## **Upright Piano Regulation**

## How to Regulate an Upright Piano in One Day Dean Petrich 2016

Unless parts need to be replaced or repaired, it is possible to restore an upright piano in one day, including cleaning, shaping the hammers, re-felting the key-bed, and regulating the keys and action. If parts must be replaced or repaired, add an extra day because these repairs must be done first before regulation. Consequently, the first step would be to assess the condition of the piano. The next step would be to make sure that new parts are at hand. The third is to prioritize which jobs are the most essential and which might be left as they are, according to financial and time restraints. The fourth is to schedule the day to do the job, and to start early.

- 1. Clean
  - a. Remove case parts
  - b. Take measurements
    - i. Before doing or removing anything, measure
      - 1. Key height
      - 2. Key dip
      - 3. Hammer blow
      - 4. Inspect lost-motion & let-off
      - 5. Check pedal motion
    - ii. Inspect the piano structure
      - 1. Bridges
      - 2. Soundboard
      - 3. Strings & Pins
      - 4. Structural framework
      - 5. Pedal connections
      - 6. Casters
  - c. Keys
    - i. Remove action and set it out of the way
    - ii. Polish capstans with 0000 steel wool or with a metal polish
    - iii. Vacuum keys
    - iv. Clean key tops with a damp cloth
    - v. Remove keys
      - 1. Number or mark the keys before removing
      - 2. Keep them in order
      - 3. Lay them on the bottom board so they are portable
  - d. Clean strings
    - i. Wear gloves and a dust mask
    - ii. Scrub strings with steel wool, wire brush or abrasive pads
    - iii. Polish metal parts with 0000 steel wool or with metal polish
    - iv. Remove any foreign matter or particles behind strings or bridges
  - e. Vacuum
    - i. Wear gloves and a dust mask

- ii. Remove large dirt by hand and place in garbage bag
- iii. Use a large clean paint brush to remove dust from crevices
- iv. Start vacuuming from the top and work towards the bottom
- v. In some instances it is possible to blow out any remaining dirt.
  - 1. If a second vacuum is available, suck the blown dust
- 2. Shape the Hammers
  - a. Location
    - i. My favorite place to shape hammers is in the piano, using Pennisten stickers to fasten it to the action bracket posts.
      - 1. If this is the plan, don't spend too much time pre-vacuuming the piano since it will have to be vacuumed again after shaping.
    - ii. Use an action holder bracket to support the action while shaping
    - iii. Ask permission where to do a dusty job
      - 1. Kitchen table or counter
      - 2. Workbench in tool room
      - 3. Outdoors on the picnic table
      - 4. On the porch steps
  - b. Sanding
    - i. Have several filing tools handy
      - 1. Wear gloves and dust mask
      - 2. Paddles of different grits
      - 3. Wide and narrow filing strips backed with tape
      - 4. Support blocks
    - ii. Start with the bass
      - 1. Get a feel for the felt on the most forgiving hammers
      - 2. File angled hammers individually
      - 3. Gang-file straight hammers
      - 4. Buff when done
  - c. Blow out action
- 3. Re-felt the Key Bed
- 4. Set hammer blow
- 5. Adjust capstans
- 6. Level keys
- 7. Adjust dip and back-checks
- 8. Let-off
- 9. Dampers
- 10. Pedals
- 11. Final check
- 12.Tune