



IMB STEP 1:

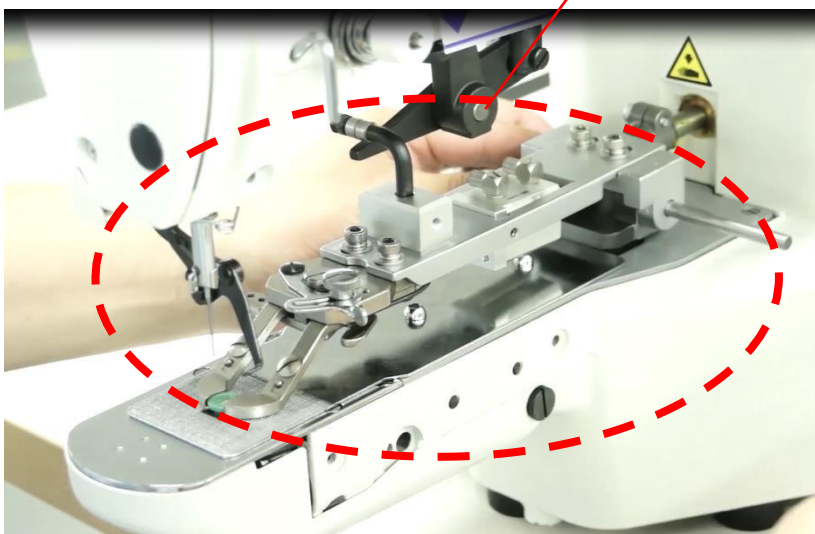
to replace brother original button clamp with IMB button clamp

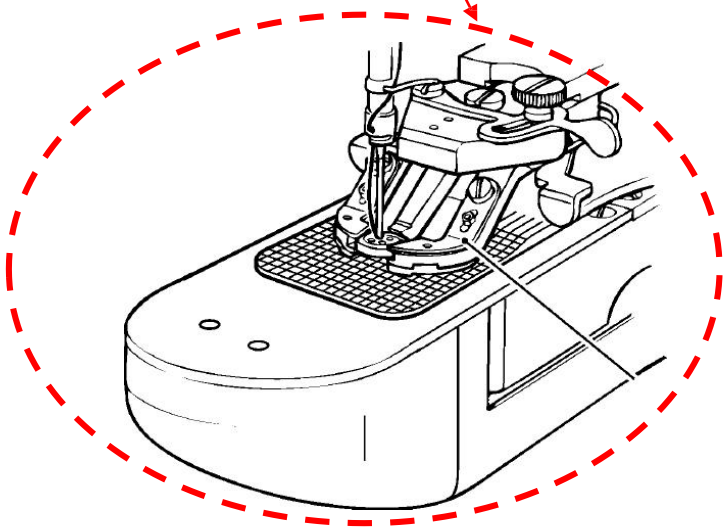
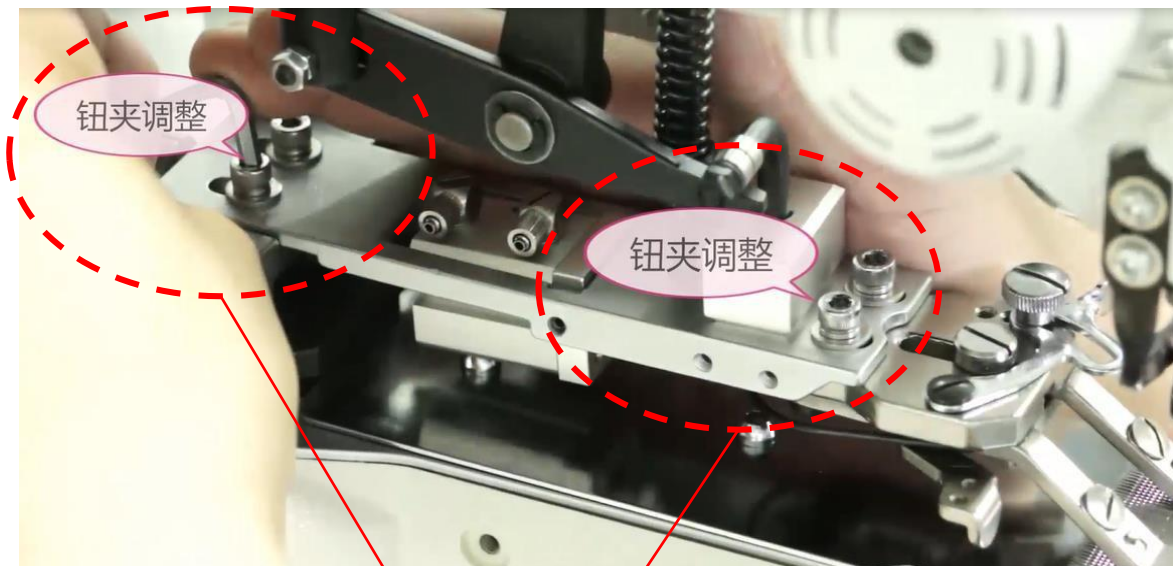
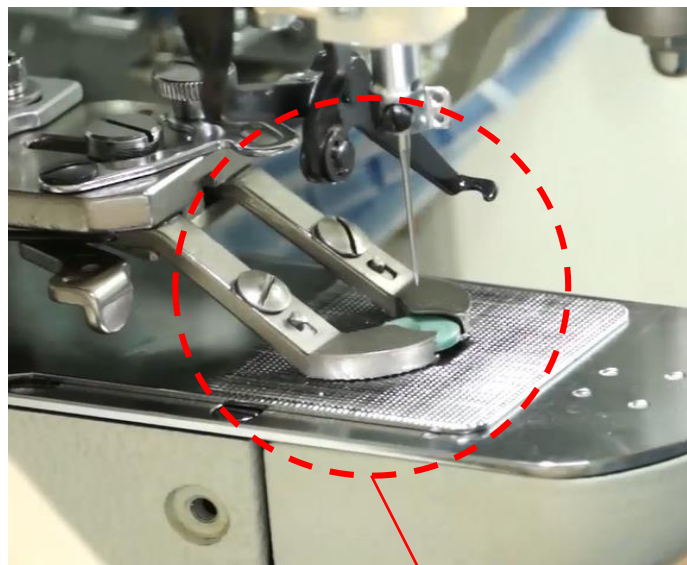


Remove brother original button clamp and replace it with IMB button clamp

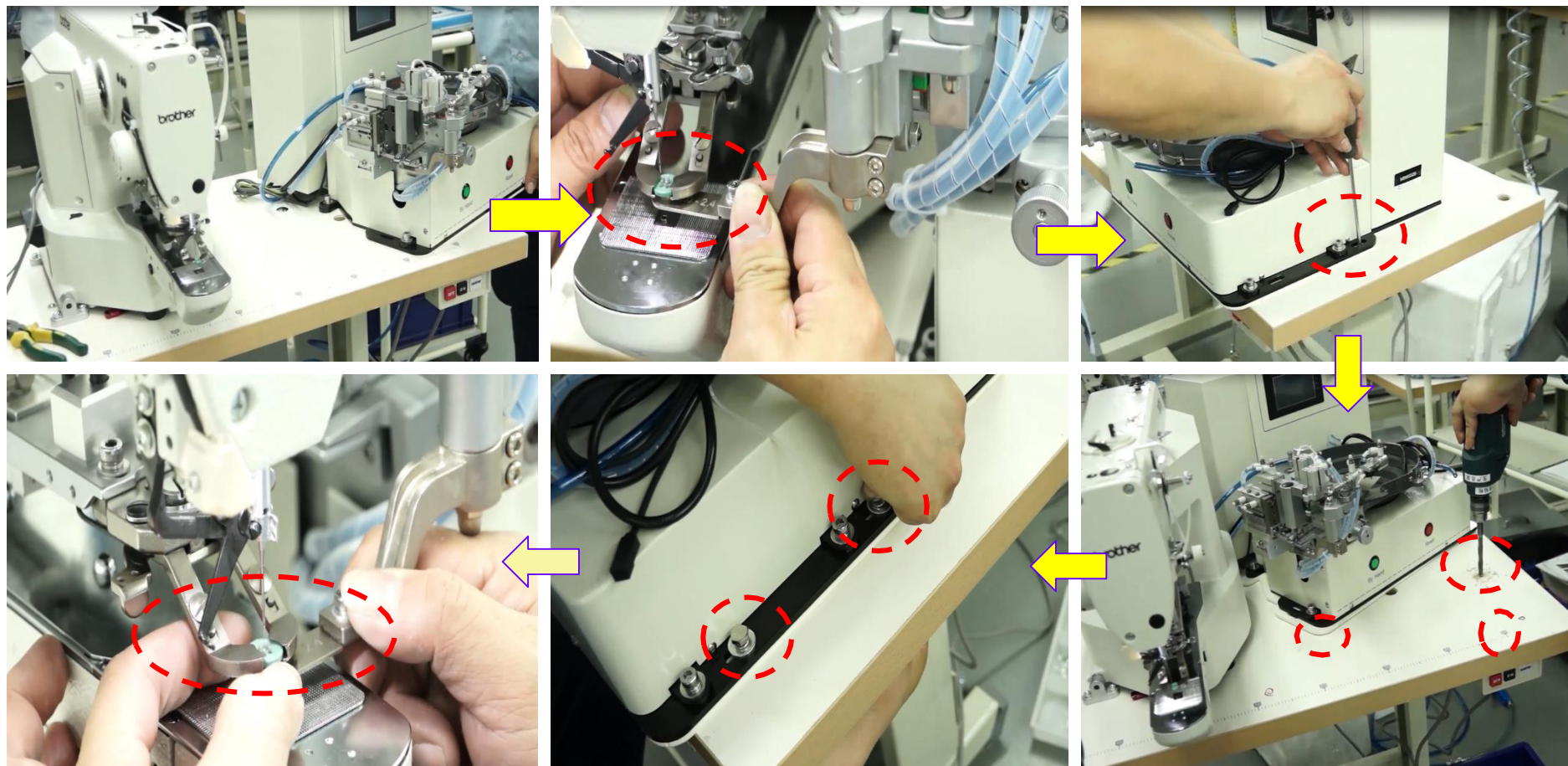


Fix button clamp from backside with screw to be sure smoothly movement up/down , adjust button position after clamp fixing.

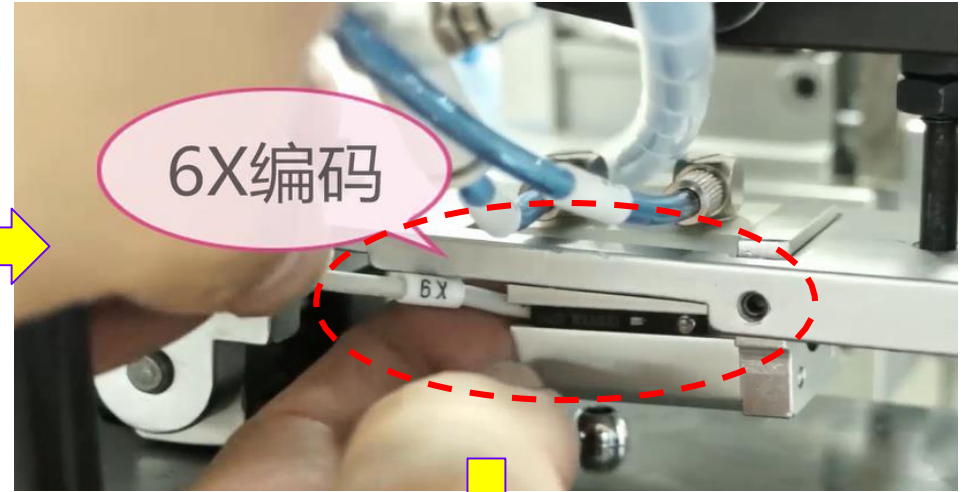
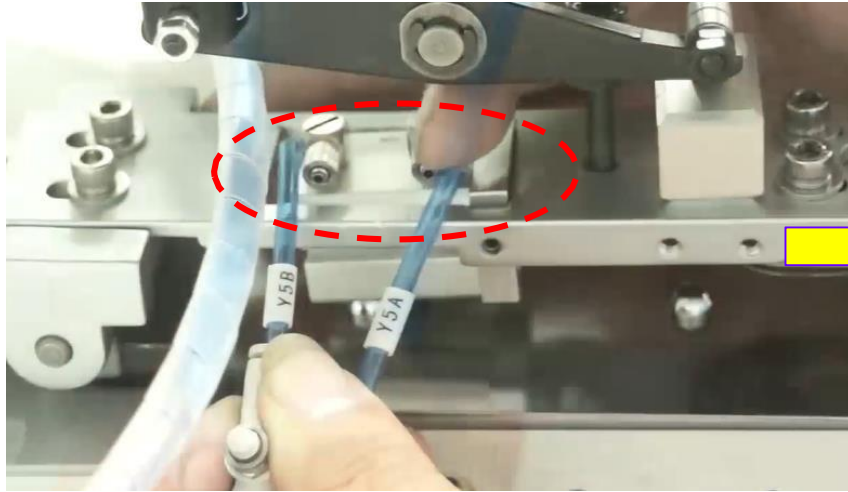




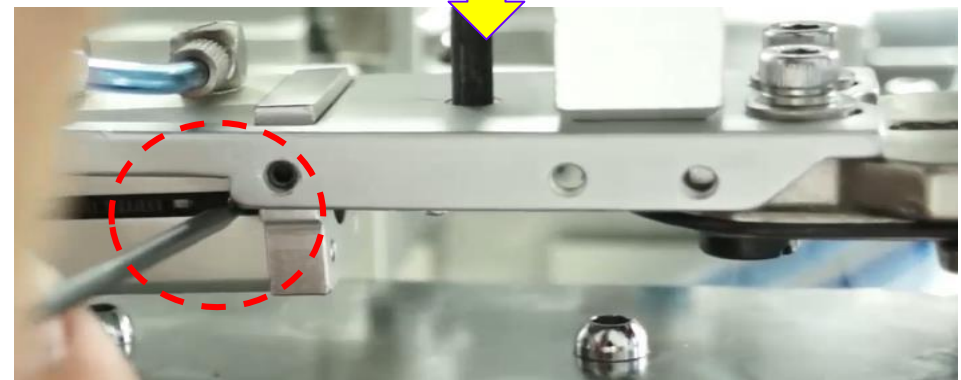
Adjust button clamp position through above red circled M5 screw to be sure needle tip always match button hole center in each single stitch



Follow above yellow arrow showing sequence to set button feeder position with machine head, allowed button feeder position difference should be within **-8mm \+ 8mm**



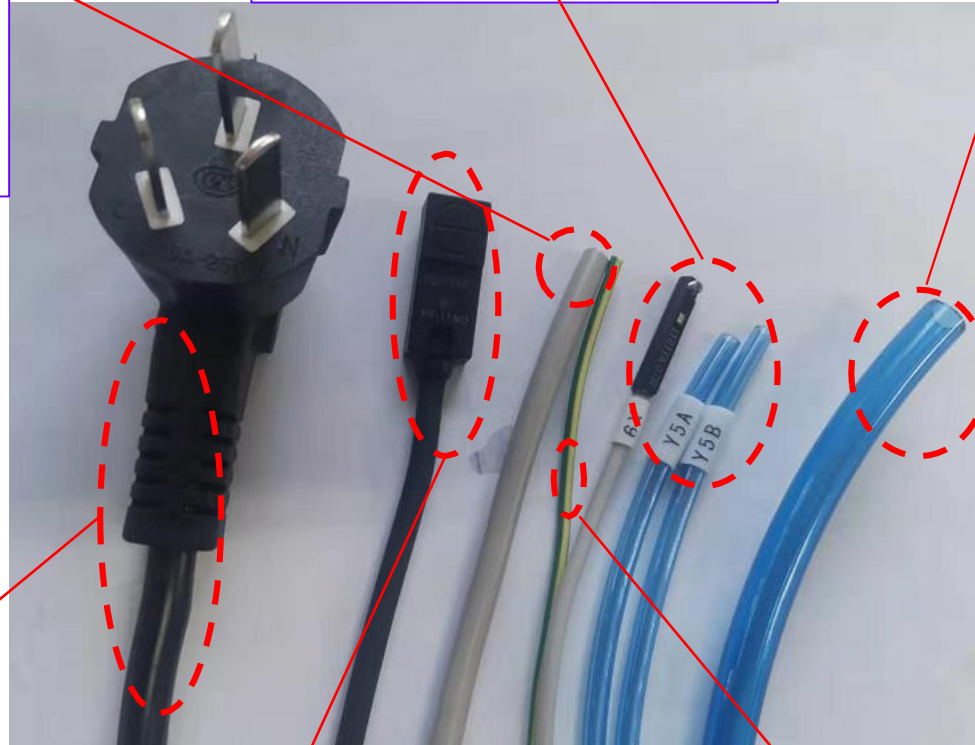
Connect air pipe Y5A, Y5B to desired cylinder as upper left picture shown.
Fix sensor X6 to button clamp cylinder with screw as upper right picture shown.



safety signal cable to be connected with pedal cable (No need to connect, it will give error if button size change everytime.)

button clamp cylinder pipe Y5A, Y5B send sensor X5

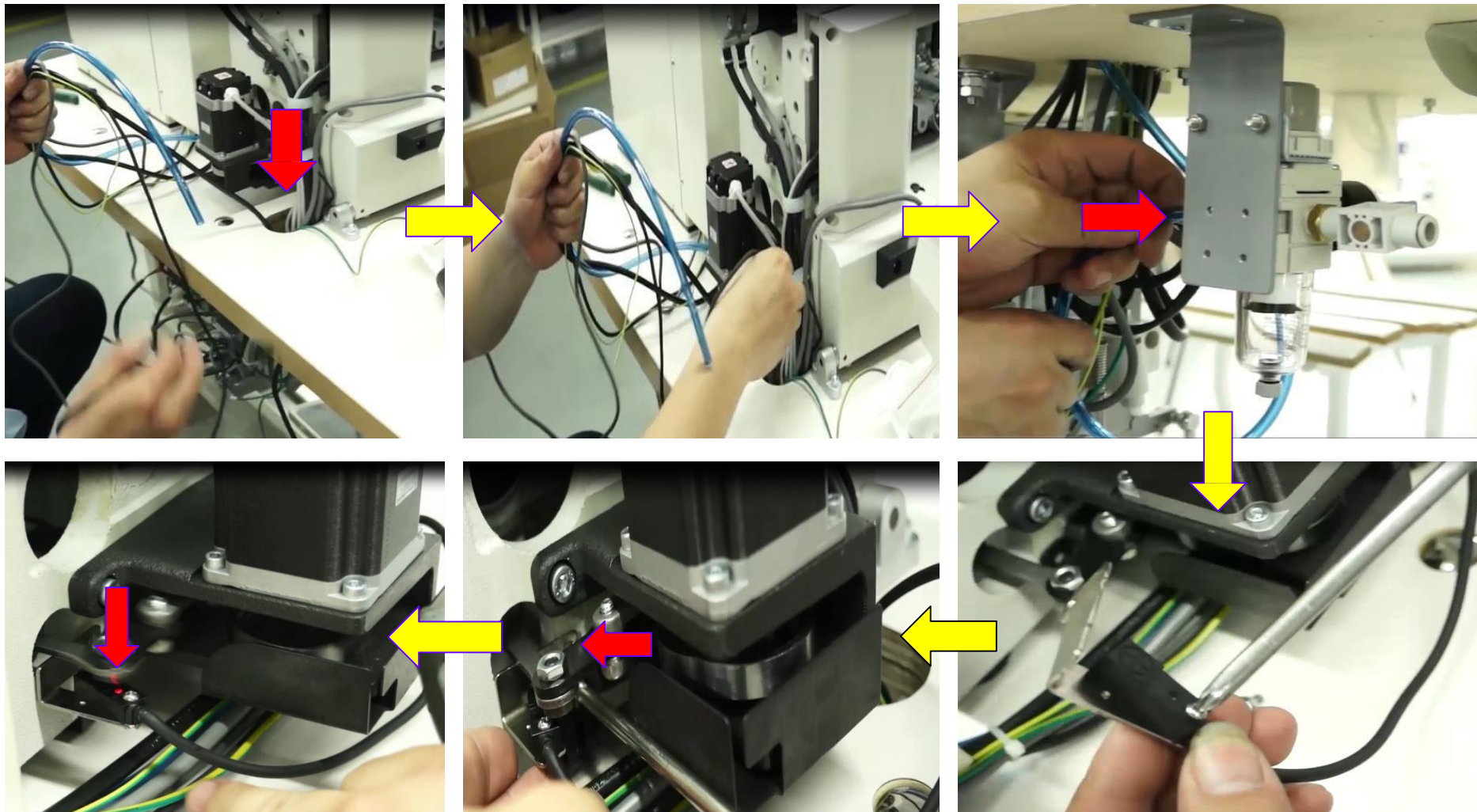
Button feeder main air pipe



220V power cable

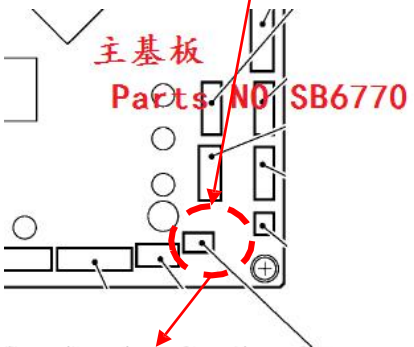
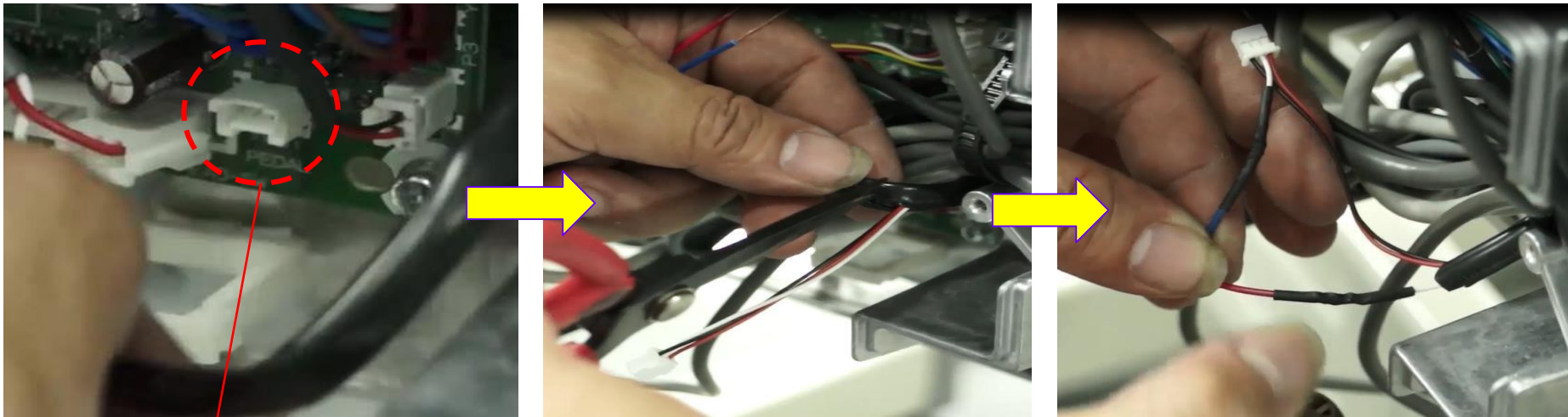
button feeding detecting sensor to be installed back side of machine head

Ground cable



Following above way to do cable threading, then install black sensor as above demo showing ,black sensor is to detect thread trimming movement ,thus ,should be installed under thread trimming level bar to detect level bar each movement then to control button feeding & sewing process .

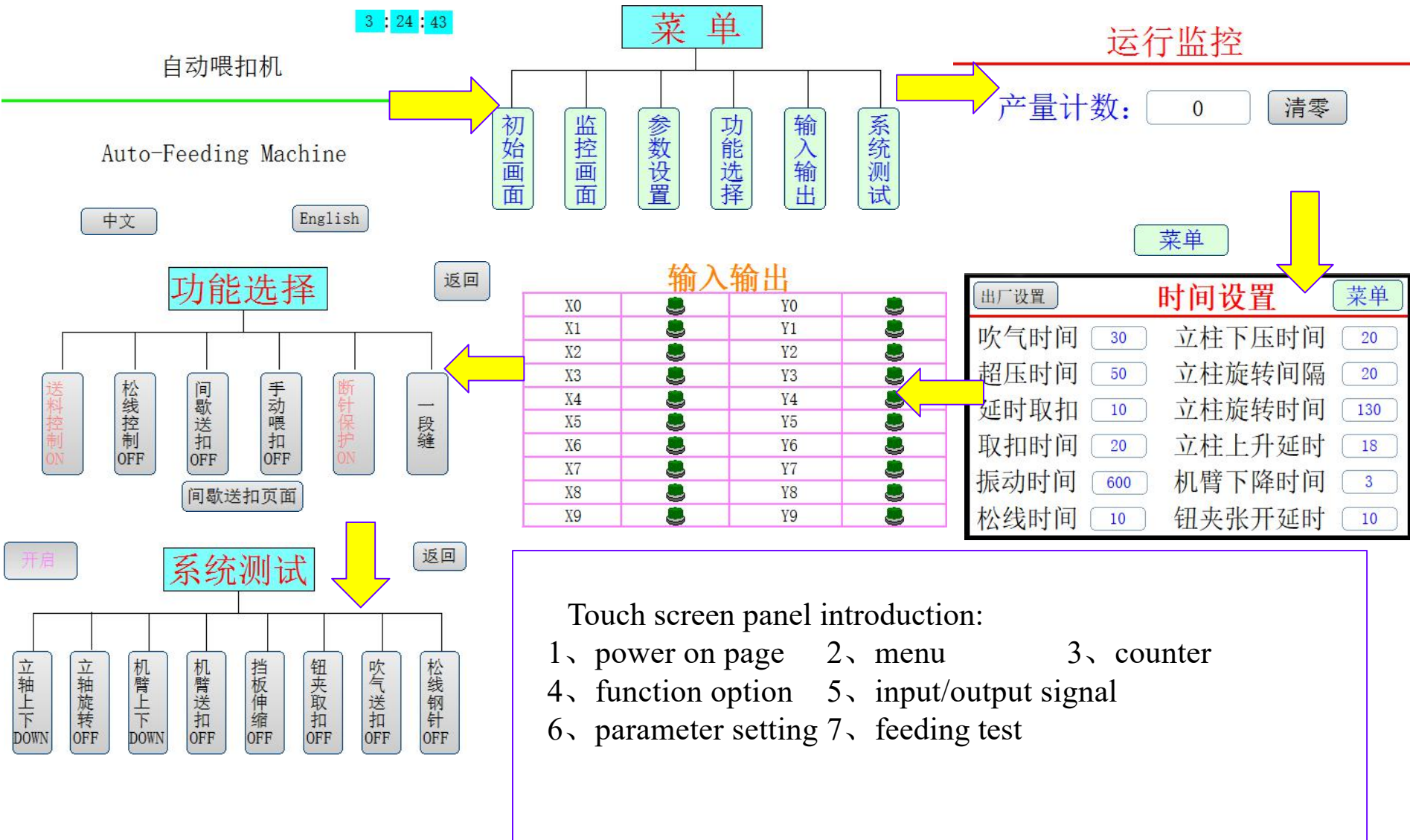
IMB Safety cable connection with pedal cable demo
(This step is optional ,better not connect.)

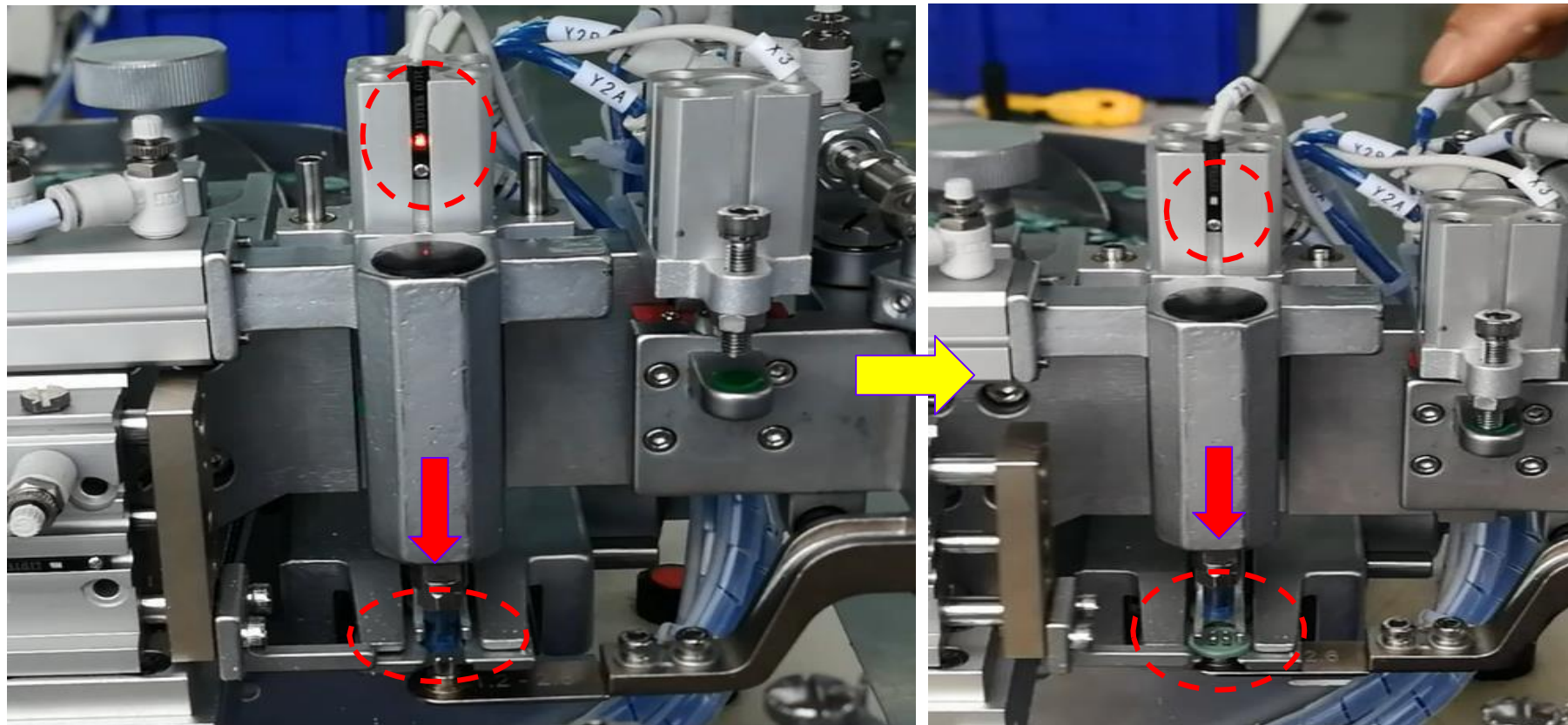


-	1	PEDAL
5V	2	
AN IN	3	
0V	4	

P8 PEDAL

Take BE-438H as example:
Remove port P8 connected cable ,and find white thin cable cut into 2, then joint white cable 2 sides with safety cable regardless of plus or minus, then put it back with P8 port. Now machine is ready for adjusting.



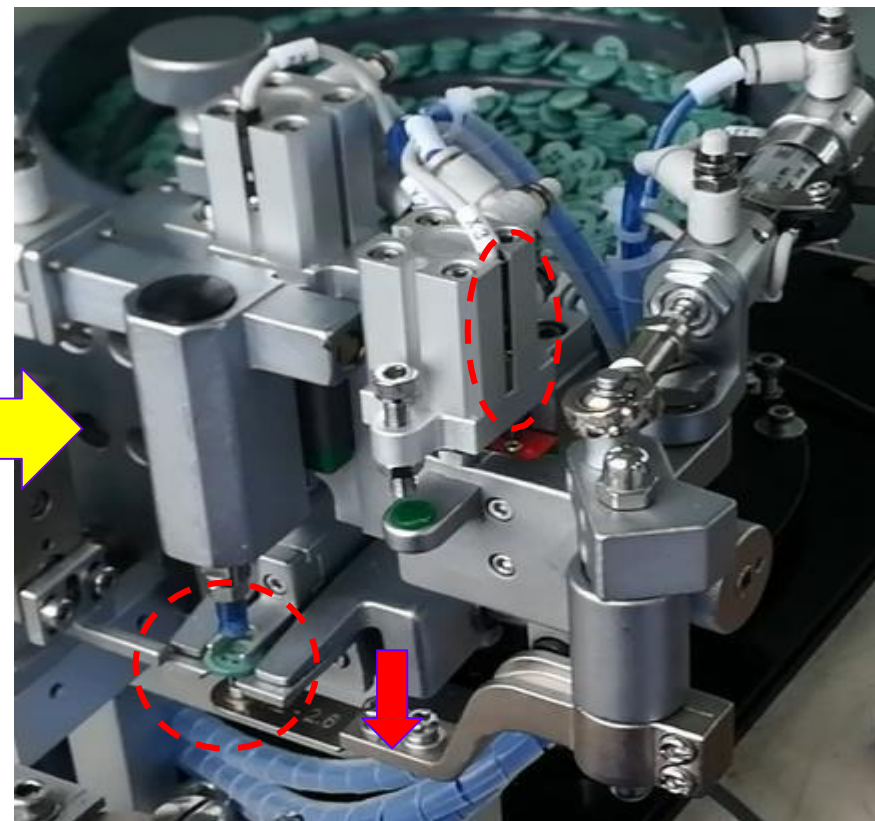
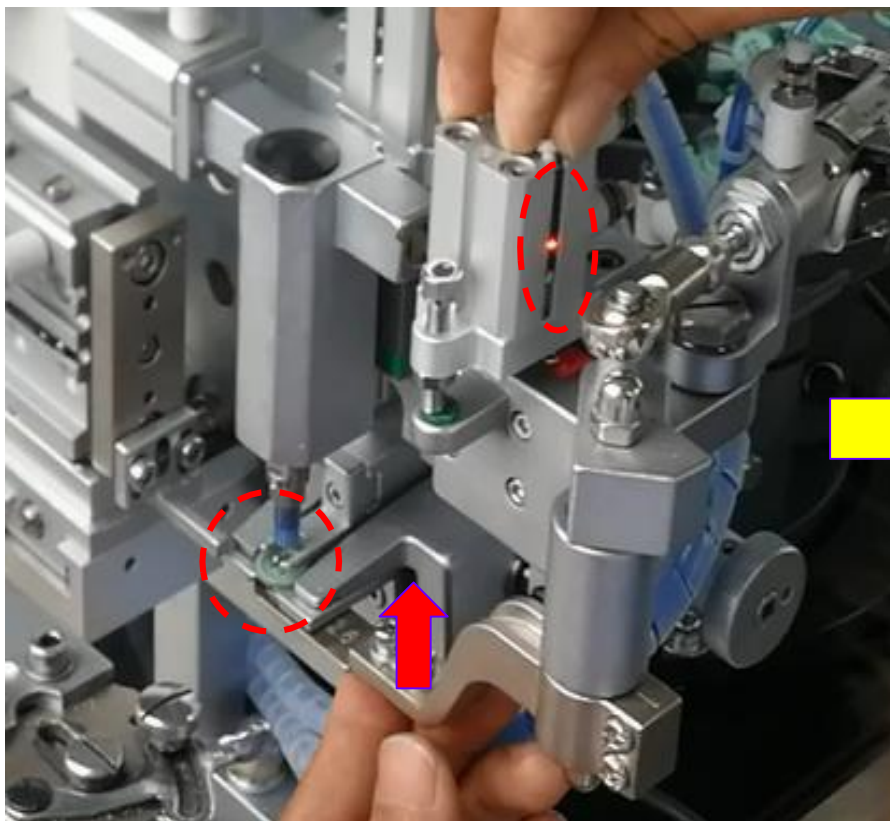


Function of X2: error E01 will come out while there is no button in above red marked position , and machine will stop , in the meanwhile sensor X2 light will be in ON status ,while no button.

X2 position setting requirement:

IF button there , X2 sensor light should be ON (Related error E01).

IF button not there , X2 sensor light should be OFF.



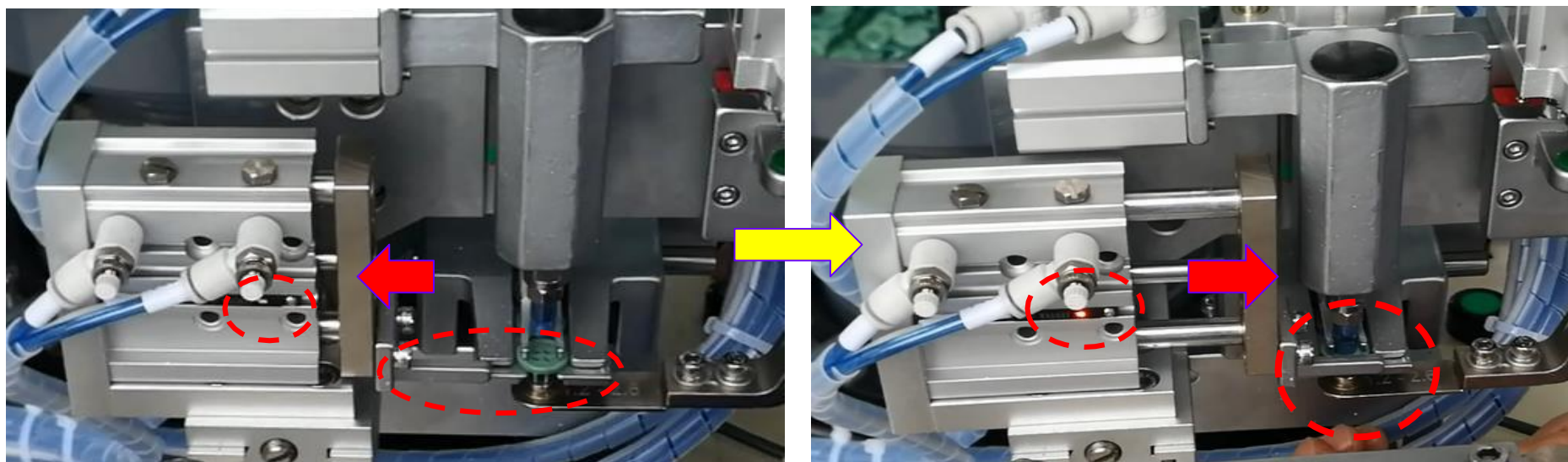
Function of sensor X3: to detect if button claw catch button successfully or not .

X3 position setting requirement:

IF button being caught , X3 sensor light should be ON

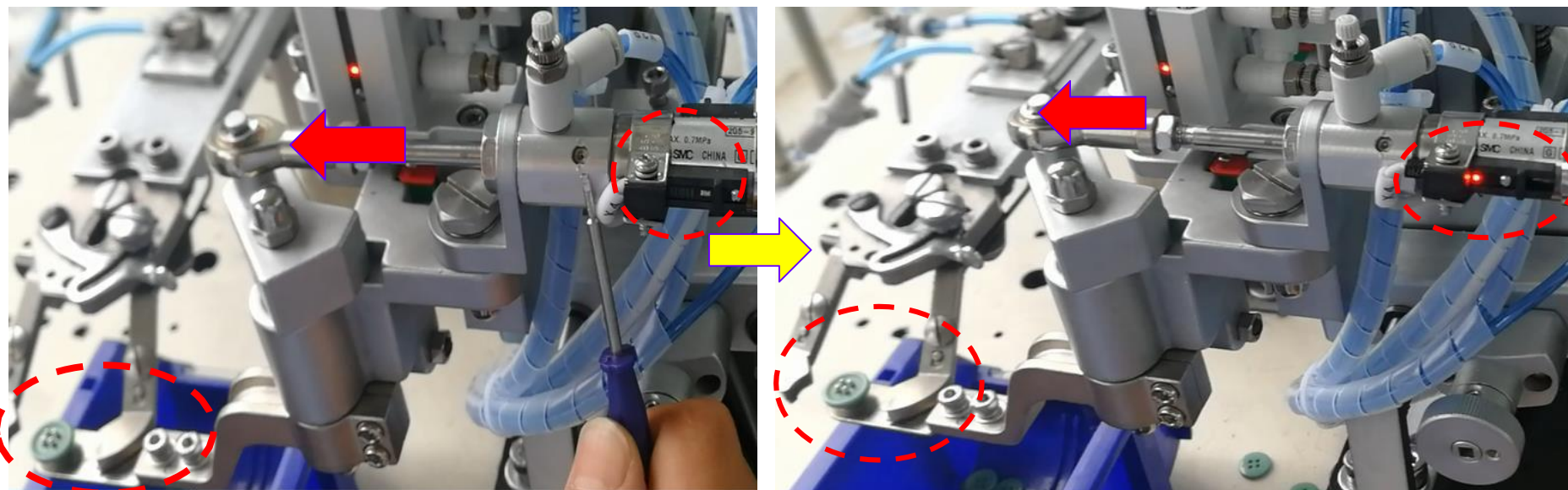
IF button not being there , X3 sensor light should be OFF. (Related error E02).

X3 timing setting requirement: while rotating cylinder going down to fix button into button claw pin, button claw will go to upper position to match button hole ,during this time, sensor X3 light should be just in ON status , if sensor light too much early or later in ON status , Error E02 will come out.

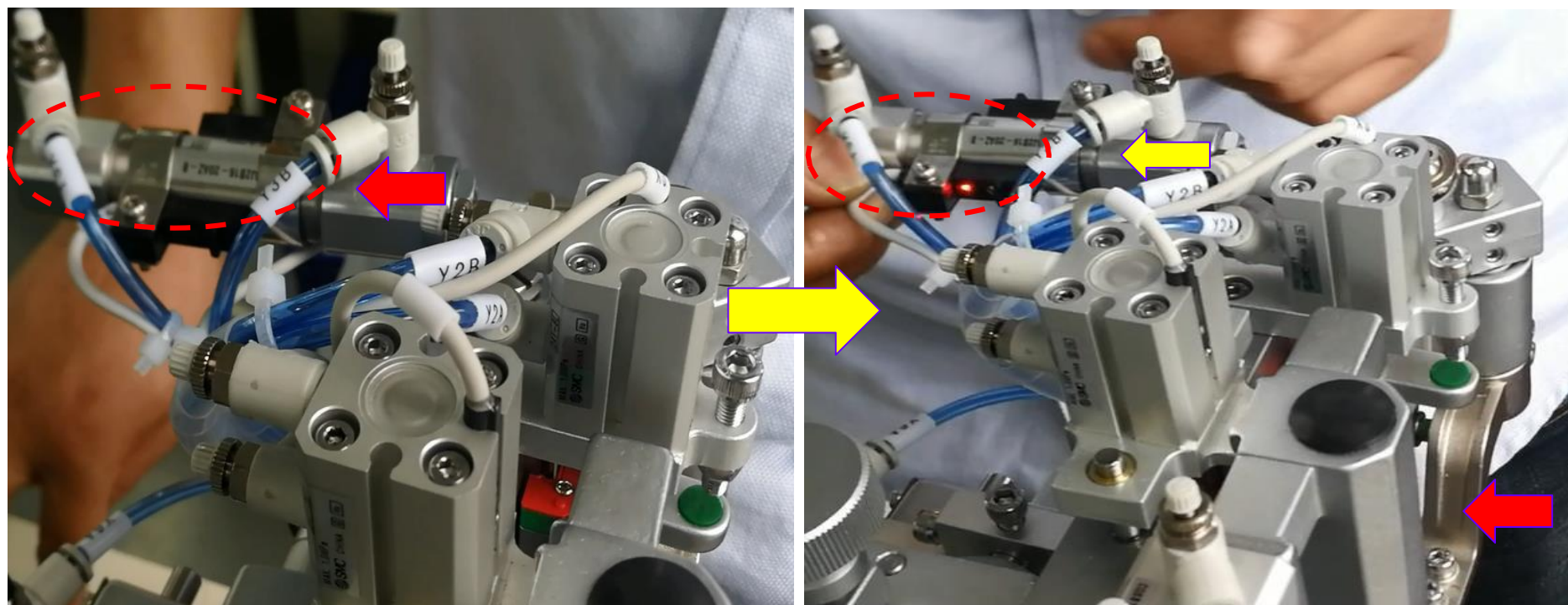


Sensor X7 : to limit button out stroke position so that button will not go outside more then drop down.

Setting requirement: there should be 0.5mm gap between button edge and block pin. X7 sensor light should be ON when cylinder pin comes out .



Sensor X4 : is to deliver button to button clamp center , when this cylinder pin in most out position sensor X4 light should be ON , if sensor light not in on status , button claw won't return back for next feeding cycle, button claw will be stuck in button clamp position



Sensor X5: is to detect if button claw cylinder return back to desired position.
 sensor X5 light should be ON after button claw controlled cylinder return back , if sensor position not setting properly , Button feeder will not go for next step even button claw reture back .

Error1: No Button**Solutions:**

1. Check the position of the magnetically controlled switch.
2. Check the PLC input terminal X2.
Check the 24V power supply

Error2: Unlocated Button**Solutions**

1. Check the position of magnetically controlled switch.
2. Check the center position of rotating post and the feeding needle plate.
3. Check the baffle position.
4. Check whether there is any surplus button on feeding needle plate or not.
5. Check the PLC input terminal X3.
6. Check the 24V power supply.

Error4: Vibrator Failure**Solutions**

1. Check the 220V power supply.
2. Check the KA1 relay.
3. Check the PLC output Y7 indicator light.
4. Check the vibrator coil.
5. Check the circuit board output of the vibrator controller.

Error3: Feeding Failure**Solutions**

1. Check the position of button-free magnetically controlled switch X2.
2. Check the position of auto-feeding photoelectric switch X1.
3. Check the position of the rising magnetically controlled switch X3 of the mechanical hand.
4. Check the position of the origin magnetically controlled switch X5.
Check the position of retractable magnetically controlled
5. Check the position of button-free magnetically controlled switch X2.
6. Check the position of auto-feeding photoelectric switch X1.
7. Check the position of the rising magnetically controlled switch X3 of the mechanical hand.
8. Check the position of the origin magnetically controlled switch X5.
9. Check the position of retractable magnetically controlled