

# QUICK START GUIDE

## Android or Windows Tablet

If you have a Tablet Style Interface (PC or Android) then skip this step.

1

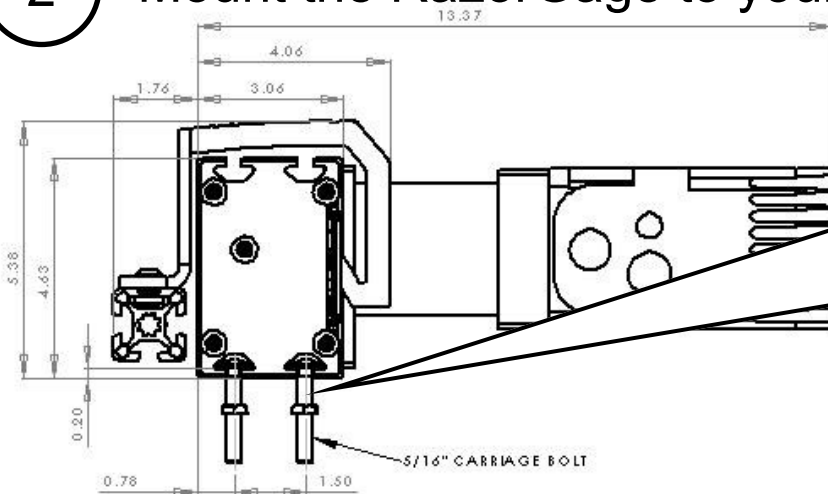
### Tower PC

Mount monitor and attach legs to control tower using hardware provided and place the control tower behind the motor end of the RazorGage



2

### Mount the RazorGage to your Own Table



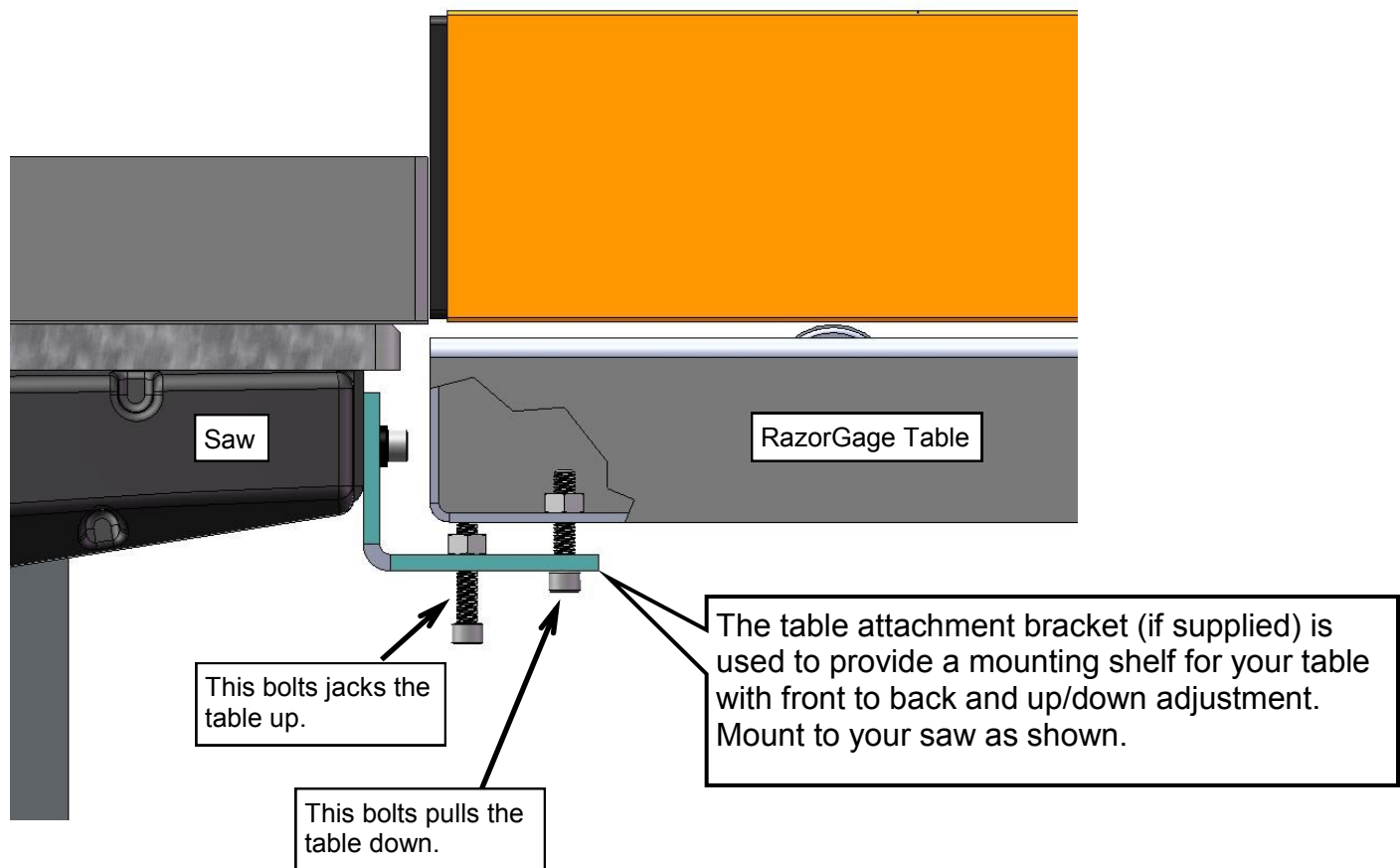
If you are mounting the RazorGage ST to your own table, use the dimensions at left to help you plan. You may use the 5/16\"/>

## Assembling the RazorGage ST with RazorGage Table

Mount the leg(s) to the RazorGage table with the bolts provided then mount the RazorGage to the table with the carriage bolts provided. The RazorGage can mount over the rollers or behind the rollers depending on your application. Use the 1/4\"/>

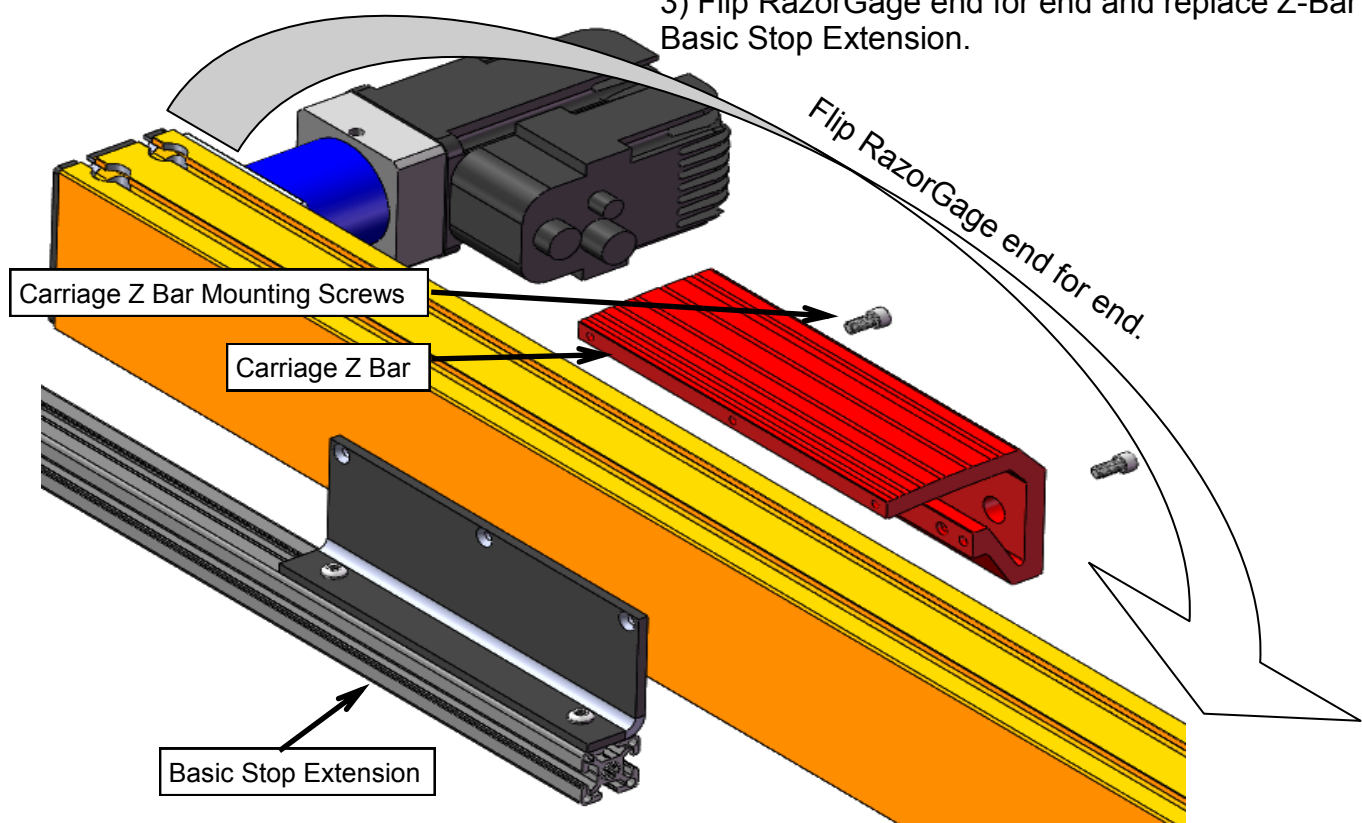


## Table Attachment Bracket



## Changing the Hand of Your RazorGage

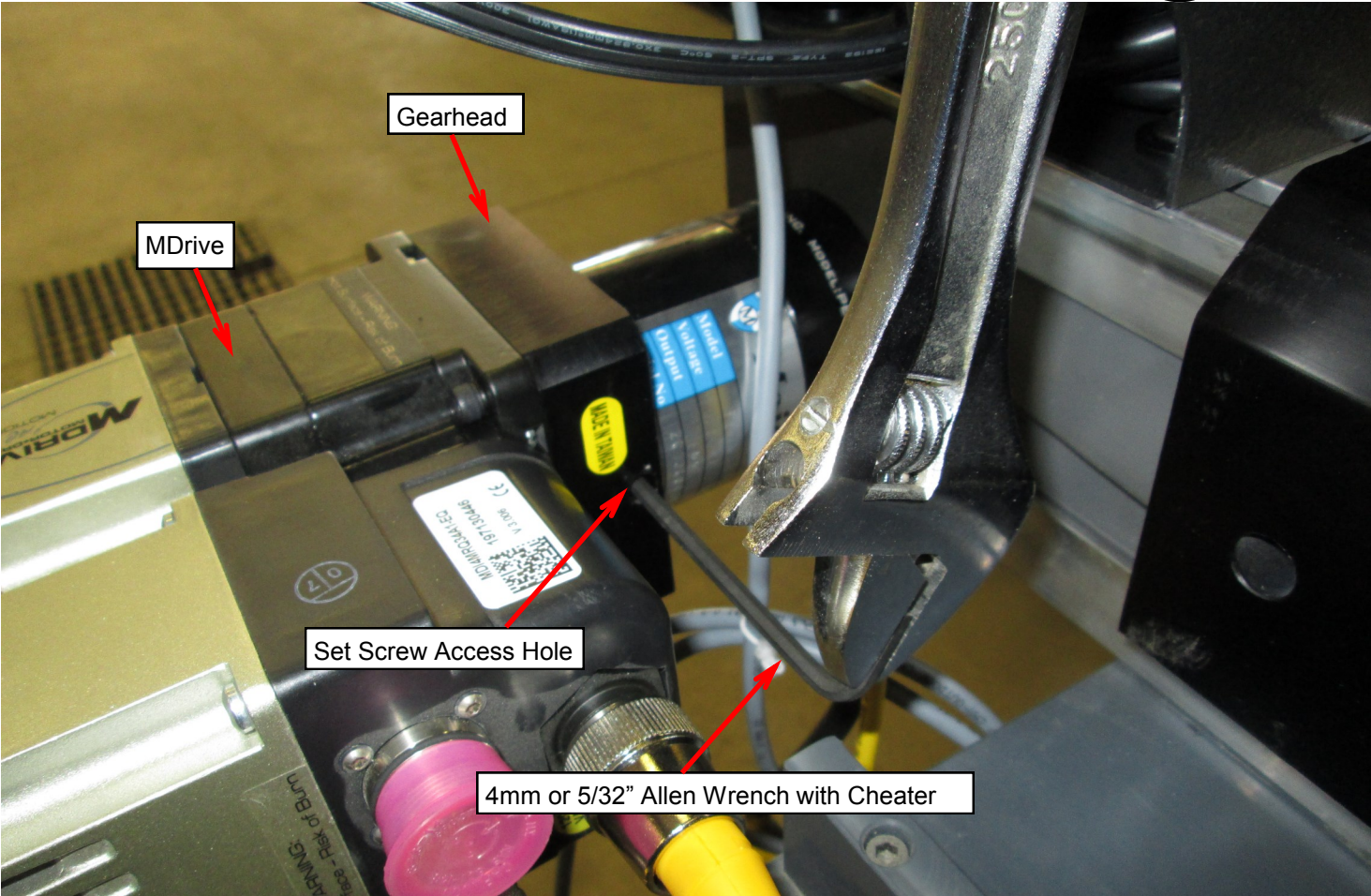
- 1) Remove Basic Stop Extension
- 2) Lift upper dust seal and extend allen wrench through holes in carriage Z-Bar to remove two screws as shown. Remove Z Bar.
- 3) Flip RazorGage end for end and replace Z-Bar and Basic Stop Extension.





# Install the MDrive on the Positioner

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Install the MDrive on the gearhead with the four mounting screws. Remove the set screw access plug and move the RazorGage carriage SLOWLY until you see the set screw through the access hole. Tighten the coupling set screw with a 4mm or 5/32" allen wrench and a cheater and replace the plug.

## Cable Connections

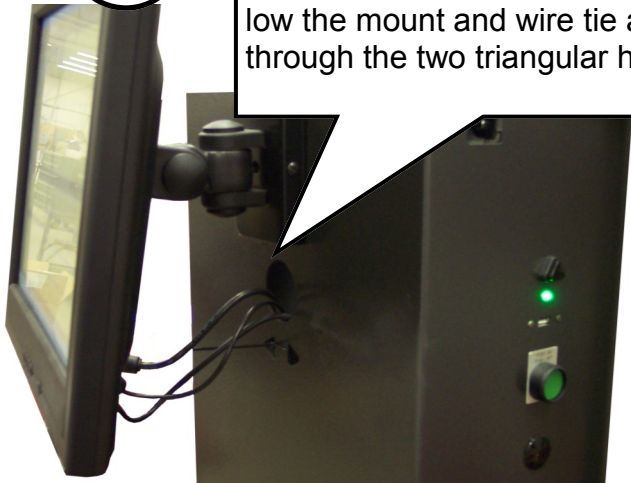
### Android or Windows Tablet

If you have a Tablet Interface then skip this step.

### Tower PC

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Mount monitor, connect VGA & power cables. Drop the USB cable coming from the monitor into the round hole below the mount and wire tie all cables through the two triangular holes.

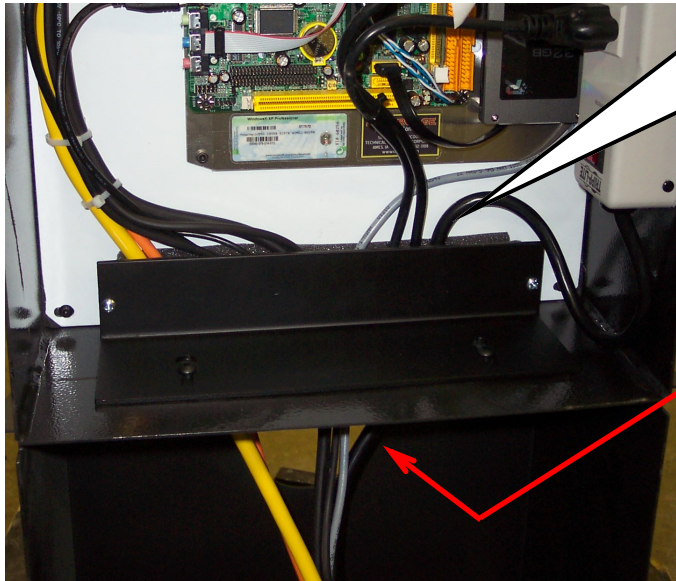




Android or Windows Tablet

If you have a Tablet Interface then skip this step.

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Loosen the screws that hold the dust seal tight and route the touch screen cables through the bottom of the cable management duct then into the enclosure through the dust seal. You may want to leave the dust seal loose until you've run your network cable, printer cable or any other peripherals you may be connecting. Be sure to tighten the dust seal when you're finished to prevent contamination from getting inside the enclosure..

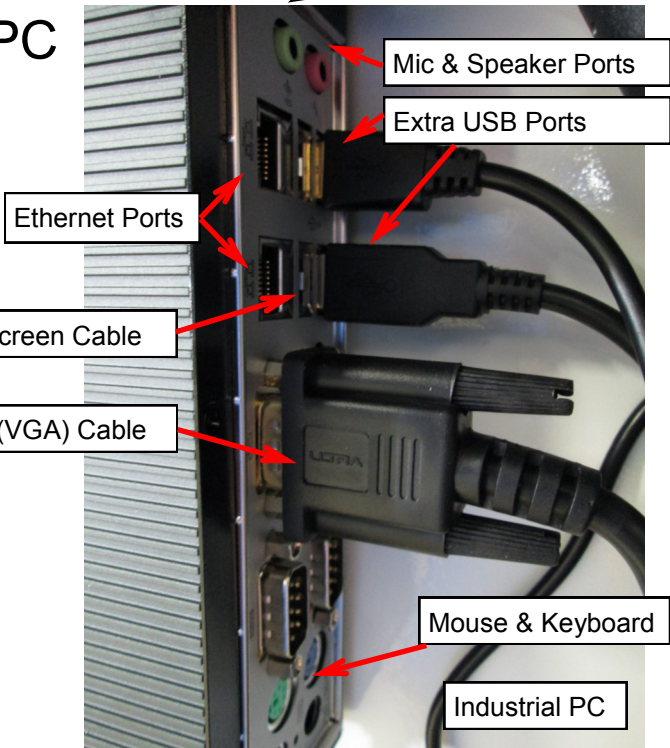
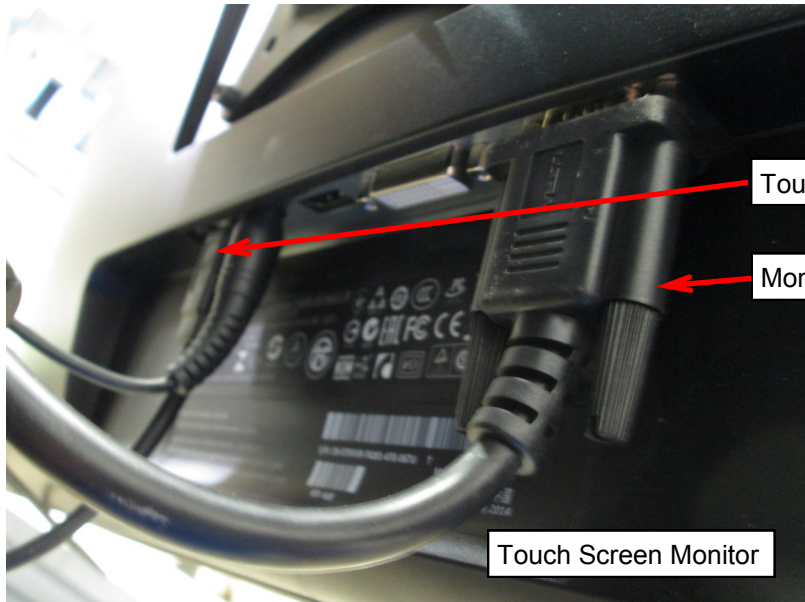


Open the door on the rear of the Tower PC Enclosure and locate the industrial PC near the top of the cabinet. Plug the VGA cable and USB cable from the touch screen into the appropriate connectors as shown below. Note the appropriate ports for other peripherals as well. Mouse & keyboard are not needed for day to day RazorGage operation.

Android or Windows Tablet

If you have a Tablet Interface then skip this step.

7 Tower PC

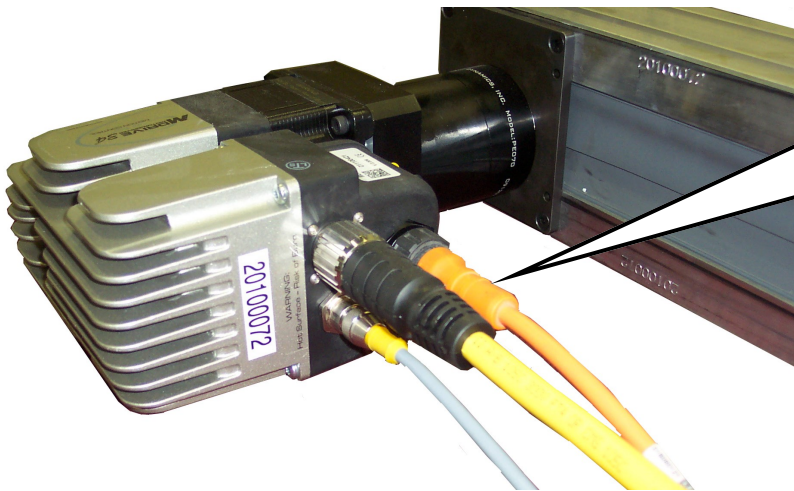




# Cable Connections continued

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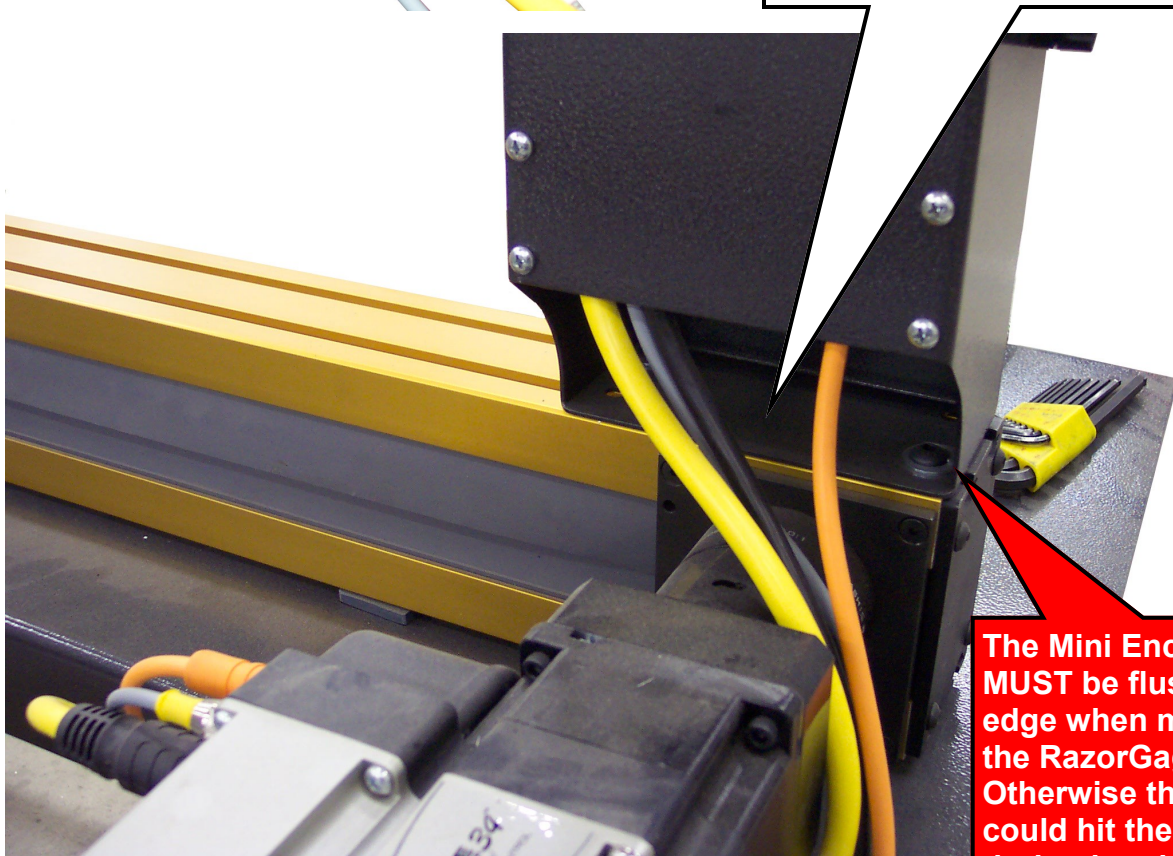
## Tower PC



Connect cables leading from Control Tower to Motor as shown. IMPORTANT: You must continually wiggle the cables as you're tightening the cable nuts to ensure a proper connection. Connect the cables from the Tablet enclosure in the same exact way.

## Tablet

On Tablet units mount enclosure to the RazorGage as shown and connect cables to the M Drive as explained in the PC example above and to the left.

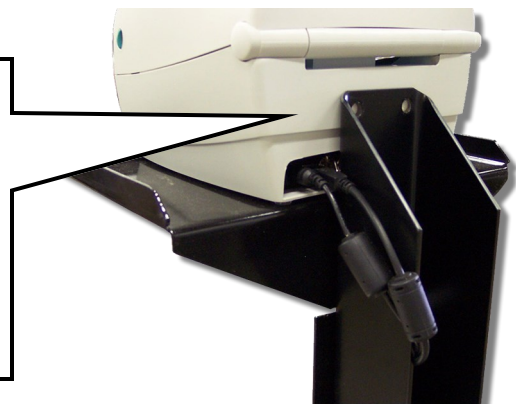


**The Mini Enclosure MUST be flush with this edge when mounted to the RazorGage extrusion. Otherwise the carriage could hit the enclosure during homing.**

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## Tower PC & Windows Tablet

If you have a printer run the power cable to the power strip and connect the USB cable to one of the open USB ports on the PC motherboard inside the Control Tower. For Tablet PCs use the right angle USB extension cable provided to go from the USB port on the left side of the tablet, down the back of the enclosure, and to the printer USB cable. If you wish you may install a USB hub to increase the number of open USB ports.



# Calibrating your RazorGage to the Machine

## 10 First adjust the stop extension.

Once your RazorGage is securely mounted to your machine you begin the first-time calibration process by first adjusting the stop extension. Loosen the mounting screws on the Stop Extension and slide it away from the saw so that it won't hit your saw when you Home the machine. With the power off, push the moving carriage toward the motor end of the RazorGage until the carriage hits the internal hard stop. Now extend the stop extension toward the saw blade until it is as close as you want it to be. If you're using the RazorGage as a pusher you will want the stop extension to reach almost all the way to the blade so that your final trim cut doesn't result in much waste. If you're using the RazorGage as a stop then adjust the stop extension so that the distance from the cut to the stop face is less than the shortest part you want to be able to cut.



Basic Stop Extension Screws on RazorGage ST

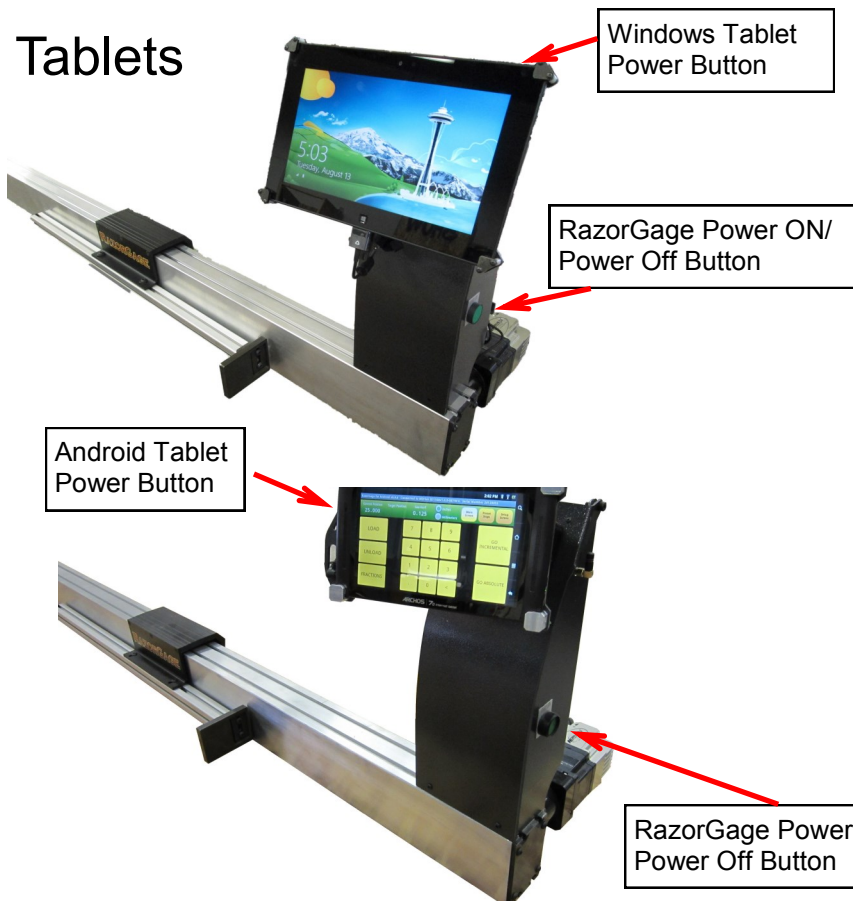


Loosening Basic Stop Extension Screws on RazorGage AT

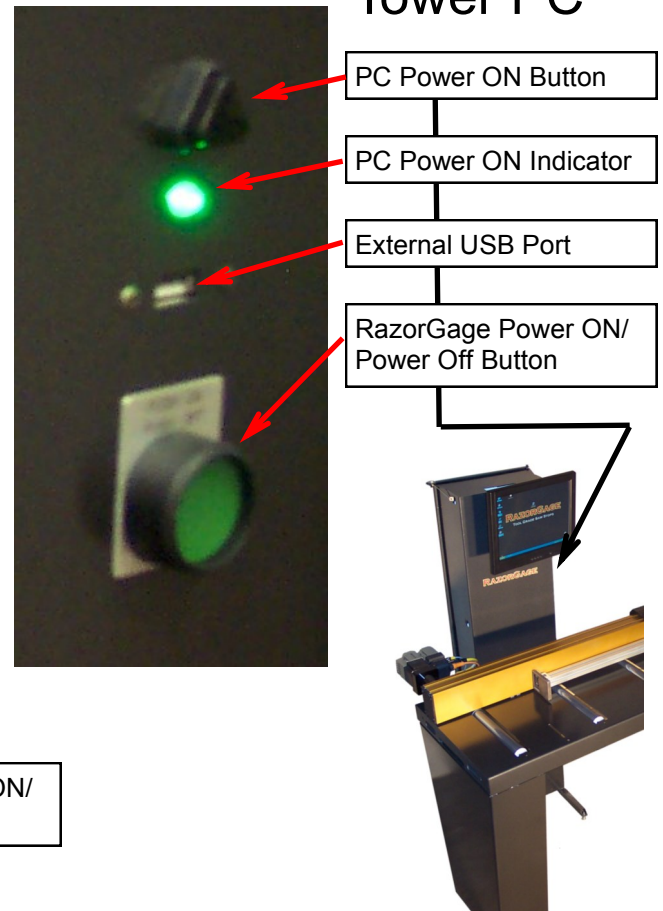
## 11 Next power up your RazorGage.

It is very important to note that there are TWO things that must be turned on: The RazorGage AND the PC. See how to power up both Tablet and Tower style RazorGages below.

### Tablets



### Tower PC

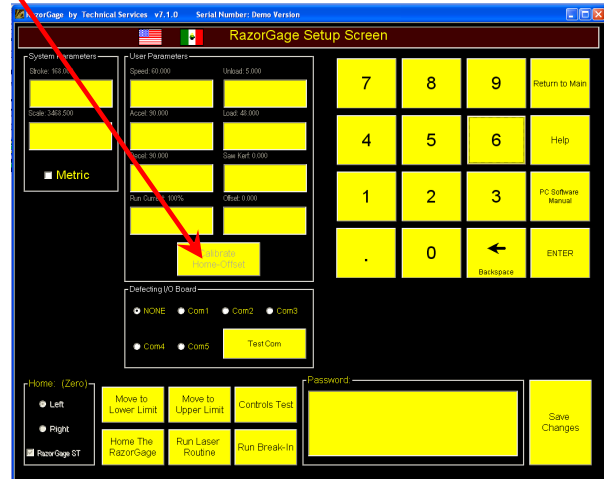
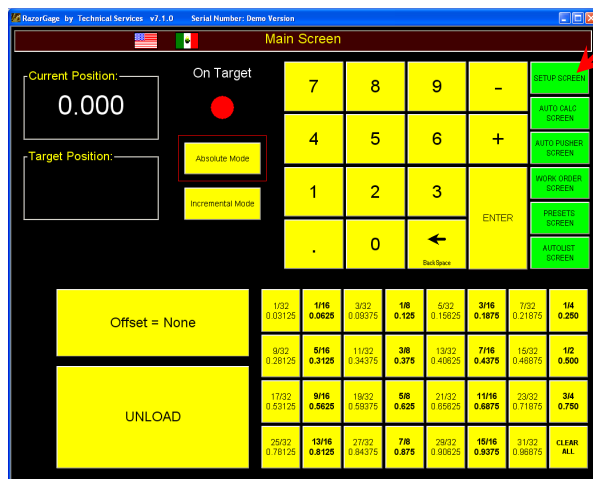




# Calibrating your RazorGage to the Machine (cont.)

## 12 Tower PC & Windows Tablet

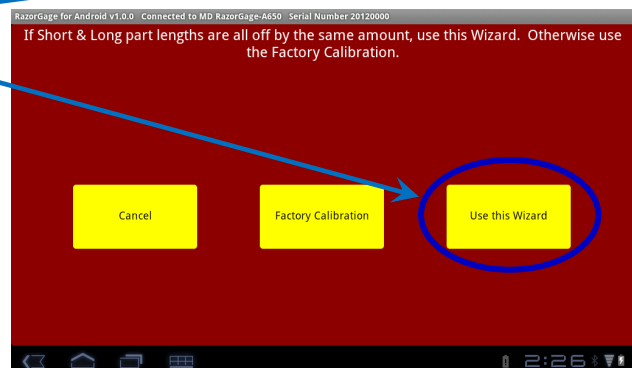
Once Windows or Android has booted, find the RazorGage icon on the touch screen and, on Windows, double click, on Android, single click. The RazorGage software will start and prompt you to press OK to home. After homing is complete the MAIN SCREEN will appear as shown below. Now you may calibrate the RazorGage to your saw. Before you start make sure that, with the RazorGage in HOME position, the stop extension is positioned close enough to the saw blade to cut the shortest part you need to cut. If you're using the RazorGage as a pusher, make sure that the stop extension is close enough to make your desired end trim cut. If you want to slide the stop extension closer or further from the blade, loosen the stop extension screws and adjust it now. When you're done press the button that says SETUP SCREEN, enter the password 90210, then press the CALIBRATE HOME OFFSET button. Follow the on screen instructions for setting the home offset and calibration. To watch a video of this procedure go to [www.razorgage.com](http://www.razorgage.com), click the YouTube button, and choose the RazorGage Calibration Demonstration Video.



**Saw Kerf:** When using the RazorGage as a pusher the Home Offset will only affect the accuracy of the first trim cut. Part length accuracy is a factor of the scale factor and the kerf. If all parts are equally inaccurate simply adjust the kerf. If short parts are accurate and long parts are not or vice versa then adjust the scale factor in step two of the Calibration Wizard accessed from the Calibrate Home Offset button.

## Android Tablet

To reference a RazorGage with the Android interface first turn on the RazorGage Power and turn on the Android tablet. Start the RazorGage software by clicking the RazorGage icon on the Android desktop. Press OK to home the RazorGage. When homing is complete use the RazorGage as a stop to cut a part or if it is impractical to cut a part with the RazorGage in home position enter the smallest length possible and use the RazorGage as a stop to cut a part. Measure the part with calipers if you have them. Otherwise take the best measurement you can with what you have. Be sure to note the intended length you entered on the screen as well as the length you measured on the part. Next press the Setup Screen button in the upper right corner of the Android software. When the Setup Screen appears press the button labeled "My Parts are Incorrect". For the initial calibration press the "Use This Wizard" button and follow the instructions on each screen that follows.



## Indexing the Motor to the Gearhead

If you installed the MDrive yourself then you will likely see a message telling you the motor must be indexed. Click NEXT and follow the instructions to index the motor. You will need your 4mm allen wrench and cheater as you will be loosening the set screw on the gearhead as part of the indexing process. Android units do not check the indexing so you will want to check it yourself. With the power off, push the carriage against the internal hard stop closest to the motor. Mark the location of the carriage. Now power up and home the RazorGage. If the final home position is less than  $3/16$ " or more than  $7/16$ " from the hard stop position, remove the plug from the gearbox set screw access hole and have a helper peer into the hole while you increment the position of the carriage. On the touch screen, switch to incremental mode and enter .010 as the increment. Press GO repeatedly until your partner tells you the set screw is accessible through the hole. Insert your 4mm allen wrench and loosen the set screw. With the wrench still in the set screw, enter a new increment of .2 and press GO. The motor shaft will turn inside the gearhead input coupling but the carriage will not move. Now tighten the set screw with your cheater handle and replace the plug. Home the Razorgage and check to see that it backs up more than  $3/16$ " but less than  $7/16$ ".

Go to [www.razorgage.com](http://www.razorgage.com) and click DOWNLOADS for the ever growing library of help documents. Click on the You Tube button to see helpful tutorial videos. You will also find help files on the USB drive that shipped with your machine and on the RazorGage Support Files folder on the Windows desktop on your RazorGage PC.

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