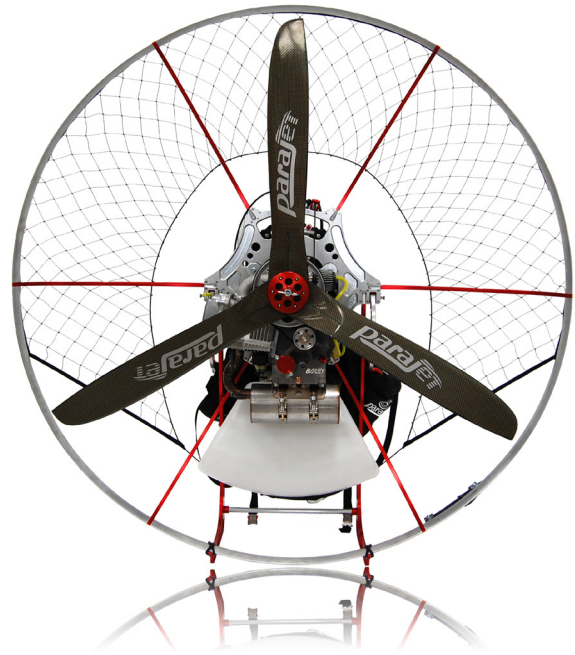


# Welcome to Zenith

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## Pilots Manual



# Welcome to Zenith



# Contents

Congratulations on the purchase of your Parajet Zenith, the next generation paramotor. We guarantee you have made an excellent choice and wish you many enjoyable flights and just as many safe landings with your Zenith.

Our power units have been designed and produced in our UK factory to exacting standards. Each Zenith is carefully inspected before leaving the factory.

Should the purchaser modify the Zenith so as to change its original specifications, the manufacturer’s warranty becomes invalid. Please read and be sure that you thoroughly understand this manual before flying the Zenith. If there is any terminology or anything else in this manual which you do not understand, please contact your dealer for clarification.



## IMPORTANT WARNING

**YOU MUST READ THIS MANUAL AND AGREE TO THE CONDITIONS OF USE BEFORE USING YOUR PARAJET ZENITH.**



Bear in mind that you will use the Parajet Zenith and paraglider at your own risk. Due to the inherent risk in flying the Zenith or any motorized paraglider, no guarantee of any kind can be made against accidents, bodily injury and/or death. Be sure, therefore, to make all required checks on the power unit and paraglider before every flight. Never try to fly if you find any part of your Zenith damaged or suspect a malfunction.

**PLEASE NOTE:  
THIS MANUAL IS NOT A SUBSTITUTE FOR FLIGHT TRAINING.  
PROPER TRAINING IS ESSENTIAL.**

Use of the Zenith powered paraglider is at your own risk.

Page

4	Pre-Flight Checks
6	Flight Safety Precautions
7	Golden Rules for Safe Flying ... Important Reading!
8	Zenith Components
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11	Fitting the Swinging Arms
12	Fitting the Outer Ring and Mesh
14	Fitting the Fuel Tank
15	Fuel Lines and Locking Netting
17	Fitting the Stand
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# Pre-flight Checks



These checks should be carried out after every 5-10 hours of flying.

1	Frame/ Prop Guard	Check for loose bolts/nuts or cracks
2	Harness	Check all belts, material for tears, worn or burnt parts of harness.
3	Propeller	Check for cracks, chips in blades; sufficient prop and guard clearance; loose or missing prop bolts/nuts.
4	Fuel Tank	Remove cap, check inside and outside for cracks and holes. Check bolts are tight on top of tank. Check fuel line for scuffs or kinks. Remove dirt or change filter if blockage is discovered.
5	Crankshaft	Turn prop slowly, listen for compression and check for "grinding metal" sound
6	Reduction Unit (where applicable depending on your choice of engine)	Check for loose bolts and excess play in propeller shaft bearings.
7	Reduction Belt (where applicable depending on your choice of engine)	Check for proper tracking, belt squarely in Pulley track. Look for cracks or worn spots on belt.
8	Cylinder Head & Crank case	Check for cracks and oil leakage.
9	Spark Plug	Check gap clearance (0.8 mm ± 0.1). Check for burnt electrodes and carbon deposits (every 10 hours).
10	Throttle Lever	Throttle lever/cable move smoothly and return.
11	Kill Switch	Throttle lever/cable move smoothly and return.

# Pre-flight Checks

12	Starter Motor (where applicable depending on your choice of engine)	Pinion gear activates and returns. Grease if necessary.
13	Electrics	Check for broken wires and loose connections.
14	Battery Terminals (where applicable depending on your choice of engine)	Check for loose terminals, heat bubbles, corrosion etc.
15	Carburettor Settings	Check idling, and full power rpm settings. Adjust as directed by manufacturer.



Warning: Use of the Parajet Zenith is at your own risk.



The Parajet Zenith has a choice of engines from various manufacturers, with varying amounts of running-in having been performed prior to shipment, depending on each manufacturer's procedures. Please confirm this for your specific engine.

With all new engines it is important that excessive throttle is **not** used for at least the first 10 hours of flying. For example, do **not** depress the throttle fully for more than 30 seconds at a time. A well run in engine will outperform an engine that has been run at full power for long periods right from the start. You can potentially damage a new engine with excessive throttle.

The Zenith Paramotor unit is to be used only after having received adequate and proper training from a qualified motor paragliding instructor.

Max pilot weight for paramotor pilots flying a Parajet Zenith paramotor is 160kg.

The Zenith should only be used with canopies designed for motor paragliding.

Always conduct a check of all components before every flight.

Always wear a helmet, flight shoes and gloves when flying the Zenith.

Always stay clear of moving parts such as propellers, pulleys and belt.

Always stay clear of hot engine parts and muffler.

Do not fly low level over water, woodland, or potentially hazardous landing areas. Do not fly into controlled airspace or over built up areas, it essential always to consider a safe landing area should you experience an engine failure or loss of power.

Before starting the engine check the area is completely clear of people and shout ...

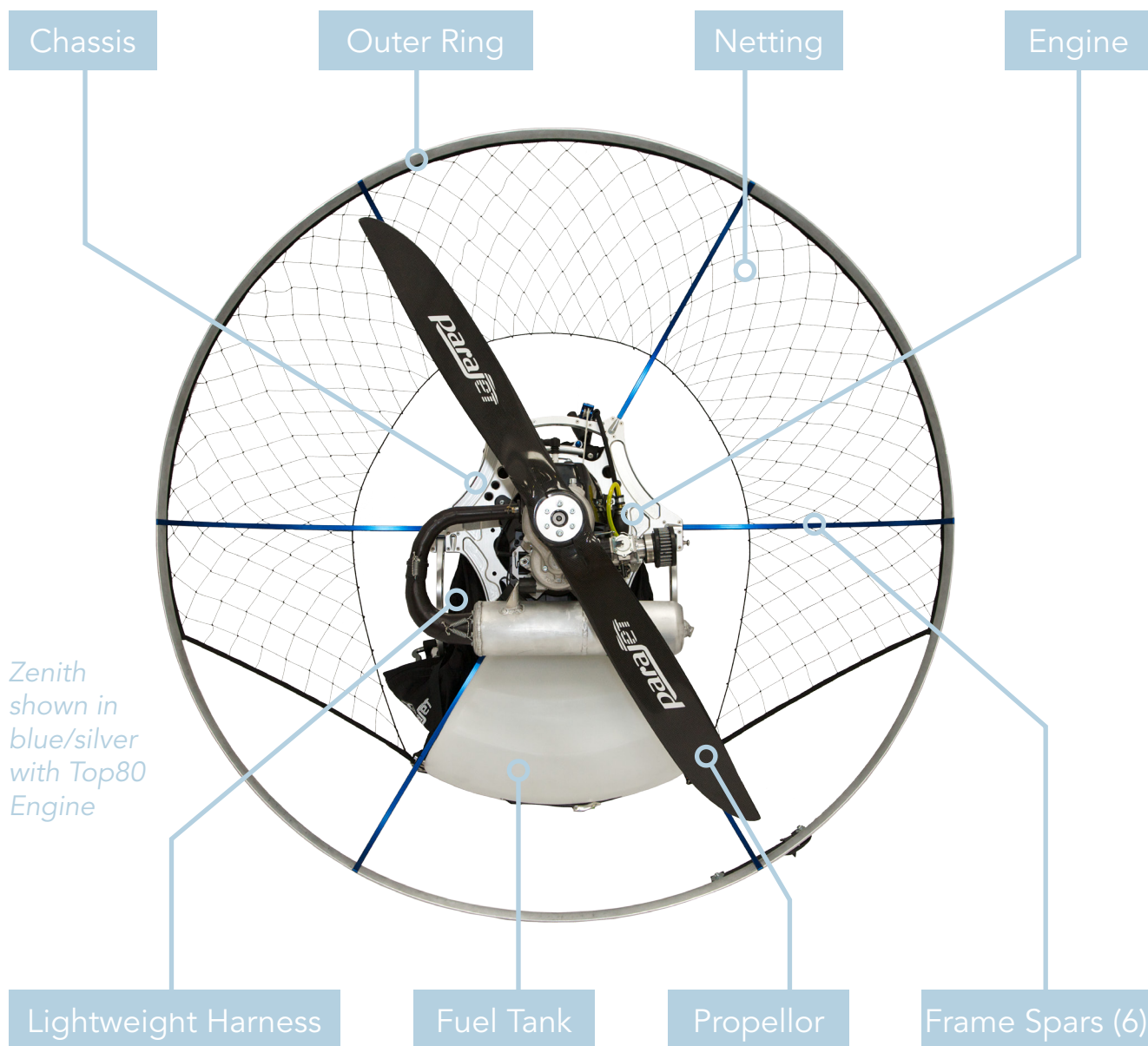


Always ensure that the power unit is switched off when not in use.

- 1 Never place your engine downwind of your wing.
- 2 Have you enough fuel to get there? Better too much than too little!
- 3 Check for any loose articles that could trail or fall into the propeller while flying and fasten them securely.
- 4 If you spot a problem, not matter how small, deal with it NOW!
- 5 Always put on and fasten your helmet before clipping into the harness.
- 6 Always carry out full pre-flight checks before launching.
- 7 Don't fly into danger – over water, trees, power lines, etc. where an engine failure will leave you in trouble.
- 8 Try not to fly in the turbulence of your own wake or that of others, especially at low altitude.
- 9 Except for collision avoidance, making a sharp turn against the torque effect during steep climbs can be dangerous, you may rapidly stall and enter a spin.
- 10 Avoid downwind low flying, it drastically reduces your options.
- 11 Be sensitive to mechanical problems early. A noticeable change in engine tone or a new vibration may spell trouble. Land and check it out!
- 12 Remember, not everyone enjoys your engine noise. Care must be taken when flying near livestock.
- 13 Never take-off towards areas of potential rotor, towards trees or buildings on the lee side of a hill.
- 14 Never touch any part of the propeller guard when the engine is running.
- 15 Always be aware of the weather, never fly if large cumulus clouds are brewing and never fly in the rain.
- 17 Never fly below the lee side of a hill, rotor is dangerous!!



# Zenith Components



## Pre-Assembly Check

Be sure to identify all components after unpacking your Zenith. If you have any questions or concerns please contact your dealer or Parajet immediately - Main enquiry Line: + 44 8700 116618

## Zenith Components:

- |                         |                                 |
|-------------------------|---------------------------------|
| 1 x Chassis & Engine    | 1 x Outer Ring & Netting        |
| 1 x Lightweight Harness | 8 x Frame Spars (inc. 2 spares) |
| 1 x Fuel Tank           | 1 x Propellor                   |



Detachable Stand

# Inserting the Frame Spars into the Chassis

The procedure for insertion and removal is identical for all six frame spars.

1

The chassis is supplied with your choice of engine fully fitted. Place the chassis and engine onto a solid, flat surface.

Align each spar with the corresponding slot within the chassis.



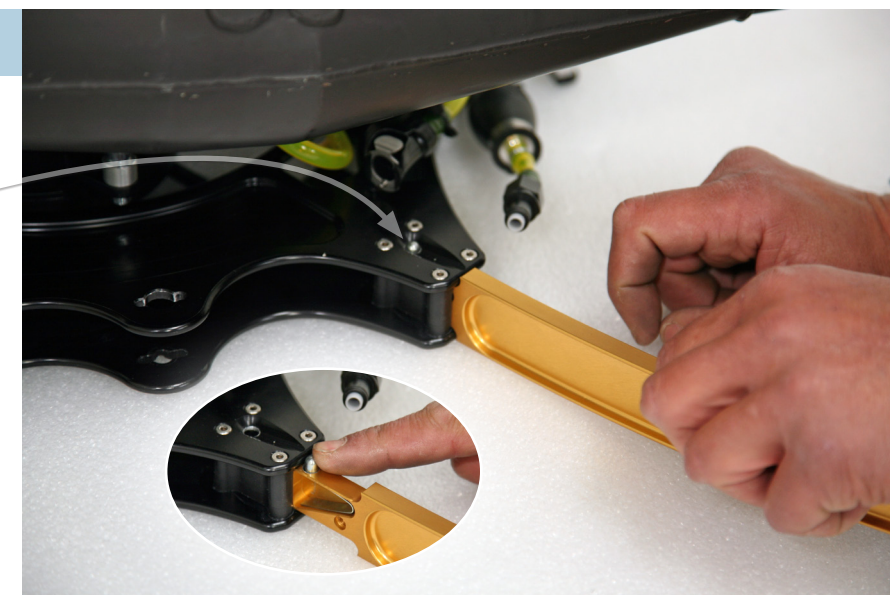
2

Press the locking pin and insert the spar into its slot.

Push the spar until the pin locates into place.

The pin will visibly locate into its hole.

Repeat this procedure for all six frame spars.



3

Note: Two of the spars have a clip mounted on a stainless steel dowel. These are for attaching the harness and fuel tank later - These spars are to be located in the bottom spar slots on the chassis.



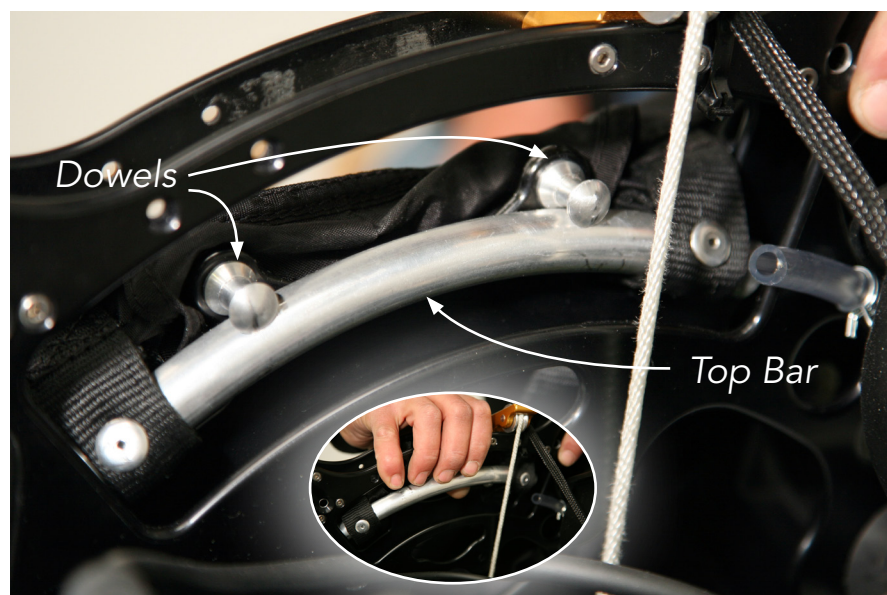


## Fitting the Lightweight Harness



## Fitting the Swinging Arms into the Chassis

The procedure for insertion and removal is identical for all six frame spars.



1

Insert the curved harness bar through the top of the chassis and over the two locating dowels. It will locate underneath the dowels.



2

Clip the female quick-release clip on each side of the lower harness into the male clip on the lower spars.



3

To release the clips squeeze both red tabs and pull apart.

1

The harness and swinging arms are supplied assembled.

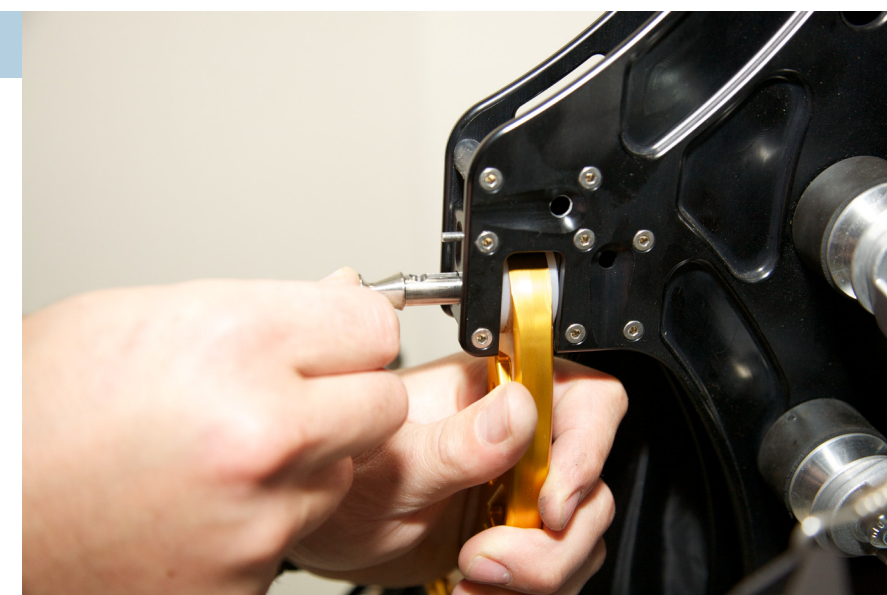
Insert the swinging arm into the locating slot on the chassis.



2

Align the hole with the pivot pin and push the pin fully into place.

Slide the safety locking pin to lock.



3

The swinging arm is locked in place and cannot be released without sliding the safety locking pin.



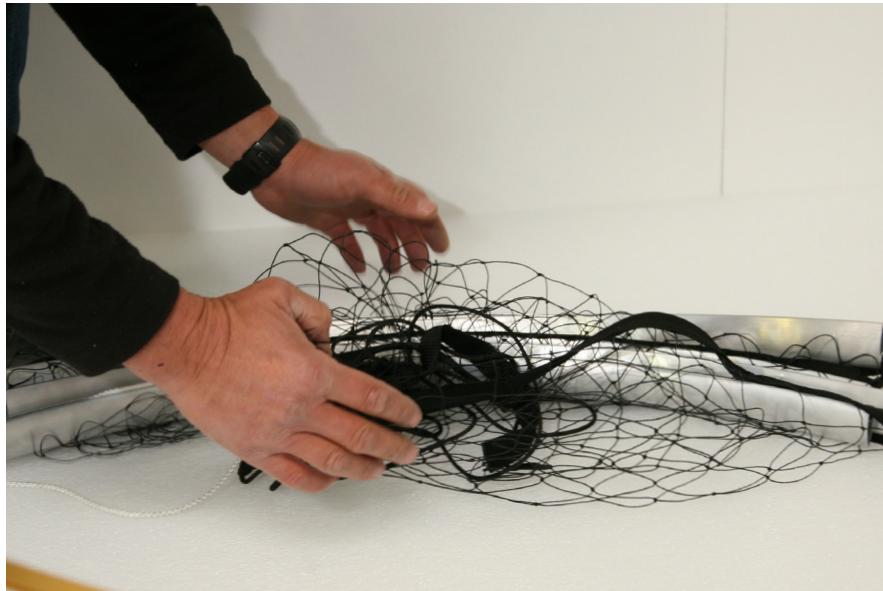


## Fitting the Outer Ring & Mesh



## Fitting the Outer Ring & Mesh

The procedure for insertion and removal is identical for all six spars.



1

The outer ring and netting are supplied as a complete set.



2

The ring sections fit onto nylon inserts on the ends of each spar.

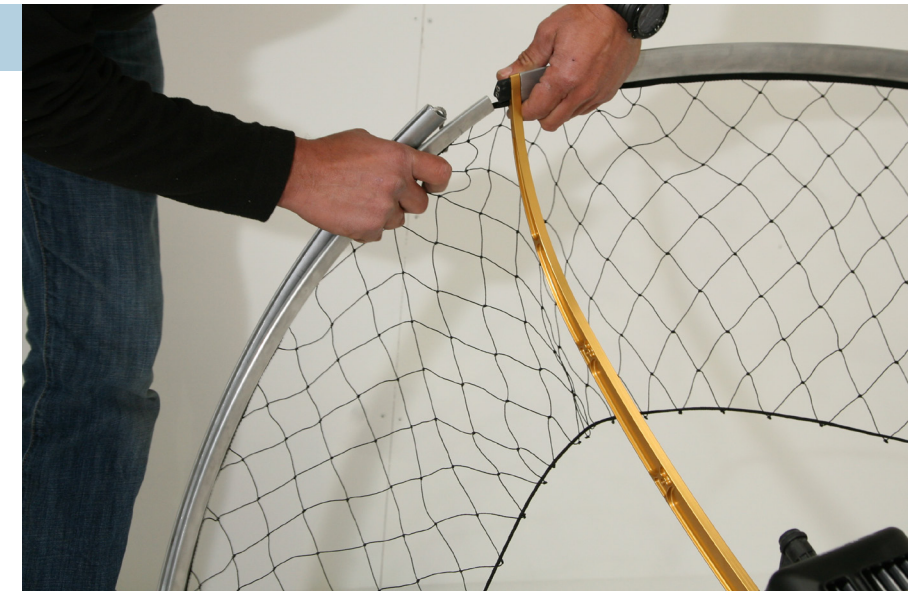


3

Build the ring, beginning with the upper ring section ...

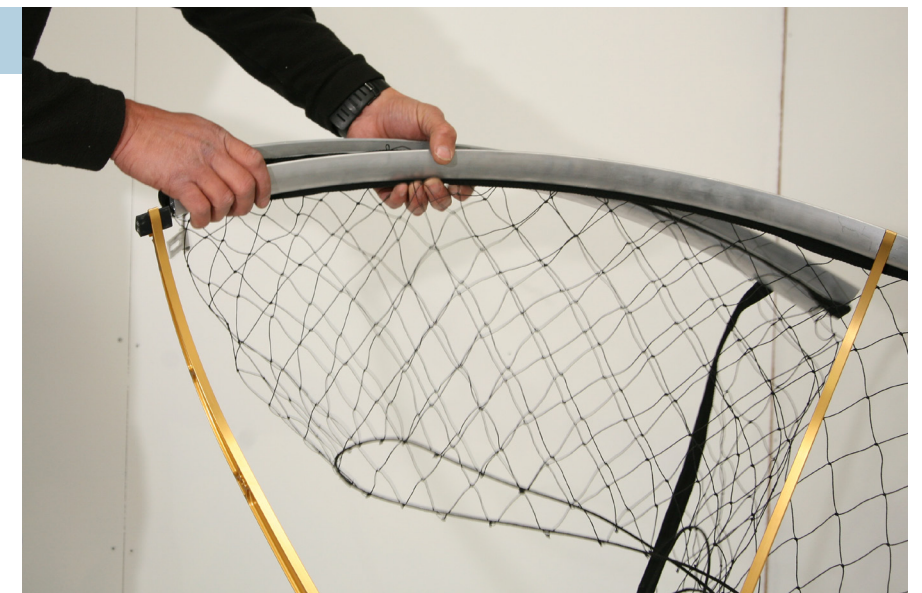
4

... followed by the four side sections.



5

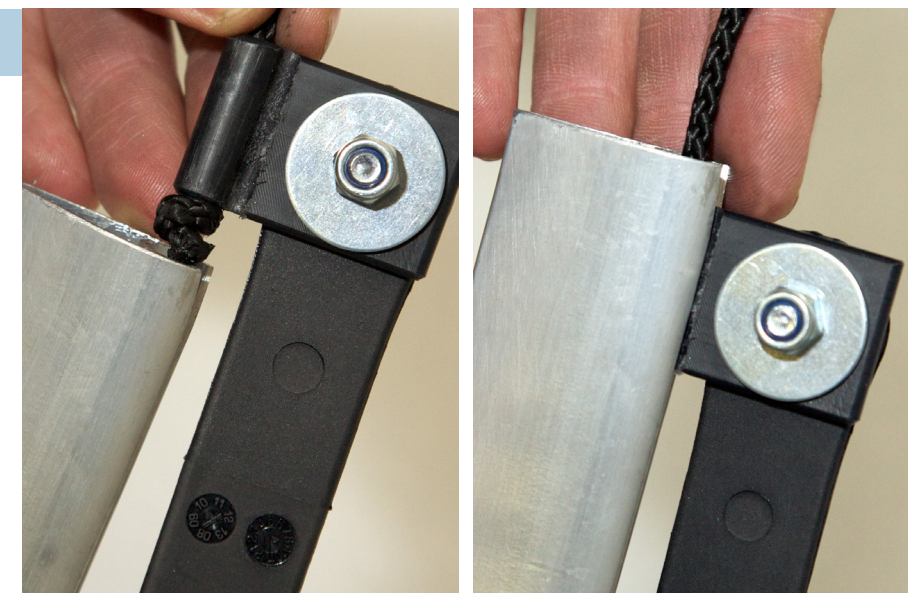
The netting will form a curve around the spars as the ring is built.



6

Before attaching the lower ring/spar connections, insert the net slide-lugs into the ring.

The fuel tank will need to be inserted next, see next page.





## Fitting the Fuel Tank



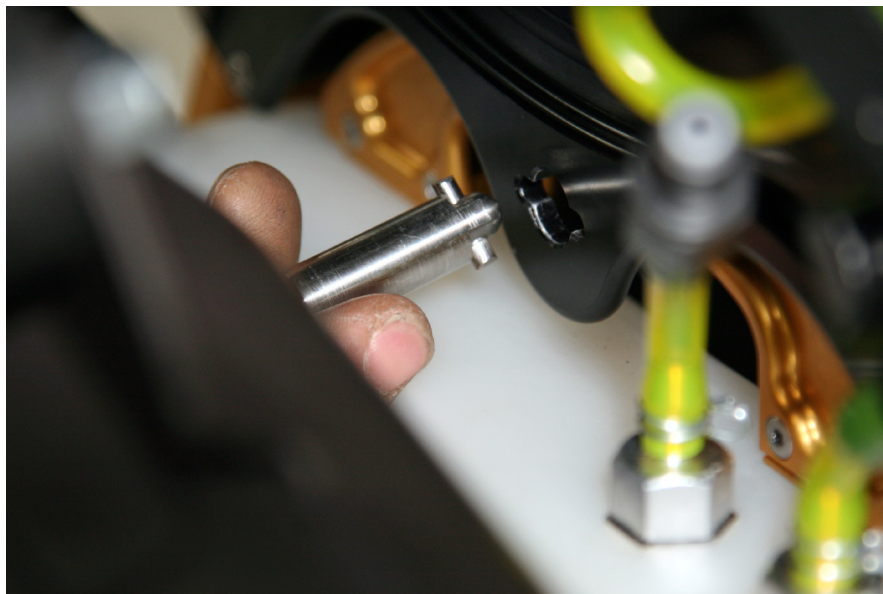
## Fitting the Fuel Tank &amp; Locking Netting



1

Insert the fuel tank - The bottom of the tank will engage with the dowels on the lower frame spars.

The slot in the bottom side of the tank handle will align with the mounting hole in the chassis.



2

Push the quick-release retaining pin into the chassis mounting hole.



3

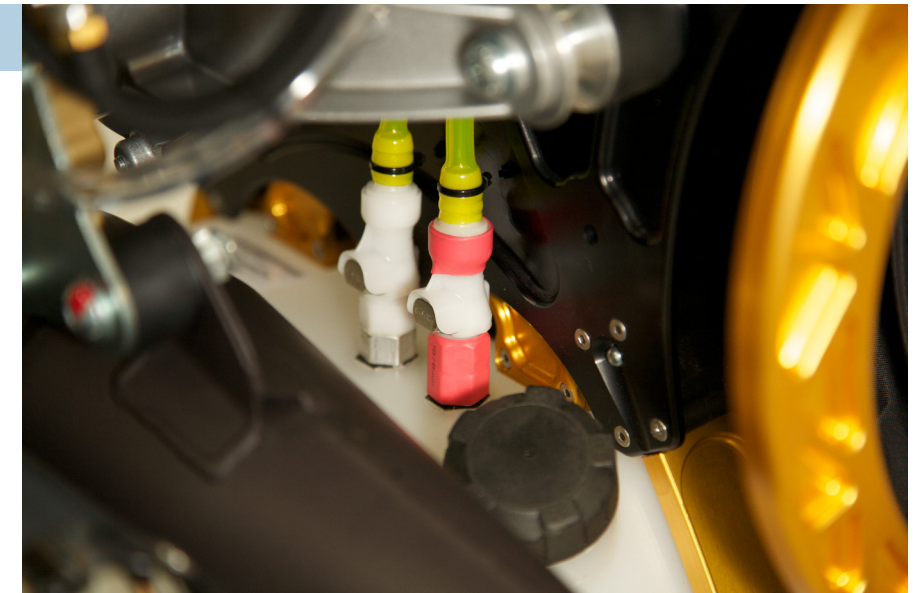
Rotate the retaining pin 90 degrees (in either direction) to lock into position.

4

The fuel lines are colour matched. The lines push-fit together.

To remove squeeze the metal tabs and pull apart.

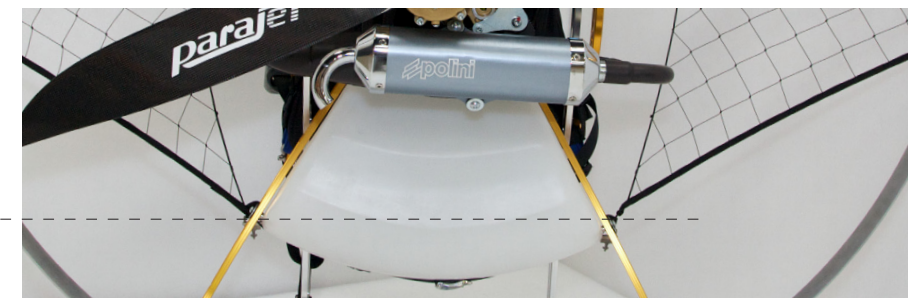
Depending on your engine choice there may be only one fuel line.



5

Connect the two ends of the inner netting line beneath the fuel tank and connect the ratchet.

Prior to tightening ensure that the netting on both the left and right side is level.

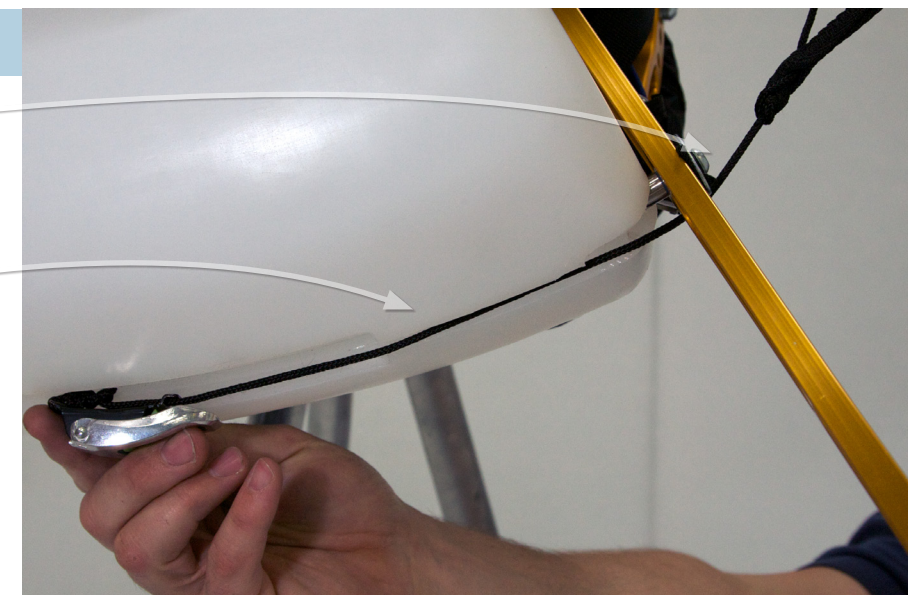


6

**IMPORTANT NOTE:**

Ensure the netting line runs on the pilot side of the spar, not the prop side and runs in the line groove on the base of the fuel tank.

Do not overtighten - If you can pull an outer rim joint apart very slightly and it gently pops back when released, the tension is correct.

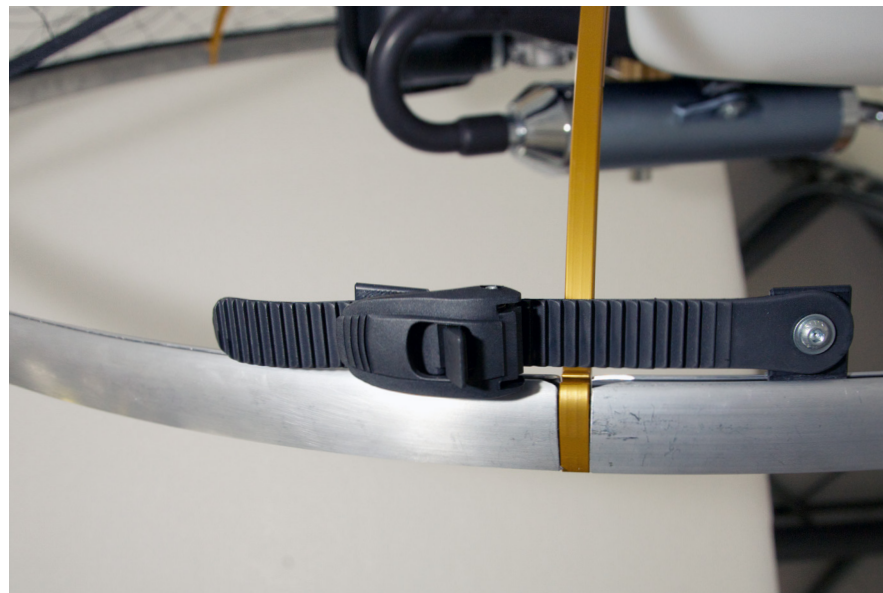




## Locking the Netting

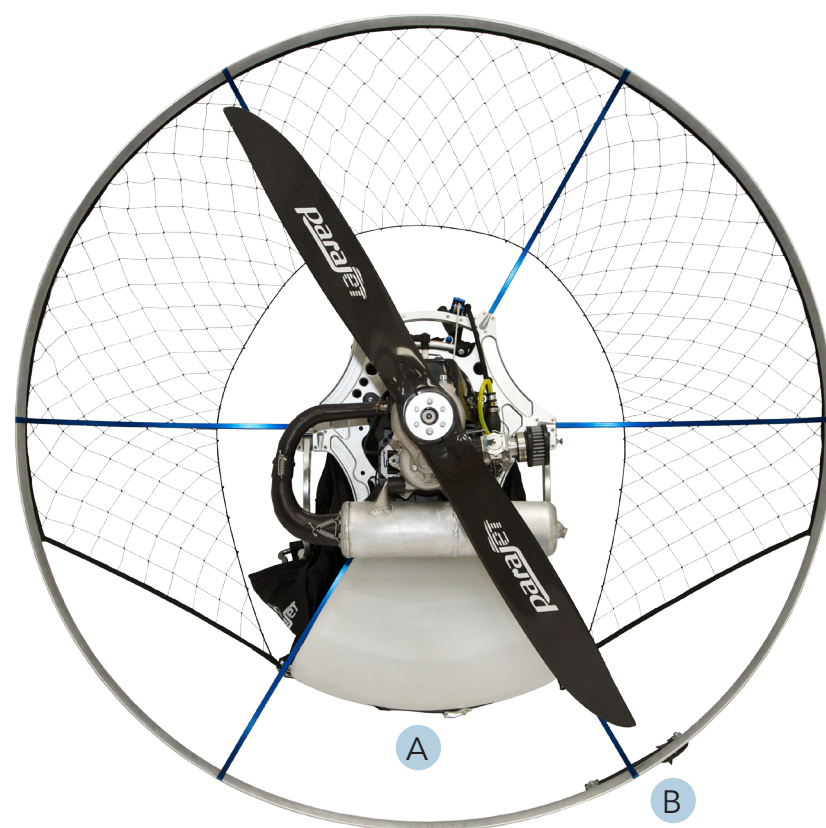


## Fitting the Stand



### Outer Ring

Connect the outer ring netting and tighten using the ratchet. Do not overtighten.



Note: The locking ratchet beneath the fuel tank is located centrally. **A**

The locking ratchet on the outer ring is offset - this helps protect it from damage. **B**

Important points to reiterate regarding the fitting of the netting:

1: Ensure the netting end lines are on the pilot side of the frame spars, not the propeller side.

2: Ensure the bottom of the netting is level before tightening the locking ratchet beneath the fuel tank and the outer ring locking ratchet.

3: Do not overtighten either locking ratchet. Patting the netting with a hand reveals the tension so it is clear to know when it is sufficiently tensioned.

The stand is supplied in three pieces. Insert the cross-bar into each leg until the pin in each end of the bar locates and secures into the hole in each leg.



Insert the two vertical legs into the chassis locating slots. The pin will locate into its securing hole.

1



2



3

Clip the feet around the outer ring and wrap the two securing bands around the feet and the outer ring.

The stand is now ready for use.

The Zenith can be flown with or without the stand fitted.





# Adjusting the Weight Shift Harness



To adjust this type of harness to the optimum weight setting, position the hang-point maillon and off-set pin as shown below. The weight ranges are given in the diagram below.

**IMPORTANT** – If the harness is not set up correctly it will result in poor handling and uncomfortable flying. It is vital therefore that the instructions are followed closely and accurately.

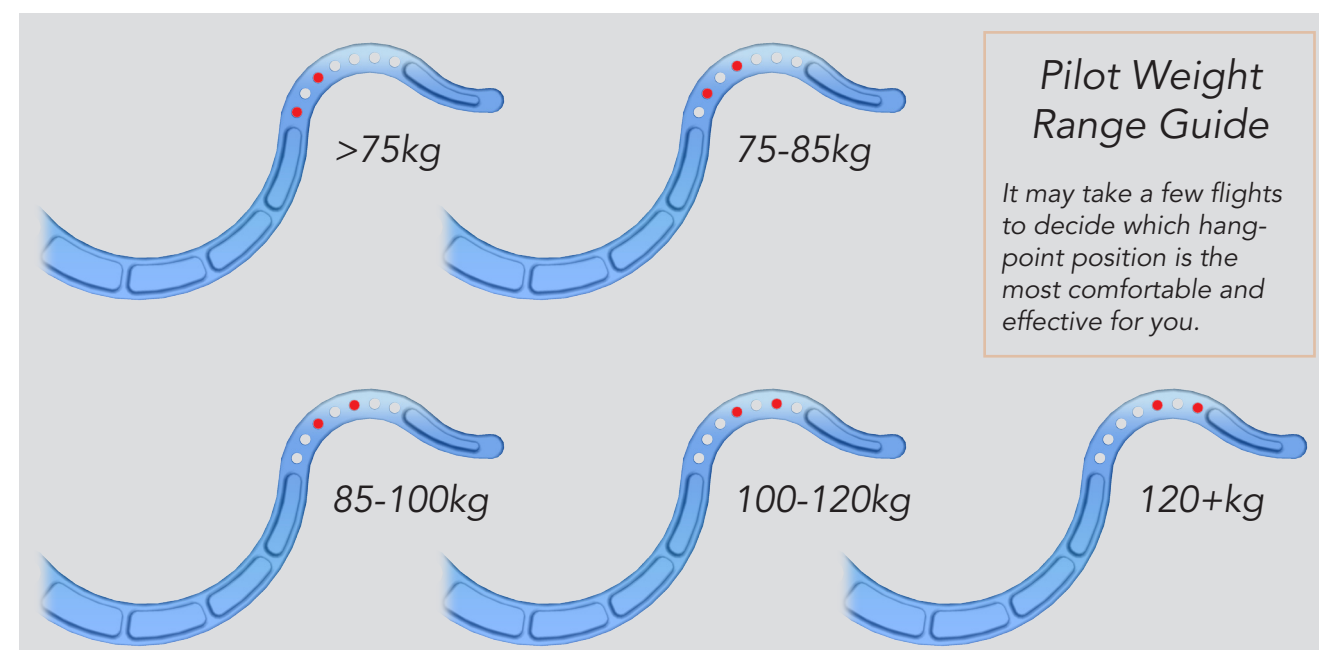


If the pilot is too heavy for the chosen harness setting this will cause the Zenith to ride up on the pilots back. This makes for an uncomfortable flying position and also causes the top of the propeller guard to press near to the paraglider brake handles which is potentially very dangerous. If you suspect this it is important that you land as soon as possible and re-set the hang points moving them one or two settings forward.

Note – Due to the dynamic nature of this harness it may take some flying time to become accustomed to the flying style. It may also take a few flights to decide which hang-point position is most comfortable and effective for you.

You will notice that on full power the flying position is more upright and that when you reduce throttle the position is more laid back. The engine off position is designed to be similar to the free flying position which is more comfortable and improves weight shift for thermalling.

**Note for customers purchasing a Zenith Custom and installing their own engine:** Check to ensure the offset positioning corresponds to the correct specification for your engine - see [1] on page 19 (opposite).



# Adjusting the Weight Shift Harness

1

The riser offset mounting is attached to the swinging arm with two 6mm bolts.

Offset side (pilot's view):  
 Zenith Thor: Left side  
 Zenith v5: Right side  
 Zenith Top80: Left side  
 Zenith Moster: Right side



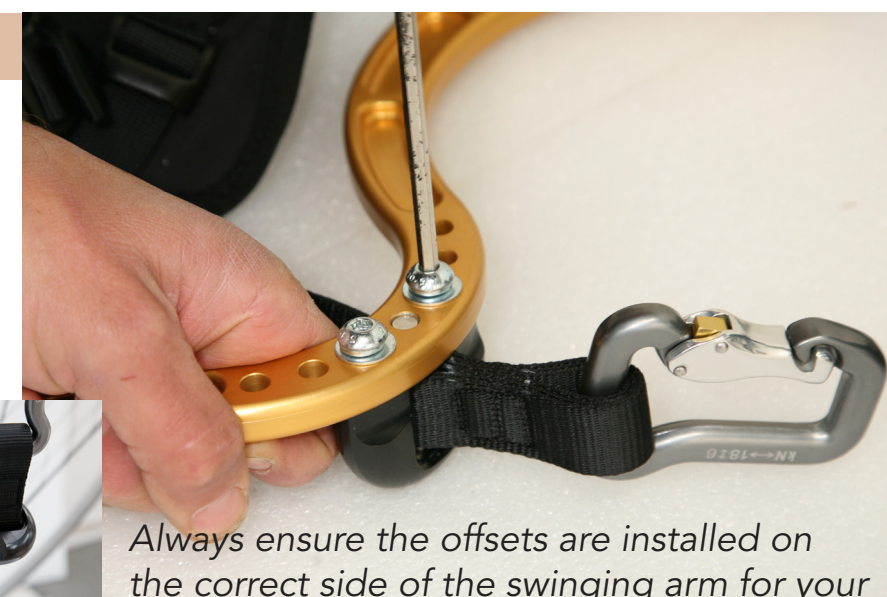
2

The two pins within the offset mounting locate into the swinging arm holes (see page 18 for positioning options).



3

The offset mountings should be tightened to 20 Nm.



Always ensure the offsets are installed on the correct side of the swinging arm for your choice of engine.



# The Parajet Harness



# The Parajet Harness



The Parajet harness has been designed with strong yet lightweight material and slender buckles which makes the harness simple and uncluttered.

The newly designed shoulder straps connect lower down the rear of the harness than other designs. This new rucksack-style configuration means the straps are tighter to the body pulling the load is closer to your back.

Coupled with generous, breathable padding, the straps make carrying your paramotor more comfortable and less likely to slip while on your back.

The higher leg strap configuration has greater tolerances for wrongful adjustment and guarantees that you will get in and out of the seat every time.

Other features include:

- Lightweight composite seat board
- Lightweight non-slip cam-buckles
- Non-slip chest strap
- Zippered side pockets



For more information about your Parajet Lightweight Harness please [click here](#) to visit the [Parajet.TV](#) information video.

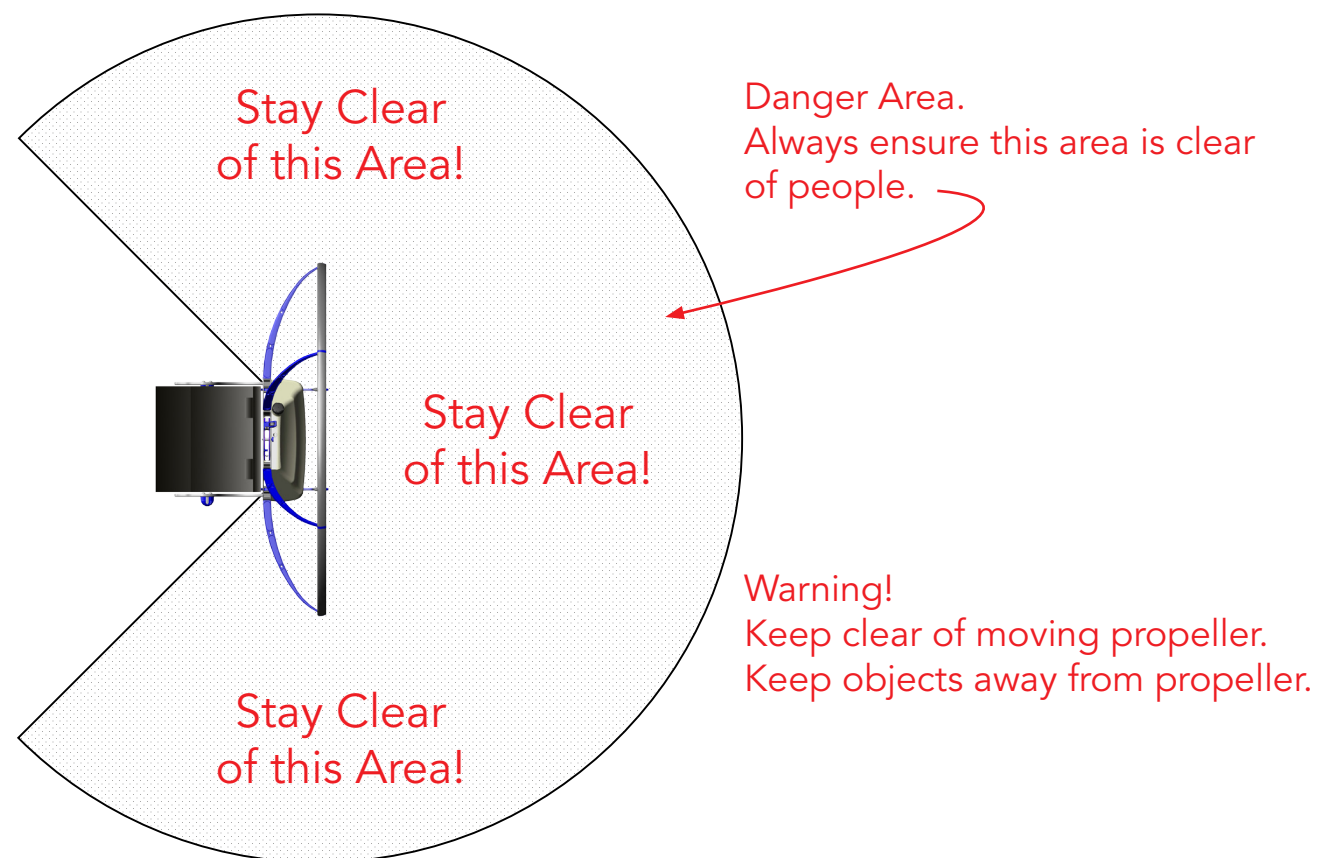


# Prior to Starting the Engine



- 1 Check carefully the surrounding area before taking out your paramotor.
- 2 Be sure to choose a flat area of ground which is well ventilated. Do not start the engine indoors or in other poorly ventilated areas.
- 3 Be sure nothing is within 3 metres of your paramotor.
- 4 Conduct a complete pre-flight check of your unit, especially looking for oil and fuel leaks. Check the unit carefully for loose nuts and bolts, bent or damaged frame or any other type of damage.
- 5 Check the level of fuel mixture. Be sure it is freshly mixed (less than four weeks old).
- 6 Check immediate area near the propeller for lines, ropes, clothing and anything that could be caught in the moving propeller or drive pulleys.
- 7 Pilots with long hair should be especially careful to cover their head.

**WARNING**



# Prior to Starting the Engine

## REMEMBER ...

- ... Always warn any persons nearby before starting the engine; Make it a habit to shout 'Clear Prop' in a loud and clear voice.
- ... The turning propeller can cause considerable damage and injury.
- ... Do not start engine indoors or other poorly ventilated areas.
- ... Be sure the area is free from anything that could be entangled in propeller.
- ... Use only freshly mixed petrol and oil recommended for your engine. The most common reason for engine damage is improper oil or petrol.
- ... Only fill tank with the engine switched off and only after it has cooled down.
- ... Follow all "No Fire" rules.
- ... Have an enjoyable and safe flight!





**Propeller and Cage Guard**

Dimensions: 140cm cage diameter  
Weight: 10kg + engine  
Material Aluminium Duralumin 6082 T6



**Zenith Thor 100**

Weight: 24.9kg  
Propeller: 2 Blade  
Engine Type: 110cc, 2-stroke  
Power Output: 20.5hp @ 8900 RPM  
Static Thrust: 60kg (132lbs)

To download Polini Thor 100 engine manual [click here](#).



**Zenith Thor 200**

Weight: 28kg  
Propeller: 2 Blade  
Engine Type: 193cc, 2-stroke  
Power Output: 29hp @ 7400 RPM  
Static Thrust: 80kg (176lbs)

To download Polini Thor 200 engine manual [click here](#).



**Zenith V5**

Weight: 27kg  
Propeller: 2 Blade (shown with optional 3 blade)  
Engine Type: 195cc, 4-stroke  
Power Output: 20.5hp @ 8000 RPM  
Static Thrust: 60kg (132lbs)

To download Bailey V5 engine manual [click here](#).



**Zenith Top80**

Weight: 19.8kg  
Propeller: 2 Blade  
Engine Type: 80cc, 2-stroke  
Power Output: 15hp @ 9500 RPM  
Static Thrust: 48kg (105lbs)

To download Top80 engine manual [click here](#).





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