# GY-ROC "B"

Metal Polishing Instructions – including for precious metals Supplied by the manufacturer TAGIT and modified by Aussie Sapphire for Australian users.

The GY-Roc Vibrahone method of cleaning and burnishing metals involves the use of specialised media. Fit drive belt before operating tumbler – slow speed is upper position on pulley, fast speed is the lower position.

For light deburring and preparation for burnishing, we recommend a plastic or ceramic media (fine or medium cut depending on action required). This media will round sharp edges slightly and leave a matte or frosted finish on metal parts. Deep scratches, spurs, parting lines, etc and any degrading marks MUST be removed and smoothed over prior to processing.

For burnishing, we recommend a dense ceramic or porcelain media which has been especially conditioned and prepared for burnishing soft metal parts without scratching the metal surface.

### A) Cleaning / Deburring Cycle – plastic or ceramic media (fine or medium)

- 1. Fill bowl approximately ¾ full with media with ratio to be a minimum 7 parts media to 1 part metal to minimise part-to-part contact (usually approx. 2 pounds or 900 grams)
- 2. Add metal parts evenly throughout total mass to be about ½ inch from top of bowl
- 3. Saturate mass with water, then drain off all water using the bowl lid to retain mass in the bowl. Remaining moisture should be sufficient
- 4. Secure bowl to the unit and place belt in the HIGH speed position
- 5. Turn unit on and operate for 10 to 15 minutes. Stop unit and remove the lid low suds or foam should be visible. If you have excess foam, try to pour off more water.
- 6. Replace lid and operate for further 45 to 60 minutes.
- 7. If desired results are not yet achieved, remove bowl and wash mass thoroughly. Rinse, drain and then repeat process.

When satisfactory results have been obtained, put a few drops of detergent (about 1 to 2 tablespoons for each ½ kg of mass) and run unit for 3 to 5 minutes. Remove mass from unit and wash thoroughly – separate parts from media and allow media to dry before storing for next job.

This stage should take about  $1\frac{1}{2}$  to 2 hours depending upon the burr condition of the parts.

8. To this mass, add approximately ¼ pound (approx 100 to 120 grams) of metal parts, 2 tablespoons of water and 1 teaspoon of cleaner cutting compound.

Note that the mass of media and parts should be about ½-1 inch (about 12-25mm) from the top of the bowl to get best cleaning results.

After the above cleaning/deburring cycle, and prior to the burnishing cycle, all parts and media must be thoroughly wash and rinsed free of compound and any contaminants which have been removed from the metal surfaces.

# B) Burnishing Cycle – porcelain media

- 1. To the clean mass of media and parts, add 2 tablespoons of water and approximately 1 teaspoon of burnishing compound.
- 2. Process time for this operation is usually 1 to 2 hours although longer time cycles can produce more brilliant finishes.

After the above burnishing cycle, and prior to the drying cycle, parts and media should be thoroughly washed and rinsed free of compound.

Alternatively, you may prefer to use stainless steel media for burnishing – use 1 to 2 kg on the fast speed setting with minimal water/compound.

#### WASH THOROUGHLY AND DRAIN

# C) Drying Cycle

Parts may also be dried in the Gy-Roc unit using ground corn cob or walnut shell. Care should be taken in this operation so that the parts do not impinge upon each other by filling the bowl almost full of drying media and running at low speed while gently dropping the parts into the mass.

Continue running at low speed for about 15 to 30 minutes or until parts are dry to the touch.

#### **WARNINGS:**

- Do not use excessive amount of water as it can cause splashing, resulting in ruined bearings and burned out motor. Please ensure that the lid is snapped on tight before operating the
- When running lightweight media, do not run the machine empty or with a half-filled bowl, particularly on high speed as this can cause the springs to break. Make sure load is balanced & circulating well when operating.
- Make sure there is a gap between the motor and surface for air circulation do not rest on thick carpet so that feet sink in and air flow is restricted to motor (can cause overheating).
- Removing the belt from the pulley when machine is not in operation will greatly extend the life of the belt. Select machine speed by fitting belt to the high or low speed groove on the pulley.

#### Manufacturer

**TAGIT** PO Box 1534 San Juan Capistrano, CA 92675, USA Phone: 949.496.7742

### **Supplier**

Aussie Sapphire 2-1243 Emmaville Road Glen Innes NSW 2370, Australia www.aussiesapphire.com.au Phone: 1800 50 21 40