# How to adjust the moving precision of Tube-S Y and X axis

➔ Problem : The precision of Tube-S X/Y axis is not correct;

Solution overview: 1. Adjust system pulse parameters--X axis;

2. Adjust system pulse parameters--Y axis;

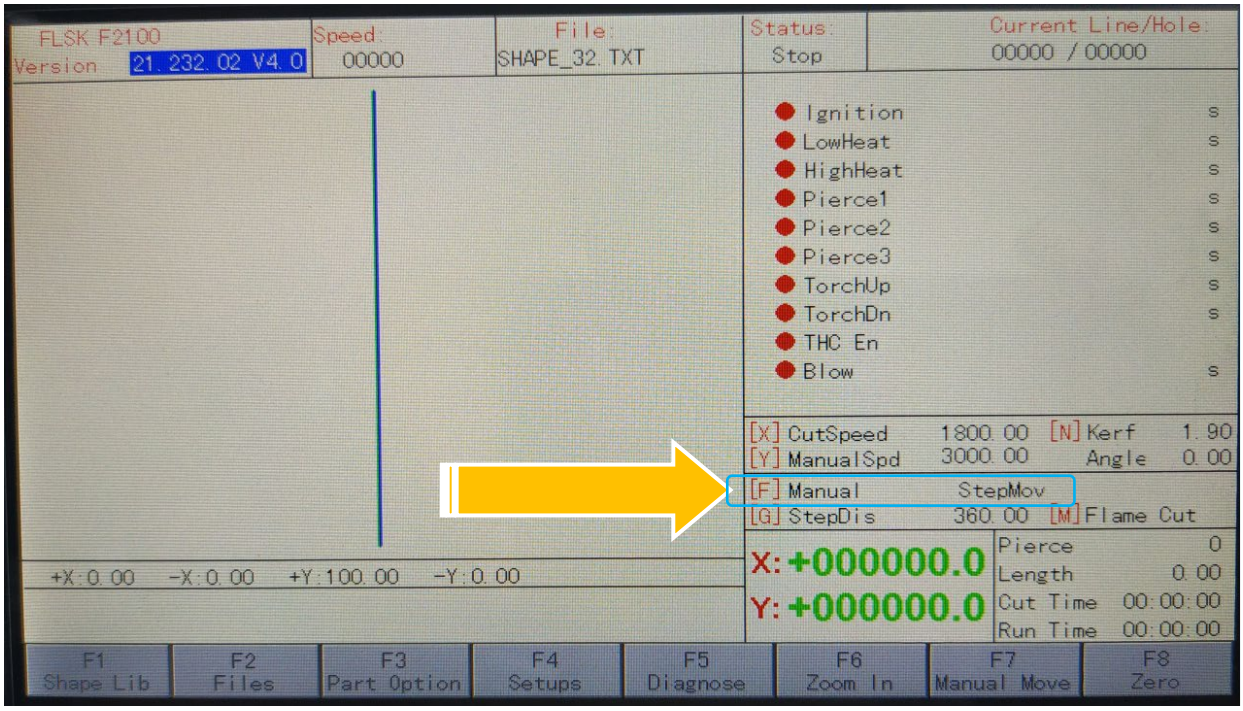
## Problem analysis:

❋ Adjust system pulse parameters--X axis;

**Solution: Step 1-** Move the X axis to one end of the frame and mark it at the initial position;

This is to measure the actual distance the X axis moves.

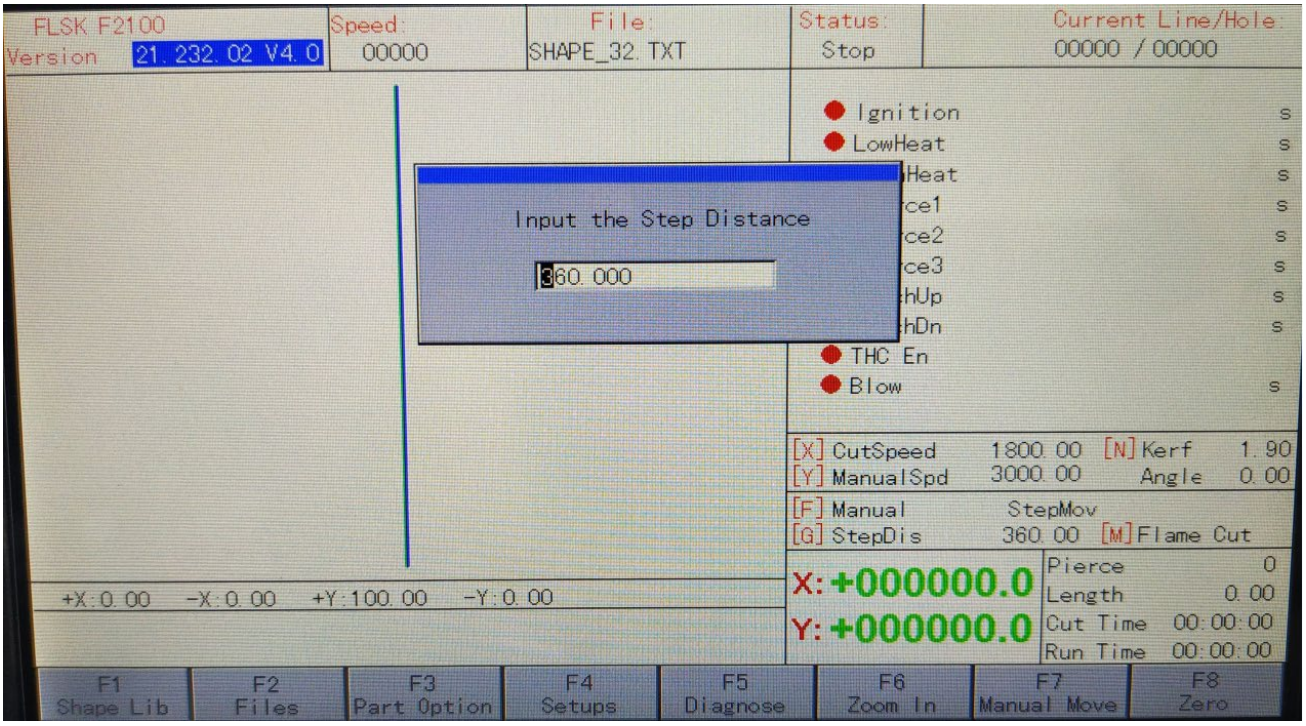
**Step 2-** Interface main ,Press 【F】button , Choose 【StepMov】As show in pic1.




Pic-1

**Step 3-** Interface main ,As show in pic1→Press 【G】button, then Input 1000 value, Press 【↵】enter As show in pic2.

Note： The input value of 1000 is the theoretical movement distance of the X axis.




Pic-2


**Step 4-** Interface main ,As show in pic1→Press 【F8 Zero】button [Clear the coordinates for easy observation], →Press X-axis direction key[Both direction keys can be], as shown in pic.→The X axis moves a some distance. Please measure the distance from this position to the initial position.

**Step 5-**Calculate the X-axis pulse with the formula;

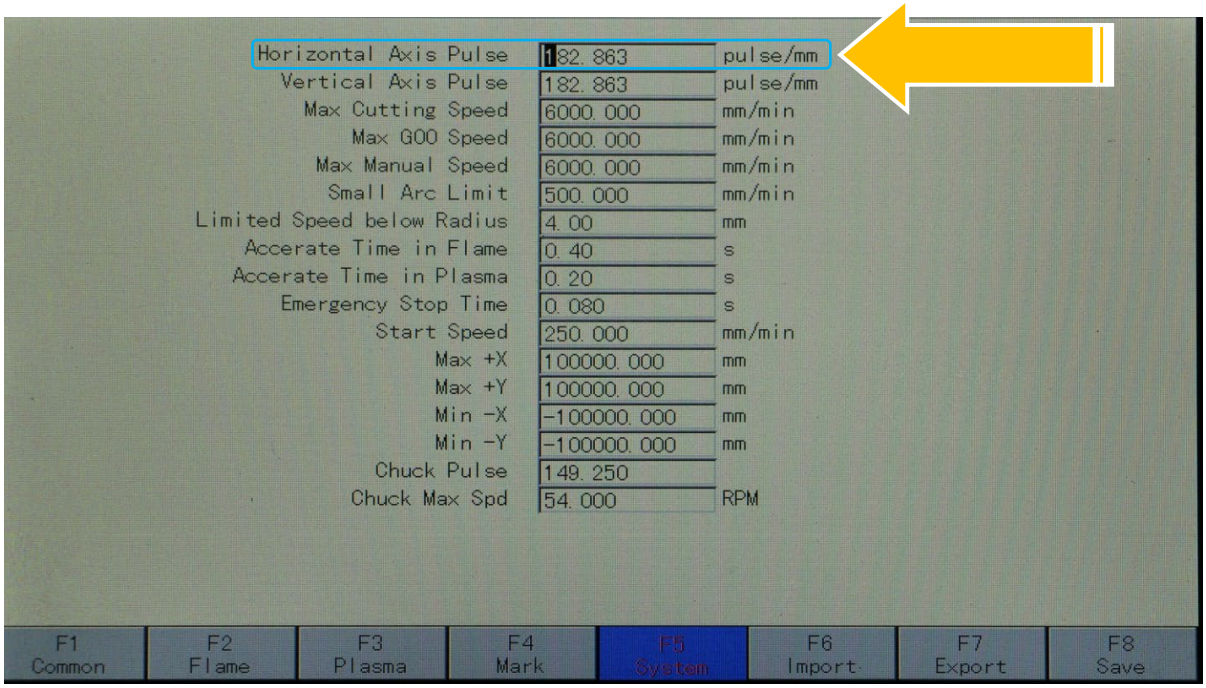
$$\frac{\text{【The theoretical distance 】}}{\text{【The actual distance】}} \times \text{System pulse value} = \text{new pulse value}$$

➔ For example: the System Pulse value is 127, The input theoretical value is 1000; The actual distance is 1500

➔ So：

【The theoretical distance:1000】 / 【The actual distance:1500】 X System pulse value: 125 = New pulse:83.333

Step 6-Output new pulses to the system;




Pic-3

**Step 7-** Please follow the steps, please try again;

Note： If you find the moving precision is still not correct, please repeat the above steps.

Problem analysis:

❋ Adjust system pulse parameters--Y axis;

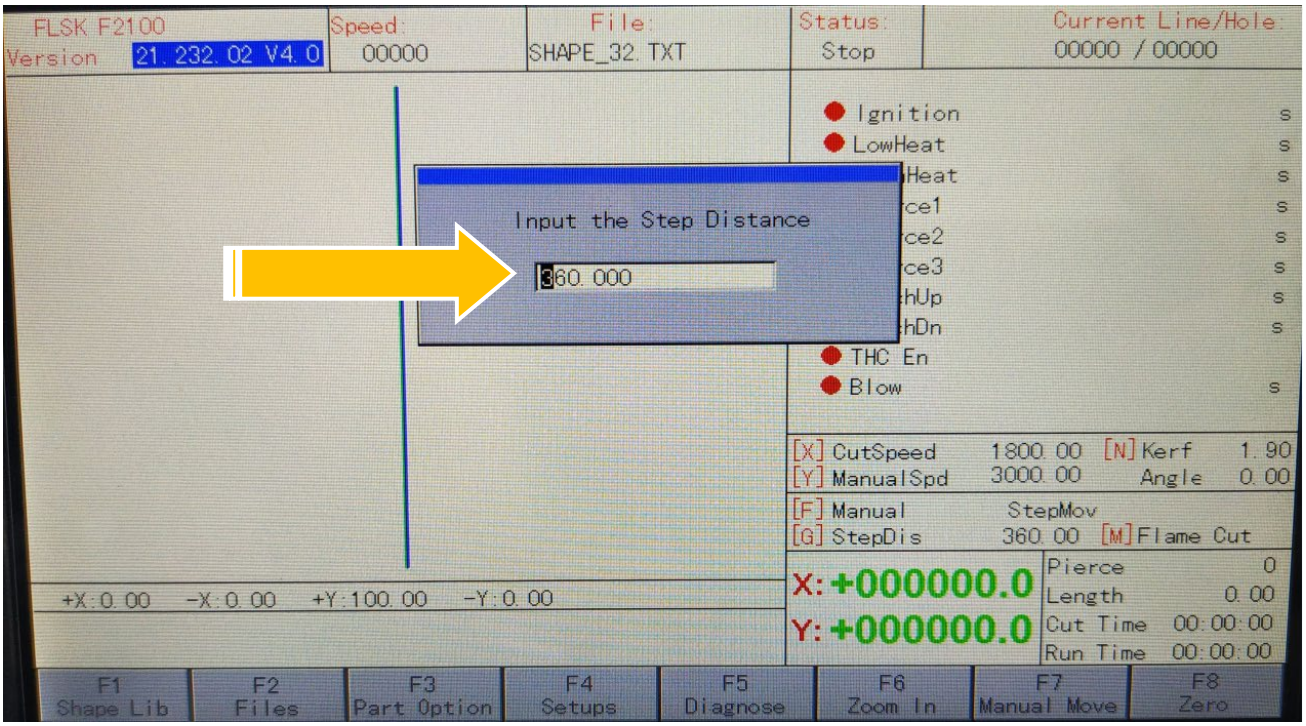
Solution： **Step 1-** Move the Y axis ; No need to install a pipe, mark the initial position on the chuck; This is to measure the actual degree of rotation the Y axis moves.

Note: The Y axis is moving at an angle,

**Step 2-** Interface main ,Press 【F】button , Choose 【StepMov】As show in pic1.

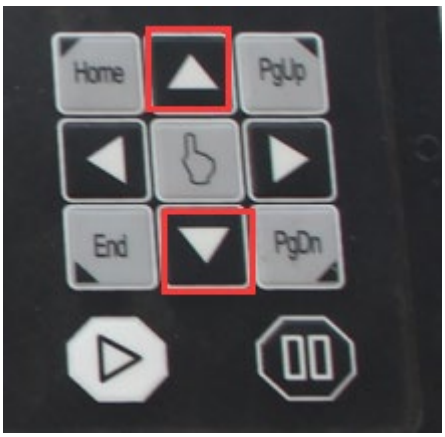
**Step 3-** Interface main ,As show in pic1→Press 【G】button, then Input 360 value, Press 【↵】enter As show in pic4.

Note： The input value of 360 is the theoretical degree of rotation of the Y axis.




Pic-4

**Step 4-** Interface main ,As show in pic1→Press 【F8 Zero】button [Clear the coordinates for easy observation], → Press Y-axis direction key[Both direction keys can be], as shown in pic.→The Y axis rotation a some angle. Please measure the rotation angle from this position to the initial position.




**Step 5-**Calculate the Y-axis pulse with the formula;

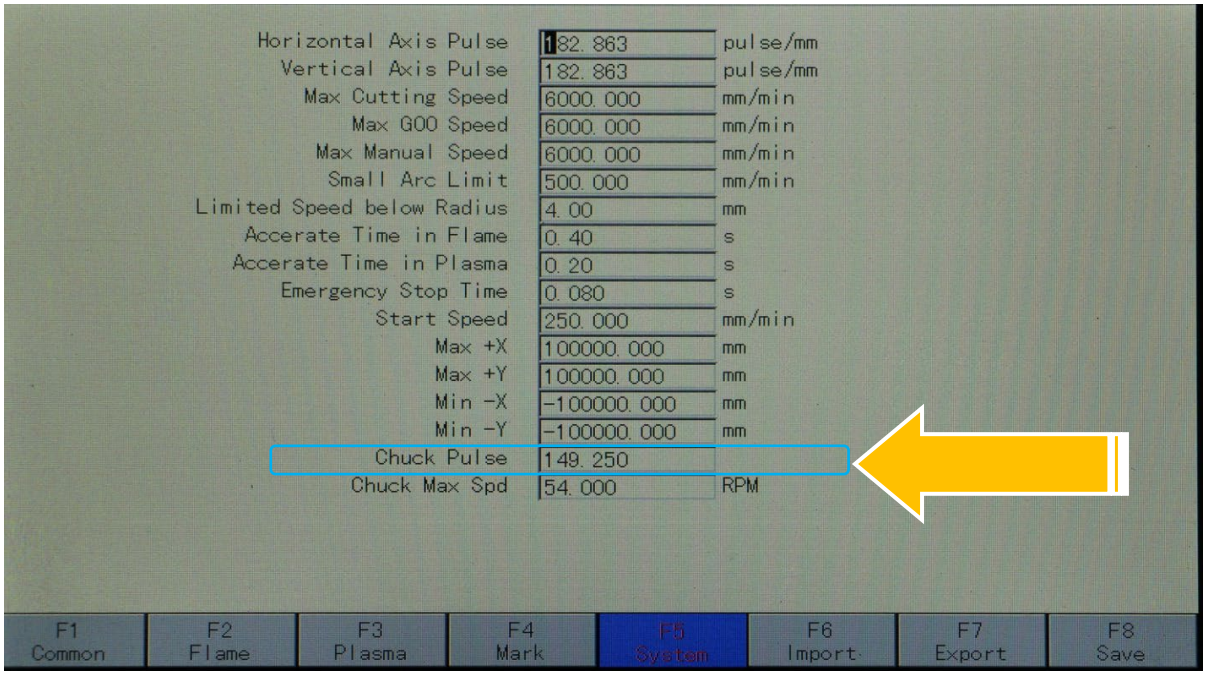
$$\frac{\text{【The theoretical rotation angle 】}}{\text{【The actual rotation angle】}} \times \text{System pulse value} = \text{new pulse value}$$

➔ For example: the System Pulse value is 125, The input theoretical angle value is 360°; The actual angle is 390°

➔ So：

$$\frac{\text{【The theoretical distance:360】}}{\text{【The actual distance:390】}} \times \text{System pulse value: 125} = \text{New pulse:115.384}$$

Step 6-Output new pulses to the system;




Pic-4

**Step 7-** Please follow the steps, please try again;

Note： If you find the moving precision is still not correct, please repeat the above steps.

**Step 8-** Change parameters 【Chuck Max Spd】to 80 RPM