



SETUP & TUNING - AXYS RMK

Below are some simple installation instructions as well as our best practices on how to set up your Axys RMK for great all-around on and off trail performance.

Installation:

- 1.) Remove the rear suspension from the snowmobile. We find that an electric impact is a must have for breaking loose these bolts.
- 2.) Once you have the suspension removed from the tunnel, detach the limiter strap from the front upper torque arm and remove your stock Walker Evans shocks.
- 3.) Remove the bushings from your stock shocks and install them in your new Raptor shocks. A screw driver works well to pry them out. 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.
- 5.) Install the suspension back in the sled, starting with the front bolts first and then the rears. Torque these to manufacturer specifications.
- 6.) After you have the suspension installed, lift the rear of the sled off the ground or roll your sled on the clutch side and set the spring preload to Raptor specs. (rear base 10 3/4) (rear firm 11.5) (front track 8.0 to 8.125) Make sure to lock the spring adjuster with an Allen wrench after spring preload is set.
- 7.) This is a good time to check track tension and alignment. You're ready to start testing!



Figure 1. Front Track Shock Mounting Position



Suspension Setup & Fine Tuning:

- 1.) For adjusting spring preload on the rear arm, turn the sled onto its clutch side and set the rear spring at 10 3/4 inches (the base spring has a free length of 11.0) and use this as a starting point. If you feel that the rear skid is stiff, adjust the spring lighter by two turns along with reducing the clicker settings. If the skid feels soft and bottoms too easy, add preload two turns at a time as well as increasing the clicker settings. If your shock is equipped with the quick cam simply adjust that one position at a time this will speed up the process to finding your desired preload setting. It can be a little counter intuitive as to what your sled may want so always make adjustments both ways until you find the exact characteristics you're looking for. Make sure to adjust your shocks until they feel too soft as well as adjusting them until they feel too firm. Somewhere in the middle is where you will most likely end up.



Figure 2. Rear Track Shock with Quick Cam Adjuster

- 2.) Set the front arm limiter strap to the stock location. After you have verified this dimension, set your spring between 8.0 to 8.125 inches.
- 3.) As far as clickers we set the compression at 3-6 clicks from soft. If your shocks are equipped with rebound adjustments, we have them set at 10 clicks out from full stiff. There are two full rotations of adjustment on the knob and it can be difficult to feel/hear the clicks in the field so turn the knob in quarter turn increments this will give you 2-3 clicks.
- 4.) The rear track shock on your Axys RMK comes standard with a Quick Cam that will allow you to make very easy adjustments in the field. We find that most sleds work better off trail with more spring preload especially if you're running a turbo charged package. You can simply grab the spring and turn it counter clockwise 1 or 2 clicks which will increase your preload by 1/2 inch. This will help control excessive ski lift and make your sled more controllable in high traction situations.



Question & Answer:

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 heels, make changes to the front track shock a couple of 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.

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 spring all the way off this will also help keep the front arm from pushing out so hard causing lift. Next if you have to take it to this level tighten the limiter strap one location making sure to adjust spring preload after you tighten the strap (back it off).

Q.) The front-rear of my sled feels bouncy or light feeling on rebound events.

A.) This typically means that the rebound is set a little too light, simply increase the rebound by turning the rebound clicker in a couple clicks at a time.

Q.) Sled feels like the suspension wants to pack up. This typically happens when going through several small bumps consecutively where the sled feels good on the first handful of bumps then bottoms hard and then starts the process over again.

A.) This typically means that the rebound is set too stiff and doesn't let the shock rebound fast enough to recover for the next bump. Simply decrease the amount of rebound by turning the clicker out a couple clicks.

