

Lapidary Tumbling Procedure

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Tumbling

All Tumbler activity and equipment must be authorized and assigned by a Shop Supervisor.

Unauthorized Tumblers will be removed from the room.

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Tumbling (Cont.)

Barrel Tumblers can only be used for a FIVE Week period and the next person on the [Tumbler Request Form](#) will have access to a tumbler.

A Current user cannot be on the waiting list.

Types of Barrels

- Rounds Barrel - Green (Small & large)
- 45 Degree Angle Tumbler

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Starting Stone Shapes

- **Vein/Slab/Seam Agate (60-600)**
 - Rough sharp edges that need to be worn down
 - Broken to size by hammer
- **Beach Agates (220-600)**
 - Already rounded and worn

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Selecting Stones

- **Sort into pre-worn vs jagged unworn shapes**
 - Pre-worn may start with medium grind (220)
- **Sort by hardness (soft vs hard)**
 - Mixing the two could result in over grinding the softer stone.
- **Sort by size**
- **Sufficient stones to fill barrel $\frac{3}{4}$ full.**

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Tumbler Request Form

- 1.0 Sign your name on Tumbler Request Form.
- 1.1 Supervisor will notify you when tumbler is available
- 1.2 You cannot sign request if you have tumbler in use. (You can request 2nd tumbler if no one is waiting for tumbler).

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Tumbler Use Form

- 2.0 Tumbler Use Form.
- 2.1 Supervisor will provide form.
- 2.2 Fill out form.
- 2.3 Get Supervisor to initial form.
- 2.4 Record each activity on the Tumbler

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Precautions

- **Always wash and handle stones and barrel in such a way that external grit will not be introduced to the process.**
- **Do not pour rocks out of barrel – handle them tenderly by hand.**

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Grinding Steps – 60 to 400

- Add 3 Tsp grit (large barrel) or
 - 2 Tsp grit (small Barrel).
- **Do Not Add Baking Soda.**
- Add about ¼ tsp of ivory soap shavings.
- Add water to just below the stones.
- Burp after 12-24 hrs running.
- Repeat for each necessary grit.

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Between Grinding Steps

- Clean barrel and rocks by flushing into bucket and pouring residue down Table #4 drain.
- **NEVER PUT RESIDUE DOWN SINK DRAIN.**

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Grinding Steps – 600 grit

- Clean Barrel & stones thoroughly.
- Barrel should be at least 1/2 full.
- Add filler pellets to get 2/3 full barrel.
- Add 2 Tsp (LARGE Barrel or 1 Tsp small Barrel) 600 Alumina grit.
- ***Do not add baking soda.***
- Add about ¼ teaspoon of ivory soap shavings.
- Add Water to level just below the top of the stones.
- Burp after 12-24 hrs running.

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Polishing Steps - Alumina

- Clean Barrel & stones & pellets thoroughly.
- Barrel should be ½ full.
- Add pellets to get 2/3 full barrel.
- Add 2 tbl of Alumina Polish.
- Do NOT add baking soda.
- Add about 1/4 teaspoon of ivory soap shavings.
- Add 1 teaspoon of sugar.
- Add water until level is just below the top of the stones.
- Burp after 12-24 hrs running.

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Between Polish Steps

- No need to burp again.
- Do NOT stop tumbler for extended period during the 1-2 week cycle.
- Clean barrel and rocks by flushing into bucket –
- NEVER PUT RESIDUE DOWN SINK DRAIN.

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Cleaning Run

- Clean Barrel, stones & polishing pellets thoroughly.
- Add 1 tsp of Ivory Soap shavings.
- Add water to just below level of stones.
- Run for 24 hours.

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Results

- 1-2 week polish cycle should return the best results.
- Should have better shine dry than wet.

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The End

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