



Barker™
SPECIALTY PRODUCTS by Hill PHOENIX

Service & Installation Instructions

Keep this booklet for future reference

- BSD-SW SERIES
- BSD-T SERIES

For Additional Copies Please Contact:

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P.O. Box 478
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IMPORTANT!!
KEEP FOR FUTURE REFERENCE

General Information

This booklet contains information on:

BSD-SW

Service, Single Deck Deli Case, with Front Tilt Glass and Swing Hardware

BSDT Series

Service, Single Deck Deli Case, with Front Tilt Glass

The BSD-SW & BSDT Series conform to the following standards



Shipping Information

IMPORTANT!

FOR YOUR PROTECTION PLEASE READ AND OBSERVE THE FOLLOWING INSTRUCTIONS:

Transportation companies assume all liability from the time a shipment is received by them until the time it is delivered to the consumer. Our liability ceases at the time of shipment.

All shipments leaving our plant have been carefully inspected. If a shipment arrives with the crating or packaging damaged, have the carrier note the condition on the receipt. Check as soon as possible for concealed damage.

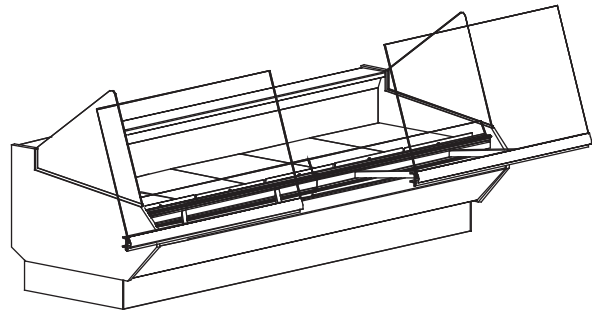
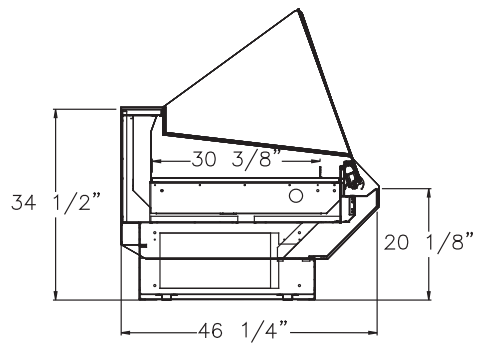
If it is found that the shipment has been damaged in transit, please **DO NOT** return it to us, but notify and file a claim with the carrier at once. **FAILURE TO FOLLOW THIS PROCEDURE WILL RESULT IN REFUSAL BY THE CARRIER TO HONOR ANY CLAIMS WITH A CONSEQUENT LOSS TO THE CONSUMER.**

If a UPS shipment has been damaged, retain the damaged material and the carton and notify us at once. WE will file a claim.

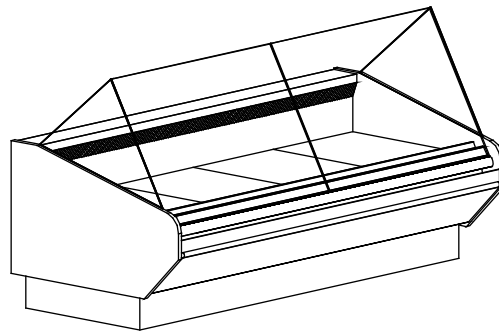
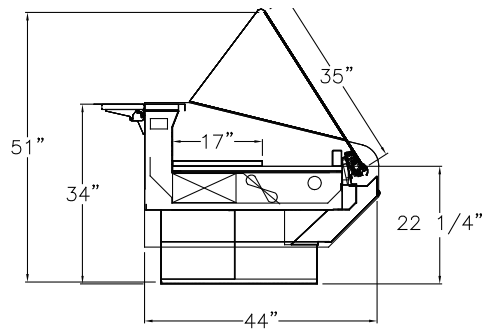
GOODS SHOULD NOT BE RETURNED FOR CREDIT UNLESS AUTHORIZED BY OUR SALES DEPARTMENT.

Case Drawings

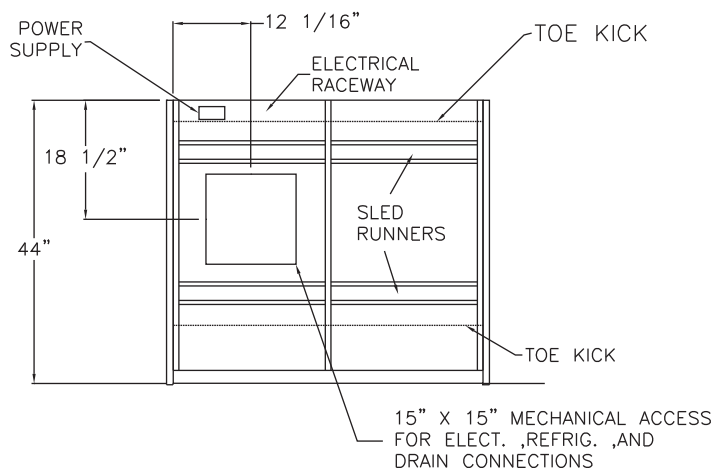
BSD-SW Series



BSD-T Series



MECHANICAL VIEW (for all models shown)



Installation Instructions

Location

This refrigerated display case has been designed for displaying and storing perishable food product. It is engineered for air-conditioned stores with a maximum ambient of 75° F and 50% relative humidity.

When selecting the location for placement of this case, avoid the following conditions:

Excessive air movement

- Doors
- Air-conditioned vents
- Other air sources

Excessive heat

- Windows
- Sun
- Flood lamps 8 feet or less from the product
- Other heat sources

Crate Removal

Move case as close as possible to its location. Remove all crating and shipping braces above the shipping pallet. Loosen the plastic dust cover from the pallet, but leave cover over the case to protect it while removing the case from the pallet. Carefully, lift case up and off the pallet. Remove dust cover. Installation hardware ships in an installation packet located inside the case.

Compressor

The 6', 8', 10 and 12' Self-Contained cases are equipped with a shipping block under the compressor. This block must be removed upon installation. Loosen all four nuts on the compressor hold down screws. Lift or pry the compressor up and remove the shipping block. DO NOT retighten screws, as the compressor should be left free to float on the spring mounts.

FAILURE TO REMOVE THE SHIPPING BLOCK WILL RESULT IN EXCESSIVE NOISE, REFRIGERANT LEAKS AND WILL VOID WARRANTY PROTECTION.

Case Exterior Loading

These cases are not designed for excessive external weight. DO NOT WALK ON THE TOP OF THE CASES. Walking on top of cases could cause personal injury and damage to the case.

Leveling

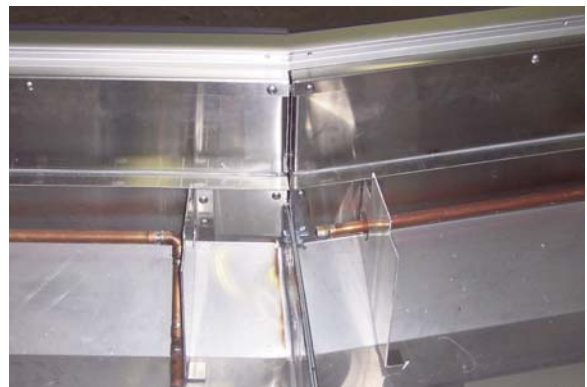
To ensure proper operation of the refrigeration system and drainage of the condensate, the case MUST BE LEVEL. Use a carpenter level to level front to back and side to side. Shim as necessary.

Joining Lineups

1. Begin all lineups leveling from the highest point of the store floor.
2. Remove front and rear toe kicks by removing screws on all sides. Set and level first case.
3. Using Proseal or Sikaflex, place a double bead around the perimeter on both cases to be joined together. (See Below)



4. Position cases together.
THE FRONT OF THE CASES MUST BE FLUSH!



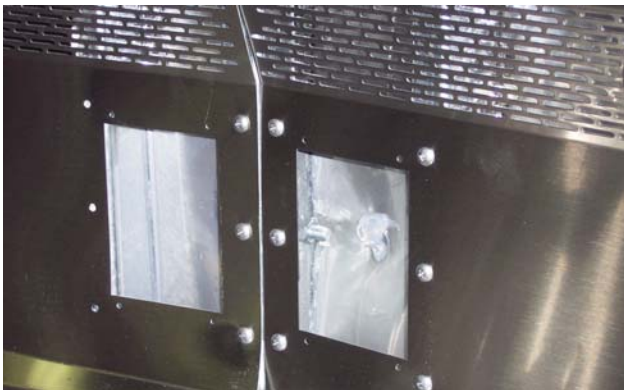
5. Bolt Location #1:
Front evaporator compartment



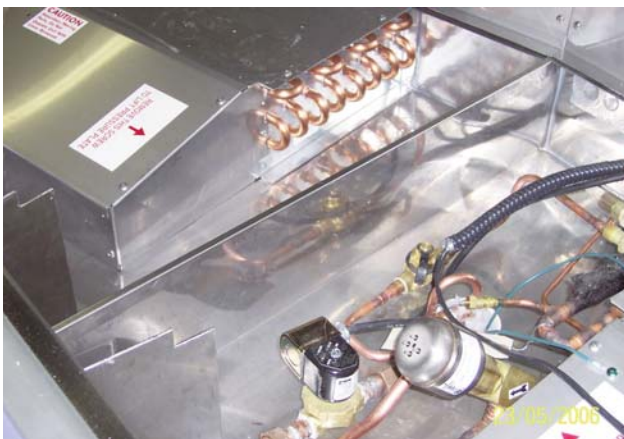
6. Sticker reads, "Remove this panel for bolt access when connecting cases together in a line-up."



7. Bolt location #2: Access panel where location tag is located on the right & left inside panel below discharge air screen. Remove this panel to gain access to bolt location then reinstall the panel.



8. When cases are joined together, seal gaps between matching edges of cases.



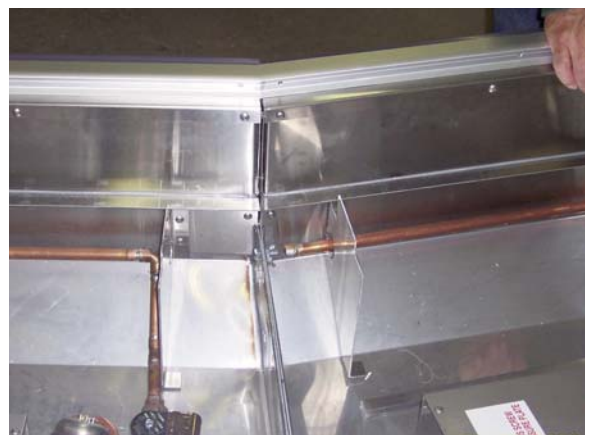
9. Between matching drain pans, add sealant to U-channel on drain pans, joining them together.



10. After lineup is set and leveled the 1 1/2" hole(s) in the upper bend of the drain pan where the cases adjoin must be sealed & siliconed with the 1 1/2" PVC female adapters provided.



11. Seal gaps between die boards and add trim strips.



12. Place a smooth bead of Sikaflex in the seam of the inside back. (left)



13. Seal rear of case.

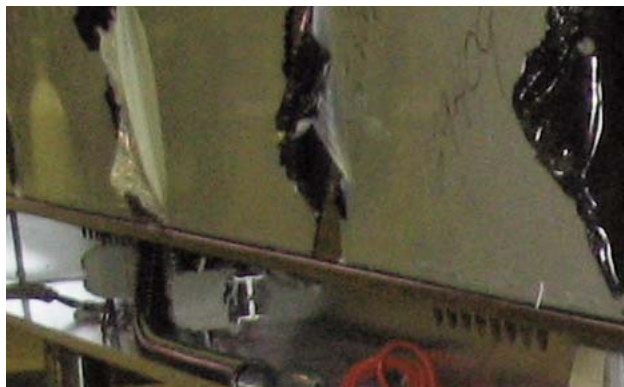


Drain, Electrical and Refrigeration Connections on Remote Cases

NOTE: Barker remote units are shipped with a dry nitrogen charge of approximately 10 lbs. pressure in the evaporator coil. During installation if nitrogen charge is not present, leak check accordingly.

1. Drains are located in the center of the case. Connect PVC drains to existing floor drains. Provide as much downhill slope as possible and avoid long runs of drain lines. Do not install condensate drains in contact with non-insulated suction lines in order to prevent condensate from freezing. Install the 1" PVC trap, which is provided with the case. All drains must be trapped.
2. Electrical connections are made through the power supply box of each case, which can be accessed by removing the back panel above the toe kick. The power supply is located in the raceway as shown to the right. Voltage requirements and component amperes can be found in the electrical section of this manual, but always check the data tag located on the side back of the case. Case must be grounded.
3. Refrigeration connections will be made through the refrigeration stub up located on the customer left side of the case (see mechanical view). See refrigeration information section for caseloads and recommended settings. Refrigeration lines may be headed together for all cases in a lineup, if desired, by lines through the access area under the case. Seal all access holes with a good grade silicon or foam tape to prevent recirculation. All lines must be correctly sized.

For proper refrigeration performance, PRODUCT MUST NOT BE PLACED IN A POSITION WHERE IT MAY AFFECT THE AIR CURTAIN. Air discharge and return air vents must remain unobstructed.

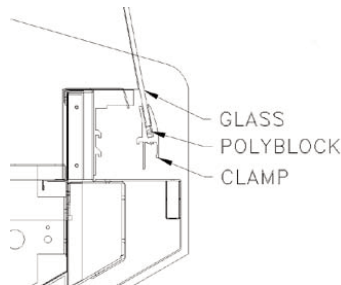


Glass Adjustment

Tilt or Swing Glass is installed at the factory with the case perfectly level, if adjustments need to be made to align the glass first check to insure the case was properly leveled during installation.

NOTE: This is a 2-person operation. One person must hold the glass at all times.

1. Lift the glass to its highest position as shown in drawing below.
2. Loosen allen screws.
3. Glass will rest on poly blocks inside the glass clamp. Do not install glass in front of the poly block. This will cause the glass to sag back into the case.



4. Starting at the right side, tap the wedge with a #2 standard screwdriver. Repeat procedure on the left side. Continue working right to left until the wedge recesses into the aluminum extrusion.
EXTREME CARE MUST BE TAKEN NOT TO TAP THE WEDGE TOO HARD.
5. Slide the glass right or left as needed.
6. Tighten the right allen screw while holding the left side of the glass firmly. Be careful to keep the glass level.
7. Tighten the remaining allen screws.
8. Lower glass into position. Repeat as necessary until glass is completely level.

NOTE: the entire glass clamp and glass can be moved sideways by loosening the allen screws that are located in the glass clamp hinges.

Tilt Glass



Swing Hardware



Plex Installation

Some cases may be equipped with removable plex on the sides of the case. Place removable plex in channels on sides of case.

If plex is used for ice application, plex must be placed on the inside of the product stop to ensure correct temperature is maintained.

Installation Checklist

Before supplying electrical power and starting case check the following:

1. Compressor Area (For Self-contained cases).
Remove shipping block on units with semi-hermetic compressors. Check location of controls.
2. Evaporator Area.
Check to ensure evaporator fan pressure plates are secure and in proper position NOTE: Hinged portion of pressure plates are secured for shipping with mounting screws. Screws do not have to be removed for case operation but must be removed to use hinge.
3. Lighting System
Check to ensure male plugs are completely inserted in female sockets and that all lamps are securely seated in light fixture.
4. Case Leveling
Visually check case. If lift glass is out of adjustment or case looks out of square, use a carpenter's level and shim as needed.

After supplying power to the case and starting unit:

1. Check to ensure all fans are operational.
2. Check all lights.
3. Check case temperature and adjust thermostat as needed. See refrigeration section of this manual for case settings.

Refrigeration Information

Case Operation

Refrigeration

The refrigeration in this case is thermostatically controlled. The case refrigerates until the cut out point on the thermostat is reached. The thermostat opens, cutting power to the liquid line solenoid. The compressor continues to run, the system pumps down causing the pressure switch to open, cutting power to the compressor. Note: Some cases may be ordered with EPR valves to control case temperature. For proper refrigeration performance, PRODUCT MUST NOT BE PLACED WHERE IT WILL AFFECT THE AIR CURTAIN.

Defrost

This case is equipped with an OFF CYCLE defrost system. The timer cuts the power to the liquid solenoid. The unit stays in off cycle defrost until the defrost timer re-energizes the liquid solenoid.

NOTE: The evaporator fan runs continuously.

Open Seafood Settings

(Applies to cases with misting systems)

Suction Temperature	24°
Discharge Temperature	31°
Superheat Set Point	10°
Time Off Defrost	2@60min
Defrost Termination	50°

NOTE: The above settings are approximate and will vary slightly with product load, lighting, store ambient conditions etc. Evaporator fans run constantly.

Refrigeration Loads

Model	BTU Lin/Ft	Evap Temp	Defrost
BSD T/SW Glass Series			
BSD-T/SW-4	450	+24°	2@60*
BSD-T/SW-6	450	+24°	2@60*
BSD-T/SW-8	450	+24°	2@60*
BSD-T/SW-10	450	+24°	2@60*
BSD-T/SW-12	450	+24°	2@60*

Model	BTU Lin/Ft	Evap Temp	Defrost
SSFO/W Glass Series			
SSFO-8	450	+24°	2@60*
SSFO-10	450	+24°	2@60*
SSFO-12	450	+24°	2@60*
SSFO-15	450	+24°	2@60*
SSFO-16	450	+24°	2@60*

* Ice Application: Defrost, 60" 2 timers a day; Evap Temp, +24°

Electronic Thermostat

The electronic thermostat is located at the rear of the case in the electronic raceway. The thermostat is equipped with a liquid crystal display providing a constant readout of the sensed temperature.

NOTE: The LCD display will be blank during defrost. A touch keypad that allows the users to select the set point temperature, differential and the heating /cooling modes.



Programming Steps for the ETC, Electronic Temperature Control

All thermostats are pre-set and cycle checked at the factory.

- STEP 1: Press the set key once to access the Fahrenheit/Celsius mode. The display will display either **F** degrees Fahrenheit or **C** for degrees Celsius. Press the **up** arrow or the **down** arrow so the display indicates **F**.
- STEP 2: Press the set key again to gain access to the setpoint. The LCD will display the current Setpoint and the **S1** will be blinking. Press the **up** arrow to increase or the **down** arrow to decrease the temperature setting.
- STEP 3: Press the set key again to gain access to the differential. The LCD will display the current differential and the **DIF 1** will be blinking. This should be set at 2°F.
- STEP 4: Press the set key again to gain access to the cooling or heating mode. The LCD will display the current mode. Press either the **up** arrow or the **down** arrow to set the display in the **C1**, cooling mode.
- STEP 5: Press the set key once more and the programming is complete. Set the lock to keep the set point.

STEP	DISPLAY INDICATION	DESCRIPTION
1.	F or C	Fahrenheit or Celsius Scale
2.	S1 (blinking)	Setpoint Temperature
3.	DIF (blinking)	Differential Temperature
4.	C1/H1	Cooling or Heating Mode

Misting and Humidification System

Recommended Time Setting

Mist	150 seconds
Offtime	10 minutes

Top knob set at 2.5 (150 seconds)

Bottom knob set at 7

Air Filter Cleaning

(Bi-Annual Maintenance Required)

Press the filter body with the thumb and index finger and pull the cap off by prying off with a flat screw driver. Clean the sponge filter by soaking in water. Squeeze dry, re-insert and replace cap on filter body.

Water Filter Cleaning

(Bi-Annual Maintenance Recommended)

Shut OFF the ball valve by turning the handle sideways. Unscrew the filter cup by hand. Be sure to place rags or paper towels underneath the filter and rinse it under running water and use a soft brush (ie. Toothbrush) for thorough cleaning. Reinsert the screen and tighten the filter cup by hand to reassemble the water filter. Turn the ball valve to ON and make sure no water is leaking from the water filter.

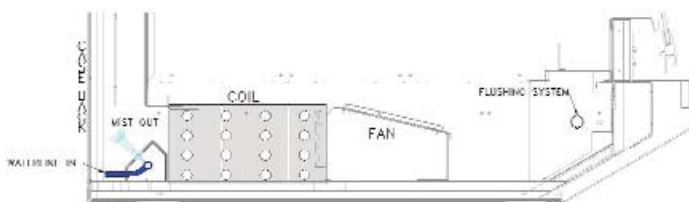
Humidity Head/Nozzle Cleaning

(No Maintenance Required)

As this is a self cleaning stainless steel nozzle, therefore no maintenance required. The opening on the nozzle head is large enough to prevent any clogging.



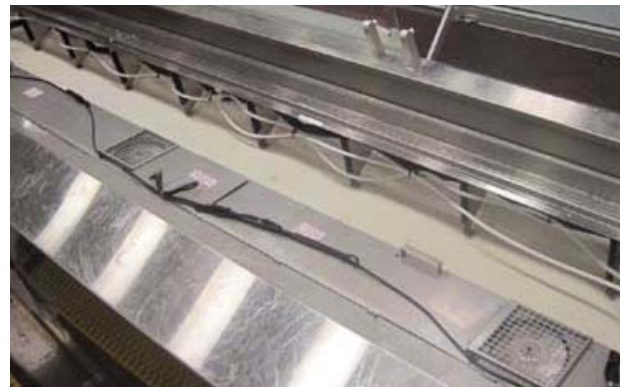
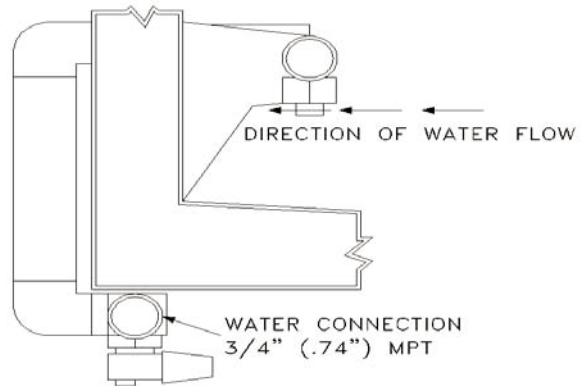
Water line is blue. Mist is directed toward the back of the case out the holes in the misting system cover.



Flushing System

Operation

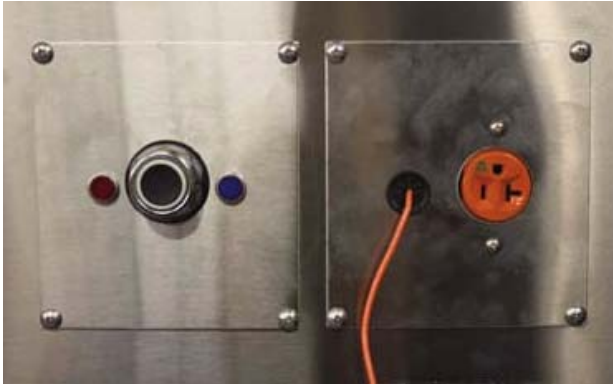
When store associate pushed the flushing button on the back of the case, refrigeration is cut off by solenoid valve. Evaporator coil "warms" for 48 minutes to prevent freezing. Flushing system activates and operates for 12 minutes. Flush system is then de-energized and normal refrigeration cycle resumes.



Flush system solenoid valve and water connection are located on bottom of case on the back right side.



Flushing Sytem



Flushing Button

WARNING!

WHEN FLUSHING SYSTEM IS ACTIVE THE REFRIGERATION TO THE CASE IS SHUT OFF. THE FLUSHING CYCLE TAKES 60 MINUTES TO COMPLETE AND SHOULD BE USED ONLY ONCE DAILY.

WARNING!

USE ONLY DOWFROST, PREMIXED 35% INHIBITED PROPYLENE GLYCOL. USE OF ANY OTHER GLYCOL WILL VOID THE MANUFACTURER WARRANTY.

NOTE: For Secondary Fluid Cases Only

Electrical Information

Remote Case Data - Electrical 120 Volt	
Model	Evap Fans
BSD Tilt Glass Series	
BSD-T-4	0.8
BSD-T-6	1.2
BSD-T-8	1.2
BSD-T-10	1.2
BSD-T-12	1.8
DRY CASES - USE LIGHTING SPECIFICATIONS	

Additional Loads for Self-Contained Units					
HP	Voltage	RLA/LRA	Cond Fan	Pan Heater	Air Sweep Fan
					Fans
1.8	120-1-60	6.8/29	0.88	6.0	0.62
1.2	120-1-60	9.4/51	1.4	6.0	0.78
3.4	120-1-60	9.8/66	1.7	6.0	1.04
1	120-208-1-60	6.7/40	0.86	4.8	1.3
1	120-208-1-60	6.7/40	0.86	4.8	1.60
REMOTE CASES - 20 MINUTES DEFROST EVERY 4 HOURS					

Wiring Color Code

Green-----Ground
 Black-----Hot
 White -----Neutral
 Red -----208/220 Only
 Brown -----Interlock System

Orange -----Thermostat
 Orange -----Liquid Solenoid
 Purple -----Hot Gas Defrost
 Purple -----Defrost Terminator
 Gray -----Light Switch
 Black/White -----Pressure Switch

Ballast Information

Ballasts are located in the electronic raceway at the rear of the case.

Secondary Wiring Color Code

Red -----Lights
 Yellow -----Lights
 Blue-----Lights

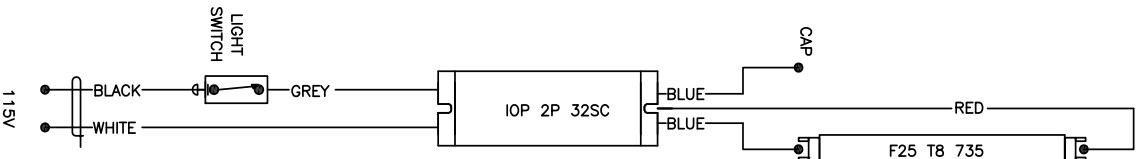
SEE BALLAST DIAGRAM
FOR EACH CASE

NOTE: Case must be grounded

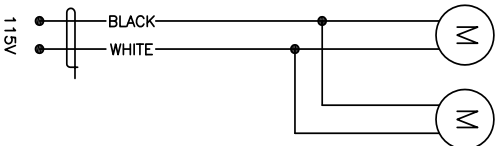
BSD-4T	(1) 2P
BSD-6T	(1) 2P
BSD-8T	(1) 2P
BSD-10T	(1) 3P
BSD-12T	(1) 3P

NOTE: SHELVES ARE OPTIONAL CASE MAY OR MAY NOT BE EQUIPPED WITH UNDER SHELF LIGHTING.

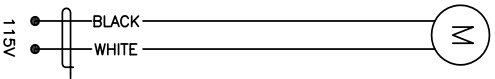
NOSE
LIGHTS



ANTI-SWEAT FANS

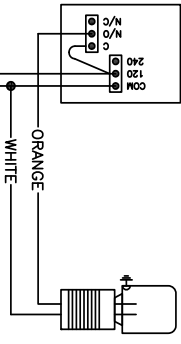


EVAP. FANS

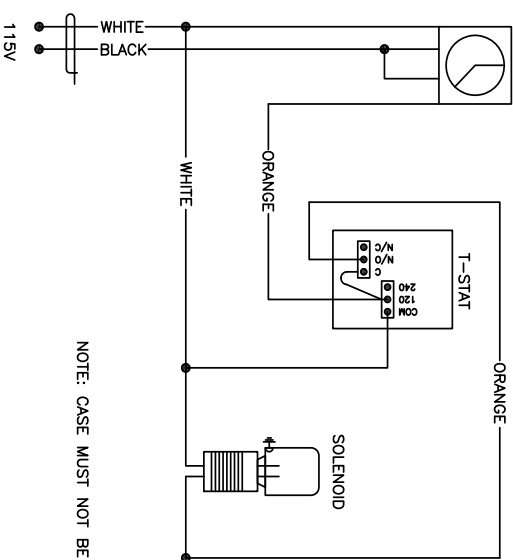


VOLT.	120-1-60
FANS	1.12
LIGHTS	1.25
BTU'S	450
EVAP. TEMP.	+20°

T-STAT



DEFROST TIMER
(OPTIONAL)



NOTE: CASE MUST NOT BE GROUNDED

DATE: 09/07/06

REVISION

PROJECT #

DRAWING #

ORDER #



P.O. BOX 478
KEOSAUQUA, IA 52565
PHONE: (319)293-5777
FAX: (319)293-5776

CUSTOMER:

BSDT-4 R

STANDARD WIRING DIAGRAM

DRAFTER

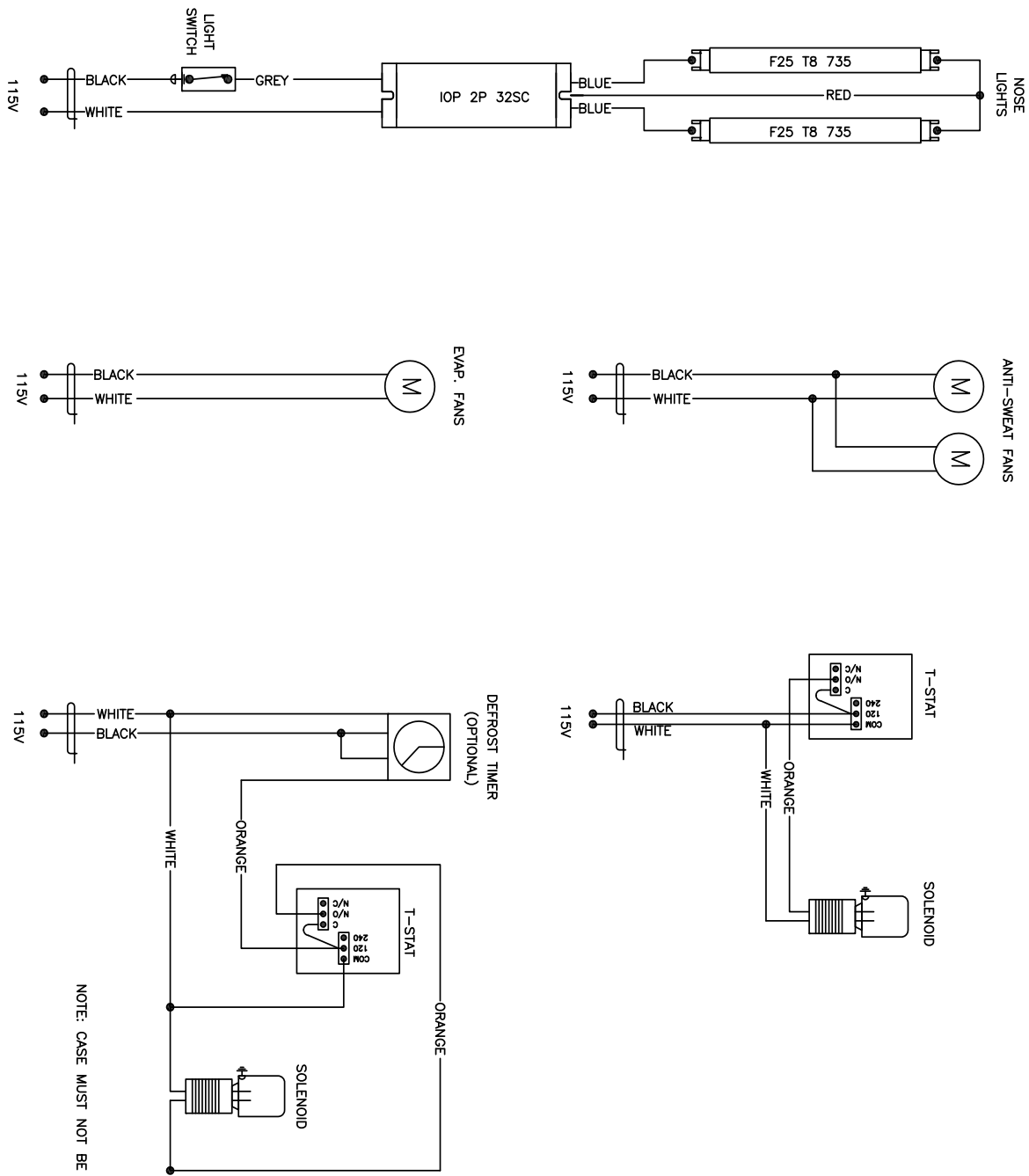
SCALE

NONE

APPROVED BY

NOTE: SHELVES ARE OPTIONAL CASE MAY OR MAY NOT BE EQUIPPED WITH UNDER SHELF LIGHTING.

VOLT.	120-1-60
FANS	1.12
LIGHT'S	.52
BTU'S	450
EVAP. TEMP.	+20°



NOTE: CASE MUST NOT BE GROUNDED

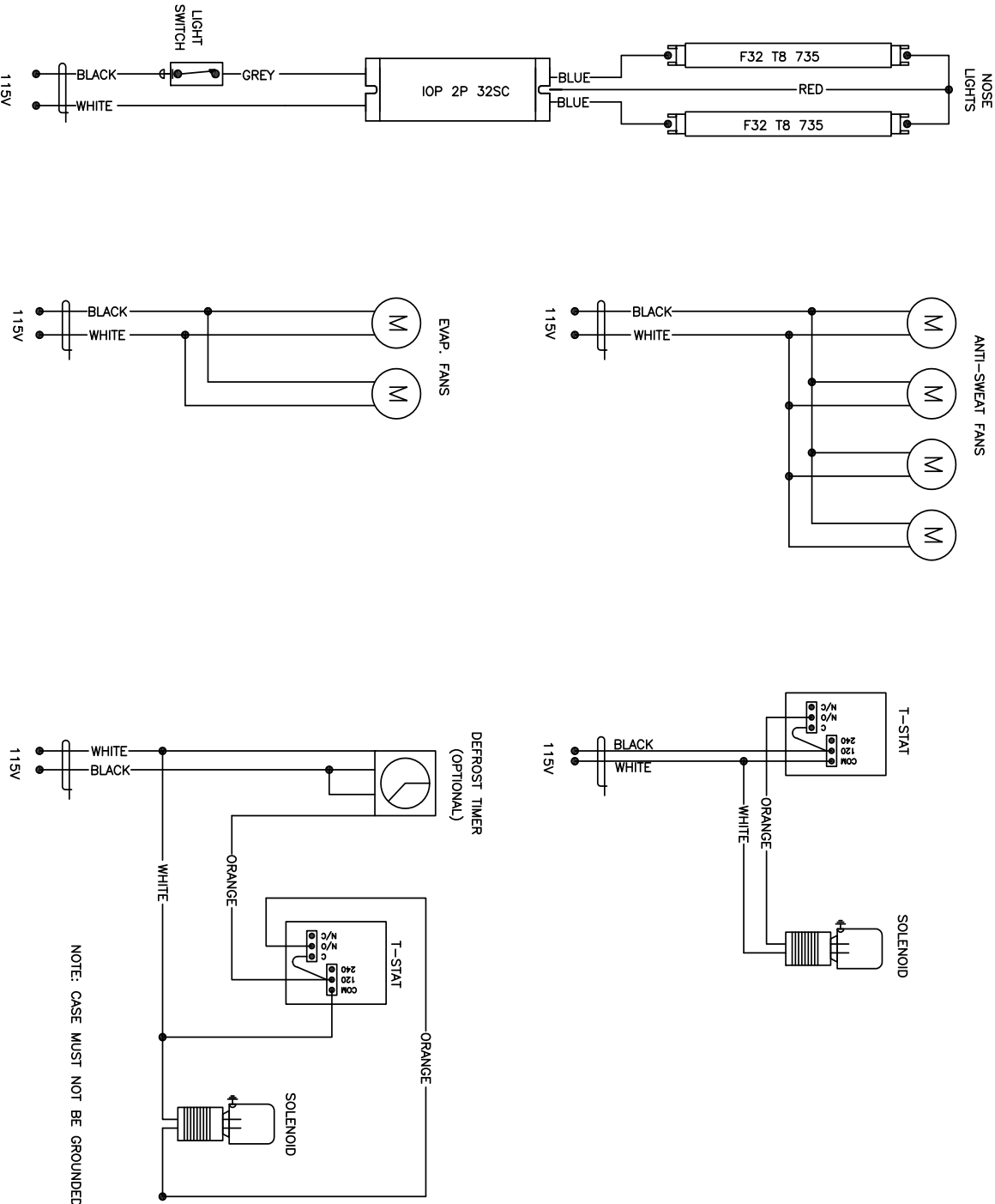
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DRAWING #	---	---	---	---	---	---	---	---	---	---	---	---	---



P.O. BOX 478
KEOSAUQUA, IA 52565
PHONE: (319)293-5777
FAX: (319)293-5776

NOTE: SHELVES ARE OPTIONAL CASE MAY OR MAY NOT BE EQUIPPED WITH UNDER SHELF LIGHTING.

VOLT.	120-1-60
FANS	2.24
LIGHTS	.95
BTU'S	450
EVAP. TEMP.	+20°

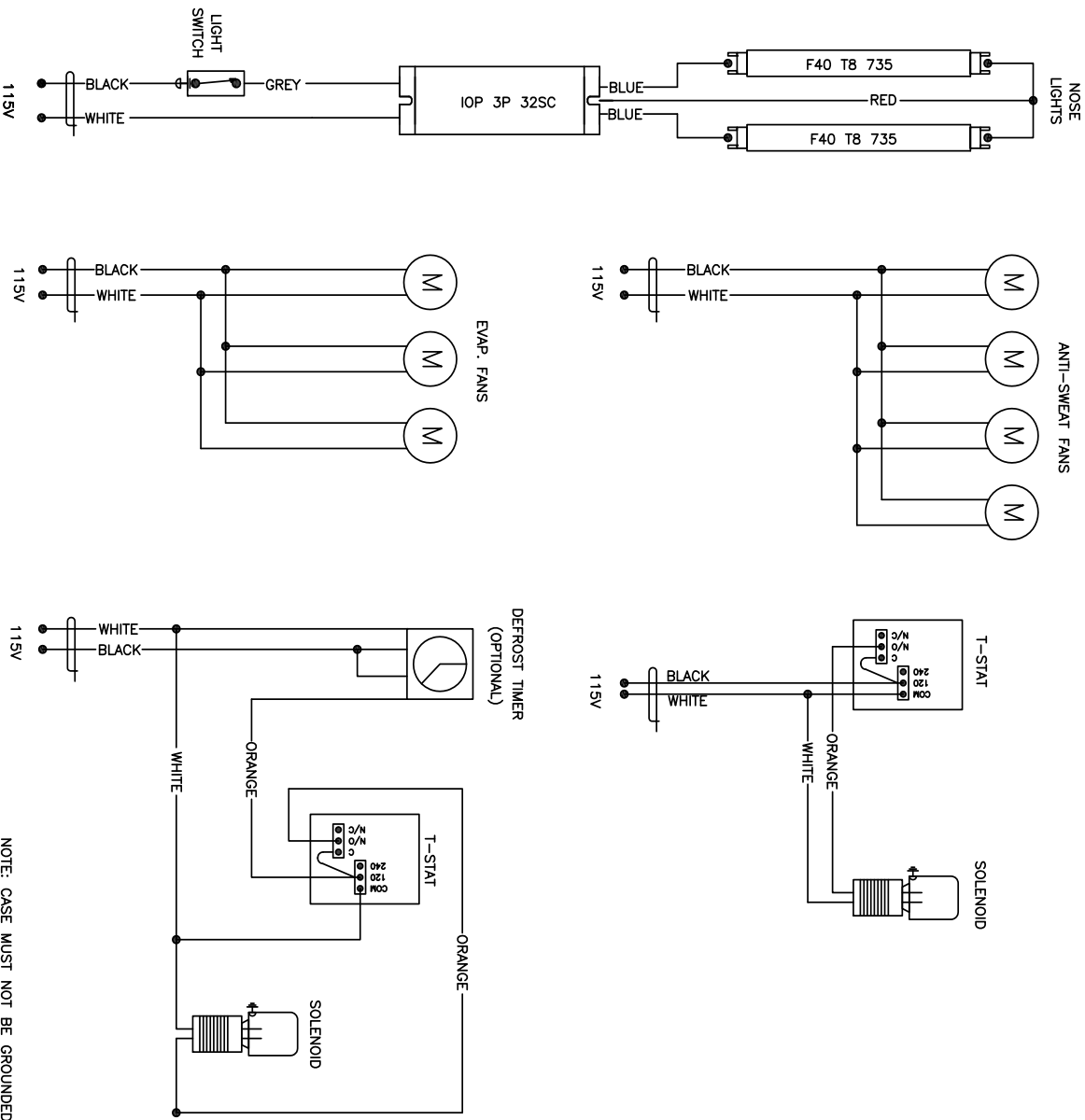


DATE:	09/07/06	REVISION	PROJECT #	ORDER #	CUSTOMER:	BSDT-8 R	DRAFTER	APPROVED BY
DRAWING #					STANDARD WIRING DIAGRAM		SCALE NONE	

Berkley
P.O. BOX 478
KEOSAUQUA, IA 52565
PHONE: (319)293-5777
FAX: (319)293-5776

NOTE: SHELVES ARE OPTIONAL CASE MAY OR MAY NOT BE EQUIPPED WITH UNDER SHELF LIGHTING.

VOLT.	120-208	1-60
FANS	2.5	
LIGHTS	.5	
BTU'S	450	
EVAP. TEMP.	+20°	



DATE: 09/07/06

REVISION: -

PROJECT #

ORDER #

P.O. BOX 478
KEOSAUQUA, IA 52565
PHONE: (319)293-5777
FAX: (319)293-5776

CUSTOMER: BSDT-10 R

DRAFTER

APPROVED BY

DRAWING #

ORDER #

PROJECT #

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KEOSAUQUA, IA 52565
PHONE: (319)293-5777
FAX: (319)293-5776

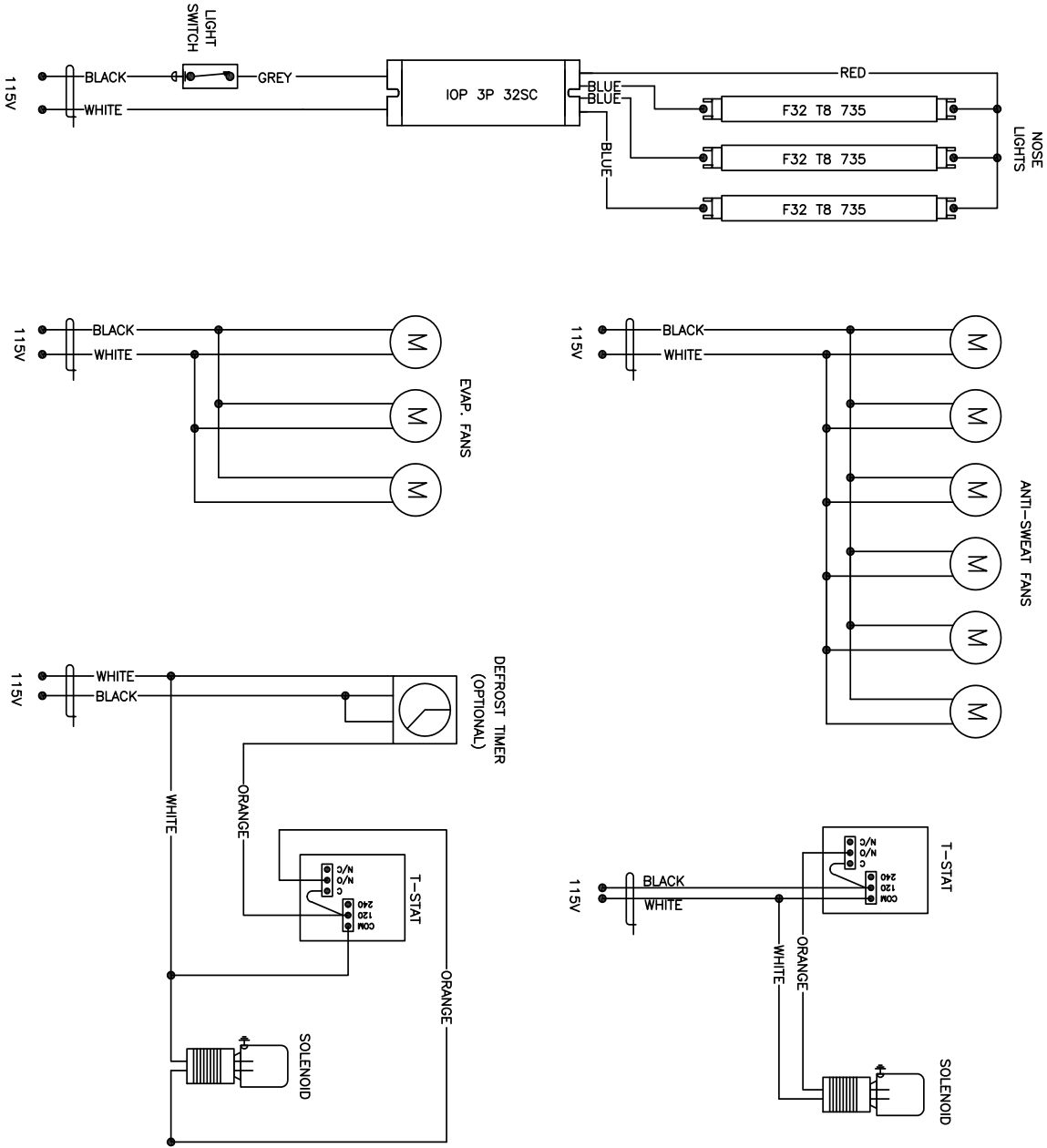
CUSTOMER: BSDT-10 R

DRAFTER

APPROVED BY

NOTE: SHELVES ARE OPTIONAL CASE MAY OR MAY NOT BE EQUIPPED WITH UNDER SHELF LIGHTING.

VOLT.	120-208	1-60
FANS	3.36	
LIGHTS	0	
BTU'S	450	
EVAP. TEMP.	+20°	

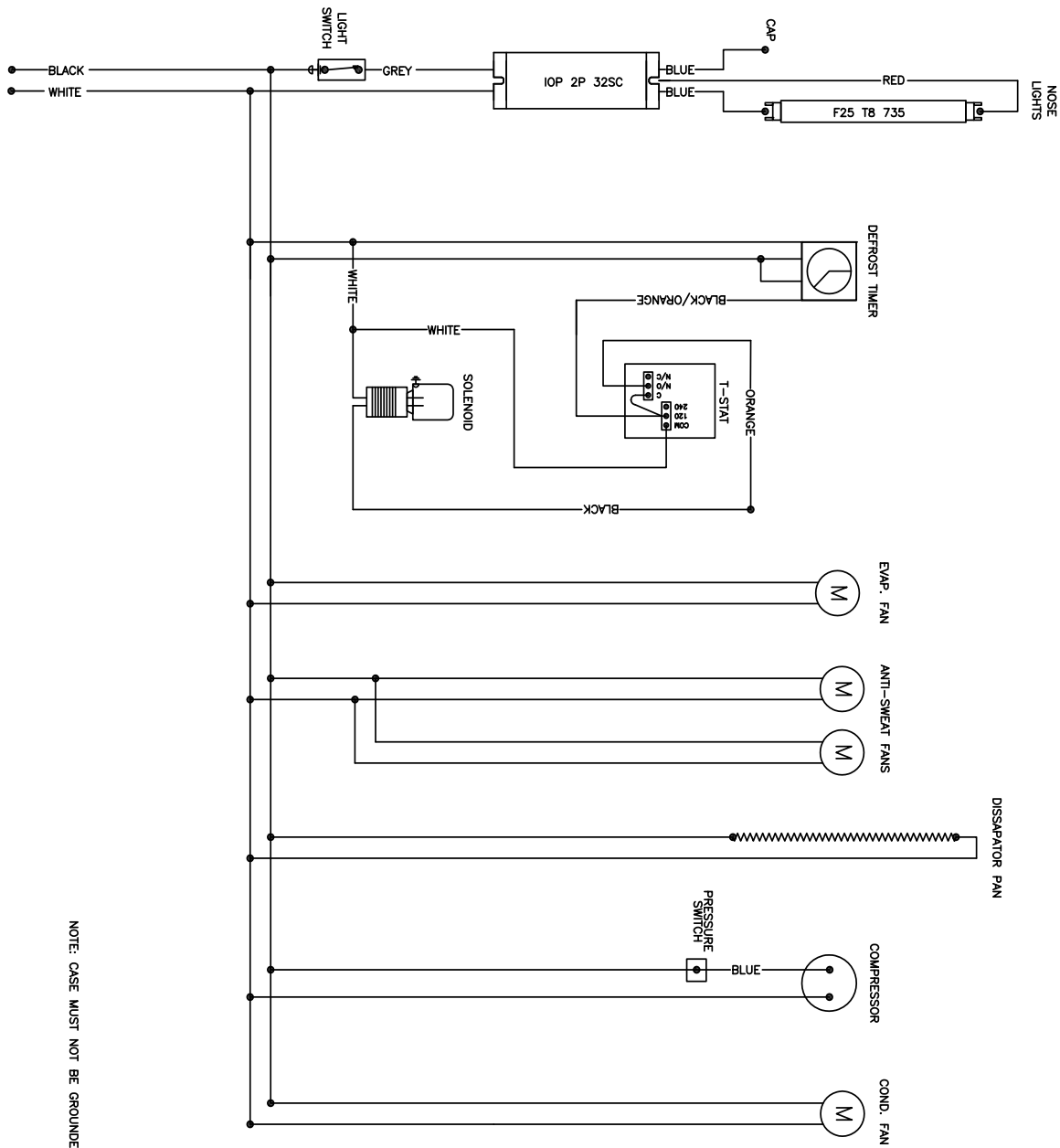


NOTE: CASE MUST NOT BE GROUNDED

DATE:	09/07/06	REVISION	---	PROJECT #	ORDER #	Barker	P.O. BOX 478 KEOSAUQUA, IA 52565 PHONE: (319)293-5777 FAX: (319)293-5776	CUSTOMER:	BSDT-12 R	DRAFTER	SCALE	APPROVED BY
DRAWING #									STANDARD WIRING DIAGRAM			

NOTE: SHELVES ARE OPTIONAL. CASE MAY OR MAY NOT BE EQUIPPED WITH UNDER SHELF LIGHTING.

VOLT.	120-1-60
AMPS	12.3
BTU'S	450
EVAP. TEMP.	+20°

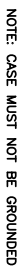


NOTE: CASE MUST NOT BE GROUNDED

DATE:	09/07/06	REVISION	—	PROJECT #	ORDER #	CUSTOMER:	BSD-T 4 SC	DRAFTER	APPROVED BY
DRAWING #							STANDARD WIRING DIAGRAM	SCALE	NONE

Barker
P.O. BOX 478
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PHONE: (319)293-5777
FAX: (319)293-5776

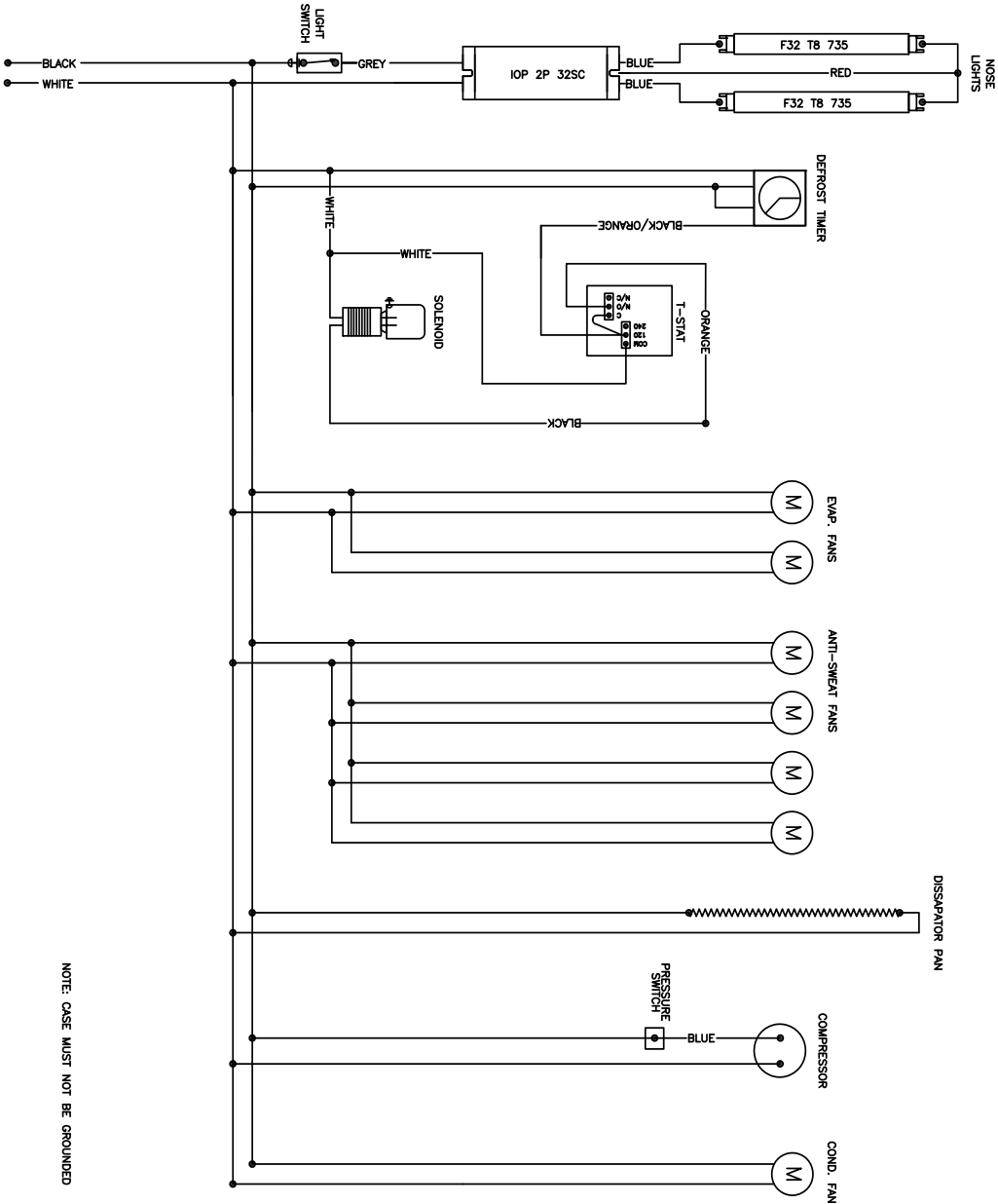
VOLT.	120-1-60
AMPS	19.38
BTU'S	450
EVAP. TEMP.	+20°



APPROVED BY

NOTE: SHELVES ARE OPTIONAL. CASE MAY OR MAY NOT BE EQUIPPED WITH UNDER SHELF LIGHTING.

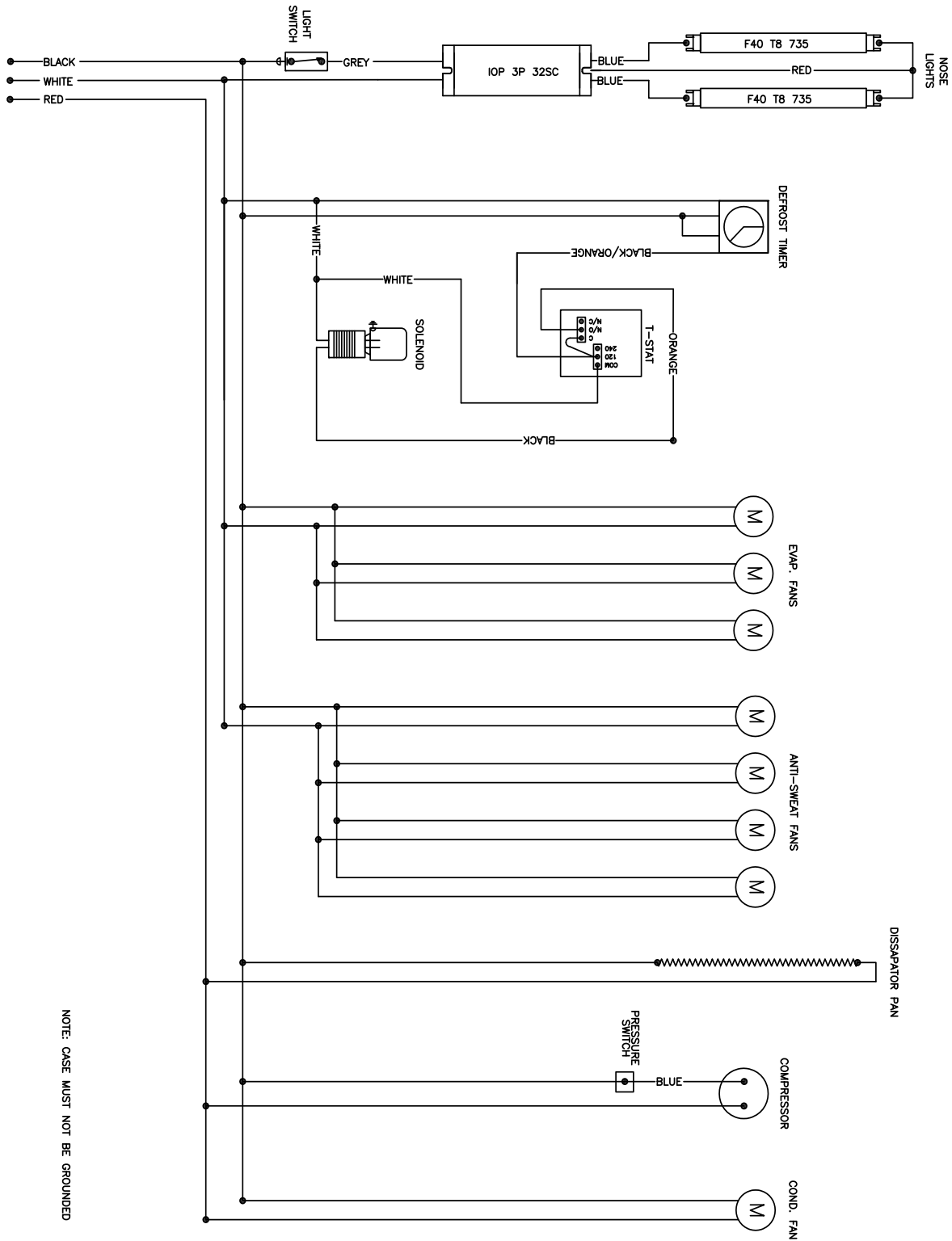
VOLT.	120-1-60
AMPS	20.34
BTU'S	450
EVA.P. TEMP.	+20°



NOTE: CASE MUST NOT BE GROUNDED

DATE:	10/04/06	REVISION	—	PROJECT #	ORDER #	Barker Co. P.O. BOX 478 KEOSAUQUA, IA 52565 PHONE: (319)293-5777 FAX: (319)293-5776	CUSTOMER:	BSD-T 8 SC	DRAFTER	SCALE	NONE	APPROVED BY
DRAWING #								STANDARD WIRING DIAGRAM				

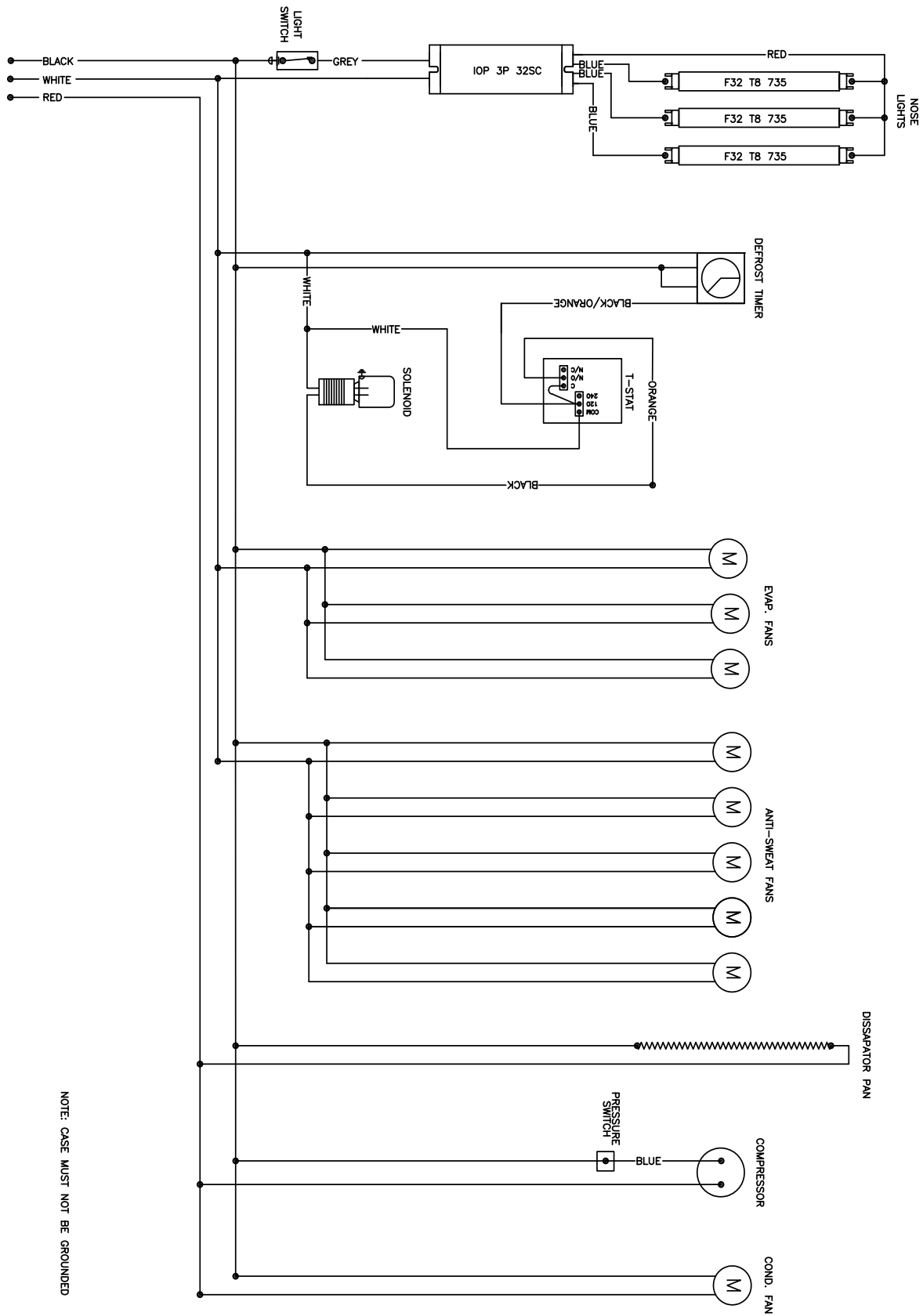
VOLT.	120-208	1-60
AMPS	13.85	
BTU'S	450	
EVAP. TEMP.	+20°	



DATE:	10/03/06	REVISION	—	 P.O. BOX 478 KEOSAUQUA, IA 52565 PHONE: (319)293-3777 FAX: (319)293-3776	CUSTOMER: BSD-T 10 SC STANDARD WIRING DIAGRAM	DRAWER	APPROVED BY
DRAWING #	-----	PROJECT #	ORDER #			SCALE NONE	

NOTE: SHELVES ARE OPTIONAL CASE MAY OR MAY NOT BE EQUIPPED WITH UNDER SHELF LIGHTING.

VOLT.	120-208 1-60
AMPS	14.45
BTU'S	450
EVAP. TEMP.	+20°



NOTE: CASE MUST NOT BE GROUNDED

DATE:	10/03/06	REVISION	---	PROJECT #	ORDER #	Barker Co	P.O. BOX 478 KEOSAUQUA, IA 52565 PHONE: (319)293-5777 FAX: (319)293-5776	CUSTOMER:	BSD-T 12 SC	DRAFTER	SCALE	APPROVED BY
DRAWING #									STANDARD WIRING DIAGRAM		NONE	

Maintenance Information

Cleaning

Case Exterior

Clean surfaces frequently with warm water and mild detergent. Do not use strong alkali solutions, steel wool, or abrasive cleansers.

Non-Glare Glass

Non-glare glass surfaces are coated to reduce the glare from lighting. Care must be taken not to scratch the coating. Use the following products only.

Cleaning Cloths

Scotch-Brite High Performance Cloth - manufactured by 3M and available in most grocery stores under the name Scotch-Brite Microfiber Cleaning Cloth in a 12" x 14" size. This cloth is washable and may be reused as long as it remains clean.

Spontex Microfibre Cleaning Cloth - distributed by Spontex and available in most grocery stores under the same name in a 15.75" x 12" size. This cloth is washable and may be reused as long as it remains clean.

The cleaning cloths named above will normally remove dust, grease, oil and fingerprints without the need for cleaning fluids. A light spray of the cleaning fluids listed below will reduce the time required for cleaning.

Cleaning Fluid - for more difficult cleaning jobs, these products are recommended:

Windex - standard product only (extra-strength or specialty products may not be suitable)

Glass-Plus - standard product only (extra-strength or specialty products may not be suitable)

Warm Water

DO NOT USE the following types of materials can be used for cleaning glass with anti-reflective coatings.

Coarse Paper Towels

Scouring Pads or Powders

Steel wool or Steel Fiber Materials

Blades

Acidic or highly Alkaline detergents

Fluorine based detergents

Case Interior

Lower deck can be removed for cleaning. Check to make sure the case drain(s) are not clogged. Clean interior with warm water and a mild detergent. A sanitizer should be used after washing to eliminate bacteria. Rinse thoroughly being careful not to flood the drain system. Avoid spraying water directly into electrical connections. **DO NOT USE A HIGH PRESSURE WATER HOSE. MAKE SURE FANS ARE SHUT OFF WHEN CLEANING THE INTERIOR OF THE CASE.** Drains should be cleaned once a month.

Evaporator Coil

Clean as needed.

Condenser Coil

FAILURE TO CLEAN COILS WILL VOID WARRANTY. Clean condenser coil every three months or as needed with a whisk broom or vacuum. Disconnect power when servicing. **FINS ON CONDENSER COIL ARE SHARP!**

Condensate Heater (Evap-O-Way)

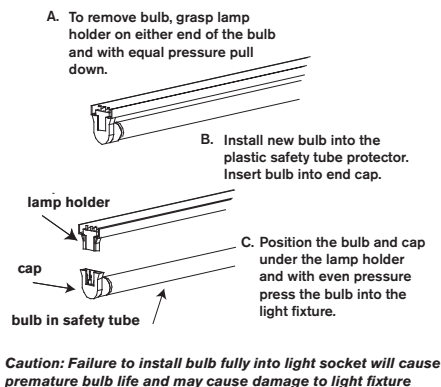
Add one teaspoon of scale remover or white vinegar to condensate heater pan once every three months or as needed. Heater is designed for 75° and 50% relative humidity. The condensate pan may overflow if design limits are exceeded.

Seafood Application

Plexiglas should be removed for cleaning. Reinstall Plexiglas by placing in front of case. Ice will hold it in place. **PLEXIGLAS MUST BE IN PLACE TO KEEP ICE OUT OF AIR SCREEN.**

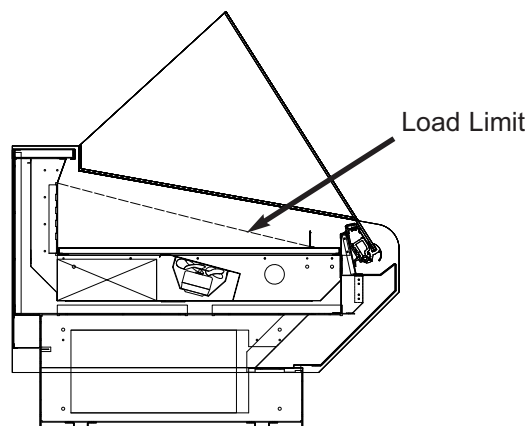
Light Replacement

The fluorescent lights in this case are furnished with plastic safety shields and end caps. When replacing fluorescent lamps, be certain to reinstall safety shield and caps. (See illustration). If the bulb is not fully seated the lights will not operate. **BE SURE BULBS ARE FULLY SEATED.** The light switch is mounted to the right side of the ceiling. See mechanical drawing for ballast box location.



Load Limits

DO NOT place product in merchandisers until all refrigeration controls have been adjusted and are at the proper operating temperature. **DO NOT** place product above load limits or in such a way that the discharge or return air grill are blocked. This will effect the performance of the case and effect the defrost system.



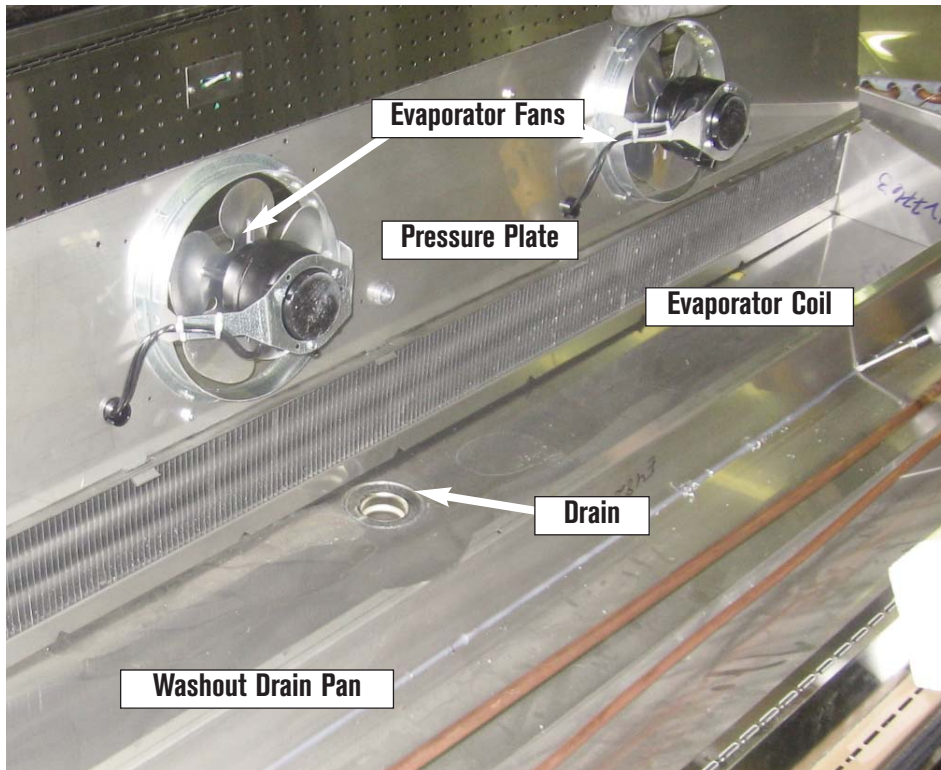
Service

WARNING!

DISCONNECT THE ELECTRICAL POWER WHEN SERVICING OR REPLACING ANY ELECTRICAL COMPONENT.

Evaporator Coil Area

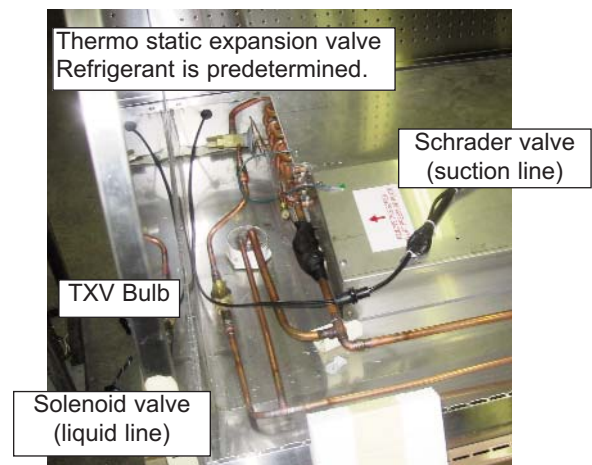
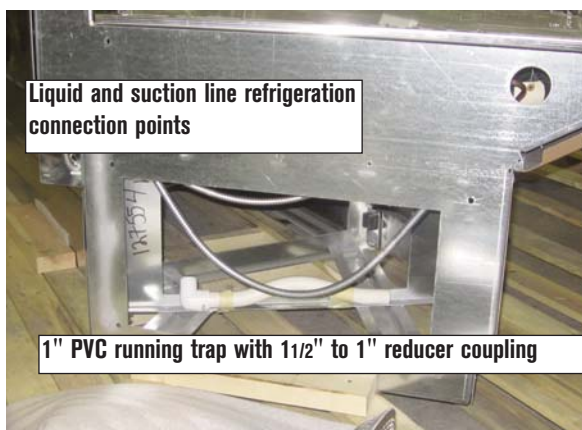
To access Evaporator Coil area, remove bottom deck by lifting up and out to expose pressure plate cover and evaporator fans. Remove screws as shown to the left and lift pressure plate cover up.



Service Instructions

1. Read the Installation and Service manual.
2. See the trouble-shooting guide in the event of problems.
3. If service is needed contact Barker Company for an authorized service person in your area. Before calling for service locate the case model and serial number on the data tag located on the customer left, outside back of the case, the customer left, inside top of the case, or contact the factory for location.

Drain and refrigeration connections are located on the customer left side at the back of the case.



Troubleshooting Guide

Problem	Cause	Action
Case temperature is too warm.	<p>Case is in defrost.</p> <p>Product load may be over its limits blocking airflow.</p> <p>Ambient conditions may be affecting the case operation.</p> <p>Condensing coil or evaporator coil is clogged or dirty.</p>	<p>Redistribute product.</p> <p>Check case position in store. Is the case located near an open door, window, or air conditioning vent?. RH should not be over 50% and temperature above 75°.</p> <p>Clean coil.</p>
Case temperature is too cold.	<p>The T-Stat Temp is set too low.</p> <p>Ambient conditions may be affecting the case operation.</p>	<p>Check setting. See factory guidelines.</p> <p>Check case position in store. Is the case located near an open door, window, or air conditioning vent? RH should not be over 50% and temperature above 75°.</p>
Condensation on glass.	<p>Inadequate air circulation.</p> <p>Product load may be over its limits blocking airflow.</p> <p>Ambient conditions may be affecting the case operation.</p>	<p>Check grill on die board for adequate airflow over glass.</p> <p>Redistribute product.</p> <p>Check case position in store. Is the case located near an open door, window, or air conditioning vent? RH should not be over 50% and temperature above 75°.</p>
Water has pooled under case.	<p>Case drain is clogged.</p> <p>Check PVC drains under case for leaks.</p> <p>Evaporator pan is overflowing.</p>	<p>Clear drain.</p> <p>Repair as needed.</p> <p>Check electrical supply to dissipater pan. Check float assembly. (Note: Cases equipped with electric dissipater pans should NEVER have food products washed or poured into the drain as it will result in damage to the heating element.)</p>
Frost or ice on evaporator coil.	<p>Check evaporator fans.</p> <p>Defrost clock doesn't work.</p>	<p>Check electrical connections. Have unit serviced by a qualified service technician.</p>

Barker Specialty Products Service Department

IMPORTANT INFORMATION!

FOR PROMPT SERVICE WHEN CONTACTING THE FACTORY FOR SUPPORT, BE SURE TO HAVE CASE MODEL AND SERIAL NUMBER HANDY.

(THIS INFORMATION IS LOCATED ON THE DATA TAG ATTACHED TO THE CASE. SEE BELOW FOR DATA TAG LOCATIONS)

For any warranty or service issues not covered by this manual, for tech support, or for warranty service calls, please contact the Barker Specialty Products Service Department at:

(319) 293-3777

Parts

Ordering Procedure

1. Contact the Service Parts Department
Melissa Marshall
703 Franklin Street
PO Box 478
Keosauqua, IA 52565
Tel: 319-293-8323
Fax: 319-293-8377
melissa.marshall@hillphoenix.com
2. Provide the serial number of the case containing the part.
To locate the serial number look on the data tag located on the customer left, outside back of the case, the customer left, inside top of the case, or contact the factory for location.
3. If parts are to be returned for credit, contact the Parts Department. Do not send parts without authorization.



BEFORE SERVICING

**ALWAYS DISCONNECT ELECTRICAL
POWER AT THE MAIN DISCONNECT
WHEN SERVICING OR REPLACING
ANY ELECTRICAL COMPONENT.**

WARRANTY

HEREINAFTER REFERRED TO AS MANUFACTURER

FOURTEEN MONTH WARRANTY. MANUFACTURER'S PRODUCT IS WARRANTED TO FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP UNDER NORMAL USE AND MAINTENANCE FOR A PERIOD OF FOURTEEN MONTHS FROM THE DATE OF ORIGINAL SHIPMENT. A NEW OR REBUILT PART TO REPLACE ANY DEFECTIVE PART WILL BE PROVIDED WITHOUT CHARGE. PROVIDED THE DEFECTIVE PART IS RETURNED TO MANUFACTURER. THE REPLACEMENT PART ASSUMES THE UNUSED PORTION OF THE WARRANTY.

WARRANTY CLAIMS: All claims should include: the serial number of the cabinet, proof of purchase, date of installation, and all pertinent information supporting the existence of the alleged defect. Any action for breach of these warranty provisions must be commenced within one (1) year after that cause of action has accrued.

All warranty service work must be pre-authorized by Barker Specialty Products (800-814-0446). Barker Specialty Products reserves the rights to designate the service provider, time in which labor is to be performed and specify amount of time per warranty problem.

This warranty does not include labor or other costs incurred for repairing, removing, installing, shipping, servicing or handling of either defective parts or replacement parts.

The fourteen month warranty shall not apply:

1. To any unit or any part thereof which has been subject to accident, alteration, negligence, misuse or abuse, operation on improper voltage, or which has not been operated in accordance with the manufacturer's recommendation, or if the serial number of the unit has been altered, defaced, or removed.
2. When the unit, or any part thereof, is damaged by fire, flood, or other act of God.
3. Outside the continental United States.
4. To labor cost for replacement parts, or for freight, shipping expenses, sales tax or upgrading.
5. When the operation is impaired due to improper installation
6. When installation and startup forms are not properly complete or returned within two weeks after startup.

THIS PLAN DOES NOT COVER CONSEQUENTIAL DAMAGES. Manufacturer shall not be liable under any circumstances for any consequential damages, including loss of profit, additional labor cost, loss of any delay in its performance hereunder due to causes beyond its control. The foregoing shall constitute the sole and exclusive remedy of any purchases and the sole and exclusive liability of Manufacturer in connection with this product.

The Warranties are Expressly in Lieu of All Other Warranties, Express of Implied and All Other Obligations or Liabilities on Our Part. The Obligation to Repair or Replace Parts or Components Judged to be Defective in Material or Workmanship States Our Entire Liability Whether Based on Tort, Contract or Warranty. We Neither Assume Nor Authorize any Other Person to Assume for Us Any Other Liability in connection with Our Product.

Mail approved warranty claims to the address listed below: