General Setup and Tuning Pro Polaris

Congratulations you just purchased one of the lightest most technologically advanced shock packages on the market! This shock package is setup and tailored for more aggressive riders that stand 85% of the time and want to throw there sled at whatever is coming their way and not have to worry about snapping their wrists off. You will find a tremendous amount of adjustability with these shocks from 20 positions of compression to endless amounts of preload adjustments. As you know there are different strokes for different folks and you will need to tune on this package to tailor it for your style at any time you have questions or concerns contact us that's what we're here for and we want you to dig our products. Here are some simple installation instructions and our best practices on how we set our Pro Rmk's up for the way we ride them and remember you will have to dial these in for how you ride.

1.) Remove rear suspension from the snowmobile. (*note: suspension bolts may be difficult to remove for the first time due to the patch lock that they use at the factory you may need to use a butane torch to preheat bolts)*
2.) Once you have the suspension on your work bench remove stock Walker Evans shocks.
3.) Remove the bushings from your stock shocks and install them in your new Raptors a screw driver works well to pry them out and reinstall them with a rubber mallet.

4.) Install your new shocks and springs into the suspension keeping the reservoirs on the left hand side of the vehicle. NOTE: If you are running bogie wheels you will need to remove the inner wheel next to the reservoirs on both the front (2013-14 use supplied wheel spacer for front) and rear shock or sever shock damage will occur. Torque fasteners to manufacturers spec.

5.) Next set the preload on the springs with as little preload as you can to help with the install process.

6.) Install the suspension back in the sled starting with the front bolts first and then the rears. Torque these to manufacturers spec.

7.) After you have the suspension back in the sled lift the backend off the ground or roll your sled on the clutch side and set the spring preload to Raptor specs. (rear base 10.5)(rear firm 11.5) (front 8.25)

8.) This is a good time to check track tension and alignment and now you're ready to start testing!

1.) For adjusting spring preload on the rear arm turn the sled onto its clutch side and set the rear spring at 10.5 inches and use this as a starting point. If you feel that the rear skid is stiff adjust the spring lighter by two turns (10.625) until you feel it

is adequate. If the skid feels soft and bottoms too easy add preload two turns at a time (10.375). These changes should be made in conjunction with clicker settings (two clicks at a time) and NEVER make more than ONE change at a time… Re-check your settings after ever couple rides to ensure setting hasn't changed.

2.) Set the front arm limiter strap to the stock location of 6.0 inches (2011-12) from the jounce bumper on the rail to the torque arm. After you have verified this dimension set your spring to 8.25 inches.

3.) As far as clickers we set them at 3 clicks here and again you will have to set them to your liking. There are two full rotations of adjustment on the knob and it can be difficult to feel the clicks in the field so what we do is turn the knob in quarter turn increments. So one full turn equals 10 clicks and so on again this will be helpful in the field when you are tuning.

Questions and answer:

Knowing what to do in given situations and conditions will help you school your buddies on a day to day basis. This is totally up to you with your setup and the more you mess the more you learn. Here are some basics.

Q.) Sled bottoms too easy on larger 2.5ft to 3.0 ft events.

A.) First always start with the clickers. If the impact is in your wrists stiffen up ski shocks two clicks at a time until acceptable. If it's in your heals then make changes to the front track shock again couple clicks at a time until acceptable. You can also add two turns on the front track spring to help this issue. If you feel it in your back or you can physically

feel the rear arm bottom turn the rear track shock two clicks at a time until it goes away. Spring preload can also help this issue increase preload two turns at a time to help bottoming.

Q.) Sled is too firm over small events wants to dance-ricochet off of everything excessive feedback in the bars.

A.) This should tell you that you need to soften up all your settings. It's ok to open all four shocks and set them on one I personally do this every time I ride and it's usually when I'm headed back to the truck and I'm shot from digging my Skidoo loving buddies out all day!

Q.) Sled has too much pitch (transfer-ski lift) and wants to trench after the skis get three feet in the air or you simply can't drive it straight up a hill side.

A.) This can be a culmination of things but I would start here. Add preload to the rear shock this will not allow the rear arm to collapse as easy wanting to cause lift. Add clicks to the rear shock our shocks adjust at very low velocities and this will slow down the event. Soften front track shock springs all the way off this will also help keep the front arm from pushing out. Next if you have to take it to this level tighten the limiter strap one hole location making sure to adjust spring preload after you tighten the strap (back it off).
We hope that this helps you adjust for the most common events and of course I could write a novel here but this should help if you have more questions with setup e-mail me and I can talk you through it.

Thanks again for choosing Raptor shocks! Jake