

idylle 39

FCV

USER MANUAL



WWW.BOS-SUSPENSION.COM
DRIVEN BY PERFORMANCE



You have just purchased a product from BOS Suspension.
Welcome to our big family!

We have a common passion, MTB and it has led us to design neat and high-end products designed for your discipline: DH, Enduro & All Mountain.

With 20 years of experience in the research, development and production of innovative and efficient products, BOS products are the result of meticulous work and unique know-how. Our entire Toulouse team is proud to accompany you on this great adventure by providing you with the best of our technology, titled in multiple disciplines.

In order to get the most out of your suspensions, we invite you to carefully read the user manual, the assembly instructions and the advice for use in order to make the most of the potential of your new material.

Thank you for choosing BOS Suspension,
Have a good ride,

SUMMARY

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WARRANTY

BOS SUSPENSION grants a contractual guarantee under the following conditions:

BOS guarantees its products against all defects in form and manufacturing faults for a period of one year from the date of original purchase. Proof of purchase will be required for any application of the guarantee. The warranty is granted to the original owner and is non-transferable. Wearing parts such as wiper seals, O-rings, guide rings, pins, bushings, screws and bolts are not covered by the warranty.

Application

The application of the warranty is subject to the laws in force in the country or state in which the original owner resides. If the local legislation differs from the warranty as described here, the warranty is deemed to be amendable to comply with it.

Limits

BOS SUSPENSION is not liable for direct, indirect, special, incidental or unforeseen damage resulting from the use of its products, subject to compliance with local legislation.

Exclusion

The guarantee does not apply in the following cases :

- Failure to comply with the installation instructions as described in the installation and adjustment manual.
- Failure to follow the disassembly/assembly instructions as described in the service manual.
- Modifications made to the product by the owner or a third party.
- Inappropriate use.
- Damage resulting from an accident, violent shock,

fall, under any circumstances.

- Failure to comply with the instructions and maintenance intervals.
- Replacement of original parts with parts from manufacturers other than BOS SUSPENSION.
- Alteration of the serial numbers with the obvious aim of making it illegible.

Procedure

Regardless of where the product was purchased, the owner must contact an authorised BOS centre to apply for the guarantee. It is compulsory to produce the purchase invoice. Otherwise, the warranty will not apply. Sending the product is subject to the prior agreement of the BOS SUSPENSION after-sales service department. Outward carriage, dismantling and packaging costs are the responsibility of the customer. In the event of refusal to apply the guarantee, the packaging and return shipping costs are the responsibility of the customer.

SAFETY INSTRUCTIONS

GENERAL WARNINGS

The fork is an important element that has a direct influence on the stability of the bike.

This manual must be consulted before using your shock absorber and for the duration of its life.

If necessary, or for any service operation, please contact an authorized BOS suspension.

After installation, test your bike at a slow pace to make sure that everything works properly.



CAUTION operations may impair your safety or cause damage to your suspension. Be sure to take note of these warnings.



IMPORTANT INFORMATIONS
These indications are intended to allow you to optimize the operations described in this manual or optimize the performance of your suspension.

TOOLS

To carry out adjustments and routine maintenance of your fork, you will need the following tools :

TOOL	USE	FIGURE
Metal saw	Steer tube cut-out	
1.5/5mm Allen key	Wheel axle/ crown fork screw	
26mm Socket	Top cap	
21mm Socket	Compression bloc nut	
14/16mm Flat wrench	Hydraulic stop position	



ASSEMBLY

The assembly of the Idylle fork on your frame requires particular attention in order to guarantee optimal safety conditions. Please make sure you follow the instructions below.

Calculate the length as below:
Length of the head tube of the frame + height of the headset + height of the stem + 5 to 10mm.

1.1 Pivot

Before cutting the pivot of your fork, measure the necessary length of pivot, taking into account the total height of your headset, stem, and adding a margin of 5 to 10mm.



Never disengage the pivot tube from the lower clamp, even if the pivot tube is too short, or when changing the frame. It is imperative to change the set for important security reasons.

1.2 Front wheel mounting

To assemble the front wheel, proceed as follows :

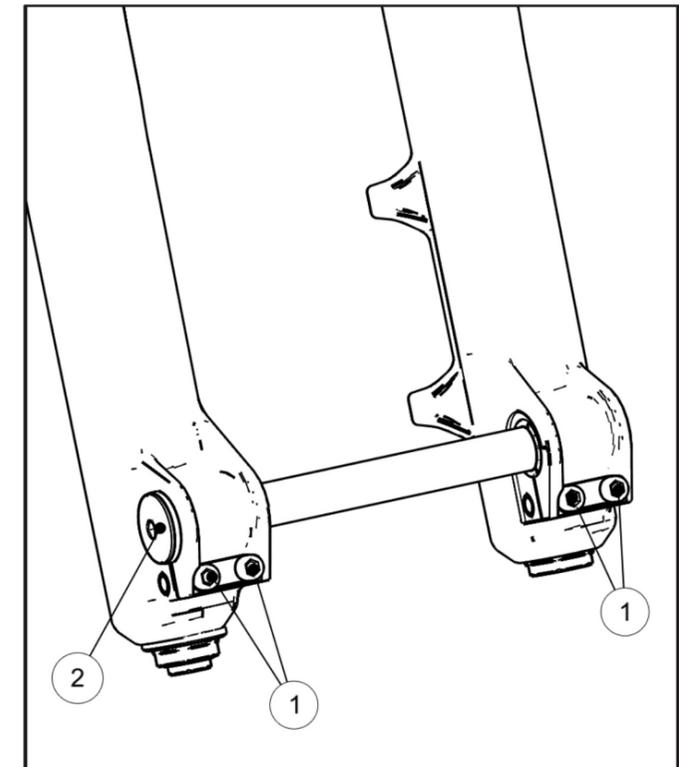
1. Loosen the fork axle screws (1).
2. Unscrew the axle (2) to remove it.
3. Place the front wheel.
4. Insert the axle and screw it in until it stops.
5. Tighten the axle locking screw (torque 4N.m).

The disassembly of the front wheel must respect the reverse previous operations.

1.3 Mounting the brake caliper

The Idylle brake caliper bolt pattern uses a post mount 200 (PS200) standard mount. In order to mount the disc brake device, apply the following recommendations :

1. When fitting the brake caliper, follow the manufacturer's instructions for the brake model used.
2. Ensure that all fixing screws are tightened to the torque recommended by the manufacturer. For that, refer to the user manual provided by the manufacturer. It is recommended to install a new set of pads to ensure better alignment.
3. Pass the brake hose from the caliper through the inside of the casting, then through the hose guide provided
4. Finish by testing the braking system on flat ground before riding on the trails.



- The disc brake caliper mounting bolts must have 10 mm of thread engagement with the fork.
- The disc brake caliper mounting bolt tightening torque level must be 10 n.m.

SETTINGS

2.1 Air pressure

The first adjustment that should be done on the fork before riding is to set the air pressure. This adjusts the stiffness of the air spring according to your weight. The stiffness of the air spring induces a degree of fork travel when you sit on your bike. This value, commonly called sag, can vary based on your usage. Whatever your weight, it should be between 20% and 30% of the total fork travel. As a reminder, SAG is measured by standing on the pedals with arms and legs straight.

To achieve the best performance from your BOS product, it is important to set your optimal pressure. **The chart below will give you some base values based on your weight. Your specific pressure may vary based on your riding style and personal preference.** However, do not stray too far from the indicated pressures, or you may risk changing the performance of your fork.

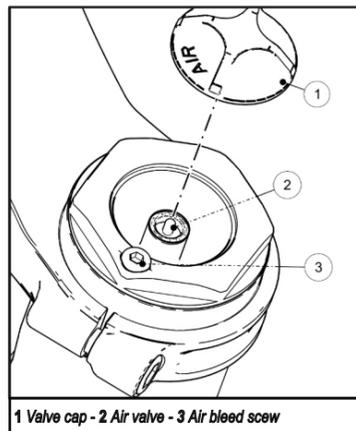


! It is recommended to use our BOS pump with digital pressure gauge for more accuracy and convenience, available on our website.

Leisure use

Rider weight (Kg/Lbs)	60/132	65/143	70/154	75/165	80/176	85/187	90/198	95/209	100/220	105/231	110/242
Pressure (PSI)	137	151	164	177	190	203	217	230	243	256	270

Add an additional 5 PSI per weight range for sports use.



! Minimum operating pressure : 115 PSI
Maximum operating : 350 PSI

SETTINGS

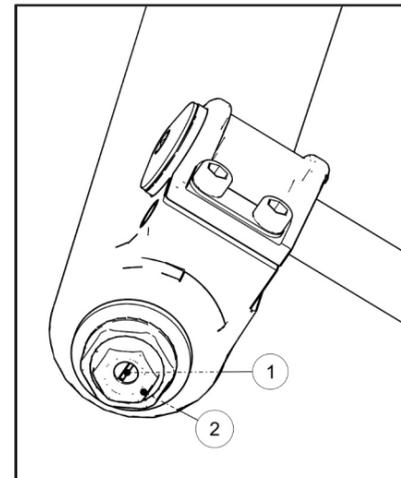
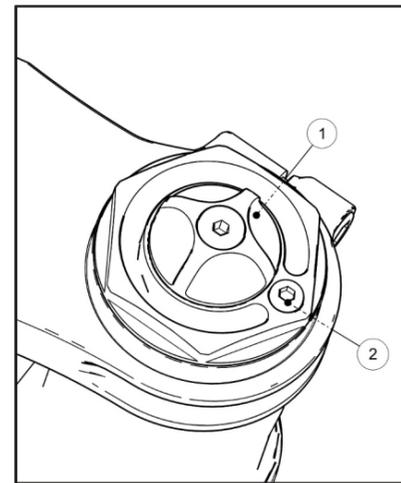
2.2 Hydraulic adjustments

The Idylle 39 FCV has one rebound setting, two compression settings (high and low-speed) and a possible internal adjustment of the hydraulic stop.

The rebound setting is adjusted via the screw on top of the right stanchion (1)

Remember to bleed your hydraulic cartridge regularly by unscrewing the screw (2) to let out the internal air pressure generated by riding.

! When bleeding the fork, do not compress it. The fork must be unloaded.



The low-speed compression setting is adjusted via the grey screw on the bottom of the right stanchion (1). It allows you to adjust the firmness of the fork during small impacts by regulating the hydraulic flow

High speed compression is adjusted by the red knob at the bottom of the right stanchion (2). It allows you to adjust the firmness of the fork during heavy shocks by regulating the hydraulic flow.

! To start your adjustment, turn the adjuster all the way clockwise (clicks = 0). Clicks are then counted one at a time while turning the adjuster in the counter-clockwise direction.

Setting Ranges :

It is difficult to give a “magical solution” to hydraulic settings as these are linked to a number of different parameters such as the influence of the rear suspension settings, the air spring pressure, the position of the fork in the crowns, and the geometry of the bike. This is not to mention personal rider preference. That being said, we can offer the following general advice.

- Frequent bottom-out : harden high-speed compression
- Feeling of harshness on roots and rocks: soften high-speed compression
- Discomfort, arms getting sore: soften low-speed compression
- Fork stays low over successive impacts and doesn't spring back: speed up rebound

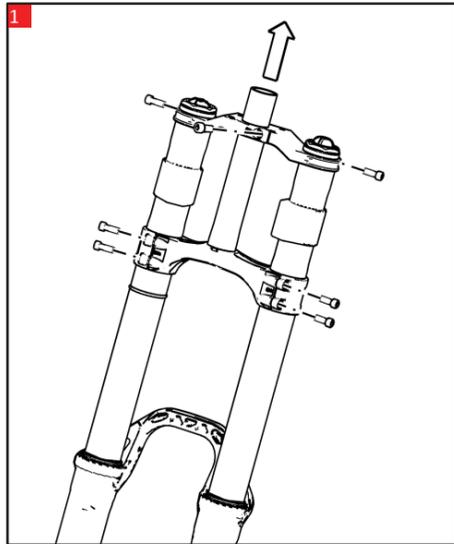
- Bike sits too high in travel: slow down rebound
- Fork diving excessively on braking: harden low-speed compression

It is worth considering other parameters that may be influencing the performance of the fork, especially if you find yourself very far from the base settings. Change your settings in steps, only adjust one setting at a time, and only open or close the one setting by a few clicks at a time. If you find yourself lost in the settings, reset to the base settings and start over again.

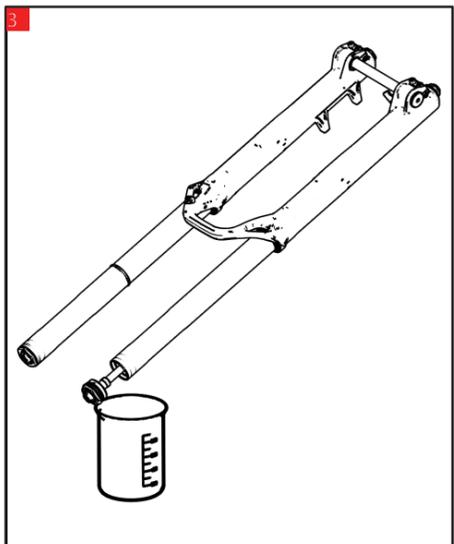
SETTINGS

Hydraulic stop adjustment

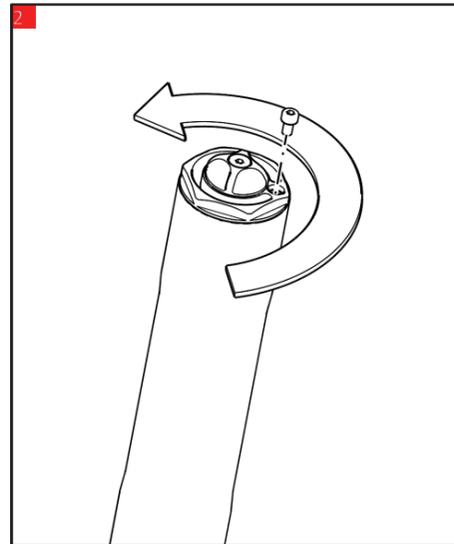
The Idylle 39 FCV is equipped with a hydraulic end stop that can be adjusted in 4 positions at 10mm intervals. This allows you to choose the start of action of the hydraulic stop on your damping stroke. To change the position of your end stop, follow the instructions below:



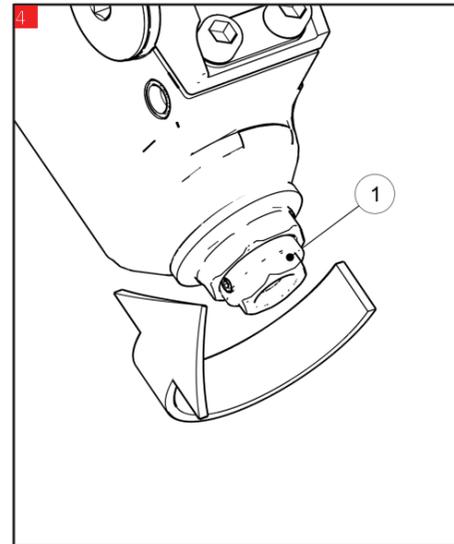
- Unscrew the screws of the upper crown with a 5mm Allen key
- Remove the upper crown followed by the elastomer frame stops
- Unscrew the lower crown screws and remove the lower crown/pivot assembly
- Be sure to note the height of the



- Drain the content of the hydraulic cartridge in an oil pan
- Leave to drain a few moments



- Unscrew the cartridge bleed screw and allow the air to escape before replacing it
- Unscrew the hydraulic cartridge with a 26mm socket

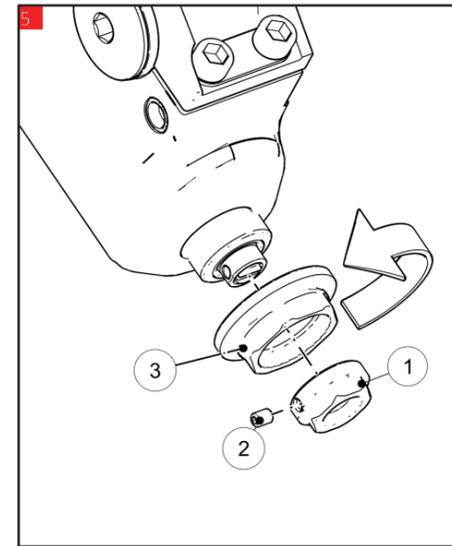


- Screw the high speed compression setting 1 all the way in, so that the stop screw is released

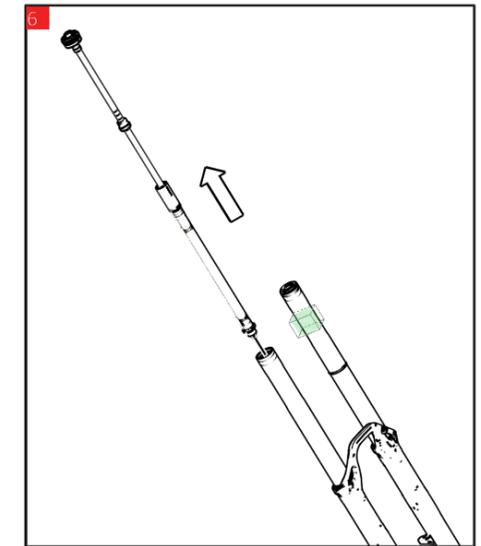


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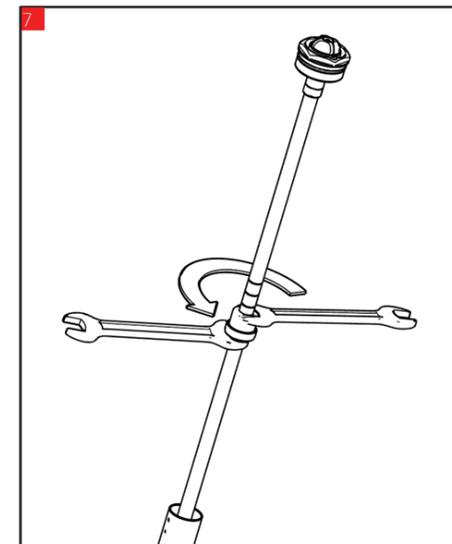
SETTINGS



- Unscrew the locking screw 2
- Remove the high speed compression adjustment knob 1
- Then unscrew the lower nut 3 and remove it



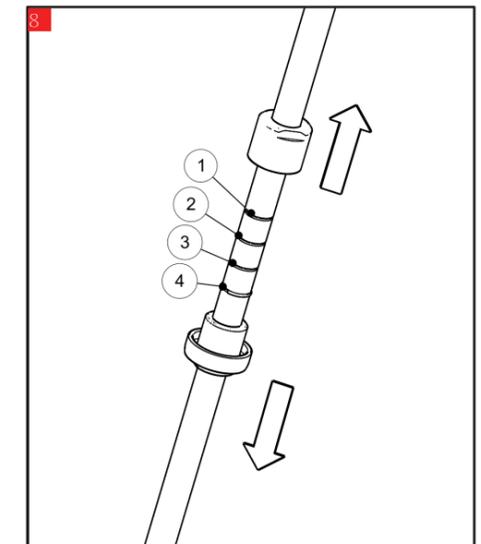
- Carefully remove the hydraulic cartridge from the fork tube
- Then place the cartridge on your workbench



- Clean the rod with a clean cloth before disassembly
- Unscrew the compression stop so as to release the retaining ring



- Be careful not to damage the rod and the hydraulic stop
- Degrease the parts before reassembly



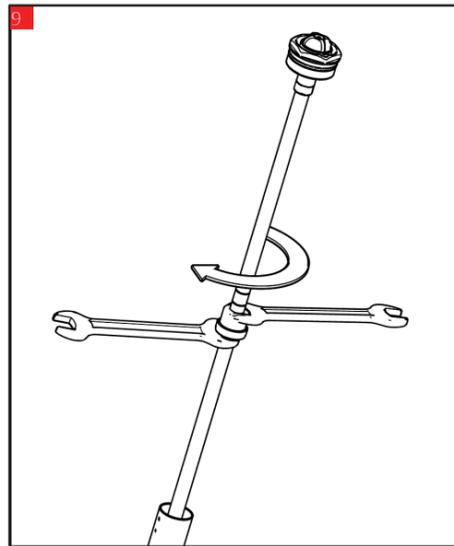
- Once unscrewed, the compression stop releases the retaining ring in position
- Move the snap ring to the desired stop position from 1 to 4: start of action furthest to closest



- Be careful not to damage the rod and the hydraulic stop

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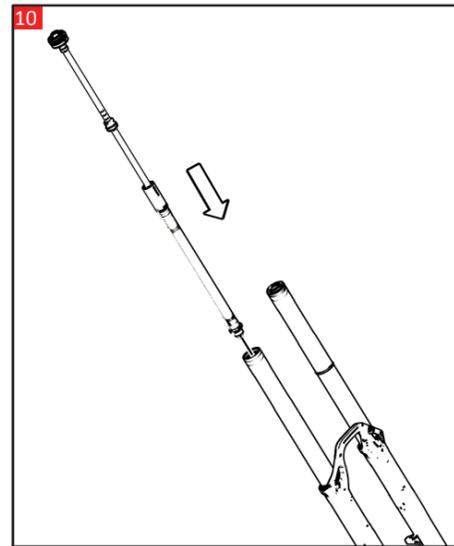
SETTINGS



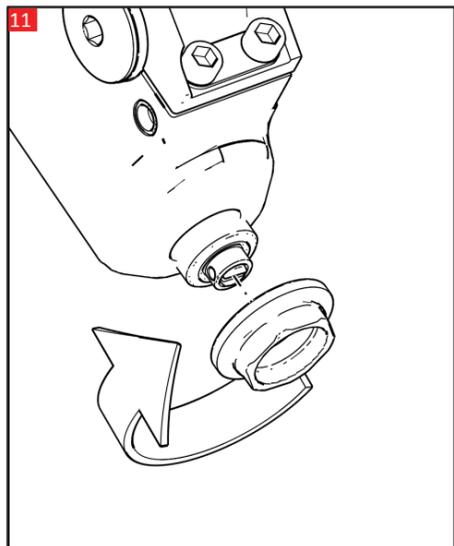
- Apply Loctite 243 to the thread
- Tighten to 7Nm

! Be careful not to exceed the specified tightening torque

14/16mm Flat wrench



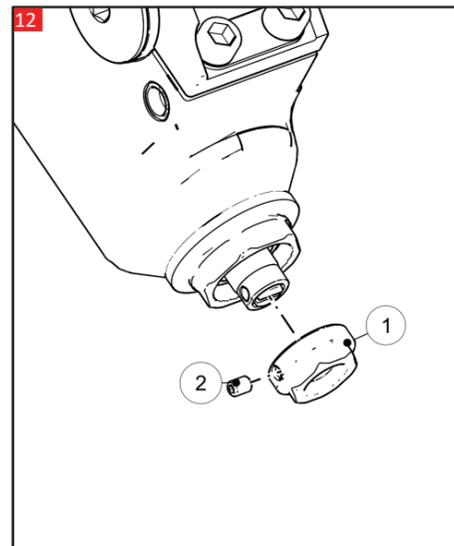
- Carefully insert the rod into the casting



- Tighten the lower cartridge nut to a torque of 10Nm

! Be careful not to damage the rod and the hydraulic stop

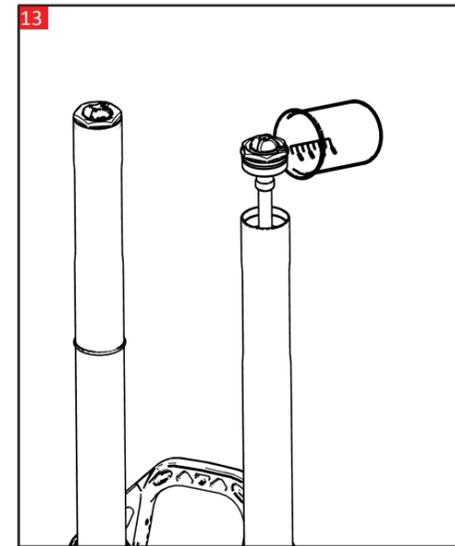
21mm Socket



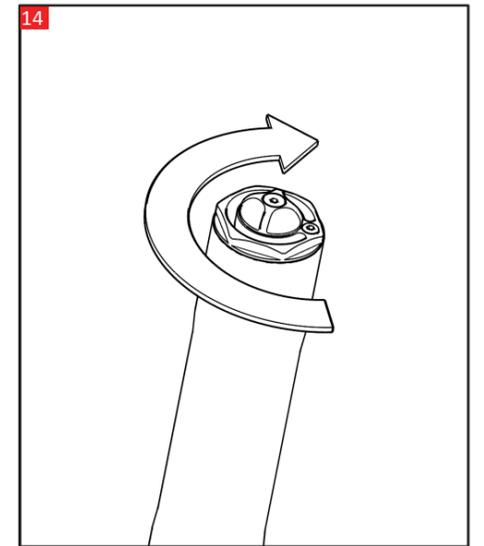
- Insert the high speed compression adjustment knob 1
- Tighten screw 2 with Loctite 243 to a torque of 0.35Nm

1.5mm Allen key

SETTINGS



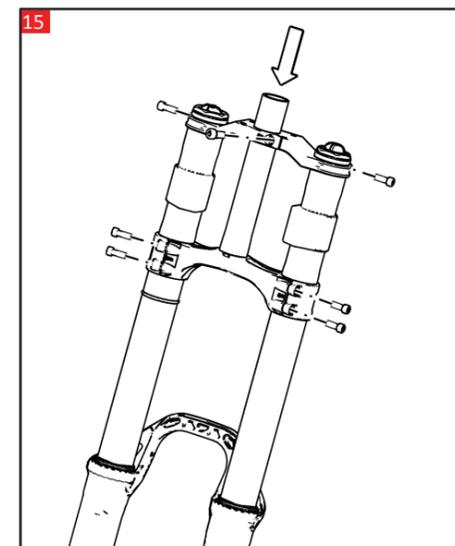
- Fill the hydraulic cartridge tube with BOS Bioil
- The recommended amount of oil is 400ml



- Screw the plug back onto the stanchion to a torque of 10Nm

! Do not exceed the specified torque as this may break the threads of the parts

26mm Socket



- Insert the lower crown, reposition the frame stops and then the upper crown
- Make sure to respect the tightening torque of the crown screws (6Nm lower crown / 7Nm upper crown)

5mm allen key

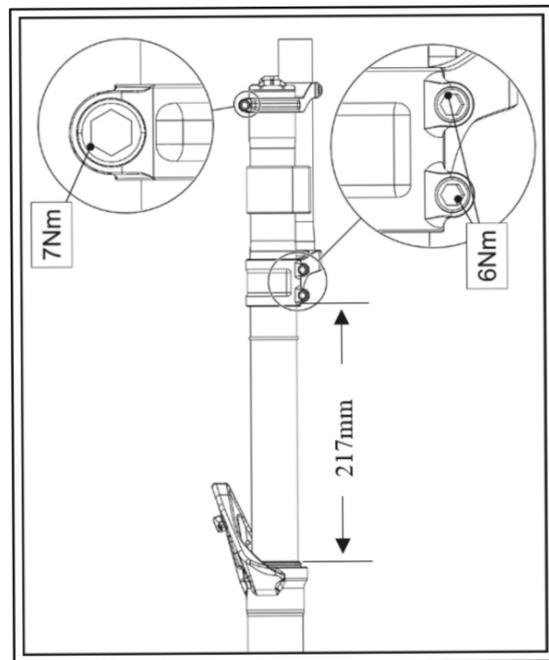
SETTINGS

Base settings – Idylle 39 FCV

Type	Rebound	Low speed compression	High speed compression
Soft	16 clics	12 clics	14 clics
Medium	18 clics	14 clics	16 clics
Hard	20 clics	16 clics	18 clics

Adjusting stanchion position in the crowns

Depending on the bicycle, the position of the fork in the crowns can vary slightly. However, you must maintain ALL the following measurements to ensure the fork's function and your security.



The lower crown height ensures the full use of fork travel and tire clearance. Use the following measurements to set your lower crown height (A). This height is measured from the top of the fork leg (the bottom of the visible part of the dust seal) to the bottom of the lower crown.

! Maximum tire diameter : 765mm
 Maximum tire width : 80mm
 Maximum « shoulder » diameter of the tire : 730mm

The distance between the top of the upper crown and the top of the stanchion must be between 0mm and 30mm (B). Once you have assembled the crowns and adjusted the heights to the measurements above, you may proceed to the tightening of the bolts. USE THE FOLLOWING BOLT TORQUES.

MAINTENANCE



3.1 Service

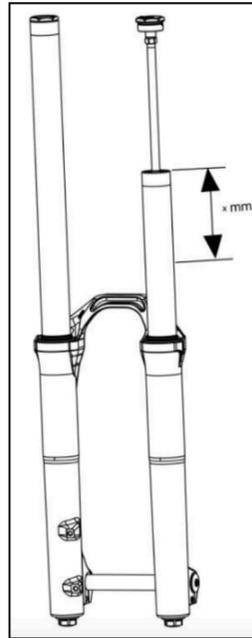
It is essential to clean your fork after each day of riding without waiting. Nothing is worse for the life of your seals than dirt and dust. The cleaning process is also extremely simple: clean the stanchions and seals with a clean rag. You can occasionally lubricate the exterior of the seal with silicone grease.

X Do not under any circumstances use degreaser. On the same note, do not power wash the forks! It will only push the mud inside the forks and get it stuck between the stanchion and the seals.

		After each ride	Every 6 month	Every year	Every 2 years
Cleaning / Checking the pressure / Checking the tightening of screws (crown+ axle)		•			
Lite service / Inspection of guide rings	Wet/muddy conditions		•		
	Racing/Frequent use		•		
	Dry/dusty conditions			•	
Full service	Wet/muddy conditions			•	
	Racing/Frequent use			•	
	Dry/dusty conditions				•

Lite service : Oil change, Inspection of guide rings, Cleaning
 Full service : Scraper seals, guide rings, internal seals change

! Remember to bleed the air from your air cartridge every 5 to 10 rides depending on usage.



3.2 Oil level

Idylle 39 Oil level

You can find below the oil levels used for your fork services.

	Oil type	Idylle 39 FCV
Hydraulic side (right)	BIOIL	220mm / 400ml
Air side (left)	AMX6	40 ml

How to set the oil height :

- Push the stanchion all the way down
- Lift the hydraulic shaft all the way up
- Measure the height between the top of the stanchion and the top of the oil with a clean ruler



It is strongly recommended to use BOS AMX6 for lubrication and BOS BIOIL oil for the closed cartridge. Changing the type of oil risks changing the fork's performance and reducing the life of wear parts.



The lubricating oil on the air side must be inserted into the fork leg and not into the air stem.

My fork leaks when I connect my high pressure pump, what should I do ?

Check with a Schrader valve core remover that the valve bush is screwed on correctly.

My fork has negative travel, is this normal?

The BOS air spring is designed to lower the engagement threshold as much as possible. Therefore, it is possible on some bikes that there will be a small negative travel.

Where can I buy replacement stickers or a valve cap?

These items and more are available in our online store.

My new fork has bushing play, what should I do?

The unique bushing alignment and tolerance on BOS forks results in less friction, more sensitivity, and some bushing play from the factory. If the bushing play feels abnormally excessive, please contact a BOS service center for help.

My fork is lowering as I deflate it, what is happening?

When you deflate the fork by the Schrader valve, you are only emptying the positive air chamber. The negative air chamber stays under pressure and exerts an opposing force on the air piston and pulls the fork down. To avoid this phenomenon, make sure your fork is fully relaxed when deflating, then slowly deflate your fork with your high pressure pump.

I just inflated my fork for the first time and it is really hard, what can I do?

Have you changed the settings of the fork? Check that the settings are still close to our recommendations in the user manual of your product.

If the problem persists, the fork may have residual pressure from production. Slide a thin plastic cable tie (Rilsan type) between the wiper seals and the plungers until the air is released. Adjust the air pressure again.

If your fork is still hard, please contact our service department at sales@bos-suspension.com.

Remember to balance the air spring

I have about 5mm of travel unused when I ride normally.

Our forks are designed to be very progressive at the end of travel to give you a bottomless feeling. This means that those last couple millimeters of travel might only be used on the biggest hits or when you case a landing. You can think of them as insurance to get you out of the trickiest situations. If you have more than about 5% of your travel unused, try lowering your air pressure by 5PSI and check your compression settings. If your compression settings are much harder than our recommended values, try bringing them closer to the base settings in your product's user manual.

I have grease/oil coming out of my brand new fork seals.

This is not unusual at the beginning of the life of a fork. Clean off the stanchions and the seals and it will stop after a few rides.

My fork has been sitting for a couple of weeks and some oil came out of the seal when I rode it the first time.

BOS seals can let out a little bit of oil when they have been sitting and dried out. Wipe off any oil, and none more will come out when the seal is lubricated again.

I have grease/oil coming out of my well-ridden fork seals.

It's time for a service! Contact your nearest BOS authorized service center for a full service.

But I haven't reached your recommended service interval yet.

Our recommended service intervals cannot cover 100% of customer's usage cases. Use in wet, muddy conditions; storage out in the sun; frequent use; or improper care can all cause your seals to wear out more quickly.

Where can I find my serial number ?

The serial number is engraved under the steer tube, it's composed of 7 numbers.

How to set the FCV?

The FCV is a factory preset internal system.

For any other information, you can send us your request by sending a message to sales@bos-suspension.com.

idylle

39 FEV

3 WAYS OPEN CARTRIDGE

INDEPENDENT
AIR CARTRIDGE

39 M M
STANCHION

ADJUSTABLE HYDRAULIC
BUMP STOP

F . C . V
TECHNOLOGY

ANTI-VIBRATION
CASTING

TRAVEL
208 MM

AVAILABLE IN
GREY OR BLACK

BOS
SUSPENSION
MADE IN TOULOUSE

BOS
SUSPENSION

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