KORG RERLACEMENT KIT

IMPORTANT!! READ INSTRUCTIONS BEFORE PROCEEDING!

Before attempting to install this kit, it should be noted that there are certain technical skills required to do so. If you lack knowledge in this area, we urge you to seek a qualified technician.

This kit can be installed into either the BX-3 or CX-3 Keyboards.

TOOLS YOU WILL NEED:

- 1) Phillips screwdriver
- 2) a drill
- 3) soldering iron
- 4) an ohm meter

INCLUDED IN THE KIT YOU SHOULD HAVE:

- 1) replacement circuit board
- 2) .039" drill bit
- 3) 1 nylon screw

DISASSEMBLY OF THE CX-3

First, be sure the unit is unplugged (sorry Techs, I have to say it). Remove screws marked A" and "B" in **Figure 1** from the bottom of the keyboard. The "B" screws secure the keyboard assembly.

Next, remove the two screws that are above the jack plate on the back of the unit. Now you can lift the cabinet up and back.

Next, <u>carefully</u> lift the keyboard assembly, flipping it back over the circuit board. At this point, you can disconnect all keyboard connectors (be sure you make a note of which connectors go where - they are numbered, making it easy to do so).

Remove all screws securing main board.

**Go to INSTALLATION **

DISASSEMBLY OF THE BX-3

Once again, be sure that the unit is unplugged. Remove the four screws on top of the unit (two on each end) and remove top panel.

The screws securing both manuals are shown in **Figure 2**. If the upper manual is the one with the problem, then you need only to remove this one. However, if the lower manual is the problem, then they <u>both</u> must come out. Having pointed this out, remove the appropriate screws for your particular situation.

Now with the unit upright and facing you, remove the metal rail <u>between the two manuals</u> running the length of the keyboard - five screws in all.

Remove the connectors of the upper manual (making note of where they go) from the main board on the right hand side; then set the manual aside. NOTE: If you have difficulty getting it out, you might try removing the left top bracket so you can flip the top drawbars back and out of the way.

Next, remove the shield covering the main board on which you are going to install the replacement board. The left board is for the lower manual, and the right board is for the upper manual.

If it is the left board (bottom manual), remove the connectors then remove the screws of the main board you will be working on.

INSTALLATION

With either the CX or BX disassembled, remove both SM304A's and the sockets if any were used. Using the drill bit provided, enlarge the holes of both chip positions <u>DRILLING FROM THE BOTTOM SIDE OF THE CIRCUIT</u> BOARD!

Next, inspect the header pins on the replacement board to be sure they are aligned as straight as possible. Position the board so that the large hole is at the upper left and gently insert pins through socket holes (insert on component side of main board). Once all pins are in, insert the board as far down as possible or about where it would be even with the tops of the connectors.

Solder in circuit board and clip off excess pins. Check to be sure there are no shorts between pins. If all looks good, reinstall main board.

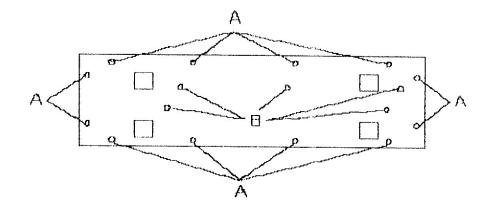
The next step is very important On the bottom of each manual, there is a screw that attaches the key contact buss to the frame. Replace this screw with the nylon screw provided. See **Figure 3**.

Put keyboard manual back into place. Next, locate the black ground wire on the end of the connector, which is to the left of the replacement board. Cut this wire just above the connector. Using your ohm meter, put one probe on the wire and the other to the metal frame of the keyboard manual. You should not register a dead short. If you do, the nylon screw is in the wrong position. Check your work and compare to Figure 3 again.

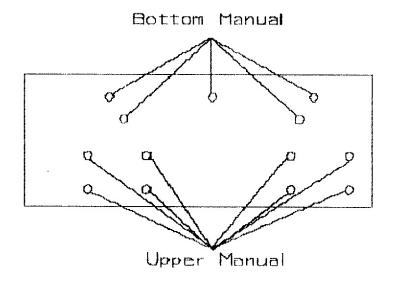
Now, solder the wire you cut to pin 19 of socket A on the replacement board. See **Figure 4**. If all looks good, you can now power the unit up to check operation. Play all the keys top to bottom. If you have any problems with notes not sounding or two notes sounding with one key pressed, chances are there is a short between pins from soldering in the board.

If all looks good, you can now reassemble your keyboard. Be sure there are no pinched wires when securing the keyboard manuals.

That completes the installation.

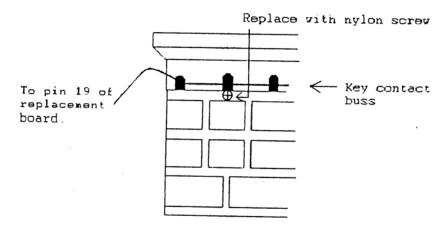


CX-3 Bottom View FIGURE 1



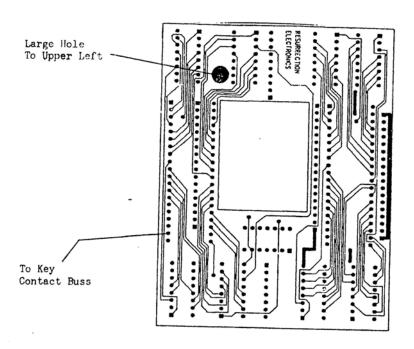
DX-3 Dottum View

FIGURE 2



Key Contact Frame

Figure 3



Solder Side FIGURE 4