

# Replacement of Silver Face CNC88 and Enhanced 527F Panel

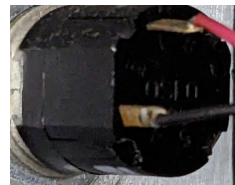
(to be used in addition to the standard panel instructions)

## Photograph and Label Wires

Take multiple photographs of every component of the pendant. Label all wires that may have lost their label or have no identification.

## Desolder the Spindle pot and Keylock

Remove the spindle potentiometer and keylock from the front panel. Ensure a photograph is taken of the wiring to these devices and note the location of the wire color and its termination. Desolder the wires and label for later reference.



## 1110-1 Distribution board

Take a photo and label the wires on the 1110-1 board. This board needs to be remounted into the new pendant. Most of the 120VAC connections are located here, as well as the low voltage control connector for the "Waiting" Beacon light, which has 3 pins.

Mount the 1110-1 into the new pendant box.



Remove the wiring through the top hinge hole in order to make space for the new enclosure.

## Pendant Pillow Block Mounts

The CNC88 pendant utilizes a smaller diameter bearing mount for both the top and bottom of the pendant. The top mount will need to be bored out to a minimum of 1.75". This is the outer diameter of the new box. The bottom mount should fit by cleaning up the bearing using a deburring tool.

Additionally, the bottom bearing mount will need to be repositioned on the sheet metal due to the increased height of the replacement box. The center to center distance of the mounts will be approximately 23.5" - 23.625".

### **Mount the pendant Box**

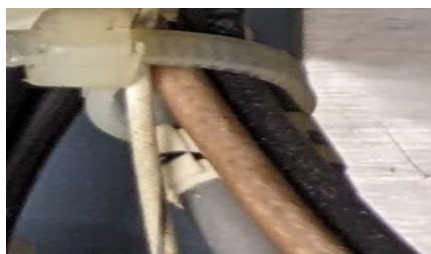
When mounting the pendant box, ensure that all wires and cables are routed back into the pendant. Additionally, route the new cables for the new panel, HDMI, USB, and white CAT5 cable.

Note that the 1090 keyboard controller's 34-pin connector will have a jumper on two pins for the beacon "waiting" light. Do not remove it. Note that the new pendant will not utilize the 34-pin ribbon cable. Unplug the other end at the 1060 motherboard's J8.

Route the wiring back through the mounting hole into the new enclosure.

### **Repurpose the Green Power Indicator Lamp**

The new panel will not utilize the green lamp that is present on the legacy panel. The two wires that were previously connected to the lamp should be repurposed and connected to the two terminals on the DIN rail mounted 120VAC outlet plug. The L terminal (Line) is where the 120VAC line power should be re-routed and the N terminal (Neutral) should be connected to the neutral wire.



### **Resolder the Spindle pot and Keylock**

Place the spindle port and keylock switch into the appropriate location of the new panel. Reference the location of the wires in the previous step and resolder the wires.

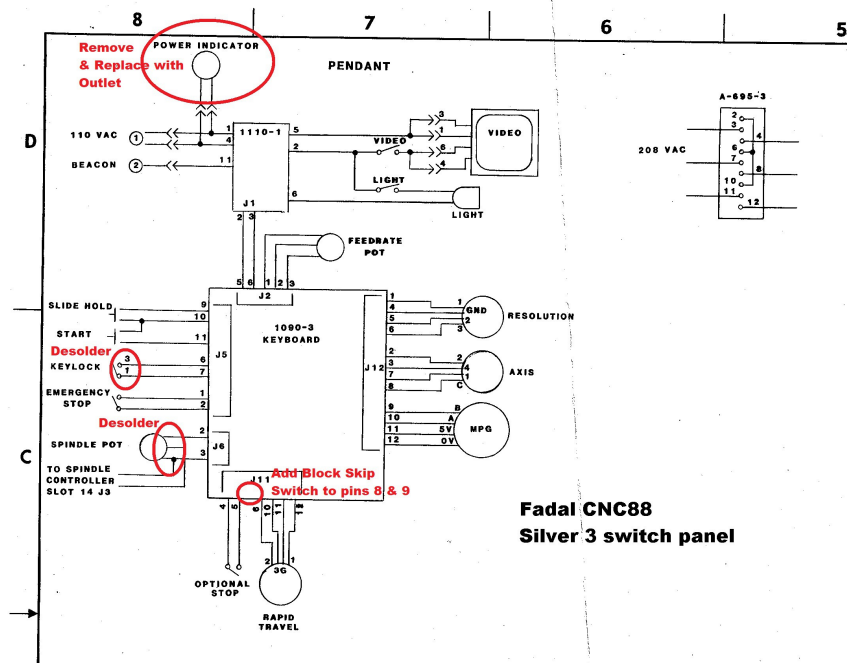
### **Block Skip Switch**

The CNC88 pendant does not have a Block Skip switch. The new panel will have the switch installed. The switch's two terminals will connect to the 1090 board on the J11 connector at pins 8 and 9. Either wire can be placed in positions 8 or 9.

### **Axis, rapid, feedrate pot and resolution switches**

Remove the axis and resolution selector switches from the legacy panel and mount them on the 527F enhance panel. Use the provided knobs as appropriate. Insert the opposite ends into the new keyboard controller.

The diagram below identifies the legacy wiring and modifications and termination differences between the 527F enhanced panel and the legacy version.



### Load Meter

The CNC88 pendant was originally shipped with an analog load meter with a + and - input. The analog signal is an output from the spindle drive that is scaled to output 2.5V for 100% load on the meter. The black input is for the - signal, the red input is for the + signal.

On the new panel, the principle remains the same. The red analog load signal is connected to the analog input of the new meter, which will be labeled as "AN0" or "Spindle". The black wire should be connected to the DC common, which is labeled as either GND or COM.

The new panel load meter requires power.

527F HS panel: This version uses a 4" LCD display. It is powered using a micro USB connector located on the bottom board stack. The power supply for the micro USB connection can be plugged into the DIN rail 120 AC plug provided in the kit.

### MPG

Reconnect the MPG wiring to the new jog wheel. It is critical that the 5V and common are placed on the correct terminals. The MPG may be damaged beyond repair if not connected properly.