

Joe Garrett's Toolkit Inventory

1. Tuning kit

The Tuning Kit contains only those tools necessary for tuning, inspection, minor repairs, minor voicing, & minor regulation. There are NO parts in this kit ... EVER! The Tuning Kit contains:

- My regular tuning hammer, the Hale Rosewood/adjustable (which I never adjust!), with many combinations of heads and tips. Also, a lightweight Ford Extension Lever, fitted with a thin-wall tip.
- 6 wide rubber mutes, temperament strips, Papp's Stick mute, two thin wire handled mutes, large/medium/small combination handle, screw driver bits, etc.
- My SAT II in its case, with the charger, foot switch, & case shoulder strap.
- Also in the SAT case, I carry two Mahaffey impact hammers (one with a #2 tip, and one with a #3 tip) for pitch raising some of the nasty stuff I work on. I find that string breakage is reduced with impact hammers. And, of course, these have been modified. (The hammer with the #2 tip was the last one Mahaffey ever made. It was so poorly threaded that I had to cut off an inch or two to get it all to work right. I found that the hammer worked more efficiently with that shorter length of stem! <G> More balanced, in my opinion. Also, I made wooden "sleeves" from an exotic wood, because the stem was difficult to grasp in the proper position. I modified the #3 Tip one exactly the same, so I had a "matching pair".)
- A Renner "Chopstick" and a variable-angle voicing tool with three needles, for minor touch-up voicing.
- A recycled small Elmer's white glue bottle, filled with regular Titebond. I've found that it's the safest type container to be carried in my Tuning Kit (least amount of "oh darns").
- A couple of pill bottles with round tooth picks/strips of walnut veneer.
- A bungee cord w/hooks on it, for holding the stickers of a spinet, when removing same.
- My own brass "Magic Line Tool" -- a quick way of measuring to see if the action is set up right. It is put into action when a customer complains of things like "heavy touch" or "poor repetition". It leaves one hand free to stroke the key, etc.
- My Key Pin Straightener, also brass, made to slide over an oval key pin and give you a visual as to whether the key pin is straight. This is done before the key easing is done and after the bushings have been replaced.
- Pierce Piano Atlas; Portable Office; "G" Piano Works Repair Labor Guide; Temperature/Humidity Gauge;

Surgical Booties; Digital Calipers; OMTA Directory, and a copy of Phillip Gurlick's book (The Piano: A Piano Technician's Guide for the Piano Owner, from the Potter Press), each time I visit a new client.

- Finally, for my Square Grand and Bird-Cage work, I have a collection of "antique" hammers (mostly very olde Hale hammers and tips). This special tuning kit gets me from size #1 (No, not #1/0), to size #7 Tuning pins, also including the dreaded "Oval" tuning pins.

2. Voicing kit

In my Voicing Kit, I carry:

- 6 or 8 voicing tools:
 - One with one long needle.
 - Two with two needles. (One with longer needles than the other.)
 - Three tools with three needles of various lengths. (One is the Yamaha voicing tool, which I've always liked.)
 - One with 4 needles, medium length.
 - And finally, my Renner "chopstick", that is truly a work of art! <G>
- Various containers of elixirs for the "chemical warfare":
 - Denatured alcohol,
 - Dissolved Key top material,
 - Water clear lacquer,
 - Acetone,
 - Sanding sealer, and
 - Appropriate mixing bottles with spill-proof caps.
- For grands: a couple of voicing blocks for firm support.
- For uprights: a piece of 1/4" plywood (rosewood-veneered), about 8" wide and 6" deep, to support the hammers.
- My personally designed hammer shank support tool for surfacing Upright hammers.
- A modified Steinway hammer surfacing block for Grands.
- Two modified sandpaper files, each with both 60 grit and 120 grit.
- Extra pre-cut sanding strips, for the paddles.
- Several backed sheets of sandpaper strips, (3" wide, various grades), for "shoe shining".
- Hammer iron w/rheostat for heat control.
- A bowl for water, and 2 old handkerchiefs for steaming.
- A piece of fire brick to set the iron on, so that it doesn't scorch the customer's possessions!

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- Eye droppers.
- Lots of paint brushes and wire brushes.
- An 8" x 16" piece of scrap string cover felt, to lay my tools on. (This is also what I wrap my voicing tools in, so that they don't get all boogered up in transit.)

3. Gorilla Kit (Major Repair/Regulation)

This kit contains every tool known to the world, that will allow you to do anything! It weighs in at 80+ lbs and is getting heavier every so often. Among other things, this contains:

- A pair of small hemostats.
- A Hale Speed Tuning Hammer, for those times when I'm dealing with "Accu-twist", super tight tuning pins.
- A Ford "Shorty" that is fixed with a thin wall tip, for those occasional close tuning pins, etc. This hammer is also very good for dealing with really loose pins, as it is much lighter than my other hammers.

4. Repinning kit

I don't 'compartmentalize the "Repinning kit" specifically; I keep it in my "Gorilla Kit", since many of these items are also used for other jobs. For repinning, I use:

- A set of Mannino's broach/reamers, in their cloth case. I modified them by sanding the handles flat and writing their sizes on the flats with a permanent fine "sharpie".
- Some tapered reamers and odd broaches for non-standard pinning situations.
- A Center Pin Holder/dispenser.
- A Hand Press center pin extractor/insertor.
- Small diagonal cutters (modified, ground flat so that they cut absolutely FLUSH).
- A pair of Center Pin Extractor Pliers for spinet Elbow work (which seems to be getting less and less<G>). (I do not use the Vagias types...hate them! I use Long Wood elbows.)
- A few strips of pre-tip sized bushing cloth and hide glue to install.
- The appropriate drill to clean out the glue/fuzz of the bushing hole.
- A counter sink, to make the bushing cloth slide through easier.
- A Steinway Teflon Bushing kit, which I have only used once in 30 years! However, it pays to be ready for the "unknown"<G>

5. Felt Kit

- A small sampling of every type of felt in every piano known to you. Also in this kit I have keyed kits (see Apsco catalogue), bridle straps, etc.

6. Woodworking kit

- This is a fairly large kit with various clamps, saws, chisels, wood, veneer, wood glue(s)....

7. Stringing kit

This contains all tools necessary to do Minor/Major String Replacement. It does NOT have any wire in it, except electrical copper wire for threading strings on. It contains:

- Measuring tools: down-bearing gauge(s), Micrometer, Machinist's rule;
- Various brass and steel punches, including a #3 nail set for bridge pins.
- Stringing braid of various colors;
- Soundboard buttons and other assorted things for fixing bridges.
- My converted "Student Hammer", which is light and has many different one-piece head/tip combinations.

8. Bass String kit

- ALL of the universal bass strings available from Schaff.

9. Plain Wire Kit

- All sizes of plain wire for pianos, harpsichords, etc.
- Brass spring wire, for duplicating something weird.

10. Hardware Kit

- All kinds of screws, nails, brads, lid pins, trap springs, trap hardware, yada yada.

11. Acrylikey Kit

- Everything needed to do in-the-field ivory repair/replacement. (If it's more than one or two, I prefer to do it in the shop. The darned stuff really stinks!)
- I have recently made an Air Evacuator, thanks to someone on the list, (sorry I forgot who.<G>) Works great and really impresses. This is also useful for CA applications.

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12. Glue kit

I have a soft-sided "lunch box" (made by Igloo, nice compact unit) to carry all my glues and lubricants in. This is easy to carry and stays upright, thus avoiding spillage. It also insulates against severe temperatures. In this container I carry a very small amount of each type of glue with me, on a regular basis.

The contents of the Glue Kit (all in a Medium Heavy Plastic Bag) are:

- Eileen's Tacky Glue, (actually it's real thick PVC-E that works almost like contact cement);
- A small bottle of Weldwood Contact Cement, (seldom used, but when ya need it, you need it!<G>);
- Small Bottle of Cold Hide Glue;
- Small bottle of Titebond III, (It's my major choice nowadays!<G>);
- "Chairlock", for joints that were originally put together with Hide glue and are difficult, if not impossible to separate for reglue, but are loose.);
- Teflon Powder;
- "TriFlow", (which is a penetrating oil with a polymer/teflon in suspension);
- Elmer's Slide-All, (A teflon powder in an Alcohol-base aerosol);
- Dry-Lube, (a Reardon product)
- a few generic Ivories and a few sharps;
- tongue depressors/stir sticks;
- plastic bags/cups.
- A small bottle of CA glue, with nitrile gloves, Vaseline, and De-Bonder. If there's a pinblock job, I take more CA glue. (I keep my main stash of CA glue in my 2nd/drinks refrigerator, where it lasts longer and has a propensity to leak, no matter!)
- Lacquer thinner, eye droppers, cups for cleaning tools in thinner, etc.
- I've learned not to carry that stuff in anything of value!<G>

13. Other Stuff

- I'm adding a really LARGE Plastic Pipe w/caps on both ends to keep my "clutter" of dampchasers, pedal rods, etc. in check. Also, I have a "load Separater",)(Harbor Freight), to keep all of this stuff from winding up in the front seat when emergency stops happen.<G>
- I've also added a cordless, 2 speed, (slow and slower), screwdriver/drill w/appropriate drill bits,

chuck/key; long screw bits from NAPA store, charger.

- Another new addition is my reel-up extension cord. (Sears or ??) This is great when the SAT needs charging in the middle of the tuning. (That should be added to Murphy's Laws!)
- Finally, I should say, my kits are always changing due to the different approaches that I keep doing.<G>