



## ***Shock Absorber Rebuild Manual***

Model

***PODIUM RC3***



### **FOX RACING SHOX**

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605-01-039- Rev C

## Disclaimer

FOX Racing Shox is not responsible for any damages to you or others arising from riding, transporting, or other use of your FOX-equipped 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 Service and Warranty provisions of this manual.

## Consumer Safety

RIDING A MOTOR VEHICLE IS DANGEROUS AND CAN RESULT IN SERIOUS INJURY OR DEATH. RIDE RESPONSIBLY AT ALL TIMES.

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

## Removal & Installation

The method for removing and installing your FOX Racing Shox is different for every vehicle. Refer to your vehicle's service manual for complete instructions.

## Recommended Service Intervals

Your FOX Racing Shox will perform the best if serviced at regular intervals:

Every Ride  
Every Ride  
Every 40 hours

Wash and dry your vehicle and suspension.  
Visually inspect shock.  
Change shock oil and seals.

**ACTUAL SHOCK AND PARTS DEPICTED MAY VARY FROM MODEL YEAR TO MODEL YEAR !**



## **Tools & Materials Required for Rebuild**



- |  |                      |
|--|----------------------|
| 1. Fox 5wt. R3 Fluid - 1 Qt.           | Fox P/N 803-11-006   |
| 2. Piston Band Installation Tool       | Fox P/N 803-00-187   |
| 3. Fox IFP Depth Setting Tool          | Fox P/N 803-00-294   |
| 4. Fox Seal Installation Bullet (5/8") | Fox P/N 398-00-094-A |
| 5. DSC Socket                          | Fox P/N 398-00-294   |
| 6. RC3 Rebuild Kit                     | Fox P/N 803-00-184   |
| 7. Misc Allen Wrench Set               |                      |
| 8. Mallet                              |                      |
| 9. Pin Spanner Tool                    |                      |
| 10. Screwdrivers                       |                      |
| 11. Torque wrench                      |                      |
| 12. 9/16 Wrench                        |                      |
| 13. 6mm Allen Hex Socket               |                      |

## **REBUILD INSTRUCTIONS**

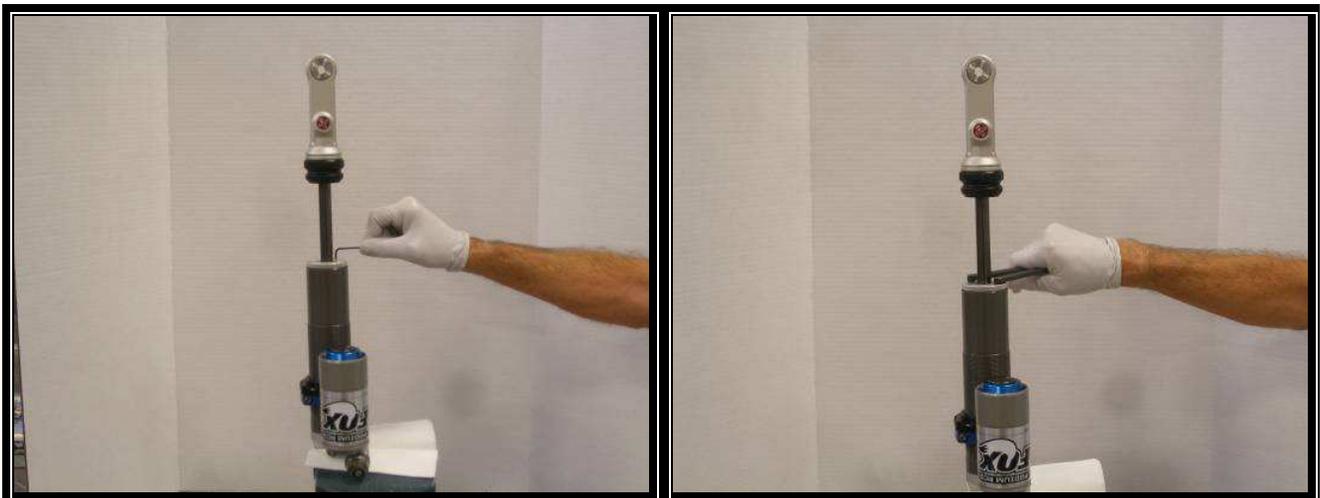
### **Important notes:**

- SAFETIES FIRST - Always wear safety glasses and read directions completely BEFORE disassembling the shock.
  - Cleanliness is critical; make sure your work area is clean and un-cluttered prior to starting work. Contamination of the shock will lead to premature wear and poor function of your shocks.
  - **IMPORTANT:** When replacing a seal during a service, make sure that the new seal is the same size, shape, and material as the one you are replacing. In some cases, there may be two seals in the rebuild kit that look similar.
1. Record the relative Preload indicator number as well as the Rebound, Compression adjustment settings and Bottom out control.
  2. Using a 4mm Allen wrench, loosen pinch bolt on preload ring and back the pre-load adjuster off until the spring is loose on the body.
  3. Remove the wire-retaining ring under the shaft eyelet end spring collar and remove spring collar parts.
  4. Clean the entire shock assembly with soapy water or mild solvent.
  5. Back the Rebound adjustment screw all the way out (full soft). Back the Low-Speed Compression adjustment knob all the way out (full soft). Back the B.O.C adjustment all the way out (full soft).

6. Clamp the shock body eyelet securely in a vice, with the shaft side up. Be sure to use SOFT JAWS to prevent damage to the shock. (Alternately, a clean towel can be used in the vice jaws to protect the shock).



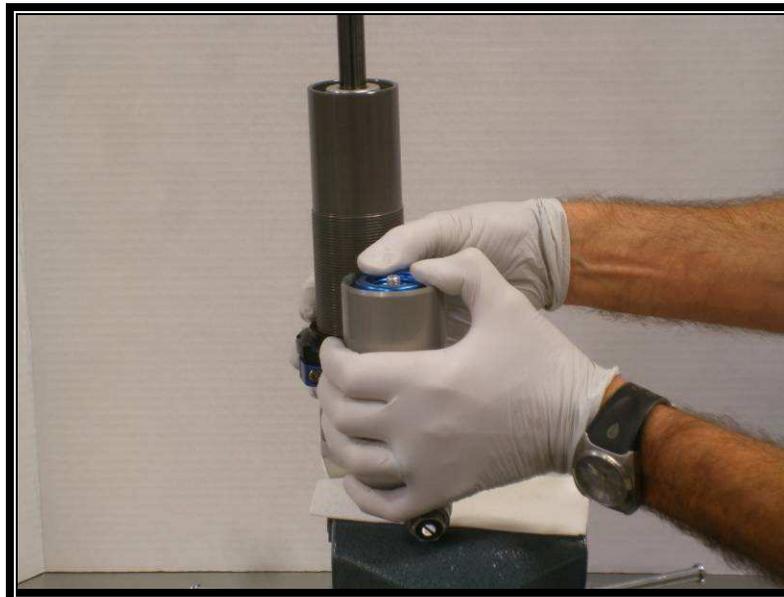
7. Using a 3/32" Hex Key, loosen the bearing cap set screw (do not take it all the way out). Use a 3/16" pin spanner tool to unscrew the bearing cap, slide the bearing cap up to the bottom-out bumper.



8. Remove the Schrader valve cap with the 3/16 pin spanner from the end of the reservoir to expose Nitrogen Schrader valve.

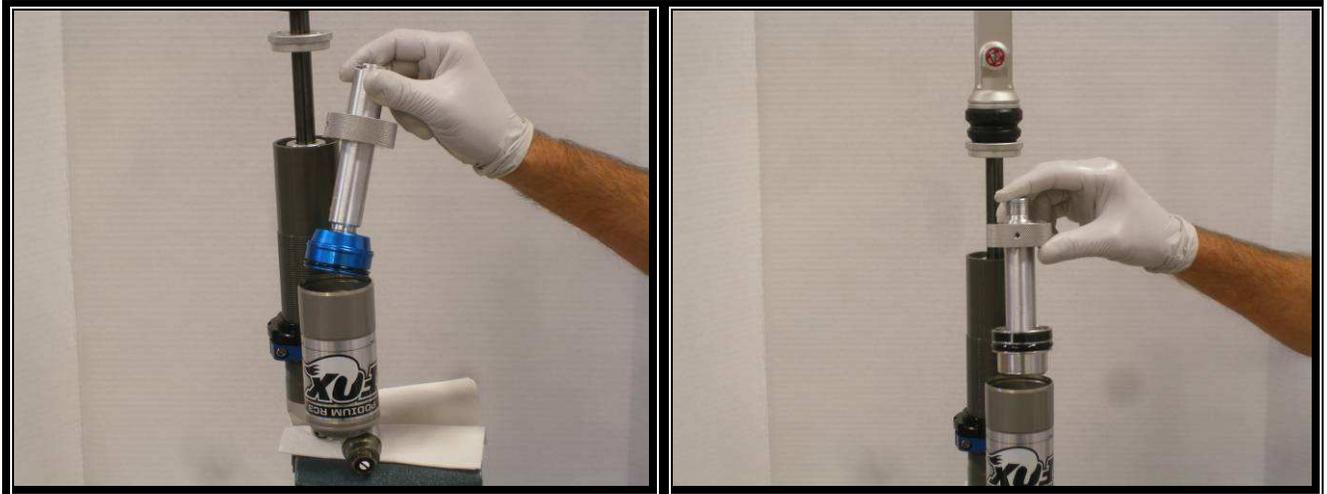


9. Depress the air valve core to release pressure. Be careful as high pressure Nitrogen will escape as you purge the valve.

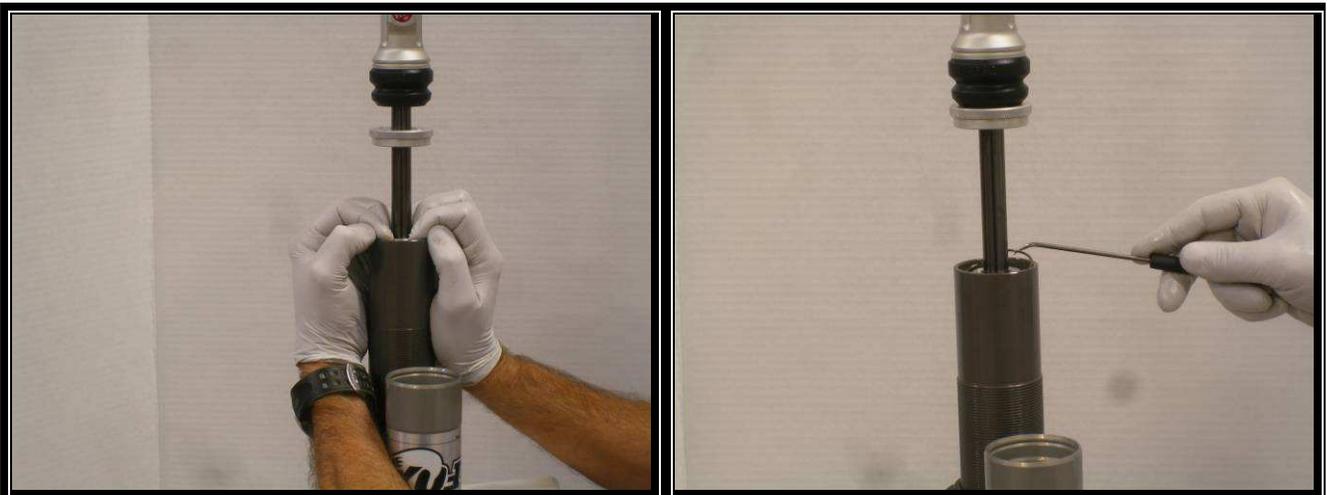


10. Depress the blue reservoir end cap to expose the wire-retaining ring. Remove wire ring. Use extreme caution not to scratch the bore of the reservoir tube.

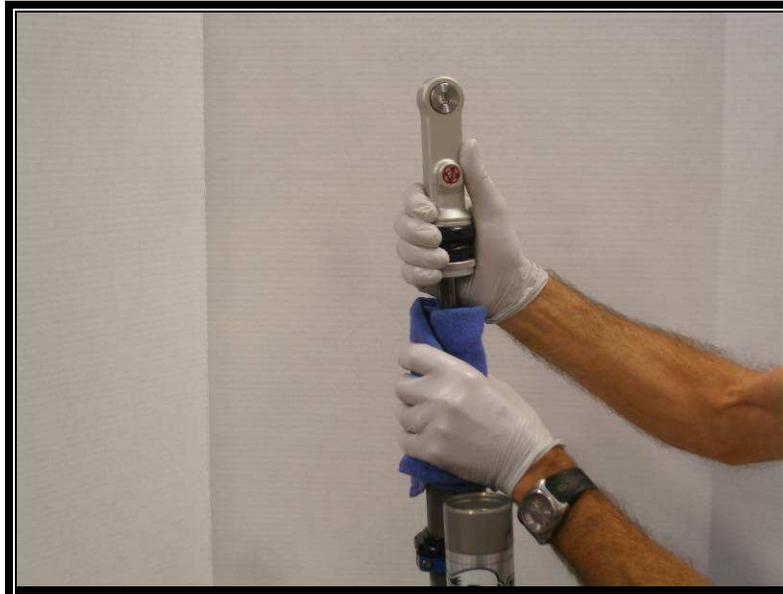
11. Remove the reservoir end cap using the extraction tool. Clean the end cap and replace the o-ring.
12. Remove the IFP bleed screw and remove the IFP using the extraction tool. Replace IFP o-ring and band. Dispose the oil from the reservoir.



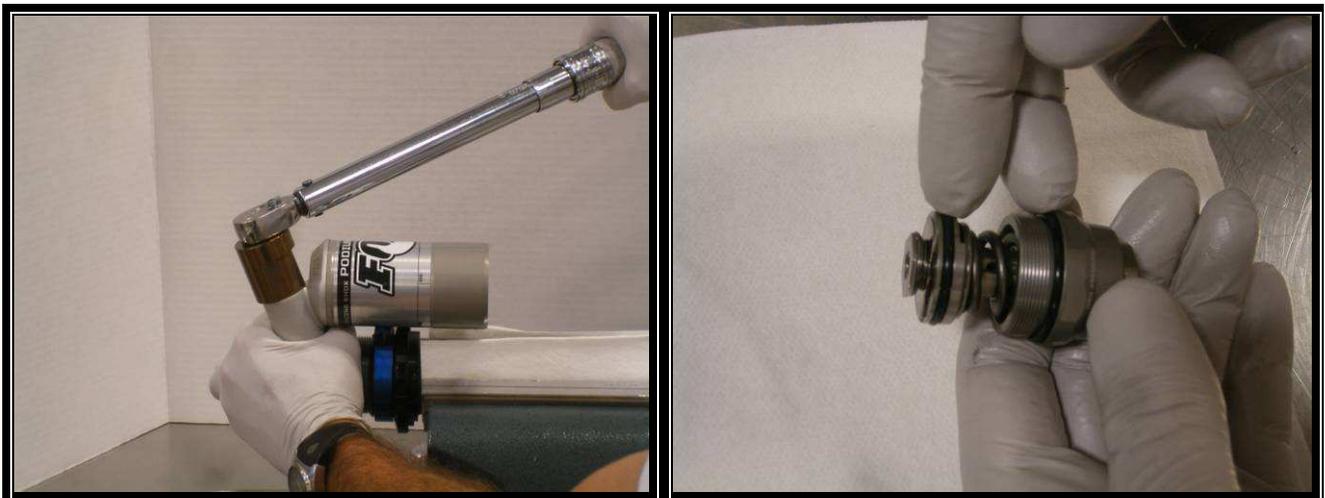
13. Using your fingertips, depress the shaft bearing into the shock body to expose the wire-retaining ring. Remove retaining ring. Use extreme caution not to scratch the bore of the body tube.



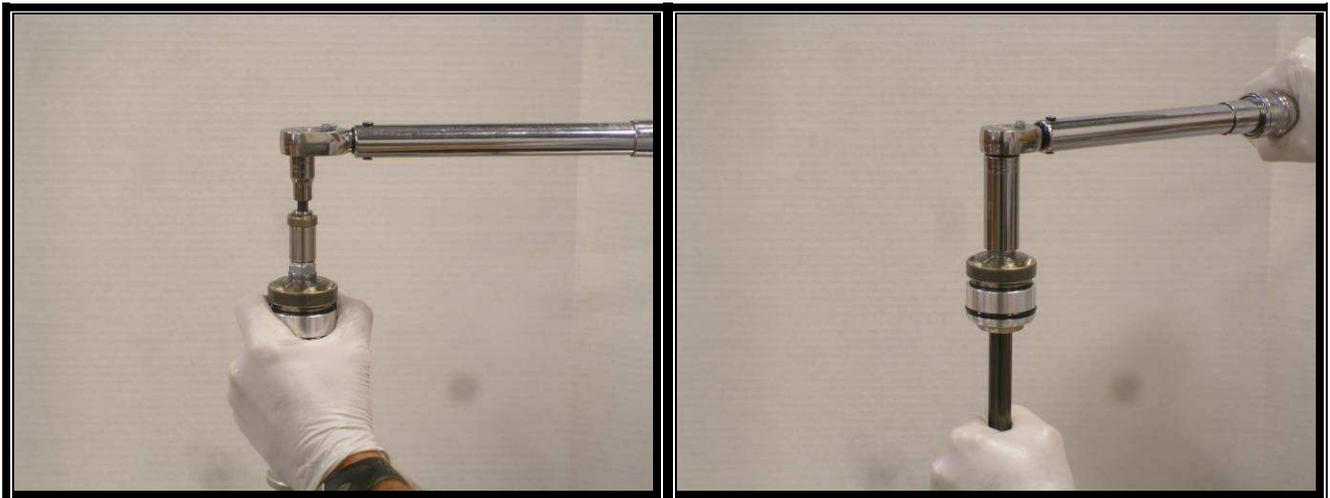
14. Remove the shaft assembly from the body tube, and place on a clean, lint free paper towel.  
(Wrap a towel/rag around the body and shaft assembly to avoid oil spill.)



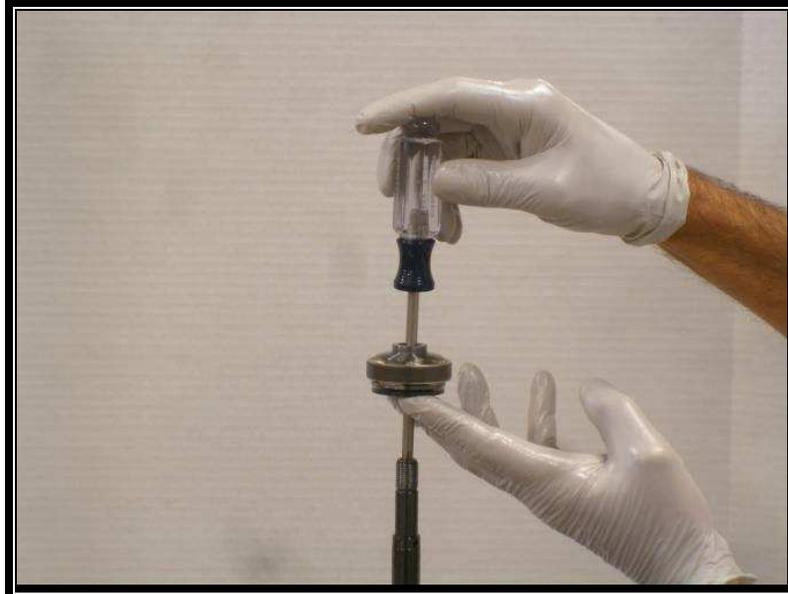
15. Using the FOX DSC socket tool # 398-00-267, remove DSC adjuster from body end cap assembly, inspect the DSC for any wear or damage, replace the o-rings. (Do not remove by using the 17mm High Speed adjuster hex, this will damage the DSC.)



16. Lightly grease the o-rings on the DSC, reinstall and torque the DSC to 35 FT-LBS. ( Do not tighten using the 17mm High speed adjuster hex, this will damage the DSC.)
17. Set body assembly aside on a clean, lint free paper towel.
18. Clamp the shaft eyelet securely in soft jaw vice with the piston end up.
19. Using a 4mm hex key socket, remove bottom-out piston from end of shaft. Ensure that the Rebound lock nut is tight.
20. Using a 17mm socket remove the shaft lock nut.



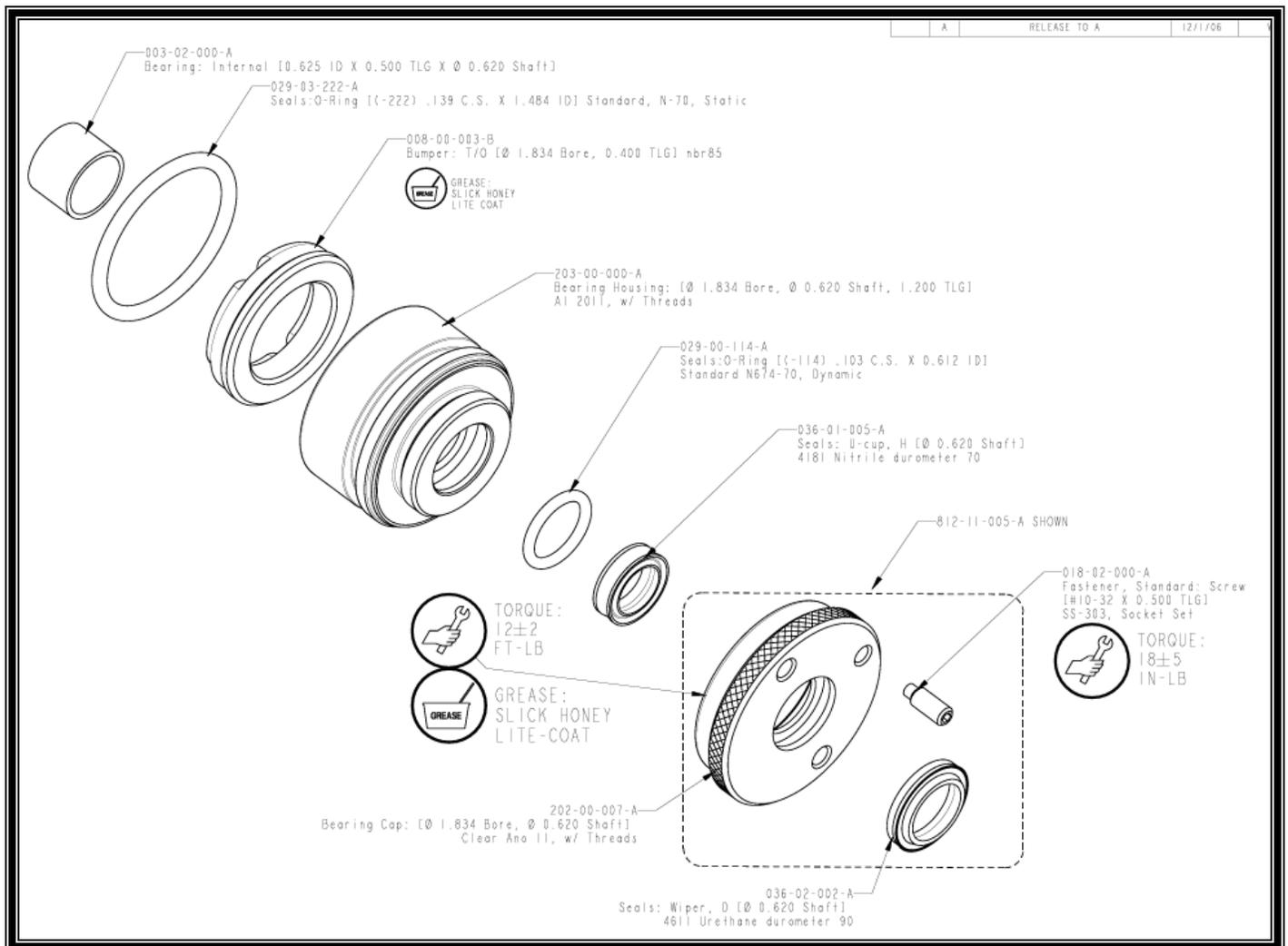
21. Slide only the tip of Phillips Head Screwdriver into hole at end of shaft. Hold the piston assembly under the top-out plate and lift upwards. Slide the piston assembly onto the shaft of the Screwdriver.



22. Slide the bearing assembly and cap off the shaft. **Use extreme caution not to scratch inside of the bearing assembly when passing it over the threads at end of shaft.**
23. Remove bottom out bumper and spacers (if any), Inspect and replace if needed. **(Note order and number of the spacers.)**



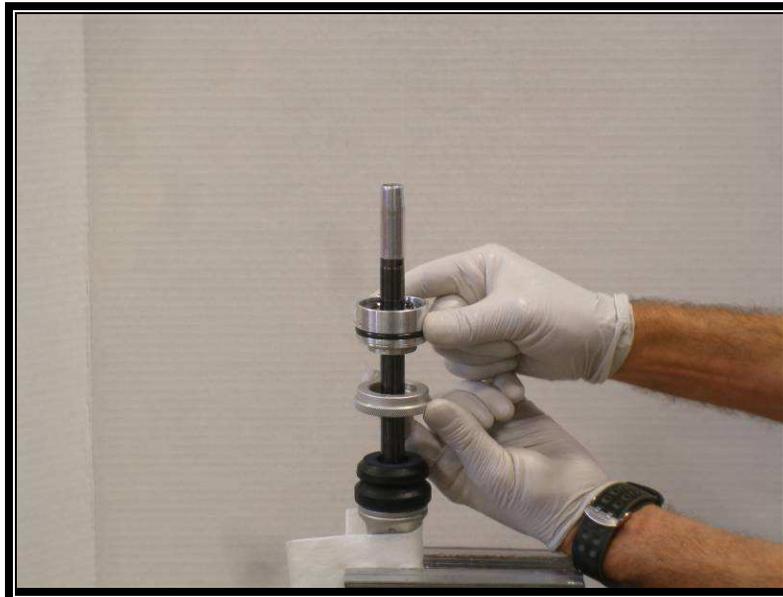
24. Remove all the seals and o-rings from the bearing assembly and cap. Use extreme caution when removing seals from bearing assembly. Do not scratch the sealing surfaces for the seals and o-rings. Doing so will compromise the performance of your shock. Replace parts in order shown in the illustration below.



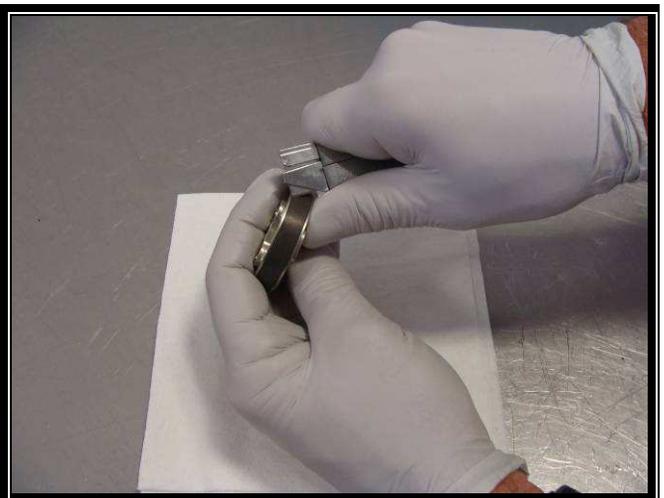
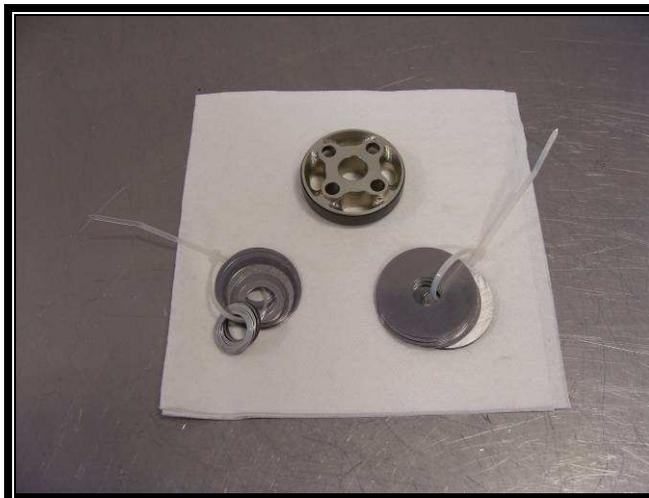
25. Clamp shaft eyelet securely in soft jaw vice.

26. Slide spacers (if any) and bottom out bumper onto the shaft.

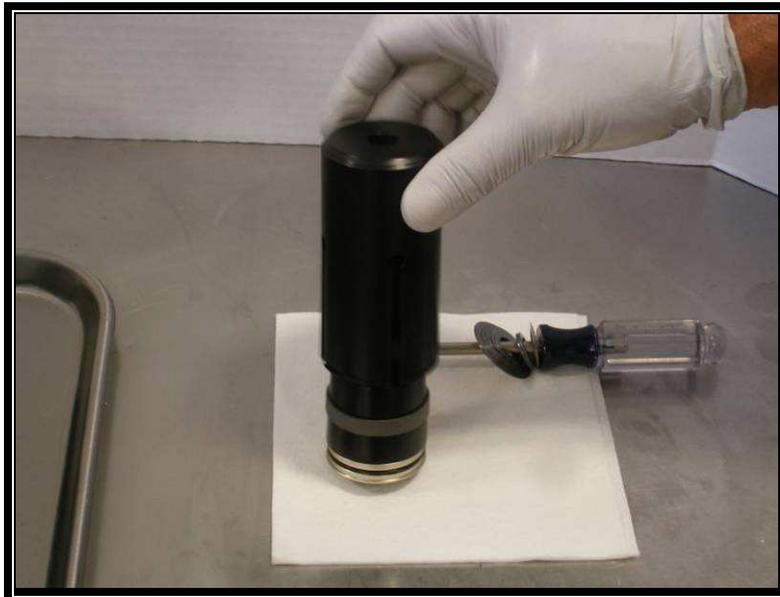
27. Install the Bullet tool on the shaft and lubricate the shock shaft with assembly lube. Slide the bearing cap and bearing assembly onto shaft.



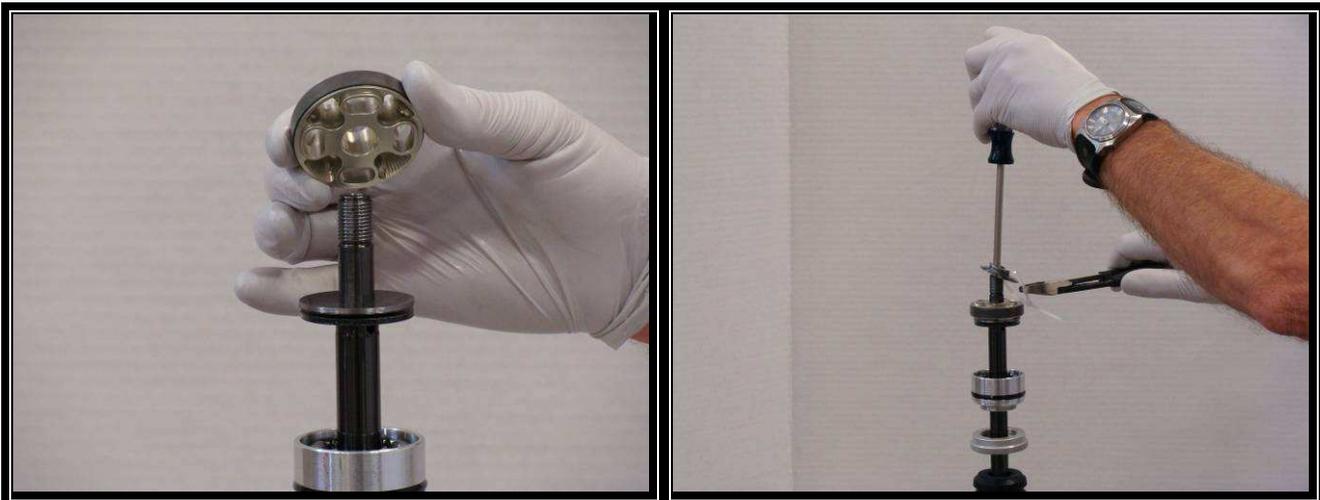
28. Separate the Compression and Rebound valve stacks. Secure the order by using a zip tie and set aside. Cut the piston band at a 45 degree angle to prevent any damage to the piston, remove both band and o-ring from the piston.



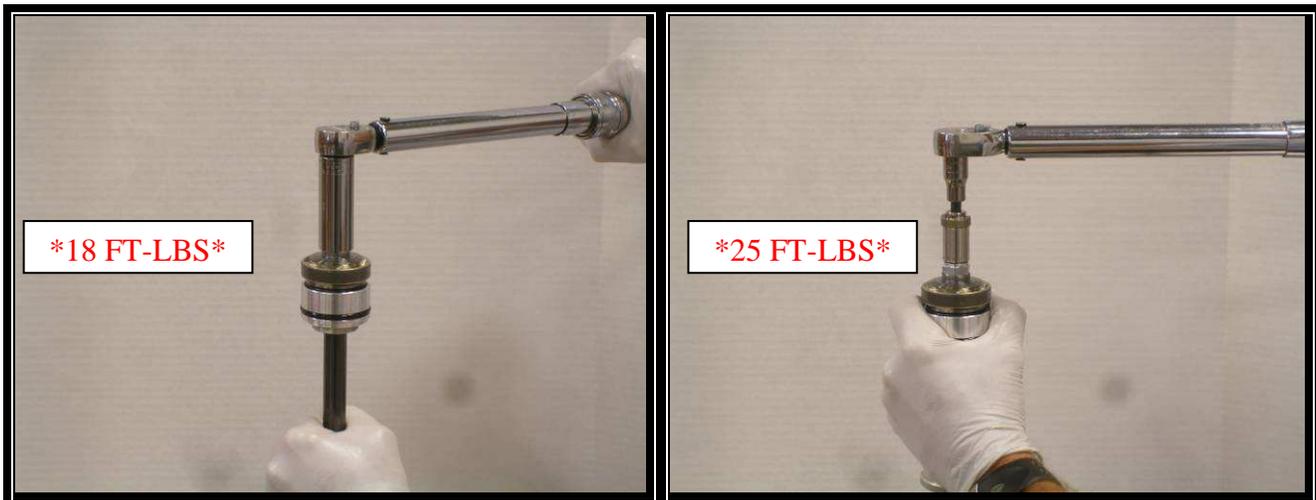
29. Install the new o-ring and piston band using the FOX Piston Band Installation tool, # 803-00-187. Ensure that the band has seated correctly on the piston before proceeding.



30. Install the Compression valve stack, piston and Rebound stack onto the shaft. (Ensure correct order of the valve stacks.)



31. Install the piston nut using a 17mm socket and torque to 18 FT-LBS. Install the bottom-out piston using a 6mm hex key socket, torque to 25 FT-LBS. Set the shaft assembly aside.

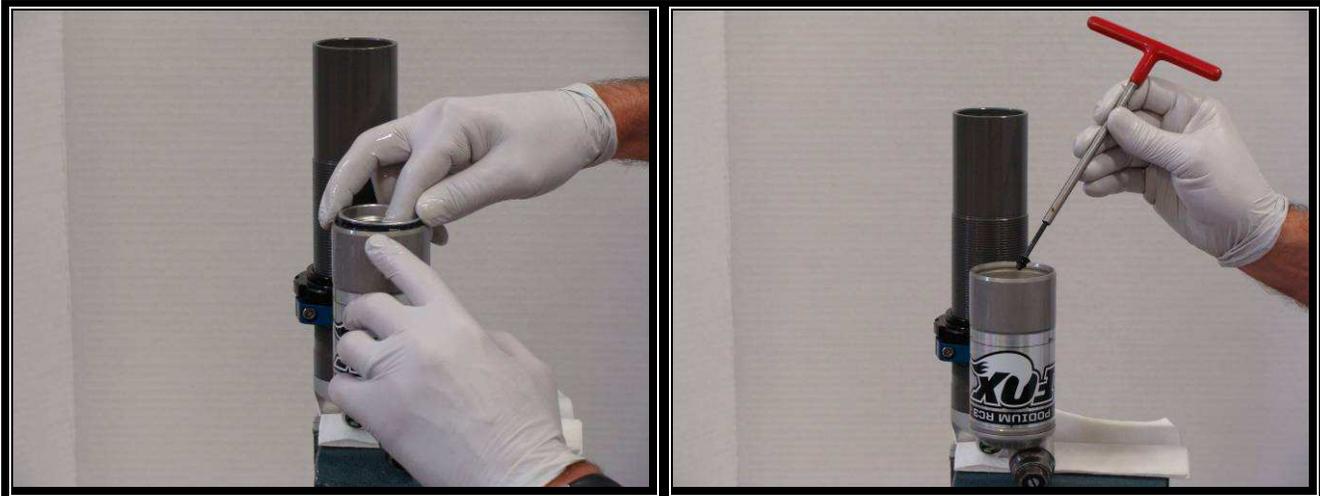


32. Clamp the body in the vise. Check that the Low Speed Compression adjuster is set to fully open position. Fill the reservoir with Fox R2 Suspension Fluid, # 803-11-006. Allow oil to level out between the body and the reservoir, this may take a few minutes. (During this process, close and reopen the Compression adjuster a few times.)

33. Fully close the Compression adjuster. Fill oil into the reservoir to 1/2" from the rim of the reservoir.



34. Cover the bleed hole in the IFP using your finger, slowly submerge the IFP into the reservoir allowing some oil to overflow. Remove the finger covering the bleed hole and submerge the IFP into the oil until the o-ring seats. This procedure prevents any air from being trapped under the IFP. Install the IFP bleed screw using a new o-ring.



35. Fully open the Low Speed Compression adjuster. Using the IFP Installation tool, push the IFP to the bottom of the reservoir this will force the air trapped in the Compression adjuster out of the body. Add oil into the body until half full. Pull the IFP up approximately 2" and push down again. Repeat this process until no air bubbles are visible in the shock body. (Use a Rag/Towel over the top of the tool to avoid oil spill.)



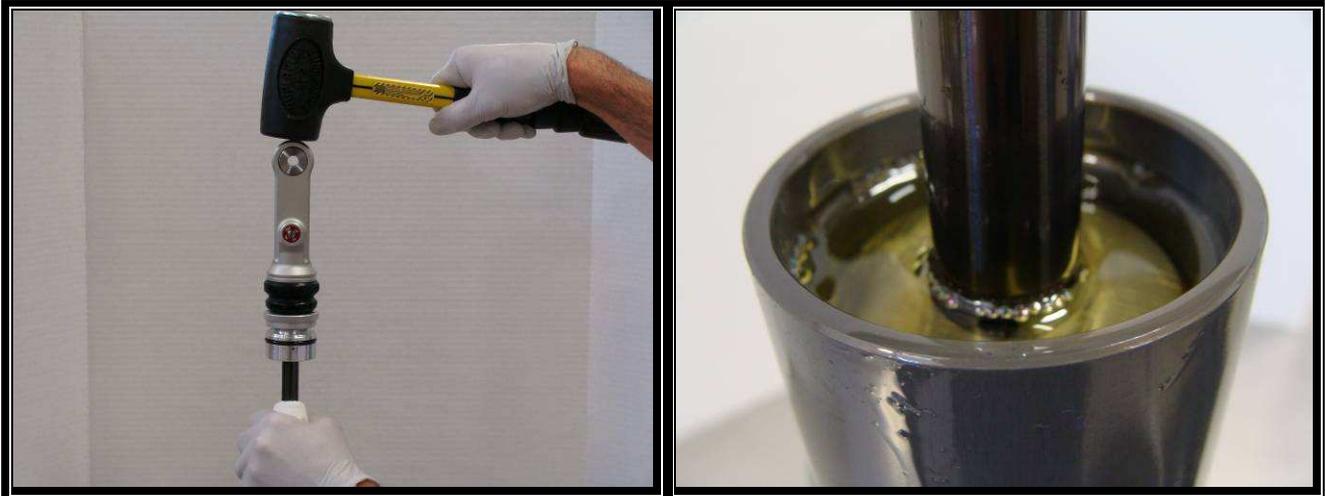
36. Pull the IFP to about 1" from the bottom and fully close your Low Speed Compression adjuster. Add oil into the body to approximately 3/4" from the rim.



37. Install the piston assembly into the body. Ensure that the piston band does not extrude out of the piston gland while doing this.



38. Wrap a rag around the shaft and the body to prevent oil spill. Strike the shaft assembly firmly, this allows the valve shims to open and to let any air bleed out from the piston assembly. Tap until the rebound bleed port is just submerged into the oil. (**Do not go any deeper.**) Allow a few minutes until all air bubbles have dissolved.



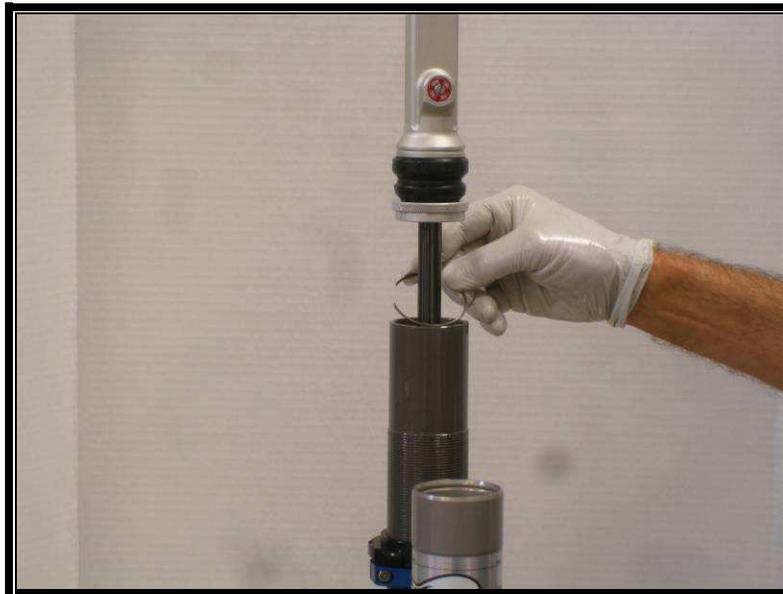
39. Install the bearing assembly allowing oil to overflow from the bleed hole in the bearing. Oil should rise to the top of the body around the o-ring.



40. Set the Low Speed Compression adjuster to fully open position. Press the bearing assembly into the body just past the retaining ring groove. Do not push the bearing any further than shown in the image below.



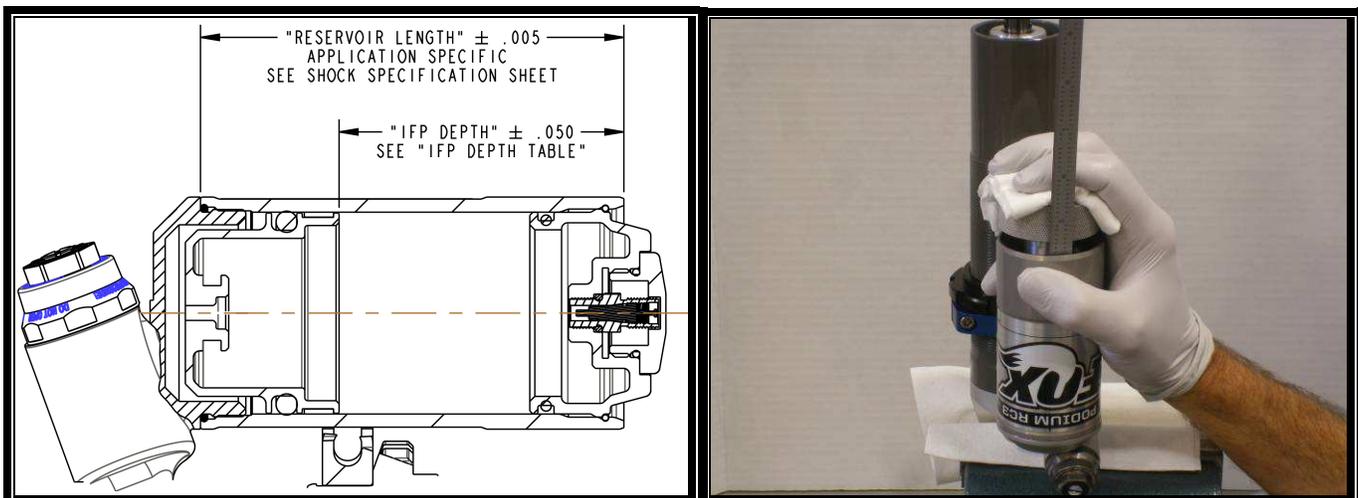
41. Install the retaining ring. Push the IFP down using the IFP tool and at the same time pulling up on the shaft. This ensures full extension on the shaft for next step.



42. Set the Low Speed Compression adjuster to fully closed position. Remove the IFP bleed screw and set the IFP depth using the table below. Please note that the IFP depth is application specific.

IFP DEPTH TABLE		
RESERVOIR PART #	RESERVOIR LENGTH	IFP DEPTH
227-20-010	3.200	1.825
227-20-011	3.400	2.025
227-20-012	3.600	2.225
227-20-013	3.800	2.425
227-20-014	4.000	2.625
227-20-015	4.200	2.825
227-20-016	4.400	3.025
227-20-017	4.600	3.225
227-20-018	4.800	3.425
227-20-019	5.000	3.625
227-20-020	5.200	3.825
227-28-000	4.000	2.625
227-28-001	4.500	3.125
227-28-002	5.000	3.625
227-28-003	5.500	4.125
227-28-004	6.000	4.625

43. Measure your IFP depth as specified in the image below and set the correct depth. Use a ruler and the IFP tool.



44. Install the IFP bleed screw.

45. Dispose the excess oil in the reservoir, a light film of residual oil left in the reservoir is ok.

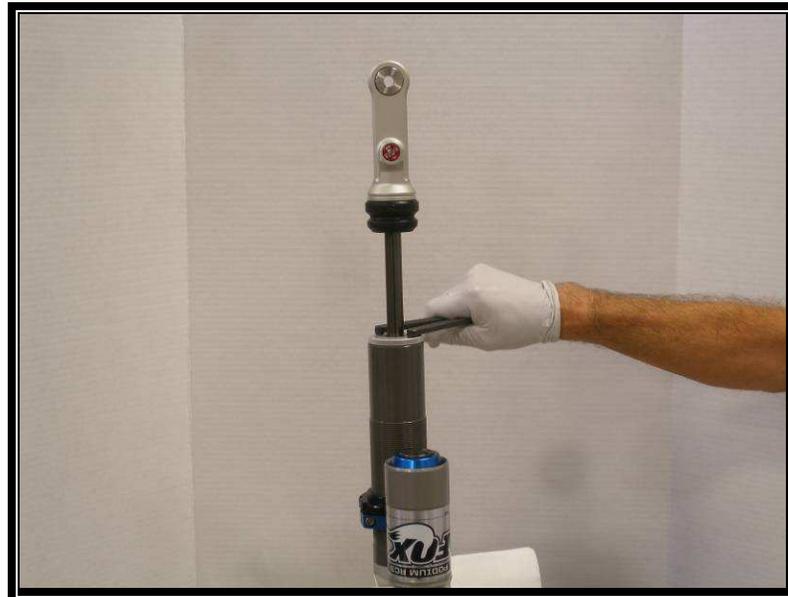


46. Lightly grease the o-ring and Install the reservoir end cap and retaining ring.

47. Charge the reservoir to 150 PSI of nitrogen. Install the Schrader cap.



48. Clean any residual oil from the top of the bearing and lightly grease the threads of the bearing. Install the bearing cap. Tighten the set screw.



49. Reinstall spring and hardware. Set all the adjusters to your personal preference or factory setting (12 clicks out from fully closed position).

Congratulations...You've completed the servicing of your FOX Podium RC3.

Carefully reinstall the shock on your motorcycle. Always refer to your motor cycles owner's for proper torque specs for your shock mounting bolts...**DO NOT OVER TIGHTEN!**

Be sure to RIDE SLOWLY in the beginning to ensure the shock and your vehicle's suspension is performing correctly.

Thanks again for choosing FOX Racing Shox.

## Contact Information

FOX Racing Shox 130 Hangar Way Watsonville, CA 95076	Phone: 800.369.7469 North America: 800.369.7469 Fax: 831.768.7026
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Business Hours: Monday-Friday 8:00AM-5:00PM, Pacific Time	

## Service / Warranty

1. Contact FOX Racing Shox at 800.FOX-SHOX (800-369-7469) to obtain a Return Authorization Number (RAN) and shipping instructions.
2. Satisfactory proof of purchase receipt is required for warranty consideration.
3. Mark the Return Authorization Number (RAN) and the Return Address on the outside of the box. Send the shock to FOX Racing Shox with the shipping pre-paid by sender.
4. Include a description of the problem, vehicle information (manufacture, year & model), type of FOX product, spring rate, type of riding, and a return address with daytime phone number.

## 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 of an OEM Customer's FOX Racing Shox equipped vehicle and is valid for one year from the original date of purchase from an OEM Customer's 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.

Warranty is void when damage to the shock has occurred from the following:

- Abuse.
- Seal damage due to power washing.
- Damage to the exterior finish caused by debris, rocks, or crashes.
- Any attempts to disassemble shock absorber.
- Modifications.
- Non-factory oil use or improper service
- Shipping damage or loss (purchase of full insurance is recommended).

## Methods of Payment

VISA, MasterCard and/or Cashier's Check

## Methods of Shipping

FOX Racing Shox uses UPS Ground Service within the USA. Customer may request UPS Air Service at an extra cost. All non-warranty shipping charges are the customer's responsibility.

