SYORS

SERVICE 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

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 shock is an important element which has a direct influence on the behaviour of your bike.

This manual must be consulted before using the BOS shock absorber and during its entire service life. It is an integral part of the shock absorber.

If necessary, or for any service operation, please contact an authorized BOS Suspension centre or consult this manual.

After installation, test your vehicle at low speed to make sure that it works properly.

USE IN SAFETY

- When using BOS products, make sure you are in good physical shape and not under the influence of products that affect your lucidity and decision-making capacity (alcohol, drugs, etc.). If you are not able to ride, do not endanger yourself or any other person.

- The shock absorber has the effect of absorbing shocks, which can generate strong heat. Do not touch the shock absorber after use. Allow it to cool before attempting any work on it.

YOUR SAFETY FIRST

When working on a BOS suspension, please wear appropriate safety equipment such as apron, safety gloves and goggles.
When handling the suspension oil, please wear nitrile gloves and goggles.

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

IMPORTANT INFORMATION
These indications are provided to enable you to perform the operations described in this manual and to optimize the performance of your suspension.

OPERATING RULES ON YOUR FORK

Before carrying out any operation, check that you have the necessary tools to perform it. Some tools will be specific to BOS shocks, they will be indicated in this manual when using them and can be ordered directly on our website *www.bos-suspension.com*.

The disassembly of your shock implies the replacement of certain parts which cannot be reassembled worn without risk of malfunction of your product (O-rings, seals, wiper seals, rings...).

Before reassembly, clean the parts thoroughly of any impurities and check their state of wear. If this seems correct, you can reassemble your shock absorber, otherwise, change the worn parts.

ENVIRONNEMENT

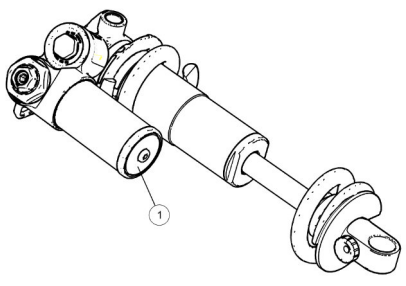
Mountain Bike is a wonderful sport that brings you a lot of happiness. However, it is potentially a source of environmental conflict with other people.

Responsible behaviour when using your bike automatically defuses problems and conflicts. Make sure that you comply with the legislation in force in your country regarding the disposal of used shock absorber oils and components.

To ensure the continued existence of mountain bike, make sure that you stay within the legal framework, are environmentally friendly and recognise the rights of others.

SERIAL NUMBER

The reference of your shock is engraved on the air cap of your shock (1). It is a sequence of 7 digits (0000000).



CLEANLINESS

When servicing your BOS suspension, make sure that you are working in conditions that will not affect performance:

- Work in a dust-free environment
- Work at a clean and organised workstation
- Use soft aluminium jaws to protect the equipment when using a vice.
- Do not scratch any surfaces when using tools.
- Clean the components when disassembling them
- Remove the sub-assemblies in the order of disassembly so that you can easily find out how to reassemble them together.
- Long sleeves are recommended or shaved arms.

If you carry out maintenance on your BOS suspension outside a workshop, you should at least :

- Avoid dust and air circulation around your work area
- A clean tarpaulin to be placed under the suspension on the floor
- A repair bracket to maintain the suspension
- An oil pan
- All the necessary tools listed below

TOOLS

Cleaning and safety :

- Safety goggles
- Clean cloths (lint-free)
- Soap (+ hot water)
- Nitrile gloves
- High pressure cleaner
- Apron
- Oil pan
- Oil fountain (optional)

Standard tools

- Dosing device
- Flat wrench 24mm
- Socket 13mm
- Allen key 3mm
- Needle
- Nitrogen bottle

Specific tools

- 152017-O-003 : Compression bloc socket
- 150707-O-030 : Shock corkscrew (for air cap removal)
- 000019-SEO-001 : air valve mounting tool
- 150807-O-035 : Floating piston removing tool

Service kit

- KREVL-SYORS : light service kit
- KREVC-SYORS : complete service kit

Oil/Grease/Glues

- Oil : AMX3
- Loctite 243
- Degreaser
- White grease
- Grease

EXPLODED VIEW

CLEANING

Clean your shock with a washing machine if you have one available.

Otherwise, use the high pressure cleaner and finish cleaning with hot water and soap.

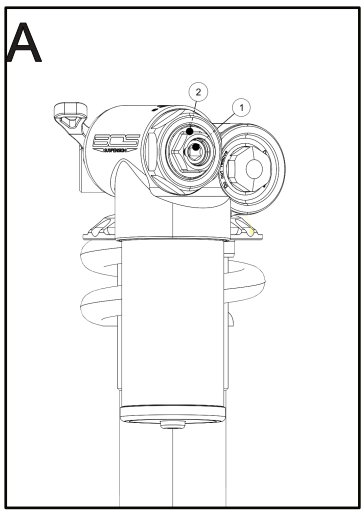
Required tools :
- Washing machine
- Soap

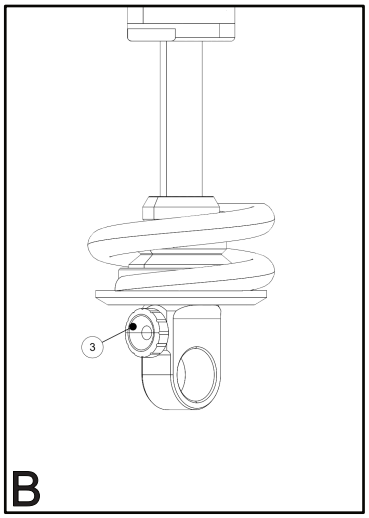
Absolutely prohibited: any aggressive product such as degreaser on joints and spherical bearing. If you use a high-pressure washer, never direct the jet directly onto the joints. Regularly remove any soil that may accumulate in the rubber stop.

DISASSEMBLY

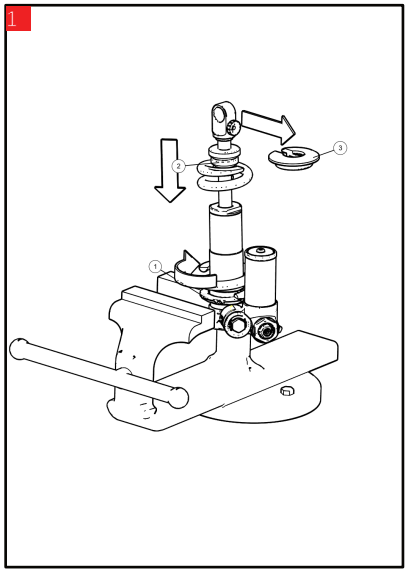
Before disassembly, be sure to record your compression low speed 1 and high speed 2 (Figure A) /Rebound 3 (Figure B) settings in a notebook.

To do this, count the number of clicks to the fully closed position. Once you have noted the setting, unscrew your settings all the way down for operations on your Shock.

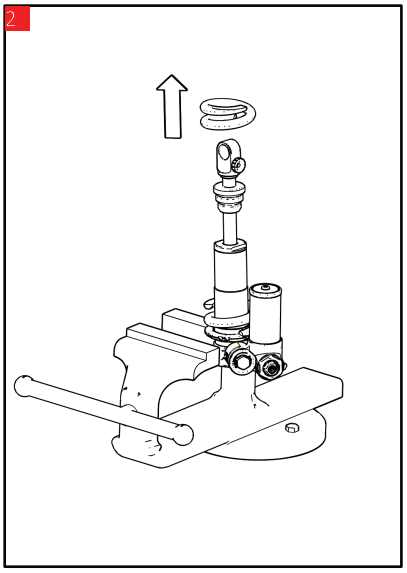




SPRING REMOVAL



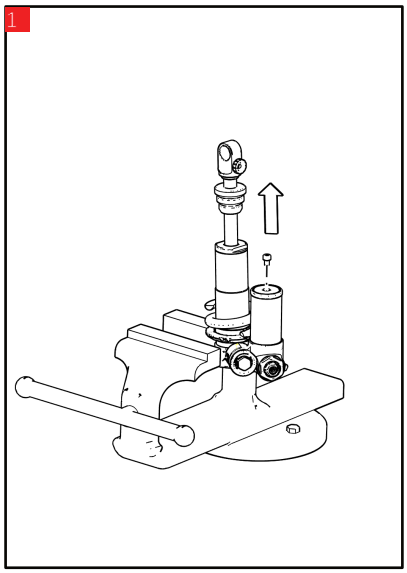
- Unscrew the preload adjuster retaining screw
- Unscrew the preload adjuster
- Push down the bump rubber to liberate the spring cup



- Remove the spring from the shock absorber

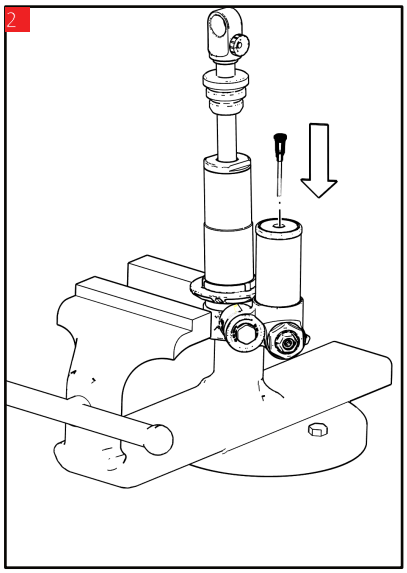
DISASSEMBLY

SHOCK DEPRESSURIZATION

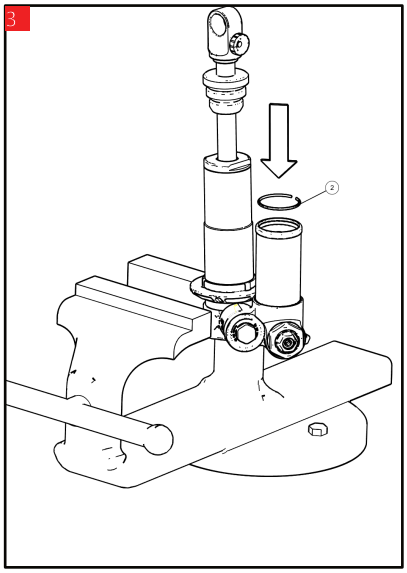


- Remove the air bleeding srew

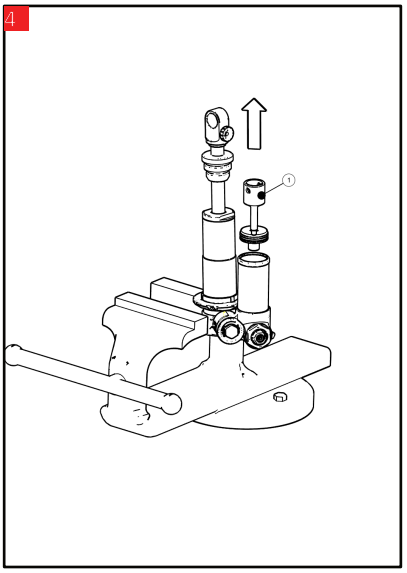
3mm allen key



- Insert a needle in the valve cap to drain the piggyback



- Push on the air cap to liberate the retaining ring
- Remove the ring

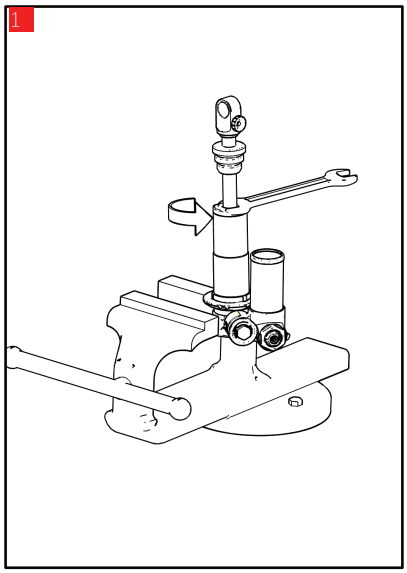


- Remove the air cap from the piggyback with BOS tool

150707-O-030 : Shock corkscrew

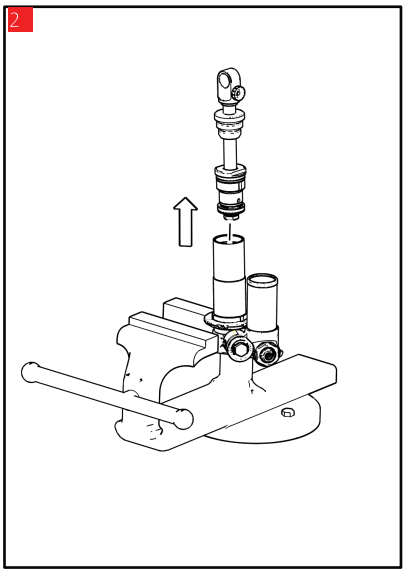
DISASSEMBLY

ROD DISASSEMBLY

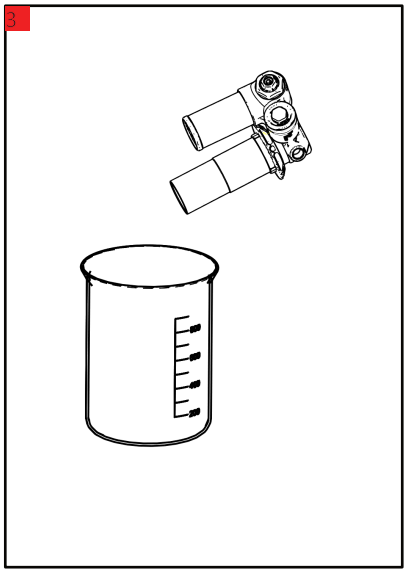


- Unscrew the rod guide

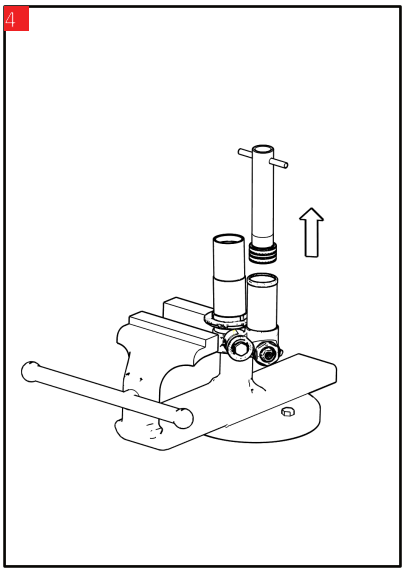
24mm Flat spanner



- Slowly remove the rod assembly from the body



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

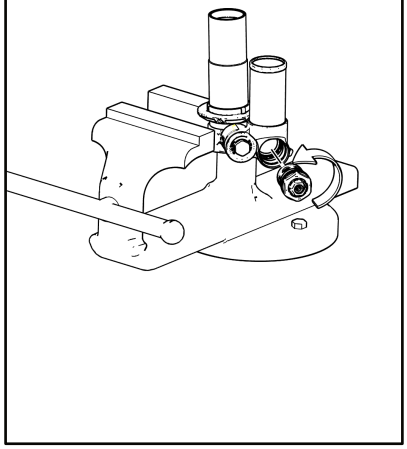


- Screw the floating piston removing tool on the floating piston
- Remove it from the piggyback

150807-O-035 : Floating piston removing tool

DISASSEMBLY

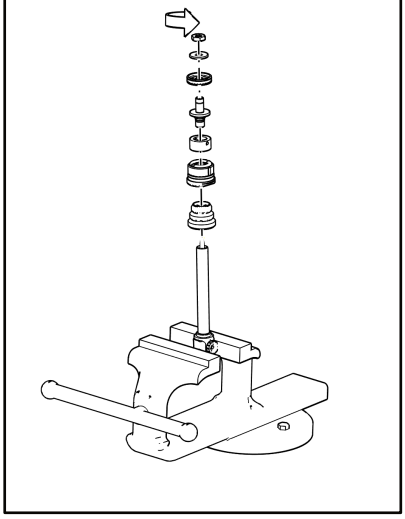
5



• Remove the compression bloc from the body

152017-O-003 : Compression bloc socket

6



• Unscrew the rod nut and remove all the parts from the rod assembly

13mm socket

Place all the parts on a workbench in the removing order to make sure of their position during assembly

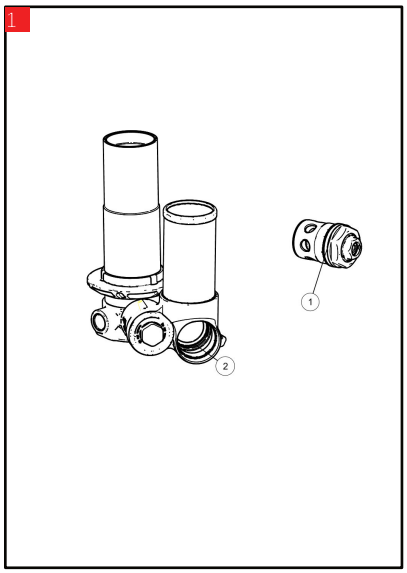
Now all the parts are removed from your shock, clean them properly by hand or with an oil cooler. Blow out all residues with compressed air to make sure all the parts are cleaned.

Be careful not to lose O-rings while using compressed air

DISASSEMBLY

SEALS REPLACEMENT

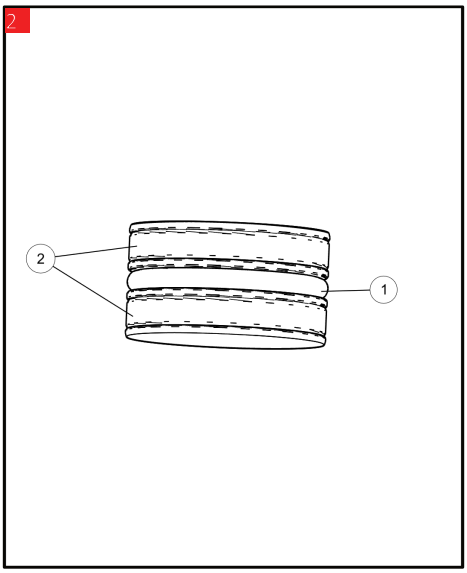
1



- Remove the internal seal in the head 2 and replace it
- Remove the external seal from the compression bloc and replace it
- Apply white grease all around the O-rings

White grease

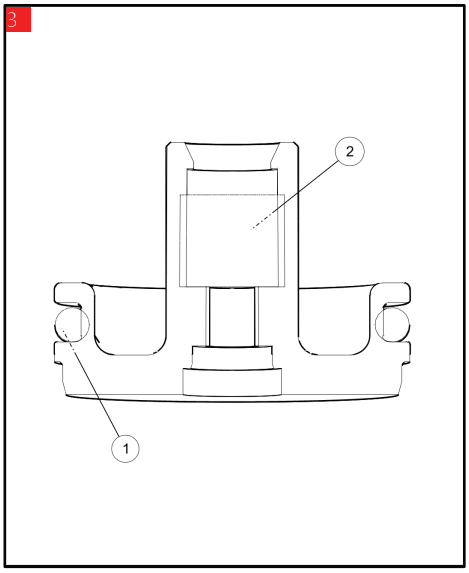
2



- Cut the piston guide (2) and remove them
- Place the new ones
- Change the O-ring note 1 and apply white grease all around the seal

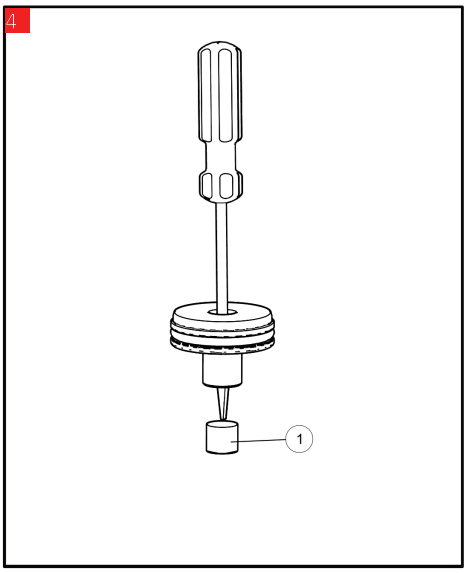
Be careful when cutting the piston guide not to damage the piston

3



- Change the external o-ring of the air cap
- Remove the valve note 2 from the cap

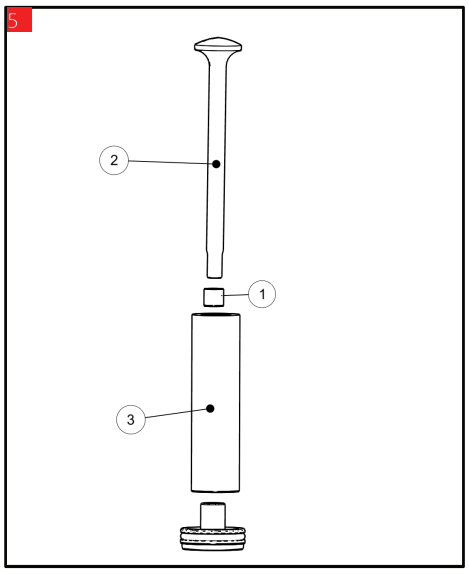
4



- Push the valve with a screwdriver to remove it from the cap

DISASSEMBLY

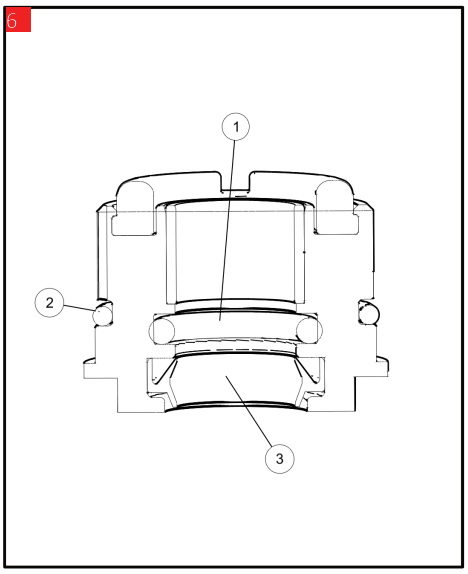
5



- Apply white grease on the valve
- Put the valve in the tool note 3
- Place the tube on the cap
- Press the valve with the tool note 2

000019-SEO-001 : Valve mounting tool

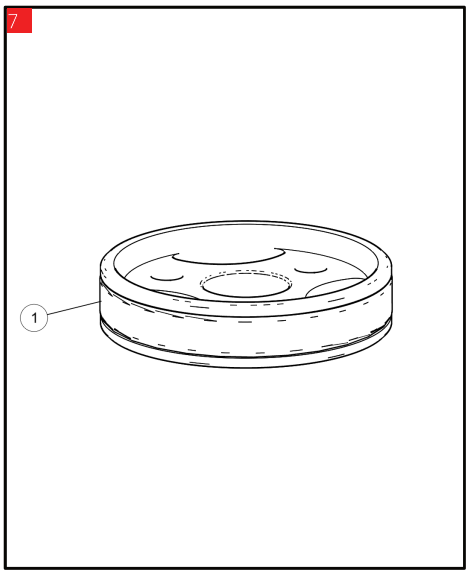
6



- Change the O-rings 1 and 2
- Change the oil seal 3
- Apply white grease on the 3 seals

White grease

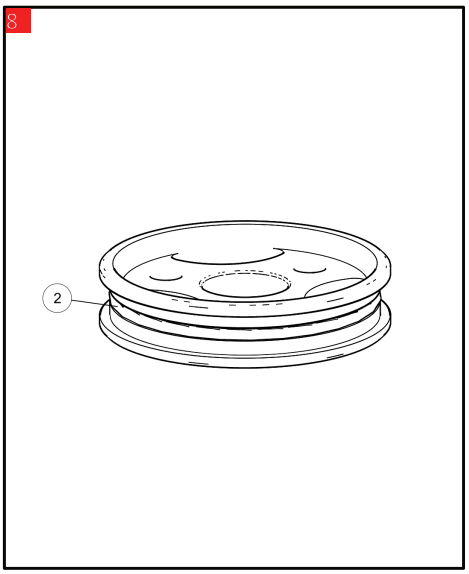
7



- Cut the piston guide and remove it

Be careful when cutting the piston guide not to damage the piston

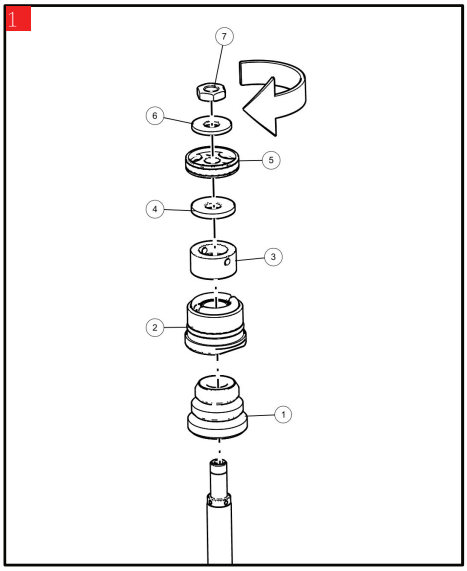
8



- Change the O-ring of the piston and place the new piston guide on it

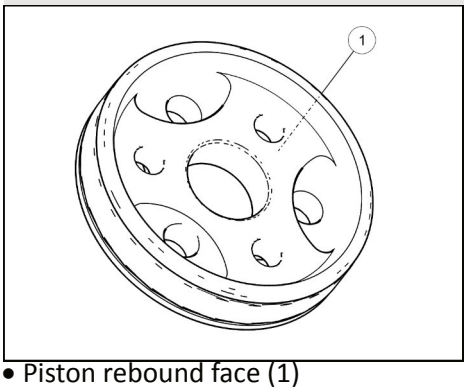
REASSEMBLY

1



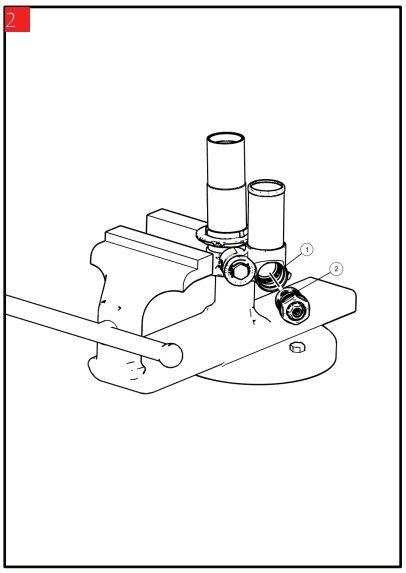
- Insert the new bumb rubber (1)
- Carefully insert the rod guide not to damage the oil seal (2)
- Insert the rebound spacer (3), make sure the two holes are positioned upwards
- Insert the compression top plate
- Insert the compression setting
- Insert the piston (compression face rod guide side)
- Insert the rebound top plate
- Apply Loctite 243 on the nut and tighten it at 7Nm

Make sure the chamfer on the top plates are opposite to the piston



- Piston rebound face (1)

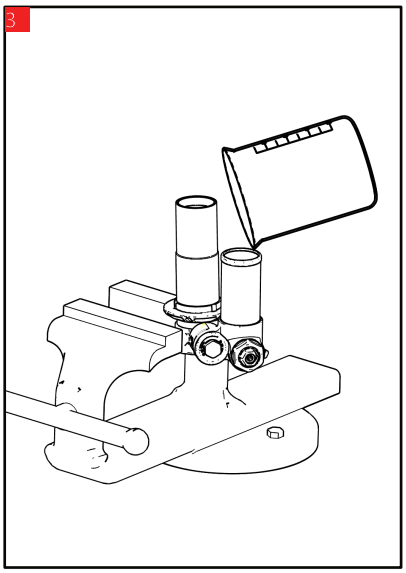
2



- Apply white grease on the O-rings 1 and 2
- Tighten the compression bloc at 20Nm

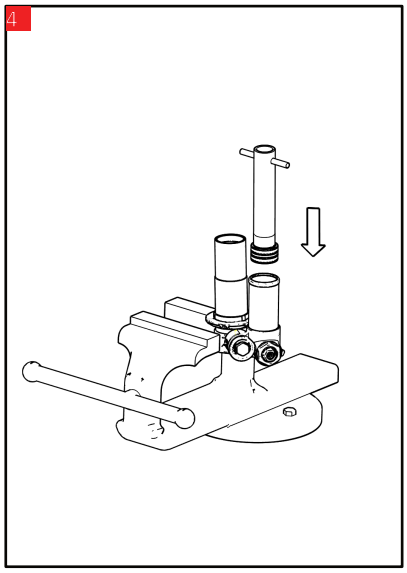
152017-O-003 : Compression bloc socket

3



- Fill the piggyback with AMX3 oil flush

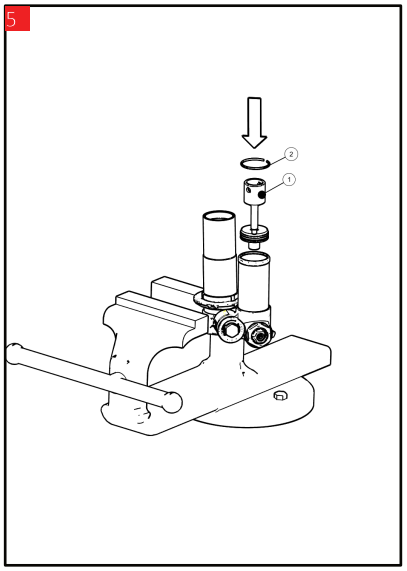
- AMX3 oil
- Oil pan



- Insert the floating piston and push it to the end
- Remove the tool

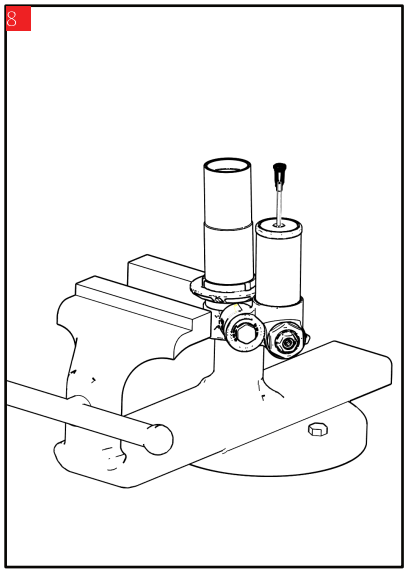
150807-O-035 : Floating piston removing tool

Be careful not to lock up air between the oil and the floating piston



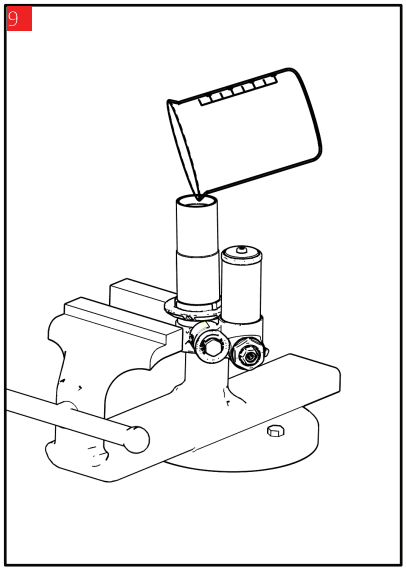
- Insert the Valve cap in the piggyback
- Place the retaining ring correctly

150707-O-030 : Shock corkscrew



- Fill the piggyback with air to maintain the floating piston against the head

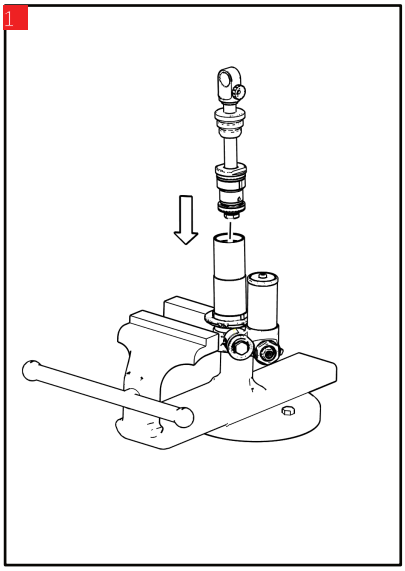
Needle



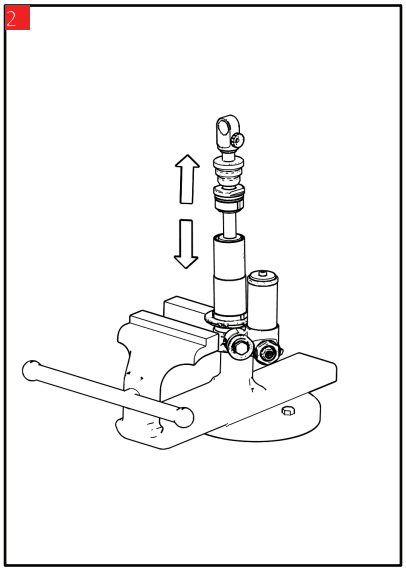
- Fill the cylinder with oil, let 20mm of air approximately

- AMX3 oil
- Oil pan

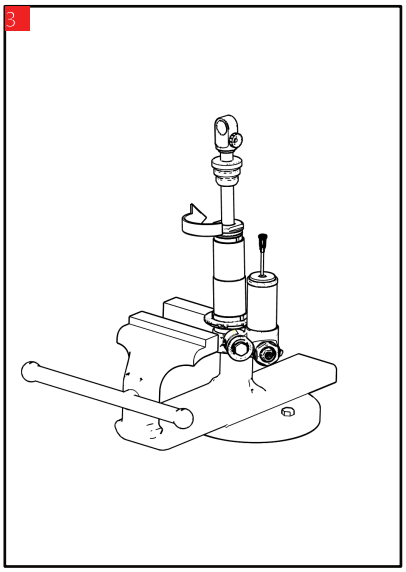
ASSEMBLY



• Slowly insert the rod assembly in the body

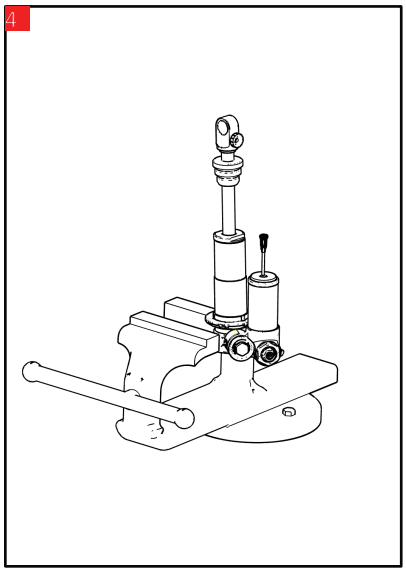


• Move the rod back and forth to expel the air trapped in the oil.

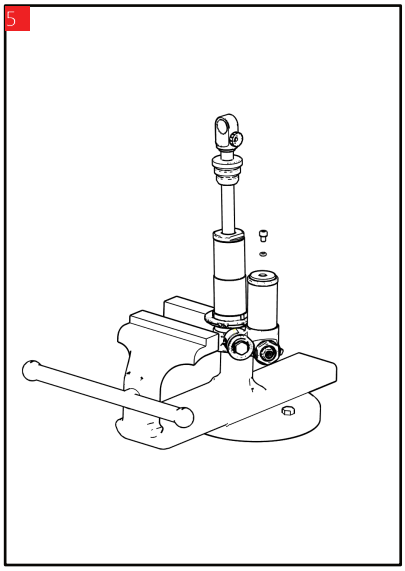


- Maintain the rod in extended position, with the rebound spacer immersed flush with the oil
- Let the air escape from the canister, keep the needle in place
- Screw the rod guide on the body (20Nm)

24mm Flat spanner

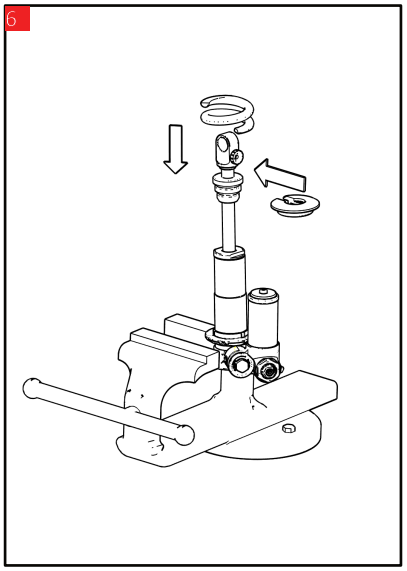


- Fill the canister with 8bars of nitrogen
- Push on the rod and make sure it returns properly
- If your rod does not return properly please redo the operation your shock.



- Apply white grease on the O-ring
- Insert O-ring and the valve cap screw
- Tighten to contact

3mm Allen key



- Insert the spring
- Place the spring cup
- Apply the original preload and screw the retaining screw

Then remember to adjust your compression and rebound to the values you noted before disassembly. Always adjust from the fully closed position.

Basic settings SYORS

Rebound	Low speed compression	High speed compression
10 clicks	10 clicks	10 clicks

Congratulations, you have just completed the overall service of your BOS SYORS.

Ride slowly at first to make sure your bike and BOS shock are working properly.

Thank you again for choosing BOS Suspension products.


Kick Valve
SYORS
Kick Valve
SYORS

SETTINGS TABLE

Land type	High speed COMPRESSION (clicks)	Low speed COMPRESSION (clicks)	REBOUND (clicks)

SERVICE ROUTINE

SERVICE TYPE	DATE (DD/MM/YY)	HOURS/KM	REMARKS

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