

# **USER MANUAL**



WWW.BOS-SUSPENSION.COM

DRIVEN BY PERFORMANCE

## iDYLLE 39



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	
5mm Allen key	Wheel axle	
1.5 and 2.5mm Allen key	Compression adjustment	



### **ASSEMBLY PROCESS**

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.

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.

Calculate the length as below:

Length of the head tube of the frame + height of the headset + height of the stem + 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:

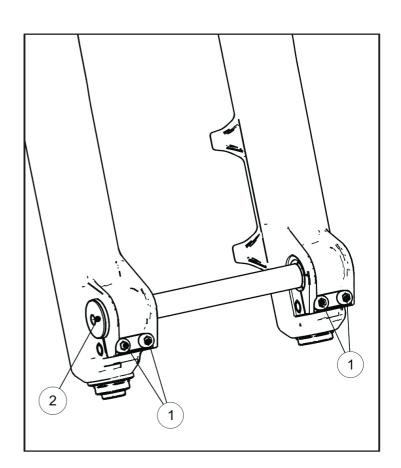
- 1. Loosen the fork axle screws (1).
- 2. Unscrew the axle (2) to remove it.
- 3. Place the front wheel.
- 4. Insert the axle and screw it in until it stops.
- 5. Tighten the axle locking screw (torque 4N.m).

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.

#### MTB Use

Rider weight (Kg)	60/132	65/143	70/154	75/165	80/176	85/187	90/198	95/209	100/220	105/231	110/242
Pressure (PSI) IDYLLE 39 SC 170 mm	159	171	184	196	208	220	233	245	257	269	282
Pressure (PSI) IDYLLE 39 SC 180 mm	150	162	173	185	197	208	220	231	243	255	266
Pressure (PSI) IDYLLE 39 SC 190 mm	142	153	164	175	186	197	208	220	231	242	253

### E-MTB Use

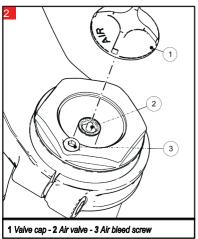
Rider weight (Kg)	60/132	65/143	70/154	75/165	80/176	85/187	90/198	95/209	100/220	105/231	110/242
Pressure (PSI) IDYLLE 39 SC 170 mm	184	196	208	220	233	245	257	269	282	294	306
Pressure (PSI) IDYLLE 39 SC 180 mm	173	185	197	208	220	231	243	255	266	278	290
Pressure (PSI) IDYLLE 39 SC 190 mm	164	175	186	197	208	220	231	242	253	264	275

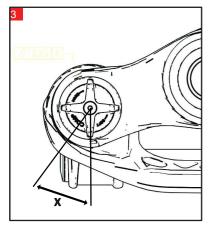


Minimum operating pressure: 115 PSI // Maximum operating pressure: 350 PSI

### **SETTINGS**









### 2.2 Hydraulic Adjustment

The Idylle 39 SC has one rebound setting and one compression setting.

**The rebound setting** is adjusted by the knob at the bottom of the right stanchion (1).

**Compression** is adjust via the black knob on the top of the right stanchion (2). Allows you to adjust the firmness of the fork during shocks by regulating the hydraulic flow. This lever has three positions. The total possible lever movement is 180°; however, the start position may be offset by an angle of about 20° from vertical.

The three positions are identified as S (soft), M (medium), and H (hard). The two extremes, S and H are reached at the fully open and fully closed positions of the lever. The M position is the click when moving between the S and H position, for fast and intuitive adjustment on the fly.

The advantage of BOS's adjustments is that they are not based on a single rate curve, i.e. for low speed only. The BOS adjustments are done based on both the low speed and high speed rate curves.

Therefore, by opting for one of the three positions, the rider is not only changing the low speed compression performance of the fork, but actually changing the LS and HS curve completely. You can see in the graph below that the relationship between LS and HS is not constant. The curve's change is precisely defined to achieve the desired performance. Thus, a single lever controls all 3 of the settings on the 3-way adjustable ldylle (rebound, low-speed and high-speed compression).

### **The S position** is for comfort.

### **The H position** is used for pedaling efficiency.

The H position considerably stiffens the fork in an effort to limit suspension oscillations during pedaling, but without locking out the fork completely. Thus, BOS remains faithful to the principle of keeping an active fork, even in its restrained state. This allows for the suspension to move over unexpected bumps, which is a simple matter of security.

#### **The M position** maintains hydraulic control and grip.

The M position in the middle is set at a precise position at the factory. However, the final user maintains the possibility of adjusting the firmness between the S and H poles. In effect, M is the base position that offers the best compromise between comfort, chassis support, and grip. If the rider prefers a softer feeling or a harder feeling, he may change the position toward the open or closed positions, S and H, without affecting the tuning of the fork.

### **SETTINGS**

### Modification of the intermediate click position:

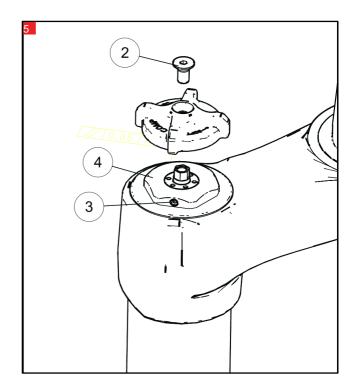
- 1. Move the lever to the intermediate click location
- 2. Undo the top cap screw
- **3.** Undo the retaining screw (set screw)
- 4. Adjust the M position setting using a 5mm wrench
- 5. Tight the retaining screw completely
- 6. Replace the lever and tight the top cap screw



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.



1.5 and 2.5mm allen key



### **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 compression
- Feeling of harshness on roots and rocks: soften compression
- Discomfort, arms getting sore: soften compression
- Fork stays low over successive impacts and doesn't spring back: speed up rebound
- Bike sits too high in travel: slow down rebound

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.

### Base settings – Idylle SC 39

Туре	Rebound
Soft	16 clics
Medium	18 clics
Hard	20 clics



Maximum tire diameter : 765mm // Maximum tire width : 80mm // Maximum « shoulder » diameter of

the tire: 730mm





### 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.



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 of	the pressure / Checking the tightening screws (crown+ axle)	•			
Lite service /	Wet/muddy conditions		•		
Inspection of guide	Racing/Frequent use		•		
rings	Dry/dusty conditions			•	
	Wet/muddy conditions			•	
Full service	Racing/Frequent use			•	
	Dry/dusty conditions				•
Lite service : Oil change, Inspec	tion of guide rings, Cleaning		1		1

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.

# **MAINTENANCE**

### 3.2 Oil level

### **Idylle 39 Oil level**

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

	Oil type	Idylle 39 SC
Hydraulic side (right)	AMX6	40 ml
Air side (left)	AMX6	40 ml
Closed cartridge	BIOIL	72 ml





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 hugh 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.

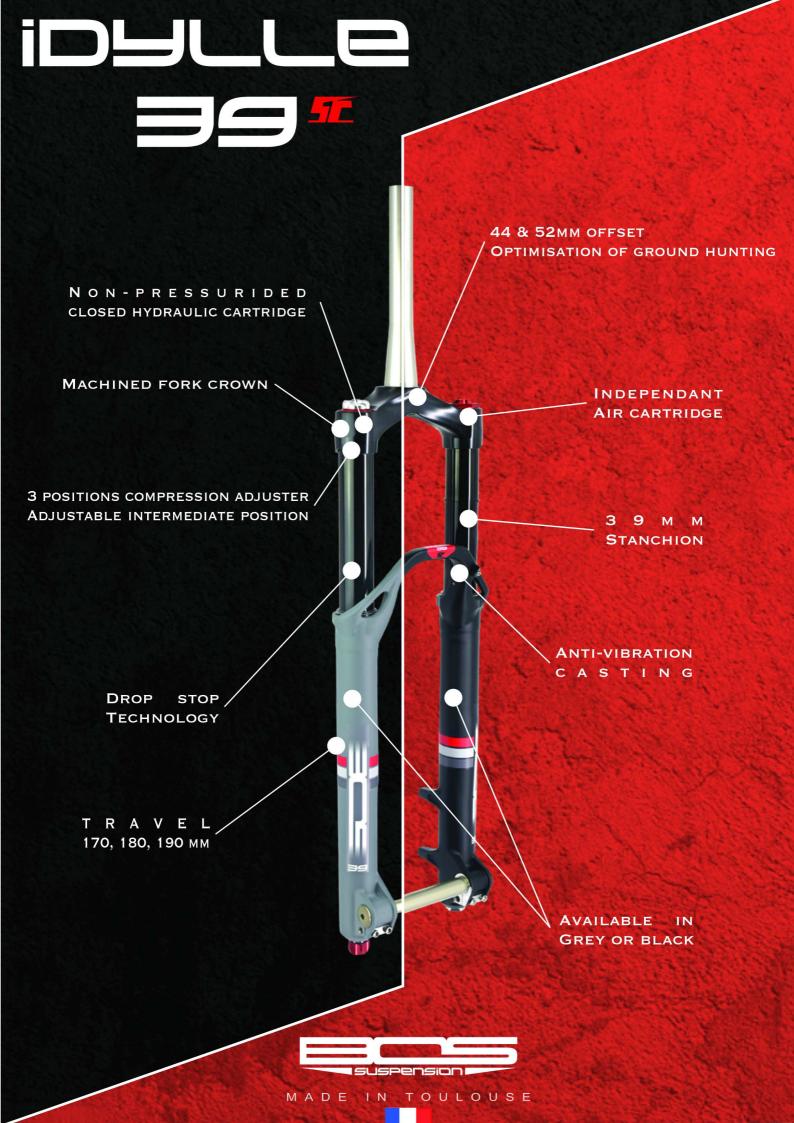
## But I haven't reached your recommended service interval vet.

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.

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





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