

## **INSTALLATION GUIDE**

SAAB 9-3: 2003-2011





**COILOVER SUSPENSION** 

### **BEFORE YOU BEGIN**

Please use this as a guide to installing your Maptun XT Coilovers in your Sport Sedan/Convertible/Combi. Always make sure to get a proper alignment after doing any kind of suspension work. The proper way to align coilovers is with a weighted alignment.

Please note that within this kit there is two universal rubber isolated brake hose brackets that is required for Saab 9-3 2003 – 2005. The OEM brackets for 2006-models can also be used as an alternative but has to be purchase separately. Part numbers for those parts is 12772033 and 12772032.



## **TOOLS YOU WILL NEED FOR THIS INSTALL**

- External Torx Sockets/Wrenches
- Metric Sockets/Wrenches
- Hex Sockets
- Pry Bar
- Angle Pliers
- Paint Marker/Pen
- · Angle Grinder
- · Hydraulic Jack
- Jack Stands (please always support a car you're working under by jack stands)

## **TABLE OF CONTENT**

•	Removing stock front suspension	page 4
•	Installing front coilover suspension	page 7
•	Removing stock front suspension	page 10
•	Installing rear suspension	page 11
•	Adjusting suspension - front	page 16
•	Adjusting suspension - rear	page 17

### **STEP 1: REMOVING STOCK FRONT SUSPENSION**

Starting out with the front - you don't need to remove the rotors as you see in the pictures, although it does make it easier to install the new suspension.

First off remove the sway bar end link. You may need to use an angle grinder here depending on where you live.

It is recommended to replace the end links with new ones.



Next remove the brake line hold down and the wheel speed sensor wiring. You can use an angle pliers on all of this including the plastic hold down for the wheel speed sensor. Gently pull that off since it will be reused.







After this you will remove the two lower bolts on the strut assembly. Note how they are facing toward the rear of the car. On reinstall you will want to make them face the front for easier install of the bracket that holds the brake line/wheel speed sensor wiring. Remove these by loosen up the nut to the end of the bolt then tap them out with a hammer. Then completely remove the nut and pull out the bolt. Pry the bottom of the strut away from the knuckle with a small pry bar.



At this point you can remove the 3 bolts from the top and remove the strut.



Below you will see the difference in height between the Stock Aero front assembly and the Maptun XT Series Assembly. This is at the height the Maptun XT Series Assembly came out of the box.



Before installation on the car, the spring must be adjusted to a default setting. Unscrew the lower spring seat (pos. A) so that the spring just makes contact with the upper and lower spring seats. After this, the lower spring seat is screwed up 5mm to get the correct pretension on the spring.

Lock the setup with the spring seat locking ring (pos. B).



### STEP 2: INSTALLING COILOVER FRONT SUSPENSION

Next up - it's time to install the Maptun XT Front Strut Assembly. This is pretty much the opposite that the removal process was with a few tweaks.

Start by tightening down the top 3 nuts.

ote: On this photo you can also see the coilover front ne tuning/adjustment of the camber setting.



t this point you will want to adjust the collar/bracket for ne sway bar link. Make sure that this collar/bracket is s high up as possible agains the spring seat. See photo ith illustration (1).

ou also want to make sure that this is at the same eight on both sides. To get the same height: measure the gap (2) between the collar/bracket and the spindle tount. Adjust both sides of the car to the same height.



Next you will install the two bottom bolts in the assembly with the nut end facing toward the front of the car.

Also make sure that the upper bolt is in the center of the oval holeof the spindle mount. This is a good default setup for front camber angle.



After this grab your new brake hose/wheel speed sensor wiring bracket and the paint marker. You will have to take this and line it up then notch it out to fit in the right area of the Maptun XT Series strut flush.

In this example an angle grinder was used.





The area marked in yellow should be notched out.



In this photo the area has been notched out and the bracket is fitted.

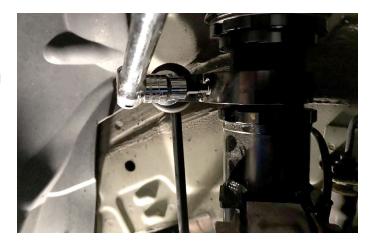


After fitting the notched out bracket tighten the nuts down and then add in the wheel speed sensor wiring then the brake hose with the clips removed from the factory strut.





Once the brake hose and speed sensor wiring are back in place take the sway bar end link and line it up with the mount. Take the link and tighten it down then snug the set screw up. The set screw does not have to be cranked down, it just needs to be snugged up as to not cause damage to the threads.



At this point if you've disassembled the brakes reassemble them. And you're done and can go on to the next side and repeat the steps above.

Continue on for the rear assembly.

### STEP 3: REMOVING STOCK REAR SUSPENSION

For the rear - if you are on the drivers side and have xenon headlights - remove the leveling arm for these (not pictured in this guide). The leveling arm is a small arm connected to the lower control arm and a black box on the body. Just remove the bottom portion, this is usually takes a 10mm wrench and socket to do.

From there start with removing the rear shock. There are 3 bolts in the top mount (only the lower corner actually has to be removed, the other two can just be loosened). And one on the bottom.

In these pictures the the mount and shock has already been removed.





Next remove the bolt holding the lower control arm to the knuckle. SUPPORT THE CONTROL ARM WITH A JACK since this will be under pressure (the spring is already removed in the picture below. After this bolt is out you will be able to lower the jack (SLOWLY) and then remove the spring by pulling down the arm.



## **STEP 4: INSTALLING REAR SUSPENSION**

Here is a comparison between a stock Aero Convertible rear spring and the Maptun XT Series Spring. Both with (1) and without (2) the spring seat and adjuster.





Next take the lower adjuster and adjust it to the desired height. Measure the gap (1) between the spring seat and adjust to the same height for both sides. Make sure to snug the bottom locking ring to ensure the adjuster can't move.



Example of highest (2) and lowest (3) positions.





After adjustments it's time to reinstall the spring.

You can use the stock spring isolator to ensure a quiet ride. You could remove the isolator for a more firm ride, however it'll also make more noise and could damage the spring perch - which is not recommended.

Take the spring and install it in the control arm. There are two options for placement of the spring seat; top or bottom position of the spring.

**Option 1:** Place the spring seat adjuster in the bottom of the spring, on the lower control arm. This option is most accessable for adjustment of the ride height.





OR

**Option 2:** Turn the spring around so that the spring seat adjuster is on top of the spring. Mount the spring seat adjuster to the upper suspension mount. This option is better suitable for very low ride height setups. This is because the spring seat will be better fixed to the spring when the suspension is fully extended (for example when the car is lifted for inspection).

Choose one of the options and install the spring. Use the same option for both sides. Slowly raise the control arm with the jack so it meets the body (but does not lift the car off the stands). Reinstall the lower control arm bolt.



Now that you've installed the spring you can concentrate on installing the rear shock. First off remove the stock shock from the upper mount - unless this is cracked or damaged. If the upper mount is cracked or damaged replace it.

To install the rear shock on the shock mount first put the small washer (included with the Maptun XT Series rear shock) on the bottom. Set the shock mount on top of that then top with the large washer and the nut. Tighten down this combination with a maximum torque of 25Nm.









Once this is complete you're ready to reinstall the rear shock. Take the rear shock and cut the zip tie on the botom. DO NOT LOSE, DAMAGE OR MISPLACE the other half of the busing that comes out - its a two part bushing and must be installed that way. First attach the mount to the body and tighten down - then reinstall the bottom of the shock to the lower control arm.







If you removed the xenon level arm please make sure to reinstall that. If you removed the brakes for the installation make sure to properly reinstall the brakes as you removed them.

Repeat for the opposite side of the car and you're done!

### **STEP 5: ADJUSTING RIDE HEIGHT - FRONT**

### **FRONT SUSPENSION**

When adjusting the height of the front suspension of the car, loosen the lower locking ring (D) against the spindle mount with bracket (E). And also the holder for the sway bar link (C).

Rotate the entire strut: clockwise to lower the ride height and anti-clockwise to increase ride height. The spindle mount with bracket (E) will remain fixed to the wheel hub and the threaded strut with spring will turn.

Make sure to retighten the lower locking ring (D) so it fits snugly to the spindle mount (E).



## STEP 6: ADJUSTING RIDE HEIGHT - REAR

### **REAR SUSPENSION**

When adjusting the height of the rear suspension of the car, loosen the locking ring (G) against the spring seat (F).

Rotate the spring seat (F) clockwise to lower the ride height and anti-clockwise to increase ride height. The threaded adjuster (H) will determine the ride height.

Make sure to retighten the locking ring (G) so it fits snugly to the spring seat (F).



# **NOTES - FRONT SUSPENSION**

# **NOTES - REAR SUSPENSION**

### If anyone has issues, questions or anything please contact info@maptun.com



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