



## KERN TRAILER

# USER AND ASSEMBLY MANUAL



**English Version**

If you have any question, please contact us at [contact@solarmoov.com](mailto:contact@solarmoov.com)

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## User Instructions and Warnings

Riding with a trailer—especially when carrying a heavy load—changes the behavior of your bicycle. You should familiarize yourself with the trailer by riding very carefully during your first outings.

The trailer must always be used under reasonable riding conditions, particularly by respecting the following rules:

- **A maximum speed of 40 km/h downhill and 45 km/h in all other situations.**
- **A maximum total loaded weight (PTAC) of 30 kg.** The empty trailer weighs approximately 10 kg. Add the weight of any options and luggage when calculating PTAC.
- Ensure the load respects the maximum authorized rolling weight (PTRA) of the towing vehicle. Verify that the brakes of the towing vehicle are suitable for towing.
- Heavy luggage should be placed at the bottom of the trailer with weight evenly distributed.
- Before each trip, check that all screws and handles are tightened and that tire pressure complies with manufacturer recommendations.

## Assembly Instructions

The trailer is delivered in a double-wall cardboard box measuring 115 × 490 × 560 mm.

The door, front handle, and rear wheel dropouts are pre-assembled. Other components are stored inside the trailer trunk. The wheel is deflated intentionally to fit inside.

La remorque est livrée dans un carton double parois de taille 115x490x560

The following items are already pre-mounted:

- **The door**
- **The front handle**
- **The rear wheel dropouts** – Caution: The screws are secured with threadlocker. The dropouts should not normally need to be removed. However, if you still wish to remove them, please reapply threadlocker to prevent loosening during the process.

The other parts are placed in bags in the trailer's trunk, except for the seat post/tow bar, which is positioned next to the frame in the cardboard box. Remove all the parts from the trailer's trunk to begin assembly. Note that the wheel is **intentionally deflated** to fit in the trunk.

The items to be assembled are listed below according to the options chosen.

- A. Basic mounting hardware for all trailers (bag #2)
- B. Drawbar on wheel axle (bag #3)
- C. Drawbar on seat post (bag #4)
- D. Kickstand (bag #9)
- E. Roof rack (bag #6)
- F. Tilttable solar panel mounting kit (bag #5)
- G. Flag (bag #7a or 7b)

Tools required:

- 2 x 10mm open-end wrenches and 2 x 13mm open-end wrenches
- For the wheel axle option: a 15mm open-end wrench
- For the seatpost option: a 5mm hex key

## A. Basic mounting components for all trailers

### Bag 2

- n°1. Door key : x2
- n°2. Stainless steel sleeve M6 :x2
- n°3. Screws 50 M6 : x2
- n°4. Small wheels : x2
- n°5. Bolt Cover M6 : x2
- n°6. Quick-release axle : x1

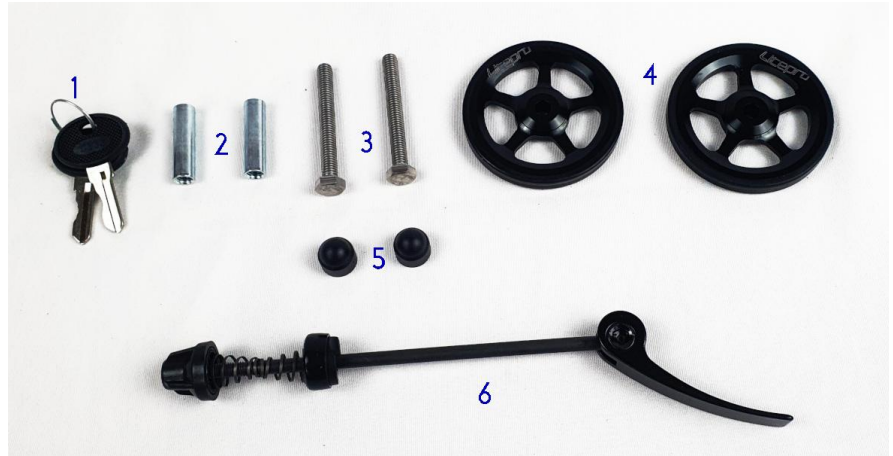


Fig. 1

### Montage

- Insert screw #3 into the axle of the small wheel #4 (Fig. 1)
- Screw sleeve #2 onto thread #3 (Fig. 2)
- Screw the assembly onto the threaded M6 hole on the trailer mounting bracket (Fig. 3)
- Position nut cover #5 on each side (Fig. 4)
- Repeat the operation for the second caster #4
- Insert the thru-axle into the wheel hub and position the assembly onto the trailer brackets (Fig. 5)



Fig.2

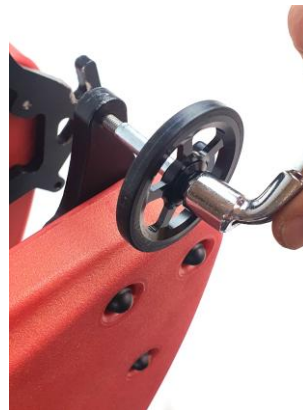


Fig.3



Fig.4



Fig.5

## B. Trailer assembly - Drawbar on wheel axle

### Bag n° 3

- #1. Aluminum trailer mounting bracket: x4
- #2. M8 nut cover: x4
- #3. M6 nut cover: x8
- #4. 50xM6 stainless steel screw: x4
- #5. 55xM8 stainless steel screw: x2
- #6. Tool-free tightening handle: x2
- #7. M6 nut: x4
- #8. M8 nut: x2
- #9. M6 washers: x8
- #10. M8 washers: x4
- #11. Aluminum drawbar spacer: x4
- #12. Bicycle wheel axle: x1
- #13. Bicycle wheel axle screw: x1
- #14. Tamper-proof screws: x2
- #15. Tamper-proof screw clamp (Torx T40 with hole): x1
- #16. Timon Teflon spacer: x4



Fig.6

### Wheel axle tiller assembly

- Position the drawbar with the notches facing upwards (Fig. 7) if the bicycle wheel is larger than 20" (otherwise, notches facing downwards).
- Slide the Teflon spacer 16 onto the aluminium spacer 11 (Figs. 8 and 9).

Fig.7



Fig.8



Fig.9

- Slide the assembled part into the upper end of the drawbar (Fig. 10).
- Position one of the mounting brackets #1 as shown in Fig. 11, using screw #5 and washer #10.
- Position a second mounting bracket #1 in the opposite direction to the first, as shown in Fig. 12, in the same way as the first bracket (i.e., using the two spacers #16 and #11, screw #5, and washer #10).
- Tighten the assembly using nut #8, but do not overtighten so that both brackets can rotate freely during assembly.

Fig.10



Fig.11

Fig.12



- Repeat the same operation on the lower part of the drawbar (using the two remaining brackets).
- Position the assembled drawbar on the front of the trailer and insert the four #4 screws into the holes as shown in Fig. 13 (adjustment is possible depending on the height of your wheel).
- Screw the four #7 nuts onto the four #4 screws.
- Also tighten the #8 nuts on the vertical #4 screws. Position the nut covers (Fig. 14).

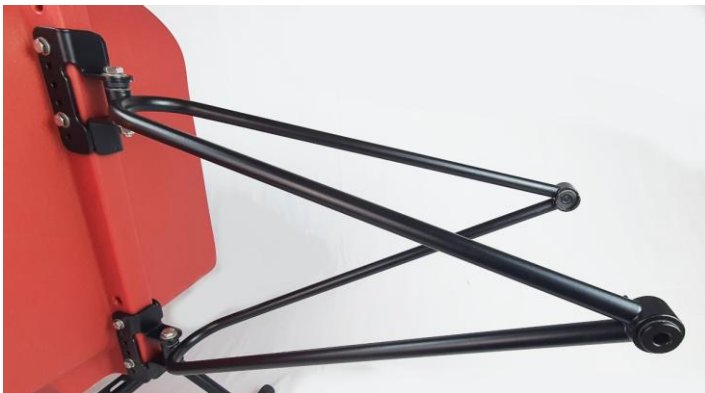


Fig.13

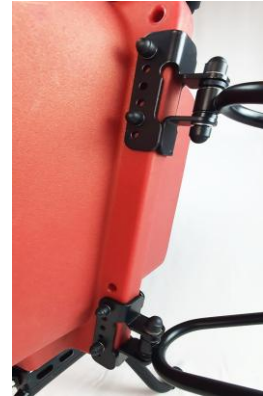


Fig.14

- On the bicycle, remove the quick-release thru-axle and replace it with the SolarMoov thru-axle #12 as shown in Fig. 15. Tighten screw #13 by hand until it makes contact, then tighten with a 15mm open-end wrench a maximum of 1/2 turn (risk of breaking the 5mm axle if overtightened).
- Position the bicycle in the slots as shown in Fig. 16.
- Position the two spacers #17 in the holes in the drawbar as shown in Fig. 16.
- Tighten handles #6 by hand (Fig. 17) or tamper-proof screws #14 (Fig. 18) with bit #15.



Fig.15



Fig.16



Fig.17

A.



Fig.18

## B. Mounting the seat post tiller

### Bag n° 4

- 1. Aluminum seat clamp: x1
- 2. Aluminum seat sleeve: x1
- 3. 55mm M8 stainless steel bolt: x1
- 4. M6 nut cover: x8
- 5. M10 nut cover: x2
- 6. 50mm M6 stainless steel bolt: x4
- 7. M10 stainless steel washer: x2
- 8. M10 stainless steel adjustment washer: x2
- 9. M6 stainless steel bolt for seat clamp: x1
- 10. M10 stainless steel locking nut: x1
- 11. M6 stainless steel washer: x8
- 12. Teflon spacer #12 (3 sizes available depending on seatpost diameter)
- 13. M6 stainless steel nuts: x4



### Timon seatpost assembly

- Position the drawbar (Fig. 19) on the frame (several adjustments are possible depending on the size of the bicycle) and insert screws #6 with washers #11 into the holes in the trailer.
- Tighten nuts #13 with washers #11.
- Place nut covers #4.

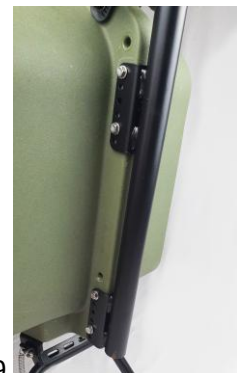


Fig.19

- Insert screw #3 into the U-shaped bracket of the drawbar, simultaneously inserting sleeve #2 between the U-shaped bracket (Fig. 20). When inserting the sleeve, also remember to insert washers #7 on the outside of the U-shaped bracket (see Fig. 20) and adjustment washers #8 on the inside of the U-shaped bracket, in contact with sleeve #2.
- Place the white Teflon spacers #12 as shown in Fig. 21.



Fig.20



Fig.21

- Slide the saddle clamp #1 between the spacers #12 and insert the saddle.
- Once the drawbar is adjusted to the correct height on the saddle, tighten screw #9 (5mm hex key).



Fig.22

## C. Mounting the kickstand

### Bag n°9 (Fig. 23)

- 1. Pre-assembled kickstand: x1
- 2. 25mm M6 stainless steel screws: x4
- 3. M6 stainless steel washers: x8
- 4. M6 stainless steel nuts: x4
- 5. Internal aluminum reinforcement plate: x1

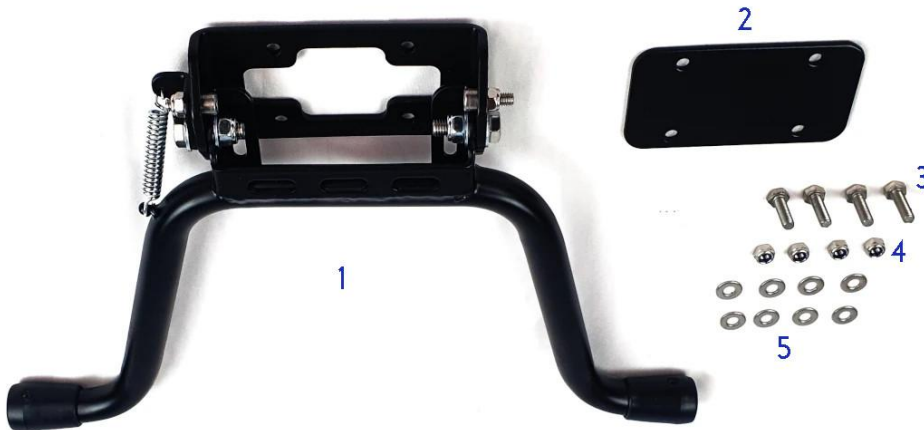


Fig 23

### Mounting

- Place the trailer upside down. Four drill marks will appear on the hull at the location of the support leg, each marked with a cross. Drill at the cross marks using a 6mm wood drill bit (the drill bit's point allows for more precise drilling).
- Position support leg #1 as shown in Fig. 23 and insert screws #3 and washers #5. Since the pre-drilled hole is 6mm, you will need to tighten the screws until they are flush with the hull.
- Inside the hull, position the reinforcing backing plate #2, along with washers #5 and nuts #4.



Fig.24



Fig.25

## D. Mounting the roof bars

### Bag n°6

- 1. Aluminum roof bars: x2
- 2. 50mm M6 stainless steel screws: x4
- 3. M6 stainless steel washers: x8
- 4. M6 stainless steel lock nuts: x4
- 5. M6 nut covers: x8

### Mounting

- Position bars #1 as shown in Fig. 26 (the largest bar at the front).
- Place screws #2 and washers #3 into the holes in the edge of the hull and tighten nuts #4/washers #3.
- Place the nut covers.



Fig.26



Fig.27

### IMPORTANT

- **Secure the items to be transported through the oblong holes in the central ridge of the trailer, not directly through the holes in the roof bars, as this risks 1) deforming the bars and 2) weakening the strapping.**
- **Balance the load between the items on the roof bars and the luggage inside the trailer to avoid significantly increasing the center of gravity, which would unbalance the bicycle/trailer combination.**
- **Observe the weight and speed limits indicated at the beginning of this document on page 2.**

## E. Panel fixing kit assembly

### Bag n°5

- 1. Panel mounting bracket: x2
- 2. Adjustable stainless steel bracket: x2
- 3. Quick-release clamp: x4
- 4. M6 stainless steel washer: x8
- 5. M6 nut cover: x8
- 6. M8 stainless steel lock nut: x2
- 7. M8 stainless steel pan head screw: x2
- 8. 50mm M6 stainless steel screw: x4
- 9. M6 stainless steel lock nut: x4
- 10. M6 stainless steel washers: x6



Fig 28

### Mounting

- Position screws #7 and quick-release fasteners on tabs #1 as shown in Figs. 29 and 30. Place washers #10 between tabs #1 and brackets #2 (Fig. 30) to prevent friction.
- Screw nut #6 with a washer #10 and the plastic nut of the quick-release fastener as shown in Fig. 29. The assembled kit is shown in Figs. 31 and 32.



Fig.29



Fig.30



Fig.31



Fig.32

## F. Flag Mounting

### Bag n°7a (yellow) or 7b (Orange)

- Item 1. Pennant: x1
- Item 2. Carbon tube: x2
- Item 3. Screw & nut: x2
- Item 4. Pennant attachment: x8
- Item 5. Pennant clips: x8

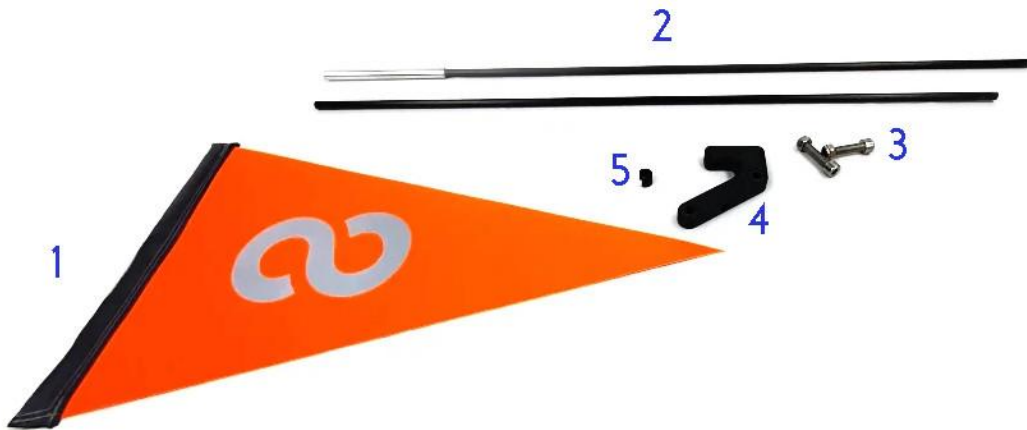


Fig 33

### Mounting

- Position carbon tube #2 (choose the one without an aluminum connector) in the pennant's slot, and join the two tubes by pushing them together.
- Position clip #5 on the carbon tube at the bottom of the pennant.
- Assemble panel bracket #4 onto the trailer's mounting tabs as shown in Fig. 30.
- Position the pennant, mounted by pushing it onto the pennant bracket, as shown in Fig. 30.



Fig.30