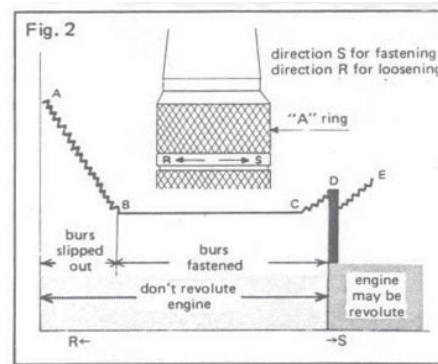
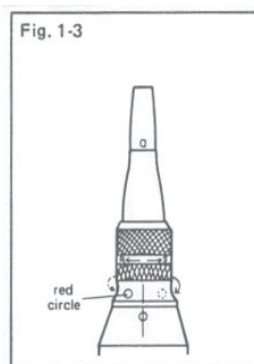
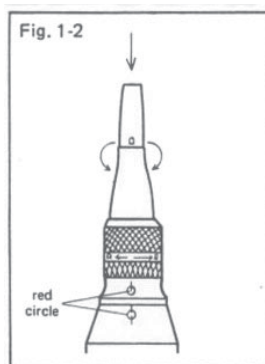
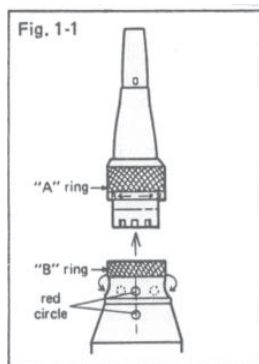


## ROBBINS ACROTORQUE HAND ENGINE

**WARNING: THIS IS A PRECISION INSTRUMENT.**

To Insure Maximum Performance:

1. Never operate the Handpiece without a Bur or Testing Bar locked in the clutch.
2. Remote or Direct Operation—by positioning Toggle Switch (#1) on upper right of console—right position to operate direct from console, left position to operate with Footswitch.
3. Power Switch Knob. (#2) Middle position—off; right position—clockwise rotation; left position—counterclockwise rotation. Red Light indicates power is on.
4. Speed Control Knob. (#3) Turn clockwise to increase R.P.M.
5. Coupling Chuck to Micro-Motor: (Fig. 1-1) Turn the "B" ring until upper and lower red dots align. Chuck is now ready to be detached. (Fig. 1-2) To install chuck into the micro-motor, align the red dots and slide the chuck into the micro-motor until there is no gap between "A" and "B" rings. (Fig. 1-3) Lock the chuck into the micro-motor by turning the "B" ring to the left, separating the red dots until tight.
6. Mounting the Bars: (Fig. 2) R is the release position. S is the secure position. Bars are inserted or removed with light finger pressure only. To release Bar, turn "A" ring counterclockwise until it stops and remove Bur. To secure Bur, turn "A" ring clockwise until the "click" is felt or heard. The bar is now secure and ready for operation.



7. Footswitch Controls: To operate with footswitch, position the Toggle Switch as described in section # 2. NEVER attach or detach the plug of the footswitch from the console without disconnecting the power source. ON/OFF Footswitch—Select desired speed and direction of rotation on console panel.

With the Toggle Switch on remote, press pedal to start the engine and raise foot to stop. Variable Speed Footswitch—Select desired direction of rotation on panel. Turn speed control knob to "L". Set Toggle Switch to Remote. The speed can now be controlled with the Variable Speed Footswitch.

8. Maintenance: If the Handpiece has become spotted with blood, it should be wiped with a cloth or gauze dipped lightly in alcohol. Immediately after every surgery, the Handpiece should undergo the cleaning procedure as follows:

1. Remove Bur and place Testing Bar into Chuck.
2. Turn engine on lowest speed.
3. Dip the tip of the Chuck one inch into Lubrasol mixture and run for 15-20 seconds.
4. Turn off Engine before withdrawing.
5. Now vigorously shake the Handpiece over an open paper to discard the Lubrasol which was drawn into the Chuck.
6. The Handpiece should now be left in the cradle of the Console exposed to the air so that any remainder of the volatile component of the Lubrasol inside the Chuck will vaporize, leaving a fine film of oil on the rotating parts of the Chuck. You have now removed any blood which may have been drawn into the Chuck, and you have also lubricated the ball bearing.

9. Sterilization: After the maintenance procedure has been completed with the Lubrasol or Sterile solution, the handpiece should be sterilized for the next case. The entire unit can be gas sterilized. If steam sterilization is to be utilized, ONLY the detachable Straight Chuck portion of the handpiece can be steam autoclaved. The Chuck can be removed from the Micro—Motor portion of the handpiece as described in Fig. 1—1 through Fig. 1—3. The temperature should not be in excess of 3150.

10. Important Notes:

- A. Do not reverse direction without stopping Engine.
- B. Never run Engine unless Bur is securely locked.
- C. Never use corroded Burs or Burs with bent or notched mandrels—do not force them into Chuck.
- D. Never place the Handpiece directly on a metal surface. This can demagnetize the motor.
- B. Take extra care not to drop the Handpiece. If it is dropped, check centricity of the mandrel at slow speed.
- F. Never move "A" or "B" Ring during rotation.
- C. Never lubricate or allow any fluids to enter the Micro—Motor. Use only a 0.5 Amp. fuse. If the unit continues to blow fuses, discontinue operation and return for repair

## CAUTION

Because the bristles in Kurtin Planing Brushes are pitched into the direction of rotation, they should be run only clockwise, as indicated by the arrow on the console; the mandrel must be inserted into the chuck of the handpiece to its shoulder. The Diamond Fraises can be rotated also counterclockwise. However, one should exercise maximum alertness and caution in dermabrading with the wheel-type of Diamond Fraise held with the screw to the mounting shaft of the mandrel. Please note, that when rotating counterclockwise, such right—hand mandrel screws may become loose and the wheel fly off. WARNING: The eyes of the patient and that of the physician and assistant must be securely protected against loose brush wire and skin debris. Never force the mounting shaft to the Diamond Fraise or of the brush mandrel into the chuck of the handpiece. Some shafts are oversized and should not be used.

11. **WARRANTY:** A one—year warranty covers the electronic package and the motor. The warranty does not cover the Chuck or the cost of its components. After every procedure, the Chuck must undergo the maintenance procedures outlined in Section #8 of the instructions. If these maintenance procedures are strictly adhered to, the Chuck will provide the user with many years of optimal performance. Any unauthorized repair or modification made to any part of the Acrotorque Hand Engine during the warranty period makes the warranty null and void. No other warranty is expressed or implied.

NOTE: Should the Acrotorque Hand Engine not perform to the satisfaction of the user, it can be returned immediately to Robbins Instruments for examination and possible adjustment.

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