

BOSS

mountain-bike *SUSPENSION*



Model year 2014

USER MANUAL

WARRANTY



Terms and conditions

BOS MTB offers warranty on its products on the following terms:

BOS MTB guarantees to the original purchaser that the BOS product for which they received this warranty is free from defects in material and workmanship for one year from the date of original retail purchase. A proof of purchase will be asked for any warranty claim. This warranty is not transferable to a subsequent purchaser.

Wear and tear parts such as dust seals, Oring, bushings, rear shock mounting hardwares, stanchions, threaded parts and bolts are not covered under this warranty.

Terms

This warranty is subject to legal jurisdictional or warranty rights of the country where it has been originally purchased, which will prevail if different from the terms herein listed.

Limits

BOS MTB cannot be liable for any loss, inconvenience damages, whether direct, incidental, consequential, resulting from the use of its products, local legislation prevailing.

Warranty exclusions

This warranty does not cover the following cases:

- Damage to products resulting from improper assembly other than listed below
- Products that have been modified by the owner or a third party
- Improper use
- Damages resulting from an accident, crash under any circumstances
- Invalid servicing procedures and servicing time frame not respected
- Replacement of the original parts by parts from other manufacturers
- Products whose serial numbers have been altered, defaced or removed.

Warranty procedure

The owner should always refer to an approved BOS center for any warranty claim. A proof of purchase is compulsory for any warranty claim. Otherwise the warranty claim will not be considered. Always contact BOS MTB warranty department before returning any products that may fall under this warranty. If "the faulty parts" do not fall under warranty, the customer will be charged for any costs in respect with warranty such as transport and package back and forth.

Settings & Maintenance



1. Assembly

Fitting your Deville AM onto your bike requires care and attention. For your safety, please follow these instructions.

1.1 The steerer tube

Before cutting the steerer tube, first take some measurements: height of the headset, length of the headtube of the frame, height of the stem and then add 5 to 10mm.

Calculate the length as below:

Add the length of the headtube of the frame to the height of the headset and to the height of the stem plus to 5 to 10mm.

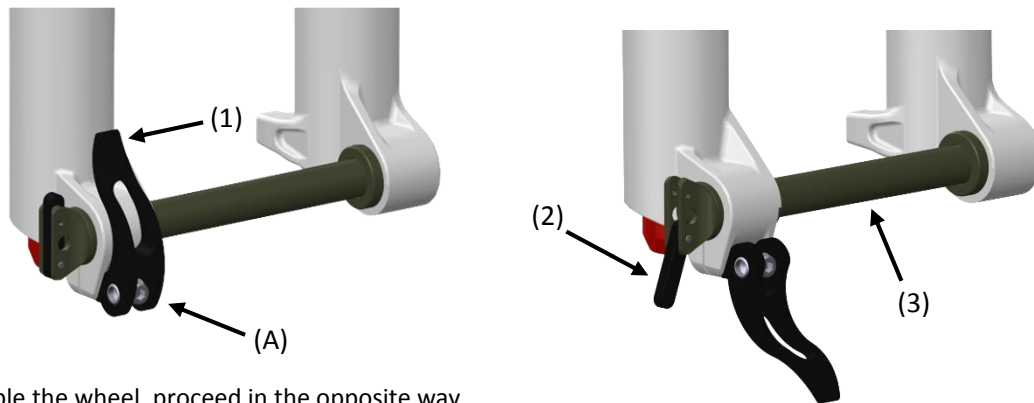
Caution :

Never attempt to remove or replace the steerer or upper tubes independently from the crown. Modifying the integrated crown, steerer or upper tubes can cause an assembly failure, resulting in a loss of control of the bicycle and serious injury.

1.2 Installing the front wheel: 20mm or 15mm axle

To assemble the front wheel, follow this procedure:

1. Open the quick release on right side of the fork (1).
2. Open the folding lever (2)
3. Unscrew the axle and remove it (3).
4. Install the wheel.
5. Insert the axle and screw it completely. Fold the lever. Close the quick release.



To disassemble the wheel, proceed in the opposite way.

Important :

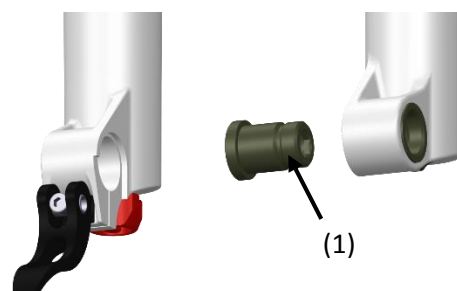
The torque of the QR screw (A) is originally set between 4 and 4.5N.m. It may be useful to check it regularly.

1.3. Mounting the 15mm axle adapter sleeve

The transition from the 20mm to the 15mm axle requires the mounting of an adapter sleeve on the left leg.

To assemble the adapter, proceed as follows:

1. Hand-tighten the 15mm adapter (1).
2. Tighten up to the torque 12N.m.
3. Refer to section 1.2 for the 15mm axle wheel mounting.



1.4. Disk brake installation

The Deville disc bolt pattern uses caliper mount for post mount 160 (PM160).

To assemble the disc brakes, follow this procedure:

1. Install the DH disc brake system, according to disc brake manufacturer's specifications.
2. Be sure to torque all fasteners and bolts to manufacturer's recommendations. Consult the instructions that came with your disc brakes for proper installation procedures. It is recommended to install a NEW disc brake pads, to ensure proper alignment and to minimize drag.
3. Route the disc brake hose (for hydraulic disc brakes) or brake cable housing (for mechanical disc brakes) from the caliper to the inside of the lower leg and through the supplied disc brake hose guide.
4. Tighten the disc brake hose guide screw (M3 x 12) with a 2.5 mm-hex key wrench, and torque it to 1 N.m.
5. Test the brakes for proper operation on level ground before hitting the trails.

The disc brake caliper mounting bolts must have 10 mm of thread engagement with the fork.

In any case, the disc brake caliper mounting bolt tightening torque level must never exceed 10 N.m.

2 . Settings

2.1 Air Spring

The sag measurement is the amount that your fork, rear shock, or both will compress when you are positioned for riding on your bike, with all your riding apparel and gear. Adjusting air pressure until you achieve your target sag will help you to determine the appropriate amount of air pressure for your fork or shock, or both.

To achieve the best performance from your BOS suspension product, the proper measuring and setting of sag is vital. As a starting point, set sag for your fork or rear shock according to the following instructions:

Recreational use :

Weight (Kg/lbs)	55/120	60/132	65/143	70/154	75/165	80/176	85/187	95/210	105/132	110/242
Air pressure (psi)	45	55	60	70	75	85	90	100	105	115

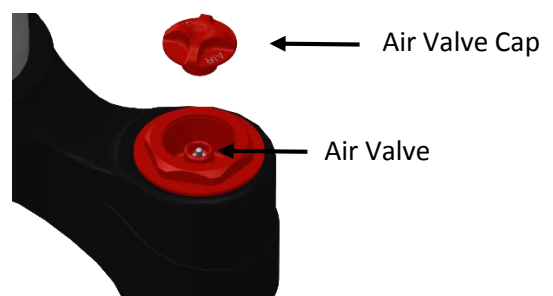
Racing use :

Weight (Kg/lbs)	55/120	60/132	65/143	70/154	75/165	80/176	85/187	95/210	105/132	110/242
Air pressure (psi)	50	60	65	75	80	90	95	105	110	120

The Deville AM has an o-ring on the fork upper tube in order to measure the SAG position. You can experiment and vary your sag percentage to better suit your riding style and overall feel.

Caution :

Minimum air pressure : 45 psi
Maximum air pressure : 120 psi



Important :

Balancing the air chamber pressure:

It is important to balance the positive and negative chambers to ensure optimum operation of the fork every time you adjust the pressure.

Proceed as follows:

After adjusting the pressure, cycle the fork slowly 3-4 times on the first inch of travel.

Thus, the air pressure is distributed equally between the chambers, and your fork is ready to roll!

2.2 Hydraulic adjustments

The Deville AM offers suspension adjustments in rebound through a knob and in compression through a lever.

Rebound adjustment is done by rotating the red knob that can be found at the bottom of the right fork leg.

The number of clicks is counted from the fully closed position while unscrewing the knob.

Harder = tighten (close) / Softer = untighten (open)



Compression adjustment is done by the position of the red lever at the top of the right fork leg. 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, as shown in Figure 1.

Figure 1 : Pedaling position H



Figure 2 : Intermediate position M



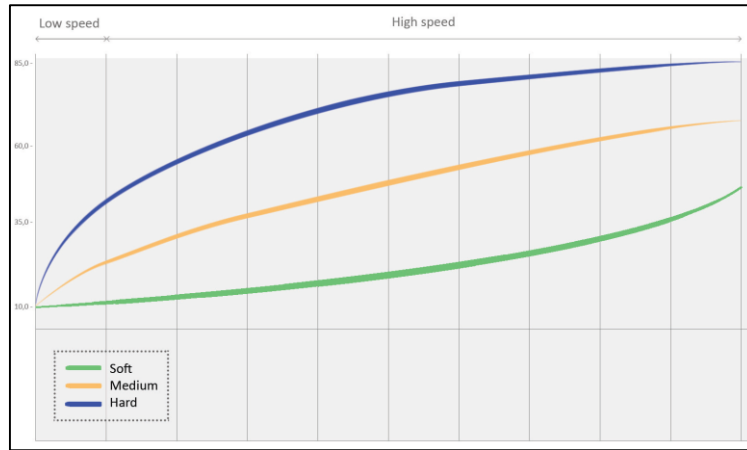
Figure 3 : Comfort position S



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 Deville (rebound, low-speed and high-speed compression).



The S position is for comfort.

The H position is used for pedaling efficiency.

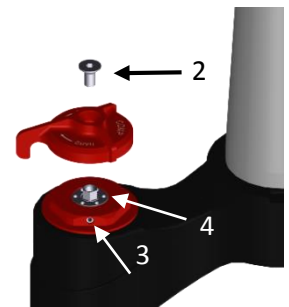
The H position considerably stiffens the fork in an effort to limit suspension oscillations during pedaling, but without locking out the fork completely. Thus, BOS remains faithful to the principle of keeping an active fork, even in its restrained state. This allows for the suspension to move over unexpected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

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 (or using the lever)
- 5: Redo the retaining screw completely
- 6: Replace the lever and redo the top cap screw



Important :

After putting the lever back together, verify that the lever does not touch the fork crown before it reaches the fully closed position.

Starting point adjustments – Deville AM

Rebound:

Recreational use: 18 clicks

Racing use : 16 clicks

Compression: 3 positions

- Soft: comfort
- Intermediate: hydraulic and grip control (adjustable intensity, refer to the user manual)
- Hard: pedaling efficiency

3 . Maintenance

3.1. Service

It is absolutely necessary to clean your fork immediately after every ride! Nothing is worse for your seals than dried mud. The cleaning instructions are very simple: clean off your stanchions with a soft, clean rag. Use fork oil or light silicone grease to lubricate the seals.

WARNING: DO NOT use corrosive products such as degreasers on your forks; these will damage the seals.

If you wash your forks with a pressure washer, never orient the stream toward the seals, as it can push dust and grime into the fork.

The Deville AM uses a closed damper and so the oil changes must be done at a BOS MTB service center. This oil change is done at the same time as the full fork rebuild.

To ensure the best performance of the stanchions, oil (Bi'oil) is added to the bottoms of the fork lowers. Amount per leg: 10ml

	Cleaning	Purge d'air	Oil service	Full service
Recreational use	After each ride	Every 10 rides	Once a year	Every two years
Racing use	After each ride	Every 5 rides	Twice a year	Once a year

Caution :

The oil service and full service must be performed by a BOS approved center. The BOS approved centers are the only able to identify and appraise a damaged or worn part, especially in case of shock or wear on structural elements such as the legs, the stanchions and the crowns.

What initial settings for the fork?

The "Deville Chart list" is available on the download section of the bosmtb.com website. The « Deville Chart list » summarizes the recommended settings (clicks and air pressure) depending on the body weight. Refer also to chapter 2 of this manual for details.

My fork is leaking when I connect the high pressure pump, what can I do?

Check with a Schrader valve tool if it is screwed correctly.

At rest position, the fork travel is slightly engaged (small SAG), is this normal?

The BOS air spring system is designed to offer the lowest threshold of release. Some forks may come with a slightly negative travel.

Where can I get the original stickers or valve cap?

Those items are available on the online store at bosmtb.com. Or contact our sales department for informations commercial@bosmtb.com.

The fork comes with a slightly play on stanchions area, what should I do?

The unique alignment of the bushings of the BOS forks creates an induced a slight frontal play. If the play is abnormally high, please contact BOS approved center for expertise.

The fork retracts when I deflate the air chamber, what's happening?

Deflating the fork means removing the air from the positive chamber only. The remaining air on the negative air chamber creates an opposite force to the main spring and retracts the fork. To avoid this, deflate step by step (30/40 psi) and alternate with a very slow oscillations (5 or 6) on the first 15 mm of stroke to recover the full travel.

The fork feeling in the M position doesn't feel right for me?

If the initial position of the M setting does not give you the feeling that you are looking for, you can modify the position of the click (refer to paragraph 2.2 in hydraulic adjustments).