# **Mainway Solutions**

## **Greasable Suspension Bushings for REV-XP**

Story & Photos | Brad Harris

Regardless of the OEM, every new snowmobile is assembled with little to no grease in the front and rear suspensions' pivot points. Don't believe me? Go remove an A-arm from your brand new ride and you'll be shocked to see no grease. We can all make our own assumptions as to why the pivoting points and rotating assemblies that have a very significant effect on our suspensions' performance are greaseless but we can all agree that the outcome is premature wear of those points and sub-standard ride quality. The easiest and cheapest way to ensure you are getting the best durability and performance out of your front and rear suspensions is to grease them, regularly. The same applies to your used or high-mile trusty old sled. But herein lies the problem. Almost all front A-arm suspensions do not have grease fittings and most of the new rear suspensions have far fewer grease fittings than they did 10 years ago. Mainway Solutions offers a solution (not just a clever name) to this problem with greasable suspension bushings and parts. Using hollowed bolts with grease fittings along with axles with ports for the grease to flow through, each pivot point can have a kit installed to allow them to be greased easily.

For the time being, they are only offered for Ski-Doo models in the original REV, REV-XP, XR, XS, XM, and new Gen4 REV chassis. For those riding Polaris, Arctic Cat, and Yamaha sleds, it's still worth a call to Mainway Solutions.

Mainway Solutions has gained a loyal customer base and great reputation with Ski-Doo owners for offering a great product. A quick search on Dootalk.com shows a lot of happy customers. So, we figured we should try this product out on a popular late model Ski-Doo, a 2012 MXZ TNT 600 ACE with SC-5 rear suspension and REV-XP front suspension (predecessor to the RAS 2) with only 1300 km on the odometer.

We ordered every available kit for the 2012 REV-XP including some very handy tool kits that really help in the removal and installation process. We used the following kits;

- MSK01 Greasable Control Arm (A-arm) Bushing Kit XP/XM/XR/XS 2008-2016 Incl. RAS 2 - \$179.00 (comes with MST04 Alignment Pin and 8 Black Caps)
- MSK02-1 SC-5 Greasable Swing Arm Bushing Kit



Original plastic bushing with axle and bolt. No grease from factory. Corrosion is common during storage after the first season of use.



MSK01 Greasable Control Arm Kit. Note the ports for the grease to travel through the bolt to each pivot point.

- 2008-2013 120-137 SC-5 \$150.00
- MSK03-1 SC-4/SC-5 Rocker Arm Bushing Kit 2005-2013 SC-4 & SC-5 with aluminum rockers - \$22.25



New upper A-arm bushing kit installed with easy access for the grease gun.

- MSK04-1 SC-4/SC-5 Rear Link Arm Bushing Kit - 2005-2013 SC-4 & SC-5 - \$17.25
- MSK05-1 SC-5 Rear Arm Bushing Kit \$65.00
- MSK07 Stabilizer Bushing and Axle Kit 2008 to current using 72064 plastic bushing - \$25.00
- MST01 Swing Arm Bushing Installation/Removal Tool - \$23.00
- MST05 Drill and Tap Kit 1/4-28 \$7.25

#### **Front Suspension**

Depending on how many km's you put on, after a season or two of riding the bushings in the A-arm pivot points will be pretty much worn out and/or corroded badly. Ski-Doo models are equipped with plastic bushings from factory and they don't have a very long life expectancy, especially without grease. Within 2000 km of riding it's not unusual to find significant play in the A-arm mounting points which



New lower A-arm bushing kit installed, ready for grease.

has a negative effect on the handling of the sled and can cause the sled to dart on the trail.

Using the supplied instructions we installed the MSK01 kit in the A-arms without issue. When removing the original bushings and axles we noted there was no grease.

We also installed the MSK07 Stabilizer Bushing and Axle Kit for the sway bar. This seemingly unimportant kit is well worth the time and effort to install and has the potential to impact the corning ability of the sled quite a bit. This kit removes the free-play between the sway bar and the chassis and in doing so helps the sway bar start to resist body roll much earlier in a corner, or much sooner in the body roll motion. In short, it helps keep the sled flatter in the corners. Not only that, but it will also dramatically reduce the noise produced from the sway bar contacting the stock bushings when pitched form side to side. The tolerance is much tighter than that of a brand new sled with this kit.

NOTE - if you can have these photos side by side as one photo the caption can read "MSK07 kit with new axle and set screw on the outside and additional bushing on the inside for increased support and reduced freeplay."





MSK07 kit adds an additional bushing for increased support and reduced freeplay.



MSK-03-1 Rocker Arm Bushing Kit adds new, wider bushings as well as grease fittings to both pivot points. This is the linkage between the centre and rear shock. Free movement is important



MSK02-1 Greasable Swing Arm Bushing Kit ready to install on the rear suspension's front arm.



MSK05-1 SC-5 Rear Arm Bushing Kit. Note how easy it is to provide grease to this important pivot point."

### **Rear Suspension**

The rear suspension contains many more pivot points vs. the front suspension and is source for ride quality and thus the enjoyment you get out of riding your sled. A properly functioning rear suspension requires lubrication to rotate and pivot easily, letting the springs and shocks absorb the energy. As the resistance to movement increases at the pivot points, the suspensions performance (ride quality) is reduced. In short, a greased up suspension is going to move much easier and ride much better than a dry suspension. The difference is definitely noticeable.

Some of the kits we installed, like the MSK04-1 SC-4 /SC-5 Rear Link Arm Bushing Kit aren't necessary on a low mileage or new sled but are recommended for replacing worn parts on a used sled.

The MSK03-1 SC-4/SC-5 Rocker Arm Bushing Kit however, is highly recommended as it adds grease fittings to an important part of the rear suspension that would otherwise go dry and add unnecessary friction, reducing ride quality.

The main kits we installed, and the most popular for replacing stock, worn out, bushings are the MSK02-1 SC-5 Greasable Swing Arm Bushing Kit and MSK05-1 SC-5 Rear Arm Bushing Kit. The stock bushings they replace are the

most common wear points in the SC-5 rear suspension and to me it makes total sense to use greasable bushings that will prevent more work in the future. As expected, the stock bushings we removed had no grease present.

The instructions provided are good with important notes included. Our installation went very well however we recommend taking your time and reading the instructions a couple times as there are a few tricks that are mentioned to make the install go smoothly. The instructions must be followed for a successful installation.

#### Summary

After our first review of the product when it arrived and during the installation process we were very impressed with the quality of the bushing kits. The difference here is that this stuff isn't being mass produced, it's made by a snowmobiler who saw a need for a product and decided to make it, right here in Canada. You can tell the owner cares. Take for example the high Grade 8.4 bolts that replace the stock counterparts, which can handle a much higher torque and clamping force for added safety and durability. The great part about dealing with Mainway Solutions is that Val, the owner, is available by phone or email to gladly help out with any questions or issues you might run into.

We'll be putting as many km's as possible on the 2012 TNT this winter and there's no doubt we'll be getting the best possible performance out of the front and rear suspensions with the least possible amount of wear.

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