

BIKE



SETTING

CLICKS

MX SHOCK

USER MANUAL

Terms and conditions

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

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

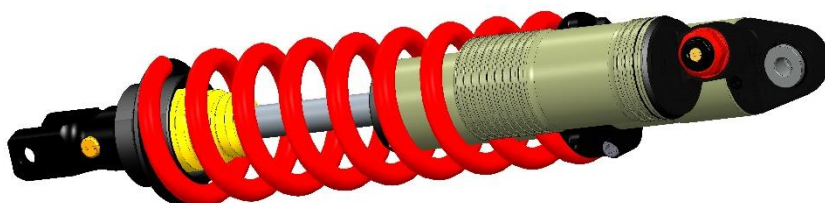
Warranty exclusions

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 others manufacturers
- Products whose serial numbers has 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 ENGINEERING 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.



1 INTRODUCTION

BOS ENGINEERING thanks and congratulates you on your choice of damper for motorbike.

Your new BOS high performance damper is developed from our years of experience on two and four wheels in official teams on all type of surface thanks to our succesful co-operation with winning. Our success and results gained in few years show the full and the exclusive implication of BOS ENGINEERING in the research of performance.

The BOS damper you just bought is especially developed for your bike and your type of race. The choice of our technical solutions, the quality of our materials, the precision and the attention brought to the assembly operations allow your new BOS dampers to be an absolute weapon to win.

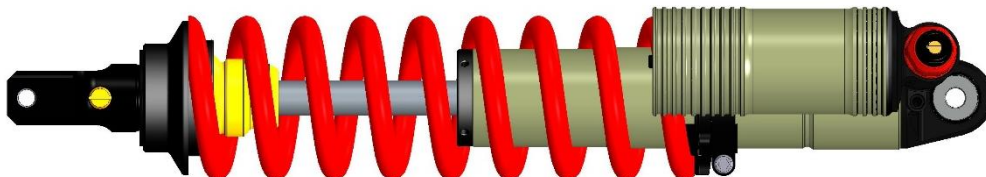
You will find on this user guide all the information needed to get the best of your BOS damper in term of mounting, setup or maintenance. This handbook talks about lots of subjects for which a private or professional pilot can be confronted to setup his dampers.

We wish you a good reading and hope this document will guide you in your life of pilot...

NB : BOS ENGINEERING never stop to increase the range of product in terms of design and quality. Therefore, while this user guide contains the main information and pictures of products, there may be minor differences between this guide and your BOS dampers.

CAUTION !

Never try to disassemble your shock. Limit yourself to the instructions given in this manual.
This shock is pressurized, for your own safety, do not try to open it.
Contact an authorized service center for any maintenance operation.



Your new BOS damper is designed to change your old one or the standard dampers of your bike. Note the different point to check when mounting :

- Remove the standard dampers

See your bike's work shop manual to follow your specific bike damper remote procedure.

- Mounting of the BOS dampers

Depending of the type of bike, your BOS damper is designed with eyelet bearing / bearing or eyelet bearing / screed mounting eyelet. In every case, the mounting procedure is the contrary of the remove procedure. If some modification are required, your contact in BOS or your local authorized distributor will inform you in advance and guide you.

3.1. COIL SPRING

Spring preload isn't considered as an adjustment. It's a base setting which is dictated by your weight. It aims to adjust the SAG (negative travel) on the shock, which is the amount the shock compresses when you sit on the saddle. It's measured as mm of bike compression, but can vary from one bike to another depending on the geometry. BOS's recommended sag for most bikes is 100mm.

NB : Don't forget the SAG is measured on the flat, whereas when you are riding the bike it can be an angle which modifies the 'dynamic' SAG.

The damper can be supplied with a spring to match your weight.

The ideal preload giving 90/110mm SAG, can permit the bike compressed 40 to 50mm when pilot is not on the saddle.

If you exceed this range, a harder spring is strongly recommended.

If you don't match this range, a softer spring is recommended.

A Spring which is too hard or with too much preload can negatively affect the shock's hydraulic damping and reduce your bike's performance.

3.2. HYDRAULIC ADJUSTMENTS

The damper is a 3 ways, which means there are three types of principal damping adjustments which affect hydraulic curve : rebound, low speed compression and high speed compression. Your shock basic setting (internal hydraulic) is designed for your bike's geometry and weight.

The purpose of damping adjustments is to use all the shock's travel without bottoming-out (or only rarely), to give grip to the rear wheel, but also to stop the bike stalling in holes, and finally to maintain a good position. Below are the basic settings for your frame. Then it's up to you to analyse its performance and adjust the settings to suit your riding style. Do this carefully and methodically, step by step. Only change one setting at a time and only by a few clicks. If it's OK, note the setting and type of terrain. If you get confused with the settings, return to the basic settings and start again.

3.2.1. Low-Speed compression (A)

The low-speed compression affects the shock's performance in compression over small bumps or through the beginning of the travel.

It can be useful to make the low-speed harder (screw clockwise) on rolling terrain with big compressions and kickers.

It can be useful to make the low-speed softer (screw anti-clockwise) on steep slopes.

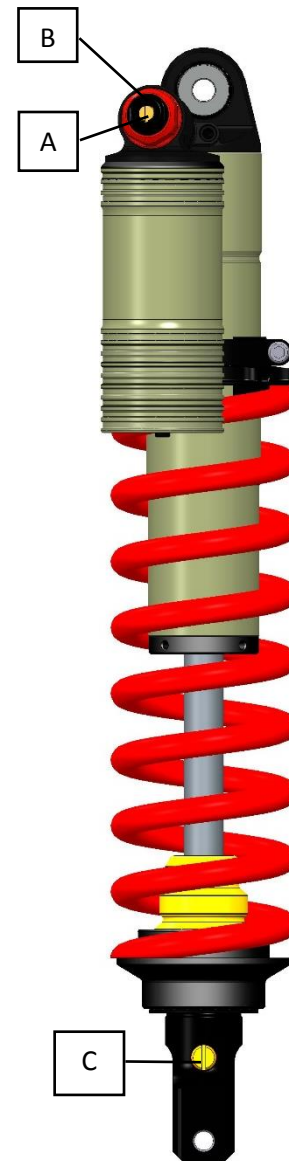
3.2.2. High-Speed compression (B)

The high-speed compression acts mainly on harsh hits (jump landings, rough rutted sections). It should be soft enough to get all the travel without bottoming-out. If, on a given track, you bottom-out a lot, make the highspeed compression harder. However, don't get hung up on bottoming-out if you only do it once or twice during a run. You risk setting your shock for 3% of the course and losing efficiency on the other 97%. If your shock doesn't get full travel, soften the high-speed compression.

3.2.3. Rebound (C)

The main factor in adjusting the rebound is the position of the bike. A bike shouldn't be 'sat-down' all the time, although the back does need to be fairly low. Playing with the rebound will allow you to keep this balance. If you feel like the back of the bike's pushing you forward on a slope or when braking, harden the rebound (screw clockwise). It can be useful to complete this adjustment (especially if the problem persists) by unscrewing the low-speed compression slightly.

If, on the other hand, the bike seems too low at the back and/or the front end has a tendency to drift offline, soften the rebound (screw anticlockwise).



IMPORTANT !

Adjustments are always made by unscrewing anti-clockwise from a fully closed position.

Cleaning :

It is essential to clean your shock after each ride using without wait ! There is nothing more dangerous for damper seal than dry mud. Operation is very easy, you just have to clean the shaft and protect it with silicon spray or protective grease. Be carefully to not use aggressive or alkaline cleaning product. If you use high pressure cleaning machine, do not guide water jet directly on the seals. Check it regularly and remove any dust/dirt from the bottom-out bumper.

	Cleaning	Light service(oil changing)	Complete service
Recreational use	After each ride	Once a year	Every two years
Racing use			Once a year

ATTENTION !

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 shafts, rods and piston.

IMPORTANT !

Never attempt to alter the pressure in the shock's reservoir. It never needs to be changed and the gas only acts to pressurize the hydraulic fluid in order to avoid cavitation. Attempting to modify the reservoir pressure will only result in shock failure.

Which is the basic setup for my shock ?

Bos shock is delivered with basic hydraulic setup calculated for your bike. You will found on first page the hydraulic setting with clicks like this :

Low-Speed compression / High-Speed compression – Rebound

(Ex 8/10-12 => L=8 / HS=10 - REB=12)

I noticed some play between the shock and the frame, what I can do ?

The mounting hardwares (bearings) must be replaced. Contact an approved BOS center to replace them.