

# Airwings Operating and Mounting Instructions

For Models

## Tour



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## Impressum

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Technical details in the text and illustrations of this manual are subject to change.

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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 gentle off-road riding. It is not suitable for rough riding, especially not for freeriding, downhill, dual slalom, jumps etc.


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.




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

- Saddle mounted on standard saddle clamp:

Release the nut on the transverse through bolt by two to three complete turns. It is not necessary to take the whole mechanism apart.



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.

 Note that the clearance between the lower side of the suspension head and the frame must be at least 4 cm. If this is not the case there is a risk of damage through collision when the seat post retracts completely under extreme load.

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

While the nut is released you can also change the tilt of the saddle. The tilt is not infinitely adjustable because it has a ratchet mechanism.

Tighten the nut again to fix the saddle in its new position. Fasten it hand-tight, i.e. with 5 Nm. Check whether the saddle resists tilting by gripping it front and rear with two hands and trying it tilt it.



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

**4** 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!

- Saddle with patented AIRWINGS mounting:

Release the two Allen screws by two to three 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 5 Nm. Normal hand force applied to a standard Allen key is quite sufficient to clamp the saddle tight.



**4** 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.

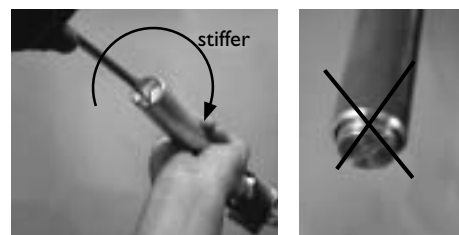
## Adjusting the suspension system

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 up to 75 kg weight and more than 75 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.

**i** 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.

## 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.

**i** 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.

 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 your saddle is mounted on a **standard saddle clamp**, release the nut of the clamp by two to three full turns and pull the saddle off the seat post together with the clamp.



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

 For modern saddles with a base consisting of two rails, the AIRWINGS patented saddle clamp is very much to be recommended. This fastening mechanism was especially designed with a mind to these saddles when used in combination with an AIRWINGS suspension seat post.


- Saddle with standard saddle clamp



Push the saddle clamp all the way onto the suspension head (1) so that the two are in direct contact.

Orient the seat of the saddle parallel to the ground surface and tighten the nut hand-tight, making sure not to exceed a torque of 5 Nm (torque wrench). Higher torques improve nothing but only increase the probability of failure!



 In order to provide a firm seat the saddle clamp should engage with the inner tube at several points. Saddle clamps with only two points of contact, for example, may allow the saddle to twist out of place – danger of accident!

- Saddle with patented AIRWINGS saddle clamp

As a rule the saddle clamp is delivered preassembled. If your seat post is preassembled start with step 3.

If this is not the case, carry out steps 1 + 2.

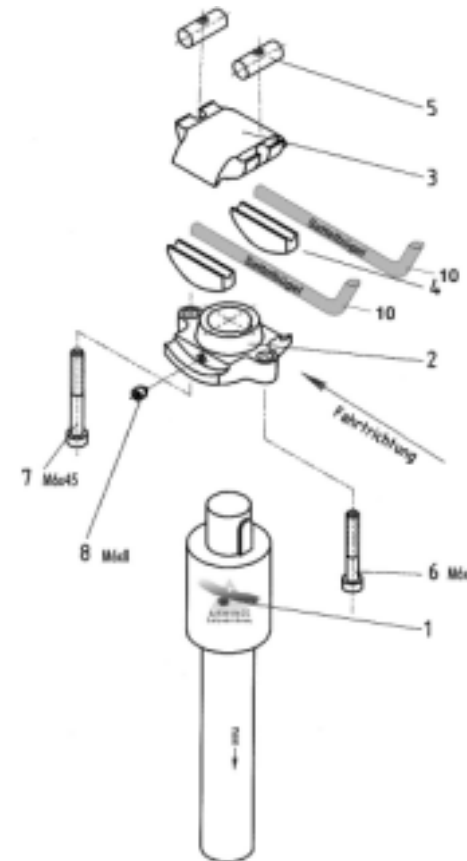
1. Push the lower assembly (2) all the way onto the suspension head (1) of the seat post. The suspension has a groove which will prevent the saddle from twisting out of position.



2. Tighten the Allen screw (8) hand-tight.

3. Place the rounded rail supports (4) on their mating surfaces on the lower assembly (2). Note that this joint determines the tilt of the saddle.

4. Place the saddle rails (10) on the rail supports.




5. Place the upper assembly (3) on the saddle rails.




6. Insert Allen screws (6) + (7) from underneath into the holes in the lower assembly (2) and clamp the upper assembly tight by screwing them into the threaded seat clamp pins (5).



7. You can determine the tilt of the saddle by the distance by which you screw each of these two Allen screws in.


 Tighten all these screws to a torque of no more than 5 Nm (medium force/hand-tight) – especially the Allen screws (6 + 7) 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!

 This saddle clamp may only be used in combination with an AIRWINGS seat post.

## 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.



 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. 1 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.

## 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 / 08136 / 998435  
Email: [info@airwings-systems.de](mailto: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