

# FOREDOM®

## Owner's Manual for the High Speed Bench Grinder Models No. 1 and 5



### For your Own Safety:

- Read Owner's Manual before operating your Foredom power tool.
- Always wear eye protection while using power tools.
- Always check to be sure that accessories are tight on their shafts before you turn on the motor.
- Always use dust collection, respirator, or face mask to prevent inhalation of dust particles from workpiece or abrasives.

### Installation

Your Foredom High Speed Bench Grinder can be used almost anywhere, but the motor should not be enclosed or confined so as to restrict air circulation. Two holes are provided in the base casting if you wish to fasten your grinder to your bench. Be sure the switch/speed control knob is in the off position (turned counterclockwise as far as it will go) before you plug in the power cord. Check the nameplate of your grinder to be sure the motor voltage matches the voltage you are using. Attach the tapered spindle TM-3 and wheel mandrel, which come with the No. 1 and No. 5 Bench Grinder, to the left and right motor shafts. Make sure that the set screws are on the flat part of the motor shaft as close to the motor as possible; and that the set screws are tight.

### Operation

The Model No. 1 Grinder produces no load speed up to 15,000 RPM, controlled by an electronic speed control which is manually adjusted. The on/off switch and speed control are operated by the knob on the front of the motor base. To shut the motor off, turn the knob counterclockwise as far as it will go. You will hear the switch click as it goes into the off position. The Model No. 5 Grinder is similar to the No. 1 except the speed is adjusted by a foot control. This model does not have an off/on switch. Please keep in mind that both grinders accomplish their work through high speed rather than high torque; therefore you should use the lightest pressure possible. With a light touch you will avoid unnecessary tool marks, rapid wear of the tool, and overheating of the motor.

### Service

Your Foredom High Speed Bench Grinder is equipped with a ball bearing motor, and requires no lubrication. However, we recommend that you keep a spare set of motor brushes, Part No. 229P. The motor brushes should be checked periodically for wear. When new they are approximately 1/2" long. They should be replaced when they have worn to 1/4". To remove the brushes, simply unscrew the brush caps. When replacing them, be sure that the contour of the brush matches the armature. The motor and base should be kept as clean and free of dust, grease, and dirt as possible.

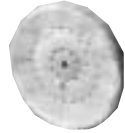
The electronic control mounted in the base of the Model No. 1 High Speed Bench Grinder contains a specially designed electronic circuit, and service on this component should be performed only by the factory. Factory repairs are made promptly and at reasonable cost. If it is not convenient to arrange for service through your dealer, you may send your equipment directly to the factory marked: "Attention: Service Department." Estimates on repairs are given promptly when requested. **Important:** When ordering spare parts, please be sure to give all the data on the nameplate located on the motor.

***Always Wear Eye Protection While Using Bench Grinder.***



## The High Speed Bench Grinder Models No. 1 and 5 come with the following accessories:

**Tapered Spindle** (Part No. TM-3) – Precision spindle suitable for use with cotton, felt, or chamois buffs with shellac hardened or lead centers on left side of grinder. Also used with inside ring buffs on wooden mandrels. Fits 1/4" diameter straight motor shafts. Optional TM-4 is tapered spindle for use on right side of motor.



**Cotton Buff** (Part No. CB-1) – 2 1/2" diameter buff for polishing and buffing. May be used with jeweler's rouge, tripoli, etc. It must be used on the TM-3 tapered spindle on the left side of the grinder. Maximum speed rating: 25,000 RPM.



**Aluminum Oxide Grinding Stone on Wheel Arbor** (Part No. 10072) – 1 3/4" diameter 80 grit stone for general grinding, sharpening edged tools, etc. Maximum speed rating: 17,000 RPM.

## Optional Accessories

Only use accessories rated for 15,000 RPM or higher. The following are available from Foredom.



**Felt Buff** (Part No. W305) – 2" diameter buff ideal for polishing gem stones, metals, etc. Maximum speed rating: 25,000 RPM.



**Rubber Bonded Abrasive Wheel** (Part No. W306) – 1 1/2" diameter wheel available in coarse, medium, or fine grit. Excellent for rust, corrosion, and scratch removal, and preparation of all metal surfaces for polishing and buffing. Maximum speed rating: 17,000 RPM.



**Steel Wire Brush** (Part No. W302) – 2" diameter brush with .008" thick wire for cleaning, brushing, and texturing metal surfaces. Can be operated at high speed. Maximum speed rating: 20,000 RPM.



**Tampico Fiber Brush** (Part No. W303) – 2" diameter brush with an unusual ability to hold abrasive compounds. Good for wet cleaning, chip removal, dulling a satin finish, or fine burr removal. Maximum speed rating: 20,000 RPM.



**Nylon Brush** (Part No. W304) – 2" diameter brush with .010" thick filaments that resist attack by most acids and alkalis, heat, and abrasion. Excellent for wet scrubbing, cleaning, and slurry abrasive finishing. It is also used extensively for fabric scrubbing, glass and bottle cleaning, and plastic burr removal. Max. speed rating: 20,000 RPM.

## Optional Accessories continued

### Collet Holder, Flexade® and Tapered Spindle

Use on right hand side of bench grinder *only*.

**Collet Holder** (Part No. CHA-1) – Holds all No. 600 series collets in 1/32" to 1/8" and 3mm sizes. Includes a 3/32" collet. Fits 1/4" diameter straight motor shafts.



**Flexade®** (Part No. BO-14) – detachable flexible shaft which converts your bench grinder into a flexible shaft machine when used with any Foredom handpiece. See the Foredom catalog for description of handpieces.



**Tapered Spindle** (Part No. TM-4) – Precision spindle suitable for use with cotton, felt, or chamois buffs with shellac hardened or lead centers. Also used with inside ring buffs on wooden mandrels. Fits 1/4" diameter straight motor shafts. For use on right side of grinder.



**Wheel Mandrel** (Part No. WM-3) – Holds rubber bonded abrasive wheels, sanding drums, brushes, and other accessories with 1/4" mounting holes and rated for maximum speeds of 15,000 RPM or higher. Use WM-3 on left side of grinder.



### LIMITED WARRANTY

The Foredom Electric Co. warrants its product to be free of defects in material or workmanship for a period of one year after purchase. During the warranty period, the defective product will be repaired or replaced without charge or, at our option, the purchase price will be refunded. This warranty does not cover damage caused in transit or by accident, misuse, or ordinary wear. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF FITNESS AND MERCHANTABILITY, ARE HEREBY LIMITED IN DURATION TO A PERIOD ENDING ONE YEAR FROM DATE OF PURCHASE, AND WE WILL NOT BE LIABLE OR RESPONSIBLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES.

Repair or replacement will be made at our option if the product is returned post-paid to:

The Foredom Electric Company  
16 Stony Hill Road  
Bethel, CT USA 06801

All warranty repairs must be done at the factory at the above address. We will not pay any shipping or transportation charges. This warranty only covers the original purchaser of the product. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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