



# ***Nijland Cycling***

## **Toogether**



## **USER MANUAL SERVICE MANUAL**

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### Symbols used

Important information for your safety is marked by special symbols. Please follow this information to avoid injury and damage to the product.



**WARNING:**  
This symbol warns of hazards to your health and points to potential risks of injury.



**CAUTION:**  
This symbol points to potential risks to the product or other items of property.



**Note:**  
This symbol indicates tips and special information.

## **Foreword**

This bike is a technologically high-quality product.

He will give you "the support in the back" that you need.

This bike a little bit difference as any other "regular bike", we recommend that you read this manual carefully, to ensure your safety.

We wish you many years of enjoyment with your Nijland Cycling bike and you will see that the pleasure is even greater, when you have sufficient attention to the maintenance of your bike.

**Nijland Cycling  
Heeten**

## Putting into use

In the factory is already spent the necessary care to your bike and your dealer made it cycle ready. The steering wheel and saddle are adjusted to the right size and the whole is checked again, so now your Toogether can go riding.

The weight of the retrofit kit and the extra motor power will have quite a significant impact on the performance of the bicycle. You must allow for longer stopping distances because of the increased weight. You should therefore practice the safe control of your electric bicycle off the public roads to start with.

You should perform a safety check on the electric bicycle before every trip to prevent accidents. You should have the bicycle's operating instructions to hand in case you need to make any adjustments to individual components of the particular model of bicycle.

## Points for attention

- Make sure you are well seen. At light rainfall and fog you turn on your lights.
- At a wet surface it is wise that you quietly inhibits Please in that case consider a longer stopping distance.
- Be careful with slippery soles, you run the risk to shoot of the pedal.
- For more safety you can use a bicycle helmet, which are for sale at your bikes-dealer.
- For the Toogether are many accessories available which has a great contribution to safety when cycling. These accessories comes later in this manual against.

## The maintenance

Of course, it is necessary to maintain your bike properly: this extends the lifetime.

Clean your bike regularly, for example, once a month.

Wipe the worst dirt away with a not too stiff bristle or brush; do this with policy to avoid scratches. Wipe off the last residue with a cloth (preferably a flannel rag)



**CAUTION:** Never clean your bicycle with a high pressure washer. The steam or waterjet can penetrate to the inside of the bearings and can remove the necessary grease.

Good maintenance is not affected by cleaning alone. Regular monitoring of vital parts is very important. It is recommended to let the dealer inspect your bike at least twice a year.

When you don't use your bike for an extended period of time, make sure you put it in a dry, cool area. It is important that the tire pressure is low and the Toogether is thoroughly clean.

## Tyres

If your tires are not at the right pressure - too soft - they will wear out faster. The pressure is correct if you're able to press the tire with your thumbs. If you have a pump with a pressure gauge, please stick to the recommended pressure listed on the side of the tire. Hard tires are much more enjoyable to ride also your bike listens better to the brakes and steering.

## Chain

A right tension of the chain is necessary in order to bring the rotating movement of the crankset to the rear wheel.

If the chain is too loose, there is a change that it runs off the sprockets and run against the chain case.

If it's too tight, You should not only put unnecessary force, but, there is also risk of damage to the bottom bracket bearings, wheel bearings and sprockets.



## Handles

Although we take extreme care to mount the handles and prevent them to sit 'Loose', it may occur that the handles come loose by the action of sunlight, temperature differences and age.

You must regularly check that the handles are fixed by trying to twist them. If a handle has been disconnected from the handlebar it should never be used again. You should let your dealer install new handles.

## Gears

The Toogether can be fitted with a Sram hub gear. By the grip shift-switch to turn to you (see fig. 1), you can enable a lighter gear. This can come in handy if you cycle uphill or if there is a strong headwind condition. If you turn off grip shift switch you select a heavier gear

When switching, it is important don't exercise strength on the pedals. When you get the system keeps your feet are still for a moment, the system get the time to change between the gears. It is wise to let your dealer do the adjustment.

## Handlebar

For a proper sitting, you can also adjust the handlebar forward or backward and up or down to your own wishes.

### Up and down

- You turn the hexagon screw of the stem (fig. 2A) a few turns counterclockwise.
- You adjust the handlebar at the right height.
- You turn the hexagon screw of the stem (fig. 2) firmly again.



**Note:** If you want to adjust the handlebar height, the security marking should be not to see.

### Forward or backward

- You turn the hexagon screw of the stem (fig. 3) a few turns counterclockwise.
- You adjust the handlebar at the right position.
- You turn the hexagon screw of the stem (fig. 3) firmly again.
- To perfect the handlebar position, you can repeat the previous steps

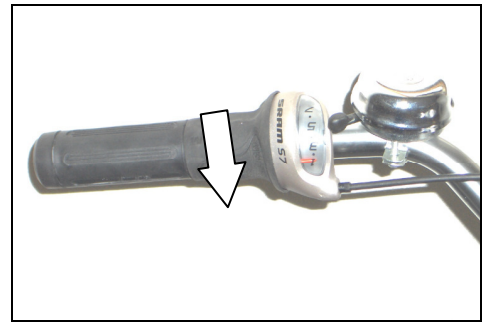


Figure 1

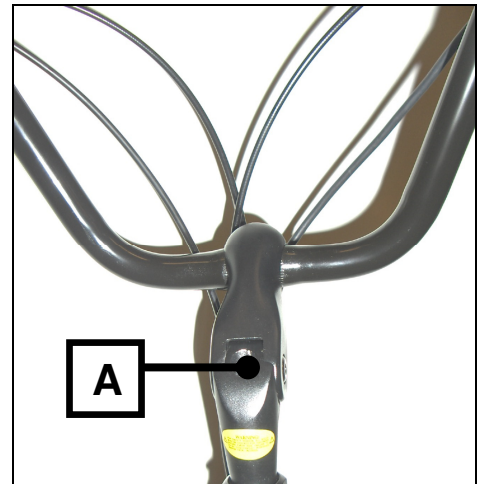


Figure 2

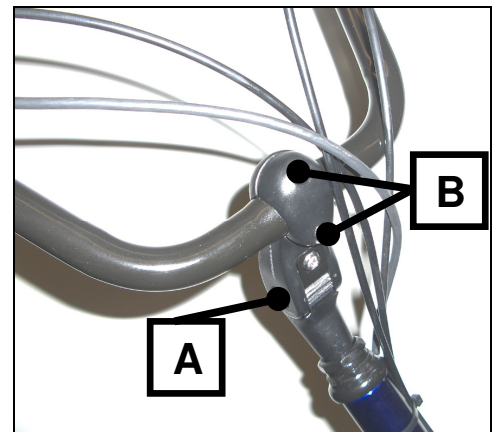


Figure 3

## lighting

The Toothers have a lighting form with Battery, consisting of batteries, headlight and rear light.

To turn on the headlight and rear light, press on the buttons that are on the light.

To turn off the lights, press on the same buttons.

## Lock

The safety lock is to operate in the following way:

- Turn the key in the lock clockwise.
- Push the sliding handle down, so that the lock the rear wheel locked.
- Turn the key in the lock counterclockwise and remove the key from the lock.

You can un-lock the rear wheel to put the key in the lock and turn it clockwise.

- **Avoid theft and put your bike always locked. Even if you ' just ' are away.**
- **Note the frame number of your bike. It is a small sticker placed on your bike. This number is also on the head sticker in front of your bike.**
- **Let your post code engrave into your bicycle engraving by your dealer.**

- **If you already have lost a key, it's advisable to make a copy of the spare key.**

## The seat

The seat of the driver and passenger are separately adjustable.

To Adjust the seat you have to lift the pin that is under your seat. If you lift the pin, you're able to slide the seat over the square tube. Then push the pin in one of the holes for the correct position.



Figure 4



**CAUTION:** Make sure that the pin under your seat is all the way into the hole. This ensures the safe use of your Toogether.

## collapsible armsupport

The seat of the Toogether can be performed with collapsible armsupport. These armsupport can be collapse up. If you sit down on the Toogether you will not suffer from the armsupport. Once on the bike then you flips this down. This gives you a comfortable armsupport when cycling. When you use the rear or front seat patched the armsupport are automatically entered (Fig. 5).



Figure 5

## Brakes

The brakes belong to the most important parts of your bike. Whenever possible, use both brakes to slow down as dosed as possible.

Always check the brakes are working properly before you ride. If you find out that you almost have to pull the brake lever up to the handle, the brakes needs readjustment

## Parking brake

The Together three-wheelbicycles are provided with a parking brake instead of a bicycle stand. In situations where the bike would not remain on the spot, you can use the parking brake. It's shown activated in fig. 7A and deactivated in fig. 7B.



**CAUTION**

### CAUTION:

Never grease your brake hubs and rims for any reason whatsoever with lubricants, this may decrease the effect tremendously.

## Mirror

A rear-view mirror should be used to enhance your awareness of the traffic situation.

- The mirror is adjustable by turning the plastic mirror box into the right position
- You can also adjust the mirror rod with the bolts (fig. 6B) forward or backward.

## Cane holder

You can use the cane holder by placing your canes or crutches in the bin (fig 8A). and lock them with the Velcro

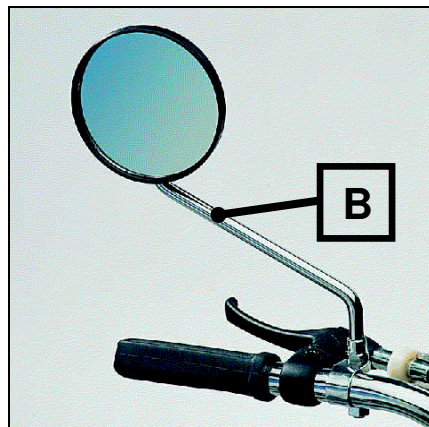


Figure 6



Figure 7A (Activated parkingbrake)



Figure 7B (Deactivated parkingbrake)



Figure 8

A



## The Electric drive set Starting up

### Safety instructions

Carefully read through all of these instructions before using the product!

Keep these instructions in a safe place! If the product is passed on to a third party, the instructions must be passed on with it.

Failure to follow these instructions may result in injury or damage to the components.

The manufacturer can accept no liability for losses arising as a result of failure to follow these instructions.



CAUTION

### CAUTION:

A damaged motor can result in the failure of structural parts and will have to be replaced.



CAUTION

### CAUTION:

Damaged electrical modules and cables can cause short circuits and must be replaced.

### Intended use

The drive set is only used for equipping a bicycle as an electric bicycle. No other use is permitted.



WARNING

### WARNING:

The electric bicycle must not be operated if the twist grip's automatic return is faulty. The fault should be rectified by a specialist dealer.



**NOTE:** Always check the twist grip's automatic return before starting up.

The system must be switched off to start with! To check the automatic return, twist the twist grip backwards and release again (see Fig 9).

The twist grip must immediately return to its initial (zero) position.

The voltage supply for the electric drive must be switched on first of all.

This takes place on the control unit located under the luggage carrier.

Remove the protective cap from the lock on the control unit.

Place the key in the lock and switch to "on" (Fig. 10).

Take the key out again so it cannot get lost during the journey. Replace the protective cap on the lock.

First mount the electric bicycle.



Figure 9



Figure 10



Only then should the control be switched on. To do this, press the button on the twist grip for longer than 1 second (Fig. 11). All three LEDs light up when the button is pressed. Release the button when all LEDs light up continuously. The control is now switched on and the drive system is ready for use.



Figure 11

## Cycling



▲ WARNING

### WARNING:

You should never block or obstruct the twist grip's automatic return while riding the electric bicycle!

Once you are under way, to increase the assistance provided by the motor and to continue accelerating, turn the twist grip more towards you while pedalling faster.

To reduce the assistance provided by the motor and reduce speed, slowly turn the twist grip forwards.

If your speed increases while you are pedalling, you should change up to a higher gear. You should change down to a lower gear if your speed decreases (e.g. riding uphill). The control unit turns the drive off if you pedal too slowly.

To deactivate the control while you are riding, e.g. if you wish to just pedal the cycle without any motor assistance or during long rides on the level or downhill, proceed as follows:

- Gently turn the twist grip forwards to its zero position
- Press the button on the twist grip for at least 1 second until all the LEDs go out.

The control is now switched off.



### NOTE:

The need to press and hold the button is a safety measure to prevent accidental switching on or off. As a further safety feature, the drive can only be switched on when the twist grip is in its zero position (front stop).

Pedal to start off, just as with a conventional bicycle. Add the power of the motor according to your own requirements by softly turning the twist grip.



### NOTE:

On the EPAC with assisted pull-away, the motor can be put in gear without pedalling by turning the twist grip. When the rider is not pedalling, the motor provides support up to a speed of 6 km/h. The assisted pull-away on the EPAC can also be used as a pushing aid.



### NOTE:

The control shuts off automatically when:

- the battery has reached the deep discharge limit.
- the motor or control unit overheat. This is possible, e.g. after longer periods of up-hill travel or extended use with a second transported battery. After an appropriate cooling period (approx. 10 - 15 minutes), the drive is ready for operation again. Before continuing on a journey, the drive system on the control unit must be switched off and on again.

## Ending the journey

Gently turn the twist grip forwards to its zero position (front stop).

Using the front and rear brakes, bring the electric bicycle to a complete stop.

Switch off the control. Press the button on the twist grip for at least 1 second until all the LEDs go out.

Remove the protective cap from the lock on the control unit.

Switch off the voltage supply. Place the key in the lock on the control unit and switch to **"off"** (Fig.12)

Take the key out of the lock if you are taking a longer break (this will prevent unauthorized use) and replace the protective cap on the lock.



Figure 12



### NOTE:

If you forget to switch it off, the control switches off automatically after approx. 15 minutes if no cycling activity takes place. You must switch it on again with the button on the twist grip before further use.

## Twist grip functions

The following can be found on the twist grip (Fig.13) :

- a button for switching the control on and off
- three LEDs, green, yellow and red, to show the charge status and any error reports.

### Switching on the control

See Chapter "Starting up"

### Switching off the control

See Chapter "Cycling"

### Indicators

The three LEDs provide information on:

- the battery power
- the control status

The three LEDs on the twist grip show the current battery voltage.

The indicator shows information on the charge status.

LED indicator	Battery voltage status
Green, yellow and red lit	Max. voltage
Yellow and red lit	Voltage reducing due load
Red lit	Voltage close to minimum value Recharge battery soon

The actual charge state of the battery can only be read off the battery itself (see Chapter "Battery charging").



Figure 13

## Status of the control, errors and warnings:

LED indicator	Error or warning
LEDs flash quickly when switched on	Twist grip not in zero position when the control is switched on. <u>Actions:</u> Put the twist grip in zero position, check the twist grip's automatic return.
LEDs flash slowly during use	The motor or control overheat. Motor is switched off. <u>Actions:</u> Return the twist grip to zero position. Do not use the motor and control for a while and allow to cool down. The drive can then be used again with no further actions required.
LEDs flash quickly during use and when switching off	Battery voltage or control unit voltage too low. Motor is switched off. <u>Actions:</u> Charge the battery. You must switch the control on again with the button on the twist grip before further use.

## Other possible faults

Fault	Effect and actions
Undervoltage on the battery or control unit	Motor is switched off. <u>Actions:</u> Charge the battery. Switch the control off and on again with the button
Short-circuit on the battery or battery completely discharged	Motor, control and battery are switched off. <u>Actions:</u> Remove the short circuit. Charge the battery. You must switch the control on again with the button on the twist grip before further use.



**WARNING**

### **WARNING:**

If the measures outlined above are unsuccessful, consult a specialist dealer. Never open the control unit,  
the motor or the battery!

## Battery

### Information on batteries

The type of battery used in the drive set combines lightness in weight with a very high charge capacity. It is therefore very compact in design and will fit easily into the battery bag provided.

Lithium-ion batteries may only be charged using a special charging circuit! The reasonable use and above all correct charging of the battery as well as protection from deep discharge and overheating will greatly help to prolong its life. An appropriate charge controller is therefore already integrated in the battery housing to ensure optimal and safe function. A mains adapter without its own charge controller is therefore all that is needed to charge the lithium-ion battery.



**WARNING**

#### **WARNING:**

Use only the mains adapter supplied to charge the battery.

Before connecting the mains adapter to the mains, you must check whether the mains voltage matches the supply voltage of the adapter. The adapter's supply voltage is indicated on the nameplate on the back of the adapter. The adapter is designed for indoor use only.

The lithium-ion battery may only be charged in a dry, non flammable environment.



**WARNING**

#### **WARNING:**

A mains adapter with a damaged mains plug or mains lead must not be connected to the mains and must be repaired immediately by a specialist dealer. The same applies to extension cables that are not technically perfect.

The mains adapter and the battery can get hot when charging lithium-ion batteries. The mains adapter should therefore be removed from the storage recess in the battery box during charging.

Water and moisture must not be allowed to penetrate the mains adapter under any circumstances. If water has entered the adapter, disconnect it from the mains supply immediately and have it checked by a specialist dealer.

Condensation water can develop on the mains adapter if there is a sudden change in temperature from cold to hot. If this happens, wait until the device has come up to the temperature of the warm room before connecting it to the mains. This situation is best avoided by storing the mains adapter where you use it.

The mains adapter may only be used to charge up the battery supplied.

Other uses of the adapter are not permitted.

Any tampering of any kind with the mains adapter or battery box is strictly prohibited!

Mechanical damage to the battery must be avoided at all cost (explosion hazard!).



## Battery charging

All batteries usually leave the factory fully charged. However, because there is always a certain amount of self-discharge (typically ~1% per day at room temperature) the battery should be charged up before being used for the first time.

Charging can be done either on the luggage carrier or off the bicycle with the battery bag removed.

The charge status is only shown directly on the battery itself (Fig. 14).

To check the charge status, briefly press the button on top of the battery.

Up to four LEDs will then light up for a few seconds to indicate the charge status.

To charge the battery, proceed as follows:

- Gain access to the charging socket on the battery box by pushing the protective cover to the left (Fig. 15).
- Plug the mains adapter into a mains socket outlet
- Connect the charging plug to the socket, the charge status indicator LEDs start to flash



### NOTE:

The mains adapter and the battery can get hot when charging lithium-ion batteries. The mains adapter should therefore be removed from the storage recess in the battery box during charging.

Charge status indicator



Figure 14



Figure 15

Gain

### Charge status display on the battery while charging:

1, 2 or 3 LEDs flash, while 3, 2 or 1 LEDs light up	Battery is charging, number of flashing LEDs corresponds to the capacity still to be charged. The number of lit LEDs corresponds to the capacity already charged.
4 LEDs lit up	Battery is nominally fully charged, re-charging active.
All LEDs off	Charging is complete, battery is 100% charged, trickle charging active.

### Charging time:

Fully charging the discharged battery takes

- approx. 4 h with 6.0 Ah battery
- approx. 7.5 h with 9.0 Ah battery

Once the battery has been charged completely, the charge controller switches to trickle charging. The battery can be left connected to the mains adapter indefinitely. The advantage of this is that the battery is always fully charged.

The battery can be used with the drive at any time, even if charging is not complete. However you will not achieve the same range that is possible with a fully charged battery.



#### Note:

Unlike other types of battery, the lithium-ion battery has no 'memory effect' of any kind. This means that it does not need to be fully discharged before it can be charged up again. It actually helps to prolong the battery's life if the charging cycles are flat, in other words if the battery is always charged up again immediately after use.

The ambient temperature during charging should be between +10 °C and +30 °C. Charging outside this temperature range reduces the available battery capacity and therefore the range. It is advisable to charge the battery in a heated room when outdoor temperatures are below zero. Direct sunlight and proximity to sources of heating such as radiators should be avoided.

Before long periods of inactivity, e.g. in winter, the battery should be fully charged up and stored in a dry, frost-free place. Charge the battery completely before using again.

The battery can become quite hot on long journeys using a lot of motor power. Temperature monitoring inside the battery box prevents charging from taking place if the battery temperature is too high. The mains adapter can be connected in this case. Charging will start automatically when the battery has cooled down sufficiently in its box. The battery can easily take up to an hour too cool down following a long uphill ride.

## Connecting the battery



### NOTE:

The battery cable should always be run coming from below under the cover and into the battery bag. This will ensure that water cannot enter the bag. Use the Velcro® tapes on the sides of the battery bag to secure the cable (Fig.15).

Make sure that the key-operated switch on the control unit is set to OFF.

Connect the plug on the battery cable from the control unit to the socket on the battery.

Twist the plug clockwise until you hear the latch engage.

Releasing the plug:

- Push back the latch on the plug,
- twist the plug anti-clockwise as far as it will go,
- disconnect the plug.



Figure 15

### Attaching the battery to the luggage carrier



WARNING

### WARNING:

Use caution when hooking the battery bag onto and unhooking it from the luggage carrier. There is a risk of your fingers being squeezed!

### Attaching the battery bag:

The battery bag can be attached to the right or left hand side of the bicycle on the luggage carrier. The luggage carrier is equipped with two attachment hooks and two mounting lugs on the rear side. The lugs may have to be adjusted when the bag is fitted for the first time. To do this, slacken the clamping screws on the top of the lugs. The lugs can now be adjusted sideways to match the struts of the luggage carrier. After adjustment, tighten the clamping screws again.

Open the locks (red) on both attachment hooks by pushing the flags in towards the bag.

Thread the lugs on the battery bag in behind the struts of the luggage carrier (adjust as necessary, see above).

Simultaneously hook the two attachment hooks on the battery bag into the upper longitudinal strut of the luggage carrier and press the bag down as far as it will go.

Close the locks by pressing the flags towards the wheel until you hear them snap in.

### Removing the battery bag:

Make sure that the plug to the battery has been disconnected (refer to Chapter "Releasing the plug").

Open the locks (red) on both attachment hooks by pushing the flags in towards the bag.

Pull the battery bag up evenly.

Detach the bottom lugs from the luggage carrier struts.

### Carrying by car

Aggressive road dirt, rainwater or a saline atmosphere will shorten the life of an electric bicycle. It should therefore always be protected with a tarpaulin when carried on a car. The batteries should be removed from the bicycle and carried at a cool place in the car.

## Technical specifications

Bike	Together E
Length (cm)	195
Width (cm)	118
Wheelbase (cm)	128
Wheelsize (inch) Front & Rear :	20 * 1,75
adjustable for leg lengths from (cm)	65
handlebar width (cm) driver	58
passenger	58
Kind of brake Front:	V-brake
Rear:	disc brake
Weight (kg)	65
Maximum load weight including luggage (kg)	220
minimum range (km)	20

Motor	
Type	RN120
Voltage	36 V
Output	200 ... 250 W (S1) / 350 W (S2), dep. on the version
Speed when riding on the level	approx. 60 ... 330 <sup>1</sup> / <sub>min</sub> , depending on version
Max. torque	35 ... 60 Nm (rating plate), depending on version
Thermal overload protection	yes
Spoke hole pitch circle	164 mm
Spoke hole diameter	3.1 <sup>+0.1</sup> / <sub>-0.1</sub> mm
Inner spoke flange distance	58 ±1 mm
Outer spoke flange distance	66 mm
Dimensions (Ø x w)	178 mm x 127 mm
Weight	3.5 kg
Battery	
Type	Li-ion battery
Voltage	36 V
Capacity	6 Ah , 9 Ah, depending on the version
Control unit	
Voltage	36 V
Current max.	depending on version 20 .. 33 A (rating plate)
Dimensions (l x w x h)	115 x 100 x 45 mm
Weight	0.7 kg



## Warranty

Nijland Cycling gives 5 year warranty on frame and fork. There is a 2 year warranty on other components, in so far as they are not subject to normal wear and tear.

You can only claim warranty if you can demonstrate the guarantee certificate together with the purchase receipt. Any transport and labour costs shall be borne by the owner.

### Warranty shall not be granted if:

- The bicycle has been used improper or careless or damaged by accident.
- The parts to ordinary wear and tear, such as chain wear, tires and cables.
- The bicycle has not been maintained as indicated in this book.
- Improper repairs have been carried out.
- Damage caused by incorrect mounting (not carried out repairs itself by Nijland Cycling)
- The construction of the bike changed.

## Finally

With this manual, Nijland cycling made you aware of the care and maintenance of your bike. We have also recommend to rely on your dealer for major repairs or maintenance.

If you think that the maintenance of the bike is still too technical for you, and you don't trust yourself with the maintenance of your bike or adjustment of parts, then go to your local dealer.

You only drive safe on a bike that is treated as indicated by the manufacturer.

## Warranty card

Fill in this warranty card carefully and keep it along with your proof of purchase for five years from date of purchase.

### Bicycle information

Brand en type:

Version:

Framenumber:

Keynumber:

Date of purchase:

### Personal information

Name:

Address:

ZIPcode and city:

### Dealer information

Name:

Address:

ZIPcode and city:

Dealer's stamp:



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