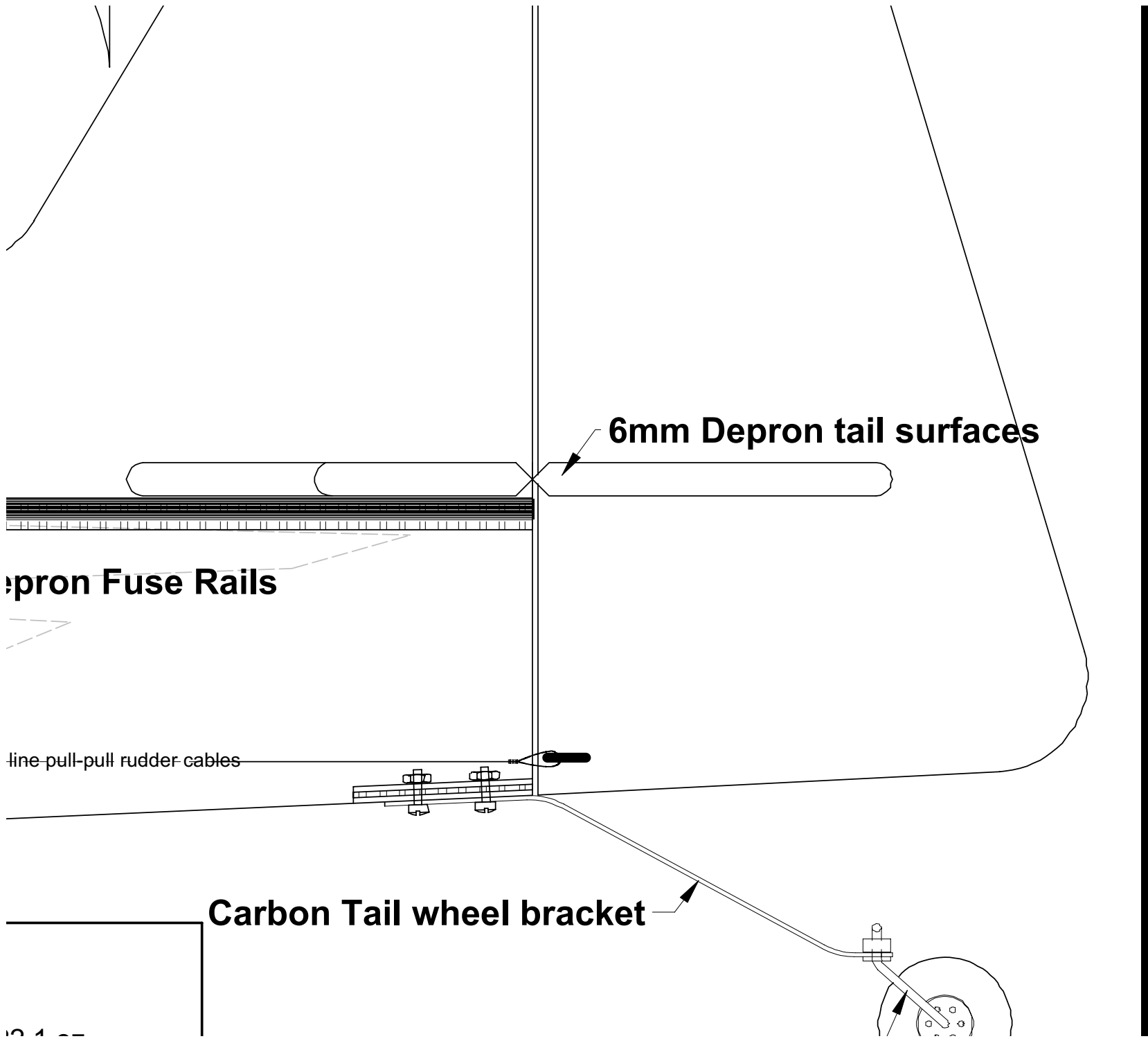




CG
CG

All hinging for control surfaces can be packing tape or actual hinges. I prefer robart hinge points epoxied in place for the added longevity and control freeness.



Depron Fuse Rails

6mm Depron tail surfaces

line-pull-pull rudder cables

Carbon Tail wheel bracket

- 2.1 oz.
- 18.6 oz.
- 38.5 oz.
- 20.6 oz.
- 27.7 oz.
- 7 oz.
- oz.
- z.
- .
- .
- oz.
- 2.8 oz.

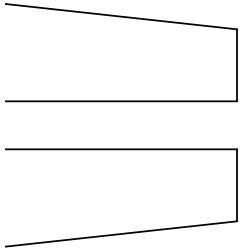
- 20.5 oz.
- 18.5 oz.
- s 26.4 oz.
- nps 25.2 oz.
- s 17.8 oz.
- amps 29.3 oz.
- nps 32.2 oz.
- ! amps 38.1 oz.

**1/16" wire wheel axel/steering arm
(Bend 90 deg. at the top to form
a control arm. Use clamp on ball
link to attach to rudder control horn)**



**Mount Battery Pack
with 1" Velcro strap.
Also use adhesive
Velcro on the side of
fuselage and back of
pack to secure in
place.**

Turbo Raven 3D

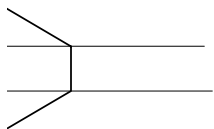


Weight	10.5-15.5 oz.
Power	24-39 oz.
Radio	4-5 Chanel
Area	295.4 in²
Loading	5.4-7.3 oz/ft²
WWW.3DFOAMY.COM	

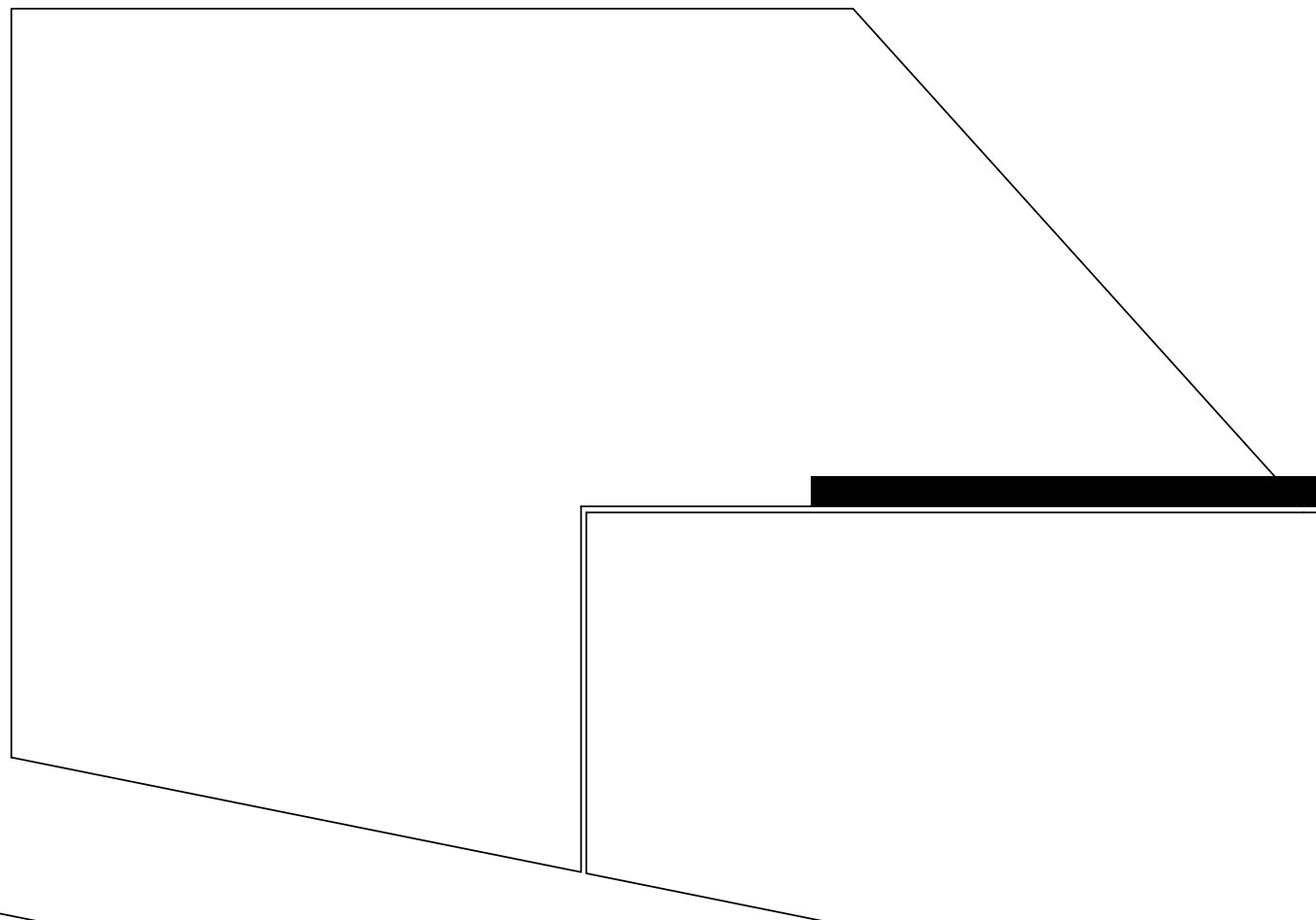
OAMY

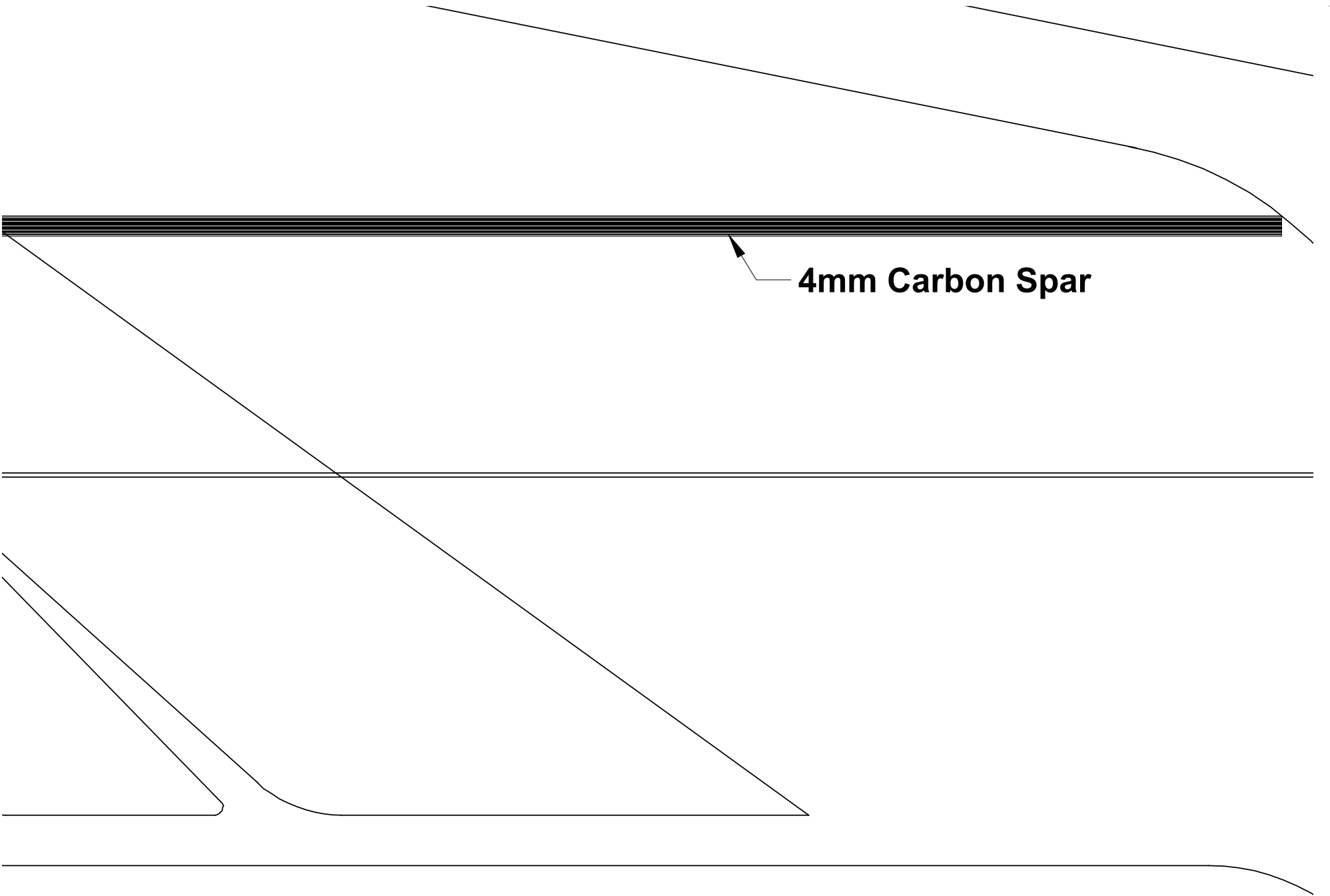
Copyright © 2004 3DFoamy.com
All rights reserved.
Designed and Drawn by Levi Jordan
Updated: 03/4/04.

om 1/32"
e can lid.



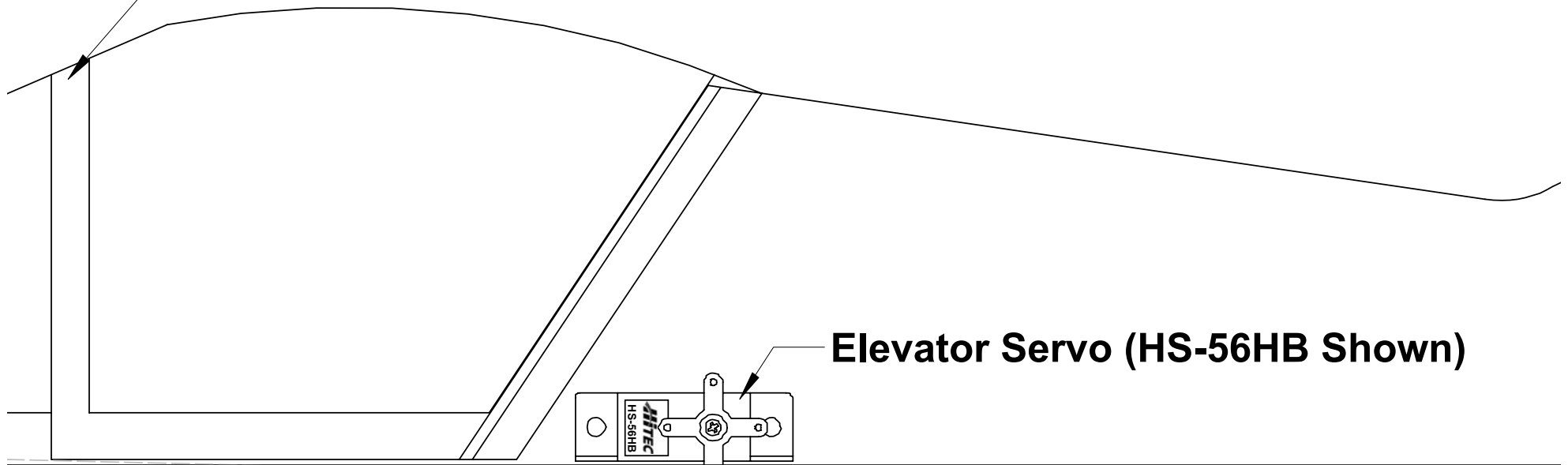
Pull





4mm Carbon Spar

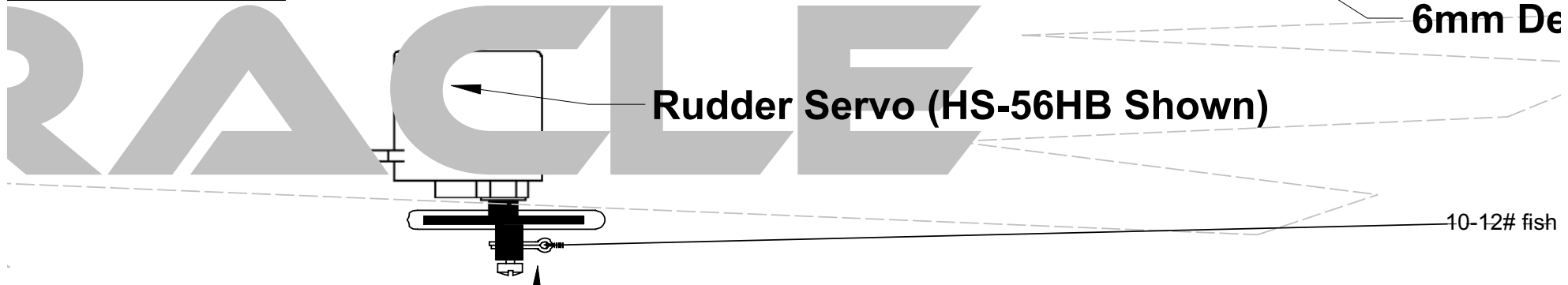
Canopy drawings for details only.



Elevator Servo (HS-56HB Shown)



6mm De



Rudder Servo (HS-56HB Shown)

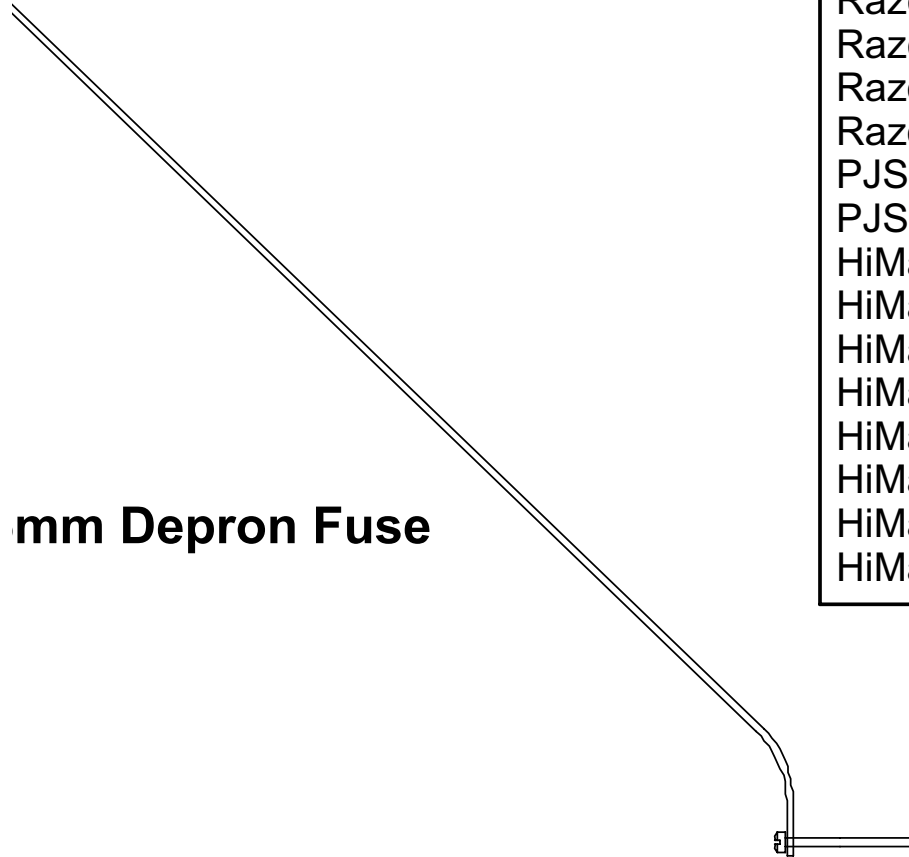
Use Cotterpin to adjust tension on pull-pull system. using Dubro EZ Conectors

10-12# fish

Motor/Battery Info

Motor	Gearing	Prop	Battery	Amp Draw	Thrust
GWS EPS350C DS	(6.6:1)	GWS 12x6	2s1p Lipo	9.5	17.1 oz.
GWS EPS350C DS	(6.6:1)	GWS 11x4.7	3s1p Lipo	11.5	24.3 oz.
Hacker B30 200	4:1 Planetary	APC 11x4.7	3s1p LiPo	11	amps 2

Molded Carbon Gear Legs

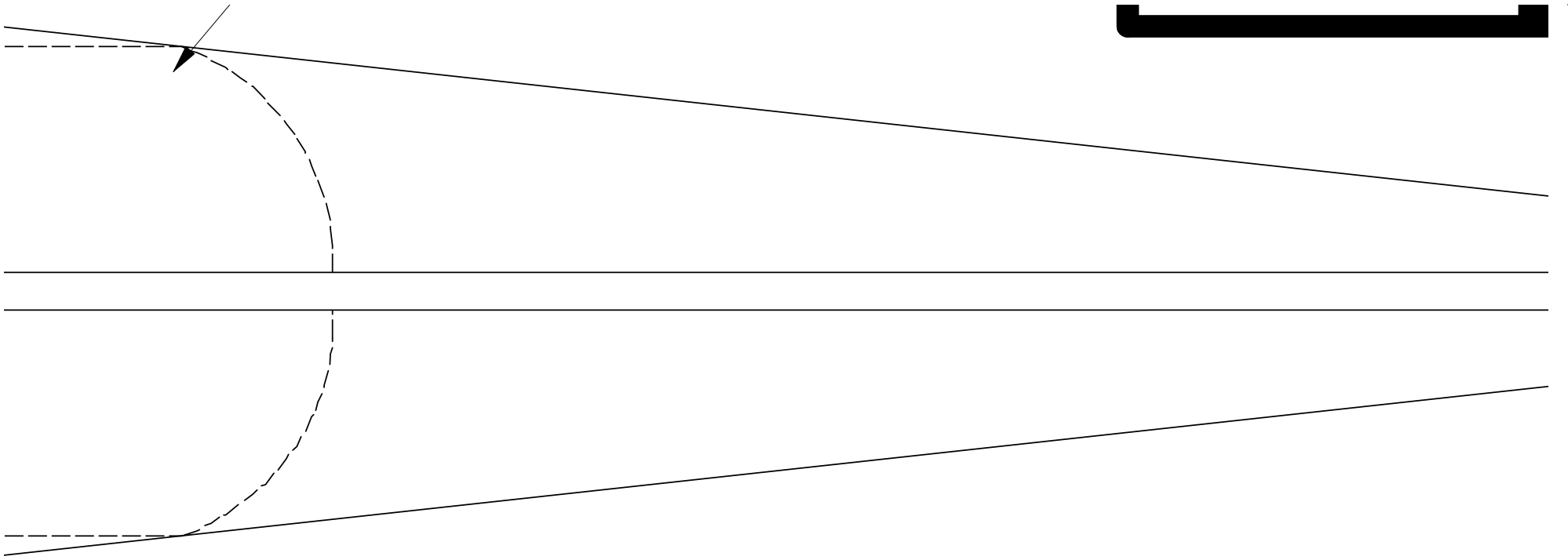


mm Depron Fuse

Painted Canopy Area

Hacker B20-20S 4:1 Planetary APC 11x4.7 3s1p LiPo 11 amps 26 oz
Hacker B20-31S 4:1 Planetary APC 11x4.7 3s1p LiPo 7.7 amps 21 oz
Hacker B20-15L 4:1 Planetary APC 11x4.7 3s2p LiPo 19.5 amps 36 oz
Hacker B20-15L 4:1 Planetary APC 11x4.7 2s1p LiPo 10.8 amps 24 oz
Hacker B20-18L 4:1 Planetary APC 11x4.7 3s1p LiPo 11.7 amps 26 oz
Hacker B20-18L 4:1 Planetary APC 12x6 3s2p LiPo 19 amps 36 oz
Razor RZ300 GWS/5.3:1 GWS 11x4.7 2s1p LiPo 8.8 amps 15.7 oz
Razor RZ300 GWS/5.3:1 GWS 12x6 2s1p LiPo 9.9 amps 18.5 oz
Razor RZ300 GWS/6.6:1 GWS 11x4.7 3s1p LiPo 12 amps 26 oz
Razor RZ350 GWS/6.6:1 GWS 12x6 3s1p LiPo 12.4 amps 27 oz
Razor RZ350 GWS/6.6:1 GWS 11x4.7 3s1p LiPo 8.7 amps 21.2 oz
Razor MicroHeli v2 GWS/6.6:1 GWS 12x6 3s1p LiPo 8.9 amps 21.2 oz
PJS 3D 500 Direct APC 10x4.7 3s2p LiPo 16.4 amps 21.9 oz
PJS 3D 550 Direct APC 10x4.7 3s2p LiPo 13.8 amps 20.7 oz
HiMax HA2015-3600 GWS/5.3:1 GWS 12x6 3s1p LiPo 8.7 amps 21.2 oz
HiMax HA2015-3600 GWS/6.6:1 GWS 12x6 3s1p LiPo 6.5 amps 15.7 oz
HiMax HA2015-4100 GWS/6.6:1 GWS 12x6 3s1p LiPo 11.2 amp 24 oz
HiMax HA2015-4100 GWS/5.3:1 GWS 11x4.7 3s1p LiPo 11.6 amp 26 oz
HiMax HA2015-5400 GWS/6.6:1 GWS 12x6 2s1p LiPo 10.2 amp 24 oz
HiMax HA2025-3236 3.6:1 Planetary APC 11x4.7 3s2p LiPo 14 amp 31 oz
HiMax HA2025-3236 3.6:1 Planetary APC 12x6 3s2p LiPo 17 amp 36 oz
HiMax HA2025-4236 4.3:1 Planetary APC 11x4.7 3s2p Lipo 20.2 amp 44 oz

Specs:

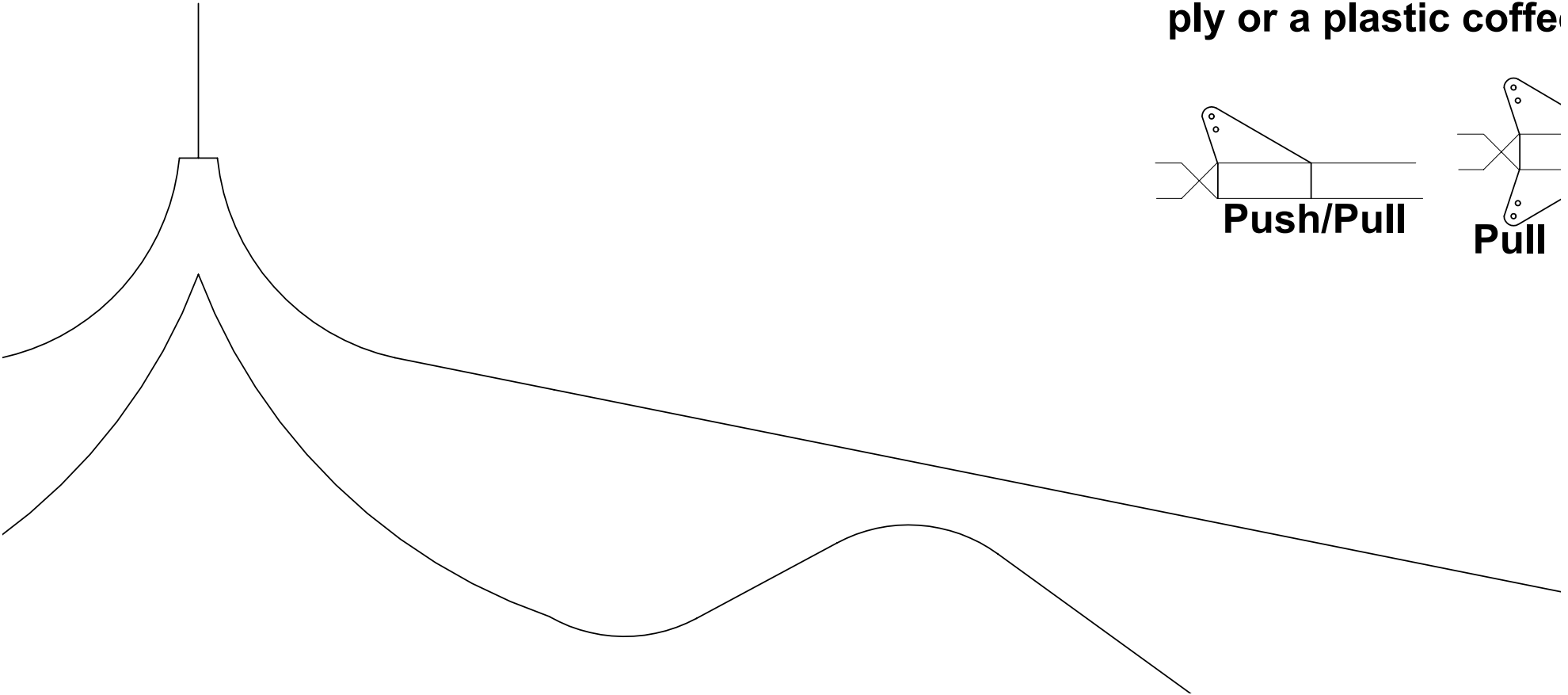


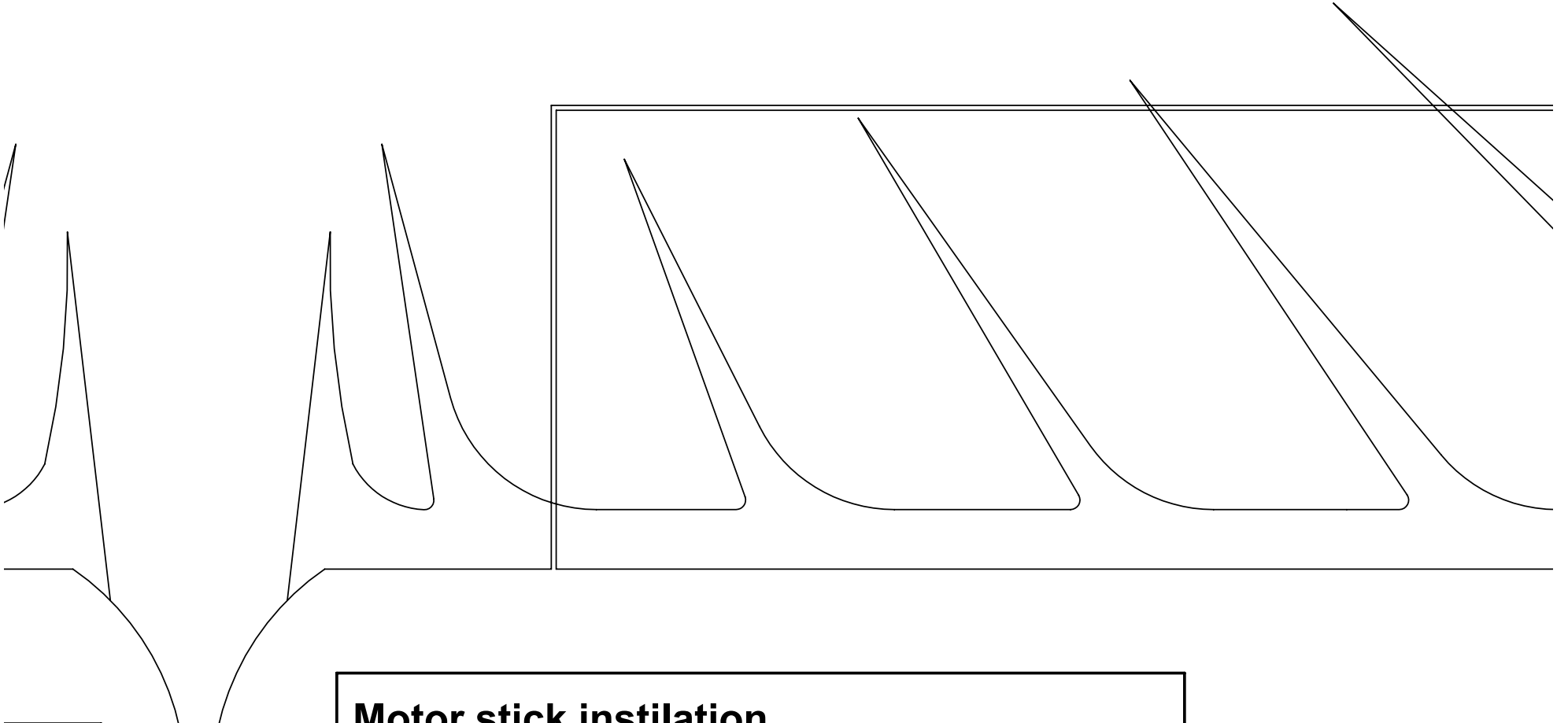
3D F





**Cut Control horns for
ply or a plastic coffee**

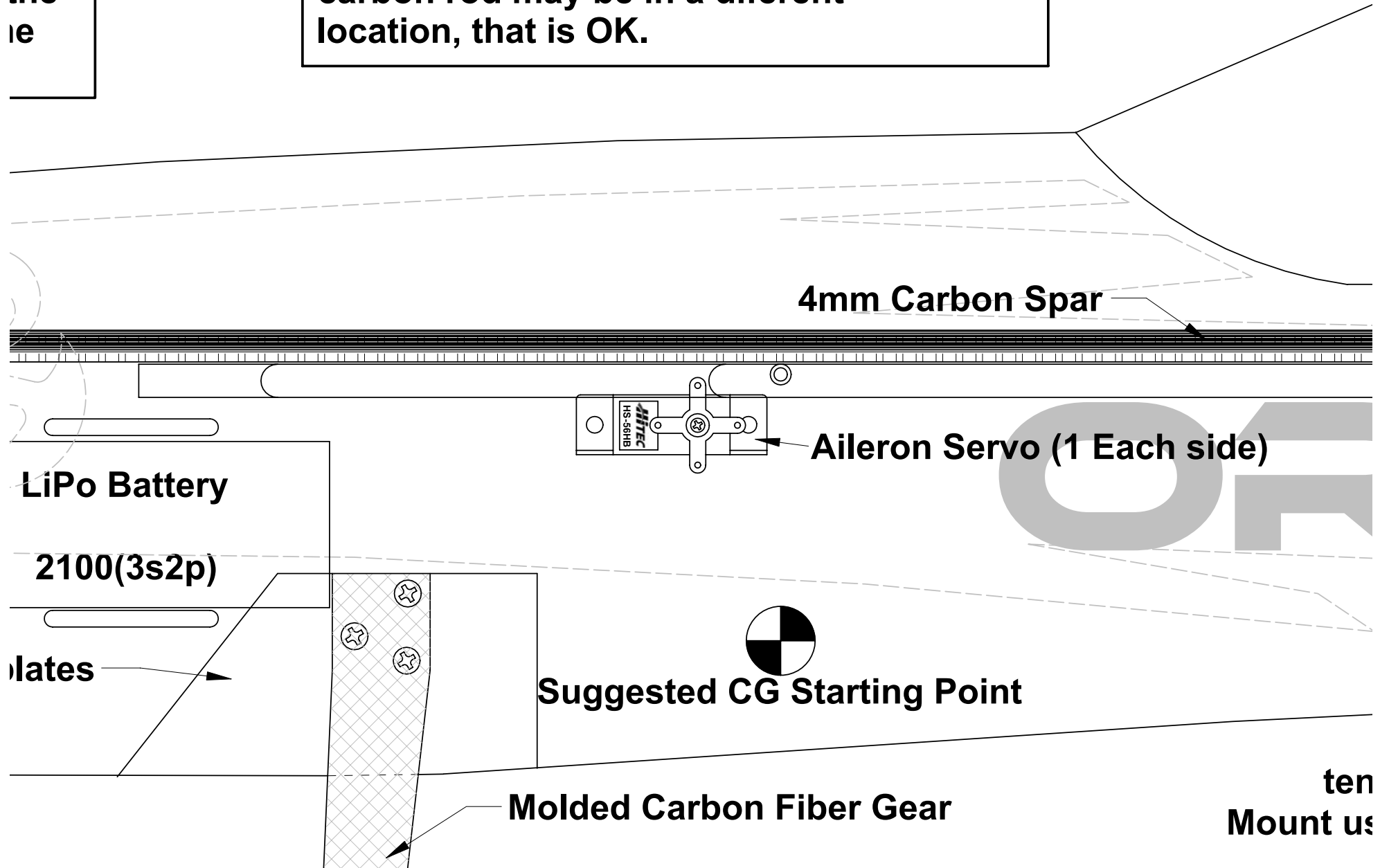


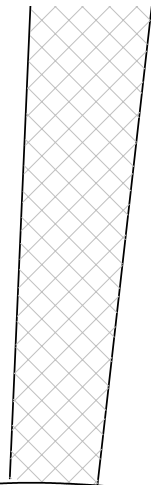


Motor stick instilation

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MOTOR STICK INSTALLATION:
You will need to adjust the position of the Carbon rod and motor mount for your motor/gearbox combination. The carbon rod may be in a different location, that is OK.

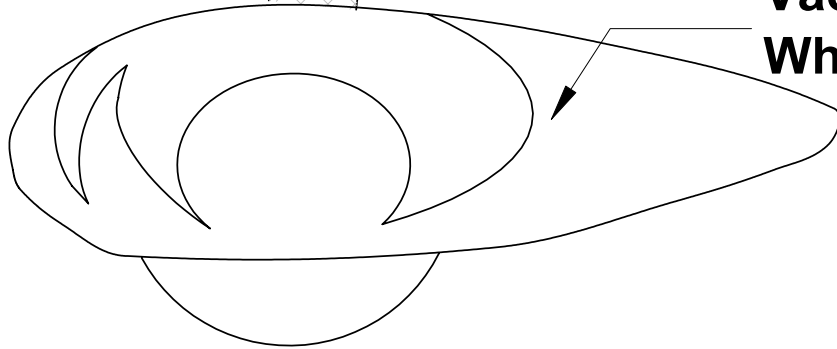




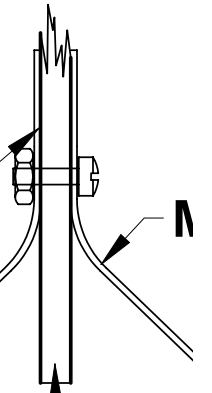
1/64" ply doublers on both sides of fuselage (see side view)

Vacuum Formed Wheel Pants

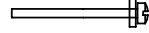
vator Joiner

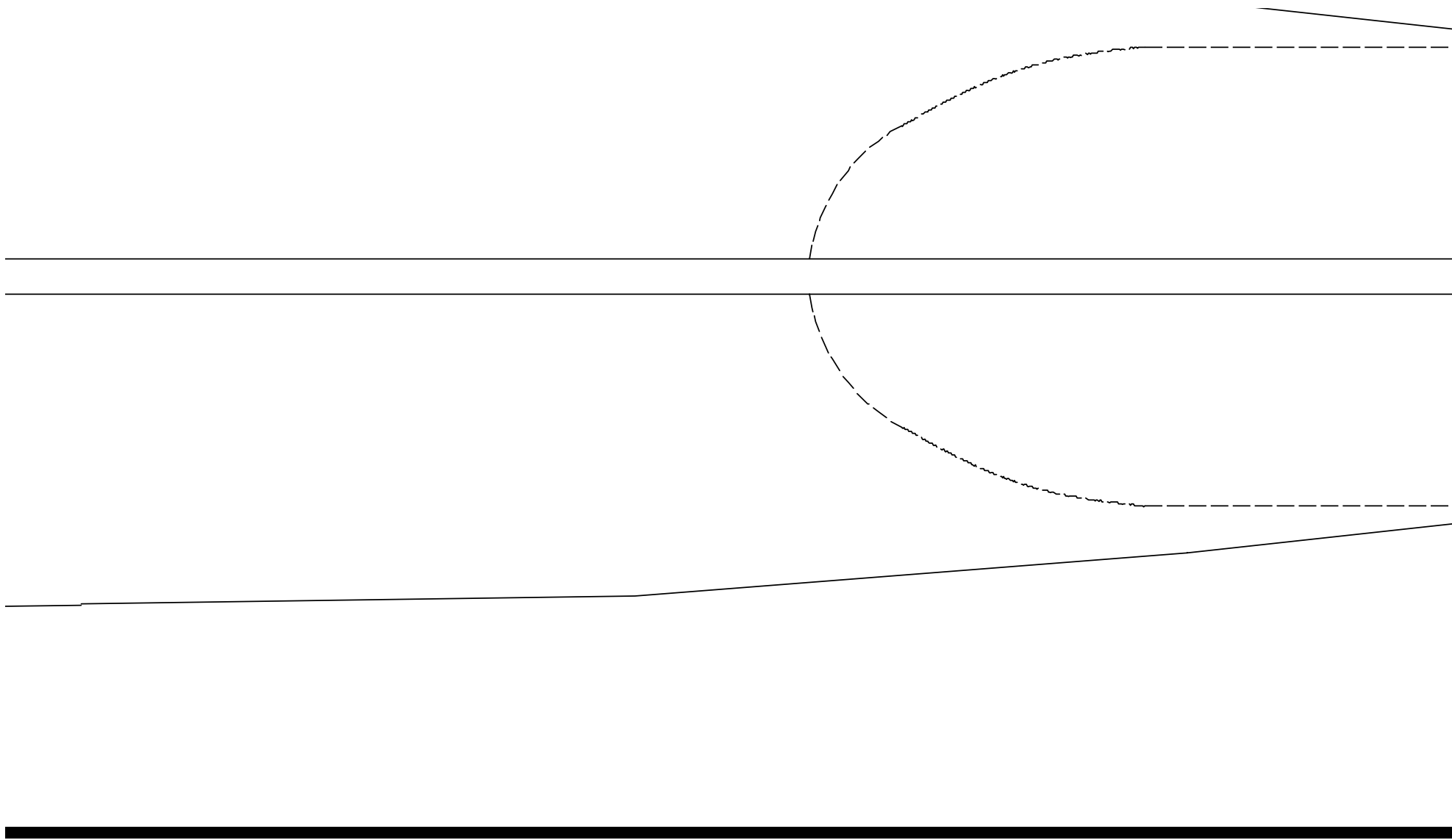


1.75" DIA



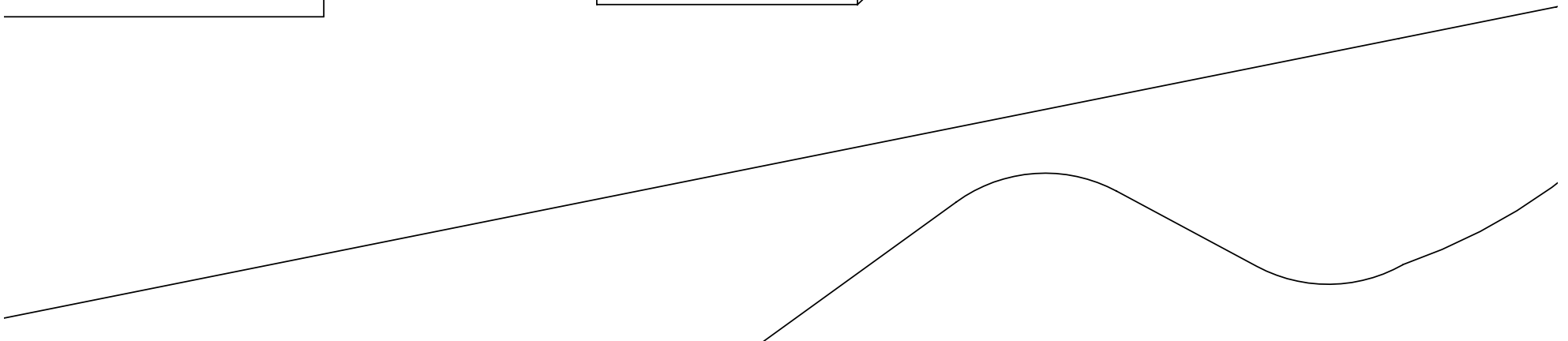
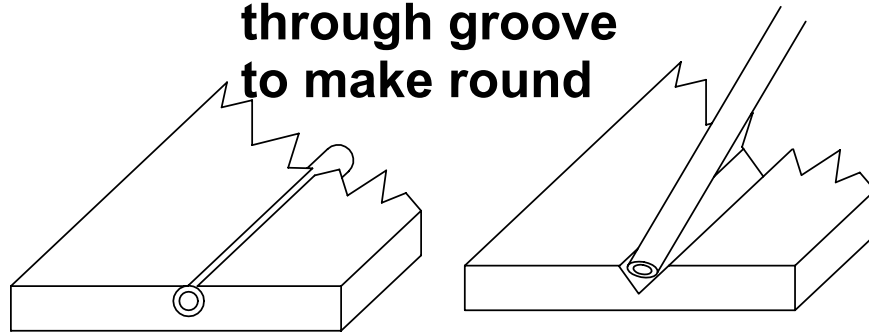
6

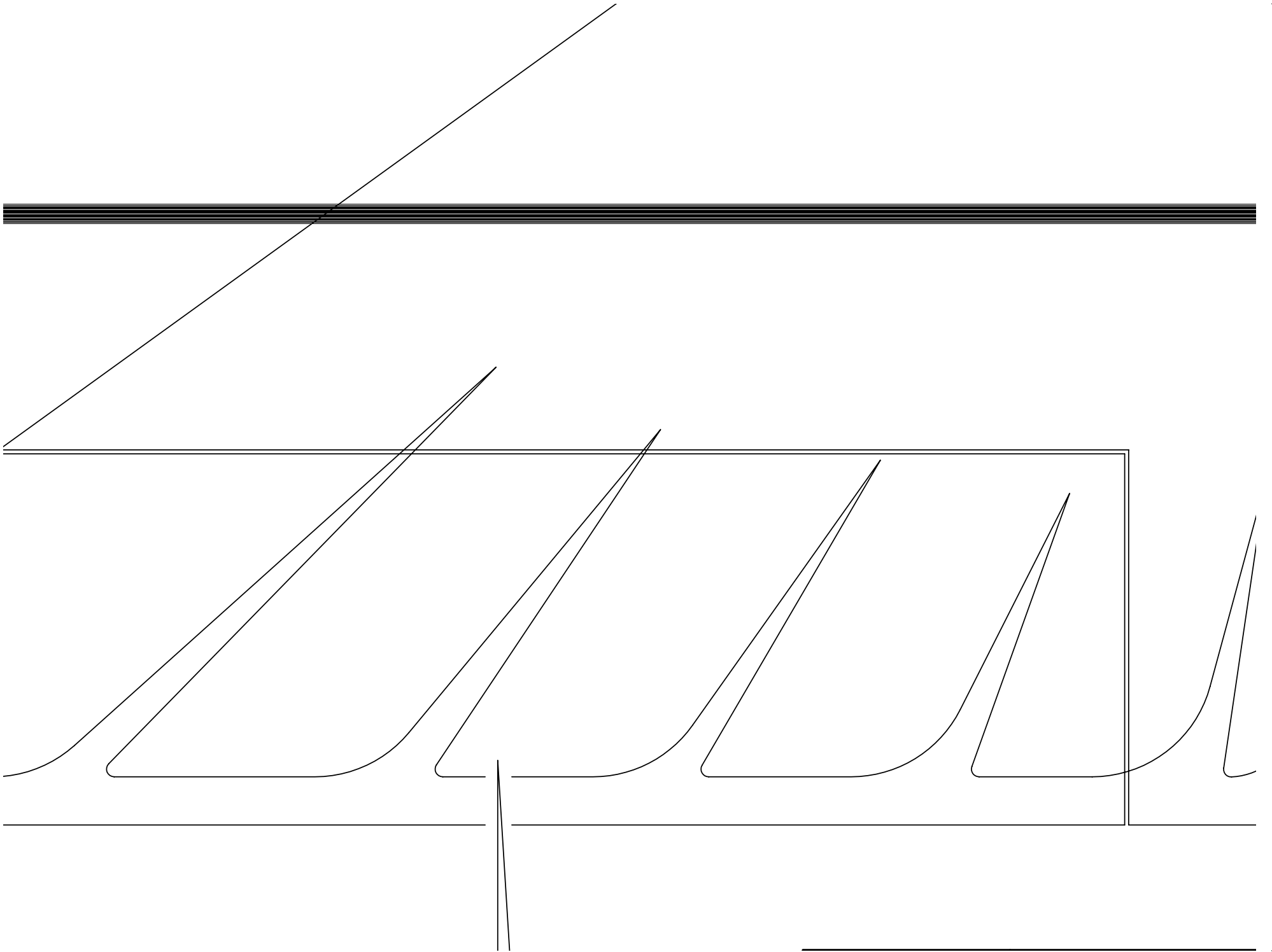




Consider leaving
long enough, but
be sure to use
main parts...5 min
will crack under

Cut a "V" groove
in foam for
spars. Pull spar
through groove
to make round





GWS 12-6 Slowflyer Prop

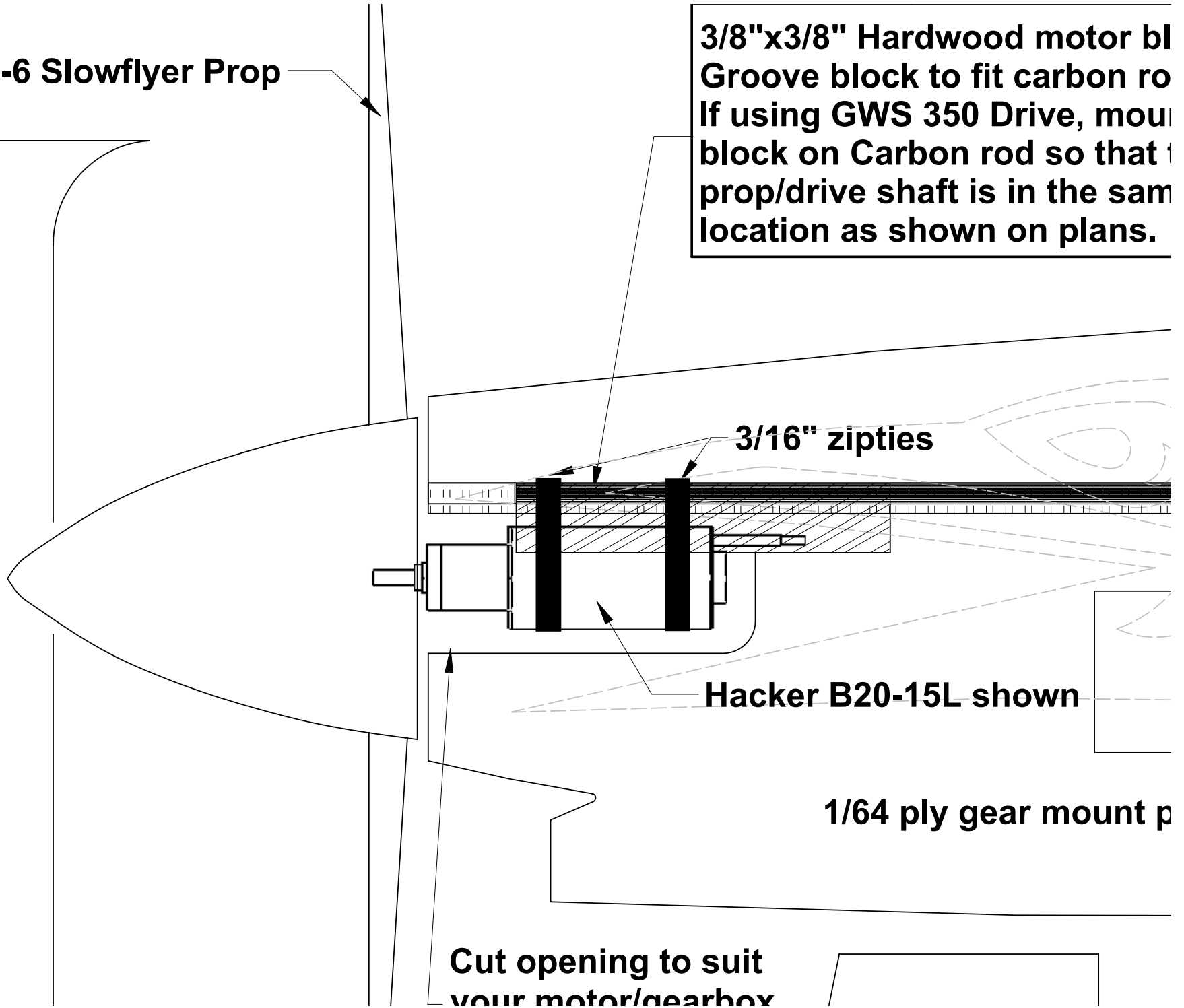
**3/8"x3/8" Hardwood motor block
Groove block to fit carbon rod
If using GWS 350 Drive, mount
block on Carbon rod so that
prop/drive shaft is in the same
location as shown on plans.**

3/16" zipties

Hacker B20-15L shown

1/64 ply gear mount p

**Cut opening to suit
your motor/gearbox**

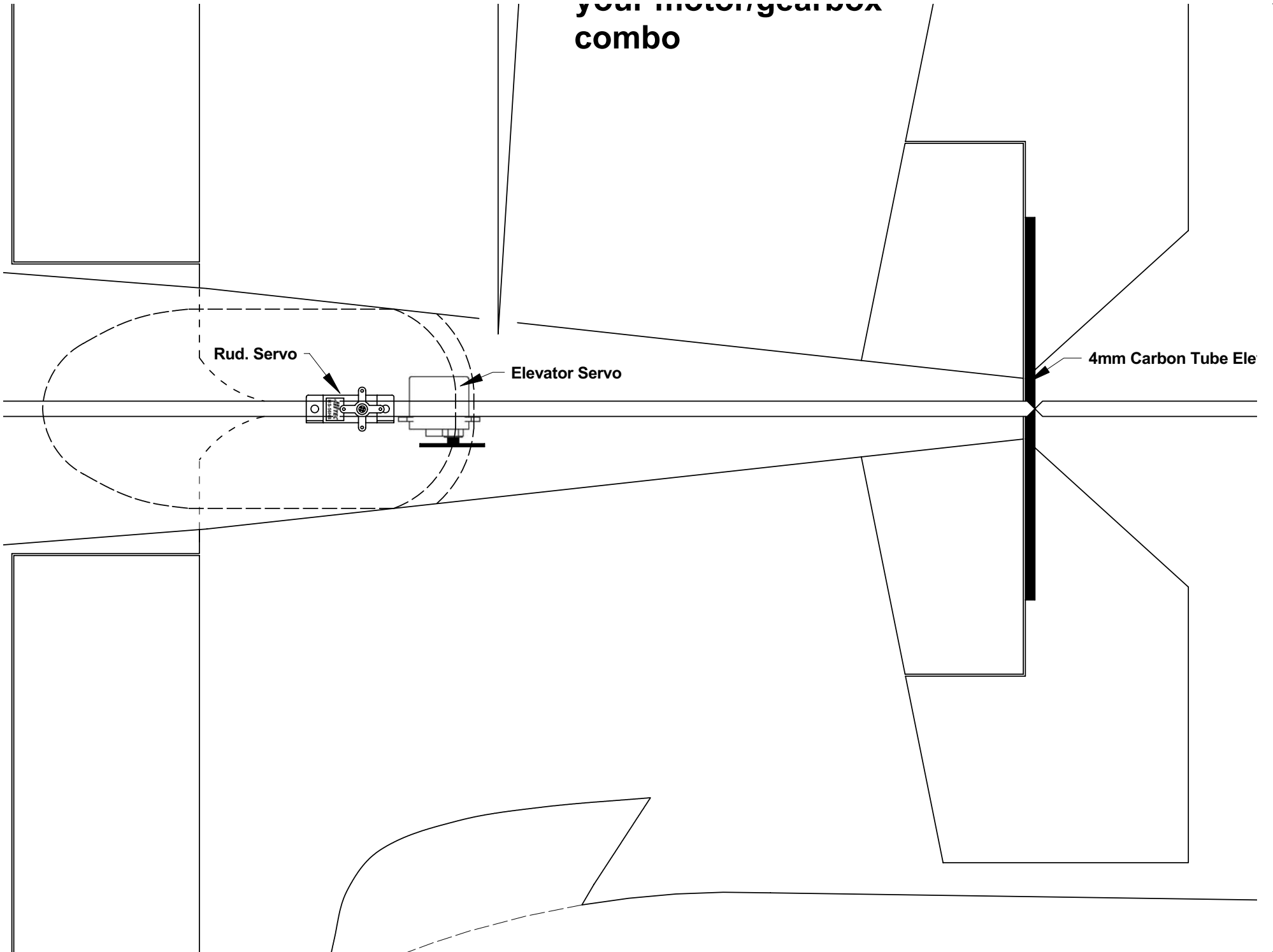


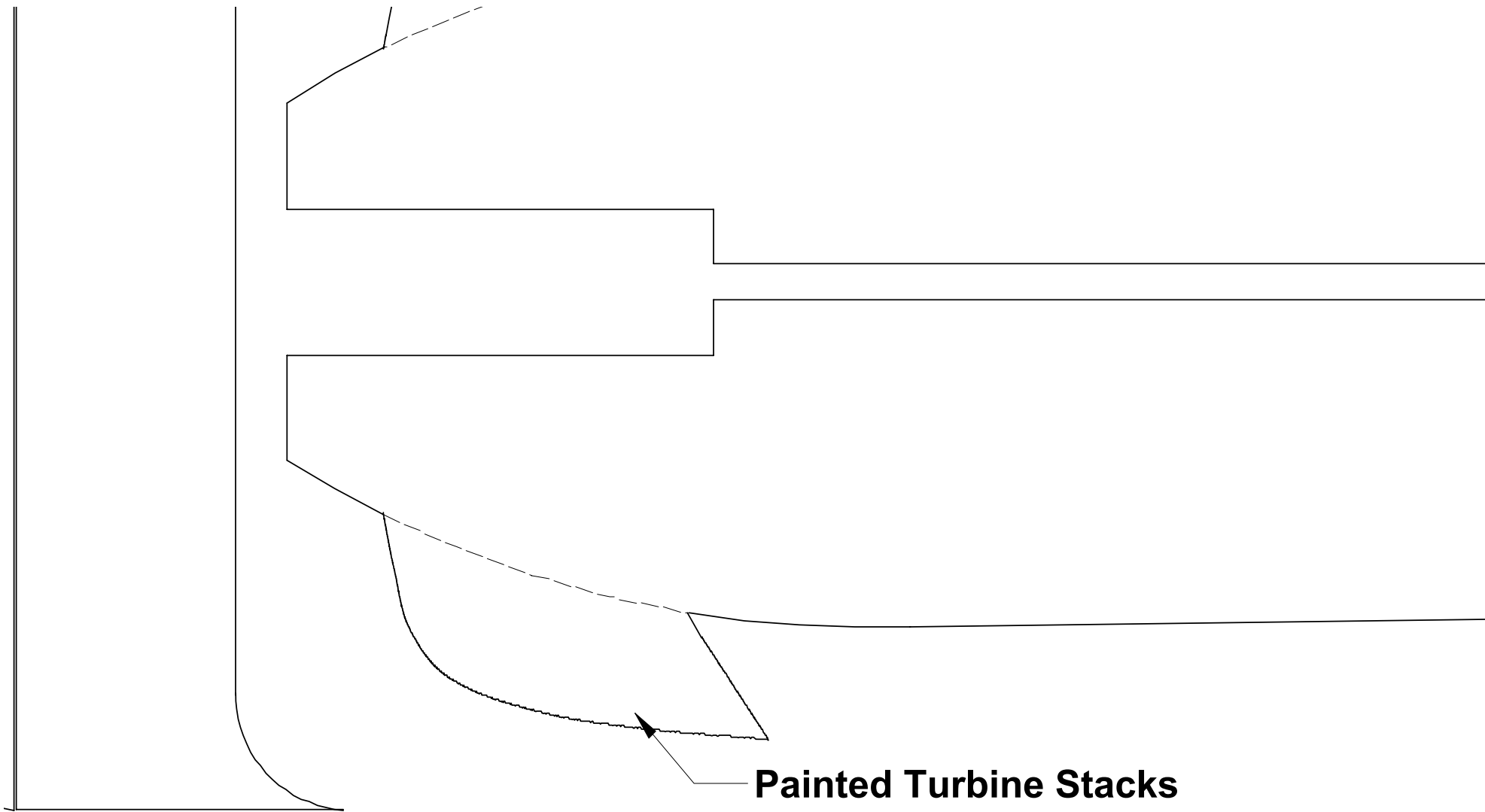
**your motor/gearbox
combo**

Rud. Servo

Elevator Servo

4mm Carbon Tube Ele

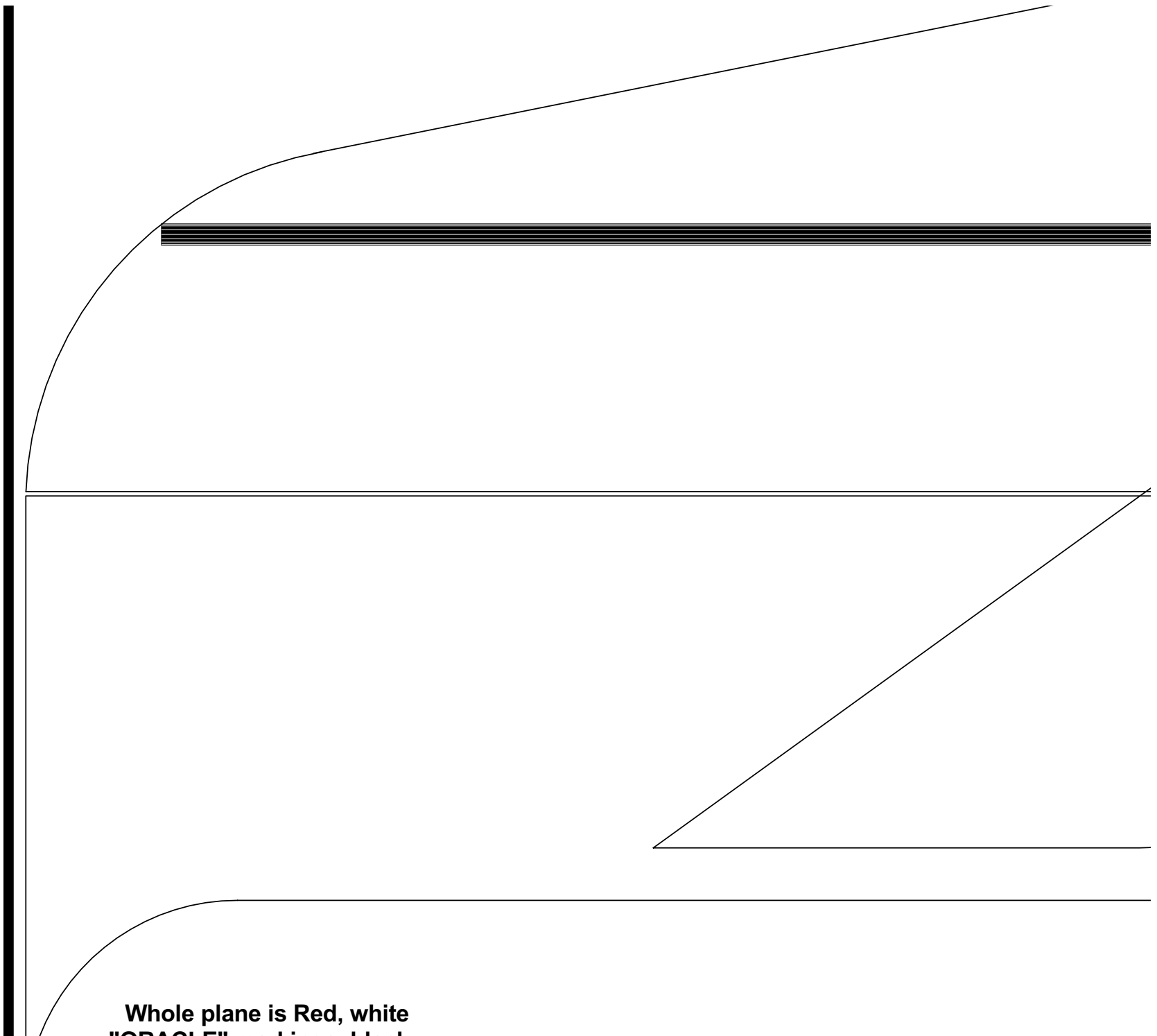




Painted Turbine Stacks

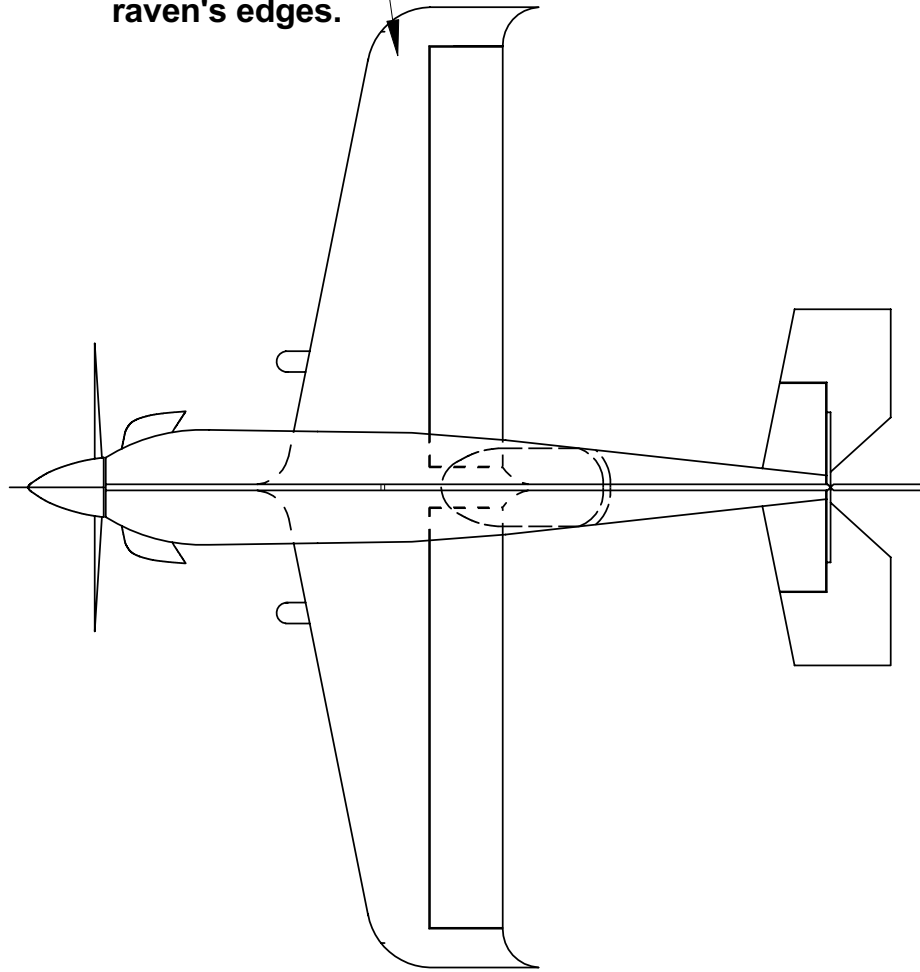
Notes on the fuse:

If you are going for all out light weight, cut out the fuse spar. The side plates are strong the plane will not be quite as tough. Make 15-30 minute epoxy or shoogoo for the main spar and foam CA are not strong enough, and won't hold the torque.

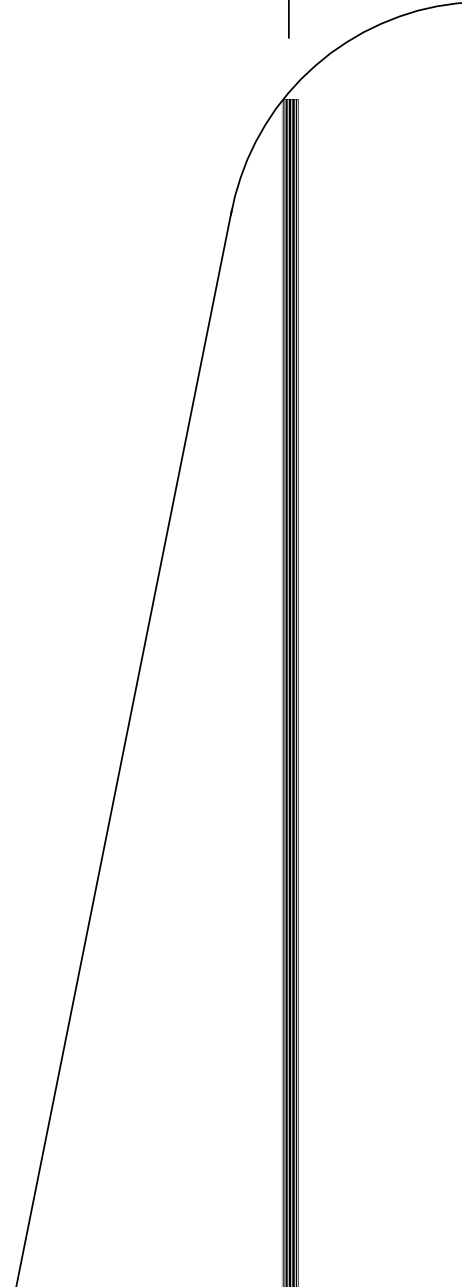


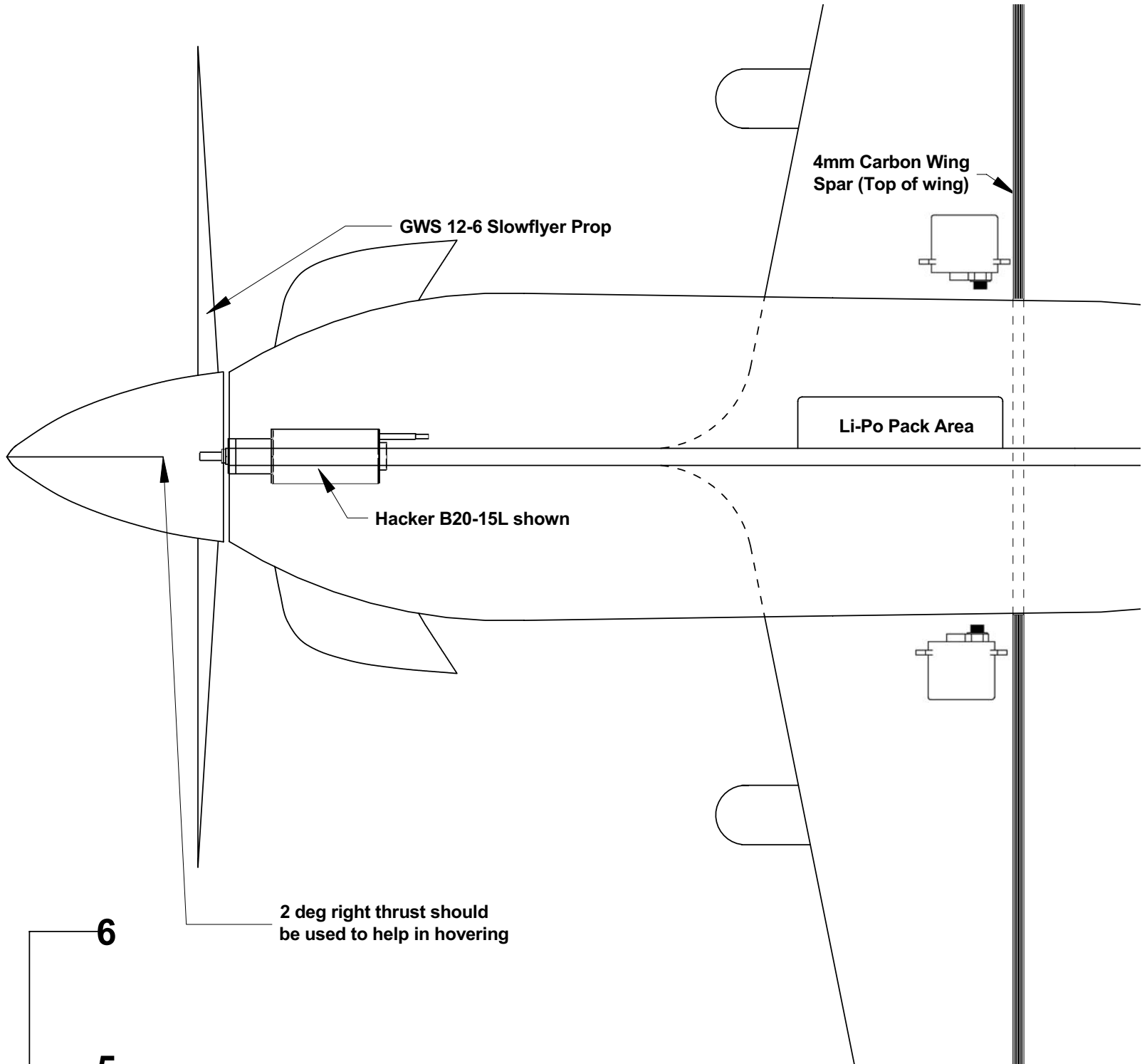
Whole plane is Red, white
"ORACLE" markings black

ORACLE markings, black raven, with yellow trim on raven's edges.



CG





4mm Carbon Wing Spar (Top of wing)

GWS 12-6 Slowflyer Prop

Li-Po Pack Area

Hacker B20-15L shown

2 deg right thrust should be used to help in hovering

6

