



RAYTECH

Since 1958

Standard Twin Tumbler Systems Instructions



Raytech Industries

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Your new Vibratory Tumbler(s) will be useful for a wide variety of finishing operations. The following are a few examples:

- Removing rust from pieces of metal without losing details or rounded edges.
- Removing burrs from hardware and stampings.
- Polishing difficult to reach surfaces to a high shine.

IMPORTANT SAFETY CAUTIONS

Please read all information and follow directions carefully.

- DO NOT cover the machine with anything (such as a blanket or a box) to dampen the noise as this could cause overheating and become a potential fire hazard.
- DO NOT overfill/overload bowl with media and parts. Bowls should not be filled more than half way. Over filling will damage motor and void the warranty.
- DO NOT use any solvents in the tumbler bowls.
- Always connect the machine to a power source that has been properly grounded to prevent any possible electrical shock.
- Your tumbler is designed not to “walk” during normal operation. We recommend that the machine be placed on a solid floor away from moisture and combustible materials. If the machine is used on a bench, it should be blocked in to prevent any accidents.
- Never attempt to operate or experiment with other than recommended media and compounds. These machines are not designed for use with ceramic media or steel medias.

Inside with your 1200 Twin Vibratory Tumbler for parts up to 3” long, you will find the following:

- Tumbler Base with 6' 110 VAC Power Cord
- One 2-1/2 lb. bag of Green Pyramid Cutting Media
- One 2 lb. bag of Corncob DryShine® Media
- One 8” Wet/Dry Tumbler Bowl sifter and Lid Assembly
- One 10” Dry Tumbler Bowl and Lid Assembly
- Rubberized Bowl and Lid Retaining Nut
- Instructions

Wearing Too Quickly

Too many parts: Ideal ratio is 30% parts, 70% media.

Too much or too little water when using Green Cutting Media:
Use just enough water to wet media.
Recommend cleaning in ultrasonic cleaner prior to tumbling

Heavy Deposits In Recesses

Not enough water added to Green Cutting media: Add more water or rinse periodically during processing.

If you have any questions about the use of this product, please contact Raytech Industries at 1-800-243-7163 or visit our website www.raytech-ind.com

however it will remove dirt, and stain residues. Typical running time for this media is 6 to 24 hours.

Maintenance

The following maintenance should be performed after every 50 hours of use:

1. Check tightness of all hardware.
2. Inspect interior of bowl to ascertain any premature wear or cracks.

To optimize media use:

1. Allow wet media to thoroughly dry before returning to unused media container
2. Continue to use media until it no longer cuts in a reasonable amount of time.
3. Continue to use all medias until they become a useless dust as the abrasive/polishing treatments permeate the entire cross section.

Troubleshooting

Problem	Possible Cause: Corrective Action
Parts Too Dull	Not in tumbler long enough: Allow more time. Skipped steps: Follow all steps for quickest results.
Bowls	Works best on parts smaller than 3" 1200 Twin and 6" 2500 Twin

Inside with your 2500 Twin Vibratory Tumble for parts up to 5" long, you will find the following:

- Heavy-Duty Wet/Dry Media Tumbler Base with
- 6' 110 VAC Power Cord
- Two 12" Wet/Dry Bowls one with solid lid/one with sifter lid
- One 8 lb. container of Green Pyramid Cutting Media
- One 5 lb. container of DryShine® Media Instructions

General Instructions

For The 1200 Twin Standard Raytech Vibratory Tumbler System

Your 1200 Twin Standard Raytech Vibratory Tumbler has been supplied with 2 bowl and lid assemblies. The smaller bowl is used for Wet Green Cutting Media and DryShine® Media. The larger 10" bowl is used for the final dry polishing operation with the DryShine® media.

To install the bowl, place it over the threaded stud in the base. Place the appropriate lid on top of the bowl and hand tighten the rubberized nut provided (wide base down) until rubber body slightly bulges. It is essential that this nut be tightened properly so that the bowl will not vibrate loose.

The working capacity of the Standard Raytech Vibratory Tumbler with the 8" bowl is approximately .05 cubic feet or three pints, capacity with the 10" bowl is approximately double. The total weight capacity is about 3 pounds for the 8" bowl, 6 pounds for the 10". These capacities include both media and the work pieces.

NOTE: Overloading the bowls will damage motor and void warranty. Your tumbler features overload protection. This will shut off the tumbler should an unsafe operating condition arise, and after a cool-down cycle, restart. If this happens, remove some parts from the bowl.

For The 2500 Twin Vibratory Tumbler System

Your 2500 Twin Vibratory Tumbler has been supplied with 2 general-purpose 12" bowls used for wet or dry polishing operations with the Green Cutting Media and DryShine® Media.

To install the bowl, place it over the threaded stud in the base, place rubber faced washer over stud (rubber face down) and gently tighten nut. Install the lid and tighten the large wing nut properly so that the lid will not vibrate loose.

The total working capacity of the Raytech 2500 Twin Vibratory Tumbler is approximately .18 cubic feet, or 11 pounds, parts and media. The capacity includes both the media and the work pieces (maximum 6" long).

NOTE: Overloading the bowls will damage motor and void warranty. Your tumbler features overload protection. This will shut off the tumbler should an unsafe operating condition arise, and after a cool-down cycle, restart. If this happens, remove some parts from the bowl. The unit starts when you plug it into a 110VAC outlet and turns off when you pull the plug.

Removing Rust, Burrs, Heavy Deposit of Dirt Etc.

Inspect condition of parts to be cleaned. Parts should be free of paint before placing in the tumbler.

NOTE: Plating may be eroded away by Green Cutting Media. To shine plated parts without removing plating use DryShine® Media. Refer to Producing a High Shine section and check parts frequently to assure desired results.

NOTE: For the 1200 Twin Vibratory Tumbler rusty parts should be placed in the 8" Small Bowl Add entire 2 1/2 lbs. of Green Cutting Media to the parts to be cleaned.

Note: For the Heavy-Duty Vibratory Tumbler, add entire 8 lbs. of Green Cutting Media to parts to be cleaned. The ideal ratio for best tumbler action is 70% media to 30% parts. Add enough water to wet the parts and media, but not so much that standing water is visible. Excessive water will dampen the vibratory action while too little water will impede proper action.

Place lid over central mounting stud. Thread Rubberized Retaining Nut (larger diameter end down) onto the stud until the body of the nut bulges slightly. As before, only hand tightening is necessary.

NOTE: For the 2500 Twin Vibratory Tumbler place the lid over the central mounting stud, install the rubberized flat washer and hand tighten wing nut properly so that the lid and bowl will not vibrate loose.

Plug Vibratory Tumbler into properly grounded 110 VAC outlet. Tumbler will start vibrating as soon as it is plugged in. If tumbler doesn't start, press switch on tumbler platform. Typical processing times range from 3 to 7 hours. It is recommended to check periodically to see if the desired finish has been achieved. Actual time to achieve this appearance may vary from 1 hour to several hours depending on condition of media and degree of rust on parts to be cleaned. For many parts no further surface conditioning is needed. If this is the case, make sure Tumbler is unplugged. Remove lid and tumbler bowl assembly. Tip tumbler bowl, with lid slightly ajar, to drain out wastewater in appropriate drain. In most cases water can be poured down any convenient drain.

Once water is drained, pour entire contents of tumbler bowl onto a paper towel or cloth. Use a magnet to remove steel parts from media or manually sort through to pick out cleaned parts. Dry parts with a hair dryer or heat lamp. Allow media to air dry and return to container of unused media for future use.

NOTE: The Green Cutting Media has abrasive throughout its cross section. The smaller worn particles of media will help clean tighter radius areas. Put hardware back into service or paint/plate as desired to improve corrosion resistance.

Producing A High Shine

To impart a highly reflective shine to the tumbled parts proceed next to the DryShine® Media. Use separate bowl for the polishing for the 1200 and 2500 Standard Vibratory Tumblers. There is no need to add any water or polishes as this media is already treated with a polish.

DryShine® Media should be tumbled with the parts for at least 6 hours. Tumbling for longer periods will yield a higher shine. Remember to use a ratio of 70% Media to 30% Parts. This dry media will not remove an appreciable amount of material,