

Special Effects unit

Here again, this unit had to be removed from the X-66 console because some extra-circuits were added (real odds jobs done by unqualified technicians). First thing was to remove and throw away all those non-original parts and circuits to restore the X-66 console in its initial state. Since it was so poorly done, it was not that difficult to do it.

The other reason to pull out the Special Effect unit was due to the fact that the command panel on the right-hand side was dirty, scratched, ugly indeed.

So, I decided to dismount completely this module in order to extract the command panel as a separate part.

This command panel has been cleaned and black-satin spray-repainted just to provide a "like-new" appearance as it should be. Chromes were re-polished as well.

During dismounting, here again, it was noticed that almost all metal plates were fully covered with magnetic particules (a kind of dendrite formation) and removed firstly with air-pressure and later on cleaned with alcohol since PCB's are quite close those metal supports.

PCB's were also properly cleaned because some traces of magnetic particules were also noticed. Conductive dust on PCB's is harmful for correct circuit operation.



Just a little anecdote to illustrate the above statement. Several years ago, I restored one Hammond B-3000 that was left for years in the garage of a house. As you may aware, this organ contains more than twenty PCB's. Just out of curiosity, I have discovered that on one PCB the conductive dust could climb up in the range of 10 K Ω on a short distance of 20 mm !

Imagine the results on the circuitry when operating (if still working). After cleaning, on the same PCB, the resistance reached infinite value. I'm part of those who are persuaded that clean circuits exempt from stain, dust, debris, oil, grease, mildews, sticky and the like will operate far better than others. Again a personal opinion.

The four lever switches were also really dirty and thoroughly cleaned with alcohol on both sides.

All elco's were systematically replaced (9 in total), quite easy when this unit is on the bench. The rest seemed OK.

When dismantling this Special Effect unit, attention should be taken on the screws. Make sure to re-install the correct screw at its original position. Mechanical re-assembling is not so easy.

Adequate precautions to avoid scratches and damages on the switch levers have to be taken.

Protect the furniture when re-mounting this unit in the console to avoid severe scratches on the wooden cabinet.

Dendrite Formation

Note : Interesting information on Dendrite Formation taken out www.smartgroup.org.