## **Material Identification Guide**

Hardware Identifiers:

Pink – M5 T-Nut



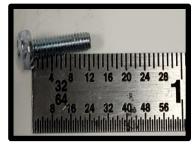
Blue – M5 x 25



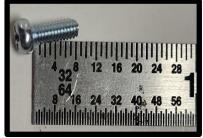
Red – M5 x 8



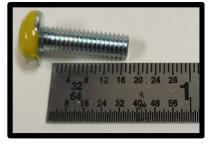
White  $-M3 \times 10$ 



Unpainted - M3 x 8



Yellow – M5 x 16



Blue – M5 Hex Nut



# **TOOLHEAD ASSEMBLY**



# **Materials Needed:**

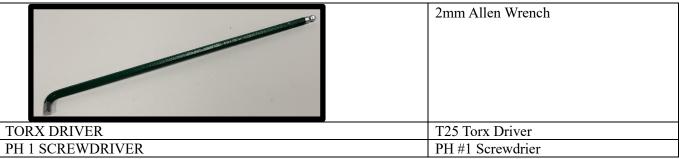
Printed Parts:	Quantity:	Description:
	1	Carriage Top Body
	1	Carriage Bottom Body
	1	Z-Axis Body
	4	Bearing Block LM8UU
	1	Pillow Block 608 Body

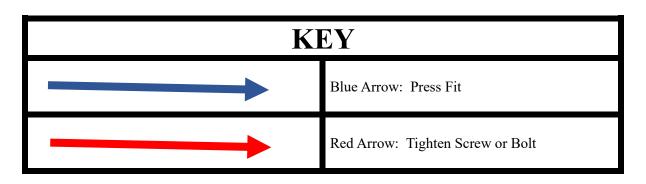
1	Tool Mount

Kit Components:	Quantity: 8	Description:
		Description:  LM8UU Linear Bearing
	2	Lead Screw Nut
	1	5x8 Coupling

Constitution of the state of th	2	180mm Rod
	1	180mm Lead Screw
170 mm	3	170mm T-Slot Aluminum

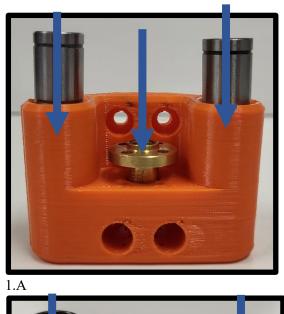
### Tools Needed:

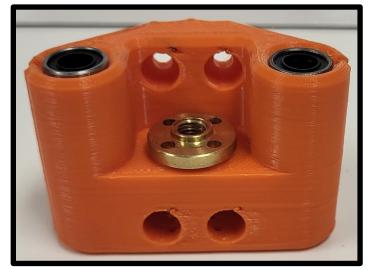




**Step 1: Vertical Carriage** 





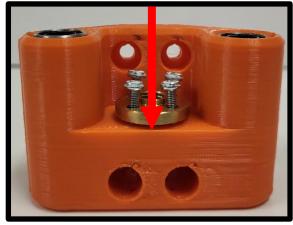


1.B



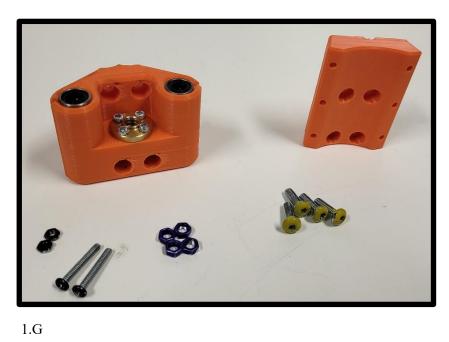


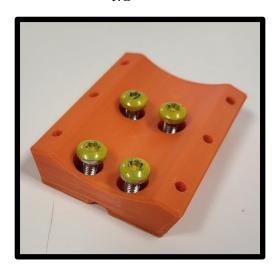
1.C 1.D



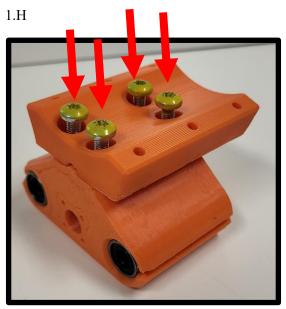


1.E









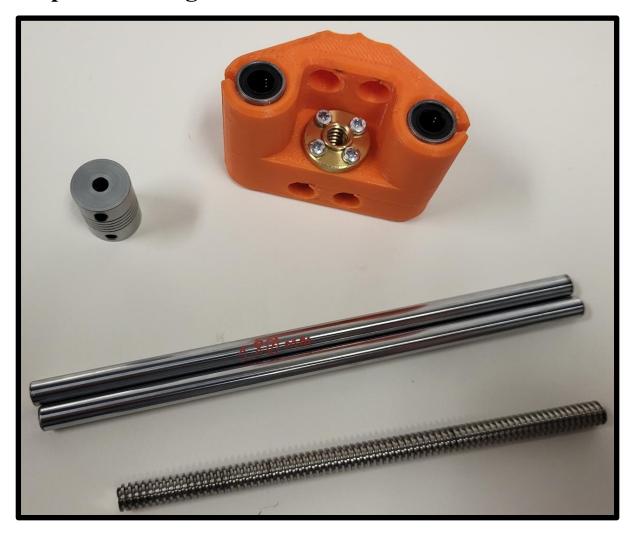


1.J 1.K

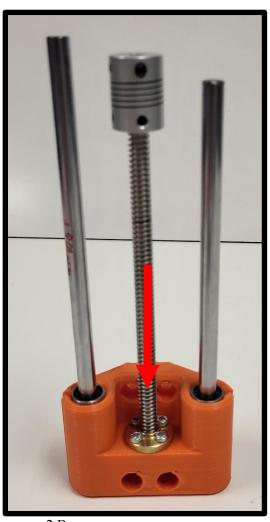
### **NOTES**

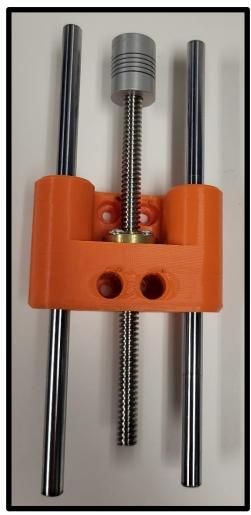
- Do Not Overtighten White Screws. They will strip the plastic.
- The carriage assembly must be completed to the 1.K step before proceeding in the assembly process. However, the following steps do not picture the tool mount part attached.

**Step 2: Carriage Rails** 









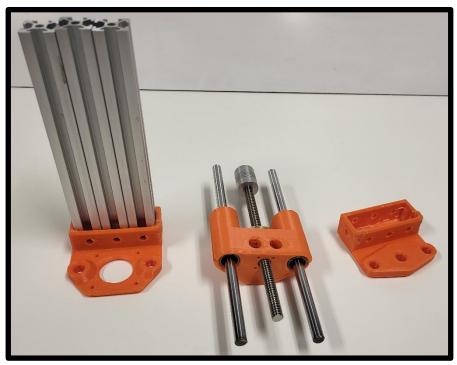
A 2.B 2.C

# **STEP 3: Toolhead Superstructure**





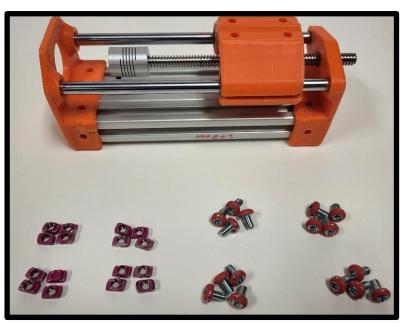




3.D







3.G



3.H (Position T-Nuts with Allen Wrench)



3.J (Left)

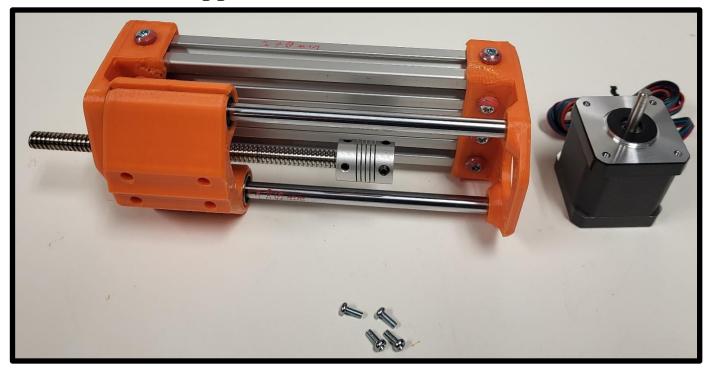


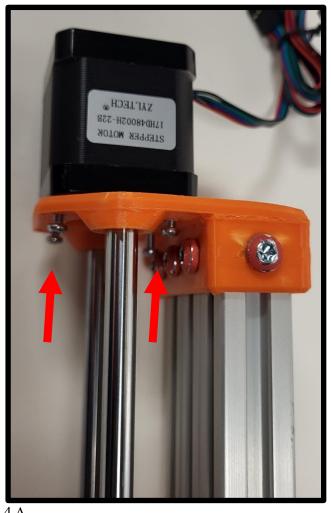
3.I (Tighten All 16)



3.J (Right)

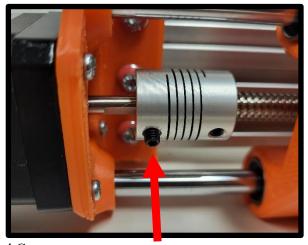
**STEP 4: Stepper Mount** 







4.A 4.B

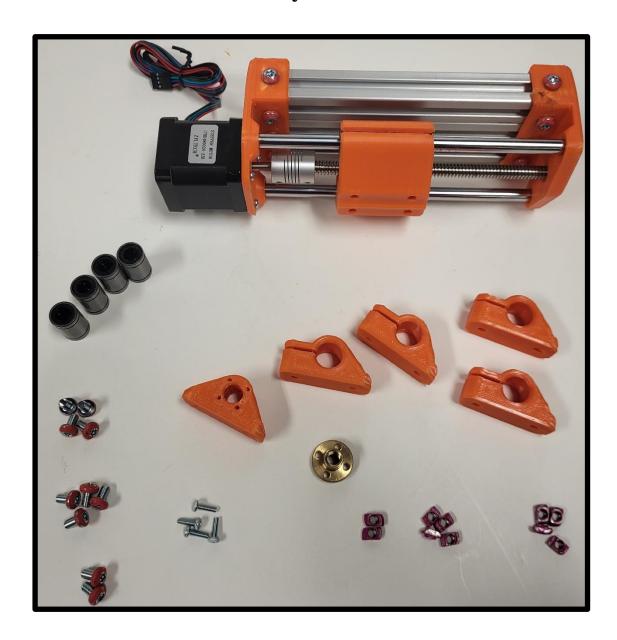




4.C 4.D

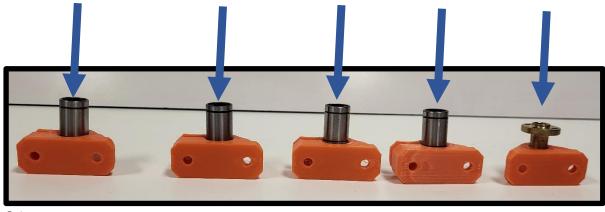
17

# **STEP 5: Final Assembly**



### **CORRECTION:**

• The pictured 10 red-topped machine screws should be 6 yellow-topped and 4 blue-topped screws instead.

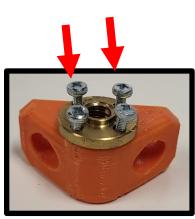


5.A



5.B





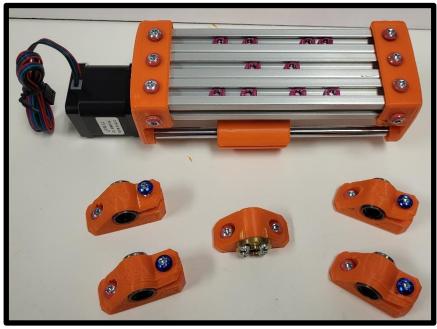
5.D



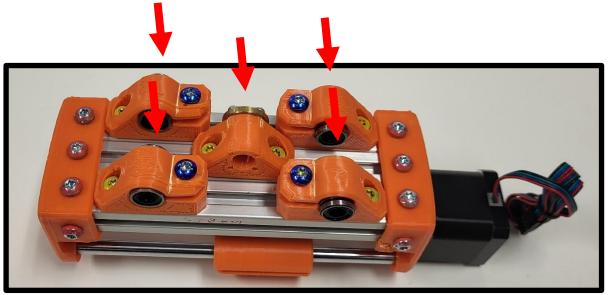
5.E

## NOTE:

• Do not overtighten the white screws



5.F



5.G (Tighten All)

### NOTE:

• The pictured yellow screws (M5x16) should be red screws (M5x8)



5.H

## NOTE:

• The pictured yellow screws (M5x16) should be red screws (M5x8)

# **Complete Toolhead Assembly**

