

LAGUNA

LAGUNA TOOLS IQ PRO

USER GUIDE FOR IQ MACHINES EQUIPPED WITH
THE RICHAUTO B57F

BASIC OPERATIONS, QUICK START, MULTI-TOOL
PROGRAMS, MAINTENANCE AND TROUBLESHOOTING





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LAGUNA TOOLS IQ PRO

INTRODUCTION

This document is intended to provide general information on how to operate the Rich-Auto B57E Controller. Refer to the quick start section for accelerated start up.

BASIC OPERATIONS



The Laguna IQ PRO WITH ATC can be ordered with either a **3 ATC (3 Automatic Tool Changer)** or a **5 ATC (5 Automatic Tool Changer)**.





TURNING ON THE MACHINE



Step 2.) Press "Green" On/Off Power Button to the Controllers for the Electrical IQ Pro Cabinet.



Step 1.) Main Power Switch "ON" Position.

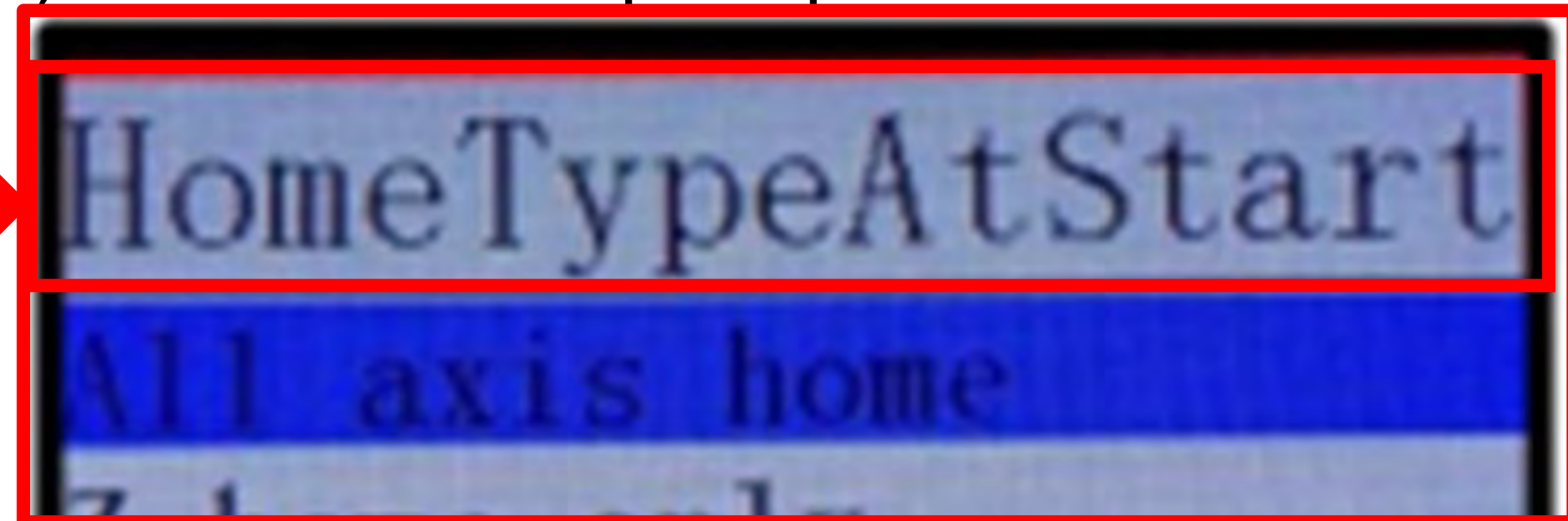
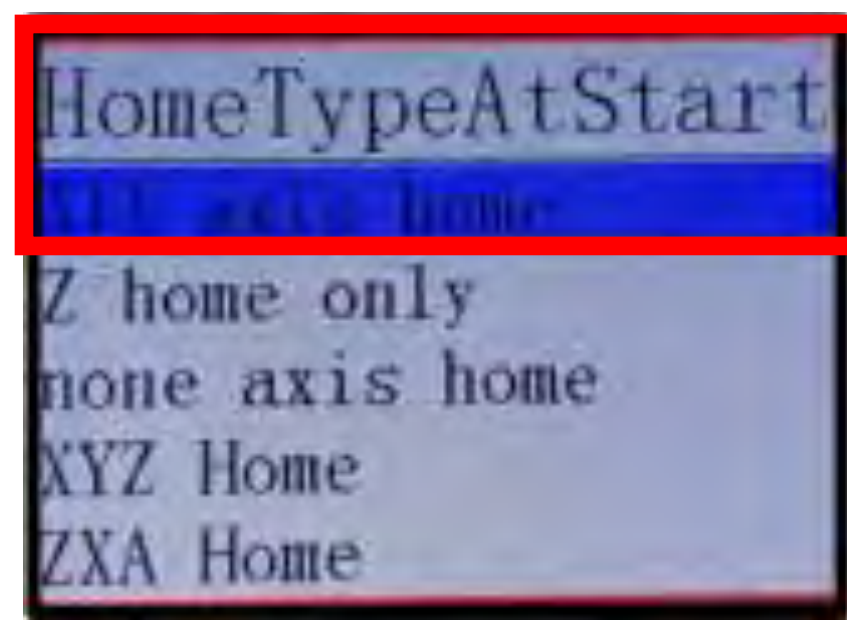


Step 1a.) Main Power Switch "OFF" Position.



ESTABLISHING HOME POSITION OF IQ PRO

1.) When the B57E controller is first powered on, the user will be prompted with the “HomeTypeAtStart” window.



2.) The machine needs to be homed each time the machine is powered.

- The tool locations are relative to the Machine Home Position 0, 0 relative to flags on X, Y, Z Axis's.

3.) The default selection is All Axis Home.

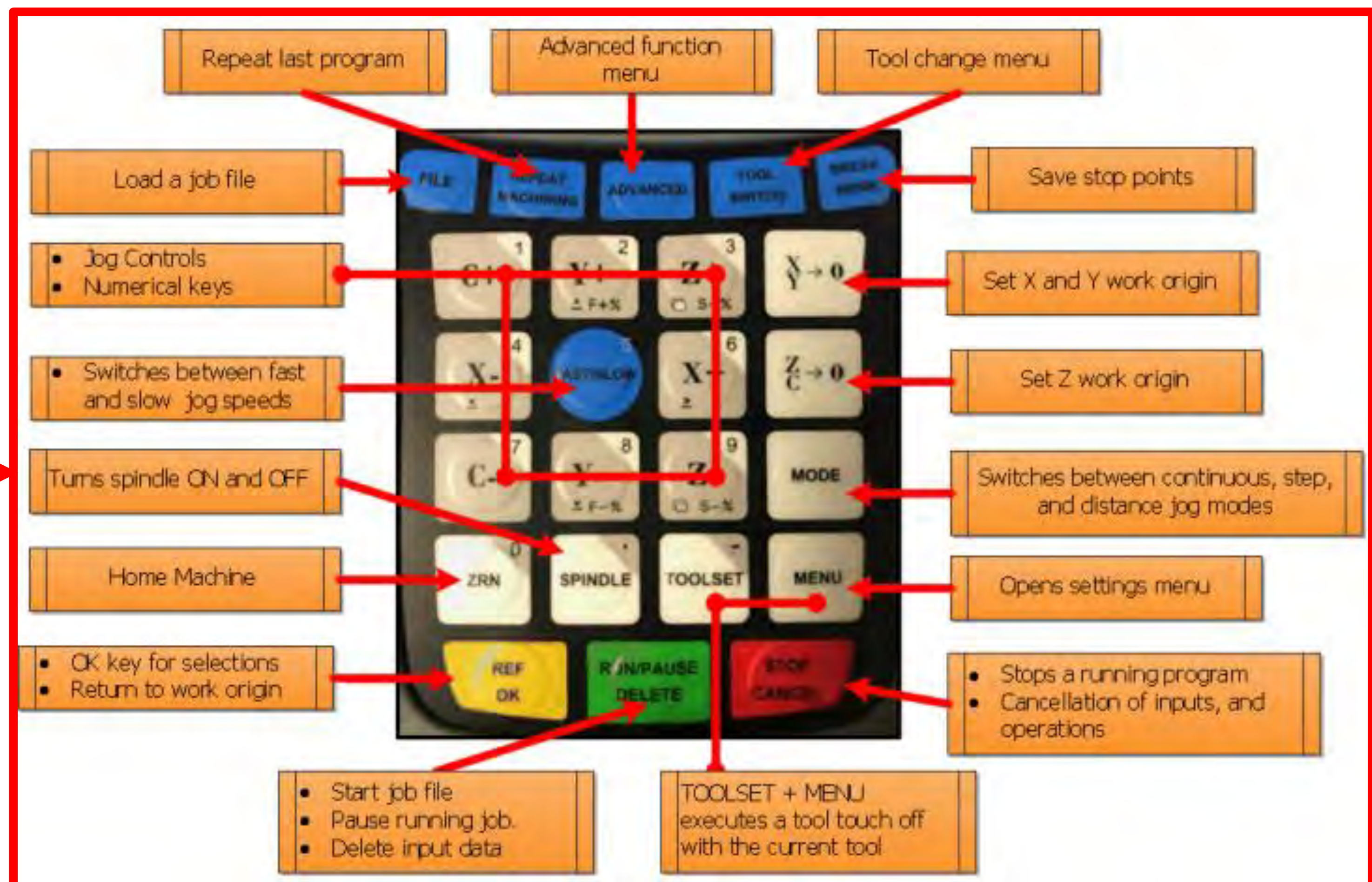
- **Press REF/OK** to begin homing all axes or press **“Stop/Cancel”**, if one wishes not to.





Basic Button Functions

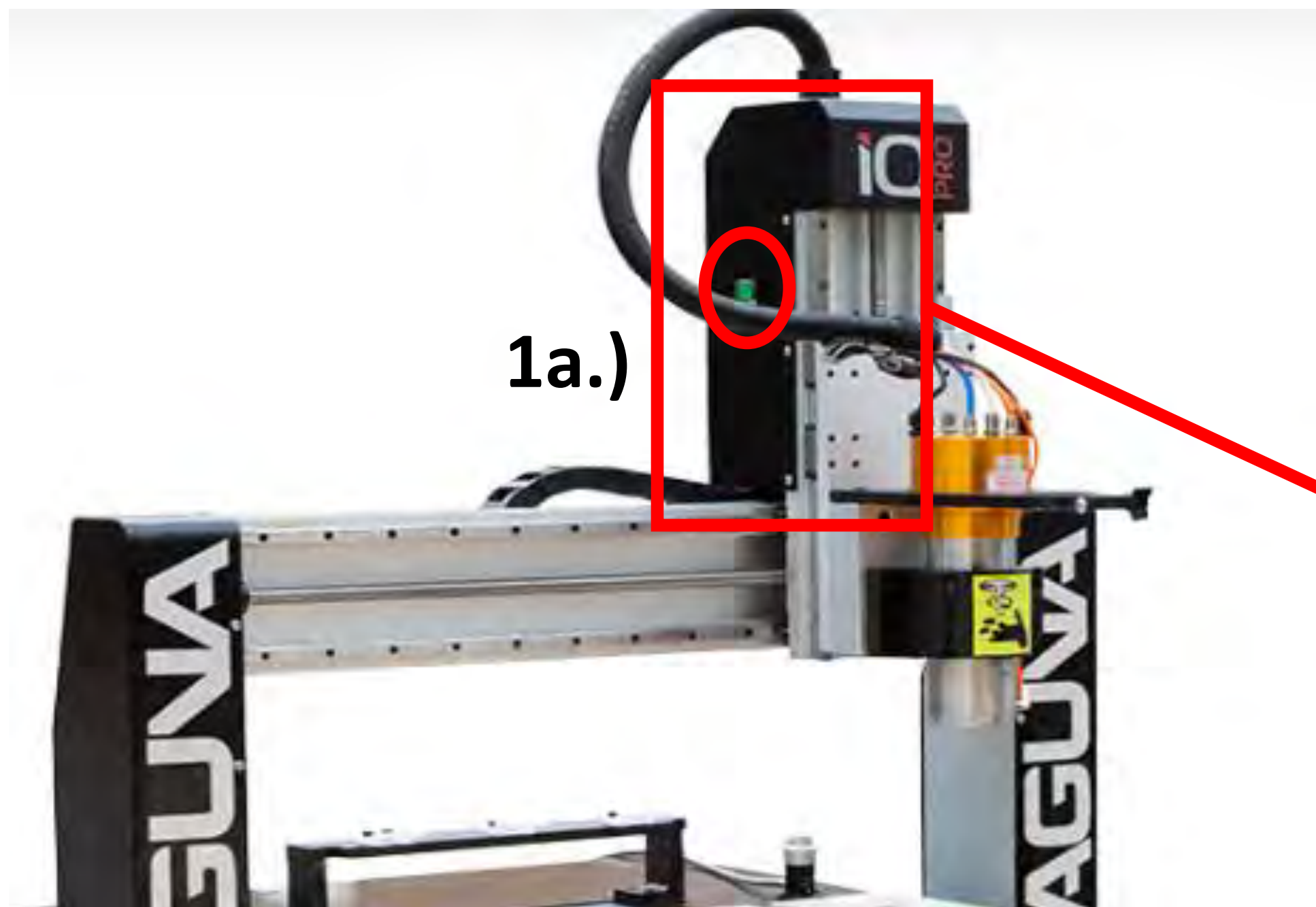
- The Rich-Auto Motion Control System uses 1-button and 2-button combination functions.
- Only the most used Shown.





Changing Tools-Must have 90-95 PSI Air Pressure in System before continuing.

1. A tool can be inserted or removed in Two Ways.
 - a) Manually - Using the **“Green”** Manual Tool Release Button” on the side of tool head.
 - b) Automatically - Using the Tool Switch Button.



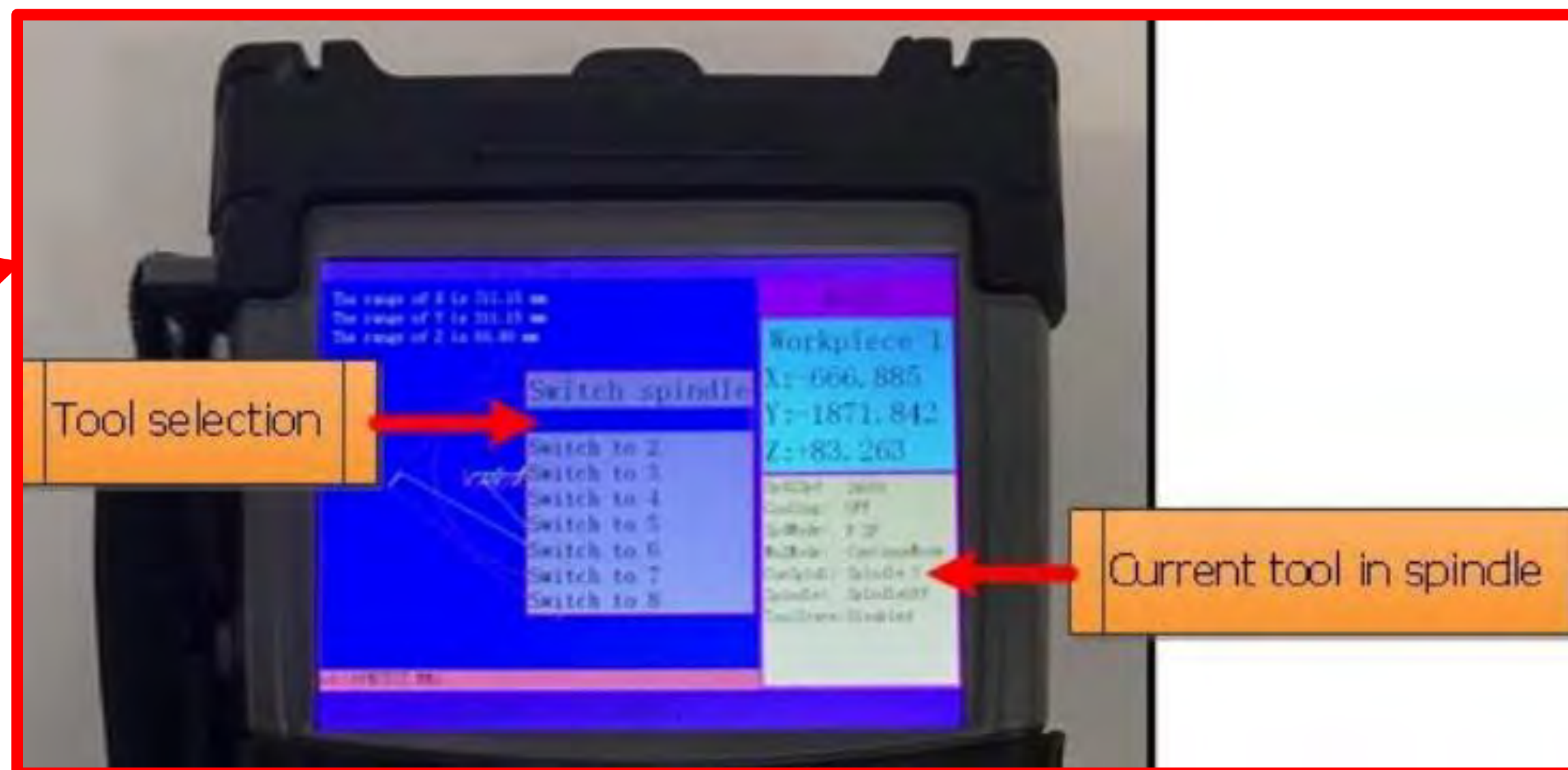
Manual Tool Release Button.



Basic Button Functions (Changing Tools Cont'd.)

1 b.) Press “Tool-Switch” button.

- Use Y+ & Y- Buttons to highlight tool selection (Tools are listed from Left to Right.).
- Machine will then switch from current Tool in Spindle to Tool Selected.
- Press **REF/OK Button**.



Press “Tool-Switch” Button.

Press the Y+, and Y-, buttons for Tool Selection.

Press **REF/OK Button**.



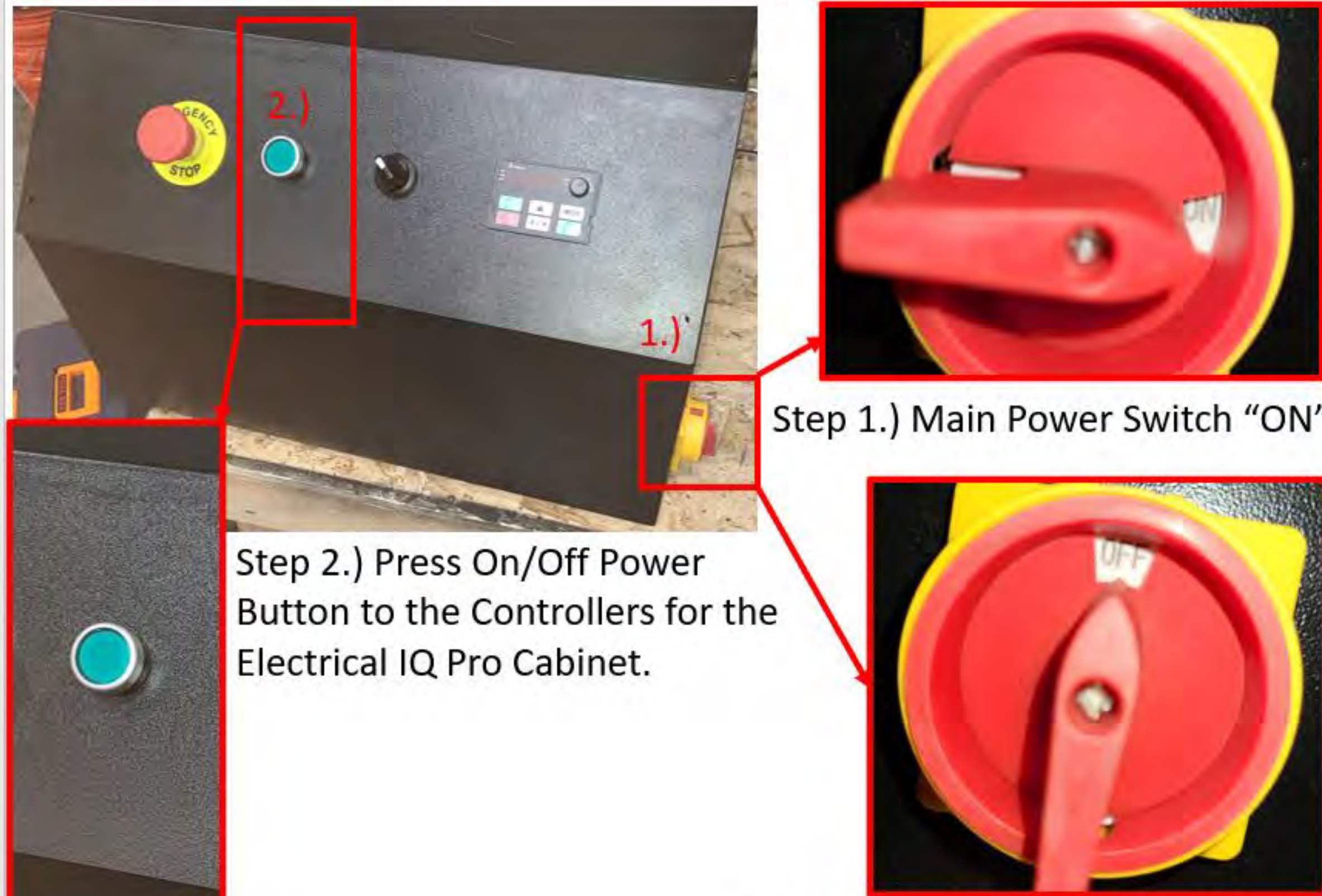
QUICK START SECTION

This section is a workflow from;
Turning the machine on, to starting one's program.

This walkthrough assumes **"Only TOOL 1"** is used.

Power on Machine.

TURNING ON THE MACHINE



Step 1.) Main Power Switch "ON" Position.

Step 2.) Press On/Off Power Button to the Controllers for the Electrical IQ Pro Cabinet.

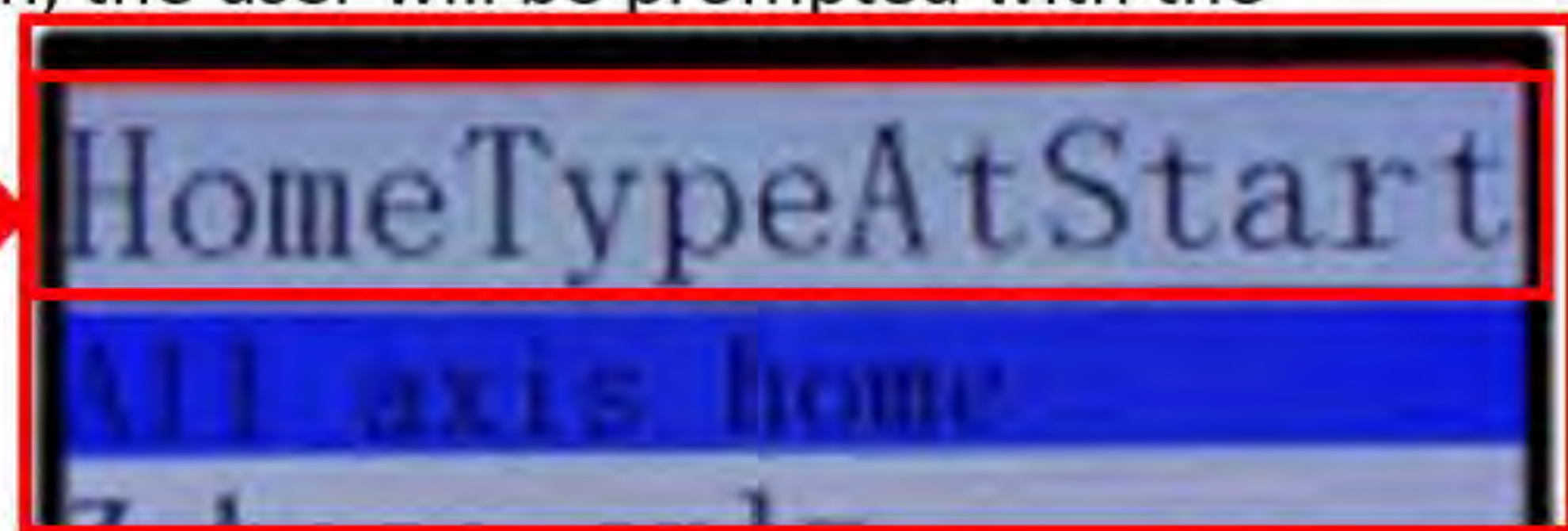
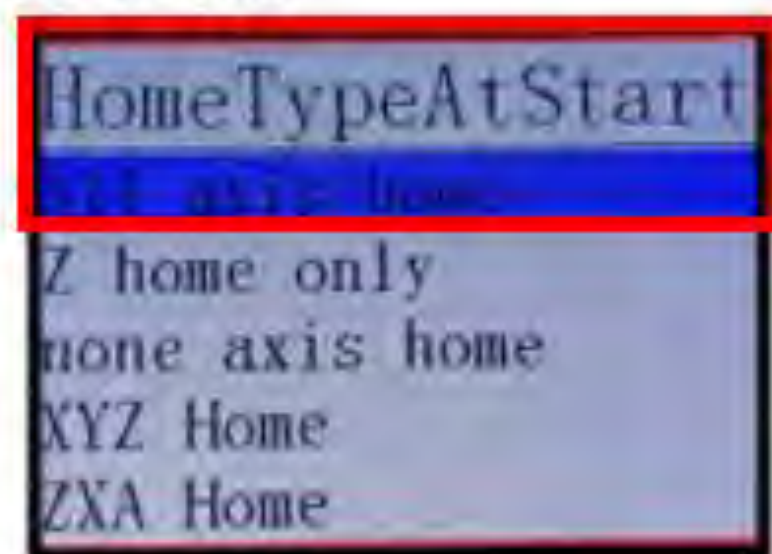
Step 1a.) Main Power Switch "OFF" Position.



QUICK START SECTION (Cont'd.) Est. Home Position on the IQ Pro.

Home Machine.

1.) When the B57E controller is first powered on, the user will be prompted with the “HomeTypeAtStart” window.



2.) The machine needs to be homed each time the machine is powered.

- The tool locations are relative to the Machine Home Position 0, 0 relative to flags on X, Y, Z Axis's.

3.) The default selection is All Axis Home.

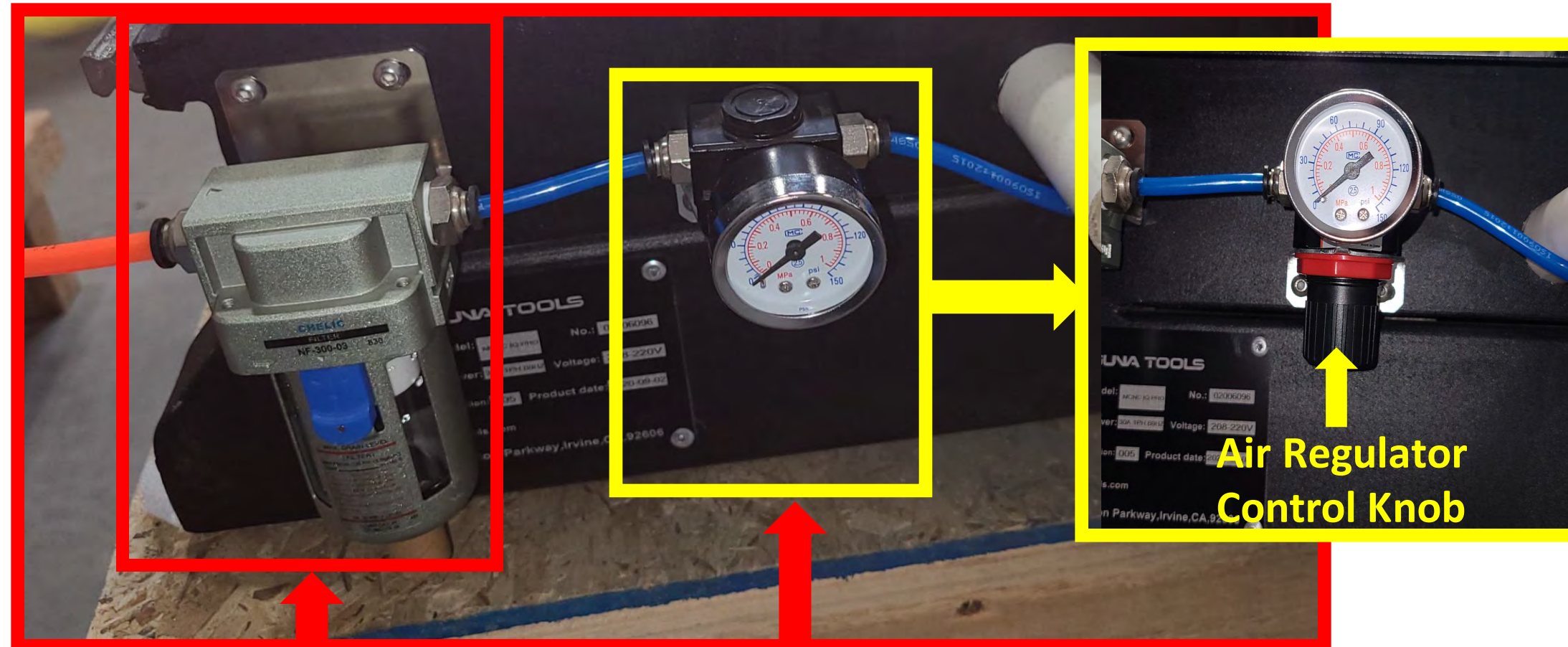
- **Press REF/OK** to begin homing all axes or press **“Stop/Cancel”**, if one wishes not to.





QUICK START SECTION (Cont'd.) Check Air Regulator System.

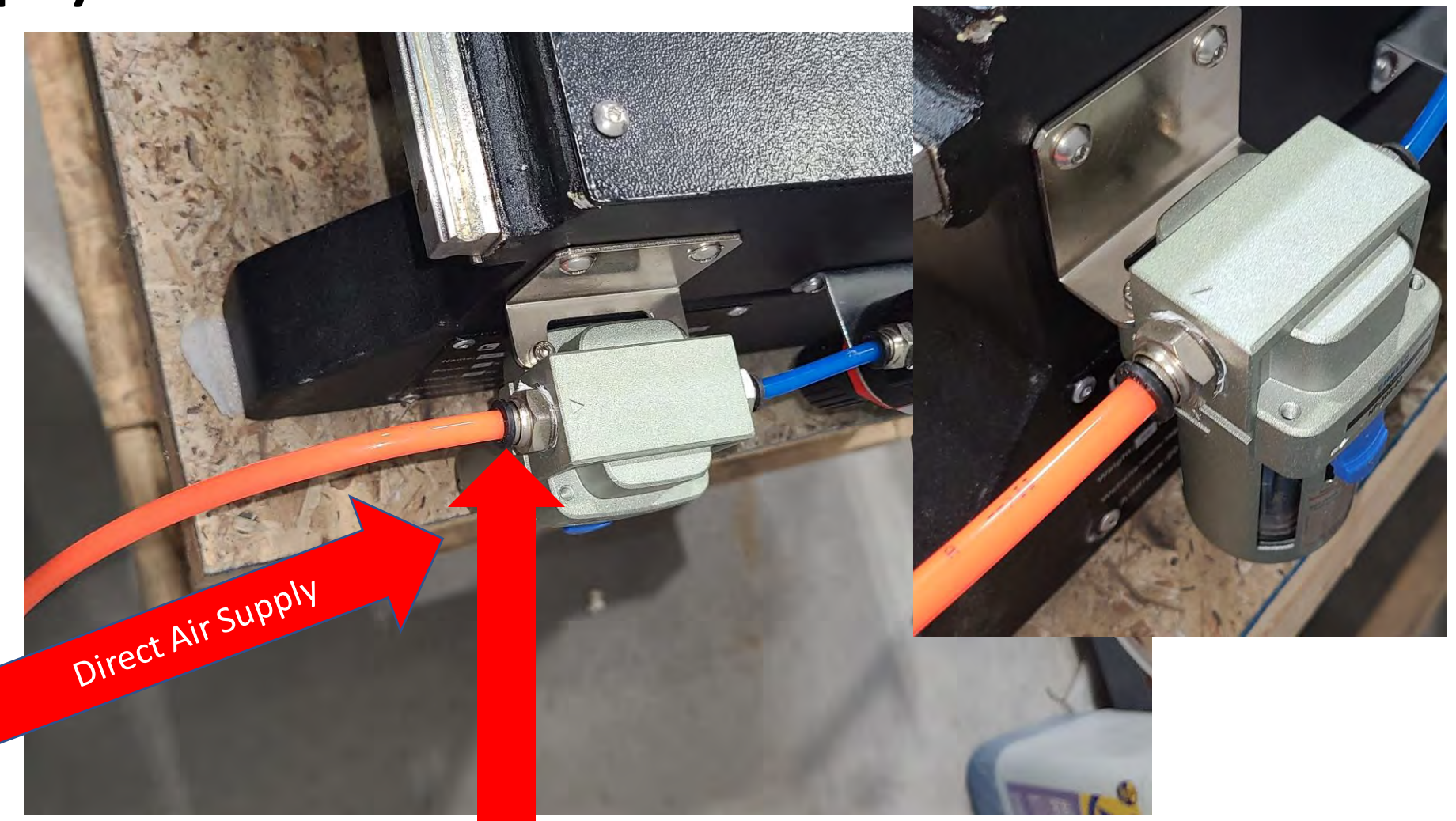
Verify that the machine is connected to an air supply.



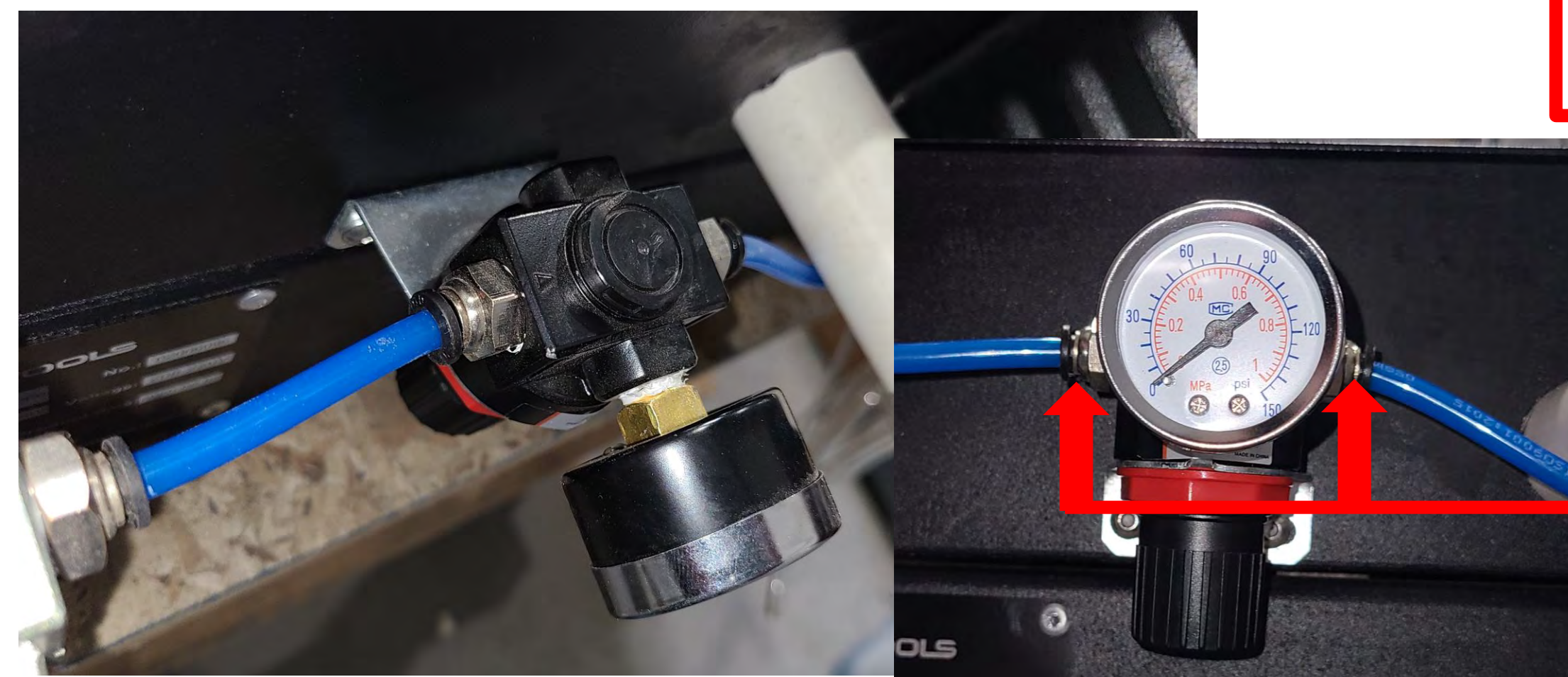
Air Filter System

Air Regulation Valve

Air Filter/Regulation System for IQ Pro Series.



Verify that Direct Air Supply is using Correct Hose Type, Size and if connection to the “Black” Tab is secure (Press Down on the Fitting to Release).



Verify that the provided tailored cut Blue Hose(s) are in direct connection with the “Black” Tabs on either side of the Air Regulator Valve is secure (Press Down on the Fitting to Release).

Air Regulator Valve

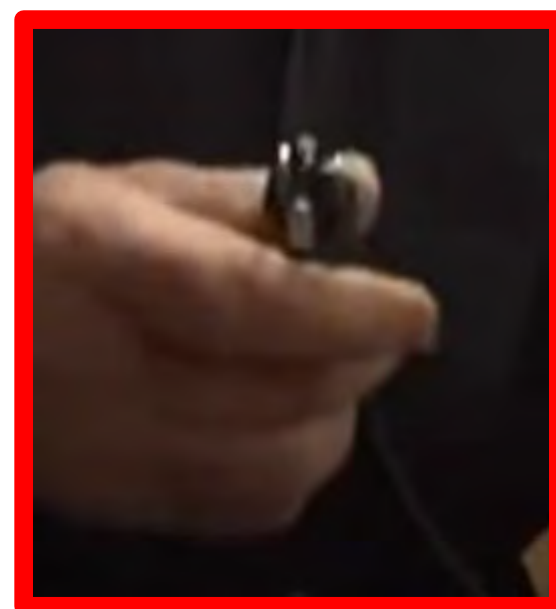


QUICK START SECTION (Cont'd.)-Air Regulator Settings/Spec's./Plug in Water Pump.

- The tool changer needs **6-7 bar or 87 psi-100 psi**.
- Use the pressure regulator on the back of the machine to adjust air pressure.



- Plug in the water pump and verify water is flowing through the spindle.
*****Only applicable to machines equipped with liquid cooled spindles.*****



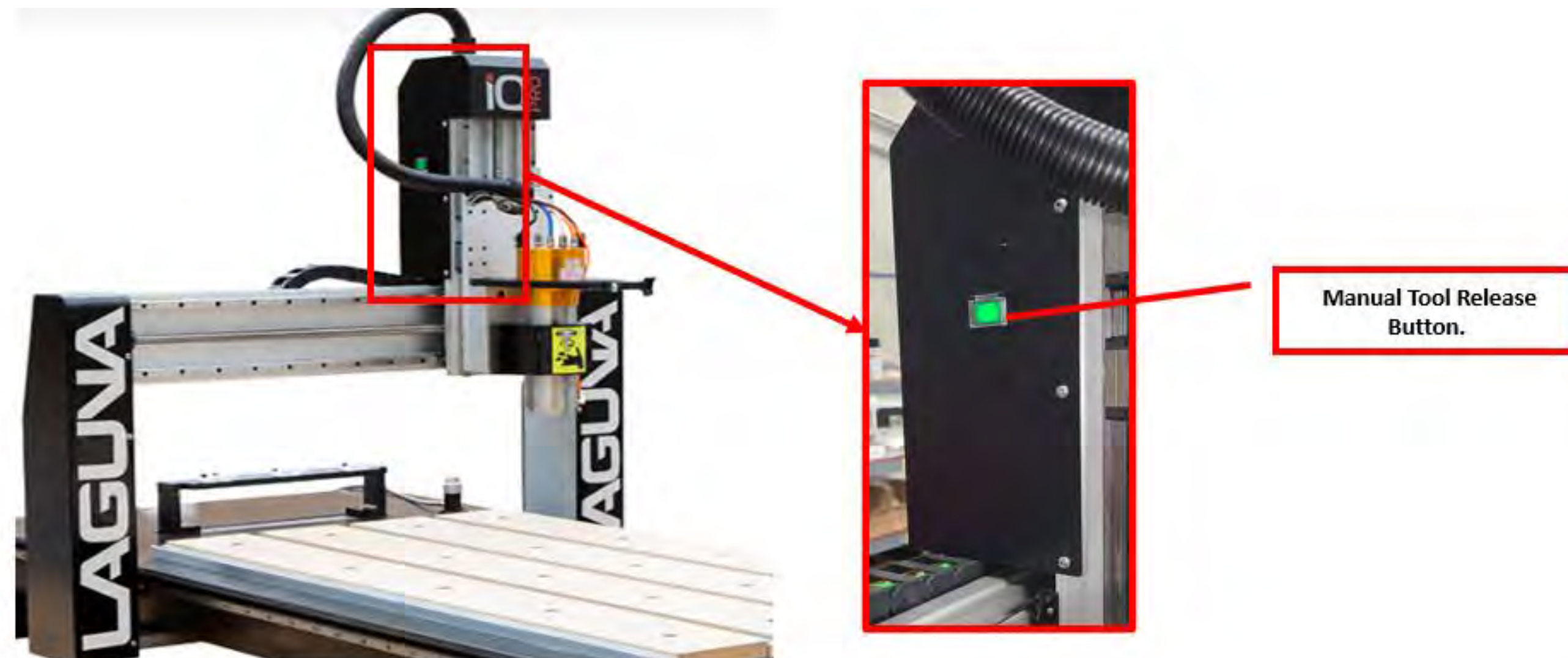
- Place the 110v/220v Electrical Plug of the Water Pump into any 110v or 220v Outlet for Operation.



QUICK START SECTION (Cont'd.)-Setup Tool Cone(s)

Setup a Tool Cone (Example 1) with the Router Bit one does intend to use.

- Use the manual tool release button located on the tool head to load the tool cone into the spindle.



- It is pertinent that the spindle releases and engages the tool cone repeatedly. This quick check will prevent an error condition.

Tool Cone with Locking Nut, Collet, and Router Bit



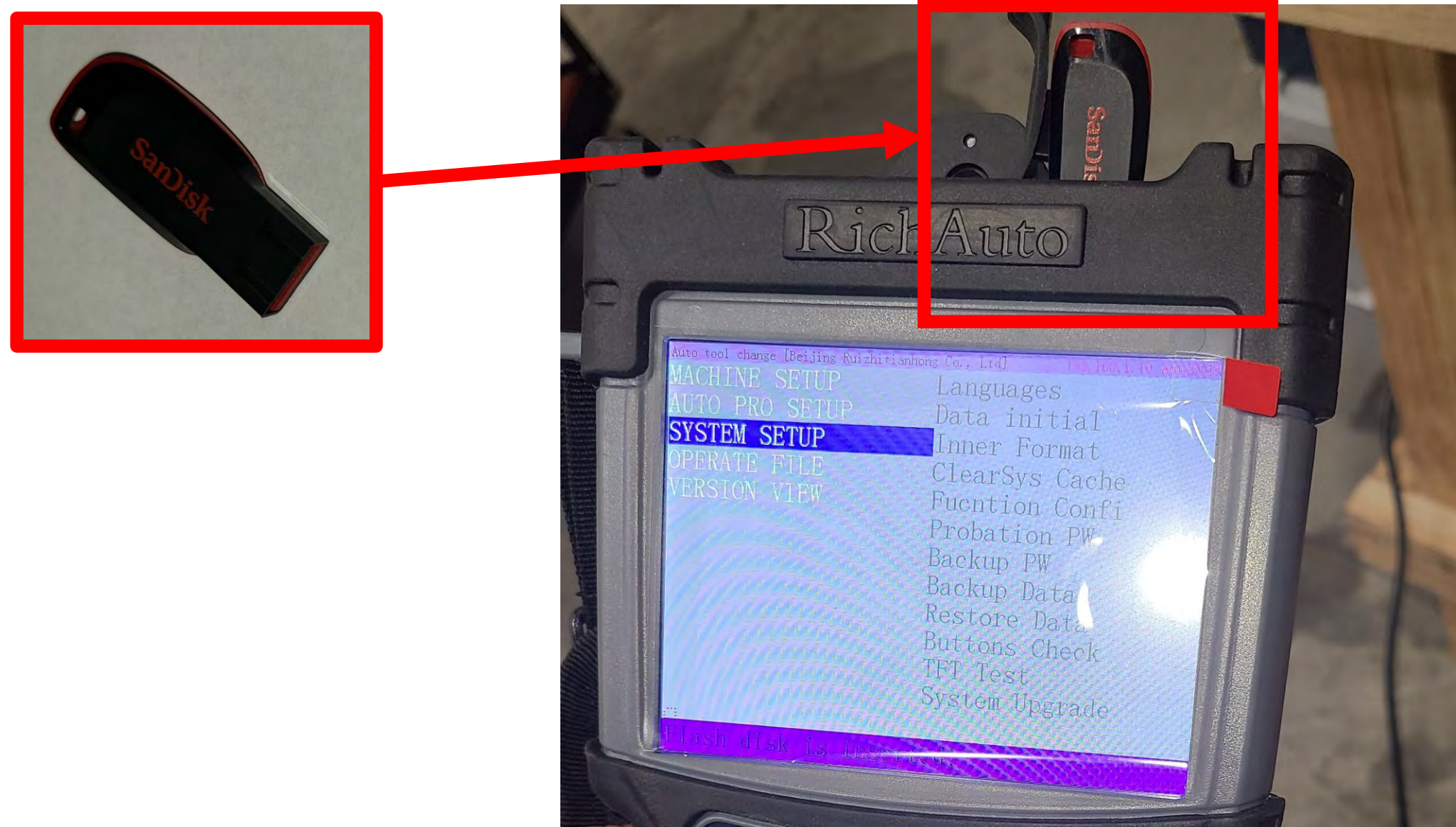


QUICK START SECTION (Cont'd.)-Transfer “g”-Code Program

Transfer your “g”-Code program onto a USB and transfer into the controller's internal memory.

******When running a program directly from a USB, memory transfer is less reliable. It is recommended to store the program in the controller's internal memory. ******

1.) Take the USB Drive that contains the “g”-Code program and place the Drive in the “USB” Port on top of the HHC (Handheld Controller).



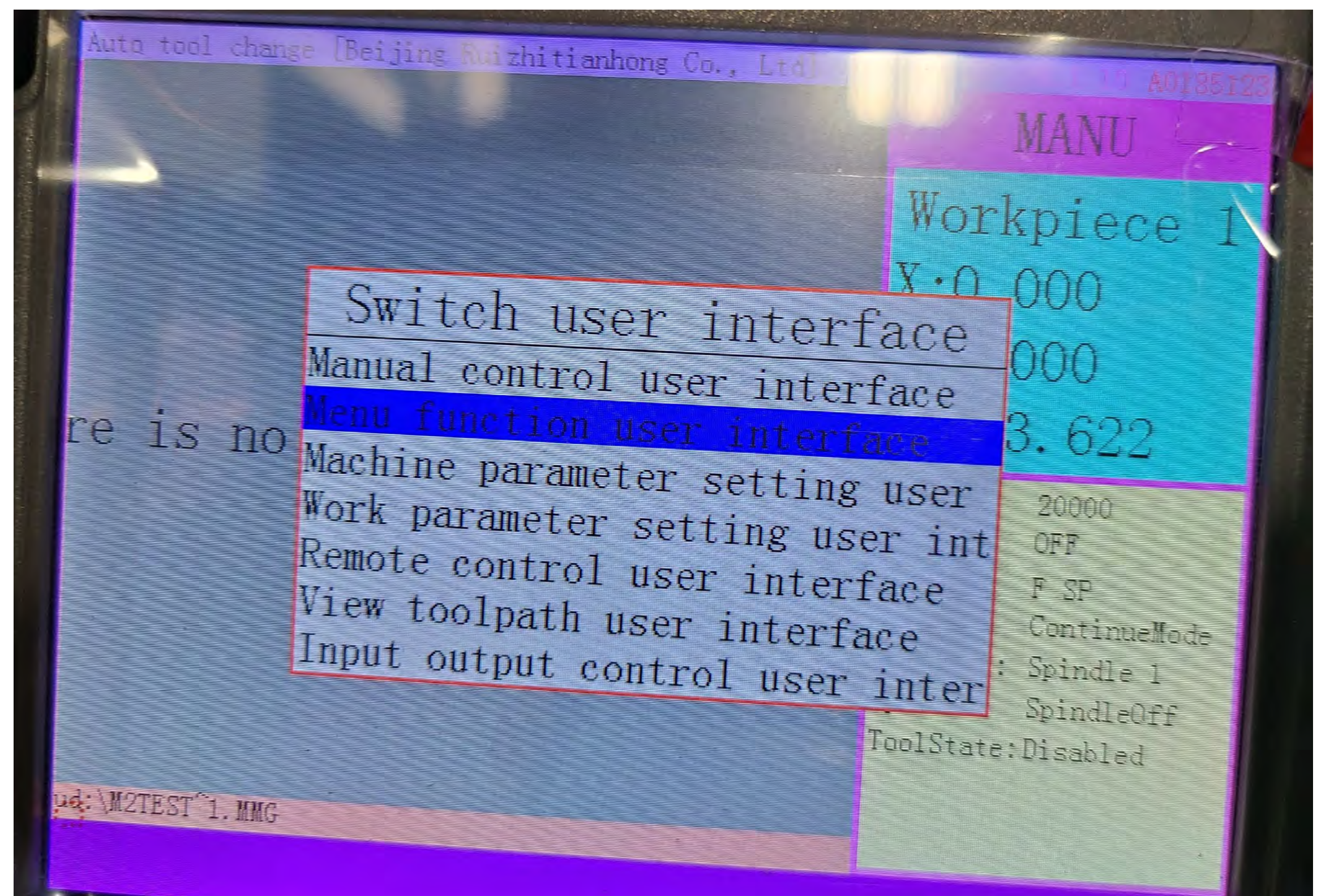


QUICK START SECTION (Cont'd.)-Transfer “g”-Code Program

2.) Go to MENU --> Menu Function User Interface --> Press **REF/OK**.



Press the up Y+, and down Y-, Buttons to Scroll down to “Menu Function User Interface”.



Press **“REF/OK”**.

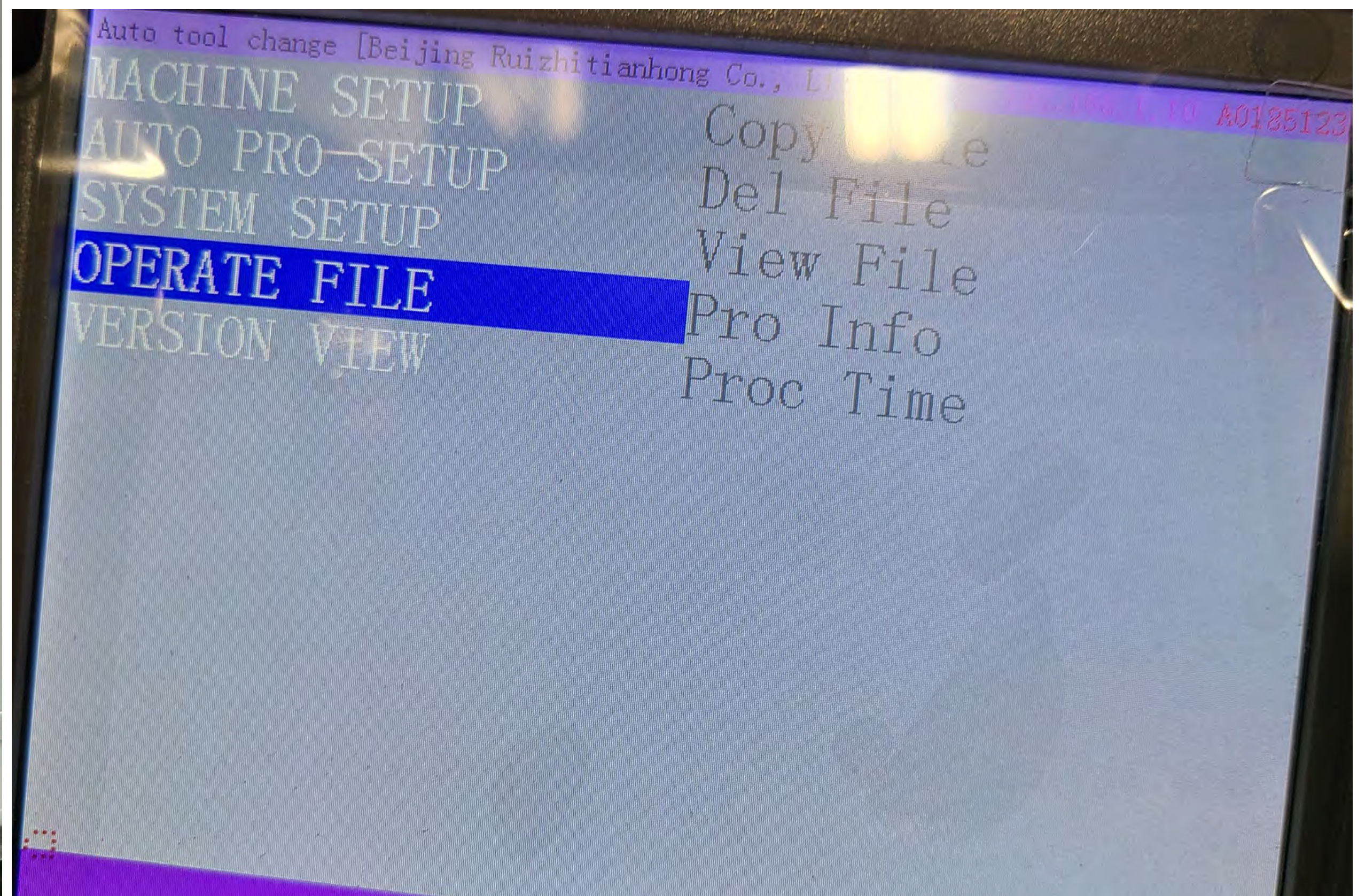


QUICK START SECTION (Cont'd.)-Transfer “g”-Code Program

4.) Using the up Y+, and down Y- Buttons to Scroll down to “Operate File”, then Press **REF/OK**.



Press the up Y+, and down Y-, Buttons to Scroll down to “Operate File”.



Press **“REF/OK”**.

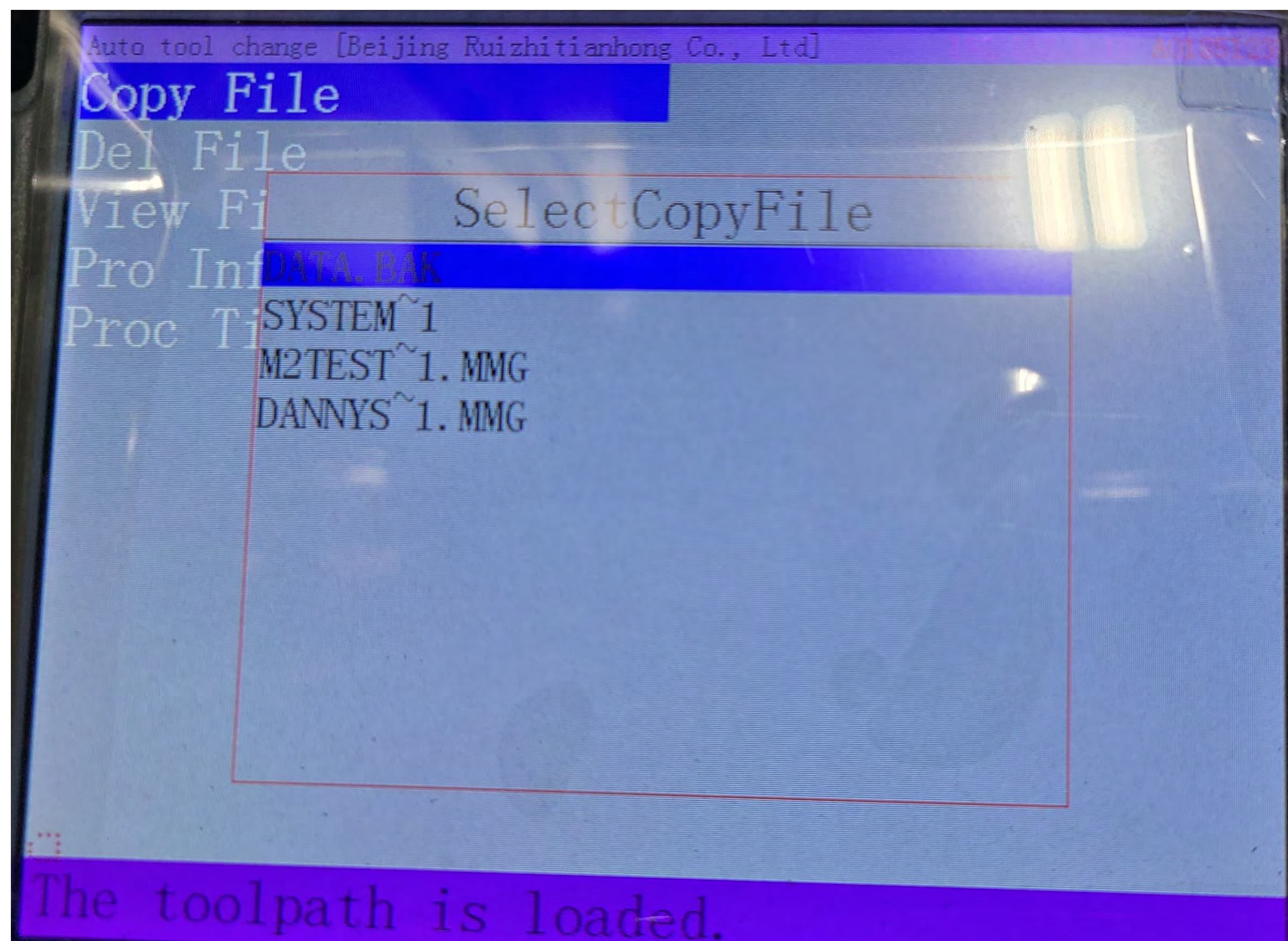


QUICK START SECTION (Cont'd.)-Transfer “g”-Code Program

5.) Select Copy File press REF/OK



Press the **up Y+**, and **down Y-**, Buttons to Scroll down to & Select **“Copy File”** then, Press **REF/OK**.



Press **“REF/OK”**.



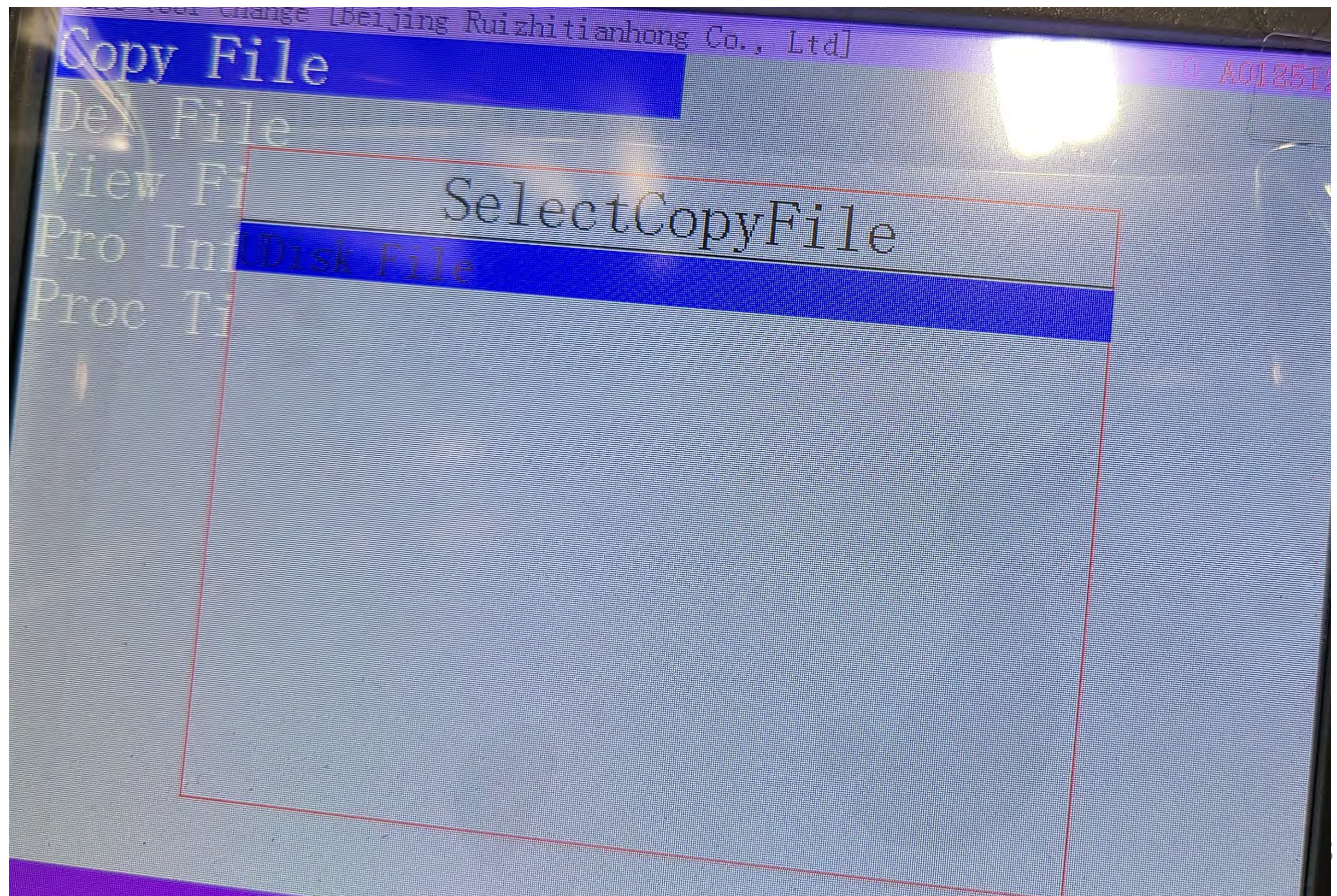
QUICK START SECTION (Cont'd.)-Transfer “g”-Code Program

6.) Select the U-Disk File you want to copy press REF/OK.



Press the **up Y+**, and **down Y-**, Buttons to Scroll down to & Select “**U-Disk File**” then, Press **REF/OK**.

Press “**REF/OK**”.



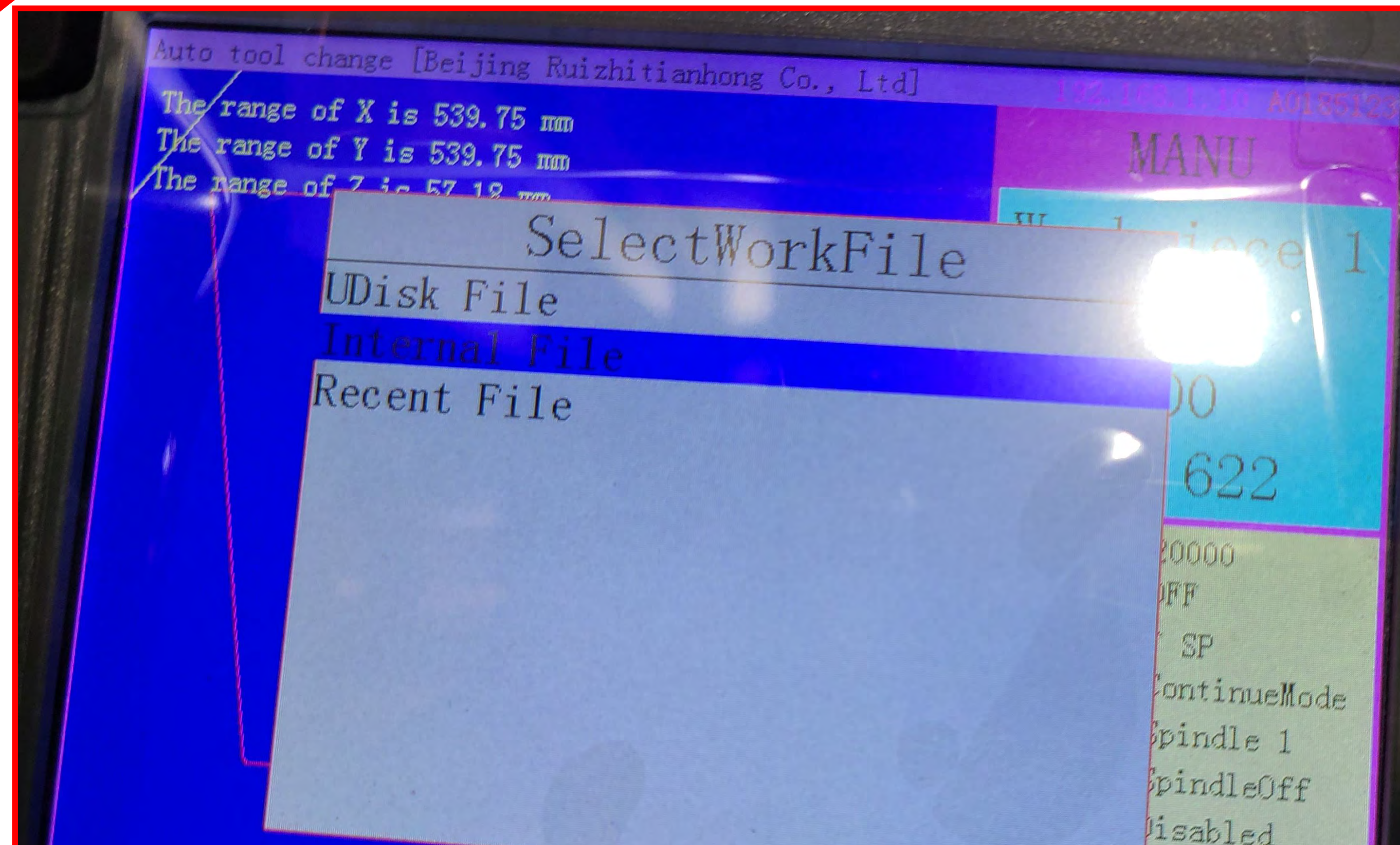


QUICK START SECTION (Cont'd.)- Load Program into Viewer

Press **"File"** ---> go to **"Internal File"** ---> **REF/OK** ---> Select your Program ---> **REF/OK**



Press **"File"**, Press the up **Y+**, and down **Y-**, Buttons to Scroll to & Select **"Internal File"** then Scroll to & Select Program, then Press **REF/OK**.





QUICK START SECTION (Cont'd.)-Transfer “g”-Code Program



Press “**STOP/CANCEL**” Button a few times to return to Home Screen.

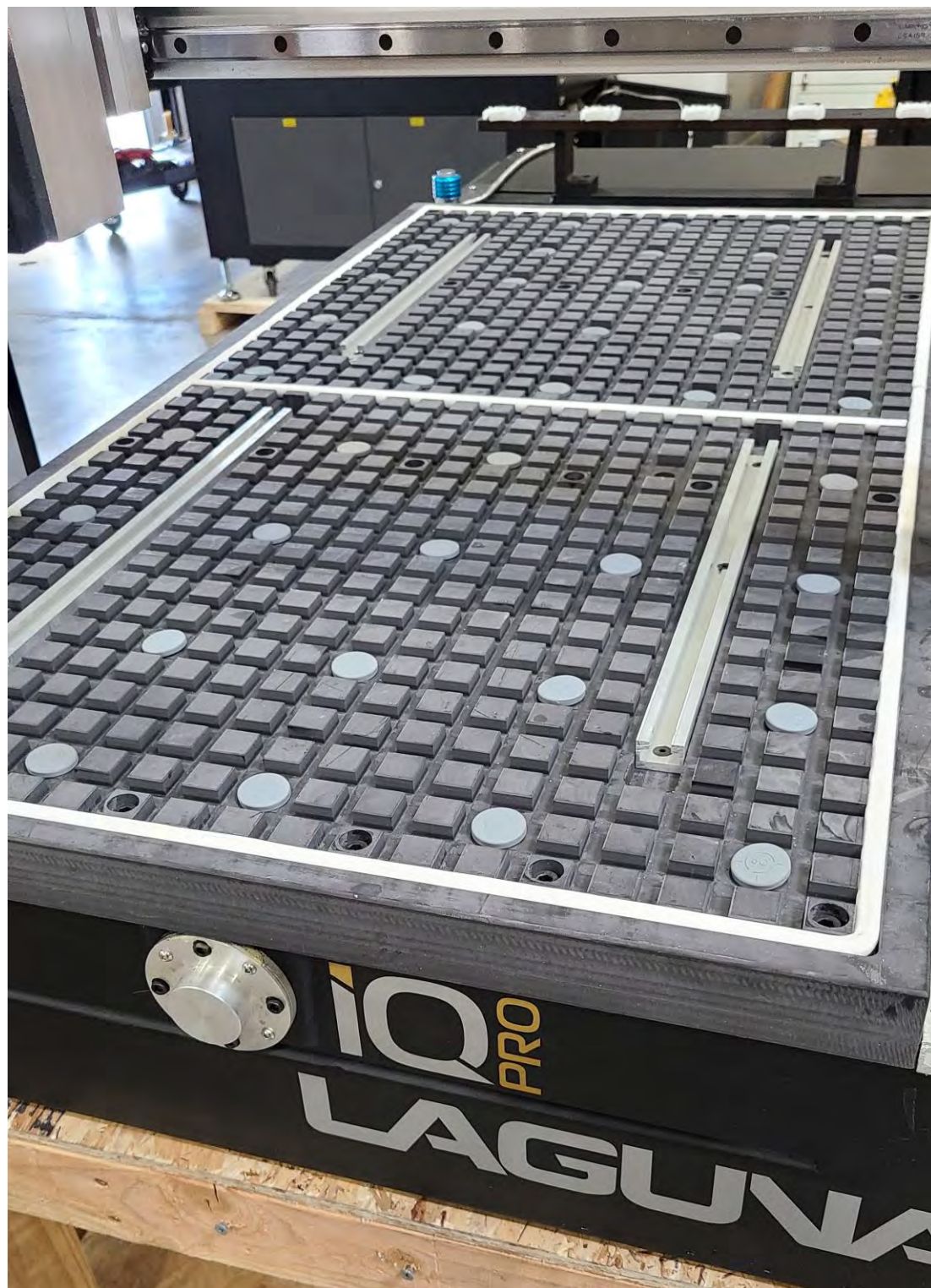




QUICK START SECTION (Cont'd.)-Mounting Work Piece onto Table Top

There exist a multitude of ways to secure your work piece. Find what method works best for your application before proceeding.

- **Always consider clearance between the router bit and table clamps.**
- **When the machine changes tools it will need to travel to the back of the machine during program execution.**



This Table is utilized to Secure the Work Piece by a “Vacuum”



QUICK START SECTION (Cont'd.)-Verify Coordinate System (See Photo Illustration Below)

Verify Coordinate System (Figure #1).

a. Workpiece 1 should be selected.

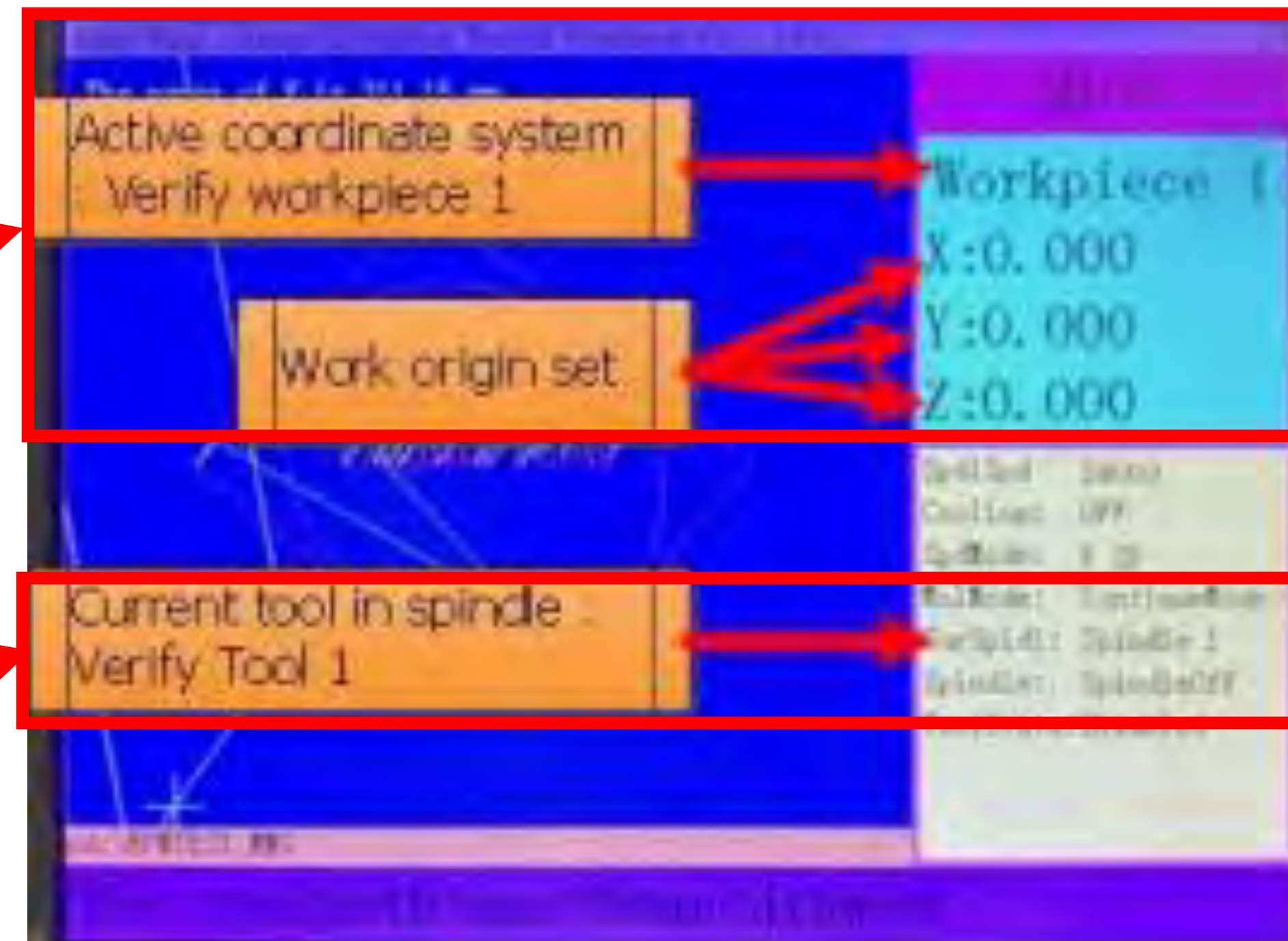
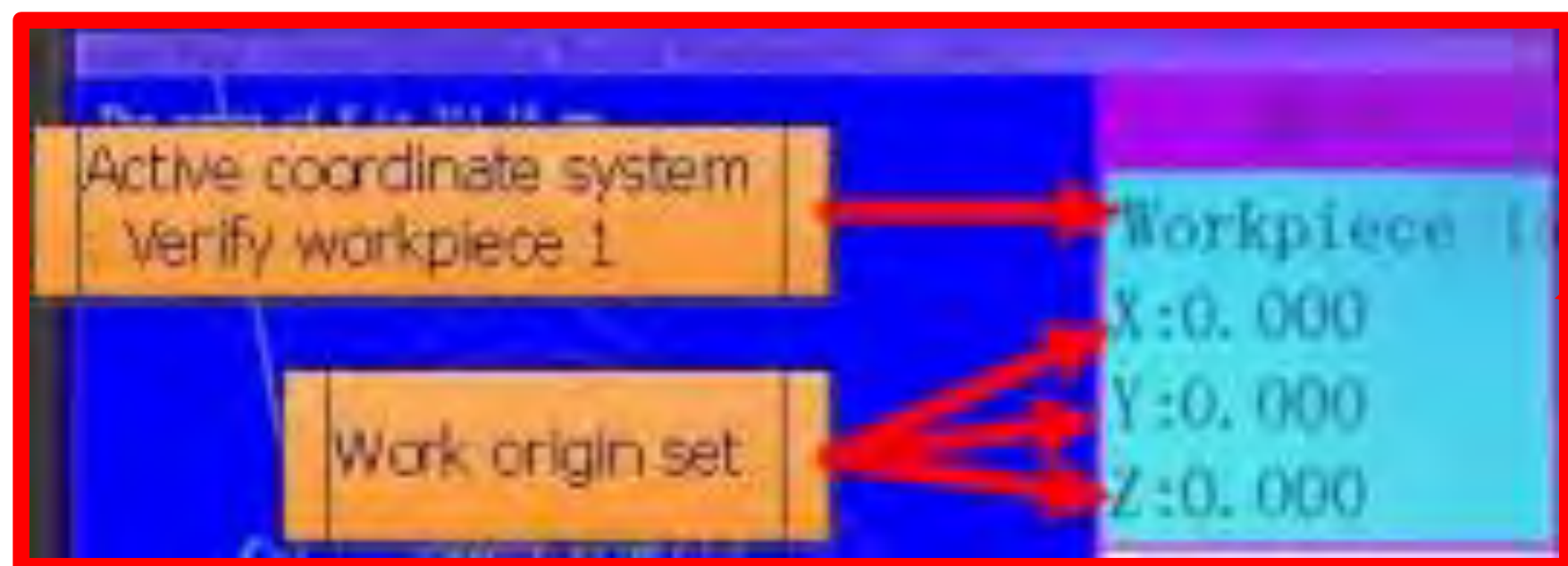


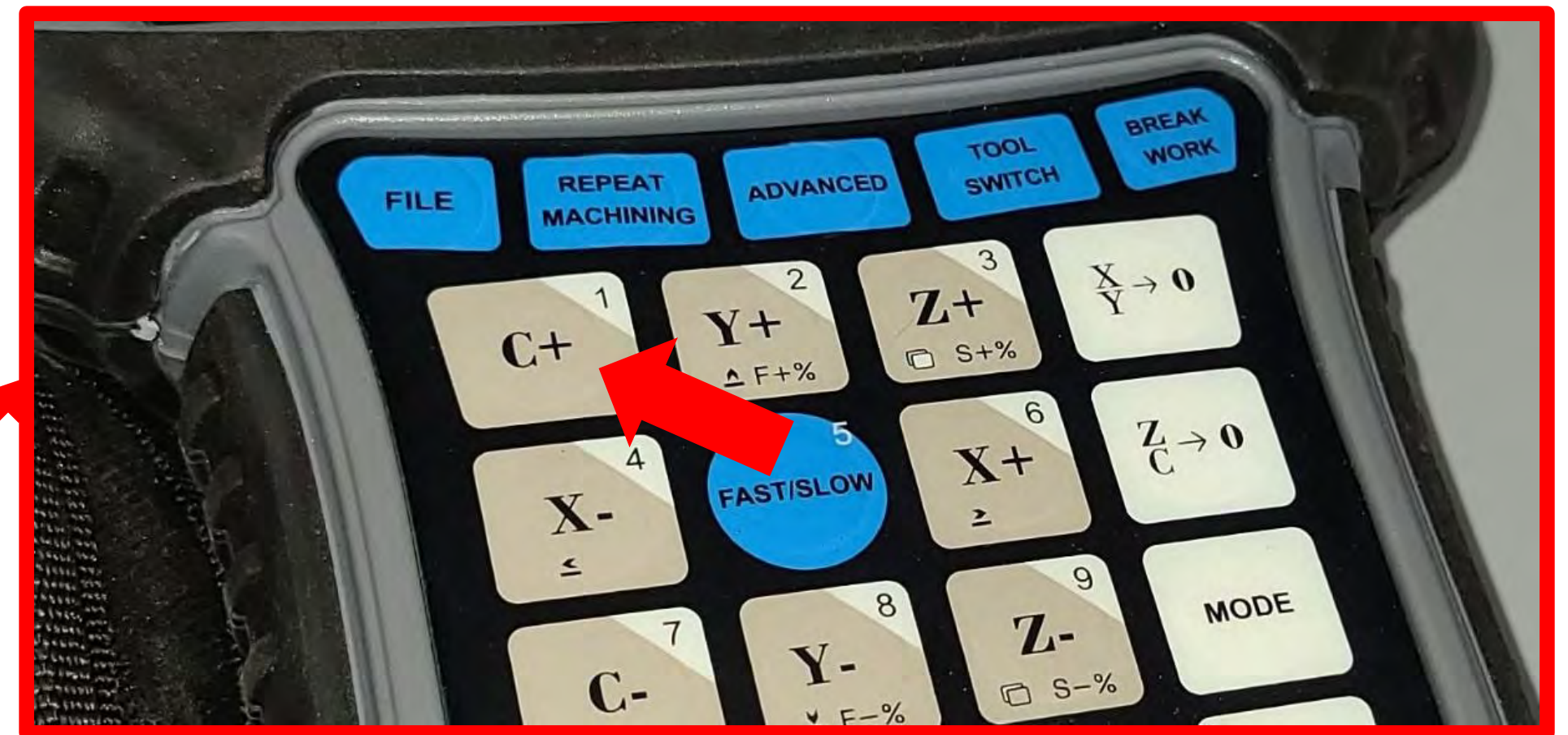
Figure #1-Control Screen after Loading Program and Setting Work Origin.



QUICK START SECTION (Cont'd.)-Verify Coordinate System (Cont'd.)



To change to Workpiece 1,
Press & Hold Down **"MENU"** Button -->
Press **"C+/1 Button"**.



2.) Press **"C+/1 Button"**.

1.) Press & Hold Down **"MENU"** Button.





QUICK START SECTION (Cont'd.)-Verify which tool cone is currently in the spindle and compare to the “CurSpindl” parameter on the controller run screen.

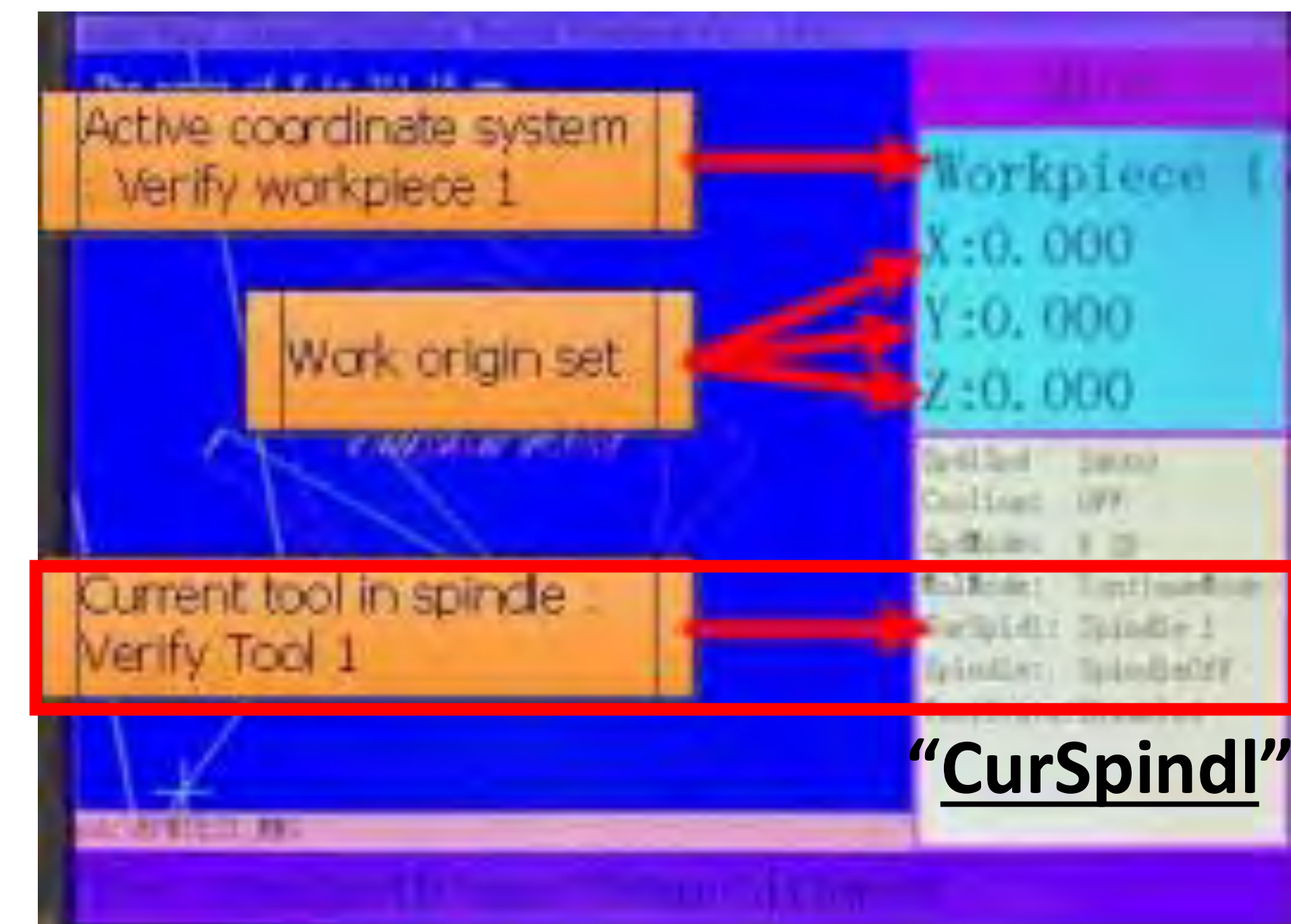
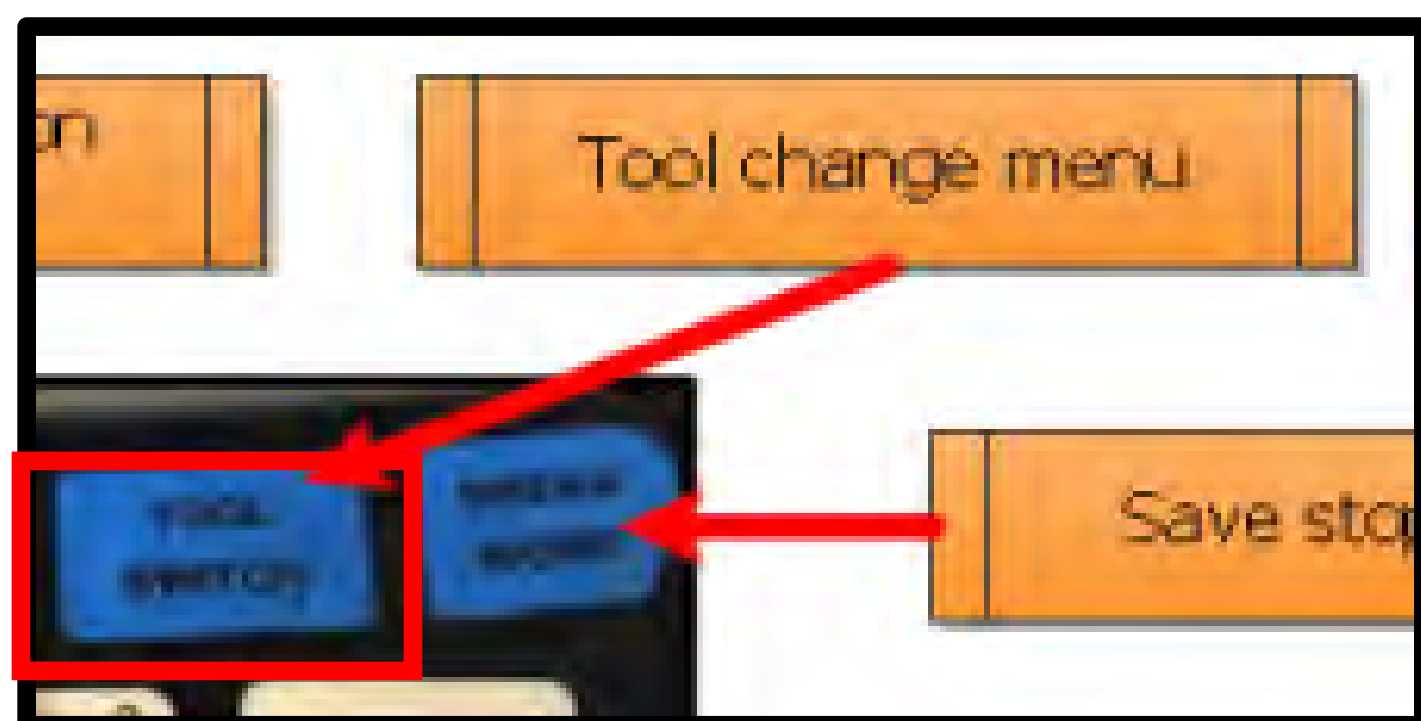
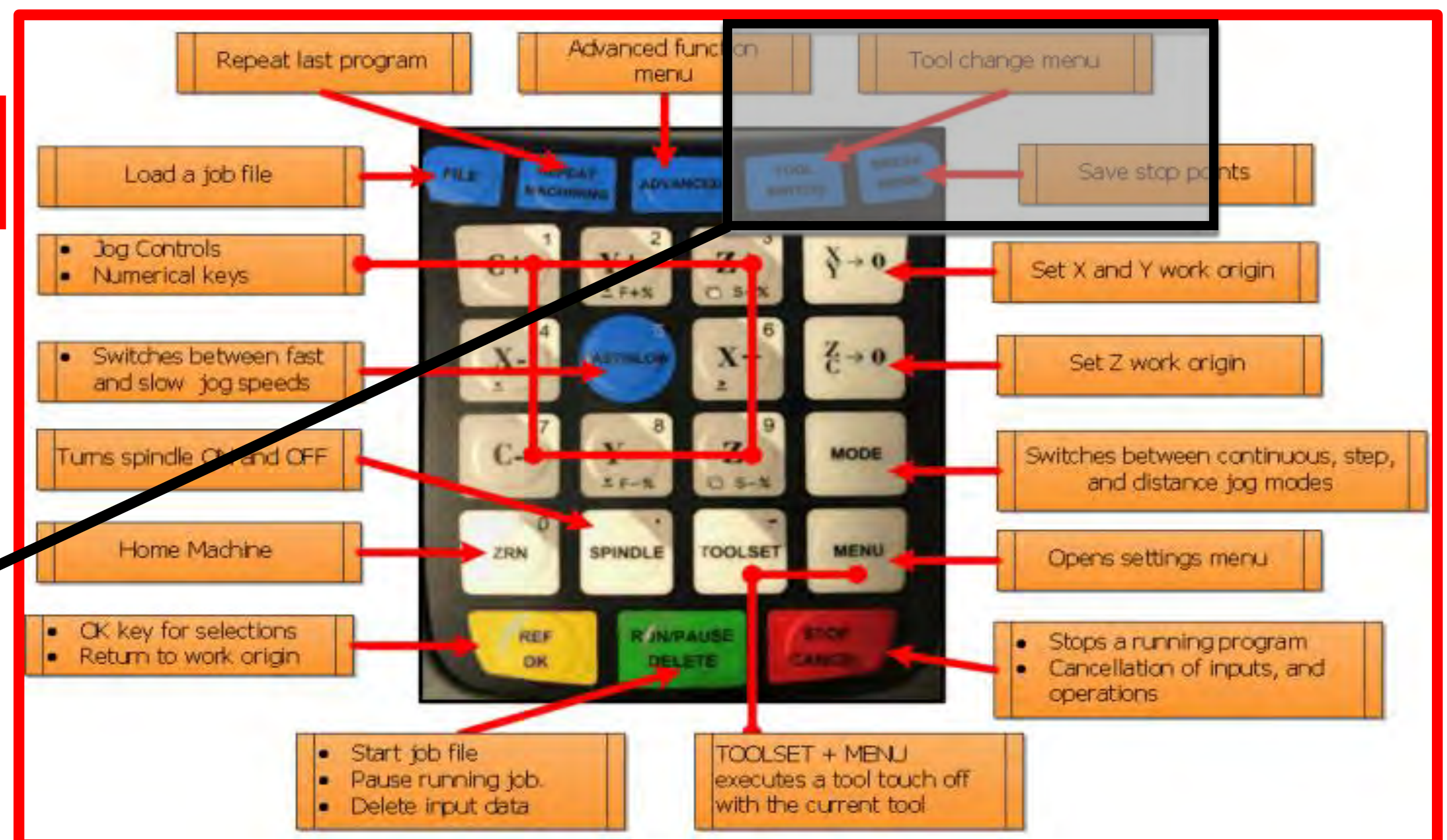


Figure #1-Control Screen after Loading Program and Setting Work Origin.

If Current Tool Number is **Not Tool #1**, then switch tools using Tool Switch Function (See Basic Button Functions-Press “Tool Change Menu Button or Tool Switch Menu Button”).





QUICK START SECTION (Cont'd.)- Set XY Origin Point

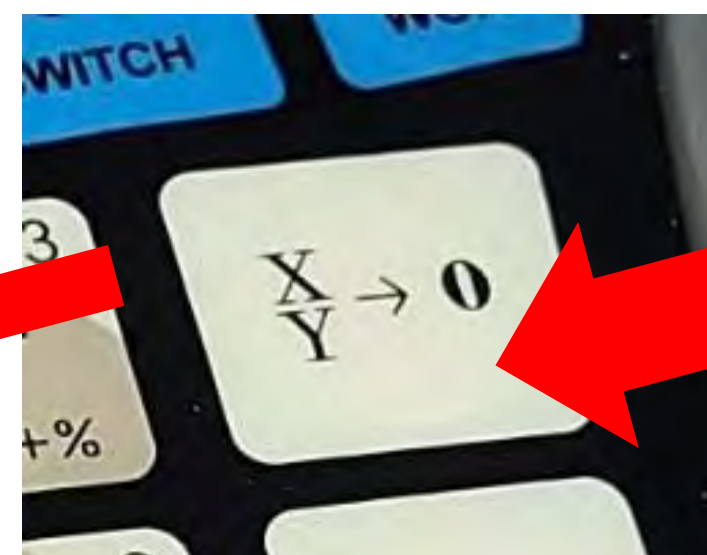
Jog the spindle to the **“Program’s Origin Point”**. This is determined by the CNC Program that was previously created.



Press the **up Y+**, and **down Y-**, **right X+**, **left X-** Buttons to Scroll or Jog up/down, right/left to the to the desired selected program.

UP Y+, and Down Y- Buttons.

Right X+, and Left X- Buttons.



Press the XY-->0 Button

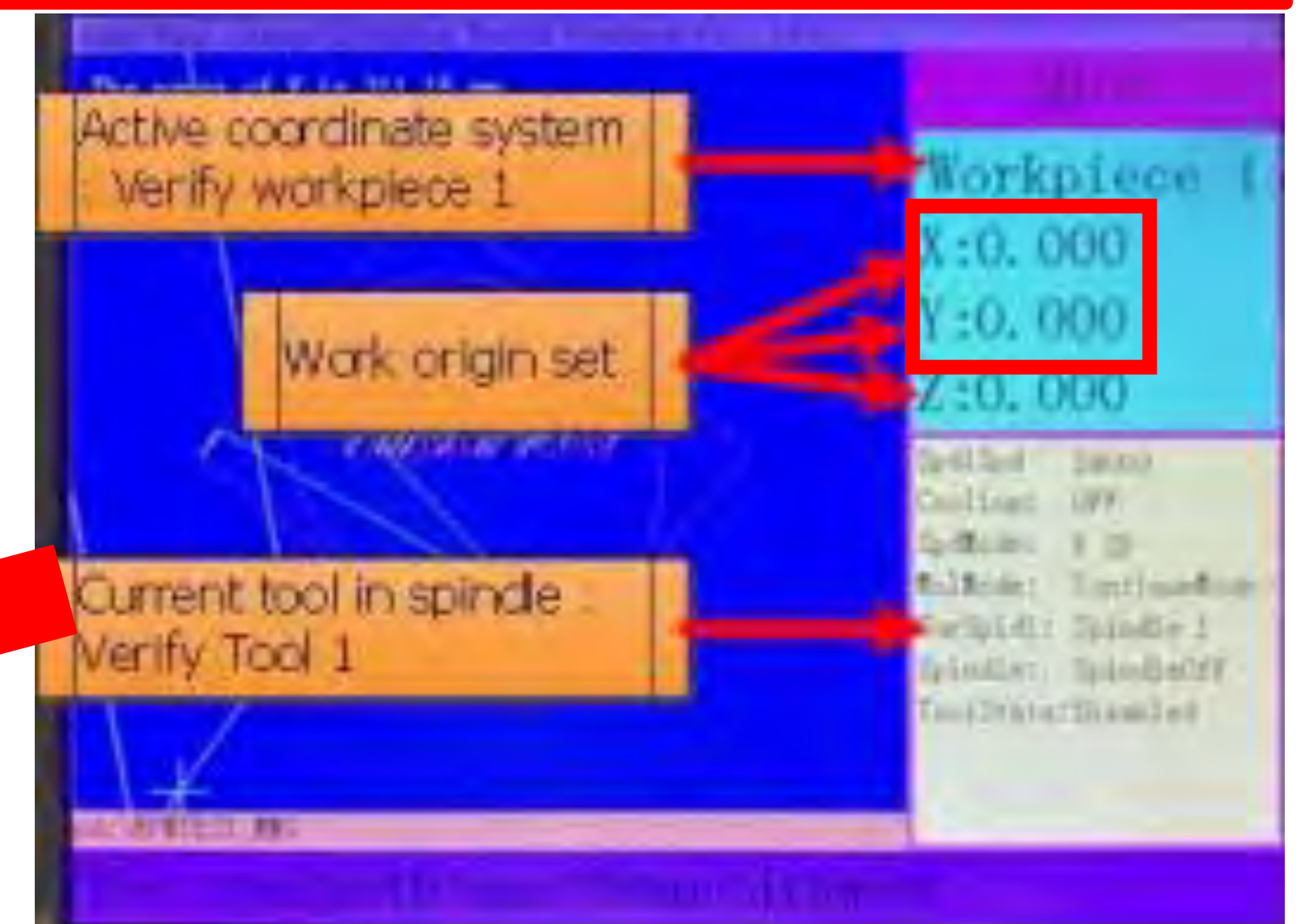


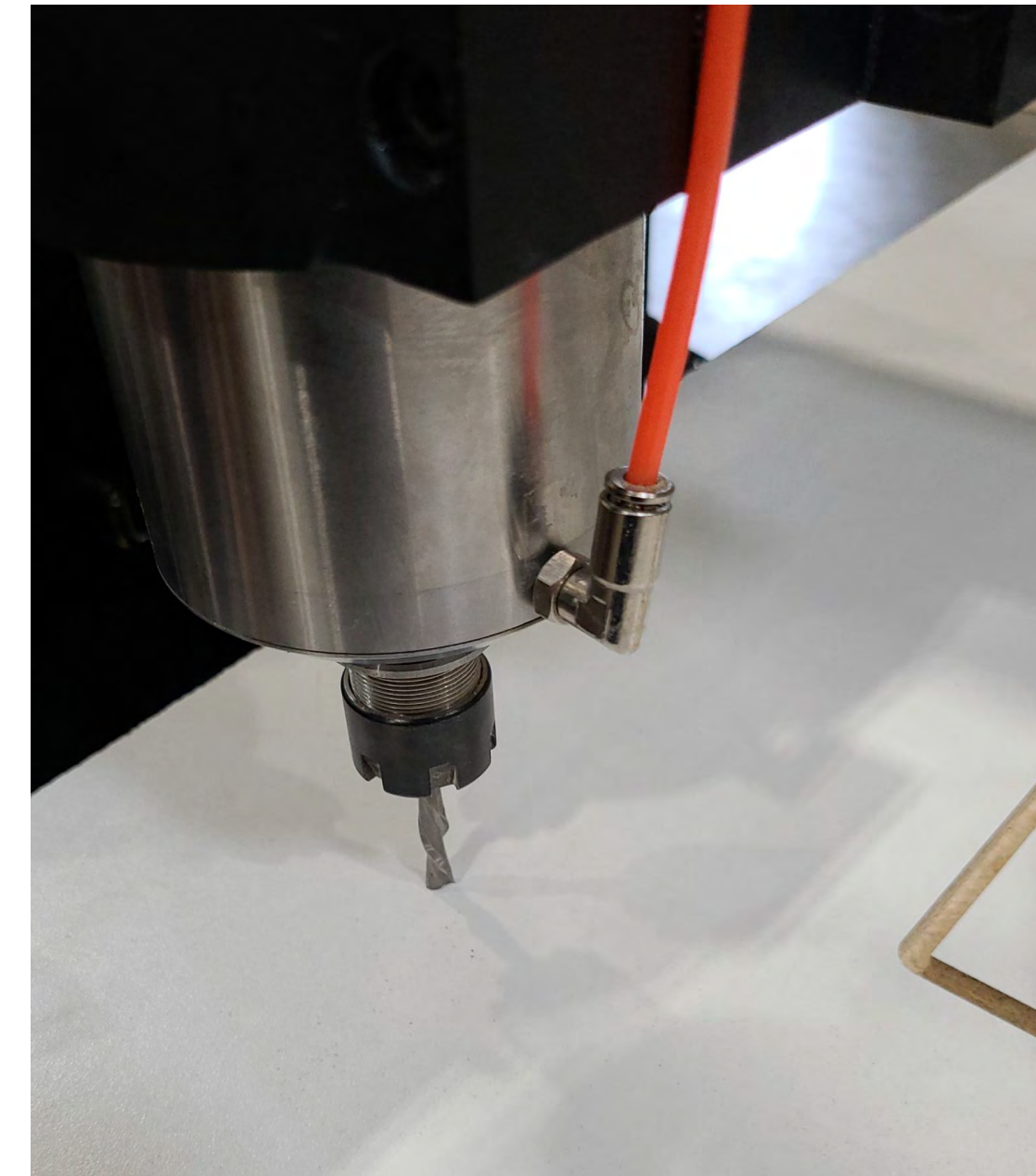
Figure #1-Control Screen after Loading Program and Setting Work Origin.

- If you are using Vectric's V-Carve Software, it is called the **“XY Datum Position”**.
- Once the spindle is in position **Press the XY-->0 Button** to set the **“XY Origin Point”**.
- On the controller, you will see the X and Y axis coordinates go to Zero-“0” (Figure #1).



QUICK START SECTION (Cont'd.)- Set the "Z" Origin Point [Manually]

a.) Set the Jog Speed to "Low" and carefully move the spindle down towards the top of your material until the desired Z-Zero Position is obtained.



"Z-Zero Position"

- i. It may be helpful to use a sheet of paper by sliding it back and forth under the bit, while jogging the z-axis down.
- ii. Once the paper is snagged by the bit you know one is within a paper thickness (0.1mm) of your material.

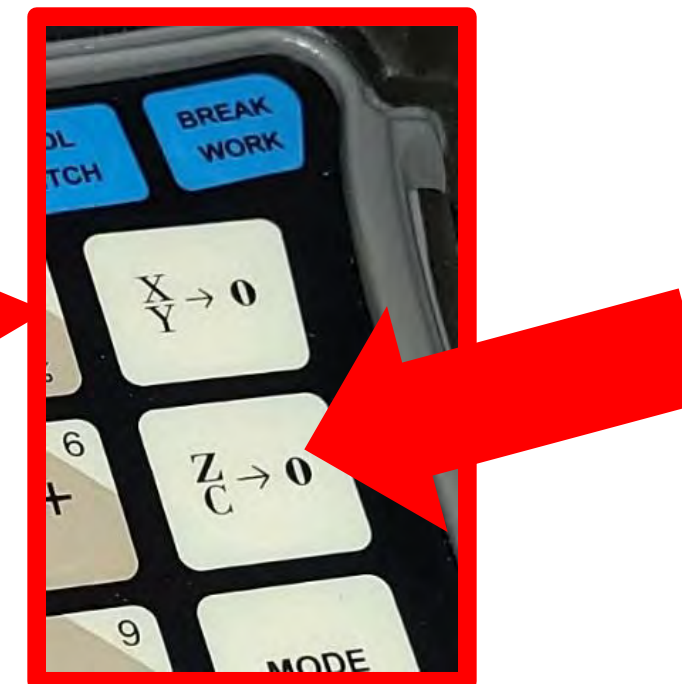


"Z-Zero Position with a piece of paper"



QUICK START SECTION (Cont'd.)- Set the "Z" Origin Point [Manually]

b.) Press the ZC-->0 button.



c.) On the controller, you will see the Z-axis coordinate go to zero (Figure #1).

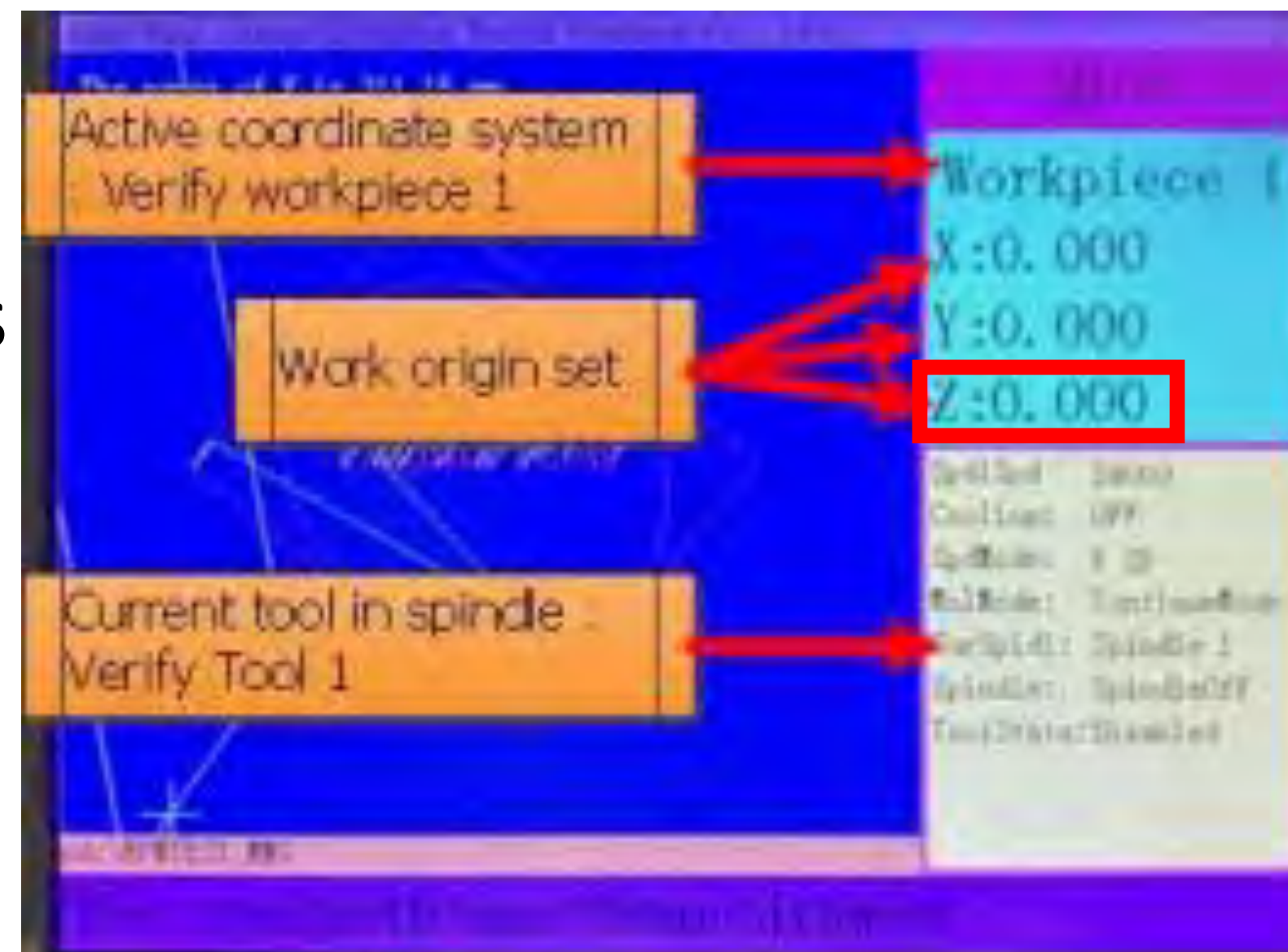
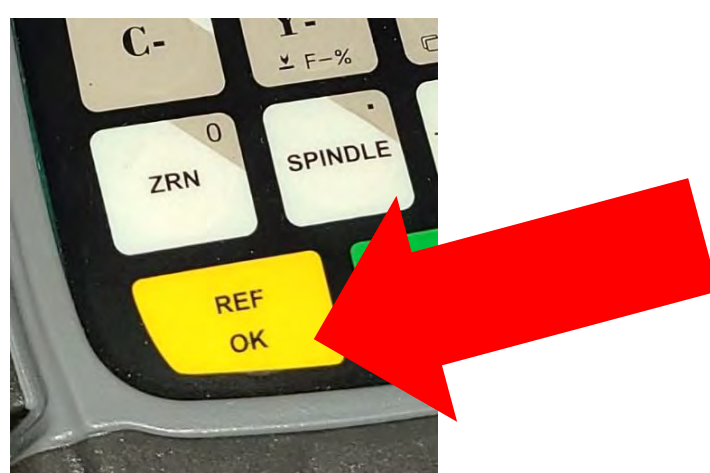


Figure #1

d.) Press REF/OK Button x2 (Twice).



e.) This will retract the spindle to a safe starting location.



QUICK START SECTION (Cont'd.)- Set the "Z" Origin Point [Manually]

f.) Put on your **SAFETY GLASSES** and run the program!



g.) In case of an emergency or machine failure you can hit the "**E-STOP** Button" on the control cabinet.



[In most cases the "**Stop/Cancel Button**" on the Handheld Controller (HHC) is a preferred stopping method.]



h.) Press the "**RUN/PAUSE/DELETE Button**" to start the program.



i.) Accept the default runtime parameters by pressing "**REF/OK Button**".





QUICK START SECTION (Cont'd.)- Set the "Z" Origin Point [Manually]

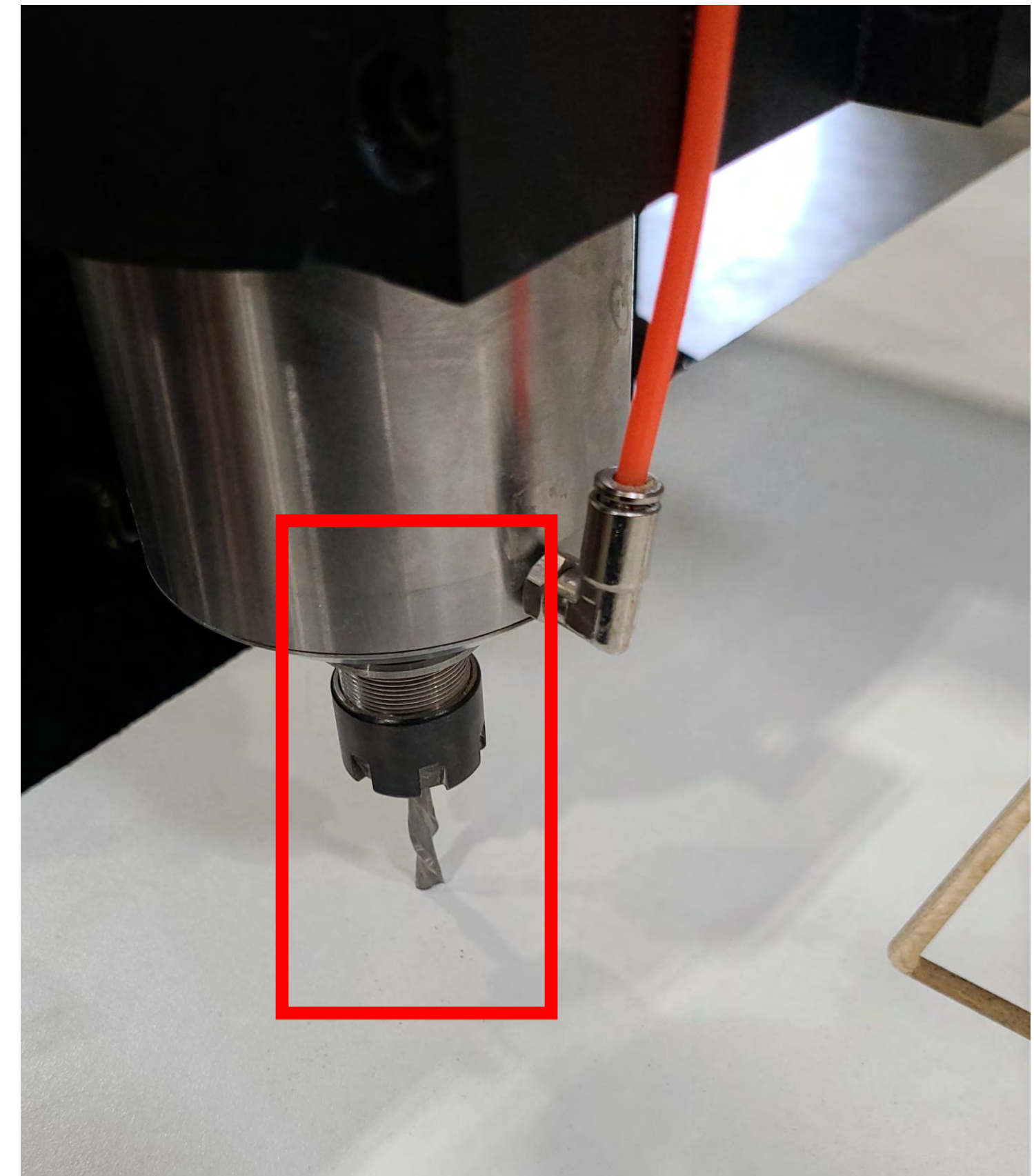
j.) While the program is running:

k.) Feed rate can be adjusted by pressing the Y+ or Y- buttons.

i. Y+ will increase the feed rate by 10%.

ii. Y- will decrease the speed by 10%

iii. The max speed is determined by the program file.



l.) Program End.

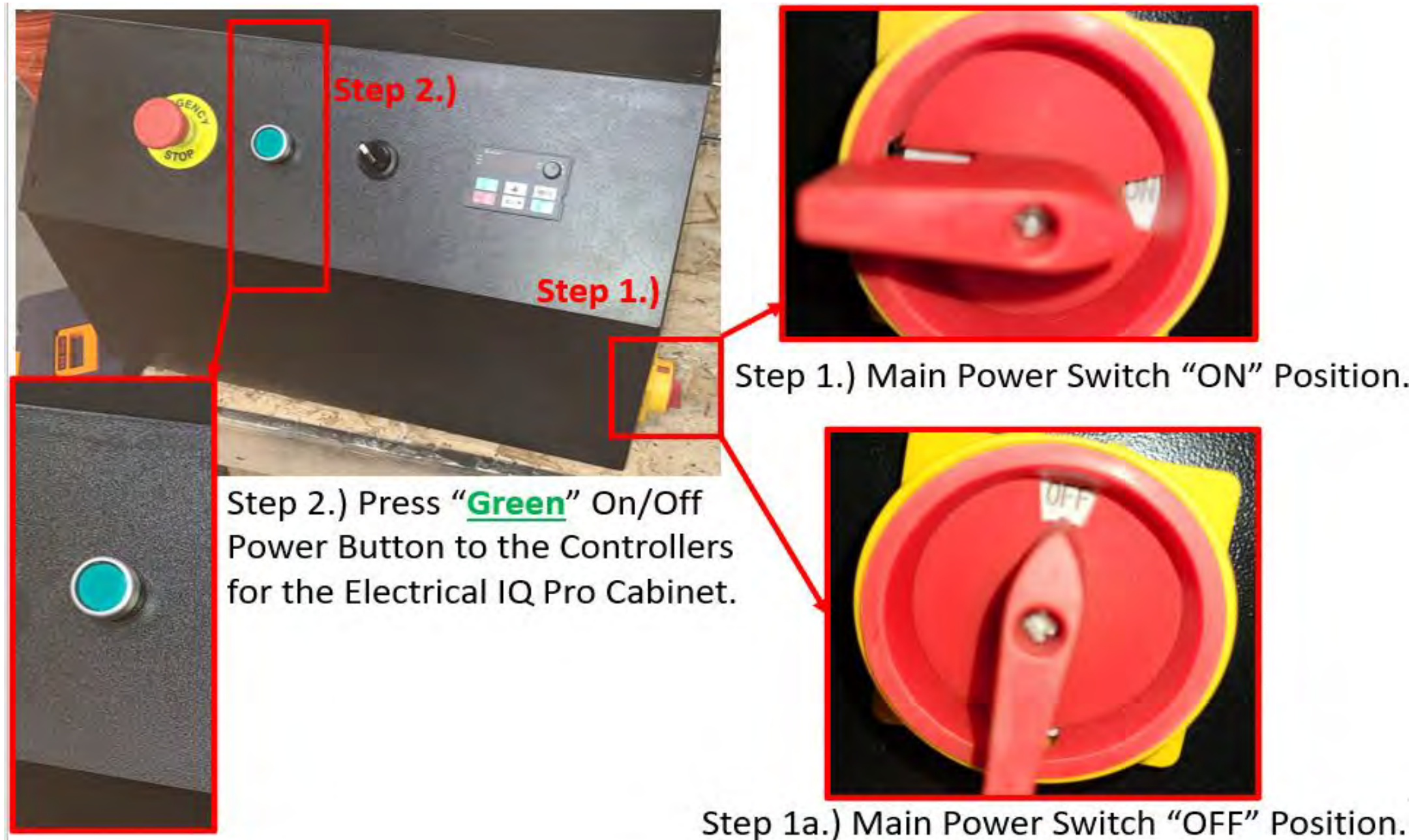
At the end of a program the spindle will **STOP** and the **Z-Axis** will retract to a safe clearance height. See Photo.



MULTIPLE TOOL PROGRAM

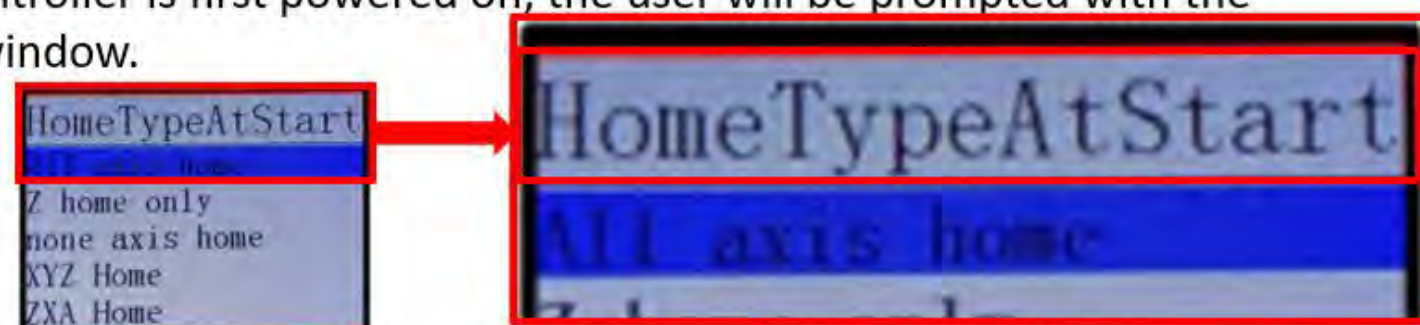
There are preliminary steps that need to be done before running a multi-tool program.

- Turn “ON” Machine.



- Establish Home Position.

1.) When the B57E controller is first powered on, the user will be prompted with the “HomeTypeAtStart” window.



2.) The machine needs to be homed each time the machine is powered.

- The tool locations are relative to the Machine Home Position 0, 0 relatives to flags on X, Y, Z Axis's.

3.) The default selection is All Axis Home.

- Press **REF/OK** to begin homing all axes or press “**Stop/Cancel**”, if one wishes not to.





MULTIPLE TOOL PROGRAM (Cont'd.)

• Set XY & Z Work Origins.

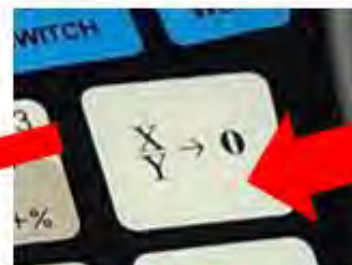
Jog the spindle to the **"Program's Origin Point"**. This is determined by the CNC Program that was previously created.



Press the **up Y+, and down Y-, right X+, left X-** Buttons to Scroll or Jog up/down, right/left to the to the desired selected program.

UP Y+, and Down Y- Buttons.

Right X+, and Left X- Buttons.



Press the **XY-->0** Button

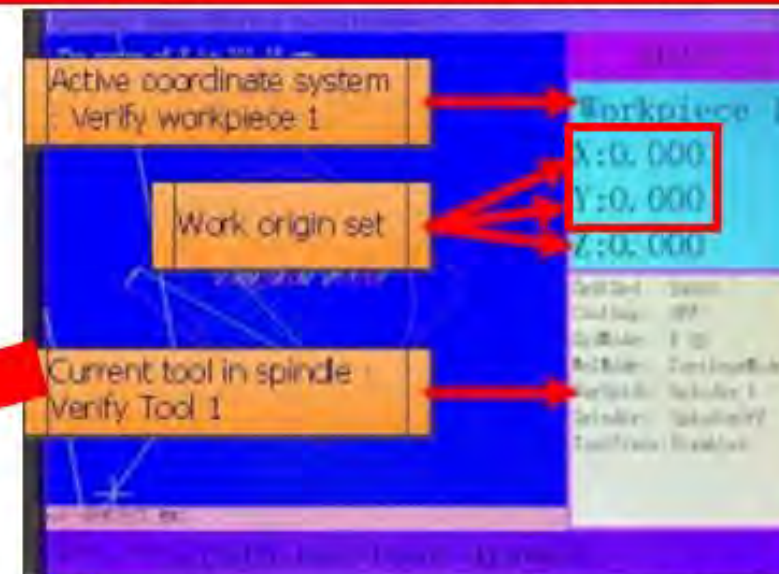
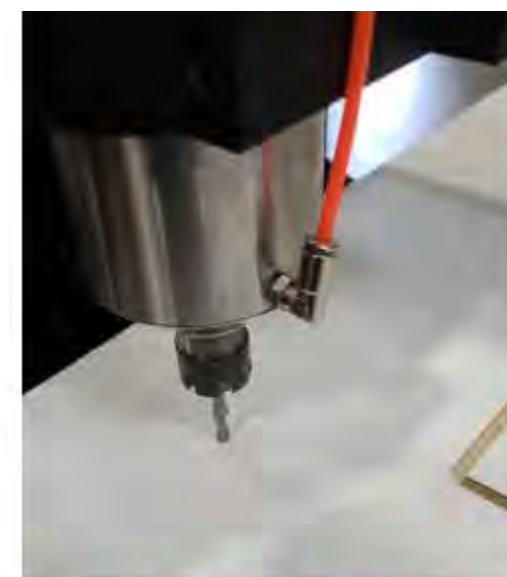


Figure #1-Control Screen after Loading Program and Setting Work Origin.

- If you are using **Vectric's V-Carve Software**, it is called the **"XY Datum Position"**.
- Once the spindle is in position **Press the XY-->0 Button** to set the **"XY Origin Point"**.
- On the controller, you will see the X and Y axis coordinates go to Zero-"0" (Figure #1).

- Set the Jog Speed to **"Low"** and carefully move the spindle down towards the top of your material until the desired Z-Zero Position is obtained.



"Z-Zero Position"

- It may be helpful to use a sheet of paper by sliding it back and forth under the bit, while jogging the z-axis down.
- Once the paper is snagged by the bit you know one is within a paper thickness (0.1mm) of your material.



"Z-Zero Position with a piece of paper"



MULTIPLE TOOL PROGRAM (Cont'd.)

b.) Press the ZC-->0 button.



c.) On the controller, you will see the Z-axis coordinate go to zero (Figure #1).

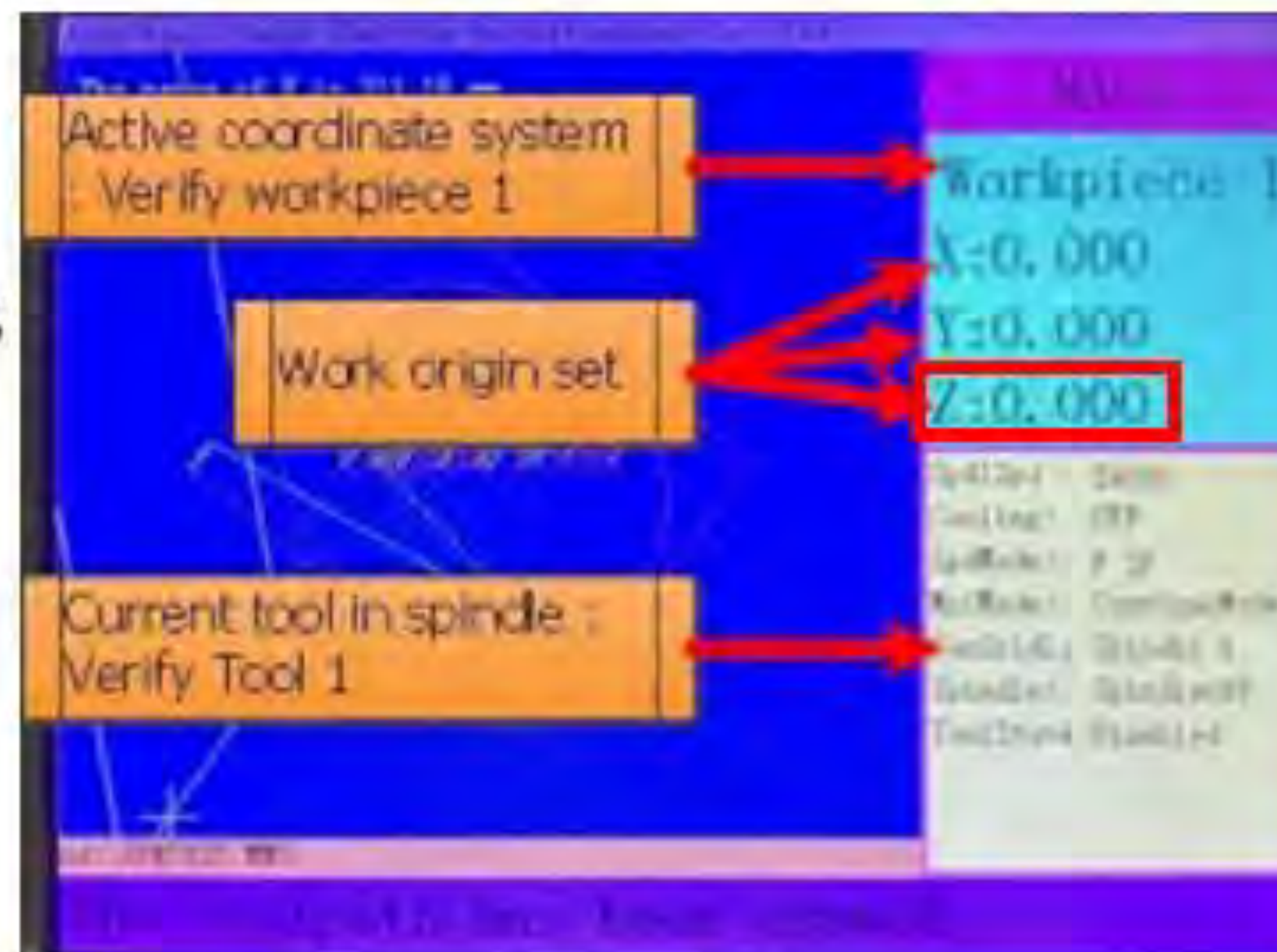


Figure #1

d.) Press REF/OK Button x2 (Twice).



e.) This will retract the spindle to a safe starting location.



MULTIPLE TOOL PROGRAM (Cont'd.)

f.) Put on your **SAFETY GLASSES** and run the program!



g.) In case of an emergency or machine failure you can hit the "**E-STOP Button**" on the control cabinet.



[In most cases the "**Stop/Cancel Button**" on the Handheld Controller (HHC) is a preferred stopping method.]



h.) Press the "**RUN/PAUSE/DELETE Button**" to start the program.



i.) Accept the default runtime parameters by pressing "**REF/OK Button**".



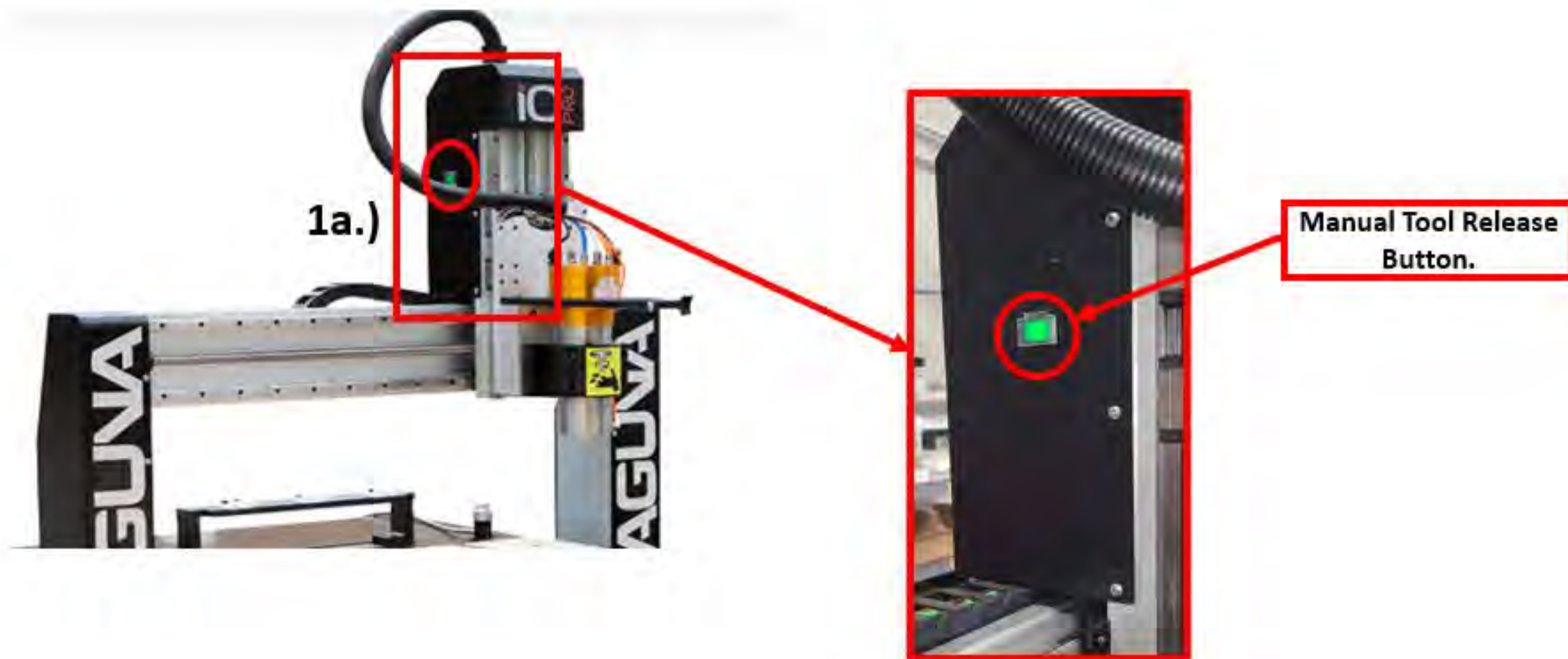


MULTIPLE TOOL PROGRAM (Cont'd.)

- Change Tools (If necessary)& Prepare Tool Cones

1. A tool can be inserted or removed in Two Ways.

- a) Manually - Using the **"Green"** Manual Tool Release Button" on the side of tool head.
- b) Automatically - Using the Tool Switch Button.





MULTIPLE TOOL PROGRAM (Cont'd.)

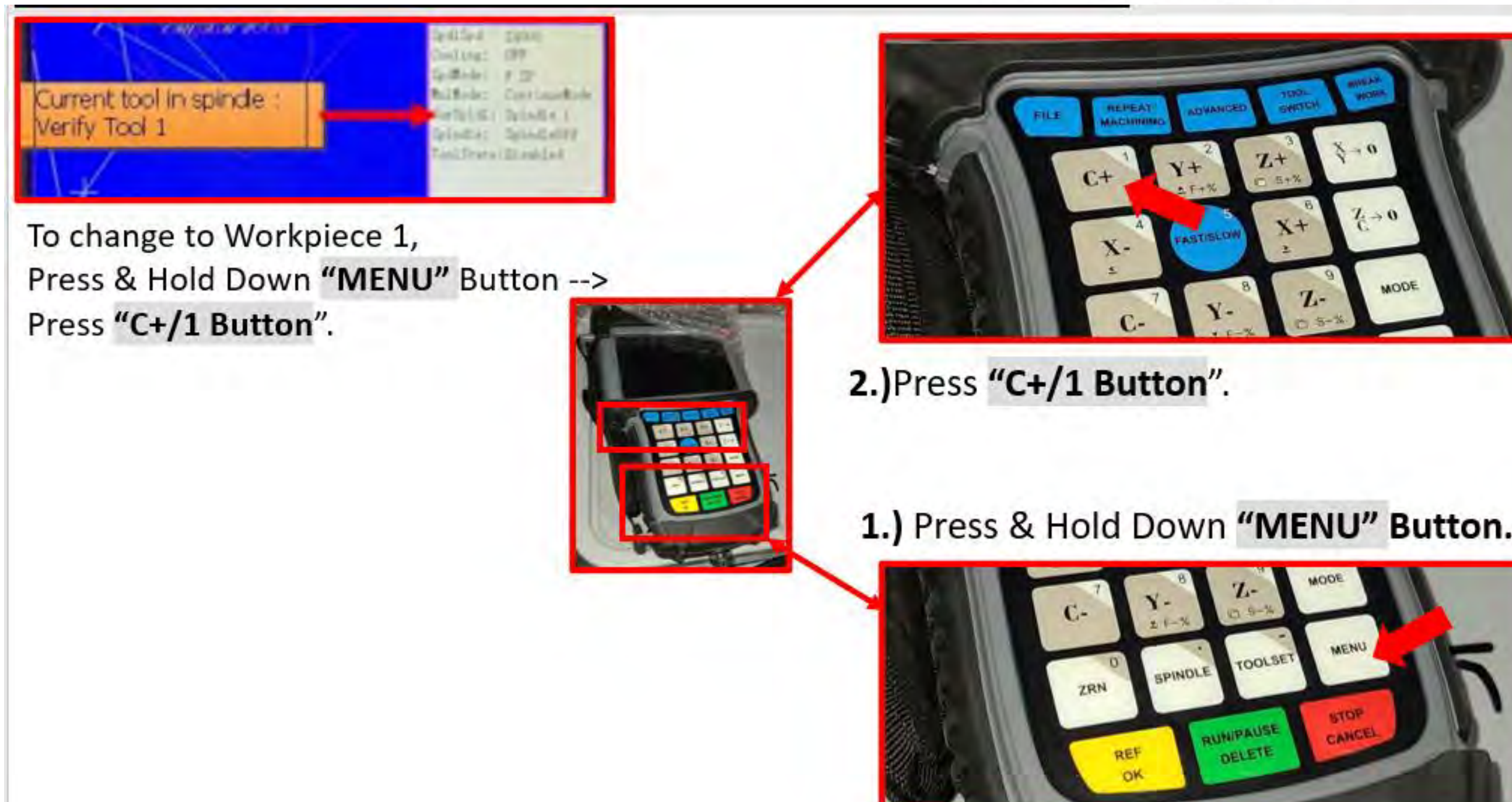
• Change Tools (If necessary)& Prepare Tool Cones (Cont'd.).

Verify Coordinate System (Figure #1).

a. Workpiece 1 should be selected.



Figure #1-Control Screen after Loading Program and Setting Work Origin.





MULTIPLE TOOL PROGRAM (Cont'd.)

- Change Tools (If necessary)& Prepare Tool Cones (Cont'd.).

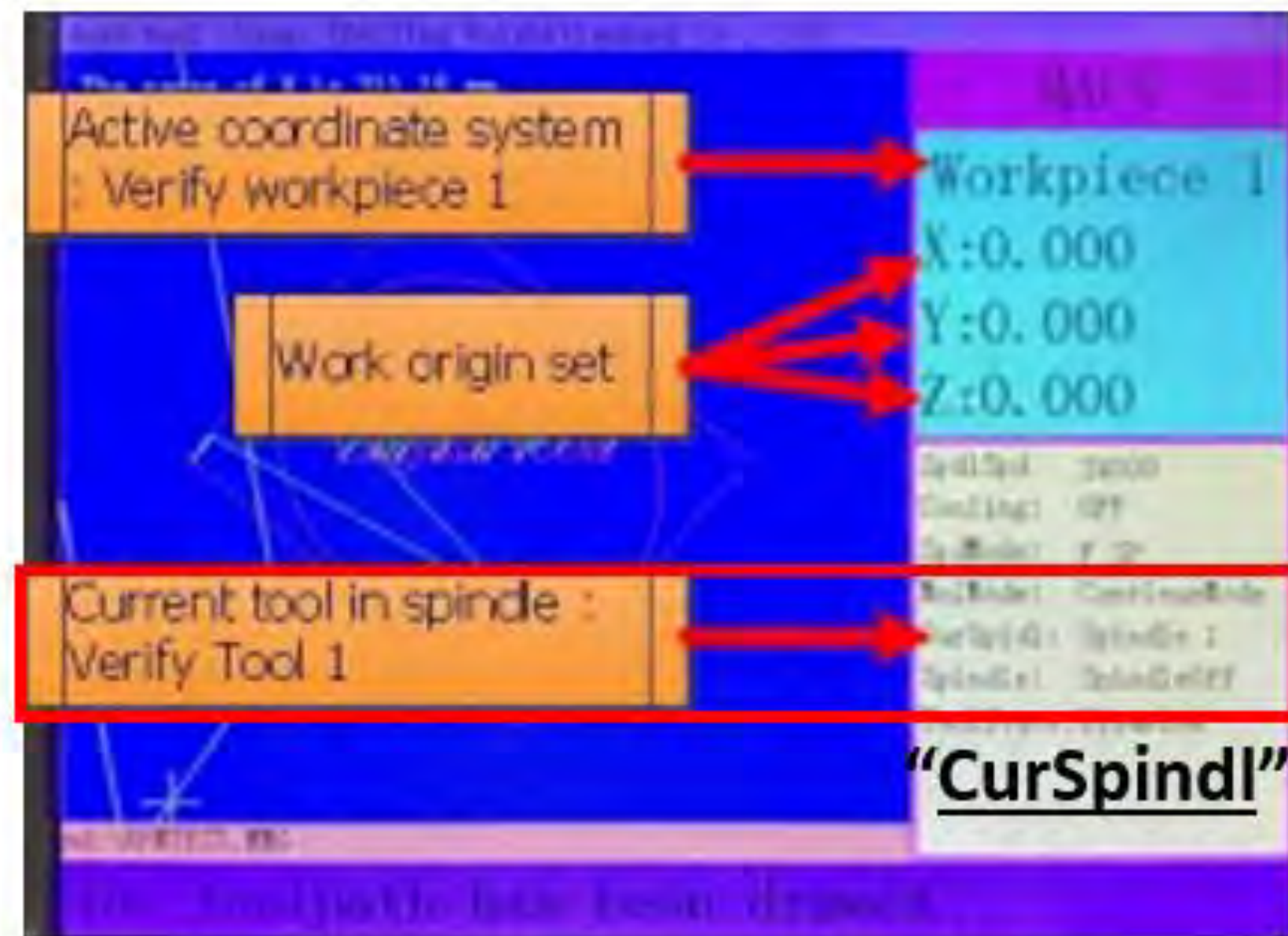
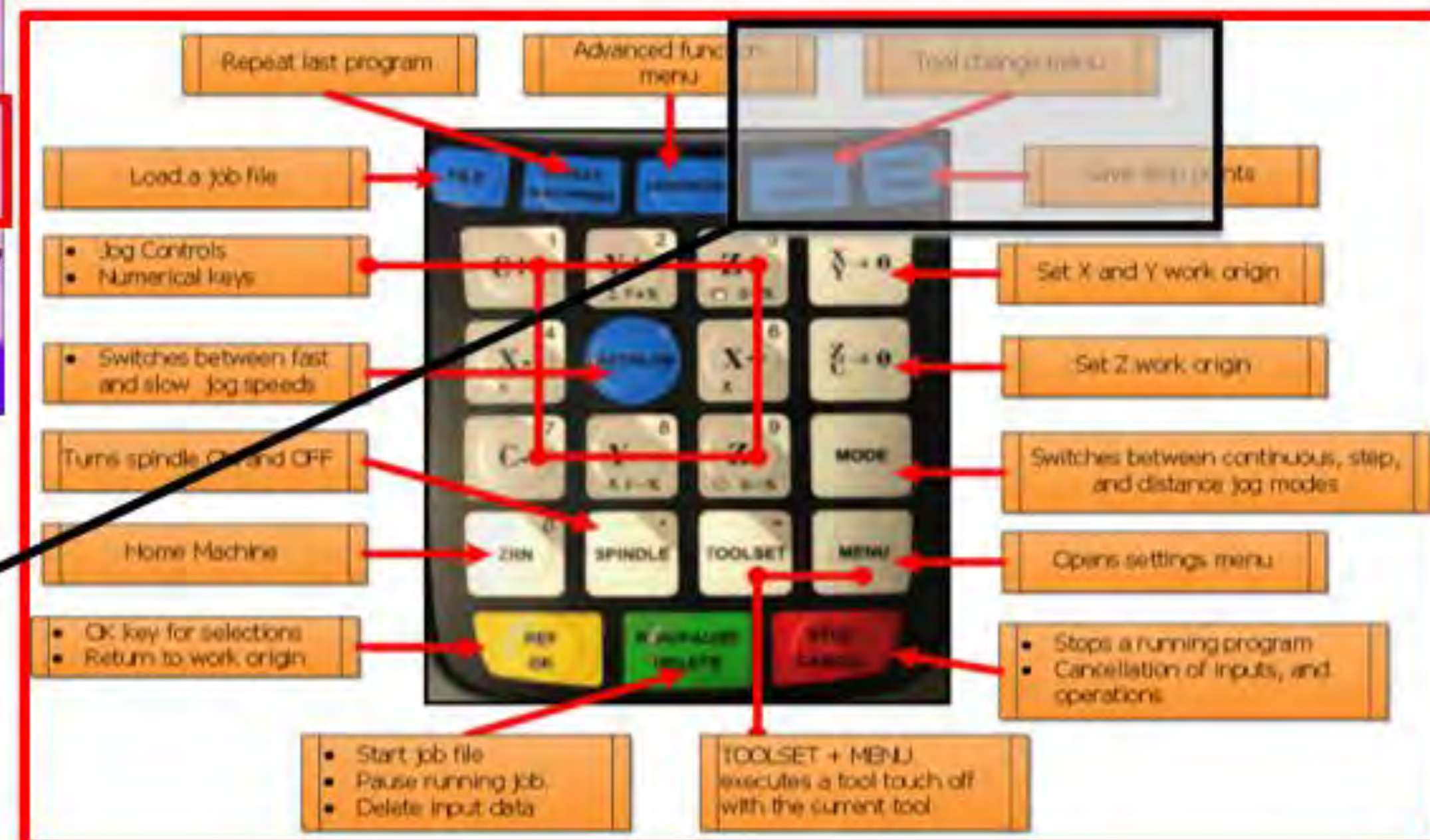


Figure #1-Control Screen after Loading Program and Setting Work Origin.

If Current Tool Number is **Not Tool #1**, then switch tools using Tool Switch Function (See Basic Button Functions-Press “Tool Change Menu Button or Tool Switch Menu Button”).





MULTIPLE TOOL PROGRAM (Cont'd.)

- Run Program.

f.) Put on your **SAFETY GLASSES** and run the program!



g.) In case of an emergency or machine failure you can hit the "**E-STOP Button**" on the control cabinet.



[In most cases the "**Stop/Cancel Button**" on the Handheld Controller (HHC) is a preferred stopping method.]



h.) Press the "**RUN/PAUSE/DELETE Button**" to start the program.



i.) Accept the default runtime parameters by pressing "**REF/OK Button**".





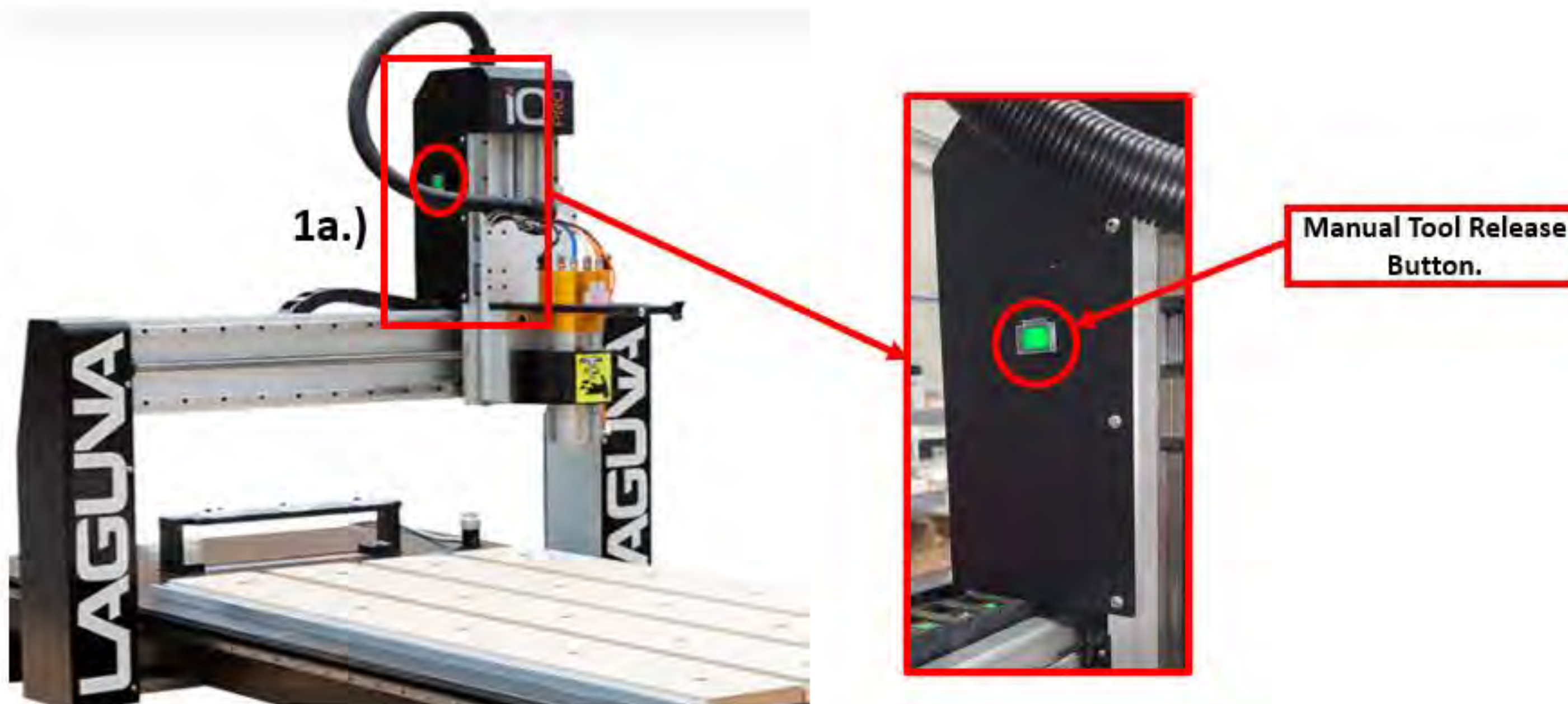
MULTIPLE TOOL PROGRAM (Cont'd.)-Setting Tool Offsets

Place the designated tools into the corresponding tool holders on the machine, determined at the time of program creation.

Change to Workpiece 1 and Tool 1.

Changing Tools

1. A tool can be inserted or removed in Two Ways.
 - a) Manually - Using the “**Green** Manual Tool Release Button” on the side of tool head
 - b) Automatically - Using the Tool Switch button.





MULTIPLE TOOL PROGRAM (Cont'd.)-Setting Tool Offsets

• Verify Workpiece 1.

Verify Coordinate System (Figure #1).

a. Workpiece 1 should be selected.

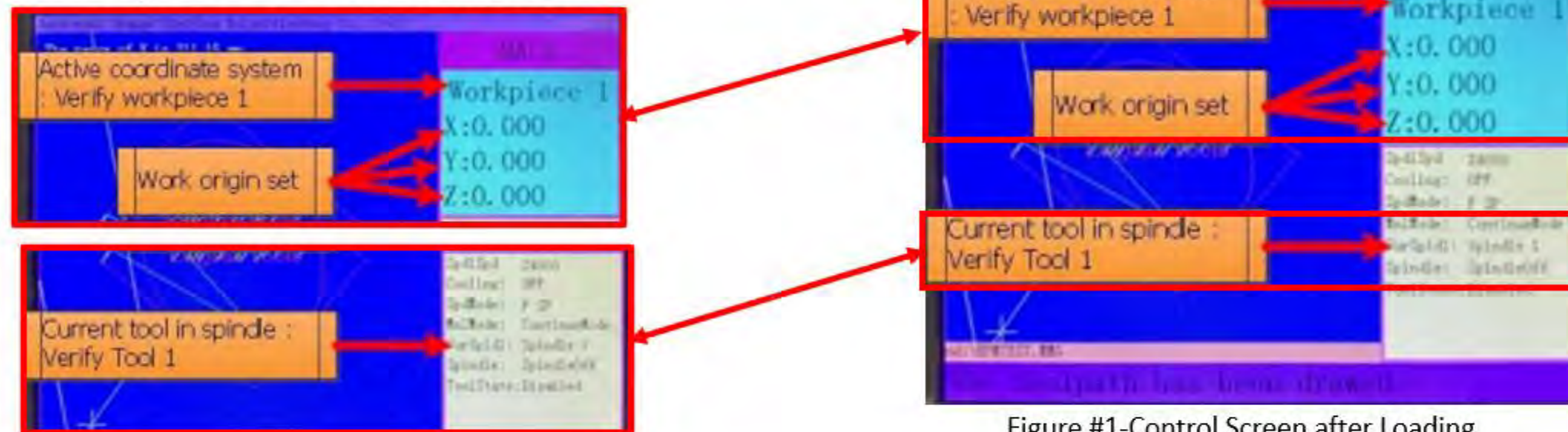


Figure #1-Control Screen after Loading Program and Setting Work Origin.



To change to Workpiece 1,
Press & Hold Down **"MENU"** Button -->
Press **"C+/1 Button"**.



2.) Press **"C+/1 Button"**.

1.) Press & Hold Down **"MENU"** Button.



• Verify **"CurSpindl"**: Spindle 1, and Tool 1 is in the spindle.

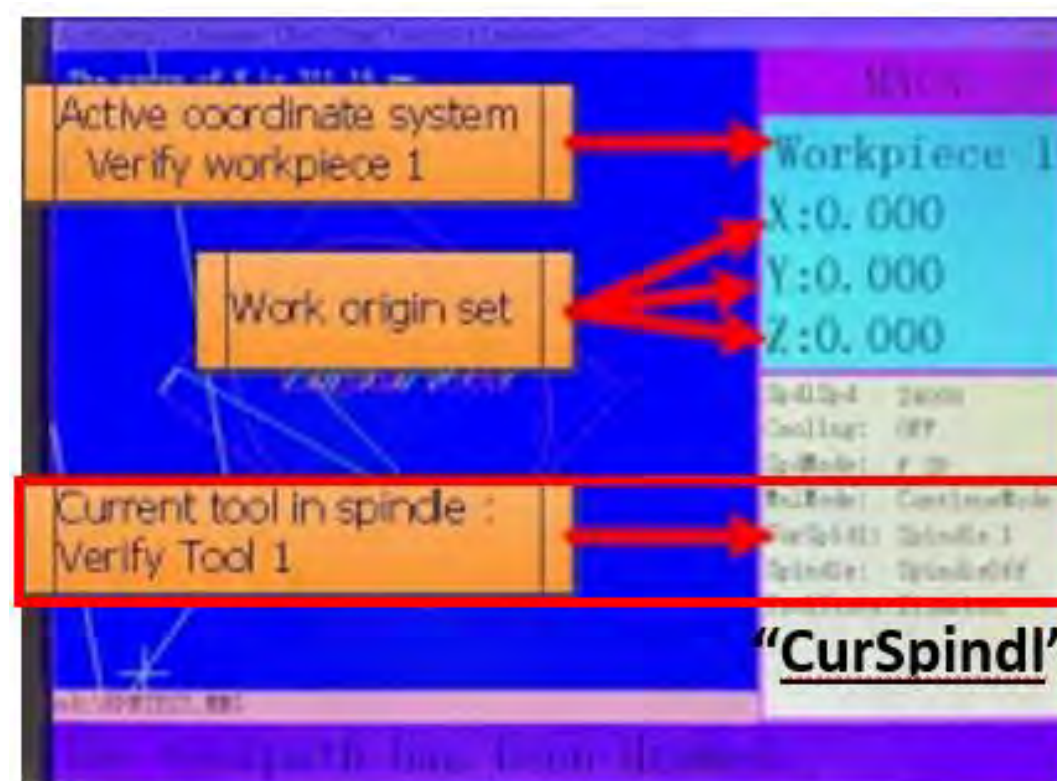
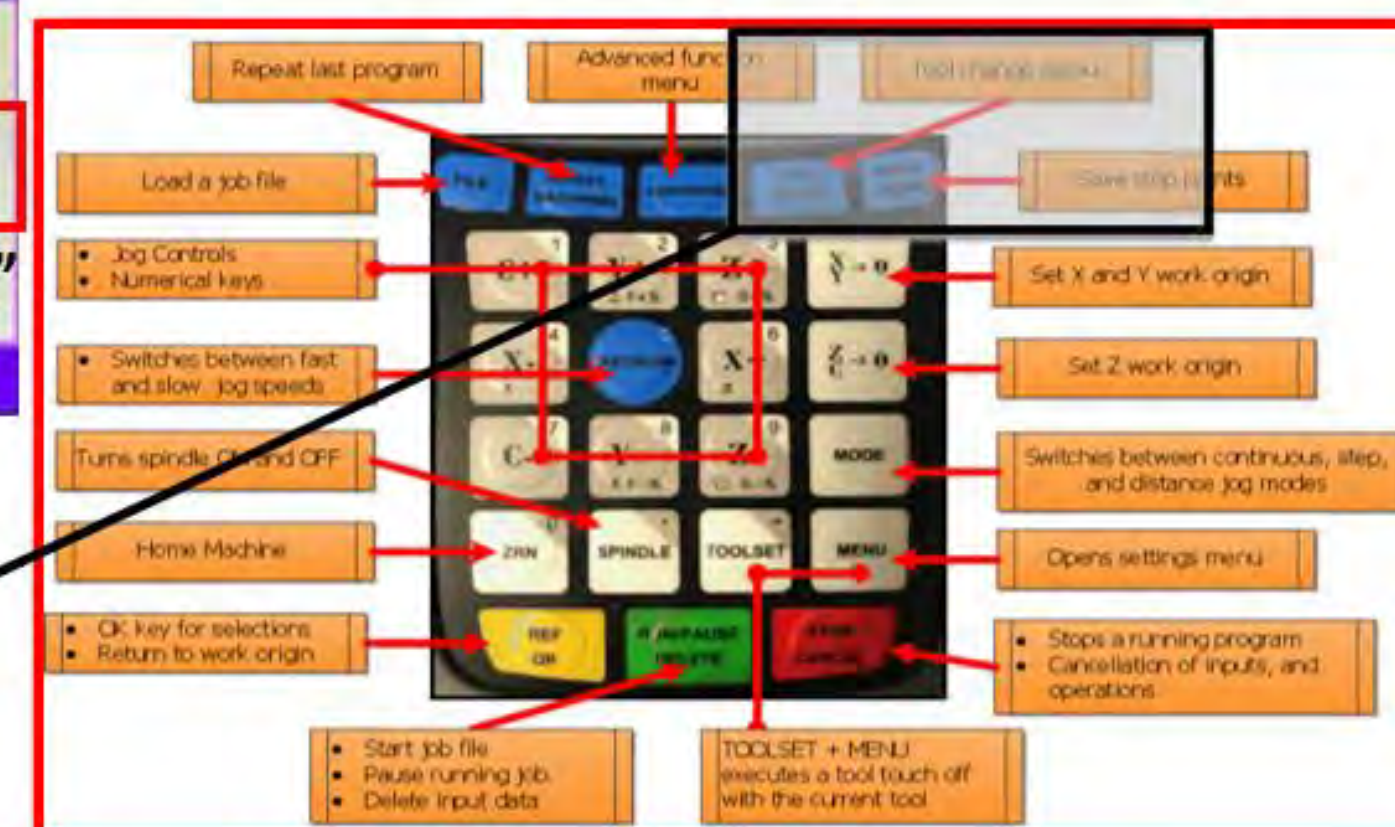
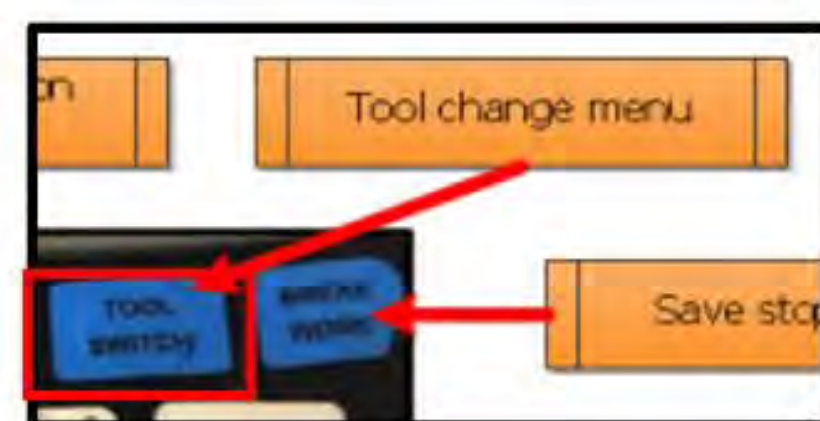


Figure #1-Control Screen after Loading Program and Setting Work Origin.

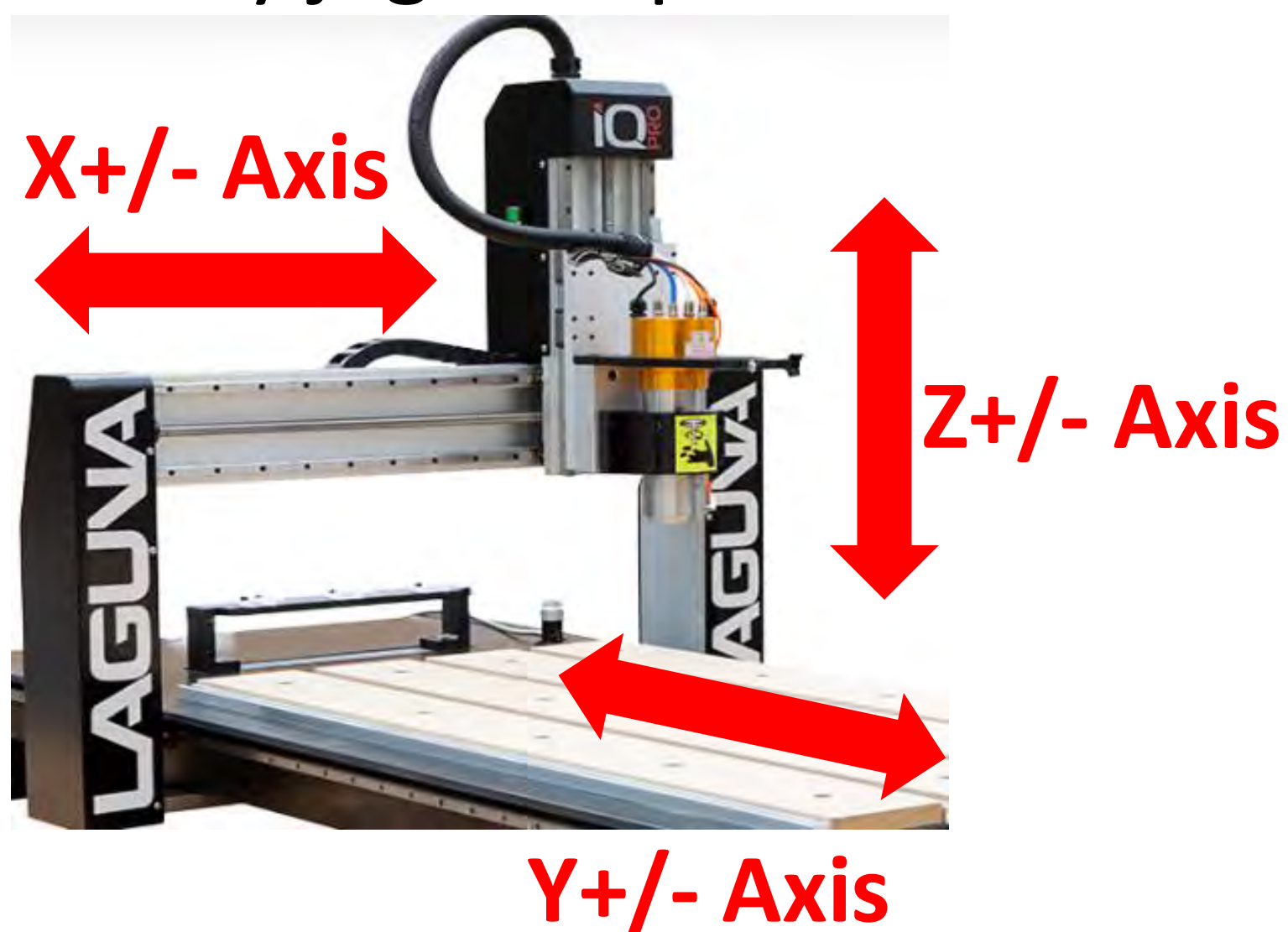
If Current Tool Number is **not Tool #1**, then switch tools using Tool Switch Function (See Basic Button Functions-Press **"Tool Change Menu Button"** or **"Tool Switch Menu Button"**).





MULTIPLE TOOL PROGRAM (Cont'd.)-Setting Tool Offsets

- Manually jog the spindle into a safe location by the tool rack.



For the "X" Axis Press the X+ or X- Buttons on the HHC.

- The machine will return to the starting position after changing tools.



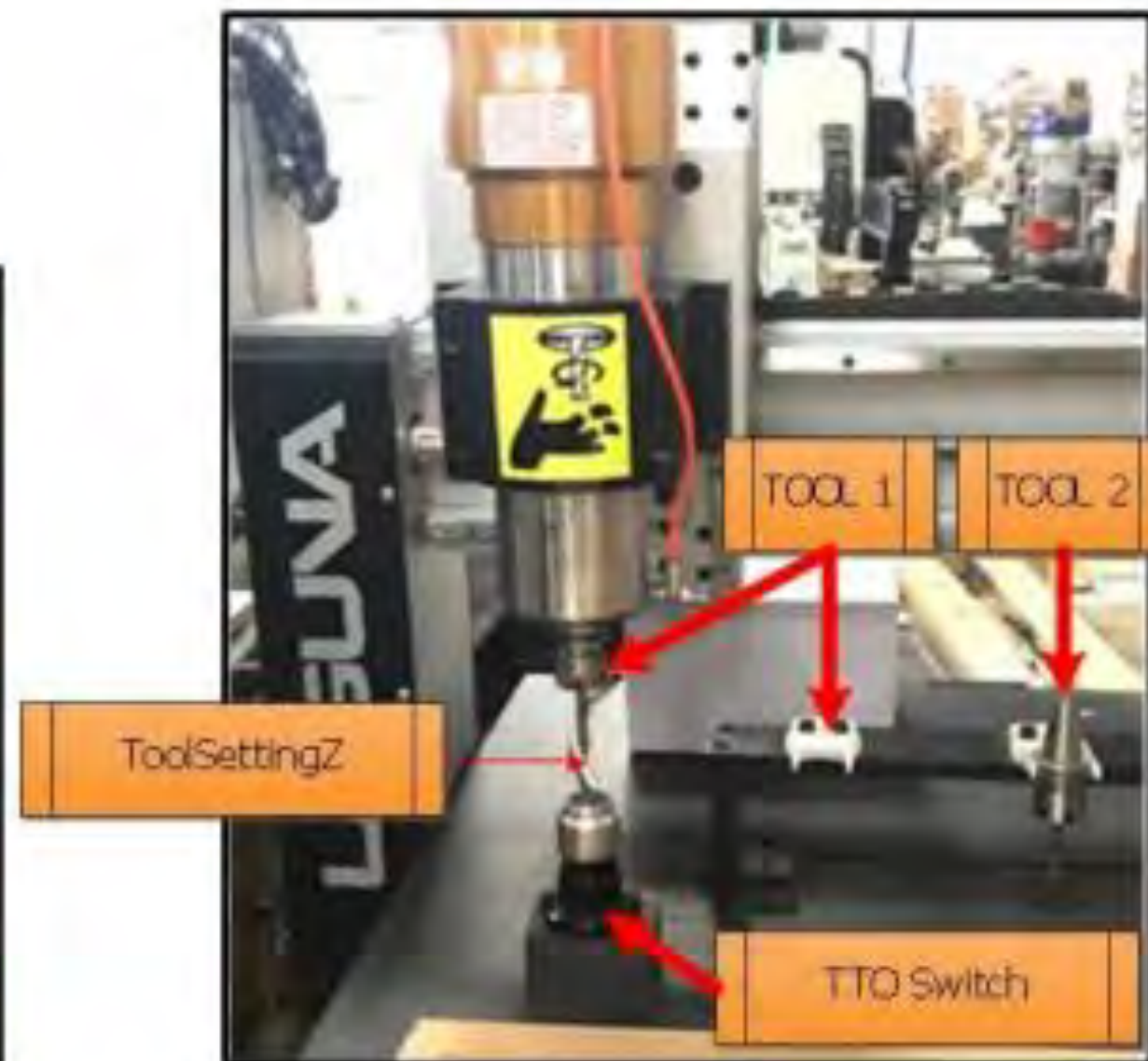
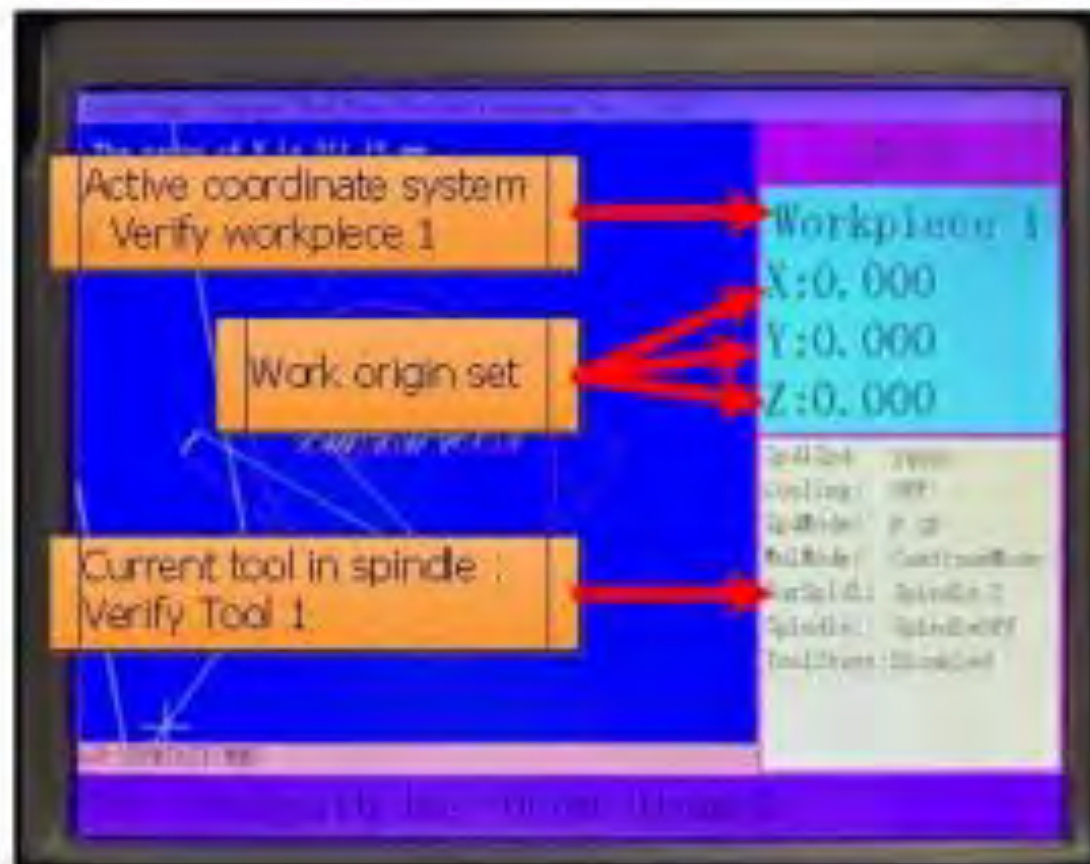
For the "Z" Axis Press the Z+ or Z- Buttons on the HHC.

For the "Y" Axis Press the Y+ or Y- Buttons on the HHC.

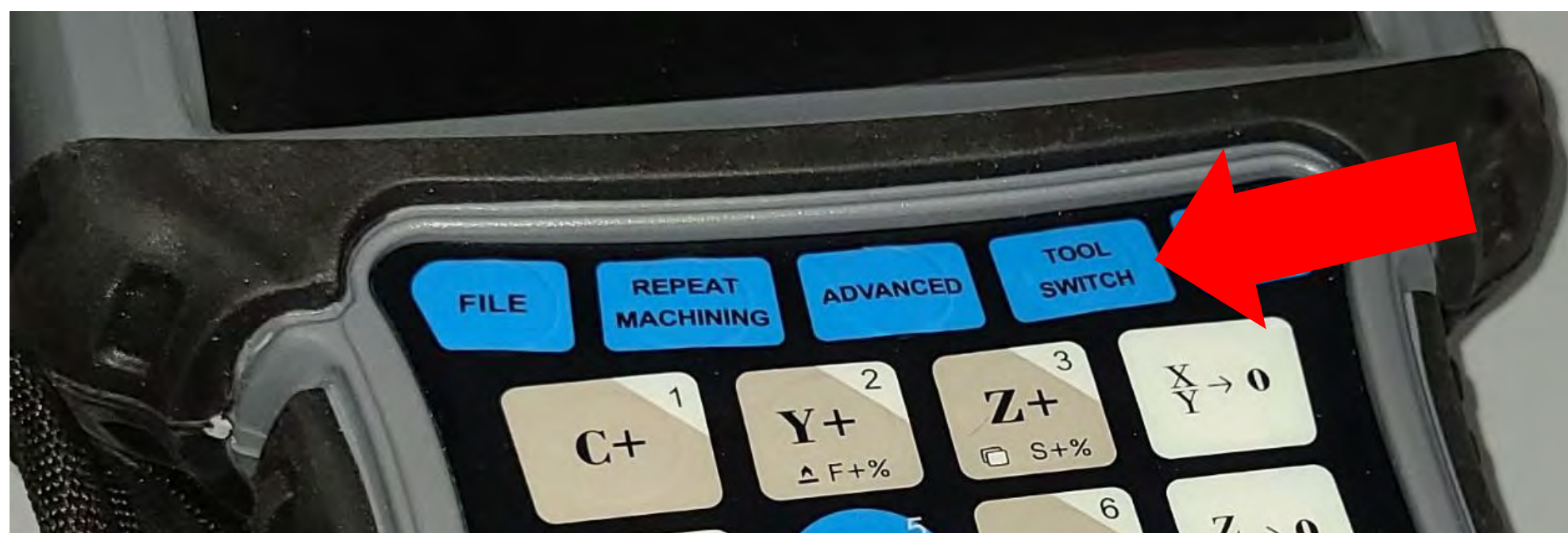


MULTIPLE TOOL PROGRAM (Cont'd.)-Setting Tool Offsets

- Press TOOLSET Button.



- The spindle will move over the tool touch off switch from its current position.
- Rapid to a preset Z value (Tool Setting Z).
- At a slower feed rate, it will lower until the switch is trigger, then retract.
- Once Tool 1 has touched off, Switch to each Tool being used and repeat Tool Set Process.





MULTIPLE TOOL PROGRAM (Cont'd.)-SETTING XY WORK ORIGIN

Log the spindle to the “**XY Origin Point**”. This is determined when the CNC program is created.

If you are using “Vectric's V-Carve Software”, it is called the “**XY Datum Position**”.

Once the spindle is in position press the “**XY-->0 Button**” to set the “XY Origin Point”.

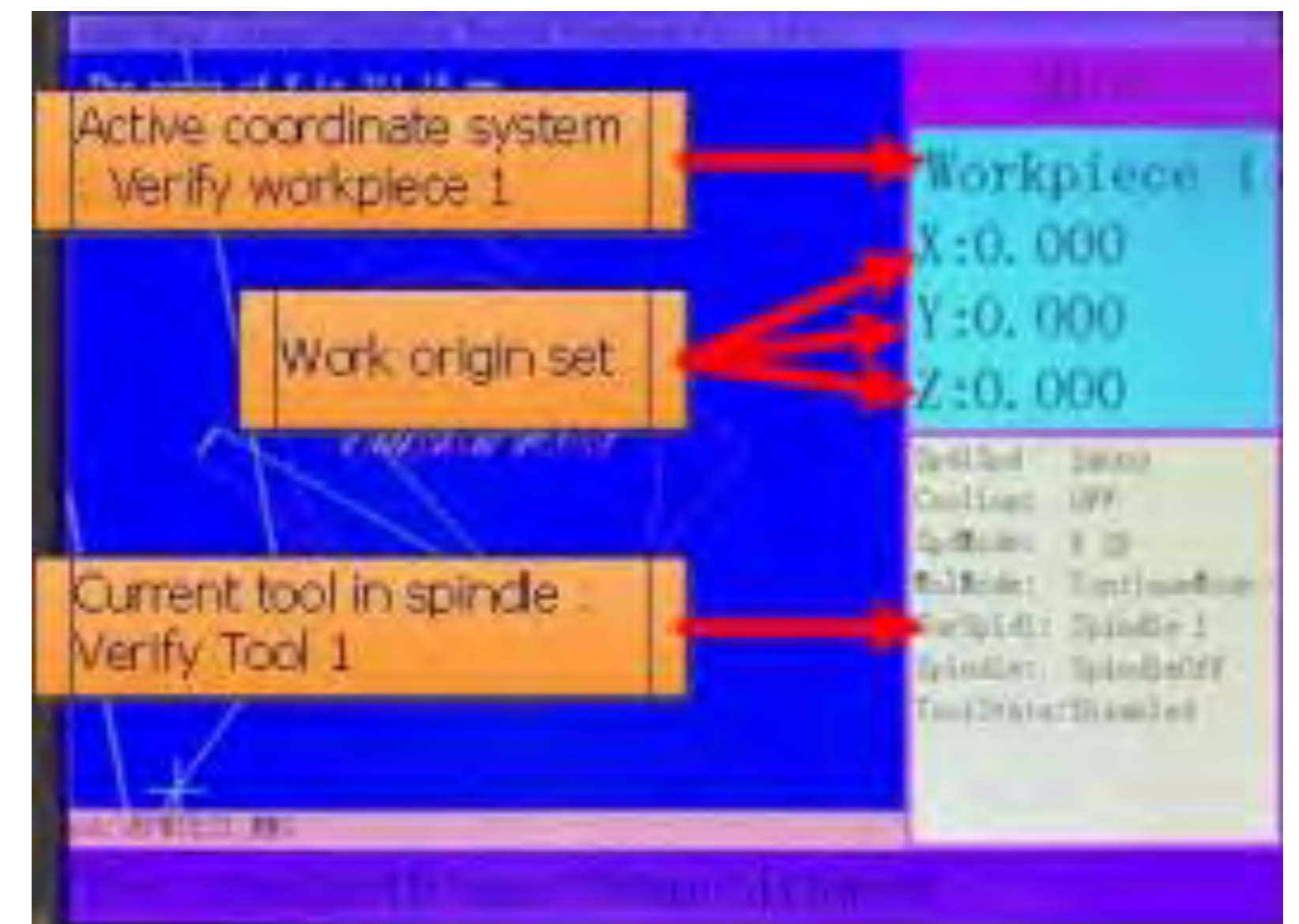


Figure #1-Control Screen after Loading Program and Setting Work Origin.

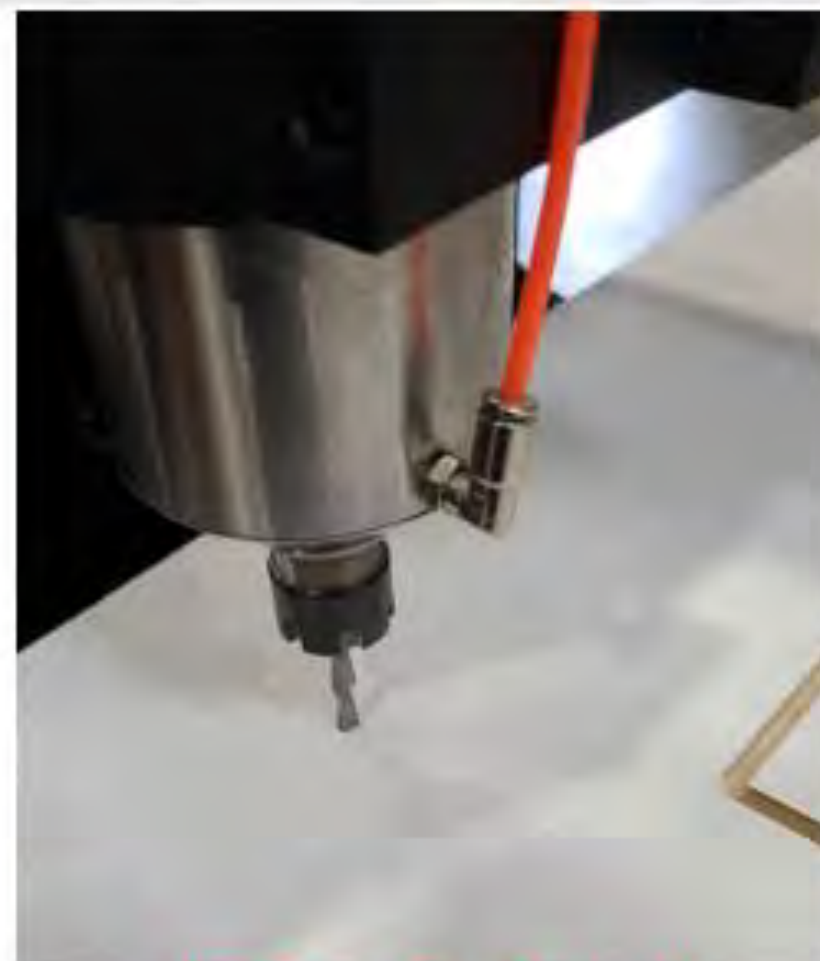
On the controller, you will see the X and Y axis coordinates go to zero (Figure #1).



MULTIPLE TOOL PROGRAM (Cont'd.)-SETTING Z WORK ORIGIN

Set the Z origin point [Manually].

- a. Set jog speed to low and carefully move the spindle down towards the top of your material until the desired “Z”, Zero “0” position is obtained.



“Z-Zero Position”

- i. It may be helpful to use a sheet of paper by sliding it back and forth under the router bit, while jogging the z-axis down. Once the paper is snagged by the bit you know you are within a paper thickness(0.1mm).



“Z-Zero Position with a piece of paper”



MULTIPLE TOOL PROGRAM (Cont'd.)-SETTING Z WORK ORIGIN

b. Press the **ZC-->0 Button**.

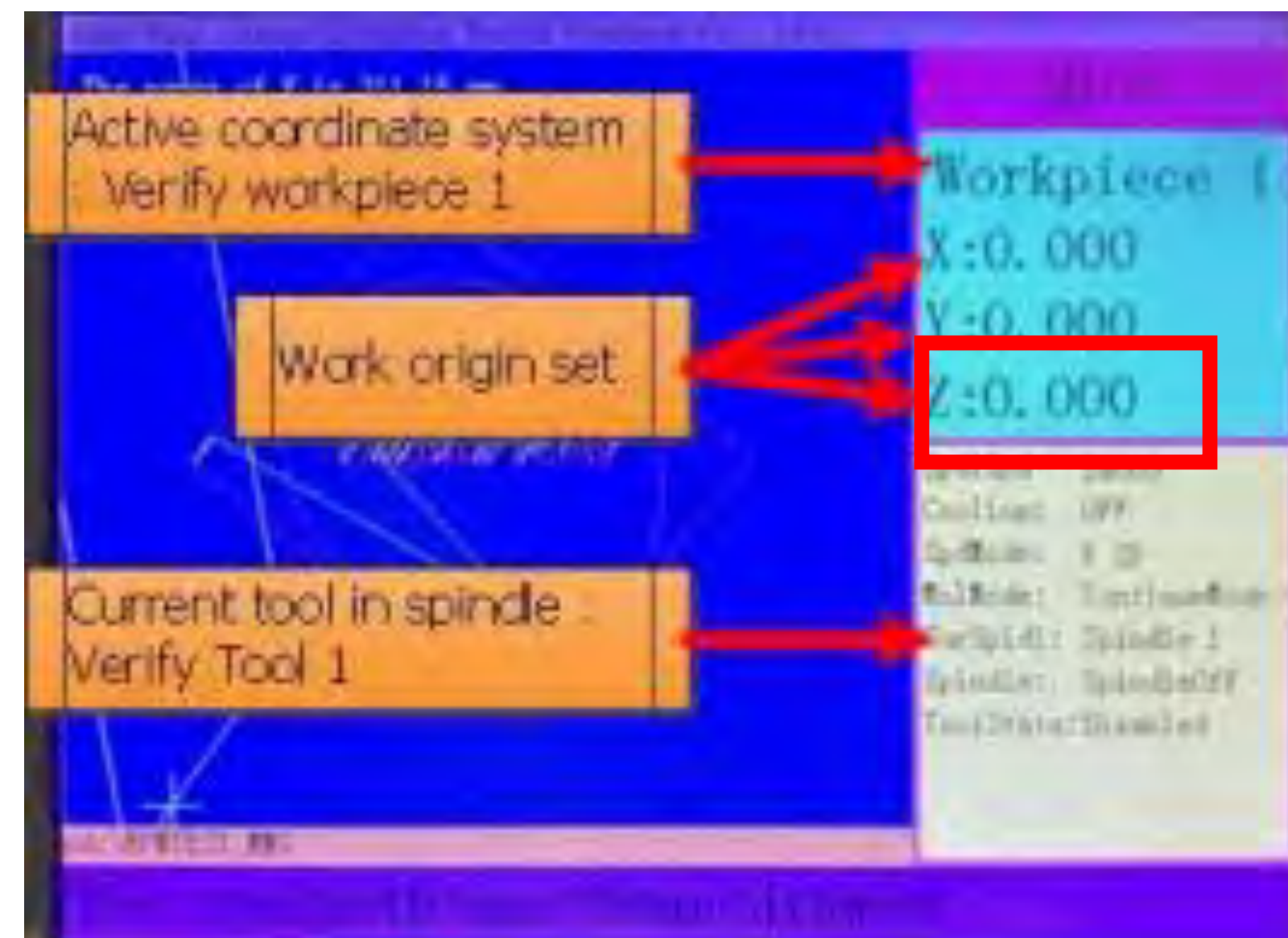


Figure #1-Control Screen after Loading Program and Setting Work Origin.

c. On the controller, you will see the Z-Axis coordinate go to zero (Figure #1).

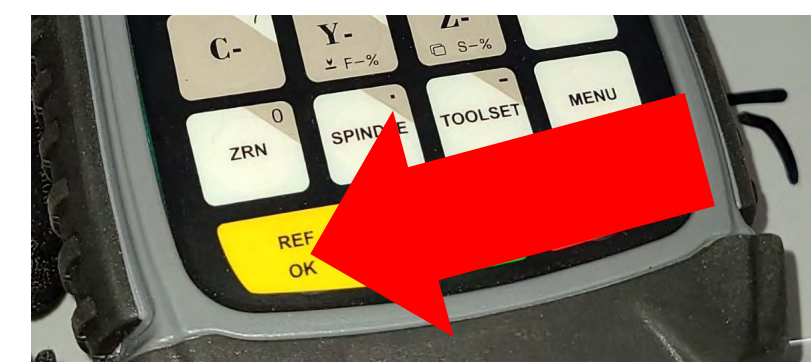


MULTIPLE TOOL PROGRAM (Cont'd.)-RUN PROGRAM

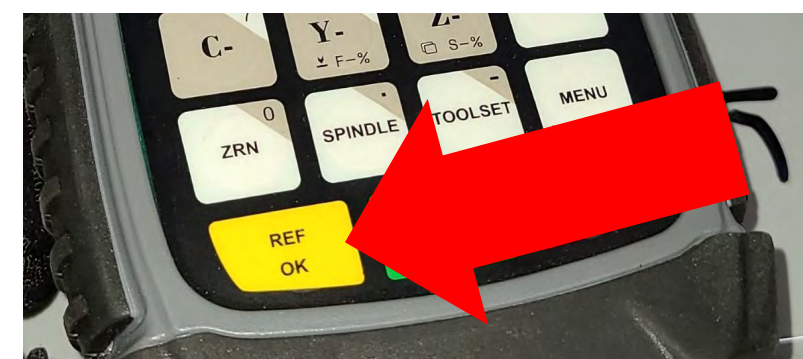
Transfer your g-code program onto a USB and transfer into the controller's internal memory. When running a program directly from a USB, memory transfer is less reliable.

It is recommended to store the program in the controller's internal memory.

a. MENU --> Scroll to Menu Function User Interface --> **REF/OK**.



b. Scroll to Machine Configuration --> **REF/OK**.



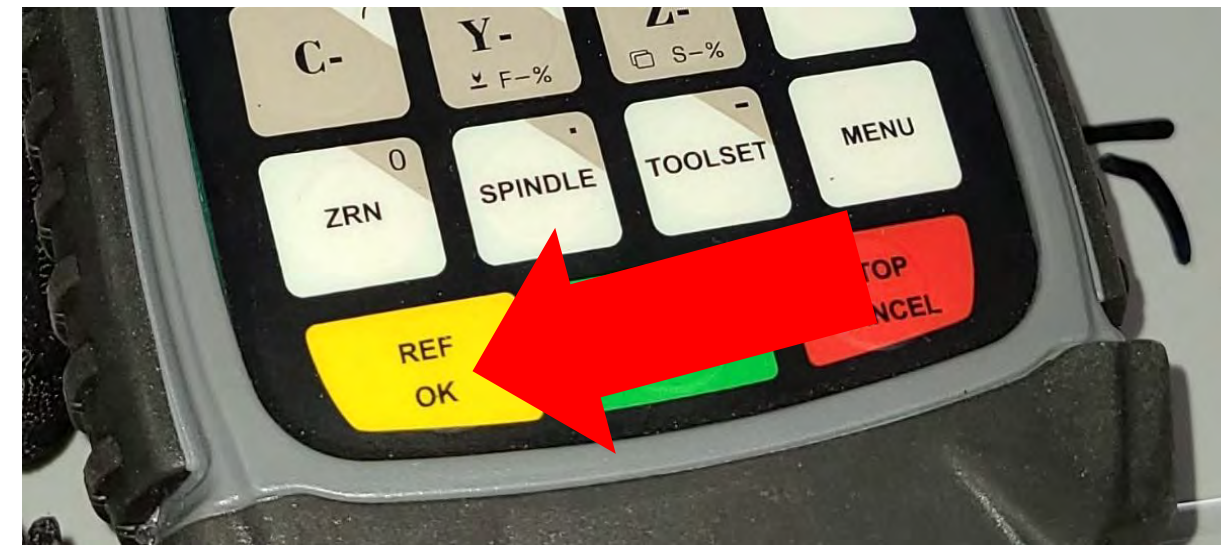
c. Scroll down to Operate File then Press **REF/OK**.



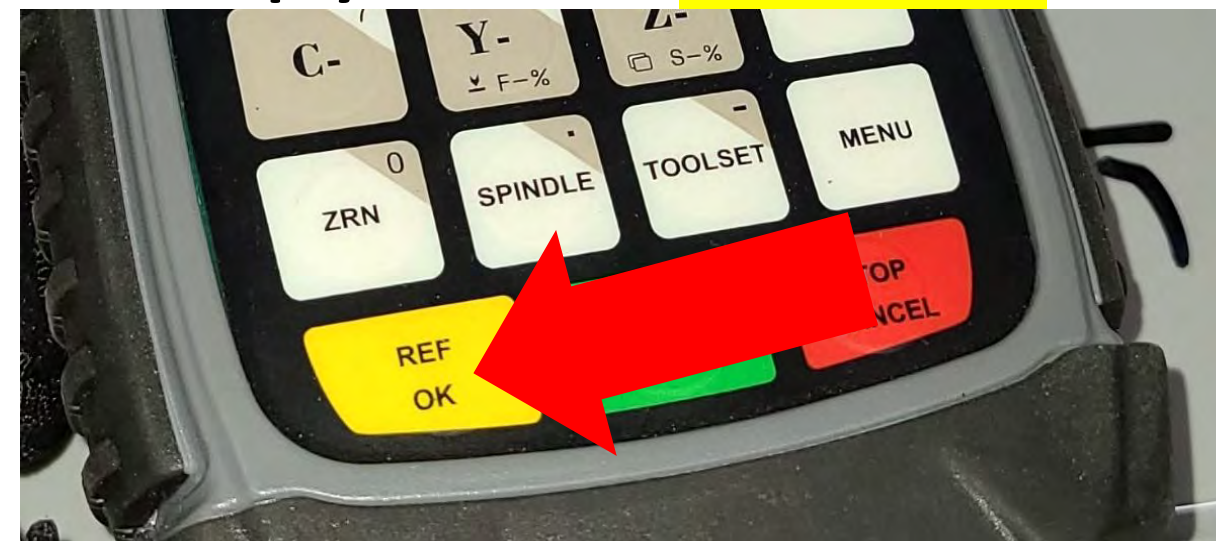


MULTIPLE TOOL PROGRAM (Cont'd.)-RUN PROGRAM

d. Scroll & Select “Copy File”, Press **REF/OK**.



e. Scroll & Select the “U-Disk File” you want to copy Press **REF/OK**.



f. Press “STOP/CANCEL” a few times to return to the controller home screen.





MULTIPLE TOOL PROGRAM (Cont'd.)-Load Program into Viewer

- Load Program into viewer Press **"FILE"** --> Scroll to **"Internal File"** --> **REF/OK** --> Scroll and Select your Program --> **REF/OK**.





UNDERSTANDING WORK COORDINATE SYSTEMS

- Machine Coordinates (Workpiece 0).

The origin is based off the home switches.

Tool positions and TTO switch location are set relative to machine coordinates.

Press **"MENU + ZRN/0"** to switch to "Workpiece 0".

- Hold down the MENU + 1-9 Buttons to move between different origin points.(This Machine can have up to 9 Origin Points on the Handheld at the same time).





UNDERSTANDING WORK COORDINATE SYSTEMS (Cont'd)

- In the picture below the Active Work Coordinate System is "Workpiece 2".



- One must Reset Origin Point.



TOOL CONE SETUP

1. Select a router bit and its corresponding collet.

*****Note: Collets & Spindle Nut must be cleaned regularly. Ensure that the slots in the Collets are free of sawdust.*****



2. Press the Collet into the Spindle Nut until it snaps into place.
3. Insert the router bit into the collet.
4. Thread on the nut and collet by hand, onto the tool cone.
5. Use the provided wrenches to tighten the spindle nut.



MAINTENANCE AND TROUBLESHOOTING

- The IQ Pro uses Linear Guide Rails, Ball Screws, and Ball Bearings. These need to be lubricated periodically (Once a Week).
- Schedule & Document into ones Preventive Maintenance Program (Per Any ISO/QS/TS Standards): Once a week, if the machine is used Daily.
- A Visual Inspection is always recommended. If the rails are dry to the touch, then get an oil can and a rag.
- Any 30WT Motor Oil or White Lithium Grease is recommended.



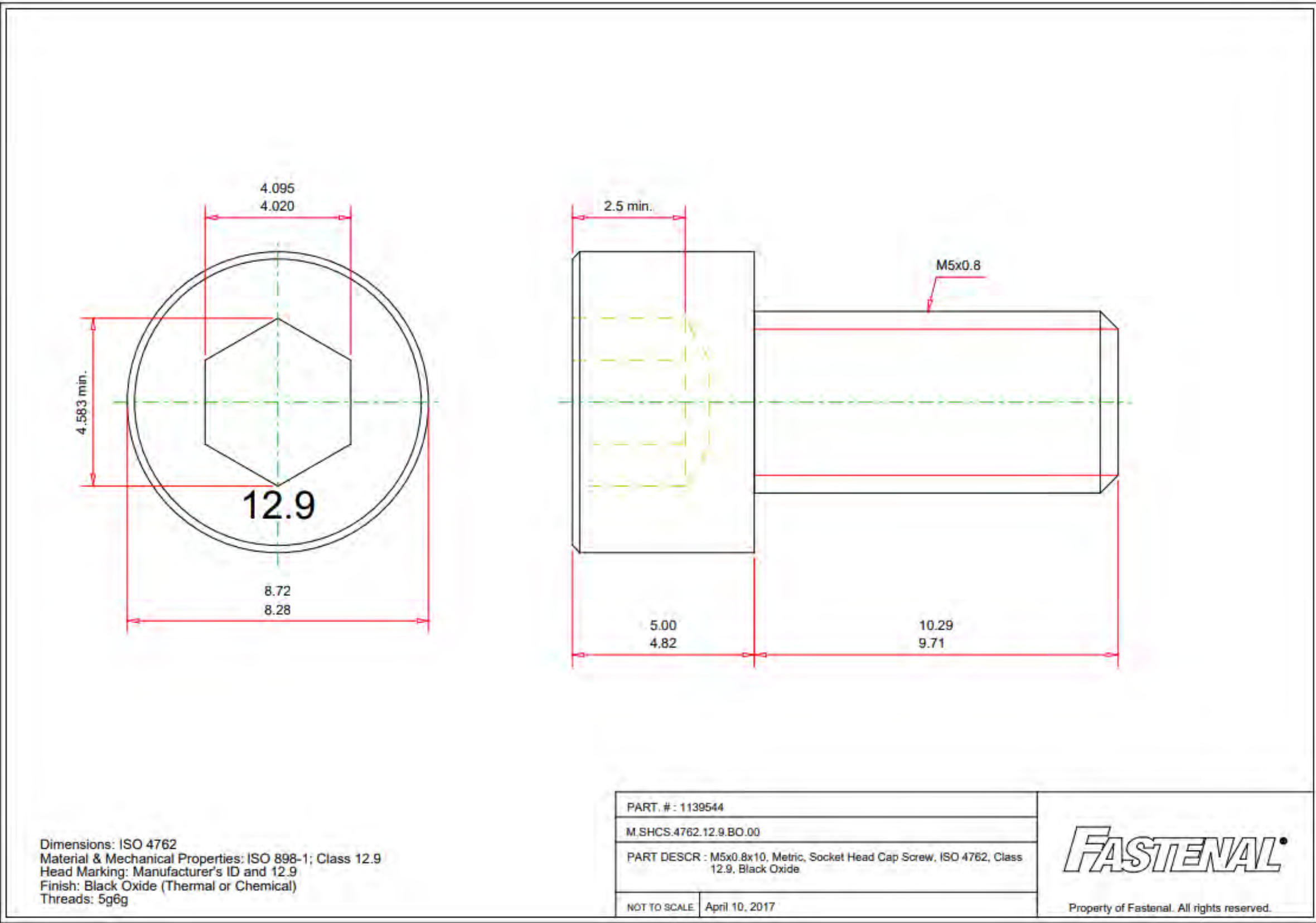
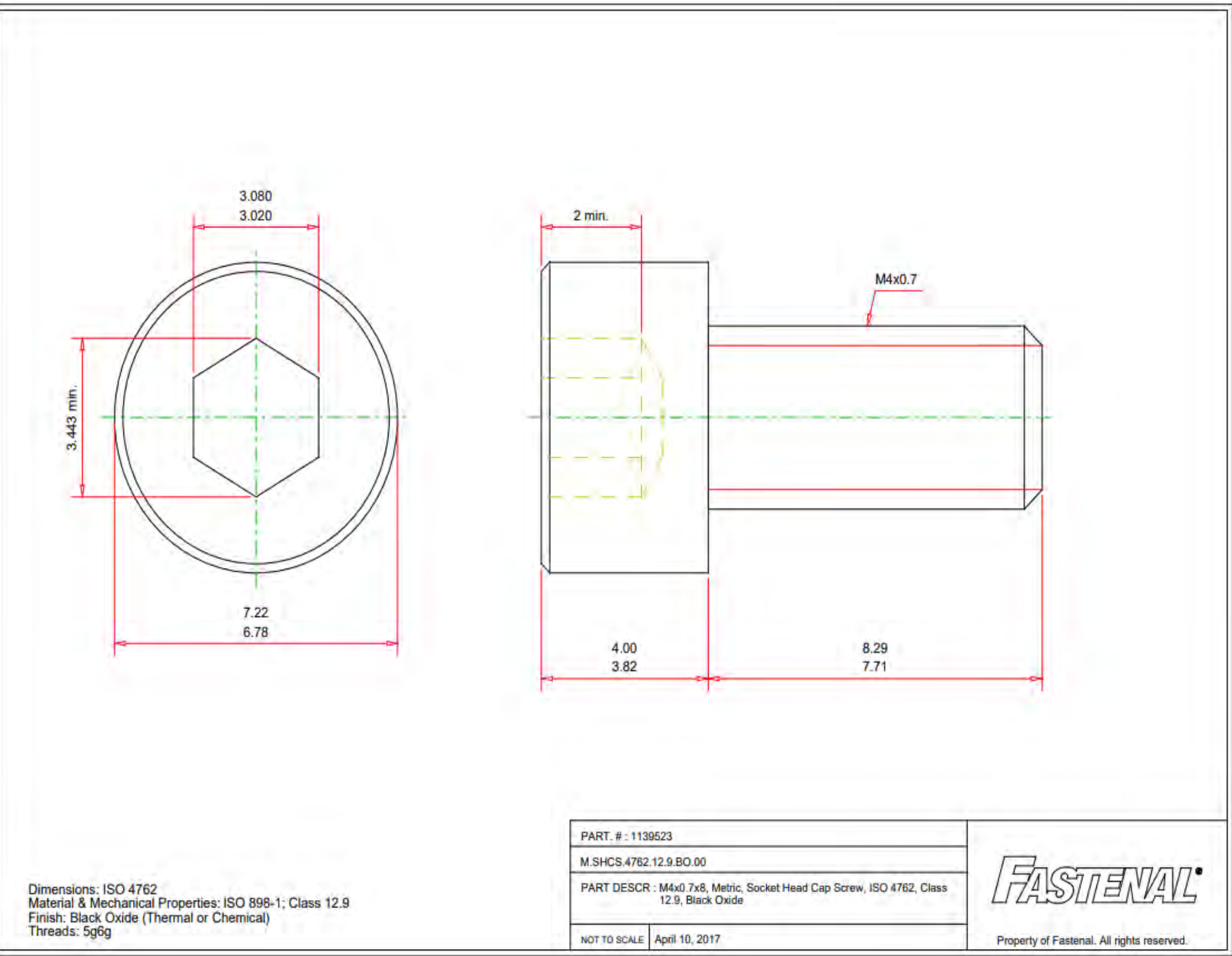
PARTS & SERVICE-



PARTS & SERVICE-

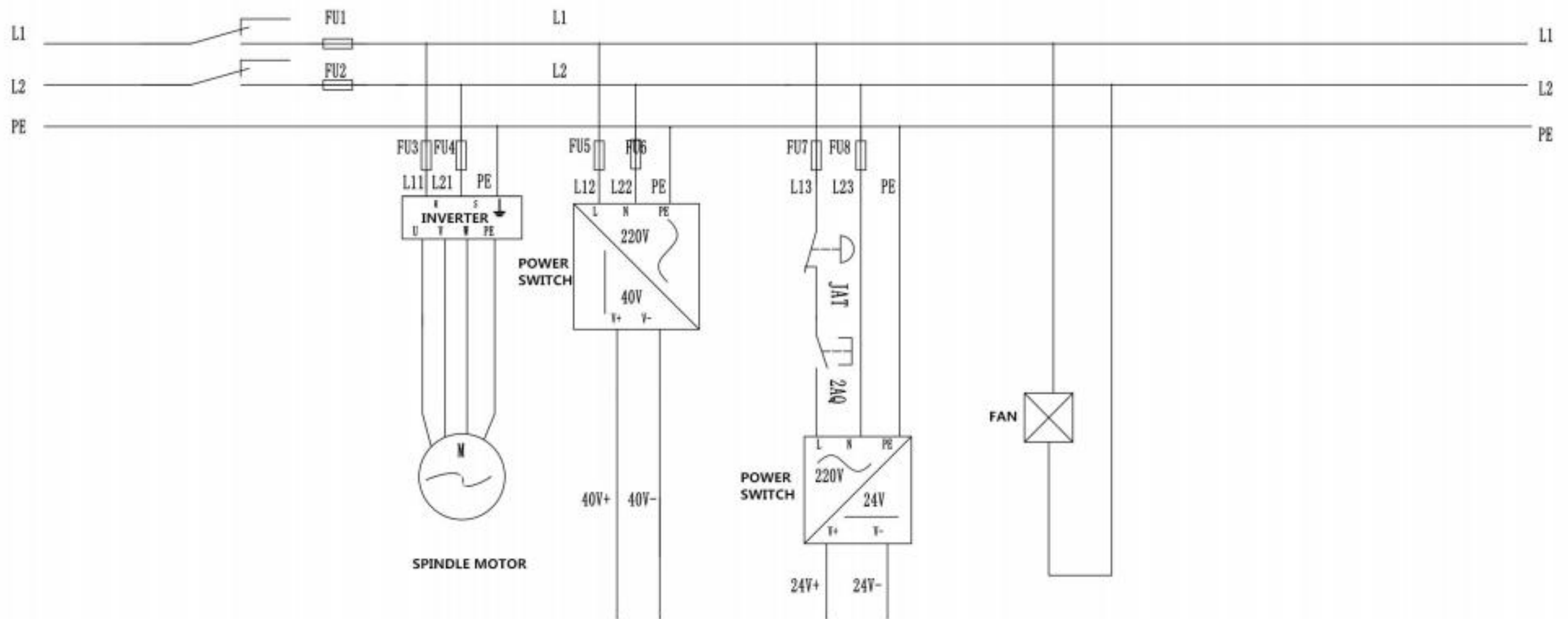
List of Fasteners & Components Used:

Name of Part	Fastenal Part #	Qty.
M4-0.7 x 8mm SHCS	1139523	?
M5-0.8 x 10mm SHCS	1139544	?



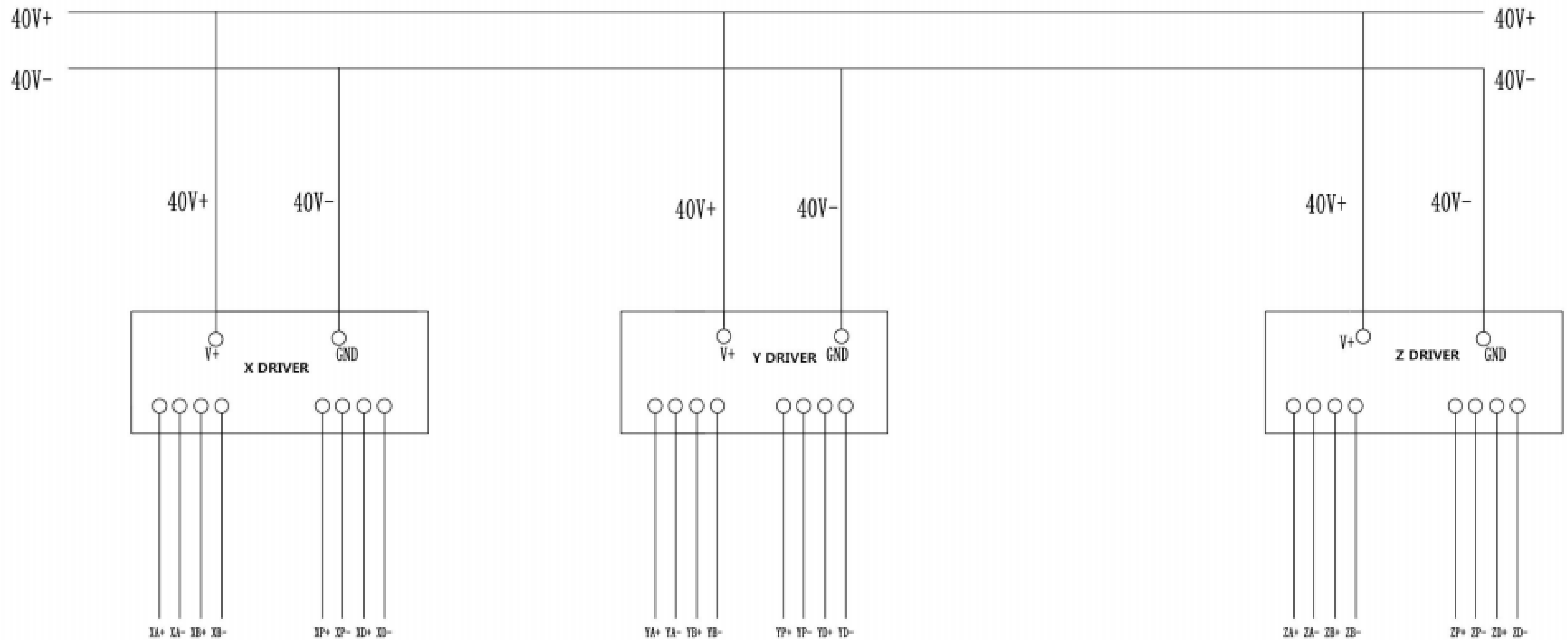


SCHEMATICS-





SCHEMATICS-





Laguna Tools Warranty-

Dealer Machinery Warranty

New woodworking machines sold by Laguna Tools carry a two-year warranty effective from the date of dealer invoice to customer/end-user. Machines sold through dealers must be registered with Laguna Tools within 30 days of purchase to be covered by this warranty. Laguna Tools guarantees all new machine sold to be free of manufacturers' defective workmanship, parts and materials. We will repair or replace, without charge, any parts determined by Laguna Tools, Inc. to be a manufacturer's defect. We require that the defective item/part be returned to Laguna Tools with the complaint. The end-user must request an RMA (return material authorization) number from Customer Service and include the (RMA) number with any and all returned parts/components requesting warranty coverage.* Any machines returned to Laguna Tools must be returned with packaging in the same manner in which it was received. If a part or blade is being returned it must have adequate packaging to ensure no damage is received during shipping. In the event the item/part is determined to be damaged due to lack of maintenance, cleaning or misuse/abuse, the customer will be responsible for the cost to replace the item/part, plus all related shipping charges. This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, lack of or inadequate dust collection, misuse/abuse or damage caused where repair or alterations have been made or attempted by others.

****NOTE: Issuing an RMA number is for referencing materials and issues, it does NOT indicate warranty acceptance/conformity.**

Laguna Tools Warranty-

CNC Limited Warranty

New CNC machines sold by Laguna Tools carry a one-year warranty effective from the date of shipping. Laguna Tools guarantees all new machine sold to be free of manufacturers' defective workmanship, parts, and materials. We will repair or replace without charge, any parts determined by Laguna Tools, Inc. to be a manufacturer's defect. We require that the defective item/part is determined to be damaged due to lack of maintenance, cleaning or misuse/abuse, the customer will be responsible for the cost to replace the item/part, plus all related shipping charges. This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, lack of or inadequate dust collection, misuse/abuse or damage caused where repair or alterations have been made or attempted by others.

Laguna Tools, Inc. is not responsible for additional tools or modifications sold or performed (other than from/by Laguna Tools, Inc.) on any Laguna Tools, Inc. woodworking machine. Warranty maybe voided upon the addition of such described tools and/or modifications, determined on a case-by-case basis. Software purchased through Laguna Tools, Inc., is not covered under this warranty and all technical support must be managed through the software provider. Normal user alignment, adjustment, tuning and machine settings are not covered by this warranty. It is the responsibility of the user to understand basic woodworking machinery settings and procedures and to properly maintain the equipment in accordance with the standards provided by the manufacturer.

Parts under warranty are shipped at Laguna Tools, Inc.'s cost either by common carrier, FEDEX ground service or a similar method.

Technical support to install replacement parts is primarily provided by phone, fax, e-mail or Laguna Tools Customer Support Website. The labor required to install replacement parts is the responsibility of the user. Laguna Tools is not responsible for damage or loss caused by a freight company or other circumstances not in our control. All claims for loss or damaged goods must be notified to Laguna Tools within twenty-four hours of delivery.

****Please contact our Customer Service Department for more information. Only NEW machines sold to the original owner are covered by this warranty. For warranty repair information, call 1-800-332-4094. Copyright 2013 Laguna Tools, Inc. ****Warning – no portion of these materials may be reproduced without written approval from Laguna Tools, Inc.**

WARRANTY & REGISTRATION

THANK YOU!

Welcome to the Laguna Tools® group of discriminating woodworkers. We understand that you have a choice of where to purchase your machines and appreciate the confidence you have in the Laguna Tools® brand.

Through hands-on experience, Laguna Tools® is constantly working hard to make innovative, precision products. Products that inspire you to create works of art, are a joy to operate, and encourage your best work.

Laguna Tools®
Imagination, Innovation, and Invention at Work

WARRANTY & REGISTRATION

Every product sold is warranted to be free of manufacturers' defective workmanship, parts, and materials. For any questions about this product, the intended use or what it was designed for, customer service, or replacement parts, please contact our customer service department:

Laguna Tools® Customer Service
2072 Alton Parkway, Irvine, California 92606, USA
1-800-332-4049
customerservice@lagunatools.com
www.lagunatools.com/why/customer-service/
8AM to 5PM PST, Monday through Friday

For warranty claims or to report damage upon receiving – please reach out to our warranty department:

Laguna Tools® Warranty Service
2072 Alton Parkway, Irvine, California 92606, USA
1-949-474-1200
customerservice@lagunatools.com
www.lagunatools.com/policies/warranty/
8AM to 5PM PST, Monday through Friday

REGISTRATION

To prevent voiding this warranty, all products sold must be registered within thirty (30) days of receiving the product. Registering the product will enable the original purchaser to receive notifications about important product changes, receive customer service, and be able to file a warranty claim against defective workmanship, parts, or materials.

REGISTER HERE!



<https://lagunatools.com/policies/warranty/>

WHO IS COVERED

The applicable warranty covers only the initial purchaser of the product from the date of receiving the product. To file such claims, the original purchaser must present the original receipt as proof of purchase.

WHAT IS COVERED

The warranty covers any defects in the workmanship of all parts and materials that make up the machine unless otherwise specified. Any part, determined by Laguna Tools®, to have a defect will be repaired or replaced (and shipped), without charge. The defective item/part must be returned to Laguna Tools® with the complaint and proof of purchase in the original packaging that it was received in. In the event the item/part is determined to be not covered by this warranty, the customer will be responsible for the cost to replace the item/part and all related shipping charges.

WARRANTY LIMITATIONS

This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, or lack of adequate dust collection. The warranty may be voided against proof of misuse/abuse, damage caused where repair or alterations have been made or attempted by others, using the product for purposes other than those described as intended use (unless with consent by Laguna Tools®), modification to the product, or use with an accessory that was not designed for the product. It is the responsibility of the user to understand basic woodworking machinery settings and procedures and to properly maintain the equipment in accordance with the standards provided in this manual.

LENGTH OF WARRANTY

All new machines and optional accessories sold through an authorized dealer carry a two-year warranty effective the date of receiving the product. Machines sold for either commercial or industrial use have a one-year warranty. Wearable parts like throat plates, bandsaw guides, etc., have a ninety-day warranty.

Table A-1 Warranty Lengths

2 Year – New Machines Sold Through an Authorized Dealer
2 Year – Accessories Sold as Machine Options (excluding blades)
1 Year – Machines Sold for Commercial or Industrial Use
1 Year – Blades and Accessories outside of Machine Options
90 Days – Wearable Parts

Aside from being free of defects upon receiving, consumable parts, like cutters and abrasives, are not covered by this warranty unless otherwise stated by Laguna Tools®. These parts are designed to be used at the expense of the operator and are available for replacement or inventory purchase. The determination of a consumable part will be made on a case-by-case basis by Laguna Tools®.

SHIPPING DAMAGE

Laguna Tools® is not responsible for damage or loss caused by a freight company or other circumstances not in the direct control of Laguna Tools®. All shipping-related claims for loss or damage goods must be made to Laguna Tools within twenty-four hours of delivery.

HOW TO RECEIVE SUPPORT

To file a warranty claim please contact the warranty department at 1-949-474-1200. To receive customer service or technical support please contact the customer service department at 1-800-332-4049. Parts, under warranty, are shipped at the expense of Laguna Tools® either by common carrier, FedEx ground services or similar method. Technical support to install replacement parts is primarily provided by phone, fax, email, or the Laguna Tools Customer Support Website.



Laguna Tools Warranty-

No Modifications Allowed or Sold.

Laguna Tools, Inc. is not responsible for additional tools or modifications sold or performed (other than from/by Laguna Tools, Inc.) on any Laguna Tools, Inc. woodworking machine. Warranty maybe voided upon the addition of such described tools and/or modifications, determined on a case-by-case basis. Normal user alignment, adjustment, tuning and machine settings are not covered by this warranty. It is the responsibility of the user to understand basic woodworking machinery settings and procedures and to properly maintain the equipment in accordance with the standards provided by the manufacturer. Parts, under warranty, are shipped at Laguna Tools, Inc.'s cost either by common carrier, FEDEX ground service or a similar method. Technical support to install replacement parts is primarily provided by phone, fax, e-mail or Laguna Tools Customer Support Website. The labor required to install replacement parts is the responsibility of the user. Laguna Tools is not responsible for damage or loss caused by a freight company or other circumstances not in our control. All claims for loss or damaged goods must be notified to Laguna Tools within twenty-four hours of delivery. Please contact our Customer Service Department for more information. Only new machines sold to the original owner are covered by this warranty. **For warranty repair information, call 1-800-332-4094.**

Laguna Tools Packaging/RMA Procedures-

Dealer Machinery Warranty

****Any machines returned to Laguna Tools must be returned with packaging in the same manner in which it was received. If a part or blade is being returned it must have adequate packaging to ensure no damage is received during shipping. In the event the item/part is determined to be damaged due to lack of maintenance, cleaning or misuse/abuse, the customer will be responsible for the cost to replace the item/part, plus all related shipping charges.**

We require that the defective item/part be returned to Laguna Tools with the complaint. The end-user must request an **RMA (Return Material Authorization) Number** from Customer Service and include the (RMA) number with any and all returned parts/components requesting warranty coverage.