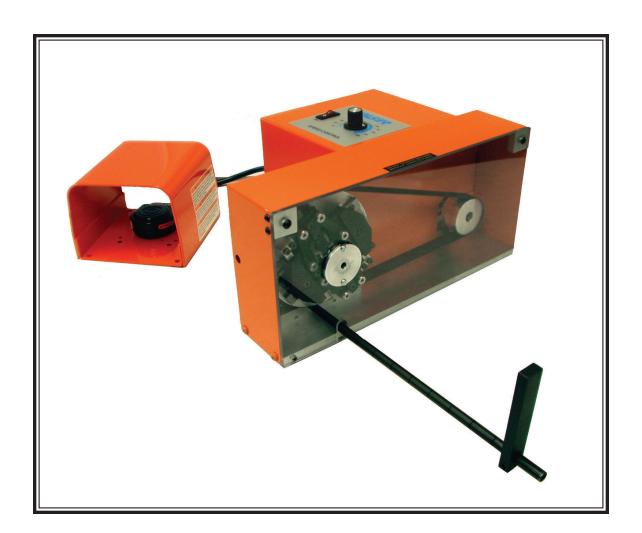


# **Operating Manual**

**Please Read Before Operating Unit** 



## **MODEL RTC1 RIGID TUBE CUTTER**

Please Call for Service or Spare Parts

Phone: (315) 454-3237 Fax: (315) 454-3090 Website: www.eraser.com E-mail: info@eraser.com







#### **SPECIFICATIONS**

9	Unlimited 2.00" (50.8mm)
	1/8" I.D 7/16" O.D.
	(3.18mmø – 11.1mmø) rigid
Blades	Double Beveled Tool
	Steel Cutting Wheels
BushingsBush	nings are purchased separatel
	Customer material sample
	is required to size bushings
Power	120V 60Hz or 230V 50Hz
Decibel Rating	60 db(A)
Size	14.5"W x 11.5"D x 7.5"H
	(368mm x 292mm x 190mm)
Weight	24 lbs/120V (11 Kg)
	26 lbs/230V (12 Kg)

#### ORDERING INFORMATION

AR1411 (RTC1 Manual Feed Tubing Cutter 120V 60Hz, Rigid Tubing Head
IR1832Steel Cutting Wheel (2 required) IR1809Set of Custom Bushings for Rigid Tubing PR1026Replacement Flat Belt IR1820Operating Manual
Optional Parts TR0176 Length Stop Rod 12"

## RTC1 RIGID TUBE CUTTER

#### **SAFETY INSTRUCTIONS**

IMPORTANT! DO NOT OPERATE MACHINE UNTIL YOU HAVE READ THOROUGHLY, AND UNDERSTAND COMPLETELY, ALL PRECAUTIONS, INSTRUCTIONS AND INFORMATION ON THESE PAGES. THIS MANUAL CONTAINS IMPORTANT SAFETY AND OPERATING INSTRUCTIONS. IT SHOULD BE RETAINED WITH THE MACHINE FOR FUTURE REFERENCE.

#### **SAFETY PRECAUTIONS - MECHANICAL**

- ! DO NOT OPERATE UNIT WITHOUT GUARDS IN PLACE OR WITH DAMAGED GUARDS.
- ! DO NOT DEFEAT ANY OF THE SAFETY FEATURES.
- ! DO NOT PLACE FINGERS OR APPENDAGES NEAR MOVING PARTS OR IN OR NEAR OPENINGS IN GUARDS.

#### **SAFETY PRECAUTIONS - ELECTRICAL**

- ! ALWAYS UNPLUG UNIT FROM POWER SUPPLY PRIOR TO ANY MAINTENANCE.
- ! DO NOT RUN UNIT WITH INCORRECT LINE VOLTAGE.
- ! NEVER RUN MACHINE WITH DAMAGED OR WORN POWER CORD.
- ! NEVER MODIFY THE PLUG PROVIDED. IF IT WILL NOT FIT INTO THE OUTLET, HAVE THE PROPER OUTLET INSTALLED BY A QUALIFIED ELECTRICIAN.

**GROUNDING INSTRUCTIONS.** Grounding provides a common return path for electric current to reduce the risk of electric shock. This machine is supplied with an electric cord with an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a licensed electrician if in doubt as to whether the machine is properly grounded.

#### **SAFETY FIRST - USE BEST PRACTICES**

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

#### REMOVE ADJUSTING KEYS AND WRENCHES.

Form a habit of checking to see that keys and adjusting wrenches are removed from machine before turning it on.

**KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Always leave at least 12" (305 mm) of space around all sides and top of unit.

#### DON'T USE IN DANGEROUS ENVIRONMENTS.

Do not use or locate machine in high-humidity environments, or expose to rain. Keep work areas well lighted.

WEAR PROPER APPAREL. Do not wear loose clothing, such as gloves, neckties, rings, bracelets, necklaces or any other clothing or jewelry that might get caught in moving parts. This is not an all-inclusive list. Wear protective hair covering to contain long hair. Non-slip footwear is recommended.

**DON'T OVERREACH.** Maintain proper footing and balance at all times.

MAINTAIN BLADES WITH CARE. Keep blades sharp and clean for optimal performance. Follow instructions for lubricating and changing blades and all accessories.

**DISCONNECT MACHINE FROM POWER SUPPLY.**Unplug the unit before servicing and when changing accessories.

**DO NOT EXCEED THE UNIT'S MAXIMUM MATERIAL SPECIFICATIONS.** Eraser's warranty will be null and void if machine has been used in any manner that is contrary to these instructions.

**CHECK FOR DAMAGED PARTS.** Before continued use of the machine, the guard and all moving parts should be carefully inspected to ensure that nothing is damaged.

Ensure proper alignment of moving parts. Check for any binding of moving parts, breakage of parts, and any other condition(s) that may affect operation. Any damaged part(s) should be properly repaired or replaced prior to any continued use of the machine.

ONLY ALLOW TRAINED AND QUALIFIED PERSONNEL TO OPERATE UNIT. Always keep these instructions within reach of the machine.

#### **USE RECOMMENDED ACCESSORIES ONLY.**

Consult this operating manual for recommended accessories. Use only parts supplied by The Eraser Company, Inc. Use of improper accessories will void Eraser's warranty and may increase risk of injury.

ALL REPAIRS SHOULD BE PERFORMED BY AN ERASER COMPANY REPRESENTATIVE ONLY.

Unauthorized disassembly of machines will void Eraser's warranty.

WHEN USING MACHINERY, ALL SAFETY PRECAUTIONS – INCLUDING, BUT NOT LIMITED TO, THOSE LISTED ABOVE - SHOULD BE FOLLOWED TO REDUCE THE RISKS OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY, AND DEATH.

IMPORTANT: NO LIABILITY WILL BE INCURRED BY THE ERASER CO. FOR INJURY, DEATH, OR PROPERTY DAMAGE CAUSED BY A PRODUCT WHICH HAS BEEN SET UP, OPERATED, AND/OR INSTALLED CONTRARY TO ERASER'S WRITTEN OPERATING MANUAL, OR WHICH HAS BEEN SUBJECTED TO MISUSE, NEGLIGENCE, OR ACCIDENT, OR WHICH HAS BEEN REPAIRED OR ALTERED BY ANYONE OTHER THAN THE ERASER COMPANY, OR WHICH HAS BEEN USED IN A MANNER OR FOR A PURPOSE FOR WHICH THE PRODUCT WAS NOT DESIGNED.

#### **OPERATING INSTRUCTIONS**

#### SET-UP:

The RTC1 is supplied with one 3/32", one 7/64", one 1/8", one 5/32" & one 9/64" Allen wrench. Bushings must be purchased separately.

! Caution: The rigid tubing cutting wheel head is intended for rigid tubing. Thin wall soft steel is the practical limit for the machine.

Place the Model RTC1 on a sturdy workbench with the right corner of the exit opening even with the right corner of the bench. Short and long cut lengths will drop out the side of the exit bushing. Material collection bins can be placed to collect the cut material as it exits the unit.

#### **BUSHING INSTALLATION:**

To aid in bushing installation refer to the drawing. If different sizes of material are going to be cut, additional bushing sets must be ordered. There are two guide bushings, the input and exit bushing. Install the input bushing & gently tighten the set screw with the 3/32 Allen wrench. Install the exit bushing in the front cover with the two screws provided. **See pictures 1 & 2**.

Feed the tubing in through the input bushing and out through the exit bushing. Set the length stop block to approximately provide the desired cut length. While gently squeezing them together, tighten the adjacent collars with the provided 7/64" Allen wrench. The actual cut length may be refined after a sample is cut. Longer cut lengths may be produced by purchasing additional length stop rods (TR0176) which may be screwed directly into the one provided with the machine. **See picture 1**.

Connect the power cord to the IEC connector, and plug the unit into the appropriate power supply (either 120V 60Hz OR 230V 50Hz).

#### **OPERATION:**

Push the material through the input bushing, head, & exit bushing until it reaches the length stop block. **See pictures 1 & 2.** 

Turn the machine on using the I/O switch on the top of the unit. Set the speed control to approximately 75% as a starting point. Depress the footswitch to cut the material. When the material is cut; release the footswitch. The cut time will vary based the material being cut. Cut times will range from a fraction of a second to several seconds. Lower machine speeds may cut better on lighter or softer materials & higher speeds will be necessary for thicker wall or harder materials. Rotate the length

stop block, remove cut piece & return block to verticle position. **See picture 2.** 

## CUTTING WHEEL REPLACEMENT. AND DEPTH ADJUSTMENT:

! CAUTION: BE SURE UNIT IS UNPLUGGED BEFORE CHANGING CUTTING WHEELS.

To replace the cutting wheels first remove the 2 screws near the top of the front cover with a 1/8" Allen wrench. Lift off the cover. Remove 2 roller holder screws with the 5/32 Allen wrench. Remove 1 brass washer & the cutting wheel assembly from the roller holder. Using (2) 1/2" wrenches loosen the jam nut from the disk bushing & remove the cutting wheel. Install the new cutting wheel & reverse the disassembly procedure to reassemble. Repeat this process for the other cutter wheel. **See pictures 1,3** & 4.

To adjust the cutting wheels deeper, turn the depth screws counterclockwise using the 5/32" Allen wrench provided. The depth is properly set when the cutting wheels are slightly deeper than the inside wall of the tubing being cut. The depth screws must be adjusted equally for the cutting head to function properly. **See pictures 3 & 4.** 

! CAUTION: BE CERTAIN THAT THE JAM NUT SIDE OF THE CUTTER WHEEL ASSEMBLY FACES THE ROLLER HOLDER. IF THE DISK BUSHING SIDE FACES THE ROLLER HOLDER THE CUTTER WILL NOT OPERATE.

#### **MAINTENANCE:**

- ! CAUTION: BE SURE TO UNPLUG THE UNIT BEFORE PERFORMING ANY MAINTENANCE. BE SURE TO EMPLOY APPROPRIATE ANTI-STATIC PROCEDURES/DEVICES WHEN DISASSEMBLING AND ASSEMBLING UNIT.
- Check the cutting wheels for wear after prolonged use. See pictures 3 & 4.
- 2) Belt tensioning or replacement begins with removing 4 screws & the rear housing with a #2 Phillips screwdriver. Remove the 2 screws & the front cover with a 1/8" Allen wrench. Loosen the 4 motor mounting screws using the 5/32 Allen wrench. Slip the old belt off the cutterhead pulley

& the motor pulley and replace with the new one. Slide the motor to the right (away from the cutter head) & hold in place while tightening the 4 mounting screws. Replace the rear housing & front cover. Reapply power & start the machine. If the belt slips on startup repeat the process but apply more tension to the belt before tightening the motor mounting screws. See picture 4 & 5.

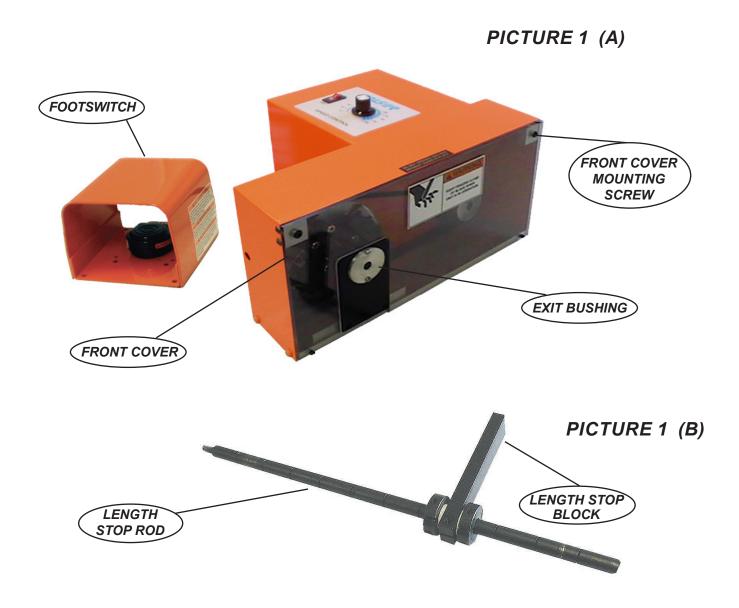
- 3) A light spray lube should be applied sparingly to the moving components on the rigid tubing cutterhead. Care should be taken not to get any lube on to the belt surface of the cutterhead pulley. See pictures 3 & 4.
- 4) No other maintenance is required for the units.

#### TROUBLESHOOTING:

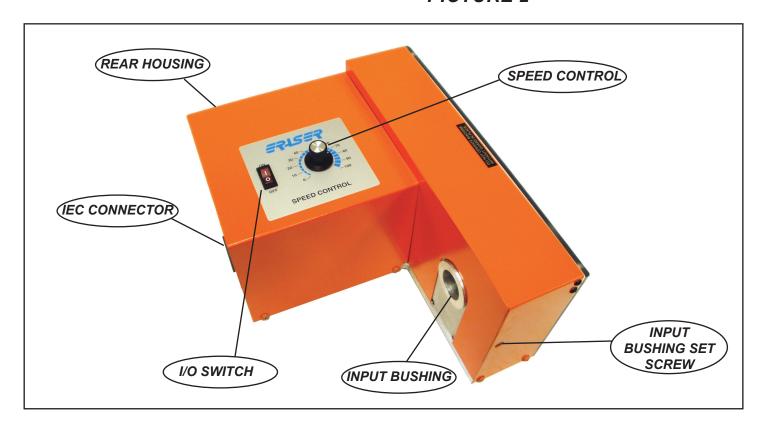
PROBLEM: Poor quality cut or no cut.

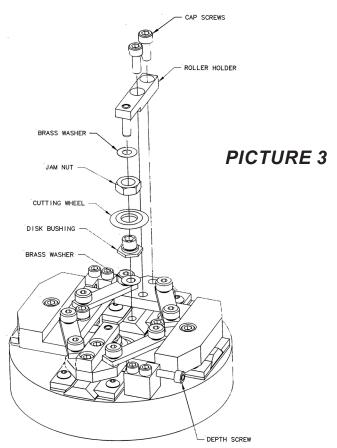
#### **SOLUTIONS:**

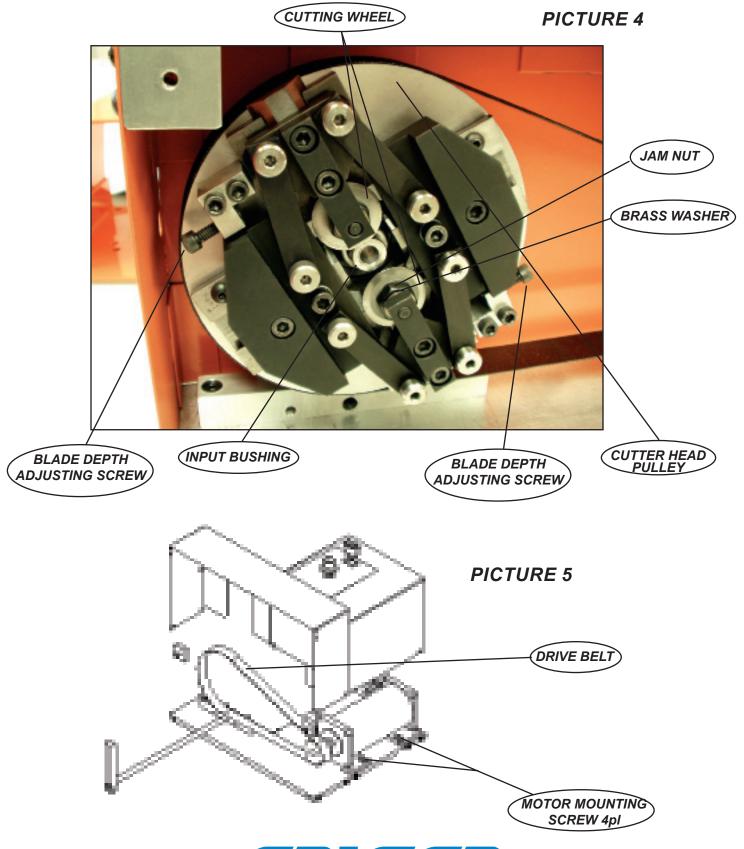
- 1) Check that the cutting wheels are not dull. Replace if necessary.
- 2) Check depth adjustment. To much cut depth will degrade cut quality.
- 3) Increase machine speed.



#### PICTURE 2







The Eraser Company, Inc. PO Box 4961 Syracuse, NY 13221, USA



Phone: (315) 454-3237 Fax: (315) 454-3090 Website: www.eraser.com E-mail: info@eraser.com

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