fisherbrand

Operation and Installation manual

Isotemp™ Freezer, Flammable Materials Storage & Explosion Proof Freezers

Model No.	
Flammable Materials Storage Freezer	05FFEEFSA
Freezer	05LFEEFSA
Explosion Proof Freezer	05EFEEFSA

fisher scientific
part of Thermo Fisher Scientific

IMPORTANT Read this instruction manual. Failure to follow the instructions in this manual can result in damage to the unit, injury to operating personnel, and poor equipment performance.

CAUTION All internal adjustments and maintenance must be performed by qualified service personnel.

Material in this manual is for informational purposes only. The contents and the product it describes are subject to change without notice. The Fisher Scientific™ channel makes no representations or warranties with respect to this manual. In no event shall the Fisher Scientific channel be held liable for any damages, direct or incidental, arising from or related to the use of this manual.

Contents

Safety Information

Your satisfaction and safety are important to the Fisher Scientific channel and a complete understanding of this unit is necessary to attain these objectives.

As the ultimate user of this apparatus, it is your responsibility to understand its proper function and operational characteristics.This instruction manual should be thoroughly read and all operators given adequate training before attempting to place this unit in service. Awareness of the stated cautions and warnings, and compliance with recommended operating parameters – together with maintenance requirements – are important for safe and satisfactory operation.The unit should be used for its intended application; alterations or modifications will void the Warranty.

This product is not intended, nor can it be used, as a sterile or patient connected device. In addition, this apparatus is not designed for use in Class I, II or III locations as defined by the US National Electrical Code, unless otherwise noted.

Alert Signals

I	**ON**
0	**OFF**
	**Safety Alert:** Important operating instructions. To reduce the risk of injury or poor performance of the unit. Read the user manual before putting the equipment into operation.
	**WARNING:** Indicates an immediately hazardous situation, which if not avoided, will result in death or serious injury.
	**CAUTION:** Indicates an immediately hazardous situation, which if not avoided, may result in minor to moderate injury.
(No symbol)	**CAUTION:** (Without Safety Alert Symbol) indicates a situation that may result in property damage.

	**Shock Hazard:** Use of this equipment involves power supplies which convert line voltage to low voltage power. Do not modify or use power supplies other than OEM equipment. Connection of the power supply may require a properly grounded receptacle. Potential for electrical shock or equipment damage exists if precautions are not followed.
	**Frost bite/ Low Temperature:** Avoid contact with cold freezer surfaces potential for cold burns or skin sticking to cold surfaces.
	**DANGER RISK OF CHILD ENTRAPMENT** Before you throw away your old freezer: • Take off doors • Leave the shelves in the place so that children may not easily climb inside.
	If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Intended Use Statement

The Freezers described in this manual are for professional use only. These products are intended for use in research for the storage of samples or inventory in the following temperature ranges:

Freezers: -12°C to -24°C (10.4°F to -11.2°F)

Explosion proof & FMS Freezers: -12°C to -24°C

These are not considered medical devices and have therefore not been registered with a medical device regulatory body (e.g. FDA): that is, it has not been evaluated for the storage of samples for diagnostic use or for samples to be re-introduced to the body.

WARNING: Only Explosion Proof Units or Flammable Material Storage Units are to be used for the storage of flammable inventory/samples.

Note: Do not store corrosive materials in these units. Any damage which occurs due to storage of corrosives will not be covered under warranty claims.

Corrosive Materials Requiring Refrigerated or Frozen Storage

- Only use models rated as Corrosion Resistant.
- Corrosion Resistant does not mean Corrosion Proof – Care in storage is still required.
- Store only corrosive reagents/samples which truly need reduced temperature storage.
- Flammable corrosive materials require Flammable Material Storage or Explosion Proof models labeled for the storage of corrosives.
- Containers must be wiped clean of moisture and chemical residue before being introduced into the unit and upon return from use.
- Containers must be sealed with either vinyl tape or Parafilm®.
- Reagents/samples which release HX (X= F, Cl, Br, I) on contact with moisture (e.g. Acyl halides, Organosilyl halides etc.) are particularly damaging to metals.
- Volatile amines will react with HX depositing salts which will lead to corrosion of metal surfaces.
- Volatile organic acids can exacerbate metal surfaces already compromised, be sure these are securely sealed.
- Refrigerated compartments are cool or cold areas but they are not to dry seal your reagents and samples.
- Bleach solutions release chlorine gas which can react with other volatiles in the cooling chamber or directly attacks metal surfaces.
- Periodically clean the interiors, clean up spills or leaking containers.
- Failure to take precautionary actions may lead to damage not covered by warranty claims Parafilm® is a registered trademark of Bemis Company, Oshkosh, WI.

Explosion Proof and Freezers

Overview

Conventional freezers are not suitable for storing flammable materials. Such units have components in their electrical and refrigeration systems that can trigger explosions of flammable air-vapor mixtures inside the unit and/or in the immediate surrounding area.

The Authority Having Jurisdiction (AHJ) determines if work areas are designated as a hazardous location with respect to the presence of flammable gases or vapors. Such locations are defined in (National Fire Protection Association) NFPA 70 Articles 500-501 and OSHA 29 CFR1910.307. Some of these classified areas are expected to experience concentrations of flammable gases and/or vapors at or above their lower flammability limits for extended periods of time.

The construction of our explosion-proof units has been evaluated by Underwriters Laboratories (UL) and are suitable for use in classified areas requiring Class I, Groups C and D* protected equipment. The electrical components such as thermostats, wiring, splices, relays and compressor motors on explosion proof units are safely housed within explosion-proof enclosures and conduit. Compressor surface temperatures have been evaluated and determined to remain below the flash point of materials found in Class I, Groups C and D.

All models have heavy-gauge, rigid, steel construction with a durable enamel finish. Interiors have epoxy enamel or ABS plastic construction. Each unit is insulated throughout for energy-efficient operation.

These units are ideal for storing cyclopropane, ethyl ether, ethylene, acetone, alcohol, benzene, butane, gasoline, hexane, lacquer solvent vapors, naphtha, natural gas or propane along with many other potentially hazardous materials.

WARNING: For FMS and EXP units where flammable materials are stored in the cooling chamber, the cooling chamber is considered a Class I Div1 or Class I Zone 1 hazardous location. Any monitoring devices placed in the cooling chamber must have an intrinsically safe rating from an appropriate certification body, such as UL, CSA, FM etc. (this includes battery or solar powered devices).

Thermocouples for building monitoring systems must be wired through an electrical barrier designed to provide isolation against voltage and current spikes, which could cause a spark resulting in fire or explosion. It is the end user's responsibility to meet these requirements. The Fisher Scientific channel cannot assist with the selection of devices, recommend, approve or design any device or monitoring circuit.

*The notation Class I, Groups C and D is an accepted abbreviation for Class I, Div 1, Groups C and D; Class I Zone 1 Group IIB.

MODEL 05EFEEFSA

21.3" Wide,

Features:

- 5.0 cubic ft. under-counter freezer
- Adjustable Mechanical thermostat
- UL Listed
- Magnetic gasket
- Hermetically-sealed compressor
- Manual defrost
- White color
- 3 Wired shelves and 3 door shelves

Model	Freezer Chamber Dimensions H x W x D inches (cm)	Total Vol. Cu. Ft.	Exterior Dimensions H x W x D inches (cm)
05EFEEFSA	29.5" x 18.63" x 19" (74.9 x 47.32 x 48.2 cm)	5.0	33.13" x 21.38" x 30.25" (84.15 x 54.3 x 64.5 cm)

Model	Electrical Characteristics Volts/Hz, Amps	Freezer Temp.Range °C (°F)	Net Wt. Lbs. (kg)	Ship Wt. Lbs. (kg)
05EFEEFSA	115/60, 1.1	-12 to -24 (10.4 to -11.2)	90 (41)	95 (43)

Note: Amps listed are at normal run mode, starting amps may be higher.

Flammable Material Storage Freezers

Overview

Conventional freezers are not suitable for storing flammable materials. Such units have components in their electrical and refrigeration systems that can trigger explosions of flammable air vapor mixtures inside the unit.

Flammable Materials Storage(FMS) freezers are designed for use in locations, which are not classified by the Authority Having Jurisdiction (AHJ) as hazardous. Under normal operating conditions the build up or presence of flammable vapors will not occur in the environment external to the unit. (Commonly known as “Ordinary Locations”)

FMS units are NOT designed for use in Class I, Division 1, Groups C and D environments, which require an Explosion- Proof Freezer.

FMS units are designed and evaluated by Underwriters Laboratories (UL) to meet the requirements of the National Fire Protection Association Standards Nos. 45, 70 and 99. These units have no internal electrical components that could trigger an explosion or fire of hazardous materials inside the unit.

These units are ideal for storing cyclopropane, ethyl ether, ethylene, acetone, alcohol, benzene, butane, gasoline, hexane, lacquer solvent vapors, naphtha, natural gas or propane along with many other potentially hazardous materials.

All models have heavy-gauge, rigid, steel construction with a durable enamel finish. Interiors have epoxy enamel or ABS plastic construction.Each unit is insulated throughout for energy-efficient operation.

WARNING: For FMS and EXP units where flammable materials are stored in the cooling chamber, the cooling chamber is considered a Class I Div1 or Class I Zone 1 hazardous location. Any monitoring devices placed in the cooling chamber must have an intrinsically safe rating from an appropriate certification body, such as UL, CSA, FM etc. (this includes battery or solar powered devices).

Thermocouples for building monitoring systems must be wired through an electrical barrier designed to provide isolation against voltage and current spikes, which could cause a spark resulting in fire or explosion. It is the end user's responsibility to meet these requirements. The Fisher Scientific channel cannot assist with the selection of devices, recommend, approve or design any device or monitoring circuit.

MODEL 05FFEEFSA

21.3" Wide,

Features:

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Model	Freezer Chamber Dimensions H x W x D inches (cm)	Total Vol. Cu. Ft.	Exterior Dimensions H x W x D inches (cm)
05FFEEFSA	29.5" x 18.63" x 19" (74.9 x 47.32 x 48.2 cm)	5.0	33.13" x 21.38" x 29.5" (84.15 x 54.3 x 74.93 cm)

Model	Electrical Characteristics Volts/Hz, Amps	Freezer Temp.Range °C (°F)	Net Wt. Lbs. (kg)	Ship Wt. Lbs. (kg)
05FFEEFSA	115/60, 1.1	-12 to -24 (10.4 to -11.2)	90 (41)	95 (43)

Note: Amps listed are at normal run mode, starting amps may be higher.

Laboratory Freezers

Overview

These are general-purpose units available in all freezer and combination /freezer models. These units are intended for basic laboratory use only. Storage of high-value, life science materials or clinical biological materials may require alarm, monitoring, back-up and temperature performance features. The need to add these features should be determined by your industrial hygienist or safety officer. These units are not suitable for corrosive environments.

WARNING: DO NOT store flammable materials in General Purpose Laboratory Freezers. Risk of explosion, fire and injury may occur.

For flammable materials use either a Flammable Material Storage Unit or an Explosion Proof Unit.

MODEL 05LFEEFSA

21.3" Wide,

Features:

- 5.0 cubic ft. under-counter freezer
- Adjustable Mechanical thermostat
- UL Listed
- Magnetic gasket
- Hermetically-sealed compressor
- Manual defrost
- White color
- 3 Wired shelves and 3 door shelves

Model	Freezer Chamber Dimensions H x W x D inches (cm)	Total Vol. Cu. Ft.	Exterior Dimensions H x W x D inches (cm)
05LFEEFSA	29.5" x 18.63" x 19" (74.9 x 47.32 x 48.2 cm)	5.0	33.13" x 21.38" x 25.75" (84.15 x 54.3 x 65.4 cm)

Model	Electrical Characteristics Volts/Hz, Amps	Freezer Temp. Range °C (°F)	Net Wt. Lbs. (kg)	Ship Wt. Lbs. (kg)
05LFEEFSA	115/60, 1.1	-12 to -24 (10.4 to -11.2)	90 (41)	95 (43)

Note: Amps listed are at normal run mode, starting amps may be higher.

Unpacking and Installation

Shipping Carton

This should be inspected upon delivery. When received, carefully examine for any shipping damage before unpacking. If damage is discovered, the delivering carrier should both specify and sign for the damage on your copy of the delivery receipt.

Open the carton carefully making certain that all parts are accounted for before packaging materials are discarded. After unpacking, if damage is found, promptly report it to the carrier and request a damage inspection promptly.

IMPORTANT: Failure to request an inspection of damage within a few days after receipt of shipment absolves the carrier from any liability for damage. You must call for a damage inspection promptly.

Unpacking

Use the list below when unpacking to verify that the complete unit has been received. Do not discard packing materials until all is accounted for.

The following items are included in the shipment:

- Freezer
- Operation Manual
- Inspection Tag

Location

Place the unit on a floor that is strong enough to support the unit when it is fully loaded. To level the unit, adjust the leveling legs at the bottom. To level the unit, the leveling legs can be either turned clockwise to raise that side of the unit, or turn counter-clock wise to lower that side. Locate the unit away from direct sunlight and sources of heat (heater etc). Locate the unit in most convenient place and near a grounded electrical outlet.

Clearance

Allow 1" of space on the sides. Allow at least 4" above the top of the unit and the same amount of space between the back and the wall.

Electrical

With the exception of Explosion-Proof models, all units must be connected to a grounded outlet matching the nameplate and/or the information furnished in this manual.

If you are not sure about the outlet, you should contact a qualified electrician for assistance.

The unit should always be connected to its own individual outlet.

Explosion-Proof models do not come supplied with a cord and plug. Units must be hard-wired by a qualified electrician.

CAUTION: DO NOT REMOVE, under any circumstances, the grounding prongs from the 3-prong power cord supplied with all units.No cord/plug is supplied with Explosion-Proof units.Contact a qualified electrician to hard-wire unit.

CAUTION: DO NOT USE electrical extension cords that may result in voltage loss and possible hazardous operation.

Be Advised

DANGER: RISK OF CHILD ENTRAPMENT. BEFORE YOU THROW AWAY YOUR OLD FREEZER:

- TAKE OFF DOORS.
- LEAVE THE SHELVES IN PLACE SO THAT CHILDREN MAY NOT EASILY CLIMB INSIDE.

DANGER: UNLESS UNIT IS SPECIFICALLY DESIGNED FOR COMBUSTIBLE OR FLAMMABLE ATMOSPHERES DO NOT USE IN THE PRESENCE OF FLAMMABLE OR COMBUSTIBLE MATERIALS OR EXPLOSIVE GASES. DO NOT USE IN PRESENCE OF PRESSURIZED OR SEALED CONTAINERS—FIRE OR EXPLOSION MAY RESULT CAUSING DEATH.

WARNING: BEFORE CONNECTING THE FINAL POWER SUPPLY, CHECK THE ELECTRICAL CHARACTERISTICS OF THE UNIT NAMEPLATE TO SEE THAT IT IS IN AGREEMENT WITH THE POWER SUPPLIED. IN ADDITION, POWER SHOULD BE WIRED TO THE UNIT ACCORDING TO THE ELECTRICAL SCHEMATIC AND ALL APPLICABLE CODES. ONLY QUALIFIED ELECTRICIANS SHOULD WORK ON THE ELECTRICAL PORTION OF ANY UNIT INSTALLATION.

CAUTION: SOLUTIONS USED TO CLEAN COILS OR NEUTRALIZE BACTERIA GROWTH MUST NOT BE CORROSIVE TO METALS (ENAMEL-COATED STEEL) AND MATERIALS USED IN THE MAINTENANCE OF THIS EQUIPMENT— DAMAGE CAN RESULT. USE A SOFT CLOTH AND WARM WATER TO CLEAN.

How to Seal Junction Box Conduit with Fiber and Sealing Compound to Help Protect Against Explosions (Explosion-Proof Units Only):

The purpose of the procedure that follows is to build fiber rope dams on the top and bottom hubs of the vertical conduit. The fiber rope damns will surround conduit wiring that is housed inside the vertical conduit.

When both the top and bottom fiber rope dams have been pressed into place, sealing compound is poured between the two and forms into an airtight plug.

All of this is done in order to prevent the very real threat of gas entering the junction box and a resulting serious explosion.

After the unit wires have been pulled through the vertical conduit the following procedure is required:

- Turn power off at the circuit breaker before proceeding.
- Place a small amount of sealing compound granules, enclosed, into a clean mixing vessel. Adds small amounts of water while stirring until a thick paste is formed, then carefully continue adding smaller amounts of water until a thick gravy consistency is achieved— NOT WATERY. Discard any material that becomes too stiff to use. Never attempt to restore workability by stirring in more water.
- Locate junction box, back/top-center of unit.
- Unscrew conduit domed-cover.

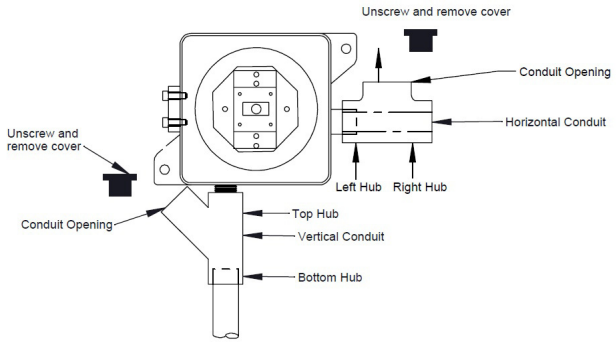


Figure 1. Sealing the junction box

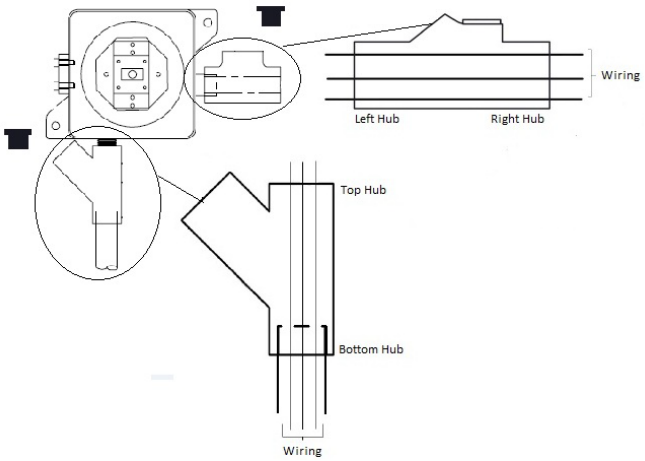
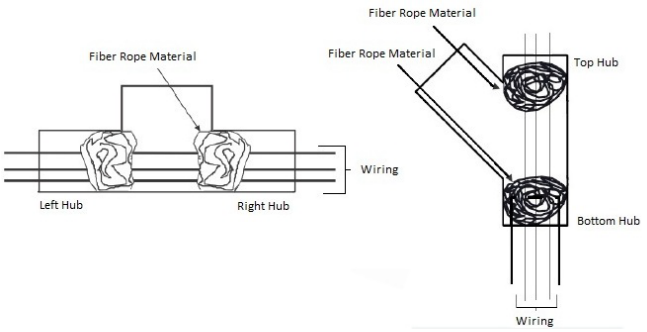
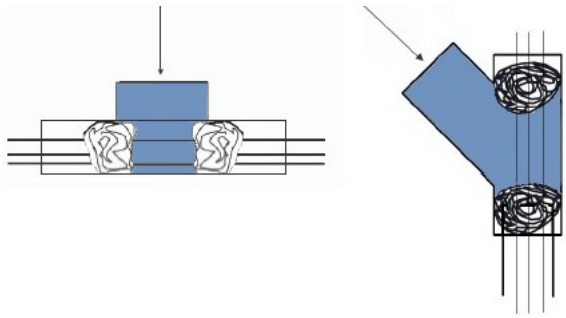


Figure 2. Conduit, Cutaway

- Insert fiber rope material down into vertical conduit opening. Pressing down firmly, work the material into the top hub and the bottom hub and—most importantly being sure the material COMPLETELY SURROUNDS THE WIRING, from the top to the bottom, completely blocking this end of the vertical conduit.
- Insert fiber rope material down into horizontal conduit opening. Pressing down firmly, work the material into the left hub and the right hub and—most importantly—being sure the material COMPLETELY SURROUNDS THE WIRING, from the top to the bottom, completely blocking this end of the horizontal conduit.





- Pour sealing compound down in between the two fiber rope dams filling the remaining space. Pour slowly, being careful not to trap air bubbles. Immediately wipe off any spilled sealing compound.
- Screw conduit domed-cover back onto conduit opening.

Note: INITIAL SETUP OF SEALING COMPOUND WILL OCCUR IN APPROXIMATELY 30 MINUTES HOWEVER, THE SEALING COMPOUND REQUIRES A **MINIMUM OF 8 HOURS ABOVE 0ºC (32ºF)** TO DEVELOP SUFFICIENT STRENGTH TO WITHSTAND EXPLOSIONS.

Operation

Environmental Operating Conditions

POLLUTION DEGREE*	2
INSTALLATION CATEGORY	II
ALTITUDE	2000 Meters MSL (Mean Sea Level)
HUMIDITY	80%maximum, non-condensing
ELECTRICAL SUPPLY	115 V 60 Hz AC
VOLTAGE TOLERANCE	±10% of normal rated line
AMBIENT TEMPERATURE RANGE	16ºC to 32ºC (59ºF to 89.6ºF)
PRODUCT USAGE	This product is intended for use indoors only

*Refer to IEC 664-1

Temperature Control

The freezer temperature can be adjusted by the Cold Control Knob. Freezer temperature will become lower as the control Knob is set closer to the “MAX” position.

Manual Defrost Procedure

For the most efficient operation and minimum energy consumption, defrost the freezer when the frost on the freezer walls is excessive or 1/4" thick.

1. To start defrosting, unplug the freezer and remove the samples.
2. Use a sponge or towel to remove water and melting ice from the freezer floor. After the frost or ice has melted, dry the interior of the freezer thoroughly.
3. When defrosting is complete, remove drip tray and dispose of water. Set cold control back to original position.

CAUTION: Do not use any sharp instrument, blade or scraper to remove ice and frost on freezer surfaces because of the very real danger of puncturing the cooling coil.

CAUTION: Do not use any electrical device to defrost the unit.

When frost accumulates, to 1/4" or more, the operating efficiency of the unit will be affected.

Material Compatibility

The interior cabinet of this unit is constructed of High impact polystyrene. Care must be exercised when determining which chemicals may be stored in the freezer sections and which type of storage materials should be employed.

HIPS (High Impact Poly Styrene) Plastic deteriorates when exposed to, but not limited to the following:

- Amines (Aromatic)
- Aldehydes (Aromatic, Aliphatic)
- Ketones (Aromatic, Aliphatic)
- Esters (Aromatic, Aliphatic)
- Ethers (Aromatic, Aliphatic)
- Hydrocarbons (Aromatic, Halogenated)

This information is taken from Plastics Edition 8 Thermoplastics and Thermosets published by D.A.T.A. and The International Plastics Selector, Inc. Cordura Companies.

9889 Willow Creek Road P.O. Box 26637
San Diego, California 92126.

How to Save Energy

- Be sure to follow location suggestions as mentioned in the previous INSTALLATION section.

- Wipe moisture from glassware or other materials before placing them in a unit.
- Don't overcrowd the unit. Too many items can increase electrical energy demand in order to keep everything cool.
- Close the door as soon as possible in hot, humid weather.
- Make certain that the door is closed tightly.
- As soon as frost has accumulated to 1/4", defrost.
- Keep containers covered, when possible, to reduce moisture buildup.
- Set operating temperature no colder than necessary for the items being refrigerated.

Safety Tips

After a unit is in operation, do not touch the cold surfaces, particularly when hands are damp. Skin may adhere to the extremely cold surfaces.We recommend handling samples by wearing gloves to avoid frost bite.

Never disconnect your unit by pulling on the power cord. Always grip the plug securely and pull straight out from the outlet.

Do not use a power cord that shows cracks or abrasions. Have a qualified electrician repair or replace damaged cords immediately.

Maintenance

Cleaning of Units

- Turn off the freezer.
- Wash interior liner with a solution of two tablespoons of baking soda and a quart of warm water. Then, rinse and wipe it out.
- Do not use soaps, detergents, scouring powders, spray cleaners or the like for cleaning the interior liner, as these may cause odors in the freezer compartment.
- Wash the ice cube tray and shelves in a mild detergent solution and dry with a soft cloth.
- Wipe the exterior surface with a soft cloth dampened with soapy water and dry it with a soft cloth. Normal appliance spray cleaners may be used for the exterior only.

Note: Make no attempt to service or repair a Thermo Scientific product under warranty before consulting your Thermo Scientific dealer. After the warranty period, such consultation is still advised, especially when the repair may be technically sophisticated or difficult. If assistance is needed beyond what the distributor can provide, please call Customer Service at 800-438-4851. No merchandise should be returned directly to the factory without obtaining a Return Materials Authorization (RMA) number from Customer Service.

Interior/Exterior and Door Gaskets

Use only mild soap and water to clean the door gasket. Never use acid, chemical thinners, gasoline, benzene or the like to clean any part of the freezer. Boiling water and benzene may deform or damage the plastic parts.

WARNING: Disconnect plug from electrical outlet before attempting any maintenance or repair of this unit.

Any internal adjustments or repairs must be performed by a qualified service representative.

Troubleshooting

In the event that your unit is not operating properly, check the following before calling for service assistance. This may save you the cost of unnecessary service calls.

Symptom	Possible cause of Problem
Unit not operating	Not plugged in. The circuit breaker has tripped or the fuse has blown.
Compressor turns on and off frequently.	Room temperature is warmer than usual. The door is opened too often. The door is not closed completely. The temperature control is not set correctly. The door gasket does not seal properly. The freezer does not have the correct clearances.
Noise problems.	A trickling sound may come from the flow of refrigerant, which is normal. As each cycle ends, you may hear gurgling noises caused by the flow of refrigerant in the freezer. Contraction and expansion of the inside walls may cause popping and crackling sounds. The unit is not level or is in contact with another appliance.

Replacement Parts

To obtain replacement parts information and pricing, please call the Customer Service Department at 1-800-438-4851 and have the unit's model, serial and code numbers available. This information is located on data plates on the rear of the unit.

Ordering Procedures

Please refer to the Specification Plate for the complete model number, serial number, and series number when requesting service, replacement parts or in any correspondence concerning this unit.

All parts listed herein may be ordered from the Fisher Scientific dealer from whom you purchased this unit or can be obtained promptly from the factory. When service or replacement parts are needed we ask that you check first with your dealer. If the dealer cannot handle your request, then contact our Customer Service Department at 800-438-4851.

Prior to returning any materials, please contact our Customer Service Department for a “Return Materials Authorization” number (RMA). Material returned without an RMA number will be refused.

Warranty

Laboratory instruments and equipment manufactured by Fisher Scientific Company L.L.C. – Laboratory Equipment Division (hereinafter called the Company") are warranted only as stated below.

Subject to the exceptions and upon the conditions specified below, the Company agrees, at its election, to correct by repair, by replacement, or by credit to the purchaser, any defect of materials or workmanship which develops within one year (13 months for freezer products) from the date of purchase by the original purchaser by the Company or by an authorized dealer of the Company provided that investigation or factory inspection by the Company discloses that such defect developed under normal and proper use.

The exceptions and conditions mentioned above are the following:

a. The Company makes no warranty concerning components or accessories not manufactured by it, such as tubes, batteries, etc. However, in the event of the failure of any component or accessory not manufactured by the Company, the Company will give reasonable assistance to the purchaser in obtaining from the respective manufacturer whatever adjustment is reasonable in the light of the manufacturer's own warranty.

b. The Company shall be released from all obligations under its warranty in the event repairs or modifications are made by persons other than its own service personnel or authorized dealer personnel unless such repairs by others are made with the written consent of the Company.

c. THE COMPANY MAKES NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EITHER INFACT OF BY OPERATION OF LAW,…STATUTORY OR OTHERWISE.

d. The above warranty and the above obligations to repair, replace, or credit are complete and exclusive and the Company expressly disclaims liability for lost profits or for special, indirect, incidental, consequential, or exemplary damages of any nature whether attributable to contract, warranty, negligence, strict liability, or otherwise even if the Company has been advised of the possibility of such damages.

e. Representations and warranties made by any person, including dealers and representatives of the Company, which are inconsistent or in conflict with the foregoing warranty shall not be binding upon the Company unless reduced to writing and signed by an officer of the Company.

Important

For your future reference and when contacting the factory, please have the following information readily available:

Model Number : _____

Serial Number : _____

Date Purchased : _____

The above information can be found on the dataplate attached to the equipment. If available, please provide the date purchased, the source of purchase (manufacturer or specific agent/rep organization), and purchase order number.

If you need assistance:

The Fisher Scientific brand products are backed by a global technical support team ready to support your applications. We offer cold storage accessories, including remote alarms, temperature recorders, and validation services. Visit fishersci.com or call:

SALES DIVISION	
Phone	1-828-658-2711 1-800-252-7100
FAX	1-828-645-3368
LABORATORY PARTS and SERVICE	
Phone	1-800-438-4851
FAX	1-828-658-2576
TECHNICAL SUPPORT	
Phone	1-800-438-4851

fisherbrand

Fisher Scientific Company L.L.C.

275 Aiken Road
Asheville, NC 28804
United States

327343H01 Rev.E July 2018

In the United States:
For customer service, call 1-800-766-7000
To fax an order, use 1-800-926-1166
To order online: fishersci.com

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part of Thermo Fisher Scientific