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Instruction Manual Part #21630Q – Rev. 4/08

Jumbo Parts Tumbler

Part #21630
Instruction Booklet



DESCRIPTION OF THE PRODUCT

Your new **Vibratory Tumbler** will be useful for a wide variety of finishing operations. The following are a few suggestions:

- Removing rust from pieces of hardware without losing details of rounded edges.
- Removing burrs from hardware and stampings.
- Polishing difficult to reach surfaces to a high shine.
- Rapid parts degreasing using **Eastwood Metal Wash (10120)**.

IMPORTANT HEALTH AND 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*** 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.

For technical assistance, phone: 1-866-759-2131

CONTENTS

Your **Jumbo Vibratory Tumbler System (#21630)** includes the following:

- **Tumbler Base with coil spring suspension with adjustable agitation counterweight**
- **#21631 22” Tumbler bowl and lid assembly**
- **All necessary bowl attachment hardware**
- **Complete instructions**

GENERAL INSTRUCTIONS

Your Jumbo Tumbler System has been supplied with 1 general-purpose bowl used for wet and dry polishing operations. The bowl may be used with our full range of tumbler media.

To install the bowl, place it over the threaded stud in the base, place rubber faced washer over stud and gently tighten nut. Make sure the bowl gasket is seated. Install the lid, the large metal washer, and tighten the large wing nut properly so that the lid will not vibrate loose.

The working capacity of the Large Tumbler System is approximately 50 pounds. The capacity includes both the media and the work pieces.

DETERMINING A STARTING POINT

Inspect condition of parts to be cleaned. Parts should be free of paint before placing in the tumbler. Paint can be removed by soaking parts in a metal container of Eastwood DEKOTE paint stripper (#10410) Qt., (#10411) Gal., XXX Finish Stripper (#21658Z) Aerosol, (#21659ZP) Qt., or Eastwood Powdercoat and Paint Dissolver (#12849) Qt., (#12850) Gal. Do not under any circumstances put paint removers or solvents in the Tumbler bowl.

Parts can be degreased by soaking in a solution of Metal Wash (#10120) (See package for directions). Or for faster degreasing, add about 1-2 teaspoons of Metal Wash concentrate (#10120) to any wet media then add enough water to wet the parts. Rinse cleaned parts in water and allow to dry. For best results sort parts to be tumbled by approximate weight and condition. Tumbling similar weight/condition parts together will yield most efficient results.

Place Tumbler on a clean, dust and grit free surface. The Tumbler rubber feet are designed to prevent the Tumbler from “walking” during normal operation. We recommend that the machine be placed on a solid floor, away from any combustible materials. If machine is to be operated on a bench, it should be blocked in to prevent any accidents. Always connect machine to a properly grounded outlet to prevent electrical shock.

NOTE: Plating may be eroded away by wet media. To shine plated parts with the least removal of plating use a dry media. Refer to Producing a High Shine section and check parts frequently to assure desired results.

NOTE: Do not overload unit. Overloading the unit may result in motor burn-out which will void your warranty.

REMOVING RUST

- 1) The ratio of media to parts should be 70:30.
- 2) Add no more than 35 lbs of media to the bowl or to within ¼” from the top of the central bowl cone (whichever is less).
- 3) Add no more than 15 lbs of parts to be cleaned. Parts should be about 7”.
- 4) Add water and rinse additive (if required). If the media requires water, only add enough to completely wet the media without creating standing pools of water. Excessive water will dampen the vibratory action while too little water will impede proper action.

- 5) Plug Vibratory Tumbler into properly grounded 110 VAC outlet. Tumbler will start vibrating as soon as it is plugged in. Observe tumbling action. Most efficient vibratory tumbler action occurs when the media and parts are seen to both rotate around the bowl circumference and cascade laterally
NOTE: This tumbler features a moveable counter-weight to adjust the vibration from mild to aggressive. If the media and parts are not moving as they should check to make sure the maximum 50 lbs total weight hasn't been exceeded. Reduce weight if needed. To further adjust tumbler action: Remove plug. Remove central bowl retainer nut and remove bowl. Place base unit on side and unbolt the bottom coverplate. Loosen the thumb nut on the counterweight by turning the screw CLOCKWISE. Moving the weight out increases the vibration, moving the weight in so it completely overlaps the fixed weight produces the mildest vibration action. Move weight to desired position and hand tighten by turning the thumbscrew COUNTER-CLOCKWISE. Reinstall base cover plate and bowl. Plug in tumbler and observe for proper media movement.
- 6) Place lid over central mounting stud, install washer and hand tighten the retaining nut.
- 7) 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 one hour to several hours depending on condition of media and degree of rust on parts to be cleaned and strength of the agitation.
- 8) For many parts no further surface conditioning is needed. If this is the case, make sure Tumbler is unplugged.
- 9) 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.
- 10) 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 wet media has abrasive throughout its cross section. The smaller worn particles of media will help clean tighter radius areas.

NOTE: Do not overload unit. Overloading the unit may result in motor burn-out which will void your warranty.

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 Dry Shine Media® III (#13450). Place parts to be polished in the tumbler bowl and add entire 15 lbs. of Dry Shine Media® III (#13450) to the parts. There is no need to add any water or polishes as this media is already treated with a polish.

Dry Shine Media® III (#13450) 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, however it will remove dirt, and stain residues. Typical running time for this media is 6 to 24 hours, but can easily run to several days.

Protect the shine with Eastwood Diamond Clear for Bare Metal (#10200Z Aerosol; #10357ZP Quart; #29894Z Extreme Diamond Clear, 8 oz.) or the Eastwood Tin-Zinc Electroplating System (#10049Z). For the longest lasting finish protection use the Eastwood HotCoat® Powder Coating System (#10198).

MAINTENANCE

The following maintenance should be performed every 100 hours of use:

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

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
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- | | |
|-----------------------------------|--|
| Parts Too Dull | <ul style="list-style-type: none">• Not in tumbler long enough: Allow more time.• Skipped steps: Follow all steps for quickest results.• Using wrong media: refer to selection chart in catalog. |
| Bowls Wearing Too Quickly | <ul style="list-style-type: none">• Parts too big for tumbler: Works best on parts smaller than 7".• Too many parts: Ideal ratio is 70% media, 30% parts. |
| Heavy Deposits In Recesses | <ul style="list-style-type: none">• Too much or too little water when using any of the wet media. Use just enough water to wet media.• Parts not properly degreased before tumbling: Degrease or add 1 teaspoon of Metal Wash to bowl.• Not enough water added to wet media: Add more water or rinse periodically during processing. |

SUGGESTED PRODUCTS

Tumbling Media and Additives

- #13451 15 lb. Bag of Brown Rust Cutting Media
- #19790 15 lb. Bag of Green Rust Cutting Media
- #13450 15 lb. Bag of Dry Shine III Media
- #19793 15 lb. Bag of 3mm Microbright® Porcelain Balls
- #19791 22 lb. Pail of 9/16" Plastic XF Cone Tumbler Media
- #13449 20 lb. Pail of 3/8" Ceramic Polyhedron Tumbler Media

- #10120 Metal Wash, 7 oz.
- #10041Z PRE® Painting Prep, 11 oz. aerosol
- #13454 Compound B Rinse Agent, 1 quart
- #21912 Compound D Burnishing Compound, 1 quart

Other items to assist in better results:

#21631 Additional 22" Tumbler Bowl

Heavy gauge, rotationally-molded, 22" Tumbler Bowl with lid, and gasket assembly, permits you to keep multiple tumblers with different media to avoid media contamination. Made in USA.

#13192 Tumbler Media Sifter

Heavy gauge plastic sifter and catch pan features a 3/8" x 3/4" mesh. Media falling into the catch pan can be immediately returned to the process bowl or dried and stored. Made in USA.

#43032 40 Piece Master Rethreading Set

To chase all hardware and restore and clean threads.

#10200Z Diamond Clear®, 11 oz. aerosol

#10357ZP Diamond Clear®, 1 quart

Clear gloss for bare metal to protect highly polished parts from tarnishing.

#29894Z Extreme Diamond Clear, 8 oz.

#10049Z Tin Zinc Electric Plating System

To produce a protective cad-like coating.

#10238Z Metal Blackening System with Diamond Clear®

To produce a non-dimensional black oxide coating.

#10198 HotCoat® Powder Coating System

To produce the most durable chip resistant finish available.

Ask about our
complete range of
HotCoat® colors



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www.eastwood.com

If you have any questions about the use of this product, please contact

The Eastwood Technical Assistance Service Department

1-866-759-2131 email: techelp@eastwood.com