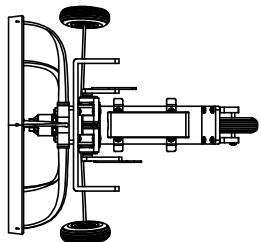
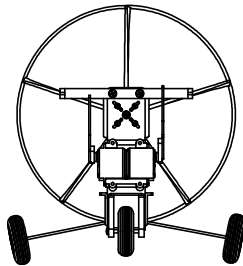
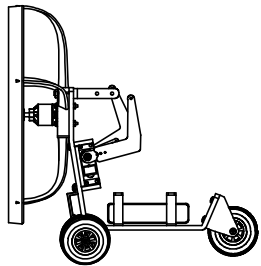
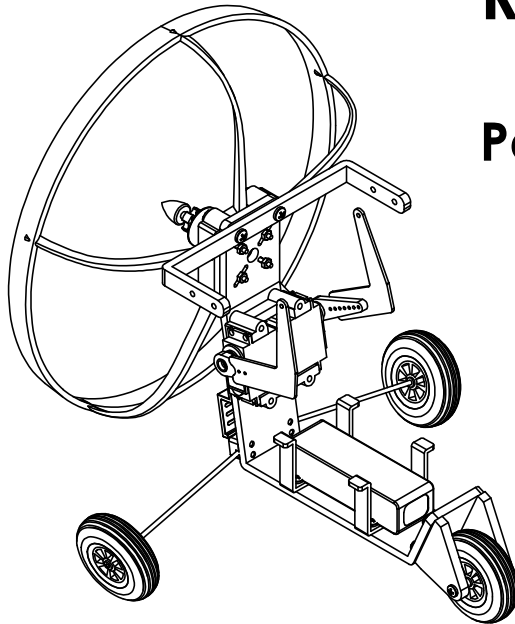


# R/C Air Adventures - 'Simple Cart'

## Paramotor cart plans, Rev. 1

Shameless DIY copy of the Opale M2 backpack that can be build in the comfort of your own home!



Plans created by  
James Presnell of  
R/C Air Adventures:  
materials list may not be  
complete for initial revs of  
these plans.

[youtube.com/rcairadventures](https://youtube.com/rcairadventures)  
[patreon.com/RCAiradventures](https://patreon.com/RCAiradventures)

### **\*\*Materials\*\***

\*Frame plate - 3mm or 6mm (1/8" or 1/4") x 50mm (2") aluminum bar, at least 410mm (16") long

\*Hang points - 6mm (1/4") x 13mm (1/2") aluminum bar, at least 280mm (11") long

\*Battery / ballast holders - 3mm (1/8") x 12mm (1/2") aluminum bar, at least 290mm (12") long

\*3D printed parts can be made from your choice of PLA, ABS, or PET

\*3mm (1/8") music wire, at least 500mm (20") long

### **\*\*Hardware\*\***

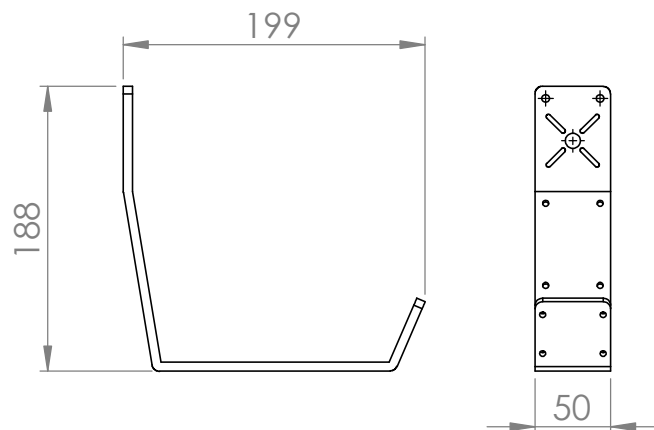
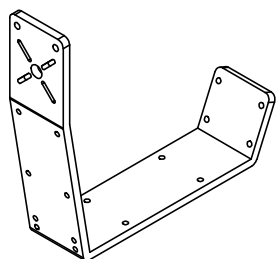
\* #8-32 or 4mm screws:  
5mm (3/16"), qty. 4  
8mm (5/16"), qty. 4  
25mm (1"), qty. 4  
32mm (1 1/4"), qty. 2

\* #8-32 or 4mm nuts (handfull)

### **\*\*Other\*\***

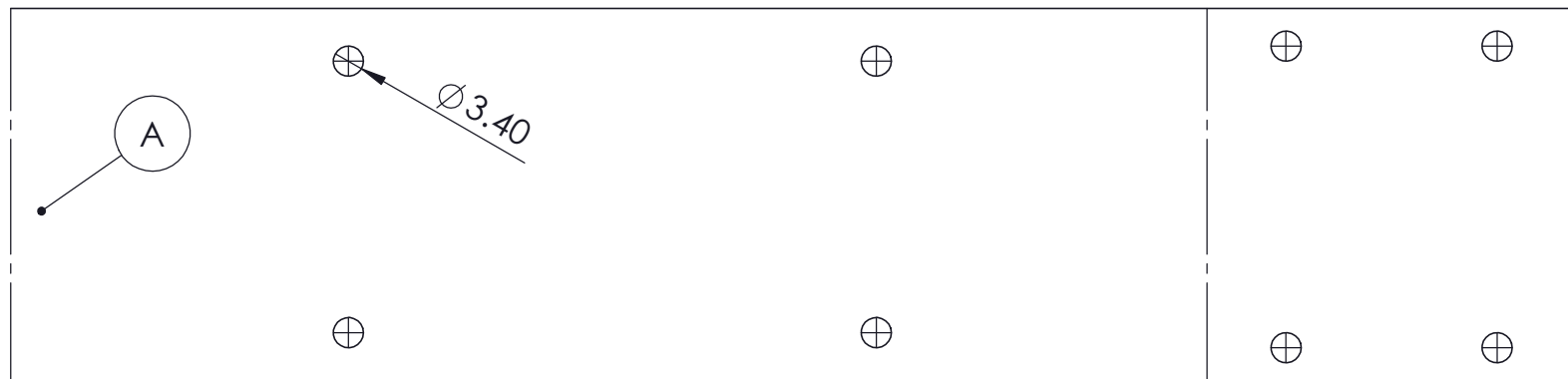
\*Opale prop guard available from Esprit Models

\*2.25" wheels, qty. 3

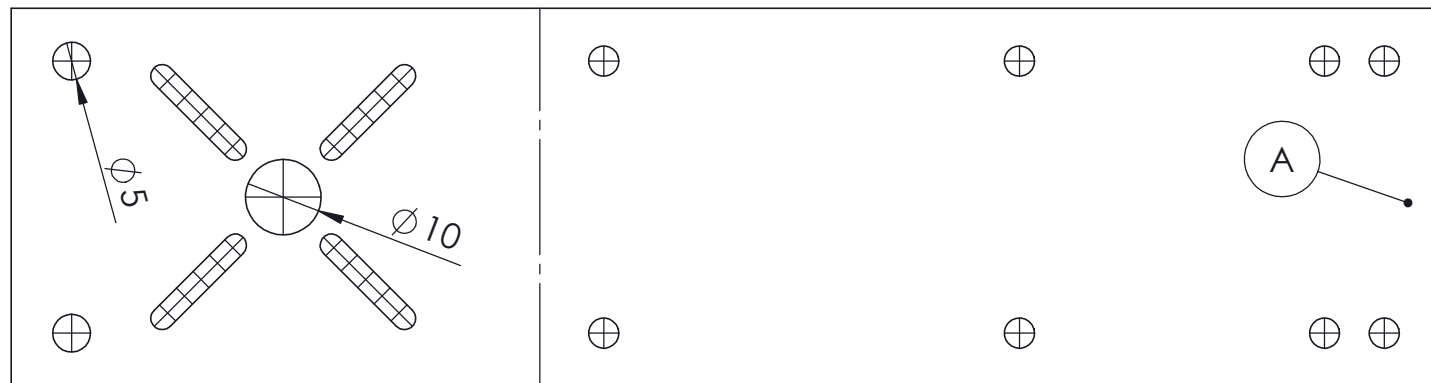


## Frame Plate

Made from either 3mm (1/8") or 6mm (1/4") thick aluminum plate, 50mm (2") wide.



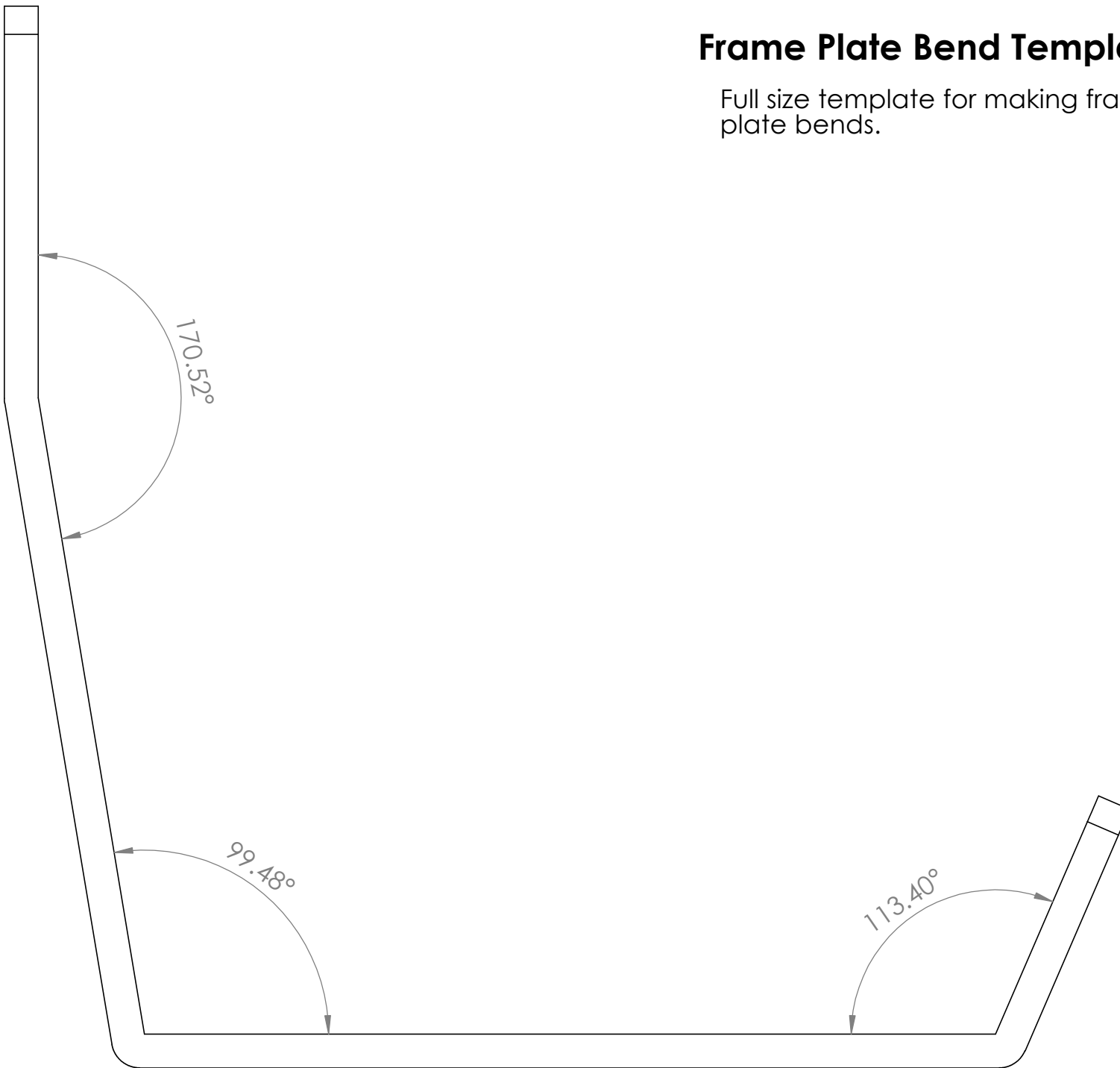
\*\* Start by cutting a piece of chosen aluminum material to 400mm (15.75"). Cut out the template to the right and paste on the aluminum, aligning the dotted lines designated 'A'. Punch all hole centers, drill holes, then make bends at dotted lines.



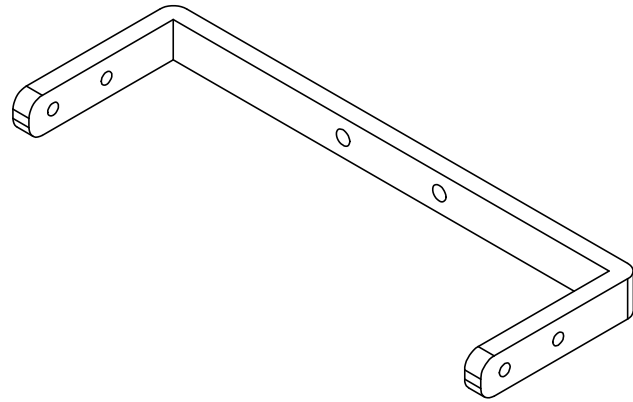
## R/C Air Adventures - 'Simple Cart'

## Frame Plate Bend Template

Full size template for making frame plate bends.

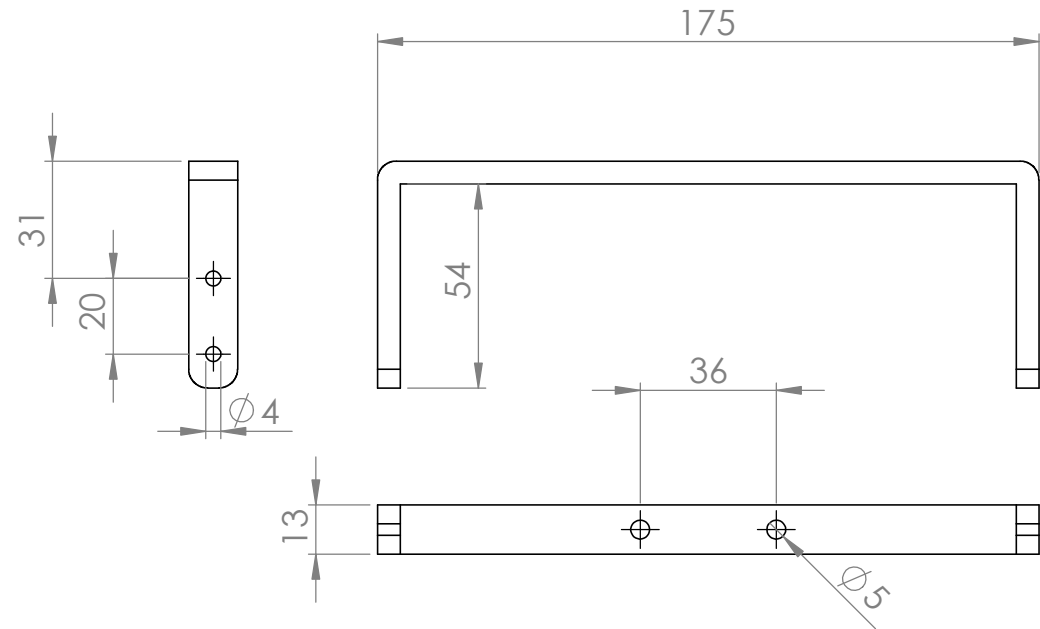


**R/C Air Adventures - 'Simple Cart'**

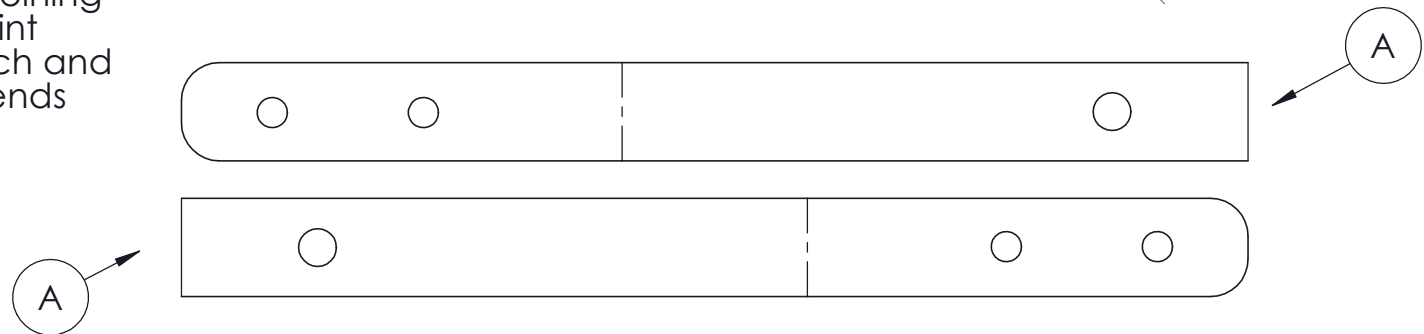


## Hang Point Bracket

Made from 6mm (1/4") thick  
aluminum bar 12-13mm (1/2") wide.

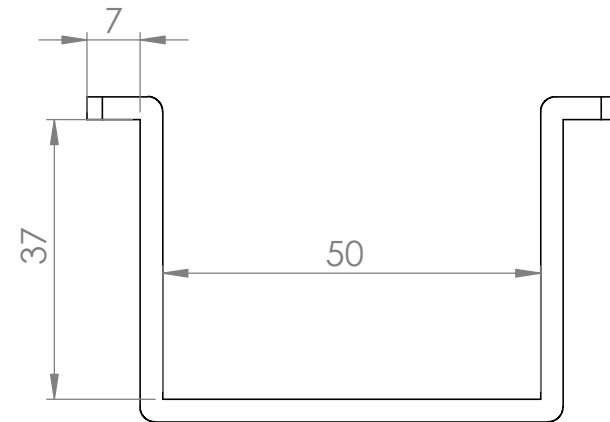
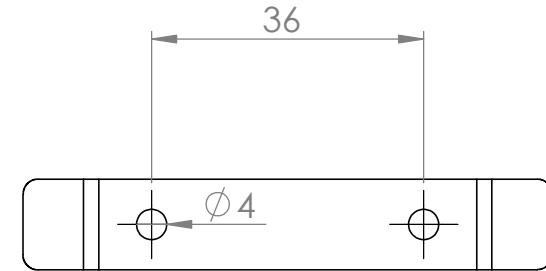
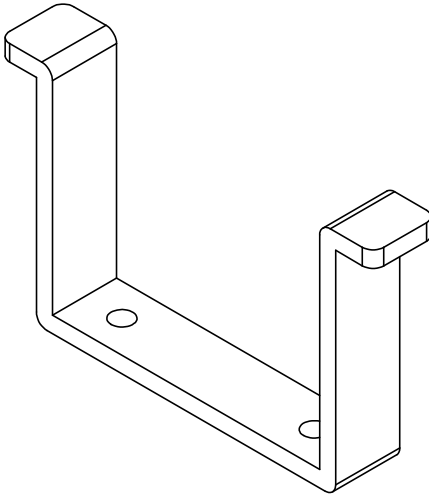


\*\* Start by cutting aluminum bar to 280mm (11"). Cut out the templates to the right and paste on material, joining the templates at the point marked 'A'. Center punch and drill holes, then make bends at dotted lines.

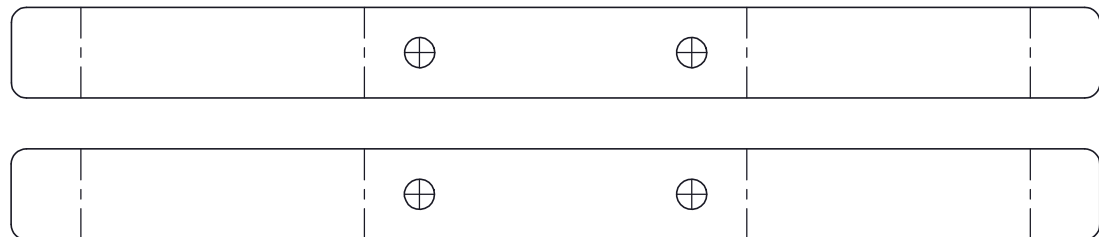


**R/C Air Adventures - 'Simple Cart'**

## Battery/Ballast Holder - 2 required



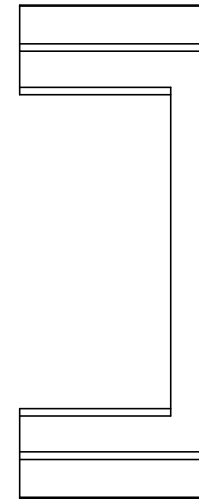
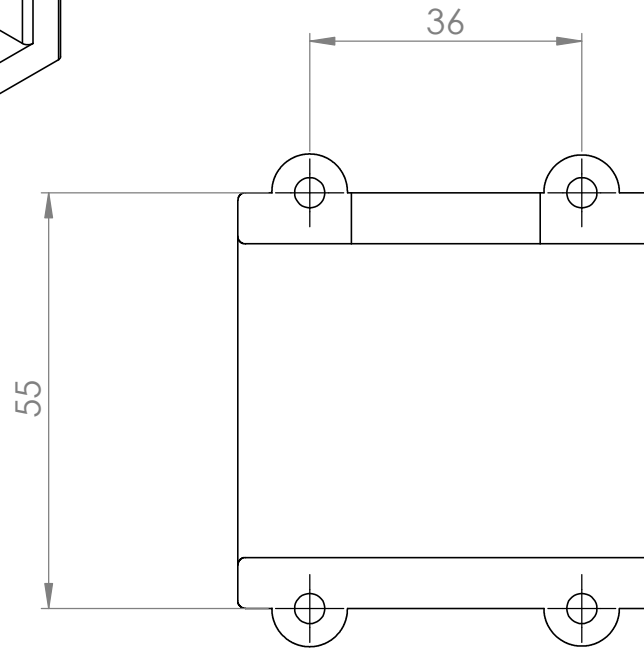
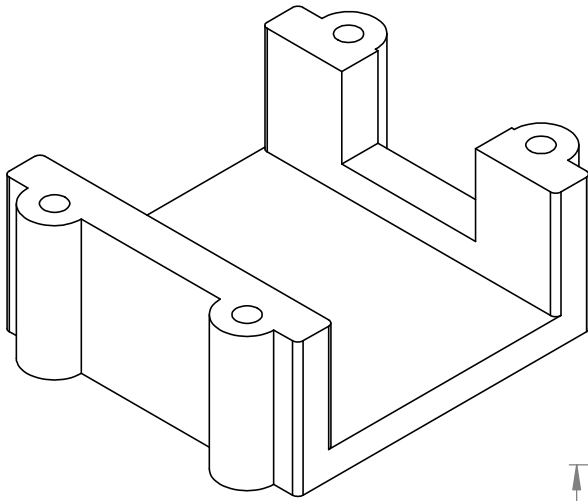
\*\* Start by cutting 2 lengths of aluminum bar to 144mm (5.7"). Cut out templates to the right and paste onto material. Pouch and drill holes as marked, then make bends at dotted lines.



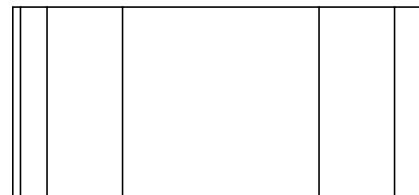
## R/C Air Adventures - 'Simple Cart'

## Servo Holder / Mount

3D printed from PLA, PET, or ABS. Print with 3 shells and about 26% infill. Fits 2 standard servos.



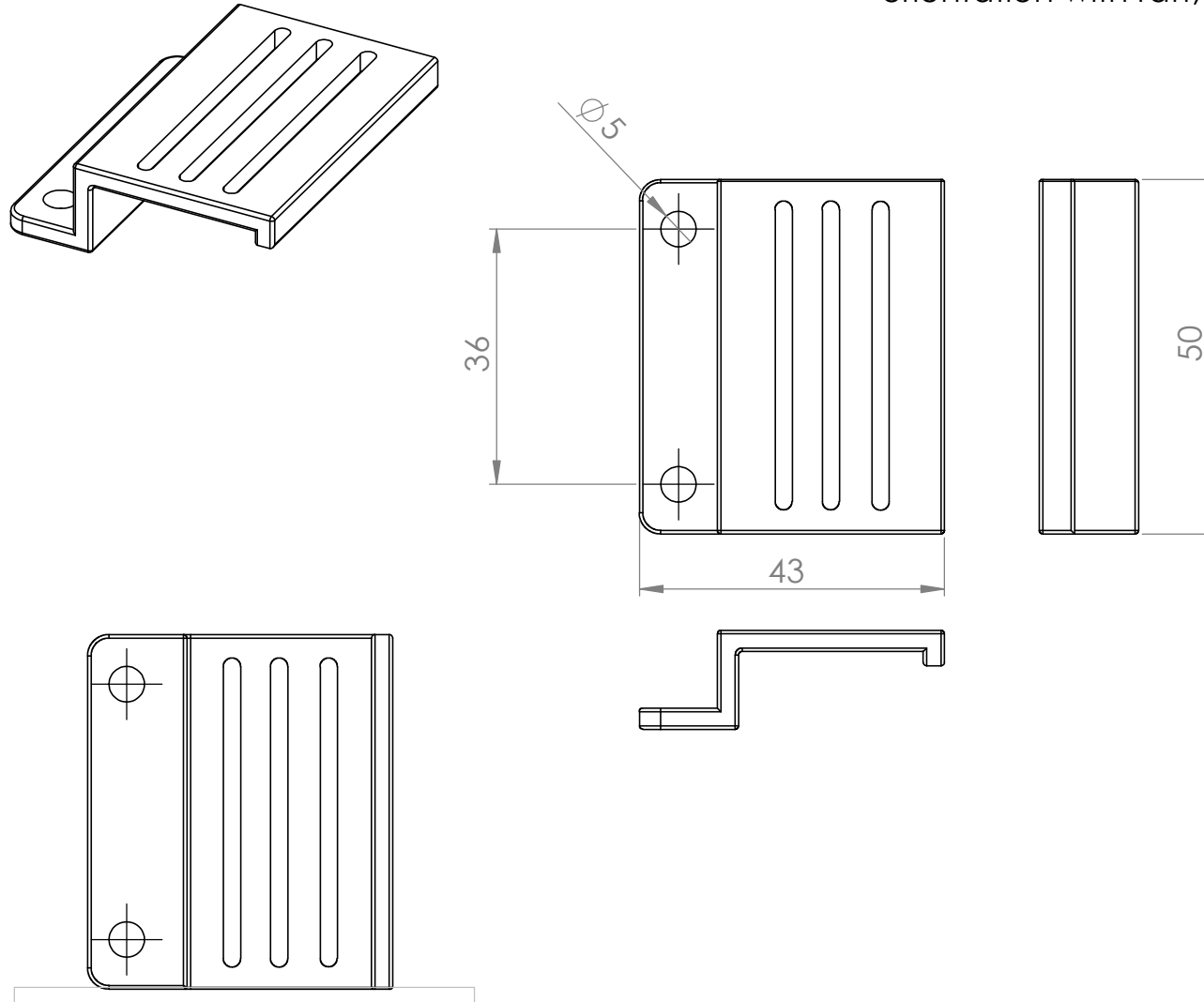
\*\*Part File:  
Simple-Cart-Servo-Mount.STL



**R/C Air Adventures - 'Simple Cart'**

## ESC Cover

3D printed from PLA/ABS/PET in vertical orientation with raft, 3 shells.



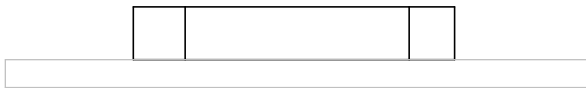
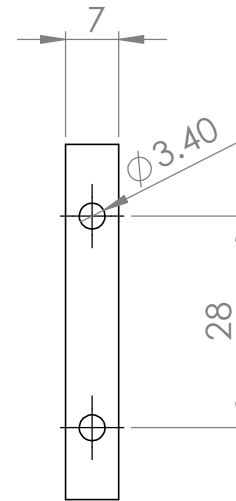
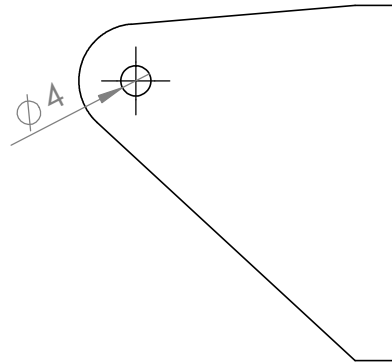
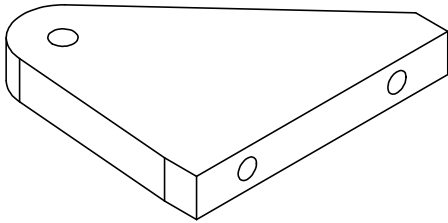
\*\*Printing orientation

'Simple-Cart-ESC-Cover.STL'

**R/C Air Adventures - 'Simple Cart'**

## Front Wheel Mount - 2 required

3D printed from PLA, ABS or PET: 3 shells and 26% or greater infill. Can be cut from flat material such as HDPE.



\*\* Print in flat orientation

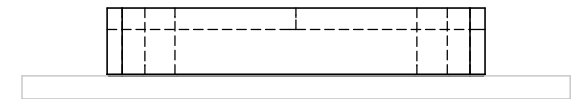
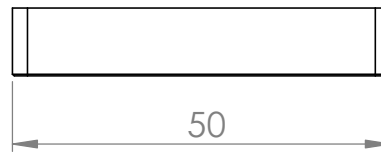
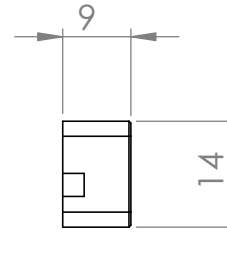
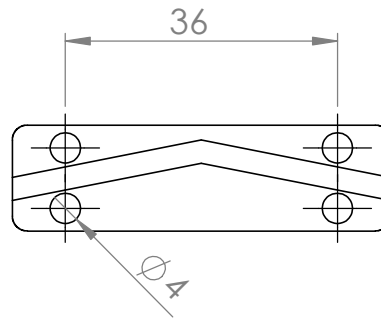
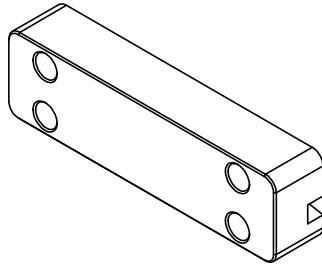
'Simple-Cart-Front-Wheel-Mount.STL'

**R/C Air Adventures - 'Simple Cart'**



## Rear Landing Gear Block / Wire

Block is 3D printed from PLA/ABS/PET, 3 shells and > 26% infill. Landing gear wire is 3mm (1/8") music wire.

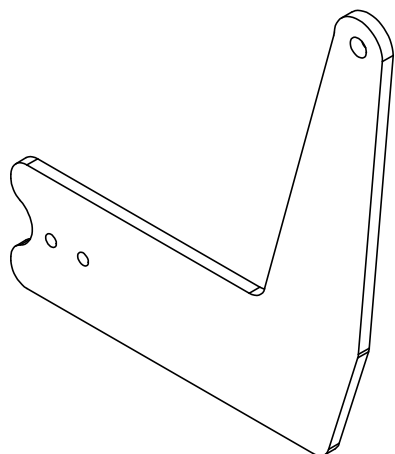


\*\*Print orientation - slot up.

'Simple-Cart-Rear-Landing-Gear-Block.STL'

Cut 3mm music wire to 320mm (12.5").  
Mark at center and use pattern above  
to achieve proper bend.

## R/C Air Adventures - 'Simple Cart'

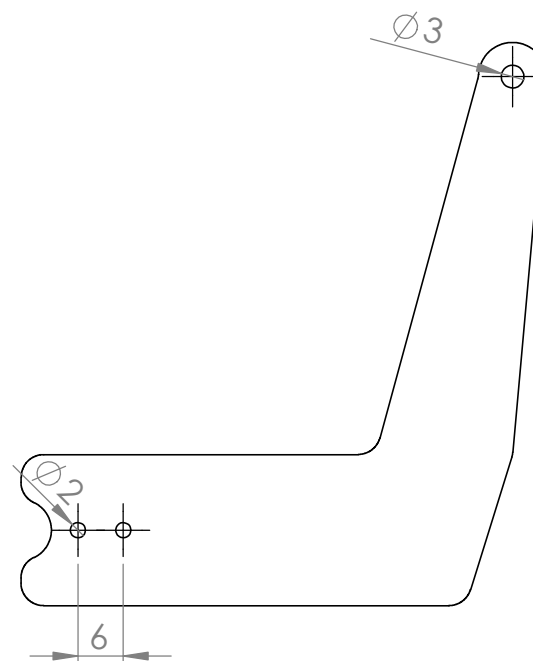


## Servo Arms - 2 required

3D printed from PLA, ABS, PET, or cut from 1.5mm (1/16") to 3mm (1/8") ply or other material

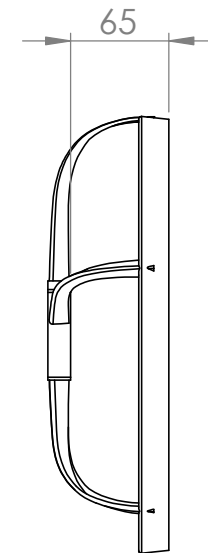
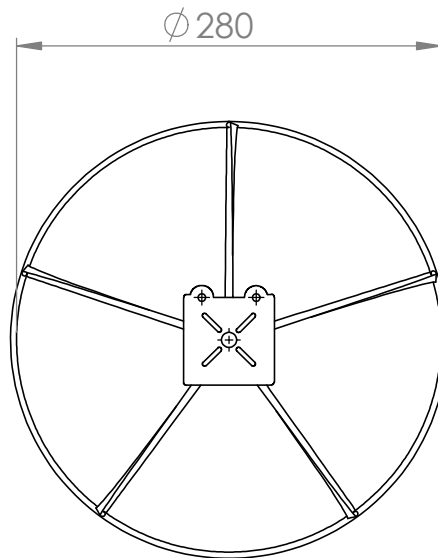
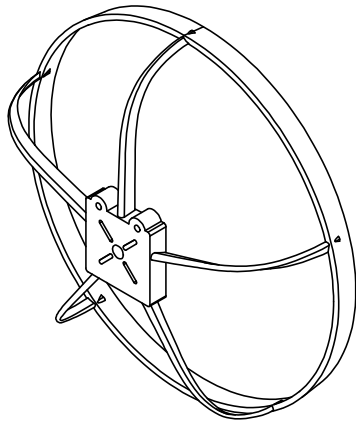
\*\* Arms can be printed or cut - it is suggested to make this part 'breakable' so that in a crash the arms will fail instead of breaking servo gears. Hole spacing should be a close fit to attach to servo arm with short screws.

'Simple-Cart-Arms.dwg'  
'Simple-Cart-Arms.STL'



## Prop Guard

Torque-reducing prop guard is purchased from Opale Paramodels or Esprit Models in the US.



**R/C Air Adventures - 'Simple Cart'**