

## INTRODUCTION

### *SCOPE OF MANUAL*

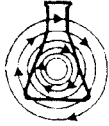
This manual contains the installation, operating and maintenance instructions, plus a description of the Incubator Shaker, Models G25 and R25, manufactured by the New Brunswick Scientific Co., Inc., 44 Talmadge Road, P.O. Box 4005, Edison, New Jersey 08818-4005, U.S.A..

The following versions of this equipment are covered by this manual.

<u>Catalog No.</u>	<u>Part No.</u>	<u>Voltage</u>	<u>Hz</u>	<u>Stroke</u>	<u>Size</u>	<u>Supplement Sheet</u>
G25	M1024-0000	115V-1Ph	60	1"	Std.	No
	M1024-0001	230V-1Ph	50	1"	Std.	No
	M1024-1000	115V-1Ph	60	1"	King	No
	M1024-1001	230V-1Ph	50	1"	King	No
	M1024-2000	115V-1Ph	60	¾"	Std.	Yes
	M1024-2001	230V-1Ph	50	¾"	Std.	Yes
	M1024-3000	115V-1Ph	60	¾"	King	Yes
	M1024-3001	230V-1Ph	50	¾"	King	Yes
	M1024-4000	115V-1Ph	60	2"	Std.	Yes
	M1024-4001	230V-1Ph	50	2"	Std.	Yes
	M1024-5000	115V-1Ph	60	2"	King	Yes
	M1024-5001	230V-1Ph	50	2"	King	Yes
R25	M1025-0000	115V-1Ph	60	0-3 ½"	Std.	No
	M1025-0001	230V-1Ph	50	0-3 ½"	Std.	No
	M1025-0002	115V-1Ph	60	0-3 ½"	King	No
	M1025-0003	230V-1Ph	50	0-3 ½"	King	No

### *DESCRIPTION OF EQUIPMENT*

The Incubator Shaker combines the advantages of a controlled temperature incubator with the efficiency of a continuous duty shaking apparatus. The Gyrotory Shaker, Model 25, is built for continuous service and reproducible agitation. Acting through a triple eccentric drive, a powerful ball bearing motor rotates the shaking platform horizontally in a circular orbit.



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To minimize friction and stress, the platform rotates on nine life-time ball bearings of high thrust and load bearing capacity. In addition, the bearing housing is designed with grease fittings to permit periodic lubrication. With the Reciprocating Shaker, Model R25, workloads roll smoothly and quietly on four sealed ball bearings in precision machined tracks. Instead of sliding the shaker platform, a roller action design is employed which allows heavy loads to be agitated for long periods of time.

The environment growth chamber is thoroughly insulated and has an extremely low heat transfer coefficient for close temperature uniformity. Work is observed through a hermetically sealed, double pane viewing window in the incubator lid. An adjustable air intake vent in the chamber permits room air to circulate through the incubator when required, without affecting temperature regulation.

An automatic switch in the drive circuit de-energizes the shaker when the incubator lid is opened. To insure operating temperature, a safety thermostat is incorporated in the heater circuit. Thermostats are fitted with tension lock-knobs to prevent inadvertent change of temperature.

### ***PRODUCT SPECIFICATIONS***

Temperature Range:	Approximately 5°C above ambient to 60°C
Recovery Time:	Approximately 45 sec. (at 37°C) for chamber to recover to 37°C after lid is opened for 10 sec. with ambient air at 25°C
Stroke:*	Rotary motion - 1" circle reciprocating motion - variable from 0 to 3 1/2"
Speed Range:*	Rotary - 40 to 400 RPM reciprocating - 30 to 285 strokes/min.
Dimension - External (with lid closed):	
	Length: 22"
	Width: 45 1/2"
	Height: 30 1/2"
Dimensions Chamber:	
	Length: 22"
	Width: 34 1/2"
	Height: 12 1/2" (optional king size 19 1/2")



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Drive Motor:	1/6 HP D.C. Drive
Net Weight:	325 lbs. (optional king size 350 lbs.)
Electrical:	See Unit Specification Plate

\*Please refer to the attached supplement for additional information pertaining to additional counterweights supplied with unit (*see pages 24, 25, 26, 27 and 28*).