# Sub-Zero Refrigerator Service Guide

A Step-by-step guide

Answers to the most common repair and service questions for your Sub-Zero

## Overview

### The most common question is, "How serviceable is it?"

Sub-Zero is a family owned company based in Wisconsin. Family owned means you care more about the label than a multi-national would. Incredibly, every Sub-Zero is tested before it leaves the factory.

Sub-Zero is notoriously slow in developing new products, because their development and quality program is so methodical.

The Most Reliable Appliance Brands: Read more »

#### THE LIGHT BULB STORY

Even the largest Sub-Zero refrigerator consumes less power than a 100-watt bulb. Dual refrigeration is one reason. Two compressors share the work, so each does its job with minimal effort. The heavy-gauge steel cabinet is fully insulated, and doors seal magnetically, holding in cold air and keeping down energy costs.



### SUB-ZERO & WOLF ARE LOCALLY GROWN IN THE USA

Sub-Zero & Wolf manufactures all their products in the United States, which eliminates the significant environmental impact caused by international shipping of materials and parts. The global transportation required to ship products assembled overseas significantly diminishes the green efforts of many other brands. By building our appliances domestically, we drastically reduce our company's carbon footprint.

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Quick tips to help you consider a new Sub-Zero purchase



# Troubleshooting

### **Products**

Sub-Zero 500, 600, BI and PRO series.

### **Troubleshooting**

There are a few quick tips to figure out what may be wrong with your Sub-Zero. Sub-Zero is one of the few products that will always be worth repairing 15-20 years old.

Plus, we will give you step-by-step help on how to repair the most common issues.



# Troubleshooting

### **Basic Refrigerator Operation**

Let's narrow it down. Basic refrigerator operation is as follows. Power on, set freezer temperature to 0° and refrigerator to 38°.

Note that the twin compressor system operates both sides from a single power source but are separate when it comes to operation and cooling.

Now you need to narrow down which compartment is having trouble and select the correct problem at hand.

### What's Wrong?

- Not Cooling?
- Water Filter?
- No Power?
- No Ice or Water?
- Light Switch?



# Not Cooling?

### Why is my Sub-Zero not cooling properly?

Models: 500, 550, 600, 611, 632, 650, 690, BI-30, BI-36, BI-42, BI-48, PRO48.

The number one reason for a no cooling situation is a clogged condenser. The symptoms would be that both the fridge and freezer section are losing cool temperature. Also, the area between the doors would be getting hot.

If the refrigerator isn't cool, check to see if the light comes on when you open the door. Next, check to see if the thermostat or display control is set properly. If both of these are OK, then check to see if the compressors are running. Sub-Zero is one of the few manufacturers with a twin compressor system, which means your fridge side can be not operational and your freezer side can be working fine (or vice versa).

See if the compressor motor is running. The compressor is in a case with no visible moving parts. It is usually located at the top of the Sub-Zero unit (except 400 and 700 series) and this is a dual compressor system, the right compressor is the fridge section. If it's humming or making a steady noise and your refrigerator is not cooling properly there could be a problem with one or more various components.

The most common is the condenser is clogged with lint, hair, debris and it needs to be cleaned. This is a simple process and should be done every six months.

Need to replace the filter? Walk through it in our repair section: Read more »

## No Power?

There is a difference between thinking there is no power and the lights and control shutting down per safety feature. All Sub-Zero units have a safety feature if the doors are left open for a period of time that will shut down all lights. You can power off and on or make sure all doors are closed and it will come back around in a few minutes.

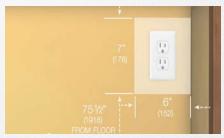
First, check that the power is on by simply pushing "POWER" on the display (top right corner). Then check power supply, this can be tougher as they are plugged in behind the grill section on the top right side. You can plug something else, like a hair dryer, into the outlet to confirm there is power.

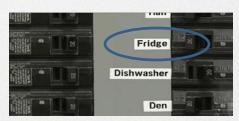
There is also a possibility that the circuit breaker has tripped. This would be located in a common area of the home and will have every electrical unit listed.

Bad light switch? See our repair section: Read more »









## Filter Replacement

### How often should I change the Sub-Zero water filter?

You should change the filter cartridge at least once every twelve months. High sediment areas may require more frequent filter replacements.

Replace the water filter cartridge when the filter indicator is lit or when water flow becomes low.

Do not use with water that is microbiologically unsafe or of unknown water quality without adequate disinfection before or after the system.

Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

This system must be installed, operated, maintained and filters replaced as required in order for the product to perform as advertised.

Want to replace the filter? Walk through it in our repair section: Read more »

## No Ice or Water?

### There's No Ice or Water in my Sub-Zero

Models: 500, 550, 600, 611, 632, 650, 690, BI-30, BI-36, BI-42, BI-48, PRO48.

Why doesn't my Sub-Zero icemaker or water dispenser get water to it?

Make sure the freezer has cooled down enough after installation. Most Sub-Zero ice makers won't produce ice until the temperature has reached less than 10°. On Sub-Zero BI and PRO48 series models you may not get any water if the filter is plugged with sediment.

Icemakers need about 40 psi to fill properly. Make sure the water supply valve is turned on. This valve is usually located under the kitchen sink and has a 1/4" copper or braided line running to the refrigerator. Turn it counter-clockwise to ensure the valve is open.

Occasionally, this fill tube may freeze. The way to check this is to remove the icemaker and look at the tube. If it is frozen, you will probably need to replace the water fill valve. Verify that the icemaker is plugged in and turned on. The wire or plastic arm will be in the down position if it is on.

Need to replace the water valve? Walk through it in our repair section: Read more »

# Repair Step by step walkthroughs for common repair issues

## Repairing

### **Step-by-Step walk through repairs**

Water Filter Replacement: BI-30, BI-36, BI-42, BI-48, PRO48

Step-by-step on how to replace the water filter

**Condenser Cleaning:** 500, 532, 550, 600, 611, 642, 632, 650, 661, 685, 690, BI-30, BI-36, BI-42,

BI-48, PRO48

Step-by-step on how to clean the refrigerator condenser

Replace the Water Valve: 500, 532, 550, 600, 611, 642, 632, 650, 661, 685, 690

Step-by-step on how to replace your Sub-Zero water valve

Replace the Light Switch: 500, 532, 550, 600, 611, 642, 632, 650, 661, 685, 690, BI-30, BI-36, BI-

42, BI-48, PRO48

Step-by-step on how to replace the Sub-Zero light switch

# Water Filter Replacement

Water Filter Replacement: BI-30, BI-36, BI-42, BI-48, PRO48

Turn power off on right side upper display. Just lift the top grill, no tools required. It will then lock into place.

Filter is located on the upper right side (as shown in picture). Sub-Zero has simplified this as it is just on a push-retract system. Push the filter in and then pull.



Replace with the new one. You will hear water go into the new filter.

Then you can push the filter reset button on the left side of filter (circled in the picture). Then simply close the grill and you are done.











## Condenser Cleaning

Condenser cleaning: 500, 532, 550, 600, 611, 642, 632, 650, 661, 685, 690, BI-30, BI-36, BI-42, BI-48, PRO48

You can use a soft coil condenser brush or soft thistle vacuum to clean the coils periodically. Because the coils exchange heat, any dust, lint or dirt on the coils reduces the ability to exchange heat. Most fridges have self-cleaning condensers, Sub-Zero does not. If there are pets in the home then it's always safe to check and keep these clean. It's crucial to keep built-in or dual compressor systems clean as in all Sub-Zero units.

### **How to Access Sub-Zero Condenser**

Older units have three Philip screws under the grill that need to be removed. The fridge door needs to be open to access these screws. On BI and PRO models the top grill will flip up like a car hood with no tools necessary. The condenser is on the top right side and will just need to be gently wiped out or softly vacuumed.









## Water Valve Replacement

Water Valve Replacement: 500, 550, 600, 611, 632, 650, 690, 700. Recommend appliance professional for BI-30, BI-36, BI-42, BI-48, PRO48

Replacement of your water valve can be done without the removal of the unit. Shutdown power and water source to the unit. This is generally located in a common area, possibly under the sink or in the basement under the unit itself.

For all 500 and 600 series units, the valves are located on the bottom left. All early 700 series units have the valves on the right. You will need to remove the two to four Philip screws under the toe-kick panel.

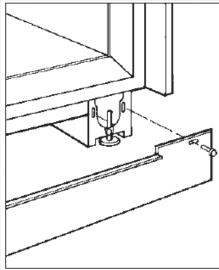
Use a wrench to disconnect copper or braided line from the valve. The valve will be secured by a Philip screw then will pull out a few inches. This will allow room to disconnect electrical connections and then the plastic coupling on the back side of valve.

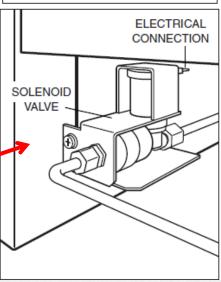
The valve can then be removed and replaced with new valve. Put new valve back in reverse order and tighten (but don't over tighten). Turn water supply on and check for leaks.











# Light or Fan Switch Replacement

Light Switch Replacement: 500, 532, 550, 600, 611, 642, 632, 650, 661, 685, 690, BI-30, BI-36, BI-42, BI-48, PRO48

After factoring in trip, labor and part cost this could save you \$200 on average.

First, shut down power to the unit. For the older 500, 600 and 700 series you need to start by removing the upper grill. Remove the three Philip screws under the top frame after you open the outer door.

Start from the top and remove the two connection wires. Use a flat head screw driver to depress the tab on the right side of the switch (shown below).

Then bring switch down through the metal frame and replace with new switch in reverse and it will lock back in automatically.

For BI and PRO models you just need to lift the grill rather than unscrew. The switches will more round but will come out the same way.









All BI and Pro models







## Repair or Replace?

### Age

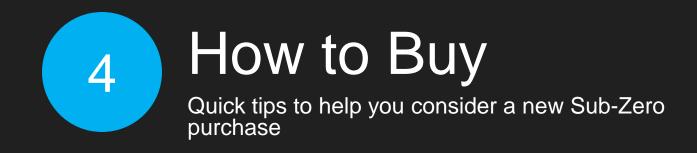
What's the age of your Sub-Zero? If it is 16+ years old be very cautious on how much you are going to invest in servicing a unit that may only have a couple years left until the next repair or replacement. Keep track of all service history so it is easier to calculate cost over the years. At the same time, a new Sub-Zero will cost \$7,500 - \$10,000, so repair could be a good option.

### **Sub-Zero Cost**

Sub-Zero's have evolved over the years, from the first single compressor designs that were thermostat controlled and not as efficient to operate. Sub-Zero products since roughly 1995 are computer controlled and have twin compressors on select models. They are now more efficient, preserving food much longer than other fridges in its class.

### **Repair Cost**

Always ask for a completed job price, rather than time and materials. Time can be skewed and the repair will be over budget. If you are heading towards 40% of the units cost in total repairs you may want to consider replacement.



## How to Buy

Sub-Zero is sold for similar prices around the country. They occasionally have rebate programs when combined with Wolf cooking products. Delivery and especially service should be considered when purchasing the Sub-Zero brand. They will also offer an extra year warranty when the product is installed by a certified Sub-Zero installer (like us).

As a tech however, repair might be the better option as it now costs over \$7,500 to replace a Sub-Zero product.

For a comparison of all professional as well as integrated refrigerators of any brand, download our <u>Counter Depth Refrigerator Buying Guide</u>.

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### See the Yale showroom here



