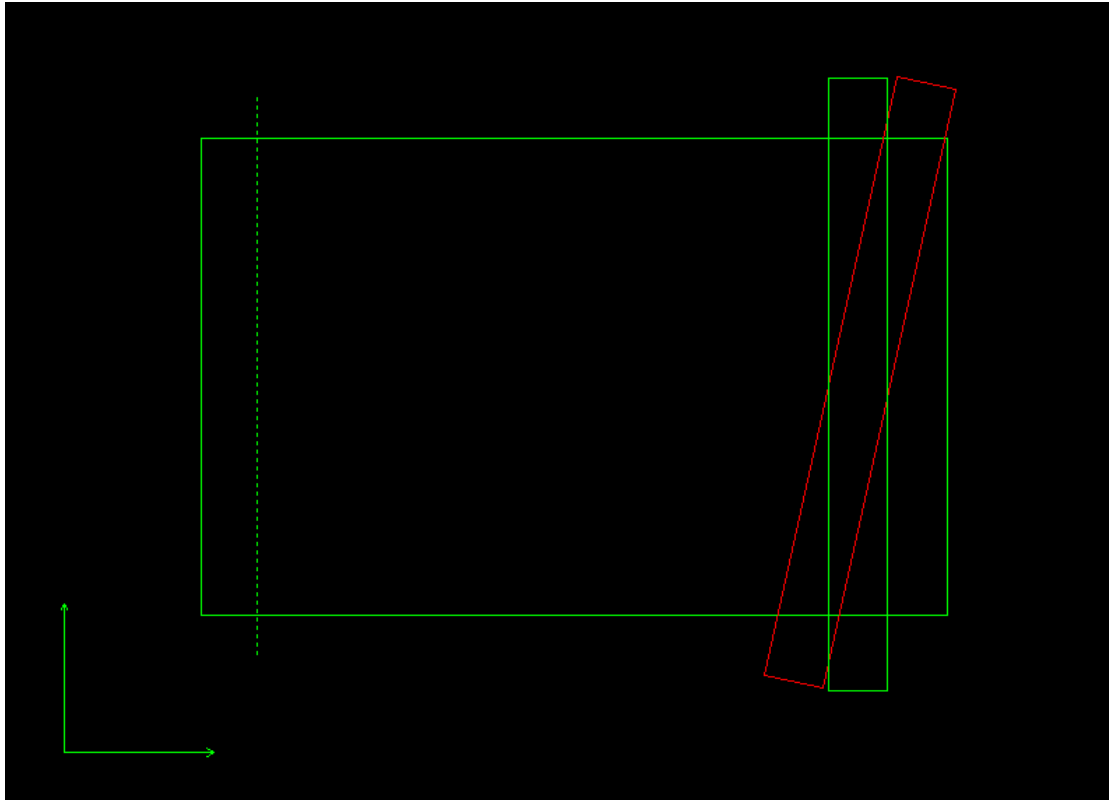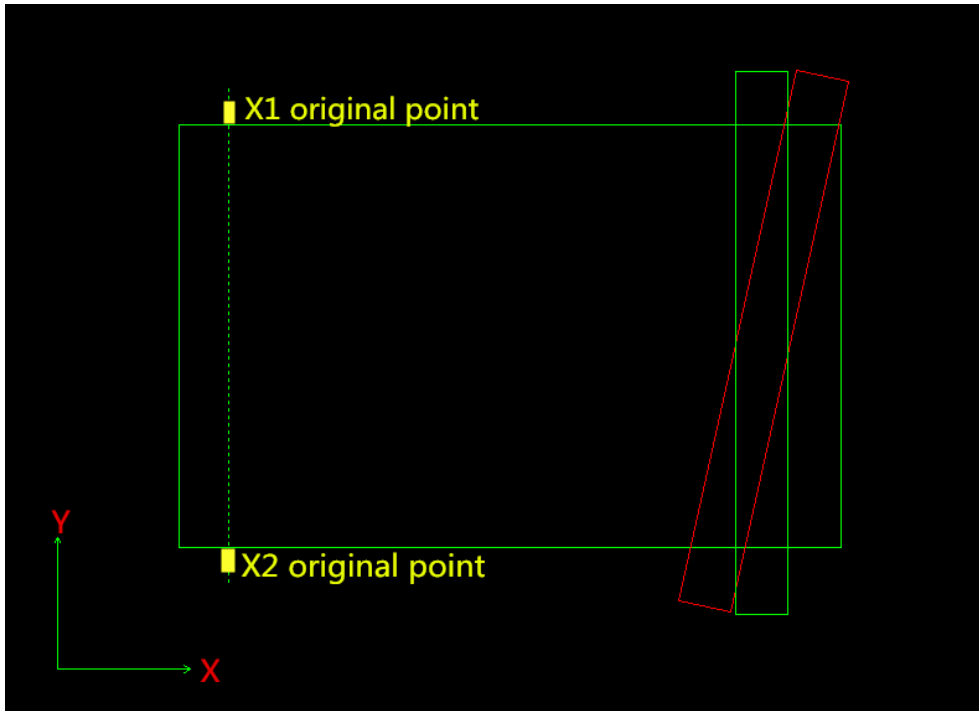Fault description:

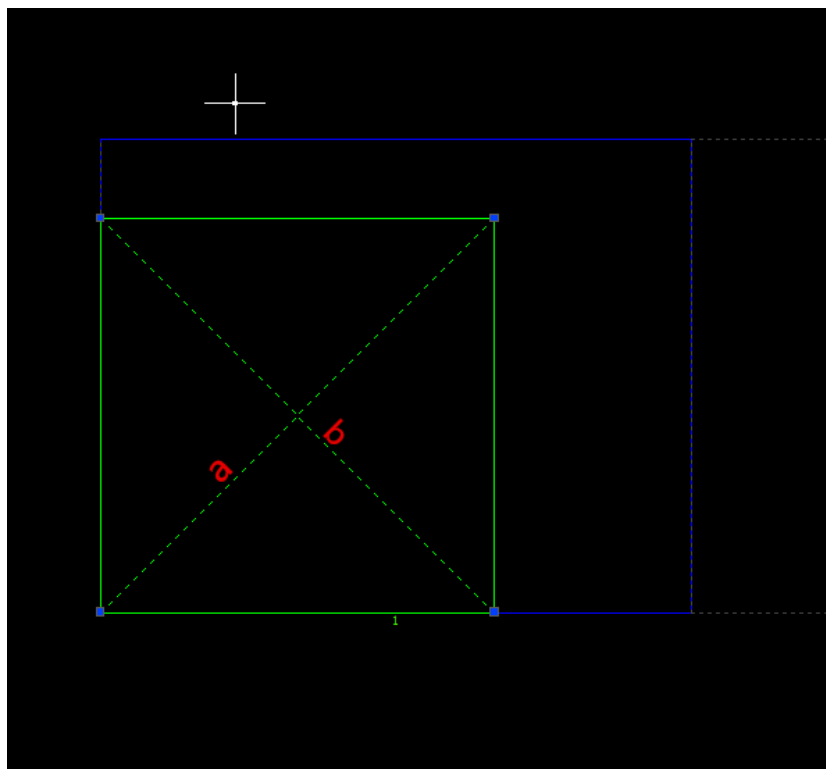When machine is running，the gantry gets stuck and skew. It looks like the picture below.

Solution:

1. First, you need to know that TK3S has two motors on X direction, also there are two X original sensors. You have to check whether the connection between the two sensors is parallel to the Y-axis or not.

How to check it?

- Draw a 1000X1000 square in the IBrightCut(SmartCut) and cut it on a paper.
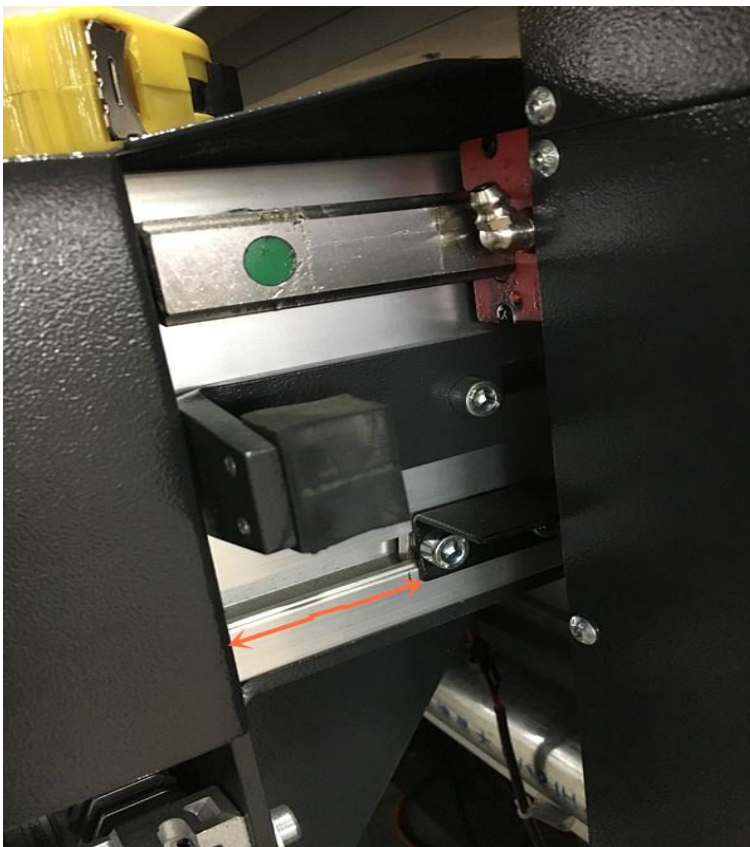
- Measure diagonal lengths "a" and "b"

● -0.1mm≤a-b≤ + 0.1mm   It's good, no need to adjust

a-b<<-0.1mm   OR   a-b>>0.1mm

It shows that the square is cut into a parallelogram, the connection between two sensors is not parallel to the Y-axis.

You need to adjust the light barrier of the X sensor to change the original point location.

2. If you have done the adjustment as what this document shows above, but the gantry still gets stuck as before. You should exchange the X1 and X2 motors, check the motors if they are all good. If the gantry gets skew in the opposite direction, then one of motor drivers is broken.

3. If machine still has the same problem, change the EPOS board.