

## IC-150/IC-150L

#### Models: Listed on Inside Cover

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IC-150

IC-150L







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## **IC-Series Cooler** Instruction Manual

## IC-150/IC-150L

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**Includes Models:** IC-150 IC-150-0-2-3-5-B-1 IC-150-L IC-150-L-2-3-5-B-1 IC-150-LB-2-3-5-B-1

#### **Model Numbering Schematic:**



### Table of Contents

#### For Future Reference

- found on the inside of your Cooler.
- Keep your receipt with this manual for future warranty service.

Model #: \_

Serial #:

Date of Purchase:

...... 4 ..... 5 .....6 ..... 6 .....6 . . . . . . 6 .....7 .....7 . . . . . . 7 ..... 8 ..... 8 ..... 8 .....9 .....9 ...... 9 .....10 ..11-12

• This easy-to-use manual will guide you in getting the best use of your Cooler. • Remember to record the model number and the serial number. This information can be

## **PARTS & IDENTIFICATION**



- Cabinet 1.
- Mullion 2.
- Mullion Rib - 3.
- Damper Base (Left)
- Damper (Left)
- Hinge Cover Blanking Cap (6)
- Damper Box Left 7.
- Damper Box Right 8.
- 9. Damper (Right)
- 10. Damper Base (Right)
- 11. Handle
- 12. Top Door Frame
- 13. Top Door Gasket
- 14. Thermostat
- 15. Evaporator Fan Cover
- 16. Evaporator Fan
- 17. Fan Baffle
- 18. Evaporator Fan Shroud
- 19. Front Glass Door

- 20. Evaporator Baffle
- 21. Door Side LED Light (2)
- 22. Front Door Gasket
- 23. Front Grill
- 24. Front Grill Bracket (2)
- 25. Side Lamp Cover (2)
- 26. Black Lamp Cover (2)
- 27. Suction Tube Group
- 28. Evaporator
- 29. Shelf (2)
- 30. Bottom Hinge
- 31. Pilasters (4)
- 32. Shelf Clips (12)
- Middle Hinge 33.
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- 35. Casters (2) w/ Brake (2)
- Condenser 36
- 37. Condenser Fan Bracket (2)

- 38. Condenser Fan (2)
- Compressor Base Plate 39.
- 40. Water Tray
- Switch Power 1 41.
- 42. Switch Power 2
- 43. Compressor
- 44. Filter Bracket Assembly
- Filter 45.
- 46. Connection Pipe
- 47. Power Cord Clip
- Thermostat Label 48.
- 49. Thermostat Box
- Thermostat Control Panel 50.
- 51. Light Switch (2)
- 52. Thermostat Box Cover Power Cord
- 53. 54. Power Cord Holder (2)
- 55. Rear Grill

#### SAFETY INSTRUCTIONS

- 1. When using this appliance, always follow the basic safety precautions:
- 2. Read the entire Instruction Manual before operating this appliance.
- 3. Use this Cooler only for its intended purpose as described in this Instruction Manual.
- 4. This Cooler must be properly installed in accordance with the installation instructions before being used. See grounding instructions.
- 5. IDW requires that a dedicated circuit be used for the unit. Failure to do so voids warranty.
- 6. Never unplug your Cooler by pulling on the power cord. Always grasp the plug firmly and pull it straight out from the outlet.
- 7. Unplug your Cooler before cleaning or making any repairs. Note: If for any reason this product requires service, we strongly recommend that a certified technician perform the service.
- When disconnecting the power source, 8. wait at least 5 minutes to reconnect the power to avoid damage to the compressor and the cooling system.
- 9. Immediately repair or replace all electrical cords that have become frayed or otherwise damaged. Do not use a cord that shows cracks or abrasion damage along its length, the plug or the connector end.
- 10. Do not operate or store your Cooler near or around explosive fumes, gasoline or other flammable vapors and liquids.
- 11. Do not use flammable liquids to clean Cooler.
- 12. Setting the temperature control to the 0 position does not remove power to the light circuit, perimeter heaters, or evaporator fans.
- 13. Do not adjust the temperature control. The temperature control is factory set between levels 4 and 5 for maximum performance.



### IC-150/IC-150L

#### **PLEASE SAVE THESE INSTRUCTIONS!**

#### **DANGER!**

#### **PROPER DISPOSAL OF THE** REFRIGERATOR

#### Precaution, Non-Operating Coolers Should Have:

- 1. Lid removed.
- 2. Baskets kept in place in order to prevent any small child from climbing inside Cooler.

#### For Proper Disposal of Cooler:

Distributors/retailers need to contact a qualified service technician:

- 1. To recover all refrigerant from the Cooler
- 2. To remove the compressor or remove the oil from the compressor

Then the distributor/retailer can contact their local metal recycling center to pick up the remaining cabinet, shelves, etc. By law, disposal of hazardous wastes may be subject to fines and imprisonment under the provisions of the environmental regulations. For more information please visit: <u>http://www.epa.gov/</u> osw/hazard/index.htm

#### **INSTALLATION**

Installation of the Cooler must be done according to applicable local codes or equivalent.

#### **Ambient Environment**

- Place Cooler on an even surface to reduce vibration and noise.
- To transport, do not tilt the Cooler beyond a 45 degree angle.
- Do not place Cooler in direct sunlight or near any heat sources.
- Do not place Cooler in environment temperatures that exceed 80°F.
- Do not place Cooler in below normal temperatures.
- Do not place Cooler in extreme humid environments, this may cause components to rust.

#### **Preparation Prior to Operation**

- Remove all packaging materials before using Cooler. This includes: foam pedestal, adhesive tape (used to fix accessories) and protective gaskets.
- Inspect Cooler for concealed damage. Immediately file a claim with the freight carrier if there is damage. IDW is not responsible for damage incurred during shipping.
- Cooler must remain unplugged in an

#### **Electrical Requirements**

- This model operates with a 110-120V/60Hz power supply. Check the electrical outlet for proper voltage.
- Dedicate one outlet for the use of the Cooler.
- Do not use an extension cord or any other multiple connectors as this can lead to compressor failure.
- If the cord is damaged, it must be replaced.

- Do not place Cooler near constant running or splattering water, this may cause immediate damage to refrigeration system.
- Must allow at least 4" between rear of Cooler and wall for proper ventilation and heat dissipation of Cooler.
- Do not place furniture or other articles with sharp edges near the Cooler in order to prevent damage to the glass door.
- This Cooler is for indoor use only.
- Place Cooler in it's final location, making • certain there is adequate ventilation in the room.

WARNING: Warranty is void if ventilation is insufficient.

upright position for 1 hour prior to use.

- Clean the interior surface with a soft cloth and lukewarm water before operation.
- Ensure that drain hose or hoses are positioned in the drain pan.
- Remove plug and cord from inside the lower rear of the Cooler.
- The Cooler should be placed close enough to the electrical supply so that extension cords are not used.
- For your safety, plug the unit into a grounded wall outlet. Please check with a certified electrician for details.

WARNING: Do not use extension cords. WARNING: Compressor warranties are void if compressor burns out due to low voltage.

WARNING: Power cord ground pin must NOT be removed!



## **CAUTION FLAMMABLE REFRIGERANT**

- Product. All Safety Precautions Must be Followed.
- Federal Or Local Regulations. Flammable Refrigerant Used.

#### SHELVING INSTALLATION





Shelves are secured in place with zip ties. Cut zip ties to adjust shelves as desired.

#### (Maximum load per shelf is 105 lbs/ 48 kg)

Display refrigerators can be loaded within the shelf dimensions from the front to back side. They can also be loaded in any space from the bottom to the top interior cabinet. Do not allow product to block the evaporator fan cover because the evaporator fan helps the cooler to ventilate properly.

#### **SPECIFICATIONS**

MODEL	VOLUME(L)	RATED VOLTAGE		RATED CURRENT	LAMP INPUT POWER	REFRIGERANT
IC-150-0235B-1				1.4 A	4 W	
IC-150-L235B-1 IC-150-LB235B-1	5.686cu.ft.	110-120V/60Hz		1.8 A	8 W	R600a/46g
NSF/ASNI-7: Type II Display Refrigerator			environr ambient	A Display Cooler intended for use in an area where the environmental conditions are controlled and maintained so that the ambient temperature does not exceed 80°F (27°C) and environment $\leq$ 65% RH (Relative Humidity).		

• DANGER - Risk Of Fire Or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing.

• CAUTION - Risk Of Fire Or Explosion. Flammable Refrigerant Used. Consult Instruction Manual/Owner's Guide Before Attempting To Install or Service This

• CAUTION - Risk Of Fire Or Explosion. Dispose Of Properly In Accordance With

• CAUTION - Risk Of Fire Or Explosion Due To Puncture Of Refrigerant Tubing; Follow Handling Instructions Carefully. Flammable Refrigerant Used.

• CAREFUL - Handling, moving and operating of the Cooler or Refrigeration Unit to avoid either damaging the refrigerant tubing, or increasing the risk of a leak.

• CAUTION - Component parts shall be replaced with like components and that servicing shall be done by factory authorized service personnel, so as to minimize the risk of possible ignition due to incorrect parts or improper service.



Securely insert shelf clips into pilasters.



Shelf clips should be level so shelf lays flat.

#### MAINTENANCE

#### Condenser

It is essential to keep the condenser coils clean and free of dust and debris at all times. Periodically clean the condenser coils with a soft bristle brush or vacuum-cleaner to properly maintain the refrigeration system. Failure to clean the condenser at regular intervals may cause failure of the refrigeration system and could void the warranty. Prior to any maintenance, be sure to unplug the Cooler.



**1** Remove the rubber cap from the front grill.



**2** Use a Phillips head screwdriver and remove the screws as shown.



**3** The front grill can now be removed by pulling it up.



- Using plastic bristle brush, carefully clean the condenser being aware that coils can bend or be damaged if too much force is used.
- **5** Replace grill and use the Phillips screwdriver to tighten the screws into place, replace the rubber caps.

#### Cleaning

- Unplug the Cooler before cleaning.
- Use a soft cloth or sponge with soap and water (non-corrosive mild detergent), while cleaning. After cleaning, wipe the Cooler using a dry cloth to prevent the Cooler from rusting.
- Do not spray water on the Cooler, and do not use hard or steel brushes to clean the Cooler.
- Do not use organic solvents, boiling water, scrubbing powders or acids while cleaning.
- A drain or waste outlet **may** be provided for draining of a display Cooler. **If** a display Cooler drain is provided for flushing, it will have a minimum internal diameter of 1" (25mm)

If the Cooler will be in a non-operational state for a long period of time, clean as instructed above, and keep the door open until interior is dry.



#### **MAINTENANCE** Accessing Cooler Components:

#### \* A CERTIFIED TECHNICIAN IS REQUIRED TO REPAIR ALL REFRIGERATION COMPONENTS FOR WARRANTY PURPOSES.

For convenient repair, the refrigeration components (compressor, evaporator, condenser, evaporation fan, condensation fan and filter) are designed using a split system; any component can be easily replaced. Replacement procedure is as follows:



- 1. Using a Phillips screwdriver, remove the (4) screws from the back grill as shown.



4. Pull the drawer forward to access the system.

#### **Moving the Cooler**

- 1. Remove all product from the unit.
- 2. Secure all loose parts inside the cooler.
- 3. Tape the door shut.
- 4. Be sure to ship the cooler in an upright position.

#### **Drip Pan**

1. During normal compressor cycle, water will drain into the drip pan and evaporate.





2. The back metal grill can now be removed.



3. Remove the (2) screws in the front.



5. To re-assemble the cooler reverse steps 1-5.



#### TROUBLESHOOTING

The following are NOT malfunctions:

Situation	Causes		
Liquid flowing noise within Cooler	• This is the sound of the cooling agent flowing through the pipes.		
Refrigeration system is shutdown for longer periods of time while temperature inside is still very low	<ul> <li>This Cooler is well insulated and can maintain a relatively ambient temperature.</li> </ul>		
Condensation on door/lid	• This may be due to a high indoor humidity or the Cooler's temperature is set too low. Wipe the door dry with a towel.		

1 This Cooler has been designed and manufactured according to National standards. If there are any questions during use, refer to this operation manual to help troubleshoot problems.

2 When disposing of the Cooler, please remove the door/lid and lock assembly to avoid children accidentally becoming trapped inside the Cooler.

Prior to calling service, check the following:

Issues	Solutions		
Cooler behaving abnormally or no longer cooling	<ul> <li>Unplug the Cooler from the outlet and contact a trained service technician for repair:</li> <li>Abnormal behavior includes Cooler tripping the circuit breakers or blown fuse.</li> <li>Cooler not cooling to the set temperature as it should.</li> <li>If you can detect a chard smoky burning plastic rubber type of a smell.</li> <li>A noticeable increase in product temperature.</li> </ul>		
Cooler is not working properly	<ul> <li>Please check power supply:</li> <li>Check the electrical outlet for power, and that the plug is properly inserted.</li> <li>Check to see if the circuit breaker is tripped or the fuse is blown.</li> <li>Check if the condenser is free of dirt and debris.</li> <li>Check for low voltage</li> </ul>		
Cooler is not keeping product cool	<ul> <li>Provide ample space between all products to ensure proper circulation of air.</li> <li>Keep Cooler away from direct sunlight or other heating source.</li> <li>Keep the door closed as often as possible.</li> <li>Be certain the Cooler is not touching external objects or walls.</li> </ul>		
Excessive noise	<ul><li>Be certain the Cooler is placed on a level surface.</li><li>Be certain the Cooler is not touching external objects or walls.</li></ul>		
Compressor turns on and off frequently	<ul> <li>The room temperature is higher than normal.</li> <li>The door is not closed completely.</li> <li>The door gasket is not sealed properly.</li> <li>There is insufficient clearance around the Cooler.</li> <li>The thermostat is not set properly.</li> <li>The frequency of cycling will be reduced when all of the product reaches the set temperature.</li> </ul>		

#### **AFTER SALES SERVICE**

Any product has the possibility of malfunction. Please observe the Cooler's operation and any changes to product being stored. If there are any abnormal cases, refer to the table below. If there is still no change after following the below instructions, please inform our service center in a timely manner to avoid a further loss of the Cooler.

#### Information to provide to your qualified service professional:

- Serial number from the interior wall of the Cooler • • Coolers' installation address and contact
- information • Installation location hours of operation
- Nature of problem
- Any reports of power interruptions

- Recent service or maintenance completed on the Cooler
- Has the Cooler been relocated from original installation location
- Clear access to the Cooler
- Coolers' instruction manual •



#### **CIRCUIT DIAGRAM** Model: IC-150-0235B-1



P1:	POWER PLUG
TH1:	THERMOSTAT
TR1,TR2:	POWER ADAPTOR
L1:	FRONT DOOR SIDE LIGHT
C1:	COMPRESSOR

## **CIRCUIT DIAGRAM**

Model: IC-150-L235B-1, IC-150-LB235B-1



P1:	POWER PLUG
TH1:	THERMOSTAT
TR1,TR2:	POWER ADAPTOR
L1:	FRONT DOOR SIDE LIGHT
L2:	FRONT DOOR LOGO LIGHT
C1:	COMPRESSOR

- F1: EVAPORATOR FAN
- F2: CONDENSER FAN



- SQ: TEMPERATURE PROBE
- S1: SWITCH OF DOOR SIDE LIGHT
- S2: SWITCH OF LOGO LIGHT
- F1: EVAPORATOR FAN
- F2: CONDENSER FAN

# CIRCUIT DIAGRAM Model: IC-150-L235B-1, IC-150-LB235B-1

## IC-150L (w/ Front Door & Lid Logos)



- L2: FRONT DOOR LOGO LIGHT
- L3: TOP LID LOGO LIGHT
- F2: CONDENSER FAN
- C1: COMPRESSOR



## IC-150/IC-150L



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