

G-Series Cooler

# G-12f/GCG-12f

UPRIGHT COOLER



Manual is for the following models:

G-12F, G-12-F33EB

GCG-12F, GCG-12-F33EB

GCG-12F2, GCG-12-F233EB

G-12-F33EB-HC, GCG-12-F33EB-HC

GCG-12-F233EB-HC



## Instruction Manual

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**G-12F**

**G-12-F33EB**

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**GCG-12F2**

**GCG-12-F233EB**

**G-12-F33EB-HC**

**GCG-12-F33EB-HC**

**GCG-12-F233EB-HC**

Instruction Manual

**G-12f**  
**GCG-12f**

## FOR YOUR FUTURE REFERENCE

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

Model #: \_\_\_\_\_

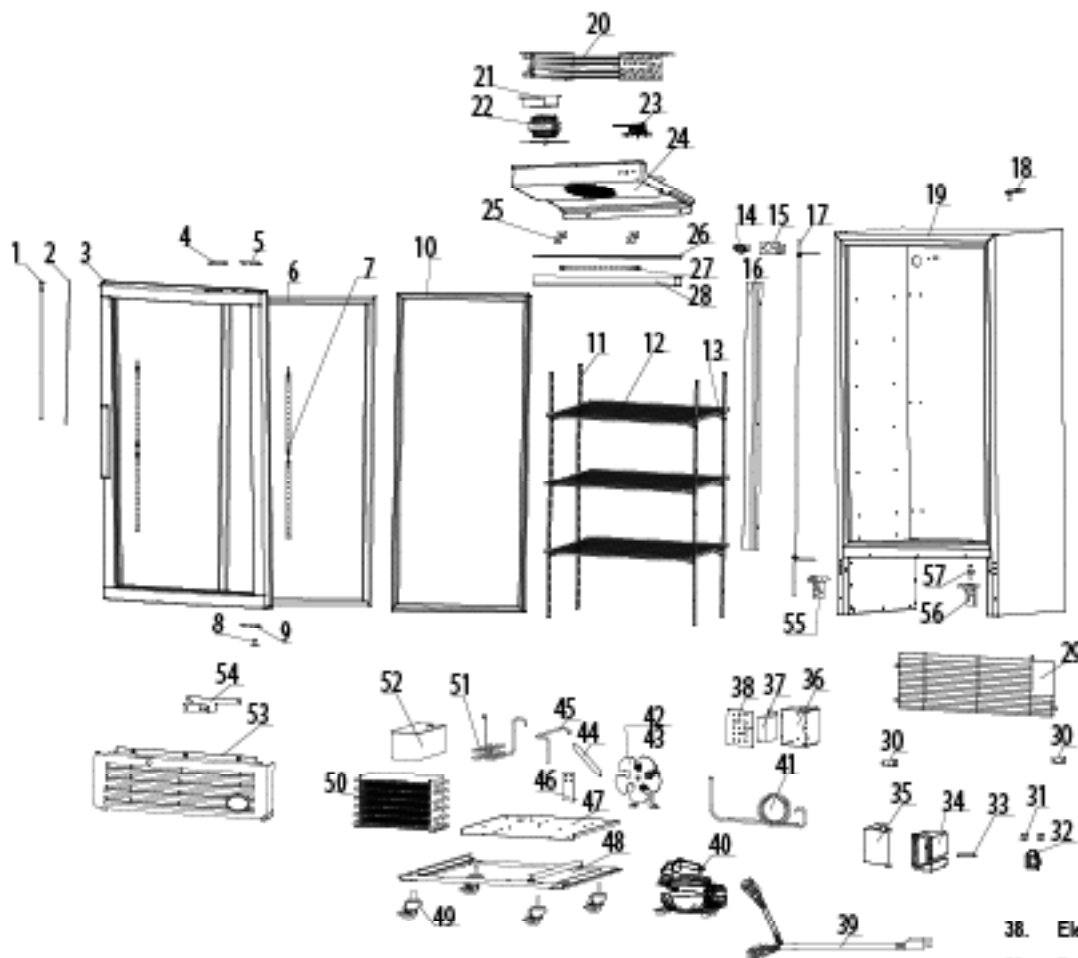
Serial #: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

## TABLE OF CONTENTS

|  |    |
|--|----|
| Parts & Identification .....                       | 3  |
| Safety Precautions .....                           | 4  |
| Features.....                                      | 5  |
| Flammable R290 Warnings .....                      | 5  |
| Instructions .....                                 | 5  |
| Ambient Environment.....                           | 5  |
| Preparation Before Operation.....                  | 6  |
| Replacing the Interior Light .....                 | 7  |
| Replacing the Door LED Lights .....                | 8  |
| Setting Up Power Cord Holder.....                  | 8  |
| Startup, Operation & Temperature Adjustment.....   | 9  |
| Lit Door 'Logo' Switch.....                        | 9  |
| Repair & Maintenance for Refrigeration Drawer..... | 9  |
| Condenser Maintenance .....                        | 10 |
| Maintenance .....                                  | 10 |
| Cleaning Shutdown Questions & Answers.....         | 10 |
| Reversible Door Exchange .....                     | 11 |
| Replacing the Fuse .....                           | 13 |
| Troubleshooting .....                              | 14 |
| After-Sales Service.....                           | 14 |
| G-12f Circuit Diagram.....                         | 15 |
| G-12f Electrical Wiring Diagram.....               | 16 |
| GCG-12f Circuit Diagram.....                       | 17 |
| GCG-12f Electrical Wiring Diagram.....             | 18 |

## PARTS & IDENTIFICATION



- 1. Auto-Closing Sleeve
- 2. Door Wire
- 3a. Glass Door (No Logo)
- 3b. Glass Door (Illuminated Logo)
- 4. Door Inserts
- 5. Top Door Limit
- 6. LED Light Cover (2)
- 7. LED Light in Glass Door (4)
- 8. Bottom Hinge Axle Sleeve
- 9. Bottom Door Limit
- 10. Door Gasket
- 11. Pilasters (4)
- 12. Shelf (4)
- 13. Shelf Clip (16)
- 14. Drain Pipe
- 15. Connecting Tube Plate
- 16. Tubing Cover
- 17. Return Tube
- 18. Top Hinge

- 19. Foam Cabinet
- 20. Evaporator
- 21. Fan Baseboard
- 22. Evaporating Fan
- 23. Thermostat
- 24. Control Panel
- 25. Control Panel Bracket
- 26. Top Lamp Stand
- 27. LED Light
- 28. LED Light Cover
- 29. Compressor Guard
- 30. Bumper Block
- 31. Light Switch (2)
- 32. Socket
- 33. Fuse Cover
- 34. Socket Box
- 35. Socket Box Cover
- 36. Electric Box
- 37. Switching Power Supply

- 38. Electric Box Cover
- 39. Power Cord
- 40. Compressor
- 41. Connecting Tube for Return Tube
- 42. Condenser Fan
- 43. Fan Support
- 44. Filter Dryer
- 45. Connecting Tube for Filter Dryer
- 46. Filter Dryer Bracket
- 47. Upper Compressor Baseboard
- 48. Lower Baseboard
- 49. Universal Wheel (4)
- 50. Condenser
- 51. Connecting Tube for Condenser
- 52. Water Container
- 53. Front Grill
- 54. Reinforced Steel for Front Grill
- 55. Left Bottom Hinge
- 56. Right Bottom Hinge
- 57. Bottom Hinge Axle

## SAFETY PRECAUTIONS

When using this appliance, always follow the basic safety precautions:

1. Read the entire User's Manual before operating this appliance.
2. Use this appliance only for its intended purpose as described in this User's Manual.
3. This cooler must be properly installed in accordance with the installation instructions before being used. See grounding instructions on page 6.
4. Never unplug your cooler by pulling on the power cord. Always grasp the plug firmly and pull it straight out from the outlet.
5. 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.)
6. 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.
7. This cooler should not be recessed or built into an enclosed cabinet. It is designed for freestanding installation only.
8. Do not operate or store your cooler near or around explosive fumes, gasoline or other flammable vapors and liquids.
9. Setting the temperature control to the 0 position does not remove power to the light circuit, perimeter heaters, or evaporator fans.

**Please save these instructions!**

**DANGER!**

**Proper Disposal of the Refrigerator**

To prevent any risk of child entrapment when discarding your cooler remove the doors and leave the shelves in place so that children cannot easily climb inside.

PRE-CAUTION, NON-OPERATING COOLERS SHOULD HAVE:

1. Glass door removed.
2. Shelves 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 Freon/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: <http://www.epa.gov/osw/hazard/index.htm>

## FEATURES

- Designed with an elegant shape and quick refrigeration speed, this commercial-grade product is an ideal choice for shopping malls, supermarkets, hotels, etc.
- Transparent glass doors are built with hollow, toughened glass that provides a high level of heat insulation. Clear doors allow for high product visibility.
- The forced air system allows for fast cooling speeds, which helps maintain a consistent temperature.
- Adjustable shelves allow for a wide variety of products to be stocked.
- A built-in lock offers the ability to secure products.
- The refrigeration unit is designed for easy access, allowing for fast and simple repairs.
- This equipment is intended for storage and display of non-hazardous packaged product.



### CAUTION FLAMMABLE REFRIGERANT

- **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 Repair Manual/Owner's Guide Before Attempting To Install or Service This Product. All Safety Precautions Must be Followed.
- **CAUTION** – Risk Of Fire Or Explosion. Dispose Of Properly In Accordance With Federal Or Local Regulations. Flammable Refrigerant Used.
- **CAUTION** – Risk Of Fire Or Explosion Due To Puncture Of Refrigerant Tubing; Follow Handling Instructions Carefully. Flammable Refrigerant Used.

## INSTRUCTIONS

### 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.
- 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.

## 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.
- For proper operation, place the cooler on a dry, level surface.
- Clean the interior surface with a soft cloth and lukewarm water before operation.
- Keep cooler in an upright position for 30 minutes prior to use.
- IDW requires that a sole use circuit be dedicated for the unit. Failure to do so voids warranty.  
**WARNING:** Do not use extension cords.  
**WARNING:** Compressor warranties are void if compressor burns out due to low voltage.  
**WARNING:** Power supply cord should not be removed or altered in any way.

## Leveling

- Set unit in its final location, making certain there is adequate ventilation in the room.  
**WARNING:** Warranty is void if ventilation is insufficient.
- Proper leveling of the G-12f/GCG-12f cooler is critical to it operating correctly. Condensation removal and door operation will be affected by leveling.  
    < **The cooler should be leveled front to back and side to side with a level.**
- Ensure that drain hose or hoses are positioned in the pan.
- Remove plug and cord from inside the lower rear of the cooler.
- The unit should be placed close enough to the electrical supply so that extension cords are never used.

## Shelving Installation



- Securely insert shelf clips into pilasters
  - Shelf clips should be level so shelf lays flat
  - Place shelf on shelf clips

(Maximum load per shelf is 30kg )

*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.*

## REPLACING THE INTERIOR LIGHT



**1** Press two sides of plastic cover by the fingers and remove it.



**2** Disconnect the lights.



**3** Unscrew (3) screws using a Phillip's screwdriver.



**4** Remove LED light strand.

**5** To install LED lights follow the above directions in reverse order.



## REPLACING THE DOOR LED LIGHTS

1 Unplug the cooler.



2 Remove plastic cover.



3 Disconnect top light strand.



4 Disconnect middle light strand.



5 Unscrew light strand.



6 Remove entire light strand.

7 To install LED lights follow the above instructions in reverse order.

Notes: If there are any malfunctions with the main control panel of LED lights, please contact a professional for replacement.

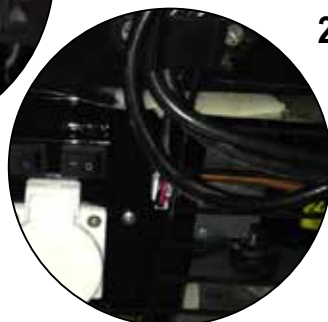
## SETTING UP SPACER & POWER CORD HOLDERS

The G-12f/GCG-12f is supplied with one set (2 pieces) of Spacers to hold the extra length of Power Cord



1 Take out the two Spacers and screws supplied in the Accessory Pack shipped with the Cooler.

2 Use a Phillips screwdriver to secure the two Spacers onto the rear of the cooler.



## STARTUP, OPERATION AND TEMPERATURE ADJUSTMENT

### Operation

- Prior to stocking cooler with product, it should be operated empty for half an hour.

### Temperature Adjustment



- G-12f/GCG-12f performance testing position of the thermostat is around 4-6.
- Component shown at the left functions as a secondary power source for low voltage items such as signs.

### Lit Door “Logo” Switch Operation



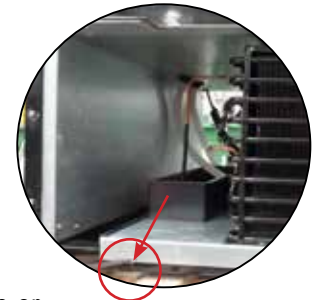
- For GCG-12f coolers only. The light switch located at the bottom left hand side on the rear of the cabinet is the ON/OFF switch for the Lit logo located on the door of cooler.

## REPAIR AND MAINTENANCE FOR REFRIGERATION DRAWER

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

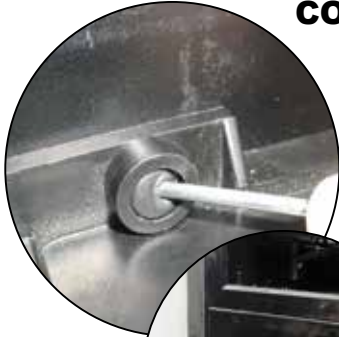
For convenient repair, the refrigeration components (compressor, evaporator, condenser, evaporation fan, condensation fan and filter) are designed using a split system; any component can be easily replaced. Replacement procedure is as follows:

- 1 Unplug the unit.
- 2 Remove the screws from the front grill, and then remove the grill.
- 3 Unplug all connections and terminals that are in need of repair.
- 4 Using a screwdriver, remove the (3) screws from the refrigeration drawer base plate.
- 5 Slide the Refrigeration Drawer out to easily access refrigeration components. Remove the component to replace or repair.
- 6 After repair, re-install all parts using the reverse procedure.

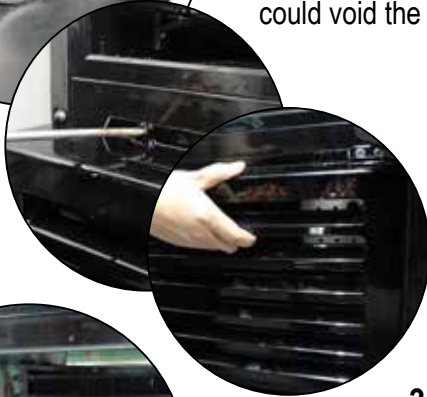


## CONDENSER MAINTENANCE

It is essential to keep the condenser coils clean and free of dust and debris at all times. It is required to 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.



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



**2** Using a Phillips screwdriver, remove the three screws as shown.



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

**4** Using plastic bristle brush, carefully clean the coil being aware that fins can bend or be damaged if too much force is used - shown left.

**5** Replace grill and utilize the Phillips screwdriver to tighten the screws into place, replace the rubber caps.

## MAINTENANCE - Cleaning Shutdown Questions and Answers

### Cleaning and Maintenance

- 1** Unplug the cooler before cleaning.
- 2** Use a soft cloth or sponge with water or soap (non-corrosive mild detergent), while cleaning. After cleaning, wipe the cooler using dry cloth to keep the cooler from rusting.
- 3** Do not spray water on the cooler, and do not use hard or steel brushes to clean the cooler.
- 4** Do not use organic solvents, boiling water, washing powder or acid while cleaning.
- 5.** A drain or waste outlet may be provided for the draining of a display refrigerator. If the display refrigerator drains are provided for flushing, they shall have a minimum internal diameter of 1" (25mm).

If the cooler's power will be off for a long period of time, unplug it, clean as instructed above, and keep door open until dry.

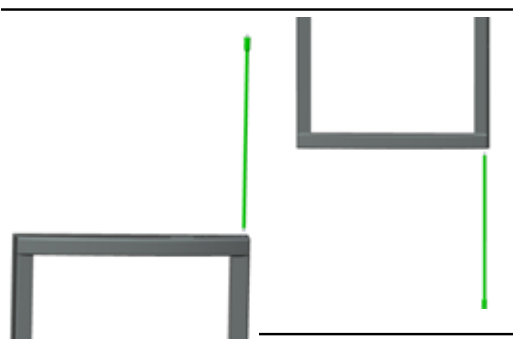
## DOOR REVERSAL (For G-10f Coolers Only)



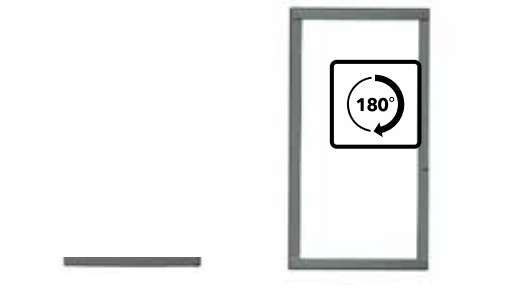
- 1 Remove the front grill, disconnect the terminals and then hide the terminals in the door's reserved hole.



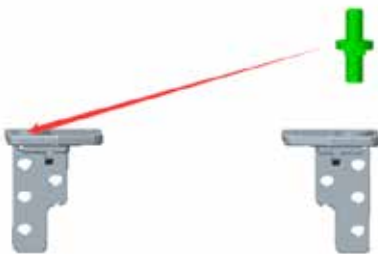
- 2 Remove the right upper hinge and bottom door limit, then remove the door.



- 3 Take out the torsion rod from the upper right of the door.
- 4 Fish out the wiring from door's reserved hole, the wiring stretches out from the upper right of door.
- 5 Insert the torsion rod into corresponding holes on bottom right of the door.



- 6 Rotate the door clockwise 180°, so the wiring is stretching out from the bottom left of the door.



- 7 Remove the hinge axis from the right bottom hinge, insert it into the left bottom hinge.

## DOOR REVERSAL Cont. (For G-12f Coolers Only)



- 8 Remove door limit from right hinge into corresponding holes on left hinge.
- 9 Feed the wiring terminals through the hinge and connect the terminals.



- 10 Reinstall the torsion rod into the new position of the door axis.



- 11 Set the upper hinge into the torsion rod at approximately a 60° angle. Rotate the hinge to the right counter-clockwise aligning the holes in the bracket with the holes on top of the cabinet.

- 12 Install the limit to the door. Installing sequence—the wave washer—gasket-limit-bolt



- 13 Check to ensure the door is securely attached and functioning properly.
- 14 Attach the front grill to complete the door reversal process.

## REPLACING THE FUSE



- 1 Unplug the cooler.
- 2 Remove the screws from the back grill, and then remove it.



- 3 Open the cover of the fuse block, as shown in the image to the left.



- 4 Unscrew the fuse box, then replace the bad fuse.



- 5 After repair, re-install all parts reversing steps 1-5.

## TROUBLESHOOTING

The following are not Malfunctions:

| Issues  | Solutions   |
|---|---|
| Liquid flowing noise within cooler  | This liquid 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. | This refrigerator has a strong level of heat preservation and can maintain a relatively ambient temperature.            |
| Condensation on glass door  | This may be due to a high indoor humidity or a low inside temperature value may be set. Wipe the door dry with a towel. |

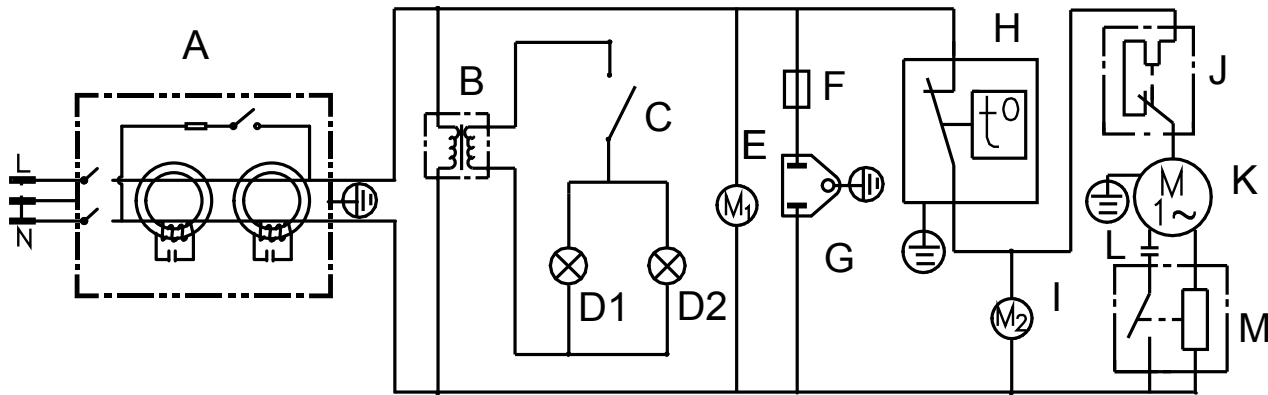
- 1 This refrigerator has been designed and manufactured according to National standards. If there are any questions during use, refer to this operation manual to help troubleshoot problems.
- 2 When disposing of the cooler, please remove the door and lock assembly to avoid children accidentally becoming trapped inside the cooler.

## 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 unit.

| Issues                              | Solutions   |
|-------------------------------------|---|
| Cooler is not functioning.          | Please check power supply: <ul style="list-style-type: none"> <li>• Fuse damage</li> <li>• The plug is not securely inserted into the wall socket</li> <li>• Check for low voltage</li> </ul>   |
| Cooler is not keeping product cool. | <ul style="list-style-type: none"> <li>• Provide ample space between all products to ensure proper circulation of air.</li> <li>• Keep unit away from direct sunlight or other heating source.</li> <li>• Keep door closed as often as possible.</li> <li>• Be certain cooler is not touching external objects or walls.</li> </ul> |
| Excessive noise                     | <ul style="list-style-type: none"> <li>• Be certain the cooler is placed on a level surface.</li> <li>• Be certain cooler is not touching external objects or walls.</li> </ul>   |

**G-12f CIRCUIT DIAGRAM**



A: Electric leakage protector

B: Power supply for LED lights

C: On/Off switch for interior and door side light

D1: Interior top LED light

D2: Door side LED light

E: Evaporator Fan

F: Fuse

G: Socket

H: Thermostat

I: Condenser fan

J: Overload for compressor

K: Compressor

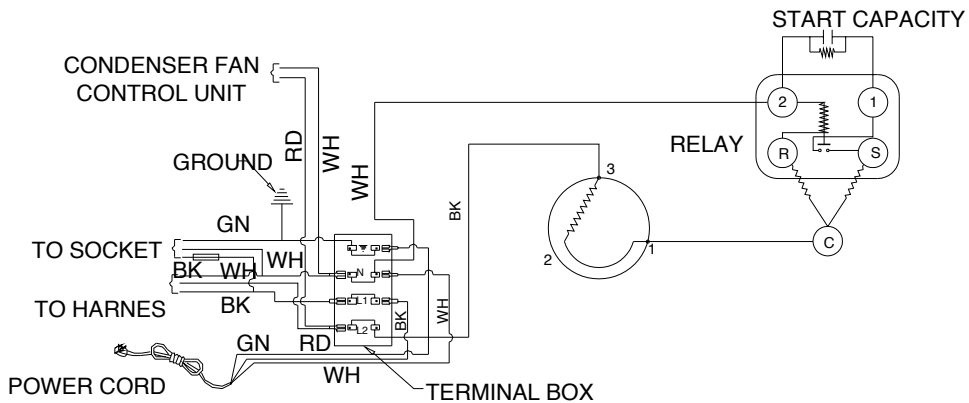
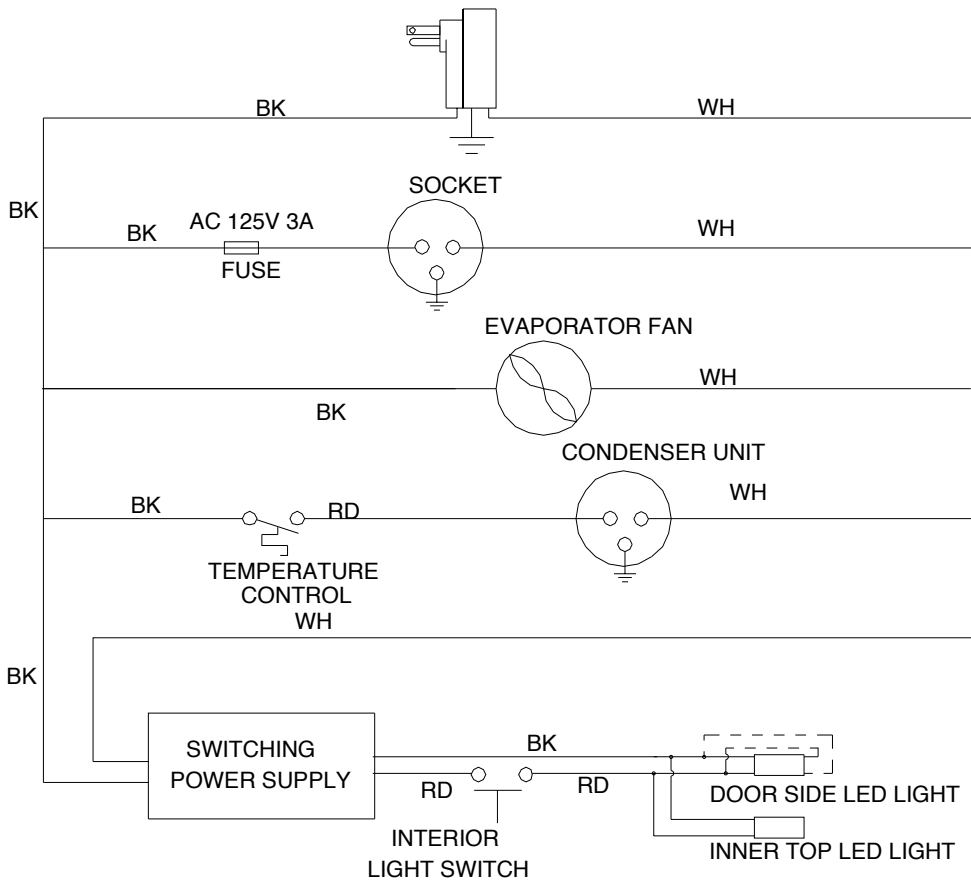
L: Compressor starting capacitor

M: Compressor relay



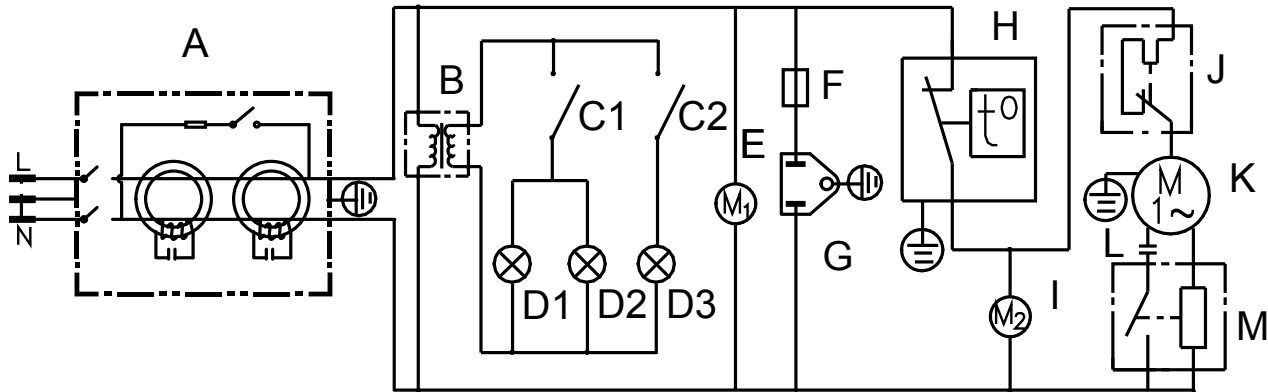
# G-12f/GCG-12f

## G-12f ELECTRICAL WIRING DIAGRAM



CONNECTIONS FOR EMI70UER COMPRESSOR

**GCG-12f CIRCUIT DIAGRAM**

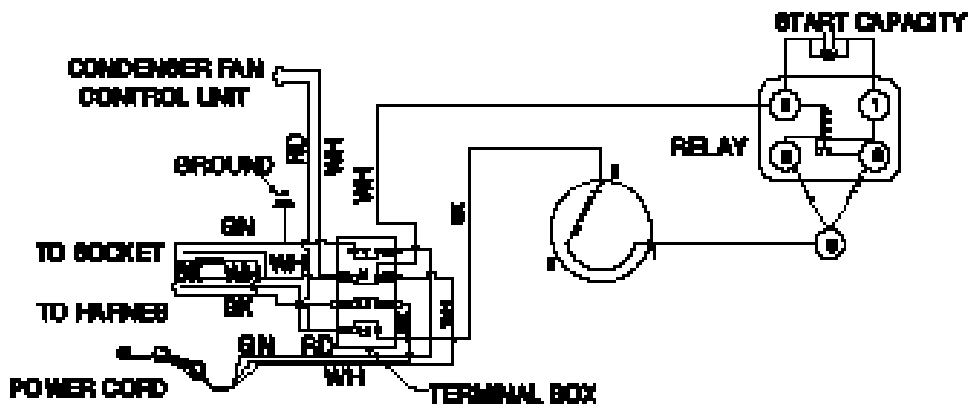
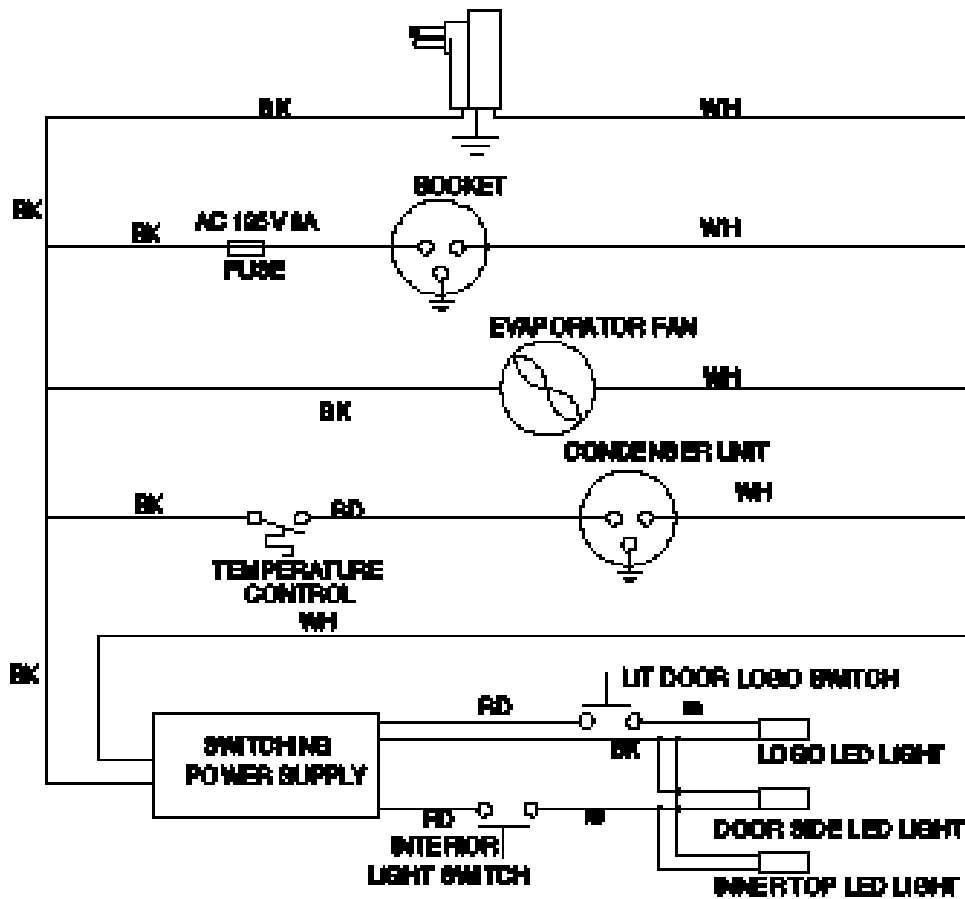


A: Electric leakage protector  
 B: Power supply for LED lights  
 C1: On/Off switch for Interior light  
 C2: On/Off switch for lit door logo light  
 D1: Interior top LED light  
 D2: Door side LED light

D3: Door LED Logo Light  
 E: Evaporator fan  
 F: Fuse  
 G: Socket  
 H: Thermostat  
 I: Condenser fan

J: Overload for Compressor  
 K: Compressor  
 L: Compressor starting capacitor  
 M: Compressor relay

## GCG-12f ELECTRICAL WIRING DIAGRAM



CONNECTIONS FOR EVAPORATOR COMPRESSOR



*Innovative DisplayWorks, Inc.*

To locate the distributor in your area go to: <http://www.idw.global/contact#distributors>