# **DUTCHAIRE**

15 CU. FT. Refrigerator



Model: 2515 12V frost free

Please read this instruction manual before connecting your refrigerator and keep it for future reference.

#### **IMPORTANT SAFETY INSTRUCTIONS**

To reduce the risk of fire, electrical shock, or injury follow these basic precautions when using your refrigerator.

**WARNING**----Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.

**WARNING**----Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.

**WARNING**----Do not damage the refrigerant circuit to increase the risk of a leak when handle, move, clean and use of refrigerator.

**WARNING**----Do not use electrical appliances inside the food storage compartments of the appliances, unless they are of the type recommended by the manufacturer.

**WARNING**----DANGER: Never allow children to play with, operate, or crawl inside the refrigerator. Risk of child entrapment. Before you throw away your old refrigerator or freezer: Take off the doors

- -Leave the shelves in place so that children may not easily climb inside.
- -The appliance has to be unplugged before carrying out user maintenance on the appliance.
- -This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given
- supervision or instruction concerning use of the appliance by a person responsible for their safety.
- -Children should be supervised to ensure that they do not play with the appliance. Cleaning and maintenance should not be made by children without supervision.
- -Please abandon the refrigerator according to local regulations as the unit contains flammable blowing gas.
- -This appliance is intended to be used in household and similar environments; such as: staff kitchen areas in shops, offices and other working environments, Recreational Vehicles farm houses and by clients in hotels, motels and other residential type environments; bed and breakfast type environments; catering and similar non-retail applications.
- -Do not store or use gasoline or any inflammable liquors and liquids inside or in the vicinity of refrigerator.
- -Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance. The refrigerant and insulation blowing gas are flammable. When disposing of the appliance, do so only at an authorized waste disposal center. Do not expose to flame.
- -Cleaning and user maintenance shall not be made by children without supervision.
- -During transportation and installation of the appliance, ensure that none of the components of the

refrigerant circuit becomes damaged. Before connecting the appliance to the power supply, let it stand for about 2 hours, which will reduce a possibility of malfunctions in the cooling system due to transport handling.

- -Clean the appliance, and be thorough, especially in the interior.
- \*\* If your fridge is equipped with an ice maker, all water lines and ice maker have to be drained and winterized for cold storage. Damage to the fridge and or to the water supply line may happen if it freezing temperatures.

If this Refrigerator is being installed into an RV, here are some tips and general guidelines to follow:

Most times your original fridge will look similar to this:

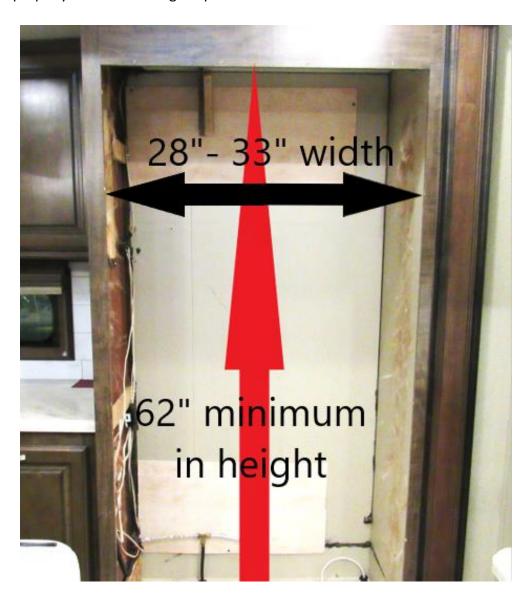


#1 Remove the old fridge box from your cavity and remove it completely from the coach

#2 Once your old fridge is out of the cabinet, check your fridge cavity sidewall for bat insolation on the sides and have it removed.

#3 The ventilation openings need to be closed off. You recommend placing a piece of foam insulation into the vent opening from the inside, then putting a wood panel over the top of the foam insulation. The refrigerator will ventilate to the inside of the coach. This will help the refrigerator run more efficiently without the outside heat getting to the refrigerator back.

#4 The max cabinet width opening is 33" for the mounting brackets. If the cabinet is wider then this you should add some wood supports to the face frame width so the mounting screws get fastened properly to hold the fridge in place.



#5 Now is a good time to run your 10/2 wire from fridge cavity to battery, normally we follow the gas line down to the under belly then zip tie to the frame that follows directly to your battery. If your not using our wire kit and using your own wiring, make sure to add a 30A breaker or inline fuse by the battery to protect this wire.



#6- Tighten gas plug into gas line and turn gas back on and check with soap water for leaks.....

#7- We recommend leaving a 6"X6" hole on the bottom left corner of the bottom vent, it will allow you access to get into the fridge control box or wiring down the road, if need be, without removing the fridge. The plastic access cover is included with the fridge.



## Installing the new refrigerator:

We highly recommend you take the new fridge doors off so they do not get damaged in the install process.

#8- If your fridge has the icemaker option; connect your ¼" water line to the back of the fridge.

\*\*\*The icemaker does need to be winterized if it will be setting in freezing temperatures at any time\*\*

## **Power Hook Up:**

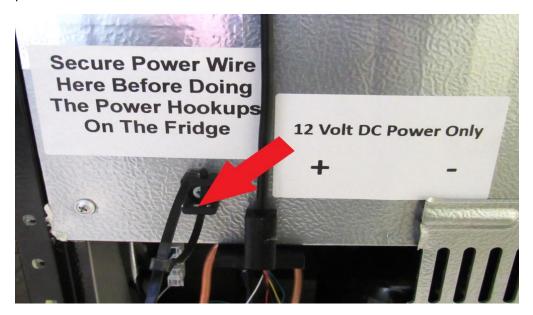
In order for normal use, the 12VDC connection must be reliable. Besides the power source the proper connection. The wire of the unit and the outer wire must meet the below requirement: A thing to remember is the compressors have an auto battery saver installed, so if your battery voltage drops below 10.5V when it starts it will not run, this can be a result of a bad battery, to small wiring or bad connection

Wire size	The max length (Feet)
14 AWG	3.2 Feet
13 AWG	8 Feet
12 AWG	13 Feet
10 AWG	20 Feet
8 AWG	33 Feet
6 AWG	50 Feet
	14 AWG wire is not recommended. 12 AWG wire or Larger is recommended.
Remarks:	This DC unit is not equipped with a power source. Please purchase a power source from an authorized dealer.

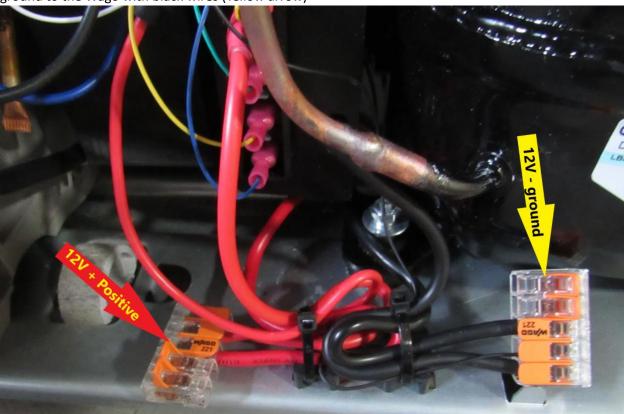
When using an adapter or AC to DC converter, the converter will need to be at least a 30Amp. The operation of this 12VDC refrigerator is also dependent on a good clean ground.

It is recommended this refrigerator be install by an authorized or qualified professional, or someone who has conversed with DutchAire on Do's and Don'ts on installation.

#6 Feed wire thru the Tie wire holder, (red arrow) complete step 5 then tighten this down to hold wire in place.



#9- Connect incoming 12VDC Positive wire to the Wago with red wires (red arrow) & connect the 12VDC ground to the Wago with black wires (Yellow arrow)



WARNING: Do not connect 120VAC anywhere to this Refrigerator

## **Important Safety Instructions**



To reduce the risk of fire, electrical shock, or injury follow these basic precautions when using your refrigerator.

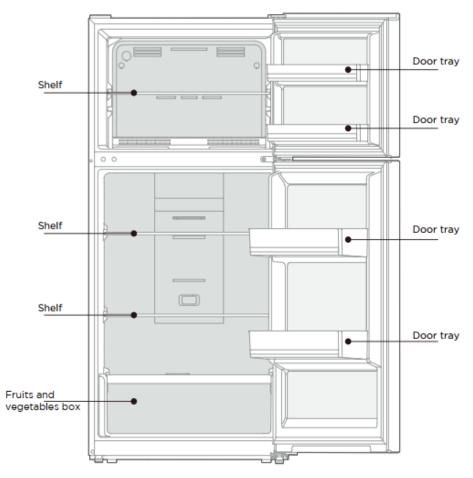
- DANGER: Risk of child entrapment. To avoid the possibility of child entrapment, please take the following precautions before you dispose of your refrigerator.
  - Remove all doors.
  - Leave shelves in place so children may not easily climb in.
  - Never allow children to play with, operate, or crawl inside the refrigerator.
- Do not store or use gasoline or any flammable vapors and liquids in the vicinity of this refrigerator.
- All refrigeration products contain refrigerants, which under the guidelines of federal law must be removed before disposal. It is the consumer's responsibility to comply with federal and local regulations when disposing of this product.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.

#10- Leveling the fridge with the cabinet front, The front levelers on the fridge might have to extended so the mounting brackets are parallel with the cabinet front. If the fridge front legs are too high and the fridge can not drop to the desired height, remove the the front fridge legs. The mounting bracket are made to hold the front of the fridge, but the back casters of the fridge need to be on the fridge cabinet base to support the fridge wieght.

#11- Fasten the refrigerator side mounting brackets to the cabinet front using the screws provided.



## **Key Components:**



(The picture above is only for reference. The actual configuration will depend on the physical product or statement by the distributor)

#### Refrigerating chamber

- The Refrigerating Chamber is suitable for storage of a variety of fruits, vegetables, beverages and other food consumed in the short term.
- Cooking foods shall not be put in the refrigerating chamber until cooled to room temperature.
- Foods are recommended to be sealed up before putting into the refrigerator.
- The glass shelves can be adjusted up or down for a reasonable amount of storage space and easy use.

#### Freezing chamber

- The low temperature freezing chamber may keep food fresh for a long time and it is mainly used to store frozen foods and making ice.
- The freezing chamber is suitable for storage of meat, fish, rice balls and other foods not to be consumed in short term.
- Chunks of meat are preferably to be divided into small pieces for for quick freezing and easy access. Please be noted food shall be consumed within the shelf time.

Note: Storage of too much food during operation after the initial connection to power may adversely affect the freezing effect of the refrigerator. Foods stored shall not block the air outlet; or otherwise the freezing effect will also be adversely affected.

When store beverages at coldest setting,inside fruits and vegetables are at risk of freezing,please set on towards less cooling if coldest setting is very cool.

## **Controller Operation:**



ON/OFF, this is used for complete Refrigerator shut down.

Refrigerator temperature can be adjusted by pushing the up arrow briefly (DO NOT HOLD), blue numbers will then blink, then scroll your temp up or down to your desired temp, once desired temp setting has been reached, controller will reset itself automatically after 3 seconds to the desired temperature.

Your actual temp might rise or fall a tad further, dependent on usage and ambient temp. Do not lower the set temperature less then 35F, the normal set point for the fridge is between 36F to 38F

## **Care and Maintenance**

- 1. Never put hot liquids or food in the refrigerator;
- 2. Cover or wrap food prior to storage
- 3. Arrange food so that air can circulate freely inside the compartment.

### Prolonged periods of disuse

If you do not intend to use the appliance for long periods of time, shut the refrigerator off. Then take out the foods, defrost and clean the appliance. Leave the door slightly open.

## **Cleaning the Appliance**

Shut the refrigerator down before cleaning the appliance.

Do not use coarse or aggressive cleaning agents as you may damage the surface.

Remove the detachable accessories in the interior of the appliance and clean with water and liquid detergent. Plastic parts cannot be washed in dishwashers.

Wash the interior of the appliance with wet cloth, or vinegar water.

## Refrigerator Usage in colder Climates

The freezer temperature will warm up some if the fridge is being used in a climate below 60 degrees. Usage of the fridge section will improve the freezer temperatures.

There is a maximum freezer cooling setting in the top of the fridge compartment that can be used to get the freezer colder. Moving the tab back will lower the average freezer temperature.



## **Trouble Shooting:**

Failed operation	Check whether the appliance is connected to power or whether the plug is in well contact.  Check whether the voltage is too low.  Check whether there is a power failure or partial circuits have tripped.
Odor	Odorous foods shall be tightly wrapped. Check whether there is any rotten food. Clean the inside of the refrigerator.
Long-time operation of the compressor	Long operation of the refrigerator is normal in summer when the ambient temperature is high.  It is not recommended having too much food in the appliance at the same time.  Food shall get cool before being put into the appliance.  The doors are opened too frequently.
Light fails to get lit	Check whether the refrigerator is connected to power supply and whether the illuminating light is damaged.
Doors cannot be properly closed	The door is stuck by food packages. The refrigerator is tilted.
Loud noise	Check whether the floor is level and whether the refrigerator is placed stably.  Check whether accessories are placed at proper locations.
Door seal fails to be tight	Remove foreign matters on the door seal.  Heat the door seal and then cool it for restoration (or blow it with an electrical drier or use a hot towel for heating).
Water pan overflows	There is too much food in the chamber or food stored contains too much water,resulting in heavy defrosting.  The doors are not closed properly, resulting in frosting due to entry of air and increased water due to defrosting.
Hot housing	Heat dissipation of the built-in condenser via the housing, which is normal.  When housing becomes hot due to high ambient temperature and storage of too much food, it is recommended to provide sound ventilation to facilitate heat dissipation.
Surface condensation	Condensation on the exterior surface and door seals of the refrigerator is normal when the ambient humidity is too high. Just wipe the condensate with a clean towel.
Abnormal noise	Buzz: The compressor may produce buzzes during operation, and the buzzes are loud particularly upon start or stop. This is normal.  Creak: Refrigerant flowing inside of the appliance may produce creak, which is normal.