

Bottle/Tube Roller

Catalog #88881-003 and 88881-004

Operation Manual 9240-11-022

MANUAL NUMBER 9240-11-022

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|------------|----------------|-------------|--------------------|-----------|
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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 Unpacking and Installation

When unpacking, follow the steps below.

1. Unpack and inspect for any damage that may have occurred during shipping. Call the seller if damage is found.
2. Verify contents against packing list and call the seller if anything is missing.
3. Place the unit on level and sturdy surface to avoid vibration and noise.
4. Check if the specified instrument voltage is identical with local power supply before powering on.

Packing List

| Description | | Catalog Number | Qty. | Remark |
|---------------------------------|---------------|-----------------------------|------|--------|
| Bottle/Tube Roller | | 88881003 US 88881004 GBL | 1 | |
| Roller bar | | 88881010 | 6 | |
| Power cables | | | 1 | |
| Operation Manual | | 9240-11-022 | 1 | |
| O-Ring (23.7X4.1mm) | | 88881011 | 20 | |
| O-Ring (13.8X3.1mm) | | 88881012 | 20 | |
| Control box | | 88881014 | 1 | |
| Stacking Accessories (Optional) | Stacking Rods | 88881013 | 4 | |
| | Knob | | 4 | |
| | Allen Wrench | | 1 | |

Installation

1. Control box installation

This unit is equipped with a separate control box. Fasten the nut on the connection plug of control box to the unit.

Note Keys on the panel of the unit will become invalid when control box is connected. One control box controls one unit only. ▲

2. Roller bars removal and installation

Roller bars can be removed and installed for different sized tubes.

2.1 Roller bars removal

Counterclockwise twist the knob to be loose on the unit end (see Figure 1-1) and then uplift the pressure sheet-metal. Uplift the roller bar (see Figure 1-2) and remove it. Press the sheet metal to the original position and clockwise twist the knob for fastening.



Figure 1-1. Loosen the Knob

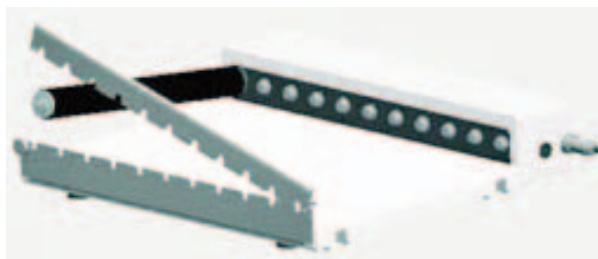


Figure 1-2. Lift Roller Bar

2.2 Roller bars installation

Counterclockwise twist the knob to be loose on the unit end (see Figure 1-1) and then uplift the pressure sheet-metal. Aim hexagon hole of roller at hexagon shaft of the unit and press the other head into semicircle orifice. Press the sheet metal to the knob position and clockwise twist the knob for fastening.

3. O-Rings

When rolling test tubes, tubes may roll off the bars due to the larger outer diameter of the tube cap. Place o-rings on the other end of the tube (see Figure 1-3) to prevent the tube from falling off. Two o-rings for each tube are recommended.

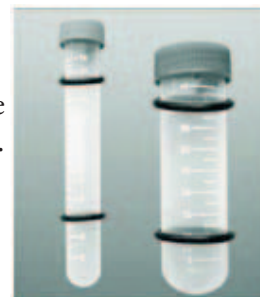


Figure 1-3. O-rings

Installation (continued)

4. Installation for stacked units

For stacking two units, optional accessories are necessary. The two units can be stacked together.

- a. Loosen the inner hexagon screw on the bottom of the unit, pull the round head of the inner hexagon screw out as the arrow direction (see Figure 1-4) until a support base is pulled out (see Figure 1-5), then tighten the inner hexagon screw. Repeat Step a for other three support bases to be extended.



Figure 1-4. Loosen Inner Hexagon Screw



Figure 1-5. Support Base Out

- b. Locate the four stainless pillars in the stacking accessories. Screw the head with the M5 screw thread into extended support base in Step a (see Figure 1-6).



Figure 1-6. Pillar

- c. Screw the other head with M4 screw thread into support base hole of the stacked unit and fasten the knob (see Figure 1-7). Repeat Step c to install remaining three support bases (see Figure 1-8).



Figure 1-7. Tighten Knob after Installation



Figure 1-8. 4 Pillars into Support Bases

Section 2 Overview

Features

- Wide speed range: 0.5-80 rpm
- Timing function (control box connected)
- Remote control (control box connected)
- Stackable function

Specifications

| | |
|----------------------------|------------------------------|
| Roller Bars | 6 |
| Roller Speed | 0.5 ~ 80rpm |
| Roller Bars Dimensions | Ø28mm×259mm |
| Available Tubes or Bottles | Max. Ø120mm bottles; tubes |
| Dimensions(W×D×H) | 360mm×402mm×72mm |
| Timing Range | 0 ~ 999min or continuous run |
| Max. Load | 6.5Kg |
| Power Requirement | 10W |
| Ambient Temperature | 4°C~60°C |
| Relative Humidity | ≤95% |
| Net Weight | 6.5Kg |
| Stacking Function | Optional |
| Power Supply | AC100~240V,50~60Hz |

Notice

- Use the unit in specified environment.
- Verify specified instrument voltage is identical with local power supply.
- DO NOT move the unit while in operation.
- DO NOT use to mix flammable or volatile liquid or operate the unit under hazardous condition.

Section 3 Operation

Interface Instructions

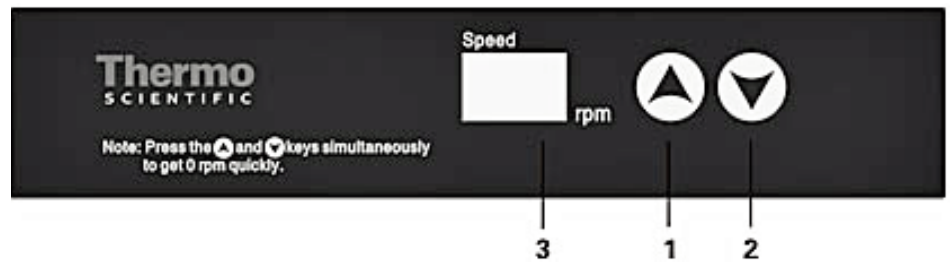


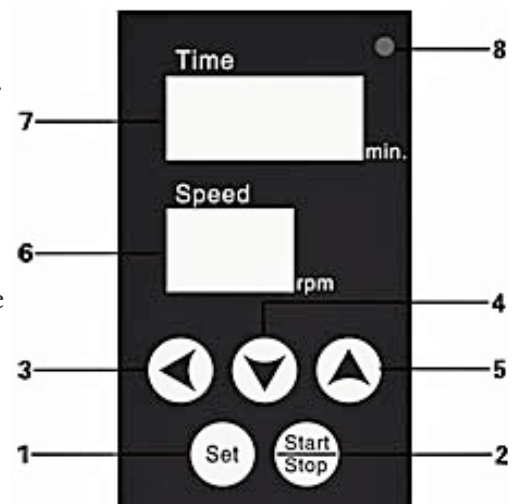
Figure 3-1. Interface Components

1. “▲” : To increase value of roller speed.
2. “▼” : To decrease value of roller speed.
3. Speed display: Show current speed of roller.

The speed of the Mini Roller will drop to 0 RPM when the down arrow key and up arrow key are pressed simultaneously.

Control Box Instructions

1. To set value of time and speed.
2. To start or stop the unit.
3. To move the cursor.
4. To decrease value. Hold for 3 seconds to quickly decrease the value.
5. To increase value. Hold for 3 seconds to quickly increase the value.



6. Displays current roller speed.
7. Displays remaining hours.
When it reads “00”, Continuous working Mode is activated. **Note** Timing function is deactivated when the unit is in Continuous working Mode.
8. Power Indicator.

Figure 3-2. Control Box Components

Section 4 Troubleshooting

| Error | Cause | Solution |
|--------------------------------|--------------------------------|---|
| Unit does not start | Power cable not connected | Check that power cable is firmly plugged into wall outlet |
| | Power supply | Check that cable is correctly installed into the unit |
| | Control box has been connected | Remote control box from unit |
| No display | Power failure | Ensure unit is powered on |
| | Time cycle completed | Repeat run |
| LED light on, unit not working | Overloaded | Check and repeat run |
| Not-responsive keypad | Control box is connected | Remote control box |

Section 5 Packing List

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| | Allen Wrench | | 1 | |

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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If equipment service is required, please call your Technical Services Department at 1-800-438-4851 (USA and Canada) or 1-740-373-4763. We're ready to answer your questions on equipment warranty, operation, maintenance, service and special application. Outside the USA, contact your local distributor for warranty information.



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