

For exploded diagram and part number information, refer to the Spare Parts Catalog available on our website at www.rockshox.com.

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- Perform service every 100 hours of riding (or less depending on riding conditions and riding style).
- Check bicycle frame rear suspension pivot and shock mounting bolts regularly to ensure there is no side to side movement. Side-to-side frame movement can damage any rear shock internally.
- Regular maintenance ensures your rear shock performs as it should.
- Model year 2005 rear shock damper internals are NOT serviceable or tunable. Do NOT attempt to disassemble air shock damper body assembly!
- ARIO REBOUND ADJUST SHOCK PICTURED. SAME PROCEDURE FOR ARIO LOCKOUT, MC3 AND MC3R.

## **GETTING STARTED**

- 1. Remove rear shock from bicycle frame.
- 2. Spray entire rear shock with isopropyl alcohol and wipe all dirt and mud from shock.
- 3. Lay tools out on work bench and provide a clean work area for service.

## TOOLS

- Safety Glasses
- Clean Rags
- Workbench with Mounted Vice
- 1.5mm Hex Wrench
- Sharp Pick/Dental Pick
- Rear Shock Pump (300 psi)
- Pliers
- 5wt Suspension Oil
- Isopropyl Alcohol (in Spray Bottle)
- Blue Threadlock



## AIR CAN REMOVAL AND SERVICE

- 1. Spray the entire shock with isopropyl alcohol, and wipe clean with a rag.
- 2. Using your fingers or pliers, remove all shock eyelet mounting hardware (fig 2a, 2b).



**3.** Remove air valve cover cap (fig 3a). Using a small hex wrench, or pick, press schrader valve pin and release all air from shock (fig 3b).

**IMPORTANT!** ALL AIR PRESSURE <u>MUST</u> BE RELEASED FROM SHOCK PRIOR TO REMOVING AIR CAN.

4. Gently secure air can shock eyelet into bench vice.

## TIP: ALUMINUM VICE 'SOFT-JAWS' PROTECT THE SHOCK EYELET WHEN CLAMPED.



5. Grip the air can by hand, and turn firmly counterclockwise (fig 5a). Firmly, pull the air can up shock damper body slowly. Air pressure may release so hold can tightly while pulling up (fig 5b). Pull up and remove air can. (fig 5c)

and a rag.

 Remove negative spring spacer (white, fig 6a) and negative spring bumper (orange, fig 6b). Clean both the spacer and bumper with isopropyl alcohol

**IMPORTANT!** Do not attempt to disassemble shock damper and/or shock eyelet assembly. The Ario and MC3/MC3R shock dampers are **not** serviceable.



**5**a







# AIR CAN / AIR SEAL SERVICE

7. Using a sharp pick, remove the black rubber dust seal. (fig 7a, 7b)

8. Hold air can, narrow end down. Using a sharp pick, remove blue air can glide ring (fig 8a, 8b).

**IMPORTANT! DO NOT SCRATCH INSIDE OF AIR CAN WITH PICK. SCRATCHES CAUSE PERMANENT AIR BYPASS.** 







9. Spray inside of air can with isopropyl alcohol (fig 9a). Wipe inside of air can with a clean rag (fig 9b). Look inside the air can and check for any rough surfaces or scratches. Run your finger along the inside of air can to feel for scratches as well. Replace air can if scratched or damaged (fig 9c).







**10.** Pinch large air piston o-ring and remove (fig 10a, 10b).

**NOTE:** THE FIXED AIR PISTON O-RING IS THE MAIN AIR SEAL. BE SURE TO REPLACE THIS O-RING.

- Kit required: Ario/MC3/MC3R Service Kit (11.4309.278.000)
- **11.** Install NEW air piston o-ring onto fixed air piston (fig 11a). Coat new o-ring with 5wt suspension oil (fig 11b).









 Install NEW blue air can glide ring (fig 12a). Install NEW air can dust seal (fig 12b).







13. Clean air can threads (fig 13) and eyelet body threads with isopropyl alcohol and a rag.



**14.** Apply two or three small drops of blue threadlock to eyelet body threads, evenly spaced. Spread evenly on threads; wipe away excess threadlock.

**15.** Apply a small amount of 5wt suspension oil to inside of air can. Using your finger, spread and coat entire inner air can surface (fig 15a). Apply a light coat of 5wt suspension oil to blue glide ring and black rubber dust seal.

**IMPORTANT!** LUBRICATION INSIDE AIR CAN ENSURES LUBRICATION OF FIXED AIR PISTON O-RING. LUBRICATION OF PISTON O-RING REDUCES FRICTION AND O-RING WEAR.

 Install negative spring bumper (fig 16a.) Install negative spring bumper spacer. (fig 16b)

17. Position air can over shock eyelet and slide down on shock body (fig 17a, 17b). Press air can down firmly and thread air can into eyelet body. Thread air can clockwise and tighten air can into eyelet body as tightly as possible by hand. (fig 17c)

**TIP:** Make sure outside of air can is free of oil. This allows more leverage when tightening air can onto shock eyelet body.

- 18. Inflate to desired air pressure. Install air valve cover cap.
- 19. Spray shock with isopropyl alcohol and wipe clean. Replace decals if necessary.
- 20. Insert mounting hardware into both eyelets.









17c







## LOCKOUT LEVER REPLACEMENT / ARIO LOCKOUT

**19.** Insert 1.5mm hex wrench through hole in end of lockout lever, and into hex bolt head. Unthread hex bolt and remove. Remove lockout lever and replace.

# **IMPORTANT!** Replace lockout lever only if damaged. Do not attempt to disassemble lockout/eyelet assembly. Lockout assembly is <u>not</u> serviceable.



## AIR PRESSURE SET-UP

#### SETTING SAG

Sag is the amount of shock travel that is used as the rider sits stationary on the bike. Typically, sag is 15 to 25 percent of all available wheel travel. Check with your bicycle manufacturer to determine the rear wheel travel and recommended sag for your particular bike before setting sag. For the Ario rear shocks you change the air spring rate to set sag.

Adjusting air pressure determines the spring rate, or stiffness, of the shock. The more you increase the air pressure, the firmer your shock will be.

## SELECTING AIR PRESSURE (SPRING RATE)

- 1. Depressurize the air chamber by removing the air cap and depressing the valve core stem.
- 2. Because every bike is different, a good starting point is to pressurize the air chamber to an air pressure equaling half your body weight.

# **NOTE:** As bicycle designs differ significantly, your bicycle may require different pressures equalng half your body weight.

#### With the shock in the open position (unlocked):

- 3. After adding air to your shock, based on your body weight, and without sitting on the bike, move the travel indicator o-ring up next to the air can.
- 4. Applying your full weight, gently sit on the bike and then dismount. Measure the distance from the indicator o-ring to the wiper seal. Write it down. This measurement is your sag. Determine what percentage of total wheel travel this sag represents.
- 5. If the sag is less than the bicycle manufacturer's recommendation, a lower air pressure should be used. Using the shock, release air pressure, and check your sag again. If the sag is greater than your bicycle manufacturer's recommendation, increase the air pressure. Check you sag again.

#### **IMPORTANT!** DO NOT EXCEED 250 PSI!

6. Install the air cap and ride.

## TROUBLE-SHOOTING

### DECREASE OR LOSS OF SMOOTH COMPRESSION STROKE

• Shock body and dust seal may be dry. Apply a small amount of lubrication to shock body. Compress the shock a few times and wipe away excess lubrication.

### SHOCK 'BOTTOMS-OUT' EASILY

· Air pressure is too light. Add air pressure and check sag. Refer to above air pressure set-up guide.

### OIL LOSS

- Inspect your shock's mounting hardware and eyelet bushings. If loose, replace.
- Remove air can and inspect shock damper/seal head/shaft. If oil is leaking from seal head, replace shock damper.
- · Inspect air can dust seal. If cracked, knicked, or cut, replace dust seal and glide ring.
- Inspect frame alignment. Remove shock. Clamp bicycle in bicycle work stand. Holding the seatpost and the rear end of the frame, move rear end side to side. If pivots are loose, tighten according to manufacturer's recommended torque settings.

### SHOCK DOES NOT LOCK OUT

• Inspect shock for oil loss. If oil is leaking, replace shock damper assembly. Contact your distributor or dealer for the correct damper assembly.