

Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

23k

CENTRALTM MACHINERY

5 LB. METAL VIBRATORY TUMBLER BOWL



59476

Visit our website at: <http://www.harborfreight.com>
Email our technical support at: productsupport@harborfreight.com

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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⚠ WARNING

Read this material before using this product. Failure to do so can result in serious injury.
SAVE THIS MANUAL.

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WARNING SYMBOLS AND DEFINITIONS

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
 DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
 WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE CAUTION	Addresses practices not related to personal injury.

IMPORTANT SAFETY INFORMATION

General Tool Safety Warnings

WARNING

Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

1. KEEP GUARDS IN PLACE and in working order.
2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
4. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
5. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
6. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.

General Tool Safety Warnings (cont.)

**Table A: RECOMMENDED MINIMUM WIRE GAUGE
FOR EXTENSION CORDS
(120 VOLT)**

NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH			
	25'	50'	100'	150'
0 – 6	18	16	16	14
6.1 – 10	18	16	14	12
10.1 – 12	16	16	14	12
12.1 – 16	14	12	Do not use.	

9. **USE PROPER EXTENSION CORD.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
10. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
11. **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
12. **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
13. **DON'T OVERREACH.** Keep proper footing and balance at all times.
14. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
15. **DISCONNECT TOOLS** before servicing; when changing accessories, such as blades, bits, cutters, and the like.
16. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
17. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
18. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
19. **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, binding 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.
20. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

Grounding Instructions



⚠ WARNING

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION READ AND FOLLOW THESE INSTRUCTIONS:

110-120 VAC Grounded Tools: Tools with Three Prong Plugs

1. In the event of a 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 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.

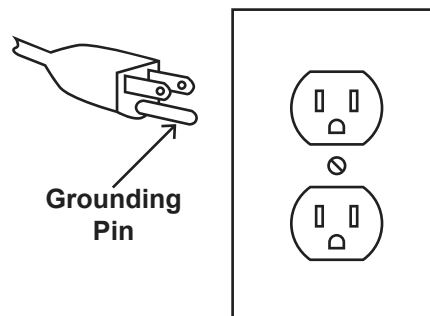
2. Do not modify the plug provided – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

3. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

4. 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.

5. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

6. Repair or replace damaged or worn cord immediately.



**125 VAC 3-Prong Plug and Outlet
(for up to 125 VAC and up to 15 A)**

7. This tool is intended for use on a circuit that has an outlet that looks like the one illustrated above in **125 VAC 3-Prong Plug and Outlet**. The tool has a grounding plug that looks like the plug illustrated above in **125 VAC 3-Prong Plug and Outlet**.
8. The outlet must be properly installed and grounded in accordance with all codes and ordinances.
9. Do not use an adapter to connect this tool to a different outlet.

Tumbler Safety Warnings

1. **Do not use ceramic, wet or water based media in Tumbler.** Use only plastic beads, ground corn cobs, walnut shells, etc.
2. **Do not use to polish stones.** A rotary tumbler (such as 65838 Rotary Rock Tumbler or 65840 Dual Drum Rotary Rock Tumbler) and water-mixed media is required for polishing stones.
3. **Do not exceed 5 lb. Tank capacity.**
4. **Do not use without Cover (4) in place.** Hazardous dust may be created and media and/or work materials may be ejected.
5. **Do not remove Cover immediately after use.** Wait at least 1 hour after tumbling is complete before opening cover. This will allow dust to settle.
6. **Do not place items on Cover during use.**
7. When servicing use only identical replacement parts.
8. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
9. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
10. Industrial applications must follow OSHA guidelines.
11. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
12. Avoid unintentional starting. Prepare to begin work before turning on the tool.
13. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
14. 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.



SAVE THESE INSTRUCTIONS.

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Specifications

Electrical Input	120VAC / 60Hz / 0.5A
Capacity	5 lb.
Tumbler Bowl Opening Diameter	7-3/4"
Tumbler Bowl Depth	4-5/8"

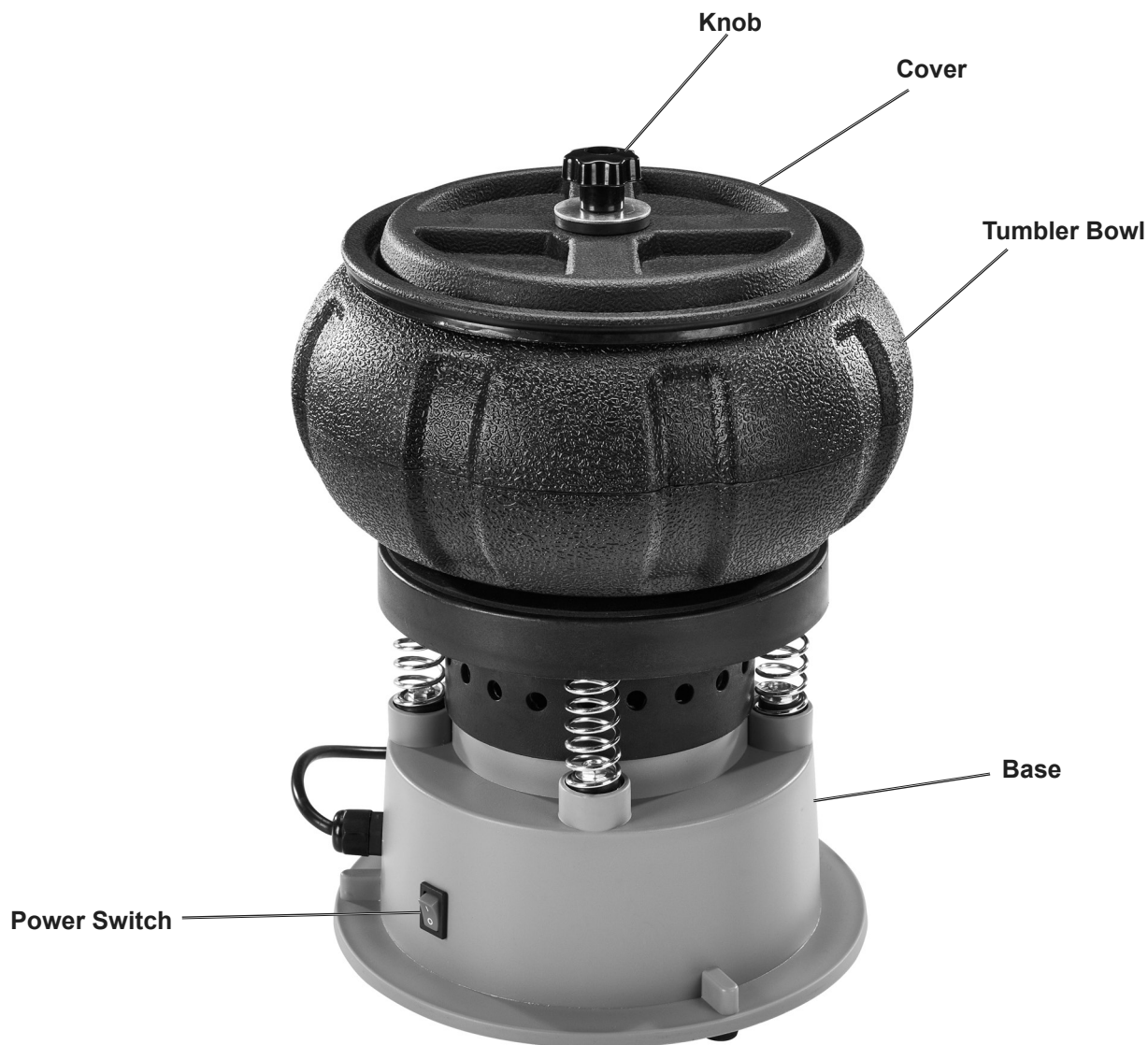
Setup - Before Use:



Read the **ENTIRE** IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Functions



Operating Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

WARNING

Before appliance assembly or adjustment, make sure the appliance's switch is turned off, the cord is unplugged, and the unit has cooled completely.

Tool Set Up

Choosing a Media

The media used in standard tumblers is generally not suitable for vibratory machines. Any 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.

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 heavy duty media.

There is a wide variety of media to be used in vibratory finishing. The chart below outlines the recommended media for this tumbler.

For Degreasing: Use corncob, walnut shell or plastic media. Tumble for 30 minutes to 1 hour.

To Remove Rust: Use plastic media. Depending on the condition of the materials, tumble for 2 - 6 hours.

To Polish: Tumble in walnut shell or corncob media. Do not add water. Add a small amount of commercial metal polish.

Note: Plastic beads are usually used with a powdered abrasive added.

CAUTION! Walnut shells can create an oil during use, which can lead to slight discoloring of object.

Item	Name	Application	Feature
30972	80 Grit Glass Bead Blast Media	Metal and plastic surfaces	Non-damaging to soft metals like aluminum and brass
46426	80 Grit Glass Bead Blast Media	Metal and plastic surfaces	Non-damaging to soft metals like aluminum and brass
66846	220 Grit Aluminum Oxide Abrasive	Cleaning, finishing and deburring	Removes rust, corrosion and paint
92150	Coarse Grade Walnut Shell Media	Cleans aluminum and brass	Rust-free paint removal; cleans transmissions and engines
92155	Fine Grade Walnut Shell Media	Cleans aluminum and brass	Rust-free paint removal; cleans transmissions and engines
93832	Rust-Cutting Resin Abrasive Media	Metal bolts and nuts	Removes rust from bolts and nuts without damaging threads
97818	30-40 Grit Plastic Abrasive Media	Aluminum, chrome, antiques and aluminum aircraft components	Fast removal of paint, light oxidation and even some rust

Workpiece and Work Area Set Up

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.

General Operating Instructions

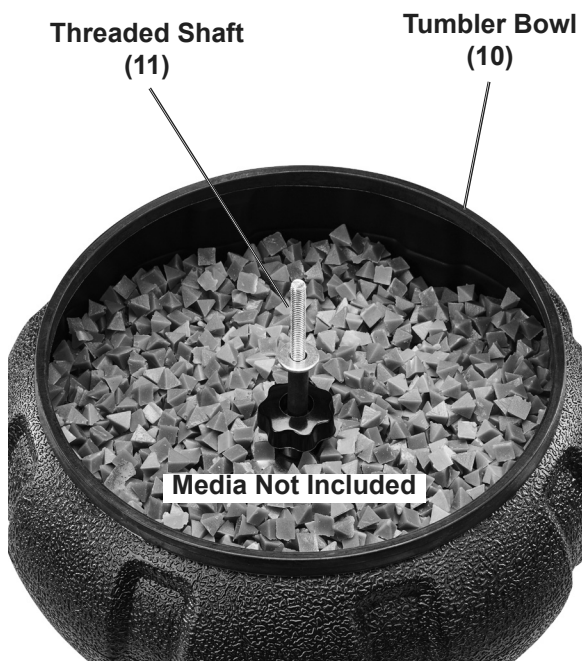
⚠ WARNING

TO PREVENT INJURY FROM BURNS:
Allow to cool before adjusting or unloading.

Note: Use this tumbler for the following finishing applications:

- * Removing rust or other surface imperfections from hardware.
- * Removing burrs from machined or stamped hardware or other small parts.
- * Polishing small parts.
- * Removing any contaminants from various metal parts.

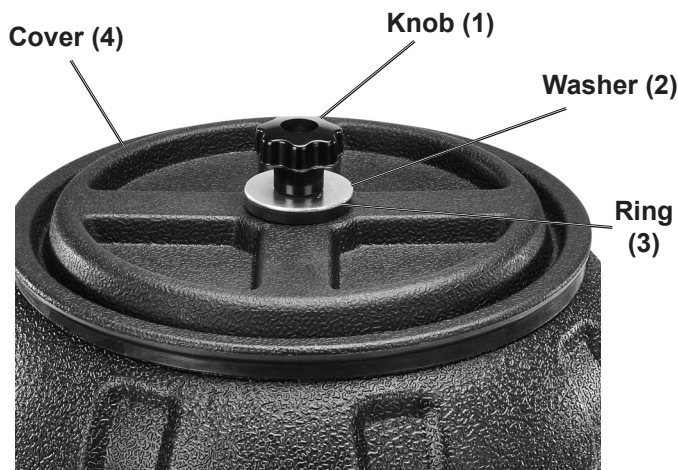
1. Make sure Tank interior is dry before each use.



2. Fill the Tumbler Bowl (10) about 2/3 full with polishing media. Add metal parts as needed up to a maximum of 5 lb. of material (including media). Do not overfill.

Note: Maximum capacity is 5 lb. and about 2/3 full tank. Overfilling will cause the polishing process to go much slower. If the Tumbler is running too slowly, simply remove some items and restart.

CAUTION! Not having enough media in Tumbler Bowl could damage parts being tumbled.



3. Place the Cover (4) on the tumbler bowl, make sure that the Threaded Shaft (11) is correctly in place. Add the Ring (3) and Washer (2) and finger-tighten firmly using the Knob (1).
4. Connect the Power Cord (35) to the nearest power outlet and press the Power Switch (34) to ON ("I").

CAUTION! Do not place any items on the Cover while the Tumbler is operating.

CAUTION! Never tumble with the Cover off, as hazardous dust may be created, and the media or work materials may be ejected from the tumbler.

5. When the tumbling is completed, press the Power Switch to OFF ("O") before opening the tumbler.
6. To prevent accidents, turn off the tool and disconnect its power supply after use. Clean, then store the tool indoors out of children's reach.

Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠ 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.

Before appliance assembly or adjustment, make sure the appliance's switch is turned off, the cord is unplugged, and the unit has cooled completely.

Cleaning, Maintenance, and Lubrication

- 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.
- Check that Seal (9) is in good condition and in place. Replace if damaged.
- The Rubber Feet (41) at the bottom of the Base (32) may eventually wear out. Inspect these periodically. If worn, replace.
- Protect the Motor (23) from water and moisture. Store Tumbler in a dry location when not in use.
- AFTER USE**, wipe external surfaces of the tool with clean cloth.
- ⚠ WARNING! TO PREVENT SERIOUS INJURY:** If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	- Cord not connected. - No power at outlet. - Tool's thermal reset breaker tripped (if equipped). - Internal damage or wear. (Carbon brushes or switch, for example.)	- Check that cord is plugged in. - Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads. - Turn off tool and allow to cool. Press reset button on tool. - Have technician service tool.
Tool operates slowly.	Extension cord too long or wire size too small.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See Table A on page 3.
Performance decreases over time.	- Accessory dull or damaged. - Carbon brushes worn or damaged.	- Keep cutting accessories sharp. Replace as needed. - Have qualified technician replace brushes.
Excessive noise or rattling.	Internal damage or wear. (Carbon brushes or bearings, for example.)	Have technician service tool.
Overheating.	- Forcing machine to work too fast. - Blocked motor housing vents. - Motor being strained by long or small diameter extension cord.	- Allow machine to work at its own rate. - Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air. - Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See Table A on page 3.



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

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR 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.

Parts List

Part	Description	Qty
1	Knob M6	2
2	Large Washer M6	2
3	Ring M6.5 X 37 X4	2
4	Cover with "T" Rubber	1
5	Large Washer M6	15
6	Tube Set	1
7	Nut M6	2
9	"H" Seal Ring	1
10	Tumbler Bowl	1
11	Threaded Shaft M6 X 170	1
12	Rubber Mat	1
13	Nut M6	9
14	Spring Mat M6	1
15	Screw M4 X 25	4
16	Screw M6 X 30	4
17	Screw M4 X 20	4
18	Spring Mat M4	8
19	Large Washer M4	8
20	Fixing Base	1
21	Motor Pillar	4
22	Nut M4	7
23	Motor	1

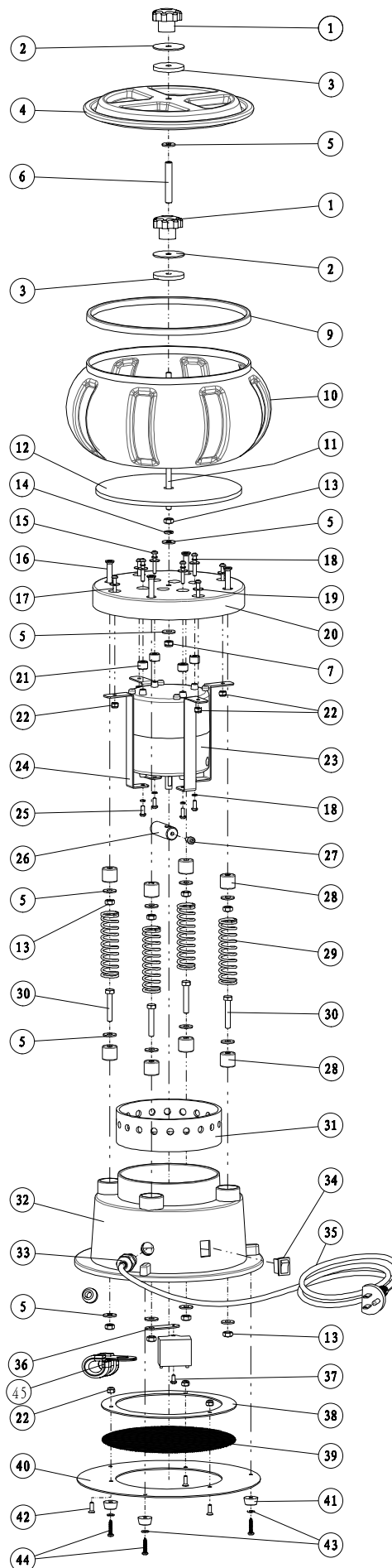
Part	Description	Qty
24	Motor Bracket	4
25	Screw M4 X 10	4
26	Vibration Weight	1
27	Screw M5X8	1
28	Spacer	8
29	Spring	4
30	Screw M6 X 35	4
31	Rubber Ring	1
32	Base	1
33	Connector	1
34	Switch	1
35	Power Cord & Plug	1
36	Bracket	1
37	Screw M4 X 8	1
38	Net Plate	1
39	Net	1
40	Base Board	1
41	Foot	3
42	Screw M4 X 12	3
43	Washer M4	3
44	Screw ST4 X 18	3

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Specify UPC 193175471871 when ordering parts.

Assembly Diagram



SAFETY

SETUP

OPERATION

MAINTENANCE

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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