

User's manual

Flanders Silent Trike



“Silent Twin”

Manufacturer: Flandersparamotor
Iepersteenweg 41
8650 Merkem
0475/23.55.60

This trike should be maintained following this manual

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1 GENERAL INFORMATION

1.1.introduction

This manual is written in order to provide a maximum of information to the pilots, so a safe, efficient and legal use of the tandem trike is at hand.

To fly this trike, one should have legal flight permission.

It is the pilot's responsibility to follow the rules of the country he is in.

Prior to his first flight, the pilot needs to read the user's manual carefully and follow the instructions. Only by this way we can guarantee an adequate functioning of this machine..

1.1 CERTIFICATES

The Flanders Silent Twin is build and certified following

The certificate numberis obtained by.....

Sound tests have been done following legal rules.

1.2 WARNINGS AND SAFETYPRESCRIPTIONS

We use in this guide the following terms:.

Warning: Instructions how to avoid dangerous situations

Attention: advise to ensure safety in the long run

Remark: not immediately influencing your flight, but still unusual or important...

SAFETY GUIDELINES:

- Read through publications such as ..., flightmagazines or IFR-reports on safety reports.
- Do not fly under bad circumstances such as strong thermic or turbulent weather.
- Do never fly close to stormy clouds, the cloud could lift you up. When bad weather arises, look for a safe spot to land.
- Get well informed about where local airports are, or where low flying occurs, avoid this places.

Warning: smoking in the trike is not allowed because of danger of fire..

2. Description

2.1 CHARACTERISTICS

- Paramotortrike with steerable front wheel.
- Chassis made out of TIG welded aluminium...
- Tandem (twin).

- 2-cylinder 4-stroke engine V1000cc Briggs and Stratton engine with electric starter. (hand started only on monotrikes)
- 3-blade propeller \varnothing 160 mm Type: Helix H40F 1.60 mmL-L-10-3
- Wing: certified gliders and/or as long as the wing corresponds to the description of the manufacturer...
- Reserve-chute: hand thrown or rocket system

2.2 TECHNICAL DATA

Length	185 cm or 72.83 inch
Height	190 cm or 74.8 inch
Width	185 cm or 72.83 inch
Tarra	135 kg or 297.69pound
Loading capacity	200 kg or 440.92 pound
Take off weight (Max)	340 kg or 749,57 pound
Fuel capaciteit	32 liter or 8.45 gallon

3. FUNCTIONING LIMITS

3.1 INTRODUCTION

The obtained results, from as well test flying as theoretical calculation, indicate the limits for good functioning and safe use.

The Flanders Silent Twin is, just as every other ultra light aircraft, not conceived for acrobatic exercises.

Turnings of more than 60° are not allowed.

It is forbidden to fly this trike when VMC does not allow it. Do not fly by wind power of more than 20km/ hour or 17 miles/hour (5, 6 m/s), or rain.

3.2 FLIGHTSPEED

Given numbers are for IAS (indicated air speed) flying with dulv tested glider TUSKER (SWING)

Max. accepted speed	73 km/u or 54 miles/h
Max. speed	70 km/u or 54miles/h
Manoeuvre speed	65 km/u or 46miles/h
Recommended speed while landing	35 km/u or 30miles/h
Min. speed	30 km/u or 24miles/h

Do not exceed maximum advised speed.

4. ENGINE

Manufacturer	Flandersparamotor
Type	Flanders V 50 hp
Trust	130 kg or 286lbs
Reduction/gear	1 / 2.16
Cylinder headtemperature	150°
Propeller	3-blade Carbon Helix 160 cm or 63 inch
Angle for propeller / Length	10° 160cm or 63inch

4.1 FUEL

The engine uses led free gasoline 98ron of a well-known brand.

Warning:

Do always use gasoline and oil of a well-known brand...

If not, unreparable damage can be done to the engine. WE ARE NOT RESPONSABLE FOR THIS.

4.2 USE OF THE ENGINE

To start: turn over the main switch to the “on” position. You hear a buzzing sound which lets you know that the start contact can be activated.

.now the start engine can be activated by pressing the start button or turning the key in the contact.

(See pictures below. The start button is to find under the throttle.

When the engine is cold, please pull on the choke and give some gas by pulling the throttle.

Stopping the engine: turn head switch to “off” position or push the stop button underneath the throttle (see picture). After the buzzing sound you need to switch of the main switch...



← ON

Remark:

- when not using the trike the main switch should always be in the “off” position.
- Strictly forbidden to start the engine by turning the propeller by hand.

4.3 THE ENGINE

Following values should not be exceeded:

Waarde	Bereik	Maximum	Notatie
RPM	0 - 4500	4500	TR/MIN or RPM
Oil temperature	75°	100°	C°
exhaust temperature			C°

5. WEIGHT AND GRAVITY

- The maximum allowed take-off weight of the Flanders Silent Twin is 340kg (750pound)

.inclusive pilot, passenger, fuel and luggage.

If you add something to the standard equipement, this maximum cannot be exceeded.

The pilot has the responsibility to stick to these limits.

- Do not exceed the range of the suspension points. They are calculated to fit for mono or tandem flight. The pilot takes place in the back, his weight can be between 45kg (92pnd) and 120kg (265pnd). You do not need to put extra weight in the passenger's seat in order to fly solo.

Attention:

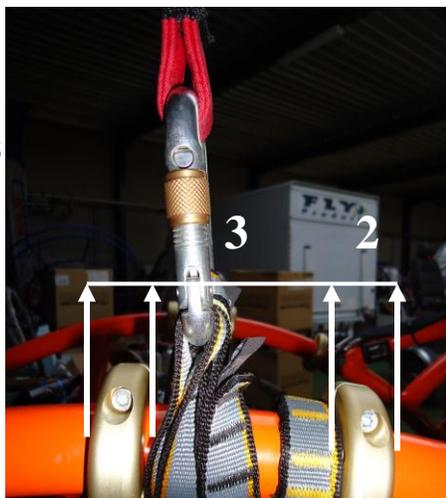
- To adjust the suspension point, you need to know the weight of your passenger.
- When you fly solo, also attach the glider to the correct suspension points.

Maximum takeoff weight.	340 kg or 750pnd
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frontside----}

{---- backside

- 1 = 30/50 kg or 66/110
- 2 = 50/90 kg or 110/198
- 3 = 90/125 kg or 198/275pnd



6. G-FORCES

The Flanders Silent Twin offers you safe flights between 1G and 4G forces.

Warning:

Do not fly acrobatic manoeuvres

- **Turnings over the 60° such as short loops or spirals are not allowed**

7. STARTPROCEDURE

7.1

Before taking in use the Flanders Silent Twin, make sure that the gear is in perfect condition to fly.

It is the user who has to make sure inspection is done before each flight.

7.2 *PREPARATION BEFORE FLIGHT*

Trike:

- Routine control on defects.
- Check if propeller does not hit the cage or other obstacles by turning it around by hand once...
- Check the fuel (if there is sufficient).
- Check if throttle cable always comes back to stand down before starting the engine.
- Check the locks on the suspensions points.
- Have the engine run softly until operating temperature is reached...

Glider:

- Fold the wing open towards wind direction...
- Unravel if needed and control the lines...
- Check the risers. (trims on-off)
- Check the steering lines.
- Attach the risers to the foreseen suspension hooks on the trike.
- Attach A-pullers which will pull up the wing...

Warning: Be sure the A-pullers are not too tight in order not to have a risk of frontstall.

Passenger:

- Have your passenger sitting on the front seat.
- Make sure they keep their feet on the footrest.
- Close security belts and check the locks.

- Wear helmets with radio communication for safety.

After this the pilot can get ready for his flight.

7.3 DAILY VERIFICATION

It is important to make sure there are no defects on the machine or wing.
Always first restore what is incorrect before flying.

7.4 MAINTENANCE.

The Flanders Silent Twin asks for little maintenance; nevertheless always clean up your gear before storing. Eventual remnants from spilling fuel or oil could influence the engine.

Always protect your engine from rain.

7.5 NECESSARY PERIODIC CONTROL

We advise you to follow up closely this periodic maintenance.

7.5.1. Every 25 hours of flight:

- take of air filter and blow out.
- check oil level.
- check and tighten bolts and nuts.
- Check on possible use or damage.

7.5.2 every 10 hours or yearly:.

- change oil.
- change oil filter.
- change sparkplugs.
- change belts where the glider is attached on.

7.5.3 every 2 years.

- change original hooks between trike and glider.
- have a thorough maintenance done by an experienced mechanic with professional competence in paramotors.

WARNING:

Flanders paramotor guarantees their product is free from defects in material and craftsmanship for a period of six months from its first flight on.

This warranty is only valuable when the trike is used following the advice in this manual. The dealer where you purchased your trike will repair without cost if something might be wrong before. In order to obtain this warranty please contact Flanders paramotor before going to your dealer.

This warranty is not applicable when appears that:

- the cause is due to carelessness or changes done to the gear without consensus of the manufacturer (Flanders paramotor)
- the engine fails due to using bad fuel or adjusting the carburettor yourself. (a professional mechanic with competence in paramotors is needed for this.)

Changing oil:



Enjoy your flight!