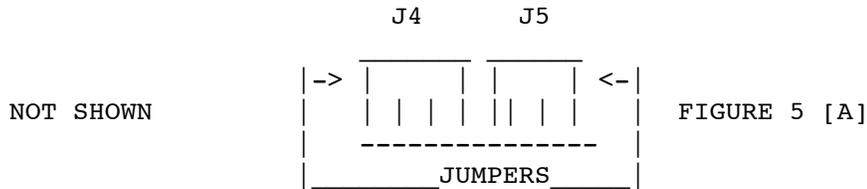


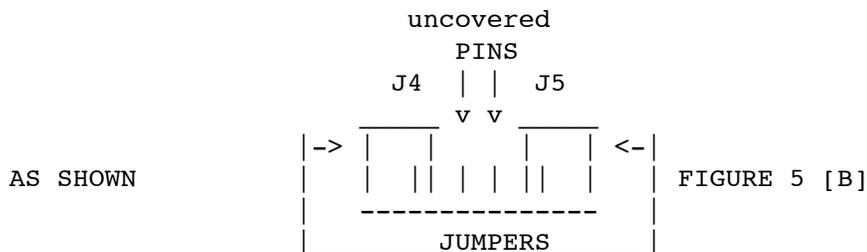
Upon reading the TITAN A///+ IIe instruction manual I became bothered by the information in Step 9 and Figure 5 on page 2-5. It states:

"Jumper J4: If you plug a serial printer into the Apple ///'s built-in RS-232-C port, jumper J4 will give you access to this printer when you are running Apple II programs. To use your serial printer in //e emulation, move jumper J4 so it covers both posts in position J4. The jumper will redirect output from slot 1 to the built-in serial port. If you have a device plugged into slot 1 of your Apple ///, you won't be able to use it in //e emulation."



The instructions then go on to say:

"If you do not want to use a serial printer plugged into the built-in serial port with your Apple II programs, leave the jumper in position J4 covering one post only, as shown in Figure 5 [B]. Output will not be redirected to the serial port, and you should be able to use any device you have plugged in slot 1."



The same goes for J5.

"Jumper J5: If you are going to put an Apple /// ProFile controller card in slot 4 of the Apple ///, jumper J5 will enable you to use your ProFile hard drive with your Apple II programs. To use the ProFile hard drive in IIe emulations, move jumper J5 so it covers both posts as shown in Figure 5 [A]. If you do not want to use your ProFile hard drive with your Apple II programs, or you have some other device in slot 4 that you want to use in IIe emulation, leave jumper J5 covering one post only, as shown in Figure 5[B]."

On Recap of the instructions and my comments:

If you place the shorting stub (jumper) to cover both pins on J4 you cannot use slot 1 but you will be able to run your serial printer out of the RS-232-C port as in Figure 5[A] and when you want to run a board (and I have a IIe .MOUSE board in slot 1) then the jumper must be moved (removed) to only uncover one pin. The same goes for J5 (and slot 4) by placing the jumper over both pins the ProFile can be used in A/// mode only and by uncovering the pins the the Profile can be used in the IIe mode.

What TITAN did not tell us is how to utilize the slots to their fullest without moving the jumpers around, which means opening up the A/// and

pulling out the boards, so that the jumpers could be moved if you HAD to configure the slots to fit your needs as they arise. The DANGER of getting this operation accomplished is that the boards and the A/// can be damaged.

You may have to remove the monitor, open up the A///, pull the cables off, remove the ProFile, remove the jumper cables from the boards, pull the boards, place the jumper(s) in the proper configuration. Then put it back together. Each time you want to change the configuration, the above steps have to be followed.

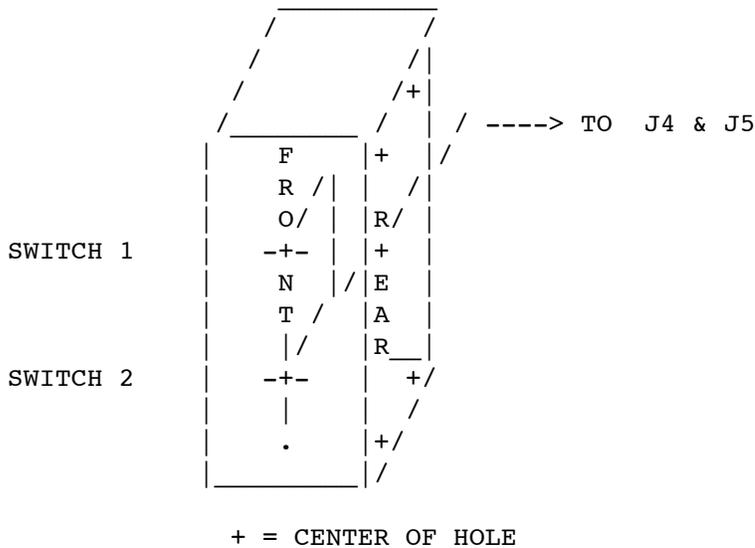
In order to alleviate this problem it became very obvious that if I wanted maximum use of the TITAN ///+IIE Emulation Board I had to figure a way to change the position of the jumpers without going into the A/// each time to make the change(s).

In order to accomplish this:

Purchase the following:

1. A small plastic box (that has an aluminum side panel that could be closed up with screws when the parts are inserted and wired up)
2. Two each single-pole single-throw switches.
3. Four-wire color coded (leads) wire.(3 ft.)
4. In-line plug (with at least for female pins that will fit over the pins of J4 & J5.
5. Optional two each subminiature phone jacks and subminiature phone plugs.

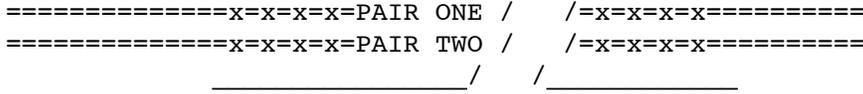
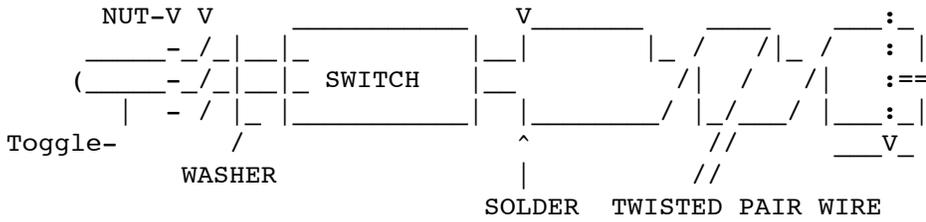
Drill holes on one side, centered so that each switch has space without cramping.



After the holes are drilled in the front (side) and formed for a tight fit, so that the switches can just fit, drill a partial hole for the dog on the flat washer(used to keep the switch from turning). After forming the holes and while the switches are out, drill a hole to feed the wires that go to J4 & J5.

Feed the wire through the hole from the rear towards the front. Tie the wires into a knot inside the box. Separate the wires into pairs. Solder one pair to each switch, as shown.





Do the same for the other switch.

Feed both switches through their respective holes in the front of the box.

Place the washer as shown into the partial hole that was drilled in the front, the lock washer and tighten the nut to hold the switch in place. Insure that the wires are inside the box and will allow for the closing of the aluminum panel. Tighten the four cover screws.

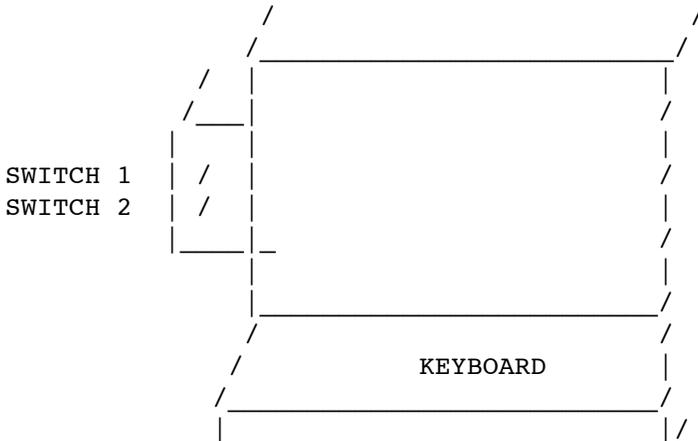
Turn off the power to the A/// remove the cover and insert the board into slot 2. DO NOT place the other board in at this time.

I suggest removal of all boards to allow the freedom of movement. Place the switch box on the left side of the cover and tape it to the side temporarily. Feed the wires to the rear of the A/// around through the slot opening along the top of the board and then down to J4 & J5. Measure this length and add an inch or so to allow for slack. Remove the switch box from the cover.

Strip the insulation off the ends of all the wires and solder the paired wires to the the plug. Feed the wires throught the back of the slot. Place the plug onto the pins adjusting the wires to run to the top of the and along the top (and tie them to the board at the hole that is on the top end), and straight out the back and around to the front.

Put the other boards into their respective slots and replace the cover.

Glue a strip of Velcro to the aluminum cover and to the side of the cover. The front of the box should be aligned with the front edge of the cover.



The wiring does not cause any problem to the signal path due to its resistance.

Parts can be obtained from Radio Shack

