

C3M-03 Canopy Latch

Parts:

Part	Quantity	Manufacturing Method
Canopy Latch Catch	1	Shearing, Braking, Welding
Grip	1	3D print
Handle Shaft	1	Bandsaw, Lathe
Handle	1	Bandsaw

Procedures:

Canopy Latch Catch

1. Retrieve 18 Gauge sheet metal sheets at least 40x20 mm (2)
2. cut sheets into shapes specified on drawing sheet
3. Break all edges
4. use sheet metal brakes to bend where necessary
5. weld 2 pieces together as shown on drawing sheet

Grip

1. 3D print in MAE-B 3D Prototyping Lab

Handle Shaft

1. Retrieve $\frac{3}{4}$ " steel rod
2. Cut using bandsaw to 2"
3. Use calipers to determine accurate stock diameter
4. Set up lathe and insert rod
5. Cut the diameter to 14.29mm (.56") over half of the rods length
6. Remove rod, rotate it, and insert the opposite end
7. Cut remaining length to .56" diameter

8. Use tailstock to drill a .25" through hole
9. Remove rod and break all edges

Handle

1. Retrieve 1/8" x 1/2" steel bar stock
2. Cut to 3" length with bandsaw
3. Break edges

Assembly

1. Weld handle and handle shaft together
2. Slide grip onto handle and secure with adhesive
3. (alternative to grip, dip handle in rubber coating)
4. Adhere opposite end of shaft into hole on underside of the release button
5. Removal of some material on the OTS assembly may be necessary