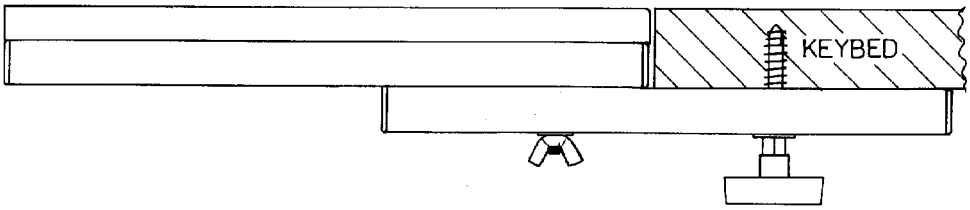
Using the Keybed Action Support ..... www.spurlocktools.com

This tool supports the grand action when it is pulled part way out for service. This eliminates the need for a work table, allowing complete action regulation, except for damper work, to be done without ever removing the action from the piano. For hammer filing, and backcheck and wippen alignment, just turn the action around and slide it onto the keybed keys-first. You can swing the support to one side temporarily for tuning.

Positioning the support: Remove the T-knob screw and unfold the action support. Hold it up against the underside of the keybed, approximately centered left-to-right. Leave a small gap between the upper arm of the support and the front of the keybed. Then insert the T-knob into either hole in the lower arm and bump upwards with the palm of your hand to mark the keybed for drilling.



Mounting to the keybed: The Action Support requires a 1/4" diameter hole in the bottom of the keybed. This is easily drilled using a 1/4" bit in your universal tool handle. It is convenient to make yourself a bit for this purpose by grinding a notch in the shank of the bit as shown below. You can also grind a mark 1 ½" from the end of the bit to indicate drilling depth. Most Yamaha and Kawai pianos already have a hole, but it may need to be enlarged. Keybeds are generally soft wood and easily drilled by hand in this way.

Grind a notch in your bit to engage your universal tool handle →

Installing the support: Before screwing the support in place you must use the T-knob screw to thread the hole. Lubricate the threads with Teflon powder, wax, or a bar of soap, then run the T-knob screw into the hole alone. The screw will insert much easier if you use a wrench on the hex nut rather than turning the T-knob by hand. Remove the screw, put it back into the support and turn it back into the keybed. It will now turn easily by hand.

Common questions:

Q: Do I need two of these?
A: No. One support mounted near the middle of the keybed is sufficient, since its purpose is just to support the front of the keyframe that overhangs the keybed. The back half of the keyframe and the action stack remain supported by the keybed.

Q: Will regulation done with the action pulled out be accurate once the action is back in place?
A: Yes, because you work from samples that were set with the action in place. Set a few let-off or hammer height samples, for example, with the action in place. Then pull it out onto the support and match the other notes to those samples. Push it back in and all notes will still match the samples. Other jobs such as repetition springs must be done entirely with the action pulled out, and are unaffected by the action location. If aftertouch disappears with the action pulled out (so you cannot see drop), try swinging the support right or left away from the area in which you are working.

Q: What if my customers object to my drilling a hole in their piano?
A: Not likely, but if it happened you could point out that pianos have many holes in the keybed already, some very large. Actually I have never had anyone mention it. And drilling by hand as explained above is very unobtrusive.

Q: What if the keybed is thicker/thinner than the top leg of the support, so the keyframe tips up or down a bit?
A: No problem, the function of the support is only to prevent the action from falling. Remember that you are regulating from samples that were set with the action in the correct position.