

JET-TECH

REFRIGERATED DISPLAY CASE
INSTRUCTION MANUAL

MANUFACTURERS LIMITED WARRANTY

Jet-Tech Systems Corporation (Jet-Tech) hereby warrants all new refrigerated display case bearing the name "JET-TECH" and installed within the continental United States of America or Canada to be free from defects in material and workmanship, under normal and regular usage and operation, for a period of one (1) year following the date of original installation.

If a defect in material(s) or workmanship is detected; or found to exist within the stated period above, Jet-Tech, at its sole discretion, shall either repair or replace any original equipment manufacturers part which has proven to fail within the machine; providing that the equipment has not been altered or tampered with in any manner, has been installed correctly as per the owners manual, and maintained and operated in complete accordance with this manual.

The labor cost to repair or replace any part proven to be defective, as per above clause(s), shall be covered by Jet-Tech, within the continental United States of America or Canada; provided that: prior authorization for this labor was approved by Jet-Tech, the service work was performed by an authorized Jet-Tech service agency; and that this agency installed an original and genuine Jet-Tech part in the machine. Any repair work performed by a non-authorized service depot remains the sole responsibility of the user, and Jet-Tech will not be held responsible. The installation of any generic part will not be valid; and therefore voids this warranty. All authorized labor coverage shall be limited to regular hourly rates only. Any supplemental hourly rates or charges, such as weekends or emergency premiums remain the responsibility of the user.

Jet-Tech hereby states that: warranty travel time shall be limited to, and without exception, a round-trip total of two (2) hours OR mileage up to a maximum of one hundred (100) miles round-trip. Any charges exceeding those stated herein must have prior authorization by the factory.

Exceptions to above warranty are: (A) Damages resulting from shipping, handling or abuse. (B) Incorrect installation and/or connections. (C) Adjustments or calibration of any parts. (D) Faults due to lack of regular maintenance or cleaning of any internal part(s). (E) Replacement of any wearable items.

JET-TECH STATES THAT THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, THAT ARE NOT SET FORTH HEREIN. JET-TECH SHALL ASSUME NO OTHER RESPONSIBILITY, EITHER DIRECT OR NON-DIRECT, OR BE LIABLE FOR ANY OTHER OR ADDITIONAL LOSS OR DAMAGE WHETHER BEING DIRECT OR CONSEQUENTIAL, AS A RESULT OF ITS EQUIPMENT.

REFRIGERATED DISPLAY CASE INSTRUCTIONS

JET-TECH

INSTALLATION NOTES:

Please ensure that during shipping none of the components have loosened.

Please remove all the plastic covering you may find on the side panels and laterals. This covering protects the machine from scratching.

Put the machine on top of the counter and level it.
The unit comes with a set of four 10cm adjustable legs.

Allow at least 6 inches clearance on the compressor side. Do not block the vents.

Ambient temperature cannot exceed 77F (25C) with a maximum of 40% relative humidity. High ambient temperature will cause the unit to work excessively, subjecting it to premature failure. High relative humidity will cause condensation (water droplets) on the glass.

The outlet must be 110 Volts and 15 Amps. It should be on a dedicated circuit, and the electrical installation should be grounded. The circuit breaker protecting this line should be adequately sized to protect the wires.

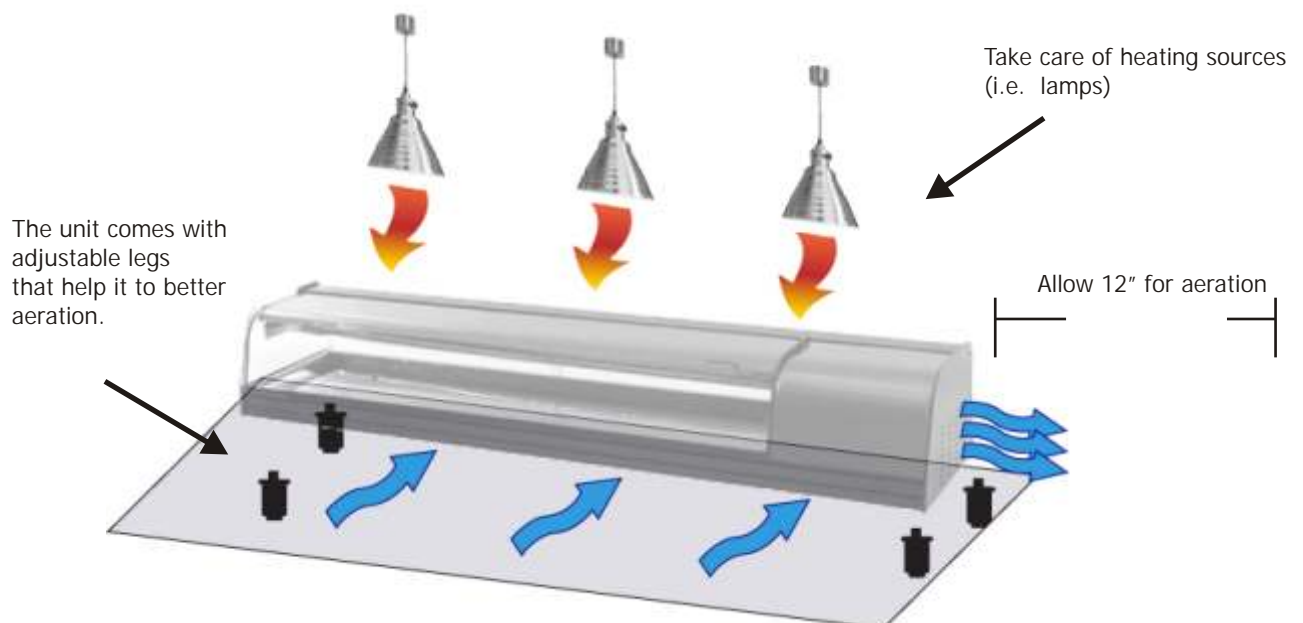
The line on which the unit is connected should not operate anything else. If the use of an



The unit comes with a set of four 10cm adjustable legs.

IMPORTANT:

Do not use plastic mats or any other insulating material on the surface. Use stainless container for the food. Any other material may not conduct the temperature adequately.
Do not use this unit 24 hours a day.
Do not adjust temperature too low (below 34F).

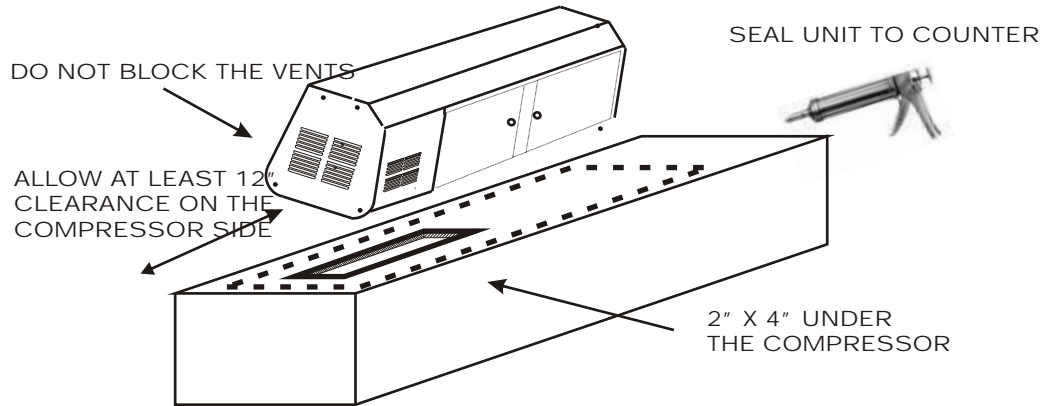


REFRIGERATED DISPLAY CASE INSTRUCTIONS



INSTALLATION NOTES:

If it is decided not to use the legs, it is recommended to allocate room for aeration and the electrical cord



REFRIGERATION SYSTEM

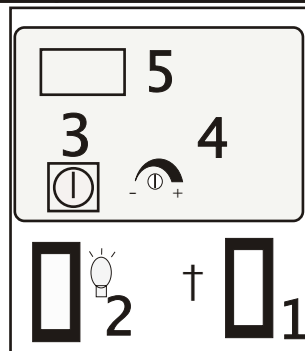
All controls are factory set and should NOT be tampered with without prior factory authorization.
This display case requires one manual defrost every night.

Temperature can be controlled with the electronic thermostat. Units are factory set to 38 degrees F (4C) and can be set at the desired temperature (32F to 46F). The setting of the temperature should be supervised.

IMPORTANT: Do not restart unit or try to restart unit after it has shut off.

- T The stainless surface in the food compartment must be clean.
- T Close the transparent sliding doors.
- T Turn the power on (next to snowflake picture).
- T Allow unit to reach operating temperature (38F). It takes about 20 minutes to reach.
- T Food compartment can be illuminated by pushing the light switch on.
- T The food must already be cold (at least 38F (4C) before it is placed in the display case.
- T Do not place product when it is still HOT. This case is NOT a refrigerator but a holding cabinet to maintain cold temperatures.
- T This unit does not have an automatic defrost system and must be turn off at night to allow

CONTROL PANEL IDENTIFICATION



- 1) Illuminated start switch
- 2) Illuminated light switch.
- 3) Button to show set temp.
- 4) Temperature adjustment
- 5) Display

REFRIGERATED DISPLAY CASE INSTRUCTIONS



REFRIGERATION SYSTEM



This unit must be kept clean. The front glass cover opens up by tilting it at the base. Be very careful not to let it drop!

The side panel covering the compressor should be opened for dusting, at least once a year. Accumulation of lint and dust on the condenser (where the fans are) will reduce the efficiency on the unit.



The refrigeration system is a self-contained unit, with a hermetically sealed compressor and requires no maintenance. The finned tube condenser should be checked at regular intervals (every 6 months) to ensure that it remains free of any dirt and dust. Use a soft brush and vacuum cleaner to clean the dirt on the condenser.

RECORD SERVICE DATA

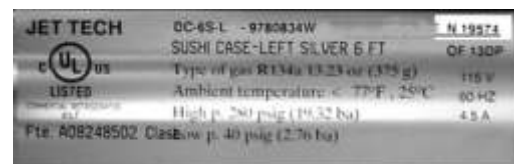
When service has to be performed, be sure to record the following:

- 1) Model of your unit.
 - 2) Serial number
 - 3) Name of the place where unit is installed.
 - 4) Customer name, address, including zip code, and phone number.
 - 5) Date purchased.
- To insure prompt service when contacting the factory regarding this unit, the following information is needed:

Case Model Number
Serial Number
(This information appears on the data plate located beside of the control panel.)
Reading our nameplate:
The serial number is on top right of the sticker.

IMPORTANT !

Serial Number appears on the data plate located beside of the control panel on top right of the sticker

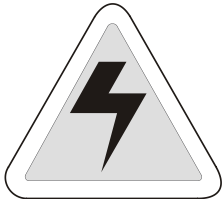


WARRANTY SERVICE

PRIOR TO ANY WARRANTY SERVICE WORK BEING PERFORMED, THE TECHNICIAN MUST CONTACT JET-TECH TO OBTAIN A WARRANTY AUTHORIZATION. THEN SUBMIT INVOICE, WORK TICKET FOR PROCESSING TO:



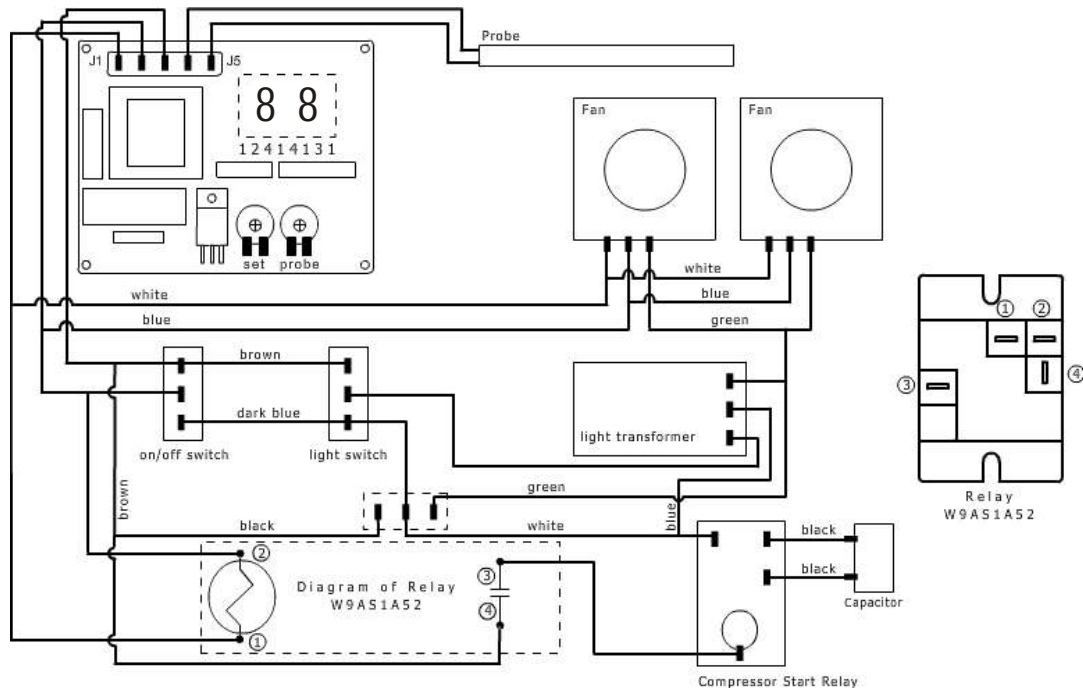
JET-TECH SYSTEMS CORP.
Tel. (514)-737-9701 or 1-888-275 4538
Extension 611 (hour between 9 to 5 eastern)
Extension 411 (after hours and week-ends)
Fax (514)-737-2792
E-mail: service@jet-tech.com



WARNING !

A qualified technician should service this unit.
Opening the unit for cleaning or maintenance exposes wires.
Unplug unit when doing so.
The refrigeration system is a sealed system under pressure. Do not try to open it.

ELECTRICAL DIAGRAM



TROUBLESHOOTING

Unit will not start and fluorescent will not work.

Is the unit connected to power source? Breaker may be off.

Is the terminal block (located in the compressor compartment) getting power? Power cord may be defective.

Verify the fuse, if it is blown, replace it with a 16 amp time delay fuse.

Check the fan motors, a defective fan might cause fuse to blow up.

The fluorescent light works but compressor won't start.

Does the electronic thermostat display show anything? (diode light, digital display)

Verify the temperature setting pressing the thermometer push button located at the electronic brain beside the temperature adjustment screw.

If the Electronic Thermostat is defective the compressor and fan motors will not start. If bypassing the electronic thermostat makes the compressor and fans start, replace the Electronic Thermostat.

Fan motors start but compressor does not, check the compressor relay and start capacitor. Replace whichever part is defective (relay or start capacitor) check wiring as well.

Fluorescent light won't work.

Fluorescent can be replaced by removing the aluminum cover and then remove the plastic reflector.

Check if the light switch is on.

Check for loosen connections at the light switch or if the switch itself is broken.

TROUBLESHOOTING

Unit is not cold enough

Take temperature reading in the food compartment with a digital thermometer.

Assure that the probe is properly placed. Probe should be attached to the evaporator. Compare with the case's temperature setting and adjust if necessary.

When taking product out or putting product in the case, do not leave the doors opened too long. Keeping the doors open will cause ice accumulation on the evaporator and increase the temperature inside the case.

Check ambient temperature. There should not be any heat source around the display case. This unit was certified to operate at a maximum of 75F (25C).

Check the ventilation system for any object blocking the holes. (grill openings) On the compressor side, there are holes in the plastic panel. These slots are very important and should never be blocked or obstructed. Heat is released through these slots and must be allowed to escape freely. A clearance of six (15) inches (40 cm) should be respected.

Condenser may be dirty. It needs to be cleaned at least every 6 months. To clean condenser, unplug unit, remove the curved glass and then the side panel. Using a vacuum cleaner, gently remove the dirt on the condenser. Do not crush the fins.

Check fan motors. If one or both fans are defective (not turning or not turning fast enough), replace them.

Condensation on the glass windows.

Putting hot food into the cool compartment will cause condensation over the glass and might spoil the food that is already cooled.

When relative ambient humidity is higher and the temperature is set at 35F (1C) it may cause condensation. Relative humidity should not be higher than 40%. For food safety, the cases temperature cannot be more than 39F(5C) degrees.

If the ambient temperature is too high or the unit is installed near a source of heat such as a cooking plate, the display case must be installed in a different location or the heat source removed .

Remember, ambient temperature cannot exceed 77F (25C) NSF standards.

TROUBLESHOOTING

Only half of the evaporator gets cold.

Check if the evaporator's pipe input and output are the same temperature. When temperature of the input pipe of the evaporator is equal to the output of the evaporator pipe, it means the unit is ok. However when doors have been opened for a long time, hot air gets into the food compartment and that affects the evaporator and only half of the evaporator gets cool.

Check the position of the probe.

Check the ambient temperature.

If the problem persist, look for Freon leaks. If there is a Freon leak, it must be located, repaired, and the compressor recharged. If the unit need to be recharged, change the filter.

Compressor charge table

° F	R-134 A	° F	R-134 A	° F	R-134 A
-48	17,7	20	18,4	88	100,7
-44	16,2	24	21,4	92	108,2
-40	14,5	28	24,5	96	116,1
-36	12,8	32	27,8	100	124,3
-32	10,8	36	31,3	104	139,2
-28	8,6	40	35,1	108	142,8
-24	6,2	44	39,1	112	151,3
-20	3,6	48	43,3	116	161,1
-16	0,8	52	47,7	120	171,3
-12	1,1	56	52,3	124	182
-8	2,8	60	57,5	128	193,1
-4	4,5	64	62,7	132	204,7
0	6,5	68	68,3	136	216,8
4	8,5	72	74,2	140	229,4
8	10,8	76	80,3	144	242,4
12	13,1	80	86,8	148	256
16	15,7	84	93,6		

TROUBLESHOOTING

Malfunction of the electronic thermostat.

If the display is blinking and shows the # 9, the probe is defective or improperly connected. Whenever that problem exists, the thermostat will go into the automatic mode.

When the unit operates on automatic, the compressor will run for one hour. It will stop for 5 minutes and will start once again for one hour. The sushi case will operate this way until the problem is corrected.

If the display is blinking and shows # 40, the probe has a short circuit. When a short circuit has occurred the unit turns to the automatic mode. Unit operates same as above.

Note: On the condition mentioned above, the one hour run plus a five minute stop, is to maintain the food compartment cool.

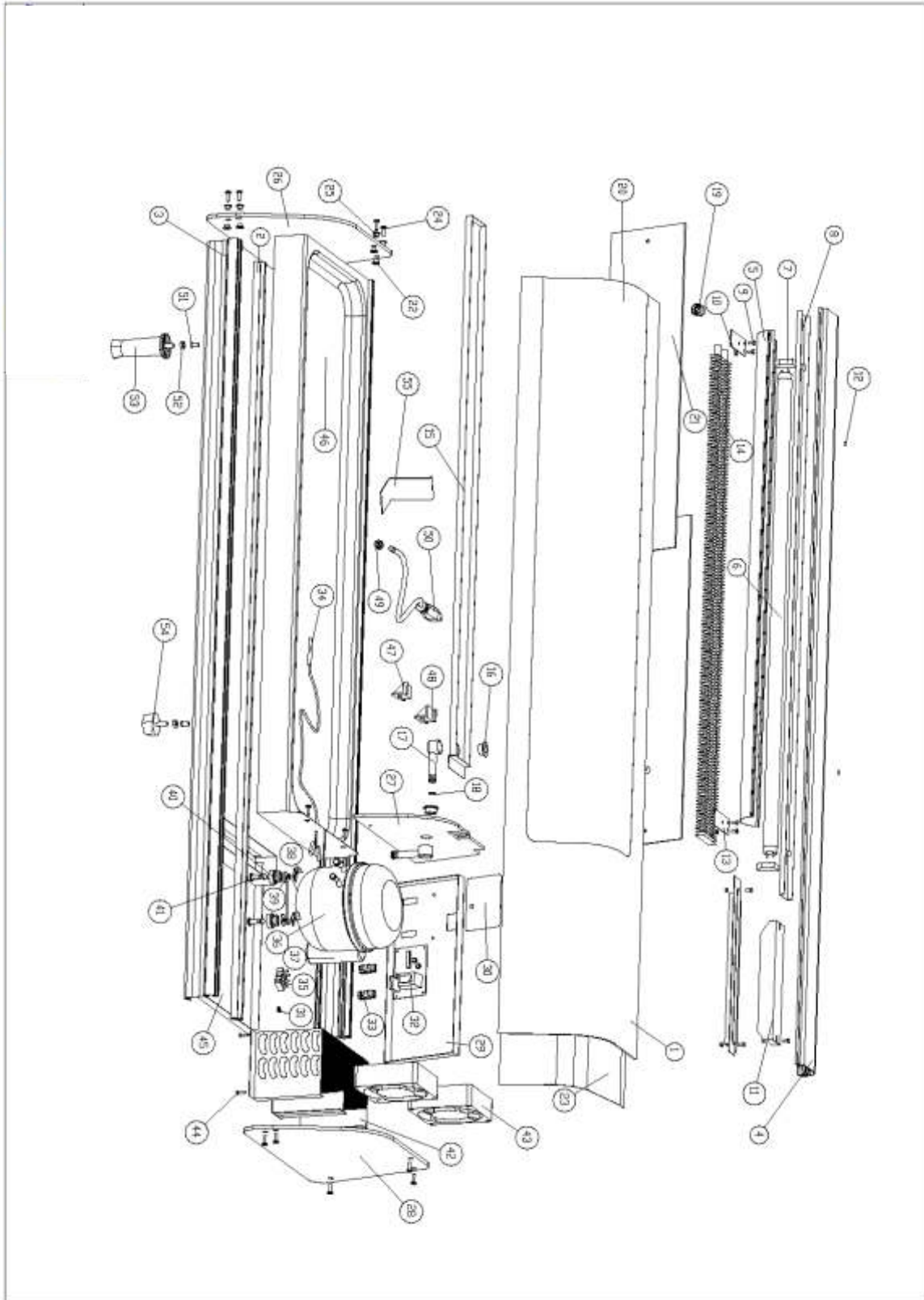
During the interval of 5 minutes when compressor is stopped, the thermostat turns to safety mode. This position will not allow the compressor to start. Never try to start compressor during this time.

Unit will not stop or simultaneously starts and stops.

Check ambient temperature. Temperature inside the case has been set between +34F(1C) to 38F (4C) degrees. If temperature is set too low the unit will not stop. In this condition the thermostat will turn to automatic mode, remaining in this position until temperature is adjusted.

If the thermostat has been changed previously, check connection 1 and 2, reversing those wires will provoke intermittence on "start stop" of the unit.

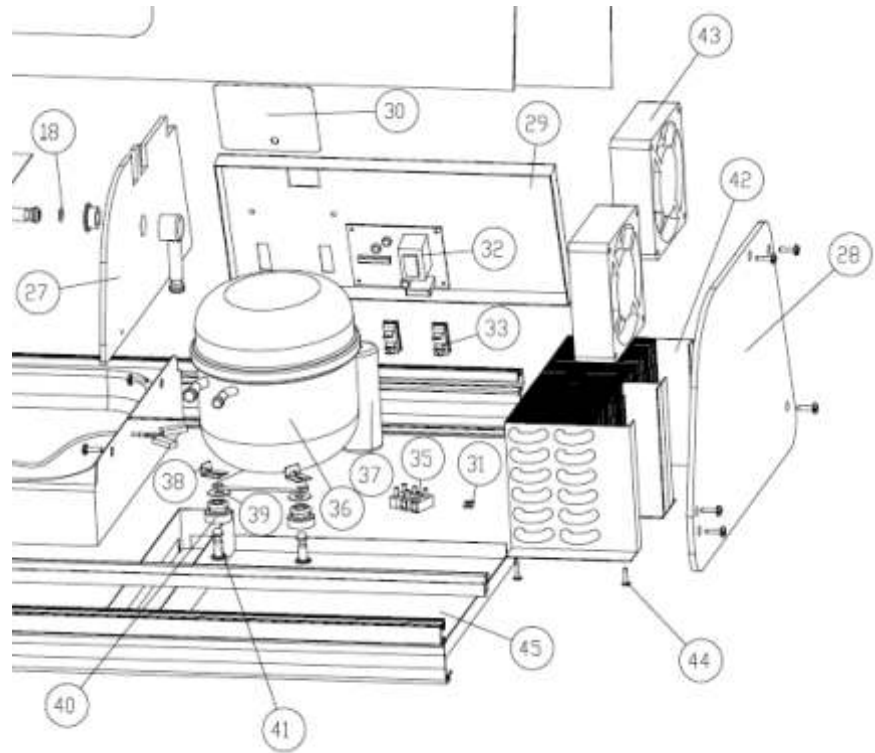
EXPLODED VIEW



REFRIGERATED DISPLAY CASE INSTRUCTIONS



EXPLODED VIEW (Detailed compressor section)



REFERENCES AND PARTS LIST

Description	REF	Part Nr Jet-Tech
Lamp Holder	7	1232001T
Screw	9	13110500
Nut Stainless Stl	10	13210060
Ballast	11	12330210
Screw	24	13112400
Control Plate	30	14214130
Elec. Thermostat	32	12414131
Lamp Switch	33	12210220
Probe	34	12414132
Terminal Block	35	12150250
Compressor	36	12530065
Compressor Kit	n/a	12530069
Capacitor	37	12530064
Condenser	42	11120020
Capillary Filter	n/a	11130040
Suction tube+capillary	n/a	31110050
Motor Fan	43	12530030
Motor Mounting	40	27810010
Electrical Cord	50	12130030
Nut (M8)	51	13413550
Divider Panel	27	14310030



For specific sizes and models
(5XX or 6XX and 7XX) please
refer to our web site
www.jet-tech.com
Or call 1-888-275-4538