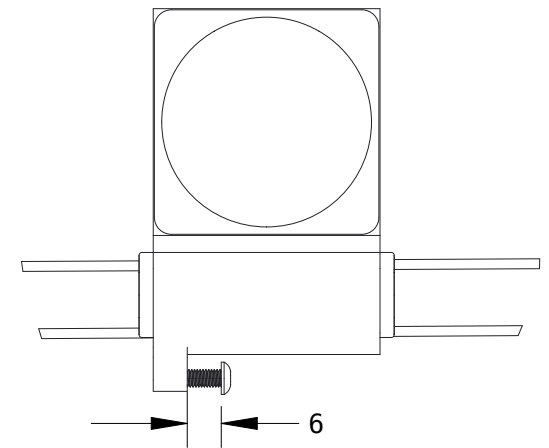
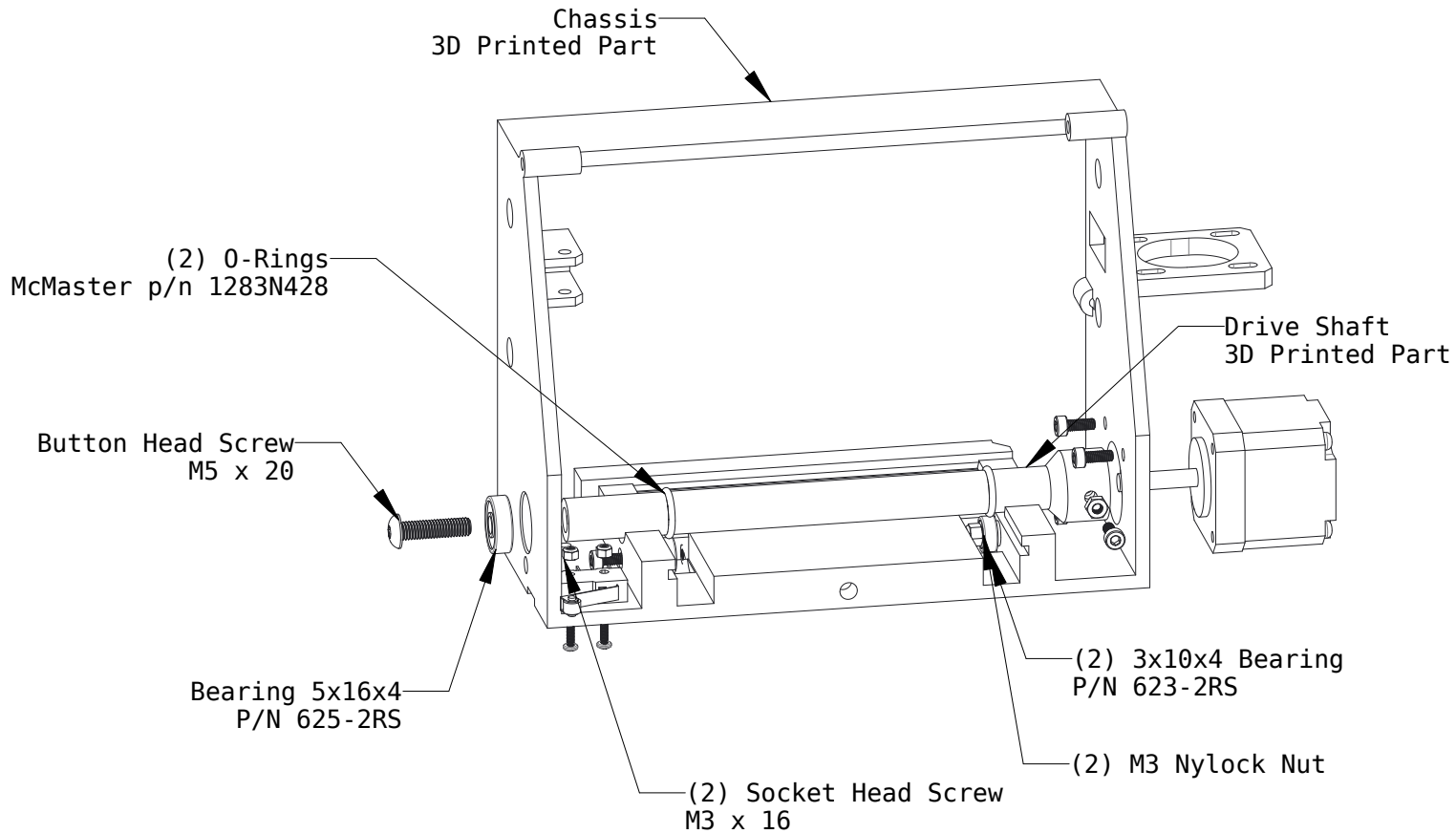


1. Cut belt to 385mm long
2. Butt ends together and slide into belt clamp
3. Install screws and nuts to clamp belt
4. Attach carriage to laser module
5. Center and snap in bearings
6. Install homing adjustment screw.

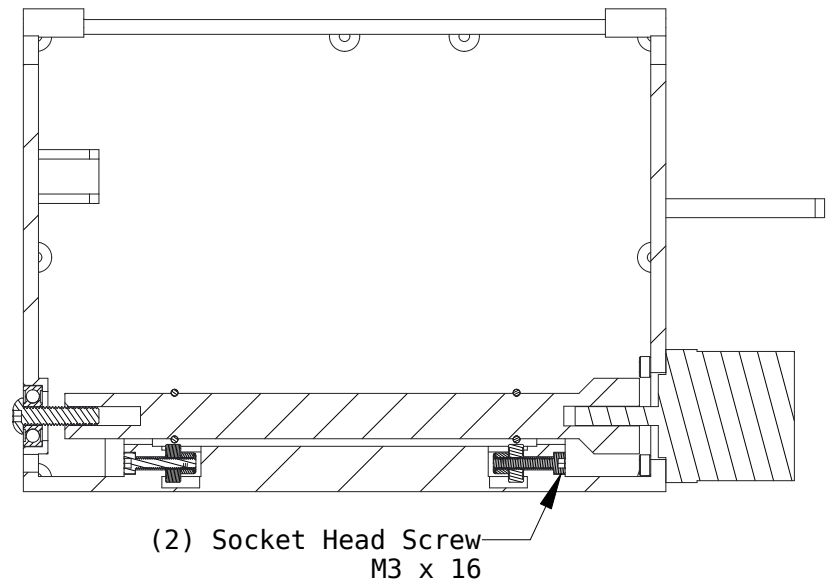
Laser Module Carriage Assembly

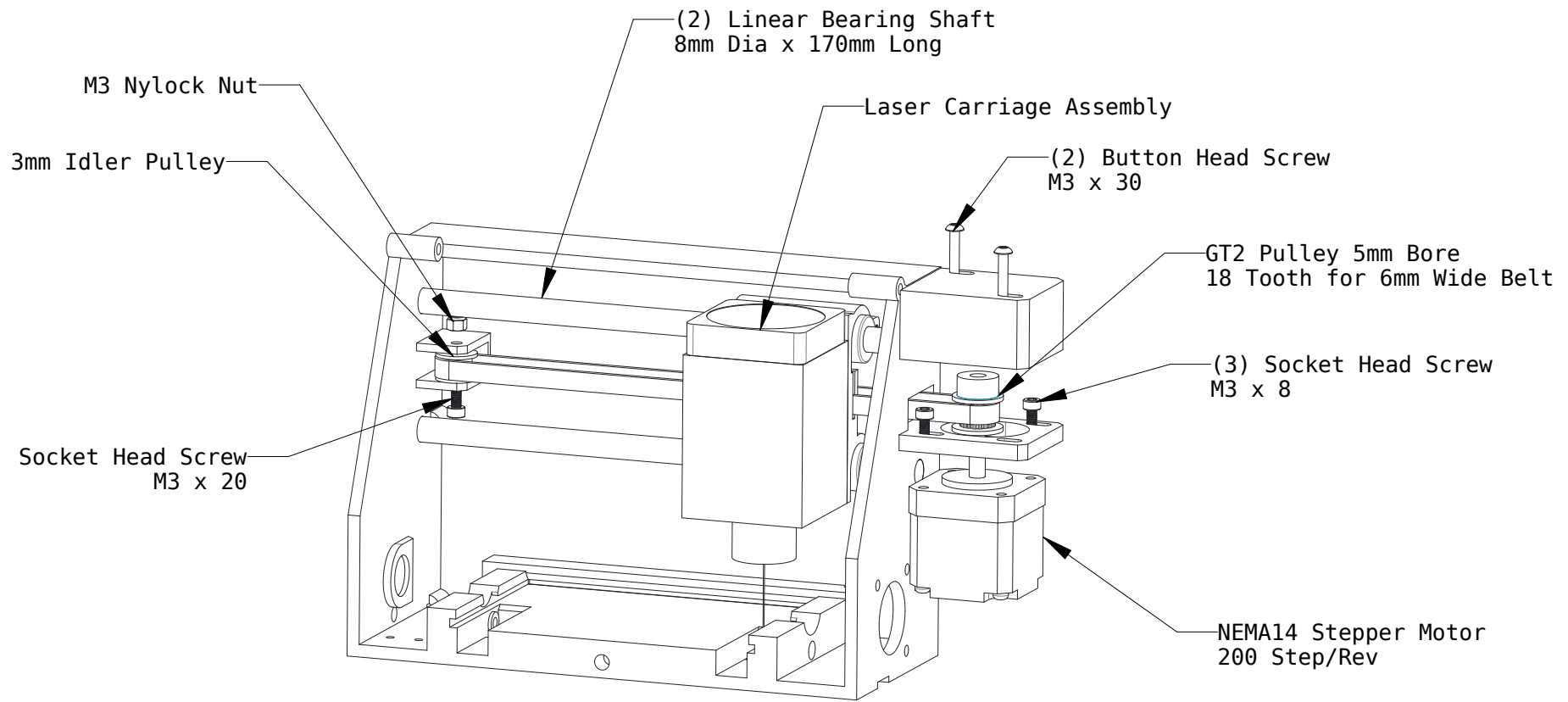




1. Press 5mm drive shaft bearing into chassis.
2. Install M3 Coaster support bearings in base of chassis. Use holes in chassis sides for tool access
3. Install o-rings on drive shaft. Make sure they are straight and not twisted.
4. Loosly attach drive shaft to motor shaft. Slide motor and drive shaft into chassis with motor wires facing the rear. Attach motor to chassis. Adjust drive shaft to center o-rings on bearings, then tighten set screw.
5. Install M5 screw and nut to support drive shaft on left side. It should self tap into drive shaft
6. Install cover interlock switch.

Lower Chassis Assembly

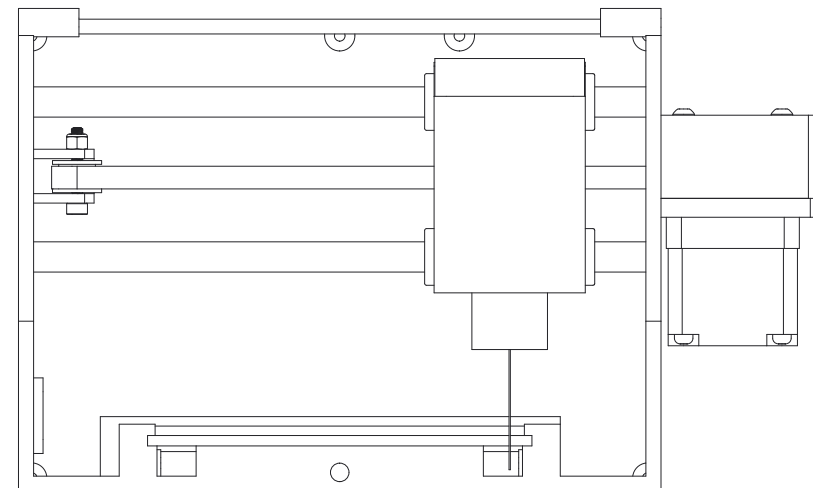


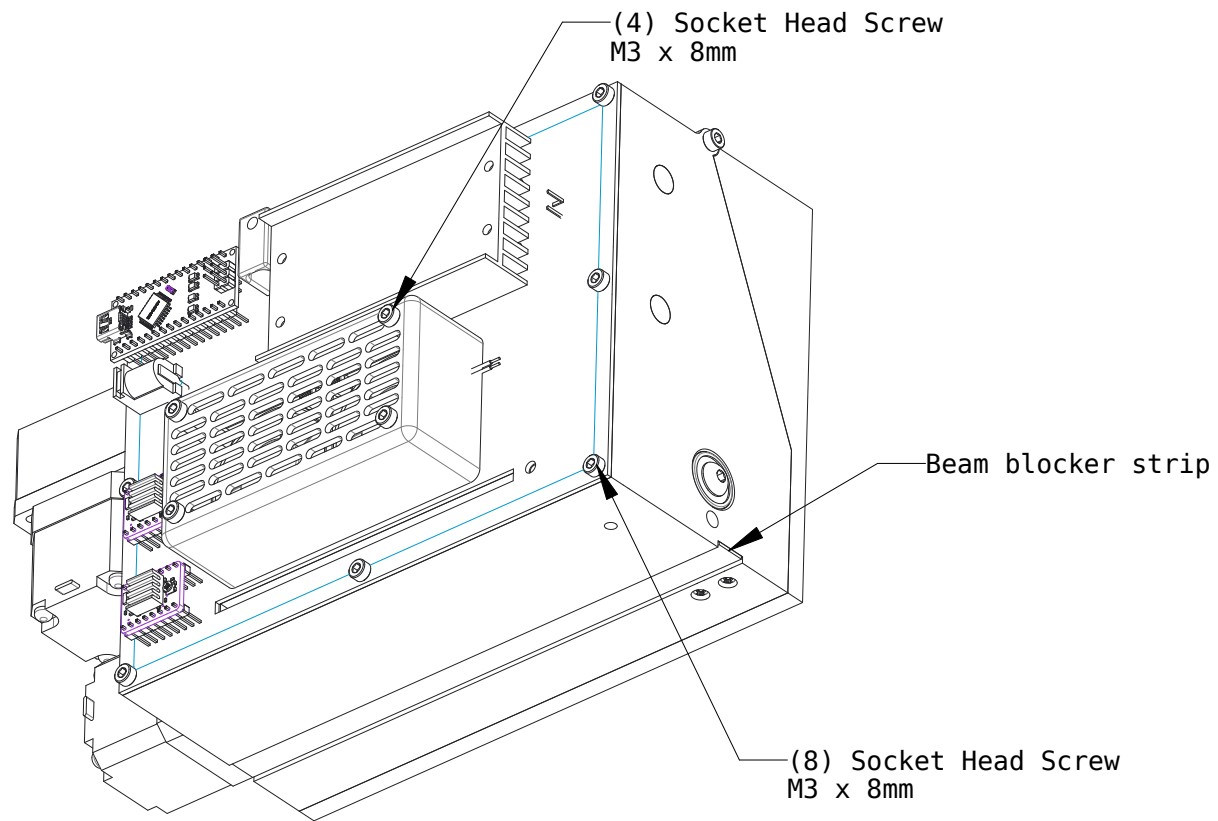


1. Install 8mm Rods half way into chassis from left side.
2. Slide Laser Carriage assembly onto rods.
3. Push rods all the way in.
4. Wrap belt on idler pulley and install pulley.
5. Feed belt through hole on right side.
6. Place pulley on belt and install motor using (2) screws belt should have no slack but not so tight that it puts stress on the chassis. Be sure pulley is level with belt.
7. Install pulley cover.

X Axis Assembly

(Previous step items not shown)





1. Attach Controller to back of chassis.
2. Route wires to laser module through notch in PCB.
3. Attach door interlock switch cable.
4. Attach motor wires.
5. Connector laser power supply cable.
6. Attach fan cover.
7. Epoxy beam blocker metal strip into bottom groove.

Final Assembly

Bill Of Materials

Description	QTY	SUPPLIER	Supplier P/N
3mm Smooth Pulley (16T equiv dia.) 6mm Wide	1		
Bearing 3mm x 10mm x 4mm	2	Generic	623-2RS
BEARING 5mm 16mm 5mm	1	Generic	625-2RS
Bearing Shaft 8mm	2		
Butoon Head Screw M3 x 30	2		
Button Head Screw M3 x 12	1		
Button Head Screw M5 x 20	1		
Coasty Beam Stop Strip	1	Fabricated	
Coasty Chassis	1	3D Print	
Coasty Controller Assy	1	Buildlog.net	Coasty Controller
Coasty Door	1	3D Printer Part	
Coasty Drive Shaft	1	3D Printed Part	
Coasty Final Assembly	1	---	
Coasty Laser Carriage	1	3D Printed Part	
Coasty Laser Carriage Assy	1	User Assembly	
COASTY WINDOW	1		
Coasty X Motor Cover	1	3D Printed Part	
Dual Fan Cover	1	3D Printer Part	
Flat Head Screw M3 x 6	4		
GT2 Belt 6mm Wide cut to 385mm	1	Generic	GT2 6mm
Hex Nut M3	3		
Laser Module 3.5W 450nm	1	Eleksmaker	LA03-3500
Linear Shaft Bearing 8mm Dual	2	Generic	LM8LUU
NEMA14 Stepper Motor	2	Generic	
Nylock Locking Nut M2	2		
Nylon Locking Nut M3	3		
Pan Head Screw M2 x 12	2		
Silicon Oring #905	2	McMaster Carr	1283N428
Socket Head Screw M3 x 8	20		
Socket Head Screw M3 x 16	2		
Socket Head Screw M3 x 20	3		
Timing Pulley GT2 18T 6mm Wide 5mm Bore	1		
Wiring Cover	1	3D Printer Part	