Chrysalises (1)

Chrysalis I

Polished and unpolished Delrin nuts (same as Chrysalis II).

1/16 in. × 1/2 in. hitch pins (same as Chrysalis II).

Polished and coated oval head 1/4-20 brass machine screws (same as Chrysalis II).

8-32 socket head set screws (same as Chrysalis II).

#4 × 3/8 in. stainless steel pan head tuning gear mounting screws (same as Chrysalis II).

Color-coded buttons (same as Chrysalis II).

Polished and coated brass bracket wood screws.

Machined 1/4-20 stainless steel spacer machine screws with 4-40 socket head cap screws used to fasten the buttons.

Machined 1/4-20 stainless steel coupling nuts.

Machined 1/4-20 stainless steel threaded rods, nuts and washers.

1/8 in. × 5/8 in. nut pins.

Aluminum ferrules and Lexan shields.

Various fasteners: screws, nuts, and washers; and two different kinds of polished Delrin flanges.

Chrysalises (2)

Chrysalis II

Two Delrin tubes used to align the axle through two soundboard center holes during assembly.

“Extruded Brass” by Prismatic Powders bridge color test pieces.

Polished and unpolished Delrin nuts (same as Chrysalis I).

1⁄16 in. × 1⁄2 in. hitch pins (same as Chrysalis I).

Polished and coated oval head 1⁄4-20 brass machine screws (same as Chrysalis I).

8-32 socket head set screws (same as Chrysalis I).

Color-coded buttons (same as Chrysalis I).

Polished and coated brass bracket wood screws.

Machined 1⁄4-20 stainless steel spacer machine screws with 4-40 socket head cap screws used to fasten the buttons.

Machined 1⁄4-20 stainless steel coupling nuts.

Machined 1⁄4-20 stainless steel threaded rods, nuts and washers.

1⁄8 in. × 7⁄8 in. nut pins.

Aluminum ferrules and Lexan shields.

Various fasteners: screws, nuts, and washers; and polished and unpolished Delrin flanges.

Chrysalises (3)

Chrysalis I & II Gears and Tools

Grover tuning gears: #V97-18NA. 12 extra gears for the Left and Right Soundboards.

Clear "Super Lube" for lubricating tuning gear sprockets and tuning gear posts inside the ferrules.

Stringing tools:

Red piano understringing felt to prevent scratching the angled surfaces of bridge Rings B.

Custom Delrin stringing tool to compress coils at tuning gears and to straighten hitch pins at the bridges.

Felt-lined tuning gear crank.

Small precision pliers with dark blue handles.

Small wire cutters with light blue handles.

Modified and standard ratcheting and plain wrenches for various internal supports screw nuts.

Custom black slotted screwdriver for the brass screws of the 16 soundboard brackets.

Custom yellow Phillips screwdriver for tuning gear mounting screws.

Modified clear "screw starter" tool for polishing Delrin nuts on wet/dry paper.

Red $\frac{3}{32}$ in. ball-end hex driver for the 4-40 socket head cap screws that fasten the color-coded buttons.

Custom wood clamp for polishing Delrin nuts at buffing wheel.

Chrysalises (4)

Chrysalis I & II Jigs and Extras

Chrysalis I nut pin location jig.

Chrysalis I and II lathe arbor for turning Lexan shields.

Chrysalis I and II short axle with center point for locating bearings.

Chrysalis I and II experimental ferrules.

Chrysalis I and II extra rosewood blocks and aluminum flanges.

Chrysalis I and II four screw assemblies for picking up sprayed soundboards.

Chrysalis II soundboard center hole location plug with handle.

Chrysalis I and II Lexan shield drilling and milling jig.

Chrysalis I snap ring for locating flanges around Delrin spacers.

Chrysalises and Canons Music Wire

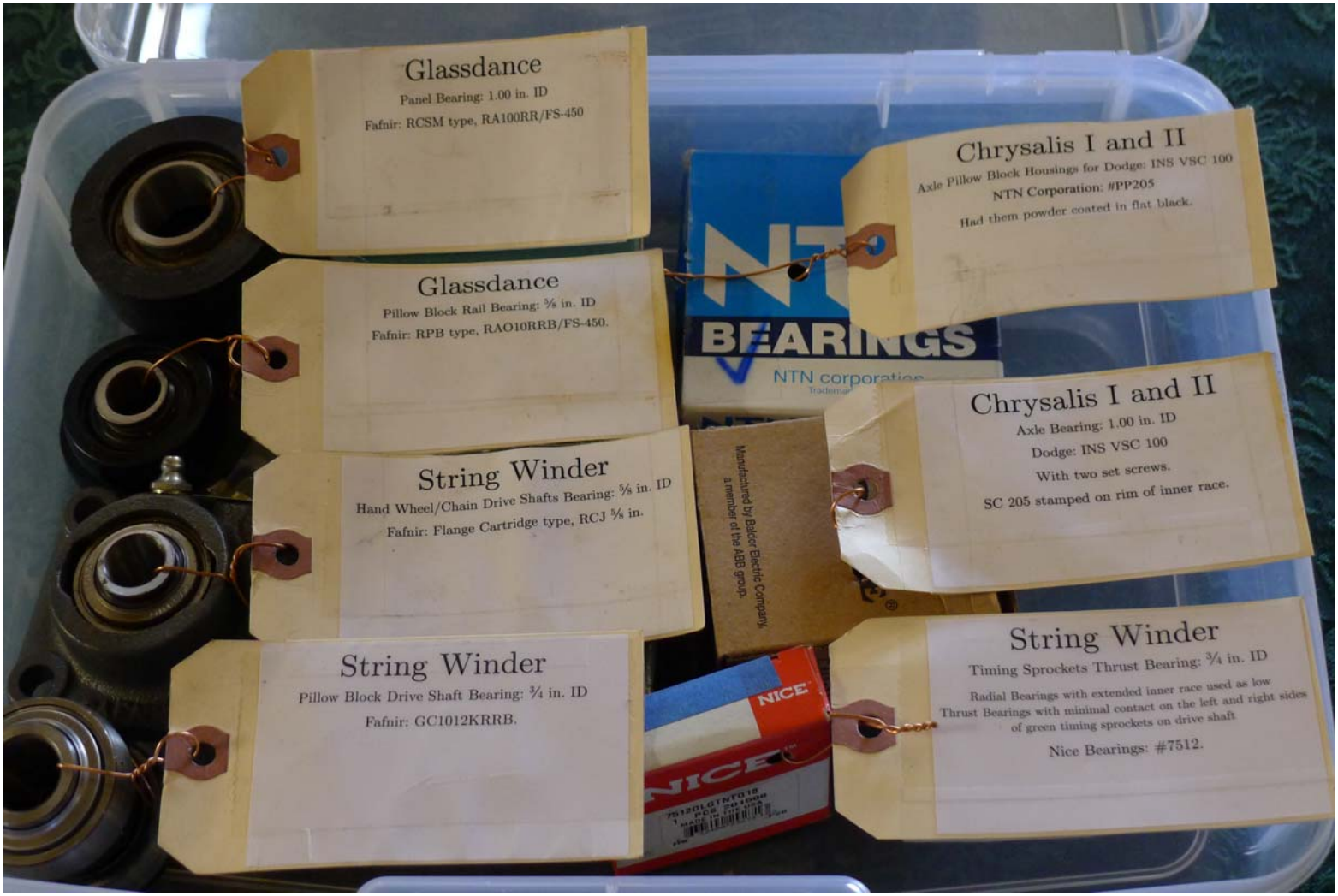
Röslau music wire sizes #6: 0.016 in., #8: 0.020 in., #9: 0.022 in., and #10: 0.024 in.

Loop-making machine for plain strings: Chrysalis I and II, Harmonic/Melodic Canon, and Just Keys.

Loop-making machine for wound strings with brass balls: Bass Canon.

Ball Bearings

Chrysalises, Glassdance, and String Winder



Felts

Chrysalises, 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 the mallet shelves on the Bass Marimba, and the brake blocks of both Chrysalises.

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 ¼-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

1⅛ in. wide red understringing felt for heavy Bass Marimba mallets. Schaff #2335

1½ 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

1½ 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