Adjustments to the NEURO HiSWING System Ankle Joint

This online tutorial describes the settings of the NEURO HiSWING that you as a patient can adjust on your own at the system joint. The NEURO HiSWING is a hydraulic system ankle joint, which is adjusted to level ground. If necessary (e.g. when walking uphill or downhill or climbing stairs), you can adjust the ankle joint angle yourself by opening the hydraulic valve via the lever. The spirit level on the system ankle joint indicates the alignment set by the orthotist for the respective slope or incline when the air bubble is centred.

You can find further information on the system ankle joint in the instructions for use of the NEURO HiSWING.

A video for patients on how to adjust the NEURO HiSWING system ankle joint can be found here.









The NEURO HiSWING system ankle joint knee joint provides special functions for the patient. You can independently make adjustments to the system joint. This allows you to:

- to wear the orthosis with different shoes,
- to go up or down slopes safely,
- to climb stairs safely and
- comfortably place the foot on the floor when sitting.

Please note that, among other things, a mechanical knee joint that does not allow a knee flexion has a significant influence on walking, even if appropriate adjustments have been made to the NEURO HiSWING system ankle joint.





To ensure safe walking and standing, it is important that your lower leg is in a defined position to the ground. This has been specified by your orthotist and indicated with the help of a spirit level.





Use the integrated spirit level of the orthosis as a guide for all adjustments. Always ensure that the air bubble is centred when the orthosis is in the shoe. It may be more comfortable for you to deviate from this when walking up or down stairs. More information about these adjustments will follow on the following slides.

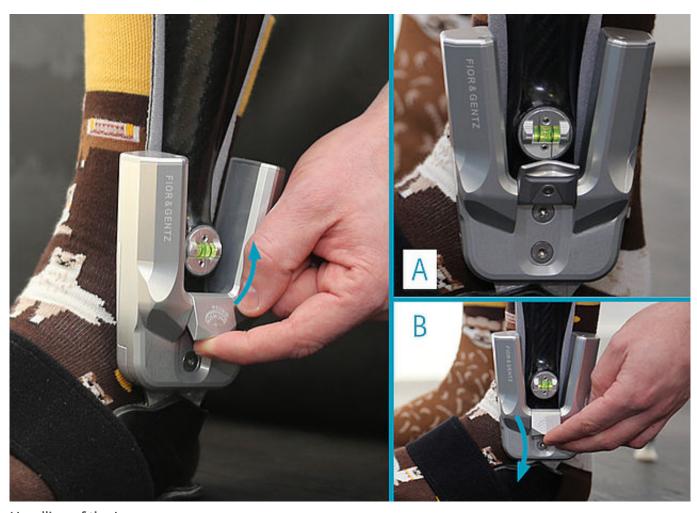




Important!

In order to make any adjustments, use the lever exclusively in the middle of the system joint. Any adjustments for which the use of tools is required is not permitted from your side.





Handling of the Lever

The lever opens or closes a hydraulic valve. It is located on the outer side of the system joint where the NEURO HiSWING logo is marked.

Push the lever upwards to open the valve and close it by pushing the lever downwards. If the lever is pushed up (A), the tibial shell can be moved freely against the foot piece. If the lever is fully pushed down (B), it is flush with the adjacent surfaces of the system joint. When closing the valve, make sure that you do not pinch anything (e.g. shoe or clothing) and do not proceed under load.





Basic Procedure for Adjustments

Place the orthos is in the shoe on the ground (e.g. on level ground or against a slope). Ensure a secure stance if you wear the orthosis on your leg.

Push the lever completely upwards. When the valve is open, you can move the lower leg against the foot. To do so, tilt it forwards or backwards. Then push the lever completely downwards again.





Adaptation to Different Shoes

Changing shoes can lead to a change in the position of the air bubble in the spirit level. Therefore, check the spirit level every time you change your shoes. Make appropriate adjustments if changes occur.in the event of changes.

Furthermore, it is possible to walk without shoes at home. Concerning this point, consult your orthotist.





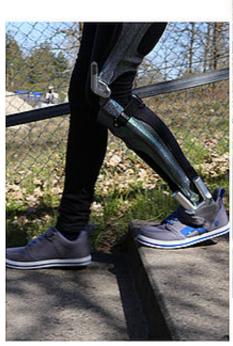
Walking safely on Slopes

Walking uphill and downhill can be a challenge with an orthosis. When walking downhill, it can feel like you are falling. When walking uphill, you can feel like you have to clear an obstacle. When the NEURO HiSWING system ankle joint has been adapted to the slope, you can master it more easily and safely.

For this purpose, proceed as follows:

- Open the lever.
- Then stand on the slope.
- Align the orthosis according to the spirit level.
- Push the lever downwards again.















Walking Down Stairs in Alternation

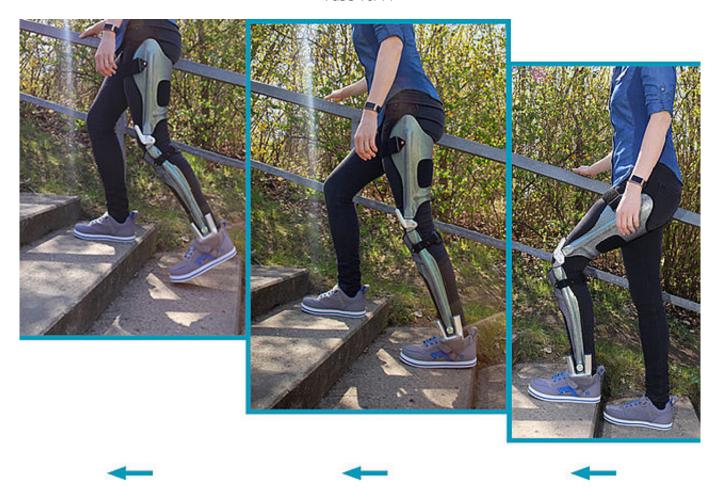
Walking down stairs in alternation (i.e. taking alternating steps with the right and left foot and not repositioning) is a challenge with an orthosis. An increased forward inclination of the lower leg towards the foot can be helpful.

Proceed as follows:

- Push the lever upwards.
- Place the orthosis in such a way that the air bubble of the spirit level is no longer centred, but positioned further back.
- Push the lever downwards again.

With this adjustment, you will find it easier to move the untreated leg to the next lower step.





Walking Up Stairs with Less Effort

The same adjustment supports you when walking up stairs. An increased forward inclination of the lower leg is helpful to place the untreated leg on the next higher step.





Sitting Comfortably

To allow a relaxed posture of the leg when sitting, proceed as follows:

- Push the lever upwards.
- The foot can now be moved freely and therefore be placed completely on the ground.
- Make sure to push the lever downwards when standing up. Use the spirit level as a guide.



