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Rio Rotary Tumbler and Replacement Barrel

Set-Up

These tumblers come fully assembled. Simply place the tumbler base on a sturdy, level work surface.

Operation

1. Place the barrel on one end.
2. Remove the lid by twisting in a counter-clockwise direction (the lid is identified by a black rubber gasket).
3. Add 3 lbs. of stainless steel shot (this is the maximum load per barrel).
5. Add up to ¼-cup of the workpieces to be burnished.
6. Dilute the Super Sunsheen™ burnishing compound as directed and pour over the top of the steel shot and workpieces, filling to 1" over the barrel contents. **Please Note:** If you are tumbling workpieces with stones in them, add one additional teaspoon of undiluted Super Sunsheen™ burnishing compound to the solution. This will cushion and protect the pieces during the tumbling cycle. Soft stones such as turquoise, coral, opal and pearls should not be put into the tumbler.
7. Re-position the lid by screwing it clockwise onto the barrel. **Please Note:** If the barrel leaks, check that the lid is not cross-treaded. Applying slight downward pressure while screwing the lid on can help prevent this. Check that the rubber gasket and all the cells along its interior are completely dry before. If leaking persists, dry the gasket and cells, then try applying a small amount of O-ring lubricant to the gasket.
8. Tumble for no more than 120 minutes.
9. Rinse the workpieces, stainless steel shot and the tumbler barrel. Dry the workpieces.

⚠ Warning! Rotating rollers can be dangerous. Turn the rollers off when loading the barrel. Tie hair securely behind the head and wear snug-fitting garments. Keep hair and loose clothing away from the machine at all times.

Required Products:

- Rio rotary tumblers: #202-209, #202-210, #202-211
- Replacement barrel: #202-212
- Mixed stainless steel shot (total of 3 lbs. is required per barrel): #339-097
- Super Sunsheen™ burnishing compound: #339-394
- Sunsheen™ steel shot cleaner: #339-317
- Replacement drive belt: #202-143
- O-ring lubricant: #710-217



Cleaning the Stainless Steel Shot

Stainless steel shot should be kept as clean as possible at all times. We recommend that shot be cleaned after every second or third use.

1. Dilute the Sunsheen™ steel shot cleaner according to the directions on the bottle.
2. Add the steel shot into the tumbler.
3. Add enough diluted shot cleaner to cover about 1" over the steel shot.
4. If the water appears dirty after tumbling, rinse the shot and repeat the process (the shot is clean when the liquid cleaner is the same color it was before it was put in the tumbler).

Polishing Stones

Step 1: Coarse Fill the barrel up to $\frac{3}{4}$ -full of stones, then add coarse (80) grit. Add water to $\frac{1}{2}$ " below the level of the stones. Run the tumbler. After a few hours, the grit and water should form a thick, creamy slurry (add more water or grit as necessary to achieve this consistency). To maintain this consistency, open the barrel every 24 to 48 hours and check the mixture, adding water or grit as necessary. **Please Note:** The tumbling grit will frost the inside surface of the barrel. This texturing is normal and permanent but will not affect the functionality of the barrel.

Required products:

Rio silicon carbide, 80-grit: #200-000/5
 Rio silicon carbide, 120-grit: #200-008/5
 Rio silicon carbide, 220-grit: #200-016/5
 Rio silicon carbide, 600-grit: #200-024/5

Please Note: Stones will not polish well without careful cleaning. Thoroughly clean grit from stones, barrel and lid gasket after each step. Use a toothbrush to clean every crevice, pocket or indentation in each stone.

Step 2: Fine Clean stones and barrel, then follow the same procedure as in step 1, using a finer (120) grit.

Step 3: Pre-Polish Clean stones and barrel, then follow the same procedure as in step 1, using a pre-polish (220) grit.

Step 4: Polish Clean stones and barrel, then follow the same procedure as in step 1, using a polish (600) grit.

Please Note: Stones may require additional (or fewer) steps to achieve the finish you want.

Care and Maintenance of Tumbler

1. Before operating the tumbler, be sure that the white nylon bearings are cradled in the end plates of the tumbler.
2. Be sure both shafts turn freely; a binding shaft may throw the barrel off its rollers.
3. Oil the bearings at the beginning of the operation and once a month after the initial oiling; use oil sparingly.
4. Do not spill abrasives on bearings or motor.
5. Use care; this motor will become hot to the touch when running. This is normal but requires caution around the motor.
6. Tumblers are protected by a thermal overload device; if the motor overheats, the unit automatically shuts off. If this happens, check for bound bearings or excessive weight; wait for the motor to cool, and it will restart by itself.
7. To assure long belt life, make certain that motor and drive pulleys are in line. Necessary adjustments can be made by adjusting the set-screw on the motor pulley.
8. If the barrel or the roller guides become wet, dry them thoroughly to prevent barrel slippage.

⚠ WARNING! Always turn rollers off when positioning and removing the barrel from the base.