# Little Things

# Ryan Sauers 1/16/2006

#### **Tools**

- Cases
  - Platt electronics soft tool case. Nice little pockets with no pallet.
  - Big soft case with vacuum cleaner.
  - Backpack full of basics.
- Flashlight screwdriver
  - Extendible magnetic pick-up in the shaft
  - Carries several types of tips
  - Bright flashlight
  - Light weight
- Aluminum "L" (1"x1"x14")
  - Shank support for filing upright hammers
  - Protect the piano edge from damage
  - Setting let-off with mute under hammer rest rail. Prop the rest rail until the hammers are just a little over an eighth and adjust the let-off until the just start to click. The sandpaper keeps it from sliding.
- LED flex light
  - "Styles Reach" from electronics shops (Fry's in Renton
- Notch in tool flange screwdriver
  - Notch enables spring replacement
- Key spacer
  - 90-degree bend in key spacer tool to provide better leverage.
  - Grind a bevel in the lower half to make it easier to slide under punchings.
- Hollow brass tube
  - Voicing needles inside hollow tube, or toothpicks. Place cork in end hole to hold them in.
  - "Sharps" are much sturdier than regular sewing needles.
  - One end flattened thin for inserting tuning strips
- Yamaha voicing tool
  - Drill hole in handle to keep needles inside.
  - Firm needle support reduces breakage.

### **Tuning**

- Tuning strips
  - Mute every other unison for aural tuning, so you don't have to handle the mute as much.
  - Virgil Smith's "cracking the unison" technique
  - Aural tuning comes down to the brain's ability to distinguish between minute details. The more one practices, the better one gets.
  - The machine is very active but so easy to become dependent on.
- Mutes
  - How to keep mutes from falling inside the piano:
    - Tie them together with bushing cloth
    - Use fresh mutes
    - Insert extra long wire handles
- False beats

- False beat suppression tool: give every string a little push before tuning with a brass rod. You'll hear a little ping or click when doing this. It makes it easier to center the tuning. Give the strings a little flex. Sand a notch on the end of the rod. (Don't put brass or aluminum on a grinder or it will clog up the wheel.)
- Tap on the bridge pins with the little handle hammer.
- Tuning scales
  - Tune with the basic principle of the thirds moving through the circle of fifths, rather than chromatically. Temper the thirds and work through a pure circle of fifths.
  - Tune a piano pure in the key of C, starting from the middle. Then listen to how it sounds. You will understand the value of an equal temperament tuning.
  - The Thomas tuning has some pure and some wide fifths, the thirds vary, and there is a nice variety of intervals. It makes the tuning quite interesting, although it also shows how subtle this is.
  - Know the history first-hand of the various temperament tunings.
- Ear plugs
  - The loudest part of the piano tone is the first tenth of a second. The ear has a muscle that constricts loud tones. By the end of a tuning, your ears will close. With earplugs the ears will actually open up.
  - Earplugs make you more open with your test blows. Hitting harder doesn't bother the ears.
  - There is less fatigue by the end of the day.
  - There is less resistance to repeat the notes.
  - Sometimes for the very top notes, remove the earplugs and pluck the top notes.

#### Regulating

- Key leveling
  - Straight edge
    - 4' aluminum with rod weight attached to the the back
    - wooden stand to support it on the whites, and raised up ½" for leveling the blacks
  - Straight edge support
    - wooden blocks with screw to place over two end pins for supporting end keys\
    - damper blocks
    - Bill Spurlock's blocks with capstans that are adjustable from the side
  - Punchings
    - Rotating the punchings will alter the key dip. To avoid this:
      - Mark the punchings. Put a dot at 6:00
      - Turn the punchings over.
- Let-off
  - Move the hammers right to the point of let-off, allowing a tiny bit to compensate for the click.
  - Insert a rubber mute under the hammer rail for fine adjustment.
  - This technique provides more room for inserting the let-off tool by lifting the stoppers higher.
  - Press the key so that the hammer just clicks and the jack just trips.
  - Now with the tool, push on the top of the jack with the key pressed down. This pushed the jack tender into the let-off button felt and compressed it.
- Spoons
  - Remove the key, unhook the bridle strap and push on the whippen.
  - For the other direction, press a tool against the top of the damper lever and compress the key.
  - Check the angle of the spoons. The direction of the curve can make a difference.
  - Check the wear of the spoon felts and move the spoon out of the groove.
  - Lubricate the spoons.

## **Customer Tips**

#### Vacuum

- Customers really appreciate your vacuuming out their pianos.
- Ryan uses "Sport" tiny vacuum. "Reico" also makes a tiny vacuum that blows. Jeannie uses a "Samuel" from Sears; it is quiet and powerful. "Oreck" seems overpriced.
- Shoulder straps make it easy to move around.
- Install an extra long cord.
- Piano dust is really fine, so the bags need to be changed frequently.
- Disinfectant wipes
  - Wipe the piano
  - Clean the keys
  - Leaves a fresh smell
- Extra items
  - ProLube, Tacky Glue, Wig Glue, Super Glue, Teflon powder
  - Touch-up pens for scratches, etc. Rub it with your finger.
  - Alcohol & bulls-eye shellac -- 50%-50% -- for a furniture polish.
- Pedals
  - Carry extra strips of cloth for re-felting around the pedals to remove the knocking sound.
  - Never leave an appointment with a squeaking pedal. Always fix squeaks.
- Benches
  - Tighten the bench screws.
- What to do with old piano parts:
  - Give old parts to the kids.
  - Carry around demonstrations to show customers how the parts work, why pins stick, etc.