

# 18-lb.VIBRATORY TUMBLER (240V/50Hz,UK PLUG)

**ITEM SB949**

## ASSEMBLY & OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.  
Due to continuing improvements, actual product may differ slightly from the product described herein.



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

## SPECIFICATIONS

Electrical Input	240V~/50Hz
Capacity(kg//lbs)	8.15//18
Tumbler Bowl Opening Diameter(mm//in)	280//11
Tumbler Bowl Depth(mm//in)	180//7

## SAVE THIS MANUAL

Save this manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

## SAFETY WARNINGS AND PRECAUTIONS

### General tool Safety Warnings

**WARNING:** When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage.

**Read all instructions before using this tool!**

- 1. Keep work area clean.** Cluttered areas invite injuries.
- 2. Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
- 3. Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
- 4. Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- 5. Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
- 6. Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- 7. Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
- 8. Use eye and ear protection.** Always wear ANSI approved impact safety goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
- 9. Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines. Keep hands and fingers clear of the Roll Dies when operating.

- 10. Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handle must be kept clean, dry, and free from oil and grease at all times.
- 11. Disconnect power.** Unplug when not in use.
- 12. Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
- 13. Avoid unintentional starting.** Be sure the switch is in the Off position when not in use and before plugging in.
- 14. Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- 15. Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn on and off properly.
- 16. Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges and refrigerator enclosures.
- 17. Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool.
- 18. Do not operate tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
- 19. Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.
- 20. Workpiece may be sharp.** After bending or cutting workpieces use caution. Be aware of sharp edges or sharp shreds of metal that may be created. Use heavy duty gloves when handling the workpiece.

**NOTE:** Performance of this tool may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

**WARNING:** The warnings, cautions, 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.

### **Tumbler Safety Warnings**

1. Do not exceed 18 lb. tank capacity.
2. Do not use without Cover (10#) in place. Hazardous dust may be created and media and/or work materials may be ejected.

3. 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.
4. Do not place items on Cover during use.
5. When servicing use only identical replacement parts.
6. 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.
7. 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.
8. Industrial applications must follow OSHA guidelines.
9. Maintain labels and nameplates on the tool. These carry important safety information.
10. Avoid unintentional starting. Prepare to begin work before turning on the tool.
11. 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.
12. **WARNING:** Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling.

## **FEATURES**

1. Vibratory Tumbler is Ideal for bench top polishing, descaling , deburring, and surface conditioning.
2. Unit is fast, quiet, and effective.
3. Heavy Polymer Bowl.

## **UNPACKING**

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please contact the seller.

## **ASSEMBLY**

**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.

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

1. Clean the appliance before use as explained in the Maintenance section.
2. Ensure that the Plastic Drain Plugs (41#) are secure and will not leak if fluid is added to the Tumbler Bowl (2#).
3. Do not plug in the Vibratory Bowl until ready for operation.

# OPERATION

## Preparation

1. This Vibratory Tumbler is designed for deburring, cleaning or polishing work materials of various types using either wet or dry polishing media.

**Note:** Very sharp or hard work materials or media may cause excessive wear on the Tumbler Bowl (2#). Do not use very sharp or hard materials in this appliance.

2. Various media are available for different jobs. Select the appropriate media and running time for your work material. The chart below offers suggestions for various situations. Always do a test run on a few pieces of work material to test the media and running time before committing work material to a specific process.

## Basic Guidelines for Media Selection

**For degreasing**, use ground corncob, walnut shell or plastic media. Vibrate for 30 minutes to 1 hour.

**To remove rust**, use commercially available treated plastic media. Depending on the condition of the materials, you will have to vibrate for 2 - 6 hours.

**To de-burr or polish**, vibrate in walnut hull or corncob media. You may add a small amount of commercial metal polish.

This is a chart of recommended media for this Vibratory Bowl. Plastic beads are usually used with a powdered abrasive added. Walnut shells and corn cob may be used alone, or with added abrasive. Polishing materials include Rouge, Ruby Powder and Linde A.

Media Type	Abrasive	Application	Weight
Plastic Beads	Fine Silicate	Light surface reduction, surface preparation for polishing	62 lb. per cubic foot
Plastic Beads	Medium Silicate	Medium surface reduction, deburring	56 lb. per cubic foot
Plastic Beads	Coarse Aluminum Oxide	Heavy surface reduction, deburring	62 lb. per cubic foot
Walnut Shell	Rouge	Polishing, Oxide removal	45 lb. per cubic foot

Media Type	Abrasive	Application	Weight
Walnut Shell	None Added	Polishing	45 lb. per cubic foot
Corn Cob	None Added	Polishing	29 lb. per cubic foot
Red Rouge	1st Step Polisher	Powdered Polishing Additive	May Vary, Not Specified
Ruby Powder	Medium Polisher	Powdered Polishing Additive	May Vary, Not Specified
Linde A	Finish Polisher	Powdered Finishing Additive	May Vary, Not Specified

## Additional Notes on Vibratory Media

The media used in standard rotating tumblers is generally not suitable for vibratory machines. Vibratory polishers often use dry media that is too light to be effective in standard rotating tumblers. Appropriate media for this vibratory polisher is available from Harbor Freight Tools.

Steel and ceramic media, generally used in tumbling, can also be used however they may cause the bowl to wear out over time due to them being an aggressive media.

There is a wide variety of media to be used in vibratory finishing, you are encouraged to experiment. Many shops are getting good results with unusual media such as erasers, wood pegs, bone and others.

## Operation

**Caution:** Vibratory finishing often creates dust which may be harmful to your health. Wait for at least 1 hour after vibrating is complete and the vibrator has been turned OFF before opening the vibrator. This will allow the dust to settle.

**Caution:** Never vibrate with the top off, as hazardous dust may be created, and the media or work materials may be ejected from the vibrator.

1. Fill the Tumbler Bowl (2#) about 2/3 full with polishing media (not included).
2. Add work material parts to Tumbler Bowl. Do not overfill Tumbler Bowl, and do not exceed work weight limit of 18 lb. including media.
3. Place the Cover (10#) on the Tumbler Bowl (2#). Place the Flat Rubber Washer (14#) and the flat metal Washer (24#) on the Threaded Shaft (8#) as shown in the Assembly Diagram.
4. Place the Knob (23#) on the Threaded Shaft (8#) and tighten in place. Tighten enough to keep the Cover (10#) in place. Do not overtighten.
5. Plug in the unit and press the Power Switch to the ON position. The Vibratory Tumbler will begin to operate.
6. When the job is completed, turn the Power Switch OFF and unplug the unit.
7. Remove the Knob (23#), and pull the Cover (10#) off the Threaded Shaft (8#) bringing the Flat Metal Washer (24#) and flat rubber Washer (14#) with it. Set the Cover assembly aside.
8. If a lubricant is used, then the Overflow Hose (40#) must be used to drain any excess lubricant/water into a suitable container, preventing overflow.
9. Check the work material to determine if the job is completed to satisfaction. If additional work is required, replace the Lid assembly and repeat the process. If the work is completed, unload the work material and media.
10. To prevent accidents, turn off the appliance and disconnect its power supply after use. Clean, then store the appliance indoors out of children's reach.

## MAINTENANCE

**FAILURE:** Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

1. **BEFORE EACH USE**, inspect the general condition of the appliance. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
2. Do not immerse motor, cord, or plug in water or any other liquid.
3. After each use, dry with a soft cloth. Wipe the motor housing with a soft clean cloth or sponge. Allow unit to dry completely before assembly or use.

Problem	Possible Causes	Probable Solutions
Appliance will not start	1. No power at outlet. 2. Cord not connected.	1. Check power at outlet. 2. Check that cord is plugged in.
Tool will not vibrate or operates slowly	1. Vibratory Bowl is overloaded	1. Reduce amount of material in Vibratory Bowl.
Work material is not finished properly	1. Improper media is being used. 2. Material has not been processed long enough.	1. Review media selection and try another option. 2. Unload excess material or extend vibration time cycle.

## PARTS LIST

Part No.	Description	Qty	Part No.	Description	Qty
1	Base	1	25	Screw M6×25	4
2	Tumbler Bowl	1	26	Spring	6
3	Plastic Adapter	1	27	Nut M10	1
4	Tank Base	1	28	Screw M6×16	4
5	Motor	1	29	Screw M6×35	6
6	Motor Frame	1	30	Nut M6	8
7	Screw M6×35	6	31	Screw M5×10	1
8	Threaded Shaft	1	32	Net	1
9	Mat	1	33	Board	1
10	Cover	1	34	Base Board	1
11	Seal Ring	2	35	Spring Washer 4mm	3
12	Rubber Gasket	12	36	Screw M4×6	2
13	Vibration Weight	1	37	Capacitor Base	1
14	Flat Rubber Washer	2	38	Capacitor	1
15	Tube	1	39	Plastic Clamp	1
16	Power Cord with Switch	1	40	Overflow Hose	1
17	Spring Washer 6mm	8	41	Plastic Drain Plug	2
18	Connector	1	42	O-ring	2
19	Foot	3	43	Screw M4×10	3
20	Nut M10	2	44	Washer 4mm	3
21	Washer 6mm	8	45	Nut M4	3
22	Screw M6×10	3	46	Washer 10mm	2
23	Knob	1	47	Spring Washer 10mm	1
24	Washer 10mm	2	48	Cable Tie	5

### PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS 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.



# PARTS DIAGRAM

