

UNPACK & FIT FRAME RINGS

When you receive the parcel with the paratrike you can see that wood panels are screwed by small screws, remove these screws and all wood panels. Now you can bring the different parts of the Paratrike out of the box.

Please take every part out carefully for them not to be damaged. The propeller protection rings may be tangled with each other or by the lines (lines netting) , remove the lines carefully.

When you have taken all the parts: rings, wheels, etc. you will see that the central part of the Paratrike is attached by a line , cut it off to take this central part from the box, you need someone help you to do it.

ATTENTION: you can see that the fuel pump is under the fuel tank, just behind the axle, when you are bringing the paratrike out of the box please pay attention that the fuel pump is not knocked with something anywhere.

Once you have brought all parts out of the box you have to fit the 2 rear wheels. In order to distinguish the left Wheel from right Wheel you will see that the one of the wheel axles is marked with 1 point, the other wheel axle is marked with 2 points, you have to match these points with the trike rear axle points in the trike rear axles, which are marked also.

Now you can fit the front wheel.

Then you can fit the propeller protection rings, please follow this sequence to fit the rings (you can see the video also):

1. Fit the upper ring part
2. Fit one of the lower ring part. Fit it on its upper part first, and then fit the 2 unions of the outer ring and fix the velcro. Repeat the same with the opposite lower ring part.
3. Now fit the lower supports near the axle, with the 2 screws; but do not tighten the nuts too much, you will do it afterwards at the end
4. Proceed to make ensure the complete ring with the Push Pins
5. Finally tighten the screws in the lower part of the rings

You can see the described operation in the video, if you follow these steps it will be easy to do it, in case you try otherwise you may not achieve to fit the ring or find it difficult.

When you have everything fitted you must check and make sure that everything in the paratrike is correctly fitted: propeller protection rings, rear axles, front wheel, etc... Check that all the screws and pins are in its place and all them are correctly tightened.

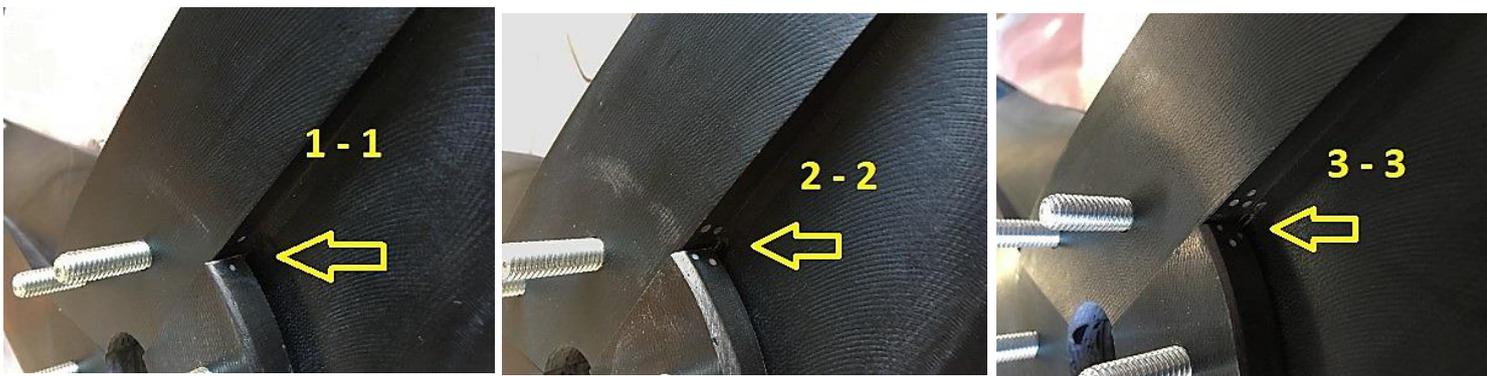
PROPELLER FITTING

Proceed to fit the propeller now in the motor. As it is a 3 blades propeller it is balanced in a specific way, you can notice some points marks in the prop profiles (*central part of the prop*), you have to match again the points in the following sequence when fitting the propeller:

1-1 // 2-2 // 3-3

You can see it in the photos below.

When tightening the propeller screws you have to do it little by little and "in star order", do not tighten the screw which is next to the other, but its opposite one first.



START THE ENGINE

WARNINGS TO FLY

In order to fly this paratrike, you need the suitable knowledge and experience in tandem paratrike flying, in case you do not count on this formation, you must take the corresponding course to be trained in this discipline, as well as be formed in all the safety matters and rules related to this particular paratrike flying activity.

As it is a Paratrike with a propeller there are potential dangers for people so we insist that it is mandatory to have the necessary experience to operate this unit. The fact of reading this Manual and instructions do not grant you the necessary experience and knowledge to operate nor to fly this unit.

When the complete Paratrike is fitted, you have to check that the belts are close and there is no object over the harness which could be lost and get caught by the propeller

The Paratrike must be in an open space to start it, far from persons, animals, obstacles...

Propeller must be towards open space. And you must position the Paratrike leaning against any solid element on its front part (such a wall, vehicle....) to avoid any risk in case any failure may

happen during starting and the engine gets suddenly accelerated, to avoid the paratrike going forwards causing any accident.

BESIDES, EVERY TIME YOU GO TO FLY, FIRSTLY YOU HAVE TO:

- warm the engine before flying for about 5 minutes accelerating the engine little by little and increasing rpm gradually.
- your first flight with the paratrike cannot last more than 30 minutes
- check all the engine and paratrike parts and fitting, screws, propeller, exhaust, etc.

AND AFTER FLYING YOU HAVE TO:

- disconnect battery from yellow buttom (*do NOT pull from the cables but take from the yellow plastic connector*).

START THE AERO 1000 ENGINE

1. CONNECT THE BATTERY. As you can see the battery is disconnected to avoid any problem, or even for it to be discharged. We recommend you to disconnect always the battery when you finish to fly and are keeping the unit stopped for some time, and also for transporting the paratrike
 2. MAKE ALWAYS SURE that you have enough FUEL in the fuel tank, because in case you ran out of fuel and you tried to start the engine the fuel pump may be seriously damaged. REMEMBER this is a 4 stroke engine and you do **NOT** have to use oil with the fuel.
 3. You can see a toggle switch near the engine, POSITION the TOGGLE SWITCH in ON position. When you do it you are hearing an small noise in the fuel pump, **you have to wait till this noise stops** (it may takes about 4 seconds, it is important to wait till the noise stops, than means that fuel pump is completely filled), do NOT try to start the engine till the fuel pump is filled
 4. PRESS the lower buttom in the hand throttle, keep this buttom pressed till the engine starts, you can press during 6-7 seconds, in case the engine does not start then stop pressing the buttom for 2-3 seconds and press it again till the engine starts.
 5. When the engine starts you have to wait for some seconds till the engine become to get warm, so you can begin to accelerate little by little for the engine gets warm gradual and completely (this can take about 2 or 3 minutes, depending on the weather condition). Now the engine is ready to be flown.
 6. To STOP the engine you have to push the buttom located in the upper part of hand throttle. Keep pushing this buttom during few seconds till the engine stops. You will use this buttom to stop the engine when you finish your flight, but you can also use the toggle switch putting it in OFF position in case you are on the ground near to the engine.
- ✓ REMEMBER always to put the toggle switch in OFF position when you finish the flight and you are transporting or storing the paratrike. Otherwise the battery may be discharged, also for safety.

- ✓ **REMEMBER also to disconnect the battery when you are not flying to store the paratrike, and also to transport it.** *(Do NOT pull from the cables but take from the yellow plastic connector).* This practice after flying will avoid the battery to be discharged, and will also avoid any short circuit danger.
- ✓ READ AERO 1000 ENGINE MANUAL (of HELVENCO) to know in detail about the engine operation
- ✓ **READ the MAINTENANCE subject (here below, next point).** But just as reminder of some important things respect this engine we mention now the following:
 - **Oil must NEVER be lacking in the carter**, you have to check it regularly looking through the viewer in the outer part of the engine
 - It is also very important that **after the FIRST 3 hours of engine use you replace the carter oil**, you have to use MOBIL 1 FS 0W-40 . After this first oil replacement you have to replace the oil every 25 hours use. PLEASE USE ONLY this mentioned oil.
 - You have to **clean the air filter** which is fitted in the injection
 - Check also **spark plug** conditions and replace if necessary
- ✓ **REMEMBER NOT TO MANIPULATE ANYTHING IN THE ENGINE**
- ✓ DO NOT CHANGE ANY ORIGINAL PART OF THE ENGINE FOR ANY DIFFERENT ONE NOR RECOMMENDED BY THE MANUFACTURER
- ✓ **IN CASE OF ANY DOUBT PLEASE CONTACT US**

MAINTENANCE

You can find here the Diamond Evo+Aero 1000 Paratrike maintenance here.

PLEASE consider both: the following instructions respect screws, textile components and carabiners **(all them key elements respect safety)** together to HELVENCO engine Maintenance Table *(below)* *(including some instructions that we have added on it).*

- **SCREWS:**

During the twenty (25) hours check-ups, you must double-check the trike's screws (in front wheel, direction bar, rear wheels, protection ring, propeller, etc); above all, you must double-check the attachment screws in the engine, the pinion, exhaust pipe, propeller, etc.

- **TEXTILE COMPONENTS:**

Make sure that the paratrike textile components, such as the harness and the Paraglider bands (slings which attach the glider to the paratrike), are not soiled by harmful liquids, such as gasoline, oil, solvents, etc. In this case, the harness can be washed with water and neutral soap. However, if the Paraglider bands (slings) come into contact with the above-mentioned liquids, they must be replaced with clean and original bands...

These bands (slings) which attach the paraglider must NOT be manipulated or altered under any circumstance. In any case, these slings MUST be replaced every 3 (3) years, replacing them sooner if it is necessary.

- **CARABINERS:**

The carabiners which attach the paraglider must be replaced every 5 years also, and before in case it is necessary.

- **PROPELLER:**

The propeller is one of the most important components of the Paratrike and that it must always be kept in perfect conditions. It is important that any and all propeller repairs be performed by a specialized company referred by Airfer company, with labor warranty.

REMEMBER that a propeller in a poor conditions can result in serious damage to the engine, causing it to stop working during flight and causing an accident.

The use of propellers not authorized by PARAMOTORES AIRFER will void the warranty.

Maintenance TABLE

• ENGINE & OTHER ELEMENTS	Every Use	After 3 hours	Every 25 hours	Every 100 hours or 2 years	Every 500 hours
Check all engine bolts	X		X		
Throttle smooth to full and return to idle, idle must hit stop	X				
Spark plug cap all the way in and tight	X				
Visual control on leakage (fuel, coolant and oil)	X				
Check the condition of the frame silent blocks / belt	X				
Check the condition of the reduction belt / and tension	X				
Check the condition of the exhaust system (springs and cradles)	X				
Replace carter oil (after engine break-in)		X			

Replace carter oil (periodically) (MOBIL 1 FS 0W-40, full synthetic)			X		
Clean oil filter		X	X		
Check magnet at drain plug for magnetic debris		X	X		
Check valve clearance according technical sheet		X	X		
Check propeller conditions (<i>repair, balance, replace.... In case and according necessary</i>)			X		
Clean the air filter fitted on injection body			X		
Check spark plug state			X		
Replace the 8 motor silent blocks				X	
Change the cooling liquid				X	
Check wear of camshaft and chain-wheel(s)				X	
Replace spark plug and exhaust springs				X	
Replace air filter y oil filter screen				X	
Remove and clean out external oil tank				X	
Optical check of the complete engine incl. exhaust silencer and primary tube				X	
Replace the 6 shock absorber rubbers in propeller hub				X	
Replace clutch friction plates and check drum condition				X	
Change drive belt				X	
Replace fuel tubes				X	
Replace throttle cable				X	
Complete engine re-build (AP500) at the local dealer					X
<ul style="list-style-type: none"> • READ & CONSIDER COMPLETE AERO1000 engine MANUAL of HELVENCO for more details 					

- ✓ Above listed summary is not limitative. All parts defined as “wear and tear” such as clutch, drive train bearings, rubbers, and air filter etc. are not part of the service schedule and should be replaced when necessary.
- ✓ As an important general principle we also outstands the 25 hours check-ups in order to have the paratrike ready to be flown at any time. But anyway we strongly advise before every flight you make a visual examination of every single component of the pararike. If the paratrike is not in ideal conditions, stop operating and immediately solve the problem.
- ✓ Note: In case of significant power loss, stop the engine ASAP and contact your local dealer or directly AIRFER, ALSO WITH ANY DOUBT ABOUT YOUR PARATRIKE.

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