



EIGHTPINS



Installation Guide and Manual

Eightpins H01
Integrated dropper seatpost

READ CAREFULLY BEFORE USE!
KEEP THIS MANUAL FOR FUTURE REFERENCE

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H01

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General

Thank you for equipping your bike with an Eightpins variable seatpost, a highstandardized, highly technical product for mountain bikes. There is a variety of points to take into consideration assembling and using the seatpost. As a result of the integration of the seatpost, it is designed entirely different in comparison to other variable seatposts. The adjustment of the seat height as well as the adjustment of the travel of the seatpost is realized with one single tube. The mechanics for this is directly connected with the frame via the Postpin axle that absorbs all axial forces. The lateral forces are absorbed by the bushing tubes and thus by the frame. It is therefore crucial to mind the maximal extension as well as the minimum insert length.

Attention! If assembled or used in a wrong way, you may hurt yourself as well as damage the frame or the seatpost.

Make sure all adjustment elements are in place at all times and that the tension of the cable is adjusted correctly. In case you do not have the skills to assemble the seatpost, please refer to your local bike dealer or the service center in your country.

Attention! Read the following assembly information and manual carefully and stepby-step and mount the Eightpins seatpost only according to the instructions.

Warranty Policy

We offer a two-years warranty for your seatpost beginning at the date of purchase. The warranty exclusively includes the repair or exchange of the components damaged. In order to claim a warranty case, the receipt is obligatory. Common wear, usual services and wrong assemblies are not covered by the warranty. If the seatpost has been altered in any way, the warranty automatically expires. The rider is responsible for any damages caused by any alteration of the seatpost.

Service

As to the service, a major advantage of the Eightpins variable seatpost is that the seatpost can be dismantled easily and that the anti-friction bushing can be cleaned and/or exchanged quickly. In case you notice a higher friction in the system, it can be greased via a grease port in the outer sleeve. With the right tools and a basic technical understanding, you may service the seatpost yourself including cleaning, exchanging or greasing the bushings and exchanging the cable. If the hydraulic gas spring of the seat post gives way or fails, it must be replaced.

The following service activities have to be done regularly.

	Before every ride	Every 50 operating hours	Every 100 operating hours	Every 200 operating hours	If necessary
Remove dried dirt with water and mild soap	X				
Cleaning the wiper		X			
Cleaning the bushing tube			X		
Exchange the bushing tube				X	
Exchange the wiper				X	
Exchange the Felt ring				X	
Refill oil in outer sleeve		X			
Replace the hydraulic gas spring					X
lubricate longitudinal guidance				X	

The various work steps can be found in the Service chapter.

For services of all kinds, please refer to your local bike workshop or to Lupaan GmbH:

Lupaan GmbH „EIGHTPINS“
 Kristein 2
 4470 Enns
www.eightpins.at
service@eightpins.at



Attention! Do not service the mechanics or the gas pressure spring yourself as the system is under high pressure and as one may risk severe injuries.

Safety instructions

Assembly and service

The assembly and the service of the Eightpins variable seatpost requires a special understanding of technical matters. Do not overestimate your own skills but refer to a professional bicycle shop or to an authorized Eightpins service partner at all times. This is the only way a correct service can be guaranteed.

Modifications

The Eightpins variable seatpost is not to be altered in any way. Do not dismount it, sand it down or paint it. Always use a torque wrench where necessary. Read the manual carefully and follow it step-by-step.

Attention: A seatpost that has not been mounted correctly does not work correctly. This may lead to crashes and injuries. Besides, the frame can be damaged.

Use and area of application

The intended use of the system is installation in a designated bicycle frame with an postpin mounting interface. The seat post is used to adjust the height of the seat position of the saddle in the range of the adjustment path specified by the product. The range of application includes touring bikes, trekking bikes and mountain bikes. Bicycle frames that do not have this feature should not be modified. The Eightpins variable seatpost must only be assembled and combined with the original Eightpins remote lever. Different leverage ratios can cause irreparable damages.

Modifications to the system or installation in unapproved bicycle frames is not permitted.

The system is not suitable for children under the age of 12. There is a risk of crushing!
Keep the seat post away from children and keep it out of the reach of children.

The use is only intended for private purposes. The product is not approved for competitions.



The product may only be used by a person who has no physical restrictions and is familiar with the operating instructions. The use of the product is only permitted by a person sitting on the bike.

Ergonomic aspects:

The ergonomics point was considered taking DIN EN ISO 12100: 2011 into account. Since the telescopic seat post offered by Eightpins is only part of the bicycle, ergonomic considerations cannot be considered.

Furthermore, it is not a work tool, but a leisure and sports device.

For further questions, please contact your dealer, supplier or manufacturer of your bike.

Special information on handling lubricants and the danger from nitrogen with which the gas spring is filled, are also available in the operating instructions.

These can be found at the end of these operating instructions.

Before the assembly

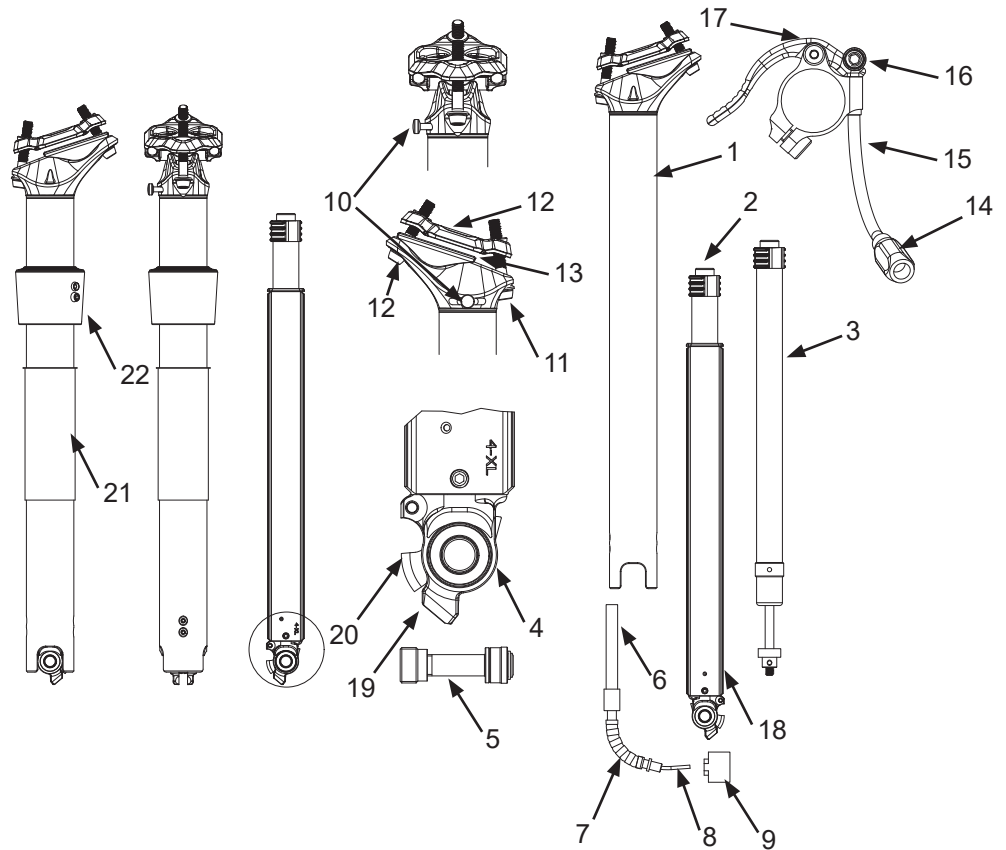
The post-pin mounting interface in the frame contains an adjustment screw on the right side of the frame for vertical alignment of the seatpost.

This screw is already set at the factory and glued with a detachable screw glue.

If the adjusting screw is not included in the frame or adjusted correctly, contact the frame supplier.

Part list

- 1 H01 Seatpost tube
- 2 H01 Cartridge unit
- 3 Hydraulic gas spring
- 4 Postpin mounting interface
- 5 Postpin axle M7
- 6 Cable housing
- 7 Flexchain outer sleeve
- 8 Cable
- 9 Special bowden endcap
- 10 Height adjust lever
- 11 Seatclamp screw front 40mm
- 12 Seatclamp screw back 35mm
- 13 Seatclamp bottom
- 14 Inline adjuster
- 15 Aluminium flex outer sleeve
- 16 Clamping nut
- 17 Remote lever nn-bar
- 18 Longitudinal guidance
- 19 Cable housing holder
- 20 Actuation lever
- 21 Bushing tube
- 22 Outer sleeve



Compatibilities

The integrated Eightpins variable seatpost is exclusively designed for frames with a Postpin interface. One can not retrofit this interface to a bicycle frame. Refer to your local bike shop in case you are in doubt.

Currently released frames:

Liteville (6X- Size sheme)	Ghost (6X- Size sheme)	Rowild (4X- Size sheme)	Bulls (4X- Size sheme)
-H-3 MK3	-Lector Superfit	-750er Baureihe	-Sonic Evo EN Alu
-301 MK15			-Sonic Evo Carbon
-4-One Gravel MK1			
-301CE MK1			

Attention: Eightpins decisively advices its customers not to modify a frame in any way, as this can weaken the frame, cause crashes and lead to severe injuries including death.

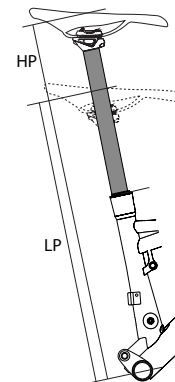
Eightpin's seatposts are divided into two different size schemes. There is a size scheme with 4 sizes: S, M, L and XL and a size scheme with 6 sizes: XS, S, M, L, XL, XXL. The size to use depends entirely on the frame size.

Use only Eightpins cartridges of the correct size for the appropriate frame size. (Example: 6X-L cartridge fits into a frame with 6-fold size scheme with the size L)

The bushing tube length is selected so that it corresponds to the minimum insertion depth of the seattube in the frame. All bending forces are transferred to the frame via the bushing tube. When assembling or exchanging the bushing tube, the correct length must be used. The respective length can be found in the table under the column bushing tube.

It is also important to pay attention to the compatibility of the seatpost tube lengths. The table contains all possible combinations. The corresponding adjustment ranges can also be found in the table. The values refer to the distance between the bottom bracket and the upper edge of the saddle. Included is a saddle with a height of 4cm.

ATTENTION! Only the intended and compatible seat post sizes, strokes and bushing tube lengths specified by the bike manufacturer may be used.



Cartridge/Frame size			Seatpost tube length								
Max Travel	Längenbezeichnung	6-XS=330mm	6-S=354mm	6-M=378mm	6-L=402mm	6-XL=426mm	6-XXL=450mm	4-S=342mm	4-M=372mm	4-L=402mm	4-XL=438mm
6X-XS 141	LP	605	629	653				617	647		
Bushing XS L=91,8mm	HP	707	731	755				719	749		
6X-S 159	LP		647	671	695				656	695	
Bushing S L=97,8mm	HP		749	773	797				757	797	
6X-M 175	LP			683	707	731				707	
Bushing M L=109,8mm	HP			785	809	833				809	
6X-L 185	LP				707	731	755			707	743
Bushing L L=121,8mm	HP				821	845	869			821	857
6X-XL 196	LP					731	755				743
Bushing XL L=133,8mm	HP					857	881				869
6X-XXL 212	LP						767				
Bushing XXL L=139,8mm	HP						899				
4X S 144	IP		623	647	671			611	641	671	
Bushing S L=97,8mm	HP		737	751	785			725	755	785	
4X M 162	IP			659	683	704			653	683	713
Bushing M L=109,8mm	HP			779	803	827			773	803	833
4X L 178	IP				689	713	737			689	719
Bushing L L=121,8mm	HP				821	845	869			821	851
4X XL 196	IP						743				731
Bushing XL L=133,8mm	HP						893				881

Installation

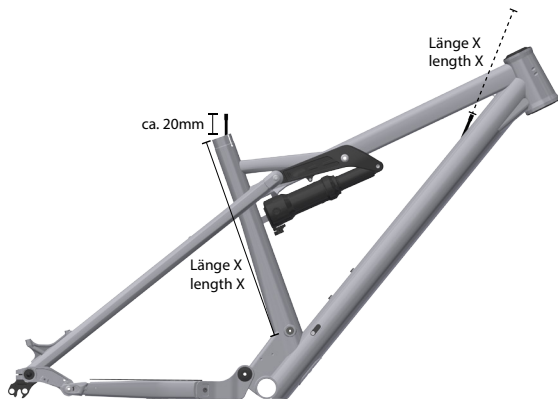
Frame/Seattube



The frame must have a 5mm hole at the top of the seat tube to mount and fix the outer sleeve. If this hole does not exist, refer to the manual of the frame supplier to find out how to drill this hole in the seat tube of the frame.

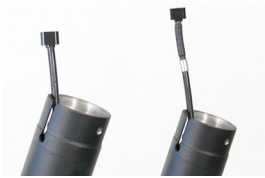
Cable housing / bowden insallation

Install the cable housing in the frame before installing the seat post. Please follow the instructions of the frame manufacturer. The cable housing is to be inserted into the seat tube until about 2 cm of it reach out of it. The second end of the housing – at the top of the frame – is to be cut depending on the frame size. The cable housing is pushed further out of the frame during assembly of the seat post by the length X. Observe the following table when cutting the cable housing and shorten it to the desired length.



Rahmengröße	Länge X	Länge X E-bike / Flexchain
6X-XS	328mm	308mm
6X-S	352mm	332mm
6X-M	376mm	356mm
6X-L	400mm	380mm
6X-XL	424mm	404mm
6X-XXL	448mm	428mm
4X-S	340mm	320mm
4X-M	370mm	350mm
4X-L	400mm	380mm
4X-XL	436mm	416mm
Gravel S	168mm	148mm
Gravel M	192mm	172mm
Gravel L	216mm	196mm
Gravel XL	240mm	220mm

Installing the bowden end cap

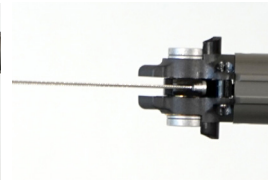


A special end cap is required to fix the outer cover to the wide mounting interface of the H01 seat post. The special end cap is only required in bicycles without e-drive (left image). Bicycles with electric drive have little space between the motor and seat post for the exit of the cable. A special flexchain outer cable is used here (right picture). This is installed between the outer shell and the special end cap.

Installing the seatpost



Before installing the seat post, check whether the small tube and the washers for tolerance compensation of the seat post are installed.



Hook the cable head into the actuation lever of the seat post



Insert the cable into the outer shell and push it almost completely through the cable housing



Hang the special end cap in the cable housing holder of the seat post mounting interface.

Attention! When installing in an aluminum frame with non-anodized inner walls, lubricate the bushing tube with grease beforehand. When installing in a carbon frame, never treat parts with rubbing paste



Push the outer sleeve and the bushing tube down for easier assembly. The cable must remain tensioned throughout the insertion of the seat post into the seat tube of the frame. It is best to hold the cable together with the cable housing at its end. Pull the cable and the cable housing slightly during insertion so that it can slide through the frame.



Now carefully insert the seat post into the frame until the bushing tube slides into the seat tube. Carefully press the outer sleeve onto the seat tube by hand until you feel the outer sleeve stop.



Push the seat post down until the post pin mounting interface of the seat post reaches the Postpin interface of the frame. You can see this from the outside when you look into the hole in the postpin interface of the frame. If necessary, turn the seat post a little and slide it so that the postpin axle can be inserted. Screw in the Postpin axle with a 5mm Allen key and tighten it loosely



Before the Postpin axle is tightened, the saddle must be installed to align the seat post.



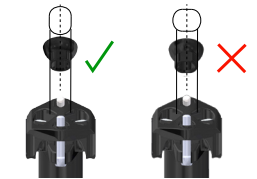
Loosen both seat clamp screws and unhook the front seat clamp screw to the front. Lift the upper saddle clamp and position it above the two saddle rails.



Let the saddle frame rails rest on the lower saddle clamp plate and hang the front saddle clamp screw back in. Loosely tighten both seat clamp screws.



When tightening the saddle clamp screws, press the saddle clamp nuts down with your finger so that they completely disappear into the upper saddle clamp plate.



Attention! The nuts which are installed in the top seatclamp have two small flat areas which have to be aligned in the long hole parallel to the riding direction.

Adjustment of the saddle angle



Loosen the rear fastening screw on the seat post head with a 5mm Allen key. Adjust the saddle inclination by turning the front seat clamp screw. After aligning the saddle inclination with the help of the front and rear saddle clamping screw, the rear screw must be tightened with a torque tool with a maximum torque of 8Nm.

Attention! The screws on the seat post head must not be tightened more than the specified torque of 8Nm. It could break. This increases the risk of injury.

Align the saddle and fix the seatpost



After mounting the saddle, the saddle must be rotated in the direction of riding. It is best to orient it with the saddle tip on the top tube. Then tighten the Postpin axis with a torque wrench with 8Nm.

Attention! The Postpin axis must be tightened to 8Nm after assembly.

Install the outer sleeve screw

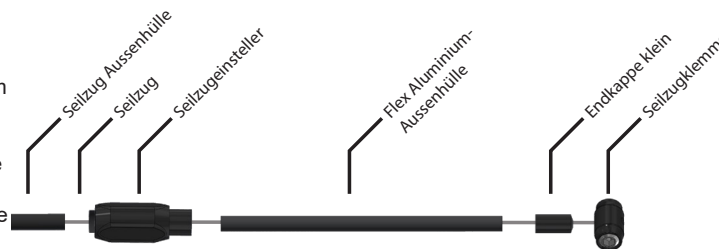


Rotate the outer sleeve so that the mounting hole of the outer sleeve coincides with the mounting hole on the frame. Screw the M5 mounting screw of the outer sleeve into the outer sleeve using a 3mm Allen key.

Attention! The screw must be able to be screwed into the outer sleeve easily and without resistance. If this is not the case, the hole in the frame may not coincide with the mounting hole in the outer sleeve. The frame can be squashed or damaged

Assembly of the remote lever

The cable system of the Eightpins seatpost consists of a common cable housing with a Steel core and a short, more flexible cable housing with an Aluminum core directly at the remote lever. The cable system right at the remote lever consists of a 10 cm Aluminum cable housing, a specific cable tension adjuster and a specific end cap for the remote lever featuring a reduced outer diameter. The specific end cap is installed at the one end of the cable housing, the cable tension adjuster at the other end. The cable tension adjuster is installed so that the side with the 4 mm label is connected with the Aluminum cable housing. The second end is attached to the steel cable housing that reaches out of the frame.



Note: Initially, put the cable tension adjuster into the minimum cable length position.

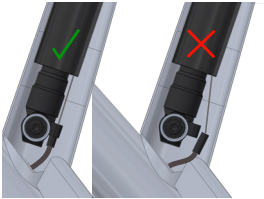


Install the remote lever between the grip and the brake lever and tighten its screw with 2.5 Nm.

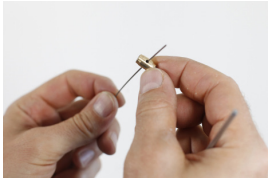
Note: The lever can be used with 2-speed drivetrain gear levers and without. Make sure the Eightpins remote lever does not interfere with the gear lever. Further turn it upwards, in order to avoid this.



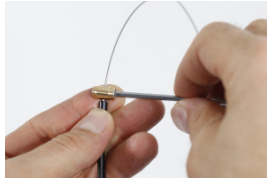
Before the cable is attached to the remote, pull it firmly until the dropper mechanics is fully open. This process is important to confirm that all components of the cable system sit tightly.



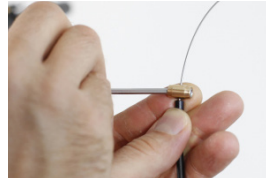
If the cable housing can be pushed into the frame in any way during the check, it has been detached from the cable housing counterpart at the Postpin mounting interface. Take out the seatpost and attach the outer sleeve in the counter part of the mounting interface



Pull the cable clamp of the remote lever over the cable and guide it all the way to the cable housing.



Very slightly tighten its screw with a 3mm Allen key on both sides so it can still be moved. Position it about 2mm away from the cable housing.

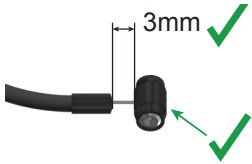


Check the measurement again by pulling the cable very lightly to ensure that the cable has not slipped back into the cable housing. Otherwise adjust the cable clamp until the distance of 2mm is correct again.

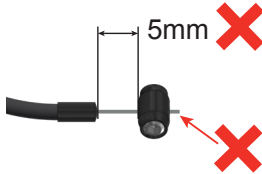


Cut the cable directly at the cable clamp. Pull it away from the cable housing a little bit in order to have the end of the cable itself disappear within it.





The distance between cable clamp and cable housing should still not exceed 3 mm.



Tighten the two screws of the cable clamp simultaneously with a torque wrench with 5 Nm.

Attention! In order to avoid injuries, the cable needs to be pulled back into the cable clamp for hiding any type of cable bits sticking out of it.



Hold the Aluminum cable housing with your hand.



With the other hand, pull the cable in order to open the dropper mechanism.



With this pretension, first hang the Aluminum cable housing with the end cap on the remote lever.



In the last step, the cable clamp can be hung on the remote lever.





Press the lever in order to control the function of the mechanics.



If the tension is too low, the seatpost speed will be low.



Adjust the cable tension with the cable tension adjuster in order to the maximum speed of the dropper post.

Manual

Using the seatpost

In order to lower the seatpost, push the remote lever at the handlebar and push down the seatpost. In order to keep the new saddle position, release the remote lever. Extending the seatpost again, you need to push the remote lever and without counterforce let it find its original height. The Eightpins H01 seat post is locked or extended using a hydraulic gas spring. The lowering function works steplessly.

Attention: The remote lever must not be pushed if the bike hangs on the saddle.

Seat post alignment

The Eightpins H01 seat post is equipped with a tolerance compensation system. This enables a rotation of the seat post of $\pm 3^\circ$ around the longitudinal axis. If the saddle alignment is rotated around the longitudinal axis, the saddle can be aligned again by loosening the postpin axle and tightening it again with 8Nm after alignment.

Height adjustment top position

See chapter height adjustment

Saddle tilt adjustment

See chapter saddle mounting

Before every trip

Before each ride, check the following functions on the seat post.

- Freedom of play rotation: The seat post should have only slight play in both directions of rotation. If there is more play, check whether the Postpin thru axle is screwed tight with 8Nm.
- Clearance of seat post: The seat post tube should only have a maximum of 2-3mm play to the front and rear when tipping. If the play is greater, check whether the minimum insertion depth has been reached and whether the slide sleeve tube is in order. (See service)

- Saddle freedom from play: The saddle frame must always be tight so that the saddle is mounted without play. The rear seat post screw is to be tightened to 8Nm.

- Smooth running lowering: The seat post must be easy to lower and must also extend easily and smoothly. If this is not guaranteed (friction too high), the guide must be lubricated via the outer sleeve (see service). If there is no improvement in the lubrication of the seat post, there may be a setting error in the setting ring in the frame. Broken or squeezed sliding bushes can also be other reasons, or the longitudinal guide on the housing of the capsule has run dry.

- Remote lever: The remote lever must be easy to operate. Check the free travel of the lever and adjust the cable tensioner if necessary. (See chapter „Installation of the control lever“) The cable must pull back completely after it has been released so that the lever is tensioned again and the cable clamp is completely in the holder. If this is not the case, the cable or the outer casing must be replaced (see service)

Note:

After a fall with your bike, or a fall of the bike with possible damage to the seat post tube, the tube must be checked for damage. Particular attention should be paid to: dents, cracks and chips of the paint. The connection between the head and the pipe must also be checked.

Pay attention here also to cracks, deformations, etc. and also check the tightness of the screws of the seat clamp. If you are unsure or have any questions, please contact your local dealer before driving on or starting up.

Operation

Adjusting the saddle height

The Eightpins H01 seat post has a height adjustment operating lever in the seat post head. This unlocks and locks the internal height adjustment of the seat post.



Before the correct height of the saddle can be set, the internal hydraulic gas spring of the seat post must be fully extended. Simply operate the control lever on the handlebar and let the seat post extend completely.



Push the lever for the height adjustment from the back to the front to open the height adjustment. Now pull the saddle up or push it down to the desired height.



As soon as the correct height is found, push the height adjustment control lever from front to back. If the lever jams, pull the saddle up 1-2mm or push it down. In this way, the teeth of the height adjustment can interlock again.

ATTENTION! The height adjustment control lever must always be locked while driving. The lever is in the rear position as far as it can go.

Service

Removal of the seat post for service purposes



Unscrew the Postpin axis with a 5mm Allen key.

Unhook the control cable from the control lever (on bar remote) or detach the control lever from the handlebar (underbar remote)
 Onbar remote: Operate the control lever. Hold the cable clamp and pull or tilt forward. Then pull the outer shell out of the remote.

Slowly pull the seat post out of the frame. Pull the special bowden end cap for the cable housing out of the holder. Unhook the cable head from the actuation lever for the hydraulic gas spring. If necessary, operate the lever by hand to create more space for hanging out.

Remove outer sleeve and the bushing tube:



Unscrew the fastening screw of the outer casing with a 3 mm Allen key.



Pull up the outer sleeve by hand.



Pull the bushing tube out of the seat tube.

Reinstall in reverse order

Oil lubrication of the seatpost tube

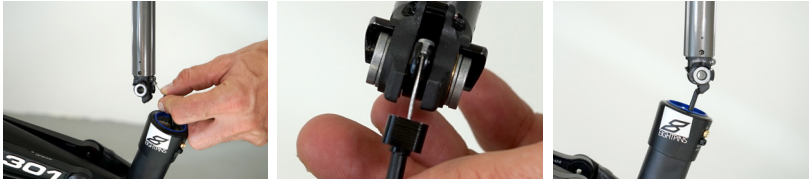
Fill Eightpins Fluid V3 oil carefully and very slowly into the grease nipple of the outer sleeve using using a 2.5 ml syringe.



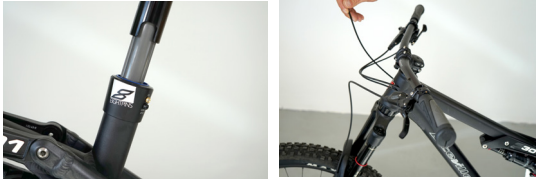
Note! Refill a maximum of 2.5 ml of oil as otherwise the internal reservoir will overflow and the oil will run into the frame.

Oil safetysheet: <https://www.eightpins.at/service-einbau-h01/>

Reinstall the seatpost



Hook the cable head into the actuation lever of the hydraulic gas spring. Push the special bowden end cap for the outer casing into the cable housing holder of the postpins mounting interface



Carefully insert the seat post into the frame. Be careful not to damage the wiper and the sliding surfaces in the bushing tube. During insertion, keep the cable under tension and pull the entire cable housing carefully out of the frame so that the seat post can slide down freely.



Push the seat post down until the Postpin mounting interface of the seat post reaches the Postpin interface of the frame. You can see this from the outside when you look into the hole in the postpin interface of the frame. If necessary, turn the seat post a little and slide it so that the postpin axle can be inserted.





Screw in the Postpin axle with a 5mm Allen key and tighten it loosely



After mounting the saddle, the saddle must be rotated into the riding direction. It is best to orient it with the saddle tip on the top tube.
Tighten the Postpin axis with a torque wrench with 8Nm.

Service of the outer sleeve



Pull off the sealing lip ring. Push the blue wiper towards the edge. Then the sealing lip ring can be removed.



Pull off the sealing lip ring.



Carefully pull the blue wiper out of the groove.



Find the end of the felt ring with a small pointed object and lift it up.



Carefully pull out the felt ring.



Clean or replace the felt ring.



Clean the inside of the outer sleeve with a cloth.



Carefully insert one end of the dry felt ring back into the groove.



Roll up the felt ring inside the outer sleeve so that it rests on the groove.



Carefully press the felt ring into the groove by hand. Make sure that both ends are fully pressed in after joint and are not overlapping or twisted.



Now reinsert the cleaned or the new scraper into the upper groove.



Tighten the sealing lip ring over the wiper.



Cleaning the bushing tube



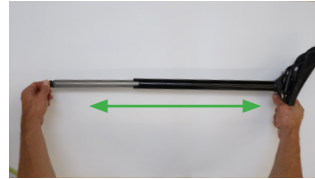
Carefully clean the sliding sleeve tube with a damp cloth.



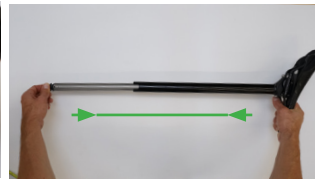
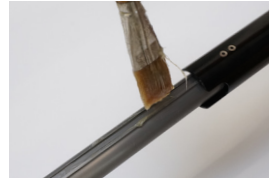
Note! The wall thickness of the tube is very thin..

Don't crush!

Clean & lubricate guide grooves



Move the control lever for height adjustment forward to the „open“ position. Pull the seatpost apart with your hand until it stops.



Clean the longitudinal guide grooves of the seat post with a cloth.
Apply grease in the longitudinal guide groove and on the two webs.
Push the seat post back together.

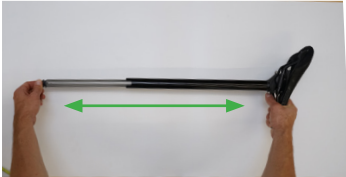


Push the height adjustment lever back into the closed position.

Seatpost tube replacement



Move the control lever for height adjustment forward to the „open“ position.



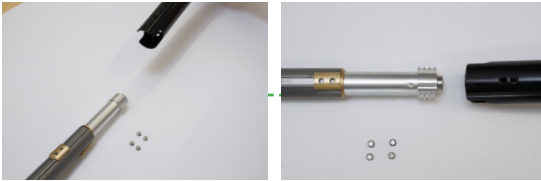
Pull the seatpost apart with your hand until it stops.



Unscrew the four fastening screws of the longitudinal guide shoes with a 2mm Allen key.



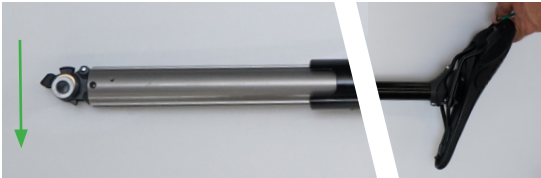
Pull the cartridge unit out of the seat post tube.



Clean the longitudinal guiding blocks and the cartridge unit if necessary. Clean the screws from adhesive residues of the screw lock.



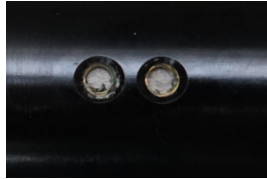
Place the longitudinal guiding blocks at the end of the longitudinal guides.



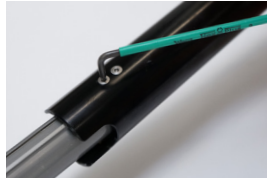
The cartridge must be oriented in such a way that the cable housing holder is oriented towards the front in the direction of riding, while the seat post head must be oriented towards the rear against the direction of riding.



Reinsert the cartridge unit into the seat post tube. Pay attention to the orientation of the cartridge. The longitudinal guiding blocks must be aligned with the holes in the seat post tube.

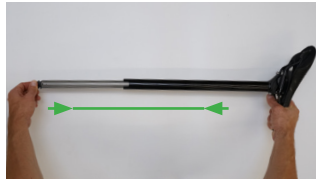


Insert the cartridge unit into the seat post tube until the holes align with the screw holes of the longitudinal guide blocks.



Drip high-strength screw lock on the four mounting screws for the longitudinal guiding blocks and screw them in carefully. It is best to first align one side and then by pushing in or pulling out the cartridge unit, align the longitudinal guide shoe on the other side with the holes and screw tight.

Note! We recommend to use Loctite 270 screw lock.



Before tightening the screws, the cartridge must be pushed as far as possible into the seat post tube. Tighten all four screws with a torque of 3Nm.



Push the seat post back together and push the lever for the height adjustment back to the closed position.

Exchange of the hydraulic gas spring

Required tools

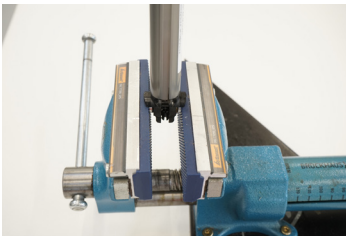


- 23mm open end wrench/or Adjustable wrench
- 2mm Inbus Stiftschlüssel
- Loctite 243 medium strength screw lock
- Loctite 270 high-strength threadlocker
- Vice
- Protective jaws for vice

Removal of the hydraulic gas spring



Before dismantling the hydraulic gas spring, clean the entire cartridge and remove grease to enable clean work..



Clamp the cartridge with a vice on the mounting interface on the left and right side

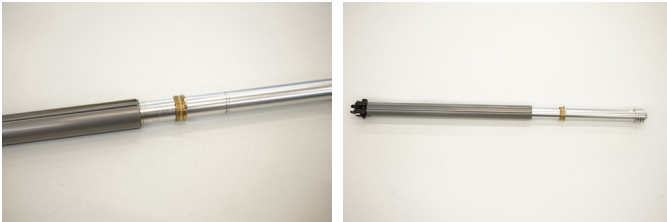
Achtung! Nur mit Schonbacken klemmen um Beschädigungen oder Verformungen zu vermeiden. Die Schraubstock nur ganz leicht fest spannen.



Using the 23mm open-end wrench, carefully turn the upper brass guide out of the cartridge. Make sure that the longitudinal guides of the cartridge are not in engagement with the open-end wrench and are therefore not damaged.

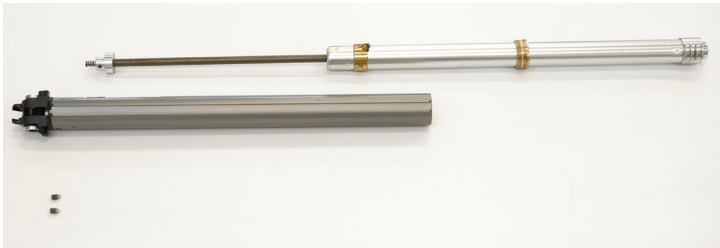
Due to the fine thread, a relatively large number of turns are necessary to completely unscrew the brass guide.

The brass guide is secured with a screw lock.

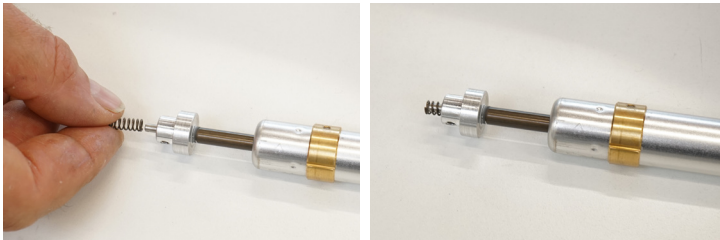


Use the 2mm Allen key to unscrew the two grub screws on the left and right at the lower end of the cartridge.

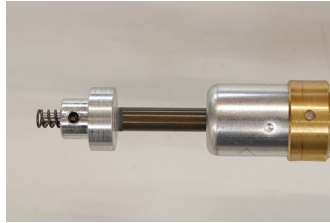
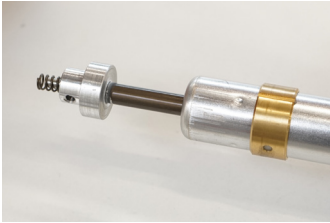
Note! The bed screws are glued in with high strength screw lock. Loosen the screws slowly and with care.



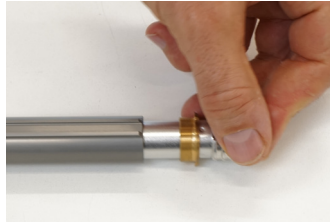
When both screws are loosened, the hydraulic gas spring can be pulled out of the cartridge.



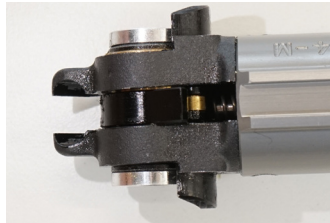
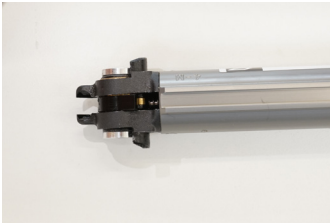
At the end of the piston rod are the mounting adapter and the actuating plunger of the hydraulic gas spring. Pull out the compression spring and place it aside. This will be needed later for the installation of the new hydraulic gas spring.



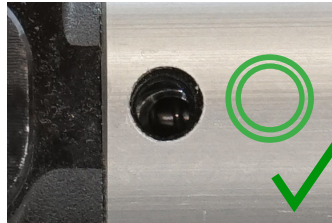
Before installing the new gas pressure spring, the position of the mounting adapter must be checked and readjusted if necessary. The holes in the mounting adapter must be aligned with the holes on the torque brass ring. To do this, align the mounting adapter with the holes. The complete piston rod rotates with it. Place the compression spring back on the tappet.



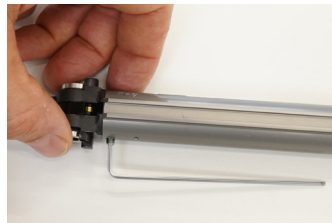
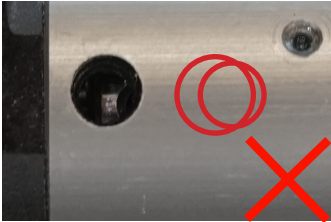
Now carefully push the gas spring back into the cartridge. Make sure that the groove in the torque brass ring is aligned with the guide inside the cartridge tube.



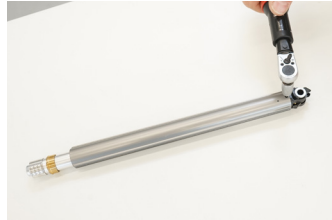
Push the hydraulic gas spring in until the plunger and spring are in contact with the actuating mechanism at the mounting interface. You can see this from the outside when you look between the actuation lever and the cartridge tube.



The holes in the piston rod adapter must coincide with the mounting holes in the mounting interface. You can control this from the outside by looking into the holes. Due to the spring preload, the holes can only really cover when you push the gas pressure spring into the cartridge with a little force.

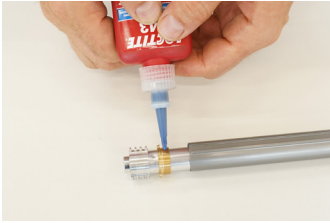


Drip high-strength screw lock on the grub screws and screw them into the holes in the mounting interface. While screwing in the first screw, the gas pressure spring must be pressed into the cartridge. Turn both grub screws as far as they will go.



Tighten both grub screws with a torque of 3 Nm.





Drip blue medium-strength screw locking on the upper brass guide.

Note! Loctite 243 is recommended to use as a screw lock.

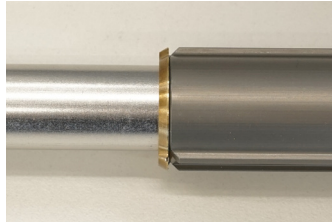


Carefully screw the brass guide into the tube of the cartridge. If it is difficult to move, use the 23mm open-ended wrench for support.



The two lugs of the upper brass guide must be aligned with the longitudinal guide grooves on the tube of the cartridge. To do this, the upper brass guide does not have to be screwed in as far as it will go, but only so far that the gap between the tube and the brass guide is minimal and the lugs on the brass guide close off the longitudinal guide grooves.

Attention! It is imperative that the brass guide is installed and the lugs are correctly aligned. Otherwise the bike can fall down while hanging on the saddle. There is a high risk of injury!



Before reinstalling the cartridge, grease the housing of the hydraulic gas spring with grease.