



*We wish you many exciting hours and a lots of fun with  
this buggy*

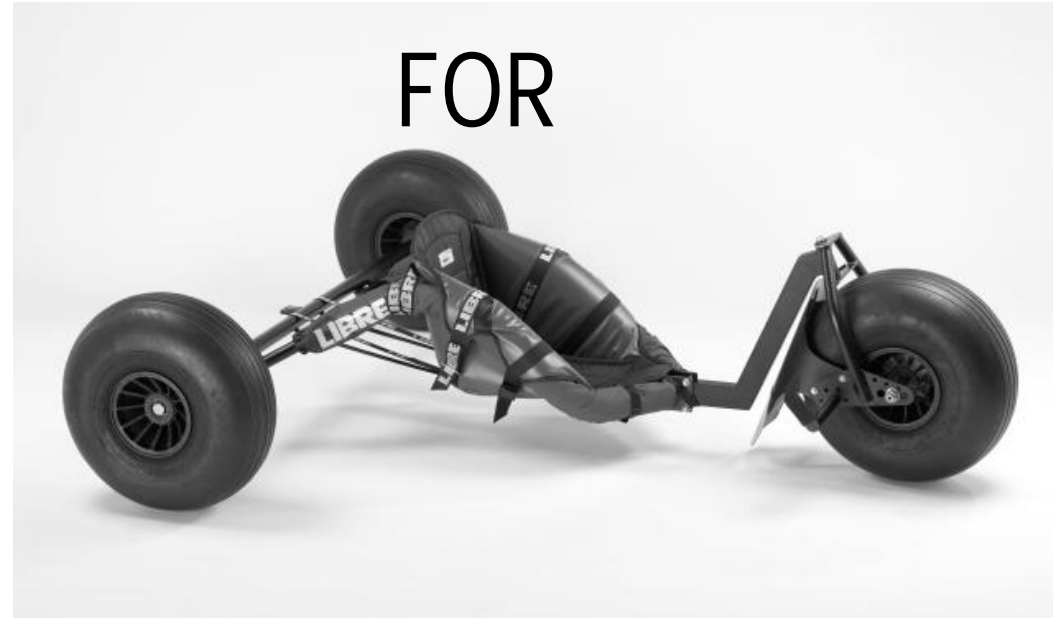
*your  
Team at*

**LIBRE** powersails

[www.LIBRE.de](http://www.LIBRE.de)

# ASSEMBLY INSTRUCTIONS

## FOR



# **DRAIGSTER**

**LIBRE** powersails

*am Fässlesgrund 8 78054 VS Schwenningen  
phone +49 7720 33964 fax +7720 22177*

Dear customer,

Thank you for your purchase of our new LIBRE Dragster buggy, with this parakart you have acquired sports equipment of the highest quality. The range of adjustments will make it possible for you to fine tune your buggy to the needs of competition or leisure riding.

This buggy comes in a shipment of 3 boxes, please check you have all parts before assembly.

### **contents of boxes**

3 x wheels Big foot light, optionally Big foot classic or Big foot AS incl. bolts and nuts.

2 x siderails with pads and siderailcovers, 4x screws M10 x 70, 8 x locknuts M10, 4x screws M8 x 25, 4x locknuts M8 and all washers.

1x Z -struts

1x seat

1 x necked downtube incl. screw M12 x 124 , nut M12, 2x Teflon washers and 2 washers 12 mm.

1 x frontfork incl. axle 20 mm, locknut M20, 2 spacers mudgard, 4 screw M6 x 16, 4x locknuts M6, 8x washers 6mm.

2x footpegs incl. 2x washers 10mm, 2x locknut M10.

1x standard backaxle, optional extra 1x Axle with camber and tracking advices.

### **Assembly**

For delivery purpose it is not possible to send this buggy Pre-Assembled The following section will help you assemble your buggy correctly.

## ***Exclusion of liability***

*Because of the nature of this sports Libre do not take any responsibility for accident that could occur during the use of this sports equipment*

## **Safety Notes**

***This buggy has been designed and buildt exclusivly for purpose of kitesailing.***

***It must only be used for its special purpose***

***It must not be coupled to other vehicles, especially engine driven ones and does not fulfil the demands of Road Traffic Regulations.***

***For this reason driving on puplic roads is not permitted***

***Use only with appropriate clothinga helmet and gloves.***

***Always behave respectfully towards passers-by , animals the environment .***

## Maintenance

Avoid sand in the thread bore of the backaxle and the other fasteners, this will lead to a seizure of the fasteners and destroys the threads. Should sand get into the threads, they can be cleaned with an old toothbrush. To protect fastener threads and the ball bearings of the wheels and downtube from corrosion they should be lubricated with salt water resistant grease, anticorrosive Spray or vaseline. This will prolong the the life span of the bearings and help you to save money.

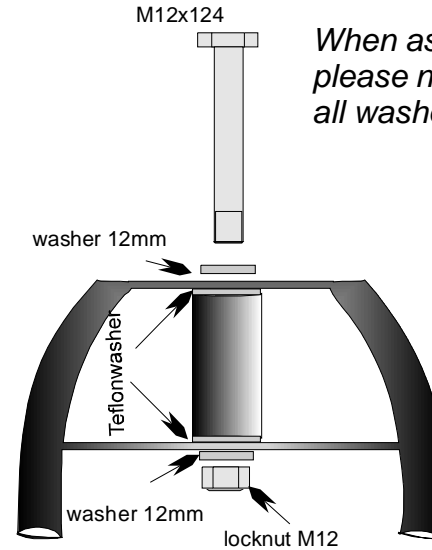
Paint damages and chips can be mended with proprietary paint, All parts have been treated and finished with a powder coat finish. After running through saltwater your buggy should be washed with clear water and all bearings should be re-lubricated

## Bearings

The bearings are by far the most highly stressed parts of the buggy. Therefore special attention and maintenance should be paid to them. After use in saltwater the bearings should be cleaned and lubricated. For this it is possible to remove the small plastic sealing rings carefully with a small screwdriver...

Then clean the bearings with a suitable solvent and lubricate with marine bearing grease. By doing this you will extend the life span of the bearings and prevent corrosion and reduce the chance of bearing seizure which will destroy the wheels.

## Step 1 mounting frontfork / downtube

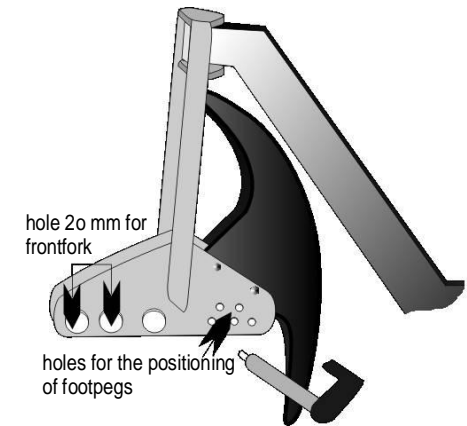


When assembling the downtube and frontfork please note about the correct positioning of all washers.



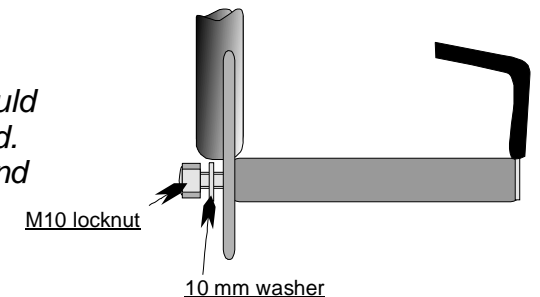
## mount the footpegs

The position of the footpegs depends on the personal preferences of the pilot. Different holes in the frontfork make a easy setup change possible.



## please note

The incorrect fixing of all bolts could result in them becoming damaged. Take note all bolts are fully tightened before use.

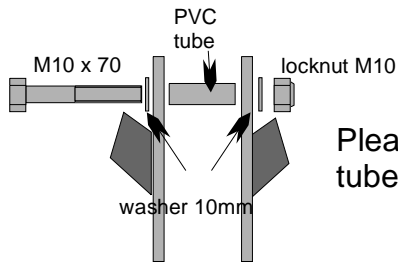
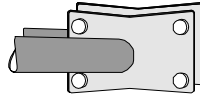


## **step 2 Mount de sideframe**

To fit the seat to the side rails please undo all straps and re-attach around each side rail. Make sure the front strap goes around and under the downtube..

In the next step you will have to connect both front plates to the down tube loosely with the 4 M10 x 70 screws.

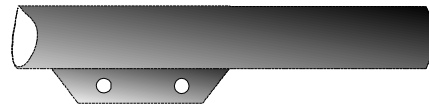
**Do not tighten the screws, so its easier to install other parts later.**



Please look to the right position of all washers tubes etc.

Now connect the sideframes with the 4 M8 x 25 to the backaxle, the plates of the axle should be facing downward .

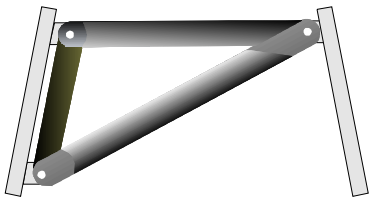
**Do not tighten these screws yet !**



### **Cross tie**

For easy assembly and stability the cross tie was built as one piece.

This part shouldnt mount between the seat and backaxle.



**Do not tighten these screws yet !**

## **Wheels**

The Dragster will be delivered with either Bigfoots, Bigfoot lights or Bigfoot AS wheels depending on your order.

These wheels come without a tread patten and therefore we recomend having grooves cut into the tyres.

With this you will get improved grip and reduced aquaplaning .

As an optional extra ,we at Libre can offer this service.

### **Discwheels**

Water on the course makes the use of Disc wheels essential.

This wheels shouldt not be used without track and camber advises.

## **Mounting the wheels**

To prevent the wheels from becoming loose while running the M 20 wheel bolts should be locked against the back axle with the lock nuts provided. This is done by using a spanner / socket on the bolt tightening the lock nut against the axle with a second spanner (30 mm) there should be no lateral movement of the wheel on the bolt.

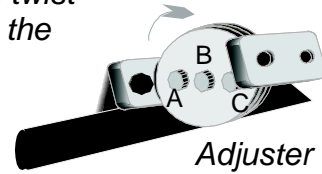
### **Tyre pressure**

A correct tyre pressure increases the riding comfort and determines the speed of your buggy on different surfaces. On soft sand you will be much faster with the correct air pressure in the wheel. we suggest following pressures:

**Front 0.4 - 1,0 bar Rear 0.5 - 1,2 bar**

## Adjustment of the tracking

The adjustment of the tracking geometry is done with the two adjustment devices that are between the back axle and the side rails . For adjustment first loosen the bolt A,B,C and twist backaxle slightly forwards. With a camber set the track will change.



**Make sure that the tracking is not adjusted too much. Otherwise the rolling resistance will increase considerably.**

The adjustment of the tracking results from the angle of the camber chosen by you, the ground and should and should be adjusted after test runs.

On soft ground we recommend to leave the adjustment of the track in a Zero position and on hard ground a slight adjustment of the track through a slight forward twist of the axle to give toe on the wheels.

### Hint

After adjusting the track it must be possible to push the buggy forward without any noticeable resistance. The adjustment of the track should be done on a flat and hard surface, because only there will the slightest increase in the rolling resistance be noticeable.

**Please mind that a change to wheel with bigger diameters requires a change of the length adjustment of the buggy, and change of the camber adjustment makes it necessary to re-adjust the track.**

## Step 3 mount the seat frame and downtube

If you have completed the following steps, now connect the down tube to the side rails.

Push the down tube between both clamping plates on the side rails. Please ensure the side plate bolts are loose enough.

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## Step 4 mount the wheels

Next attach the wheels to the buggy.

### Hint:

It is easier to attach the front wheel when the buggy is upside down. The bolts for the back wheels are already attached to the wheels.

## Step 5 adjust the seat

Now the buggy is on its wheels ,you can begin to adjust the seating position.

Turn strap 1 around the sideframes twice and tighten it behind the backrest.

After this you shouldnt lash the straps 2 and turn the straps 3 around your backaxle loose .

Now you can sit in your buggy and adjust the seat to suit your riding position.

The straps 3 attached to the back axle should have less tension on them until you sit in the seat.



## **Step 6 adjust the length from your downtube**

If your seatposition fits, you only have to prepare the length of the downtube.

For this take seat in your buggy displace the the downtube during the clamp plates and check the correct length if you found the length - tighten the 4 M10 x70 screws and ready

## **Special features :**

By the way - If you mount your frontwheel, certainly you found 2 holes with screws on both sides of the the axle .

These threads are fore mount specially weights at frontwheel.

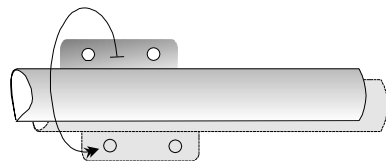
Please take care that you are always use the M10 x70 screws if you didn't use the weights.

This protects the inserts from dirt.

## **High adjustment**

If you turn the backaxle ( plates shows down ) its possible to chop your buggy.

This couldt be necessary if you use wheels with higher diameter like discwheels or its helpfull at bumpy areas.

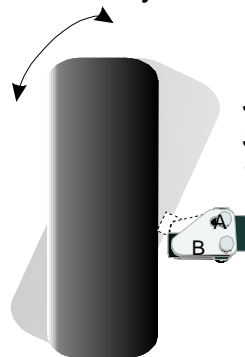


## **Backaxle with track and camber advices**

Against surcharge the Dragster is also available with adjustable backaxle .

## **Adjusting the camber**

Different situations and ground conditions make it necessary to use your buggy with different camber angles. The changes are done using on the adjustment devices on each end of the back axle.

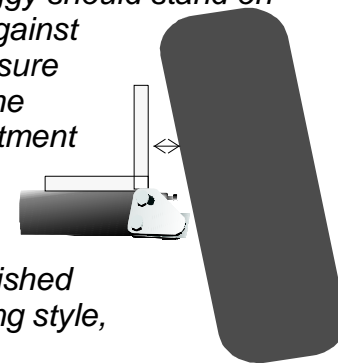


To adjust the camber the backwheels must be mounted. slaken off bolts A and B so that the device can be shifted with light resistance and choose the camber you want. We recommend not to choosing a camber more than 10 degrees angle because the rolling resistance will increase unnecessarily. When adjusting the camber make sure that both wheels have the same angle.

### **Hint:**

On a buggy with large diameter disc or spoke wheels the adjustment of the camber is absolutley necessary to reduce the shearing forces. With Big Foot wheels the rolling restistance of a wheel with camber increases considerably and the buggy runs slower

For an exact adjustment of the camber the buggy should stand on level ground. Use a set square and line it up against the back axle as shown in the sketch and measure the distance between the uppermost point of the rim and the square. This makes an exact adjustment of the camber on both sides possible.



The angle of the camber will need to be established in dynamic tests as it depends upon your driving style, the course of race and the surface.

### **Hint:**

An adjustabale protractor, obtainable in any DIY store, will help you to find the setting and it makes it easier for you to repeatedly your favorite adjustment of the camber. Many racing Pilots make camber gauges from a pendulum and board for easy setting.