## James Jones Dampers

Dampers are engaged by the force of your foot on a pedal which pulls down on a self centering string connected to a loop of string running between the left and right dampers. This loop between the dampers is continuous if you have a Tri-stander but if you have any other kind of stand you will have two lines (one from each damper). This allows you to thread the line through or around parts of stands if necessary. Once these two lines are hooked together under the stand you will than connect the line from the damper pedal to this loop by the S hook on the end of damper pedal cord. If you don't need to thread the two lines around stand parts you may want to cut off the metal snap and the plastic ring and just tie the two ends together permanently. This takes care of the problem of what to do with the S hook and ring which can mar your instrument and is in general an annoyance. If you are using a Tri-Stander than you will have a continuous line with no break I recommend the Tri-Stander for the most stable platform for your instrument with dampers. This hook should ride free on the loop. This makes it self centering. Don't hook the pedal line to the plastic ring. The cord length from the pedal is adjusted by merely unwinding the line from the back of the pedal. Winding the line around the two dowels takes up a lot of slack while winding the line around one of the dowels makes fine adjustments. Use a combination which gives you the adjustment you need. You will make adjustments until the pedal is just off the floor. You don't want the pedal too high as it will be hard on your ankle over time. It doesn't take much down pressure to activate the damping. The damper return spring is a tension spring located within the stainless steel tubing. This tubing rotates on two nylon end pins which reside in top and bottom wooden pillow blocks.

Dampers are for the most part maintenance free or at least we hope they are.

Felt or Rubber/Foam may eventually get tired and not do its job and will need to be pulled / rubbed off and replaced. The foam is held on with super glue which does a very good job but unfortunately too good if you want to remove old foam. I recommend that you send it back to me if that needs to be done. If a cord breaks because of wear, replace it with an equivalent variety of braided cord or the original Kevlar line (see below).

If you need to thread new cord through holes use a thin piece of wire folded in two. Poke it through all holes from the top of the instrument. Keep poking until it comes through. Place the string in the fold of the wire and pull it through. Knot the cord enough so it doesn't slip through the hole in the flapper. Burn off the ends with a match so they don't unravel unless it is Kevlar in which case a drop of 'super glue' will keep it from unraveling.

Replacing strings if you have dampers is a whole lot easier if you remove the damper flappers and set them to the side. To accomplish this unscrew the screws that hold the bottom pillow block . Holding the damper in place, carefully remove the screws from the lower pillow block. Than, with control and holding onto the lower pillow block, slide the tube end out of the hole in the top pillow block keeping the pillow block assembly (tube, flapper and lower pillow block) together. Let the flapper rotate in your hand to take the tension off the spring. Don't let the pillow block or damper flapper strike the instrument as it rotates. You don't have to remove the top pillow block. You won't be able to take the flappers far from the instrument unless you remove the attached cord but if the cord shows a lot of wear, you may want to cut and replace the cord.

Reinstalling the damper and lower pillow block is all those steps in reverse. Slip the top end of the tube into the top pillow block. Rotate the tube/flapper until it rests on the stop pin located on the top pillow block. This will set the proper amount of tension or pre-load on the spring. Once the tension has been set place the bottom pillow block over the screw holes and reinsert the screws. Make sure the end of the screw goes in the pilot hole on the instrument. You know you've done it right if the damper is being held in the up position by the spring and it rotates on its axis.

If the damper seems to be sticking or not rotating smoothly the pillow blocks may be slightly misaligned as a result of being bumped. This can cause the damper to bind. Sometimes just another slight tap can sometimes realign it. If this doesn't do it the misalignment may be more serious. The way to test this is to unscrew the shorter screw towards the inside of one of the pillow blocks. This enables you to rotate the pillow block just slightly. If that eliminates that problem you'll need to rotate the pillow block enough so you can fill the screw hole in the instrument with a toothpick and some glue. Let dry than clamp the pillow block firmly with a clamp and a caul. Test for free rotation and than drill a smaller diameter hole (than the screw) into the instrument through the pillow block while in its new position. Reinsert the screw.

It might need a bit of lubricant. Some type of Teflon or greaseless spray may help but make sure it does not get on the instrument itself but just on the ends of the rod. It is a plastic/wood interface.

The system is sturdy but be a little extra careful going through doors. You don't want to give those pillow blocks a hit as they do stick up although no higher than the bridge which means it will fit into any case you may have. If you have any comments or suggestions for improvement please write me a note.

Thanks,

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