)	+49%	
BAKED POTATOES	+47%	
CHOPPED STEAKS/GRAVY	+43%	
REFRIED BEANS	+43%	
SPAGHETTI/MEAT SAUCE	+39%	
GREEN BEANS	+39%	
SCRAMBLED EGGS	+36%	
MACARONI & CHEESE	+33%	
CHICKEN BREASTS	+12%	
WATER	0%	FASTER

VI. d - MAXIMUM LOAD PER BATCH:

Model RBC50 has a maximum recommended capacity of 50 lbs. of food. This would be approximately five (5) 12" x 20" x 2-1/2" pans with 2" thick product.

Model RBC100 has a maximum recommended capacity of 100 lbs. of food. This would be approximately ten (10) 12" x 20" x 2-1/2" pans with 2" thick product.

Models RBC200 and RBC200RT have a maximum recommended capacity of 200 lbs. of food. This would be approximately twenty (20) 12" x 20" x 2-1/2" pans (one cart) with 2" thick product.

Models RBC400 and RBC400RT have a maximum recommended capacity of 400 lbs. of food. This would be approximately forty (40) 12" x 20" x 2-1/2" pans (two carts) with 2" thick product.

All Blast Chiller units will provide more uniform cooling of the food if they are setup close to their capacity of food with each blast chill cycle. This is due to the fact that the heat being removed from the food tends to moderate the temperature of the air being circulated. Lightly loaded blast chill cycles tend to run with colder air temperatures, which can cause the food to freeze near the outside surfaces of the pans. The soft chill cycle should be used if the chiller is loaded less than 50% of capacity.

VI. e - PAN PLACEMENT IN THE UNIT:

All pans of food with a batch should be grouped together in the same area of the unit (i.e. Top, Middle, or

VI. e - PAN PLACEMENT IN THE UNIT (cont'd):

Bottom). This will facilitate easier removal from the unit if more than one batch is being blast chilled at the same time, but have different completion times.

In the RBC50 model, air flows through the unit in a horizontal plane from right to left, and left to right, therefore, there is no significant difference if the pans are placed toward the rear of the unit or toward the door.

In the RBC100 model, air flows through the unit in a horizontal plane from right to left, therefore, there is no significant difference if the pans are placed toward the rear of the unit or toward the door (see figure 14).

AIR FLOW
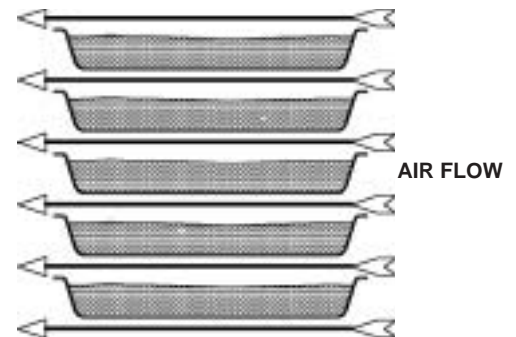
Fig. 14

On the Roll-In and Roll-Thru models, it is recommended that the slower cooling foods within the batch be placed in the area of the cart which will be toward the rear of the Blast Chill interior (away from the door). This area of the unit receives the incoming air from the blowers and is slightly cooler than the air passing over the pans nearest the doors (see figure 15).
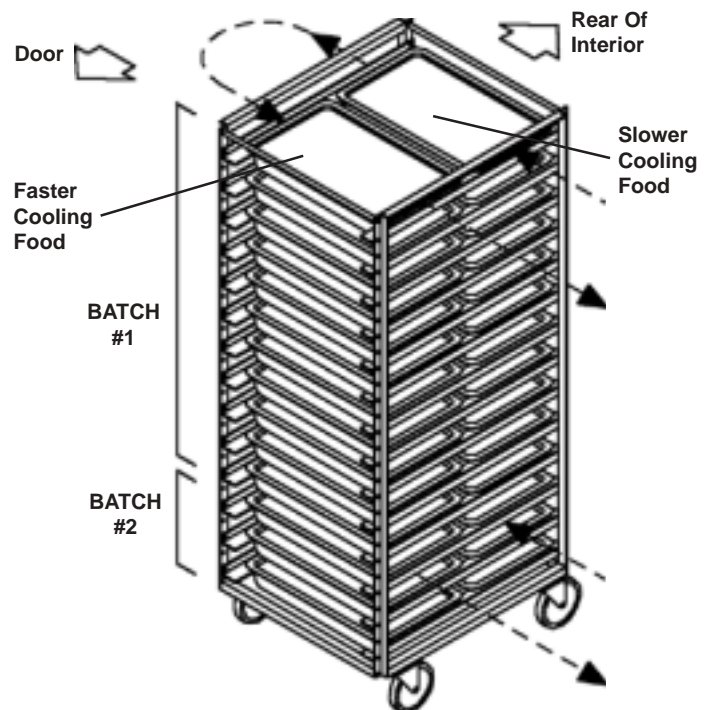

Fig. 15

VI. f - FOOD PROBE PLACEMENT:

The food probes should be placed into the food product so that the tip of the probe is near the core (absolute center) of the food in the pan. The food probe senses temperature in the last 1" of metal tip. The core area will be the slowest to cool, therefore is used to monitor the completion of the blast chill cycle (see figure 16).

Sensing area of probe should be inserted as close to center of food product as possible.

Temperature
Sensing Area

Food
Probe

→ 1" ←
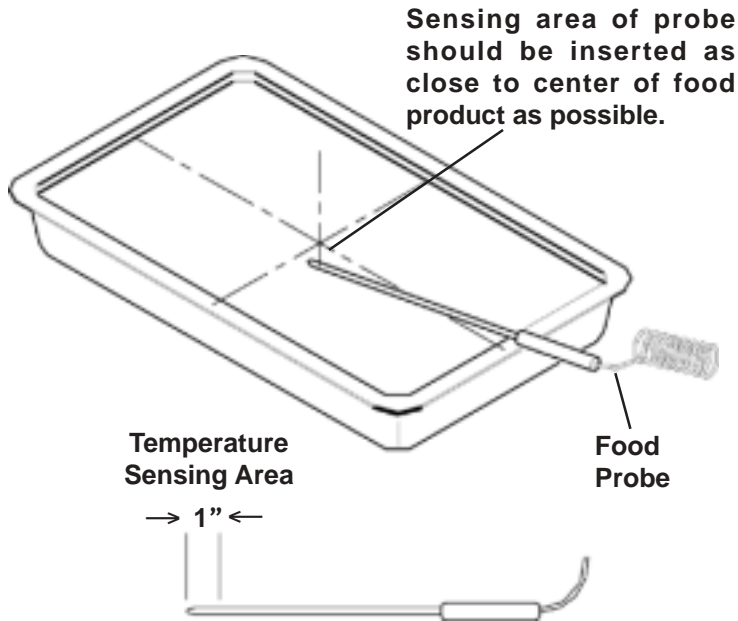
Fig. 16

Care should be taken to assure that the food probe tip is not touching the bottom or sides of the pan since these areas will cool much faster than the core area, prematurely terminating the blast chill cycle before the core has reached the desired temperature.

VI. g - EXAMPLE BATCHES FOR RBC50:

Three food probes are available for assignments of 1, 2 or 3 separate batches of food. They may be assigned in a variety of combinations. Please review some of the various combinations shown in figures 17, 18, 19 & 20.

Fig. 17 - Batch #1, 3 Probes Assigned & Placed In Pans At Top, Middle & Bottom

REAR OF INTERIOR

Batch #1

DOOR

Fig. 17

Fig. 18 - Batch #1, 2 probes (1 & 2) assigned & placed in pans at top & bottom batches. Batch #2, 1 probe assigned and placed in pan at middle batch.

REAR OF INTERIOR

Batch #1

Batch #2

DOOR

Fig. 18

Fig. 19 - Batch #1, 1 probe assigned & placed in pans at middle. Batch #2, 2 probes (1 & 3) assigned and placed in pans at top & bottom of each batch.

REAR OF INTERIOR

Batch #1

Batch #2

DOOR

Fig. 19

Fig. 20 - Batch #1, 1 probe (2) assigned & placed in pan at middle of batch. Batch #2 & #3, 2 probes (1 & 3) assigned and placed in pans at top of each batch.

Batch #1

REAR OF INTERIOR

Batch #2

Batch #3

DOOR
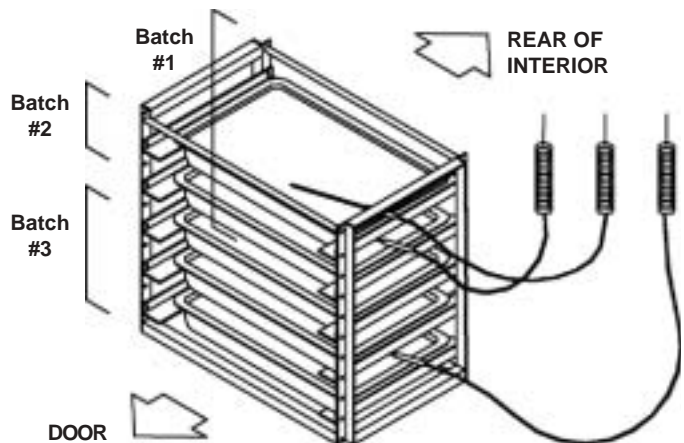
Fig. 20

VI. h - <u>EXAMPLE BATCHES FOR RBC100</u>:
Three food probes are available for assignments of 1, 2 or 3 separate batches of food. They may be assigned in a variety of combinations. Please review some of the various combinations shown in figures 21, 22, 23 & 24.

Figure 21 - Batch #1, 3 probes assigned & placed in pans at top, middle & bottom of batch.
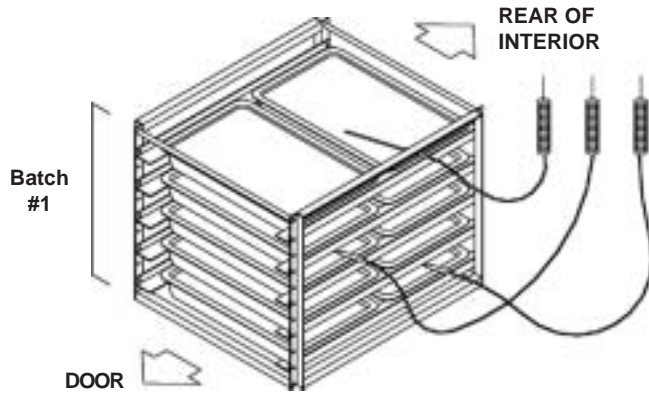
Fig. 21

Figure 23 - Batch #1, 1 probe (1) assigned & placed in pans at middle of batch. Batch #2, 2 probes (2 & 3) assigned & placed in the top & bottom of batch.
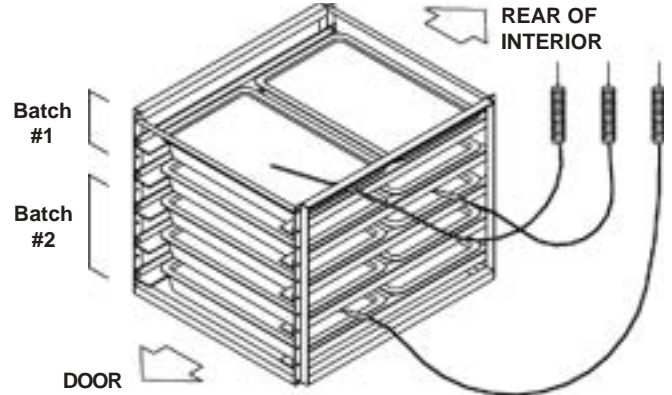
Fig. 23

Figure 22 - Batch #1, 2 probes (1 & 2) assigned & placed in pans at top & bottom of batch. Batch #2, 1 probe (3) assigned & placed in the middle of batch.
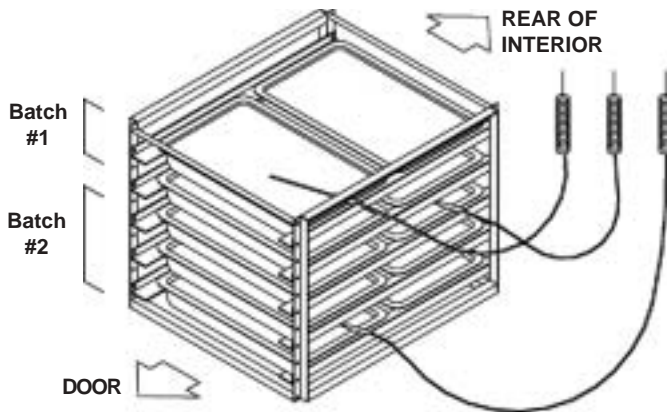
Fig. 22

Figure 24 - Batch #1, 1 probe (1) assigned & placed in pans at middle of batch. Batch #2 & #3, 2 probes (1 & 3) assigned & placed in the top of each batch.
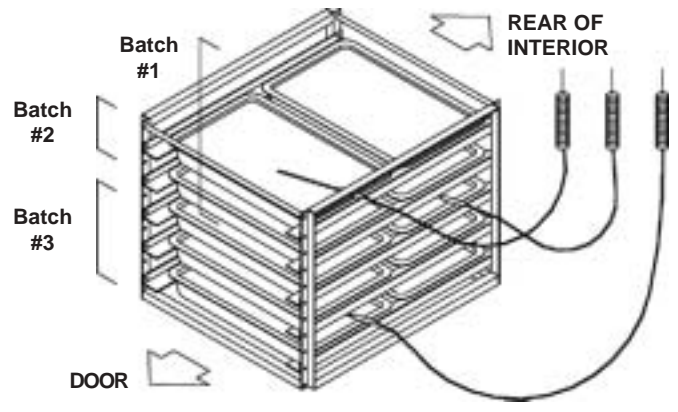
Fig. 24

VI. i - <u>EXAMPLE BATCHES FOR ROLL-IN MODELS</u>:

Three food probes are available for assignments of 1, 2 or 3 separate batches of food. They may be assigned in a variety of combinations. Please review some of the various combinations shown in figures 25, 26, 27 & 28.

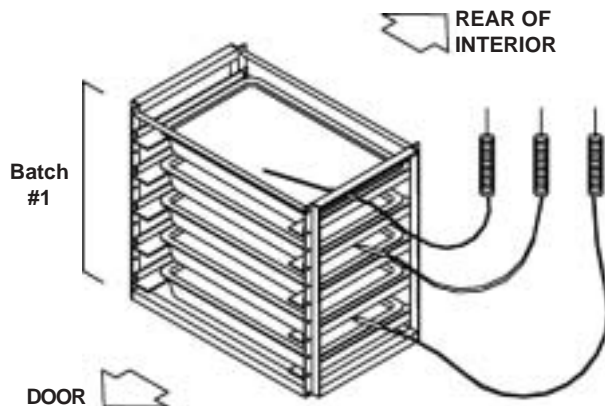**Figure 25 - Batch #1, 3 probes assigned & placed in pans at top, middle & bottom of batch.**
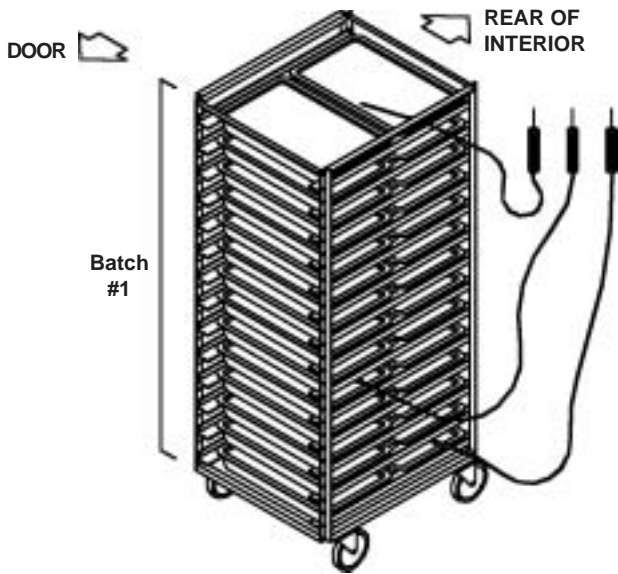
Figure 27 - Batch #1, 1 probe (1) assigned & placed in pans at middle of batch. Batch #2, 2 probes (2 & 3) assigned & placed in the top & bottom of batch.

Figure 26 - Batch #1, 2 probes (1 & 2) assigned & placed in pans at top & bottom of batch. Batch #2, 1 probe (3) assigned & placed in the middle of batch.
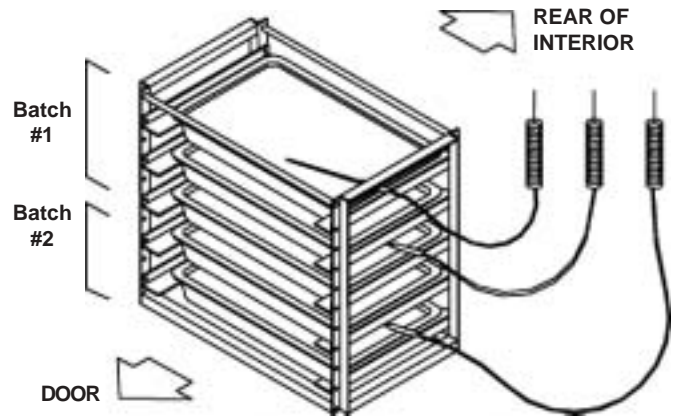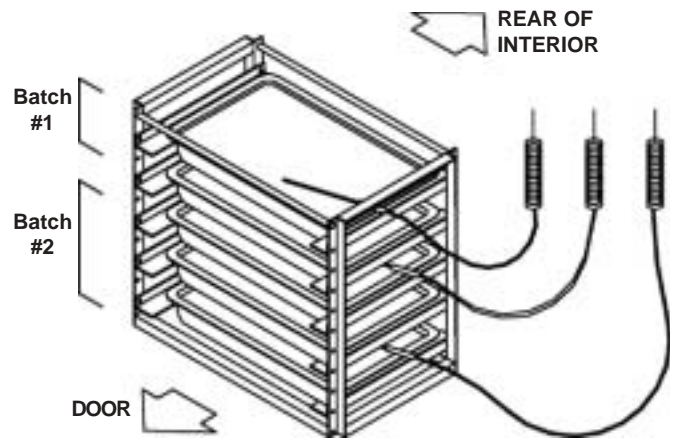
Figure 28 - Batch #1, 1 probe (1) assigned & placed in pans at middle of batch. Batch #2 & #3, 2 probes (1 & 3) assigned & placed in the top of each batch.
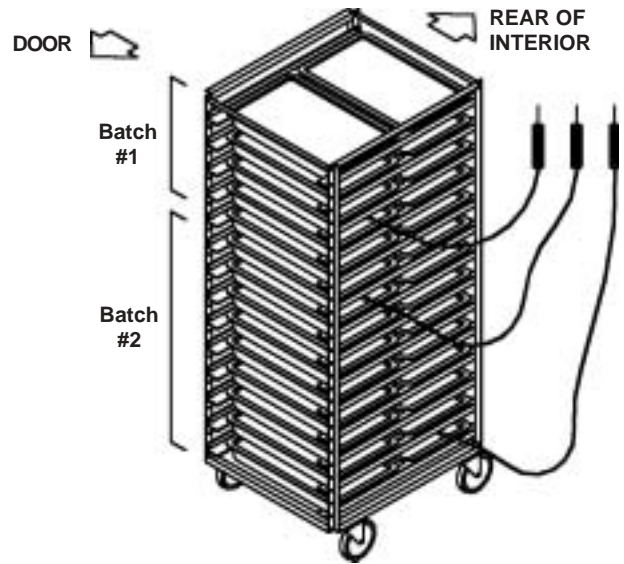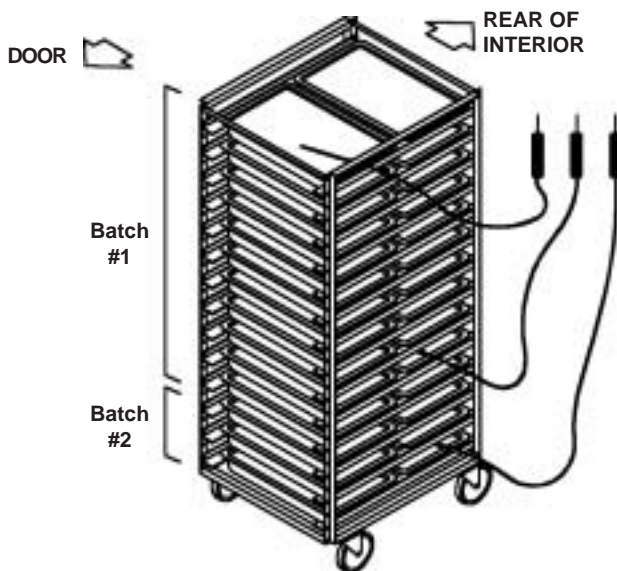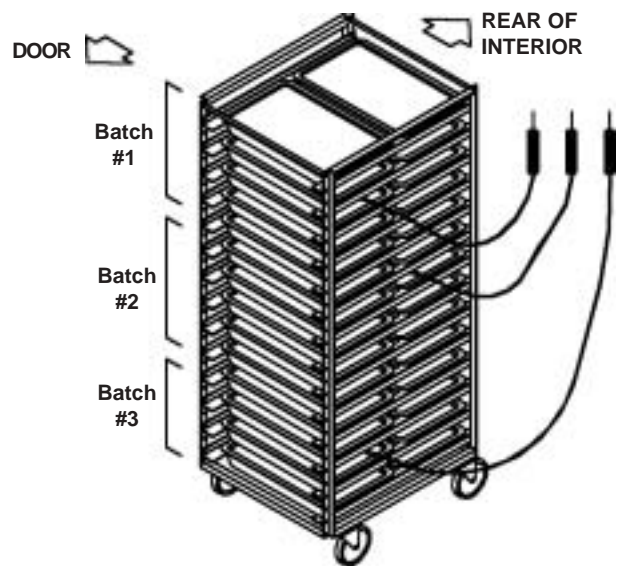
VII. OPERATING THE BLAST CHILL CONTROL

EMPLOYEE NUMBER

PROGRAM A NEW BATCH

FOOD PROBES 1,2 & 3 PRODUCT TEMPS

PROGRAMMED CHILL CYCLES
• BLAST CHILL
• SOFT CHILL
• FLASH CHILL
• CONSTANT CHILL

LOCK KEY PAD

SETS DATE & TIME

TIME OF DAY

ADJUST PROGRAM SETTINGS UP OR DOWN

INTERIOR TEMPERATURE

CLEARS BATCH DATA

DISPLAYS REMAINING TIME IN CONSTANT CHILL BATCH

MANUAL DEFROST

PRINT CURRENT TIME & TEMP
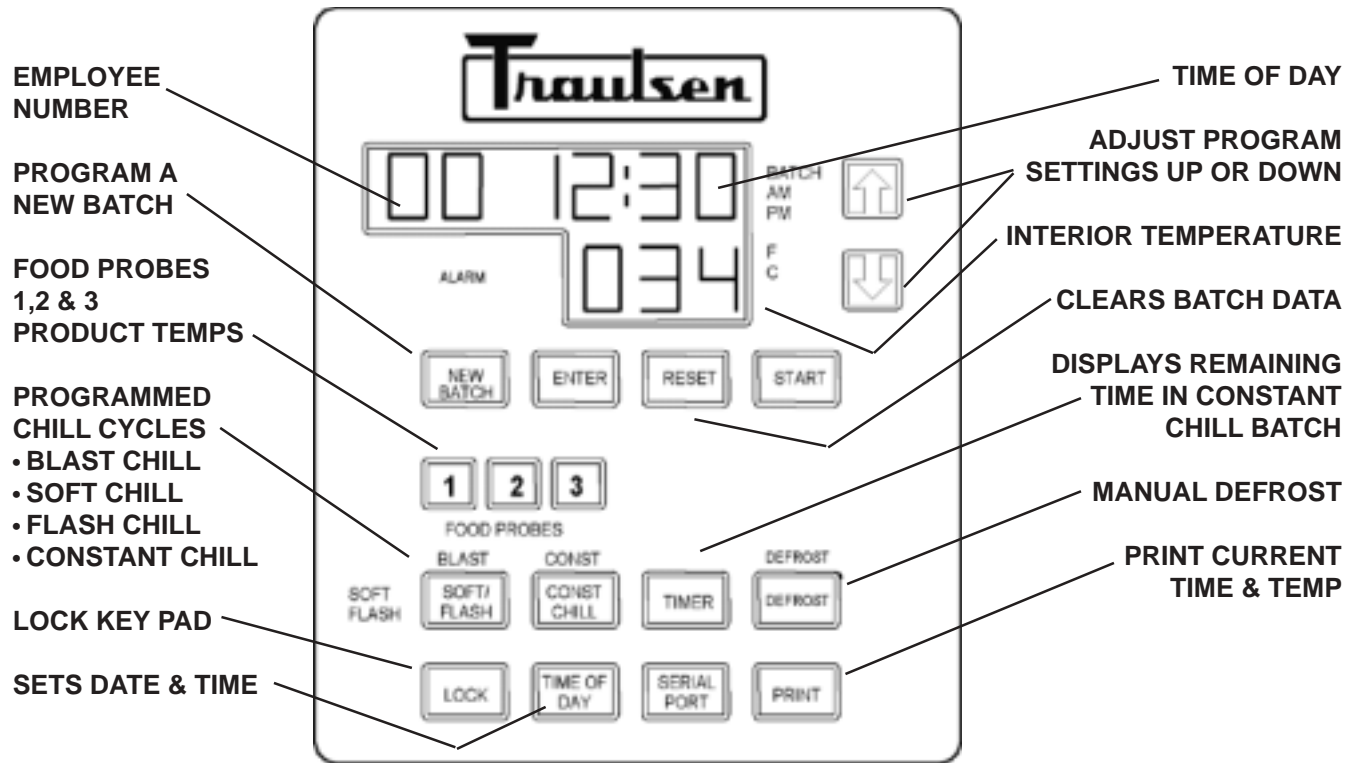
VII. a - <u>OPERATING MODES</u>:

The <u>Digitraul II</u> (control panel) performs the following five basic functions:

1. Maintenance Mode
2. Blast Chill Mode
3. Soft Chill Mode
4. Flash Chill Mode
5. Constant Chill Mode
6. Continuous Batching Mode

MAINTENANCE MODE - Operates as a holding refrigerator. Fail safe temperature holding range, preset at the factory of 34°F to 38°F (1.1°C to 3.3°C) and has an adjustable range of 30°F to 41°F (-1°C to 5°C).

BLAST CHILL MODE - Input temperatures from 140°F to 180°F (60°C to 82°C). Range of completion of Blast Chill cycle is adjustable between 35°F to 41°F (2°C to 5°C). Blast chill mode should be used for high density food such as meat, vegetables and starches.

SOFT CHILL MODE - Designed for light loads or low density products. Product is always setup using probes. As food temperature reaches 70°F (21°C), the fan speed is reduced. This will allow respiration, which will increase pull down times to control Blast Chilling effects. When air temperature reaches 34°F (1°C), the compressor cycles off and back on at 38°F (3°C). When food temperature reaches settings of 35°F to 41°F (2°C to 5°C), the cycle is complete.

FLASH CHILL MODE - Product is always setup with probe/probes. This mode reduces product temperature to 0°F (-18°C) and is adjustable between 0° to +5°F (-18°C to -15°C). When the alarm sounds, product is ready to be removed. Cabinet automatically returns to 34°F to 38°F (1°C to 3°C) normal operating temperature. <u>NOTE:</u> All product will be frozen in this mode. Freezing times will vary depending upon the product. All product must be removed after cycle is complete. The chiller will not hold product in frozen state.

CONSTANT CHILL MODE - This mode is similar to Blast Chill except that the food probes do not control the cycle. It is a time controlled operation, reverting to maintenance mode at the end of the timeframe set. Food probes can be used to monitor product temperature. System will automatically defrost every three (3) hours. To perform a "Constant Chill Operation" press the NEW BATCH, then the CONSTANT CHILL button. The display will change to a digital clock reading of (1:30) with the hour flashing. Use the up & down arrow buttons to change the hours up or down and then push ENTER. Now the minutes will be flashing. Set the minutes desired with the arrow buttons and then press ENTER. Now press the START button to run the batch. When the amount of time set in the display is reached, the unit will sound the alarm and return to maintenance mode. Note: Pressing "TIMER" button during the batch will display the time remaining in the current cycle.

VII. b - CONTINUOUS BATCHING FOR BLAST CHILL AND FLASH CHILL MODES (CANNOT BE USED WITH SOFT CHILL):

This allows you to start a batch using probe (1), then start a second batch using probe (2), and later still another batch using probe (3). When a batch is complete, the batch can be cleared and another batch can be started causing the unit to run continuously in "Blast Chill" mode. While operating in this mode, the unit will defrost automatically every 3 hours. The control is shipped from the factory configured with this feature OFF. To activate this see section "VII. j".

CAUTION: Use of this process can extend the product chill times.

VII. c - PROBE TEMPERATURE:

To check a temperature of a probe during operation, press that probe number (1, 2, or 3) button and release. The current probe temperature will come up in the display for 30 seconds.

VII. d - LOCK FUNCTION:

Pressing the lock button will lock out all functions except for the temperature probes. All batches in process will complete.

VII. e - UNLOCK FUNCTION:

Press the hidden button behind the "T" on the Traulsen logo to unlock the lock function.

VII. f - DEFROST CYCLE:

A. AUTOMATIC DEFROST - will occur every three (3) hours between batches. The control will default to defrost at the start of a programmed batch if the unit is within one (1) hour of the scheduled three-hour (3) defrost cycle. The blower fans are off during the defrost cycle, allowing the product to be loaded and a new batch programmed during the defrost. The programmed chill cycle will start automatically after the completion of the defrost cycle. Product is held at safe temperatures in the blast chiller during defrost.

B. MANUAL DEFROST - Pressing the "DEFROST" button in any mode will initiate the defrost cycle and cancel any batch in progress.

VII. g - PRINTOUT DATA:

To print data at any time, press PRINT. Output will include: Date & Time, Software Version, Interior Air Temperature and the Three Probe Temperatures. Also, included in the blast/ soft/ and flash modes, is a printout of a graph with batch data.

NOTE: At the end of a batch, all of the above data is printed out. System will store the previous 72 hours of temperature data printed out in 5-minute increments.

VII. g - PRINTOUT DATA (contined):

Note: Up to three copies of the Batch Data can be printed automatically. See section "VII. j" to adjust the number of batch copies required

VII. h - RESETTING DATE AND TIME:

Press "Time of Day" button. Notice MM/DD/YY in the display with the "MM" flashing, adjust the month using the up/down arrows. To advance to next setting press enter and adjust using the up/down arrows. Repeat process for the day, year, hours, minutes, and am/pm selections.

VII. i - PROGRAMMING A NEW BATCH:

STEP 1: To operate the unit in Blast Chill mode, press the button labeled "NEW BATCH". Notice that the first two (2) digits start to flash in the display (see figure 29). These two digits can represent an employee's number to identify the person running the batch. To change the numbers in the display, use the UP and DOWN arrows to set specific numbers. When the number is set, press ENTER to proceed to the next step.
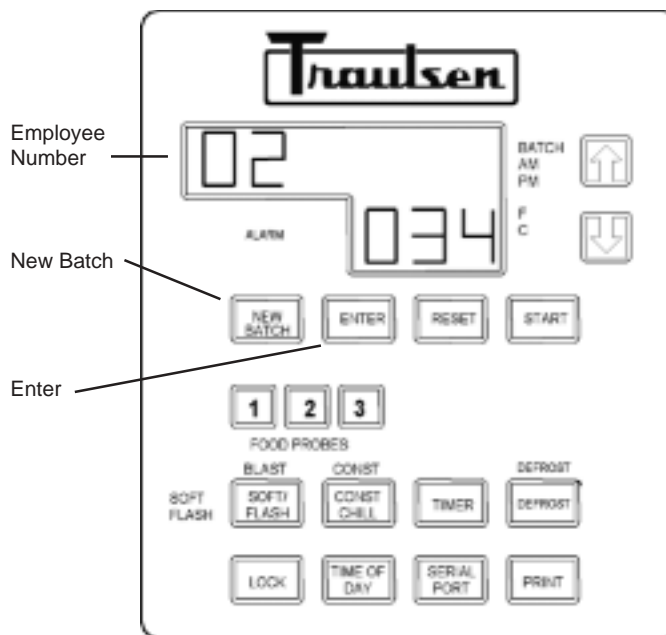
Fig. 29

STEP 2: The next four (4) digits in the display are now flashing (see figure 30). These numbers will represent a batch identification number. To proceed on to the next batch in sequence, press ENTER. The display will automatically display the next number set in sequence. Proceed to the next step.

NOTE: If you do not want to accept the next batch number assigned, you may set in the display, any four (4) digit number desired using the UP and DOWN arrows. After a preferred batch number has been set, press ENTER to lock in that specific number and proceed to the next step.
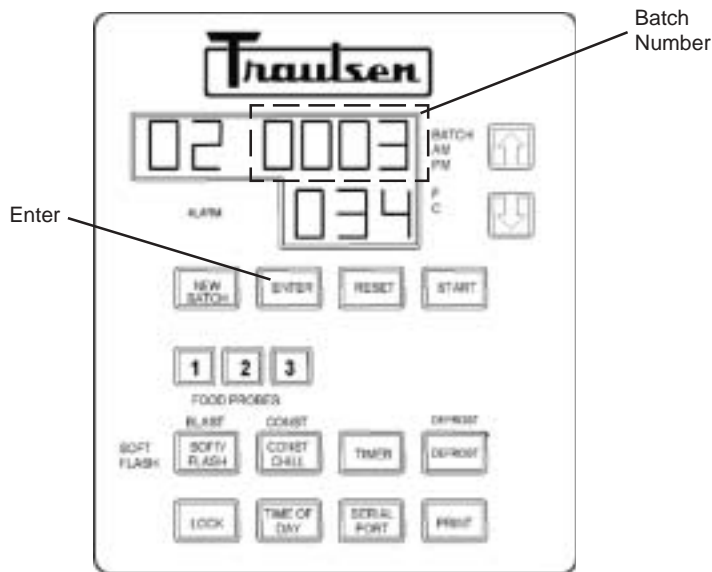
Fig. 30

STEP 3: Notice that the word BLAST is flashing directly above the SOFT/FLASH button. If you wish to blast chill product, press ENTER. If a soft chill is preferred, press the SOFT/FLASH button once, and then press ENTER. If a flash chill is required, press the SOFT/FLASH button twice, and then press ENTER. NOTE: Whichever chill cycle mode is selected, there will be a light illuminated "stating" the mode that has been chosen. This will be the mode in which the unit will run (see figure 31).

Fig. 31

STEP 4: There are now three probe lights flashing directly above the "numerical buttons" of unit 1. To select the probes in which you intend to use for the batch, individually push the "color coordinated buttons" that match the color of the individual probes placed into the food product. The lights will stop flashing and remain on continuously for the probes selected. If you are only using one or two of the three probes, the probe(s) not selected will automatically drop out on startup. Now that the probes have been selected, press ENTER (see figure 32).

Fig. 32

STEP 5: The Blast Chiller unit is now ready to run. Press the START button now. NOTE: To stop the chill cycle, press the RESET button. This will clear all of the programmed settings and return the unit to maintenance mode (see figure 33).

Fig. 33

STEP 6: After completion of the chill cycle the assigned food probe light on the central panel will flash and the "batch data" will automatically print. NOTE: To clear end of batch data, (food probe lights are flashing), press the RESET button (food probe lights are off).

VII. j - CONTROL PANEL CONFIGURATION:
INTRODUCTION - The Traulsen Blast Chiller Unit is preset and tested at the factory to be fully functional using default settings programmed into the unit. Therefore, it is advised that the following procedures should be performed by an experienced blast chill operator, or an approved blast chill technician.

STEP 1: Start configuration by pressing the "T" on the Traulsen logo (see figure 34). The display will show U1A, which is the maintenance air temperature, 34-38°F is typical during operation. Press the "T" again, now U1E1 is displayed. This displays the current maintenance evaporator coil temperature. Press again, notice U1E2 is displayed. This displays current chill evaporator coil temperature. Press again, and notice the "F" for Fahrenheit begins to flash next to the display screen. You have now accessed the first set function. Using the UP/DOWN arrows, you can change the settings for Fahrenheit to Celsius (F° to C°, see figure 35).

Press "T" on logo to start configuration and unlock.
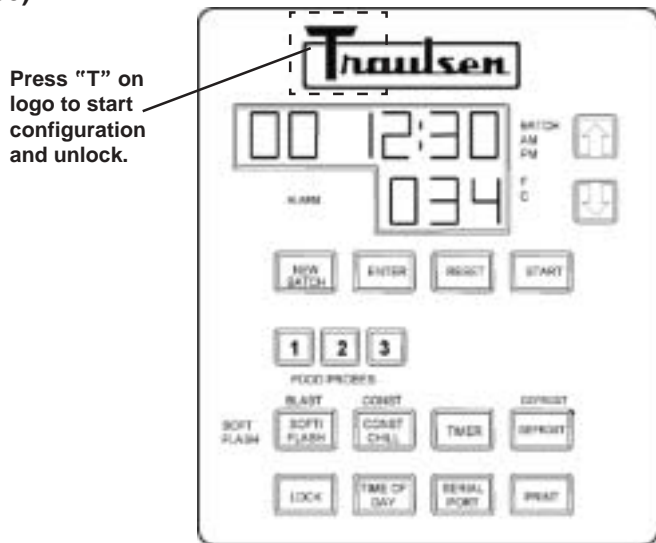
Fig. 34

STEP 2: Press ENTER.

STEP 3: The display shows the temperature flashing. This is the cut out air temperature of the maintenance mode. Using the UP/DOWN arrows, adjust setting from 30°F to 34°F (-1°C to 1°C). Default setting is 34°F (1°C).

STEP 4: Press ENTER.

Fahrenheit

Fig. 35

STEP 5: The display shows the temperature flashing. This is the cut out air temperature of the maintenance mode. Using the UP/DOWN arrows, adjust setting from 37°F to 41°F (-3°C to 5°C). Default setting is 38°F (3°C).

STEP 6: Press ENTER.

STEP 7: The word "BLAST" is flashing above the SOFT/FLASH button. Using the UP/DOWN arrows, adjust the temperature range in the display from 35°F to 41°F (-2°C to 5°C). This is the blast chill and soft chill end point temperature. Default setting for "BLAST CHILL" is 41°F (5°C).

STEP 8: Press ENTER.

STEP 9: The word "FLASH" is flashing above the SOFT/FLASH button. Using the UP/DOWN arrows, adjust the temperature range in the display from 0°F to 5°F (-18°C to -15°C). This is the flash chill end point temperature. Default setting for "FLASH CHILL" is 5°F (-15°C).

STEP 10: Press ENTER.

STEP 11: "H" will display on the screen. UP/DOWN arrows will change solid display to flashing "H" display and back.

> Solid "H" = Normal factory setting to support a HACCP operating mode.
>
> Flashing "H" = Allows Continuous Batching mode of operation. See Continuous Batching for Blast Chill and Flash Chill Modes (cannot be used with Soft Chill, see figure 36).

Fig. 36

STEP 12: Press ENTER.

STEP 13: Number 1,2 or 3 will appear on the screen. use the UP/DOWN arrows to select the desired number of Printed Batch Data copies.

STEP 14: Press ENTER. This completes the control panel configuration process. The unit is now ready for operation.

VII. OPERATING THE CONTROL (cont'd)   VIII. UNDERSTANDING PRINTOUTS

VII. k - <u>PROBE TEMPERATURE & ALARM WARNINGS</u>:
The food probes sense temperatures in the last 1" of the probe (nearest the tip). There are three food probe warnings that can occur during a programmed batch. The warnings will flash the "red" ALARM light, the audible alarm will sound, and a printout noting a probe failure has occurred during completion of a batch. Should a probe failure occur during a programmed batch, the blast chiller unit will automatically switch to the remaining probes for that batch. If only one probe was programmed for the batch and fails, the blast chiller will automatically switch from the programmed batch to constant chill for a 1 hour and 30 minute timed chill cycle. The three (3) warning conditions are:

a) **Over Temperature** - exposing the food probe to product that is 212°F (100°C). An over temperature alarm will occur if food temperature is above 212°F (100°C) at loading. Pressing the PRINT button will print all food probe temperatures, a defective or unplugged food probe will print 500°F (260°C).

b) **Under Temperature** - exposure to product with a temperature below -5°F (-21°C). Pressing the PRINT button will print all food probe temperatures, a defective or unplugged food probe will print -99°F (-73°C).

c) **Food Probe Open Circuit** - should the food probe fail or become unplugged creating an open circuit, it will sound the alarm. Pressing the PRINT button will print all food probe temperatures, a defective or shorted food probe will print -99°F (-73°C).

VIII. UNDERSTANDING PRINTOUTS

VIII. a - <u>CURRENT DATA PRINTOUT</u>:
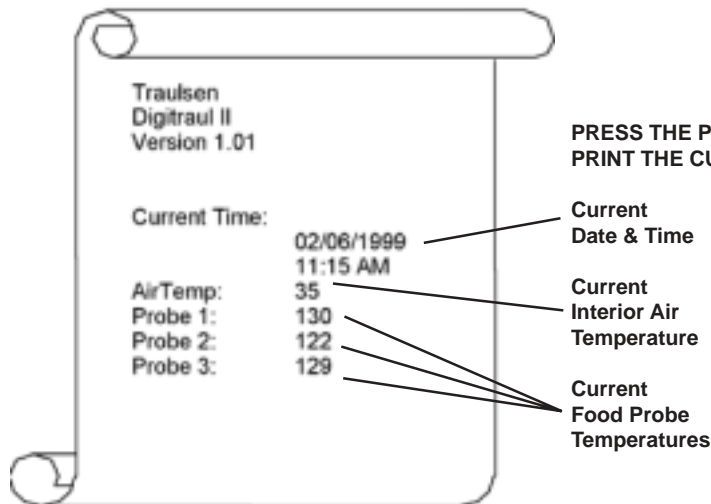
VIII. b - <u>CONSTANT CHILL CYCLE - BATCH DATA</u>:

THE BATCH DATA WILL PRINT OUT AUTOMATICALLY AT THE END OF A COMPLETED BATCH


```
Traulsen
Digitraul II
Version 1.01                          Program
                                      Chip
                                      Revision

Employee Number:                      Operator
                01                    Number

                                      Automatic New
Batch Number:                         Batch Number
                0026
                                      Unit 1 or 2
Unit Number: 1
Batch Mode:                           Batch Mode:
                                      Constant Chill
                Const Chill
                                      Start of Batch
Start Time:                           Date & Time
                02/06/1999
                11:15 AM              End of Food Batch
                                      Probe Temperat-
Probe 1:        35                    ures
Probe 2:        33
Probe 3:        34
Total Batch                           Total Time
Time:                                 Programmed
                                      For The Constant
                0 Hours               Chill Cycle
                50 Minutes
Stop Time:                            End of Constant
                02/06/1999            Chill Cycle
                12:05 PM              Date & Time
```

PRESS THE PRINT BUTTON TO PRINT THE CURRENT DATA


```
Traulsen
Digitraul II
Version 1.01

Current Time:                     Current
              02/06/1999          Date & Time
              11:15 AM
AirTemp:      35                  Current
Probe 1:      130                 Interior Air
Probe 2:      122                 Temperature
Probe 3:      129
                                  Current
                                  Food Probe
                                  Temperatures
```

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VIII. c - <u>BLAST CHILL CYCLE - BATCH DATA</u>:

**THE BATCH DATA WILL PRINT OUT AUTOMATICALLY
AT THE END OF A COMPLETED BATCH**

Traulsen
Digitraul II
Version 1.01 → **Program Chip Revision**

Employee Number:
01 → **Operator Number**

Batch Number:
0027 → **Automatic New Batch Number**

Unit Number: 1 → **Unit 1 or 2**

Batch Mode:
Blast Chill → **Batch Mode: Blast Chill**
                      Soft Chill
                      Flash Chill

Start Time:
02/06/1999
01:20 PM

**Graph of Batch Probe Data
Key Temperature vs. Time
Identification
$140°F$, $70°F$, end ($41°F$)**

```
140  –  *
     –
     –
     –
     –
     –
     –
 70  –      *
     –
 41  –      *
     |||||||||||||||||||||
     0  1  2  3  4  5  6
```

Time from
140F to 70F:
1 Hours
3 Minutes → **Time Required To Chill Product From $140°F$ to $70°F$**

Time from
70F to end:
0 Hours
27 Minutes → **Time Required To Chill Product From $70°F$ to $41°F$**

Probe 1:   39
Probe 2:   41
Probe 3:   40 → **End of Batch Food Probe Temperature The Warmest Probe Must Reach The End of Batch Temperature ($41°F$) To Complete The Chill Cycle**

Total Batch
Time:
1 Hour
35 Minutes → **Total Time To Complete The Chill Cycle From Start Temperature (above $141°F$) Down To End Temperature ($41°F$)**

Stop Time:
02/06/1999
02:50 PM → **End of Constant Chill Cycle Date & Time (batch is complete). System Returns To Normal Refrigeration $35°F$ to $38°F$ (maintenance mode)**

VIII. d - THE 72-HOUR DATA LOG:

PRINTS THE TEMPERATURE IN 5-MINUTE
INCREMENTS STARTING WHEN CURRENT
DATA WORKING BACK

Unit 1

	Air	F1	F2	F3	E1	E2
				09/30/1998 06:26 AM		
R	33	36	37	38		
					31	37

Notes The Time & Date From Power OFF To Power ON

Unit 1

	Air	F1	F2	F3	E1	E2
				12/01/1998 06:26 AM		
C	25	36	39	38		
					0	15
R	33	37	37	37		
					32	32
S	37	72	75	76		
					30	35
S	31	42	43	39		
					18	26
R	28	36	39	38		
					26	30
R	35	36	35	36		
					29	35
D	43	36	39	38		
					54	50
B	75	160	163	171		
					46	48
B	59	132	133	136		
					31	32
B	41	90	91	93		
					18	18
A	26	43	44	(-99)		
					0	3
F	19	28	29	27		
					12	14
	Air	F1	F2	F3	E1	E2

- Constant Chill → C
- Soft Chill → S
- Maintenance Refrigeration Mode → R
- Defrost Cycle → D
- Blast Chill → B
- Alarm Mode → A
- Flash Chill → F

- Failed Or Un-Plugged Food Probe → (-99)
- Chill Cycle Evaporator Coil
- Maintenance Evaporator Coil
- 1, 2, & 3 Food Probe
- Air Probe

VIII.e - <u>FOOD PROBE FAILURE WARNINGS</u>:

```
WARNING
PROBE FAILURE

Food Probe: 3 ─────────────── Failed Food Probe
Unit Number: 1 ─────────────── Unit Number Location of Failed Probe
Alarm Time:
          12/22/1998 ───────── Alarm Date & Time
          11:15 AM
Employee Number:
               01 ──────────── Employee Number

Batch Number: ──────────────── Batch Number
             0001
```
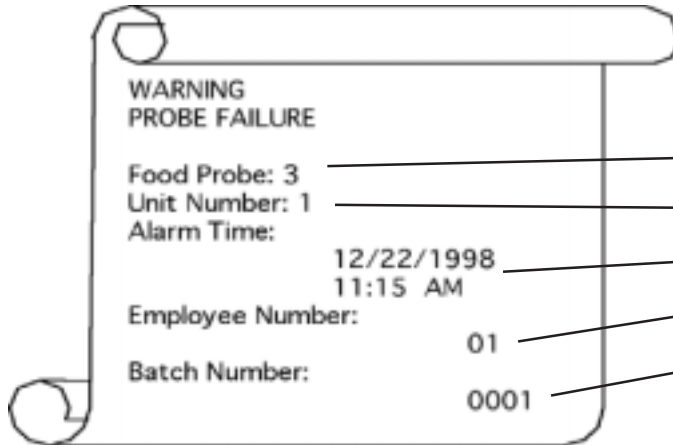
FOOD PROBE FAILURE WARNING:
Alarm occurs only during a programmed batch.

```
WARNING
THIS   UNIT  HAS
BEEN   RUNNING
FOR  6  HOURS. ────────────── 6-Hour Batch Warning Notification
ALL   BATCHES
TERMINATED
Unit Number: 1
Alarm Time: ───────────────── Alarm Date & Time
          02/12/1999
          12:57 AM
```
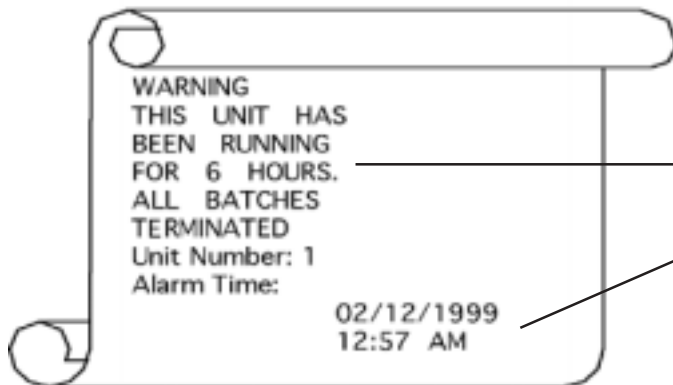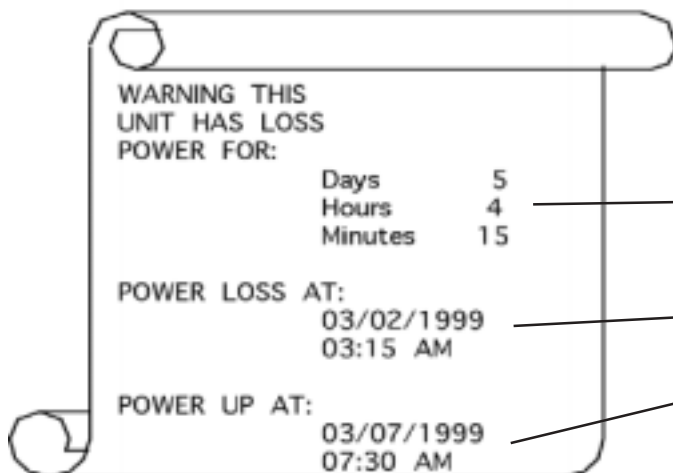
CHILL CYCLE BATCH OVER 6 HOURS:
Alarm occurs when a programmed batch runs for more than 6 hours. The chill cycle will continue to run until complete or cancelled/

```
Unit  Number:  1 ──────────── Unit Number With Refrigeration Failure
REFRIGERATION
FAILURE
OVER  TEMPERATURE ─────────── Refrigeration Failure Over Temperature Warning
CALL  SERVICE
Alarm Time:
          02/12/1999 ───────── Alarm Date & Time
          08:42  PM
```

REFRIGERATION FAILURE:
Alarm occurs when interior temperature remains over 100°F (37.8°C) for more than 20 minutes. CAUTION: The blast chill unit will shut down and requires power OFF and then back ON to reset normal operation (reset button will not work).

```
WARNING  THIS
UNIT HAS LOSS
POWER  FOR:
          Days        5 ────── Power Loss Warning
          Hours       4        NOTES:  Days
          Minutes    15                   Hours
                                          Minutes
POWER  LOSS  AT:
          03/02/1999 ───────── Power Loss
          03:15  AM             Date & Time

POWER  UP  AT:
          03/07/1999 ───────── Power Is Restored
          07:30  AM             Date & Time
```

POWER LOSS NOTIFICATION:
Alarm occurs as a result of a power loss, immediately after power is restored.
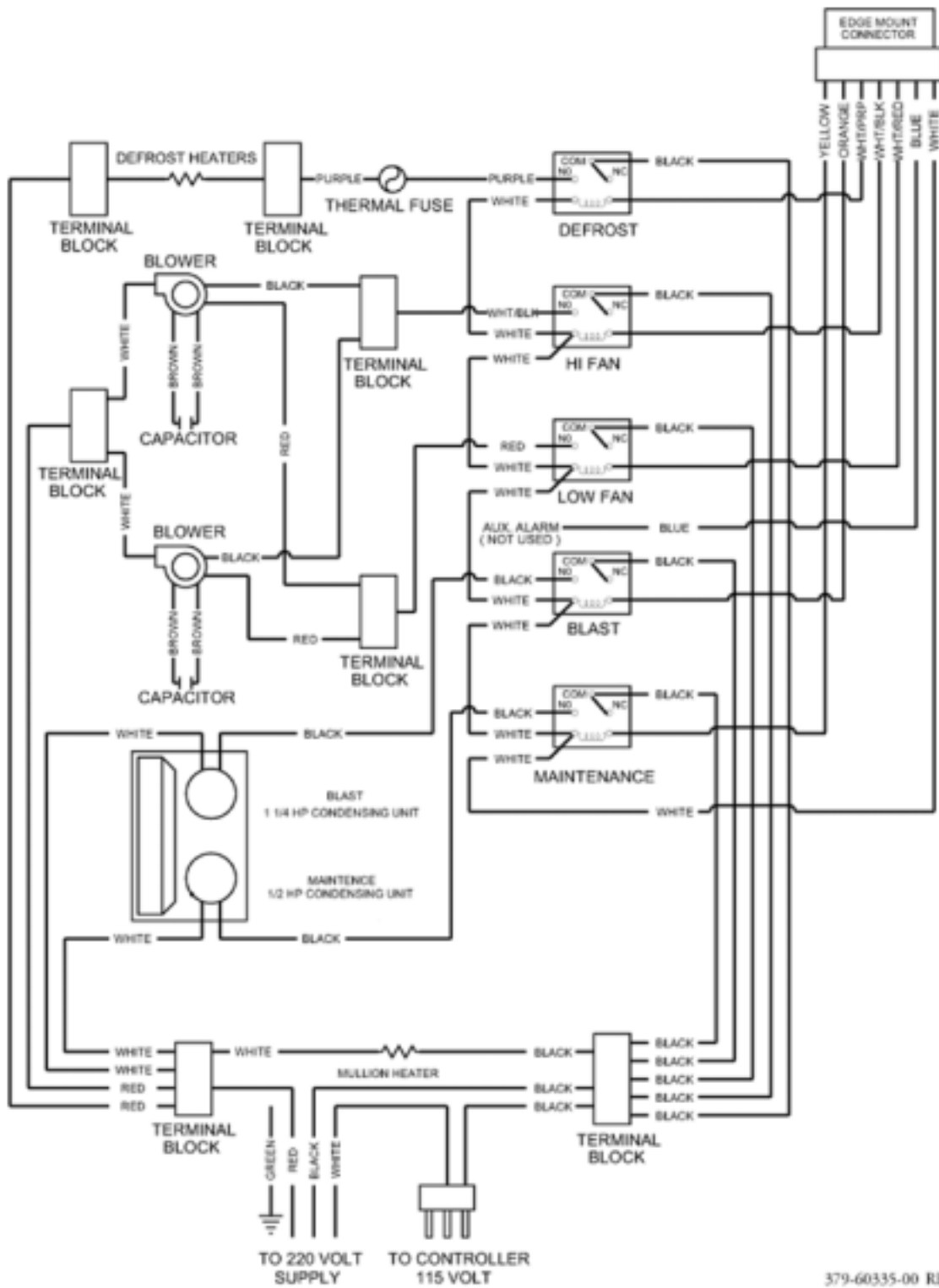
IX. TROUBLE SHOOTING GUIDE

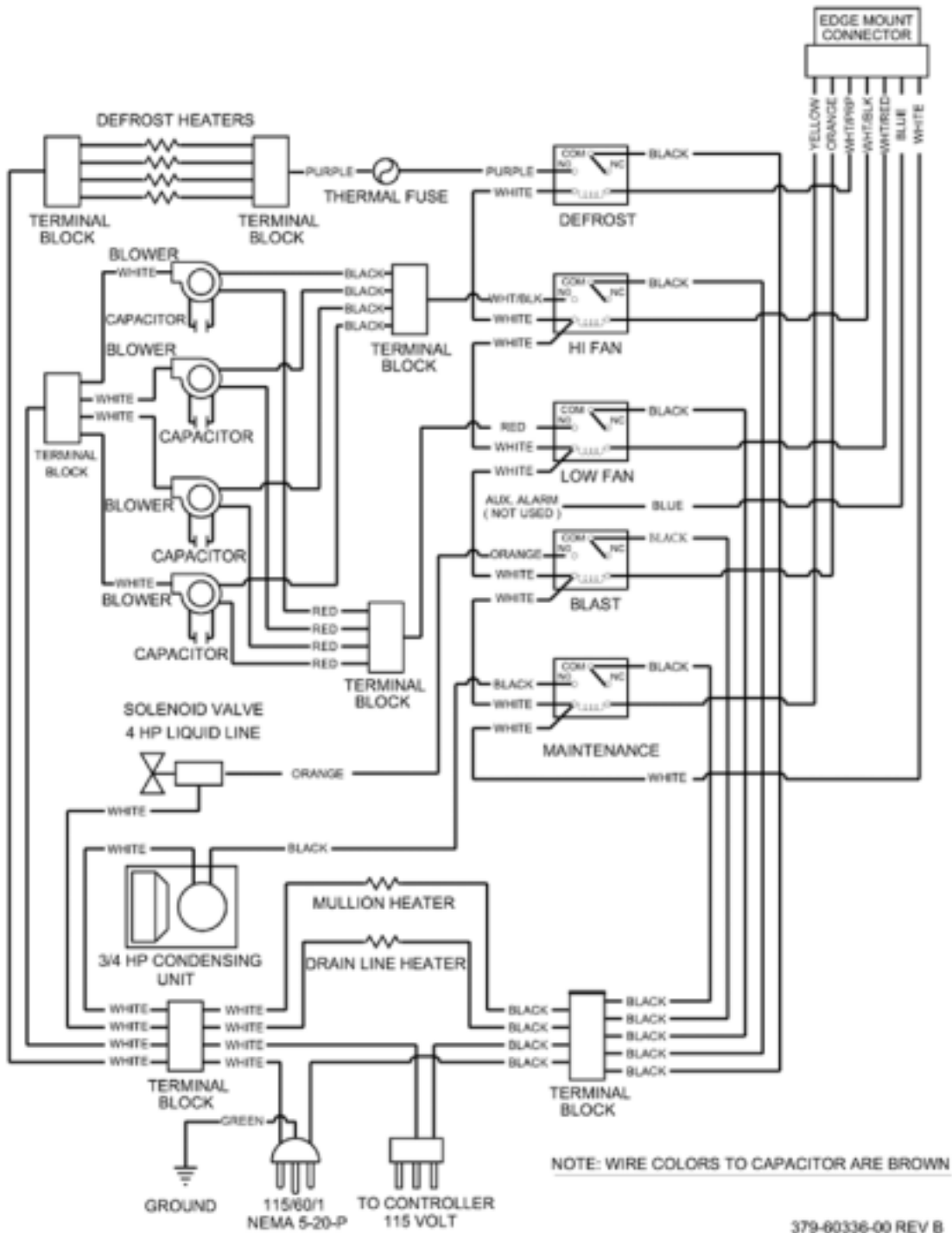| SYMPTOM	PROBABLE CAUSE/SOLUTION
1. Condensing unit fails to start when programming a new batch.	a. Check power supply to condensing unit. b. Batch was not programmed properly, was START pressed after programming batch? If "YES" the display should return to TIME and TEMPERATURE. c. System problem. Call for service.
2. Batch requires too much time to chill product down to 40° F. "Chill Cycles Batch Over 6-Hours" will ALARM and a printout will note the chill cycle has exceeded maximum safe time.	a. Is the door closed properly? If not, close door completely. b. Too much product loaded. Adjust the load to not exceed capacity of the unit. c. Product depth in pan exceeds 2-1/2". Reduce pan load per guidelines on page 7. d. Has pan been covered with a lid, plastic wrap or foil, and is this not in direct contact with the product? Cover product correctly as per guidelines on page 7. e. Perhaps the product loaded is of a high density. Allow additional chilling time. f. Dirty condenser coil. Clean condenser as per instructions on page 6. g. Evaporator coil iced. Allow to defrost (press DEFROST to initiate a manual defrost).
3. "Food Probe Failure" - ALARM will occur during a chill cycle batch with printout noting the "Food Probe Failure Warning."	a. "Food Probe Failure" - printer will notify the operator that it is converting to Constant Chill mode. Food probe(s) may not have been assigned while programming the chill cycle batch. Review new batch procedures on page 13. b. Press the food probe button, if the display reads "---", press "PRINT." If a (-99°) F probe temperature is displayed then there is an open circuit. Check the probe plug connection. c. Press the food probe button, if the display reads "---", press "PRINT." If a 500° F probe temperature is displayed then there is an open circuit. Check the probe plug connection. d. Food probe was placed in excessively hot product. Product temperatures exceeding 210° F can result in the probe reporting false temperatures. Cool food probe and test again. f. Food probe fails and will then operate correctly at a later time. Program a Blast Chill batch using the suspect probe. Wiggle the food probe wire. If a second "Food Probe Failure" occurs the food probe is defective. Replace with new food probe. g. Damaged or defective food probe. Replace with new food probe.
4. "Refrigeration Failure" - ALARM with a printout noting the warning will occur when the interior temperature exceeds 100° F for more than 20-minutes. Blast Chill refrigeration system will shut down as a safety default. The compressors and blower fans are shut off and the control key pad is locked out.	"Refrigeration Failure" CORRECTION - Remove power from the unit. Unplug and then replug the unit or reset the circuit breaker (OFF and back ON). The Blast Chiller will reset and turn ON. "Power Loss Failure" will printout when reset. a. Batch programming was incomplete or incorrect and chill cycle did not start. Try programming batch again. b. Too much product loaded. Adjust the load to not exceed capacity of the unit. c. Dirty condenser coil. Clean condenser as per instructions on page 6. d. Refrigeration system failure, unit will not cool after having been reset. Call service for repair.
5. "Power Loss Notification" - Printout notes the time power was lost and the time in which it was restored.	a. Power was lost to the Blast Chill unit. If product was inside the unit see the 72-Hour Data Log to determine if product temperature was compromised.
6. Cannot program a new batch.	NOTE: Always press the "RESET" button twice to clear the old complete batch data from memory before programming a new batch. a. The LOCK feature may be activated. See page 13 to unlock the control. b. Unit may be in a defrost cycle. Batch can be programmed at this time and will Auto Start after the Defrost Cycle is complete. c. Program chill cycle batch is in process, a new batch can be programmed after completion of current batch. d. A batch may have been only partially programmed. Press "RESET" twice to clear any incomplete batch information.
7. Printer not printing.	a. Printer is out of paper. Replace printer paper roll as per instructions on page 6. b. Printer ribbon is out of ink. Replace printer ribbon cartridge. c. Printer paper may be installed incorrectly, allowing the paper to feed behind the printer ribbon. Remove the paper from the printer and reinstall the paper as per instructions on page 6. d. Paper does not feed or jams behind the paper feed slot in the cover. Remove paper and reinstall as per instructions on page 6.
8. No display on control.	a. Check power supply and circuit breaker. b. Confirm unit is correctly plugged into a working power outlet. c. System problem. Call for service.
9. Condensation on exterior surface.	Condensation on the exterior surface of the unit is perfectly normal during periods of high humidity, otherwise refer below for other possible causes. a. Check door alignment and gasket for proper seal. b. On Roll-In/Roll-Thru models, check bottom door sweep for proper adjustment. c. Electric door heater malfunction. Call for service.

X. WIRING DIAGRAM - RBC50

379-60347-00   REV B
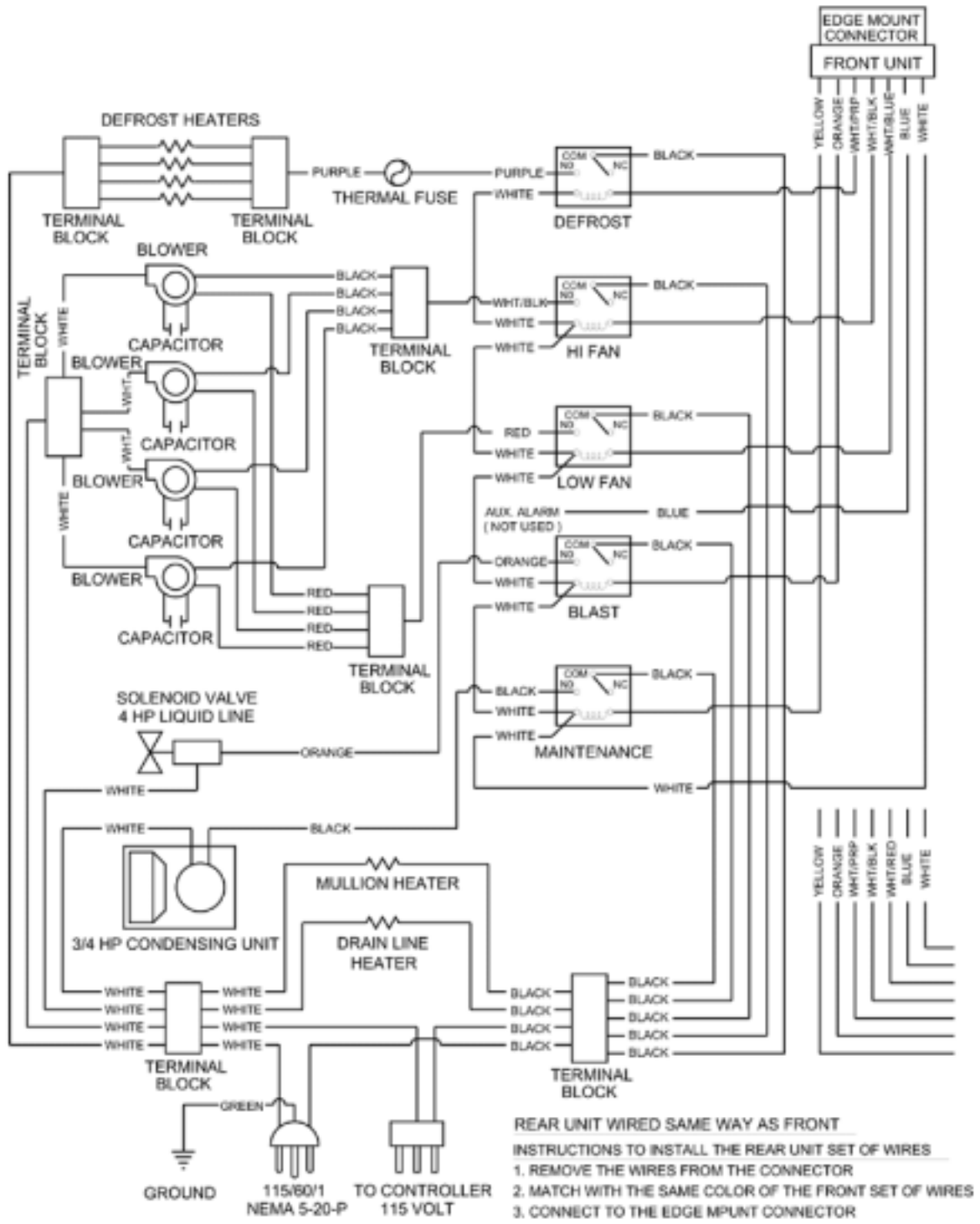
X. WIRING DIAGRAM - RBC100

379-60335-00 REV B

X. WIRING DIAGRAM - RBC200 & RBC200RT

NOTE: WIRE COLORS TO CAPACITOR ARE BROWN

379-60336-00 REV B

EDGE MOUNT CONNECTOR
FRONT UNIT

YELLOW ORANGE WHT/PRP WHT/BLK WHT/BLUE BLUE WHITE

DEFROST HEATERS

TERMINAL BLOCK   TERMINAL BLOCK

PURPLE   THERMAL FUSE   PURPLE   COM NO NC   BLACK
WHITE
DEFROST

TERMINAL BLOCK

BLOWER
CAPACITOR

BLACK
BLACK
BLACK
BLACK

TERMINAL BLOCK

WHT/BLK   COM NO NC   BLACK
WHITE
WHITE   HI FAN

BLOWER
CAPACITOR

WHT

BLOWER
CAPACITOR

WHITE

RED   COM NO NC   BLACK
WHITE
WHITE   LOW FAN

AUX. ALARM (NOT USED)   BLUE

BLOWER
CAPACITOR

RED
RED
RED
RED

TERMINAL BLOCK

ORANGE   COM NO NC   BLACK
WHITE
WHITE   BLAST

SOLENOID VALVE
4 HP LIQUID LINE

BLACK   COM NO NC   BLACK
WHITE
WHITE   MAINTENANCE

ORANGE

WHITE

WHITE

WHITE   BLACK

MULLION HEATER

3/4 HP CONDENSING UNIT

DRAIN LINE HEATER

WHITE   WHITE
WHITE   WHITE
WHITE   WHITE
WHITE   WHITE

TERMINAL BLOCK

BLACK   BLACK
BLACK   BLACK
BLACK   BLACK
BLACK   BLACK
BLACK   BLACK

TERMINAL BLOCK

GREEN

GROUND   115/60/1 NEMA 5-20-P   TO CONTROLLER 115 VOLT

YELLOW ORANGE WHT/PRP WHT/BLK WHT/RED BLUE WHITE

REAR UNIT WIRED SAME WAY AS FRONT
INSTRUCTIONS TO INSTALL THE REAR UNIT SET OF WIRES
1. REMOVE THE WIRES FROM THE CONNECTOR
2. MATCH WITH THE SAME COLOR OF THE FRONT SET OF WIRES
3. CONNECT TO THE EDGE MPUNT CONNECTOR

NOTE:WIRES TO CAPACITOR ARE BROWN

379-60337-00 REV B

XI. WARRANTY INFORMATION

STANDARD DOMESTIC WARRANTY

TRAULSEN & CO., INC. **warrants new equipment to the original purchaser, when installed within the United States against defective material and workmanship for one (1) year from the date of original installation. Under this warranty,** TRAULSEN & CO., INC. **will repair or replace, at its option, including service and labor, all parts found to be defective and subject to this warranty. The compressor part is warranted for an additional four (4) years. During this period** TRAULSEN & CO., INC. **will supply replacement compressor(s) if deemed defective, however, all installation, recharging and repair costs will remain the responsibility of the owner.**

This warranty does not apply to damage resulting from fire, water, burglary, accident, abuse, misuse, transit, acts of God, terrorism, attempted repairs, improper installation by unauthorized persons, and will not apply to food loss.

The remote compressor(s) used on models RBC200, RBC200RT, RBC400 and RBC400RT (when purchased from Traulsen) are warranted only for the original one (1) year period. Optional extended four (4) year warranties may be purchased at time of original equipment purchase.

THERE ARE NO ORAL, STATUTORY OR IMPLIED WARRANTIES APPLICABLE TO TRAULSEN, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. TRAULSEN SHALL HAVE NO OBLIGATION OR LIABILITY FOR CONSEQUENTIAL OR SPECIAL DAMAGES, GROWING OUT OF OR WITH RESPECT TO THE EQUIPMENT OR ITS SALE, OPERATION OR USE, AND TRAULSEN NEITHER ASSUMES NOR AUTHORIZES ANYONE ELSE TO ASSUME FOR IT ANY OBLIGATION OR LIABILITY IN CONNECTION WITH THE EQUIPMENT OR ITS SALE, OPERATION OR USE OTHER THAN AS STATED HEREIN.

INTERNATIONAL COMMERCIAL WARRANTY

(for Canadian warranties see domestic US warranty)

TRAULSEN & CO., INC. warrants to the original purchaser the Refrigeration Equipment manufactured and sold by it to be free from defects in material and workmanship under normal use and service for a period of one (1) year from date of shipment. Under this warranty, **TRAULSEN & CO., INC.** will reimburse the purchaser for the replacement of any part of said equipment (excluding dryers & refrigerant gas) which then proves to be defective. **This warranty does not apply to damage resulting from fire, water, burglary, accident, abuse, misuse, transit, acts of God, terrorism, attempted repairs, improper installation by unauthorized persons, and will not apply to food loss.**

TRAULSEN'S standard warranty does not apply to Export Sales. Rather, for a period of one (1) year from date of original installation not to exceed Fifteen (15) months from date of shipment from factory, TRAULSEN:

will replace, F.O.B. factory, any defective parts normally subject to warranty.

will not cover the cost of packing, freight or labor such costs being the sole responsibility of the dealer.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED AND CONSTITUTES TRAULSEN'S FULL OBLIGATION AND LIABILITY. WARRANTIES NOT AVAILABLE ON REMOTE MODELS.

XII. PARTS LIST

PART/DESCRIPTION	PART #
Condensate Evaporator Pan Kit	329-60018-00
Interconnect Harness (for RBC400/RBC400RT)	333-60082-00
Ribbon Cable	333-60083-00
Red Food Probe	333-60086-01
Blue Food Probe	333-60086-02
Green Food Probe	333-60086-03
Shelf To Fit Blast Chill Racks	340-05337-03
Keyboard/Printer/Board (RBC200)	950-60118-00
Keyboard/Printer/Board (RBC100)	950-60119-00
Racks, Roll-In (Roll-In/Roll-Thru models)	OTR-TRA-13
Printer Ribbon	SER-00001-00

XIII. INDEX

HOURS OF OPERATION:
Monday thru Friday 7:30 am - 4:30 pm CST

EXTENDED WARRANTY SERVICE HOURS
Monday thru Friday 4:30 pm - 6:00 pm CST

Traulsen

Quality Refrigeration

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