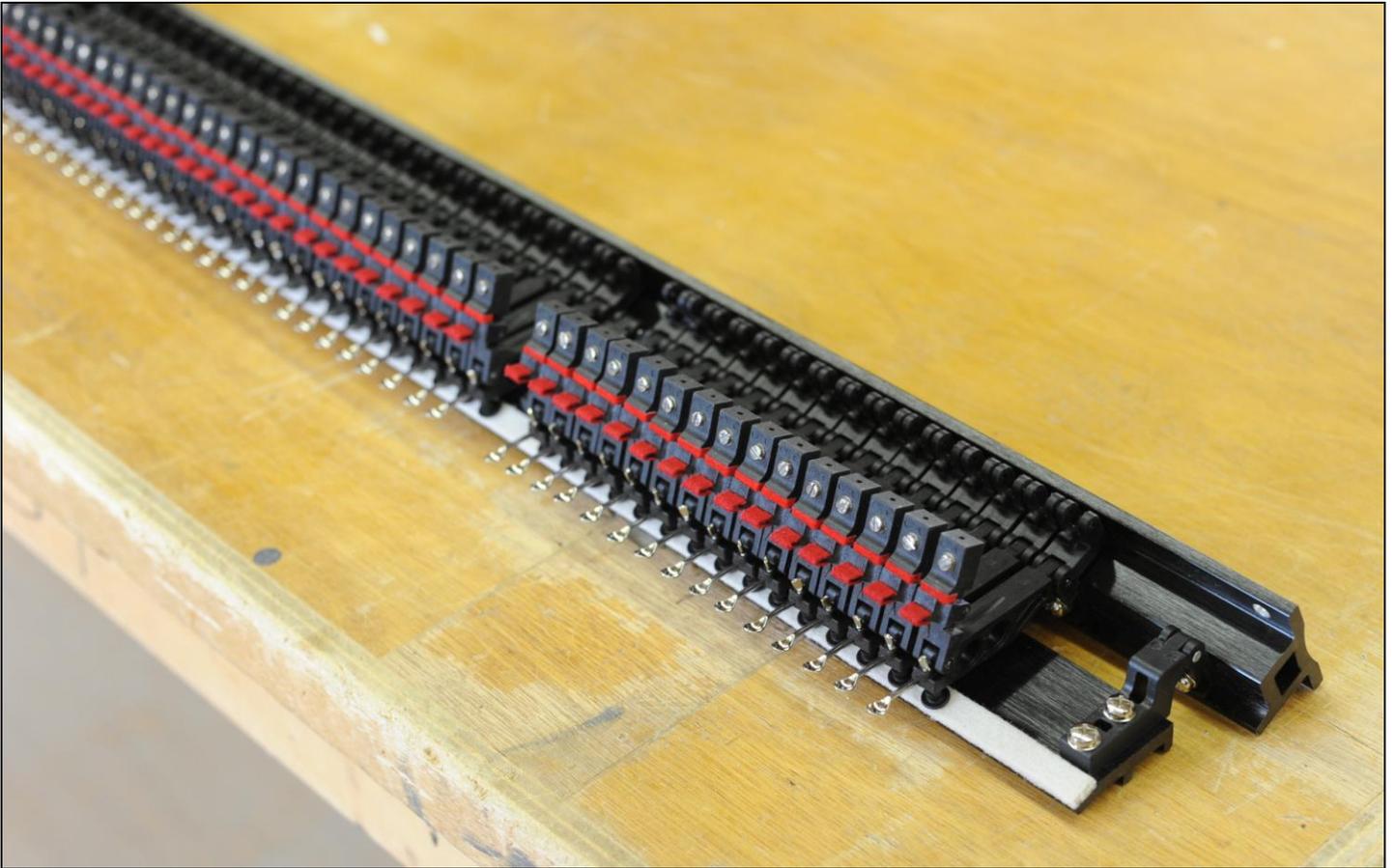


Assemble Damper Action



If you ordered a kit as opposed to an assembled damper action then you will need to assemble the parts into a useable damper action.



The kit you ordered includes an un-drilled Damper Flange Rail, an un-drilled Damper Sustain Tray, the correct quantity of underlevers with

the leading pattern as ordered, tray flanges, tray contact cloth and screws.



You will need the following tools for assembly.

Battery powered screw driver
#2 Phillips screw driver tip
Medium Phillips (#2) screw driver
Travel paper
 Thin (typing paper)
 Thick (manila file folder)
Small machinist's square
Razor blade



You will need a drilled damper flange rail. If you have undrilled rails you will need to drill the rails before assembly is possible. If you need help drilling the rails download the procedure or video with that information.

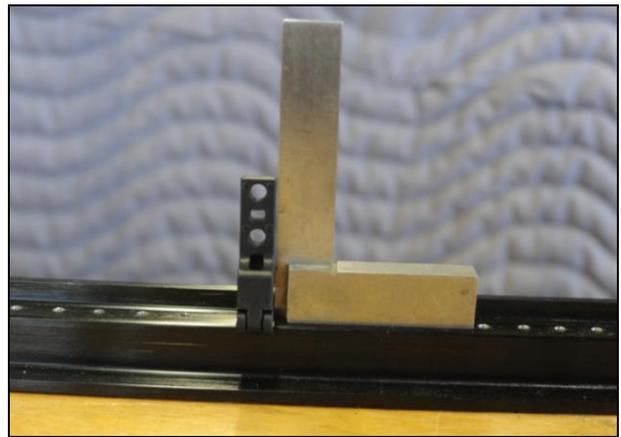
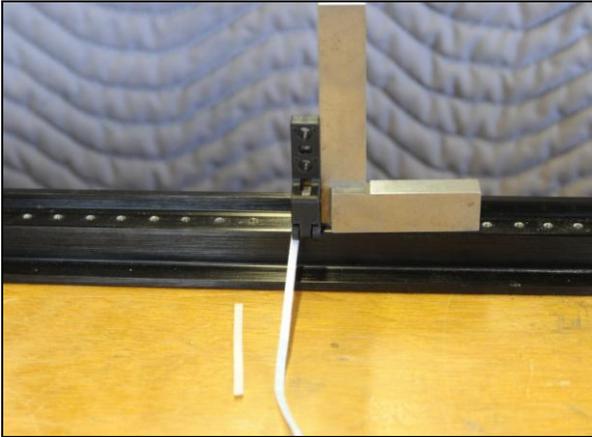


Assemble the tray flanges to the flange rail. Tray flanges use the same screws as the underlever flanges.

It is important to understand that, unlike wood, composite flanges do not require that the action screws be retightened every year. All that is required is a moderate tension between the screw and the flange.

A standard Phillips #2 screwdriver is the cheap and slow method of assembling a damper action.

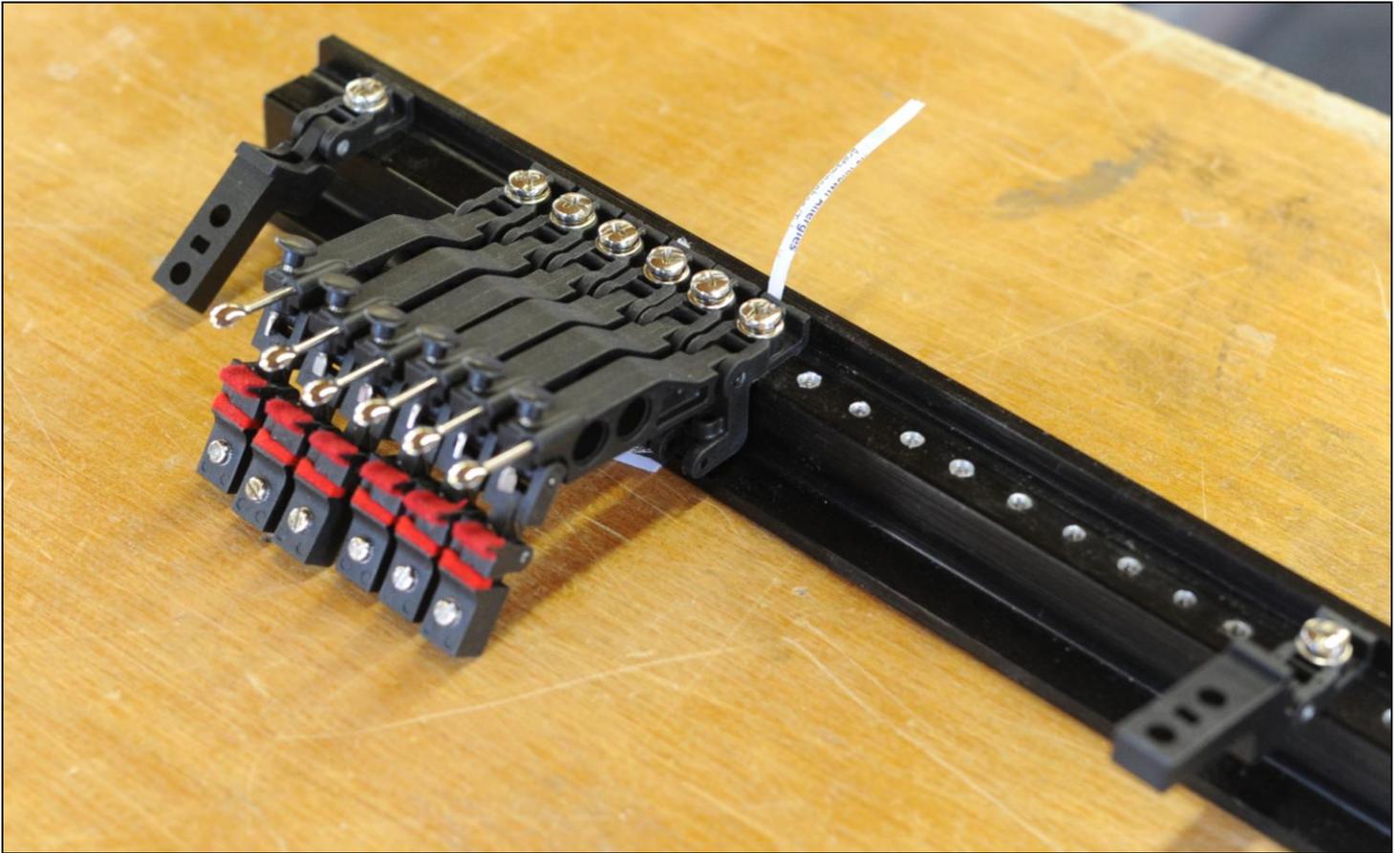
The fast way is to use a small battery powered screw driver. Set the clutch to a moderate tension so that you do not over tighten the screws.



When you travel for swing basically you make sure that the tray flange is mounted perpendicular to the flange rail.

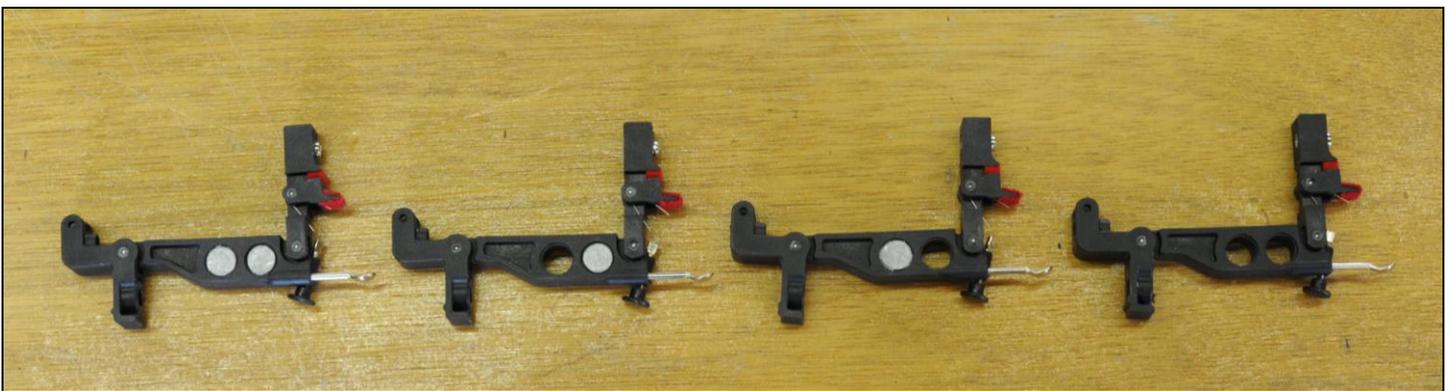
To check this, use a square from the flange rail itself.

Place paper between the rail and the flange on one side or the other until the tray flange is perpendicular to the rail.



With the tray arms on the table, rotate the rail back and forth. If you see the tray flanges moving side to side during this operation the tilt is incorrect.

If tilt is not correct, you will need to add paper at the bottom of the flange on one side or the other to correct this.



When you install the underlevers it is important that you pay attention to the leading pattern.

Notice that some underlevers have two leads.

Some have one lead in the forward position

Some have one lead in the back position

And some have no leads at all.

From bass to treble, this is the order they need to be installed.

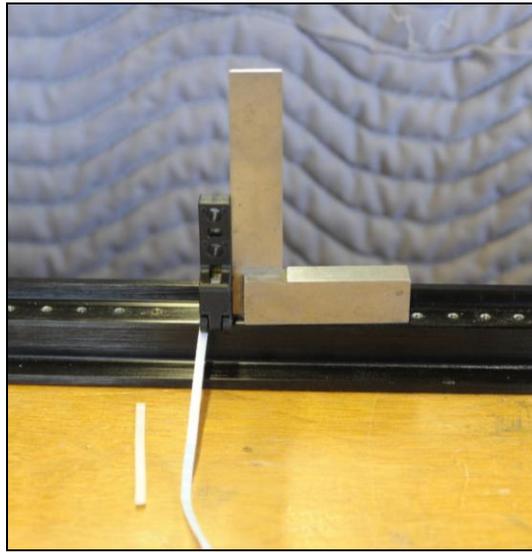
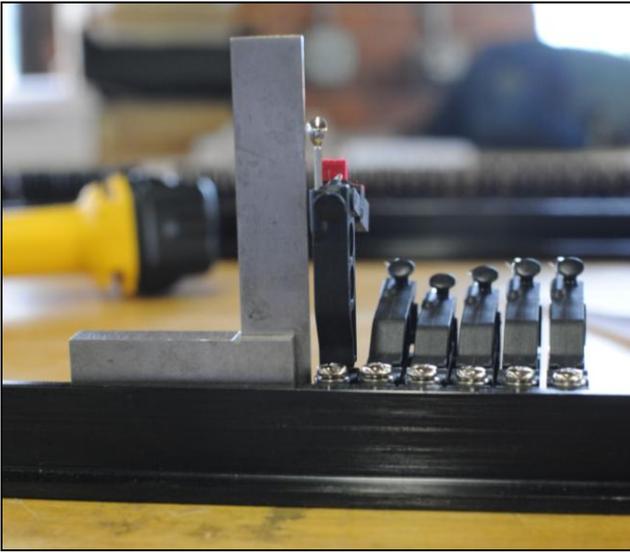


Assemble the underlevers to the flange rail in the correct order. Use a screwdriver to tighten with moderate tension the screws to fasten the underlevers to the rail.

As with tray flanges, composite underlever flanges do not require the screws be retightened every year. Consequently, all that is required is a moderate tension between the screw and the flange.

A standard Phillips screwdriver works, is cheap and slow.

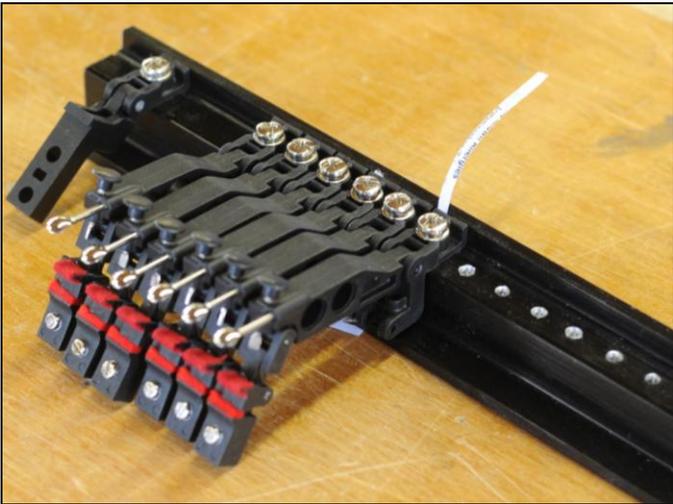
It is much faster to use a small battery powered screw driver. An added benefit is that the clutch can be set to a moderate and consistent tension so that you do not over tighten the screws.



As with the tray flanges, when you travel for swing all you are doing is making sure that the underlever is mounted perpendicular to the flange rail.

To check this, use a square from the flange rail itself.

Place paper between the rail and the flange on one side or the other until the underlever is perpendicular to the rail.

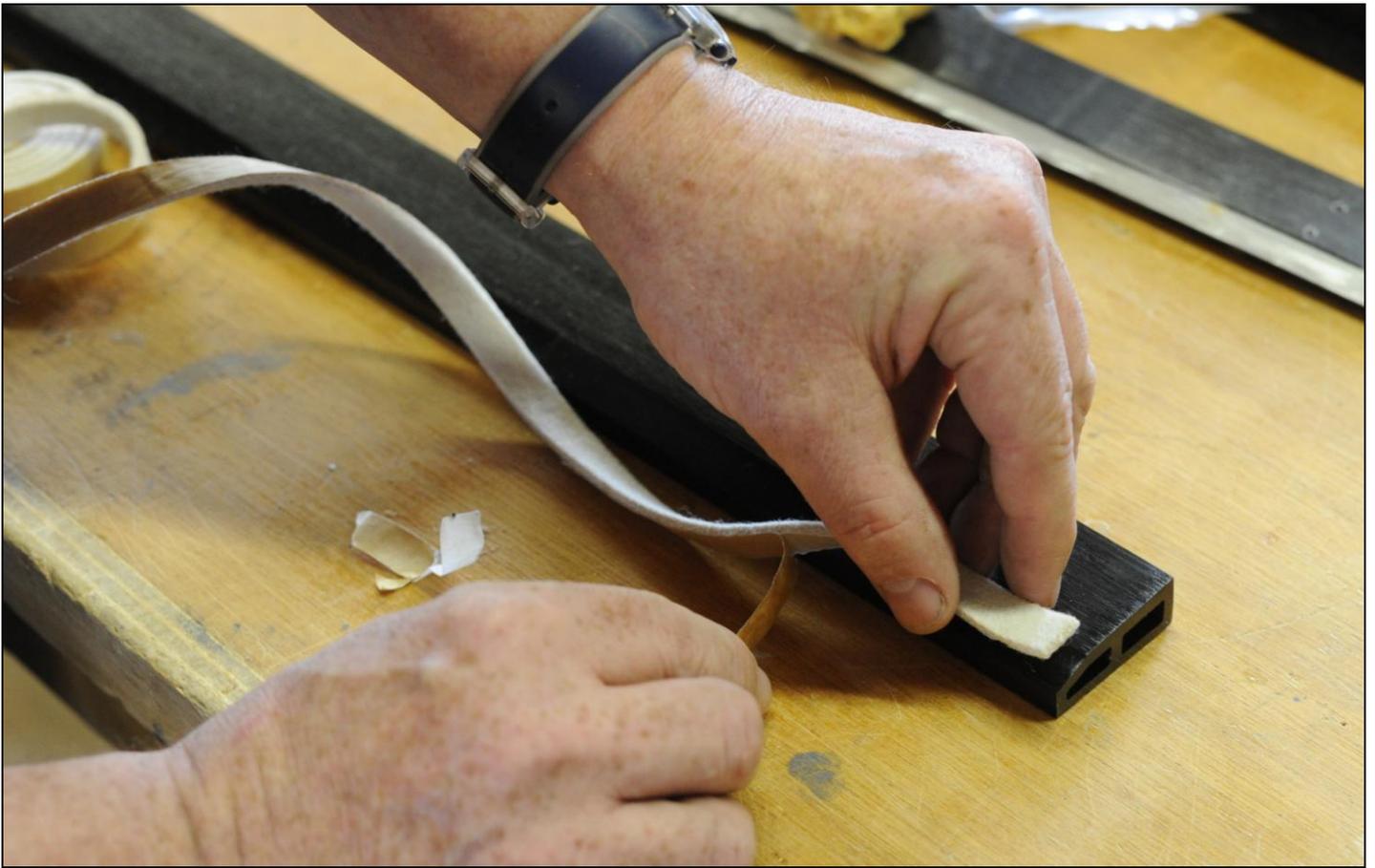


With the underlevers resting on the table, rotate the rail back and forth. If you see the underlevers moving side to side during this operation then tilt is incorrect.

If tilt is not correct, you will need to add paper at the bottom of the flange on one side or the other to correct this.



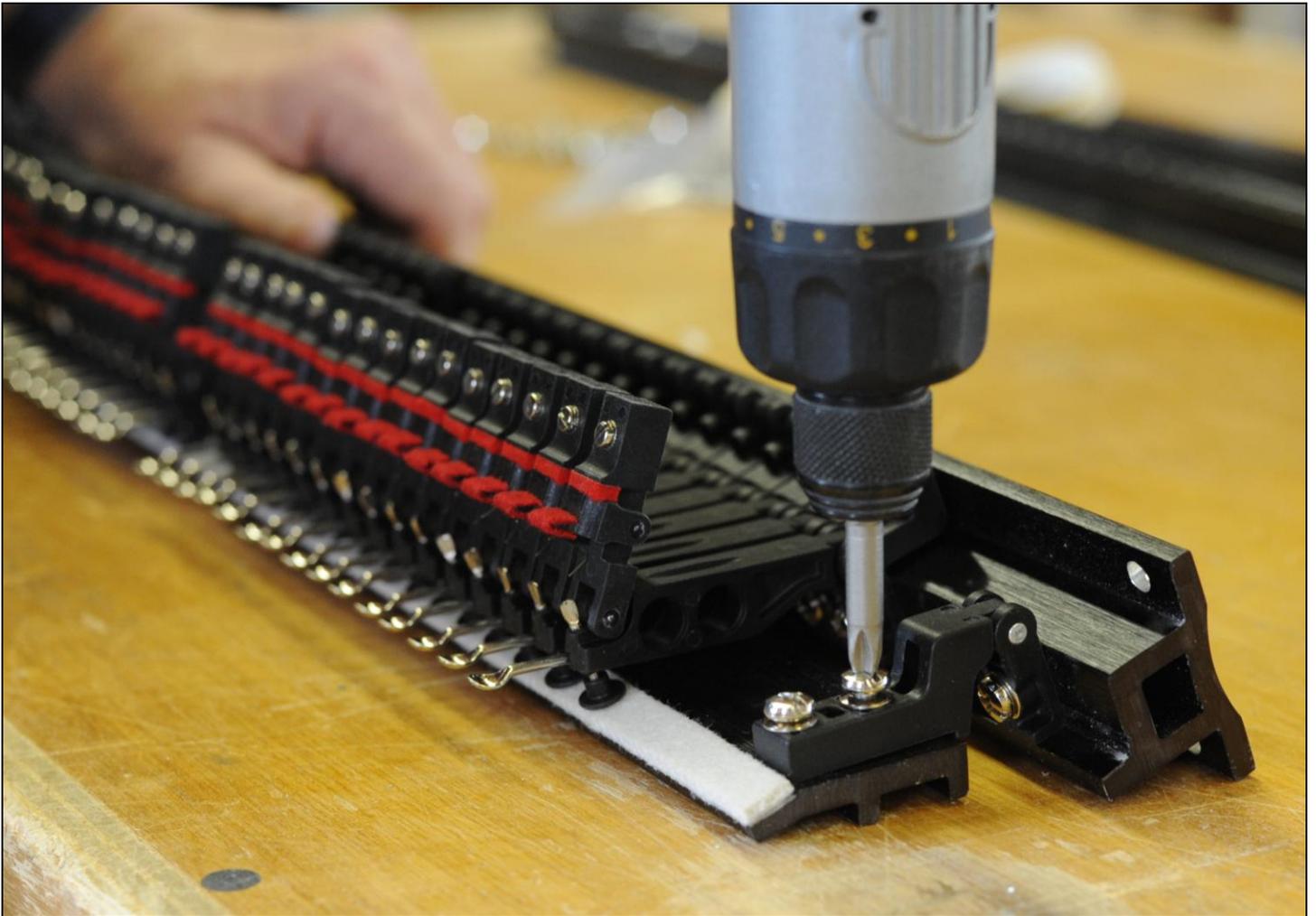
WNG uses self sticking contact cloth where the tray picks up the underlever. The first step is to peel back the backing paper.



Install the contact cloth in the defined place on the tray so that is against the inner edge.



After the contact cloth is attached, it must be trimmed. Use a razor blade to trim the cloth to the damper tray.



When all travelling is done, attach the tray to the damper action. The tray arm attaches to the tray to provide a pivot point for the rotation of the Damper Sustain Tray.

Place the Damper Sustain Tray on the table just in front of the damper action. Lift the rail with the underlevers and tray flanges up and then set down on the tray so that the buttons are on the cloth support and the tray flange arms are on the tray.

Make sure that the stop on the back of the tray arm is behind the tray. Move the tray side to side until the screw holes line up with the tray flange arms.

On the tray use the same screws as for the underlevers. Thread the screws into the tray and moderately tighten.

Again, composite flanges will not require the screws to be retightened every year. All that is required is a moderate tension between the screw and the flange.

