

DIY - REAR SHOCKS

1. Clean the shock to keep dirt and grime out of the shock during rebuild
2. Uninstall piston guard
3. Using a fine pic remove the hard plastic plug
4. Using a needle, bleed out the nitrogen from the bypass body (1-2 minutes)
5. Place shock in a vice to remove end cap
6. Using Tech Pin Spanner to remove end cap
 - a. You might need a pipe to act as a breaker bar as they can be stuck on. Don't be afraid as some need some SERIOUS TQ to break them free.
 - b. NOTE: Advise getting TWO grade 8 bolts to replace the small tips on the spanner. They are not deep enough and getting two bolts allows you to have a better bite on the cap.
7. Place piston and screw cap on clean towel for now
8. Carefully pour the old fluid into a bucket and making sure to hold the internal bypass tube in the shock.
 - a. Don't flip the shock upside down fast or the internal bypass will fly out and get oil everywhere
9. Pull the internal sleeve and place on a clean towel for now
10. PUSH down the end cap on the bypass side to make the snap ring more accessible
11. Remove the snap ring
12. Using a allen key to remove the screw and seal from end of bypass body
 - a. Using a small bolt, thread it into the end cap and pull the cap off
 - b. Place on clean towel in the order and orientation you take things off*
13. Using a 1/4 by 20 thread bolt, screw it into the bottom valve and pull out
 - a. Here you will need a custom made tool

OR
 - b. Use a bolt and zip ties as seen in the picture to pull the inner valve out enough from our experience.
14. Clean the shock pistons at this time
15. Clean the internal body of the shock
 - a. You will need to use a long wrench with a towel wrapped around it to get down into the body
16. Place the shock valve assembly into the vice and remove the end nut 19mm
17. CAREFULLY remove the shim stack and place on a clean towel in order of removal and in the SAME orientation as you took it off.
18. Remove buffer ring
19. Remove shock end cap
20. **CRITICAL step**, using a small allen see if you can break loose the two bleeder screws on the screw cap
 - a. If they turn with no issue leave them cracked slightly so you are ready to bleed the air out
 - b. If they are locked in there you will need to order a new screw cap, and two bleeder screws and two ball valves. Total is about \$40ish with shipping for all those parts from FOX
21. Place seals in order they go onto the different parts
 - a. NOTE you will not use all the seals in the kit. The thinner seals we did not use
22. Shock end cap - seals need to be placed in as order
 - a. Make sure to oil the seals before installing
 - b. White seal fist, pointed side up
 - c. Softer black sea, pointed side up
 - d. Hard black seal, pointed side up
 - e. Replace outer seal
 - f. Replace bottom seal

g. NOTE: 2010 trucks have Raptor A shocks. These use a round lower O ring VS a square ring as in B versions.

23. Replace seal on inner valve
24. Replace seals on outer bypass body cap
25. Oil the shock piston shaft to make it easier to install the end cap
26. Place screw cap back onto the shock
 - a. NOTE: Make sure to rock this onto the shaft or you will bend the inner seal and damage it. You know you have a successful install if the screw cap moves up and down with not much effort.
27. Place buffer on to shock
28. Place shim stack carefully back on to the shock in the same orientation it was taken off
29. Reinstall nut and tighten so that about 1/2 of the thread is above the nut or so
30. Install the inner piston of the bypass body first
 - a. Oil the wear band and place on the valve and carefully push into the bypass body
 - b. Push the piston all the way down to the bottom of the tube but leave pull tool attached
31. Poor in shock fluid (25.5onces - 750 - 760ML) this volume includes over fill
32. Move the bypass valve up and down SLOWLY to work out any air bubbles
33. Pull the bypass valve up SLOWLY to bring more fluid over to the bypass body so it has a buffer, only a few MM.
34. Install bypass end cap by pushing it down past notch in tube
35. Install snap ring
36. Reinstall main body bypass tube
37. Reinstall and tighten shock screw cap on main piston
38. Charge shock to 240PSI and keep needle in shock to keep chamber charging
39. Bypass end cap will snap into place and fluid should begin to come out of bleeder screws
40. Let oil come out until there is no more air bubble
41. tighten screws
42. remove nitrogen needle
43. Reinstall piston guard

