## HSSW Hummel Switch Box Upgrade Installation Instructions

## Removing the Old Switch Box

DANGER: DO NOT ATTEMPT ANY REPAIRS WITH THE POWER CORD CONNECTED. BE SURE TO UNPLUG THE POWER TO THE MACHINE BEFORE STARTING THESE REPAIRS.

- 1. Remove top cover from switch box.
- 2. Loosen screw in switch knob and remove switch knob.
- 3. Use a screwdriver to pry the face off the switch.
- 4. Remove the 2 screws holding the switch in.
- 5. Remove the nuts from the back of the capacitors.
- 6. Disconnect motor wires A, A1, 2, 11 & 22 from the switch, making sure they are labeled. Mark 2 as start.
- 7. Disconnect motor wires 1 & 2 from the contactor, making sure they are labeled.
- 8. Disconnect the motor wire from the run capacitor. Mark this as start.

Note - both start wires will be different from the rest, normally they are light blue and slightly smaller wires.

- 9. Disconnect the 2 small motor wires from the contactor & fuse holder. These will not be used.
- 10. Remove the capacitors.
- 11. Remove the 6 screws holding the motor box in place.
- 12. The switch box can now be removed.

Note - If there are any wires still connected to the motor, be sure to mark them before disconnecting. There are several wires in the box with the same numbers, so you may have disconnected the wrong one earlier.

# Installing the New Switch Box

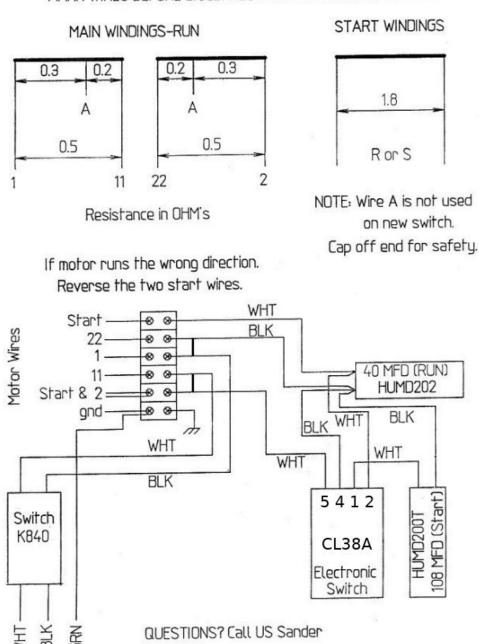
- 1. Cap off both A wires & the 2 small white wires. These will not be used.
- 2. Install crimp eyelets on wires 1, 2, 11, 22 & both start wires.
- 3. Make sure the rubber gasket is on top of the motor, and install the new switch box on the motor. Be sure not to get any wires pinched between the box and the motor.
- 4. Install the 6 screws in the switch box. Make sure the green ground wire in the box is connected to one of the screws.
- 5. Connect the wires as shown in the wiring diagram. The number 2 wire you labeled as start will go on the terminal with the other number 2 wire. The other start wire will go on the end terminal as shown in the wiring diagram.
- 6. With the wires all connected, plug in the motor and turn it on. Note the direction it rotates. If it rotates the wrong direction, unplug the motor and reverse the two start wires.
- 7. Place the wiring diagram in the switch box for future reference, and reinstall the top cover. Your motor is now ready to use.

Watch our install videos on youtube for more in depth instructions! Scan the code or search for **US Sander HSSW Box** 



#### **HSSW Box**

## MARK WIRES BEFORE DISCONNECTING FROM ORIGINAL SWITCH

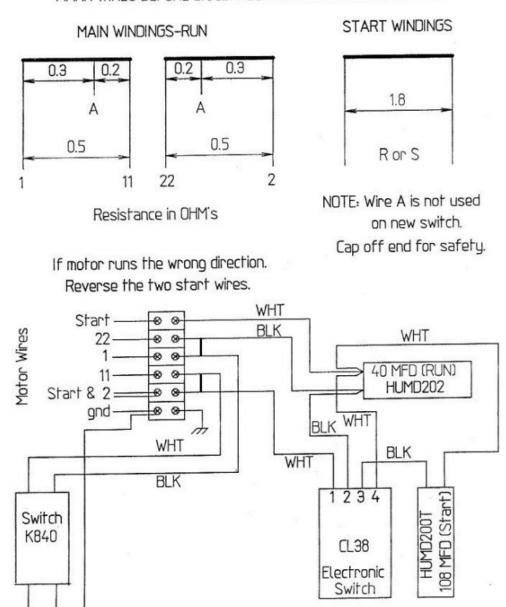


Boxes made after 3/24/2021

518-875-6124

#### **HSSW Box**

## MARK WIRES BEFORE DISCONNECTING FROM ORIGINAL SWITCH



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QUESTIONS? Call US Sander

### To retrofit HSSW box from CL38 sinpac to CL38A

First, you will need to identify the components. There are 3 cylinders strapped in the corner of the box. One of these is metal; this is the run capacitor (the other 2 are black plastic). One will have a label that says Stearns Sinpac, and the terminals will be labeled 1-2-3-4. This is the Sinpac start switch (the component we are replacing). The last one is the start capacitor.

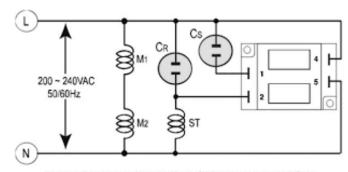
- 1. Connect white wire from terminal 1 on sinpac to terminal 5 on new switch
- 2. Connect black wire from terminal 2 on sinpac to terminal 4 on new switch
- 3. Connect black wire from terminal 3 on sinpac to the run capacitor terminal with the black wires
- 4. Connect white wire from terminal 4 on sinpac to terminal 2 on new switch
- 5. There is a white wire that connects the start and run capacitors. Disconnect from the run capacitor, and connect it to terminal 1 on the new switch.

Mount the new switch in a secure location, making sure the wires cannot contact ground.

A generic wiring schematic for the CL38A is provided below for reference.

#### Electronic Start Switch WIRING DIAGRAM

Model ECS 225P (.5 - 6.0 HP, 200-240 VAC)



Cs = Starting Capacitor, Cr = Run Capacitor M1,M2 = Main Coil, ST = Start Coil