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E3300.00 SINGLE SPEED CUTTING MILL (115V, SINGLE PHASE, 50/60 HZ)

## USE AND CARE OF CATALOG NUMBER: E3300.00 Mill (115 V, 50/60 HZ)

#### **PRELIMINARY**

Mill has been properly adjusted at the factory. However, clearance between stationary and rotor knives should be checked manually before power is turned on, to prevent possible damage caused if any of the stationary knives have shifted during shipment. Check for tip-to-tip clearance between all rotor blades and the two stationary knives by placing a piece of paper of average thickness (.002 to .003 in.) against each stationary knife in turn and turning the rotor shaft by hand counterclockwise so that all four rotor blades pass the stationary knives. Knives should touch the paper but not cut it. Greater clearance will interfere with the action of the mill. Remove the VCI paper that is covering the cutting head prior to use.

#### **Unpacking:**

Save the packaging incase the unit needs to be returned. Use team lift to remove mill from the box.



**USE TEAM LIFT** 

# !!!DANGER!!!



NEVER REACH INSIDE THE CHAMBER WHEN THE CHAMBER DOOR IS CLOSED.

NEVER LEAVE THE PLUNGER OR ANY OTHER LARGE OR HARD OBJECT INSIDE THE CHAMBER WHILE THE DOOR IS CLOSED AND POWER IS CONNECTED.

THIS UNIT REMAINS ENERGIZED UNTIL POWER IS DISCONNECTED OR DOOR IS OPENED.

FAILURE TO COMPLY WITH WARNING NOTICES COULD RESULT IN DEATH, SERIOUS INJURY, OR EQUIPMENT/PROPERTY DAMAGE AND VOID THE WARRANTY.



#### Installation:

Place the mill near an appropriate electrical outlet. <u>DO NOT USE WITH AN EXTENSION CORD OR MULTIPLE OUTLET STRIP. DO NOT PLUG INTO A GFI OUTLET.</u> The mill should be plugged into an outlet with no other appliances on the circuit.

#### Assembly:

Open the mill chamber by turning the chamber hand wheel counter-clockwise. Lift the right arm of the support bracket away from the latch.

Assemble the hopper onto the top of the head. Seat the hopper cover.

To install a sieve, loosen the receiver assembly by turning the two sieve release hands wheels at the bottom of the mill until the alignment pins disengage. Be sure that the sieve is oriented with the label face up on the edge closest to the chamber door.

Latch door and tighten chamber hand wheel. Attach power cord to rear of mill and plug into an appropriate electrical socket.

#### Operation:

After the red power switch is switched on, rotation begins by pressing the white start button.

Start the mill before adding sample. Materials, which do not flow freely, may be forced into the chamber with the plunger.

For optimal results, feed material slowly so that the rate of feed approximates the rate of delivery of ground material. Do not overload or overfill the chamber. The chamber should not contain more material than can be agitated by the revolving blades. Overloading may result in heating, caking, or clogging. The mill is equipped with 6A circuit breaker that will trip when overloading occurs. Hard or tough materials should be reduced to small size before feeding into the mill. If jamming occurs, shut off power (red switch) immediately. Open the chamber door and remove the jamming particles before resuming.

Due to the static charge created when some plastics are ground best results are usually obtained at higher speeds, to take advantage of the fanning effect of the rotating knives.

A safety module prevents operation of the mill with the chamber door open.

#### **CAUTION:**

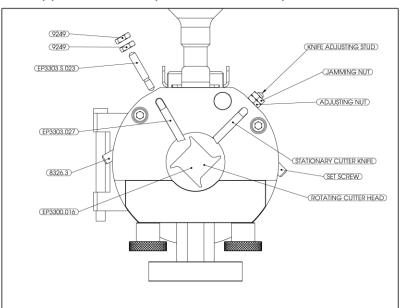
DO NOT OPEN THE CHAMBER DOOR WHILE THE MACHINE IS RUNNING. SERIOUS INJURY MAY RESULT IF THESE INSTRUCTIONS ARE NOT FOLLOWED.

CLEANING / REPLACEMENT OF KNIVES

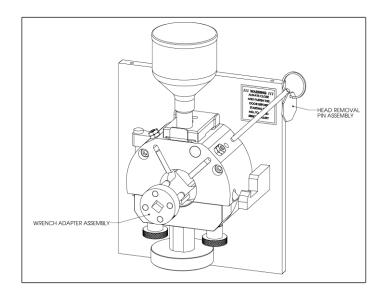
CAUTION: Make certain all electric power to the mill is shut off before replacing any blades. Unplug mill from outlet as an additional safety precaution.

## <u>CAUTION: When replacing or handling rotating blades use appropriate personal protective equipment.</u>

1. Remove hopper from the top of the mill and open the chamber door.



2. Loosen the *rotating cutter head* from the shaft by engaging the *head* removal pin assembly with the spindle and unscrewing the *rotating cutter head* with the *wrench adapter assembly*. Carefully remove the *rotating cutter head* and set on workbench.



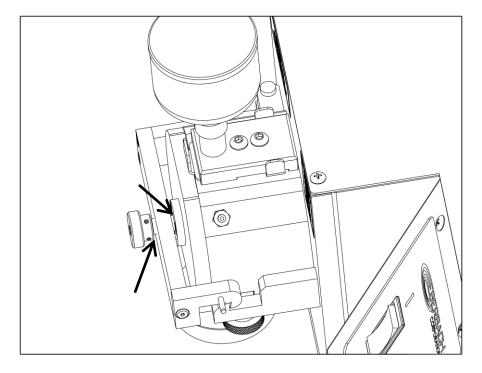
- 3. Clean the *rotating cutter head*, making certain that all burrs, chips and dirt have been removed. Replace *rotating cutter blade* if damaged or worn out.
- 4. There is a *setscrew* associated with each *stationary knife*. These *setscrews* lock the knifes firmly in position.
- 5. Loosen the *setscrew* holding the first stationary knife that is to be replaced. (If replacing the entire set of stationary knives, it may be convenient to start with the knife in the upper right.)
- 6. Hold or support the knife while removing both *jamming nut* and *adjusting nut* from the *knife adjusting stud*. Carefully remove the knife.
- 7. If other *knives* are being replaced, remove the remaining knives.
- 8. Unpack replacement *knives*. Insert *threaded stud* into its hole and seat *knife* in slot. (See illustration for correct position of knife bevel.) Replace the two *nuts* and draw the *knife* up so that there is ample clearance between it and the *rotating cutter head*. Repeat this operation for the other *knife* being replaced, and draw up the remaining *knife*.
- 9. Loosen *nuts* of the first stationary *knife* to be adjusted. Insert a piece of paper of the necessary thickness (about 0.003" inch) between the *knife* and the *rotating cutter head*, and adjust the clearance by raising or lowering the *adjusting nut* until the *knife* pinches the paper but does not sever it.
- 10. Slightly tighten the *setscrew* to clamp on the knife. (May require further adjustment later.)

- 11. Turn *rotating cutter head* to make certain that all edges clear the installed *stationary knife*. If one rotor knife projects beyond the others, adjust clearance of stationary knife with respect to this rotor knife. Identify this rotor knife and make all stationary knife adjustments to it.
- 12. Repeat steps 9 and 11 above for the remaining *stationary knives*. Recheck all clearance and all associated nuts and set screws.

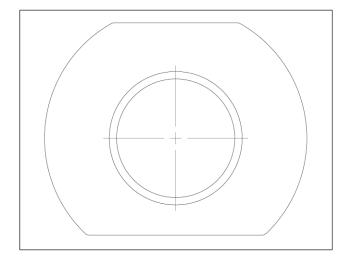
NOTE: Do not over-tighten to the point where threads may be stripped.

If you have any doubts or inquiries concerning operation contact your supplier or Eberbach Corporation technical service.

### **Maintenance**



The door screw could become difficult to tighten over time. If so apply MOLYKOTE 1000 on the threads.



If the seal were to be damaged, replace with a suitable type. Standard seal (Viton) used on E3300.00 is Eberbach stock #5457.7

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PartNo	DESCRIPTION	QTY.
4166	BEARING	2
4272.6	3L170 BELT	1
4404.1	1/8" X 1-1/4" KEY	1
4481.2	AK25 X 5/8 PULLEY W/ KEY	1
4776.5	1/4"-20 SS KNOB	2
4952	OIL SEAL BEARING	1
5185.5	1/4" X 3/4" S/S 316 DOWEL PIN	2
5185.7	1/4" X 3/4" STEEL DOWEL PIN	2
5227	PIN	1
5505.7	RUBBER FOOT	4
5634	3/8" COMBINATION BOX WRENCH	1
5641.1	1/8" ALLEN HEX L KEY WITH BALL	1
5707	SMALL BRUSH	1
5708	ANGLE SCRAPER	1
5810	4oz GLASS JAR WITH CAP	3
5811.5	BLACK POLYPROPYLENE SCREW COVER	3
6063	CABLE TIE, LOW PROFILE MOUNT	5
6063.2	CABLE TIE	6
6065	WIRE TIE	5
6101.5	EBERBACH CONTROL PANEL OVERLAY	1
6220	CABLE TIE HOLDER WITH ADHESIVE BACKED	1
6272	AC POWER INLET	1
6475	PUSH BUTTON, GREEN	1
6476	PUSH BUTTON, RED	1
6649	CORD AND PLUG	1
6751.4	TERMINAL BLOCK COVER	1
6751.5	TERMINAL BLOCK ANCHOR	1
6751.6	GROUND TERMINAL BLOCK, UT2.5-3PE	1
6759	CIRCUIT BREAKER 6A	1
6760.8	CONTACTOR	1
6804	CUTTING FINGERS STICKER	1
7148.5	MOTOR, 1/2HP	1
7617	#6-32 X 1/2" S/S ROUND HD. MACHINE SCREW	2
7779	#10-32 X 1/2" S/S ROUND HD. MACHINE SCREW	5
8005	#8-32 X 1/2" FLAT HD. MACHINE SCREW	5
8118.5	1/4"-20 X 3/4" CROSS HEAD MACHINE SCREW	2
8285	#8-32 X 1/4" S/S TRUST HD. SCREW	39
8294.5	1/4"-20 X 3/8" S/S BUTTON HD. SOCKET SCREW	1
8326.3	1/4"-20 X 1.5" S/S SET SCREW	2
8529.3	5/16"-18 X 5/8" HEX HEAD SCREW	4
8569	7/16"-14 X 1" S/S HEX HEAD SCREW	4

8569.5	7/16"-14 X 3-1/2" S/S HEX HEAD SCREW	4
8579.4	#6-32 X 1/2" S/S SOCKET HD. SCREW	12
8580	#6-32 X 3/4" SOCKET HD. SCREW	2
8582.1	#8-32 X 1/2" SOCKET HD. SCREW	3
8585	#10-32 X 3/4" SOCKET HD. STEEL SCREW	2
8589.2	1/4-20" X 1-5/8" S/S SOCKET HD. SCREW	2
8590.5	1/4"-20 X 2-1/2" S/S SOCKET HD. SCREW	2
9206	#6-32 S/S NYLON LOCK NUT	2
9225	#6-32 S/S MACHINE SCREW NUT	2
9235	#8-32 S/S MACHINE SCREW NUT	2
9254.1	#10-32 316 S/S MACHINE SCREW NUT	4
9285.5	7/16"-14 S/S HEX NUT	4
9438	5/16" SAE WASHER	4
9474	#6 S/S SAE WASHER	2
9504.5	7/16" S/S WASHER	4
9521	#10 SPLIT LOCK WASHER	2
9527.5	7/16" S/S SPLIT LOCK WASHER	4
E3300.A.HP.S	HOPPER ASSEMBLY	1
E3300.A.S20	SIEVE 20 MESH	1
E3300.A.S40	SIEVE 40 MESH	1
E3300.A.S60	SIEVE 60 MESH	1
EP3300.015	SPINDLE	1
EP3300.016	ROTATING CUTTER HEAD	1
EP3300.019	HEAD CHAMBER	1
EP3300.026	LIMIT SWITCH BRACKET	1
EP3300.127	MOUNTING TRACK	1
EP3300.501A	HEAD REMOVAL PIN ASSEMBLY	1
EP3300.504A	WRENCH ADAPTER ASSEMBLY	1
EP3300.508A	REAR PANEL ASSEMBLY	1
EP3300.509A	CONTROL PANEL ASSEMBLY	1
EP3300.516A	FRONT CLOSURE PLATE AND HINGE ASSY	1
EP3300.517A	SAFETY SWITCH PLUNGER ASSEMBLY	1
EP3300.530A	DELIVERY CHUTE ASSEMBLY	1
EP3300.654A	WIRING HARNESS	1
EP3303.002	BEARING CARTRIDGE	1
EP3303.005	BEARING SPACER	1
EP3303.008	FEET POST	4
EP3303.018	LOCKING PAD	1
EP3303.025	STATIONARY OUTSIDE HINGE PAD	1
EP3303.027	STATIONARY BLADES	2
EP3303.034	SPINDLE PULLEY	1
EP3303.040	TOP PANEL	1

EP3303.050	BASE	1
EP3303.052	RIGHT SIDE PLATE	1
EP3303.053	LEFT SIDE PANEL	1
EP3303.054	MOUNTING PLATE	1
EP3303.057	SIDE CONTROL CLEAT	1
EP3303.S.004	REAR BEARING CAP	1
EP3303.S.023	KNIFE ADJUSTING STUD	2

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