

C3M-02 Canopy Hinge

Parts:

Part	Quantity	Manufacturing Method
Hinge Arm	2	Waterjet
Middle Mount	1	Waterjet

Procedures:

Hinge Arm

1. Create part Drawing for HingeArm.sldprt
2. Save file as a .dxf file type
3. Load file into the AWJ machine and ensure it is correctly scaled (1:1).
4. When loading stock material into machine ensure that it is secured properly (use F-clamps if possible)
5. For details on how to operate the AWJ machine refer to:
https://mae.ufl.edu/designlab/Advanced%20Manufacturing/AWJ/AWJ.htm#Generating_Cutting_Path
6. Once cutting is finished, CAREFULLY hand jog nozzle away from part so you can unload finished parts (edges will be sharp and need deburring)

Middle Mount

1. Create part Drawing for Middlemount.sldprt
2. Save file as a .dxf file type
3. Load file into the AWJ machine and ensure it is correctly scaled (1:1).
4. When loading stock material into machine ensure that it is secured properly (use F-clamps if possible)
5. For details on how to operate the AWJ machine refer to:
https://mae.ufl.edu/designlab/Advanced%20Manufacturing/AWJ/AWJ.htm#Generating_Cutting_Path
6. Once cutting is finished, CAREFULLY hand jog nozzle away from part so you can unload finished parts (edges will be sharp and need deburring)

NOTE: Both the middle mount and hinge arm are cut from the same piece of stock material

7. Create all three bends in part (Make sure part is facing the right direction before you start making the bends)

Assembly

Parts: Middle mount, Hinge Arm, M6 screws, spacers, End fittings

1. Unlock the screw in the end fittings and insert the first spacer.
2. Insert the Arm Hinge using the circular end hole into the end fitting
3. Insert the second spacer and close the end fitting
4. Repeat the same process for the other side of the hinge
5. Place the Middle mount in between both Arm Hinges and use the M6 screws to secure it in place
6. **MAKE SURE** that the nuts in the M6 screws are properly tightened. Refer to this guide for some guidelines on tightening:
https://www.atlascopco.com/content/dam/atlas-copco/industrial-technique/general/documents/pocketguides/9833864801_L.pdf