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Instruction Manual Part #13447Q – Rev. 12/04

Economy Vibratory Tumbler – Gen. II

Part #13447

Operating Instructions

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Product Description

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

- Removing rust from pieces of hardware without losing details or 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).

Inside your Economy Vibratory Tumbler you will find the following:

- **#13447 110V Tumbler, Bowl, and Lid**
- **#43204A Green Rust Cutting Media**
- **#43204B Dry Shine Media**

IMPORTANT HEALTH & 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. Do not operate if cord is damaged.
- ***Only operate on a solid surface, away from combustible materials.***
- 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.

General Instructions

1. Set Tumbler on a flat, hard surface.
2. Fill bowl with appropriate media and parts to be tumbled.
3. Secure lid by threading the supplied nut down on the stud and tighten by hand.
4. The working capacity of the Standard Eastwood Vibratory Tumbler with the 8" bowl is approximately .05 cubic feet or three pints. The weight capacity is about 3 pounds for the 8" bowl. These capacities include both 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 Aircraft and Automotive Paint Remover (#34069Z). Do not under any circumstances put Aircraft and Automotive Paint Remover 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 the Green Rust Cutting Media (#43204A) and add enough water to wet the parts. For the Standard Vibratory Tumbler, use the small wet tumbler bowl to degrease parts. Rinse cleaned parts in water and allow to dry. For best results sort parts to be tumbled by approximate weight and condition.

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 Green Rust Cutting Media (#43204A). To shine plated parts without removing plating use Dry Shine Media (#43204B). Refer to Producing a High Shine section and check parts frequently to assure desired results.*

Removing Rust

Place rusty parts into the bowl. Add entire 2-1/2 lbs. of Green Rust Cutting Media (#43204A) to the 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. If degreasing is necessary add a small amount (about 1 or 2 teaspoons of Metal Wash (#10120) to the bowl. Excessive water will dampen the vibratory action while too little water will impede proper action.

Place lid over central mounting stud and tighten nut onto stud hand tight.

Plug Vibratory Tumbler into properly grounded 110 VAC outlet. Tumbler will start vibrating as soon as it is plugged in. 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 Rust 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 Dry Shine Media (#43204B). Place parts to be polished in the larger tumbler bowl and add entire 2 lbs. of Dry Shine Media (#43204B) 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 (#43204B) 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.

Protect the shine with Diamond Clear for Bare Metal (#10200Z Aerosol; #10189Z Pint) 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 for 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
Parts Too Dull	• Not in tumbler long enough: Allow more time. • Skipped steps: Follow all steps for quickest results.
Bowls Wearing Too Quickly	• Using wrong media: For Standard Vibratory Tumblers, use wet media in 8” wet or dry bowl. Do not use ceramic media in this tumbler. • Parts too big for tumbler: Works best on parts smaller than 3”. • Too many parts: Ideal ratio is 30% parts, 70% media. • Too much or too little water when using Green Rust Cutting Media: Use just enough water to wet media. • Worn bowl may be replaced with part #13448, replacement bowl and lid, Economy Tumbler
Heavy Deposits In Recesses	• Parts not properly degreased before using Green Rust Cutting media: Degrease or add 1 teaspoon of Metal Wash to bowl. • Not enough water added to Green Rust Cutting media: Add more water or rinse periodically during processing.

Replacement Media

#43204A **2 1/2 lb. Bag of Green Rust Cutting Media**
#13184C **8 lb. Bag of Green Rust Cutting Media**
#43204B **2 lb. Bag of Dry Shine Media**
#13184D **5 lb. Bag of Dry Shine Media**
#13450 15 lb. Bag of Dry Shine III Media
#13451 15 lb. Bag of Brown Pyramid Media
#13452 8 lb. Bag of Brown Pyramid Media

Media Separator

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 the USA.
#13192 **Tumbler Media Sifter**

Suggested Products

Other items to assist in better results:

#43032 **40 Piece Master Rethreading Set**
To chase all hardware and restore and clean threads.

#10200Z **Diamond Clear, Aerosol**
#10189Z **Diamond Clear, Pint**
To protect highly polished parts from tarnishing.

#10049Z **Tin Zinc Plating System**
To produce a protective cad-like coating.

#10113Z **Metal Blackening System**
To produce a non-dimensional black oxide coating.

#10198 **HotCoat™ Powder Coating System**
To produce the most durable chip resistant finish available.