

Tube Revolver

Catalog #88881001 & 88881002

Operation Manual 9240-11-021

Thermo
SCIENTIFIC



Important Read this instruction manual. Failure to read, understand and follow the instructions in this manual may 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. ▲

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MANUAL NUMBER 9240-11-021

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Important operating and/or maintenance instructions. Read the accompanying text carefully.



Potential electrical hazards. Only qualified persons should perform procedures associated with this symbol.



Equipment being maintained or serviced must be turned off and locked off to prevent possible injury.



Hot surface(s) present which may cause burns to unprotected skin, or to materials which may be damaged by elevated temperatures.



Marking of electrical and electronic equipment, which applies to electrical and electronic equipment falling under the Directive 2002/96/EC (WEEE) and the equipment that has been put on the market after 13 August 2005.



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- ✓ Always use the proper protective equipment (clothing, gloves, goggles, etc.)
- ✓ Always dissipate extreme cold or heat and wear protective clothing.
- ✓ Always follow good hygiene practices.
- ✓ Each individual is responsible for his or her own safety.

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When more extensive service is necessary, we will assist you with direct factory trained technicians or a qualified service organization for on-the-spot repair. If your service need is covered by the warranty, we will arrange for the unit to be repaired at our expense and to your satisfaction.

Regardless of your needs, our professional telephone technicians are available to assist you Monday through Friday from 8:00 a.m. to 6:00 p.m. Eastern Time. Please contact us by telephone or fax. If you wish to write, our mailing address is:

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Section 1 Introduction

Thank you for purchasing the Thermo Scientific Tube Revolver. This unit was designed to mix reagent, solution, and other chemical substances for use in the research, medical science, biological engineering, chemical science, and pharmaceuticals industries. Tube Revolver is simple in appearance, and is constructed through precise manufacturing and strict quality control for stable operation, precise control, and reliable quality.

Features

- Assortment of rotisseries included
- Selection of reciprocating or rotating operation mode
- Stepless speed regulation
- LED indication of speed

Specifications

Rotation Speed	10-40rpm
Capacity	42 × 0.5ml/0.8ml tubes
	30 × 1.5ml/2.0ml tubes
	14 × 5ml/7ml tubes
	14 × 10ml/15ml tubes
	6 × 50ml tubes
Ambient Temperature	4 ~60
Size - W×D×H	26 × 14.8 × 19.5cm
Operation Mode	Rotating / Reciprocating
Indication	LED
Power	10W
Weight	≤1kg
Power Supply	100~240V, 50/60Hz

Control Panel

- “▲” Speed-up/increase value
- “▼” Slow down/decrease value
- “Mode” Selection of operation mode
- “LED” to show the settings and working status.

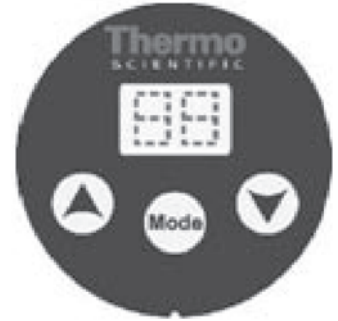


Figure 1-1. Control Panel Components

Packing List

	Description	Catalog Number	Qty.	Remark
1	Tube Revolver	88881001 US 88881002 GBL	1	
2	Operation Manual	9240-11-022	1	
3	Rotisserie for 10ml/15ml tubes	88881005	2	For rotisserie axle
4	Rotisserie for 5ml/7ml tubes	88881006	2	
5	Rotisserie for 1.5ml/2ml tubes	88881007	2	
6	Rotisserie for 0.5ml/0.8ml tubes	88881008	2	
7	Rotisserie Axle		1	
8	Rotisserie for 50ml tubes	88881009	1	For revolving rack
9	Revolving Rack		1	
10	Power adaptor		1	

Section 2 Operation/Rotisserie Installation

1. Install the rotisserie with reference to Rotisserie Installation in this section.
2. Mount the corresponding tube on the rotisserie.
3. Turn the power switch to “on”.
4. Switch the operation mode between “rotating” and “reciprocating” by pressing the Mode button.
5. Set the speed by pressing the up or down arrow button when it is on “rotating” mode.

** 50ml tube rack could be installed with or without the rotisserie axle.*

***LED shows “00” on “reciprocating” mode; LED shows the last speed setting value when it is on “rotating” mode.*



Figure 2-1. Control Panel

Rotisserie Installation

1. Hold the tube revolver housing firmly, insert one end of the rotisserie axle into the slot, turn it until it clicks into place, and insert the other.

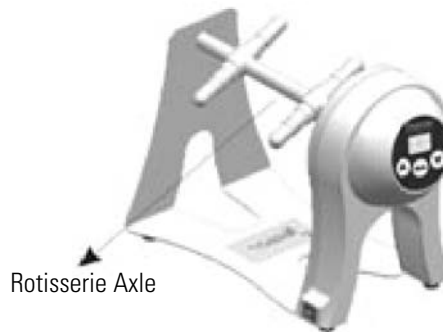


Figure 2-2. Axle

2. Mount the desired tube rack.
3. Place the O-rings into the groove on the rotisserie axle.

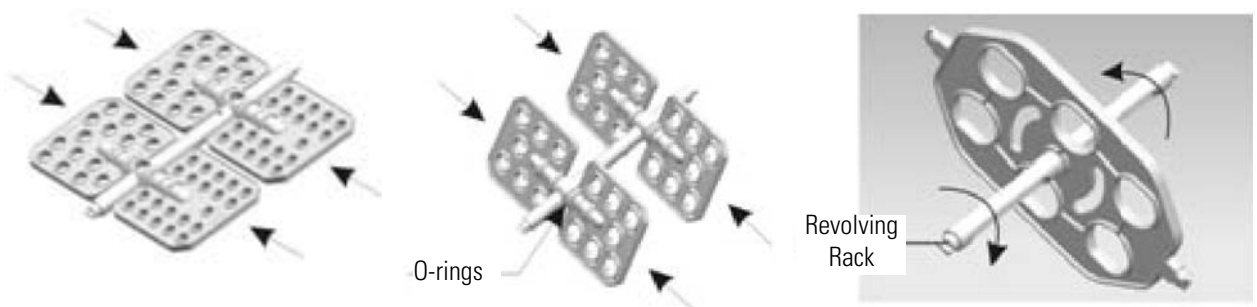


Figure 2-3. Assembly

4. Load the tubes onto the tube rack.



Please follow the notes below for ensuring long-term usage:

1. Place the tubes steady in working condition.
2. To ensure the unit optimal performance, please reduce the load or keep the load balanced if there is any noise.

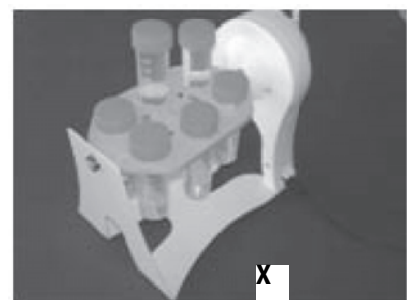


Figure 2-4. Balanced Load

Section 3 **Cleaning**

For safe use, clean the tube revolver as follows:

- Unplug the power cord before cleaning.
- Clean the unit by a soft damp cloth or a mild non-corrosive (pH≤8) detergent
- Do not spray the unit.
- Be sure that the unit is completely dry before operation.
- Wear gloves when cleaning.

THERMO FISHER SCIENTIFIC STANDARD PRODUCT WARRANTY

The Warranty Period starts two weeks from the date your equipment is shipped from our facility. This allows for shipping time so the warranty will go into effect at approximately the same time your equipment is delivered. The warranty protection extends to any subsequent owner during the first year warranty period.

During the first two (2) years, component parts proven to be non-conforming in materials or workmanship will be repaired or replaced at Thermo's expense, labor included. Installation and calibration are not covered by this warranty agreement. The Technical Services Department must be contacted for warranty determination and direction prior to performance of any repairs. Expendable items, glass, filters and gaskets are excluded from this warranty.

Replacement or repair of components parts or equipment under this warranty shall not extend the warranty to either the equipment or to the component part beyond the original warranty period. The Technical Services Department must give prior approval for return of any components or equipment. At Thermo's option, all non-conforming parts must be returned to Thermo Fisher Scientific postage paid and replacement parts are shipped FOB destination.

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