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Top mount renewal & new koni shocks (rough guide)

Over that last few months, the handling of the coop has become quite unacceptable. Not actually heard clunks/bangs, but the car would wander around in a straight line under acceleration and braking.

Also would pull slightly to one side under heavy braking conditions.

I am going to attempt a 'how to'. Remember I am no mechanic; therefore some of the techniques I may outline below may be quite wrong. So if you copy them, and manage to damage your car or yourself, I take NO responsibility.

Here goes...... Parts required

2 x Plastic/ rubber top mount bearing
2 x Top mount plates
2 x Rubber Bumpstops
4 x Anti Roll Bar bushes
2 x Koni Adjustable shock absorbers (Part no 8641-1320Sport)
Copper grease

Tools Required Sockets & Spanners....10,13,17,19mm 4 & 12mm Drill bits Drill Junior hacksaw Torque Wrench (Optional) Spring compressors Flat screwdriver Centre punch Hammer A little bit of Luck



The first procedure is to jack up the front of the car and support on axle stands.

Use the below position for the axle stands. It's out of the way of the areas you will need

Right, we are now ready to begin removal of the front suspension.

You will now need a 17mm socket. To remove the ARB bushes. It's a good idea to replace these with new ones. Only about 60p each from AA, or about £5 for 4 from Fiat.



I only changed my tie rods about 5 month ago, so I'm only renewing the bushes. You can easily re-new the tie rod with bushes now.

The next step I applied the spring compressors. As you I thought you don't really want to remove the whole Macpherson strut with the spring tension being held by the top strut bolt.

Let the compressors take the load. A quickly released spring can cause serious injury or death. 🐨



With the spring compressors in place its time to start taking out bolts.

I first loosened the top strut nut. I used a long bar to make the job easier. You will need a deep 19mm socket for this. Don't completely remove the nut, just take out the tension so you can remove it when the strut is off the car.



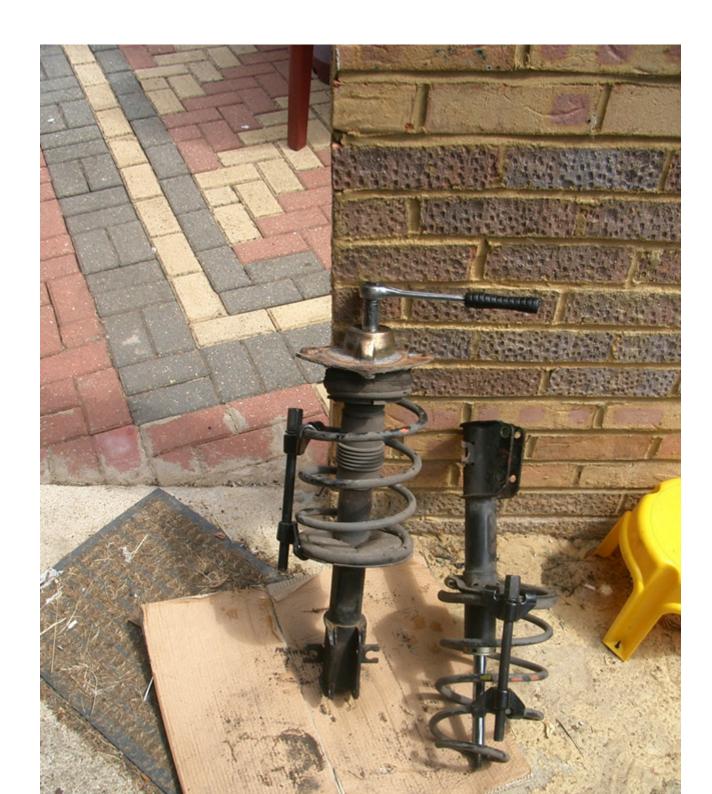
You can now remove the three top mount bolts. You will need a 13mm socket for this. Note the bolt to the rear (out of view) is a bit of a pain to reach. To make life easier, unclip the plastic fasteners for the wiring loom and pull up gently. You should then expose the bolt.

Now remove the 10mm nut holding the abs sensor wire to the strut, and a flat headed screwdriver to remove the clip holding the brake hose.



The two 19mm nuts are visible in the above picture. You will need a 19mm ring spanner to hold the bolt whilst releasing.

When the bolts are all removed, push the shock absorber back & down to release it from the top and mount. Pull it away carefully from the car. You should have extracted this ;



The old stuff that come off the car. Notice the bumpstops are still like new after 5 years. Obviously I don't drive that hard round the corners.....



That looks knackered.....



The bearing was stiff as well....

Now should you have KYB or other make of shocks, it's simply a case of renewing the complete strut. But if you have Koni, you're automatically opted for a little bit more work.



Note, I am keeping the original springs. I like the 4x4 look...lol

FITTING THE KONI INSERT DAMPERS

To get the Koni inserts to fit, you need to do a bit if butchering.

Firstly turn the strut upside down, and mark the centre with centre punch and hammer.

Then drill a 4mm hole as below;



This will release the gas from the shock.

Now, this is where you will need a bit of elbow grease. (Or a angle grinder)

Cut off 39mm from the top of the strut. You can use a junior hacksaw. Slow, but does the job.



Here's one I done earlier

You will get some oil leak here. So get a container ready to empty it onto. In my case. One shock had no oil left....

Once you have done this, enlarge the bottom 4mm hole to 12mm. Make sure you remove any filings and burrs (sp?)

Now you can insert the Koni Shock, and fix it into place via the washer and nut, to the bottom of the strut. Everything should line up.

Now assemble the strut again, with new top mounts and bearings.

As they say......fitting is the reversal of removal......

Best of Luck.....