

Airwings Operating and Mounting Instructions

For models

EVOLUTION by AIRWINGS Hillstener GmbH EXTRA BIKE II by AIRWINGS Hillstener GmbH



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Impressum

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State as of October 2003

Dear Customer,

thank you for buying a suspension seat post from AIRWINGS. Our products are manufactured in Germany with the high quality demanded of mechanical engineering products and in accordance with the relevant industrial standards. Please read these instructions carefully before performing any work on your seat post. Be sure to observe the instructions on maintenance and care, bearing in mind that a certain degree of skill and high-quality tools are essential for any kind of work done on your bike. Don't overestimate your own abilities and turn to your bicycle dealer for help if should ever have the slightest doubt.

Your AIRWINGS suspension seat post enhances your riding comfort and protects you against bumps from the ground. The seat post is designed for use on tarred or other hard-surface roads and paths, as well as for cross-country, marathon and cycling tours. It is not suitable for freeriding, downhill, dual slalom, jumps etc. Improper use can result in sudden failure, with unforeseeable consequences.

For your own safety, please note that the weight of the rider including any baggage he may be carrying on his back must not exceed 140 kg. At the same time, observe the maximum weight specified by the bicycle manufacturer. Mounting a carrier or a child seat to the AIRWINGS seat post is not permitted.

We wish you many years of riding enjoyment and fun on your patented AIRWINGS suspension system.

AIRWINGS Hillreiner GmbH
www.airwings-systems.de

Adjusting saddle height

To adjust the saddle to the **desired height** you need to open the seat post binder and then shift it up or down inside the seat tube. Instructions on how to open and close the seat post binder will be given in the user manual provided by the bicycle manufacturer, especially if your bike is equipped with a quick-release. There you will also find tips on how to find the correct saddle height.

 Do not ride your bike with the seat post drawn out to a length where you can see the max-mark. This could cause damage to the seat post or frame.



With frames where the seat tube extends beyond the top tube the seat post must reach below the level of the top tube! In some cases this will require an insertion depth of at least 10 centimeters.

The method of adjusting the **fore-to-aft position** and tilt of the saddle will vary depending on the type of seat post.

Release one of the two Allen screws by 2 to 3 complete turns using a 5 mm Allen key. It is not necessary to take the whole mechanism apart.



Give the saddle a light blow if it doesn't move easily at first and then bring it into the desired position.

To adjust the tilt you first need to release both screws. The saddle will tilt as you tighten them again depending on which screw you tighten more. You may find it necessary to repeat releasing and tightening the screws several times to get the saddle into the desired position. Finally tighten the screws again with a torque of no more than 6 Nm. Normal hand force applied to a standard Allen key is quite sufficient to clamp the saddle tight.



 Use a torque key or ask your bicycle dealer to tighten the screws with the correct torque.

⚠ If you use too much force or tighten the screw with a long-handled tool or a pair of pliers there will be a risk that the screws, the seat clamp pin or the mounting itself fail. Danger of accident!



⚠ After adjusting the saddle check whether everything is securely fastened. Take hold of the saddle front and rear and try to twist it against the frame of the bike. Also try to tilt the saddle by bringing your weight to bear on it once at its front and once at its rear end. If the saddle or the seat post yields to force, tighten the screws a little more, e.g. half a full turn.

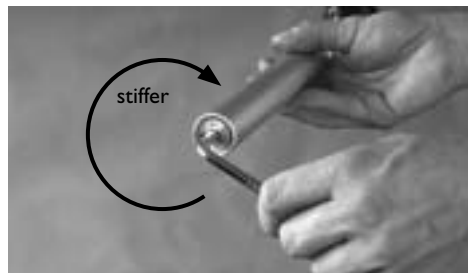
Adjusting the suspension system

Your AIRWINGS seat post has been adjusted to an average rider's weight. Adjusting the springiness of your AIRWINGS seat post to give you maximum riding comfort is easy. For this purpose you need to remove the seat post from the frame. Read through the manual provided by the bicycle manufacturer before removing the seat post from the frame.

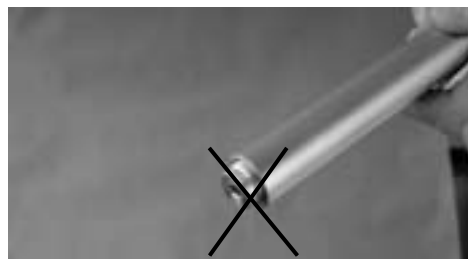
i Mark the position of your seat post in the frame by drawing a line with a felt pen along the upper edge of the seat tube and another line perpendicular to the first. Then you will easily find the original position again when remounting the seat post.



If the seat post felt too soft, turn the screw a few turns clockwise (as when looking at the seat post from its end), i.e. inward. This will make the spring stiffer.



If the seat post felt too hard, turn the screw counterclockwise (as when looking at the seat post from its end), i.e. outward. An important note: At the very most, turn the adjusting screw out to a point where it is flush with the end of the seat post tube. Turning it out further could cause the seat post to fail!



After adjusting the seat post, check whether it still yields a little, i.e. by about 10 mm, when you sit on the saddle in your usual riding position.

If the seat post should still yield too much after its preload has been increased or if it should still not yield noticeably after it has been set to its softest adjustment, you will need a different AIRWINGS spring package to improve your riding comfort. Ask your dealer for advice.

i AIRWINGS seat posts fitted with original springs can be adapted to riders of less than 40 kg up to more than 130 kg. Exchanging the springs is a job best left to your bicycle dealer!

Maintenance and care

Clean your seat post regularly with a soft cloth and water, removing any adhering dirt and salt. For obstinate dirt you can use warm water with a few squirts of commercial washing-up liquid. Do not use aggressive cleaning agents such as solvents etc.

⚠ A steam jet is not suitable for cleaning your AIRWINGS seat post, since a powerful water jet can penetrate it and spoil the lubrication.

After allowing the seat post to dry well it is advisable to rub its metal surfaces in with commercial hard wax. This should be done in any case at least twice a year. When the wax has aired sufficiently give the surface a polish. In this way your seat post will keep its shiny appearance for years.

i If your seat post is mounted in a steel frame you should dismount it once a year. Clean the seat post and seat tube with a cloth and grease both surfaces before mounting the seat post again. This will help to prevent the seat post from rusting onto the frame.

Lubricating the interior of your AIRWINGS seat post is easy to do from the outside and will keep it working smoothly for many years. We recommend lubrication every 5000 km or once a year. If you use your bike in rougher conditions (frequent rides in the rain or in very dusty terrain) your seat post will want lubrication more often. Apply a grease gun containing commercial (high viscosity) bearing grease to the lubricating nipple and pump two to three shots of grease into the seat post. Small shots are quite sufficient. Please don't fill your seat post up to the top with grease!



Mounting the seat post and saddle

Mounting the seat post and saddle requires a fair degree of experience and skill and should therefore best be left to your bicycle dealer. If you want to give it a try yourself, be sure to follow the instructions carefully.

⚠ AIRWINGS seat posts come in many different diameters. Make sure that your seat post matches the diameter of your frame!

i AIRWINGS holds a series of sleeves available for adapting seat posts to frames with unusual tube diameters. Ask your dealer about adapters if you need one.

Dismounting the old seat post

Before mounting your new AIRWINGS seat post you will need to remove your old seat post. Release the seat post binder on the frame (observing the instructions of the bicycle manufacturer!) and pull the old seat post out. Remove any old grease and dirt that may have accumulated inside the seat tube.

i If your old seat post is stuck hard we recommend applying a little thin oil to the edge of the seat tube. Let the thin oil seep in, if possible overnight, before trying again to twist the seat post out. If this doesn't work either, ask your dealer for help.

If you have a **patented seat post**, release the screw connection completely and take the saddle off the seat post.

Mounting the saddle on the seat post



Place the tilting assembly (B) on the seat post head (A); (B) receives the seat post rails and provides an engaging surface for the upper assembly (C), thus permitting you to adjust the tilt of the saddle. Note that the position of the tilting assembly is as shown in the picture. Otherwise the mechanism could fail!



1. Preparing the upper assembly (C)
(C) has two recesses for the threaded seat clamp pins (D) at its front and rear end. The seat clamp pins must be oriented such that they can afterwards receive the Allen screws (E).



2. Place the saddle on (B) with the rails resting on the rail supports; next place the upper assembly (C) together with the seat clamp pins (D) on the saddle rails. Check whether you have mounted the tilting assembly correctly. The rail clamping surfaces should be exactly opposite each other.



3. Turn the Allen screws (E) into the seat clamp pins (D) in the upper assembly (C) and tighten them hand-tight at first.
4. Now adjust the tilt of the saddle as you want it. You can do this by adjusting the Allen screws (E).

Your bicycle dealer will be pleased to inform you what saddle tilt is normally most suitable, healthy and comfortable for you. As a rule the saddle should be horizontal, however.

5. After adjusting the saddle to the desired tilt tighten both Allen screws equally to a torque of no more than 6 Nm. This should normally be possible using a proper-sized Allen key without any additional tools.



- Applying excessive force, e.g. with a pair of pliers, poses a risk of damaging the screws, seat clamp pins or upper assembly. The ideal solution is to use a torque wrench!

⚠ Tighten all these screws to a torque of no more than 6 Nm (medium force / hand-tight), especially the adjusting screws that determine the tilt of the saddle. Overtightening screws won't make the saddle any more secure whereas it can cause damage to the saddle rails and seat post. Danger of breakage!



Mounting the new seat post onto the frame

Grease the seat post and the inside of the frame's seat tube and insert the seat post. The seat post should slip in easily but without any play! Don't on any account use brute force! If in doubt, ask your bicycle dealer.



⚠ If your frame is made out of carbon you are not supposed to use grease! Please read the manual of the bike.

If you are use a shim apply grease on the in- and outside. Align the slot of the shim with the slot of the frame. Close the clamping according to the manual of the frame manufacturer.



⚠ After mounting the seat post check whether everything is tight and secure. Grip the saddle front and rear and try to twist it against the frame. Also try to tilt the saddle by bringing your weight to bear once on its front and once on its rear end. If the saddle or seat post yields to force, tighten the screws a little as necessary, e.g. by half a turn.

Warranty (liability for defects) and guarantee

Your AIRWINGS seat post was manufactured with care and left the factory in good working order.

You have full warranty rights during the first two years after purchase or delivery of the seat post. Your contracting partner and contact person in the event of defects is the bicycle dealer from whom you bought the bicycle or seat post.

Please bring your customer's receipt with you so that your complaint can be processed smoothly. Always keep your receipt in a safe place in case you should need it.

To prolong the service life and durability of your seat post only use your bicycle for its intended purpose (see p. I and the user manual provided by the bicycle manufacturer) Be sure also to observe the maximum load specifications. Furthermore, it is essential that you follow these mounting instructions (especially the torque specifications) and the specified maintenance intervals accurately.



It can happen that a little grease oozes out of your suspension seat post on first use. A slight abrasion of paint from the black shaft during use is normal and will impair neither the functioning nor the durability of your seat post.

Notes on wear

Some components of your seat post are subject to wear due to their function. The rate of wear will depend on care and maintenance and the way you use your bicycle (mileage, rides in the rain, dirt, salt etc.). Bicycles that are often left standing in the open may also be subject to increased wear through weathering.

These components require regular care and maintenance. Nevertheless, sooner or later they will reach the end of their service, depending on conditions and intensity of use. These components must be replaced when they have reached their limit of wear.

Guarantee

In addition to the statutory warranty (liability for defects) AIRWINGS Hillreiner GmbH gives you a three-year guarantee (as of the date of sale) against material and manufacturing defects of your AIRWINGS seat post. In a guarantee-activating event the AIRWINGS company reserves the right to repair the defective seat post or to replace it with the current successor model. Further claims (assembly costs, transport etc.) are excluded.

The guarantee presupposes that,

- you returned the guarantee card to AIRWINGS immediately after purchase,
- the seat post was properly mounted and adjusted by a bicycle dealer,
- you have used and maintained the seat post in accordance with the information provided in these instructions.

In a guarantee-activating event please turn directly to
AIRWINGS Hillreiner GmbH
phone: 0049 / 8136 / 998435
Email: info@airwings-systems.de

If we have agreed to take the seat post back, send it to

AIRWINGS Hillreiner GmbH
Hofer Straße 37
D-85229 Hirtlbach
Germany

