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Blue Marble NGTUMBLER3LB

National Geographic 3 Lb. Professional Rock Tumbler

Model: NGTUMBLER3LB

INTRODUCTION

The National Geographic 3 Lb. Professional Rock Tumbler is designed to transform rough rocks into beautifully polished gemstones. This kit offers a hands-on educational experience for users of all ages, featuring a durable motor with adjustable time and speed settings, and a quiet, leak-proof barrel. The included GemFoam provides an exceptional final shine to your polished stones.

WHAT'S IN THE BOX

Your National Geographic Rock Tumbler Kit includes the following components:

- Complete Rock Tumbler Machine with 3 Lb. Capacity Barrel
- Assorted Rough Gems (3 lbs.)
- 4 Stages of Polishing Grit (Coarse, Medium, Pre-Polish, Polish)
- 5 Jewelry Settings (for creating custom jewelry)
- GemFoam (for dazzling shine)
- Rock Strainer
- Instruction and Learning Guide

EVERYTHING YOU NEED



POLISHING GRITS



GEMFOAM™



ROUGH GEM ASSORTMENT



TUMBLER WITH 2LB BARREL



ROCK STRAINER



JEWELLERY SETTINGS

Image: All components included in the National Geographic Rock Tumbler Kit.

SETUP

- 1. Unpack Components:** Carefully remove all items from the packaging. Inspect the tumbler and accessories for any damage.
- 2. Placement:** Place the rock tumbler on a stable, flat surface. Due to the continuous operation and potential for slight vibration, it is recommended to place it in an area where noise is not a concern, such as a garage or basement. Consider placing it on a rubber mat to minimize vibration and prevent movement.
- 3. Power Connection:** Connect the power adapter to the tumbler and plug it into a standard electrical outlet.
- 4. Barrel Preparation:** Ensure the tumbler barrel is clean and dry before adding rocks and grit. The barrel features a stainless-steel lid and a rubber lining for a tight, leak-proof seal.

TUMBLING MADE EASY



1. ADD ROUGH ROCKS



2. ADD GRIT



3. ADD WATER



4. SET TIMER

Image: Visual guide for preparing the tumbler barrel with rocks, grit, and water.

OPERATION: TUMBLING PROCESS

The rock tumbling process involves several stages, each using a different grit size to gradually smooth and polish the rocks. Patience is key, as the entire process can take several weeks.

General Guidelines:

- **Rock Selection:** Only tumble rocks of similar hardness and durability together. Mixing different types can lead to uneven polishing or damage.
- **Barrel Fill Level:** For optimal results, fill the barrel approximately 2/3 to 3/4 full with rocks. Too few rocks will cause them to bounce rather than tumble effectively, while too many can overload the motor.
- **Water Level:** Add just enough water to almost cover the rocks in the barrel.

Tumbling Stages:

The kit includes four stages of polishing grit. Follow the suggested times and speeds for each stage:

Grit Stage	Grit Type	Suggested Time	Speed Setting	Purpose
Grit #1	Coarse (Silicon Carbide 60/90)	3-5 days (until sharp edges are lost)	Speed 3 (Fastest)	Initial shaping and smoothing of rough edges.
Grit #2	Medium (Silicon Carbide 120/220)	6-8 days	Speed 2	Further smoothing of rock surfaces.
Grit #3	Pre-Polish (Aluminum Oxide 500)	6-8 days	Speed 1 (Slowest)	Prepares rocks for final polishing, developing a slight gloss.
Grit #4	Polish (Aluminum Oxide)	7-10 days	Speed 1 (Slowest)	Achieves a high-gloss, dazzling finish.

Note: After each stage, thoroughly clean the rocks and the barrel to prevent cross-contamination of grits. Rinse rocks into a bucket, not directly down a drain, as grit can clog pipes.

Using GemFoam:

After the final polishing stage (Grit #4), add the reusable GemFoam and water to the barrel. Tumble for a short period (e.g., a few hours) to enhance the shine and achieve a truly dazzling finish on your gemstones.

PATENTED GEMFOAM™ FOR THE SHINIEST FINISH



Image: Illustrates the use of GemFoam for the final polishing step.

Control Panel:

The tumbler features a digital control panel to set the tumbling duration and speed.

DURABLE & PROGRAMMABLE



BUILT TO LAST

HEAVY-DUTY
MOTOR

TIMER
- 1-9 DAYS
- 3 SPEEDS

Image: The control panel with 'Days' and 'Speed' settings, and power buttons.

MAINTENANCE

- **Cleaning:** After each tumbling stage, thoroughly clean the barrel and the rocks. Use the included strainer to separate rocks from the used grit and water. Rinse the barrel and rocks with clean water.
- **Motor Care:** Keep the motor unit clean and free from dust and grit. Avoid getting water into the motor housing.
- **Drive Belt:** The tumbler uses a drive belt to rotate the barrel. An extra drive belt is included in your kit. If the belt shows signs of wear or breaks, replace it by carefully following the instructions in the learning guide.
- **Storage:** When not in use, store the tumbler in a cool, dry place away from direct sunlight and extreme temperatures.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Tumbler stops or motor shuts down.	Overloaded barrel (too many rocks or too heavy).	Remove some rocks to reduce the load. Unplug the tumbler, then plug it back in to reset.
Rocks are not polishing as expected.	Incorrect grit-to-rock ratio, insufficient tumbling time, or cross-contamination between grit stages.	Ensure correct grit amounts are used. Extend tumbling time if needed. Thoroughly clean barrel and rocks between stages. Consider using ceramic media to fill gaps and improve tumbling action.
Barrel is leaking.	Lid not properly sealed or damaged rubber lining.	Ensure the lid is screwed on tightly and the rubber lining is correctly seated and undamaged.
Excessive noise or vibration.	Uneven load in the barrel, worn drive belt, or unstable surface.	Distribute rocks evenly in the barrel. Check and replace the drive belt if worn. Place the tumbler on a stable, level surface, preferably with a rubber mat.

SPECIFICATIONS

Product Dimensions: 12.76 x 10.31 x 6.69 inches

Item Weight: 8.14 pounds

Item Model Number: NGTUMBLER3LB

Manufacturer: JMW Sales, Inc.

Recommended Age: 8 years and up

Barrel Capacity: 3 Lb.

Motor Features: 3-speed motor, 9-day timer

WARRANTY AND SUPPORT

National Geographic is committed to providing high-quality educational toys and exceptional customer service. If you encounter any issues or have questions regarding your rock tumbler, please contact our support team. We are dedicated to ensuring your satisfaction with our products.

For support, you may contact: help@natgegeotoys.com