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**FLASH BEER CHILLER - TAYFUN 75-ICE
BANK
OPERATION AND SERVICE MANUAL
T75F-1/4T3**



August, 2016

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1. INSPECTION

Each shipment should be carefully checked against the bill of lading or packing slip. The shipping receipt should not be signed until all items listed on the bill of lading have been accounted for. Check carefully for concealed damage. Any shortage or damages should be reported to the delivering carrier.

Damaged material becomes the delivering carrier's responsibility, and should not be returned to the manufacturer unless prior approval is given to do so.

Warning: This equipment contains a refrigerant which may harm the public health and environment by destroying ozone in the upper atmosphere. Venting or release of certain refrigerants to the atmosphere is illegal. Refrigerant recovery devices must be used when servicing this unit. Consult your local codes for requirements.

Warning: Do not service this unit before disconnecting all power supplies.

2. INSTALLATION REQUIREMENTS

- Dedicated power line, 115V, 60Hz, 15Amp.
- Recommended ambient temperature range 60-90F.
- Adequate air circulation as follows:
 - air condenser cannot be obstructed or covered in any way, - no filters allowed to be used with the unit.

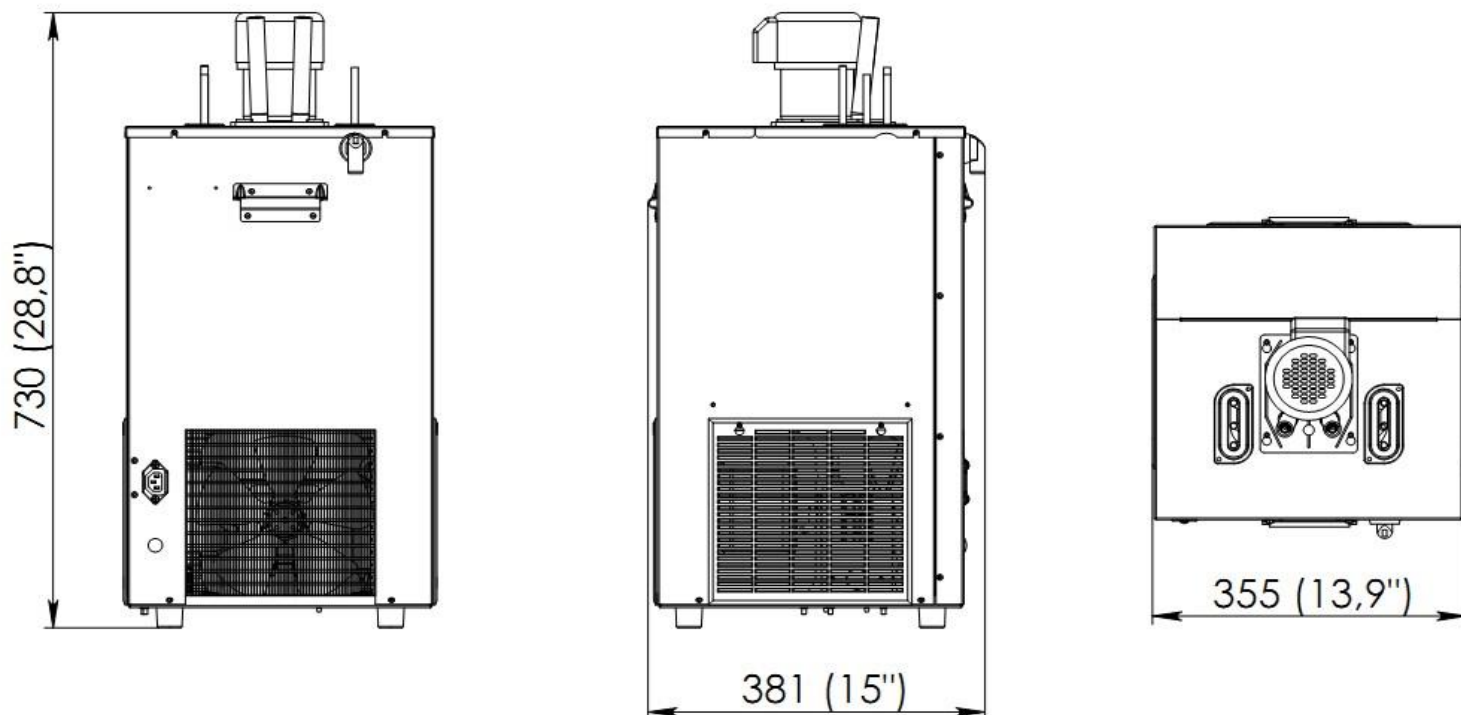
3. SPECIFICATION

Name	Unit	TAYFUN 75 ICE BANK
Part Number		T75F-1/4T3
Maximum Distance	Ft	up to 25'
Capacity, (evap 20F)	BTU/hr	1900
Water tank capacity	Gal	4.92
Ice bank at 90F	Lbs	21.8
Product lines	Coils	3 (5/16"O.D.)
Dedicated Circuit	Amp	15
Voltage	V/Hz	115/60
Compressor Power	H/P	1/4
Thermostat	Type	Manual
Glycol Pump	Type	Vertical
Refrigerant	Type	R134a
Refrigerant amount	Lbs	0.507
Dimensions	Width, in	13.9
	Depth, in	15.0
	Height, in	28.8
Weight (net/gross)	Lbs	70.5 / 82

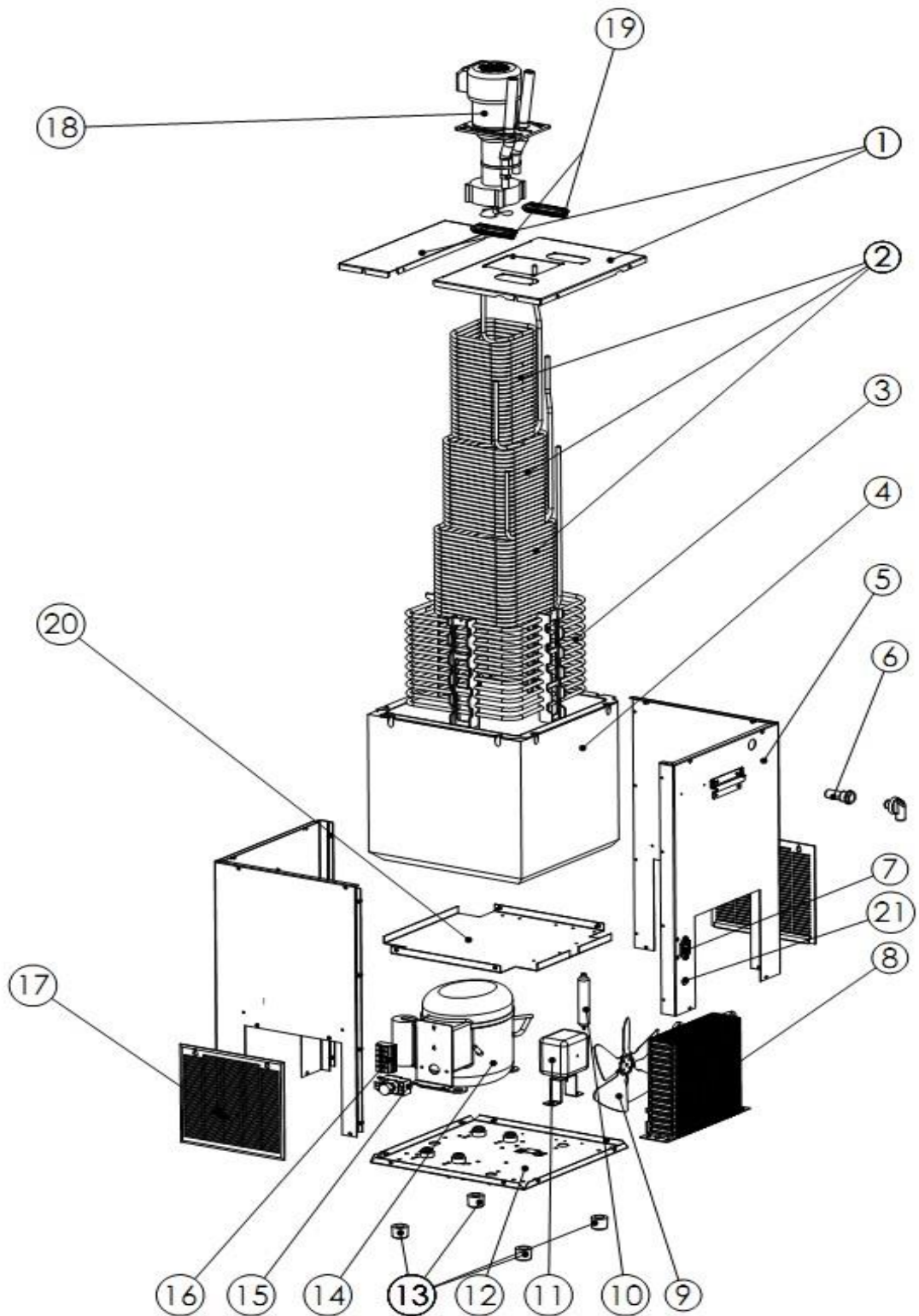
4. REPLACEMENT PARTS

DESCRIPTION/ MODEL	TAYFUN 75 ICE BANK
Compressor	Tecumseh : AEZ4430Y or AE4430Y, or Embraco NEK6160Z
Start capacitor	<u>for Tecumseh AEZ4430Y</u> : 375 μ F /160V or <u>for Tecumseh AE4430Y</u> : 243-292 μ F /110V or <u>for Embraco NEK6160Z</u> : 145-174 μ F /165V
Start relay	<u>for Tecumseh AEZ4430Y</u> : MTRPH0033 (current relay), Optional : 3ARR12KP*477(current relay) or <u>for Tecumseh AE4430Y</u> : RP6218-CXR (current relay) or <u>for Embraco NEK6160Z</u> : 9660-****-172 (current relay), Optional : MTRPH0019 (current relay)
Thermo overload relay	<u>for Tecumseh AEZ4430Y</u> : T0797 or <u>for Tecumseh AE4430Y</u> : T91531-23-CXR or <u>for Embraco NEK6160Z</u> : MRT22AHK, Optional : T0590
Condenser	"Lu-Ve" STFT 14221
Condenser fan	"EBM" M4Q045-BD-03-04
Pump motor	for Totton/FloJet/ : YDK80/60-2-90A3
Pump	Totton/FloJet/ TOTTON SPC42
Lamp	C-35UL (green)
Manual thermostat	Ranco K50-H2005/003 (6FLA, 36LRA, 250Vac) or any similar UL-recognized

4.1. OVERALL DIMENSIONS



4.2. PARTS VIEW



- | | | | |
|----|------------------------------|----|---------------------------|
| 1 | LIDS | 12 | BASE |
| 2 | PRODUCT LINE | 13 | RUBBER LEGS |
| 3 | EVAPORATOR | 14 | COMPRESSOR |
| 4 | WATER TANK | 15 | THERMOSTAT |
| 5 | PROTECTIVE CASING | 16 | TERMINAL POD |
| 6 | OVERFLOW | 17 | PLASTIC GRID |
| 7 | CONNECTOR R302SN /250V, 10A/ | 18 | WATER PUMP and PUMP MOTOR |
| 8 | AIR CONDENSER | 19 | COVER |
| 9 | IMPELLER | 20 | FRAMING |
| 10 | DRIER FILTER | 21 | LAMP |
| 11 | CONDENSER FAN | | |

5. ICE BANK CHILLER SET-UP

Once the survey of the location has been completed to determine the positioning of the ice bank chiller and the connecting draft beer dispensing stations (refer to the specifications sheet to be certain that the trunk line will be within the recommended distance), make the necessary provisions to place the unit and provide for the electrical services.

The ideal set-up is to mount the ice bank chiller on a proper equipment stand that is easily accessible for routine maintenance and service.

NOTE: Do not place the ice bank chiller in the walk-in cooler, as the cold ambient temperature will reduce the cooling performance of the unit.

NOTE: A minimum of twelve inches of clearance should be allowed around the entire unit for proper performance. Additional clearance should be considered for optimal performance and serviceability.

6. WATER FILLING

The water tank capacity is 4.92 Gal.

NOTE: Fill the tank with water only, no glycol should be added. Distilled water _____ should be used.

Fill the tank with water by removing the black plug on the deck lid and placing a funnel in the fill hole. Pour in the water until all evaporator coils are covered. After water circulation start-up add additional water if required to reach the recommended level in tank.

NOTE : Always inspect the water tank for any debris as such might damage the pump.

7. SYSTEM START-UP

It is a good practice to operate the ice bank unit until sufficient amount of ice builds around the evaporator coils before running beer through to the dispensing tap. This enables the water circuit to be checked for leaks.

Run the beer product through the ice bank.

Check the system for leaks.

Thoroughly insulate all line joints in the trunk line and dispensing taps.

8. MAINTENANCE

1. Inspect the unit every 3 months to ensure that the water level is maintained to the fill level.
2. If the level is low, add the proper volume of water to maintain the recommended level in the tank.

3. Check and clean the condenser using a non-metal brush every week, and using an air compressor or a vacuum cleaner every six months. Please check our instructions below.

Note: If the unit is installed under the bar or in a high traffic area, cleaning with a compressor or a vacuum is required every three month.

4. Check for proper air flow through the unit ensuring enough clearance around it is allowed. There must be no obstructions in front of the air flow vents especially any sort of filters in front of the condenser unless approved by UBC.

5. Check the condition and effectiveness of the trunk line insulation.

9. AIR-COOLED CONDENSER CLEANING

UBC ice bank chillers are equipped with special tubeless heat exchangers, manufactured with an innovative technology. This ensures the maximum capacity with the smallest size. Any condenser is

prone to accumulate dirt and airborne dust that may reduce or block the air flow. To guarantee the cooling effectiveness and to prevent damage to other electrical components, the condenser must be cleaned regularly.

9.1. BI-WEEKLY CLEANING

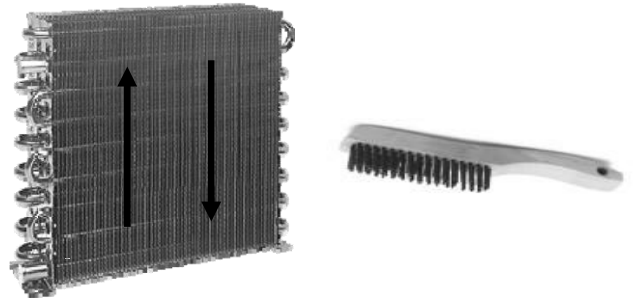
Step 1: Disconnect the power.

Step 2: Clean the condenser with a non-metal brush, available at any Home Depot, Lowe's or any other hardware store.

For best results the condenser should be cleaned top-down (see picture).

Step 3: A finish soft brush or vacuum cleaning is recommended.

Step 4: Connect the power.



9.2. SEMI-ANNUAL or QUARTERLY CLEANING

The bi-weekly condenser cleaning can only guarantee surface cleaning. Using a non-metal brush it is impossible to reach and clean the funnel and between the funnel space. Only air blowing or deep vacuum cleaning can achieve proper cleaning results. To maintain high performance and efficiency, a semi-annual cleaning routine must be established. Please follow the instructions as described below:

Step 1: Disconnect the power.

Step 2: Clean the condenser with a non-metal brush.

Step 3: Clean the condenser thoroughly using a pressurized air flow (portable air compressor) or a vacuum cleaner. (see picture below) Check condenser cleanness using a flashlight. Continue until compressor appears clean in between the fins. Step

4: Connect the power and turn on the unit.



10. ICE BANK TROUBLESHOOTING

PROBLEM	POSSIBLE FAULT	POSSIBLE CAUSE	SOLUTION
No Product.	Product frozen in coil.	<p>Ice bank too large? Beer coils/ lines are frozen in the ice?</p> <p>If beer lines are not frozen in the ice.</p> <p>Has customer been cleaning lines.</p>	<p>Change thermostat setting from 7 (MAX) to 6 or 5 depending on the ambient temperature.</p> <p>Check if the thermostat probe is in place, in the plastic holder attached to evaporator coils.</p> <p>Test/replace thermostat.</p> <p>Check the keg, fob detector, the VM water cooled beer chiller and trunk line.</p> <p>Clean beer lines.</p>
Water tank overflows, water on T75 Icebank unit or on the floor near the unit.	Beer leakage from fittings connecting trunk line to the product lines in T75-Icebank unit.	Products lines from the trunk line or from the unit are not properly connected to John Guest fittings.	Immediately notify a service technician. If water gets into the condensing unit it might cause a short circuit and permanently damage the T75-Icebank.
Product consistently too warm, fobbing.	No ice bank or water tank is too warm.	<p>Has the T75-Icebank unit been running for at least 6-10 hrs?</p> <p>Is thermostat set at 7(MAX).</p> <p>Is ambient temperature above 90°F?</p> <p>Water level is too low.</p> <p>Fuse blown or no electrical supply.</p> <p>Refrigeration system failed.</p>	<p>Depending on the ambient temperature it takes from 6-10 hours to form an ice bank.</p> <p>Turn thermostat knob to 7 (MAX).</p> <p>Ambient temperature cannot be above 90°F for the system to run properly.</p> <p>Refill the tank with water so it covers all of the coils.</p> <p>Check fuse, plug, RCCB switch and mains switch.</p> <p>Check if the condenser is free of dirt and dust or any obstacles that might affect air circulation – refer to refrigeration troubleshooting.</p> <p>Check if the base unit is plugged into a dedicated 15 Amp power circuit – refer to refrigeration troubleshooting.</p>

10.1 REFRIGERATION TROUBLESHOOTING

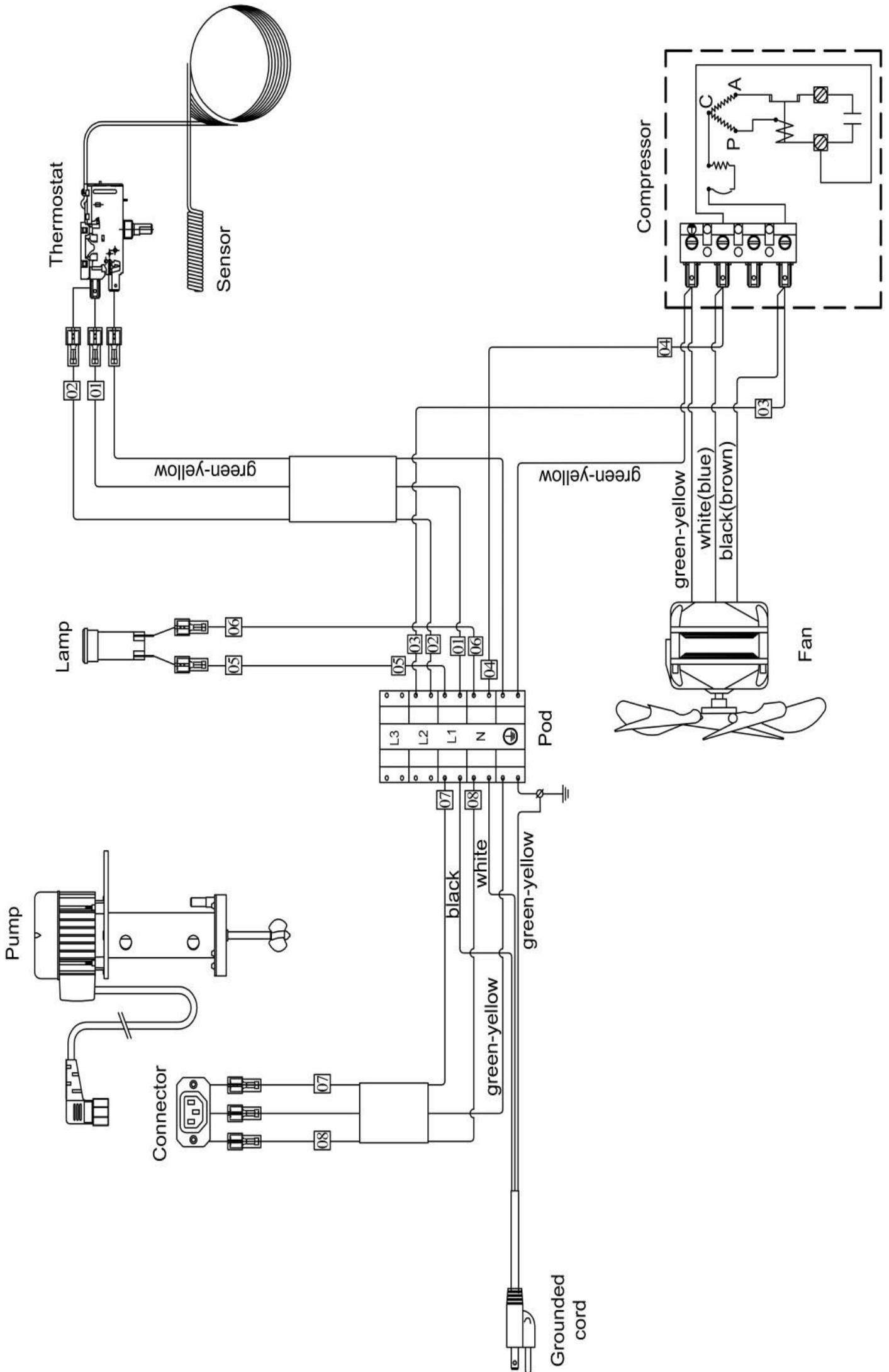
PROBLEM	CAUSE	SOLUTION
Compressor does not start, no signal appears on the thermostat's.	No proper power supply.	<ol style="list-style-type: none"> 1. Check the power (voltage) in receptacle. 2. Turn off the start switch or the disconnect switch. 3. Using a multimeter check the power in the manual thermostat (Digital Thermostat : contacts 6-7). 4. Improper or loose wiring. Check against wiring diagram and wire properly.
	Thermal protector is not working properly.	Replace the unit.
Compressor does not start , thermostat reads tank temperature, no hum, but the fan motor is running.	Improper or loose contact in the thermostat or wrong thermostat setting.	Check contacts on the manual thermostat. Check contacts 8-9 on the digital thermostat.
	Start capacitor or start relay malfunction.	First check and replace the start relay and then the start capacitor.
	Compressor motor has a ground fault (also known as a short circuit to ground).	Replace the unit.
Compressor does not start, thermostat reads temperature, hum.	Thermostat not functioning properly.	Check and replace thermostat.
	Inadequately Low voltage to compressor usually caused by poor quality or non dedicated power line.	Measure voltage across common and run terminals on the compressor (shown on the compressor). Voltage must not drop below 90% of rated voltage. Turn off the system until proper voltage is restored.
Compressor starts and runs but no temperature reading is displayed.	Probe failure or loose wiring.	<ol style="list-style-type: none"> 1. Check probe wiring. 2. Replace probe.
Compressor starts and runs, stops in less than 1 min.	Inadequate Low voltage to compressor usually caused by poor quality or non dedicated power line.	Measure voltage across common and run terminals on the compressor (shown on the compressor). Voltage must not drop below 90% of rated voltage. Turn off the system until proper voltage is restored.
	Start relay not working properly usually caused by overheating of the compressor due to poor air circulation through the air condenser or inadequate low voltage in the power line.	Replace the start relay
	Improper or loose wiring.	Check against the wiring diagram and wire properly.
	Discharge pressure too high.	Replace the unit.

	Internal mechanical trouble in the compressor usually caused by overheating of the compressor due to poor air circulation through the air condenser or inadequate low voltage in the power line.	Replace the unit.
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Compressor starts and runs, but short cycles on thermal protector (more than 1min. but less than 5 min.).	Inadequate low voltage to compressor usually caused by poor quality or non dedicated power line.	Measure voltage across common and run terminals on the compressor (shown on the compressor). Voltage must not drop below 90% of rated voltage. Turn off the system until proper voltage is restored.
	Return gas to compressor is too warm, usually caused by overheating of the compressor due to poor air circulation through the air condenser	<ol style="list-style-type: none"> 1. Check air-cooled condenser fan. If not working, to be replaced. 2. Check and clean air-cooled condenser.
	Thermal protection is not working properly, usually caused by overheating of the compressor due to poor air circulation through the air condenser.	Replace the unit's thermal protection sensor. Check if the condenser is clean – this means you can see through the condenser with a flash light.
	Compressor's discharge or suction pressure is too high.	Replace the unit.
	Compressor motor has windings shorted, usually caused by overheating of the compressor due to poor air circulation through the air condenser or Inadequate low voltage to compressor usually caused by poor quality or non dedicated power line.	Replace the unit.
Unit runs OK, but run cycle is shorter than normal.	Wrong digital thermostat settings, such as: 1. Temperature differential lower than 2F	Refer to Digital Thermostat settings, such as: 1. Check and reset C1 (sensor differential).
	Thermostat not working properly.	Replace the thermostat
	Probe not reading correctly.	Replace the probe.
	Glycol pump not working properly.	Check and replace the pump.
Unit operates long cycles or continuously.	Wrong digital thermostat settings, such as: 1. SET POINT value is very low.	Refer to digital thermostat settings, such as: 1. Check and/or reset SET POINT.
	Refrigerated glycol has excessive load or poor insulation, or the system is inadequate to handle load.	Check operating conditions and prevent heat leakage where possible. Ambient temperature must not exceed 100F.
	Return gas to compressor is too warm, usually caused by dirty condenser or faulty fan motor.	<ol style="list-style-type: none"> 1. Check air-cooled condenser fan. If not working or slow, to be replaced. 2. Check and clean air-cooled condenser.
	Thermostat malfunction.	Check thermostat settings and/or replace thermostat.
	Probe is not reading correctly.	Replace the probe.

	Glycol pump is not working properly.	Check and replace the pump
	Low glycol level in the tank.	Check glycol level in the tank. Evaporator coils must be covered with glycol (fill level).
	Freon leakage.	Replace the unit.
Unit rattles or vibrates during operation.	Loose parts or mountings, tubing rattle, compressor vibration.	<ol style="list-style-type: none"> 1. Place the unit an even surface. 2. Identify sound or vibration source Screws to be tighten to avoid vibration.

11. ELECTRICAL WIRING DIAGRAM



12. LIMITED PRODUCT WARRANTY

UBC Group warrants that its products will be free from defects in material and workmanship, under normal use, regular service and preventative maintenance for 1 year from the date of sale. The warranty period for compressors is 5 years as described below.

Prerequisites

This warranty is available to the first end user for equipment purchased from UBC authorized dealers. Equipment resold without such authorization will not be covered under this warranty. All equipment must be properly installed according to guidelines found in the product manuals.

Approved usage conditions for operation must be provided as required in the product manuals (including but not limited to ambient conditions, dedicated power circuit and required clearance)

All equipment must be maintained and cleaned regularly as specified in the product manuals.

Warranty stub must be submitted to UCB Group at the completion of the installation.

In case of equipment failure customer must contact UBC Group for repair authorization before any repairs are made.

Warranty claim form must be completed and submitted to UBC Group.

Warranty Period

Warranty period is one (1) year from the date of installation but no longer than fourteen (14) months from date of sale. Compressor warranty period is five (5) years from the date of installation or sixty two (62) months from the date of sale.

Warranty stub must be completed and returned to UBC Group for warranty to be activated and installation date to be determined. In the absence of a warranty stub warranty period will begin on the date of sale.

Warranty Coverage

Refrigeration Units (including compressor)

If a product is deemed defective by UBC GROUP within the warranty period described above UBC GROUP, at its discretion, will either repair or authorize the repair of the product. UBC GROUP will be responsible for the labor charges according to the Labor Charges segment. within the warranty period provided that all above mentioned prerequisites are satisfied. UBC GROUP may also replace the product at its discretion bearing the labor costs for the product replacement according to the Labor Charges segment. The customer is responsible for the return of the defective part or product to UBC GROUP for inspection and defect determination. Customer must package the part or product according to the specific product's manual before shipping it. UBC Group will cover the shipping costs for the part or product as described in the Shipping segment of this warranty.

Compressor

Compressors are covered for an additional Parts Only warranty for a period of four (4) years beyond the general coverage described above. Under the additional coverage if a compressors is deemed defective by UBC Group providing that all of the prerequisites described above are met it will be exchanged for a new compressor. UBC Group will not cover the labor charges

LIMITED PRODUCT WARRANTY (continued)

associated with the compressor replacement. It is the responsibility of the customer to return the defective part to UBC Group. Customer must package the part according to the specific product's manual before shipping it. UBC Group will cover the shipping costs for the part as described in the Shipping segment of this warranty.

The customer has the option to send the unit to UBC Group for compressor replacement and in this case will be responsible for all shipping charges. There will be no additional charges by UBC Group for the compressor replacement.

Defect Determination

Defect determination is the sole discretion of UBC Group. Customers must contact UBC Group to receive authorization for any course of action prior to any repairs. A warranty claim form must be completed and submitted to UBC Group in order to process the claim and authorize any reimbursements. If a repair is made without the explicit authorization from UBC Group it will not be covered by the warranty and will not be reimbursed.

“Authorization for return” is for inspection purposes only. It is the sole discretion of UBC as to whether or not a credit/refund will be allowed. UBC GROUP's determination of defects is final.

Product Delivery

The customer is responsible for inspecting units upon receipt for concealed damage caused during shipping. The customer must report damaged or non-working units or components to UBC Group immediately. Deliveries with physical damage should be denied. A claim must be filed with the carrier for any damages during shipping. UBC Group is not responsible for units damaged during shipping.

Warranty does not cover

- Physical damage or water damage to the unit caused by negligence of the user.
- Improper installation and modifications made without UBC Group's explicit approval.
- Damage resulting from electrical supply, water supply, drainage, flood, storm or any other incidents.
- Repairs made without the explicit authorization of UBC Group or without the submission of the warranty claim form.

Note:

UBC GROUP IS NOT RESPONSIBLE FOR ECONOMIC LOSS OR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSSES OR DAMAGES ARISING FROM FOOD OR PRODUCT SPOILAGE CLAIMS AS A RESULT OF REFRIGERATION FAILURE.

Shipping

During the warranty period UBC Group will be responsible for shipping charges as describe in the previous segments. UBC Group will ship replacement parts using standard ground shipping only. Refrigeration units will be shipped on pallets ground freight (LTL) only. If expedited shipping is needed the customer will incur the difference in shipping cost.

LIMITED PRODUCT WARRANTY (continued)

Labor Charges

□□ Please present this schedule to the service company to avoid any labor charge misjudgments. When submitting a bill for warranty work, the hours submitted must be within the guidelines listed below. The form is designed for a single claim for a single unit. If more units serviced additional forms required. The time spent on the job should be multiplied by the straight time labor rate to determine the charge. UBC Group reserves the right to pay no more than the average commercial hourly rates within the particular territory or region of the country. UBC Group will not cover any additional fees charges or material costs associated with a claim, with the exclusion of Freon gas if used to refill the unit. To prevent delays in processing claims, a complete explanation of the diagnosis and repair is required.

Technician making refrigeration system repairs must be certified per EPA requirements. For locally purchased parts UBC allows credit up to our dealer/distributor price.

Under no circumstances should UBC Group's liability for labor charges exceed the purchase price of the unit in the original invoice.

MAXIMUM LABOR TIME ALLOWED FOR A WARRANTY CLAIM

Travel time	1 hour
Diagnosis (check and determine the probable cause of the problem; allowed only once)	1 hour
Part replacement (thermostat, pump & motor, start relay, fan & motor, etc.)	1/2 hour
Refrigeration (detect a Freon leak, fix and refill Freon)	1 hours
Compressor replacement	3 hours
Unit replacement	2 hours

If the repair cannot be finished in one visit and a second visit is required another hour of travel time will be allowed. The maximum travel time for a single claim is two (2) hours.

Instructions for completing form

- All fields must be filled out completely
- All parts replaced must be listed in the claim form
- Must be submitted in legible form (print)
- All claims **MUST** be submitted directly to UBC Group in order to receive reimbursement:

Email: info@beer-co.us

Email: info@beer-co.ca

Fax: (866) 659-8904

Fax: (905) 629-2577

Phone: (636) 379-2226

Phone: (905) 629-2597

12.1. WARRANTY CLAIM FORM

Please see instruction before completing form!

Service invoice
Number (if attached) _____

Return authorization number _____

Date malfunctioned		Date repaired		Date form completed	
Model number		Serial Number		Installation date	
SERVICE COMPANY - Contact name, Phone, Full address			CUSTOMER - Contact name, Phone, Full address		

COMPLAINT:

Symptoms and summary of diagnosis made are required. List hours and explanation for each repair made. Give exact location of any leaks.

Service performed	Hours

Parts replaced or refrigerant used (type and amount)	Price

If the problem cannot be fixed and the unit must be replaced please call UBC to obtain an authorization number prior to sending the unit for warranty claim. Make sure to write that number on the top of this form.

Labor Charges Summary

Hours _____

Labor Rate per hour _____ \$ Subtotal hours _____ \$

Parts _____ \$

GRAND TOTAL _____ \$

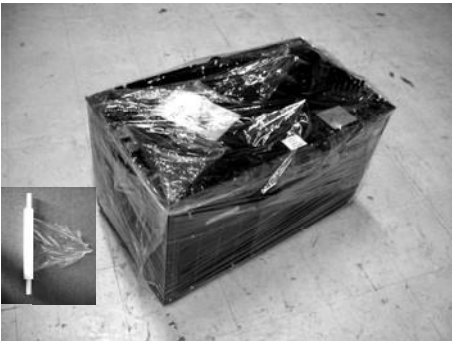
CUSTOMER SIGNATURE _____

SERVICE TECHNICIAN SIGNATURE _____

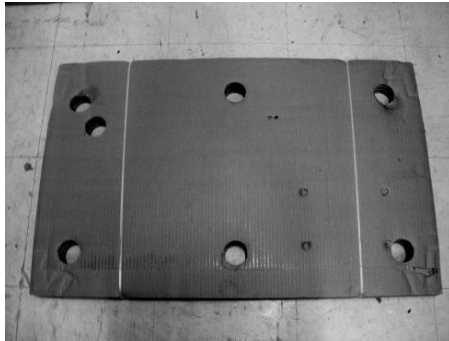
13. WARRANTY RETURN PACKING INSTRUCTION

- All returns must be authorized by UBC prior to shipping. ☐☐ UBC will provide with a ship to address once return is authorized ☐☐ A warranty claim form must be completed and faxed to UBC.
- Warranty units must be shipped on a pallet and freight only
- If you don't have the original packaging contact UBC to obtain one
- Units sent without proper packaging will not be processed for warranty claims

1. Wrap the entire unit with shrink wrap



2. Place the bottom pad on an even surface



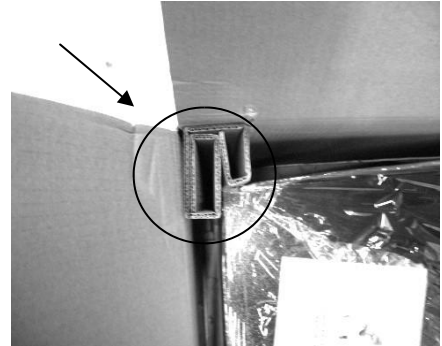
3. Place the unit on the bottom pad making sure it is centered



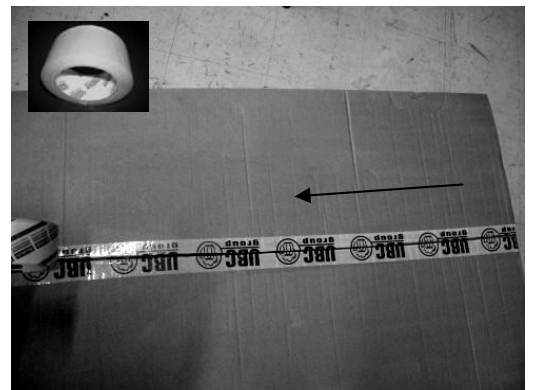
4. Place the box on top of the bottom pad



5. Place the cardboard packing corners inside the



6. Close and seal the box with packaging tape



7. Fasten the box with 2 straps, one on each side as shown below. In the absence of original straps use customs



8. Place the box on a pallet making sure it is centered. If shipping with other boxes make sure the box is entirely on the pallet

9. Secure the box to the pallet using straps, buckles or fasteners and strap guards. Make sure to fasten the strapping tightly to guaranty the box will not fall from the pallet during shipping. You may also use shrink wrap as long as the box is properly secured to the pallet.



10. Attach shipping labels and a “non



stackable” label

- The unit must always remain in its upright position, especially during shipping.
- Do not flip the unit or box on the sides or its top!

14. INSTALLATION NOTES

Serial number: _____ Model Number _____

Installation date: _____

Installation address: _____

