



## INTRODUCTION

This 600-2 Series Technical Service Manual has been compiled to provide the most recent service information for 600-2 Series units. This information will enable the service technician to troubleshoot and diagnose malfunctions, perform necessary repairs, and return a unit to proper operational condition.

The service technician should read the complete instructions contained in this manual before initiating any repairs on a 600-2 Series unit.

## IMPORTANT SAFETY INFORMATION

Below are Product Safety Labels used in this manual. The "Signal Words" used are **WARNING** or **CAUTION**.

When reviewing this manual, please note these different Product Safety Labels placed at the beginning of certain sections of this manual. You must follow the instructions given in the boxes of the Product Safety Labels in order to avoid personal injury and/or product damage.

The sample Product Safety Labels below illustrate the precautions that should be taken when the signal word is observed.

### **WARNING**

**INDICATES THAT HAZARDOUS OR UNSAFE PRACTICES COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.**

### **CAUTION**

**Indicates that hazardous or unsafe practices could result in minor personal injury, and/or product damage, and/or property damage.**

In addition, please pay attention to the signal word "**NOTE**", which highlights information that is especially important for the topic being covered.

## TECHNICAL ASSISTANCE

If you should have any questions regarding the 600-2 Series and/or this manual, please contact:

*Sub-Zero Freezer Company, Inc.  
ATTN: Service Department  
P.O. Box 44988  
Madison, WI 53744 - 4988*

*Customer Service & Parts / Warranty Claims  
Phone #: (800) 222 - 7820*

*Technical Assistance  
Phone #: (800) 919 - 8324*

*Customer Service & Technical Assistance  
Facsimile #: (608) 441 - 5887*

*Parts / Warranty Claims  
Facsimile #: (608) 441 - 5886*

*Service Department E-Mail Address:  
customerservice@subzero.com*

*Office Hours:  
7:00 AM to 7:00 PM Central Time  
Monday through Friday*

**This manual is designed to be used by Authorized Service Personnel only. Sub-Zero Freezer Co., Inc. assumes no responsibility for any repairs made on Sub-Zero refrigeration units by anyone other than Authorized Service Technicians.**

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### WARRANTY INFORMATION

This page summarizes the 2, 5 & 12 Year Warranty provided with every 600-2 Series unit, as well as two special warranties:

- *Non-Residential Warranty* - Applies to units installed in non-residential applications.
- *Display/Model Home Warranty* - Applies to distributor or dealer display units, and units in model homes, sold three years after date of manufacture.

Following the warranty summaries are details and notes about the warranties.

#### TWO, FIVE & TWELVE YEAR Warranty

- 2 year TOTAL PRODUCT, \*parts and labor.  
**NOTE:** Stainless Steel (Classic, carBon & Platinum) doors, panels & product frames are covered by a 60 day parts & labor warranty for cosmetic defects.
- 5 Year SEALED SYSTEM, \*\*parts and labor.
- 6th - 12th year LIMITED SEALED SYSTEM, \*\*parts only.

#### ONE & FIVE YEAR Non-Residential Warranty (Example: Office, Yacht, etc.)

- 1 Year TOTAL PRODUCT, \*parts and labor.  
**NOTE:** Stainless Steel (Classic, carBon & Platinum) doors, panels & product frames are covered by a 60 day parts & labor warranty for cosmetic defects.
- 5 Year SEALED SYSTEM, \*\*parts and labor.

#### ONE & FIVE YEAR Display/Model Home Warranty (Display units sold three years after date of manufacture)

- 1 Year TOTAL PRODUCT, \*parts and labor.  
**NOTE:** Stainless Steel (Classic, carBon & Platinum) doors, panels & product frames are covered by a 60 day parts & labor warranty for cosmetic defects.
- 5 Year SEALED SYSTEM, \*\*parts and labor.

### Warranty Details:

- \* Includes, but is not limited to the following:  
*Electronic Control System Components, Fan & Light Switches, Fan Motors & Blades, Defrost & Drain Heaters, Defrost Terminator, Drain Pan, Drain Tubes, Wiring, Light sockets & bulbs, Ice maker, Water Valve, Door hinges, Door closers & Cams, Compressor Electricals, etc. . .*
- \* Stainless Steel (Classic, Platinum & Carbon) doors, panels and product frames are covered by a limited 60 day parts and labor warranty for cosmetic defects.

#### \*\* Includes the following:

*Compressors, Condenser, Evaporators, Filter-Driers, Heat-exchangers, All Tubing that Carries the Freon.*

**NOTE:** Condenser Fan Motors, Freon, Solder and compressor electricals are NOT considered sealed system parts.

### Warranty Notes:

- All warranties begin at unit's initial installation date.
- All Warranty and Service information collected by Sub-Zero is arranged and stored under the unit serial number, and the customer's last name.  
*Sub-Zero requests that you have the model and serial number available whenever contacting the factory or parts distributor.*
- The serial tag on SIDE-BY-SIDE models is located by the top door hinge in the freezer compartment.
- The serial tag on OVER-AND-UNDER models is located by the top door hinge in the refrigerator compartment.
- The serial tag on ALL-REFRIGERATOR and ALL-FREEZER models is located by the top door hinge in the refrigeration compartment.

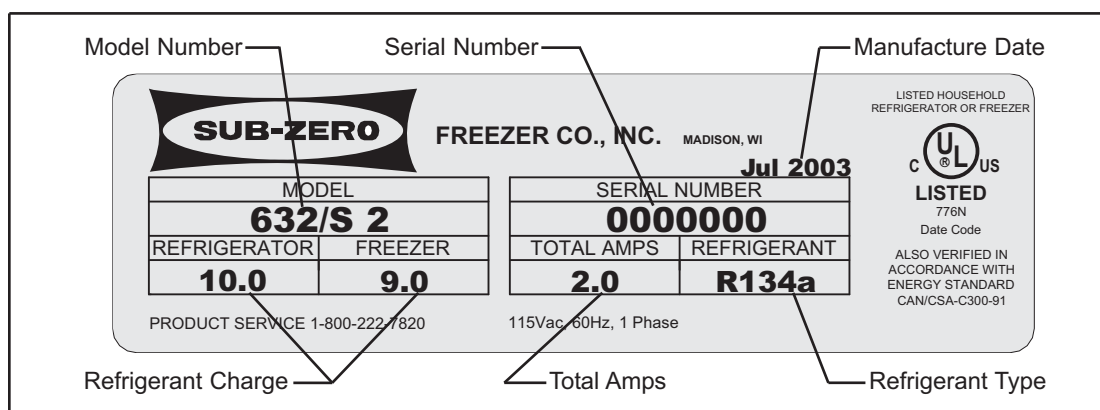


Figure 1-1. Serial Tag Layout (Layout Reference Only)

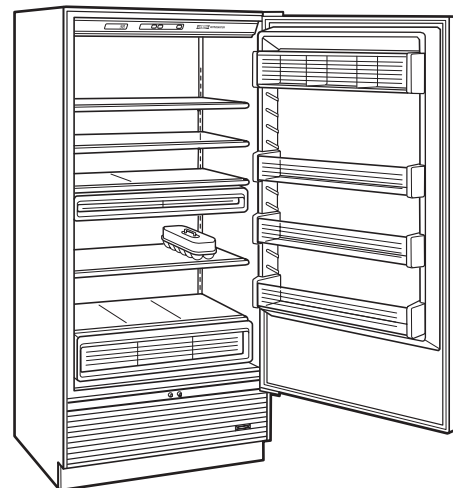
## MODEL DESCRIPTIONS

These pages briefly describes the models covered in this 600-2 Series Technical Service Manual (*Models 601R-2, 601RG-2, 601F-2, 611-2, 611G-2, 632-2, 642-2, 650-2, 650G-2, 661-2, 685-2, 695-2*) The letter after the backward slash in the alpha-numeric model number indicates the exterior variation ("**F**" indicates a **Framed** look with the door trim visible, "**O**" indicates that it is intended for the door panels to **Overlay** the door trim, "**S**" indicates the unit is **Classic Stainless Steel** finish, "**B**" indicates the unit is **carBon** Stainless Steel finish, "**P**" indicates the unit is **Platinum** Stainless Steel finish). The "-2" means this is the second design build for this series.

The following lists contain the model numbers of the 600-2 Series with a brief description of each model. A diagram of the basic model configuration accompanies each list.

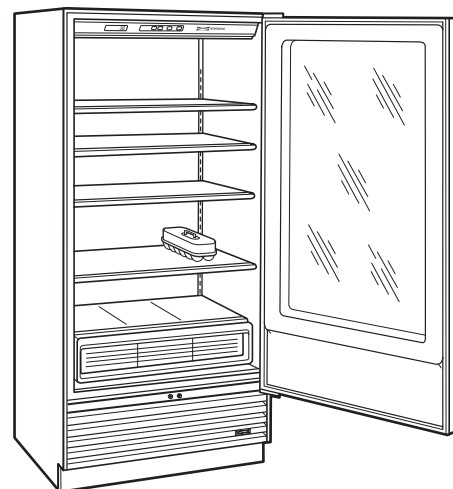
**NOTE:** Functional parts are common to each model configuration, meaning for example, models 601R/F-2, 601R/O-2 and 601R/S-2 will utilize common functional parts. For this reason, the backward slash and letter after the model numbers will only be used in this manual when necessary.

MODEL	DESCRIPTION
601R/F-2	36" Wide, All-Refrigerator, Framed Door Trim with Handle, Louver Grille
601R/O-2	36" Wide, All-Refrigerator, Overlay Door Trim without Handle, Louver Grille
601R/S-2	36" Wide, All-Refrigerator, Classic Stainless Steel Door and Grille
601R/B-2	36" Wide, All-Refrigerator, CarBon Stainless Steel Door and Grille
601R/P-2	36" Wide, All-Refrigerator, Platinum Stainless Steel Door and Grille



Model 601R-2

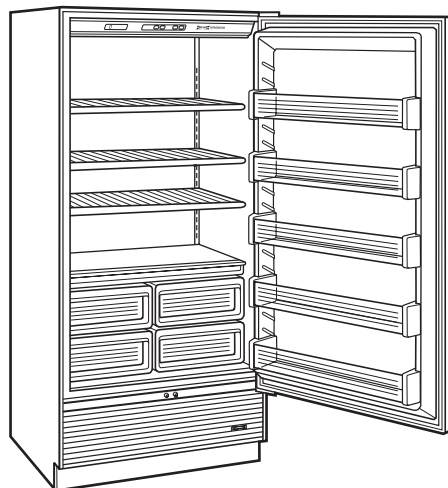
MODEL	DESCRIPTION
601RG/F-2	36" Wide, All-Refrigerator, Glass Door, Framed Door trim with Handle, Louver Grille
601RHAG/F-2	(Same as above with High Altitude Glass)
601RG/O-2	36" Wide, All-Refrigerator, Glass Door, Overlay Door Trim w/o handle, Louver Grille
601RHAG/O-2	(Same as above with High Altitude Glass)
601RG/S-2	36" Wide, All-Refrigerator, Glass Door, Classic Stainless Steel Door and Grille
601RHAG/S-2	(Same as above with High Altitude Glass)
601RG/B-2	36" Wide, All-Refrigerator, Glass Door, carBon Stainless Steel Door and Grille
601RHAG/B-2	(Same as above with High Altitude Glass)
601RG/P-2	36" Wide, All-Refrigerator, Glass Door, Platinum Stainless Steel Door and Grille
601RHAG/P-2	(Same as above with High Altitude Glass)



Model 601RG-2

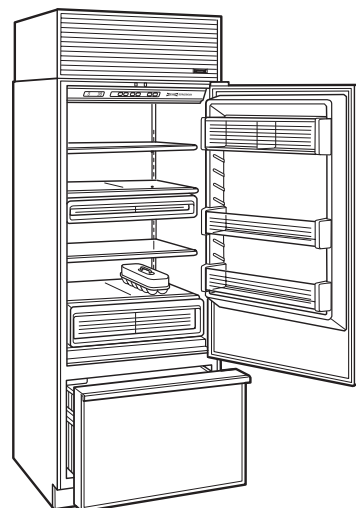


MODEL	DESCRIPTION
601F/F-2	36" Wide, All-Freezer, Framed Door Trim with Handle, Louver Grille
601F/O-2	36" Wide, All-Freezer, Overlay Door Trim without Handle, Louver Grille
601F/S-2	36" Wide, All-Freezer, Classic Stainless Steel Door and Grille
601F/B-2	36" Wide, All-Freezer, CarBon Stainless Steel Door and Grille
601F/P-2	36" Wide, All-Freezer, Platinum Stainless Steel Door and Grille



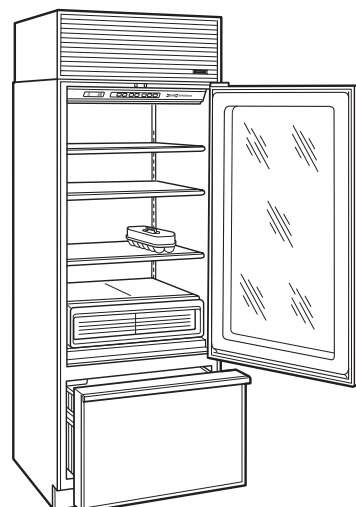
**Model 601F-2**

MODEL	DESCRIPTION
611/F-2	30" Wide, Over/Under, Framed Door Trim with handles, Louver Grille (Standard)
611/O-2	30" Wide, Over/Under, Overlay Door Trim without handles, Panel Grille (Standard)
611/S-2	30" Wide, Over/Under, Classic Stainless Steel Doors and Grille
611/B-2	30" Wide, Over/Under, carBon Stainless Steel Doors and Grille
611/P-2	30" Wide, Over/Under, Platinum Stainless Steel Doors and Grille



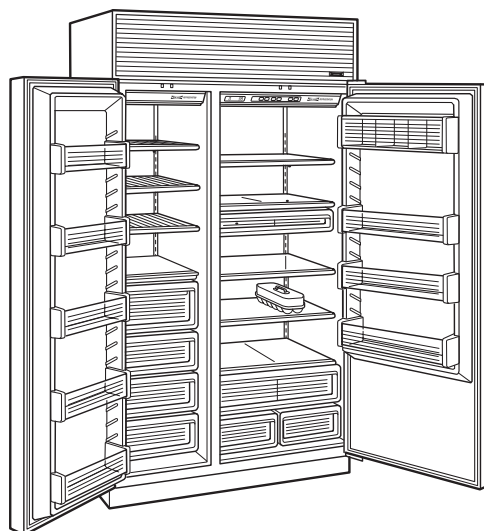
**Model 611-2**

MODEL	DESCRIPTION
611G/F-2	30" Wide, Over/Under, Glass Refrig Door, Framed Door trim w/Handles, Louver Grille (Standard)
611HAG/F-2	(Same as above with High Altitude Glass)
611G/O-2	30" Wide, Over/Under, Glass Refrig Door, Overlay Door Trim without handles, Panel Grille (Standard)
611HAG/O-2	(Same as above with High Altitude Glass)
611G/S-2	30" Wide, Over/Under, Glass Refrig Door, Classic Stainless Steel Door and Grille
611HAG/S-2	(Same as above with High Altitude Glass)
611G/B-2	30" Wide, Over/Under, Glass Refrig Door, carBon Stainless Steel Door and Grille
611HAG/B-2	(Same as above with High Altitude Glass)
611G/P-2	30" Wide, Over/Under, Glass Refrig Door, Platinum Stainless Steel Door and Grille
611HAG/P-2	(Same as above with High Altitude Glass)



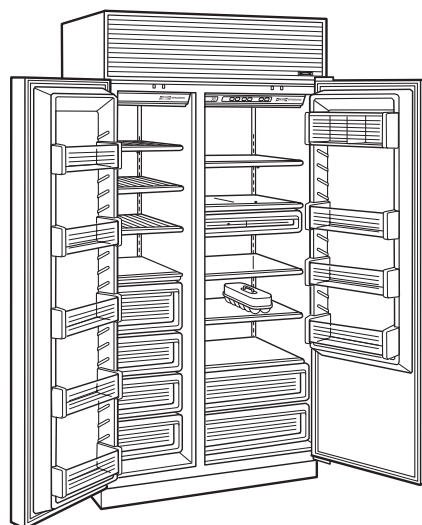
**Model 611G-2**

MODEL	DESCRIPTION
632/F-2	48" Wide, Side-by-Side, Framed Door Trim with Handles, Louver Grille (Standard)
632/O-2	48" Wide, Side-by-Side, Overlay Door Trim without Handles, Panel Grille (Standard)
632/S-2	48" Wide, Side-by-Side, Classic Stainless Steel Door and Grille
632/B-2	48" Wide, Side-by-Side, carBon Stainless Steel Door and Grille
632/P-2	48" Wide, Side-by-Side, Platinum Stainless Steel Door and Grille



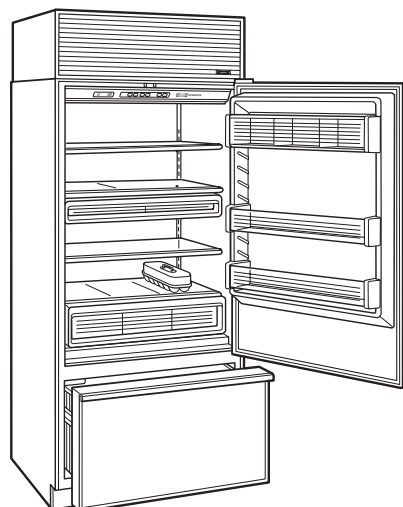
**Model 632-2**

MODEL	DESCRIPTION
642/F-2	42" Wide, Side-by-Side, Framed Door Trim with Handles, Louver Grille (Standard)
642/O-2	42" Wide, Side-by-Side, Overlay Door Trim without Handles, Panel Grille (Standard)
642/S-2	42" Wide, Side-by-Side, Classic Stainless Steel Door and Grille
642/B-2	42" Wide, Side-by-Side, carBon Stainless Steel Door and Grille
642/P-2	42" Wide, Side-by-Side, Platinum Stainless Steel Door and Grille



**Model 642-2**

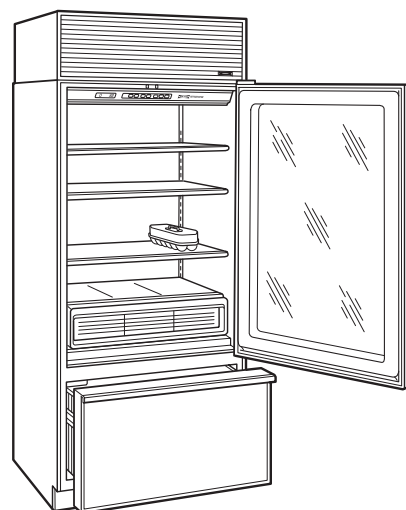
MODEL	DESCRIPTION
650/F-2	36" Wide, Over/Under, Framed Door Trim with handles, Louver Grille (Standard)
650/O-2	36" Wide, Over/Under, Overlay Door Trim without handles, Panel Grille (Standard)
650/S-2	36" Wide, Over/Under, Classic Stainless Steel Doors and Grille
650/B-2	36" Wide, Over/Under, carBon Stainless Steel Doors and Grille
650/P-2	36" Wide, Over/Under, Platinum Stainless Steel Doors and Grille



**Model 650-2**

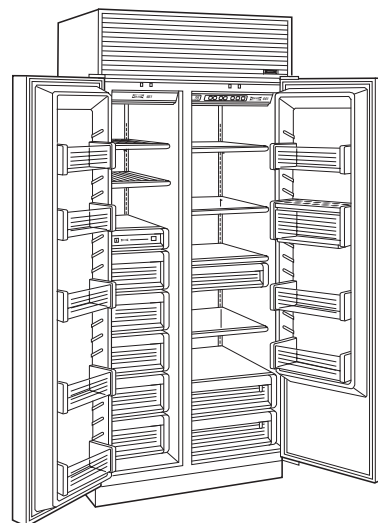


MODEL	DESCRIPTION
650G/F-2	36" Wide, Over/Under, Glass Refrig Door, Framed Door trim w/Handles, Louver Grille (Standard)
650HAG/F-2	(Same as above with High Altitude Glass)
650G/O-2	36" Wide, Over/Under, Glass Refrig Door, Overlay Door Trim without handles, Panel Grille (Standard)
650HAG/O-2	(Same as above with High Altitude Glass)
650G/S-2	36" Wide, Over/Under, Glass Refrig Door, Classic Stainless Steel Door and Grille
650HAG/S-2	(Same as above with High Altitude Glass)
650G/B-2	36" Wide, Over/Under, Glass Refrig Door, carBon Stainless Steel Door and Grille
650HAG/B-2	(Same as above with High Altitude Glass)
650G/P-2	36" Wide, Over/Under, Glass Refrig Door, Platinum Stainless Steel Door and Grille
650HAG/P-2	(Same as above with High Altitude Glass)



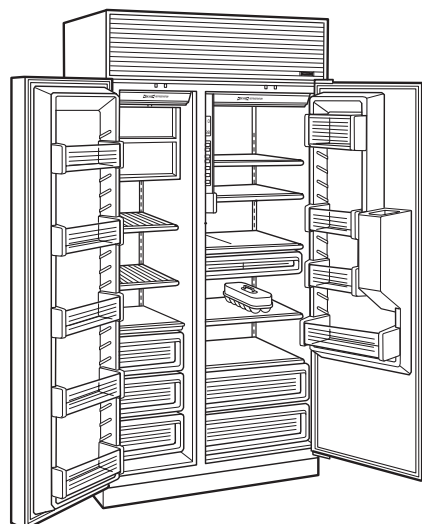
**Model 650G-2**

MODEL	DESCRIPTION
661/F-2	36" Wide, Side-by-Side, Framed Door Trim with Handles, Louver Grille (Standard)
661/O-2	36" Wide, Side-by-Side, Overlay Door Trim without Handles, Panel Grille (Standard)
661/S-2	36" Wide, Side-by-Side, Classic Stainless Steel Door and Grille
661/B-2	36" Wide, Side-by-Side, carBon Stainless Steel Door and Grille
661/P-2	36" Wide, Side-by-Side, Platinum Stainless Steel Door and Grille



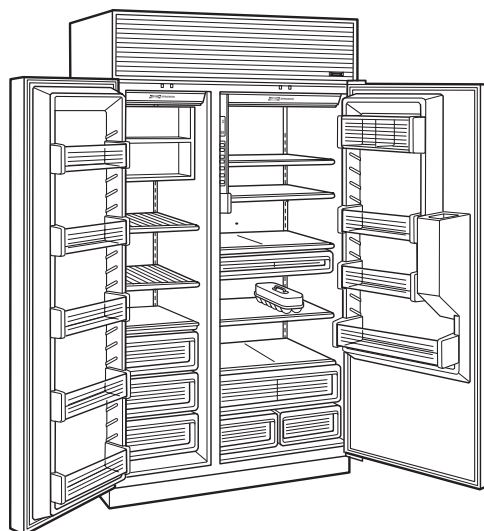
**Model 661-2**

MODEL	DESCRIPTION
685/F-2	42" Wide, Side-by-Side, Ice/Water Dispenser, Framed Trim w/Handles, Louver Grille (Standard)
685/O-2	42" Wide, Side-by-Side, Ice/Water Dispenser, Overlay Trim w/o Handles, Panel Grille (Standard)
685/S-2	42" Wide, Side-by-Side, Ice/Water Dispenser, Classic Stainless Steel Door and Grille
685/B-2	42" Wide, Side-by-Side, Ice/Water Dispenser, carBon Stainless Steel Door and Grille
685/P-2	42" Wide, Side-by-Side, Ice/Water Dispenser, Platinum Stainless Steel Door and Grille



**Model 685-2**

MODEL	DESCRIPTION
695/F-2	48" Wide, Side-by-Side, Ice/Water Dispenser, Framed Trim w/Handles, Louver Grille (Standard)
695/O-2	48" Wide, Side-by-Side, Ice/Water Dispenser, Overlay Trim w/o Handles, Panel Grille (Standard)
695/S-2	48" Wide, Side-by-Side, Ice/Water Dispenser, Classic Stainless Steel Door and Grille
695/B-2	48" Wide, Side-by-Side, Ice/Water Dispenser, carBon Stainless Steel Door and Grille
695/P-2	48" Wide, Side-by-Side, Ice/Water Dispenser, Platinum Stainless Steel Door and Grille



**Model 695-2**