



MANUEL D'INSTRUCTION POUR LE RÉFRIGÉRATEUR 12/24V SOLSTICE

INSTRUCTION MANUAL FOR 12/24V DC SOLSTICE

MODELE /MODEL 308 / 393



Pour assurer l'utilisation sécuritaire des appareils Solstice, s'il vous plait lire les instructions suivantes complètement avant d'opérer l'appareil

To ensure proper use of this appliance and your safety, please read the following instructions completely before operating this appliance

User guide

First, let us congratulate you on your purchase of one of our SolFreeze appliance. You've purchased an unusual appliance, which has been subjected to various quality controls, both aesthetically and technically, making your refrigeration appliance functional and reliable, right from its first use on a DC electrical source (12 Volts or 24 Volts DC only). Your food will be well preserved, either frozen in the top section or chilled in the bottom section. We emphasize the importance of reading this user's guide before connecting the appliance.

User Information

The information disclosed in this leaflet is important information concerning the use of our refrigerator model Solstice 308 and 393 and is not common to any other refrigeration unit. Please read this guide before connecting the appliance.

For disposal of this product, please contact your local service center. In Québec, contact Recyc-Québec at 1-800-807-0678.

For technical, warranty or non-warranty service inquiries, please contact SolFreeze at 1-888-691-3309.

Safety instructions

NEVER CONNECT TO ALTERNATING CURRENT (120 / 240 VOLTS A.C.)

Avoid contact with liquids (transport in the rain, outdoor storage) by protecting the device and packaging with a waterproof tarpaulin. Do not place containers with liquid contents on top of the device to prevent deterioration of insulation and other damage to electrical components that may be caused by accidental spillage.

SECURITY REQUIREMENT

Danger: risk of fire or explosion flammable refrigerant used

Do not Pierce refrigerator tubes

Do not use mechanical devices to defrost the refrigerator.

- Ensure that maintenance is carried out by factory-authorized service personnel to minimize product damage or safety issues.

WARNING: Keep ventilation openings in the appliance enclosure or built-in structure free of obstructions.

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.

WARNING: Do not use electrical appliances inside the appliance's food storage compartments, unless they are of the type recommended by the manufacturer.

CAUTION: Children should be supervised to ensure that they do not play with the device.

DANGER: Risk of child entrapment. Before disposing of an old appliance:

- Remove the door or lid.
- Leave shelves in place so that children cannot easily climb inside.

DANGER: Do not add a lock to the door or cover. This can lead to entrapment and harm to children.

SAFETY REQUIREMENTS

This device is not intended for use by persons (including children) whose physical, sensory or mental capabilities may be different or reduced, or who lack experience or knowledge, unless such persons are given supervision or training in the operation of the device by a person responsible for their safety.

ABOUT THE LOCATION OF YOUR APPLIANCE

- The rear must be well ventilated.
- Keep away from insulation materials and heat sources.
- Keep away from damp areas and water sources to avoid electrical problems and malfunctions.
- Place and keep appliance on a stable surface (adjust legs under appliance if necessary).
- Maintain a minimum clearance of 3cm on each side of the unit (right and left), 3cm at the top and 10cm at the rear.
- Avoid placing toxic and corrosive gases in the vicinity.
- Position the device so as to have easy access to the DC connection terminals.
- Avoid pulling, stretching, and twisting the DC power cord, and avoid placing heavy objects on the cord to avoid damaging it.

Before Use

PREPARATION

Unpack the unit and all accessories.

Position the unit properly and level (see location section above)

Clean the inside of the unit (see maintenance section below)

Open the appliance doors and wait for the appliance to reach room temperature.

Trial period (initial start-up)

- 1- See the “warnings” and “technical advice” sections below.

- 2- Connect the appliance directly to a reliable 12 Volt or 24 Volt DC power source (battery or other), which should be unconnected to other appliances when connecting the fridge. Any connection to the fridge (power cord or extension lead) should be made before connecting the DC power source terminals.
- 3- The unit will detect either voltage without any manipulation. However, the lighting (LED bulb) might have to be manually adjusted to the correct voltage.
- 4- To start the appliance (empty), turn the thermostat knob to maximum (1 being the hottest temperature and 7/maximum being the coldest temperature).
- 5- Leave the thermostat on maximum for about 4 hours (without opening the doors) to obtain the coldest temperatures, then set the desired temperature.

***Note.** If the unit has been transported horizontally (lying down), stand it upright and wait 24 hours before plugging it in and switching it on.

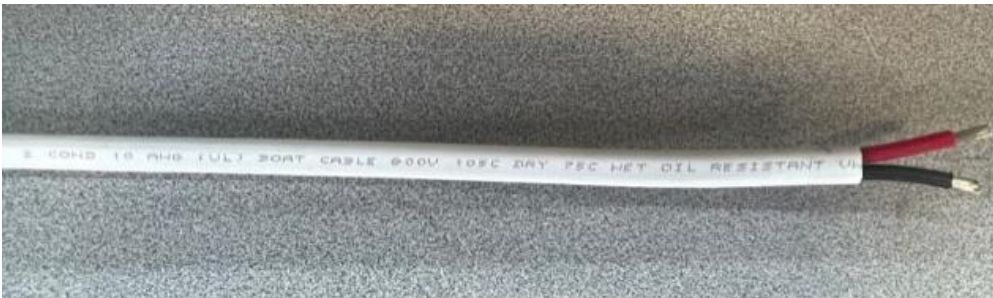
If the appliance is shut down for more than one day, repeat steps 3 & 4 above to restart it. However, it is preferable to keep the appliance running at all times, even if there is no food inside, to prevent any negative influence on the appliance's service life.

Technical Advice

Connection:

Wire type and size

To connect your SolFreeze device, it is recommended to use multi-strand tinned copper, double-sheathed marine-type cable that can take up to 600V and 105C as a dry temperature. The right choice of wires can greatly affect the performance of your SolFreeze device



In addition, the correct wire gauge is essential to ensure the power supply of your device. Refer to the following table to select the correct wire gauge to connect your device to the DC power source.

		LONGUEUR DU FIL De la batterie à l'appareil et de l'appareil à la batterie (en pieds)																			
		LENGTH OF WIRING From battery source of current to appliance and back to battery source (in feet)																			
Courant Total De L'appareil selon le voltage (A/HR) Total Current Of Appliance according to voltage (A/HR)	24 VOLTDC	3%	10	15	20	25	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
		2-5A	14	14	14	12	12	12	10	10	10	8	8	8	8	8	6	6	6	6	6
	12 VOLTDC	3%	10	15	20	25	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
		2-5A	14	14	12	12	10	10	10	8	8	8	8	6	6	6	6	6	6	6	6
		Wire Gauges for a 3% Voltage Drop Grosseur Du Fils pour une baisse de voltage de 3%																			

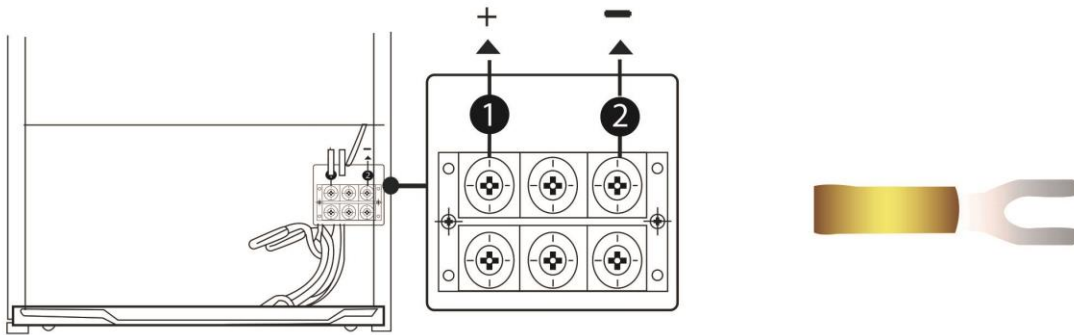
Install a 15amp overload protection (fuse) on the positive line/borne of your 12V or 24V source (batteries). Using the wrong voltage may cause damage to the device or the user.

Make sure not to reverse the polarities, i.e. connect the positive wire to the positive (+) terminal and the negative wire to the negative (-) terminal (see diagram).

Note:

Damage to the electronic control due to reversed polarity is not covered under warranty.

If using solar panels, ensure proper grounding.



WARNING

If you have to move the unit, it's best to empty it of all food and containers.

Disconnect the negative pole first, followed by the positive. Ideally, disconnect the electrical power source (battery or other) before unplugging or reconnecting the fridge.

Do not lift the appliance by the doors, top or valves.

It is preferable not to move the appliance outside, during a period of bad weather (too much rain, snow).

When positioning the unit, ensure that the power cable is not trapped or damaged.

If the unit is not to be used for an extended period, unplug it to avoid electrical disturbances and restrict the potential for fire caused by ageing wire insulation. Dry the inside of the unit and leave the doors open to reduce the risk of unpleasant odours and mould.

Do not use mechanical devices or other means to accelerate the defrosting process.

Do not screw or pierce freezer walls.

All packaging connected to the appliance must be removed.

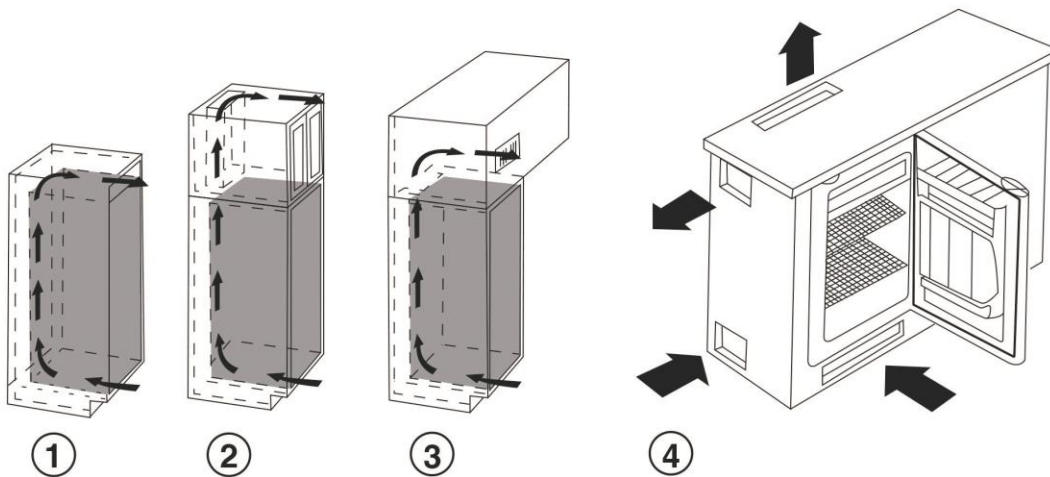
WARNING: Risk of child entrapment. Before disposing of your old freezer:

- Remove the doors
- Put baskets and the like in a suitable place so that children can't easily climb inside.

Installation

- Install the refrigerator in a convenient location, away from extreme heat and cold. Allow sufficient clearance between the refrigerator and the side wall so that the door(s) can be opened without obstruction.
- Select a space with a strong levelled floor.
- Allow 1" clearance between the side of the fridge and the wall.
- The appliance must be correctly connected to the 12V power supply. Ventilate the rear of the refrigerator to ensure heat dissipation.

Suggested ventilation for built-in refrigerator



Applications

Once the unit has been switched on and has cooled down, it should consume between 2.5 and 3.5 amps per hour.

The temperature of the empty appliance (bottom section) should be between 1* Celsius and 4* Celsius for refrigerators.

Freezer

Freezer temperature should be between -8 Celsius and -12 Celsius (note that glass containers with liquid contents should not be placed in the freezer).

Maintenance

CLEANING

Clean the unit once a month as required.

Wash in hot water.

Never clean with flammable fluids. The fumes can create a fire hazard.

Avoid using the following products: alkaline detergents, abrasive powder, petroleum-based products, alcohol, benzene, caustic detergents, nylon brushes, banana oil, to avoid damaging plastic surfaces.

Clean up spills of cooking oil and Soya sauce immediately, otherwise the plastic components will remain stained.

Clean seals (door edge rubbers) immediately after damage, so that they retain their functional integrity.

Check the condition and position of the DC wire before reconnecting the unit (see previous sections “test period” “warning” & “technical advice”).

Defrost

When a layer of frost covers the inside walls of the freezer and refrigerator, unplug the appliance, and allow it to melt (don't forget to temporarily place your food in a cold place for storage). Wipe off the water with a dry cloth, wait 5 to 10 minutes and reconnect the appliance.

CAUTION: Do not use mechanical devices to accelerate defrosting other than those suggested in these instructions.

MOVING THE REFRIGERATOR

- Disconnect the power supply.
- Make sure that the refrigerator remains upright during transport (if possible), otherwise you can lay it down on the side of the electronics module.

ENERGY-SAVING TIPS

- The refrigerator should be located in the coolest part of the room, away from heat-producing appliances or heating ducts, and out of direct sunlight.
- Allow hot food to cool to room temperature before placing in the refrigerator.
- Be sure to wrap food properly and wipe containers dry before placing in the refrigerator. This reduces frost build-up inside the fridge.

APPLICATION AND REMOVAL OF ACCESSORIES

All accessories, such as freezer shelves, drawers and door bumpers, can be removed by lifting upwards and pulling out towards you, or by pulling out towards you and lifting up.

WATER DRAIN HOLE

The hole is located inside on the rear inner wall, and is used to drain off the accumulation of water due to condensation inside the unit. Avoid any obstruction or accumulation of debris in this area.

In humid weather or during heatwaves, condensation can build up sufficiently and overflow the water collection container at the rear of the fridge (above the compressor). In this case, remove the fridge (see warning above), take out the collection container and empty.

DOOR REVERSALE MANUAL FOR SOLSTICE 308 and 393

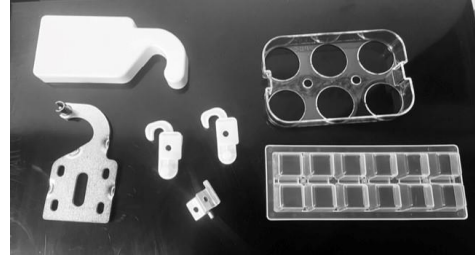
The tools needed to reverse Solstice 308 and 393 doors



You'll need the following tools
(from left to right):

- Ratchet wrench
- Flat screwdriver
- Phillips #2 screwdriver
- Allen key 5/32
- Socket 8mm and 10mm
- Adjustable wrench

You'll also need the door reversing kit
included with the user manual.

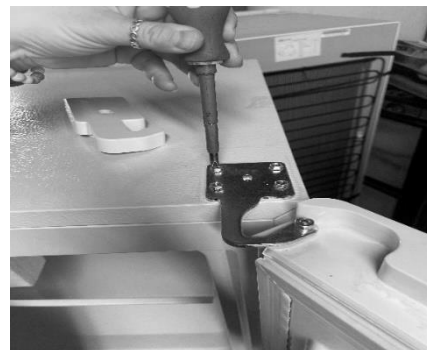
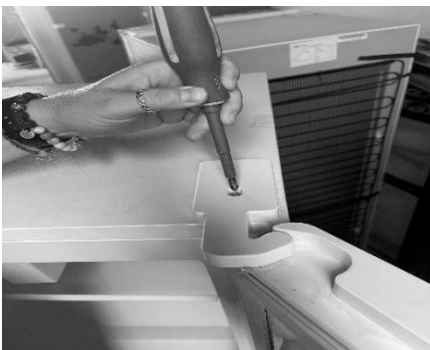


1. Unplug the refrigerator or switch off the power
supply

2. Position the refrigerator at an angle to allow access
above and below it. (DO NOT LIE ON THE BACK,
AS YOU MAY BREAK THE CONDENSER).



3. Remove the plastic cap from the hinge on the top of the
refrigerator using a flathead screwdriver. Then unscrew the
hinge with the Phillips screwdriver and remove it completely.



4. Remove the top door by
sliding it upwards



5. Unscrew the center hinge using the 5/32 Allen Key and remove the bottom door by sliding it upwards



6. Remove the lugs and remove the hinge under the refrigerator using the ratchet wrench and 8mm socket or Philips screwdriver no.2.



7. Unscrew the hinge pin using a wrench. Turn the hinge and reinstall the pin and lug



8. Remove the screw in the new hinge position and lift the paper to expose the holes. Reinstall the hinge on the new side



NB: Do not screw all the way in, as these screws are used to adjust the doors.

9. Locate the hinge support bag included in the refrigerator. Unscrew the refrigerator and freezer door hinge supports from the refrigerator door and freezer door. Install new hinge brackets on the left-hand side of both doors.



10. Slide the door onto the bottom hinge pin and reinstall the center hinge on the left side (after removing the small stickers and the screw cover that hides the holes).



NB: Do not screw all the way in, as these screws are used to adjust the doors.



11. Slide the top door onto the center hinge pin



12. Locate the new metal top hinge supplied in the refrigerator and install on the opposite side.



13. Remove the plastic cap on the left-hand side of the top of the refrigerator and install it on the right-hand side to cover the holes in the old hinge.



14. Adjust the doors using the bottom hinge, which moves back and forth, and the hinge, which moves horizontally from left to right, to ensure a tight fit. Once the door is correctly positioned, screw on the bottom hinge and the center hinge.

15. Install the top hinge cap. You can now return the refrigerator to its upright position and make sure the doors close properly.



Troubleshooting guide

You can easily solve many common refrigerator problems, saving the cost of a service call.

Try the suggestions below to see if you can solve the problem before calling for service.

Fridge not working.	<ul style="list-style-type: none">• The refrigerator is unplugged.• Circuit breaker tripped / fuse blown
The refrigerator compartment is too hot.	<ul style="list-style-type: none">• Compressor running out of air• Ambient temperature warmer than normal• Door left open or frequently opened.• The refrigerator does not have the correct clearances.• The refrigerator has recently been disconnected for some time.
Vibration or rattling (slight vibration is normal)	<ul style="list-style-type: none">• Temperature control is not set correctly.• Door left open or opened frequently.• Door gasket does not seal properly.• A large quantity of hot food has been stored recently. Wait for the refrigerator to reach the set temperature.• Le réfrigérateur a récemment été déconnecté pendant un certain temps.
The temperature of the extreme surface of the refrigerator is hot.	<ul style="list-style-type: none">• The leveling feet need to be adjusted.• - The fridge is placed on an uneven or weak surface.
Moisture builds up inside the Refrigerator	<ul style="list-style-type: none">• The outside walls of the refrigerator may be up to 30° F warmer than the ambient temperature.• - This is normal as the compressor works to transfer heat from inside the refrigerator cabinet.• - The door is left open or frequently opened.• Défective door seal• It's normal for a thin layer of frost to form. forms on the rear of the refrigerator (if it becomes too thick, defrosting is required)
Bubbling or giggling noises (like boiling water)	<ul style="list-style-type: none">• This is the normal sound of refrigerant (used for cooling) circulating throughout the system.
Bursting or cracking noises when compressor starts up	<ul style="list-style-type: none">• This is normal, as metal parts undergo expansion and contraction, like hot-water pipes. The sound will stabilize or disappear as the refrigerator operates.
The door will not close properly	<ul style="list-style-type: none">• Refrigerator not on level surface.• Gasket is dirty. Storage basket out of position

SOLFREEZE WARRANTY POLICIES

(KEEP FOR YOUR RECORDS)

Solstice Refrigerator 12 and/or 24 Volts DC

2 YEAR LIMITED WARRANTY

COMPRESSOR & CONTROLLER GUARANTEED 2 YEARS

SolFreeze warrants that Solstice refrigerators 12/24 Volts DC are free from technical defects for a period of 2 years from the date of purchase. Special feature; the compressor and the electric energy controller are guaranteed by the manufacturer/supplier separately from these specific components. The warranty offered on refrigerators and their components is reduced to 90 days from the date of purchase if the appliance is used in commercial applications.

Limited Warranty Inclusions / Coverage

- 1- Repair or replacement of defective technical parts
- 2- Labor required to remedy any diagnosed failure, only when the repair is carried out by SolFreeze in Chateaugay
- 3- Shipping costs (ground transportation only for the 1st year) related to the sending and return of individual parts (with authorization from SolFreeze)

Limited Warranty Limitations / Restrictions

- 4- The warranty does not apply to products;
 - Having been transported in a horizontal position, other than as stated on the packaging
 - Having been connected to DC less than 24 hours after horizontal transport
 - Having been subjected to negligence, abusive or unreasonable use
 - Having undergone improper installation
 - Having undergone repairs or alterations not authorized by TSI
 - Having been damaged by accident, fire or during transportation
- 2- Failure to follow the instructions described in the user guide, illustrating the methods of use, maintenance and transportation, voids the application of the warranty
- 3- The owner of the appliance must transport any defective appliance to SolFreeze or authorized distributor, at his own expense and by the means of his own choosing, to have the work covered under warranty carried out. Except for the inclusions disclosed above (paragraph #3), the consumer is required to pay the costs related to the transportation of said appliance, as well as the costs of parts and labor provided by anyone other than SolFreeze (unless expressly authorized by SolFreeze)

4- Any part used to repair said appliance must meet the requirements and specifications of SolFreeze (unless expressly authorized)

8- The duration of the warranty is limited to 2 years, from the date of purchase, including the compressor and the electric energy controller, which are covered by their separate warranty extending over 2 years (parts & labor)

Exclusions from the limited warranty

What the limited warranty does not cover;

9- Any transportation costs of the appliance, other than those defined in paragraph # 3

10- Any travel/mileage/transportation costs and expenses incurred to obtain warranty service

11- Any costs incurred to obtain mobile repair service

12- Any defect in glass or plastic components, lighting elements (bulbs or LEDs) and fuses

13- Any aesthetic defect (scratches, dents, cracks, etc.)

14- Any maintenance work, as recommended in the user guide

5- Any indirect loss resulting from the consequences of a refrigerator failure (e.g., provisions, food, liquids, medications, external DC power supply system and network)

Legal rights

This warranty gives the consumer certain legal rights. You may also have other rights, which may vary from province to province.