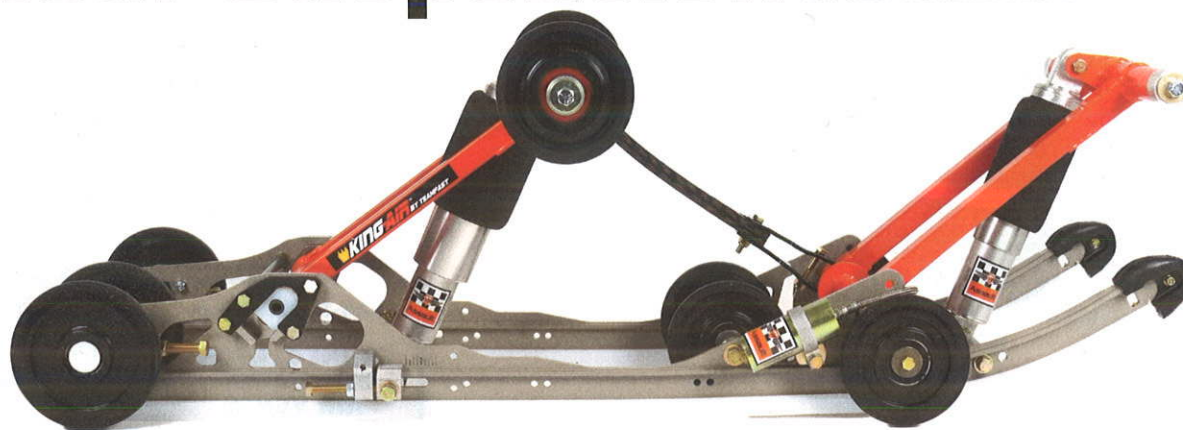


KING-AIR

Rear Suspension

From TeamFAST



New for the 2018/2019 season is yet another rear suspension from the masters of comfort at TeamFAST. Their reputation precedes them, as most every snowmobiler on the planet should be familiar with their many creations over the years, ranging from the creation of suspension coupling (now found on all brands of snowmobiles) to the epic M-10 suspension, followed by the M-12, M-16, Airwave and M-20 variants. And let's not forget the pinnacle effort, the production of the BLADE snowmobiles from the Karpik family.

Things have been relatively quiet for the past few years up in Eveleth, Minnesota. BLADE snowmobile production is down to a trickle, and yes, there are still a few hand-built sleds each year that sneak out of the old Armory building that is home to the TeamFAST and BLADE efforts. Here at SnowTech we still own a BLADE, a 2002 Stryker 700 now fitted with a 137" Airwave version of the M-10 suspension. This particular machine was last used as a testing or development sled for the Airwave suspension by TeamFAST out in Island Park, Idaho.

M-10 mastermind Gerard "King" Karpik has been busy working on various engineering projects for these last few years, contracting his services out to several companies in need of his expertise and knowledge. Of notable interest would be his time with the Gates Rubber Company working on transmissions and drive belts, and most recently working with Yamaha

on special development projects.

Splitting his time between TeamFAST and his contract obligations, Gerard has quietly been working on his next disruptor suspension, this one being called the KING-AIR. Just as the OEM suspensions have slowly evolved over time, so have the designs and engineering of the TeamFAST suspensions. One of the biggest advancements in recent years has been the adaptation of the Firestone air shocks which have enabled the calibration to evolve to new heights and capabilities through the ability to independently set the ride height and the spring rate.

Now for the 2018/2019 season TeamFAST appears to be ready to bring the KING-AIR to market in 121" and 137" track lengths. Let's look at the unique features and what makes this version different and better than what is currently available.

More Travel -

The KING-AIR's front arm cross-shaft is positioned in front of the rails providing up to 2 + inches more critical bump absorbing travel than your current suspension. This added stroke better isolates riders from the major jolts and jarring of frontal impacts.

Coupling is KING -

Stock suspensions with their long-front/short-rear-arm geometry deliver only a limited amount of coupled travel. The KING-AIR employs full-parallelogram

geometry generating lots of coupling that dramatically reduces rail to bump contact angles. This "angle flattening" generates the bump bridging you need to top the dreaded stutters - no need to slow down there!

New Bypass Shocks -

TeamFAST has rethought and improved their bypass valving technology. They now allow free-er travel at mid-stroke while providing greatly increased control at the upper and lower ends of travel. And they are now employed in both rear shocks, doubling their effect.

Going Remote -

Front-arm shocks on rider-forward sleds are critical in delivering the smooth finesse we all seek. TeamFAST has found





King Karpik Talks About the New KING-AIR Suspension

We caught up with Gerard "King" Karpik to get the inside scoop on the KING-AIR rear suspension, its development and the goals of this new design. Here's what the King himself had to say;

"We've got 2 years of development into the package and it will earn any attention you give it.

There has been a selloff of G-bump performance by the OEMs for ride quality elsewhere. We noticed that opening and set our target at increased breadth of the comfort zone and good G-bump performance in our suspension, and to be certain the KING-AIR has the widest in the industry. We did all kinds of work over the last 2 seasons including everything from rising rate arm geometries, to internal shock redesign and extra hydraulic bump stop systems - all in an effort to better handle G while not losing anything we had everywhere else.

You'll notice that the linkage arms and external bump stops never made it to production. The cost/benefit wasn't there, and our new shocks offered better control and return. In that work we've gotten on top of that most challenging bump profile and now handle everything from "G to shining G" without trading in our superior air-ride quality elsewhere. As for our overall ride spec we went for a lighter, more spirited feeling off trail while focusing on G-bump performance. This is the best suspension for fun flying over rough trails - that anyone's money can buy.

We are also trying to make it easier to own our systems going forward and have started a program called Q-Mount. In that system our goal is to have the effort of stock suspension removal and install of ours reduced. The first Q-mount kit is aimed at the Viper/Sidewinder & AC Procross chassis. On these, our base KING-AIR installation can be accomplished in just one hour."



that by employing a remote reservoir on the front arm shock they could achieve large gains in small and medium bump control, and the KING-AIR features it.

Unfair Advantage -

The unique rolling-lobe air springs on the KING-AIR'S shocks provide an optimally-progressive spring rate and a major weight reduction. Comparatively speaking the best coiled-steel springs can offer is preload adjustment, as you're stuck with the factory-specification spring rates.

While air-cylinder shocks offered by other manufactures claim you'll "float" they actually create overly-progressive spring rates that are difficult to set for wide ranging snow conditions. By setting the air pressure in the large volume air shocks on the KING-AIR you can adjust the preload and spring rate in tandem to tailor the ride to your weight and riding style, providing the enjoyment of the widest sweet-spot for all conditions.

*Available for
121" - 137" track length sleds.
Arm Colors: Orange or Black
Rail Colors: Titanium or Aluminum
MSRP: Starting at \$1,895*

Contact TeamFAST at
218-744-2101 or visit
www.TeamFAST.com to learn more.

