



Power Head "E" System



Owners Manual and Safety Instructions

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Power Head Manual

On behalf of everyone at Mantis, we would like to thank you for the purchase of the Mantis Electric Extended Reach Unit. This machine was designed to the highest standards to ensure you many hours of uninterrupted service.

This manual provides the information necessary for safe and efficient operation and service. For your safety, it is critically important that you read and understand this entire manual before operating your machine.


A. Special Safety Information

▲ WARNING ▲ DANGER ▲
ATTENTION: THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS.
▲ WHEN YOU SEE THIS SYMBOL ▲
HEED ITS WARNING! STAY ALERT!

▲ WARNING ▲ DANGER ▲
READ & UNDERSTAND THIS MANUAL BEFORE ATTEMPTING TO OPERATE THIS MACHINE.
TO REDUCE THE POTENTIAL FOR ACCIDENTS, COMPLY WITH THE SAFETY INSTRUCTIONS IN THIS MANUAL. FAILURE TO COMPLY MAY RESULT IN SERIOUS PERSONAL INJURY AND OR EQUIPMENT AND PROPERTY DAMAGE.



No. 331600 - Warning Label

 We Make Gardening Easier® 1028 Street Road Southampton PA 18966 USA Phone: 215-355-9700 FAX: 215-956-3855 Item # 330102	115 Volt AC ~ 60 Hz 850 Watts 5.4 kg (11.8 lbs) Max 8000 min XX/XX	Serial Number
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Serial Number Label



SAFETY SYMBOLS IDENTIFICATION



What the symbols mean:

1. Read the instructions.
2. Do not expose to rain.
3. Remove plug from main (electric power source) immediately if cable is damaged or cut.
4. Double insulated.

Service Information Contact

If you have questions about any topic in this Manual, or for the name of your local dealer, call 1-800-366-6268 toll free, Monday - Friday, 8:00 a.m. to 5:30 p.m., Eastern Time, or ask for Customer Service.

General Safety Rules

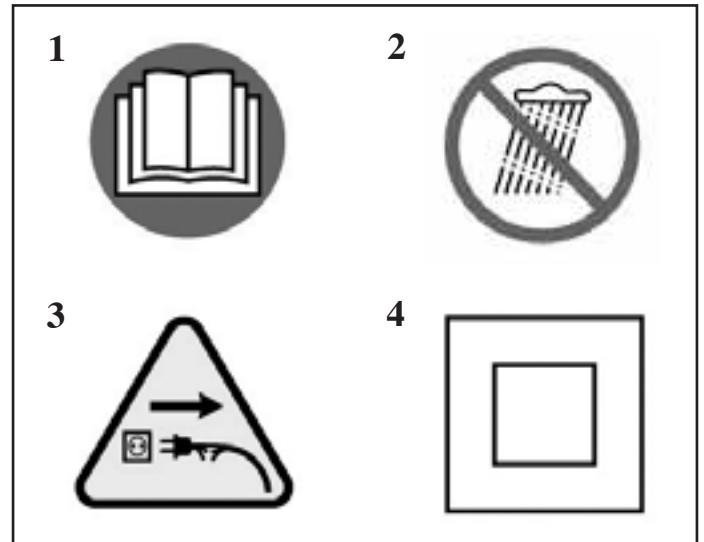
 **WARNING** 
WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTIONS, INCLUDING THE FOLLOWING, SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK AND PERSONAL INJURY.

Pay particular attention to all sections regarding safety.

Read and understand all these instructions before operating this product and save these instructions. Be familiar with the controls and the proper use of equipment.

For safe operations:

1. Keep work area clean.
Cluttered areas and benches invite injuries.
2. Consider work area environment.
Do not expose power tools to rain. Do not use power tools in damp or wet locations. Keep work area well lit. Do not use power tools where there is risk of fire or explosion.
3. Guard against electric shock.
Avoid body contact with earthed or grounded surfaces, e.g. pipes, radiators, stoves, ovens, refrigerators.
4. Keep children away.
Do not let visitors touch the tool or extension cord. All visitors should be kept away from area. Local regulations may restrict the age of the operator.
5. Store idle tools.
When not in use, tools should be stored in a dry, high or locked up place, out of reach of children.



6. Do not force the tool.
It will do the job better and safer at the rate for which it was intended. Walk, never run.
7. Use the right tool.
Do not force small tools or attachments to do the job of a heavy duty tool. Do not use tools for purposes not intended; for example, do not use chain saw attachment to cut tree limbs or logs.
8. Dress properly.
Do not wear loose clothing or jewelry that can be caught in moving parts. Long trousers, non-slip gloves and sturdy work shoes with non-skid soles are recommended when working outdoors. Wear protective hair covering to contain long hair.
9. Use protective equipment.
To avoid injury, wear ear, eye protection, face or dust mask if the operation is dusty. To avoid injury from falling branches, wear helmet. Eye protection must meet ANSI Z 87.1 requirements.
10. Do not abuse the cord.
Never carry the tool by the cord or yank it to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.
11. Maintain tool with care.
Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubrication and changing accessories. Inspect tool cord periodically and if damaged, have it repaired by an authorized service facility. Inspect extension cords periodically and replace, if damaged. Keep handles dry, clean and free from oil and grease.

12. Disconnect tools.

When not in use, before servicing and when changing accessories such as blades, bits and cutters.

13. Remove adjusting keys and wrenches.

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

14. Avoid unintentional starting.

Do not carry a plugged in tool with a finger on the switch trigger. Ensure switch is off when plugging in.

15. Use outdoor extension leads.

When tool is used outdoors, use only extension cords intended for outdoor use.

16. Important extension cord information:

- a. Make sure the extension cords are in good condition before use.
- b. Based on the total length of cord that you are going to use, check the chart to make sure the cord meets the correct minimum cord gauge (AWG) requirements.

IMPORTANT NOTE:

Using an undersized cord or a larger number cord gauge (AWG) than recommended in the chart, will cause a loss in power and overheating of the unit. Using a smaller number cord gauge (AWG) than recommended in the chart, is acceptable.

Extension cord chart (minimum cord gauge (AWG))

Length (feet)	1 to 25	26 to 50	51 to 100	101 to 150
Cord gauge (AWG)	18	16	14	12

17. Stay alert.

Watch what you are doing. Use common sense. Do not operate tool when you are tired, ill or under the influence of alcohol or other drugs.

18. Check damaged parts.

Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch does not turn it on and off.

Don't operate the machine with a damaged or excessively worn cutting device.

⚠ WARNING – DANGER ⚠

LITTLE WONDER WILL NOT BE RESPONSIBLE FOR THE FAILURE OF CUTTING DEVICES OR ACCESSORIES THAT HAVE NOT BEEN TESTED AND APPROVED FOR USE WITH THIS UNIT. USE ONLY MANUFACTURER-RECOMMENDED REPLACEMENT PARTS.

19. The use of any accessory or attachment, other than those recommended in this instruction manual, may present a risk of personal injury.

20. Have your tool repaired by a qualified person.

This electric tool conforms to relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

21. Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

22. Work only in daylight or in good artificial light.

23. Keep all guards attached at all times when unit is operated.

24. Always use the shoulder strap.

Adjust the strap for comfort before starting the engine.

25. Secure unit during transport to prevent damage or injury.

26. **Machine should not be used in any position that causes any part to come within 10 feet of overhead electrical lines.** Always be aware of overhead power lines.

27. **Always** keep a firm grip on both handles when motor is running: one hand grasps the front “loop” handle while the other hand grasps the rear handle. Severe injuries can result if you try to use this machine with only one hand or with an insecure grip.

28. **Thoroughly** inspect the area where equipment is to be used and removed all objects, which can be thrown by the machine.

29. **Always** keep area clear of children, pets, and bystanders.

30. **Always** inspect your unit before each use and ensure that all handles, guards and fasteners are secure, operating, and in place. Be sure that all electrical cords are not damaged or broken.

31. **Always** maintain and examine your attachments with care. Follow maintenance instructions given in manual.

32. **Don't** attempt to repair any part of the extended reach “E” system. Have repairs made by a qualified repairman. See that only original “Mantis” parts are used.

33. Maintain a firm footing and good balance, do not overreach while trimming. Before you start to trim, check the work area for obstacles that might cause you to lose your footing, balance or control of the machine. While operating the machine always be sure of a safe and secure operating position especially when using steps or a ladder. Always be sure of your footing on slopes.

35. Securing the extension cord.

Bend the extension cord about 15 inches from the plug end. Push that bend through the oblong opening in the back of the handle. Then loop the bend under the cord retaining clips as shown. This will prevent the extension cord from detaching from the hedge trimmer plug.

⚠ WARNING – DANGER ⚠
IMPROPER ASSEMBLY OF THIS EQUIPMENT CAN RESULT IN SERIOUS INJURY. MAKE SURE TO FOLLOW ALL INSTRUCTIONS CAREFULLY. IF YOU HAVE ANY QUESTIONS, CONTACT MANTIS CUSTOMER SERVICE.



34. Always disconnect power cord from power source:

- a. Before cleaning blockages.
- b. Before checking, cleaning or working on the cutting portion of the unit.
- c. After striking a foreign object: inspect the cutting part for damage and make repairs before restarting and operating the unit.
- d. If machine starts to vibrate abnormally (check immediately).
- e. Whenever you leave the unit.

B. Specification

Power Head Model	Total Weight	Power Rating	Max Speed	Shaft Length
330102	11.8 lbs	850W	8000 RPM	36"

C. Loop Handle Installation

a) Orient the loop half of the handle as shown on the picture, and place it on the outer shaft of the Power Head.



b) Align 4 holes of the second part of the handle with the holes of the loop half.



c) Drive in the four screws supplied, starting with the bottom two screws. Do not tighten screws.



d) Adjust handle location to your preference, and then tighten all screws.

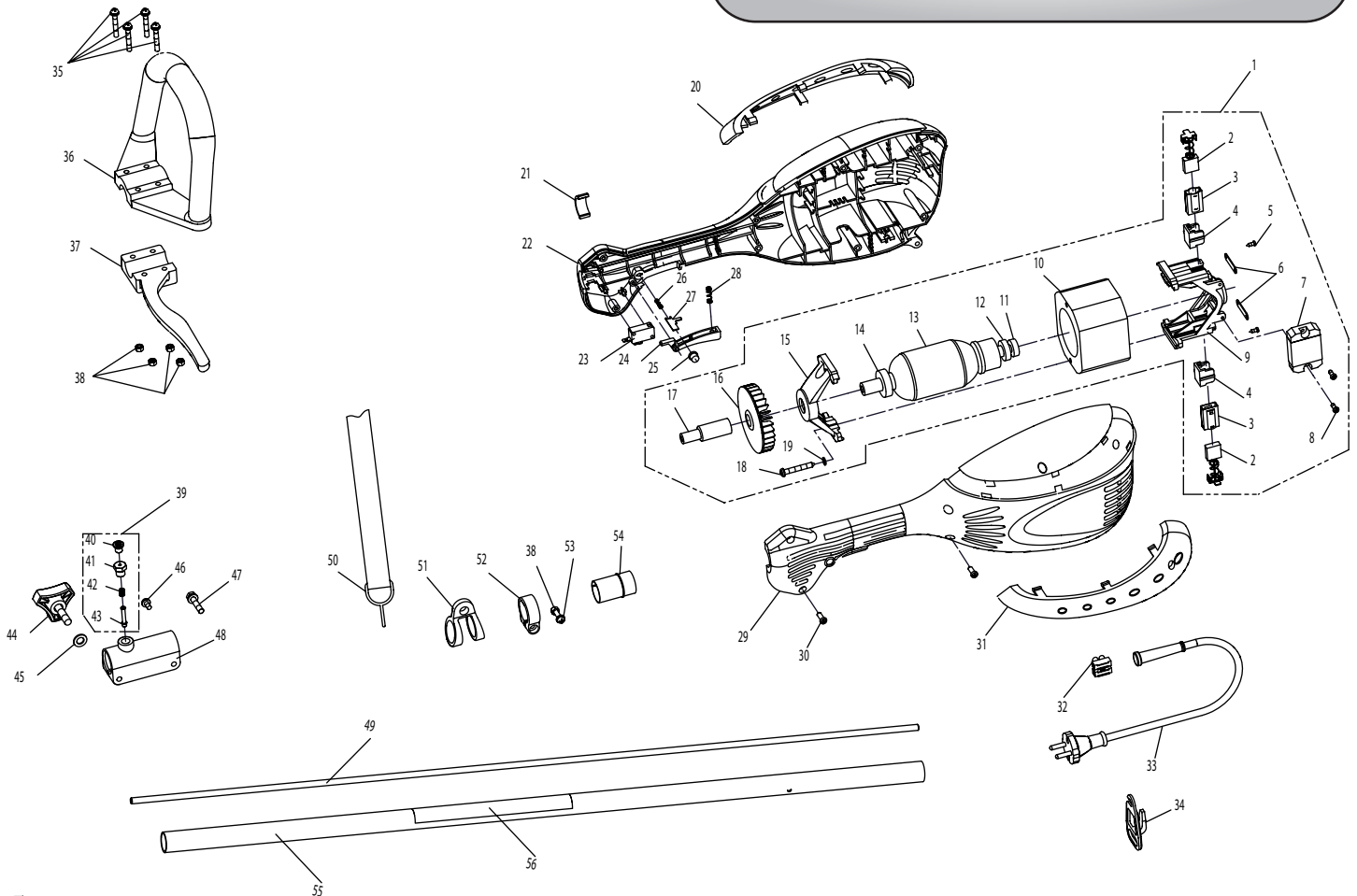


D. Brush Replacement

Brush of the motor is replaceable. Brush has to be replaced after approximately 150 hours of use. The life of the brush depends on the use of the unit and may last much longer. Do not replace it yourself. Contact Mantis Customer Service for brush replacement.

Power Head Exploded View

⚠ WARNING – DANGER ⚠
USE CAUTION WHEN OPENING THE POWER HEAD.



Power Head Parts List

KEY #	DESCRIPTION	PART #	QTY	KEY #	DESCRIPTION	PART #	QTY
1	MOTOR ASSEMBLY	331252	1	29	CASING (LEFT)	331276	1
2	MOTOR BRUSH	331253	2	30	SCREW ST4,2X16	331564	8
3	BRUSH HOLDER	331254	2	31	INLAY (LEFT)	331277	1
4	HOLDER	331255	2	32	WIRE JOINTER	331278	1
5	SCREW ST2,9X10	331556	4	33	POWER CORD	331279	1
6	SHUTTER	331256	2	34	EXTENSION CORD CLIP	331280	1
7	REV CONTROLLER	331257	1	35	SCREW M5X35	331565	4
8	SCREW ST3,5X13	331557	2	36	LOOP HANDLE	331281	1
9	BRUSH END BELL	331258	1	37	CLAMP	331282	1
10	STATOR	331259	1	38	NUT M5	331566	5
11	MAGNETO RING	331260	1	39	QUICK DISCONNECT KIT	331283	1
12	BEARING 609-2Z	331269	1	40	PULL BUTTON	331284	1
13	ROTOR	331261	1	41	NUT	331567	1
14	BEARING 6002-2Z	331293	1	42	SPRING	331568	1
15	END BELL	331262	1	43	PIN	331569	1
16	FAN	331263	1	44	KNOB	331285	1
17	INTERNAL SHAFT ADAPTER	331264	1	45	WASHER	331570	1
18	SCREW ST4,8X80	331562	2	46	SCREW M5X12	331571	1
19	WASHER	331563	2	47	BOLT M6X30	331572	1
20	INLAY (RIGHT)	331265	1	48	QUICK DISCONNECT ADAPTER	331286	1
21	WIRE COVER	331266	1	49	INTERNAL SHAFT 950X7MM	331287	1
22	CASING (RIGHT)	331267	1	50	SHOULDER STRAP-ASS'Y	331288	1
23	SWITCH	331268	1	51	HANGER	331289	1
24	TRIGGER	331271	1	52	CLAMP	331290	1
25	TRIGGER LOCKOUT BUTTON	331272	1	53	SCREW M5X20	331573	1
26	TRIGGER LOCKOUT SPRING	331273	1	54	SLEEVE	331291	1
27	TRIGGER LOCKOUT	331274	1	55	OUTER SHAFT 24X915MM	331292	1
28	TRIGGER SPRING	331275	1	56	WARNING LABEL	331600	1

**2 YEAR LIMITED SERVICE & WARRANTY POLICY
FOR ELECTRIC POWER HEAD “E” SYSTEM**

MANTIS extends this limited warranty against defects in material and workmanship for a period of two years from the date of purchase, to the first retail purchaser and each subsequent owner during the warranty period. This warranty covers all portions of the Mantis Electric Power Head “E” System.

MANTIS will repair or replace, at its option, any part or parts of the product proven to be defective in material or workmanship under normal usage during the warranty period. Warranty repairs and replacements will be made without charge for parts or labor. All parts replaced under warranty will be considered as part of the original product, and any warranty on the replaced parts will expire coincident with the original product warranty. In the event of a defect or malfunction, the purchaser must send the product, postage paid to:

Mantis
2800 Turnpike Dr.
Suite #1
2800 Commerce Center
Hatboro, PA 19040

MANTIS assumes no responsibility in the event that the product was assembled or used in noncompliance with any assembly, care, safety, or operating instructions contained in the Owner’s Manual; was not used with reasonable care; or was misused, used for other than normal or intended purposes. This warranty does not extend to parts affected or damaged by normal wear and tear.

MANTIS MAKES NO EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS EXCEPT THOSE CONTAINED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS LIMITED TO THE DURATION OF THIS WRITTEN LIMITED WARRANTY. MANTIS DISCLAIMS ALL LIABILITY FOR INDIRECT AND/OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THAT ABOVE LIMITATIONS AND EXCLUSIONS 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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