



Compact, Low Cost Incubators

Model No.
100, 100IDE, 100JPN,
100-5JPN, 101, 105, 106,
120, 120JPN, 120-5JPN, 121,
125, 126, 150, 150JPN, 152

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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.

The Thermo Scientific compact, low cost incubator has been designed with function, reliability, and safety in mind. It is your responsibility to install it in conformance with local electrical codes. For safe operation, please pay attention to the alert signals throughout the manual.

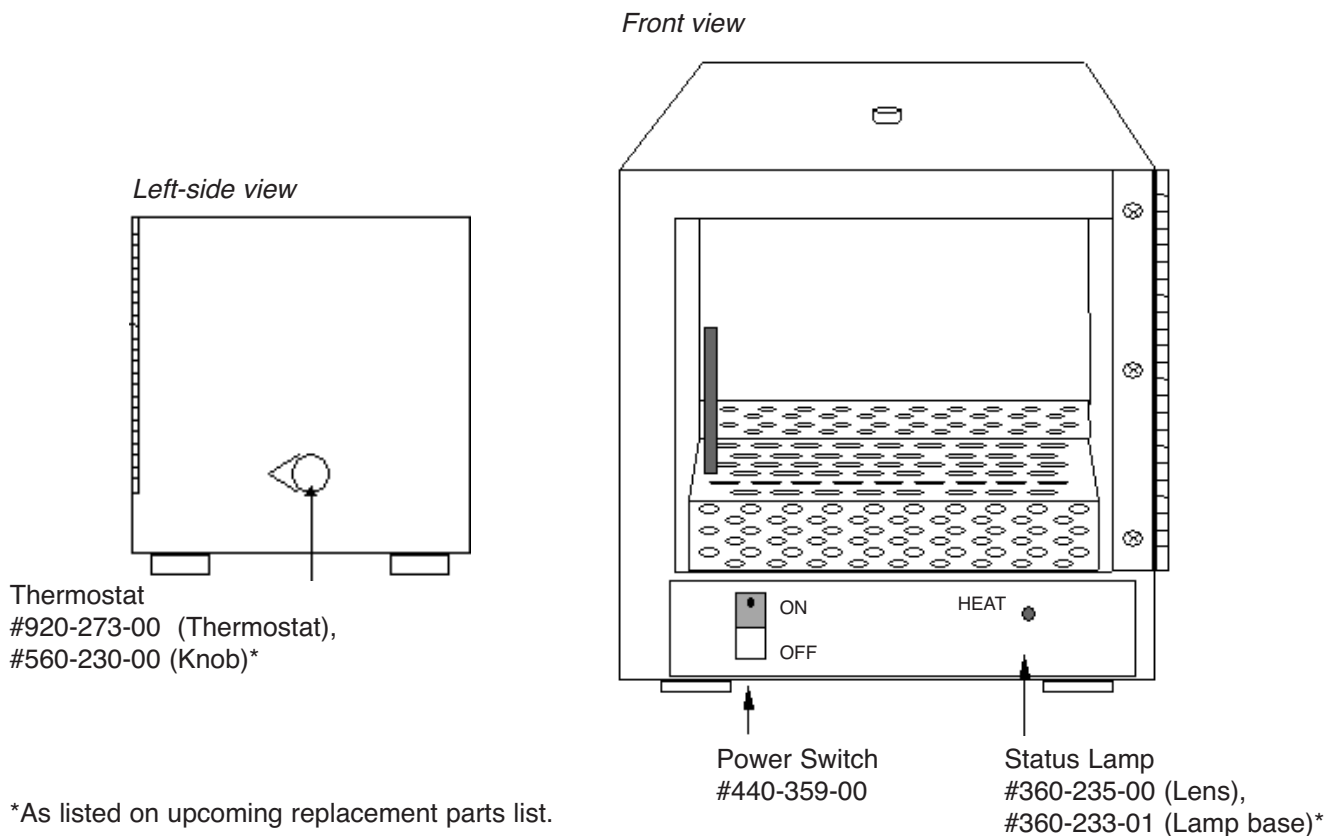
This manual contains important operating and safety information. The user must carefully read and understand the contents of this manual prior to the use of this equipment.

Introduction

The Thermo Scientific compact, low cost incubators are useful for biochemical, bacteriological and hematological studies. They provide a controlled environment for growing microorganisms, as well as, for the study of chick and invertebrate embryos.

All models have specially designed heaters to eliminate the hazards of open-wire internal heaters. A pilot light indicates when the heaters are activated. Solid, corrosion resistant aluminum chamber walls with 1-inch (2.5cm) fiberglass insulation help to distribute heat evenly throughout the chamber. Powder coated, durable, heavy gauge steel exteriors make the units easy to clean and maintain. A bimetallic thermostat controls temperature.

Models 105, 106, 125 and 126 have an acrylic outer door but, otherwise, provide the same performance as the other units. Models 150, 150JPN and 152 are Educational Incubators with acrylic outer doors. These units are intended for egg incubation and are not to be used for clinical purposes.



*As listed on upcoming replacement parts list.

Specifications

Power Requirements:

| | |
|-----------------------------|---------------------------------------|
| 100, 100IDE, 105, 120, 125: | 120VAC, 50/60 Hz, 100 Watts, 0.8 Amps |
| 150: | 120VAC, 50/60 Hz, 150 Watts, 1.3 Amps |
| 150JPN: | 100VAC, 50/60 Hz, 104 Watts, 1.0 Amps |
| 101, 106, 121, 126: | 240VAC, 50/60 Hz, 100 Watts, 0.4 Amps |
| 152: | 240VAC, 50/60 Hz, 150 Watts, 0.6 Amps |
| 100JPN, 120JPN: | 100VAC, 50/60 Hz, 70 Watts, 0.7 Amps |
| 100-5JPN, 120-5JPN: | 100VAC, 50/60 Hz, 100 Watts, 1.0 Amps |

Temperature Range:

| | |
|-------------------------------------|-------------------------------------|
| 100, 100IDE, 100JPN, 101, 105, 106: | From slightly above ambient to 40°C |
| 120, 120JPN, 125, 126: | From slightly above ambient to 60°C |
| 150, 150JPN, 152: | From slightly above ambient to 45°C |
| 100-5JPN, 120-5JPN: | From slightly above ambient to 65°C |

Interior Dimensions:

| | |
|--|---|
| 100(IDE), 100JPN, 100-5JPN, 101, 105, 106: | 12"W x 12"D x 8"H (30 x 30 x 20 cm) |
| 120, 120JPN, 120-5JPN, 121, 125, 126: | 12"W x 12"D x 12"H (30 x 30 x 30 cm) |
| 150, 150JPN, 152: | 13-7/16"W x 13-11/32"D x 12-11/16"H (36 x 34 x 32 cm) |

Exterior Dimensions:

| | |
|--|--|
| 100(IDE), 100JPN, 100-5JPN, 101, 105, 106: | 14-3/8"W x 13-11/32"D x 11-5/16"H (37 x 34 x 30 cm) |
| 120, 120JPN, 120-5JPN, 121, 125, 126: | 14-3/8"W x 13-11/32"D x 15-5/16"H (37 x 34 x 41 cm) |
| 150, 150JPN, 152: | 13-7/16"W x 13-11/32"D x 15-5/16"H (37 x 34 x 41 cm) |

Chamber Volume:

| | |
|--|-----------------------------|
| 100(IDE), 100JPN, 100-5JPN, 101, 105, 106: | 0.67 cubic feet (19 liters) |
| 120, 120JPN, 120-5JPN, 121, 125, 126: | 1.00 cubic feet (28 liters) |
| 150, 150JPN, 152: | 1.32 cubic feet (37 liters) |

Shipping Weight:

| | |
|--|-----------------|
| 100(IDE), 100JPN, 100-5JPN, 101, 105, 106: | 15 lbs. (7 kg) |
| 120, 120JPN, 120-5JPN, 121, 125, 126: | 27 lbs. (12 kg) |
| 150, 150JPN, 152: | 33 lbs. (15 kg) |

SPECIFICATIONS

Unit's Environmental Operating Conditions

| | |
|------------------------|--|
| Pollution Degree: | 2 |
| Installation Category: | II |
| Altitude: | 2000 meters MSL (Mean Sea Level) |
| Humidity: | 80% maximum, non-condensing |
| Electrical Supply: | 120VAC or 240VAC |
| Voltage Tolerance: | ±10% of normal rated line |
| Temperature: | 15°C to 40°C |
| Product Usage: | This product is intended for use indoors only |

Unpacking and Installation

Shipping Carton

The shipping carton 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.

Location

Place the unit on a level table or bench where it will be operated, away from drafts and wide variations in ambient temperature, near a power supply source that matches the unit nameplate requirements. Allow clearance around the unit for free air convection, accessory attachment and user convenience.

The incubator door opens from the left side.

Thermometer Installation

The thermometer holder doubles as a vent fixture on the top of the unit. Place the grommet in the hole at the top of the thermometer holder. Push the thermometer, supplied with the unit, through the grommet until 3-inches of the thermometer (including the bulb) extends through the holder. Push the holder into the vent on top of the cabinet until about 1/4-inch of the holder is exposed.

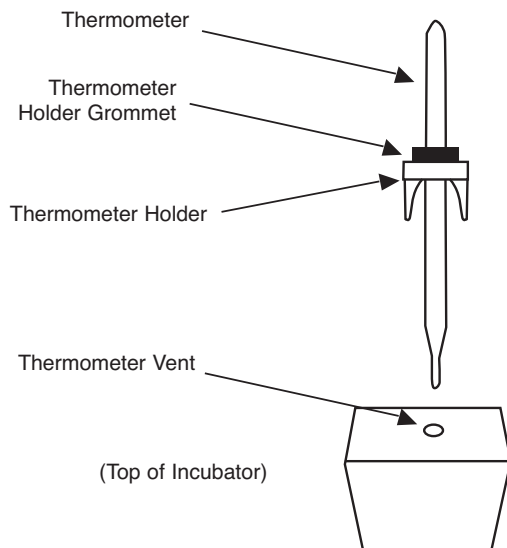
The thermometer bulb should extend about 2-inches into the chamber.

Turn the thermometer in its holder for easy reading.



Note

It may be necessary to squeeze the 3 prongs of the thermometer holder to install it more easily.



Shelf Installation

100 series comes with 1 fixed shelf. 120 series units are supplied with two aluminum shelves: one is fixed to the bottom of the chamber, the other is placed on top. 150 series has two removable, nonadjustable, perforated aluminum shelves.

**Note**

Leave unit disconnected when not in use.

Electrical Requirements

- Use a properly grounded electrical outlet of correct voltage and current handling capacity.
- Do not remove or modify grounded power plug. Use only properly grounded outlets to avoid shock hazard.

Operation

**Warning**

Do not use in the presence of flammable or combustible materials or explosive gases. Do not use in the presence of pressurized or sealed containers – fire or explosion may result, causing death or severe injury.

**Warning**

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

Startup and Operation

1. When the cordset is plugged into an outlet, the incubator is ready for use. Turn the power switch ON. Note thermostat knob on lower right hand side of incubator-rotate the thermostat knob clockwise to increase the temperature, counterclockwise to lower the temperature. The status lamp is lit when the heaters are energized.
2. Allow one hour for the temperature inside the chamber to stabilize; then check the thermometer.
3. Repeat Steps 1 and 2 until the desired setting is obtained. The incubator is then ready to be loaded.
4. Load the incubator so that items or specimens are spaced far enough apart to allow for proper air circulation.
5. Insofar as possible, keep the incubator door closed in order to reduce possibility of fungus growth starting from airborne organisms entering the chamber.

Maintenance



Note

Make no attempt to service or repair a Thermo Scientific product under warranty before consulting your distributor. 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 the customer service department at 1-800-553-0039. No merchandise, however should be returned without prior approval.



Warning

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

Routine Cleaning

Clean up any spills immediately. Remove the plug from its outlet for a thorough cleaning between incubation periods. The chamber interior and shelves can be cleaned with a mild detergent or soap and water. Do not use abrasives or metallic scouring pads on any part of the unit.

To clean the viewing door use a soft damp cloth. A regular window cleaning solution can be used. Avoid scratching the acrylic plastic.

Repairs and Servicing

Unplug the unit from its outlet before servicing. The thermostat is easily accessible inside the chamber.

A heater is located under the floor of the chamber. Turn the incubator upside down and remove 4 screws from the bottom of the cabinet. Lift out the bottom and the insulation covering the heater. Disconnect the heater leads and remove 2 nuts that hold the heater to the floor of the chamber.

Replacement Parts

| DESCRIPTION | PART NUMBER |
|---|-------------|
| Temperature Control Knob: | 560-230-00 |
| Cordset: | 470-187-00 |
| Door, Acrylic (Models 105, 106): | 540-262-00 |
| Door, Acrylic (Models 125, 126, 150): | 540-261-01 |
| Door, Acrylic (Models 150): | 540-261-00 |
| Door Handle: | 560-263-00 |
| Thermometer Holder Grommet: | 790-022-00 |
| Thermometer: | 910-136-00 |
| Heater, 100/120V units: | 340-152-00 |
| Heater, 240V units: | 340-152-01 |
| Heater, 100V/100W (100-5JPN, 120-5JPN): | 340-152-02 |
| Heater, 100/120V units (150): | 340-209-00 |
| Heater, 240V units (152): | 340-209-01 |
| Tension Catch: | 600-124-00 |
| Hinge: | 570-341-00 |
| Rubber Feet (4): | 790-214-00 |
| Shelf (100, 105, 120, 125 Series): | 172-134-00 |
| Shelf, Lower (150 Series): | 172-135-00 |
| Shelf, Upper (120, 125, 150 Series): | 172-136-00 |
| Status Lamp Base: | 360-233-01 |
| Status Lamp Lens (amber): | 360-235-00 |
| Power Switch-120V: | 440-359-00 |
| Power Switch-220V: | 440-292-00 |
| Thermometer Holder: | 910-039-00 |
| Thermostat: | 920-273-00 |
| Wiring Schematic: | 228-604-00 |

The manufacturer reserves the right to change specifications without prior notice.

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 **Thermo 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 563-556-2241 or 800-553-0039.

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.

Two Year Limited Warranty

This Thermo Scientific product is warranted to be free of defects in materials and workmanship for two (2) years 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:

2555 Kerper Blvd., Dubuque, Iowa, 52004-0797

Phone: 563-556-2241 or 1-800-553-0039

Fax: 563-589-0516

Web: www.thermo.com