

The following photos and instructions are to install the 928 Motorsports, LLC.

Complete Hypercoil/Koni Performance Spring Kit

with Ride Height Adjustment Sleeves



Questions? Call our toll free number 877-FOR-928M or send an e-mail to info@928motorsports.com



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We recommend you read all these instructions before beginning.

Remove the front or rear shocks from your 928 following the instructions found in the 928 Workshop Manual, Section 40. Disassemble them according to the instructions in that section also.

If you are not sure what you are doing, it is recommended you only disassemble one spring and shock at a time. That way you lessen the risk of mixing the parts up, and if you get stuck, you can always go to the other side of the car and look at it for reference.

NOTE: you will need a spring compressor to safely disassemble the shock and spring assembly. Some of the parts will be re-used during assembly, the next pages will tell you which ones.

BE CAREFUL—THE STOCK SUSPENSION SPRING IS PRE-LOADED AND CAN COME OFF WITH FORCE! USE AN APPROPRIATE SPRING COMPRESSOR.



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The Koni shocks in your kit will come out of the box with the ride-height adjustment sleeves already on them for your convenience.

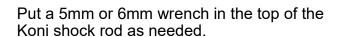
Screw the adjustable lower spring perches on them, and place the white plastic washers on the top as shown here:

For starters, set the front lower spring perches at their bottommost position, and the rears about 1.5" from the bottom as shown.





It is easiest to put the preliminary rebound adjustment in the Koni's now. They can be adjusted again later, but it's easier to put the initial settings into them now.



Place the shock on the floor and press the shock rod all the way down until it hits the bottom. That is where the valve is. Turn the wrench as you push down and you will feel it drop into place.



Continue pressing down and turn the valve clockwise gently until you have gently closed the valve. Note the direction your wrench is pointing, and open the valve (counter-clock-wise) 1 full turn (360 degrees) if it's a front shock; and 1.5 turns (540 degrees) if it's a rear shock. Let go, and the shock will slowly rebound up. They are adjusted and ready to install now.



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Front Koni/Hypercoil Installation

This diagram shows the order of the stock parts on your 928 **front** shocks. We will be referring to this diagram through the next pages.

Assemble yours from the bottom-up as follows:

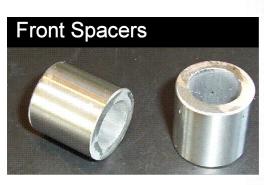
The stock spring perch (Item 10) is not used. The Hypercoil will set directly on our adjustable lower spring perch.

NOTE: the short springs are the FRONT springs. The long springs are for the REAR.

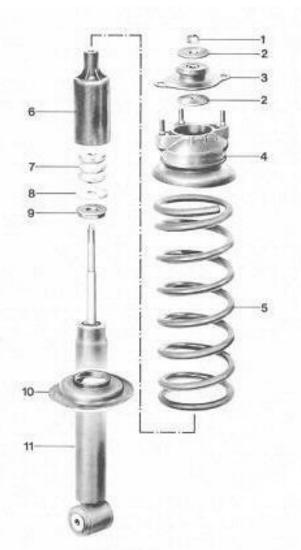
Re-use your shock snubber (Item 7) from your old shocks or replace it if it is bad. We have new and improved ones if you would like.

The dust boot (Item 6) is not used.

Substitute the steel spacers we provide.







Do not forget to install the shock snubber! It is an important part of your suspension. Let us know if you need new ones. We have them in stock.



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Front Koni/Hypercoil Installation

Now set the Front Upper Spring Perch Adapter atop your spring.



Your front shock and spring assemblies should look like this at this time. You can see the springs are on the adjustable lower perches, the shock snubber is on, and the stainless steel spacer is in place.

Although you needed a spring compressor to take apart your old spring assemblies, you will not need one to assemble your Hypercoils.



Then you can place the stock upper spring perch atop our spring perch adapter.





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Front Koni/Hypercoil Installation



The large washer goes back on top now. It is Item 2 in the diagram, and it is important it be installed with the domed-side up.

Now place the rubber shock absorber mount (Item 3) atop of everything else, and then secure in place with the other washer (this time dome side down) and the new nut from your kit.





Mount the shock and spring into the car just as before.

In this picture, the customer has our steel upper A-arm. Yours may be aluminum.

You may want to screw the lower spring perch off the bottom of the threaded section, allowing the spring to fall, in order to help you get the spring and shock assembly through the center of your A-arm.

Finally, when the assembly is in the car, adjust your ride height by raising the lower spring perch.



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Rear Koni/Hypercoil Installation

This diagram shows the order of the stock parts on your 928 **rear** shocks. We will be referring to this diagram through the next pages.

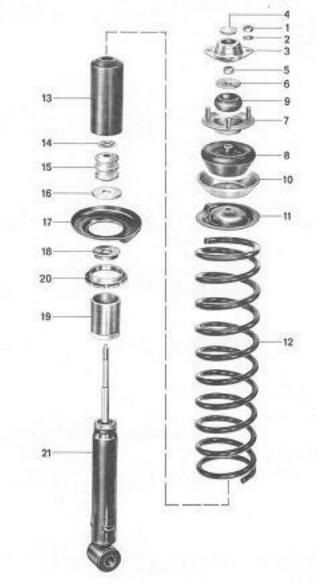
Assemble yours from the bottom-up as follows:

The stock spring perch (Item 17) is not used. The Hypercoil will set directly on our adjustable lower spring perch.

NOTE: the short springs are the FRONT springs. The long springs are for the REAR.

Re-use your shock snubber (Item 15) from your old shocks or replace it if it is bad. We have new ones if you need them.

The dust boot (Item 13) is not used. No spacers or substitution is needed.



After you have set your rear spring onto the spring perch, set the Rear Upper Spring Perch Adapter atop the spring.





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Rear Koni/Hypercoil Installation

Your rear Koni/Hypercoil should look like this at this time.

Now put the stock pieces you previously removed (Items 11 through 1 from the diagram) all in place to complete the assembly.

Note that the stock upper spring perch <u>is</u> used, and it nests right on top of our aluminum spring perch adapter.





When you are finished, you are ready to mount the shock and spring assembly back in to your 928.



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When you are finished, the 928 will need to settle the suspension again because you lifted the car. This is whether or not you have worked on the car—every time the 928 is lifted and then put back down it will sit high initially. The Porsche manual instructs you to drive the vehicle 3-5 Km (2-3 Miles) to settle the suspension. *Then* you can see what the true ride height is and adjust as needed.

If you find that your 928 sits very high even after you have driven it as above, please follow the instructions on the next page.

RIDE HEIGHT ADJUSTMENT

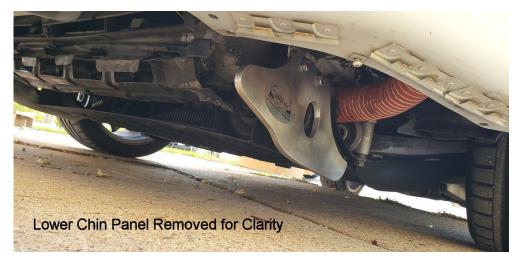
If you decide that you want to adjust the ride height of your 928, proceed as follows:

Adjusting the height of the car is a simple job of turning the lower spring perch (the gold colored spanner nuts) up or down. However: this is difficult to do with the weight of the car on them.

So, lift the car to take the weight off the spring and spring perch, turn the spanner nut, and put the car back down. Removing the tire makes it easier to reach the spanner nut. Adjust the position of the perch by turning the gold colored spanner nut, and count the number of threads from the bottom of the spring perch to the bottom of the threaded collar. That way you can make the other side match when adjusting it. Put the tires back on, then drive or bounce the car to resettle the suspension, and remeasure.

Recommended: If you decide to lower your 928, be sure to install a pair of our **Protection Plates** on it to prevent damage to your alternator, air conditioning compressor, and front chin spoiler when you go in and out of steep driveways.

They are available in the BODY section of our website, or by calling us at the number below. They bolt on easily to all 928 models in just minutes.





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OPTIONAL INSTUCTIONS If you find that your 928 sits very high after you have replaced your shocks, and will not settle down.

CAUSE: This is usually because the mechanic pushed the front suspension down aggressively to make it easier to get the shocks out. The front lower control arm may not be able to come back up on its own, and needs a little help.

THE CURE: Lift the front of the car and loosen the 4 bolts on each side that hold the lower control arm to the frame. In the picture below, they are numbers 19 and 22. Loosen the bolts about 2 turns each. Then put the car down on the ground and bounce it a few times. A good way to do this is to open a car door and stand on the sill, then rock the car up and down. Then go to the other door, open it, and repeat.

Once the car has settled, reach under the car and tighten those bolts up again. You must do this without jacking up the car. Then you can jack up the car and torque them correctly to 85 Nm, or 65 ft lb.

