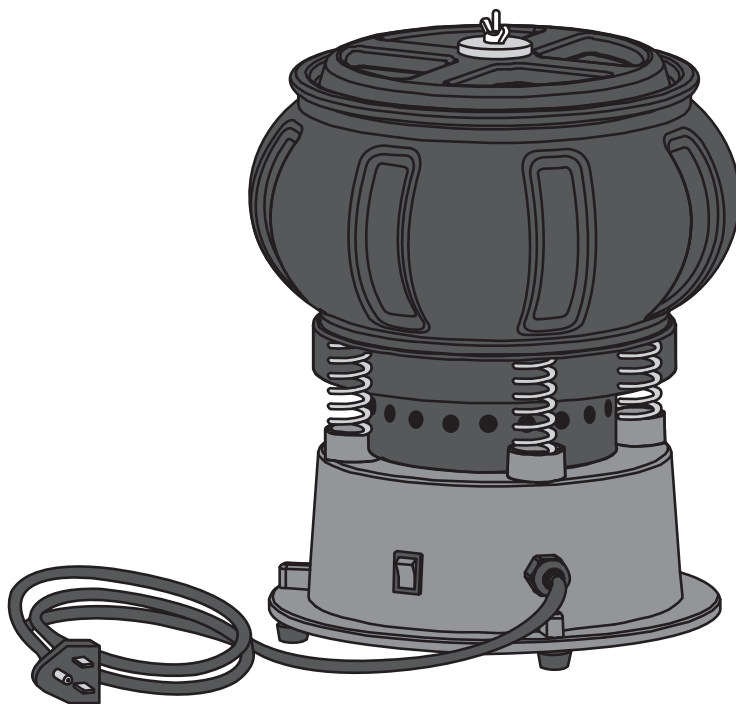


model no. 299-5513-0

**Mastercraft®**

## POLISHING TUMBLER



**IMPORTANT:**

Please read this manual carefully before running this polishing tumbler cabinet and save it for reference.

**INSTRUCTION  
MANUAL**

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**NOTE:**

If any parts are missing or damaged, or if you have any questions, please call our toll-free helpline at 1-800-689-9928.



**SAVE THESE INSTRUCTIONS**

This manual contains important safety and operating instructions. Read all instructions and follow them with use of this product.

SPECIFICATIONS

Electrical input	120 V/60 Hz/0.5 A
Capacity	5 lb (2.3 kg)
Tumbler bowl opening diameter	7 3/4" (19.7 cm)
Tumbler bowl depth	4 5/8" (11.75 cm)
Power cord	78 3/4" (2 m), 18 AWG x 3C (3 prong with ground)
Dimensions (H x W)	12 1/2" x 9 3/4" (31.75 x 24.75 cm)
Net weight	8 lb 1 oz (3.6 kg)

SAFETY GUIDELINES

WORK AREA SAFETY WARNINGS

- **Keep the work area clean, well ventilated and well lighted.** Cluttered or dark areas increase the risks of electric shock, fire, and injury to persons.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

GROUNDING POWER TOOL SAFETY WARNINGS

- **Grounded power tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt whether the outlet is properly grounded.** If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the users.
- **Do not abuse the power cord. Never use the power cord to carry the tool or pull the plug from an outlet. Keep the power cord away from heat, oil, sharp edges, or moving parts. Replace damaged power cord immediately.** Damaged power cords increase the risk of electric shock.
- **Avoid body contact with grounded surfaces such as pipes, radiators, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W".** These extension cords are rated for outdoor use, and reduce the risk of electric shock.
- **Always keep the power extension cord away from moving parts on the tool.**

PERSONAL SAFETY WARNINGS

- **Stay alert. Watch what you are doing and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair increases the risk of personal injury as a result of being caught in moving parts.
- **Avoid unintentional starting. Make sure that the power switch is off before plugging in.** Plugging in power tools with the power switch on invites accidents.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of power tool in unexpected situations.

- **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for the appropriate conditions.

### TOOL USE & CARE SAFETY WARNINGS

- **Do not force the tool.** The tool will do the work better and safer at the speed and capacity for which it was designed.
- **Do not use ceramic, wet or water based media in the tumbler.**
- **Do not use without the tool cover in place.** Hazardous dust may be created and media and/or work materials may be ejected without the tool cover in place.
- **Do not use the power tool if the power switch does not turn it on or off.** Any tool that cannot be controlled with the power switch is dangerous and must be replaced.
- **Disconnect the power cord plug from the power source before making any adjustments, changing accessories or storing the tool.** Such preventative safety measures reduce the risk of starting the tool accidentally.
- **Only use this tumbler on a solid level surface.**
- **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **Maintain tools with care and keep them clean.** Properly maintained tools are less likely to bind and are easier to control. Do not use a damaged tool.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that affects the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for the your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.
- **CA PROP 65:** This product, when used with dry polishing materials (media), produces chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

### TOOL SERVICE SAFETY WARNINGS

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- **When servicing the tool, use only identical replacement parts.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

### SPECIFIC SAFETY WARNINGS

- **Maintain labels and/or nameplates on the tool.** These carry important information. If unreadable or missing, have them replaced.
- **Always wear qualified safety impact eye goggles, full face shield and heavy work gloves when using the tool.** Using personal safety devices reduce the risk of injury.

- **Maintain a safe working environment.** Keep the work area well lit. Make sure that there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, trash, and other debris. Do not use a power tool in areas near flammable chemicals, dusts, and vapours. Do not use this product in a damp or wet location.
- **Make sure to read and understand all instructions and safety warnings in this manufacturer's manual.**
- **Avoid unintentional starting.** Make sure that you are prepared to begin work before turning on the tool.
- **Never leave the tool unattended when it is plugged into an electric outlet.** Turn off the tool, and unplug it from its electrical outlet before leaving.
- **Always unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.**

### GROUING INSTRUCTIONS

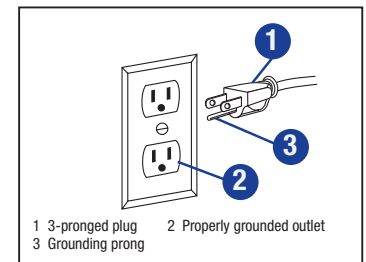
#### 110-120 V~ GROUNDED TOOLS: TOOLS WITH THREE PRONG PLUGS

**IN THE EVENT OF AN ELECTRICAL MALFUNCTION OR BREAKDOWN,** grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having 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.

**DO NOT MODIFY THE PLUG PROVIDED** – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

**YOUR GROUNDING PRONG** in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal.

**Check** with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.



#### WARNING!

DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS.

- To reduce the risk of injury, user must read instruction manual.
- Read all safety warnings and instructions before attempting to install or operate this product. Failure to follow the warnings and instructions may result in personal injury and property damage.

#### CAUTION!

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

**USE ONLY 3-WIRE EXTENSION CORDS** that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated above: a **125 V~3-Prong Outlet**. The tool has a grounding plug that looks like the plug illustrated: a **125 V~3-Prong Plug**.

The outlet must be properly installed and grounded in accordance with all codes and ordinances.

Do not use an adapter to connect this tool to a different outlet.

**GUIDELINES FOR USING EXTENSION CORDS**

Verify that the extension cord is in good condition. When using an extension cord, be sure to use one that is heavy enough to carry the current that the tool will draw. An undersized cord will cause a drop in line voltage, which will result in loss of power and overheating. The table below shows the correct size to use according to cord length and the amperage rating on the tool's nameplate. When in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Verify that the extension cord is properly wired and in good condition. Always replace a damaged extension

Amperage rating of the tool (120 V circuit only)		Total length of the extension cord			
		25' (7.6 m)	50' (15.2 m)	100' (30.4 m)	150' (45.7 m)
More than	Not more than	Minimum gauge for the extension cord (AWG)			
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Do not use	

cord, or have it repaired by a qualified electrician before using it. Keep extension cords away from sharp objects, excessive heat, and damp or wet areas.



**WARNING!**

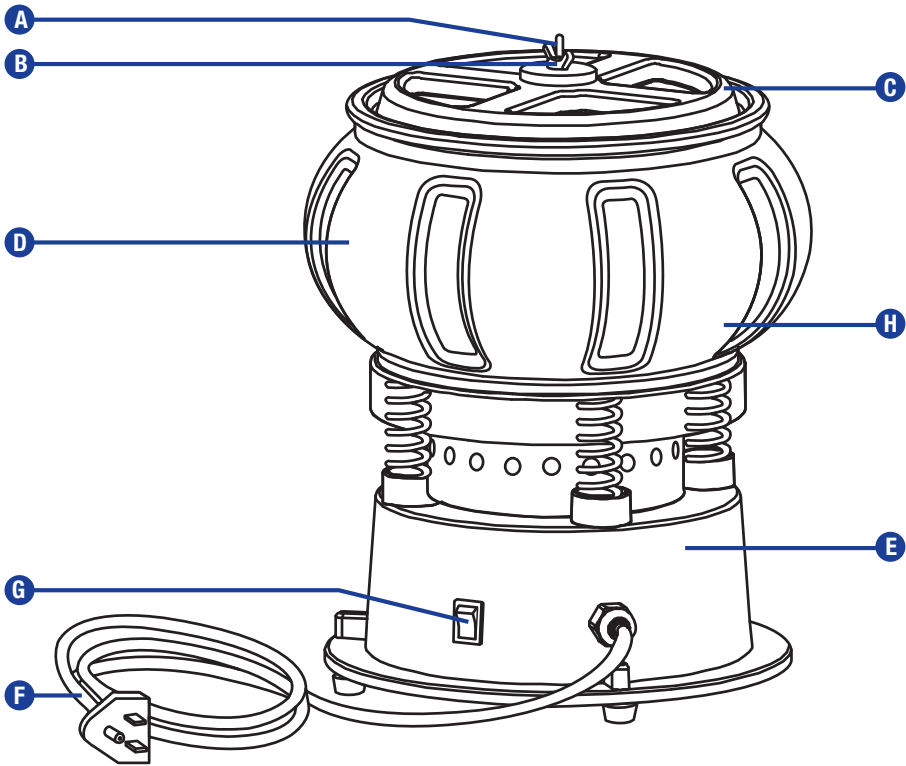
TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:

- Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.
- Do not modify the power cord plug provided with the tool.
- Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.
- This tool must be grounded while in use in order to protect the operator from electric shock.



**KEY PARTS DIAGRAM**

No.	Description	No.	Description
A	Centre shaft	E	Base
B	Wing nut	F	Power cord and plug
C	Tumbler lid	G	Power switch
D	Tumbler bowl	H	Tumbler



**WARNING!**

If any part is missing or damaged, do not use the product until the missing or damaged part has been replaced.

SETUP

CHOOSING A MEDIUM

1. The media used in standard tumblers is generally not suitable for vibratory machines. The media that is run wet is not suitable for this tumbler. Vibratory tumblers often use dry media that is too light to be effective in standard tumblers.
2. Steel and ceramic media, generally used in tumbling may also be used in heavy duty vibratory machines. However, this tumbler is not designed to work with these heavy duty media, which will wear out the bowl prematurely.
3. There is a wide variety of media to be used in vibratory finishing, and you are encouraged to experiment. You would be surprised to find how many shops are using outlandish media like erasers, wood pegs, bone and other odd media which are getting good results.
4. The chart below outlines some recommended media for this vibratory tumbler. Plastic beads are usually used with a powdered abrasive added. Walnut shells can create an oil during use, which can lead to slight discoloring of object.

Media type	Application	Benefit
80 Grit glass bead blast media	Metal and plastic surfaces	Non-damaging to soft metals like aluminum and brass
220 Grit aluminum oxide abrasive	Cleaning, finishing and deburring	Removes rust, corrosion and paint
Coarse grade walnut shell media	Cleans aluminum and brass	Rust-free paint removal; cleans transmissions and engines
Fine grade walnut shell media	Cleans aluminum and brass	Rust-free paint removal; cleans transmissions and engines
Rust-cutting resin abrasive media	Metal bolts and nuts	Removes rust from bolts and nuts without damaging threads
30-40 Grit plastic abrasive media	Aluminum, chrome, antiques and aluminum aircraft components	Fast removal of paint, light oxidation and even some rust
Coarse mesh ground glass media	Soft metals	Aggressive removal of paint, elastomer, and vinyl coatings

SET UP OF WORKPIECE AND WORK AREA

1. Designate a work area that is clean and well lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.

OPERATING INSTRUCTIONS

**IMPORTANT:** This tumbler is for use with dry polishing materials (media). Do not use wet or water based media in this tumbler.

**IMPORTANT:** This tumbler is ideal for many polishing applications including:

- Removing rust or other surface imperfections from hardware
- Removing burrs from machined or stamped hardware or other small parts
- Polishing small or hard to reach small parts
- Removing grease or other contaminants from various metal parts

1. Make sure that the interior of the tumbler bowl is dry before each use.

2. Fill the tumbler bowl (1) about 2/3 full with polishing media (not provided). Add some metal parts as needed up to a maximum of 5 lb (2.3 kg) of material (including media). Do not overfill. Maximum capacity will vary with the size of the items being polished. Overfilling will cause the polishing process to go much slower. (Fig. 1)

**IMPORTANT:** If the tumbler is running too slowly, simply remove some items and restart.

**IMPORTANT:** Not having enough media in bowl could damage parts.

3. Place the tumbler lid (2) on the tumbler bowl (1), making sure to get the gasket correctly in place. Add the washer and wing nut (3) to the top and hand tighten firmly. (Fig. 2)

4. Connect the power cord to the nearest power outlet. Press the power switch to the "ON" position ("I").

Fig. 1

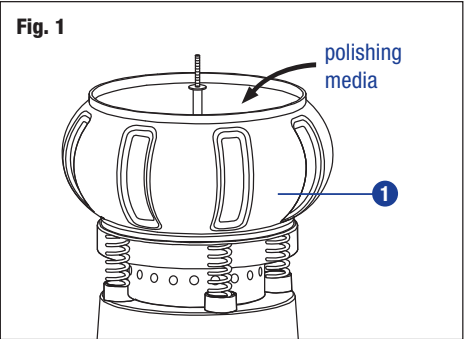
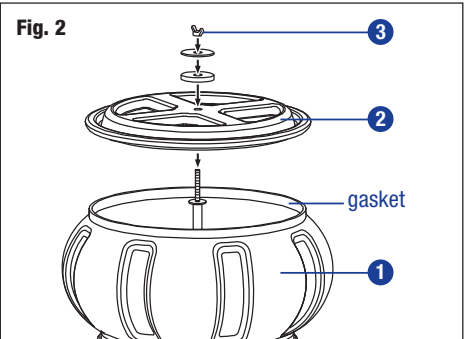


Fig. 2



WARNING!

- Ceramic media will cause excessive wear on the tumbler bowl. Do not use ceramic or other very hard media in this tumbler.
- Tumbling often creates dust which may be harmful to your health. Wait for at least 1 hour after tumbling is complete and turn OFF the tumbler before opening the tumbler. This will allow dust to settle.
- Never tumble with the lid off, as hazardous dust may be created, and the media or work materials may be ejected from the tumbler.

- IMPORTANT:** The following measures are recommended for your best operation of the tumbler:
- For degreasing, use ground corncob, walnut shell or plastic media. Tumble for 30 minutes to 1 hour.
  - For removing rust, use commercially available treated plastic media. Depending on the condition of the materials, you will have to tumble for 2–6 hours.
  - For polishing, tumble in walnut hull or corncob media. Do not add water. You may add a small amount of commercial metal polish.
5. When the tumbling job is completed, move the power switch to the OFF ("O") position before opening the tumbler.
6. To prevent accidents, turn off the tumbler and disconnect its power from power supply after use. Clean, then store the tumbler indoors out of reach of children.

MAINTENANCE

1. Before each use, inspect the general condition of the tool. Check for loose hardware, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
2. When using, always be sure that the gasket seals are in good condition and in place. If they become damaged, replace them.
3. The rubber feet at the bottom of the bowl may become worn after extensive use. Inspect them periodically, and if worn, replace them.
4. Protect the motor from water and moisture.
5. After use, wipe the interior of the bowl and the external surfaces with clean cloth. Store the tumbler in a dry location out of reach of children.

**IMPORTANT:** This tumbler is not intended for polishing stones. For polishing stones, you need a lapidary tumbler which uses water mixed media.



WARNING!

- To prevent serious injury from tool failure, do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.
- If the supply cord of this power tool is damaged, it must be replaced only a qualified service technician.

TROUBLESHOOTING

Problem	Possible Cause	Likely Solutions
Tool will not start.	1. Cord not connected. 2. No power at outlet.	1. Check that cord is plugged in. 2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure that circuit is right capacity for tool and circuit has no other loads.
Tool operates slowly.	1. Extension cord too long or wire size too small.	1. Eliminate use of extension cord. If an extension cord is needed, use one with proper diameter for its length and load.
Excessive noise or rattling.	1. Internal damage or wear.	1. Have technician service tool.
Overheating.	1. Motor being strained by long or small diameter extension cord.	1. Eliminate use of extension cord. If an extension cord is needed, use one with proper diameter for its length and load.

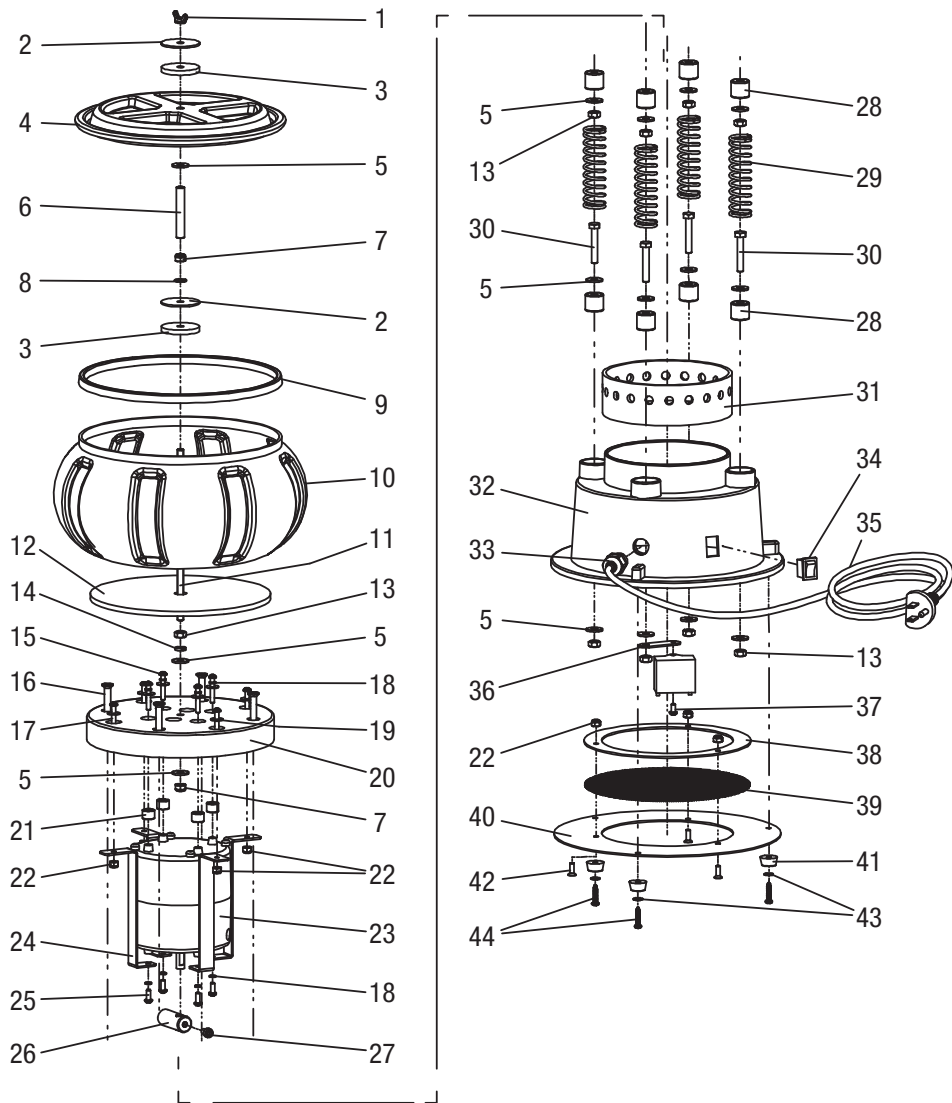


WARNING!

Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.



EXPLODED VIEW



No.	Description	Qty.
1	Wing Nut	1
2	Washer (M6)	2
3	Ring (M6.5x37x4)	2
4	Lid	1
5	Washer (M6)	15
6	Center Shaft	1
7	Nut (M6)	2
8	Washer (M6)	1
9	Gasket	1
10	Tumbler Bowl	1
11	Threaded Shaft (M6x170)	1
12	Rubber Mat	1
13	Nuts (M6)	9
14	Spring Washer (M6)	1
15	Screw (M4x25)	4
16	Screw (M6x30)	4
17	Screw (M4x20)	4
18	Spring Washer	8
19	Washer	8
20	Tank Base	1
21	Motor Tab	4
22	Nuts (M4)	7

No.	Description	Qty.
23	Motor	1
24	Motor Frame	4
25	Screw (M4x10)	4
26	Vibration Weight	1
27	Screw (M5x8)	1
28	Rubber Gasket	8
29	Spring	4
30	Screw (M6x35)	4
31	Rubber Ring	1
32	Base	1
33	Connector	1
34	Power Switch	1
35	Power Cord and Plug	1
36	Bracket	1
37	Screw (M4x8)	1
38	Net Plate	1
39	Net	1
40	Base Board	1
41	Foot	3
42	Screw (M4x12)	3
43	Washer (M4)	3
44	Screw (ST4x18)	3

NOTE:

The manufacturer and/or distributor has provided the parts list and assembly diagram in this manual as a reference tool only. Neither the manufacturer nor distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to make any repairs to the product, or that he or she is qualified to replace any parts of the product. In fact, the manufacturer and/or distributor expressly states that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer. The buyer assumes all risk and liability arising out of his or her repairs to the original product or replacement parts thereto, or arising out of his or her installation of replacement parts thereto.



### 3-Year Limited Warranty

This Mastercraft product is guaranteed for a period of **three (3) years** from the date of original retail purchase, against defects in materials and workmanship.

Subject to the conditions and limitations described below, this product, if returned to us with proof of purchase within the stated warranty period and if covered under this warranty, will be repaired or replaced (with the same model, or one of equal value or specification), at our option. We will bear the cost of any repair or replacement and any costs of labour relating thereto.

#### These warranties are subject to the following conditions and limitations

- a) a bill of sale verifying the purchase and purchase date must be provided;
- b) this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions) or which is being used for industrial, professional, commercial or rental purposes;
- c) this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product which are expected to become inoperative or unusable after a reasonable period of use;
- d) this warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, tune-ups or adjustments;
- e) this warranty will not apply where damage is caused by repairs made or attempted by others (i.e. persons not authorized by the manufacturer);
- f) this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);
- g) this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;
- h) this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners; and
- i) this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

### Additional Limitations

This warranty applies only to the original purchaser and may not be transferred. Neither the retailer nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential or exemplary damages arising in connection with the sale, use or inability to use this product.

### Notice to Consumer

This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal legislation.

Made in China

Imported by

Mastercraft Canada Toronto, Canada M4S 2B8