

CHECKING YOUR STROKE SWITCH AND STROKE SWITCH CIRCUIT.

There are 4 main components in the stroke switch circuit.

1. The magnetic reed switch on the back of the saw.
2. The cable that links the switch to the relay.
3. The 12V relay which the switch drives, this is inside the control cabinet in the top right corner on the din rail. In older systems there are 2 relays one for the emergency stop and one for the switch. To determine which is which push the emergency stop button in the light on that relay will go out. The stroke switch is the other relay.
4. The input/output card which is also in the control cabinet.

Trouble shooting.

1. If the stroke switch is not registering and or you are getting the BLADE VIOLATION warning, test to see if you can STOP CUTTING then select another member to set up. If you can then continue on, if not the problem will be in the communication circuit and you should contact a Mango Tech employee.
2. When you pull the saw out in front of the fence you should see the LED on the relay turn off, when the saw goes back again this will turn on. If it does not, go to step 3. If it does go to step 5.
3. Being careful not to touch the wires to the frame, short the wires that connect to the switch (either remove them and twist them together or use a small piece of wire to jump them together) and observe the relay, if the light on the relay comes on replace the switch. If it does not move to step 4.
4. Remove the cable from A1 on the relay and put a jump wire between A1 and the red terminal to the right. If the light then comes on replace the cable between the relay and the switch. If it does not check your 12V power supply and contact a Mango Tech employee.
5. If the relay light operates as expected then the issue is going to be in the card or the relay. Open the DIAGNOSTICS part of the Mango Tech program and answer NO to AUTO DIAGNOSE. Choose the SENSORS tab on the left, you will see the STROKE SWITCH on the right. Remove wires from terminals 11 and 14 on the relay and touch them together and take them apart this will simulate the saw switch being on and off. You should see the STATE value change from ON (touched together) to OFF (apart). If you see this happen replace the relay. If you do not then replace the card.

