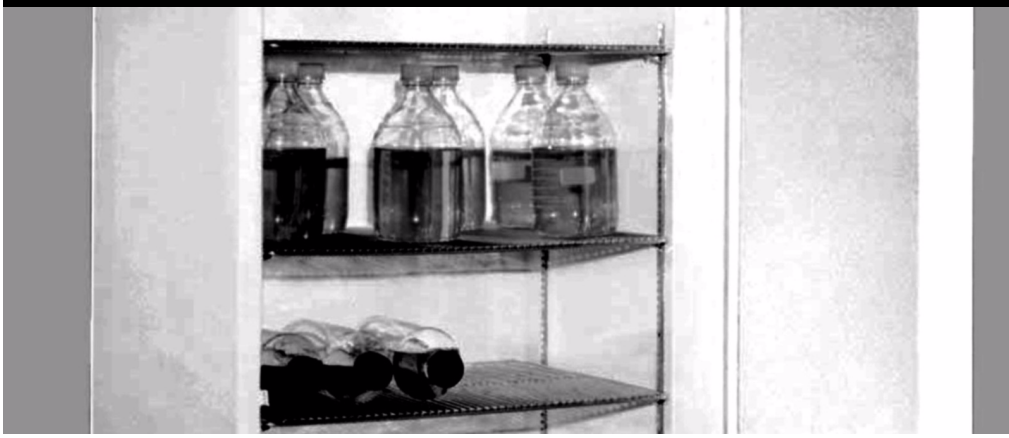
Installation and Operation Manual

Thermo Scientific
General Purpose and Flammable Storage
Laboratory Refrigerators and Freezers



Part of Thermo Fisher Scientific

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General Purpose and Flammable Materials Storage Refrigerators and Freezers

Cool-Lab General Purpose:
3767A, 3767-1A, 3766A, 3766-1A

Flammable Material Storage:
3552-10A, 3552-11A, 3552-11ACN,
3566-10A, 3566-11A, 3566-11ACN
3560-10A, 3560-11A

107774 Rev. A

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Safety Information

Alert Signals



Warning
Warnings alert you to a possibility of personal injury.



Caution
Cautions alert you to a possibility of damage to the equipment.



Note
Notes alert you to pertinent facts and conditions.



Hot Surface
Hot surfaces alert you to a possibility of personal injury if you come in contact with a surface during use or for a period of time after use.



Warning
As a routine laboratory precaution, always wear safety glasses when working with this apparatus.



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

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

Your satisfaction and safety are important to us 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 National Electrical Code, unless otherwise noted.

Unpacking

Save all packing material if apparatus is received damaged. This merchandise was carefully packed and thoroughly inspected before leaving our factory.

Responsibility for its safe delivery was assumed by the carrier upon acceptance of the shipment; therefore, claims for loss or damage sustained in transit must be made upon the carrier by the recipient as follows:

Visible Loss or Damage

Note any external evidence of loss or damage on the freight bill, or express receipt, and have it signed by the carrier's agent. Failure to adequately describe such external evidence of loss or damage may result in the carrier's refusing to honor your damage claim. The form required to file such a claim will be supplied by the carrier.

Concealed Loss or Damage

Concealed loss or damage refers to loss or damage, which does not become apparent until the merchandise has been unpacked and inspected. Should either occur, make a written request for the carrier's agent within 15 days of the delivery date; then file a claim with the carrier since the damage is the carrier's responsibility.

If you follow the above instructions carefully, we will guarantee our full support of your claim to be compensated for loss from concealed damage.

DO NOT – FOR ANY REASON – RETURN THIS UNIT WITHOUT FIRST OBTAINING AUTHORIZATION

Performance Characteristics

Temperature Ranges

Refrigerator: 3° to 13°C (37° to 55°F)
Freezer: -20° to -10°C (-4° to 14°F)

Temperature Stability

@ 4 °C ±4 °C
@ -20 °C ±4 °C

Electrical Requirements

See dataplate attached to unit.

Installation

Selecting a Location

Choose a location for the refrigerator that will provide at least four inches of clearance between the cabinet and any adjacent vertical surface at the sides and four inches at the rear. Twelve inches of clearance is required above the top surface of the refrigerated cabinet. Appropriate electrical power must be available. Locate the refrigerator within eight feet of the power outlet so that no extension cord is required.

Leveling the Unit

The refrigerator must be level in order to provide adequate condensate drainage as well as proper door alignment and operation. The refrigerator should be in its final operating location and set so that it is firmly positioned on the floor.

After discarding crating screws and wood base, level the freezer side-to-side and front to back by adjusting the supplied leveling feet. The leveling feet can be adjusted so the front of the unite is slightly higher than the rear – this will allow the door to close easily if it is left halfway open.

Shelves

Shipped inside each cabinet are four fixed shelves which also serve as part of the evaporator coil on freezer models.

Electrical Connection



Caution
Be sure that the power supply is the same voltage that is specified on the refrigerator's data plate.

Determine the total amount of current presently being used by other apparatus connected to the circuit that will be used by this refrigerator. It is critical that this added current demand and other equipment on this circuit not exceed the rating of the fuse or circuit breaker in use.

The frequency and nominal voltage requirements for the unit are specified on the data plate, which is located on the interiors upper left side. Only plug the unit into a power source that meets these requirements. Low line



Warning
For personal safety this unit must be properly grounded.



Caution
Do not use an extension cord. Use of an ungrounded cord or an overloaded circuit VOIDS the compressor warranty.

voltage is often the cause of service complaints. With the unit running, check that the line voltage is within ±10% of that specified on the data plate.

The power cord on this product is equipped with a three-prong (grounding) plug appropriate for the voltage, current, and location for which it was designed. The plug will mate with a standard grounding outlet of the corresponding configuration to minimize the potential of an electrical shock hazard. It is the customer's responsibility to have the wall receptacle and supply circuit checked by a qualified electrician to verify that they are appropriate for the power requirements of the product, that they match the supplied plug, and that they are properly grounded and have over-current protection.

WARNING: DO NOT under any circumstances cut or remove the third (ground) prong from the power cord. DO NOT use a two-prong adapter plug. Where a two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the user to have it replaced with a properly grounded three-prong receptacle.

Operation



Warning
If the unit is tilted in excess of 30 degrees, do not apply electrical power for a minimum of 12 hours.

Initial Startup

Turn power on and verify that the condenser fan is running. This model has a condenser fan located on the condensing unit on top of the cabinet.

Temperature Control

To adjust the interior temperature down, simply turn the thermostat knob clockwise. For operation above an altitude of 3000 ft., have the thermostat adjusted by a technician.

Condensate Disposal

The condensate drain is at the center rear of the interior floor. The condensate drain tube is connected to this drain and is attached to the left front bottom of the unit behind the front sheet metal. Unhook and place the drain tube into a suitable pan and remove the drain plug. Turn the power to the unit to the off position (O) and allow the unit to defrost. **NOTE: Model 3766A and 3766-1A are frost-free units.**



Warning
Do not heat any substance above a temperature which will cause it to emit toxic fumes—death or severe injury may result.

Material Compatibility

The interior cabinet of this unit is constructed of epoxy-coated steel. Care must be exercised when determining which chemicals may be stored in the refrigerator and freezer sections and which type of storage materials should be employed.

ABS Plastic deteriorates when exposed to, but not limited to, the following:
Aliphatic Hydrocarbons; Aromatic Hydrocarbons; Fully and Partially Halogenated Hydrocarbons; Alcohols Monohydric; Phenols; Ketones; Esters; Ethers; Organic Acids (concentrates and dilute); and Concentrated Oxidizing Acids. 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

Aluminum Alloys are susceptible to corrosion when exposed to but not limited to most inorganic acids, bases and salts with a pH outside of their passive range of pH 4 to 9. It is also important to recognize that the compatibility of aluminum alloys with mixtures of organic compounds cannot always be predicted from their compatibility with each of the compounds. For example, some aluminum alloys are corroded severely in mixtures of carbon tetrachloride and methyl alcohol, even though they are resistant to each compound alone. This information is taken from Corrosion and Corrosion Protection Handbook Second Edition
Published by
Marcel Dekker, Inc.
270 Madison Ave.
New York, NY 10016

Troubleshooting

This table is intended to assist in resolving user-correctable refrigerator problems by relating symptoms to their likely causes. If service beyond the scope of this table is required, contact Customer Service at 1-800-438-4851.

Symptom	Probable Cause	Action
Does Not Run	Unit Unplugged	Plug in Unit
	Blown fuse or tripped circuit breaker	Check fuse or circuit breaker at breaker box
Runs Continuously	Frost buildup on refrigeration coils	Defrost unit
Clicking Sound	The compressor is equipped with a thermal protector. This device shuts off the compressor when it becomes too hot. A clicking sound occurring about every 30 seconds indicates this protector is working	Unplug unit for 1 hr. Plug in and try running again. If the unit doesn't begin to run, call for service.
Insufficient Cooling	Thermostat set too high	Reduce thermostat setting
	Unit frosted	Defrost unit

Maintenance



Warning
When servicing the unit, disconnect from the electrical power source.



Caution
Do not use any type of abrasive such as steel wool, or fluids such as gasoline, Naphtha, and thinner. These materials could be harmful to aluminum, plastic materials, door gasket, and painted surfaces.

Cabinet Cleaning

The cabinet interior should be cleaned frequently. Any spilled liquid should be wiped off immediately. Stains resulting from some spills can be permanent if not quickly removed. The most convenient time to clean the interior is after defrosting. The cabinet exterior should be cleaned occasionally. A mild detergent and lukewarm water or a solution of bicarbonate of soda (1 tablespoon per gallon of water) is recommended for cleaning the interior and exterior of the cabinet. All surfaces should be rinsed and thoroughly dried.

Condenser

The condenser coil is located behind the sides and rear exterior panel. These surfaces may be warm to the touch. This is necessary to the operation of the refrigeration equipment and is normal.

One Year Limited Warranty

This Thermo Scientific product is warranted to be free of defects in materials and workmanship for one (1) year from the first to occur of (i) the date the product is sold by the manufacturer or (ii) the date the product is purchased by the original retail customer (the “Commencement Date”). Except as expressly stated above, the MANUFACTURER MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, WITH RESPECT TO THE PRODUCTS AND EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF DESIGN, MERCHANT ABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

An authorized representative of the manufacturer must perform all warranty inspections. In the event of a defect covered by the warranty, we shall, as our sole obligation and exclusive remedy, provide free replacement parts to remedy the defective product. In addition, for products sold within the continental United States or Canada, the manufacturer shall provide free labor to repair the products with the replacement parts, but only for a period of ninety (90) days from the Commencement Date.

The warranty provided hereunder shall be null and void and without further force or effect if there is any (i) repair made to the product by a party other than the manufacturer or its duly authorized service representative, (ii) misuse (including use inconsistent with written operating instructions for the product), mishandling, contamination, overheating, modification or alteration of the product by any customer or third party or (iii) use of replacement parts that are obtained from a party who is not an authorized dealer of Thermo Scientific products.

Heating elements, because of their susceptibility to overheating and contamination, must be returned to the factory and if, upon inspection, it is concluded that failure is due to factors other than excessive high temperature or contamination, the manufacturer will provide warranty replacement. As a condition to the return of any product, or any constituent part thereof, to the factory, it shall be sent prepaid and a prior written authorization from the manufacturer assigning a Return Materials Number to the product or part shall be obtained.

IN NO EVENT SHALL THE MANUFACTURER BE LIABLE TO ANY PARTY FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR ANY DAMAGES RESULTING FROM LOSS OF USE OR PROFITS, ANTICIPATED OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THE SALE, USE OR PERFORMANCE OF ANY PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), ANY THEORY OF STRICT LIABILITY OR REGULATORY ACTION.

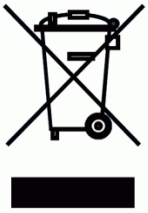
For the name of the authorized Thermo Scientific product dealer nearest you or any additional information, contact us

www.thermofisher.com

1-866-9-THERMO

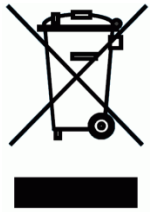
WEEE Compliance

Great Britain



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Deutschland



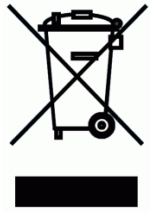
WEEE Konformittät. Dieses Produkt muss die EU Waste Electrical & Electronic Equipment (WEEE) Richtlinie 2002/96EC erfüllen. Das Produkt ist durch folgendes Symbol gekennzeichnet. Thermo Fisher Scientific hat Vereinbarungen getroffen mit Verwertungs/Entsorgungsanlagen in allen EU-Mitgliederstaaten und dieses Produkt muss durch diese Firmen widerverwetet oder entsorgt werden. Mehr Informationen über die Einhaltung dieser Anweisungen durch Thermo Fisher Scientific, die Verwerter und Hinweise die Ihnen nützlich sein können, die Thermo Scientific Produkte zu identifizieren, die unter diese RoHS. Anweisungfallen, finden Sie unter **www.thermo.com/**

Italia



Conformità WEEE. Questo prodotto deve rispondere alla direttiva dell' Unione Europea 2002/96EC in merito ai Rifiuti degli Apparecchi Elettrici ed Elettronici (WEEE). È marcato col seguente simbolo.Thermo Fisher Scientific ha stipulato contratti con una o diverse società di riciclaggio/smaltimento in ognuno degli Stati Membri Europei. Questo prodotto verrà smaltito o riciclato tramite queste medesime. Ulteriori informazioni sulla conformità di Thermo Fisher Scientific con queste Direttive, l'elenco delle ditte di riciclaggio nel Vostro paese e informazioni sui prodotti Thermo Scientific che possono essere utili alla rilevazione di sostanze soggette alla Direttiva RoHS sono disponibili sul sito **www.thermo.com**/

France



Conformité WEEE. Ce produit doit être conforme à la directive européenne (2002/96EC) des Déchets d'Equipements Electriques et Electroniques (DEEE). Il est marqué par le symbole suivant. Thermo Fisher Scientific s'est associé avec une ou plusieurs compagnies de recyclage dans chaque état membre de l'union européenne et ce produit devraitêtre collecté ou recyclé par celles-ci. Davantage d'informations sur laconformité de Thermo Fisher Scientific à ces directives, les recycleurs dans votre pays et les informations sur les produits Thermo Scientific qui peuvent aider le détection des substances sujettes à la directive RoHS sont disponibles sur **www.thermo.com/**

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:

SALES DIVISION

Phone:	828/658-2711 800/252-7100
FAX:	828/645-3368

LABORATORY PARTS and SERVICE

Phone:	800/438-4851
FAX:	828/658-2576

TECHNICAL SUPPORT

Phone:	800/438-4851

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