

Folding bicycle instruction manual

Congratulations on your **ECOSINO** bike purchase

Your bike is designed, assembled and adjusted for safe use meeting the EN14764:2005 standards.

With proper care your *ECDSTOP* bike will be making you happy over many years. Due to different *ECDSTOP* models are differently equipped, present manual provides general and specific information.

Should you have any questions regarding our product or its parts please contact your cycle dealer.

Assembly and initial adjustment imply specific tools and require skills; therefore it should be effected by an experienced seller's mechanic.

Some maintenance can be performed only by a professional mechanic.

Since bicycle is a vehicle do not neglect safety rules.

Present manual contains useful information that will help you enjoy riding and use your bicycle with no danger.



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Present manual covers **ECOSMO** brand biycles.

1. SAFETY

- 1.1. ATTENTION! Please remember cycling can be a hazardous activity.
- 1.2. Before each ride check the bike as described in Section 4.
- 1.3. When riding, use individual means of protection. Wear a helmet to protect your head from injury, glasses will cover your eyes from dust and insects, gloves will save your hands in case of fall.
- 1.4. Before entering road traffic, study its rules Most countries and regions have their own national regulations for cyclists. Here are the most crucial rules:
 - 1.4.1. Use appropriate hand signals.
 - 1.4.2. Ride along the required road side (never ride against traffic).
 - 1.4.3. If you're in a team while on the road cycle one by one.
 - 1.4.4. Protect yourself (try to forecast unexpected). Remember: You are not always visible; though cycling becomes more popular, many drivers do not know bicycle signals.
- 1.5. Be careful when cycling on roads with dangerous surface. Please be careful while riding on gravel roads.
 - 1.5.1. Make sure you're allowed to ride there. Not all parks and private places are opened for cyclists.
 - 1.5.2. Put on protective apparel, including helmet, glasses and gloves.
 - 1.5.3. Stubs, stones, potholes make ground cycling dangerous. (Avoid rocks, branches and hollows.)
 - 1.5.4. When going down slow down, moving your body backwards and downwards; it's advisable to use rear brake.
 - 1.5.5. Consider others. Use the bell to warn them you're on the way.
- 1. 6. Use brakes with care. Always keep a safe distance when stopping behind other vehicles or objects. Braking distance and power should correspond to road conditions depending on weather. Use both brakes at the same time and avoid front brake overusing.
- 1. 7. Protect yourself Always be ready to face risk. Please remember you are less visible to other cyclists, bikers and pedestrians than a car. Always be prepared to stop or skirt.

- 1.8. Watch the road. Though road conditions and tracks design have recently become better you should be always aware. You can meet pits, drains, low edges, etc on your way. Cross the railway cautiously at the angle of 90 degrees. In case you don't feel confident, get off the bicycle and drive it.
- 1.9. Watch the parked cars when passing by. You can easily get into trouble in case a car drives suddenly away or a car door is suddenly opened on your way. For your safety it's advisable to use the alarm bell.
- 1.10. Be careful when driving at night . Your bicycle is equipped with required reflectors set; fix them where it's necessary and make sure they are clean. Do remember no matter you have reflectors you are still in danger of being injured unless light is focused on them. We also advise you to set light equipment on your bicycle and wear bright clothes to be seen on the road. The key point is to see and to be seen. Please use numerous and various gadgets for that.
- 1. 11. M ind wet weather. Any brakes no matter the design don't function same way in wet and dry weather. That is why one should stick to safety rules. When it's wet outside your well adjusted and oiled brakes still require an increased lever pressure and a longer braking distance. It will take you more time to stop. Besides, wet weather leads to bad view (for you and car drivers) and worsens road adherence. Slow down when turning on wet road. Greasy leaves and hatches can be dangerous as well.
- 1.12. If you use additional equipment and make technical changes to your bike (child seat, additional seats, lighting equipment installed) take the national traffic regulations and applicable standards into account.
- 1.13. Never leave your bike unattended to prevent theft.

2. ASSEMBLY

2.1 Unfold the folding frame

2.1.1 All the folding bike should be folded before go out



- 2.1.2 Take out of the bike and put on flat ground, people stand on the chainwheel/crank side, prepare to unfold the bike.
- 2.1.3 Before unfold the frame, make sure all the lock device are open.
- 2.1.4 Unfold the front and rear parts of the bike, make the folding device closed, then the front and rear parts of the frame are on the same horizon.
- 2.1.5 6-8KGF. Press the folding device on the frame, make the device are closed, it need 6-8KGF to close the folding device on the frame.

2.2 Unfold the handle bar

- 2.2.1 Pull the handle bar opposite the folding direction, and let the folding device full closed.
- 2.2.2 Press the folding button ,let the folding button be closed,it need 6-8KGF to close the folding button.
- 2.2.3 Turn the safe button anticlockwise, let the safe button fully cove the folding handle.



2.3 Adjust the height of saddle

2.3.1 Seat post and handle stem all have the quick release device for

adjusting the height.

- 2.3.2 Open the quick release ,and then adjust the height of the seat post.
- 2.3.3 After adjusting to the suitable height, press the handle of quick release, and then close.
- 2.3.4 Adjust the quick release, one side of the quick release can be adjusted,

hold the screw at the end then turn the quick release lever clockwise or

anticlockwise. See also the section «3. ADJUSTMENT».

Your bicycle must be assembled by professional mechanics in an authorised workshop or at the seller's.

3. ADJUSTMENT

3.1. Diagram of unfolding the bike

3.1.1 Unfold the frame



3.1.2 Unfold the handle bar



3.1.3 Raise the seat post



3.2. Adjustment the height of stem and seatpost

3.2.1 Handle stem

The dept of inserting the stem should not be less than the position of the safety line.

Close the quick release make sure it is safe.



3.2.2 Saddle and Seat post
Seat post height can be adjusted as you wish ,but the depth should not be less than the position of safety line.
If have two safety line,can not be more than the highest safety line.



3.2.3 Angle of the saddle Angle of the saddle should be slight up in order to avoid the rider leaning forward. If have two safety line, can not be more than the highest safety line.







3.3. Handle bar

You can easily define handlebar tilt and bent. Make sure the handlebar tilt is horizontally centred in the stem. Otherwise, you may refer to your own comfort requirements. To adjust/mount the handlebar release/take off Allen bolts, set the bar within the stem centre and keep the necessary tilt direction.

3.4. Saddle, seatpost

Put the seat at the approximate height, the torque of quick-release bolt 5-8 N/m (do not mount the seat post height drawn out beyond the limit). Get on your bike, let somebody hold you or put the bike beside the wall when on it. Put your heels on pedals. Spin the pedals back. When wearing your shoes there should be a slight bend in your knee in a proper riding position. At the same time you shouldn't fall over the saddle when riding. Tip the saddle nose either parallel to the ground or a bit up to stay on the seat without moving towards the handle bar. To adjust the saddle angle and position towards the seat post back and forth release the bolt in the seat post; in case you have a two-bolt fix release the bolts in rotation. After you adjust the saddle to the desired position torque the bolt with 12-15 N/m. In case of the two-bolt fix adjust the angle by tightening one of the bolts and loosening the other. The final torque for each bolt is 12 N/m.

pic. 9

3.5. Pedals

Before setting the pedals oil the thread with grease thick coat, it will prevent pedals sticking to cranks. When pedals are mounted tighten their axles inside the cranks with torque of 20-30 N/m (pic. 8, 9).





3.6. Front derailleur

There is no front derailleur on this model

3.7. Rear derailleur

- 3.7.1. Before adjusting rear derailleur make sure its fastener is not deformed and the guide plate is in parallel with the chainwheels (pic. 16).
- 3.7.2. Turn the cranks forward and mount the right shifter to the small chainwheel position; set the chain onto the smallest rear sprocket (pic. 18).
- 3.7.3. Turn the adjustment bolt counterclockwise in half turns until the cable is tensioned (pic. 17).

- 3.7.4. Using the stop screw H (high) adjust the rear derailleur outermost position so that derailleur roller is situated exactly under the smallest sprocket (pic. 18).
- 3.7.5. Fix the rear derailleur cable tension so that it couldn't lengthen (5 N/m) (pic. 19).
- 3.7.6. Turn the cranks forward and set the chain to the largest sprocket (pic. 20).
- 3.7.7. Using the stop screw L (low) make sure when gear is the lowest (the largest sprocket) the plate with rollers freely functions in-plane of bigger chainwheel (pic. 20); at the same time shifter should be easily and exactly set to the lowest gear.
- 3.7.8. Using the stop screw for shifter (or derailleur) delicate adjustment make the rear derailleur duly function (pic. 17).





3.8. Rim brakes

- 3.8.1. Mount the brake pads so that the pad braking surface is in parallel with the rim braking surface and it's set right in the middle (pic. 21).
- 3.8.2. Tighten the adjusting bolt against the brake lever and unscrew it by two turns (pic. 22), fix the cable on the lever in such a way that distance between pads and rim amounts to 1-2 mm (5 N/m) (pic. 23).
- 3.8.3. Pull the brake lever, use the lock ring if necessary to adjust the distance between brake pads and rim (pic. 22).
- 3.8.4. Use the adjusting bolt on brake arms to pull them equally aside (pic. 24).
- 3.8.5. Once pads become worn and cables are pulled adjust the cable tension by using the lever bolt or by using the lock nut at the cable holder located at the point where the brake cable enters the brake lever; please, keep in mind the lock should be screwed 5 mm less into the lever.



3.9. Mechanical disc brakes

- 3.9.1. Before adjusting disc brakes make sure discs are not deformed, pads' surface is smooth, without any scratches.
- 3.9.2. With your eye control set the disc brake caliper in such a way that pad braking surface is in parallel with the brake disc. Fix the caliper bolts (5-8 N/m) (pic. 25).
- 3.9.3. Use the adjusting bolt to mount a fixed pad in such a way it is as close as possible to the disc without touching it while wheel rotating.
- 3.9.4. Adjust the brake cable so that when pulling the lever it's 2-3 cm apart from the handlebar (5-8 N/m) (pic. 26), if required use the adjusting bolt on the brake lever.
- 3.9.5. As a rule disc brakes completely grind after 100-200 km distance run.
- 3.9.6. In proportion to wear use the adjusting bolt on caliper and brake lever to set necessary clearance between pads.



3.10. Hydraulic discbrakes

- 3.10.1. Before adjusting hydraulic disc brakes make sure discs are not deformed, pads' surface is smooth, without any scratches.
- 3.10.2. With your eye control set the disc brake caliper in such a way that pad braking surface is in parallel with the brake disc (pic. 27). Fix the caliper bolts (5-8 N/m).
- 3.10.3. Use the adjusting bolt to mount the brake lever at your own requirement (pic. 28).
- 3.10.4. As a rule disc brakes completely grind after 100-200 km distance run.



3.11. Tyres

- 3.11.1. Before riding pump up the wheels till the required pressure. The pressure needed is shown on the tyre sidewall.
- 3.11.2. Use the pump appropriate for your bicycle nipple. There are two main types of nipples: for bicycle (PRESTA) and car (SCHRADER) (pic. 29, 30).
- 3.11.3. Before you start inflating a bicycle tyre with PRESTA nipple, loosen the safety screw (pic. 30), make sure it works after one-time press. Once you inflate the bicycle tyre with PRESTA nipple, tighten the safety screw back.



4. MAINTAIN YOUR BICYCLE.

4.1. Before every ride

- 4.1.1. Check the way your brakes function. Press the brake lever rolling the bicycle forward and backward. The wheels should clearly block.
- 4.1.2. Check the holding force of wheels quick releases.
- 4.1.3. Check the tyre pressure (Tips are given in 3.11).

4.2. Once a week (about 100-200 km distance riding)

4.2.1. Clean and oil the chain (choose special silicone or teflon based lubricants, use specific cleaners). Depending on weather conditions and riding frequency the break between maintenance sessions can vary.

4.3. Once a month (about 500-800 km distance riding)

- 4.3.1. Check the chain for wear using the tool required.
- 4.3.2. Check whether hub, headset, bottom bracket and pedal bearings are properly adjusted.
- 4.3.3. Tight the crank bolts to the torque specification. For cranks set to bottom bracket axle 35-40 N/m.
- 4.3.4. Check that all stem and handle bar bolts are tightened to the torque specification (5-8 N/m).
- 4.3.5. Check the wheels radial and face true. If necessary change the rims. To adjust you will need a spoke wrench (we strongly advise you to contact an authorised service centre in this case).
- 4.3.6. Check brake pads condition, in case you have V type brakes; check the wear of rims braking surface. Once the special grooving remains the rim is still possible to use; once the grooving is no longer visible, the rims are subjext to change.

4.4.Once a season

- 4.4.1. Suspension fork is maintained according to the manual enclosed. Fork oil seals are to be cleaned or replaced, suspension fluid is to be changed. If you ride your bicycle when it's rainy, snowy or dirty service it more often than the schedule suggests. You can determine by sight or once you feel the fork malfunctions whether suspension systems require service.
- 4.4.2. Check cables and their cover condition. The cover should not be damaged in the cable-held places. The cables must have smooth surface with no signs of souring and be able to run freely inside the cover. If required, change the cables and cover.
- 4.4.3 Change the lubricant inside the hubs, bottom bracket and head set (provided that bearings are possible to dismount for service).

Within first 2 weeks of bicycle riding (about 100 km distance run) take it to the service centre for first maintenance. It includes determining torque of cranks on bottom bracket spindle (500 Nm); checking headset, stem and handle bar torque (star nut — 3 Nm, stem bolts — 5 Nm); spokes' tension check; brakes and derailleurs adjusting. Bicycle first maintenance in authorised service centre will be free if it's bought from your dealer.

5. GUIDE TO GENERAL RULES

5.1. Recommended tools for service and repair:

- Torque wrenches with measure range of 3 to 50 N/m;
- Allen keys 2, 3, 4, 5, 6, 8 mm;
- Spanner keys 9, 10, 13, 15, 17 mm;
- · Cap keys 15 mm;
- Screwdriver Ph+ (1);
- · Tire levers;
- Air-gauge pump.

For further consult on wide range tools usage please contact your dealer.

5.2. Seat (saddle) adjustment

Follow the recommendations given in 3.4. Your comfort cycling will depend on correctly chosen saddle height and shape, as well as its adjustment.

5.3. Apparel

We strongly advise you to wear a helmet. Choose the one considering your riding style and frequency. Let a bike shop assistant help you when buying. Cycling gloves will let you provide a good grip for the bar. Sole of the shoes should be stiff and nonslip. Clothes should be loose and comfortable fitting your body. Wide pant legs can easily be caught by cranks or stuck between the chain and chainwheel. Wide jacket or T-shirt can easily hitch on the bar, stem or seat.

5.4. Gear shift

While riding choose the most comfortable for you sprockets ratio regards the area. Follow the rule to never use such derailleur gears as: smallest front chainwheel – smallest rear sprocket, largest front chainwheel – biggest rear sprocket. Such use leads to the unfavorable run of chain and fastens chain and sprockets wear.

Pressing the shifter moves the chain to the large chain rings. When shifting the chain over the chain wheels (front derailleur) it's advasable to apply less force with pedals, at least before the chain reaches the 6-7 teeth sprocket. Otherwise, such shift can lead to chainwheel break down (bend, teeth damage) or chain out of order (links torn or bent).

When shifting the smallest rear sprockets (rear derailleur) it's advisable to slow down the pedal force. Do not try to shift the gears without chain rotation. It may disadjust the derailleurs.

5.5. Chain

To mount – dismount the lock. Oil the chain duly to prevent it from early wear, as well as the chainwheels. Apply specific lubricant on the chain once or twice a week so that oil could infiltrate the links. Finally rub off excess lubricant with a rag, thus chain won't get dusted.

5.6. Storage

When not riding store your bicycle in rooms with appropriate humidity, protected from sun and precipitations.

6. WARRANTY INFORMATION

6.1. Service life and warranty period

Before riding, please read the manual carefully and follow all stated requirements. The warranty period

for the bicycle (provided that first maintenance is duly held) is 12 months, for equipment is 6 months (from the date of bicycle sale). Suspension guarantee is set by its producer. Material and frame welding guarantee is 5 years.

During the warranty period you may repair your bicycle for free in case it's damaged due to producer's fault. You should contact the seller or the guarantee service center to fix the problem.

The warranty is valid only in case a guarantee card is duly filled i.e. it includes the serial number of bicycle's frame, the date of sale and the seller's stamp. The buyer delivers defective bicycle to the after-sales service shop at their expense. Only clean and fully mounted bicycles are taken to the warranty repair.

6.2. Warranty terms

Once a new bicycle is sold the seller makes a special mark in the warranty registration of the present manual (item 7 in the bicycle passport). The buyer should check whether the record is done by the seller. The warranty period is estimated from the date of bicycle handover to the buyer. During the warranty period the producer guarantees to fix free of charge all defects found in this period and not caused by the actions of third parties, force majeure or the actions not related to the buyer's fault. The warranty covers manufacture defects in bicycle equipment and joints. Warranty obligations of the producer include the following: bicycle components/parts repair or replacement in case of material's defect or breakdown due to producer's fault (following of operating instructions and without any mechanical damages on the bicycle and its parts; or with mechanical damages but without any cause-and-effect relations between damages and defects).

Obligations under this warranty are limited by free of charge bicycle repair in authorized service center. Warranty repair is made by the workers of authorized service center with the Certificate of Conformity.service center with the Certificate of Conformity.

6.3. Buyer' s responsibilities

- 6.3.1. Use, service, keep and maintain bicycle in accordance with this manual.
- 6.3.2. Check the bicycle in accordance with this manual every time before riding.

6.4. Cases not covered by warranty

- 6.4.1. Regular maintenance service of the bicycle.
- 6.4.2. Repair and replacement of parts due to natural wear (lubrication, deterioration of tyres and tubes, brake pads, suspension joints, etc.).
- 6.4.3. Radial and and face true arisen from the bicycle use.
- 6.4.4. Mechanical damages of any parts as a result of a fall or an accident.
- 6.4.5. Damages caused by punctures, cuts, breaks of tyres and tubes.
- 6.4.6. Repair and replacement of spare parts and components produced by the buyer's request and not caused by bicycle defects.
- 6.4.7. Damages or corrosions caused by external factors including splits and scratches by rocks, effects of salt, hail, etc.

6.5. Removing bicycle from guarantee

- 6.5.1 Incase of independent and non-qualified repair without the certifice of conformity.
- 6.5.2. Improper follow-up maintenance.

6.5.3. Installation of components, parts, or accessories not originally intended for or compatible with the bicycle as sold (frame cleared from paint, holes drilled, parts cut off, adding/removing parts to suspension, mounting disc rotors of bigger diameter, etc).

6.5.4. Use of bicycle for commercial purposes (rent, taking part in competitions, etc).

7. DATA SHEET

Model:	
Serial number:	
Owner:	
Address, phone:	
Sale date:	
Seller stamp:	
Notes:	

Producer can change bicycle equipment at its own discretion. Warrantee conditions are agreed and accepted. Have no claims against outside appearance and equipment.

Buyer: _____