

Drawbars

Needless to repeat that perfect functioning of the five drawbars blocks is essential in any Hammond organ including X-66 console.

A summarized procedure is described in the Service Manual that fits for current drawbars' repairs but insufficient to my opinion under a full restoring process.

To attain the drawbars, the tab control panel has to be removed (7 screws in total, quite easy) and flipped vertically in order to get proper access to the drawbars blocks.

When doing this operation, it was noticed at once that three wires were found loose, 'floating in the air'. This means already 3 drawbars were out of service.

All brown cables of drawbars are disordered as well as the bundles of 9 coloured ones on the upper side of each section. Removing the drawbars becomes now quite easy.

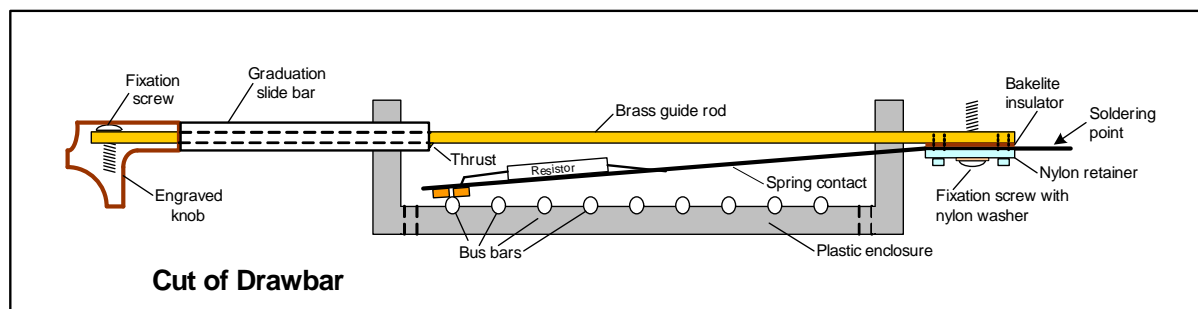
When laid down on the bench, then you realize the importance of removing (once again) all foreign debris, excesses of grease, oxydation, accumulation of dust.. Time now to dismount and clean up with alcohol.

The whole procedure on drawbars maintenance is fully described in 'Hammond Inside' DVD of Alain Kahn. It is not the purpose here to reinvent the wheel. Simply refer to this chapter of this DVD, you get it in 'live' version.

Nothing complicated, it's a matter of patience. Have a glass of beer, switch on the radio, take it easy, no stress.

Check for correct operation and 'feeling'. If not enough, slightly bend the contact spring to render the proper excursion. Before remounting the drawbars, should you like to see all the drawbar knobs in perfect horizontal alignment, then it's the right time also to check if all brass guide rods are straight. Generally, a little curve is noticed at the level of the thrust.

When completed, it is now time to grease again. One dot of grease is applied on each bus bar where the contacts are touching. In this case, special lubricant (1) was used but pure vaseline would do also the job. Re-mounting is quite easy, don't mix the knobs. For back leads resoldering, also refer to AK's DVD.



(1) Tunerlub – Cat.26-01 – HF Lubricant made by GC Electronics (USA). Available at <http://webuyhammonds.com/index.html>



In this regard, I would like to add some personal advices. When possible, it's a good practice to cut the end of the lead, strip it by about 10mm, twist the wires and solder it vertically (here again, my third hand is missing...)! Why ? By doing so the solder will flow inside the sheath and will so reinforce greatly the whole mechanical strength. Generally, lead breakages appear between the solder and the sheath. The ultimate in luxury is to insert thermo-shrink tube.

