ROCK SHOX

monarch plus

2011 Technical Manual

SRAM ROCK SHOX Avid TRUVATIV

SRAM LLC WARRANTY

EXTENT OF LIMITED WARRANTY

SRAM warrants its products to be free from defects in materials or workmanship for a period of two years after original purchase. This warranty only applies to the original owner and is not transferable. Claims under this warranty must be made through the retailer where the bicycle or the SRAM component was purchased. Original proof of purchase is required.

LOCAL LAW

This warranty statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state (USA), from province to province (Canada), and from country to country elsewhere in the world.

To the extent that this warranty statement is inconsistent with the local law, this warranty shall be deemed modified to be consistent with such law, under such local law, certain disclaimers and limitations of this warranty statement may apply to the customer. For example, some states in the United States of America, as well as some governments outside of the United States (including provinces in Canada) may:

a. Preclude the disclaimers and limitations of this warranty statement from limiting the statutory rights of the consumer (e.g. United Kingdom).

b. Otherwise restrict the ability of a manufacturer to enforce such disclaimers or limitations.

LIMITATIONS OF LIABILITY

To the extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event shall SRAM or its third party supplies be liable for direct, indirect, special, incidental, or consequential damages.

LIMITATIONS OF WARRANTY

This warranty does not apply to products that have been incorrectly installed and/or adjusted according to the respective SRAM technical installation manual. The SRAM installation manuals can be found online at www.sram.com, www.rockshox.com, www.avidbike.com, www.truvativ.com, or www.zipp.com.

This warranty does not apply to damage to the product caused by a crash, impact, abuse of the product, non-compliance with manufacturers specifications of usage or any other circumstances in which the product has been subjected to forces or loads beyond its design.

This warranty does not apply when the product has been modified.

This warranty does not apply when the serial number or production code has been deliberately altered, defaced or removed.

This warranty does not apply to normal wear and tear. Wear and tear parts are subject to damage as a result of normal use, failure to service according to SRAM recommendations and/or riding or installation in conditions or applications other than recommended.

WEAR AND TEAR PARTS ARE IDENTIFIED AS:

Dust seals/Bushings/Air sealing o-rings/Glide rings/Rubber moving parts/Foam rings/Rear shock mounting hardware and main seals/Stripped threads and bolts (aluminum,titanium, magnesium or steel)/ Upper tubes (stanchions)/Brake sleeves/Brake pads/Chains/Sprockets/Cassettes/Shifter and brake cables (inner and outer)/Handlebar grips/Shifter grips/Jockey wheels/Disc brake rotors/Wheel braking surfaces/Bottom out pads/Bearings/Bearing Races/Pawls/Transmission gears/Spokes/Free hubs/ Aero bar pads/Corrosion/Tools

This warranty shall not cover damages caused by the use of parts of different manufacturers.

This warranty shall not cover damages caused by the use of parts that are not compatible, suitable and/or authorized by SRAM for use with SRAM components.

This warranty shall not cover damages resulting from commercial (rental) use.

ROCKSHOX SUSPENSION SERVICE

We recommend that you have your RockShox suspension serviced by a qualified bicycle mechanic. Servicing RockShox suspension requires knowledge of suspension components as well as the special tools and fluids used for service.

Used suspension fluid should be recycled or disposed of in accordance to local and federal regulations.

NEVER pour suspension fluid down a sewage or drainage system or into the ground or a body of water.

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For exploded diagram and part number information, please refer to the Spare Parts Catalog available on our web site at www.sram.com.

For order information, please contact your local SRAM distributor or dealer.

Information contained in this document is subject to change at any time without prior notice.

Your product's appearance may differ from the pictures/diagrams contained in this document.

Product names used in this document may be trademarks or registered trademarks of others.

TABLE OF CONTENTS

SAFETY FIRST!

At SRAM, we care about YOU. Please, always wear your safety glasses and protective gloves when servicing your RockShox suspension. Protect yourself! Wear your safety gear!

PARTS NEEDED FOR SERVICE

Prior to servicing your shock, it is important that you have all of the necessary replacement parts. For exploded diagram and part number information, please refer to the Spare Parts Catalog available on our website at www.sram.com. For order information, please contact your local SRAM distributor or dealer.

TOOLS NEEDED FOR SERVICE

The following chart is a list of the tools needed for service on your Monarch Plus rear shock. While this chart is intended to be comprehensive, it is still only a guide. The tools required for each step of service are detailed in the text of the service section.

TOOLS
Safety/Starting Equipment
Safety glasses
Nitrile gloves
Apron
Clean lint free rags
Oil pan
Bench vise
Soft jaws
Clean work area
General Tools
13, 17, and 27 mm open end wrench
Adjustable wrench
Torque wrench
10 mm socket
13 and 27 mm crowfoot socket
T10 TORX®
Sharp pick
Schrader valve core tool
SRAM Tools
Mounting hardware/eyelet bushing tool
Shaft clamp tool
Gauged shock pump
Monarch air fill adapter
Oil/Liquids
Air can lube (Maxima® Maxum4 Extra 15w50)
Suspension fluid (RockShox 3wt)
Grease (Parker® O-Lube)
Isopropyl alcohol
Blue threadlock

MOUNTING HARDWARE & BUSHING SERVICE

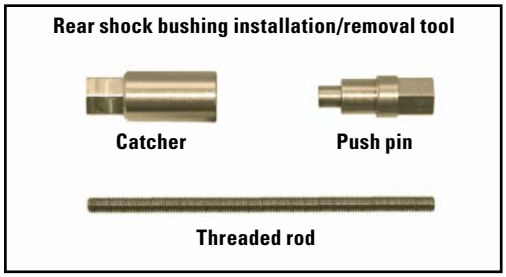
Prior to servicing your rear shock, you will first need to remove it from your bicycle frame according to your bicycle manufacturer's instructions. Once your shock is off your bicycle, you will need to remove the mounting hardware before performing any service.

Any time you need to clamp the rear shock eyelets into a vise, use aluminum soft jaws to prevent damage to the eyelets.

MOUNTING HARDWARE REMOVAL

Some mounting hardware is easily removed using only your fingers. Try to remove the end spacers with your fingernail, then push the bushing pin out of the bushing. If this works, move on to the next section titled "Bushing Service".

If you are unable to remove your mounting hardware using your fingers, use the SRAM rear shock bushing installation and removal tool.



Note: images in the following steps are of Vivid Air, but are applicable to Monarch Plus.

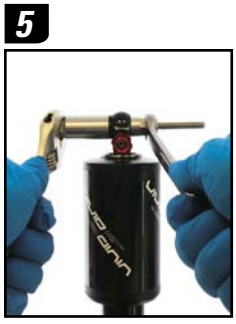
1. Thread the push pin, stepped end first, onto the threaded rod until the rod slightly protrudes from the hex-shaped end of the push pin.

2. Insert the threaded rod through the shock eyelet so that the push pin rests against the bushing pin.

3. Thread the catcher, with the large open end first, along the rod until it rests over the end spacer on the opposite side of the bushing pin.

4. Clamp the catcher in a vise or hold it secure with a 13 mm or adjustable wrench. Use a second 13 mm open end or adjustable wrench to thread the push pin along the rod until it stops against the end spacer. Unthread the push pin from the threaded rod and remove the end spacer from that side.

5. Re-install the push pin onto the threaded rod and hand thread it along the rod until it rests against the bushing pin (inside the shock eyelet bushing) again. Use a 13 mm wrench to thread the push pin along the rod until it stops against the shock eyelet.



6. Unthread the catcher from the threaded rod. Remove the end spacer from the threaded rod and the bushing pin from the catcher. Remove the push pin and threaded rod from the shock. Repeat for the other eyelet. Then, set the mounting hardware aside until you have finished servicing your shock.

BUSHING SERVICE

To replace damaged or worn out bushings, use the RockShox rear shock bushing installation and removal tool.

BUSHING REMOVAL

1. Insert the threaded rod through the shock eyelet so that the base of the push pin rests against the bushing.

2. Thread the catcher, with the large open end first, along the rod until it rests on the opposite side of the shock eyelet.

3. Clamp the catcher in a vise or hold it secure with a 13 mm open end or adjustable wrench. Use a second 13 mm open end wrench, an adjustable wrench, or a socket wrench with a 13 mm socket to thread the push pin along the rod until the push pin rests against the shock eyelet.

4. Unthread the catcher from the threaded rod. Remove the tool from the shock eyelet and discard the old bushing. Repeat for the other eyelet.

BUSHING INSTALLATION

5. Apply a small amount of grease to the outside of the new bushing.

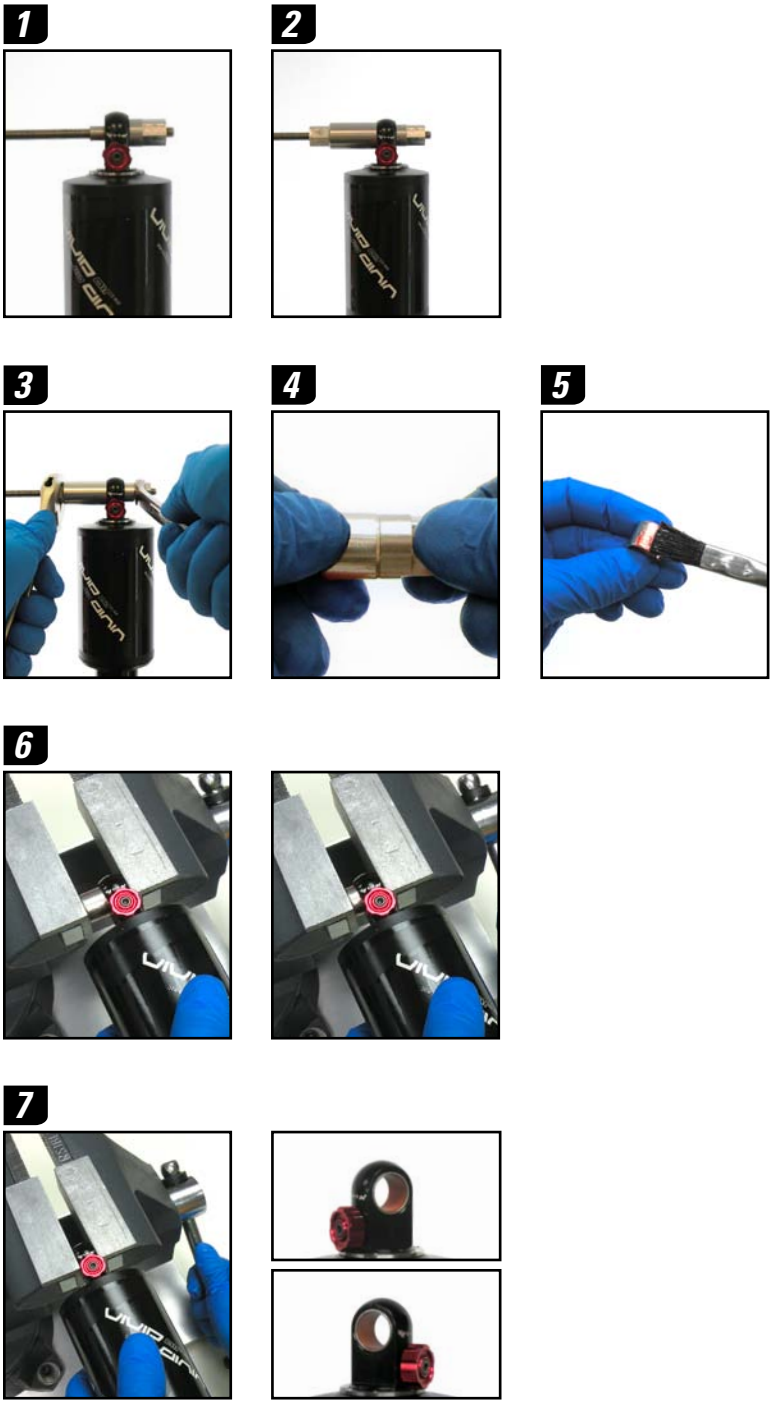
   Position the shock eyelet and bushing between the soft jaws of a vise. Slowly turn the vise handle to begin pressing the bushing into the shock body.

   To prevent damage to the shock, position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws.

   Check the alignment of the bushing as it enters the eyelet. If the bushing starts to enter the eyelet at an angle, remove the bushing from the eyelet, regrease the bushing, and repeat this step until the bushing enters the eyelet straight.

6. Continue to press the bushing until it is completely seated in the eyelet.

7. Remove the shock from the vise and repeat the installation process for the other bushing and eyelet.



MOUNTING HARDWARE INSTALLATION

Some mounting hardware is easily installed using only your fingers. Press the bushing pin into the shock eyelet bushing until the pin protrudes from both sides of the eyelet an equal amount. Then press an end spacer, large opening first, completely onto each end of the bushing pin. If this works, you have completed mounting hardware and bushing service.

If you are unable to install your mounting hardware using your fingers, use the SRAM rear shock bushing installation and removal tool.

1. Thread the push pin, stepped end first, onto the threaded rod until the rod slightly protrudes from the hex-shaped end of the push pin.

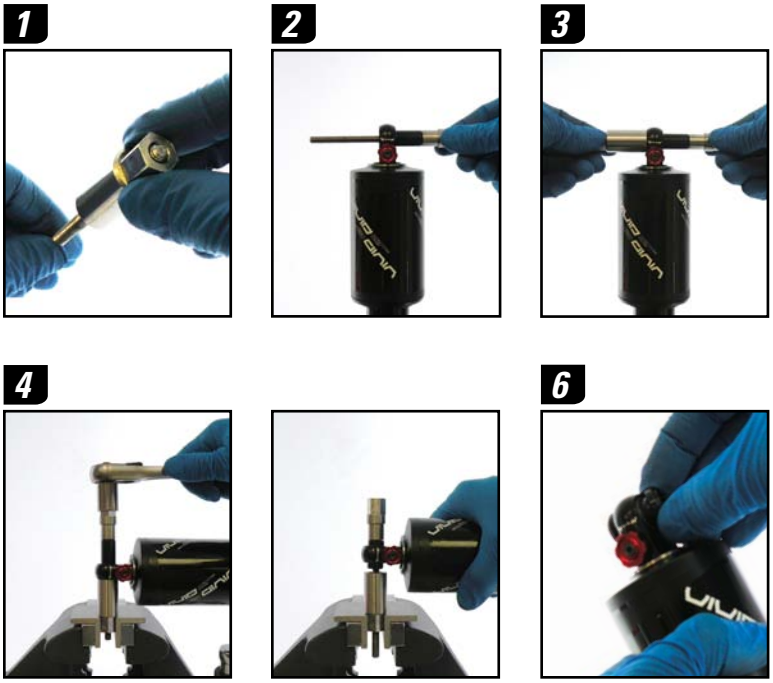
2. Insert the threaded rod through the bushing pin then through the shock eyelet so that the bushing pin is positioned between the push pin and the shock eyelet.

3. On the opposite side of the shock eyelet, thread the catcher, large open end first, along the rod until it rests against the shock eyelet.

4. Clamp the catcher in a vise or hold it secure with a 13 mm open end or adjustable wrench. Use a second 13 mm open end wrench, an adjustable wrench, or a socket wrench with a 13 mm socket to thread the push pin along the rod so that it pushes the bushing pin into the shock eyelet bushing. Continue to thread the push pin and push the bushing pin into the shock eyelet bushing until the bushing pin protrudes from both sides of the eyelet an equal amount (you may need to unthread the catcher slightly to check the bushing pin spacing).

5. Unthread the catcher from the threaded rod and remove the tool from the shock eyelet.

6. Use your fingers to push an end spacer onto each end of the bushing pin, with the large diameter side of the spacers facing the shock eyelet.



MONARCH PLUS SERVICE

INTRODUCTION

Prior to servicing your rear shock, you will first need to remove it from your bicycle frame according to your bicycle manufacturer's instructions. Once your shock is off your bicycle, remove the rear shock mount hardware. Rear shock mount hardware removal instructions can be found in the "Mounting Hardware and Bushing Service" section of this document.

Monarch Plus rear shock service includes instructions for completing both routine and comprehensive service procedures. Routine service procedures are maintenance items that should be performed at regular intervals in order to keep your shock functioning optimally. Comprehensive service procedures are long-term maintenance items that should be performed periodically as a supplement to the routine service items. When performing routine service intervals, you only have to complete the sections titled 'Routine Service'. When performing comprehensive service intervals, you will complete all instructions, in order, including the routine service procedures.

EXPLODED VIEW - MONARCH PLUS REAR SHOCK ASSEMBLY

A. Top out bumper
B. Reservoir cap retaining ring
C. IFP reservoir valve cap
D. IFP teservoir cap
E. IFP (Internal Floating Piston)
F. Reservoir
G. Compression assembly
H. Compression lever
I. Rebound adjuster
J. Air can valve
K. Damper body eyelet
L. Seal head/air piston
M. Main piston
N. Damper shaft
O. Damper bleed screw
P. Damper body
Q. Sag indicator o-ring
R. Air can
S. High volume air sleeve
T. Air can eyelet

GETTING STARTED

1. Remove the shock mounting hardware (see the "Mounting Hardware and Bushing Service" section).

2. Clamp the eyelet at the air can end of the shock into a bench vise, with the shock positioned sideways.

   Use aluminum vise soft-jaws to protect the shock eyelet when clamped.

   Do not clamp any of the adjusters, they will be damaged.

3. Place an oil pan on the floor underneath the area of the shock. Place a large oil absorbing rag directly underneath the vise where the shock will be clamped to catch all suspension fluid that will spill from the shock during service.

4. Check and record your current air pressure setting to assist with post-service set up.

5. Turn the Rebound adjuster counter-clockwise until it stops. Set the Compression lever to the *MIN* setting (RC3 only).

   Count each detent click as you turn the adjuster and record the number of clicks to assist with post-service set-up.

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AIR CAN REMOVAL

6. Remove the air can valve cap. Use a small hex to depress the Schrader valve and release all air pressure from the air can. Use a Schrader valve tool to remove the valve core.

CAUTION
Failure to remove all air pressure can lead to personal injury during air can disassembly.

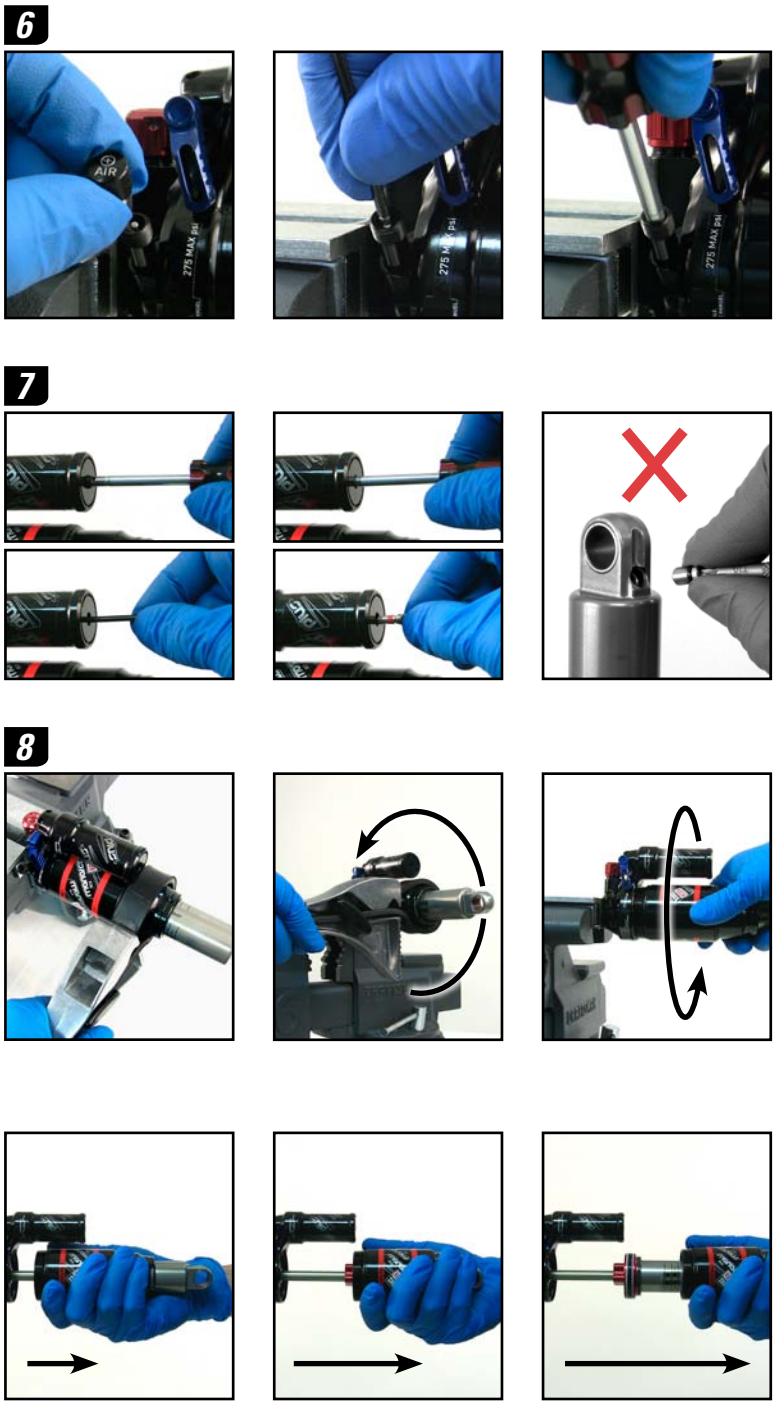
7. Use a Schrader valve tool to remove the IFP reservoir valve cap. Use a small hex to depress the Schrader valve and release all air pressure from the IFP reservoir. Use a Schrader valve tool to remove the Schrader valve core.

CAUTION
Failure to remove all air pressure can lead to personal injury during IFP reservoir disassembly.

Do not remove the damper body bleed screw from the damper body eyelet until instructed to do so. Removing the damper body bleed screw while the shock is pressurized will result in fluid being forcefully ejected from the bleed port.

8. Use a strap wrench to remove the air can. Wrap the strap around the section of the air can furthest from the air can eyelet. Turn the wrench counter-clockwise to unthread the air can. Once it is completely unthreaded, slowly pull the air can along the damper body to remove it.

Vacuum pressure will increase as you pull the air can along the damper body, then suddenly release as the end of the can comes over the damper body eyelet.



AIR CAN SERVICE

When using a pick to remove seals, do not damage the shock parts. Any damage will allow air/fluid to bypass the seals, resulting in decreased performance.

After the removal of each seal/glide ring, spray isopropyl alcohol into the glands and wipe them with a clean lint free rag. Apply a small amount of grease (Parker® O-Lube) to the new glide rings/seals before installing them.

9. Use your fingers to remove the air can outer o-ring located at the base of the threads on the large end of the air can. Apply a small amount of grease to the new o-ring and install it.

10. Use a pick to remove the air can dust wiper, o-ring, glide ring, and backing ring.

    Pierce the seals with the pick and pull or push to remove them. Do not scoop or dig the seals out as this may damage the air can sealing surface.

11. **High volume air cans only:** Use a pick to remove the high volume sleeve retention o-ring.

12. **High volume air cans only:** Firmly grip the high volume sleeve and slide it off of the air can.

13. **High volume air cans only:** Use your fingers to remove and replace the high volume sleeve seals.

14. **High volume air cans only:** Spray isopropyl alcohol inside the high volume sleeve and wipe it with a clean lint free rag.

15. **High volume air cans only:** Evenly spread a small amount of grease to the inside of the high volume air sleeve. Slide the air sleeve onto the air can until it stops.

16. **High volume air cans only:** Replace the high volume sleeve retention o-ring.

17. Remove the top out bumper from the damper body.

18. Use your fingers to remove and replace the seal head/air piston quad ring seal and glide rings. Make sure the new quad ring seal is situated between the two new glide rings.

19. Spray isopropyl alcohol inside the air can and on the air can threads and wipe them with a clean lint free rag.

20. Install the new air can glide ring, stepped side first, into the air can by positioning it over the small opening of the air can. Push one side of the glide ring into the air can and use your finger to hold it against the innermost step. Use another finger to push around on the glide ring until it is completely seated on the innermost step.

21. Apply a small amount of grease to the air can inner o-ring. Install the o-ring into the small end of the air can, so that it rests on the air can glide ring.

22. Install the new air can backing ring into the inner gland inside the small end of the air can, so that it rests between the o-ring and the inner step. You will need to compress the glide ring slightly to fit it into the gland.

23. Orient the air can dust wiper so that the flat side faces toward the air can and the angled side faces away from the air can. Install the new dust wiper by gently squeezing it into the outer gland at the small end of the air can.

    Set the air can aside until you are ready to install it onto the shock.

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DAMPER BODY SERVICE

24. Remove the shock from the vise, then re-install it into the vise by the damper body eyelet, with the shock positioned vertically.

25. Use a 17 mm open end wrench to loosen and remove the seal head/air piston assembly from the damper body.

    Fluid will spill from the shaft/seal head/piston assembly.

26. Remove the shock damper body from the vise and pour the fluid into the oil pan.

27. Spray the shaft assembly with isopropyl alcohol and wipe it with a clean lint free rag.

28. Use the SRAM shaft clamp tool to clamp the shaft assembly into the vise, piston side up.

    Spray isopropyl alcohol on the shaft clamp and wipe it with a clean rag prior to use.

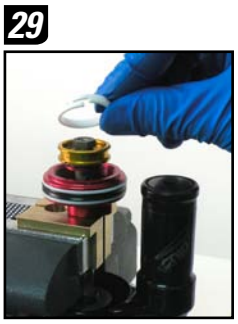
29. Remove and replace the glide ring located on the damper piston.

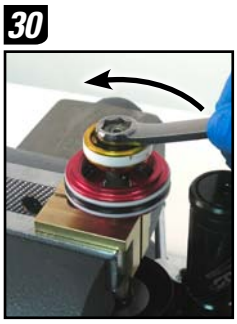
30. Use a 10 mm socket wrench to unthread the piston nut. Carefully remove the main piston assembly (piston nut, main piston, and shim stack washers), keeping all parts together, and set it aside.

31. Pull up on the seal head/air piston to remove it.

32. Use a pick to remove and replace the main shaft o-ring located in the interior of the seal head.

33. Use a pick to remove and replace the seal head/air piston inner o-ring, located at the base of the threads in the seal head/air piston.





34. Apply grease to the seal head/air piston inner o-ring and install the seal head/air piston onto the shaft assembly with the seal head threads oriented upward.

35. Thread the piston assembly by hand back onto the shaft assembly and use a torque wrench with a 10 mm socket to torque it to 4.5 N·m (40 in-lb).

36. Remove the shaft assembly from the vise and set it aside.

37. Spray isopropyl alcohol on the inside and outside of the damper body and wipe it with a clean lint free rag. Inspect the inside and outside of the damper body for scratches. If scratches are found, the damper body will need to be replaced.

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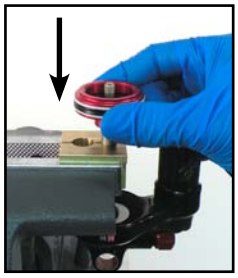

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IFP RESERVOIR SERVICE

38. Clamp the shock vertically by the air can eyelet into a bench vise.

39. Use your finger to push the IFP reservoir cap into the reservoir until it stops.

40. Position a Schrader valve tool opposite the split in the retaining ring. Use the Schrader valve tool to push the reservoir cap retaining ring out of the groove in the IFP reservoir. Use your fingers to remove the retaining ring from the reservoir.

41. Thread the shock pump into the Monarch air fill adapter. Thread the Monarch fill adapter into the IFP reservoir cap. Pull up on the pump/adapter/cap to remove the cap from the reservoir. Unthread the reservoir cap from the pump/adapter and set it aside.

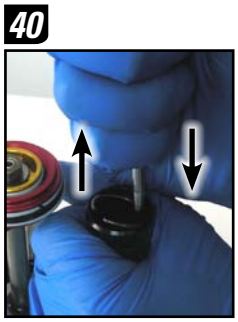
42. Use your fingers to remove and replace the reservoir cap o-ring.

43. Use an adjustable wrench to loosen and unthread the reservoir from the shock body.

    Fluid will spill from the reservoir and/or shaft assembly.

    When removing the reservoir from the shock body, it is possible that the compression piston/valve assembly will dislodge from the shock body and come out with the reservoir. This is OK. Use your fingers to pull the piston/valve assembly out of the reservoir and set it aside.

44. If the compression piston/valve assembly is still installed in the shock body, use your fingers to pull on the piston nut while rocking it from side to side to remove the compression piston/valve assembly from the shock body.



45. Use your fingers to remove and replace the compression piston o-rings.

46. Use your fingers to remove and replace the reservoir/shock body o-ring, located at the base of the threads inside the shock body.

47. Use your finger to push the internal floating piston (IFP) out of the non-threaded side of reservoir.

48. Use a T10 TORX® to remove the IFP bleed screw.

49. Use a pick to remove and replace the IFP bleed screw o-ring. Set the bleed screw aside.

50. Use your fingers to remove and replace the IFP o-ring.

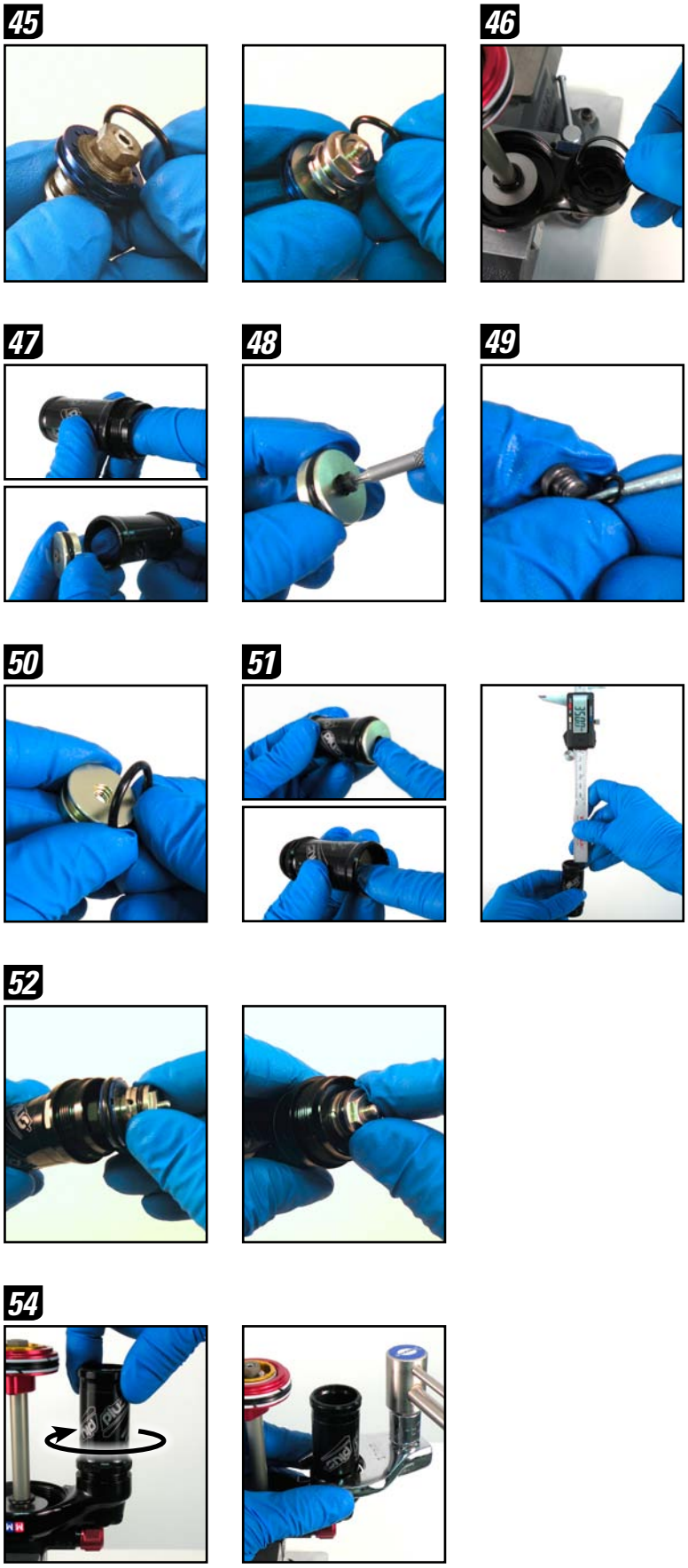
51. Apply a small amount of grease to the IFP o-ring. Press the IFP, with the flat side facing out, into the non-threaded side of the reservoir. Push the IFP into the reservoir to a depth of 35 mm.

52. Apply a small amount of grease to the compression piston o-rings. Insert the compression piston/valve assembly, nut side first, into the threaded side of the reservoir. Push the piston/valve assembly into the reservoir until it stops.

53. Apply a small amount of grease to the reservoir/shock body o-ring.

54. Thread the reservoir into the shock by hand. Use a torque wrench with a 27 mm crowfoot socket to tighten the reservoir to 8.4 N·m (75 in-lb).

55. Remove the shock from the vise.



SHOCK ASSEMBLY AND BLEED PROCEDURE

56. Clamp the damper body eyelet into the vise, with the damper body positioned vertically.

57. Wrap a clean lint free rag around the damper body.

58. Pour RockShox 3 wt suspension fluid into the damper body until it is completely full.

59. Slide the seal head/air piston against the damper piston assembly.

60. Install the seal head/air piston onto the damper body. While holding only the seal head/air piston, thread it completely onto the damper body.

    Do not hold on to the air can eyelet while inserting. It will move the piston/shaft assembly, causing too much fluid to displace out of the damper body.

    Fluid will begin to drip from the reservoir during seal head/air piston installation. This is normal.

61. Use a torque wrench with a 17 mm crowfoot socket to tighten the seal head/air piston to 28.2 N·m (250 in-lb).

62. Remove the shock from the vise, then firmly clamp it back into the vise at the air can eyelet, with the shock positioned vertically.

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63. Slowly push the damper body downward. Fluid will begin to fill the reservoir and bleed through the IFP bleed port. Continue to push downward on the damper body until it stops.

CAUTION
Do not look directly into the reservoir as you push on the damper body. If you attempt to cycle the fluid in the damper too quickly while looking directly into the reservoir, fluid will forcefully be ejected from the reservoir into your face and eyes.

64. Pour additional suspension fluid into the reservoir until it is level with the top of the reservoir.

65. Insert a 5 inch socket extension (or similar tool) through the damper body eyelet. Grip the socket extension and slowly pull up on the damper body until it stops. This will cycle fluid from the reservoir back into the damper body and purge air bubbles from the system. Repeat the last three steps until no more air bubbles emerge from the IFP bleed port. Remove the socket extension from the damper body eyelet.

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66. Use a T10 TORX® to remove the damper body bleed screw from the damper body eyelet.

67. Use a pick to remove and replace the damper body bleed screw o-ring. Set the bleed screw aside.

68. Wrap a clean lint free rag around the damper body.

69. Slowly push down on the damper body to purge air bubbles out of the damper through the bleed port in the damper body eyelet. Once air bubbles cease to come out of the bleed port, stop pushing on the damper body. Leave the damper body in this position until instructed otherwise.

    It may be necessary to fill and purge the damper additional times to completely remove air from the damper body. If this is the case, fill the reservoir with suspension fluid, pull up on the damper body until it stops, then slowly push down on the damper body. Repeat this process until bubbles cease to come out of the bleed port.

70. Use a T10 TORX to install the damper body bleed screw into the damper body eyelet. A small amount of fluid will drip out of the port as the screw is threaded in, this is OK. Use a torque wrench with a T10 TORX socket to tighten the bleed screw to 1.1 N·m (10 in-lb). Use a lint free rag to wipe the excess fluid from the damper body.

71. Pour additional suspension fluid into the reservoir until it is level with the top of the reservoir.

72. Slowly pull up on the damper body until it stops.

73. Use a T10 TORX to thread the IFP bleed screw into the IFP. Tighten the bleed screw until the IFP begins to spin.

74. Remove the shock from the vise. Pour the remaining fluid out of the reservoir, then wipe the residual out of the reservoir with a clean lint free rag.

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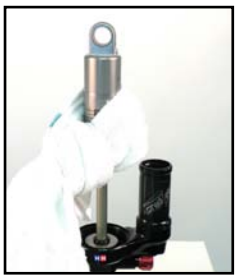

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75. Clamp the shock back into the vise by the air can eyelet, with the shock positioned vertically.

76. Use the Schrader valve tool to install a new Schrader valve into the reservoir top cap.

77. Apply a small amount of grease to the reservoir cap o-ring. Push the reservoir cap into the reservoir with the flat side of the cap facing outward, until the cap is just beyond the retaining ring groove.

    Keep the reservoir cap square with the reservoir as you install it so that it doesn't bind.

78. Place one end of the reservoir cap retaining ring into the retaining ring groove in the reservoir, then push around on the ring until the ring is completely seated in the groove.

79. Thread the Monarch air fill adapter/shock pump into the reservoir top cap. Pull up on the adapter until the top cap rests against the retaining ring.

    Once the top cap is resting aginst the retaining ring, firmly pull up on the adapter to ensure that the retaining ring is completely seated in the groove.

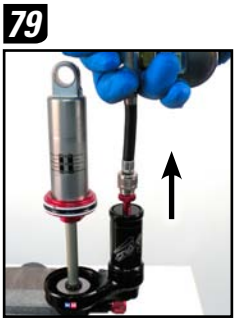
80. Use the shock pump with the Monarch air fill adapter to pressurize the damper body to 250 psi.

    Once you have pressurized the shock, remove the Monarch air fill adapter from the air fill port BEFORE removing it from the shock pump. Separating the pump from the adapter first will allow all of the air to escape from the shock.

    If you have the proper fill equipment, you may substitute air with nitrogen.

81. Use a Schrader valve tool to install the reservoir valve cap.

82. Spray the damper assembly with isopropyl alcohol and wipe it with a clean lint free rag.



AIR CAN INSTALLATION

83. Install the top out bumper onto the damper body.

84. Use isopropyl alcohol to clean the air can threads.

85. Apply a small amount of grease to the air can outer o-ring.

    Do not get any grease on the air can threads.

86. Apply a small amount of blue threadlock to the air can threads.

    Do not get any threadlock on the o-ring as threadlock will prevent the o-ring from sealing properly.

87. Position the large side of the air can over the damper body eyelet. Firmly press the air can down onto the air piston and damper body until the air piston is inserted into the air can.

88. Remove the shock from the vise. Clamp the shock back into the vise by the damper eyelet, with the shock positioned vertically.

89. Pour 0.3 mL of lube (Maxima® Maxum4 Extra 15w50) into the air can.

    Do not overfill the air can with lube. Too much lube in the air can can limit the travel, cause leakage, and result in poor shock performance.

90. Pull up on the air can until the air can threads and the eyelet body threads make contact. Keep upward pressure on the air can while turning the eyelet body counter-clockwise to thread it into the air can. Use a 13 mm open end wrench to turn the eyelet body if necessary. Thread the eyelet body onto the air can as tightly as possible by hand.

    Do not allow the air can outer o-ring to get pinched between the eyelet body and the air can.

    Use isopropyl alcohol and a lint free rag to clean the outside of the air can. This allows for a better grip when tightening the shock eyelet body onto the air can.

    High volume air cans only: *Grip the lower portion of the can. Otherwise the high volume sleeve will rotate independent of the air can preventing tightening of the air can.*

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91. Use a strap wrench to grip the air can while using a torque wrench with a 13 mm crowfoot socket to tighten the air can eyelet to 16.9 N·m (150 in-lb).

    Ensure the outside of the air can is free from fluid. This allows a better grip when tightening the shock eyelet body onto the air can.

    High volume air cans only: *Grip the lower portion of the can. Otherwise the high volume sleeve will rotate independent of the air can preventing tightening of the air can.*

92. Use a Schrader valve tool to install a new Schrader valve into the air can valve.

93. Use a shock pump to inflate the shock to the desired air pressure, then install the valve cap.

94. Remove the shock from the vise.

95. Spray isopropyl alcohol on the entire shock and wipe it with a clean lint free rag.

96. Install the sag indicator o-ring (if applicable).

97. Re-install the shock mounting hardware (see the *Mounting Hardware And Bushing Service* section).

    This concludes the service for your Monarch Plus shock.

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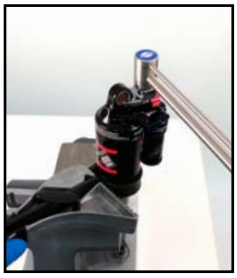

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