

Technical Six-Pack

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Stories

In 1974 Isaac immigrated from USSR. The highest paid people in the medical profession are brain surgeons, then cardiologists. We have only one brain and one hear to work on, whereas we have 88 parts. Conventions are to avoid historical mistakes. Beethoven and Schubert lived five blocks away and never met. In the restaurant industry there is a definition of inefficiency: the waiter makes two trips for salt and pepper. Vick Jackson's father was a butcher, so Dick new a little about lamb; he invented VJ Lube which works on wood, metal, leather, felt, and more.

Jean Korolov invented special wheels for moving pianos around in the shop. The problem with spider dollies is that they make the piano too high. In the dealer show rooms many hours are spent removing the shiny brass casters to be re-polished after many moves. "Shop and Showroom dollies" will hold a piano with the original casters on, are easy to move, and keep the piano low. They cost \$

Isaac's shop has everything in drawers to keep out dust, rodents, and to keep track of everything.

Miscellaneous Tips

- If leg locks are missing, make some new ones with scraps of wood.
- Baldwin pianos have set screws in the pedal lever.
- Spinnet keys that are broken can be repaired with wooden inserts that are available from Isaac.
- When removing key frame felts, place the new next to the original and feel. Make a board of felt samples for quick feeling & size comparisons.
- Collect extra keys from every possible piano so you can unlock fallboards.
- When the dogs think the piano leg is a tree and there are a number of wheels to be replaced, collect old wheels. Brass wheel sets can cost \$300+. Use a modified flat bar to remove old wheels.
- Use a pencil dipped in glue to match colors. A tooth brush holder will hold the pencil.
- When the rubber bushings are worn out on Steinway pedals, take back-check recovering leather and cut two pieces the size of a back-check. Lay one piece of buckskin criss-cross on another and poke them in the hole. This will not squeak or need VJ Lube.
- When clamping odd-shaped objects, attach hinged feet
- When the pedal rotates in the flange, the flange stays put. It is not possible to push the pin through the pedal itself. The rotation happens in the pivoting block, the pedal. Look with a flashlight to see if the pin walked out. Yamaha uses small plastic wire clamped to the side to prevent the pin from walking out. The L-shaped pin is clamped from the side.
- 1" PVC with tube insulation for keeping things from getting scratched

- To rebush large holes, like wooden pedal hinge holes, take a self-centering drill on the grinder. That way the drill bit won't wander. Modify the drill bit by grinding it down so it will not split, esp. for drilling center pin holes.
- To clamp cracked round piano legs, use hose clamps. Drill & plug with a hammer shank.
- Pedal lyres and grand legs. Post-Refinishing Syndrome is what the refinisher and the builder forgot to do. If the glue joints have been weakened and is coming apart. It is necessary to dismantle it, fix it, and refinish it. Pedal lyres don't have blind wedges. On the top of the lyre you can see the locks. Slice a dowel and drive it into the top of the lyre or leg. Drive the wedge into the hole and add glue. This will widen the gap and will not come out. Wood and wood works better than using metal wedges or bolts.
- Brass screws don't get rusty from moist fresh wood.
- If the artist bench does not work because both of the cheap plastic knobs are cracked from the set screw, solid metal knobs can be purchased from Jansen. Instead of using L-shaped tools, switch to T-handle Allen wrench.
- If the artist piano bench is split, glue & clamp extra pieces of wood onto the inside.
- To re-felt the pedal housing, use a block of wood as a caul to clue in felt so the pedals don't knock.
- To prevent one-pound rolls of wire from exploding, bend a tuning pin on the end of the wire to keep track of the end of the wire. Keep the rolls in labeled or color-coded cloth pouches to keep track of sizes.
- Plastic tubing will protect clamps, files, chisels, and more.
- The biggest time-waster in any craft is set-up and clean-up.
- Isaac starts around 8am every day. The mom is gone taking the kids to school and going to the store. When she returns, the piano is done, he has a check and he has avoided rush hour. In the evening many people love a 6:00 appointment. Working this heavy daily schedule provides evening time and free time later for trips with the family.
- Make a sample caster hole block to know which diameter of drill bit will be needed for any given caster. The holes are pre-drilled in the jig so he can quickly fit whichever caster into the holes to determine the size.
- Cleaning pianos makes more money than voicing pianos.
 - First spray with a cleaner along the back rim.
 - Isaac uses an old vacuum cleaner and a second hose so that he can blow and suck at the same time. Blow the dirt back to the wet area to capture the dust. He holds the suction tube up while blowing.
 - To wipe the sound board, uses a karate belt or a long strip torn from an old beach towel.
- When you find a complete set of pedals, place them together in a sock.
- When working on wheels or pedal lyres, Makita electric screwdriver can take apart any screws, pedal levers, rusty screws, costs \$100 from Amazon TD020D 7.2v.
- Blind technicians have found that dealing with Baldwin type dowels when regulating let-off, find a tool for punching braille holes. These cost about \$5 and are available from blind service centers and from Amazon.

- For key weighting, instead of using band saws for cutting leads, use cheap garden clippers. Lead is poisonous and sawing will create dust. Since lead is soft it is easy to cut. Garden shears can also be used for cutting shanks and other things.
- People who rebuild houses must use wedges for installing doors. Also when floors squeak they use shims which can be bought in packets for \$1.60. Place a wedge between two keys to put pressure on a tight key bushing so that when you are done tuning the key will be eased.
- Here is a simple pedal repair technique. For a tight squeaking Yamaha pedal, probably the knurled part of the pin is worn out and is moving. Remove the pedal. Punch out the pin. Drill a round hole through the top. Tap a hole and put in a set screw. This pedal will never squeak again. On an upright piano this saves time from removing the bottom board since the end pin is removable because of the set screw.
- Carry extra screws # 16, 18 and 20 because they are not available from hardware stores.
- Young Chang and other pianos have problems in the music desk area. After cleaning it, Kawai sells material in white, brown and black with an adhesive back.
- To remove glued on felt, add vinegar and use a razor blade.
- Baby wipes and refills are handy for wiping up glue, cleaning your hands, etc.
- How long does it take for an average technician to re-pin an entire rail of action parts? A whole rail of hammers can be done in 50 minutes. Wippens take a little longer. The key to speeding up the process is first having a \$10-\$15/hour helper. The helper marks them all and removes every other one. Shorten the push pin on the center pin extractor. While doing something else, have the helper push out the center pins only half-way to keep the flange and shank together. Keep the bass, tenor and treble sections separate. The pins can then be pulled out with a pliers, fit, burnished, etc. When cutting the pins, use the cutters to pull out the adjacent pin. By doing every other one you can keep the alignment. The helper puts them back. You double-check the alignment before removing the other half that are still in the action.
- The only thing we do every day is to tune four five or six pianos a day.
- It takes 20 years to become an overnight success. It takes 10 years to learn, 10 years to get good and 10 more years to become an expert.
- Use a 3M mic diversion wheel to polish anything.
- To store things, use shower door clamps, or, better yet, monster safety pins.
- Be ready to fix microphone stands in churches & schools. The stand won't go up & down, the bolts are missing, etc. hardware stores carry knobs.
- Chinese, Korean and other Asian pianos are sometimes difficult for removing the vertical action because the key frame has swelled up and the action is pushed against the bolts. Use a cowboy boot puller. This solves global warping.
- When dealing with a pedal, you must have the lyre support sticks in place. They are often missing. Drill a recess for a lyre stick or dowel above the pedal box in the bottom of the lyre leg. Make blocks with two screw holes that can be fastened below the keybed. You can also make an adjustable dowel or use rubber tubing. If there is metal to metal, add a small piece of buckskin. Order the sticks from Steinway and they will be

too long; cut it once and it will be too short. Cut it a second time and it will still be too short.

- If you must dismantle a lyre, place a bottle jack on the box between the lyre legs, add some wooden blocks and break apart the top. Mark the parts. Glue it back together. Move the parts sideways and back and forth to find out if there are loose glue joints.
- To save a piano bench, the sliding mechanism hits the books and begins to destroy the bench. Some hinges are very tight, which damages the hinges. People will bend the hinge the wrong direction. Instead, install a chain at about 95 degrees open. You can buy a 100' roll of chain on ebay. About 30% of benches are missing this part or it doesn't work. Turn the bench upside down, check the bottom and check or add glides.
- Use file folders for stop block shims.
- Have your helper cut punchings and store them on a spinet elbow stick.
- On the Asian pianos the plastic pedal rod inserts get lost. Make a wooden one or install a screw.
- Jansen makes a piano lifter lever.