Tools & Parts: Glassdance (1)

#10 standard washers: nylon, brass, and stainless steel.

000-beveled Danco plumber washers.

Stainless steel 8-32 × ⅛ in. socket head set screws and one hex key wrench; for fastening inverted sprocket hubs against the aluminum tubes that I epoxied into the inner races of the ball bearing panel assemblies.

10-24 zinc plated coupling nuts — with 5⁄16 in. width across the flats — sawed in half and faced on a lathe.

#10 × 1 in. stainless steel fender washers and stainless steel 10-24 nuts.

Wood slivers for adjusting wobbling glasses. See: Glassdance_Components_Manual-1.pdf, p. 3 and pp. 23-25.

41 aluminum glass stem tubes with machined 7⁄16-14 threads and bonded glass stem sleeves with 0.490 in. OD. See: Glassdance_MachiningGlassStemTubes_Manual-3.pdf.

7 aluminum tubes: 0.500 in. OD × 0.402 in. ID × 3 5⁄32 in. (in blue layout fluid) for machining glass stem sleeves. McMaster-Carr #9056K65.

7 machined aluminum glass stem sleeves. Slide these loose sleeves over the 7⁄16-14 glass stem threads to temporarily support the glasses while rotating them on the aluminum stem roller. See: InstrumentBuilding_JigsExtraParts.pdf and Glassdance_Components_Manual-1.pdf, p. 23.

Glassdance (2)

19 pan-head Phillips machine screw assemblies with painted fender washers and bonded nuts. Bonding Agent: Loctite #271.

(1) 10-24 × 5 in. *fully threaded* stainless steel machine screws.
(2) #10 × 1 in. stainless steel fender washers.
(3) 10-24 stainless steel nuts.

In the foreground, two unpainted 10-24 × 5 in. *fully threaded* stainless steel machine screws with bonded and rounded nuts for heads. I made these with standard threaded rods and nuts. A *safe* installation of the glasses with these machine screws does not require — should not require — a Phillips screwdriver inside the glasses.

See: Glassdance_Components_Manual-1.pdf, pp. 7–8 and p. 10.

16 pan-head Phillips machine screw assemblies with unpainted fender washers and bonded nuts.

2 matching $^{11}/_{16}$ in. wrenches for tightening and loosening $^{7}/_{16}$-14 aluminum front primary nuts and front jam nuts.
2 matching $^{5}/_{16}$ in. wrenches for tightening and loosening 10-24 zinc plated back primary nuts and back jam nuts.

See: Glassdance_Components_Manual-1.pdf, pp. 12–14.

Glassdance (3)

Assemblies bonded with SureHold Super Glue: (1) stainless steel washers 7/16 in. (0.469) ID × 1 in. (0.922) ID × 0.051 thick,
(2) neoprene washers 1/2 in. ID × 1 1/16 in. OD × 0.108 in. thick.

7/16-14 aluminum nuts, 3/8 in. thick.

7/16-14 aluminum jam nuts, faced on a lathe to 1/4 in. thick.

Dow-Corning #55 o-ring grease.

Silicone tubing liners 1/2 in. ID × 3/4 in. OD, 1/8 in. wall thickness. Lengths: 29 mm, 30 mm, 31 mm, and 32 mm.
Packed in lubricant: Johnson's Baby Powder.

Flexible 5/8 in. motor to drive shaft coupling. (Another spare located in soundproof motor box.)

Assemblies: Idler sprockets with their hubs and socket head set screws inside aluminum ball bearing tubes.
For testing the fit and lubrication of silicone liner tubes and aluminum glass stem tubes.

Glassdance (4)

Disassembled glass holder jig.

Lathe and vice jigs.

Extra idler sprockets.

Bull's eye leveling jig for lapping machine.

Diamond Glass Cutting Tools:

¼ in. diamond core drill with inlet connection to a submersible aquarium water pump.

3 diamond coated countersinks.

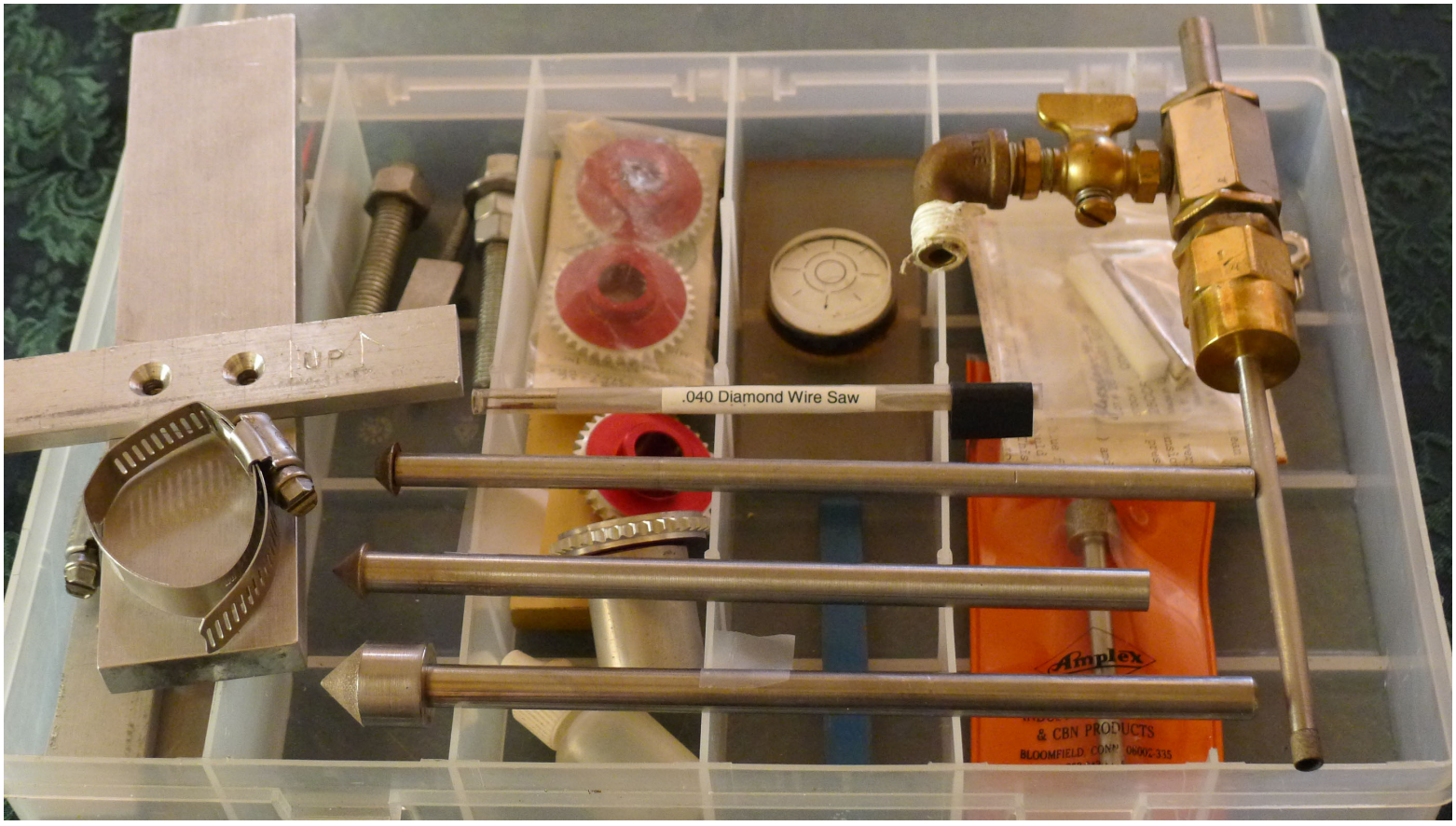
3 @ 0.040 in. diamond wire saws.

2 diamond coated files.

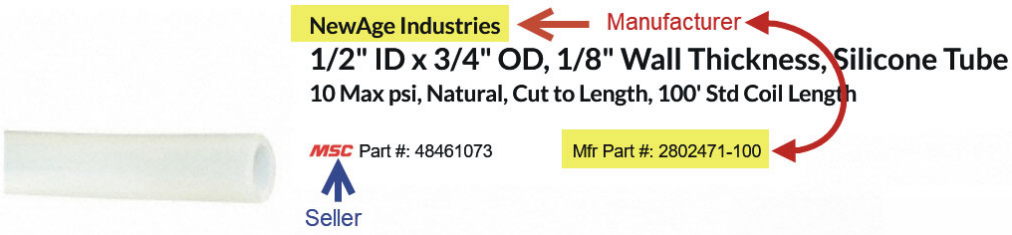
3 small diamond coated tools; not used.

Instructions and tools for splicing the blade of the Gryphon Corporation diamond band saw.

Extra white Teflon guides for the blade of the diamond band saw.



Glassdance (5)



Hardness: 50 Shore A

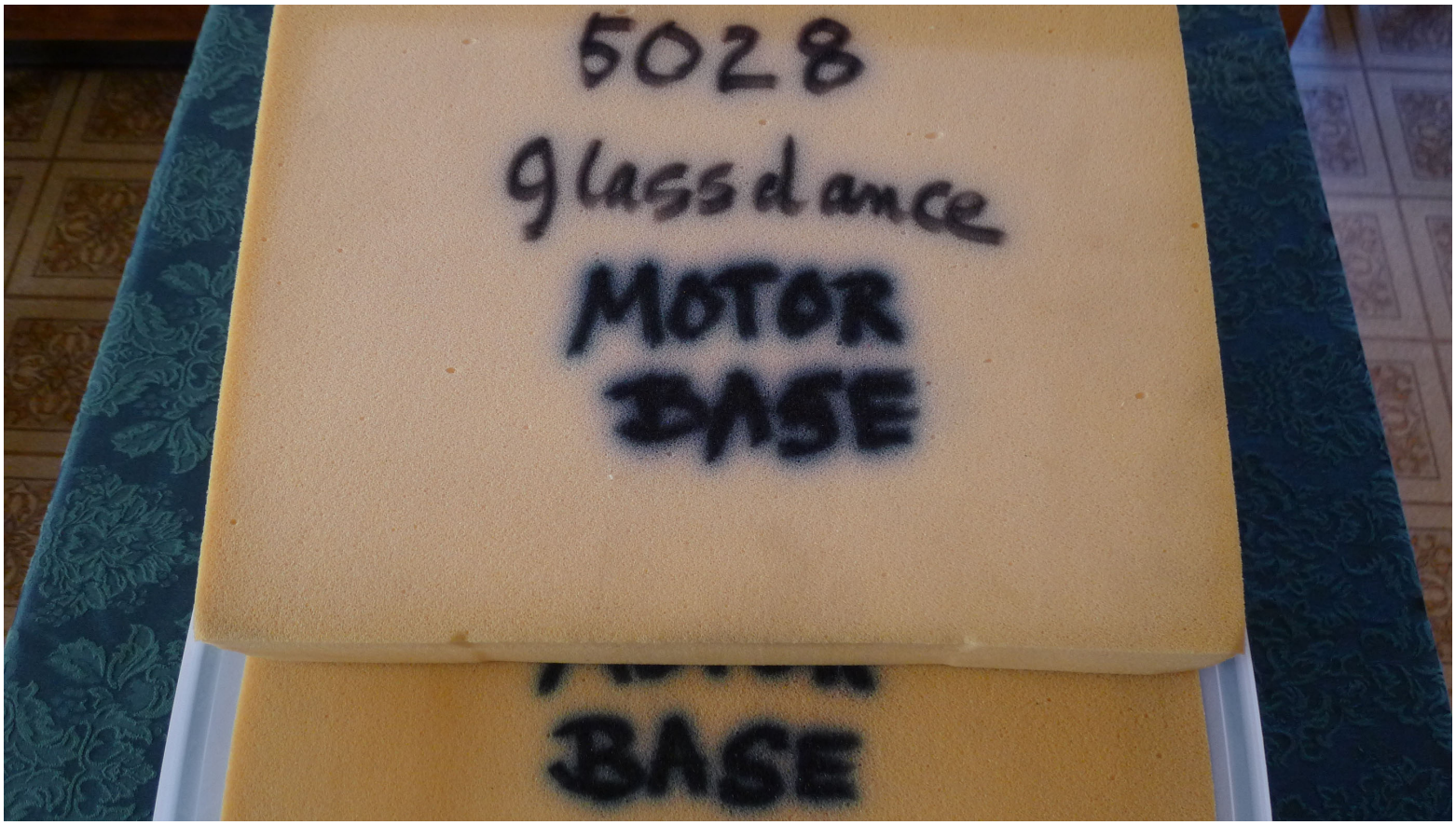
Replaced disintegrated rubber tubing with silicone tubing in 2018.

Ceramic posts for hanging glasses upside down in annealing kiln.

Glassdance (6)

Two Spare Foam #5028 Bases.

For the Right Angle Gearmotor. Bodine Electric Company, Model Number 587.



Glassdance (7)

Mobile SHC 630 Gear Oil

For the Right Angle Gearmotor. Bodine Electric Company, Model Number 587.

Use only Mobile SHC 630 Gear Oil. Do not overfill! Fill only to the drain hole, which is located $1\frac{5}{16}$ in. from the bottom of the gearbox. The drain hole has a metal screw plug and neoprene washer. Allow excess gear oil to flow out before replacing plug and washer. Excessive hydraulic pressure from too much oil can destroy the motor.

See: Glassdance_RightAngleGearmotor_Manual-2.pdf

One syringe for adding small amounts of oil.

One vintage Coleman aluminum funnel for oil changes.

Glassdance (8)

Machined Sasaki "Isabelle" Crystal Brandy Snifters

One box contains 23 glasses, and the other, 16 glasses. All glasses have been drilled, annealed, and fitted with threaded aluminum glass stem tubes. All are in various stages of having been cut and ground.

(See Glassdance_Components_Manual-1.pdf, Section 4.)

For many reasons, I did not initially mount them on the Glassdance. However, from this stock, I replaced two glasses; one in 1986 and the other in 2013. So, their full acoustical and musical potential has yet to be determined.

Glassdance (9)

Brand New Sasaki “Isabelle” Crystal Brandy Snifters

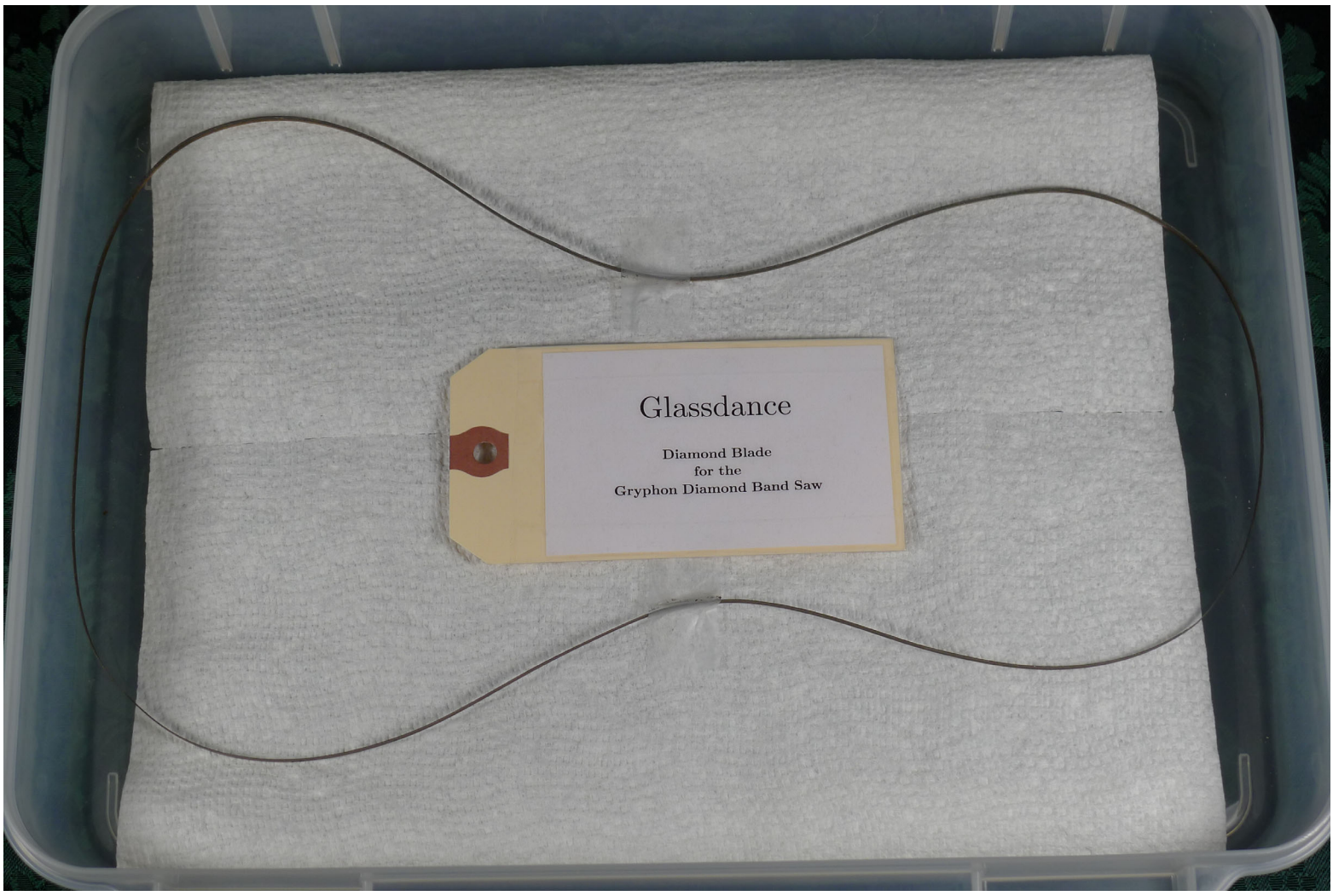
The large box on the bottom contains 32 glasses, and the small box on top, 16 glasses. All 48 glasses are in their original condition. They were contributed by Mr. Sasaki to the Chrysalis Foundation in 1985.

Glassdance (10)

Diamond Blade for the Gryphon Diamond Band Saw

See: Glassdance_Components_Manual-1.pdf, p. 21.

See: http://www.gryphoncorp.com/page/



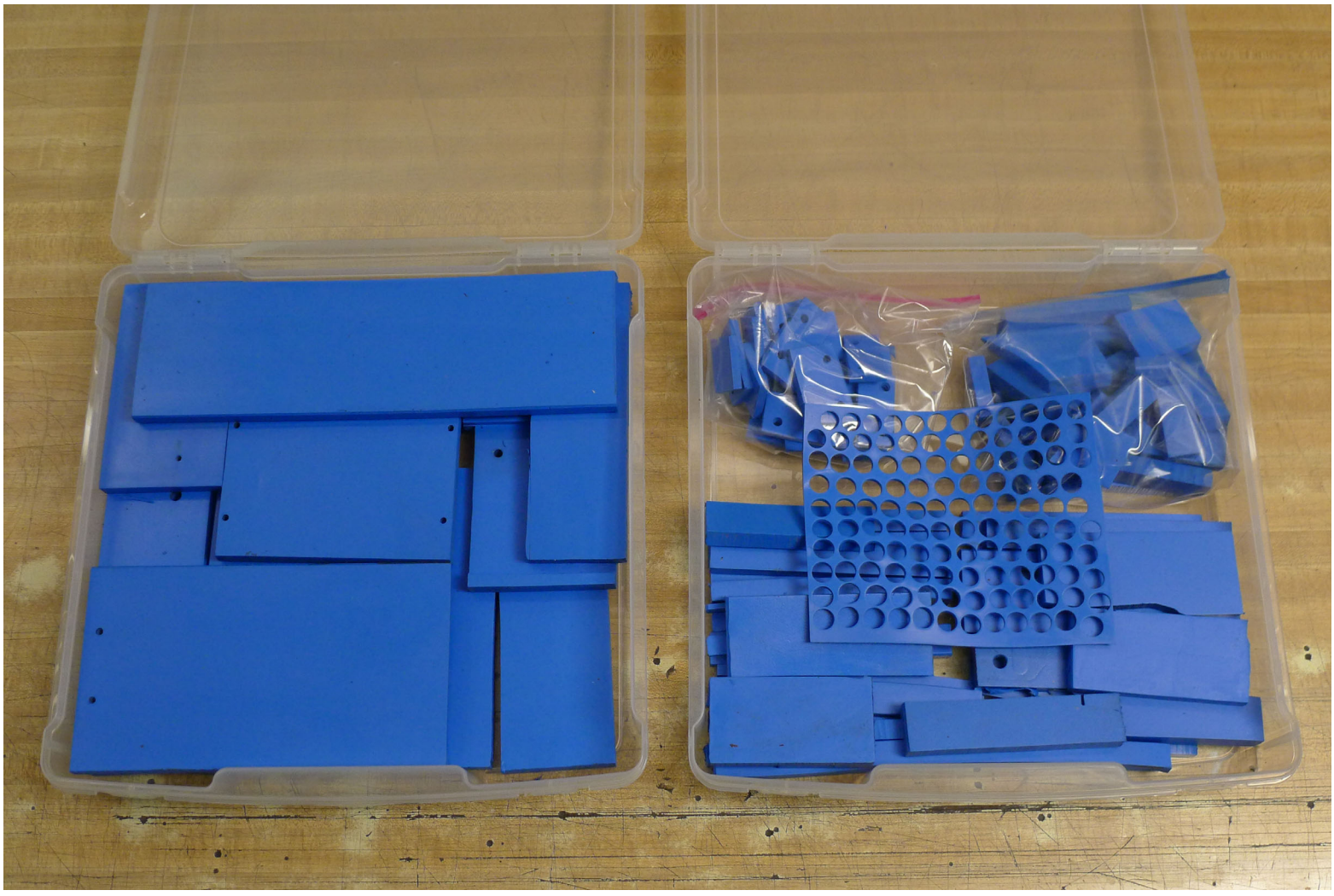
E-A-R™ ISODAMP™ C-1002

Glassdance, Canons, and String Winder

E-A-R ISODAMP C-1002 is a thermoplastic material designed to absorb vibration and dampen — reduce or eliminate — structure-borne sound and noise.

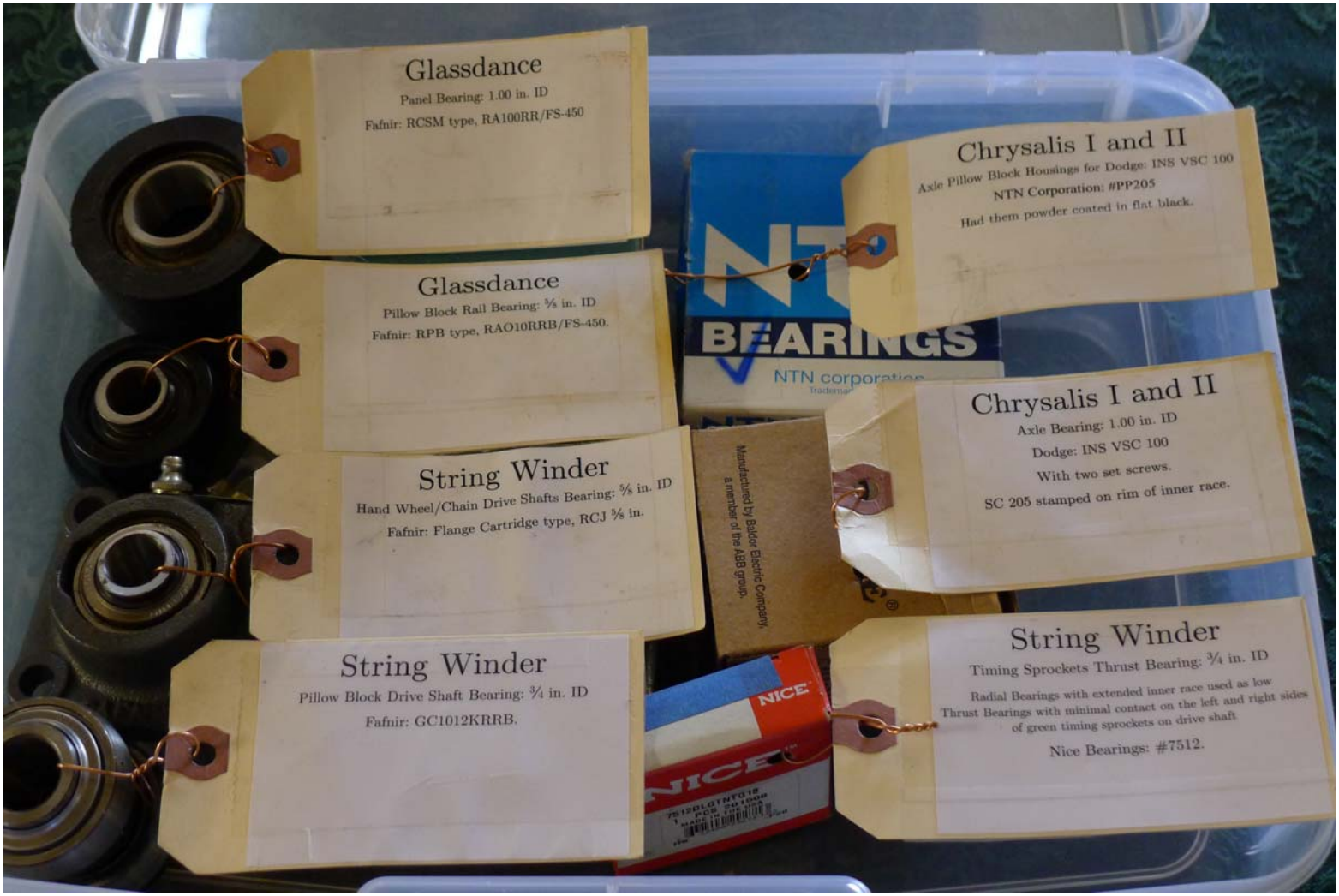
https://www.rathbun.com/e-a-r/damping-isolation#1

I also use this vibration damping material under the machinery mounts of my band saw, drill press, milling machine, and air compressor.



Ball Bearings

Chrysalises, Glassdance, and String Winder



W.M. Berg Catalogs (1)

Glassdance & String Winder Components

Four small old catalogs with color pages.

As of — September 2019 — the sales department still accepts legacy part numbers.

W.M. Berg Catalogs (2)

Glassdance & String Winder Components

One large recent catalog with black and white pages.