Resonance Testing at different locations

VT 1190

Purpose

My goal is to characterize the resonance of the machine at eight (8) different points.

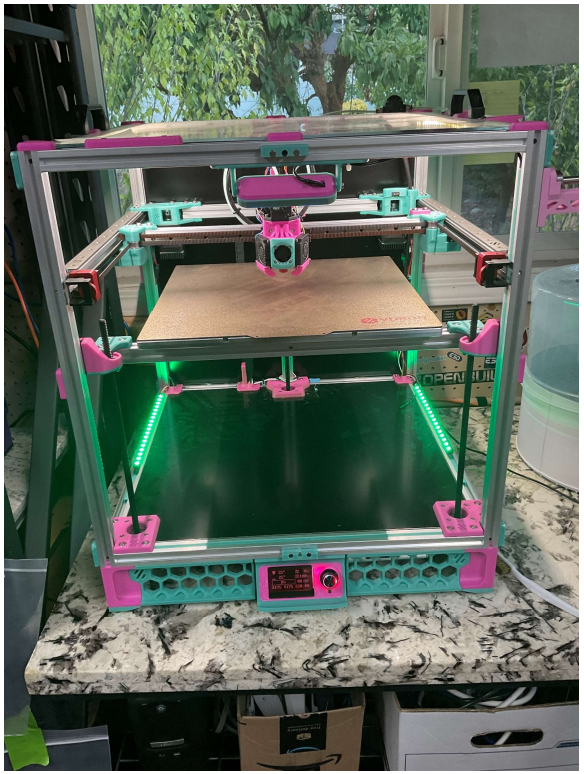
Then to start selectively breaking my machine and measuring the resonance.

With this I hope to build a database of what the input shaping graphs will look like with different issues.

One can then use this database to diagnose and fix the issue.

Trident 300 – self sourced

XOL, ebb36, revo voron,
chaotic labs cnc ab tensioners, Orbiter 2.0,
tap R8

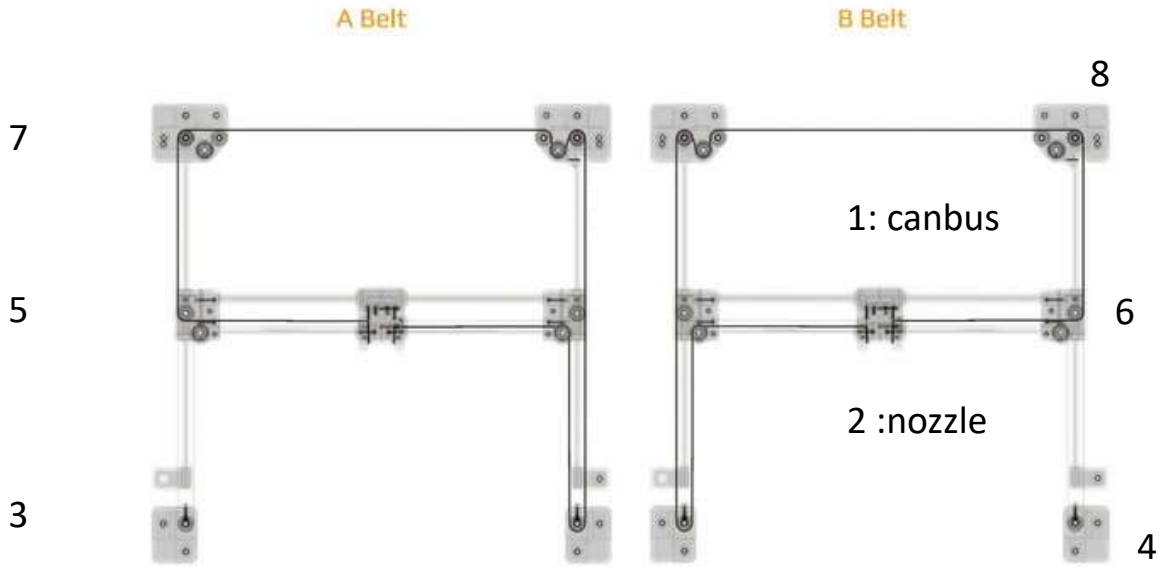


#Ebb36# [adxl345]
cs_pin: ebb36:PB12
spi_software_sclk_pin: ebb36:PB10
spi_software_mosi_pin: ebb36:PB11
spi_software_miso_pin: ebb36:PB2
#axes_map: x,y,x

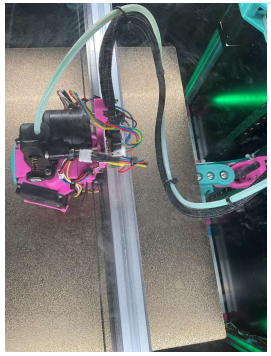
#Nozzle[mcu ampon]
serial: /dev/serial/by-id/usb-Anchor_Ampon-if00[adxl345]
cs_pin: ampon:CS
#Test
[resonance_tester]
accel_chip: adxl345 probe_points: 175, 175, 20
accel_per_hz: 100

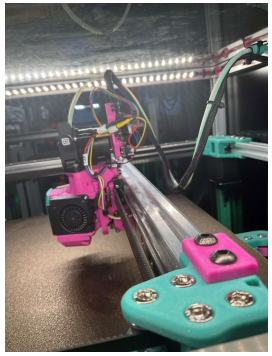
[input_shaper]
shaper_freq_x: 62.8shaper_type_x: mzv
#accel_x: 11,600
shaper_freq_y: 41.2
shaper_type_y: mzv
#accel_y: 5000

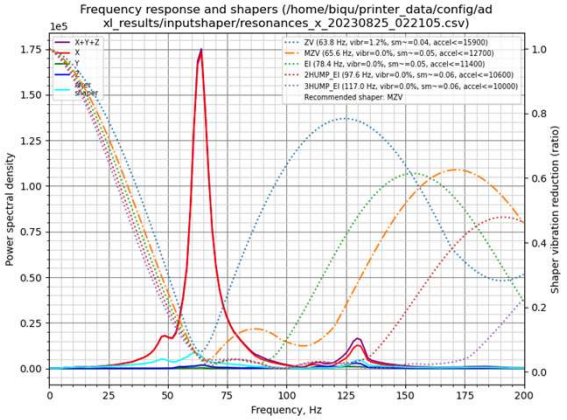
ADXL locations

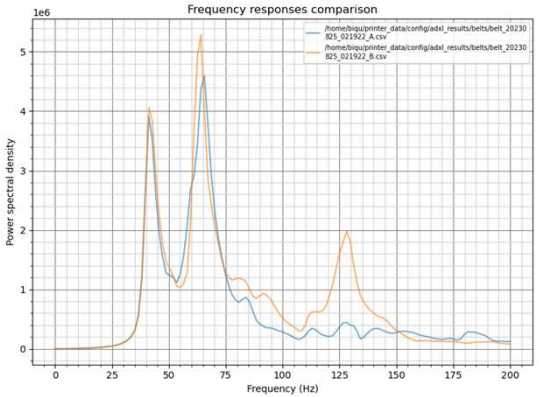


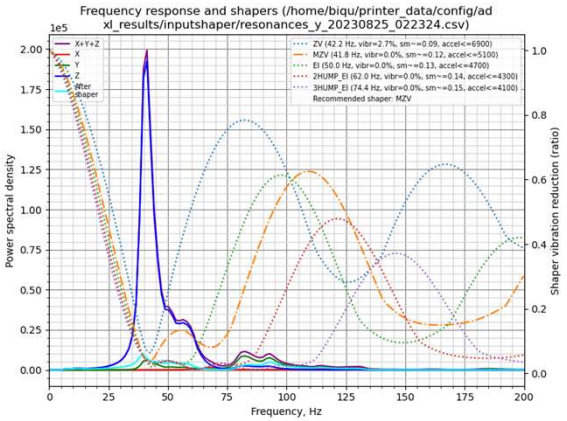
1: EBB36 adxl – canbus
boxxy nozzle adxl not connected







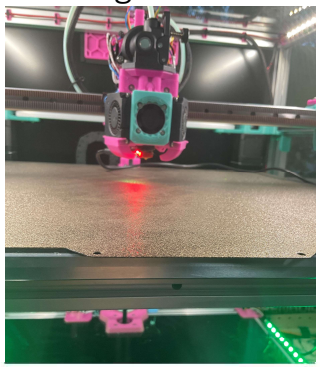


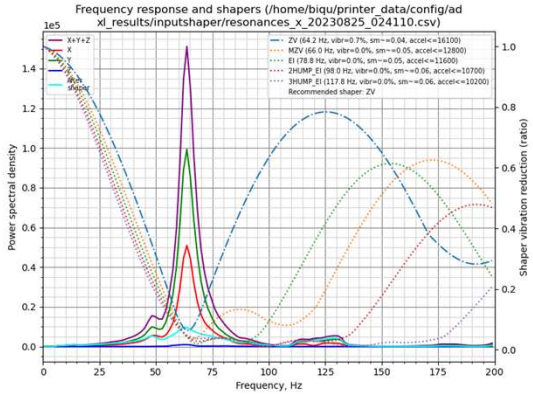


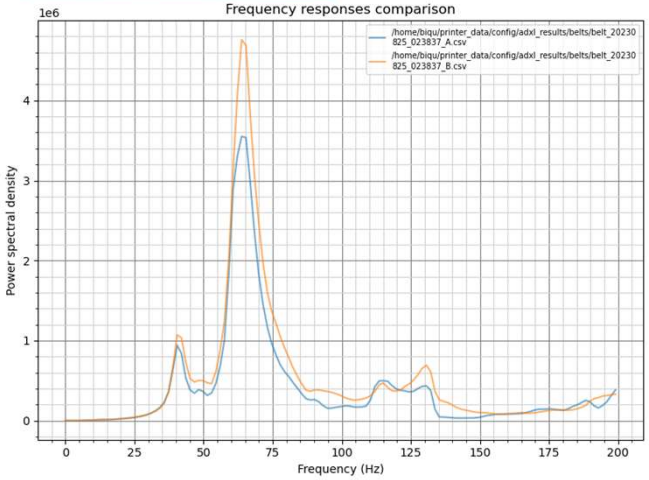
2: Boxxy nozzle probe - at nozzle

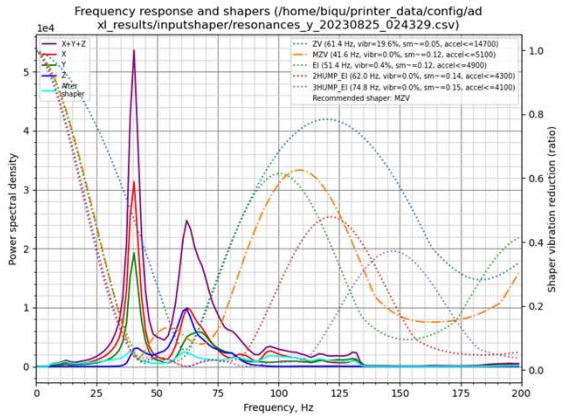
remember -revo voron-

not as good as other nozzles without springs.



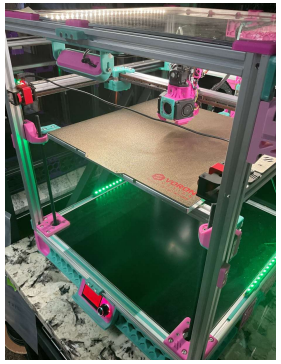


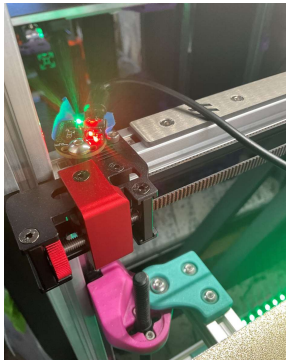


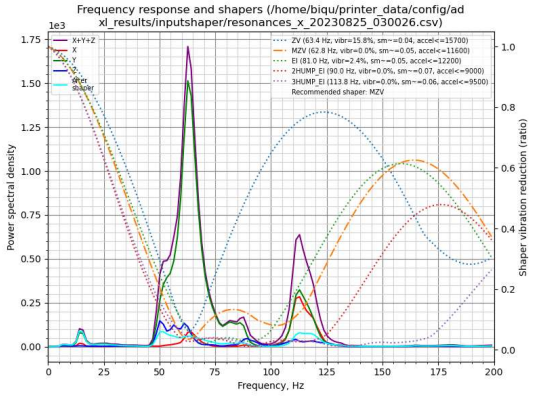


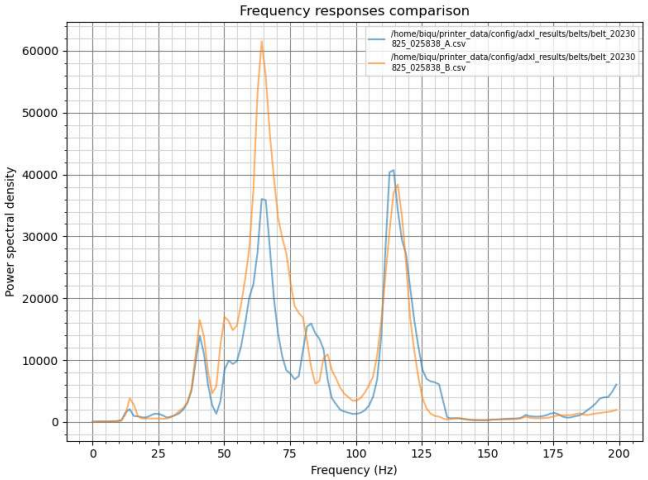
3: Boxxy nozzle probe - front left idler

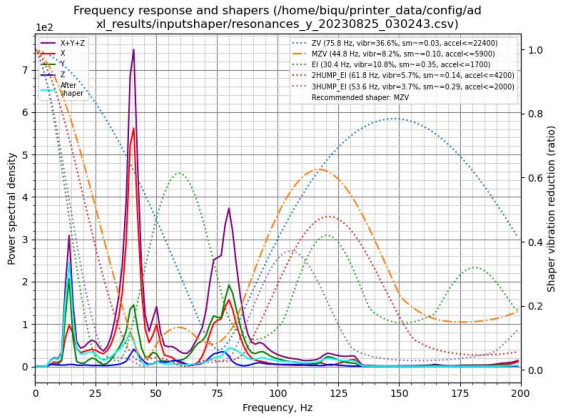
not ideal cable routing



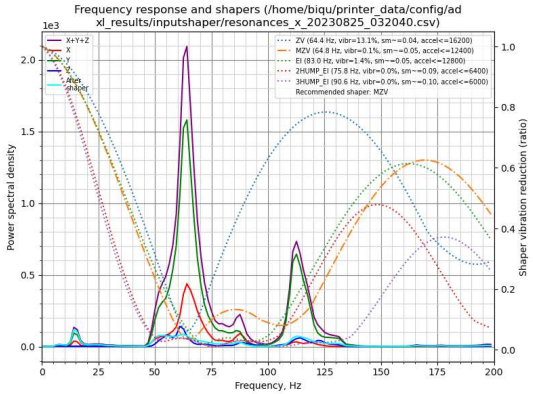


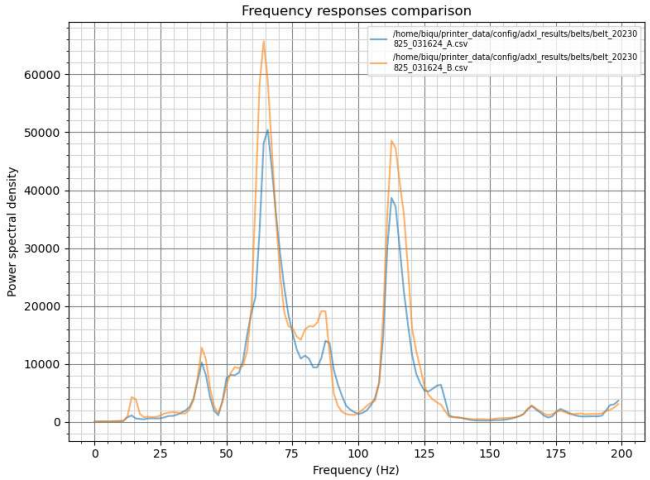


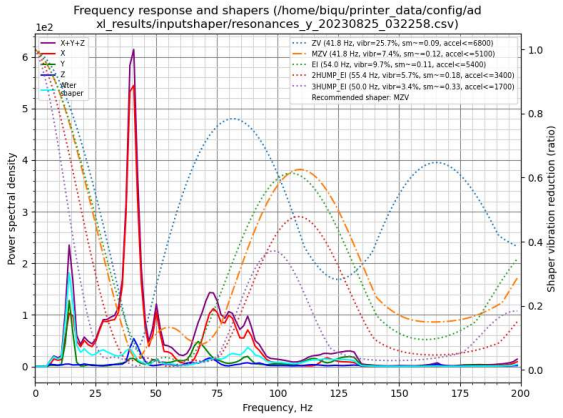




4: Boxxy nozzle probe - front right idler

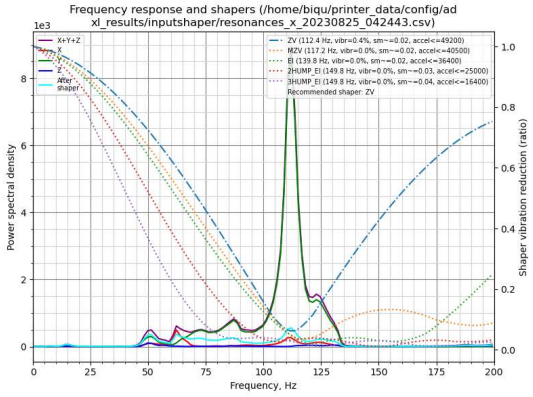


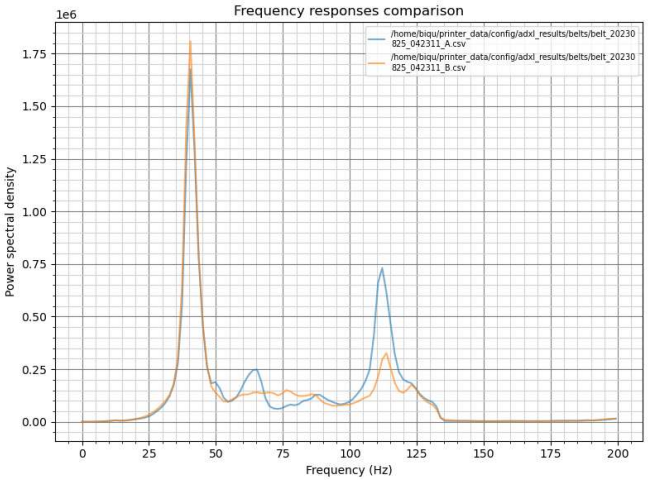


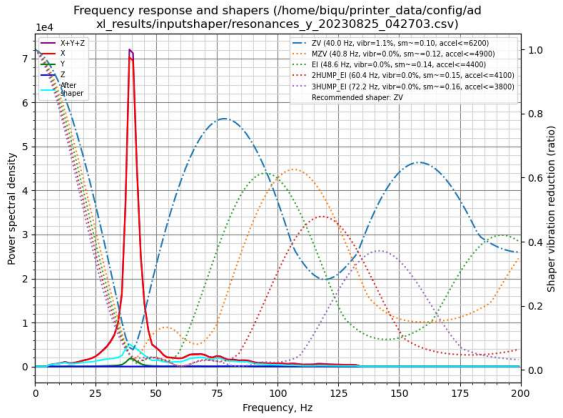


5: Boxxy nozzle probe – left xy-joint

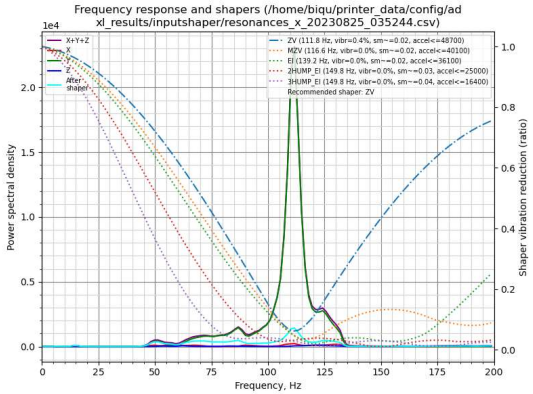
note: need to replace m5x10 with an m5x12 in order to screw in nozzle probe

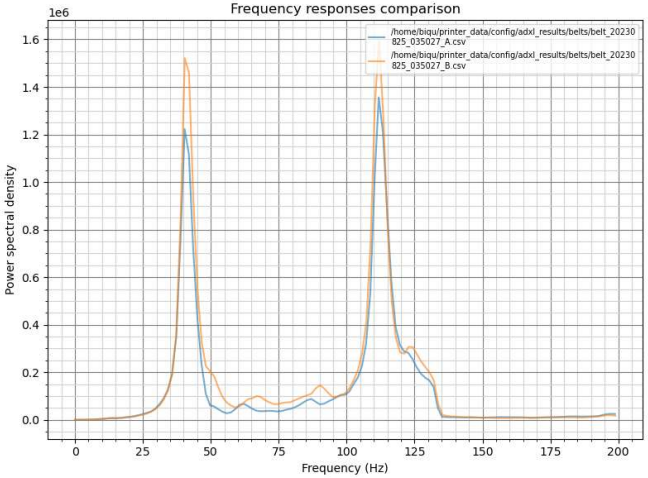


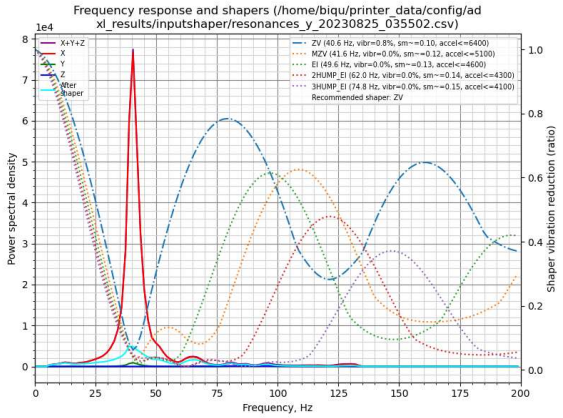




6: Boxxy nozzle probe - right xy-joint

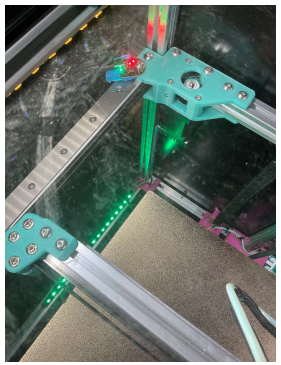


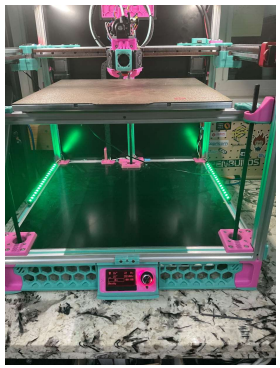


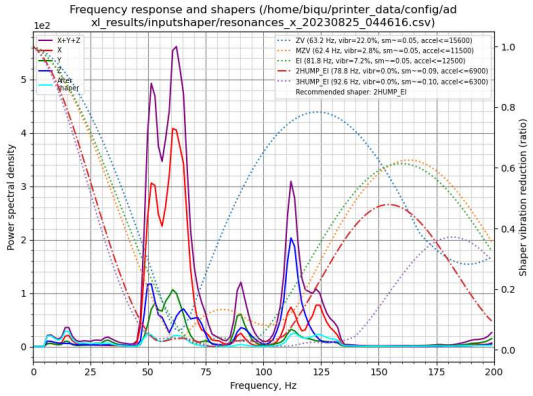


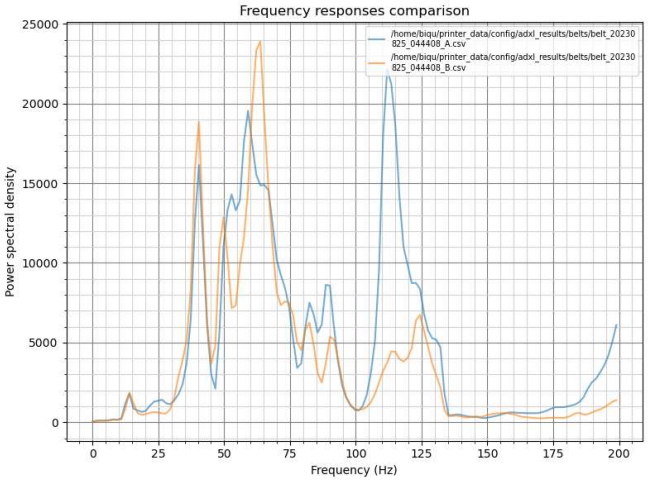
7: Boxxy nozzle probe – left reat joint

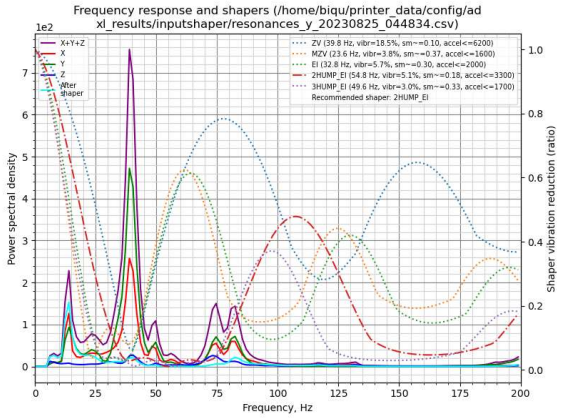
note: need to replace m5x10 with an m5x12 & washer in order to screw in nozzle probe





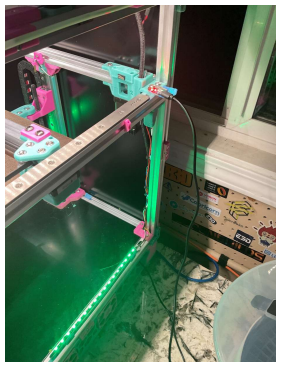


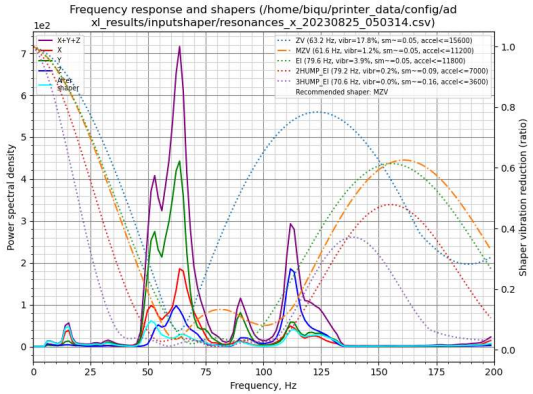


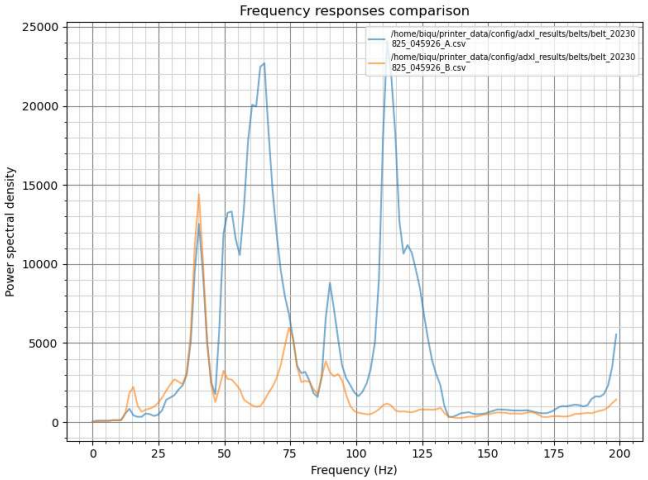


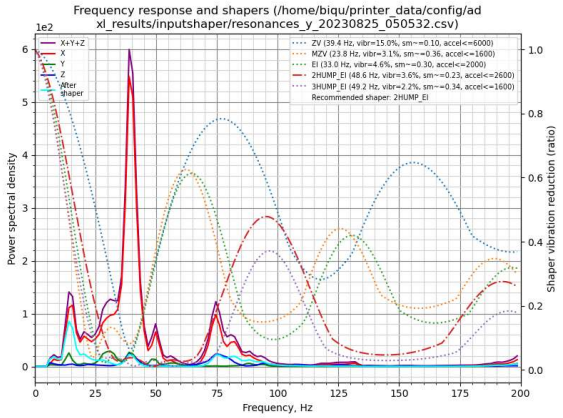
8: Boxxy nozzle probe – right reat joint

note: need to replace m5x10 with an m5x12 & washer in order to screw in nozzle probe









1b: EBB36 adxl – canbus

verification run after all test