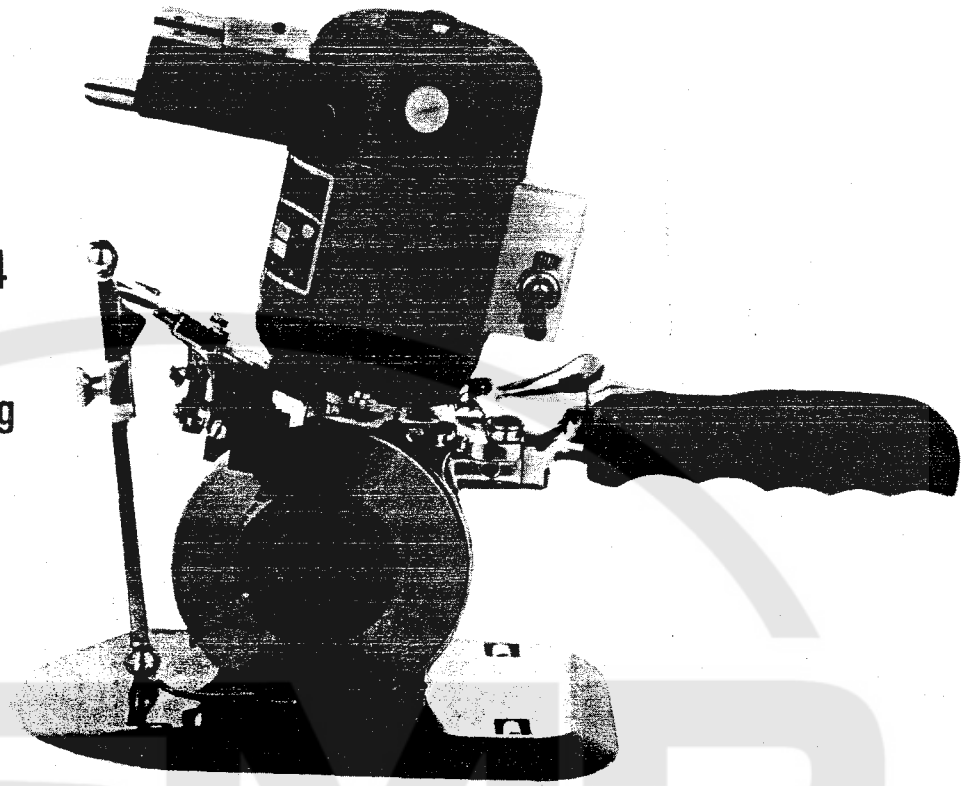
MAIMIN®



ROTOSHERE 4

Instructions

& Parts List Catalog

Edition 3

IMPORTANT SAFETY INSTRUCTIONS

When using your cutting machine, basic safety precautions should always be followed, including the following:

1. Read all instructions.
2. Use machine only for its intended use as a portable cutting machine.
3. Turn machine to "OFF" before connecting or disconnecting power cord.
4. Do not install or store this machine in a wet location.
5. Keep area around machine free from the accumulation of lint.
6. Always disconnect machine from electrical connector when not in use, before servicing, and when changing blades.
7. Do not operate machine with a damaged cord or if machine has been dropped. Do not disassemble; take to qualified serviceman for repairs. Incorrect reassembly can cause electric shock when the machine is used.
8. Keep visitors away. Do not leave machine unattended while it is connected.
9. Keep hands away from blade.
10. Be sure machine is properly grounded while in use to protect the operator from electrical shock. Surrounding the Terminal Pins is a Ground Shield which is designed to be used with the Maimin Grounded Connector (#458B, or #458A for 3 phase machine). See tag supplied with Connector for wiring instructions.

    Use correct electrical wiring.

U.S.A. only	1 phase:	Use AWG 16/3 SJ, SJT or SJE
	3 phase:	Use AWG 16/4 SJ, SJT or SJE
INTERNATIONAL	1P + N + ⏚:	Use 3 x 1, 0 mm² CEE(2)61
	3P + ⏚:	Use 4 x 1, 0 mm² CEE(2)61

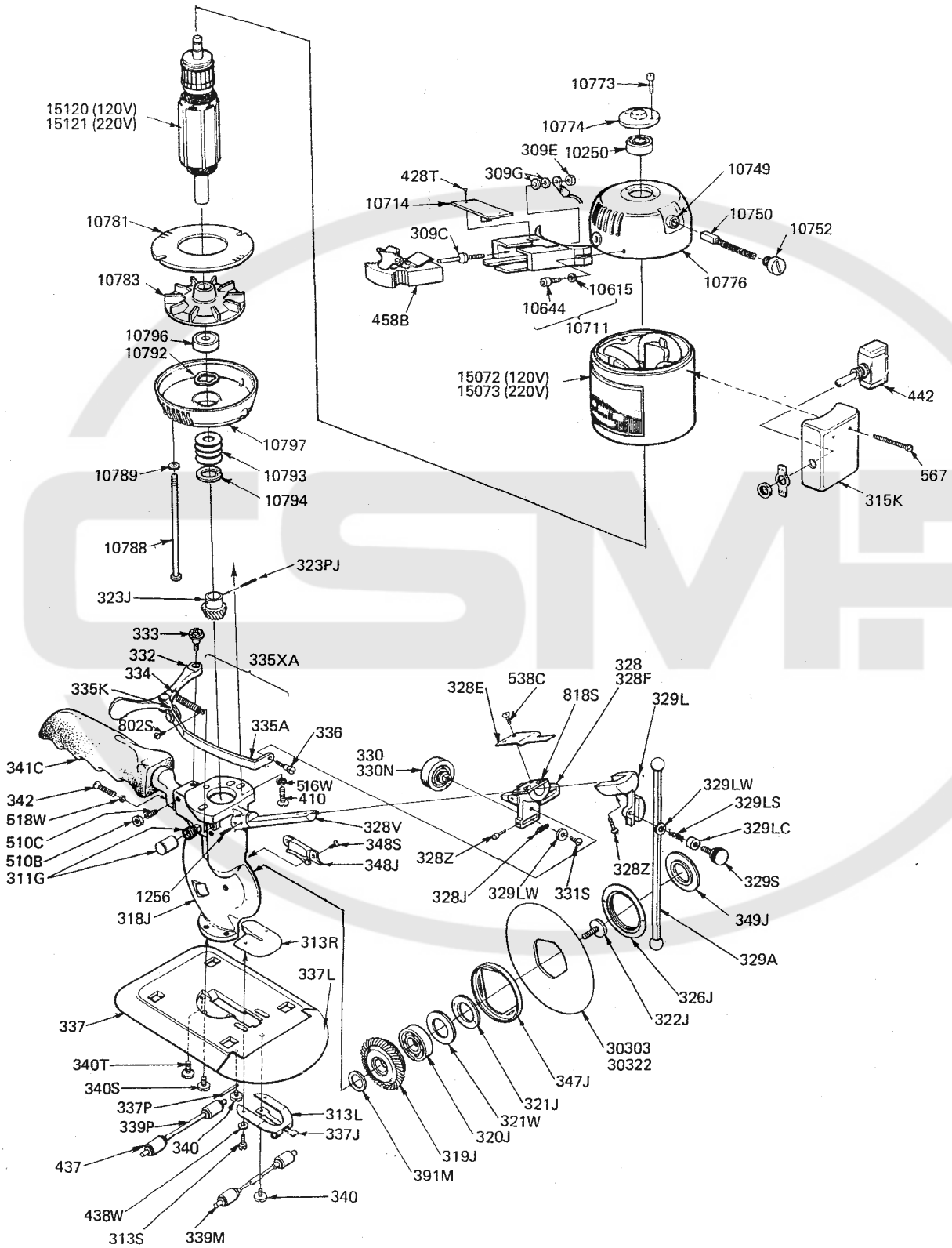
    DANGER: Improper connection of cord into connector can result in risk of electric shock.
    Check with a qualified electrician or serviceman if the grounding instructions are not completely understood.
11. Keep machine clean and blade sharp for best and safest performance.
12. The knife key and other wrenches must be removed from machine before starting motor.
13. Keep guards in place and in working order.

Save These Instructions

See back page for Operating Instructions

MAIMIN TECHNOLOGY
2915 COURTYARDS DR., BLDG. B, NORCROSS, GA 30071, U.S.A.

ROTOSHERE 4 MOTOR & STANDARD ASSEMBLY



ALWAYS GIVE MACHINE **SERIAL NUMBER** WHEN ORDERING PARTS

PARTS LIST

PART NO.	DESCRIPTION
309C	Terminal Pin
309E	Nut
309G	Washer
311G	Grease Cup
313L	Lock, Throat Plate
313R	Throat Plate – R4
313S	Screw, Throat Plate
315K	Switch Box – R4
318J	Standard – R4
319J	Gear with Bearing – #6
320J	Gear Bearing (200K) – #6
321J	Bearing Lock – #6
321W	Bearing Washer
322J	Gear Screw – #6
323J	Pinion – #6
323PJ	Pinion Pin – #6
326J	Knife Lock – #6
328	Grinder Frame with Stones
328E	Check Spring
328F	Grinder Frame only
328J	Coil Spring
328V	Track – 4"
328Z	Screw, 6 x 7/16 Fil. Hd.
329A	Knife Guard – 4"
329L	Guard Carrier
329LC	Spring Cup
329LS	Spring
329LW	Washer
329S	Screw, Guard Carrier
330	Stones with Bushing, Pair
330N	Stones only, pair
331S	Screw, 8 x 3/8 Rnd. Hd.
332	Trigger
333	Trigger Screw
334	Trigger Spring
335A	Link – 4"
335K	Link Knuckle
335XA	Link with 332, 334 – 4"
336	Link Screw
337	Roller Plate with Lip & Rollers
337J	Lip Spring
337L	Roller Plate Lip
337P	Lip Pin
339M	Roller Shaft with Rollers, Front
339P	Roller Shaft with Rollers, Back
340	Lip Screw, M Hd., 10 x 1/8
340S	Standard Screw, M Hd., 10 x 1/4
340T	Standard Screw, Rear, M Hd., 10 x 5/16
341C	Handle Assembly
342	Screw, 8 x 3/4 Oval Hd.
347J	Thread Seal – #6
348J	Grease Circulator – #6

PART NO.	DESCRIPTION
348S	Screw, 4 x 3/16 Flat Hd.
349J	Gear Cap
391M	Trunnion Washer – #6 – .002"
410	Screw, 8 x 1/2 Fil. Hd.
428T	Screw
437	Roller Shell only
438W	Washer
442	Switch
458B	Grounded Connector
510B	Nut
510C	Screw, 10 x 3/8 Set
516W	Lock Washer
518W	Lock Washer
538C	Screw, 6 x 5/16 Bind. Hd.
567	Screw, 6 x 1 Pan Hd.
802S	Screw, 6 x 3/16 Bind. Hd.
818S	Screw, 6 x 1/4 Flat Hd.
1256	Rollpin
10250	Bearing
10615	Washer
10644	Screw, M4 x 0, 7 x 10 Soc. Hd.
10711	Terminal Block Assy (w/10714, 10644, 309C)
10714	Terminal Block Cover
10749	Brush Holder
10750	Carbon Brush
10752	Brush Cap
10773	Screw
10774	Cap
10776	Top Housing
10781	Fan Washer
10783	Fan
10788	Assembly Bolt
10789	Washer
10792	Undulated Washer
10793	Washer
10794	Retaining Ring
10796	Bearing, Bottom
10797	Bottom Housing
15072	Top Housing and Field Assembly 120V
15073	Top Housing and Field Assembly 220V
15120	Armature R41-5 120V
15121	Armature R42-5 220V
30303	Knife-4"
30322	Knife, High Speed Steel-4"

Parts Not Illustrated

327K	Knife Key
328B	Top Plate for Grinder Frame
15141	Suppressor
22028	Tube of Grease

OPERATING INSTRUCTIONS

To Cut

Your Rotoshere 4 is designed to cut light or medium weight materials up to 2″ in height. The material should be spread smoothly on a flat table and stacked to the desired height. If the material is very light, it is helpful to put a sheet of underlay paper beneath the bottom ply. The shapes to be cut should be marked on the top ply or on a paper pattern laid on the top ply. Always cut the small marked pieces from the large marked pieces for accuracy and convenience.

To Start

Your new Maimin Rotoshere 4 is delivered ready for operation. It is merely necessary to insert the handle (Part No. 341C) and lock it into the standard (Part No. 318J) with the two screws (342, 510C). Then connect the machine to an electrical outlet of the same voltage as on the nameplate of the machine by means of the current connector (458B). Flip switch (442) to "on" position to start motor. The knife guard (329A) acts as a protective guard for the operator so that it should be down at all times. The ball on the bottom of the knife guard should only be slightly above the top of the lay in order to prevent the operator's hand from accidentally touching the knife.

Knives Available

For general use the regular 4″ round knife (30303) is satisfactory. However, there are certain materials such as fiberglass that tend to dull the knife edge unusually quickly. For these materials, a high-speed steel 4″ knife (30322) is recommended as it retains a sharp edge longer.

To Sharpen Knife

With motor running, firmly depress the trigger (332) until both emery stones turn against the knife. Press down firmly for about two seconds but not hard enough to slow the blade. Repeat three or four times. The blade will then have a keen cutting edge.

To Lubricate Gear

Grease the gear (319J) and pinion (323J) monthly by turning the grease cup (311G) on the side of the standard one complete turn. When the grease cup is empty refill it with grease. The grease to be used is Maimin grease (22028) or Lubriplate 930-AA.

To Change Knife

Detach current connector (458B) from the machine and lower the knife guard (329A). Lay the machine on its side. Loosen the two throat plate screws (313S), and slide the throat plate (313R) forward. Lift check spring (328E) on top of the grinder frame (328), and pull the frame to the end of the track (328V) for sufficient clearance to remove or install the knife. Remove knife lock (326J) by turning it counter-clockwise with knife key. Do not use a screw driver or a punch to remove knife lock as they will damage it and the gear bearing.

To Adjust Sharpening Stones

Unscrew the stone lock screw (331S) one turn, and move the stones to or away from the knife by turning the stone adjusting screw (328Z). Then tighten the stone lock screw. Both stones should begin revolving at the same moment when the trigger (332) is pulled slowly. The ground bevel on the knife should be about the same width on both sides, approximately 1/16 inch (1.6mm). The stones are moved closer together to obtain a narrower bevel and further away from the knife to obtain a wider bevel.

To Change Sharpening Stones

First remove knife. Loosen stone lock screw (331S). Unscrew the stone adjusting screw (328Z) until the stone with bushing (330) slides out to the end of the slot in the grinder frame (328). Then remove the stone lock screw, and pull the stone with bushing out of the grinder frame. Be careful not to lose the coil spring (328J) and the washer (329LW). When installing the new stone with bushing, slide the neck of the stone bushing into the slot, first making sure that the coil spring is in its position between the neck of the stone bushing and the stud on the inside of the slot. The stone lock screw should be fitted through the washer and screwed into the stone bushing. The adjustment is explained in the preceding paragraph.

To Adjust Throat Plate

As the knife wears, move the throat plate (313R) towards the knife so that the space between the front edge of the knife and the front of the slot on the throat plate is about 1/16 inch (1.6mm). The knife should be in the middle of the throat plate slot. Adjust the throat plate by loosening the two throat plate screws (313S). Press in the throat plate lock (313L) to slide it along the lip spring (337J). When the throat plate is in the desired position, release the throat plate lock to catch between the teeth on the lip spring. Tighten the throat plate screws.

To Change Carbon Brushes

If the motor starts slowly or you notice arcing at the commutator, probably the carbon brushes are worn out. To change the carbon brushes (10750), unscrew the two brush caps (10752), pull out the old brushes, and replace with new ones. The copper commutator on the armature develops a black carbon ring after considerable use and should be cleaned. While the motor is running lightly press a piece of commutator chalk or fine emery cloth (through the slot in the top housing (10776)) against the copper commutator to clean off this carbon ring.

To Remove Gear

Remove Knife and Gear Cap. Remove Gear Screw (322J) by turning clockwise (it has a left hand thread). Lift thread seal (347J) off the gear. Take off the grease circulator (348J) by removing its two screws (348S). Lift out the gear with bearing. *Important:* When the gear was mounted on the trunnion shaft, a few trunnion washers (391M) were placed behind the gear on the trunnion shaft to properly mesh the gear and pinion. The grease on the gear may cause these trunnion washers to stick to the bearing. Do not lose these trunnion washers. Be certain to replace them on the trunnion shaft. If the gear is to be removed for any length of time, put the gear screw back in place so that the trunnion washers will not slip off.

To Adjust Play in Gear

The gear (319J) and pinion (323J) are lapped together initially to obtain a close fit. Eventually the gear and pinion wear so that there is an increase in play (backlash) between the teeth on the gear and the pinion. Provided the gear bearing is in good condition (no side movement of knife), the backlash between the teeth on the gear and the pinion can be reduced by removing one or two trunnion washers (391M). Remove the gear and take out the thinnest trunnion washer. These trunnion washers are available in three thicknesses. It is advisable to remove the thinnest trunnion washer first in order to check to see if the backlash has been eliminated. There must always be a slight amount of backlash or the gear and pinion will screech when run together. After removing the trunnion washer, it is necessary to replace the gear and gear screw to check the backlash.

CAUTION: Always Disconnect Machine from Electrical Outlet Before Making Adjustments.

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