

 **G.2 ST**  **G.2 LT**

*Parallel suspension seatpost*

**INSTALLATION + OPERATING INSTRUCTIONS**

## INTRODUCTION

Thank you for purchasing a by.schulz product. Please read the manual carefully before installation and usage. If you have any further question please contact your specialist dealer. **Have a great ride!**

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## 1. USAGE APPROVAL

By.schulz products (e.g. the speedlifter system) are available on the bike market for more than 25 years, and we are an international supplier for bike manufacturer, wholesale dealers and dealers. Multiple components are standard equipment on bicycles, cross country MTB, pedelecs and e-bikes.

The G.2 ST / LT seatpost is suited for use in bicycles, cargo bikes, pedelecs and e-bikes up to 45 km/h. It is NOT usable for extreme stress such as downhill riding, dual slalom, free-riding or riding with jumps.

The G.2 ST / LT seatpost is forged from aluminium and is tested and approved according to the DIN norm:

City Trekking	Ebike bis 25km/h Pedelec	Speed-Ebike bis 45km/h S-Pedelec	MTB Cross Country	Cargo Bikes
DIN EN ISO 4210	DIN EN ISO 15194	DIN EN ISO 15194	DIN EN ISO 4210	DIN 79010
✓	✓	✓	✓	✓

## 2. SCOPE OF DELIVERY

- Seatpost
- Mudcover (not included, if original equipment)
- Operating instructions

## 3. SAFETY INSTRUCTIONS



1. This instruction contains important information on the proper installation, use, and maintenance of the G.2 ST / LT seatposts. Please take the listed warnings and safety instructions seriously. Otherwise personal injury and material damage may occur, for which the dealer or manufacturer is not liable.
2. The installation is easily possible on bicycles and e-bikes, but pay attention to the **Installation Requirements (see page 6)** beforehand. If you do not have the appropriate expertise, we strongly recommend installation by a specialist dealer.
3. Child seats, trailer couplings or luggage racks may not be attached to the G.2 ST / LT seatposts because this can lead to breakage or damage.
4. We recommend to always use the protective cover made from neoprene to prevent soiling. Be sure to use the mudcover to cover the spring mechanism if a child seat is attached behind the seatpost. Without the cover, there is a risk of injury to children's hands!
5. To avoid further accident risks after a fall with damage, the seatpost must be replaced.



This symbol indicates an important screw connections, and the screw must be tightened with an specific tightening torque. The correct tightening torque is either listed on the part itself or in these operating instructions. A torque wrench is required for proper installation. Screws that are not tightened correctly, may loosen or break without warning. This may cause a fall and lead to personal injuries and material damage.

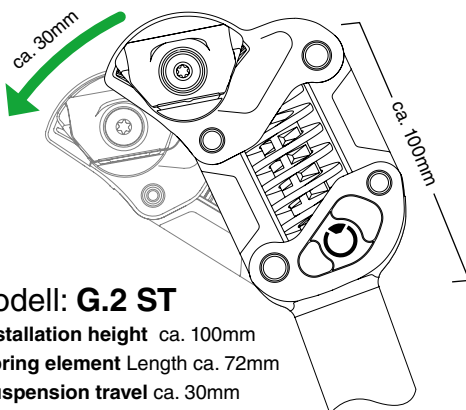
### Before the first ride:

We strongly recommend checking the overall fitness of the bicycle and the operational safety of the seatpost before each ride.

First check that the saddle is firmly attached to the seat clamp. Also make sure that the seatpost tube is firmly attached to the bicycle frame without any slack. It must be clamped in the desired position so that it cannot be turned or shifted inside the seatpost tube. Please note that the minimum insertion depth of the seatpost is 90 mm.

## 4. TECHNICAL DATA

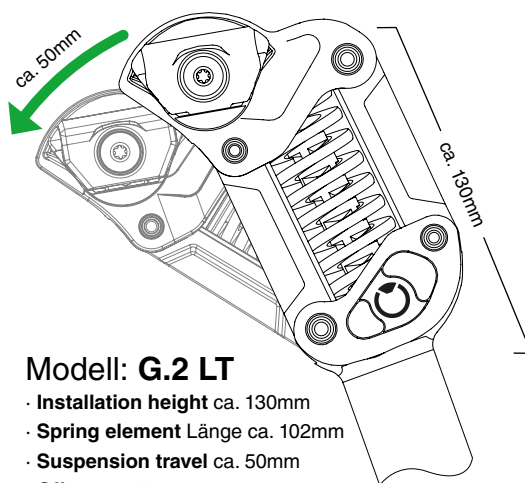
- Parallel suspension seatpost
- Material: 3D forged aluminium AL-6061-T6, AL-6066-T6
- Designed for a maximum rider weight of 150 kg
- IGUS high performance polymer plain bearings/stainless steel pins
- Spring elements in 5 different strengths, selectable according to rider weight and easily exchangeable
- Seat clamp with fine adjustment and robust grating
- For saddle rail tubes with 7mm diameter, 8 mm is optionally available



### Modell: G.2 ST

- Installation height** ca. 100mm
- Spring element** Length ca. 72mm
- Suspension travel** ca. 30mm
- Offset** ca. 17mm
- Tube diameter** Ø 25.4 - 34.9mm
- Lengths** 350 - 450mm / shortenable
- Weight** ab ca. 600g

**Riding direction**



### Modell: G.2 LT

- Installation height** ca. 130mm
- Spring element** Länge ca. 102mm
- Suspension travel** ca. 50mm
- Offset** ca. 19.5mm
- Tube diameter** Ø 26.6 - 34.9mm
- Lengths** 380 - 670mm / shortenable
- Weight** ab ca. 750g

Length [mm]	Ø G.2 ST seatpost										
	25.4	26.4	26.6	26.8	27.2	30.6	30.9	31.6	33.9	34.9	
300	X										
350		X	X	X	X	X	X	X			
400					X						X
450								X	X	X	

Length [mm]	Ø G.2 LT seatpost										
	25.4	26.4	26.6	26.8	27.2	30.6	30.9	31.6	33.9	34.9	
380					X			X	X		
480									X	X	X
670									X		

Available sizes as of Nov. 2022. Subject to change w/o notice.

**X** = Rider weight up to **150kg**    **X** = Rider weight up to **130kg**  
**■** = with internal thread for pull-out stop ring

## 5. FUNCTION

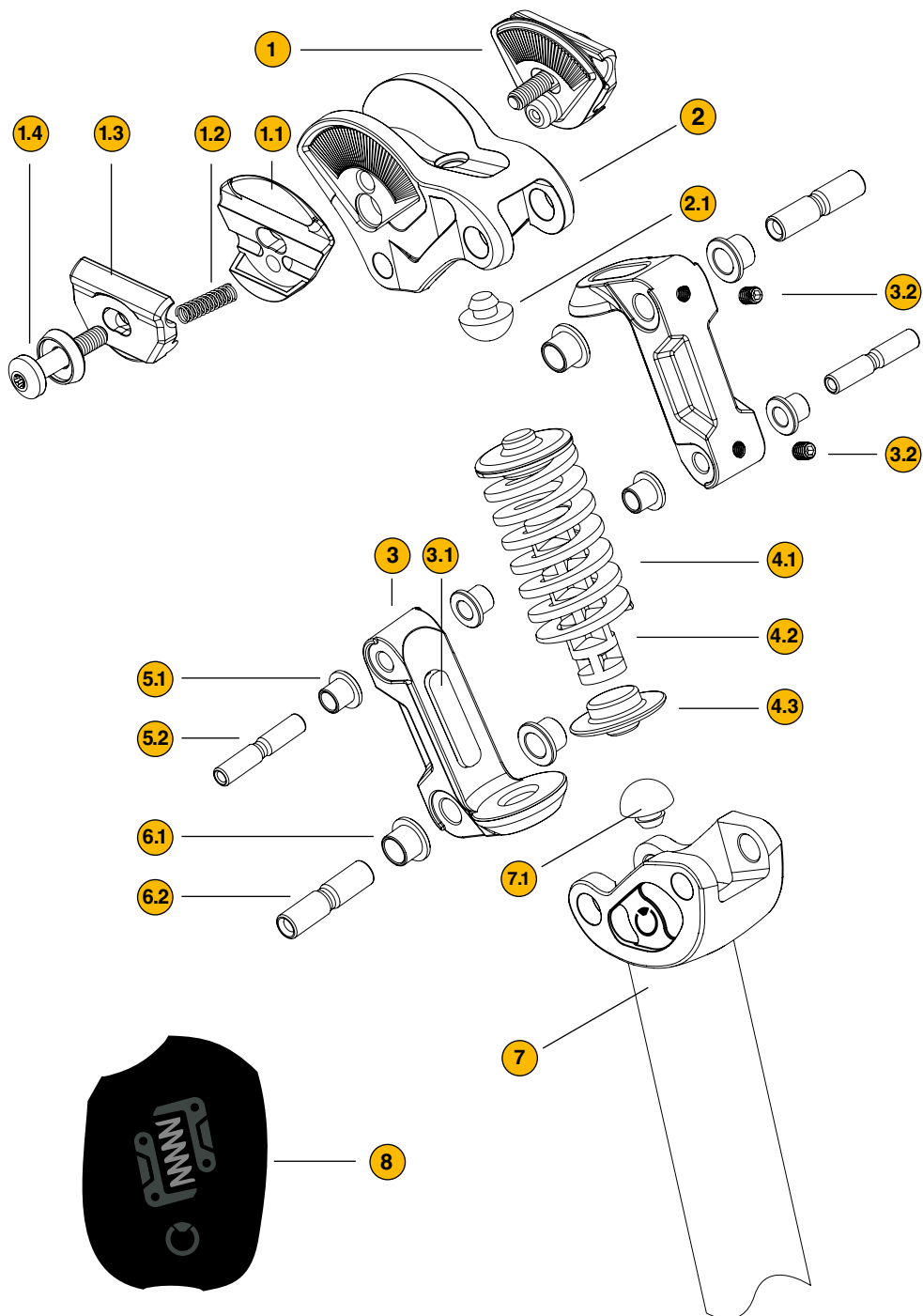
The parallelogram suspension seatpost is designed to offer the highest level of riding comfort, and this in the city as well as in rough terrain. The suspension is progressive, i.e. the system responds sensitively to light shocks and with increasing spring resistance to hard impacts.

When compressing, the G.2 ST parallelogram suspension seatpost moves up to 18 mm backwards and 22 mm downwards, and the G.2 LT up to 33.5 mm backwards and approx. 40.5 mm downwards.

Due to the use of a heavy-duty flat wire steel spring as well as technical elastomers in the centre of the spring and on the inside of the arms, even hard impacts (e.g. deep pot-holes) do not lead to blocking of the suspension.

Additionally the backward extension movement is damped by the hemispherical elastomers in the head and base part. In order to adjust the G.2 ST / LT to the weight of the rider and the riding style, easily interchangeable spring elements with different spring stiffness and dampers are available.

Exploded view G.2 ST (and G.2 LT) March 2018, may change at any time



## 6. COMPONENTS

### SEAT CLAMP :

1. Seat clamp- assembled
  - 1.1 Seat clamp base with toothing
  - 1.2 Seat clamp pressure spring
  - 1.3 Seat clamp upper part
  - 1.4 Seat clamp screw M6, Torx T25 with washer  
(optional: Allen key 5 mm)

### HEAD :

2. Head base part with fine toothing
  - 2.1 Internal backstroke damper

### SPRING ARM :

3. Spring arm with spring plate (2x)
  - 3.1 Elastomer - stop damper (2x)
  - 3.2 Grub screw M5 (4x) - Allen key 2.5 mm

### SPRING ELEMENT :

- 4.1 Flat wire steel spring
- 4.2 Elastomer – central damper
- 4.3 Spring end-cap with centering pin (2x)

### SMALL PIVOT BEARING :

- 5.1 Igus plain bearing, inner Ø 6.5 mm, (4x)
- 5.2 Stainless steel pin, outer Ø 6.5 mm, (2x)

### LARGE PIVOT BEARING :

- 6.1 Igus plain bearing, inner Ø 8 mm, (4x)
- 6.2 Stainless steel pin, outer Ø 8 mm, (2x)



### SEATPOST BODY :

7. Seatpost tube with base part
  - 7.1 Internal backstroke damper

8. Mudcover / Protective Cover

## 7. SPRING ELEMENTS

For the parallelogram suspended G.2 seat post, different strong spring elements are offered which can be easily and quickly changed (see page 08-09). The following table will help you in the choice of the right suspension element, considering the rider weight, riding position and riding profile into the decision.

	COLORCODE	HARDNESS GRADE	
	RED	<b>Soft</b>	45-65 Kg
	YELLOW	<b>Medium</b>	60-85 Kg
	GREEN	<b>Standard</b>	80-105 Kg
	BLUE	<b>Hard</b>	100-130 Kg
	BLACK	<b>Extra Hard</b>	125-150 Kg

### Rider weight =

body weight of the rider + additional weight (e.g. backpack)

Spring elements are available in soft, medium, standard, hard and extra hard for riders with a body weight ranging from 45 to 150 kg. The spring elements are marked with a color code indicating their properties.



**G.Series ST Spring Element**



**G.Series LT Spring Element**

Only use the original by.schulz suspension elements for the G.2 seatpost. Using third-party components may interfere with the function of the seatpost and may cause accidents, personal injuries, material damages and will void the claims from liability for material defects and warranty! (see page 11).

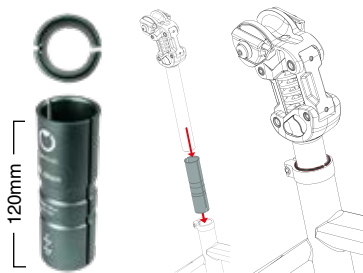
## 8. INSTALLATION REQUIREMENTS

Please make sure that the inner diameter of the seat tube of the bicycle frame and the outer diameter of the G.2 ST / LT seatpost are the same.

Different dimensions can lead to clamping failure as well as accidents and material damage or personal injury.

With a reducing sleeve, the tube diameter of the seat post can be adapted to the dimension of the seat tube. To adapt the seat post tube, we recommend the double-slotted aluminium reducing sleeve from by.schulz with a height of 120mm provided for this purpose. The following diameters are available:

$\varnothing 34,9 > 31,6$   
 $\varnothing 34,9 > 30,9$   
 $\varnothing 33,9 > 31,6$   
 $\varnothing 33,9 > 30,9$   
 $\varnothing 31,6 > 27,2$   
 $\varnothing 30,9 > 28,0$   
 $\varnothing 30,9 > 27,2$   
 $\varnothing 30,6 > 27,2$   
 $\varnothing 30,2 > 27,2$   
 $\varnothing 30,0 > 27,2$



When using a third party reduction shim please make sure that it is it out of aluminium, has a minimum length of 90 mm and is completely inserted into the seat tube.



Always use the appropriate saddle clamps for the corresponding saddle frame. Saddle clamps for saddle rails with a diameter of 7 mm are installed by default. 8 mm saddle clamps can also be installed. Never combine 8 mm saddle clamps with 7 mm saddle rails or vice versa.

**Note:** Saddles with oval rails must not be installed.

## 9. INSTALLATION

### 9.1 Seatpost installation

#### Note before installation:

In order to avoid scratching the seatpost tube all sharp edges and burrs in the opening of the seat tube of the bike

frame must be removed and the area must be cleaned.

For metal frames we strongly recommend greasing the inside of the upper seat tube (the reducer sleeve should also be greased when used). This ensures problem-free height adjustment of the seatpost later.

Do NOT use grease for frames made of carbon fibre reinforced plastics (Carbon). Instead use a special assembly paste for carbon parts and frames.

1. Please make sure that the insertion depth of the seatpost tube is not less than the minimum value of 90 mm. A marking on the uncut seat post tube illustrates this. This marking (STOP MIN: INSERT) is located on the back of the seatpost below the extension scale. Above the scale you will find the production series no.



Minimum-insert

Serial No.

2. Especially with small-sized bicycle frames or frames with pre-equipped bottle cages, it might be impossible to insert the seatpost far enough into the seat tube of the bicycle. In this case the seatpost tube of the G.2 ST / LT can be shortened. We explicitly recommend that you commission a specialist dealer with this work. After shortening the seatpost tube always make a new marking for the 90 mm minimum insertion depth.

This marking must NOT be in the form of a notch! The seat post tube must never be shortened below a minimum length of 90 mm..

3. After insertion into the seat tube of the bicycle, the seatpost is fastened by correctly tightening the clamping screw or closing the quick release lever of the seat tube clamp (please also refer to the bicycle manufacturer's recommendations).

### 9.2 Saddle installation

1. Loosen the saddle clamp screw of the left and right saddle clamp (Fig.9.2.1) until the gap of the holding groove is approx. 9 mm (Fig.9.2.2). When unscrewing the saddle clamp screw, the saddle clamp opens due to the spring pressure of the concealed spring without twisting.



## T25



Abb.9.2.1



Abb.9.2.2



**Note:** make sure the saddle is firmly attached to the seat clamps. A loose saddle can lead to accidents, personal injuries or material damage.

2. Insert the saddle rail from above optionally into the right or left holding groove of the saddle clamps. (Fig.9.2.3)



Abb.9.2.3



Abb.9.2.4

3. Then push the seat frame into the groove of the opposite seat clamp (Fig 9.2.4). You must overcome a slight pressure point until the seat frame audibly engages.

4. Tighten the two saddle clamps until the frame is loosely held in them. The saddle should still easily be movable by hand in the lengthwise direction, and the angle can be adjusted in the detent of the saddle clamps.

### 9.3 Seat Angle / Seating Position Adjustments

1. The saddle clamps and the head of the G.2 seatposts are equipped with a forged fine toothing. This allows you to individually adjust the desired saddle angle. You can also move the saddle rail lengthwise (Fig. 9.2.5). The saddle must not be clamped in the curved area, but only in the straight area of the rail!



Abb.9.2.6

## T25



Abb.9.2.7



The M6 Torx T25 saddle clamp screws (optional: 5mm Allen screw) must be tightened to 12-14 Nm with a torque wrench.

3. To adjust the desired seat height, open the clamping screw or the quick-release lever of the saddle clamp. Move the saddle to the desired position and retighten the screw to the specified torque or close the quick-release lever.

4. The spring mechanism of the seat post already dips a little lower due to the load when sitting up. Therefore, you can fix the saddle approx. 10 mm higher to compensate for the dipping of the spring element. Your specialist dealer will be happy to advise you on this.

### 9.4 Saddle Removal

1. In order to remove the saddle first loosen the two seat clamp screws. The clamping mechanism opens automatically because of the pressure of the internal saddle clamp spring.

2. When the opening width of the holding groove is approx. 9 mm, pull the saddle rail upwards out of the saddle clamp. A slight pressure point must be overcome for this.

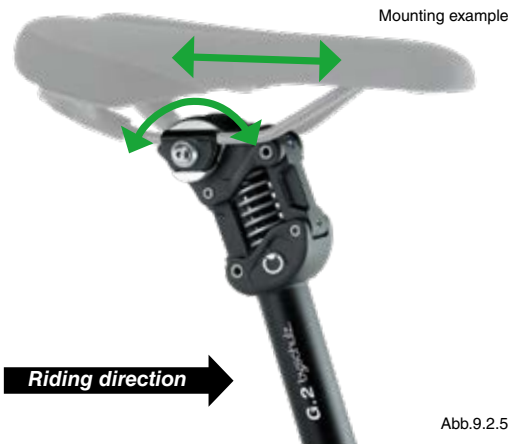


Abb.9.2.5

## 10. CHANGING THE SPRING ELEMENT

### 10.1 Removal of the Spring Element



**Note :** We recommend keeping the G.2 ST / LT seatpost mounted in the bicycle frame when changing the suspension element. The saddle does not have to be removed either.



**Note :** Use the changing the spring for a visual inspection of the elastomer damping elements in the seatpost base, the spring arms and the head of the G.2 ST/ G.2 LT seatpost. The spring mechanism must be opened completely in order to check the backstroke damper. Clean the inner area of the head and body if necessary.

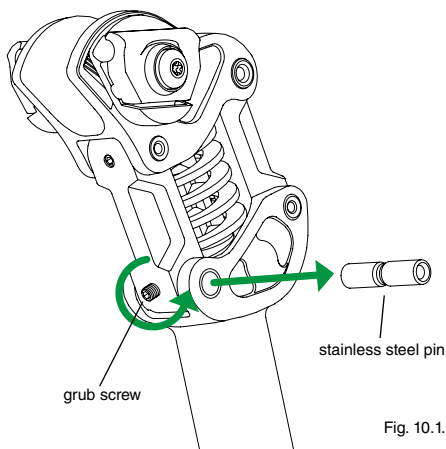


Fig. 10.1.1

1. Open the M5 grub screw of the large pivot bearing in the rear arm of the G.2 ST / LT seatpost with a 2.5 mm Allen key. Turn the screw counterclockwise until it protrudes approx. 2 mm from the arm. Then use a proper tool to push the 8 mm stainless steel axle out of the bearing.

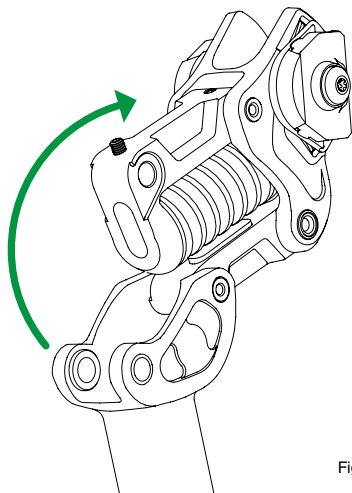


Fig. 10.1.2

2. Now open the parallelogram mechanism by pulling the rear spring arm upwards by hand. The entire upper part of the seat post tilts forward in the direction of travel.

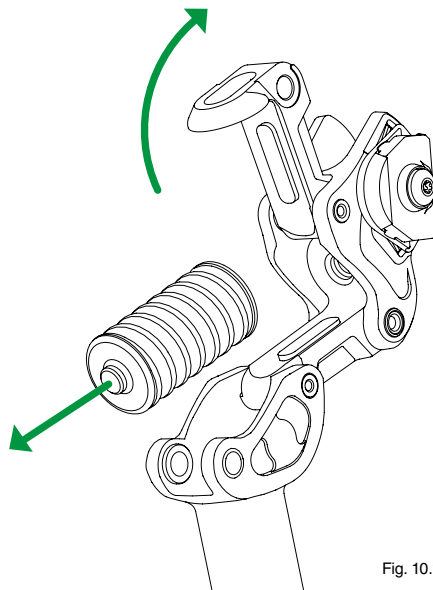


Fig. 10.1.3

3. Lift up the rear spring arm upwards in the small pivot bearing until the spring element is released from the adjustment in the spring plate. Now you can remove the spring element by hand. (see Fig. 10.1.3).

Use this opportunity to check the condition of the elastomer damper elements in the seat post base, spring arms and head of the G.2, and to clean the inner area of the spring element mount!



## 10.2 Installation of the spring element

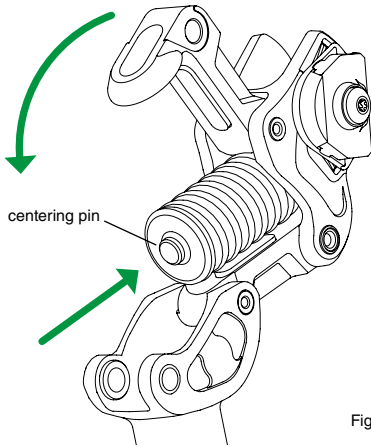


Fig. 10.2.1

1. Place the original ST / LT spring element in the parallel-gram mechanism by hand. Press the centering pin of the spring element into the corresponding hole of the spring arm plate of the front spring arm.

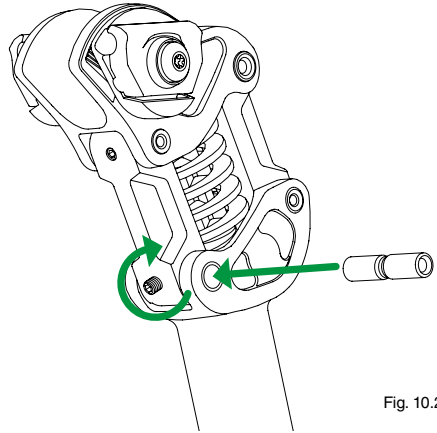


Fig. 10.2.3

3. Fold the entire parallel suspension mechanism in the small pivot bearing back downwards to the stop. Then re-insert the 8 mm pin. Make sure the pin is correctly aligned with all holes.

The M5 screw must have sufficient blue thread locking adhesive, apply new adhesive if necessary. Refasten the M5 headless screw and tighten it with a torque of 2,5 Nm. The pin is now safely fastened by its centering groove.

Please check the correct fit of all components before the first ride with the new spring.

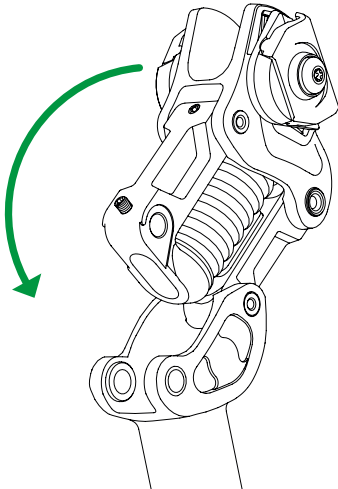


Fig. 10.2.2

2. Now push the rear spring arm back downwards to make the adjustment of the spring element between the arms. The second centering pin of the spring element audibly engages in the hole of the spring arm plate of the rear spring arm.



**Note :** The M5 grub screw must be inserted with medium strength thread locking adhesive, and must not loosen on their own under any circumstances after tightening. Check if the grub screw is still tightened with a torque of 2,5 Nm after approx. 1-2 hours of operation. Use a torque wrench with a 2.5 mm Allen head attached.

## 11. MAINTENANCE / CARE / CLEANING

The G.2 ST / LT suspension seatpost is based on a well thought out concept and consists of high-quality components. This guarantees you a long riding pleasure with regular maintenance.

After the first 3 months or approx. 250 km of riding, check all screws for correct tightening torques. Have this check carried out and documented by a specialist dealer every year thereafter, or after approx. 2000 km. To ensure trouble-free use of the G.2 support, all bearing pivot points should also be cleaned and lubricated during this check.

The supplied protective and safety cover made of neoprene effectively prevents dirt build-up (mud, sand, etc.) and thus ensures low cleaning and maintenance effort. We recommend the permanent use of the neoprene sleeve.

Keep the parallelogram mechanism of your G.2 ST / LT seatpost and the bearings free of dirt and mud and clean them regularly.

Tough dirt can usually be removed with warm water and standard dishwashing detergents. For the care of the bearing pivots, we recommend the manufacturer Ballistol (universal spray). Do not use a steam cleaner or harsh cleaning agents such as acetone, trichloroethylene or methylene for cleaning, as these cleaning agents attack the components, elastomers and bearings.

If you disassemble the seat post completely for cleaning or maintenance purposes, it is recommended to lubricate the bearings and axles with acid- and resin-free bearing grease when reassembling.

When cleaning the G.2 seat post, look for damage, deformation or other changes to the components. If you have any questions regarding operational safety, your dealer will be happy to help you.

## 12. WARRANTY / GUARANTEE

The following conditions, which describe the requirements and scope of our warranty service, do not affect the warranty obligations of the seller under the purchase contract with the end user. For the processing of a warranty claim, the proof of purchase with the date of purchase and delivery must be submitted in each case.

A warranty obligation is not triggered by minor deviations from the target condition, which are insignificant for the value and usability of the product.

Please keep the proof of purchase. Your specialist dealer or source of supply is the contact person in the event of a complaint.

For the by,schulz seat post type G.2 ST / LT we provide warranty according to the following conditions / points:

1. We will remedy free of charge defects which are demonstrably based on a material and/or manufacturing defect, if these are reported to the first end user immediately after detection and within 24 months after delivery. If the defect becomes apparent within 6 months of delivery, it shall be presumed to be a material or manufacturing defect.

2. No guarantee can be given if the defects in the product are due to transport damage for which we are not responsible, improper assembly, misuse, non-standard use, lack of maintenance or care or failure to observe operating or assembly instructions. Excluded are damages and their consequences caused by improper assembly, modification of the original parts, accidents, overloads (downhill, jumps, competitions etc.).

3. The person who mounts the by,schulz G.2 ST / LT seatpost bears full responsibility for the assembly, compatibility and condition of the mounting parts. The warranty claim expires if repairs or interventions are carried out by persons who do not have sufficient professional knowledge, or if our product is provided with spare parts, supplements or accessories that are not original parts and thus cause a defect.

4. In the event of a warranty claim, if we refuse or fail to remedy the defect, a replacement of equal value will be delivered free of charge within the above-mentioned period.

5. Warranty services do not cause an extension of the warranty period, nor do they set a new warranty period in motion. The warranty period for installed spare parts ends with the warranty period for the product.

6. Further or other claims, damages caused by misuse are excluded - as far as a liability is not mandatorily ordered by law.

7. These warranty conditions apply to products purchased in Germany. For by,schulz products purchased abroad, the warranty conditions issued by our respective country representative shall apply. You can request these from the dealer from whom you purchased the product.

Our customer service and service partners will be happy to assist you even after the warranty has expired.

**NOTES :**

[www.byschulz.com](http://www.byschulz.com)



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**Operating instructions  
available for download:**

[www.byschulz.com](http://www.byschulz.com)



**Installation videos  
available under :**

[www.youtube.com](http://www.youtube.com)

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