

String Winder Tools & Parts (1)

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Four 8-32 \times $\frac{3}{8}$ in. custom machined screws for fastening the drive shaft keys to the hubs of the *lower* timing pulleys. Round head diameters reduced on a lathe.

Two blue E-A-R ISODAMP C-1002 thermoplastic brake pads. See: [StringWinder_Ball-Thrust-Bearings_Manual-2.pdf](#)

Five Bussmann Fuses: ABC-2 250V for the DC Gearmotor Reversible Speed Control (SCR): [Legacy Grainger: #6X165](#).

Four Snap Action Switches: [Omron: #A-20GV-B7-K](#), [Grainger: #6X284](#).

See: [StringWinder_ElectricalComponents_Manual-4.pdf](#), p. 7, p. 14, respectively.

One $\frac{3}{8}$ in. universal joint socket tool for the long chain tension nut.

See: [StringWinder_Long-Chain-Tension-Nut_Manual-3.pdf](#), p. 5.

String making tools: wire cutters and needle nose pliers.

For the bronze wrap wire spools: Belleville spring tension washers and needle thrust bearing washers.

For the bronze wrap wire spools: One extra needle thrust bearing.

Five white high-temperature PTFE buffer washers for placing between the ball-thrust bearings and the lower timing pulleys.

Brass balls with 0.140 in. diameter holes to fit the copper plated hitch pins of the Bass Canon.

Bag of brass balls with undersized holes.



String Winder (2)

Two Green Timing Belts, W.M. Berg: #50TB-70, for the Green Timing Pulleys, W.M. Berg: #50TP10-26.
See: https://www.chrysalis-foundation.org/wp-content/uploads/StringWinder_Operation_Manual-1.pdf, p. 9.

Six linear bearing support rail sections.

Two machined aluminum bushings with $\frac{3}{4}$ in. ID's, and two aluminum shafts with $\frac{3}{4}$ in. OD's. Place a matched pair of ball bearing plates on the workbench, insert the bushings into the drive shaft holes, and slide the shafts through the bushings. With this parallel alignment of the plates, determine the locations of the ball-thrust bearings, the E-A-R brake pads, and the long chain tension nut. See: [StringWinder_Long-Chain-Tension-Nut_Manual-3.pdf](#).

One $\frac{5}{32}$ in. ball-end hex driver for two $10-24 \times \frac{5}{8}$ in. black oxide socket head cap screws used to fasten the cover of the Furnas Drum Switch #R44. Due to a severe lack of space, these two screws are very difficult to install with conventional screwdrivers. However, the ball-end of the hex driver provides a wide clearance angle for turning the cap screws. To avoid stripping threads, make sure that the cap screws are in straight alignment with the threaded holes.
See: [StringWinder_ElectricalComponents_Manual-4.pdf](#), p. 4.



String Winder (3)

Seven phosphor bronze (CDA 510) spools of wrap wire, and five sets of spool posts.

See: https://www.chrysalis-foundation.org/wp-content/uploads/StringWinder_Operation_Manual-1.pdf, p. 2.

See: https://www.chrysalis-foundation.org/wp-content/uploads/StringWinder_Long-Chain-Tension-Nut_Manual-3.pdf, pp. 1–2.

Phosphor bronze wrap wire diameters:

0.006 in.

0.007 in. (two spools)

0.008 in.

0.009 in.

0.010 in.

0.011 in.

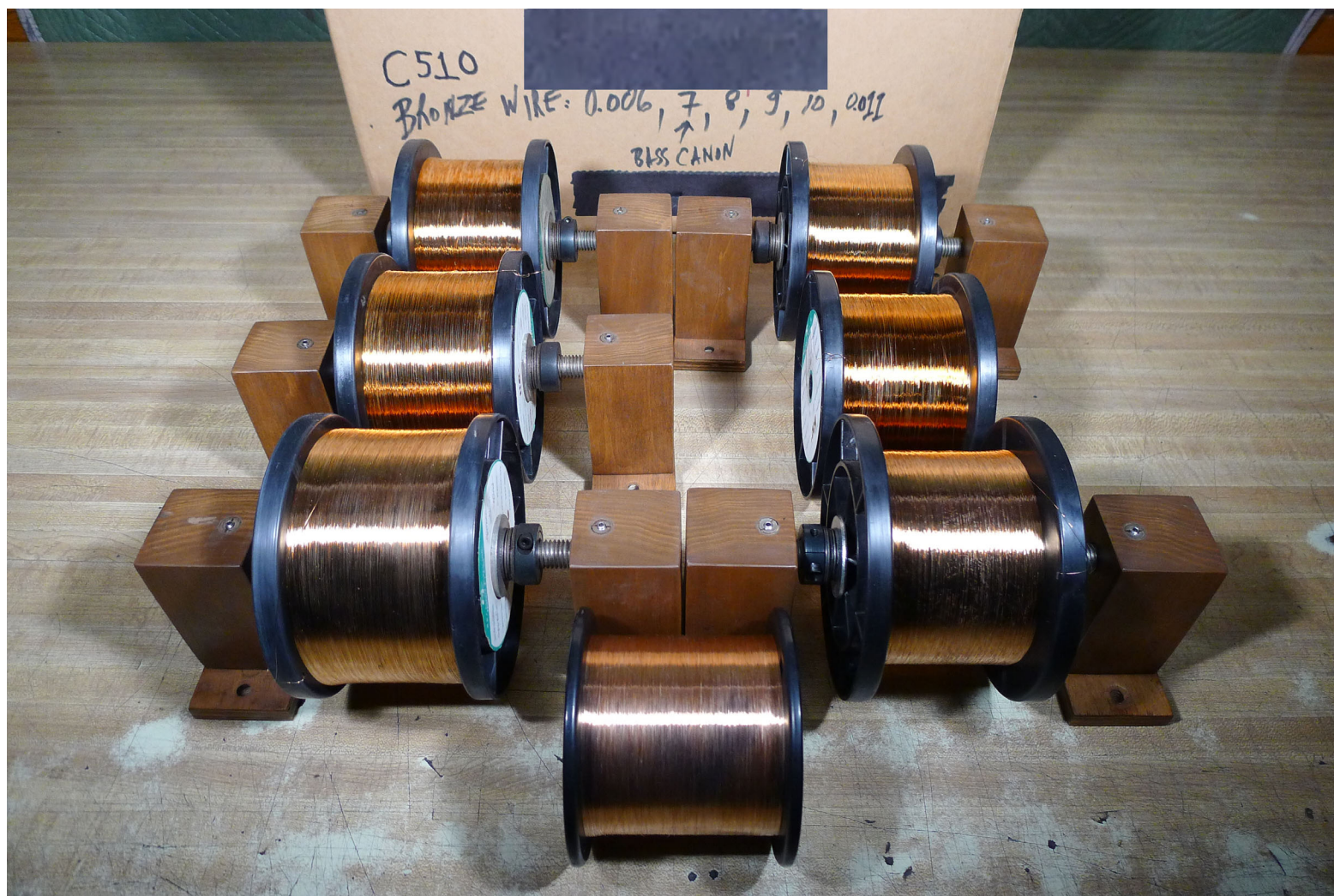
Currently, the Bass Canon strings consist of the following materials:

Steel music wire core: 0.022 in.

Phosphor bronze wrap wire: 0.007 in. \times 2 = 0.014 in.

Nylon fiber bedding: 0.002 in. \times 4 = 0.008 in.

Grand total diameter: 0.022 in. + 0.014 in. + 0.008 in. = 0.044 in.



Canons (6)

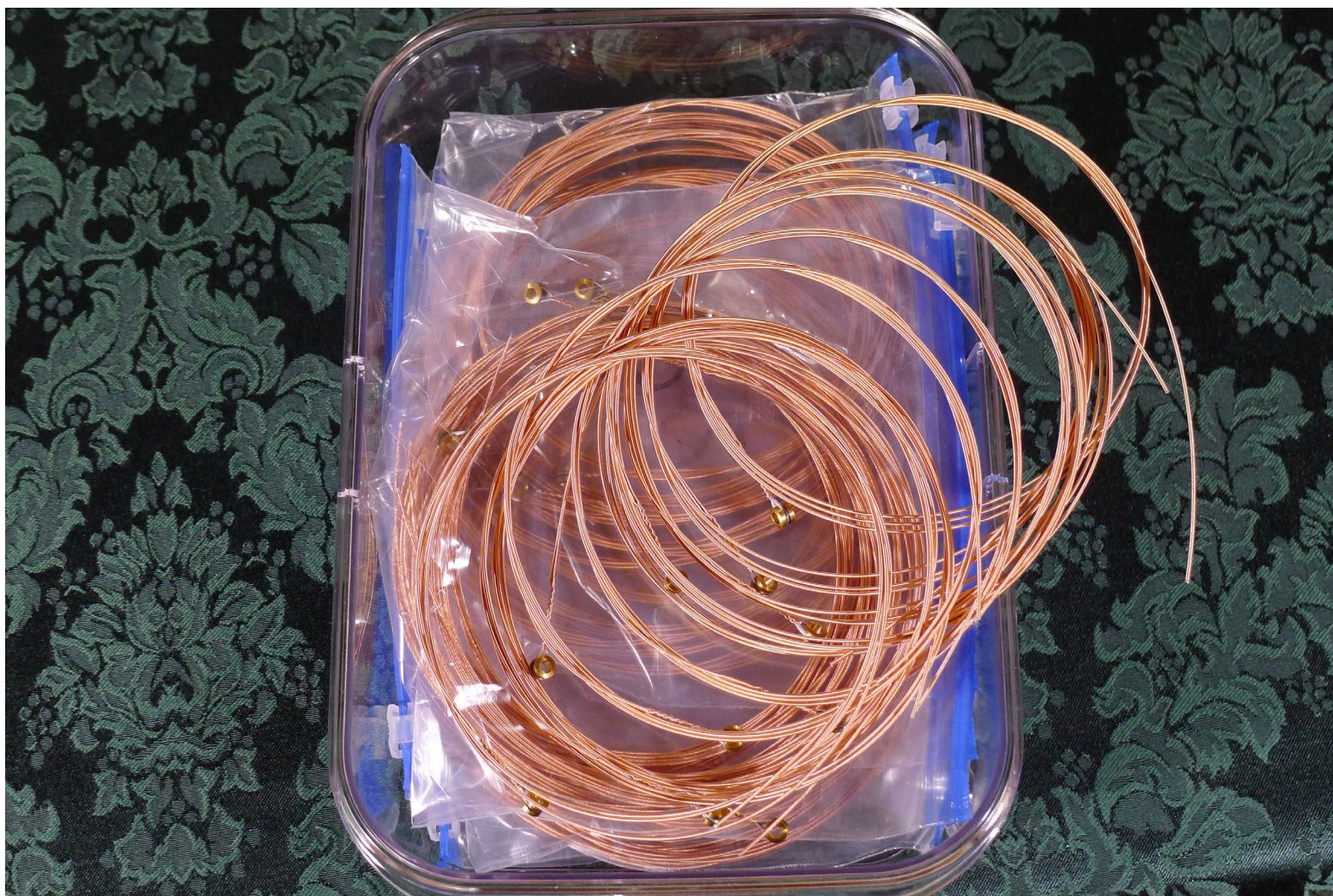
Bass Canon Wound Strings

See: [Canons_ToolsParts.pdf](#)

March 2023

Bass Canon wound strings backup set. 72 strings + 8 extra strings = 80 strings total.
Strings stored in eight zip lock plastic bags inside a Rubbermaid Brilliance No. 2024351 airtight container.

Wound string diameter dimensions: 0.022 in. music wire core; 0.007 in. phosphor bronze wrap $\times 2 = 0.014$ in.;
0.002 in. nylon fiber bedding $\times 4 = 0.008$ in. Grand total diameter: 0.022 in. + 0.014 in. + 0.008 in. = 0.044 in.



See: [String Winder](#)

See: [StringWinder_Operation_Manual-1.pdf](#)

See: [BassCanon_Customized_Looping_Machine_Manual.pdf](#)

E-A-R™ ISODAMP™ C-1002

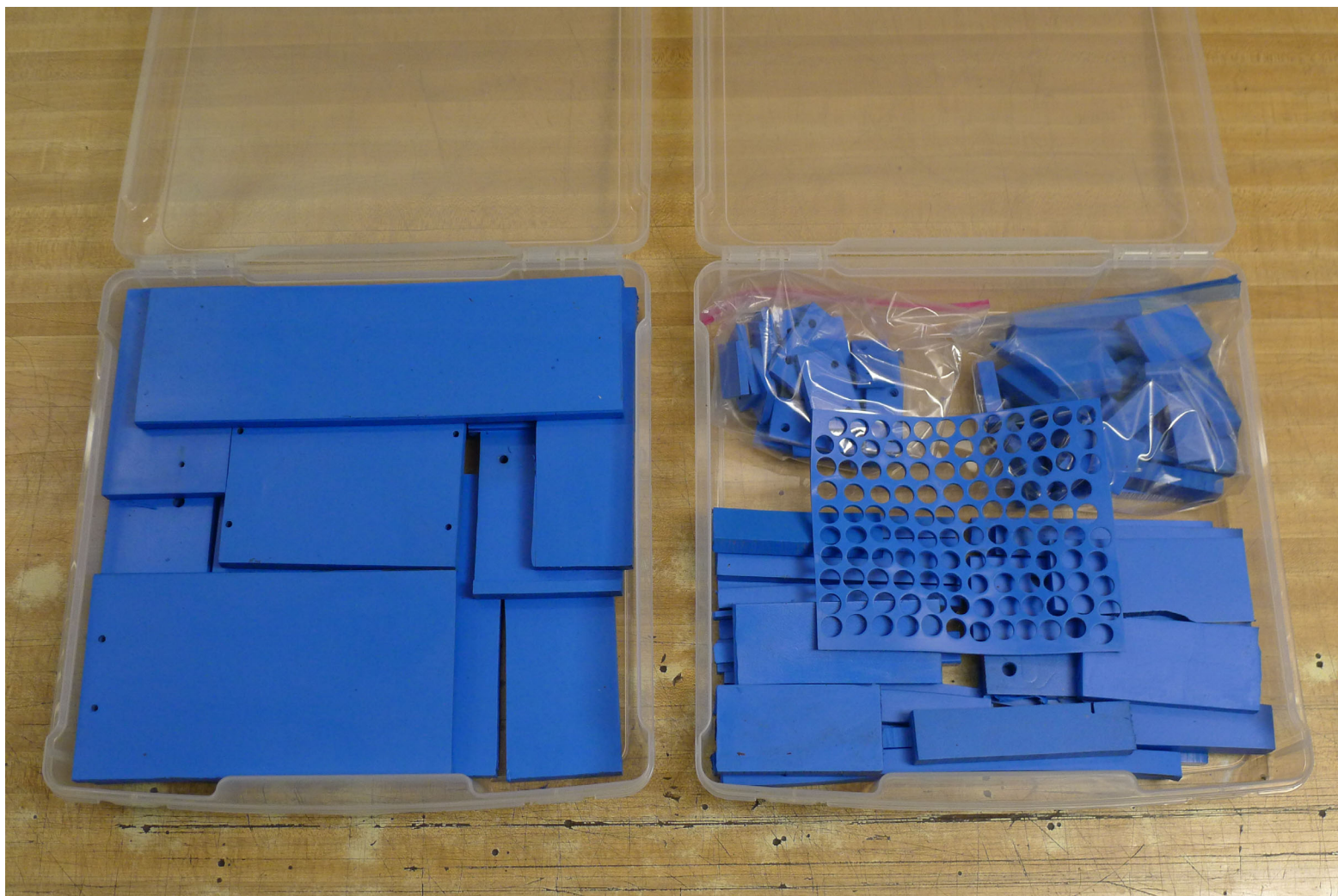
Glassdance, Canons, and String Winder

Two Boxes

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

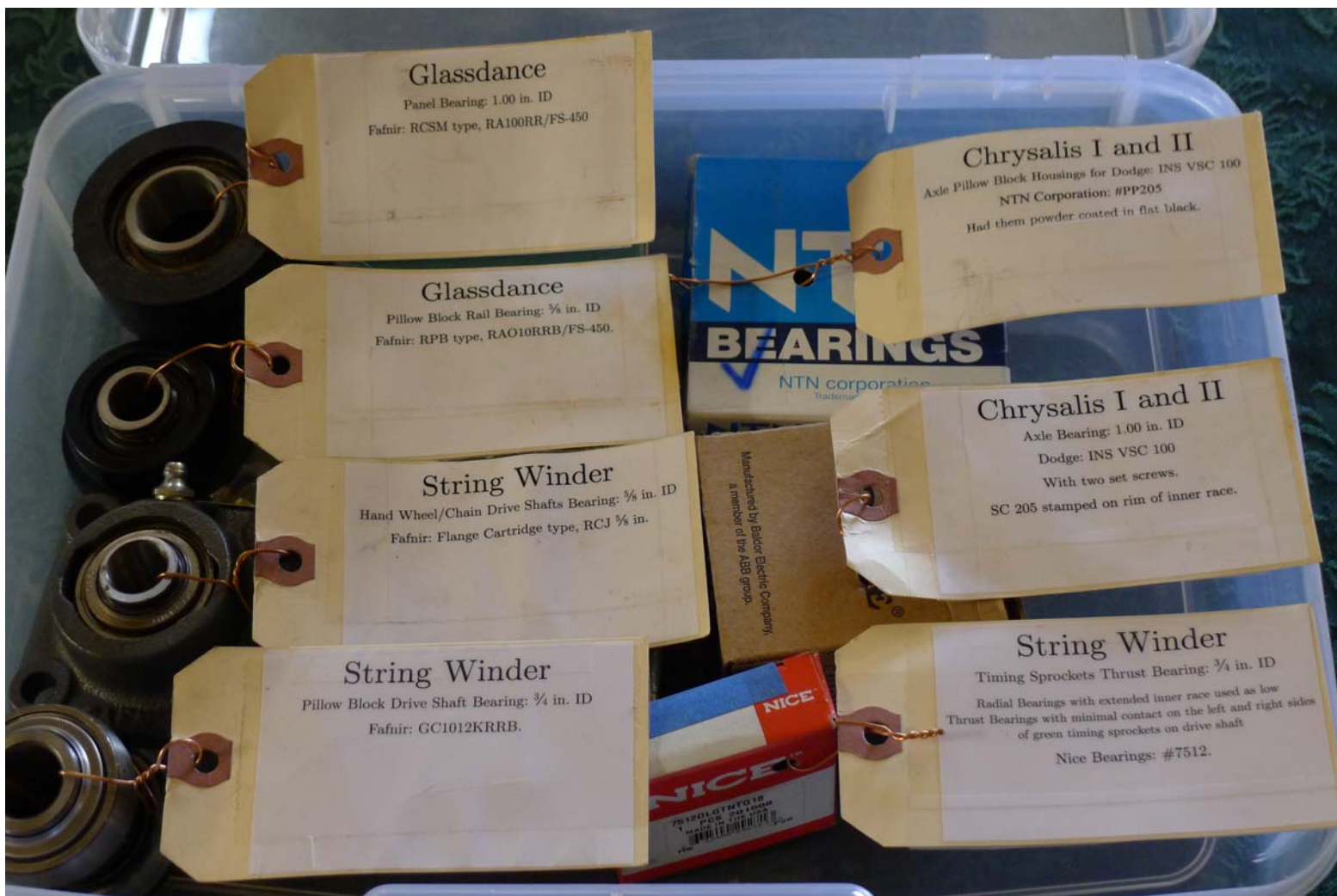
<https://www.rathbun.com/e-a-r/damping-isolation#1>

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



Nut Plates & Furniture Foot Levelers

Bass Marimba, String Winder, Diamond Marimbas

Long Bass Marimba nut plates.

Long String Winder nut plates.

Short nut plates (not used on instruments).

1/2-13 left hand nuts welded to plates.

1/2-13 right hand nuts welded to plates.

For Diamond Marimbas I and II, *unmachined* and *unfinished* furniture foot levelers.



Felts

Diamond Marimbas, Bass Marimba, String Winder

Brown felt from the American Piano Supply Co; they are no longer in business. I was unable to find this material anywhere. American Piano described it as, “Steinway Style Stringing Cloth, #33894NS — Brown.” This is a highly durable felt that I used to cover two mallet shelves on the Bass Marimba.

From left to right, all Schaff Piano Supply Co. products.

3 in. wide red understringing felt used to line the hose clamps that hold the $\frac{1}{4}$ -wavelength resonators on the Diamond Marimbas and the Bass Marimba. I also used this felt as cushion material on the cavity resonator brackets of the Bass Marimba, and on the ball bearing plates of the String Winder. This is also an excellent material for hand polishing wood, metal, and/or Delrin parts found on most instruments. Schaff #302R

1 $\frac{1}{8}$ in. wide red understringing felt for heavy Bass Marimba mallets. Schaff #2335

1 $\frac{1}{2}$ in. wide — thick — green backrail cloth for heavy Bass Marimba mallets: Schaff #322A

1 in. wide red pressure bar felt for heavy Bass Marimba mallets. Schaff #950

1 $\frac{1}{2}$ in. wide — medium thick — green backrail cloth for Bass Marimba mallets and resonator plugs. Schaff #322B

2 in. wide red Steinway style stringing cloth for extra long custom music stand shelves. Schaff #2331R



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.

