FOX
RACING SHOX

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INTRODUCTION

Thank you for choosing FOX Racing Shox for your vehicle. In doing so, you have chosen the number one shock absorber in the industry! All FOX Racing Shox products are designed, manufactured and assembled by the finest professionals in the industry. As a consumer and supporter of FOX Racing Shox products, you need to be aware of the importance of setting up your new shock correctly to ensure maximum performance. This manual will provide you with the step-by-step instructions of how to set up your shock. It is a good idea to keep your receipts with this manual and refer to it for service and warranty issues.

GENERAL INFORMATION

CONTACT INFO

FOX Racing Shox
130 Hangar Way
Watsonville, CA 95076

Phone: 831.274.6500
North America: 800.369.7469
Fax: 831.768.9342

E-mail: atv@foxracingshox.com

Website: www.foxracingshox.com

BUSINESS HOURS: MONDAY-FRIDAY 8:00AM-5:00PM PACIFIC TIME

SHIPPING METHOD

We use UPS ground service within the USA

METHODS OF PAYMENT

Visa, MasterCard, American Express, Cashier's Check

SERVICE/WARRANTY PROCEDURE

Step 1: Contact FOX Racing Shox at 831.274.6500 to obtain a Return Authorization number (R.A. number) and shipping address.

Step 2: Satisfactory proof of purchase receipt is required for warranty consideration.

Step 3: Mark the R.A. number and the Return Address clearly on the outside of the package and send the item(s) to FOX Racing Shox with shipping charges pre-paid by sender.

Step 4: Include a description of the problem, vehicle information (manufacturer, year and model), type of FOX Racing Shox product and return address with daytime phone number.

VALVING GUARANTEE

If it is determined that a Float AirShox requires a valving change within the first 90 days of ownership, FOX will perfrom the revalve at no charge for the original customer. The customer is required to follow the Service/Warranty procedure and is responsible for all shipping costs to and from FOX Racing Shox. Unless otherwise specified, FOX Racing Shox will return ship the shocks UPS ground service.

WARRANTY POLICY

FOX Racing Shox products are covered by a 1-Year Limited Warranty against defects in materials and/or workmanship. Any modifications to the product will void all Warranty. This Warranty will be extended to the original retail consumer and is valid for one year from the original date of purchase from an authorized dealer. Warranty is limited to the repair or replacement of the FOX Racing Shox product. FOX Racing Shox reserves the right of final decision with regards to all warranty related issues.

GENERAL EXCLUSIONS FROM THIS WARRANTY SHALL INCLUDE, BUT ARE NOT LIMITED TO, ANY FAILURES CAUSED BY:

- Installation of parts or accessories that are not qualitatively equivalent to genuine FOX Racing Shox parts
- Abnormal strain, neglect, abuse and/or misuse
- Accident or collision damage
- Modification of original parts
- Lack of proper maintenance (Very important - see Maintenance Schedule)
- Shipping damages or loss (purchase of full value insurance is recommended)
- Damage to interior or exterior caused by rocks, crashes or improper installation
- Oil changes or service not performed by FOX Racing Shox

SPECIFIC EXCLUSIONS FROM THIS WARRANTY SHALL INCLUDE:

- Parts replaced due to normal wear and tear and/or routine maintenance
- Parts subject to normal wear and tear and/or routine maintenance
- Bushings, bearings and reducers
- Seals
- Suspension fluids

WARRANTY Q & A

Q What costs are my responsibility during the warranty period?

A The customer is responsible for all costs of maintenance services, non-warranty repairs, accident and collision damages, oil, seals, bushings and reducers, and mounting hardware.

Q What are some examples of “abnormal” strain, neglect or abuse?

A These terms are general and overlap each other in areas. Specific examples are: Ghost riding, big drop, stunt / dare-devil riding, riding with broken parts, riding without oil in shock, etc.

Q Does the warranty cover incidental costs such as shipping or dealer labor?

A No, the warranty is limited to repair of materials and/or workmanship.

DISCLAIMER

FOX Racing Shox is not responsible for any damages to you or others arising from riding, transporting or other use of your shock or vehicle. In the event that your shock breaks or malfunctions, FOX Racing Shox shall have no liability or obligation beyond the repair or replacement of your shock, pursuant to the terms outlined in the warranty provisions of this manual.

FOX Racing Shox makes no other warranty of any kind, expressed or implied. All implied warranties of merchantability and fitness for a particular purpose which exceed the obligations and time limits stated in this warranty are hereby disclaimed by FOX Racing Shox and excluded from this warranty.

CONSUMER SAFETY

MOTORIZED OFF-ROAD VEHICLE RIDING IS DANGEROUS AND CAN RESULT IN DEATH OR SERIOUS INJURY. TAKE YOUR RESPONSIBILITY TO YOURSELF AND OTHERS SERIOUSLY.

- Maintain your vehicle and suspension
- Wear protective clothing, eye protection and a helmet
- Ride within your limits
- Tread lightly

Before riding, take the time to read the FOX Racing Shox manual on set-up, use, and service of your shock. If you have questions, contact FOX Racing Shox directly at 831.274.6500.

We highly recommend if for any reason your shock absorber ever loses damping, oil, air pressure, behaves erratically, or makes any unusual noises that you **STOP RIDING IMMEDIATELY** and have your shock absorber inspected by a FOX Racing Shox dealer or contact FOX Racing Shox directly at 1-800-FOX-SHOX.

RIDING ON A SHOCK ABSORBER THAT IS BROKEN OR MALFUNCTIONING CAN RESULT IN LOSS OF CONTROL, CRASHING, AND POSSIBLE SERIOUS INJURIES OR DEATH.

Never modify your vehicle frame or shock. Only use genuine FOX Racing Shox parts for your shock. Any modification, improper service, or use of after-market replacement parts will void the warranty and could damage the shock or cause loss of control of the vehicle resulting in serious injury or death.

Follow the scheduled maintenance recommendations in this Manual. Always have your shock serviced by FOX Racing Shox.

THE PORTION OF THE SHOCK THAT IS CHARGED WITH NITROGEN DOES NOT NEED TO BE OPENED IN ORDER TO PERFORM CLEANING AND LUBRICATION OF THE AIR SLEEVE CHAMBER.

OPENING A NITROGEN PRESSURIZED SHOCK CAN BE DANGEROUS AND CAN RESULT IN INJURY. THIS OPERATION SHOULD ONLY BE PERFORMEED BY FOX RACING SHOX OR A QUALIFIED PROFESSIONAL SHOCK TECHNICIAN.

KIT CONTENTS

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ITEM	QUANTITY
Float AirShox	2
FOX High Pressure Pump	1
Float AirShox Owner's Manual	1
FOX Float Fluid	Varies
Reducers and O-Rings	1 Set
Roost Guards	2
Roost Guard Mount Pads	2
Roost Guard Mount Clamps	2
FOX Decals	4

PUMP

A FOX Racing Shox High Pressure Air Pump is included with your FLOAT shocks. It is used to add air to and release air pressure from the air spring chamber. FOX Racing Shox part number is 027-00-004.

VERY IMPORTANT: Before making any air pressure adjustments, the vehicle's suspension must be unloaded and fully extended! Place a block or floor jack under the front of the frame so that both wheels are off the ground.

- Remove the air valve cap from the shock.
- Thread the pump's valve chuck onto the shock's air valve until pressure registers on the pump gauge. This takes approximately 6 turns. Do not over-tighten pump on air valve as this will damage the pump chuck seal.
- Stroke the pump a few cycles. The pressure should increase slowly. If pressure increases rapidly check to make sure the pump is properly fitted and tightened onto the air valve.
- **NOTE: IF SHOCK HAS NO AIR PRESSURE, THE GAUGE WILL NOT REGISTER PRESSURE.**
- Pump to desired pressure setting. You can decrease pressure by pushing the black bleed valve button. Pushing the bleed valve half way down, and holding it there, will allow pressure to escape from the pump and shock. Pushing the bleed valve all the way down and releasing it will allow only a small

amount of pressure to escape (micro adjust). When unthreading the pump from the air valve fitting, the sound of the air loss is from the pump hose, not the shock itself.

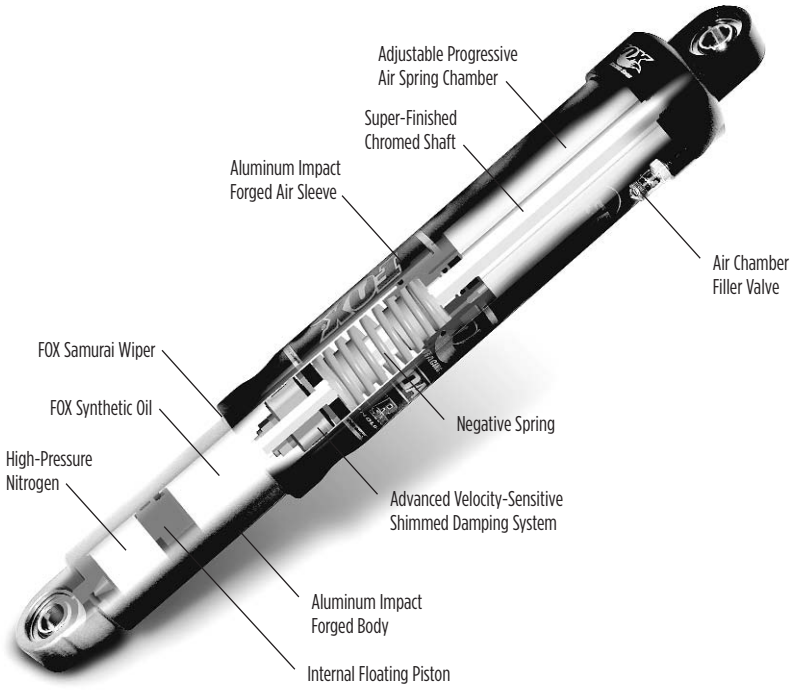
- **NOTE: WHEN YOU ATTACH THE PUMP TO THE SHOCK, THE HOSE WILL NEED TO FILL WITH AIR. THIS WILL RESULT IN A LOWER PRESSURE, REGISTERING APPROXIMATELY 2 TO 5 PSI ON THE GAUGE.**
- DO NOT EXCEED 150 PSI!
- Replace the air valve cap before riding.

CAUTION: IMPROPER STORAGE OF THE PUMP ON THE VEHICLE DURING OPERATION CAN CAUSE DAMAGE TO THE PUMP. TAKE PRECAUTIONS TO PROTECT IT FROM IMPACTS AND VIBRATION DURING RIDING.

FEATURES

PERFORMANCE, LIGHTWEIGHT, DURABILITY

Your FOX FLOAT (FOX Load Optimizing Air Technology) Airshox are high performance shock absorbers that use air as their spring instead of heavy steel coil springs or expensive titanium coil springs. Hey, there's not too many things that are lighter than air, right? Underneath that air sleeve is the same high performance, velocity sensitive, shimmed damping system that you'd expect in FOX Shox. FLOAT AirShox dampers contain high pressure nitrogen gas and FOX synthetic shock oil separated by an internal floating piston system. This ensures consistent, fade free damping in all riding conditions.



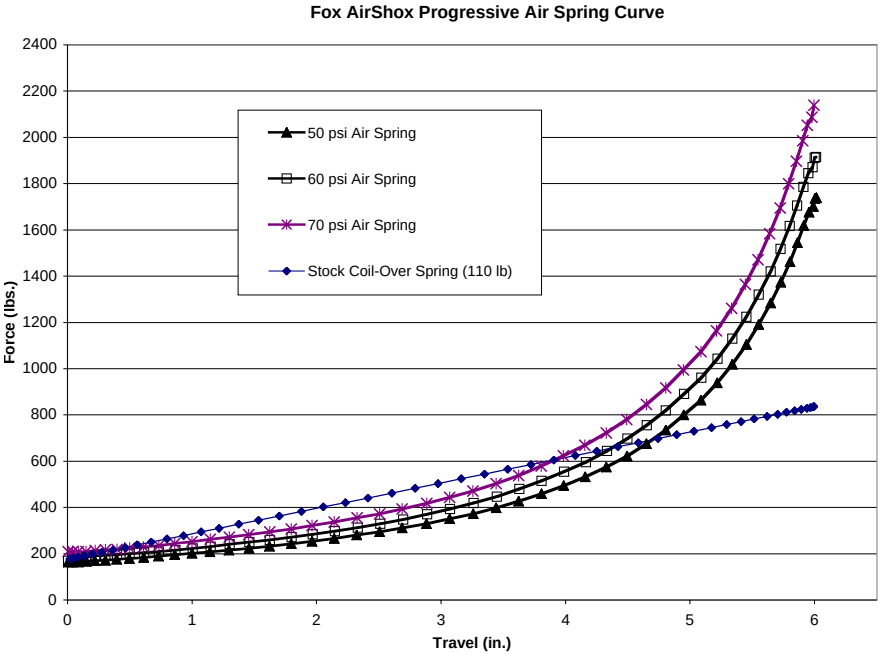
FLOAT Airshox are built using 6061-T6 aluminum impact forgings for lightweight and strength. The chromed damper shaft is super-finished for low stiction and long seal life. All of the seals and wipers are engineered specifically for FLOAT AirShox. The damper shaft and seals are contained within the air sleeve, protecting them from mud, water, ice and whatever else mother nature throws at them during the course of a ride.

ADJUSTABLE PROGRESSIVE AIR SPRING

Air springs are not just lightweight. They are also progressive! What does that mean? As the graph below shows, during the second half of shock travel, the spring force builds rapidly. This virtually eliminates harsh bottoming of the suspension and provides a "bottomless" feel.

The graph compares the spring forces for 3 different initial pressure settings (50, 60 and 70 psi). The progressive air spring pressure is infinitely adjustable (up to a maximum of 150 psi) for different rider weights and terrain conditions using the included FOX High Pressure Pump. The adjustment of the air spring changes both preload and spring rate, making it a much more effective adjustment than preloading a coil-over spring. This means that air spring pressure adjustments will allow your FLOAT AirShox to be used on a wide variety of rider sizes (a spouse or child for example) without having to buy different rate springs as with a coil-over shock.

The graph also shows a typical stock straight rate steel coil-over spring. As you can see, it builds it's spring force over travel in a linear, straight line fashion. This straight spring rate does not give the progressive bottom-out protection that FLOAT AirShox do.



MOUNTING

WARNING: If you do not have confidence in your abilities to correctly install your FLOAT AirShox, have them installed by a trained professional mechanic.

Your Float AirShox should bolt on to your vehicle with no modification to the frame, control arms or A-arms. Follow these steps to mount your shocks:

Step 1: Place a block or a jack under the front of the frame so that both wheels are off the ground.

Step 2: Remove stock shocks from the vehicle. Note location of spacers, etc. Save the bolts, nuts, washers, etc., as you will use these with the Float shocks.

Step 3: Reference the Setup Sheet inserted in this manual. Find the part number for your particular Float shock. (Note: the part number for your Float shock is engraved on the back side of the body cap eyelet).

Step 4: On the Set-up Sheet, find the Mounting Orientation for your part number. This will tell you if the shock absorber air sleeve mounts are pointing up or pointing down and if the Air Chamber Filler Valve orients to the inside or the outside of the vehicle.

Step 5: Mount the roost guards on the shock body using the supplied clamps and pads. The pad goes under the clamp on the opposite side of the shock from the roost guard to protect the body from the clamp. The clamp screw should be on the opposite side from the roost guard for frame clearance. (see Photo 1)

Step 6: Align the bottom edge of the roost guard with the end of the body. The top of the roost guard should overlap the edge of the air sleeve by a minimum of 1/8 - 1/4 inch (see Photo 2). If the guard does not overlap the edge of the air sleeve by the minimum measurement, slide it up the body until it does. The guards should be mounted on the fronts of the shocks, taking into account left and right orientations. (see Photo 3)

Step 7: Clamp the roost guards in place. Do not over tighten!

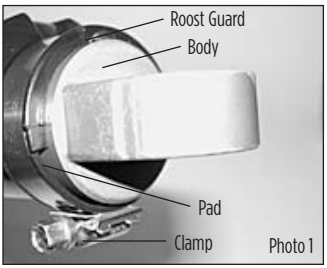


Photo 1

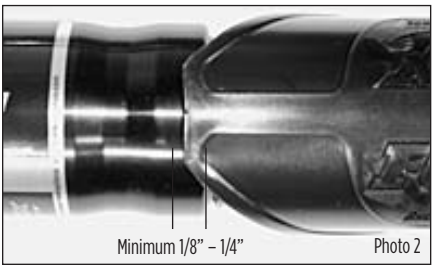


Photo 2

Photo 3

Photo 4


Photo 5

Step 8: On the Set-up sheet, note the upper reducer width and the lower reducer width. On some vehicles, the upper and lower reducer widths are different!

Step 9: Remove reducers and o-rings from bag. Install an o-ring on each reducer. (see Photo 4)

Step 10: Apply a small amount of grease to the spherical bearings.

Step 11: Install the upper and lower reducers in the spherical bearings. Make sure that the upper and lower reducers are installed correctly per the mounting orientation. (see Photo 5)

Step 12: Using the stock hardware, bolt the Float shocks into the bottom mount first. You may need to squeeze the reducers together to slightly compress the o-rings in order to install. With the bottom bolt in, lift the wheel and A-arms until the holes in the top shock reducers and the top shock mount align. Install the top bolt.

Step 13: Properly tighten all mounting hardware.

Step 14: Proceed to the Float AirShox Basic Set-up Section.

BASIC SET-UP

Although the air chambers in your Float Airshox come set at 50 psi from FOX, we encourage you to follow the procedures outlined in this section to optimize their performance. The air spring pressure settings are specific to each part number as outlined in the inserted set-up sheet. The air spring pressure for each part number was tuned for a sport rider weighing 185 lbs. (without gear) for the best all-around performance. It is possible that you may want to fine tune the air spring to match your weight, riding style, and riding terrain.

Step 1: **VERY IMPORTANT: BEFORE MAKING ANY AIR PRESSURE ADJUSTMENTS, THE VEHICLE'S SUSPENSION MUST BE UNLOADED AND FULLY EXTENDED! PLACE A BLOCK OR FLOOR JACK UNDER THE FRONT OF THE FRAME SO THAT BOTH WHEELS ARE OFF THE GROUND.**

Step 2: Reference the Set-up sheet inserted in this manual. Find the part number for your particular Float shock and note the recommended starting air pressure. **(NOTE: THE PART NUMBER FOR YOUR FLOAT SHOCK IS ENGRAVED ON THE BACK SIDE OF THE BODY CAP EYELET).**

Step 3: Remove the cap from the Air Chamber Filler Valve.

Step 4: Screw your FOX High Pressure Pump onto the air valve until the pump head is seated. **DO NOT OVERTIGHTEN.** If there is already pressure in the shock, it will show on the pump guage. (See the "Pump" section of this manual for more specifics on the FOX High Pressure Air Pump).

Step 5: Set the pressure to the recommended starting air pressure.

Step 6: Unthread the pump from the shock and replace valve cap. Repeat this for your other shock.

Step 7: Now go ride the vehicle.

Step 8: If the front suspension bottoms too easily or rolls too much during cornering, increase the air pressure by 5 PSI and ride again.

Step 9: If the suspension is too firm and you want a more compliant ride, reduce the air pressure by 5 PSI and ride again.

MAINTENANCE

GENERAL MAINTENANCE:

Your FOX Float AirShox are designed using the highest quality materials and most advanced coatings to ensure a long operational life. For maximum performance, FOX recommends the following maintenance schedule:

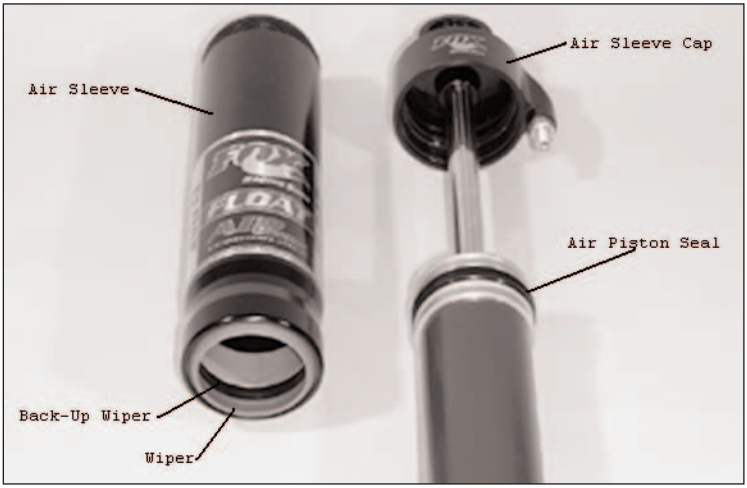
- Monitor the air pressure in your shock once every other month
- Perform air sleeve maintenance once a year.* (see instructions in Air Sleeve Maintenance section)
- Perform shock absorber oil service (complete shock rebuild) every 3,000 to 5,000 miles**

Of course, the maintenance intervals depend heavily on the type of riding and the riding conditions. The above recommendations are just that, recommendations for the average rider. If at any point, you feel a degradation of damping or air spring performance, stop riding immediately and identify the cause of the problem (see FAQ on the back page of this manual).

* A person of average mechanical aptitude can perform air sleeve maintenance. No special tools are required. However, failure to maintain cleanliness or a careless job of air sleeve maintenance can be worse than no maintenance at all! If you are unsure, it is best to send your shock absorber to FOX or a qualified professional shock technician.

** The shock absorber oil service requires specialized tools for disassembly and re-assembly. It is essential that this service be completed by FOX or a qualified professional shock technician.

AIR SLEEVE MAINTENANCE



Step 1: Remove the shock from the vehicle.

Step 2: Remove stainless steel reducers and clean with parts cleaner.

Step 3: Clean the outside of the shock with soap and water. Cleanliness is critical!

Step 4: Release all air pressure from air chamber filler valve. The shock will contract slightly due to the internal negative spring.

Step 5: Clamp air sleeve cap eyelet in a vise with soft jaws.

Step 6: Loosen air sleeve, turning it counter-clockwise by hand and slide it down the body. (Photo 6)

Photo 6

Step 7: Remove the air piston slyde rings from the air piston.

Step 8: Clean inside the air sleeve with parts cleaner.

Step 9: Inspect the wiper and back-up wiper inside the air sleeve.

Step 10: Replace if damaged or worn.

Step 11: Clean body, air piston seal, air piston slyde rings and shaft with parts cleaner.

Step 12: Inspect air piston seal for wear or damage.

Step 13: Replace if damaged or worn.

Step 14: Lightly lube the air sleeve cap o-ring and threads with FLOAT Fluid or Multi-purpose Lithium based grease (NLGI #2).

Step 15: Liberally lube the air piston seal and slyde rings with a comercially available fork seal grease.

Step 16: Lightly grease the wiper and back-up wiper.

Step 17: Slide the air sleeve over the body until the leading edge of the air sleeve is at the air piston.

Step 18: Install the first air piston slyde ring.

Step 19: Carefully slide the air sleeve over the installed slyde ring and the air piston seal.

Step 20: Install the second air piston slyde ring. (Photo 7)

Photo 7

Step 21: Carefully slide the air sleeve over the second installed slyde ring and half way to the air sleeve cap.

Step 22: Add the recommended amount of FLOAT Fluid to the air sleeve per the Set-up Sheet inserted in this manual. The amount of FLOAT fluid is specific to each part number. (Photo 8) **NOTE: ON APPLICATIONS THAT MOUNT THE SHOCKS WITH THE AIR FILLER VALVE DOWN, DO NOT ADD THIS ADDITONAL FLOAT FLUID.**

Step 23: Slide the air sleeve down to the air sleeve cap.

Step 24: Thread air sleeve into air sleeve cap and hand tighten until the air sleeve bottoms in the air sleeve cap.

Photo 8

Step 25: Do not over tighten air sleeve or use tools other than your hands.

Step 26: Inflate shock using inflation instructions listed in the Pump Instructions.

Step 27: Dry bushings and reducers.

Step 28: Install reducers in eyelet bushings.

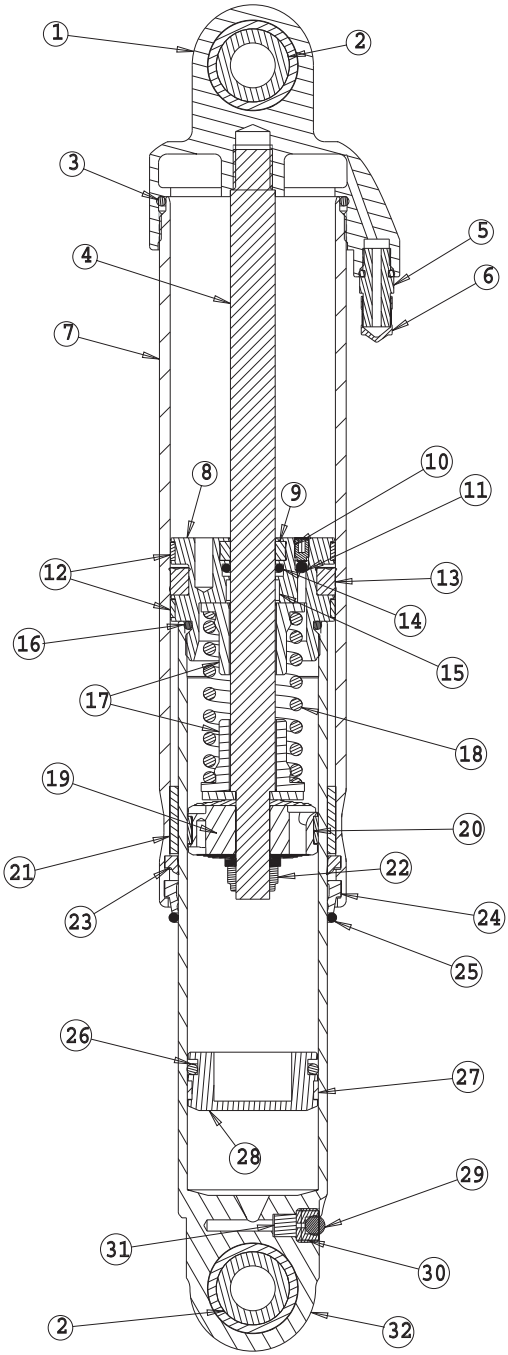
FLOAT FLUID PART NUMBERS

- 025-03-002-A 5 cc Pillow
- 025-03-003-A 8 oz. Bottle

SHOCK OIL SERVICE

This service should only be preformed by FOX Racing Shox or a qualified professional shock technician. Rebuild instructions and necessary replacement parts are available in FOX Rebuild Kit part # 803-00-099-A.

COMPONENTS AND PART NUMBERS



PART NUMBER AND DESCRIPTIONS

BALLOON #	PART NUMBER	DESCRIPTION
1	206-02-079-A	Body Cap
2	001-00-005-A	Spherical Bearing
3	029-01-135-A	Body Cap O-ring
4	229-28-XXX-A	Shaft (shock length dependent item)
5	802-00-001-A	Air Valve Assembly
6	010-00-004-A	Air Valve Cap
7	231-18-001-A	Air Sleeve (shock length dependent item)
8	203-01-016-A	Bearing Housing
9	036-01-013-A	Shaft Seal
10	018-01-004-A	SS Fastener
11	010-01-000-A	Chrome Ball
12	002-00-012-A	Air Piston Slyde Ring
13	036-01-014-A	Air Piston Seal
14	029-06-112-A	Shaft O-ring
15	003-01-001-A	DU Bearing
16	029-03-125-A	Bearing O-ring
17	039-01-013	Spring Guide
18	234-00-101	Negative Spring
19	807-00-XXX-A	Valving Assembly (shock absorber specific)
20	002-00-011-A	Piston Slyde Ring
21	003-00-008-A	Air Sleeve DU
22	018-00-003-A	Piston Nut
23	036-02-017-A	Back-up Wiper
24	036-02-016-A	Samurai Wiper
25	029-03-130-A	Travel Indicator O-Ring
26	029-01-217-A	IFP O-ring
27	002-00-010-A	IFP Slyde Ring
28	223-00-008-B	Internal Floating Piston (IFP)
29	010-01-007-A	Nylon Ball
30	010-00-017-A	Air Valve Pellet Retainer
31	010-00-000-A	Air Valve Pellet
32	204-35-XXX-A	Impact Body (shock length dependent item)
	006-01-000	Roost Guard (not shown)
	026-02-007	Roost Guard Clamp (not shown)
	026-01-010	Roost Guard Clamp Pad (not shown)

FAQ

QUESTIONS AND ANSWERS

Question: There is a slight amount of oil at the air sleeve/body cap joint. Is there something wrong?

Answer: No, the air sleeve threads are lubricated with light grease to make disassembly easier. Sometimes, a slight amount will ooze down the air sleeve. Simply clean the air sleeve and body cap. Keep an eye on the air spring pressure to make sure it remains steady.

Question: Is it normal for oily dirt to build up at the FOX Samurai wiper?

Answer: Yes, this means that the wiper system is working properly. Periodically wipe the oily dirt from the Samurai wiper to keep it clean.

Question: There are small dings on my Aluminum impact body. Will this cause an air leak?

Answer: No, the air seal occurs on the inside of the air sleeve only. Small dings on the impact body over time are normal and are nothing to be concerned about. However, big scratches or dings in the impact body will allow water and dirt contamination into the air sleeve that could lead to a long-term air seal failure. In the case of major scratches or dings in the impact body, it is best to replace it.

Question: Will I have to adjust my air pressure when I go up in altitude?

Answer: No, the air pressure in the air sleeve is not affected by changes in altitude

Question: What about the damping in this shock?

Answer: This shock uses the same proven velocity sensitive, oil damped valving arrangement that is used in all FOX Racing Shox shock absorbers. The valve code or calibration has been carefully tuned for each application to give the best all-around performance over a variety of conditions.

Question: The air pressure in my shock absorber is different every time I measure it. What's wrong?

Answer: First be sure that the suspension and shock absorber is fully extended by jacking up the vehicle by the frame so that the front wheels are hanging. This is the "home" position for measuring pressure. Second, every time you thread on the pump to the shock, the pressure reading will go down slightly as the gauge fills up. This is typically between 2 and 5 psi.

Question: My shock absorber leaks air slowly over time. What's wrong?

Answer: There are three possible leak paths. To determine which one is the culprit, remove shock from vehicle, charge the air spring pressure, and submerge the shock in a sink or a bathtub. If the air bubbles are coming from the air filler valve, replace it (parts available from FOX - part number: 802-00-001-A). If the air bubbles are coming from the body cap/air sleeve joint, replace the body cap O-ring (part number: 029-01-135-A). If the air bubbles are coming from the bottom of the air sleeve past the FOX Samurai wiper, clean the air sleeve and replace the air piston seal (part number: 036-01-014-A) and the two Air Piston Slyde Rings (part number: 002-00-012-A).

TUNING NOTES:

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TUNING NOTES:

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