

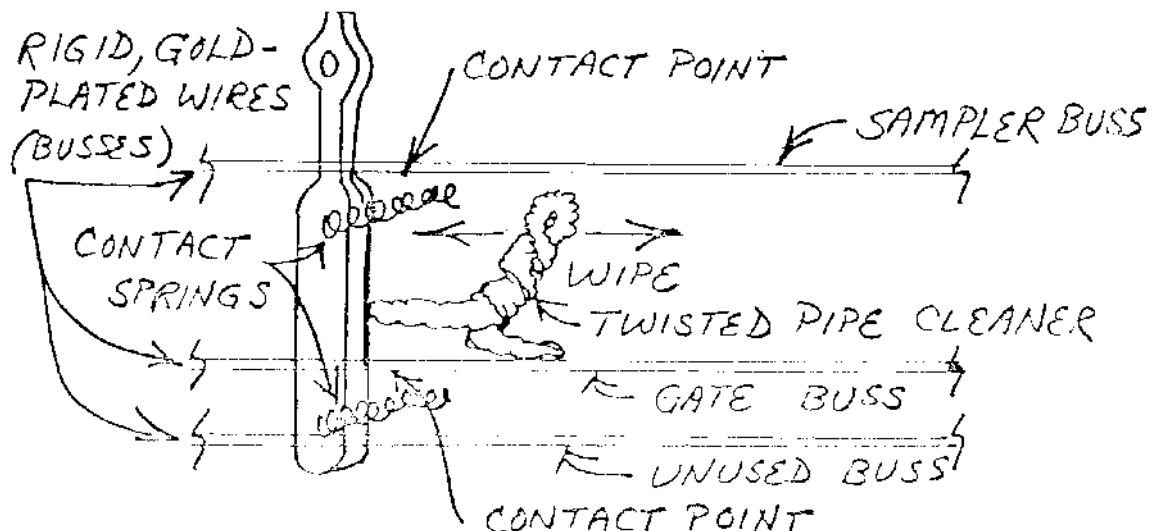
100 AND 101 KEYBOARD CLEANING PROCEDURE

Keyboard Removal -

1. Remove all 5 pan-head screws and 3 woodscrews from bottom of case. Note where they went.
2. Remove the 2 screws from the top keyboard brace.
3. Remove the brace (it may be in tight) and carefully lift out the keyboard.

Cleaning -

1. Rest the keyboard on its back edge, front end of keys pointing up, spring contacts facing you.
2. Press a key and notice the action that takes place. A clear plastic bar moves up pulling with it the ends of 2 gold springs against 2 gold buss bars. Sometimes dirt accumulates at the point where the spring touches the buss bar causing erratic pitch variations and/or multiple triggering of the envelope generators (or none at all) during a single key stroke. The top row of contacts relate to pitch voltage, and the bottom row triggers the envelopes and keyboard sampling circuitry.
3. When handling the contacts, extreme care must be taken not to stretch or in any way deform the springs. Dirt can be removed from springs and buss bars at the point of contact by using the end of a pipe cleaner or "Q Tip" moistened with TV tuner and control spray cleaner or tape recorder head cleaner. Very carefully swab the contact area and when finished, make sure the clear bar is resting vertically and not turned to one side. It is helpful to work with the key while cleaning. It is okay to plug in the keyboard and listen to see what progress you are making.
4. Notice that when a key is not pressed, the lower spring is resting against a buss that is not used electrically and cleaning this lower buss is not necessary.



Special Problems -

1. If thorough cleaning of a particular keys contacts does not remedy the problem, here are some probable causes.

On a particular key only -

Envelope trigger intermittantly or not at all and no new pitch is heard.

(Check the solder connections directly below the defective key.)

One last note on keyboard problems -

KB2 voltage will be unstable if the keyboard plug is not making good contact with the socket on the front panel. You can determine whether or not this is a problem by "wiggling" the connector while listening to oscillator 3 in the KB2 mode. This is usually caused by dirt and oxide in the socket and can be cleaned by inserting a pipe cleaner end moistened with the cleaners mentioned earlier into each hole in the socket and scrubbing thoroughly. Do this with the system unplugged from power of course.

If the connector is badly worn, it should be replaced. A new panel connector is available from the factory for \$3.00.

Re-installing keyboard -

Gently put the keyboard into the box and install the 5 bottom screws. If there were 3 washers along the front between the keyboard and case, make sure they are in place first. Position the wood brace along the top and install the 2 top screws and the 3 bottom wood screws.