

Hygear Suspension

141 Pro Linkage Kit with Custom Axis Shock

During a long trail ride last winter with our 2015 Yamaha SR Viper S-TX DX demo, we noted that, when driving through sharp chop and chatter, its 141-inch rear end harshly kicked and tended to knock the driver's butt off the seat. One other note was that the suspension felt like only about two-thirds of the total travel was being used.

By the next ride on our Viper, its skidframe had undergone an upgrade that transformed it from being an "OK" suspension, as one notebook read, to a skid that rode more comfortably and was well equipped for chopped-up trails and big bumps.

The 141-inch skidframe in Yamaha SR Viper S-TX/X-TX and nearly identical Arctic Cat XF High Country and Cross Country models is a lightweight suspension designed primarily for off-trail use. Examine the back of Arctic Cat M, Polaris RMK and Yamaha M-TX models and you'll see that those mountain sleds all use the same basic uncoupled suspension concept with a coil-over rear shock/or Fox



FLOAT air shock to dampen the bumps. Those suspensions work well in the back-country, but they're not ideal for long days on the trail, which is why we turned to Hygear Suspension to improve the on-trail performance of our SR Viper.

Parts that comprise the Hygear Suspension 141 Pro Linkage Kit we installed look rather simple, but the two billet alu-

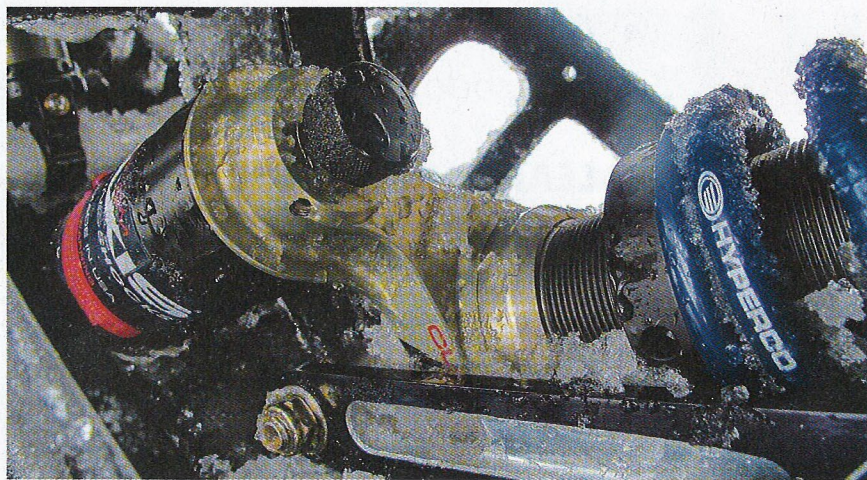
minum link rods and steel linkage change the suspension's motion ratio and add progression so the suspension feels smooth over stutters but is more resistant to bottoming. The linkage can be used with a stock shock, but we also tested a Custom Axis coil-over shock with external compression and rebound damping adjustability. All of this cranked our SR Viper S-TX's fun meter past 11.

On The Gas

We were really impressed by how well the system worked and for how it made our Viper easier to drive. Ride quality greatly improved with more usable travel and the front end felt like it was more connected to the trail – making it more predictable and, whether ridden slowly or aggressively, the machine had become more fun to drive.

With the new linkage and premium

There are close quarters where the shock and link rods attach to the lower mount on the front torque arm.

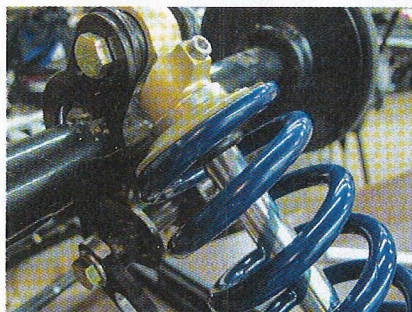


SUSPENSION FOCUS

141 Pro Linkage Kit – \$199.99
Custom Axis Pro Rear Shock – \$899.99
Hygear Suspension
Freeville, New York
607/533-7434; hygearsuspension.com

QUALITY: Visible hard parts look cool and fit expertly.
ACTION: Included instructions were good, but Hygear has a video on its website that more effectively shows how to install the kit.
MONEY: The only downfall of the setup we tested is that it costs more than \$1,000.

Custom Axis shock, the skidframe handled everything from stutter bumps to moguls to deep holes so riding the sled was more relaxing and fun. A particular scenario where the kit made a significant, positive impact was when the rear suspension would smack into a sharp bump or incline while carrying a lot of speed. Unlike when equipped with the original motion ratio and Fox FLOAT damper, the machine didn't deflect or feel harsh on impacts like we'd grown accustomed to before installing the set-



The black, crescent-shaped piece that's fastened with the same bolts that fasten the shock (top) and link rods (bottom) is the special linkage that changed the suspension's motion ratio.

up, but instead it absorbed the bumps and tracked straight. We could eat the bumps and smile.

The right settings for our 155-pound test rider through stutter bumps and soft, melty snow conditions were with the compression shock clicker set to five clicks from full soft. Further experimentation led us to crank the compression clicker out to 12 clicks from full soft, but that was too firm. We experimented

with various rebound-damping settings, and found that five clicks from full soft worked best to cancel the stutter bumps and give a smooth ride.

Bolting the kit in place is relatively simple, as long as installers understand the correct orientation and method to install the linkage on the rear torque arm. Parts fit well and there wasn't spring preload working against us while we lined up the components.

The linkage kit is available separately, so owners looking to improve the ride quality and bump capability of their 141-inch Yamaha or Arctic Cat ought to consider this upgrade. For \$200 the linkage is a great, low-risk solution that can be easily complemented with one of several shock options from Hygear, including the Custom Axis damper that we tested.

— Andy Swanson