## **RAZORGAGE** POSITIONERS • SOFTWARE • SYSTEMS MDrive Stall Troubleshooting

If your RazorGage is stalling when pushing stock, look for any physical obstructions that may be impeding the carriage's ability to slide freely. Look closely at areas where your stock transitions from the table to the saw to make sure the leading edge is not catching.





You may also want to make sure the scale is within the normal range for your machine's encoder type. Most use an internal rotary encoder. The default scale for internal rotary is 3468. The normal range for any encoder on a Razorgage should not be greater than +/- 10 from the default.





MDrive motors with an internal rotary encoder will have a sticker that ends with EQ. If the sticker ends with EE it has an external encoder.

The external encoder could be rotary or linear.

Linear default: 2540 Rotary default: 3387



If your settings look correct and you still have a stalling problem verify the motor is getting the proper voltage. An MDrive should have 120VAC on it's three pin cable.



Remove Access Hole Plug & Push RazorGage Carriage VERY slowly until you see the set screw through the hole. Loosen the set screw slightly.

If you have correct voltage and it is still stalling remove the motor from the gearbox to determine if the issue is mechanical or a problem with the motor.



Remove the four screws holding the MDrive Motor to the gearhead and remove the MDrive Motor.

With the motor disconnected from the gearbox home the positioner. If it is working properly the motor shaft should spin until power is removed. If it does not spin or stops after turning the motor is defective and needs to be replaced. If the motor tests okay then there may be a mechanical problem. With the motor off move the carriage by hand and check the gearbox for noise or a rough feel as the carriage moves down the beam.

If the motor tests okay, everything checks out mechanically, and it is still stalling there may be an encoder problem. In this case the motor would need to be replaced.