



## Installation and Owner's Manual

For models DE / EV 0041 - 3.6 cubic foot, AC / DC electric refrigerators.  
For models DE / EV 0061 - 7.0 cubic foot, AC / DC electric refrigerators.

### Special Requirements for Marine Installations:

These refrigerators are internally wired so that the AC and DC circuits are isolated from each other. If the positive (+12/24 volts) input is grounded (by cuts in the wire insulation, incorrectly insulated components, etc.) a voltage potential can be caused throughout the boat, which causes corrosion to form on any metal parts that are exposed to water.

This condition can be avoided by wiring the boat so that the AC and DC grounds are common and so the wiring is protected per NNMA CERTIFICATION HANDBOOK (1987). Inspect all wiring to make sure that the insulation is not damaged and use plastic wire clamps.

One reference for more information on corrosion is:

BOAT AND YACHT CORROSION CONTROL  
by Yacht Corrosion Consultants, Inc.  
2368 Eastman Ave. #6  
Ventura, CA 93003

**English**

**French**

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Part No. 626669A (5-04)

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## Owner's Manual

### NORCOLD - Dual Electric Two Year Limited Warranty Policy

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Norcold, Inc. warrants that when properly installed and placed under normal service and use its refrigeration equipment is free from defects in material and workmanship for two years commencing from the original date of purchase of the new equipment.

#### Limitations of Warranty

1. This Warranty is the only warranty for a Norcold AC/DC refrigerator. This Warranty does not extend to glassware, electric light bulbs, and replaceable fuses.
2. This warranty does not apply to parts and assemblies that have been subjected to misuse, improper installation, abnormal service, transit damage, recharging of cooling system, accident, fire, improper repair, tampering or abuse.
3. Irrespective of the nature of the warranty protection offered or claimed, the period of warranty shall in no case extend beyond two years commencing from the original date of purchase of the new equipment.

#### LIMITATION OF REMEDY

1. **THE RESPONSIBILITY OF NORCOLD UNDER THIS OR ANY WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT (AT NORCOLD'S OPTION) OF THE DEFECTIVE PART OR ASSEMBLY.**
2. **IN NO EVENT AND UNDER NO CIRCUMSTANCES SHALL NORCOLD BE RESPONSIBLE UNDER THIS LIMITED WARRANTY FOR ANY OTHER CHARGE WHATSOEVER, INCLUDING BUT NOT LIMITED TO CHARGES OR CLAIMS FOR LABOR, LOST BUSINESS, LOST TIME, LOST PROFITS, LOSS OF USE, OR ANY KIND OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, HOWEVER DENOMINATED OR DESCRIBED. THE REMEDY UNDER THIS WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT.**
3. **SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.**

#### DISCLAIMER OF OTHER WARRANTIES

**THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED. ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED AND EXCLUDED.**

#### Legal Rights

This warranty gives you specific legal rights, and you may have other legal rights which vary from state to state.

## Dual Electric Warranty Information

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Your refrigerator is made to provide the ultimate in cooling satisfaction and will serve you reliably in the years to come. Norcold refrigerators are the only RV refrigerators made in the United States and offer a standard limited two-year warranty.

To activate your two-year limited warranty, complete and mail the warranty registration supplied.

Help us to help you.

Write the model number and serial number below for future reference. These numbers are on the serial plate in the refrigerator. The serial plate is located in the fresh food compartment on the top right hand side. Use these numbers when receiving service or in any correspondence concerning your refrigerator.

Model number \_\_\_\_\_ Serial number \_\_\_\_\_

If a problem occurs with your refrigerator, contact any of the service centers throughout the United States and Canada. To find an authorized Norcold Service Center near you, please telephone the Norcold Customer Support Dept. at 800-543-1219 (option-1) or visit our web site at [www.norcold.com](http://www.norcold.com).

Norcold is committed to providing products that are in harmony with the environment. Your Norcold refrigerator meets all environmental safety standards.

## Dual Electric Warranty Questions

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This warranty is the only warranty for your Norcold refrigerator. There are no other express warranties. The only uses for this product are described in this manual. Part or model specifications are subject to change without notice.

### What does this warranty cover?

This warranty covers labor and freight (ground service only) and costs incurred in removing and reinstalling the refrigerator when necessary to replace a defective part and any parts replaced under warranty (including cooling units).

### What is not covered by this warranty?

- Travel expenses for bringing the refrigerator to an authorized Norcold Service Center for warranty coverage.
- Additional costs caused by the inability to bring the refrigerator to an authorized Norcold Service Center.
- Defects which are caused by transit damage, misuse, neglect, or accident.
- Manufacturing defects found at the time of purchase, parts replaced under warranty, and associated labor, which the original consumer-purchaser does not communicate to Norcold within 30 days.
- Labor, performed without need for parts replacements, which the original consumer-purchaser does not communicate to Norcold within 30 days.
- Defects in glassware, electric light bulbs, or replacement fuses.
- Defects caused by improper installation, maintenance, or adjustment.
- Normal maintenance of this refrigerator as described in this manual.
- Defects caused by the improper use of parts or parts not manufactured or supplied by Norcold for repairs or replacements to the refrigerator.

Norcold will not be liable for any incidental or consequential loss or damage, due directly or indirectly to the use of this product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above may not apply to you.

### How long does this warranty last?

This warranty is effective for a period of two years from date of purchase.

### What will Norcold do?

Norcold will provide free service and replacement of defective parts, at no charge, at all authorized Norcold Service Centers. Norcold has the option of replacing the defective parts or the entire refrigerator. If the refrigerator is replaced, Norcold is not responsible for replacing dealer installed options.

### How do you get service?

Bring the refrigerator to any authorized Norcold Service Center and show proof that the defective item is within warranty coverage.

If you are unable to bring the refrigerator to an authorized Norcold Service Center:

- Send a written notice of the defect to Norcold.
- Norcold will promptly advise you how to obtain warranty service.

### What rights do you have?

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

## Safety Awareness

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Read this manual carefully and understand the contents before you use the refrigerator.

Be aware of possible safety hazards when you see the safety alert symbol on the refrigerator and in this manual. A signal word follows the safety alert symbol and identifies the danger of the hazard. Carefully read the descriptions of these signal words to fully know their meanings. They are for your safety.



**WARNING:** This signal word means a hazard, which if ignored, can cause dangerous personal injury, death, or much property damage.



**CAUTION:** This signal word means a hazard, which if ignored, can cause small personal injury or much property damage.

## Safety Instructions

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### WARNING:

- The storage of flammable materials behind or around the refrigerator creates a fire hazard. Do not use the area behind the refrigerator to store anything, especially flammable materials (gasoline, cleaning supplies, etc.)
- Do not remove the round ground prong from the refrigerator AC power cord. Do not use a two prong adapter or extension cord on the AC power cord.
- A circuit overload can result in an electrical fire if the wires and/or fuses are not the correct size. Use only the wire and fuse sizes as written in the "Installation Manual".
- Incorrect installation, adjustment, change to, or maintenance of this refrigerator can cause personal injury, property damage, or both. Have service and maintenance work done by your dealer or by an authorized Norcold Service Center.
- Disconnect both the AC and DC power sources before doing any maintenance work on the refrigerator. All service work on this refrigerator must be done by a qualified service technician.
- Do not bypass or change the refrigerator's electrical components or features.
- When you discard an appliance, remove all doors to prevent accidental entrapment and suffocation.

- Do not spray liquids near electrical outlets, connections, or the refrigerator components. Many liquids are electrically conductive and can cause a shock hazard, electrical shorts, and in some cases fire.



### CAUTION:

- The rear of the refrigerator has sharp edges and corners. To prevent cuts or abrasions when working on the refrigerator, be careful and wear cut resistant gloves.

## About Your Refrigerator

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### Storage Volume:

This refrigerator is made to store fresh and frozen foods and for making ice.

Total capacity DE / EV0041	3.6 cubic feet
Total capacity DE / EV0061	7.0 cubic feet

### Food compartment:

Start up the refrigerator and let it cool for eight hours before loading with food. If the refrigerator does not start to cool down after about two hours, contact your dealer or an authorized Norcold Service Center.

For the best cooling performance:

- Let air move freely inside the entire food compartment.
- Do not cover the shelves with plastic, paper, etc.

To decrease the amount of ice that collects on the freezer plates:

- Cover all liquids and moist foods.
- Let all hot foods cool before putting them in the refrigerator.
- Do not open the door any longer than necessary.

### Freezer compartment:

The freezer compartment is made to keep pre-frozen food frozen and not to quick freeze food. Keep pre-frozen foods in the freezer compartment.

**NOTE:** When making ice, put the ice cube tray directly on the freezer surface. Do not put other items on the ice cube tray while the water is freezing. The water freezes more rapidly if the power switch / thermostat is at the coldest temperature setting.

## Door latch for travel:

During travel, the door latch prevents the door from opening. There are no chains, slides, or any devices that you must engage.

## Interior light:

The DE / EV0041 interior light is located on the left wall of the fresh food compartment. The DE / EV0061 interior light is located behind the divider that separates the freezer compartment from the fresh food compartment.

The interior light comes on when the refrigerator is ON and the door is open. To replace the bulb:

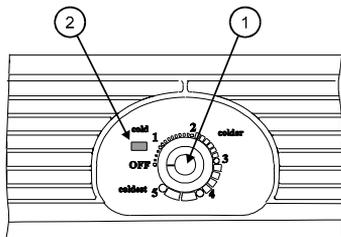
1. Use tape to hold the light switch down, which removes power from the light circuit.
2. Remove the cover [1] by pulling it toward the front of the refrigerator (See Art00988).
3. Remove the light bulb [2] from the holder [3].

NOTE: Use only a GE#214-2 bulb as the replacement bulb. This bulb is available at most retail automotive parts centers.

4. Install the replacement bulb.
5. Install the cover.
6. Remove the tape from the light switch.

## Operation

### Controls:



Art01663

- Power switch / Thermostat ..... 1  
 Power indicator ..... 2

The power switch / thermostat [1] controls operation of the refrigerator (See Art01663). When the power switch / thermostat is in the "OFF" position, no voltage is supplied to the cooling system.

The green power indicator [2] illuminates when the power switch / thermostat is in any position except the "OFF" position and the cooling system is energized.

The power switch / thermostat also controls the temperature of the refrigerator. Number 5 is the coldest temperature setting. When you start up the refrigerator, turn the thermostat to the 5 position. Allow the refrigerator to cool down for eight hours and then turn the thermostat to the temperature setting that you wish.

The refrigerator operates on either AC and DC voltage. If both power sources are connected to the refrigerator, it operates on AC voltage. If AC power becomes unavailable, such as when you disconnect shoreline power, the refrigerator operates on DC power.

**CAUTION:** Do not operate the refrigerator when the ambient temperature is higher than 110° F. Operation of the refrigerator when the ambient temperature is higher than 110° F will start the over heating shut-off device on models DE0041T and DE0061T only. See the "Overheating shut-off device" section.

Operation of other models when the ambient temperature is higher than 110° F. can cause poor cooling performance and permanent damage to the compressor.

### DC Operation Guidelines:

**CAUTION:** Do not operate the refrigerator on battery power only. Operation of the refrigerator directly from the battery will rapidly discharge the battery. Correctly supply DC power to the refrigerator.

The refrigerator gets DC power from the vehicle battery system. The battery system also supplies power to any other DC appliances or accessories of the vehicle.

A dual battery system provides the best power usage. This system uses two batteries. One battery supplies DC power only to the vehicle engine and its accessories. The second battery supplies DC power only to the DC appliances of the vehicle. An alternator, powered by the vehicle engine, charges both of the batteries.

## Refrigerator Care Checklist

Your refrigerator will give you years of trouble free service if you do these simple checks every three to six months:

- Keep the food compartment and the freezer clean. See "Cleaning".
- Defrost the refrigerator as necessary. See "Defrosting".
- Make sure the door seals correctly. See "Door Sealing".

- Be aware of any cooling changes that are not because of weather, loading, or thermostat changes. If changes occur, contact your dealer or an authorized Norcold Service Center.
- Make sure the air flow in the lower intake vent, through the refrigerator condenser and coils and out the upper exhaust vent is not blocked or decreased.
- Make sure the area behind the refrigerator is clear. Do not use the area behind the refrigerator for storage of anything, especially combustible materials, especially gasoline and other flammable vapors and liquids.

### Defrosting:

The freezer plates of the refrigerator operate at below freezing temperature and will naturally form frost from humidity, which is always present in the air. The humidity inside the refrigerator increases:

- with higher outside temperature and humidity.
- with the storage of non-sealed fresh foods or warm foods.
- with the amount of time that the door(s) are open.
- with any air leakage into the refrigerator.

It is normal for frost to collect inside the refrigerator. Excess frost decreases the cooling performance of the refrigerator. Defrost the refrigerator as necessary:

- Remove all food from the refrigerator.
- Turn the refrigerator OFF.

**NOTE:** Defrosting the refrigerator makes excess water inside the refrigerator, which falls onto the drip tray and flows to the outside of the refrigerator through the drain tube.

- Put dry towels (etc.) inside the refrigerator to help remove the excess water.



**CAUTION:** High temperatures can cause the inside surfaces of the refrigerator to warp or melt. Do not use pans of HOT water, a hair dryer, or any other high temperature devices to defrost the refrigerator. Do not use any hard or sharp objects to remove frost. Damage to the interior of the refrigerator can occur.

- To increase the speed of defrosting, put pans of WARM water in the refrigerator.
- Remove the wet towels (etc.) and dry the interior.
- Start up the refrigerator.
- Allow the refrigerator to cool down.
- Return all food to the refrigerator.

### Cleaning:

A good time to clean the refrigerator is just after you defrost it.

Clean the inside of the refrigerator as often as necessary to avoid food odors:

- Remove all food from the refrigerator.

**NOTE: Do not use abrasive cleaners, chemicals, or scouring pads because they can damage the interior of the refrigerator.**

- Wash the interior with a mild cleaner or a solution of liquid dish detergent and warm water.
- Rinse with a solution of baking soda and clean water.
- Dry with a clean cloth.
- Put all food back into the refrigerator.

To remove and clean the drip tray:

- Make sure that the drip tray is empty of water.
- Pull the drain tube plug out from the inside of the drip tray and out of the drain hose.
- Pull the drip tray down to remove from the slots in the refrigerator cabinet.
- Clean the drip tray.
- Put the drain tube plug down into the drip tray and push the drip tray back into the original position.
- Push the drain hose back onto the drain tube plug.

### Door sealing:

If the door does not seal correctly, excess frost will collect inside the refrigerator. Make sure the door seals correctly:

- Close the door on a piece of paper that is about the size of a dollar bill (See Art00980).
- Gently pull the paper.
  - You should feel a slight drag between the gasket and the cabinet.
  - Do this on all four sides of the door.
  - If you do not feel a slight drag on the paper, the door is not sealing correctly.
  - Have your dealer or an authorized Norcold Service Center correct the seal of the door

## Troubleshooting

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### If the refrigerator does not cool correctly in either AC or DC mode:

- Make sure the power switch / thermostat is not in the OFF position.
- Make sure the power switch / thermostat is at the temperature setting that you wish.
- Make sure that the power source(s) to the refrigerator is serviceable.
- Make sure that the fuse or circuit breaker is intact (See "Overcurrent protection system")
- Make sure that the refrigerator is correctly installed and that the built in vents are not blocked.
- Make sure that the ambient temperature is not unusually high (more than 110° F. / 43° C.) (See "Overheating shut-off device operation").
- Make sure that the door is closed.
- If the weather is hot, make sure that the door is sealing correctly.
- Make sure that the air circulation inside the refrigerator is not decreased by foods or by shelves that are covered with plastic, paper, etc.
- Make sure that hot foods were not placed in the fresh food compartment of the refrigerator.
- Make sure that the freezer is defrosted.

After you make these checks, if the refrigerator does not operate, contact your dealer or an authorized Norcold Service Center.

### Over heating shut-off device operation (models DE0041T and DE0061T):

Operating the refrigerator in high ambient temperatures can over heat the cooling unit and cause premature failure of the compressor (See the label inside the refrigerator).

To protect the cooling unit from over heating, the refrigerator will automatically shut-off when the vehicle air temperature is higher than 110° F. If shut off occurs, an audible alarm tone (an intermittent beeping) operates from the refrigerator.

To stop the audible alarm tone and restart the refrigerator, turn the thermostat counterclockwise to the "OFF" position and then clockwise to the desired thermostat position.

The refrigerator will not restart until the air temperature is lower than 110° F.

### Over current protection system:

Your refrigerator has an over current protection system in the electronic circuit to prevent damage to the inverter which may occur due to a reverse polarity connection.

If the refrigerator does not operate and the green power light does not come on, check the fuse, which is located in-line with the DC connector, and the polarity of the DC power supply. If the refrigerator still does not operate, another problem can exist in the inverter. Have an authorized Norcold Service Center check the refrigerator.

## Refrigerator Maintenance Checklist

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Read and understand the following maintenance sections of this manual.

**NOTE: Norcold is not responsible for installation, adjustment, alteration, service, or maintenance performed by anyone other than a qualified RV dealer or an authorized Norcold Service Center.**

Have a qualified RV dealer or an authorized Norcold Service Center do these annual safety and maintenance checks:

- Make sure the AC and DC voltages are correct (See the "Electrical current necessary" section).
- The wire connections must be clean, tight and free of corrosion. If any of these items are not correct:
  - A voltage drop to the refrigerator will occur.
  - The voltage drop will decrease the cooling performance of the refrigerator.



**CAUTION:** Disconnect the positive (+) DC power supply wire from the battery before you do a "fast charge" of the battery. Failure to disconnect the positive (+) power supply wire from the battery during a "fast charge" can cause damage to the refrigerator or other 12 volt DC appliances.

- Make sure the area at the rear of the refrigerator is free of anything, especially combustible materials, gasoline, and other flammable vapors and liquids.

## Wiring Pictorial

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The parts of the wiring pictorial are (See Art01730):

1 .....	Power supply
2 .....	DC input
3 .....	AC input
4 .....	Power switch / thermostat
5 .....	Evaporator sensor
6 .....	Compressor
7 .....	DC 24V fan
8 .....	Interior light
9 .....	Door switch(s)
10 .....	Divider heater (DE / EV0061 models)

## Replacement Parts

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You may purchase replacement parts through your dealer or an authorized Norcold Service Center.

# Installation Manual

## Safety Awareness

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Read this manual carefully and understand the contents before you install the refrigerator.

Be aware of possible safety hazards when you see the safety alert symbol on the refrigerator and in this manual. A signal word follows the safety alert symbol and identifies the danger of the hazard. Carefully read the descriptions of these signal words to fully know their meanings. They are for your safety.



**WARNING:** This signal word means a hazard, which if ignored, can cause dangerous personal injury, death, or much property damage.



**CAUTION:** This signal word means a hazard, which if ignored, can cause small personal injury or much property damage.

## Safety Instructions

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### WARNING:

- For installations which need an electric outlet that is energized by an external power source, the refrigerator must be electrically grounded as written in local codes or the National Electrical code, NFPA 70.
- Incorrect installation, adjustment, alteration, or maintenance of this refrigerator can cause personal injury, property damage, or both.
- Obey the instructions in the "Ventilation Requirements" section of this manual.
- Do not bypass or change the refrigerator's electrical components or features.
- Protect all wiring from physical damage, vibration, and excessive heat.
- Do not spray liquids near electrical outlets, connections, or the refrigerator components. Many liquids are electrically conductive and can cause a shock hazard, electrical shorts, and in some cases fire.



### CAUTION:

- The front and rear of the refrigerator has sharp edges and corners. To prevent cuts or abrasions when working on the refrigerator, use caution and wear cut resistant gloves.

## Assemble the Enclosure

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- Make sure that the enclosure is the correct size:
  - For DE / EV 0041 models - 30 7/8 inches high x 23 1/4 inches wide x 23 1/2 inches deep.
  - For DE / EV 0061 models - 52 7/8 inches high x 23 1/4 inches wide x 23 3/4 inches deep.
- Make sure the floor is solid and level.
  - The floor must be metal or a wood panel and extend the full width and depth of the enclosure.
  - The floor must be able to support the weight of the refrigerator and its contents.
- Make sure there are no adjacent heat sources such as a furnace vent, etc.

## Ventilation Requirements

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This refrigerator is made for a built-in installation. Correct ventilation is necessary for the correct operation of the refrigerator and to increase the life of the refrigerator cooling system.

Ventilation allows the natural air flow that is necessary for good refrigeration. Cooler air comes in through a lower intake vent, goes around the refrigerator coils where it removes the excess heat from the refrigerator components, and goes out through an upper exhaust vent. If this air flow is blocked or decreased, the refrigerator will not cool correctly. Do not install the vents into completely enclosed areas such as closets or cabinets.



**CAUTION:** The refrigerator has built in vents at the top and at the bottom. Make sure that the flow of air through these vents is not blocked in any way. Blockage of air through these vents can cause:

- shortened life of the refrigerator cooling unit.
- poor cooling performance of the refrigerator.
- continuous operation of the refrigerator.
- fast battery discharge.
- void of the refrigerator warranty.

## Installation Options

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### Install the decorative door panel(s):

- Make a decorative door panel [4] (See Art01664).

**NOTE:** The decorative panels must be 3/16 inch or less in thickness and must be within  $\pm$  1/32 inch of the following dimensions:

- For DE / EV0041 models, the door panel must be 17 13/16 inches wide x 23 5/8 inches tall.
  - If the door panel has a raised panel, the size of the raised part of the panel must be less than 17 7/16 inches wide x 23 5/16 inches tall.
- For DE / EV0061 models, the lower door panel must be 17 13/16 inches wide x 27 1/4 inches tall.
  - If the door panel has a raised panel, the size of the raised part of the panel must be less than 17 7/16 inches wide x 26 15/16 inches tall.
- For DE / EV0061 models, the upper door panel must be 17 13/16 inches wide x 16 1/2 inches tall.
  - If the door panel has a raised panel, the size of the raised part of the panel must be less than 17 7/16 inches wide x 16 3/16 inches tall.

- Pull the panel retainer [3] off the hinge side of the door [6].
- Push the decorative door panel into the slots [5] of the door.
- Push the panel retainer in the original position on the door.

### Reverse the door swing (DE / EV0041 models):

This refrigerator has door hinges that allow you to change the direction that the door opens by moving the hinges to the opposite corner.

1. Remove the door (See Art01658 and Art01659):
  - Turn out and save the upper hinge pin [2].
  - Open the door a small amount and pull the top of the door away from the upper hinge of the refrigerator.
  - Turn out and save the lower hinge pin.

- Lift the door off of the lower hinge pin [3].

NOTE: Make sure that the plastic bushings [18] remain in the door hinges.

2. Change the position of the strike plate and the strike plate cover (See Art01665):

- Remove the screws [4] that attach the strike plate (with hole) [5] and the strike plate cover (without hole) [6].
- Reverse the strike plate and the strike plate cover and put each one on the other side of the refrigerator cabinet.
- Attach the strike plate and strike plate cover with the screws.

3. Change the position of the cabinet hinges (See Art01658 and Art01659):

- Remove the screws [8] from the upper cabinet hinge [10].
- Reverse this hinge and put on the other side of the refrigerator as the lower cabinet hinge.
- Attach the cabinet hinge with the screws.
  - Do not fully tighten the screws at this time.
- Turn the lower hinge pin [3] down into this hinge.
- Remove the screws [12] from the lower cabinet hinge [13].
- Put this hinge on the other side of the refrigerator as the upper cabinet hinge.
- Attach the cabinet hinge with the screws.
  - Do not fully tighten the screws at this time.

4. Change the position of the door hinges and handle (See Art00985 and Art01666):

- Remove and save the screws [1] that attach the door handle [2] to the refrigerator door.
- Remove the door handle.
- Pull the panel retainers off the door.
- Reverse the panel retainers and push onto opposite side of the door.
- Reverse the door handle and put on the other side of the door.
- Attach the door handle with the screws.
- Remove and save the plastic cap [ 22] that is opposite the upper hinge of the door.

- Remove the screw [9] from the door hinges [11].

- Remove the upper door hinge.
- Reverse the hinge and put on the opposite side of the door as the lower door hinge.
- Remove the lower door hinge.
- Reverse the hinge and put on the opposite side of the door as the upper door hinge.
- Attach each of these hinges with the screws that were removed from the other side.

NOTE: You may need to pierce a hole in the door gasket allow the screw to engage to door hinge.

- Put the plastic cap in the hole that is opposite the upper hinge.

5. Install the door:

NOTE: Make sure that the plastic bushings [18] remain in the door hinges.

- Put the door down onto the lower hinge pin.
- Align the holes in the upper hinge and the hinge bushing and hold in this position.
- Screw the upper hinge pin down into the upper hinge and into the door.
- Align the door so the space between the door and the cabinet is equal all around the door.
- Hold the door in this position and tighten all of the hinge screws.

**Reverse the door swing (DE / EV0061 models):**

The refrigerator has door hinges that allow you to change the direction that the doors open by moving the hinges to the opposite corner.

1. Remove the doors (See Art01657).

- Turn out and save the upper hinge pin [14].
- Turn out and save the center hinge pin caps [15].
- Open the upper door a small amount and pull the top of the upper door away from the upper hinge of the refrigerator.
- Lift the upper door off of the center hinge pin [16].

- Turn out and save the lower hinge pin [17].
- Open the lower door a small amount and pull the bottom of the lower door away from the lower hinge of the refrigerator.
- Pull the lower door down off of the center hinge pin.

NOTE: Make sure that the plastic bushings [18] remain in the door hinges.

2. Change the position of the cabinet hinges (See Art01657):

- Remove the screws from the upper cabinet hinge [19].
- Put this hinge on the other side of the refrigerator cabinet as the lower cabinet hinge.
- Attach the hinge with the screws.
  - Do not fully tighten the screws at this time.
- Remove the screws from the lower cabinet hinge [20].
- Put this hinge on the other side of the refrigerator cabinet as the upper cabinet hinge.
- Attach the hinge with the screws.
  - Do not fully tighten the screws at this time.
- Remove the three screws from the center cabinet hinge [21].
- Remove the center cabinet hinge.
- Turn the screws back into the original holes and tighten the screws.
- Remove the three screws on the opposite side of the refrigerator cabinet.
- Reverse the center cabinet hinge and put it on the opposite side of the refrigerator cabinet.
- Attach the hinge with the screws.
  - Do not fully tighten the screws at this time.
- Turn the center hinge pin [16] out of bottom of the center cabinet hinge.
- Reverse the center hinge pin and turn it down into the top of the center cabinet hinge.

3. Change the position of the strike plate and the strike plate cover for both doors (See Art01655):

- Remove the screws that attach the strike plates (with hole) [5] and the strike plate covers (without hole) [6].
- Reverse the strike plates and the strike plate covers and put each one on the other side of the refrigerator cabinet.

- Attach the strike plates and strike plate covers with the screws.

4. Change the position of the door hinges and handle of both doors (See Art00985 and Art01666):

- Remove and save the screws [1] that attach the door handle [2] to each door.
- Remove the door handle from each door.
- Pull the panel retainers off each door.
- Reverse the panel retainers [3] and push onto opposite side of each door.
- Reverse the door handle and put on the other side of each door.
- Attach each door handle with the screws.
- Remove and save the plastic cap [ 22] that is opposite the upper hinge of each door.
- Remove the screw [9] from each door hinge [11].
- Remove each upper door hinge.
- Reverse the hinge and put on the opposite side of each door as the lower door hinge.
- Remove each lower door hinge.
- Reverse the hinge and put on the opposite side of each door as the upper door hinge.
- Attach the hinges with the screws that were removed from the other side of each door.

NOTE: You may need to pierce a hole in the door gasket allow the screw to engage to door hinge.

- Put the plastic cap in the hole that is opposite the upper hinge of each door.

5. Install the lower door:

- Make sure a hinge bushing is in the top of the upper door hinge.
- Push the upper door hinge up onto the center hinge pin.

- Allow the door to close and put the bottom of the lower door hinge onto the lower cabinet hinge of the refrigerator.
  - Make sure a hinge bushing is in the bottom of the lower door hinge.
  - Align the holes in lower door hinge and the lower cabinet hinge.
  - Turn the lower hinge pin down into the lower cabinet hinge.
6. Install the upper door:
- Make sure a hinge bushing is in the bottom of the lower door hinge.
  - Put the lower door hinge down onto the center hinge pin.
  - Allow the door to close and put the top of the upper door hinge under the upper cabinet hinge of the refrigerator.
  - Make sure a hinge bushing is in the top of the upper door hinge.
  - Align the holes in upper door hinge and the upper cabinet hinge.
  - Turn the upper hinge pin up into the upper cabinet hinge.
  - Turn a center hinge pin cap back onto each end of the center hinge pin.
7. Align the doors and tighten all of the screws.

## Connect the Drain Tube

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### CAUTION:

If you do not remove the orange cable tie from the drain tube, the result will be water inside the refrigerator.

If you do not connect the drain tube to another tube, the result will be water at the rear of the refrigerator.

1. Remove and discard the orange cable tie that seals the drain tube at the rear of the refrigerator.
2. Attach the drain tube to another tube which allows the defrost water of the refrigerator to correctly drain to a sump or to an area outside the vehicle.

## Install the Refrigerator

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1. Fasten the refrigerator into the enclosure (See Art01668):

- Push the refrigerator fully into the enclosure opening.

NOTE: DE/EV0041 models have four mounting screws and DE/EV0061 models have six mounting screws.

- Put the mounting screws [4] through the mounting flange [5] on both sides of the refrigerator.

- Make sure the mounting screws are through upper hole [6] of each pair of holes in the mounting flanges.



**CAUTION:** If the mounting screws are not through the upper hole of each pair of holes in the mounting flanges, the side trim pieces will not fit correctly.

2. Install the side trim pieces (See Art01669 and Art01670):

- Open the door(s).

- Push the top only of each side trim piece [7] onto the metal frame [8] of the refrigerator.

- While holding the top only of each side trim piece onto the metal frame, push each side trim piece up and under the top grill [9].

- Align the hinges, the strike plate cover, and the strike plate with the openings in the side trim pieces and push the remainder of each side trim piece onto the metal frame of the refrigerator.

- The side trim should engage the metal frame and the inner tabs [10] with a "snap" sound.

3. Put the hinge hole covers onto the refrigerator cabinet opposite the hinges and over the empty hinge holes (See Art01655 and Art01665).

4. Install the bottom grill (See Art01660):

- Align the mounting clips [1] of the bottom grill [2] with the openings [3] in the bottom rail of the refrigerator cabinet.



**CAUTION:** Carefully push both ends of the bottom grill equally to engage the mounting clips in the bottom rail at the same time. If the mounting clips engage the bottom rail one at a time, damage to the bottom grill can result.

- Push the bottom grill toward the lower frame until the mounting clips "snap" into the bottom rail.

## Connect the Electrical Components

### Electrical current necessary:

AC Operation	DE0041 and DE0061 models 120 volts AC voltage (108 volts min. - 132 volts max.) 59 hertz min. - 61 hertz max.
AC Operation	EV0041 and EV0061 models 220 volts AC voltage (205 volts min. - 253 volts max.) 49 hertz min. - 51 hertz max.
DC Operation	DE / EV0041 and DE / EV0061 models 12 volts DC voltage (10.2 volts min. - 15.4 volts max.)  24 volts DC voltage (21.2 volts min. - 30.5 volts max.)

This refrigerator operates on both AC and DC electrical sources. Operation out of these limits may damage the refrigerator's electrical circuit parts and will void the warranty.

### Connect the 120 / 220 volts AC supply:

 **WARNING:** Connect the AC power cord only to a grounded three-prong receptacle. Do not remove the round ground prong from the power cord. Do not use a two-prong adapter or an extension cord. Operation of the refrigerator without correct ground can cause dangerous electrical shock or death if you are touching the metal parts of the refrigerator.

Put the AC power cord [24] (See Art01655 and Art01659) into a grounded three-prong receptacle:

- Make sure the AC power to the receptacle goes through a fuse or a circuit breaker which will protect the vehicle when an outside power source is used.
- If the AC power to the receptacle is supplied by an on-board generator, make sure that both the voltage and the frequency are within the specified limits (See the "Electrical current necessary" section).

### Connect the 12/24 volts DC supply:

To reduce the risk of electrical interference from other DC appliances and induction from voltage spikes:

- The refrigerator must have an independent 12/24 volt DC supply.
- Route the DC power supply wires including the fuses directly from the battery to the refrigerator.

- Twist the DC power supply wires from the battery to the refrigerator.

 **CAUTION:** Do not use a converter or a battery charger to supply the DC power to the refrigerator. These devices do not supply filtered DC power. When using a converter or a battery charger, make sure a battery is in-line between them and the refrigerator.

As the distance from the vehicle battery to the refrigerator increases, the correct AWG wire size also increases. If the wire size is too small for the distance, a voltage drop occurs. The voltage drop decreases the cooling performance of the refrigerator.

1. Find the minimum wire size to use:

 **WARNING:** Use only the recommended wire size.

- Measure the distance from the vehicle battery to the refrigerator:
  - If the distance is 0 - 12 feet, use #14 AWG min. wire size.
  - If the distance is 12-20 feet, use #12 AWG min. wire size.
  - If the distance is over 20 feet, use #10 AWG min. wire size.
- 2. To protect the DC power supply wiring, install a 15 amp fuse or circuit breaker in the positive (+) DC power supply wire as close to the battery as possible.
  - There is a 10 amp automotive fuse in the DC circuit at the refrigerator junction box.
- 3. Connect the DC power supply wires (See Art01655 and Art01659):

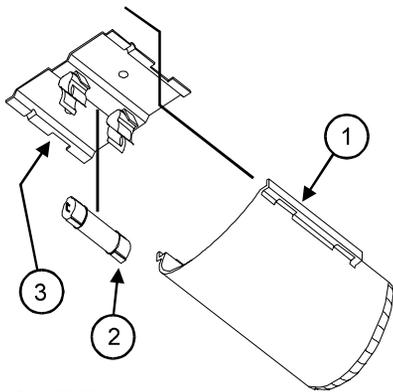
 **CAUTION:** If the DC power supply leads are attached incorrectly, damage to the refrigerator power supply will occur.

- Connect the positive (+) DC power supply lead to the red wire [25] of the refrigerator.
- Connect the negative (-) DC power supply lead to the black wire [26] of the refrigerator.
- Make sure that:
  - Each DC power supply lead is attached to the correct polarity wire of the refrigerator power supply.
  - The chassis or the vehicle frame is not used as one of the conductors.

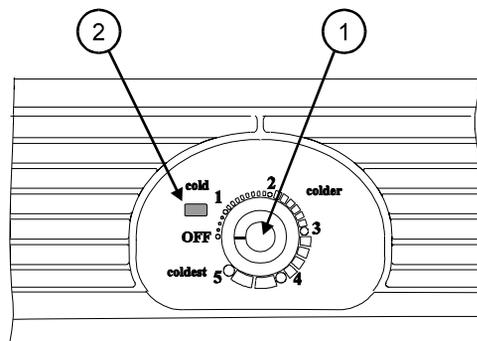
- The DC power supply wires including the fuses are routed directly from the battery to the refrigerator.
- The wire connections must be clean, tight and free of corrosion. If any of these items are not correct:
  - A voltage drop to the refrigerator will occur.
  - The voltage drop will decrease the cooling performance of the refrigerator.



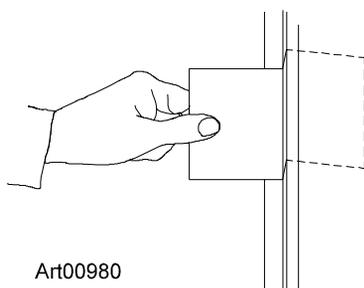
**CAUTION:** Disconnect the positive (+) DC power supply wire from the battery before you do a “fast charge” of the battery. Failure to disconnect the positive (+) power supply wire from the battery during a “fast charge” can cause damage to the refrigerator or other DC appliances.



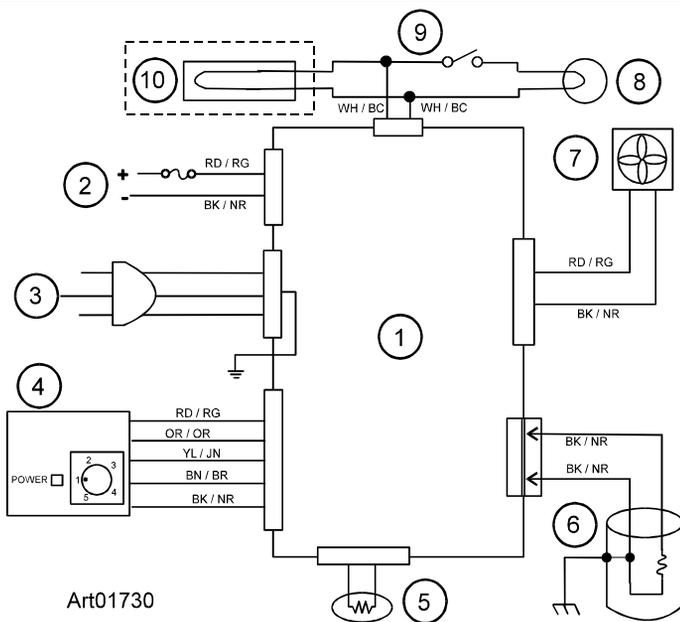
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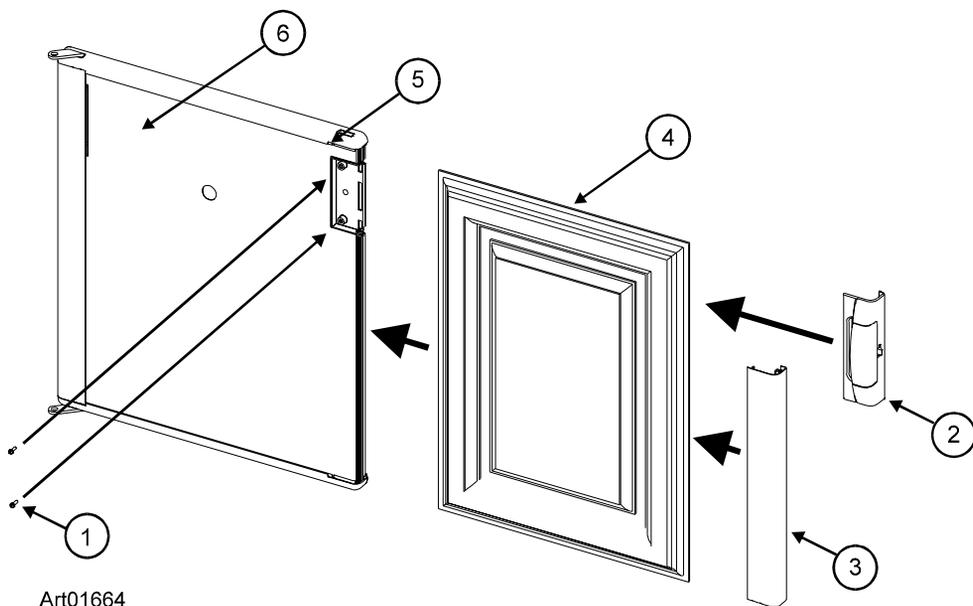
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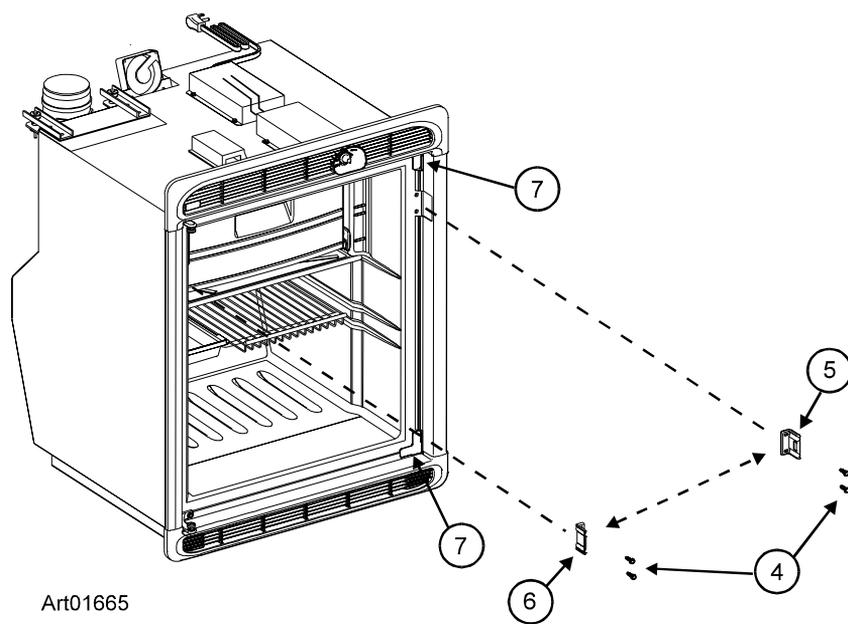
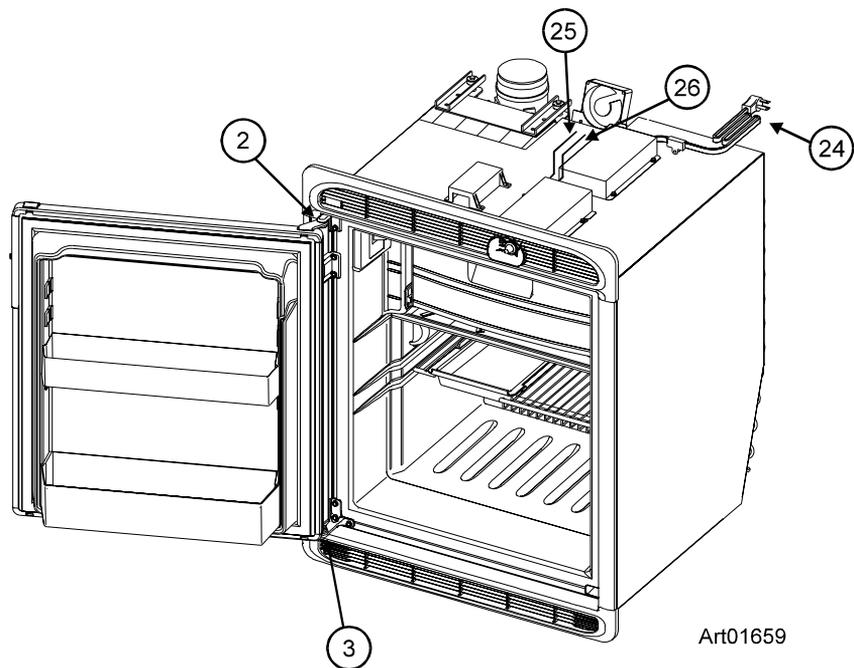
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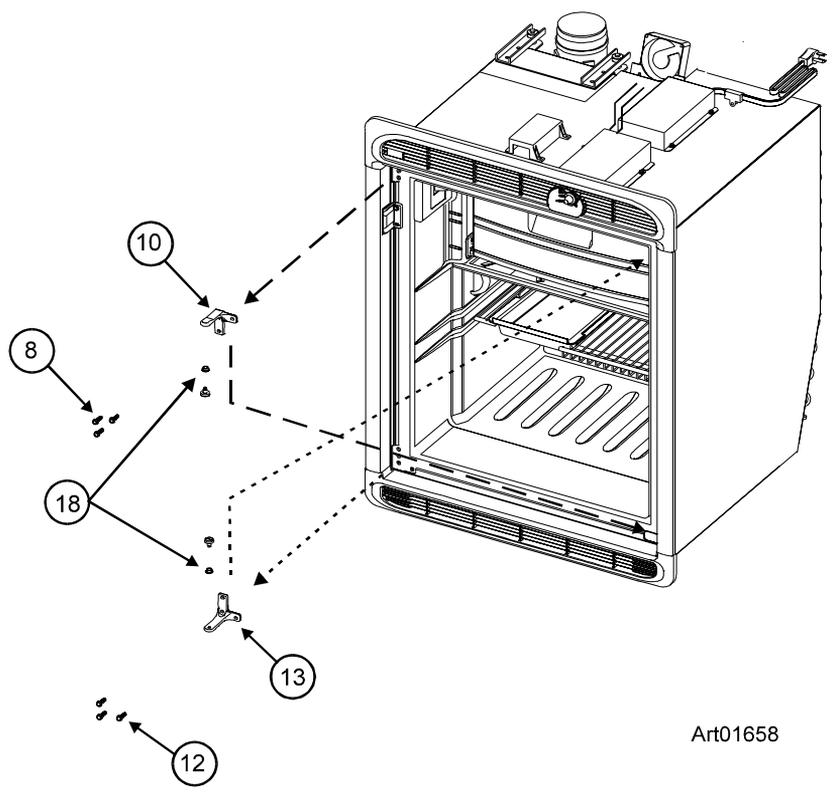


Art01730

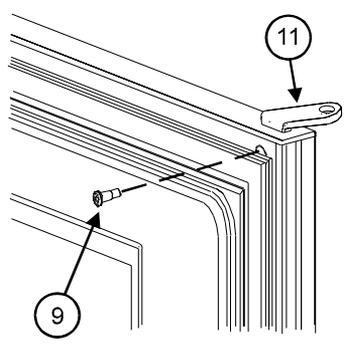


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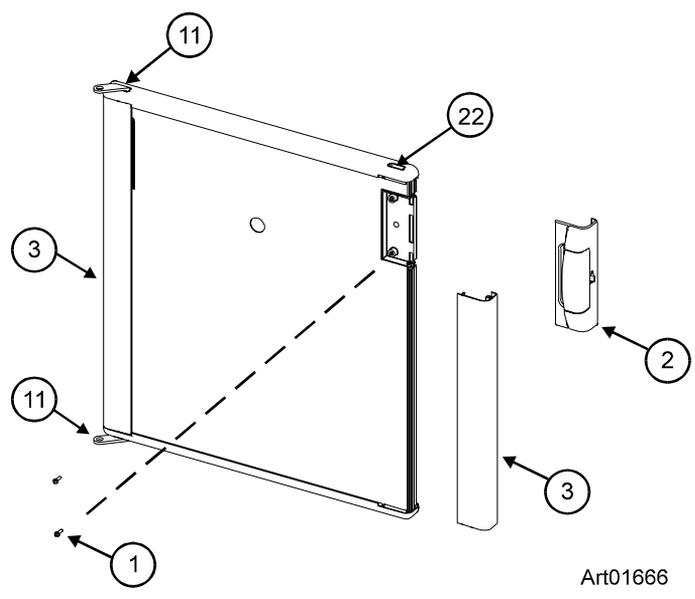




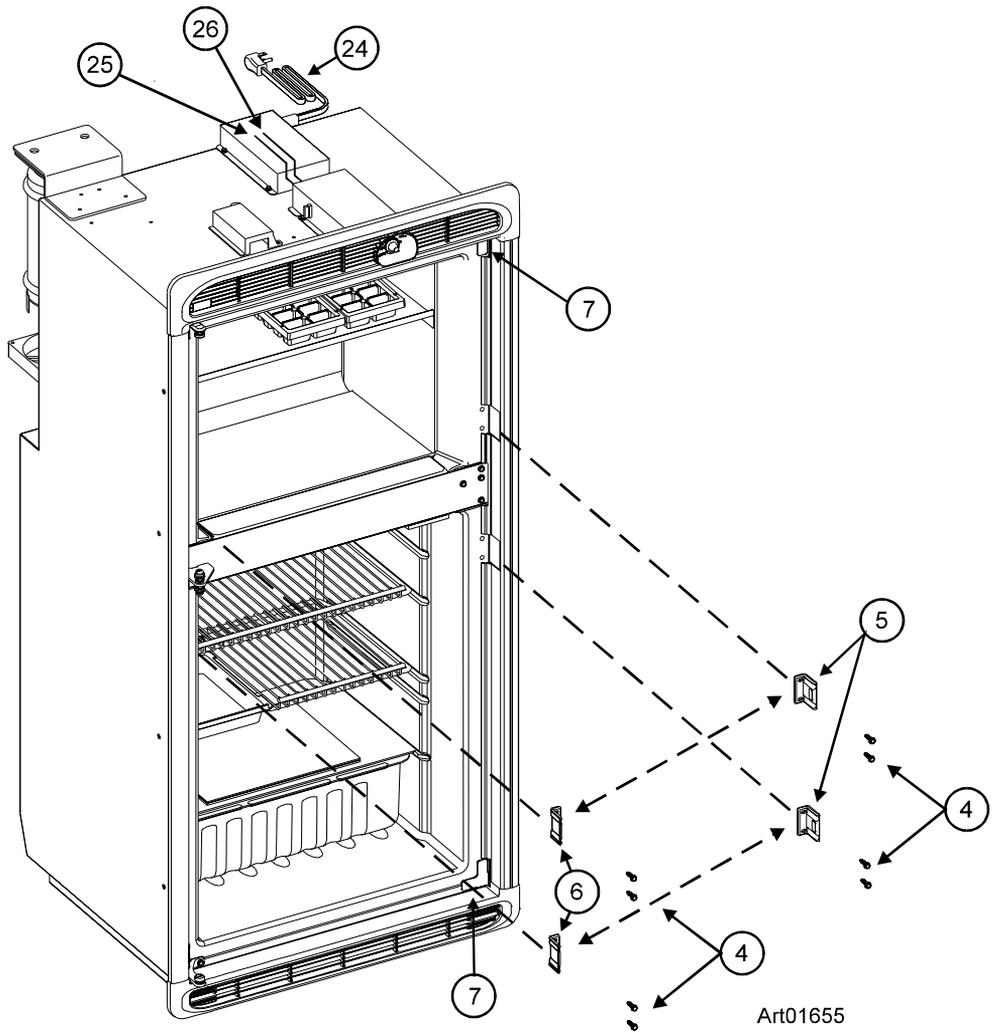
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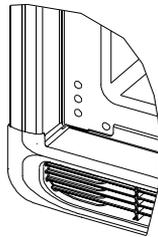
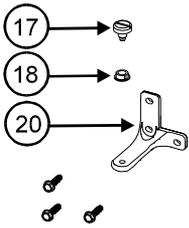
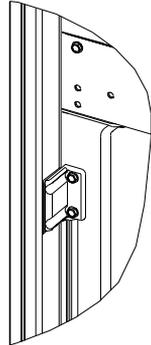
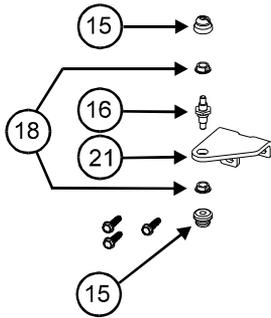
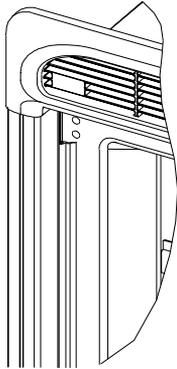
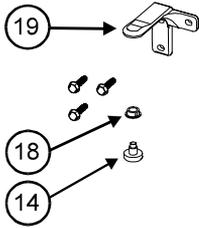
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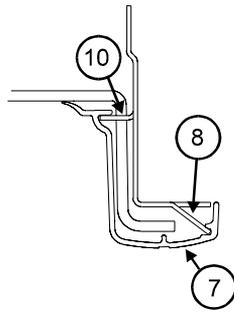
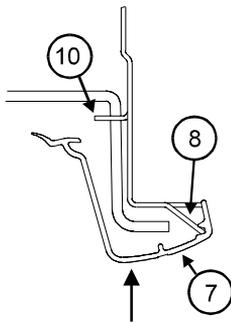
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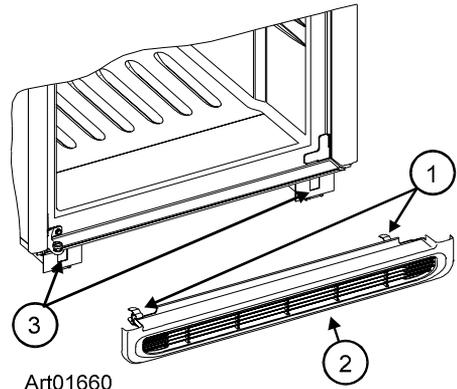
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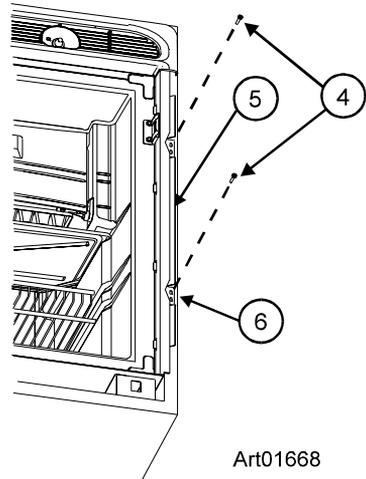
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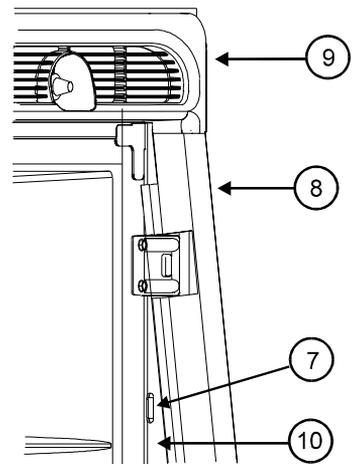
Art01670



Art01660



Art01668



Art01669