

# **Installation and Owner's Instructions**

## Water Dispenser

This refrigerator is equipped with an optional water dispenser. The InstallationManual and the Owner's Manual do not include instructions about this option. Please use these instructions for the Installation and the Operation of the water dispenser. Keep these instructions with the refrigerator Installation Manual Owner's Manual for future use.

# English

## French

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## **Owner's Instructions**

### Water Dispenser

The water dispenser is assembled to the refrigerators at the factory as optional equipment. If the refrigerator does not have a factory installed water dispenser, one cannot be added to the refrigerator at a later time.

The water dispenser has a water reservoir that is built into the rear of the refrigerator fresh food compartment. As water is dispensed, the reservoir automatically refills with water. The reservoir allows the supply water to cool to the same temperature as the inside of the refrigerator fresh food compartment.

Most vehicle manufacturers have a water filter installed in the plumbing system to remove odor, taste, chlorine, and sediment from the water. If the vehicle does not already have a water filter installed, Norcold recommends that you install one before operating the water dispenser. Contact your dealer.

The water dispenser operates only on demand and will operate in ambient temperatures as low as  $0^{\circ}$  F. To allow operation at temperatures between  $0^{\circ}$  F and  $32^{\circ}$  F, the water dispenser has a heater on the solenoid water valves and on the water line between the solenoid valves and the water dispenser.

At temperatures below 0° F, store the water dispenser as written in the "Water Dispenser Storage" section of these instructions.



**CAUTION:** The water line heater does not protect the water supply line from the vehicle shut off valve to the solenoid valves on the back of the refrigerator.

Do not allow the temperature inside the refrigerator fresh food compartment to be less than 32° F. At this temperature, the water inside the reservoir will freeze and damage the reservoir. If the vehicle is to shut down during cold weather, store the water dispenser as written in the "Water Dispenser Storage" section of these instructions.

The water dispenser operates on:

12 Volts DC.

- Potable water at a pressure of 15 psi - 125 psi.



**CAUTION:** Connect the water dispenser only to a potable water supply. The dispenser system does not make untreated water potable.

The dispenser is made to operate with water. Do not connect the dispenser to any other beverage source.

The convenient features of the water dispenser are:

- one hand operation.
- a task light which comes on while the water dispenser is on.
- a drain grid and drip cup which are removable for easy cleaning.
- a message center, on non-metal door models) which provides a location for notes, reminders, etc.

#### Water dispenser operation:

First time operation:

The first operation of the water dispenser removes the air from the water dispenser system.

- 1. Open the water shut off valve of the vehicle.
- 2. Hold a glass below the dispenser nozzle.
- 3. Push in and hold the dispenser arm [1] until the water flows out in a steady stream and does not sputter (See Art01703).

- NOTE: This may take a minute for the built-in reservoir to fill for the first time and to eliminate the air from the system. You should discard and not use the first several glasses of water from the dispenser. New plumbing connections and/or impurities in the water supply line from the first use or after winterizing can cause the first glasses of water to be discolored or have an odd flavor.
- 4. Release the paddle to stop the water flow.
- 5. Remove the glass from below the dispenser nozzle.

Continued operation:

- 1. Allow the water in the dispenser to cool before using the dispenser.
  - The cooling time will vary with the supply water temperature.
  - A complete refill of the built-in reservoir will take longer
- 2. Make sure that the air inside the refrigerator can freely circulate around the water reservoir which is located at the rear of the fresh food compartment.
- NOTE: Do not stack food tightly in front of the water reservoir. If the air inside the refrigerator can not circulate around the water reservoir, the water in the dispenser will not cool correctly. Do not set hot food against the front of the water reservoir.
- 3. Hold a glass below the dispenser nozzle.
- 4. Push in and hold the dispenser arm [1] (See Art01703) to start the water flow.
- 5. Release the paddle to stop the water flow.
- 6. Remove the glass from below the dispenser nozzle.

#### Water dispenser shut off:

If the water dispenser does not shut off when you release the paddle:

- Push the refrigerator ON/OFF button to turn the refrigerator off.
- See the "Troubleshooting" section of these instructions to find the cause of the problem.

#### Task light:

The task light comes on whenever the water dispenser is on.

#### Drain grid and drip cup:

The drain grid and drip cup are located below the water dispenser arm.

To remove the drain grid [3], push down on the center of the rear edge of the drain grid to raise up the front edge so you can grasp it (See Art01704).

To remove the drip cup [4], grasp the handle area inside the drip cup and lift it out of the well (See Art01705).

#### Water dispenser cleaning and disinfecting:

To clean the drain grid and the drip cup:

- Remove the drain grid and the drip cup from the well.
- Wash the water dispenser, the drain grid, and the drip cup with a mild cleaner or a solution of liquid dish detergent and warm water.
- Rinse with clean water.
- Dry with clean cloth.
- NOTE: Do not use abrasive cleaners, chemicals, or scouring pads because they can damage the finish of the parts.
- Put the drain grid and drip cup back in the original positions.
- Follow the instructions of the RV manufacturer to disinfect the drinking water supply of the vehicle.

Occasionally food or liquid spills may fall into the reservoir area. For ease of removal and cleaning, the cover is attached to the inside of the refrigerator with velcro. To clean the cover [1] and reservoir [2] (See Art01725):

- Remove the wire shelves and the crisper bins from the refrigerator.
- Remove the reservoir cover.
  - Put your finger through the cover at a corner and gently pull the cover forward to loosen the velcro tab at the corner.
  - Slide your finger around the back of the cover to the next velcro tab.
  - Gently pull the cover forward to loosen the velcro tab.
  - Repeat until the cover is removed.

- Wash the reservoir, the cover, and the area around the reservoir with a mild cleaner or a solution of liquid dish detergent and warm water.
- If you need to clean behind the reservoir, remove the two screws [3] that attach the reservoir to the refrigerator cabinet.
- Gently clean behind the reservoir.
- Put the two screws back in the original position.

# Message center for non-metal door models only (optional):

An optional message center, for non-metal doors only, is available for purchase. The message center [2] may be located to the right of the water dispenser (See Art01703). You may use magnets or self-stick notes to attach papers to the message center.

### Water Dispenser Storage

To prepare the water dispenser for seasonal storage (See Art01724):



**CAUTION:** Do not operate the water dispenser when the ambient air temperature is 0° F. or lower. Damage to the water solenoid valves and the water supply line can occur.

- 1. Close the vehicle water supply valve to the refrigerator.
- 2. Remove the water supply line [1] from the water solenoid valve [2].
- 3. Remove the water dispenser line [3] from the water solenoid valve.
  - Do not remove the foil heaters from around the water solenoid valve and the water dispenser line

**CAUTION:** Drain the water dispenser. Failure to drain the dispenser can cause damage to the dispenser components and result in leaks.

- 4. Drain all of the water from the water supply line and the water dispenser line.
- NOTE: Make sure to use a large enough container to catch the water that drains from the dispenser water line. The water dispenser contains almost a quart of water.
- 5. Put the ends of the water lines and the water solenoid valve each into a clean plastic bag.
- 6. Use tape to close each plastic bag around the water lines and the water solenoid valve.

- To use the water dispenser after seasonal storage:
- 1. Remove the tape and plastic bags from the end of the water lines and the water solenoid valve.
- 2. Connect the dispenser water line to the water solenoid valve.
- 3. Connect the water supply line to the water solenoid valve.
- 4. Open the vehicle water supply valve to the refrigerator.
- 5. Push and hold the dispenser arm until the water comes out in a steady stream and does not sputter.
- NOTE: You should discard and not use the first seven glasses of water from the water dispenser.

#### **Replacement Parts**

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

### **Wiring Pictorial**

Use this wiring pictorial instead of the wiring pictorial that is in the Owner's Manual. The parts of the wiring pictorial are (See Art01707)

1 Display overlay
2 Display board
3 Divider heater
4 Thermistor / Light assembly
5 Igniter (gas models only)
6 Power board
7 120 VAC Power cord
8
9 5 Amp fuse (12 VDC)
10 Movable door-seal heater
11 Fans
12 Temperature switch
13 Gas valve (gas models only)
14 Door switches
15 AC heaters
16 Door contacts
17lce maker water line heater (ice maker models only)
18
19 Dispenser board (dispenser models only)
20 Dispenser micro switch (dispenser models only)
21 Dispenser valve (dispenser models only)
22 Water valve heater (dispenser models only)
23 Dispenser water line heater (dispenser models only)
24 Ice maker water line heater (dispenser models only)
25 Temperature switch (dispenser models only)
26 Dispenser light (dispenser models only)
20 Dispenser light (dispenser filodels ofly)

## Wiring Diagram

Use this wiring diagram instead of the wiring diagram that is in the Owner's Manual. The parts of the wiring diagram are (See Art01708).

1Power board
2 Gas valve (gas models only)
3 Temperature switch
4 Interior light
5 Divider heater
6 ON / OFF switch
7 Voltage regulator
8 MODE button
9 TEMP SET button
10 Overlay
11 Temperature switch (dispenser models only)
12 Display board
13 120 VAC Connection
14 AC heaters
15 Door switches
16 Temperature switch (ice maker models only)
17 Flapper heater
18 Fans
19 Water line heater (ice maker models only)
20 Door contacts
21 Dispenser light (dispenser models only)
22 Dispenser valve (dispenser models only)
23 Water valve heater (dispenser models only)
24 Dispenser water line heater (dispenser models only)
25 Dispenser micro switch (dispenser models only)
26 Ice maker water line heater (ice maker models only)
27 Igniter (gas models only)
28 Temperature switch

## Troubleshooting

Problem	Solution
The water is too warm.	<ul> <li>Check:</li> <li>That it has been at least 4 hours since the dispenser reservoir was filled.</li> <li>That the refrigerator has operated for 8 hours before loading with food.</li> <li>That food is not stacked tightly in front of the reservoir.</li> <li>That hot food is not against the front of the reservoir.</li> <li>That the refrigerator temperature control is set to a cold enough temperature.</li> <li>That the refrigerator is cooling correctly.</li> <li>See your dealer or authorized Norcold Service Center.</li> </ul>
The water does not dispense.	<ul> <li>Check:</li> <li>That the vehicle water pump or water source is on and /or fully open.</li> <li>That water supply valve to the dispenser is open.</li> <li>That the water filter of the vehicle water supply system is not clogged.</li> <li>That the water supply line is connected to the water solenoid valves.</li> <li>That the solenoid water valve is corrrectly connected to 12 VDC.</li> <li>That the dispenser arm moves freely.</li> <li>See your dealer or authorized Norcold Service Center.</li> </ul>
The water does not shut off.	<ul> <li>Turn the refrigerator "OFF" at the refrigerator controls.</li> <li>Turn off the vehicle water pump or remove water source to dispenser.</li> <li>Turn the refrigerator "ON" at the refrigerator controls.</li> <li>Check: <ul> <li>That the dispenser paddle moves freely.</li> <li>That the small round button behind the dispenser paddle moves freely in and out.</li> <li>That the valve closes when it is de-energized.</li> <li>See your dealer or authorized Norcold Service Center.</li> </ul> </li> </ul>
The water flow is weak or sputtering.	<ul> <li>Check:</li> <li>That the water filter of the vehicle water supply system is not clogged.</li> <li>That the water lines behind the refrigerator are not kinked.</li> <li>That the water pressure to the vehicle is not low.</li> <li>That any water valves leading the the dispenser are fully open.</li> <li>That after winterizing or replacing the water filter, all air is purged from the vehicle water lines.</li> <li>That the tip of the dispenser nozzle does not have build up mineral deposits. If so clean with a swab or soft cloth.</li> <li>See your dealer or authorized Norcold Service Center.</li> </ul>
The water has an odor or bad taste.	Check: - That the vehicle water filter may need to be replaced. - That a vehicle water filter may need to be installed. - That the vehicle water system may need to be sanitized. - That the dispenser reservoir is purged by running out several glasses of water. - See your dealer or authorized Norcold Service Center.
The task light does not come on.	Check: - That the solenoid water valve is corrrectly connected to 12 VDC. - See your dealer or authorized Norcold Service Center.
The task light does not go off.	Check: - That the dispenser arm moves freely. - See your dealer or authorized Norcold Service Center. Art01713

## Installation Instructions

# Install the Water Dispenser Components (non-metal door models)

- 1. Install the back splash assembly (See Art01710):
  - Put the hook on the bottom of the back splash assembly [4] down into the slot [5] of the water dispenser panel [2].
  - Align the two (2) rectangular mounting studs on the rear of the back splash assembly with the two (2) mounting lugs [6] on the water dispenser panel.
  - Using equal pressure, push both mounting studs into the mounting lugs at the same time.
  - The mounting studs should engage and lock into the mounting lugs with a "click" sound.

# Install the Water Dispenser Components (metal door models)

- 1. Install the back splash assembly (See Art01710):
  - Put the hook on the bottom of the back splash assembly [4] down into the slot [5] of the water dispenser panel [2].
  - Align the two (2) rectangular mounting studs on the rear of the back splash assembly with the two (2) mounting lugs [6] on the water dispenser panel.
  - Using equal pressure, push both mounting studs into the mounting lugs at the same time.
  - The mounting studs should engage and lock into the mounting lugs with a "click" sound.

# Install Decorative Door Panels (non-metal door models)

- NOTE: The doors are made to accept decorative panels. The decorative panels must be 3/16 inch or less in thickness. Install the decorative door panels in the refrigerator doors before installing the refrigerator in the vehicle.
- 1. Make two upper door panels that are 16 13/64 inches wide x 18 3/8 inches high:
  - Raised panels must be centered on each door and no larger than 15 11/32 inches wide x 17 17/32 inches high.
- 2. Make a lower RH door panels that is 16 13/64 inches wide x 41 13/64 inches high:
  - Raised panels must be centered on the lower RH door and no larger than 15 11/32 inches wide x 40 11/32 inches high.
- 3. Make a lower LH door panel that is 16 13/64 inches wide x 34 13/64 inches high:
  - Raised panels must be centered on the lower LH door and no larger than 15 11/32 inches wide x 33 37/64 inches high.
- 4. Install the decorative door panels:
  - Pull the panel retainer [1] off of each door [2] (See Art01712).
  - Push a decorative door panel [3] into the slots of each door.
  - Make sure that each panel retainer is correctly positioned and push the curved snap [4] of the panel retainer [5] inside of the curved snap [6] of the door (See Art01648).
  - Make sure that the decorative door panel [3] of the lower LH refrigerator door is behind the water dispenser panel [7].

### **Connect the Water Dispenser**

The water dispenser is assembled to the refrigerator at the factory as optional equipment. If the refrigerator does not have a factory installed water dispenser, one can not be added to the refrigerator at a later time.

The refrigerator installer must connect a cold water supply line to the solenoid valve at the rear of the refrigerator. The following are necessary to connect the water dispenser.

- 1/4 in. OD copper tubing for the water supply line.

OR

- 1/4 in. OD plastic tubing for the water supply line.
- 1/4 in. shut off valve in the water supply line. This should be easily accessible through the lower intake vent.

#### Connect the water supply line:

Install a 1/4 in. OD water supply line [1] from the water shut off valve of the vehicle to the solenoid water valve [2] at the rear of the refrigerator (See Art01724):

- NOTE: A brass compression nut [1], a brass sleeve, a plastic sleeve [2], and a brass insert [3] are supplied and attached to the rear of the refrigerator (See Art01702).
  - Put the compression nut and then the sleeve onto the water supply line [4].
    - For copper tubing, use the brass sleeve.
    - For plastic tubing, use the plastic sleeve [2].
    - For plastic tubing with .040 in. wall thickness, also use the brass insert [3].
    - Flush the water supply line until the water is clear.
  - Put the water supply line into the compression fitting of the solenoid valves.
  - Tighten the compression nut by hand (hard finger tight).
  - Using two wrenches, tighten the compression nut 1  $\frac{1}{2}$  to 2 turns.
  - Open the water shut off valve of the vehicle.
  - Examine the connections for leaks.





