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**DDMWorks 3-way adjustable Sport Shocks
 DDM-18-2**



The DDMWorks sport shocks offer a great increase in handling over the stock shocks. This simple upgrade is customizable by you, the driver, to make the handling of the Slingshot suit your driving style.

If you are pretty handy with tools these Coilovers can be installed in under an hour, however we suggest that you schedule at least a couple hours for the installation.

If you have any questions during the installation you can call or text (864) 907-6004 or email us at Tech@ddmworks.com.

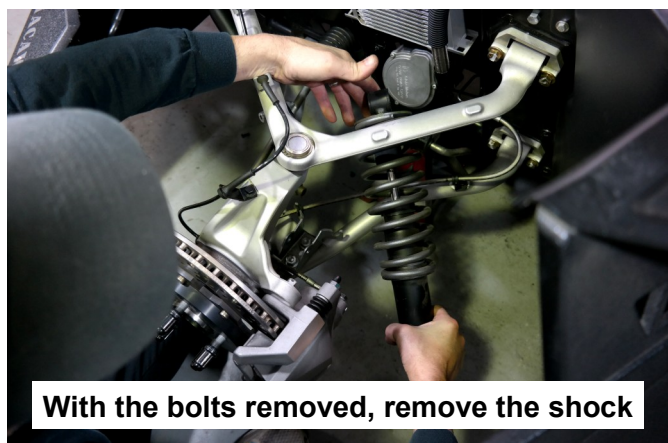
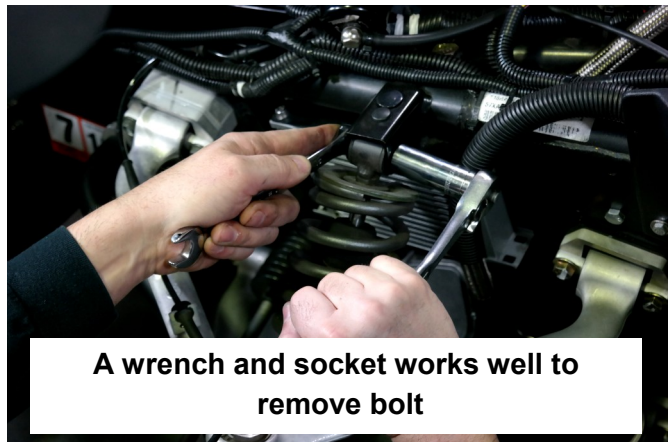
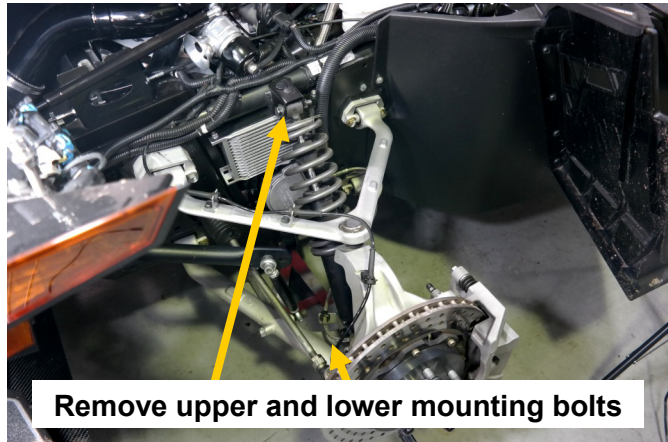
TOOLS NEEDED

15mm and 17mm deep well sockets and drive
Jack and Jackstands
General purpose grease
A friends helping hand is helpful

QTY	PART DESCRIPTION
2	Front shocks with spacers installed
1	Rear shock with spacers installed
1	Set of Adjustment wrenches

Removing the Stock Front Shocks

1. To remove the stock shocks, your Slingshot will need to be put up on Jackstands. Lift from the frame rail underneath and support both sides of the front frame with jackstands. Before putting the Slingshot up on jackstands, make sure to just loosen your lug nuts slightly (do not remove), as once the Slingshot is in the air on the Jackstands, it will be more difficult to break the lug nuts loose.
2. Now that the Slingshot is supported by jackstands, loosen the lug nuts all the way and remove the 2 front wheels.
3. With the wheels removed you will see the front shocks connecting between the upper frame and the lower control arm. There is a single bolt in each location that holds the shock in place. Using a combination of wrenches or sockets, remove the nut from the back of the bolt on the top and bottom. Once the nuts are removed, you can push the bolt out of the top mount first, angle the shock down toward the engine and then remove the lower bolt.
4. Now remove the lower mount bolt. With both bolts removed, you can remove the stock front shocks from the Slingshot.



Installing new DDMWorks Adjustable Front Shocks

1. Installing the new shocks is going to be just a reverse process of removing the stock shocks. Start by removing the zip tie on the lower mount of the new shocks. The lower mount is the side that has the adjustment knobs. The lower mount has 2 spacer washers that need to be installed to space the shock in the lower mount on the control arm.

The lower mount uses 2 spacer washers, a little grease will help hold them in place



2. If you put a little bit of grease on the spacer washers, they will hold themselves in place while you install the new shocks.

3. Install the bottom of the new shock first, slide the bolt through the lower mount making sure that there is a spacer washer on both sides of the shock. Once the bolt is through, install the nut on the bolt, but do not tighten it down yet.



Install the new shocks into position

4. Next, cut the zip tie holding the spacers on the top of the shock and install the top of the shock into position. Once it is in position, slide the bolt through and tighten the nut to 35 ft/lbs of torque. Also, tighten the lower nut to 35 ft/lbs at this point also.



Install the bolt and nut and tighten both the top and bottom to 35 ft/lbs

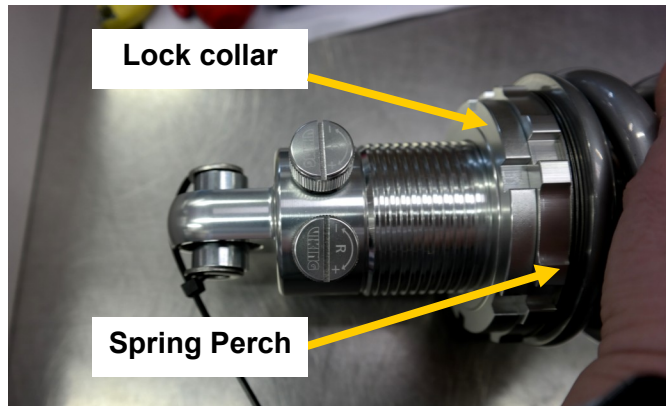
5. The front shocks are not shipped at stock ride height as it makes installation a little tougher. So at this point you will use the wrenches included to adjust the spring perch to the stock ride height and also make the initial adjustments to the shocks.

Adjusting ride height on the DDMWorks Adjustable Front Shocks

1. With both of the front shocks installed you will now need to set the front ride height. The front shocks are shipped at a lower ride height to make installation easier. When the front shocks are shipped out, you will find that the measurement from the bottom of the shock to the spring is around 2". For a stock ride height, that measurement will need to be 4".



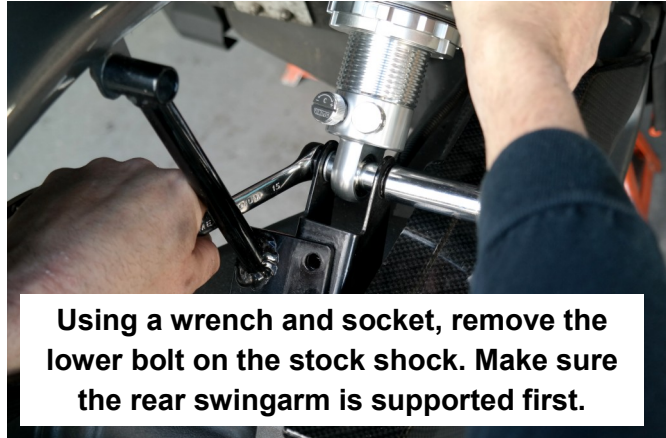
2. If you are not familiar with coilover adjustments, here are some basics to help you adjust them. First off, never adjust the spring perch without it being lubricated. A little bit of anti-sieze on the threads of the shock body will make the adjustments much easier and keep the shock body threads from possibly getting messed up. This can be wiped off after adjustment is made and finalized.



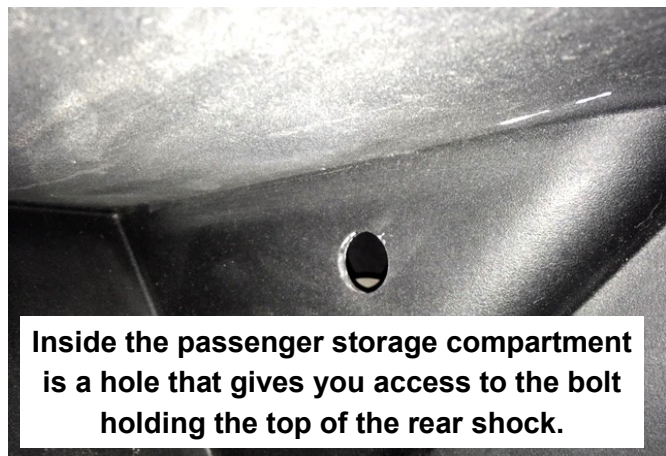
3. There are 2 separate parts to the lower spring mount, a lock collar and the spring perch. The lock collar is there to lock the spring perch into position after you set the ride height. You will also find that there are 2 different wrenches included in your kit, one has a larger opening that fits the spring perch and one has a smaller opening for the lock collar.
4. If you want to make the vehicle sit higher, you turn the spring perch from left to right, which will compress the spring more and put more "pre-load" on the spring and cause the Slingshot to sit higher. If you want to lower the Slingshot, you turn the spring perch from right to left and reduce the amount of preload on the spring, which lowers the Slingshot. Adjusting the springs is also easier with the Slingshot wheels off the ground. Once the ride height is where you want it to be, use the wrench with smaller opening to tighten the lock collar to the spring perch which will make sure the ride height stays. Set your front shocks at 4" at this point unless you want to lower your Slingshot, a good start for a lowered Slingshot is a 3.5" measurement from bottom of shock to spring.

Removing the Stock Rear Shock

1. Removing the stock rear shock is very similar to the front shocks. We also recommend removing the rear tire when doing this install. Although it is not needed, it makes the operation a little easier. Jack the Slingshot up and secure it on jackstands. There is a single bolt on the bottom and a single bolt on the top holding the shock in place.



2. We will start by removing the lower bolt first. Before removing that lower bolt, you need to make sure that the swing arm is supported, since once the shock is removed, if nothing is supporting the swing arm, it will drop down. Typically we use a jack to support the rear swingarm when doing the shock install.



3. With the rear swingarm supported, remove the bolt and then lower the swingarm down a couple inches, which will give a little better access for the top shock mount bolt.

4. To get to the top mount bolt, you will need to go into the storage compartment behind the passenger seat. In the back of that storage compartment toward the top you will see a small hole.

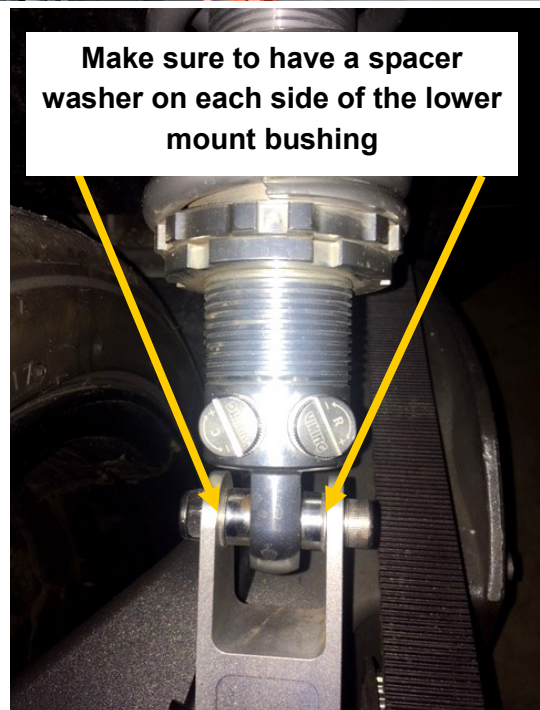
5. Using a deep well 15mm socket you can loosen the bolt holding the top of the rear shock.

6. Once that bolt is loose, from the back of the Slingshot, lift the shock up as much as you can and some people will be able to reach up and remove the bolt holding the shock. Some people will have to pull it out of the storage compartment, this really just depends on the size of your hands.

7. Once the bolt is removed, the shock lifts out easily.

Installing new DDMWorks Adjustable Rear Shock

1. The new shocks will get installed with the adjustment knobs close to the mount on the swingarm. Remove the zip tie on the top of the shock and insert it up into the hole where the stock shock was removed.
2. If you have someone that can help for this next part, it is helpful. You need to get the bolt started on the top mount of the new shocks. With one person, it is a little tough to hold the shock and reach up with the bolt to get it started. With 2 people you can have one person hold the shock and reach up and help guide the bolt into the shock. Once you get the top bolt started, do not tighten it yet.
3. With the top bolt started, use the jack and jack up the swingarm until the lower shock mount lines up with the mount on the swingarm. When installing the shock into the lower mount make sure that you keep a spacer washer on each side before inserting the lower mount bolt.
4. With both bolts started now, tighten down the bolts to 35 ft/lbs of torque.
5. The rear shock comes adjusted to stock ride height already from us. You can choose to lower the Slingshot if you would like to by lowering the spring perch and decreasing the spring pre-load on the spring. The shock ships with a 4" measurement from the bottom of the shock body to the bottom of the spring, we suggest starting at 3.5" if you want to lower the rear of the Slingshot. Make sure to apply anti-sieze to the threads before adjusting and also remember it is easier to adjust the spring perch with the wheel in the air.



Adjusting the damping on the DDMWorks Adjustable Shocks

1. All of the shocks are sent out at full soft on compression and rebound from us. Looking at the shock adjusters (2 knobs on the bottom of the shocks), you will see one that has a “C” and one with a “R”. The “C” is for compression or when the shock becomes shorter and the “R” is for rebound when the shock gets longer. The shocks have 19 “clicks” of adjustment for both compression and rebound. All setting below are clicks off of full soft.

2. For a ride quality/street setup we suggest the following initial settings—

Front Shocks: 1-4 compression; 4-8 rebound

Rear Shocks: 0-3 compression; 2-5 rebound

In general, for good handling and excellent ride quality, the rebound should be set roughly 2 to 6 clicks higher than the compression. For example, a good starting point for the street is 2 clicks off of full soft on compression and 6 clicks off full soft on rebound for the front. For the rear 1 click off full soft compression and 3 clicks off full soft rebound for the rear. Each click is from full soft how the shock is shipped. To make sure you are starting from full soft, turn each knob counter-clockwise (-) direction, then turn the knob clockwise (+) the number of clicks you want to go to. If you lose count or want to start over you can always turn the shocks full soft again and start over.

3. For a Handling/fun mountain road setting we suggest -

Front Shocks: 8-10 compression; 10-14 rebound

Rear Shocks: 6-8 compression; 8-12 rebound

4. For a Autocross setting we suggest -

Front Shocks: 10-14 compression; 14-18 rebound

Rear Shocks: 6-10 compression; 10-14 rebound

5. For a drag racing setting we suggest -

Front Shocks: 12-18 compression; 0-4 rebound

Rear Shocks: 0-4 compression; 4-10 rebound



Final Installation Notes

With the initial settings for ride height and compression and rebound you will have a much improved handling Slingshot. You can continue to adjust the ride height and shock settings to dial in your suspension to your liking.

Because of all the different options we see on Slingshots, these settings are just a suggestion that should be a good starting point. Some Slingshots may need a little more compression or rebound adjustments with some other aftermarket parts to work optimally. If you have any questions while adjusting your DDMWorks shocks, feel free to contact us and we will help guide you through the adjustments.



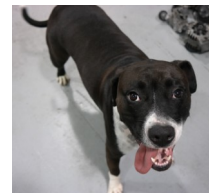
Congratulations! You have successfully installed your new DDMWorks Adjustable Sport Shocks!



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Tech Support

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This product is
Buddy the
Turbo Dog
Approved!

