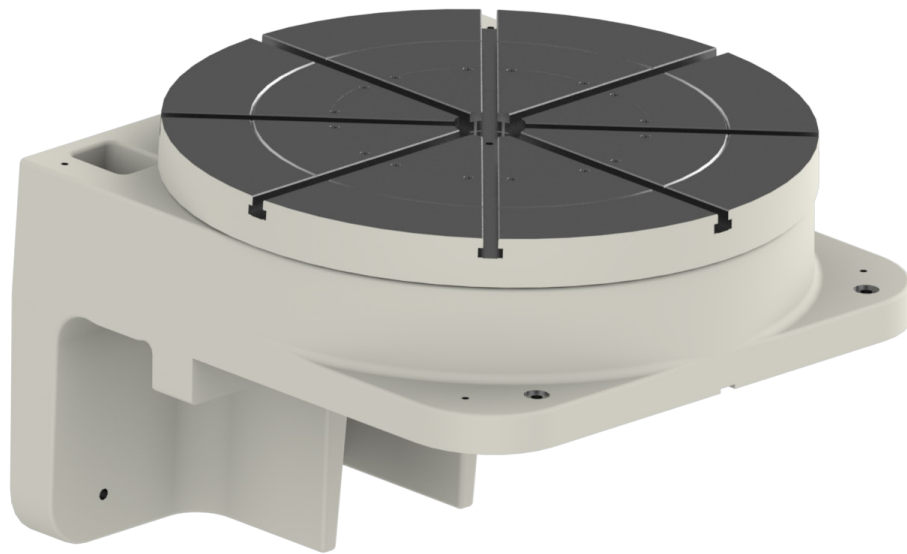


# **ROTTLER**

## **9243**

# **VERTICAL LATHE**

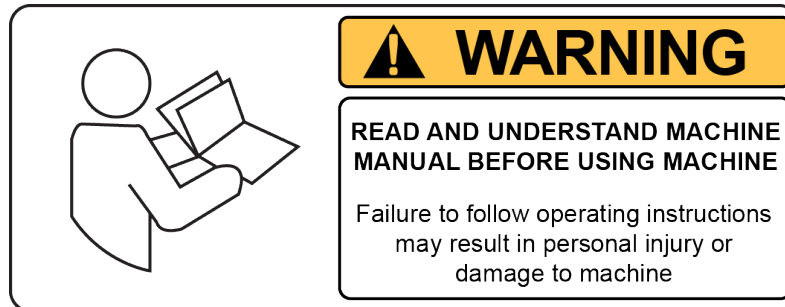
## **OPERATION AND MAINTENANCE MANUAL**



# SAFETY

## Safety Information

For Your Own Safety Read This Instruction Manual Before Operating This Machine.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in serious injury.



**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

## Safety Instructions for Machine Use



**This machine is capable of causing severe bodily injury**

**ONLY A QUALIFIED, EXPERIENCED OPERATOR SHOULD OPERATE THIS MACHINE. NEVER ALLOW UNSUPERVISED OR UNTRAINED PERSONNEL TO OPERATE THE MACHINE.** Make sure any instructions you give in regards to machine operation are approved, correct, safe, and clearly understood. Untrained personnel present a hazard to themselves and the machine. Improper operation will void the warranty.

**KEEP GUARDS IN PLACE** and in proper working order. If equipped with doors, they must be in the closed position when the machine is in operation.



**KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.

**KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.

**WEAR THE PROPER APPAREL.** **DO NOT** wear loose clothing, gloves, rings, bracelets, or other jewelry which may get caught in moving parts. Non-Slip foot wear is recommended. Wear protective hair covering to contain long hair.

**ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eye glasses only have impact resistant lenses, they are NOT safety glasses.



**DO NOT OVER-REACH.** Keep proper footing and balance at all times.

**USE THE RECOMMENDED ACCESSORIES.** Consult the manual for recommended accessories. The use of improper accessories may cause risk of injury.

**CHECK DAMAGED PARTS.** Before further use of the machine, a guard or other part that is damaged should be checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, breakage of parts, mounting, and other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

**NEVER OPERATE A MACHINE WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Full mental alertness is required at all times when running a machine.

**IF AT ANY TIME YOU ARE EXPERIENCING DIFFICULTIES** performing the intended operation, stop using the machine! Then contact our service department or ask a qualified expert how the operation should be performed.

**DO NOT MODIFY OR ALTER THIS EQUIPMENT** in any way. If modifications are deemed necessary, all such requests must be approved and/or handled by Rottler Manufacturing. Unauthorized modifications could cause injury and/or damage to machine and will void the warranty.

**SAFETY DECALS SHOULD NEVER BE REMOVED.** They are there to convey important safety information and warn of potential hazards.

**ALL LOCAL SAFETY CODES AND REGULATIONS** should be followed when installing this machine.

**ONLY QUALIFIED PERSONAL** should perform service on the electrical and control systems.

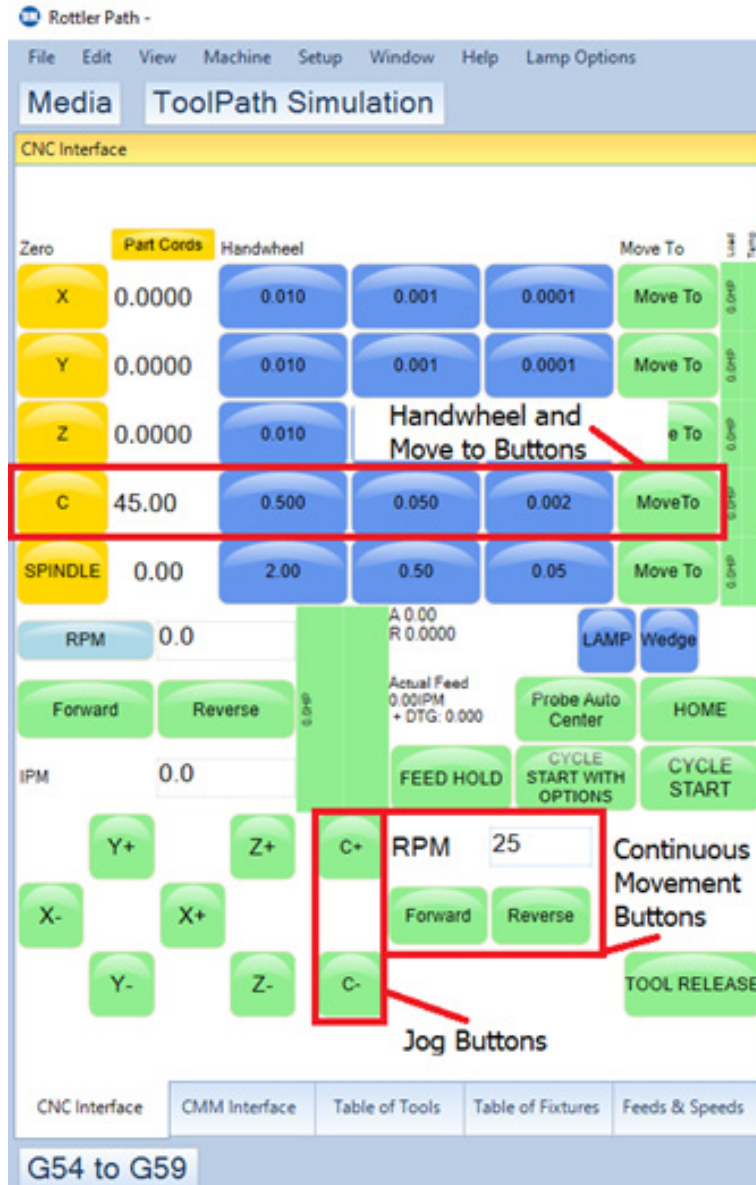
When boring the machine is capable of throwing metal chips over 10- feet from the cutting area. Always use the guards. Eye protection must be worn at all times by the operator and all other personnel in the area of the machine.



**CAUTION** No list of safety guidelines can be complete. Every piece of shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to follow guidelines could result in serious personal injury, damage to equipment or poor work results.

# Operation of Vertical Lathe

## Basic machine controls



## Command lines

You can either use it for a turning operation with live tooling or single point cutter. Or it can be used as an indexer for drill and tap holes or milling operation. The two command lines that you can use in the R-cam are Turn C and Rotate C. Turn C will start it at a specific RPM and hold it there until commanded different. Rotate C will make it turn to a specific degree location from 0° to 360°.

**CAM Operations**

Layout Columns Font Size Refresh toolpath

Name	✓	RPM			
1. Turn C					
RPM		0.00			
2. Rotate C			0.000	Absolute	True
ZClearance		0.0000			
Angle		0.000			
Angle Abs or Inc		Absolute			
Changeclamps		True			

CAM Operations GCode Editor

**Toolbox**

Toolbox Properties List of Part Programs Interactive

**Insert**

- ⊕ 3d CAD
- ⊕ 3d Surfacing
- ⊖ 4th Axis
  - Coord Move
  - Coord Ref
  - Rotate c
  - Turn c
- ⊕ Auxilery
- ⊕ Canned Cycles
- ⊕ Core Instructions
- ⊕ Emulate Tool Diameter
- ⊕ Engraving
- ⊕ GCodes
- ⊕ Media

# 9243 Vertical Lathe Maintenance Guide

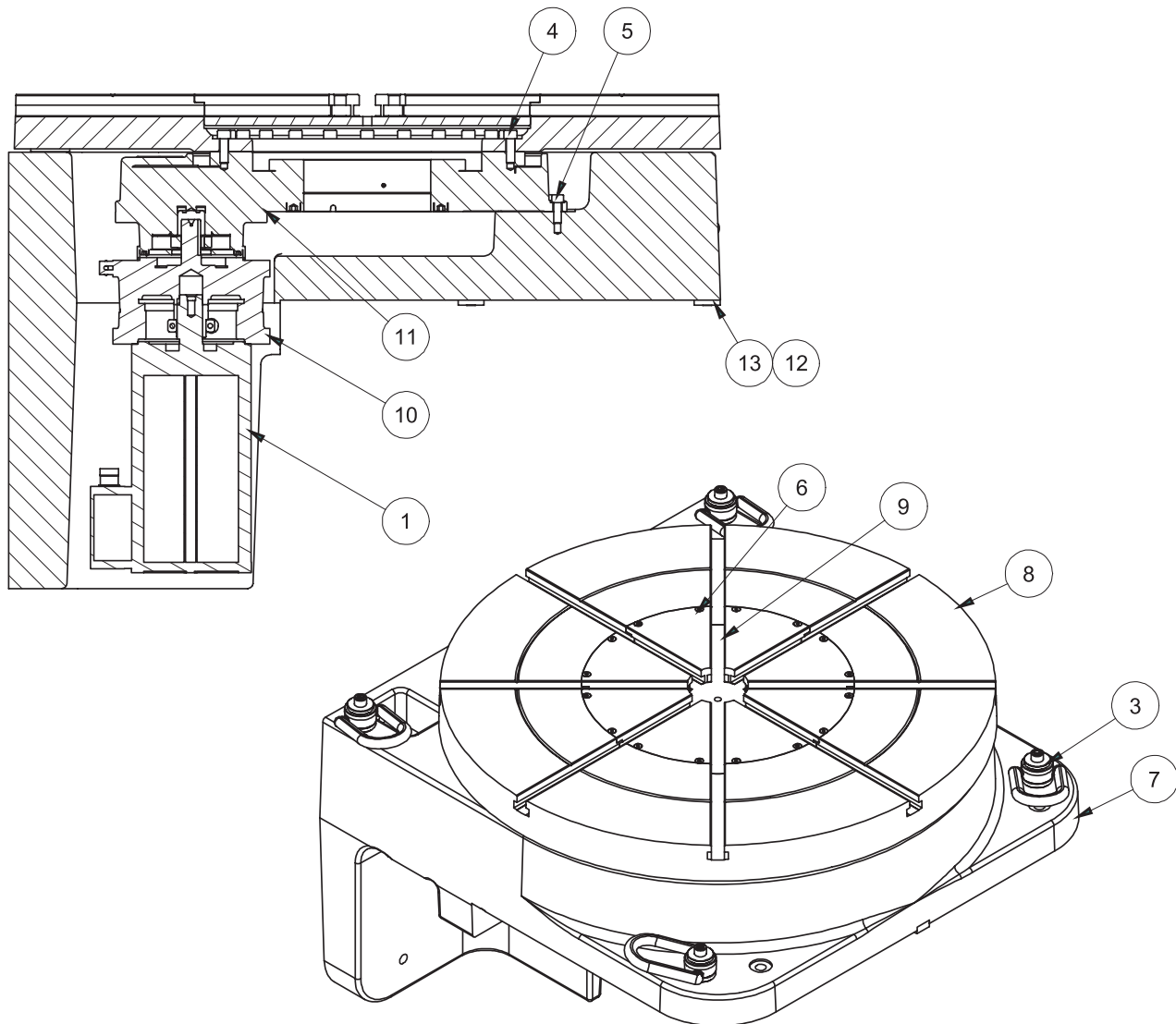
Rottler recommends the bearing should be greased every three months in normal usage. The bearing manufacturer recommends that the greasing be carried out during rotation at slow speed. Slowly apply and complete a minimum of five rotations. Repeat in opposing grease access port. It may need to be lubricated more frequently based on the application conditions, and observable tooth or roller wear. We recommend grease that can be sourced locally.

The gear teeth can be lubricated in two ways:

1. Apply grease to the pinion rollers and roll the pinion back and forth five times over one-meter circumference of gear teeth, repeating the process until the entire gear is lubricated.
2. Use swabs apply a very small, pea sized, dab of grease on the middle of each tooth face and rotate the ring gear five times.
3. Wiping excess grease from the sides of the gear and pinion body will prevent grease being thrown off during operation and for general cleanliness.

The main bearing should be greased every six months or 2 million pinion revolutions in normal usage but may need to be more based on the operating environment. A light extrusion of the new grease must appear at the protection seal lip. Recommended is, Mobil SCH Polyrex EP2, or equivalent High Temperature Synthetic Polyurea Grease.





Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	650-5-20K	MOTOR SG80A/F60
2	2	6354E	3/4 Strain Relief
3	4	6654G	RING, HOIST AUTO ROTATE FIXTURE F80
4	28	650-4-55	M10x1.5 x 35
5	17	MF-31	S.H.C.S.3/8 - 16 UNC - 1
6	16	MF-15	S.H.C.S. 1/4-20 UNC X 1
7	1	9244B	EM105 VERTICAL LATHE, BASE, MACH
8	1	9245B	EM105 VERTICAL LATHE, TABLE, MACH
9	1	9246B	EM105 VERTICAL LATHE, TABLE INSERT, MACH
10	1	9243B	NEXEN SERVO MOTOR BRAKE, SBP7-24.0-050, SPECIAL ORDER
11	1	9243A	NEXEN ROLLER PINION INDEXER, CRD350P-MRG-17:1
12	4	MF-94	S.H.C.S. 5/16-18 X 3/4
13	4	6553K	Locating key