

## TOKIWA DAMPER ACTION REPLACEMENT KIT

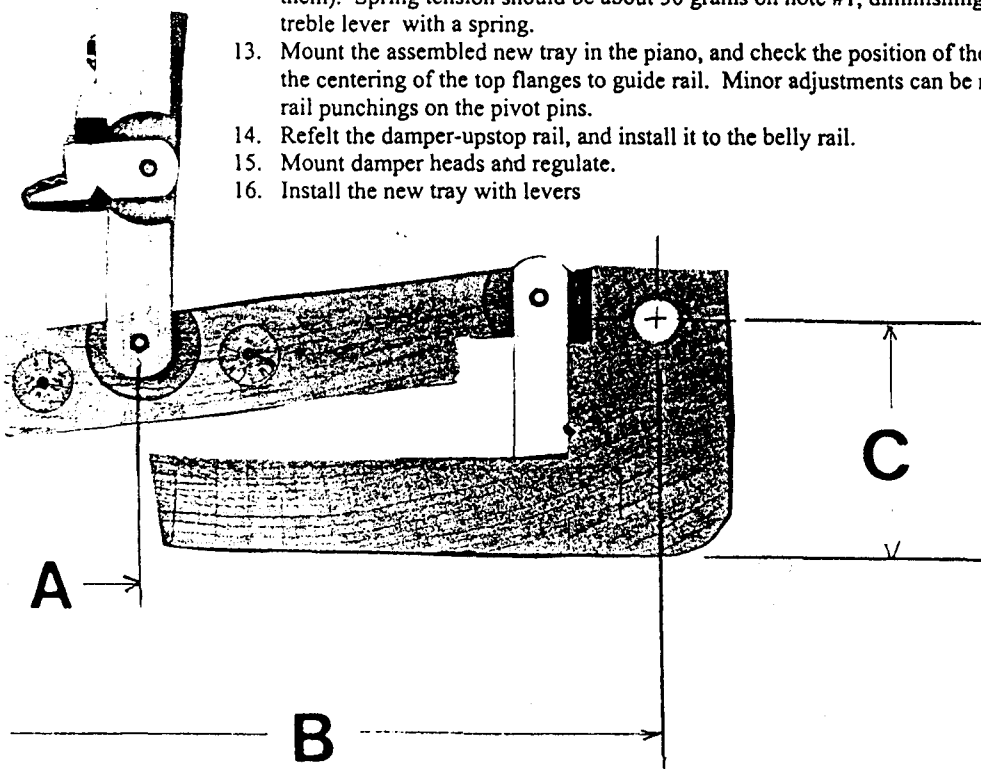
### BASIC GUIDELINES:

This system will use the old pivot blocks. If the original tray is in the correct position, using the following instructions will duplicate the position of the top flange under the guide rail, and also the position of the underlever over the key end felt.

The early pianos with rigid veneer Sostenuto Tabs (i.e. early Steinway) do not extend as far toward the knife as the spring return tabs in this kit. Make sure you have enough room for the knife to clear the backchecks on these older pianos.

### INSTRUCTIONS:

1. Measure the distance "A" on the above drawing on the old damper lever. (In most cases it is the same as the new parts provided in the kit.)
2. Measure the distance "B" on the drawing on each end of the old tray on both treble and bass ends (THEY MAY BE QUITE DIFFERENT). Record your measurements.
3. Make a scale stick from the pinblock scrap provided. Lay the stick across the old damper levers directly over the flanges, and mark the center of each underlever arm. This will be your pattern to drill the new tray. (BE SURE AND INDICATE TREBLE AND BASS ON YOUR SCALESTICK)
4. Mark the new tray for flange screws from your scalestick. (BE CAREFUL NOT TO PUNCH THE SCORING MARK FOR THE FLANGE KEEPER WIRE)
5. If you are using the damper assist springs provided, mark the scoring line for them on the new tray.
6. Drill the new tray for flange screws, and assist springs (if you are using them). We suggest using a drill press, with a fence. Assist springs can be mounted with round toothpicks in a hole of slightly larger diameter. Flange screw holes require a 1/8" diameter drill, 6" long.
7. Mount the new flanges at the ends only (treble & bass) on the new tray. Measure the distance on the old tray from the center of these end flanges to the edge of the tray sits next to the pivot blocks. Transfer these measurements to the new tray, (center of the flange to outside edge of tray). Before cutting check overall measurement of tray and compare old and new. Cut the new tray to length. (Remember older Steinway pianos have a projection on the treble end for a leaf spring, don't cut this off if you intend to retain this spring!)
8. Glue on the end blocks provided with the new tray.
9. Measure the distance "C" on the drawing on each end of the old tray on both treble and bass ends (THEY MAY BE DIFFERENT)
10. Using the measurements "C" and "B" index the location of the pivot pins on your new tray. Drill and mount the pins. Precise location of these pivot pins is critical to the proper location of the new tray.
11. For replacement of late model short-arm and Teflon type underlevers, use the following measurements on both ends of the tray. Distance "C" 3.55 inches. Distance "B" 1.33 inches.
12. Mount all new levers on the new tray, with keeper wire. Install tray felt, and assist springs (if you are using them). Spring tension should be about 30 grams on note #1, diminishing evenly to about 20 grams on the last treble lever with a spring.
13. Mount the assembled new tray in the piano, and check the position of the levers over the key end felts, and the centering of the top flanges to guide rail. Minor adjustments can be made using various thickness balance rail punchings on the pivot pins.
14. Refelt the damper-upstop rail, and install it to the belly rail.
15. Mount damper heads and regulate.
16. Install the new tray with levers



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