

TUMBLE-VIBE 10

Professional Rock Polishing Kit

NO DRAIN 115V

Operating Instructions



*Grits are included,
rocks are not
included in kit

Your new Raytech Finishing machine is useful for a wide variety of finishing options. The following are a few examples:

- Industrial model designed for rock polishing
- Heavy duty drive and suspension
- Polishing metal or plastic parts.
- Grinding and polishing “baroque” gemstones from rough chips.
- Smoothing and polishing preformed cabochons and small slabs.
- Polishing seashells.

Equipment is warranted for one year from date of purchase.

Each type of product finishing requires its own sequence of steps with appropriate abrasives, polishes and grits.

Consult your distributor for recommended grits and compounds.

Raytech Industries

A Division of Lyman Products

475 Smith Street, Middletown, CT 06457

Tel (860) 632-2020 Fax (860) 632-1699

www.raytech-ind.com

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General Instructions

Your new Raytech Tumbler comes with a motorized base, one bowl and one lid. If the tumbler will be used for rock polishing as well as for cutting, always purchase a reserve bowl strictly for the polishing step so that it will be free from embedded cutting grit. (Spare bowl part # 23014R TV-10 Bowl NO DRAIN)

To install the bowl, place it over the threaded stud in the base and screw on the nut provided.
Note: It is essential that this nut be tightened securely so that the bowl will not vibrate loose. An easy way to do this is to tighten by hand until it is snug.

The working capacity of the Tumble-Vibe 10 is approximately .10 cu. ft. (or six pints) or 8 pounds. The capacity includes both the grits and the work pieces or rocks.

Maintenance

- The following maintenance should be performed after every use:
- 1. Inspect interior of bowl at all times for premature wear.
 - 2. Inspect wiring prior to turning on at all times for premature wear.
 - 3. Check tightness of all hardware.
 - 4. Keep the unit clean!
 - 5. When using grits, don't allow to run too dry as this will cause premature wear on the bowl.
(i.e: no standing water - slurry mixture.)
 - 6. Keep shaft clean of grits and water.

Health & Safety Cautions

- 1. Do not cover the machine with anything (such as a blanket or a box) to insulate the noise as this could cause overheating and become a fire hazard.
- 2. Always connect the machine to a power source that has been properly grounded to prevent any possible electrical shock.
- 3. The TV-10 is designed not to "walk" during normal operation. We recommend that the machine be placed on a solid floor away from any combustible materials. If the machine is used on a bench, it should be blocked in to prevent any accidents. Do not bolt or attach these units to a workbench by any means, as this will void warranty.
- 4. Never attempt to operate or experiment with other than recommended grits and compounds.
- 5. Do not dispose of grits down drain. Remove as much grit as possible by straining.

TV-10 Replacement Parts

Description	Item #
Bowl(no drain) & Lid	#23014
Shaft	#8095030
Wing Nut	#8033450P
Strainer Assembly	#23114
Motor Base Assm. 115V	#7631422
Washer (on bowl)	#8077300
Hex Nut (in bowl)	#8033900P
Washer (in bowl)	#2990617
Lid Only.	8094151



General Set-Up & Instructions

Your new Raytech Professional Polishing Kit comes complete and ready to operate.

Upon opening the box you will find:

a motorized base, (1) bowl, clear lid, and (2) rubber nuts.

Inside the bowl you will find:

(4) bags of tumbling grit that are labeled Step 1 - Step 4.

Each step represents a different grit.

Step 1 = Silicon carbide Grit-100/120,

Step 2 = Silicon carbide Grit-700F,

Step 3 = Iolox 50 and

Step 4 = Raybrite TL.

These (4) steps take you from rough grind to final polish.

Take the bowl, which contains all (4) grits off the tumbler base.

Secure the bowl to the tumbler base using one of the rubber nuts provided. After tightening, there should be a bulge in the rubber nut. This is normal and will prevent the bowl from vibrating off the base. Note: the larger end of the rubber nut should set against the top of the bowl. See illustration depicting correct installation of the rubber nut. The working capacity of the Tumbler-Vibe 10 is approximately 0.10 cubic feet or approximately 6 pints, which also equates to a holding weight of (8) pounds of rocks.

A spare bowl (#23014R) is available for sale as it is common and recommended that one bowl be used for your grinding and pre-polish steps and the other bowl for your final polish step. This practice will eliminate possible contamination of the different grits. It is important to check the tightness of the hardware as well as inspect the interior of the bowl to ascertain any wear after every 500 hours of use.

Using Your Different Grits, Capacities:

Note: If you are using grits purchased from another source, please contact them with questions regarding their use.

Raytech tumblers are very useful for smoothing and polishing a wide variety of stones. They are particularly useful for finishing sawed or ground-to-shape preforms where the surface of the stone must be smoothed and polished without destroying the basic shape. It is recommended that the tumbler bowl be filled to capacity for the tumbling action to be effective. If too much of the stone is lost in the rough grinding step, it is better to make two batches of rough ground rock and choose only the best of those to continue with the subsequent steps. The stones will finish the best if there is a mixture of sizes included. A considerable portion of small pieces of stone is very helpful in finishing the hollow areas.

Note: Stones of mixed hardness usually do not finish well if combined in the same batch. In most cases it is more beneficial to finish only one type of material at a time. It is good practice to scrub and wash the stones thoroughly between steps to avoid contamination, thus the reason why we recommend a second bowl as the rougher grits can become embedded in the walls of the bowl, preventing the stones from being polished.

STEP	GRIT	QUANTITY OF GRIT	WATER REQUIRED	CYCLE TIME
I Rough Grind	Silicon Carbide 100/120	4 teaspoons every 12 hours. Rinse out sludge every other time grit is added. New grit required as old grit breaks down and sludge no longer feels gritty.	If rocks are dry, add 8 tsps. If rocks are wet from rinsing, add half the quantity above. If tumbling action slows down from evaporation, add enough water to restore tumbling action. Check every 8 hours.	5-10 Days
II Fine Grind	Silicon Carbide 700F	4 teaspoons	Same As Above	1-2 Days
III Pre-Polish	Iolox 50	4 teaspoons	Same As Above	1 Day
IV Polish	Raybrite TL	4 teaspoons	Same As Above	1-2 Days

COMMENTS

The Tumble-Vibe is especially useful for finishing stones where the shape should not be greatly altered, as with sawed or ground preforms. For full rounded stones, Step One is best completed with a rotary tumbler.

If soft stones are tumbled, this step should continue long enough to break down the grit to a fine particle. At least 2 days will probably be required after last grit addition.

Eliminate this step with soft stones such as Dolomite, Malachite, Rhodochrosite, etc.

Change entire load after 1 day.