

## Upright DamperSpoons

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What might change the damper spoon adjustments?

- Worn damper lever felts, felt compression.
- Adjusting lost motion with the capstans.
- Changing the angle of the damper wire.
- Installing new damper felts.
- Changing key dip.
- Changing hammer blow changes the whippen angle and therefore the capstans.

There is a lot of leeway with damper spoons. The spec is half a hammer stroke before the damper lifts, but if it is 5/8ths it won't make much difference. In the seventies, some companies treated the damper lever felts with an acid that corroded the spoons. These can be remedied by pushing the damper lever down, which can free them up; but the best solution is to replace the felts. Ed bent a damper spoon back and forth about 20 degrees; it broke on the 49<sup>th</sup> bend.

Jim's favorite spoon-bending tool is the thin flat tool. He stopped using the round tool with the 2 right angle bends years ago.

### **Technique:**

Go between the whippens, move under the rail, feel the flange, slide it beyond the flange, and set it behind the damper lever so you can see it wink. Now you are close to the spoon. Once you feel the damper wink, slide the tool onto the spoon. Don't bend the spoon with the tool. Move the whippen against the tool, so the whippen actually does the bending.

Adjusting spoons on a vertical are easy because there is ample working room. Adjusting spoons on a console or even a studio, the keys must be removed. Adjusting on a spinet the adjustment is beneath the key bed.

Not all spoons were created equally. Some go one way, some go the other. Know which angle they lean before inserting the tool. You must be able to play both sides of the whippen.

On consoles and spinets, you don't necessarily need the tool to adjust the spoons.

Remove the key and the bridle strap. Push down on the whippen to bend the spoon back. If you get it too far back, then the spoon needs to be bent back again. Take off the bottom board, reach up under the key bed and push back on the spoon with your finger. Another way is to hold the top of the damper lever stationary and to lift the front of the whippen up; this technique can stress the damper flange.

*Always bend the damper wires first so the pedal lift is aligned.*

To adjust an entire section of damper spoons, insert a rubber tuning wedge under the damper lever arm so that the damper and the damper lift at the same time. Adjust them all to this measurement. Another way is to set a few samples throughout. Remove the action and tip the action back, and match the marked samples.

If the dampers are making the touch too heavy, here are several techniques:

1. Reduce the tension of the damper springs with a wire bender. Reducing the damper springs too much will cause the dampers not to dampen.
2. Bend the spoons so that the key moves farther before the damper lifts.
3. Bend the spoon back in a curve will also make the touch feel less stiff. The rate at which it lifts the damper is slower. By the time the whippen goes all the way up and the tip of the spoon is pushing higher on the lever, the rate changes.
4. Mark the dampers on the top in the piano, remove the action, and adjust them according to your marks.
5. There are times when you cannot reach the spoon in the piano. Tip the action back in the piano and adjust it from behind.