

Installation Instructions Art. No. 429077H Gas Spring for Dental Stool KaVo Physio 5005

The following instructions describe the process for replacing the gas spring on the KaVo Physio 5005 dental stool.

dental stool KaVo Physio 5005

DKL Replacement
Gas Spring 429077H



Preparation

Lay the dental stool on a lightly padded surface (e.g., cardboard, towel).

IMPORTANT! When lifting the dental stool, always hold it from the bottom and by the backrest. This prevents the gas spring from becoming dislodged!

The gas spring is only inserted and not screwed in.

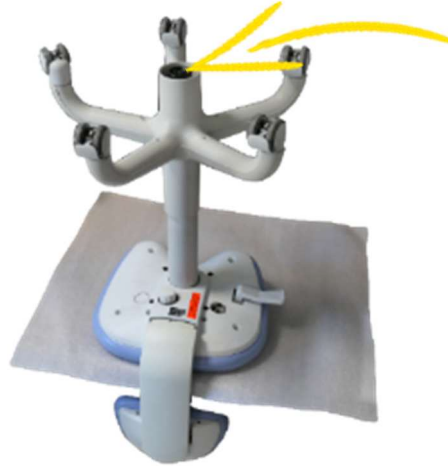
Especially with a newly installed gas spring, it can slip out if it's not yet firmly seated from use, and then it will need to be reinserted.

The gas spring will only be seated firmly enough not to slip out when lifting after repeated and sustained use (by sitting on it).



Remove the Retaining Clip

The gas spring is secured with a retaining clip underneath the stool.



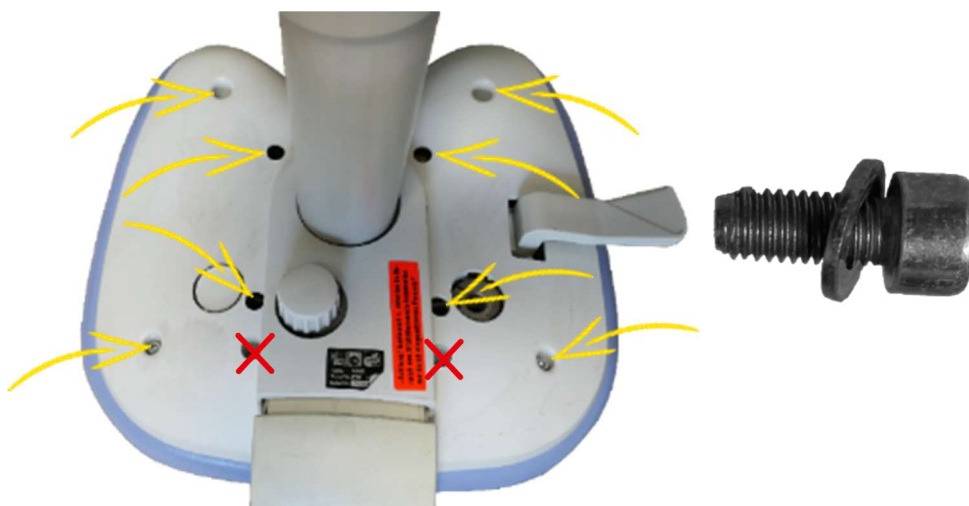
Lift the retaining clip's bracket with a screwdriver, slide the retaining clip down, and remove the washer.



Unscrew the Seat Cushion

Unscrew 8 of the 10 screws from the bottom using a 5mm Allen key. Not all screws and washers may still be present. For reassembly, use new M6x12 cap screws with a 5mm hex socket and suitable washers (DIN 125 6.4).

Caution! The plastic seat cover on older models might already be unstable. On some stools, the washer counterparts may be broken out. Therefore, exercise caution when unscrewing, re-screwing, and handling to avoid additional damage.



Das Stuhlgestell vom Polster heben

Caution! When lifting the chair frame, always hold it with both hands in a way that prevents the gas spring from slipping out!

Caution! There is a plastic bridge inside the seat cover, in the area of the backrest column, which serves as a decorative panel. This will fall out when you lift the frame. Secure it for reassembly.



Unscrew the Seat Adjustment Lever

To loosen the seat cover, the seat adjustment lever must be unscrewed with a 3mm Allen key (2 screws). Remove the unscrewed seat adjustment lever from the seat cover.



Unscrew the two remaining screws under the seat cover.



Lift the Gas Spring from the Wheelbase

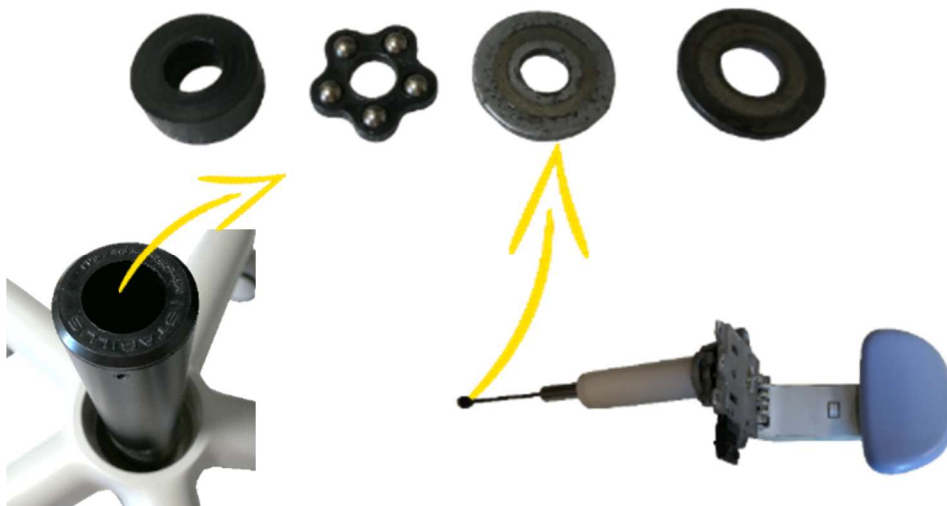
The seat cover is then loosened, and the gas spring with the seat frame can then be lifted out of the wheelbase.



Pull off the tube cover from the gas spring receptacle in the wheelbase.

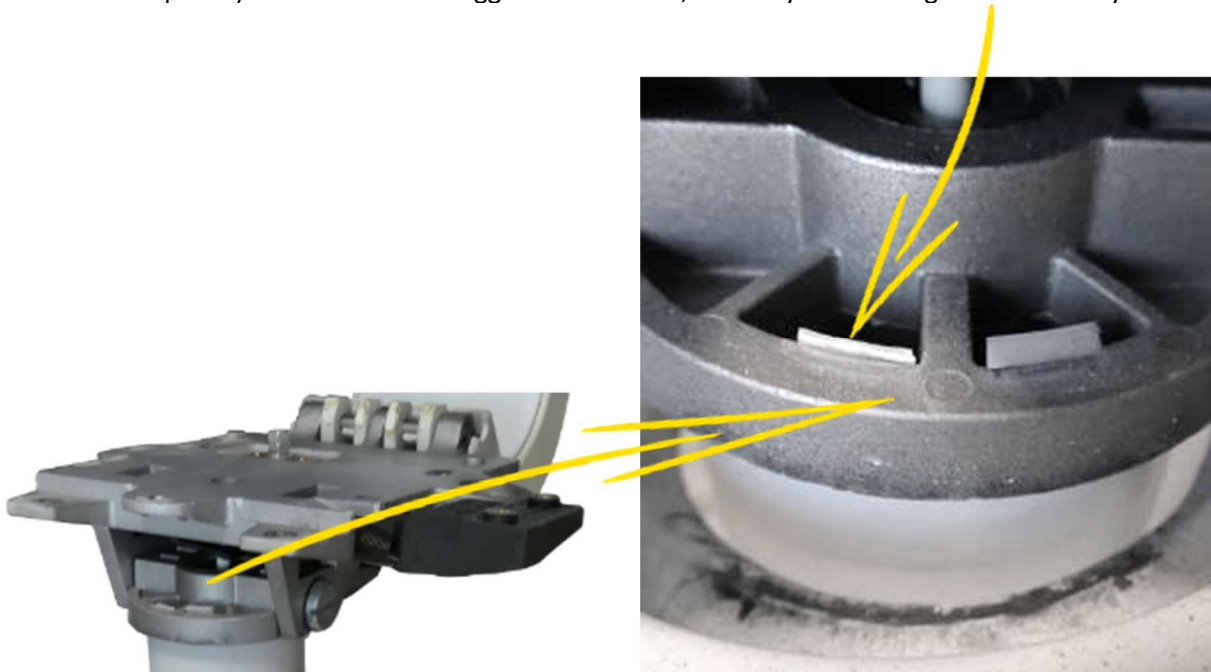


At the bottom end of the gas spring, there are four attachments. These usually lie in the gas spring receptacle and must be shaken out. These parts are no longer needed. Afterwards, thoroughly wipe clean the opening of the gas spring receptacle.



Loosen the Tube Cover

The upper tube cover is secured in the seat frame by clamps. The two front clamps can be pushed back from above. **Important!** Press carefully. On older stools, the clamping edges are sometimes broken off (on the left in the photo). If the cover has sagged on the stool, it's likely that all edges have already broken off.

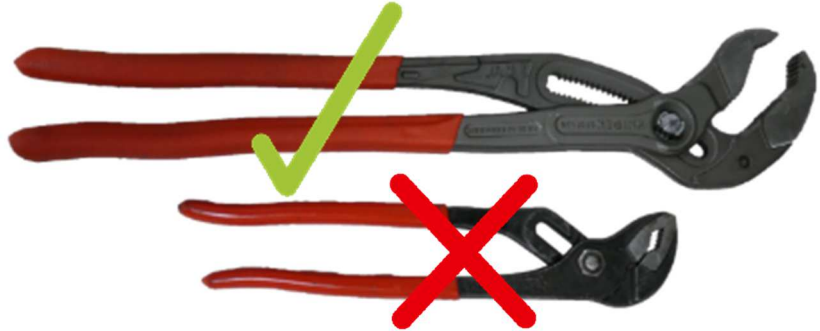
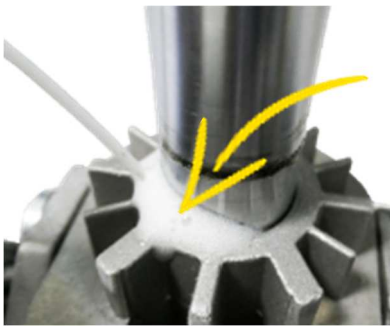


The rear clamps of the tube cover aren't accessible from above, so they must be carefully pushed away with a screwdriver to avoid breaking them off.



Remove the Old Gas Spring

Spray some oil spray around the gas spring receptacle in the seat frame and let it soak in. You typically won't be able to remove the gas spring with a pipe wrench from a hobby workshop. Therefore, it's recommended to use a professional pipe wrench. The longer the handle, the higher the leverage. Recommendation: a handle length of at least 350 mm (14 inches).



Grip the gas spring with the pipe wrench and try to loosen it from its clamping by moving it back and forth. This is laborious and doesn't always succeed on the first attempt.

Important! Lay the seat frame on a padded table surface with the backrest facing downwards. The gas spring is often very tightly stuck, and loosening it is easier if a second person stabilizes the seat frame with the backrest.



Afterward, wipe off any excess oil spray in the clamping opening with a cloth.

Preparing the New Gas Spring

At the top end, remove the retaining clip and the washer.



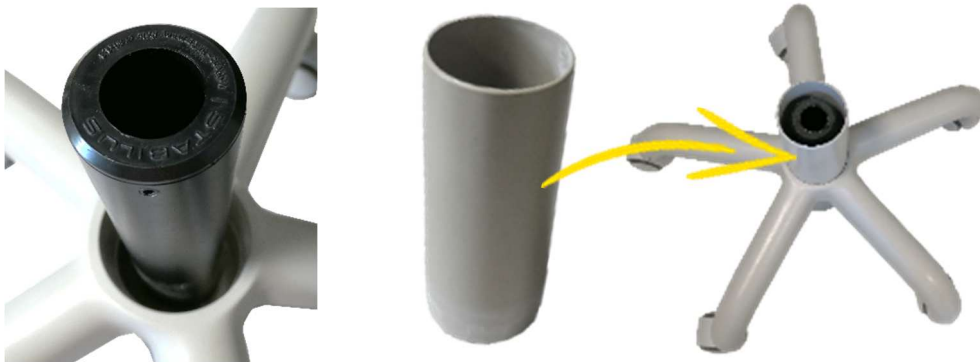
Inserting the New Gas Spring into the Seat Frame

Insert the new gas spring, with the end containing the red plastic pin, into the seat frame and press it firmly into place.



Reassembly of the Wheelbase

Place the tube cover back onto the gas spring receptacle.



Insert the second tube cover with the clamping hooks into the first tube cover and carefully place the seat cover on top.

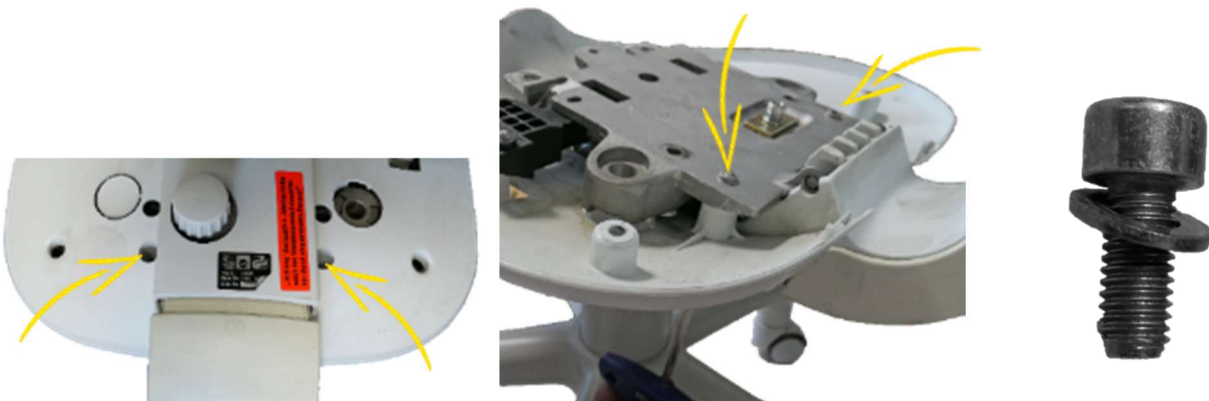


Reassembly of the Seat Frame

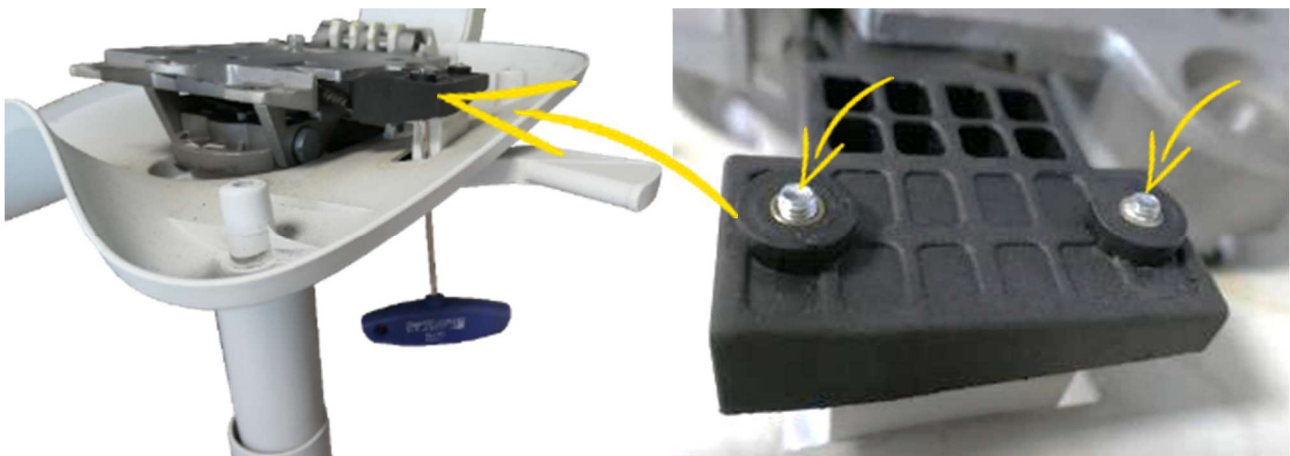
Insert the gas spring, which is in the seat frame, into the gas spring receptacle of the wheelbase frame.



Pull up the seat cover and screw it into place at the two marked points.



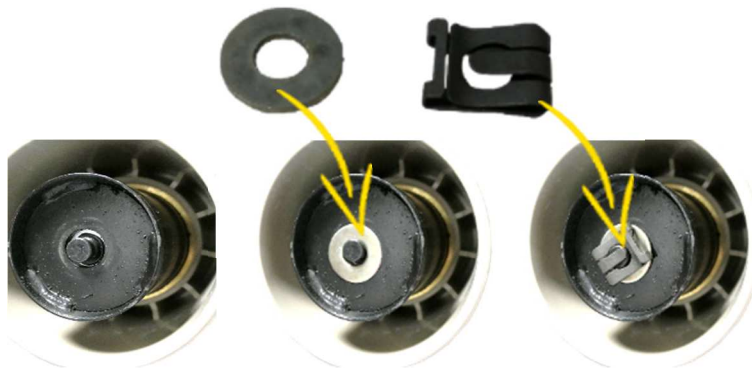
Reattach the seat adjustment lever with a 3mm Allen key. First, hand-tighten both screws, then fully tighten them.



Secure the Gas Spring Under the Wheelbase

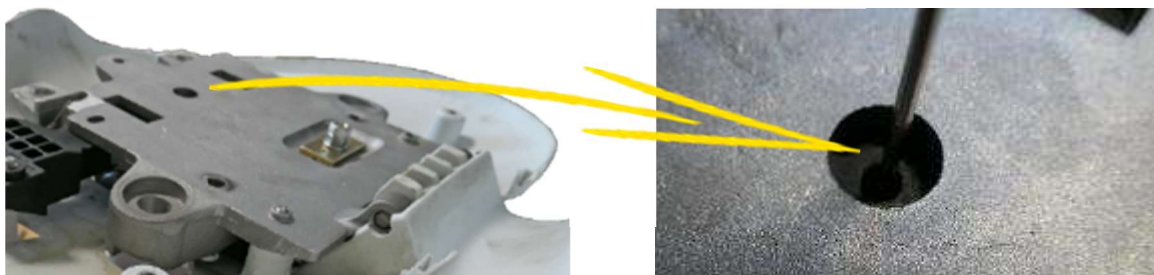
Turn the stool over and place it on a padded surface with the seat plate facing down. **Caution!** Grip the stool with both hands to prevent the gas spring from slipping out.

Reattach the washer and retaining clip to the bottom end of the gas spring.



Grip the stool securely and place it on the floor. Then, place the seat cushion (without screwing it in) onto the stool and test the function of the gas spring under load.

The release mechanism of the gas spring is adjusted using a 2mm Allen key in the seat frame.



The adjustment should be done in $\frac{1}{4}$ to $\frac{1}{2}$ turns.

- If the gas spring sinks → Turn counterclockwise
- If the gas spring does not release → Turn clockwise

Thoroughly test the gas spring release mechanism again. Test at least 10 releases by sitting on the stool, and while sitting, move the stool back and forth and rock it a bit. This ensures that the inserted gas spring is firmly seated in the receptacle.

If the gas spring does not release as desired, remove the seat cushion again, adjust the release, and retest until the gas spring's release is set correctly.

Completing the Reassembly

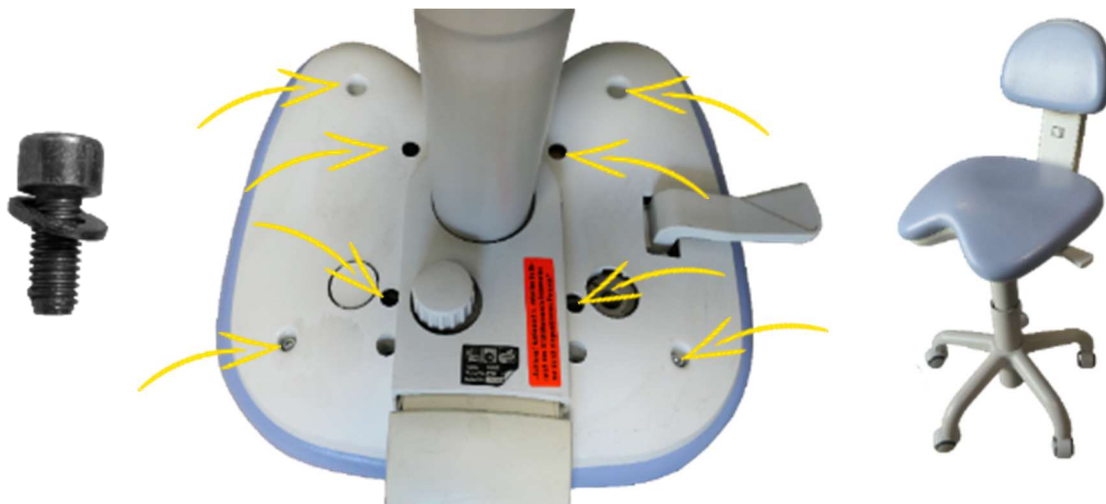
Reattach the upper tube cover. Make sure the clamping hooks of the tube cover are aligned with the clamping edges. Then, carefully snap the tube cover's clamps into place. **Important!** Due to the age of the stools, the clamping edges of the tube cover are prone to breaking and must be handled with corresponding care.



Before screwing down the seat cushion, put the plastic decorative strip back into its fitting.

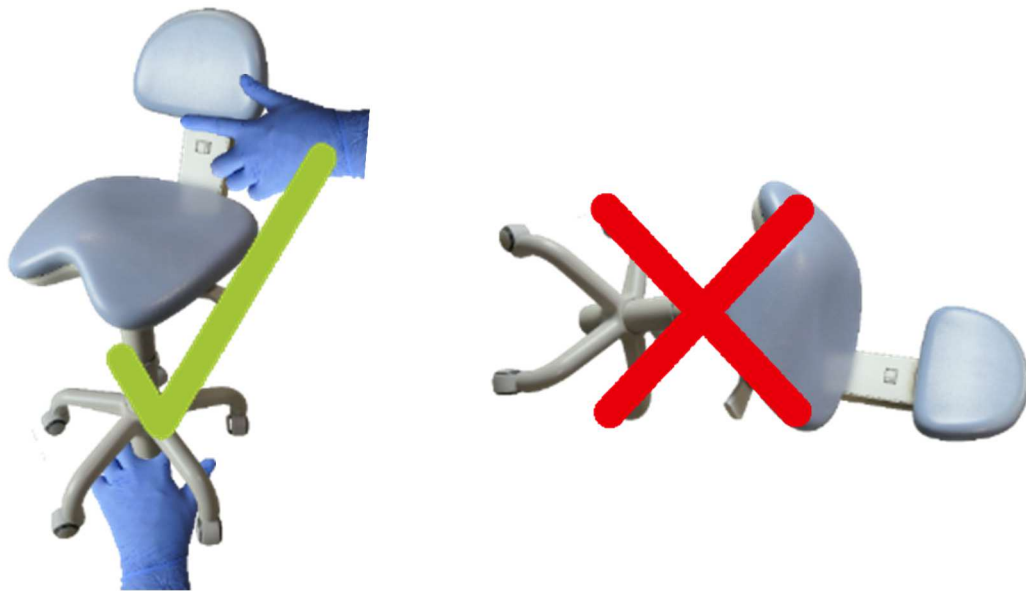


Finally, place the seat cushion on top and hand-tighten the remaining eight screws with washers. Then, fully tighten all ten screws. If any screws and washers are missing, replace them with M6x12 cap screws with a 5mm hex socket and suitable washers (DIN 125 6.4).



Transport and Lifting Instructions

Important! When transporting dental stools, always remember that the gas spring is only inserted. Therefore, always hold the stool by the foot ring and the armrest, and never transport it lying down, to prevent the gas spring from coming loose. Especially with new gas springs, the ends of the gas springs are not yet sufficiently wedged in from use and could become dislodged. After prolonged use, gas springs wedge themselves in and cannot be easily dislodged.



Further Questions and Assistance

Do you need any other parts for your dental stool? Castors (Art. No. DKL250018), or would you like new upholstery in the colour of your choice for your dental stools or dental units?

You can find information about our product range at www.neuepolster.de. For any further questions, please feel free to contact us by email at polster@dkl.de or by phone from Monday to Thursday from 8 AM to 5 PM at Tel. +49 (0)551 5006 202.