



Circe Cycles

Helios & Eos
Separable Tandem
Manual

This manual accompanies the Owners manuals for the Helios and Eos

Introduction

The separable kit fitted to your Helios or Eos tandem allows for even greater flexibility in the way you can enjoy your tandem. This manual gives you the information needed to use and look after the separable features of your tandem. The instructions below are aimed at a standard flat-bar build using images of the Helios.

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Key

1. Stoker cross bar
2. Couplings
3. Drain pipe
4. Front section
5. Fork
6. Rear Sec
7. Locating pins



2.0 Transporting your tandem

Depending on the method of transport the Helios or Eos separable tandem can be packed in a number of ways. For full protection, suitable for air travel, we recommend either the one or two case system. For partial protection, suitable for car, boat or train travel, we recommend using two soft bags.

2.1 One case system using the Traveller case

The one case system allows the whole tandem to go into one case and, depending on configuration, will also take the optional Traveller Trailer Kit.

Restrictions

- Mudguards need to be removed
- Only certain pannier racks will fit in the case, racks need to be removed for packing.
- Ursus Jumbo stand has to be removed (Pletscher twin leg stand can be left on)
- Eos fork may need removing
- Some bar configurations may be problematic.

Necessary tools

- Adjustable torque wrench 2-15Nm with 4, 5 and 6 mm allen key fittings, and same size separate allen keys
- Pedal spanner
- Masterlink pliers

2.11 Disassembly



Step 1.

Prepare your tandem for packing by removing the pedals and ensuring the drive chain is in the smallest sprocket at the rear (for derailleur gear system) for hub gears ensure it is in the lowest gear with the least cable tension.

Step 2.

Remove the captain seatpost, release the brakes (applies to V brakes only) and turn the bike upside down. Remove the wheels and skewers/Thru Axle (for hub gears follow the dedicated manufacturers' instructions for wheel removal). Install the chain keeper into R/H rear dropout as shown to hold the drive chain in place. Release all the zip (or velcro) ties so the cables are no longer attached to the frame, this can be done with the end of your finger nail or a small flat



Step 3.

Lay the bike down and remove the following:

- stoker seatpost (Q/R)
- stoker bars from the captain seatpost (5mm)
- handlebars from the stem (4 or 5mm)
- steerer extender from the frame (Q/R)
- timing chain. For the Helios, release by undoing the joining link using Masterlink pliers. NB: Be aware some joining links are single use. You may have enough slack in the timing chain to remove without undoing the joining link. For the Eos, loosen the eccentric bottom bracket to slacken the chain giving room to remove it, following the Owners manual.

To separate the handlebars from the front section the front brake cable needs to be removed from the brake lever, or in the case of hydraulics remove the lever by undoing the hinged clamp.



Step 4.

Using a 6mm allen key undo the coupling bolts so that the stoker cross bar can be removed. Then undo the pinch bolts on the drain pipe, also with a 6mm allen key. The pinch bolts don't need to be removed completely, but should be sufficiently undone so that they allow the drainpipe and frame sections to slide apart with a moderate twisting/pulling force. The locating pins at either end of the underside of the drainpipe need to be depressed before the drainpipe will slide off.

Step 5.

Place the front frame section and the rear triangle into the case as shown. Foam packing should be fitted between all contact points to prevent damage.





Step 6.

Place the stoker and captain bars into the case as shown. The stoker stem will need to be aligned in such a way that the bar and stem are effectively flat. Add foam packing where parts come into contact.

Step 7.

Put the stoker seatpost inside the rear triangle as shown (position 1). Slide the captain's seatpost inside the drain pipe and place in the case in position 2. Place the stoker crossbar in position 3. Ensure all contacting parts are well protected with foam packing.



Step 8.

Put the chain, stem, skewers and pedals in the mesh bag and place securely in the case, then put the foam divide over the bike. Put the axle protectors onto the wheels and place into case as shown. Pull the straps over and tighten. Close case.



2.12 Assembly

Step 1.

Remove all the parts from the case taking care not to damage any of the parts in the process. Start by sliding the drain pipe on to the rear section, pushing on as far as the end of the matt section. Leave the pinch bolts loose for the moment. If the bike has a stand fitted, use it to support the rear end.

N.B. Ensure you have the drain pipe the correct way round, with the bolt heads on the left, non-drive side.



Step 2

Slide the front section into the drain pipe pushing it up to the end of the matt section. Then align the front and rear section, so that the stoker cross bar can be fitted. To ensure correct engagement of the couplers the position of the front or rear section may need to be adjusted in the drain pipe until the couplers fit together correctly. Insert the bolts into the couplers and with a 6 mm allen key fitting tighten them to the recommended torque setting (14 Nm).

N.B. Note cable orientation before fixing the stoker cross bar in place.



Step 3

Fit the Captain's handlebars on to the stem and fit back onto the bike (make sure the Q/R is tightened fully). Insert the Stoker seatpost into the bike and extend enough to stand the bike upside down. Align the drainpipe with the stoker and captain chainsets and ensure the locating pins have sprung into place. If you have a Helios you can use the chain tensioner as a reference point to help alignment. Once aligned tighten the pinch bolts in increments, alternating between bolts until up to recommended torque setting (14 Nm).



Step 4

Thread the timing chain round the smallest ring on both chainsets. For the Helios reconnect using the joining link (if reusable) or fit a new link (if not reusable). Once connected, you can lift the chain on to the tensioner. For the Eos, tension the chain using the eccentric bottom bracket as per the Owners manual. Reattach all the cables using the zip ties (or velcro), make sure the cables are orientated correctly at the handlebars.

N.B. Make sure the cranks are orientated correctly so that captain and stoker crank arms match in angle.



Step 5

Put the wheels back in to the bike and replace the skewers, axle bolts or thru axles, ensuring they are tightened correctly. The bike can now be turned over and put on the stand if the bike has one fitted.

Step 6

Reconnect the front brake to the lever or put the lever back onto the handlebar, reconnect the rear brake if required. Ensure both brakes are working correctly before riding. Fit the stoker bars on to the captain's seatpost and insert into the bike. Install the pedals, then make final adjustments to seat and handlebar position.

N.B. Before riding double check all bolts and Q/R's are tightened correctly and the bike is safe to ride.



2.2 Two case system using standard suitcases

The two case system requires two suitcases of sufficient size and rigidity to carry the two separate parts of the Helios or Eos tandem. This system offers the advantages of using readily available suitcases and the reduction in weight and volume of each package making it easier to carry, and utilise individual baggage allowances.

Restrictions

- Requires two suit cases of sufficient size (dependent on model and spec).
- Mudguards need to be removed
- Only certain pannier racks will fit in the cases, racks need to be removed for packing.
- Ursus Jumbo stand has to be removed (Pletscher twin leg stand can be left on)
- Fork may need removing
- Some bar configurations may be problematic, especially drop handlebars.

Necessary tools

- Adjustable torque wrench 2-15Nm with 4, 5 and 6mm allen key fittings, and same size allen key fittings
- Pedal spanner
- Masterlink pliers

Packing

Follow Steps 1 - 4 above for packing the one case system.



Step 5.

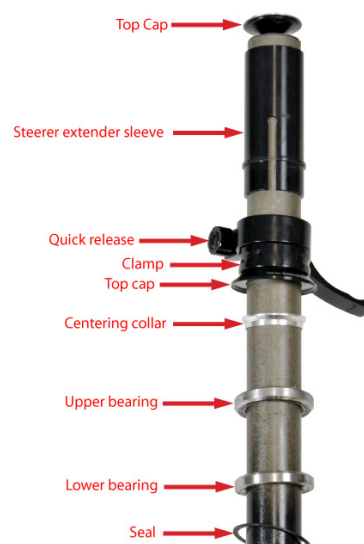
Place the rear end of the tandem, rear wheel, captain handlebar and captain seatpost into the case. Positioning may vary depending on the case. Ensure all parts are sufficiently protected with foam packing.

N.B. Depending on the case, model and spec, the rear tyre may need to be deflated.

Step 6.

Depending on the case, remove the forks from the front section by first loosening the clamp bolt using a 5 mm allen key. Then undo the top cap bolt completely, again using a 5 mm allen key. The forks should now slide out of the headtube. See note below on noting the order the parts are removed.

N.B. Slide all the headset parts back on to the fork in the exact order they came off. The image shows the Helios fork as an example. It can be useful to photograph the order if you are concerned about putting them back in the correct order.



Step 7.

Place the front frame section, forks, stoker handlebar, drain pipe, stoker cross bar, captain's bar and front wheel into the case. Positioning may vary depending on the case. Ensure all parts are sufficiently protected with foam packing.



2.3 Two bag system using the Circe soft bag

The two bag system offers a lighter, quicker pack than the hard case systems. It doesn't offer the same protection as the hard case system and is not recommended for air travel, but works well for train, coach or car travel. As the bags can fold up small enough to be carried on the tandem, this system is particularly suitable where several intermediate modes of transport are to be used.

Necessary tools

- Adjustable torque wrench 2-15Nm with 4, 5 and 6mm allen key fittings, and same size allen key fittings
- Pedal spanner
- Masterlink pliers

2.31 Disassembly

Step 1.

Remove the stoker bars from the captain's seatpost, and then swap the captain and stoker seatposts round whilst dropping them to their lowest positions. Remove the front brake cable from the lever (for cable brakes) or remove whole front lever (for hydraulic brakes) and release all the zip ties (or velcro) holding the cables so that the captain's handle bars are disconnected from the front section.

Lift the timing chain off the tensioner and remove it from the captain's chainset. - timing chain. For the Helios, release by undoing the joining link using Masterlink pliers. NB: Be aware some joining links are single use. You may have enough slack in the timing chain to remove without undoing the joining link. For the Eos, loosen the eccentric bottom bracket to slacken the chain giving room to remove it, following the Owners manual.

Store the chain eg putting in the mesh bag and hook round stoker chainset as shown.



Step 2.

Using a 6mm allen key undo the coupling bolts so that the stoker cross bar can be removed. Then undo the pinch bolts on the drain pipe, also with a 6mm allen key. The pinch bolts don't need to be removed completely, but should be sufficiently loose so that they allow the drainpipe and frame sections to slide apart with a moderate twisting/pulling force. The locating pins at either end of the underside of the drainpipe need to be depressed before the drainpipe will slide off.

Step 3.

Once the two frame sections are apart the front section including the front wheel, stoker bars, stoker cross bar and drain pipe can be put in one bag.

The rear section including the rear wheel, captain bar and stem can be placed in the other bag.

Ensure sufficient protection is placed around the frame parts as required.



3.0 Maintenance

The separable tandem parts made up of the couplings and drain pipe require minimal maintenance. However, they should be kept as clean as possible to avoid damage to the contacting surfaces. The couplings, drainpipe and frame ends can be cleaned using a cloth and a weak degreasing agent, for larger debris use a soft sponge and soapy water to clean the surfaces before gently wiping dry.

Before every ride the couplings and drain pipe pinch bolts should be checked to make sure they are tight (correct torque setting is 14 Nm).

To prevent gauling the bolt threads used on the couplings and drain pipe should be lightly coated in anti-seize.

4.0 Warranty

Cyclecentric warrants, to the original owner, that the retrofitted separable tandem kit, made up of two frame couplers and 'drain pipe' are free of defective materials and workmanship for two(2) years from the original date of purchase. This warranty is independent of the original frame warranty and is in no way an extension of that warranty. Warranty is conditional upon the bike being operated under normal conditions and being properly maintained. This warranty does not apply to:

- damage through normal wear and tear
- neglect (inadequate care and maintenance)
- damage from crashes or jumping
- overloading through excess weight
- incorrect assembly
- modifications to the bike (additional or changed components)
- theft
- use as a power driven vehicle
- failure to follow instructions or warnings in the owner's manual
- activities for which they were not designed.

Bending of frames, forks, handlebars, seat posts or wheel rims can be a sign of misuse or abuse. Cyclecentric reserves the right to make sole determination of whether any failure or damage claimed under warranty was caused by material or manufacturing defect, and reserves the sole discretion to repair or replace any parts covered by this warranty. The owner shall be responsible for all labour, shipping, and travel costs connected with the repair or replacement of warranted parts. Cyclecentric will, at our sole discretion, normally consider compensation for reasonable labour, shipping, and travel costs associated with warranty claims. Cyclecentric shall in no event be liable for incidental or consequential losses, damages or expenses in connection with its bicycle products.

4.1 Contact information

Cyclecentric Ltd
37 High Street
Longstanton
Cambridge
CB243BP

tel. +44 (0) 1954 782020
email. info@circecycles.com