

1. Ion to Cobalt spring conversion

I got a how to here but its a Redline thing so here we go .

Step1. The task is to install cobalt size Pedders springs on a Redline. The top hat and spring diameter are different on the Cobalt, (smaller) so stuff has to happen. You need some Cobalt parts (new top spring plate) some secret shims from me. I shoulda replaced the lower plastic gasket for looks I have it I did not. Damn fone keeps ringing while I work

Step 2. Jack the car up jack stands etc, or hoist whatever do it safely, remove wheels.

Step 3. support control arm,(undo leading control arm bushing bolts if you have spherical trailing arm bushings which limit travel in service operations) undo top spring retainer,

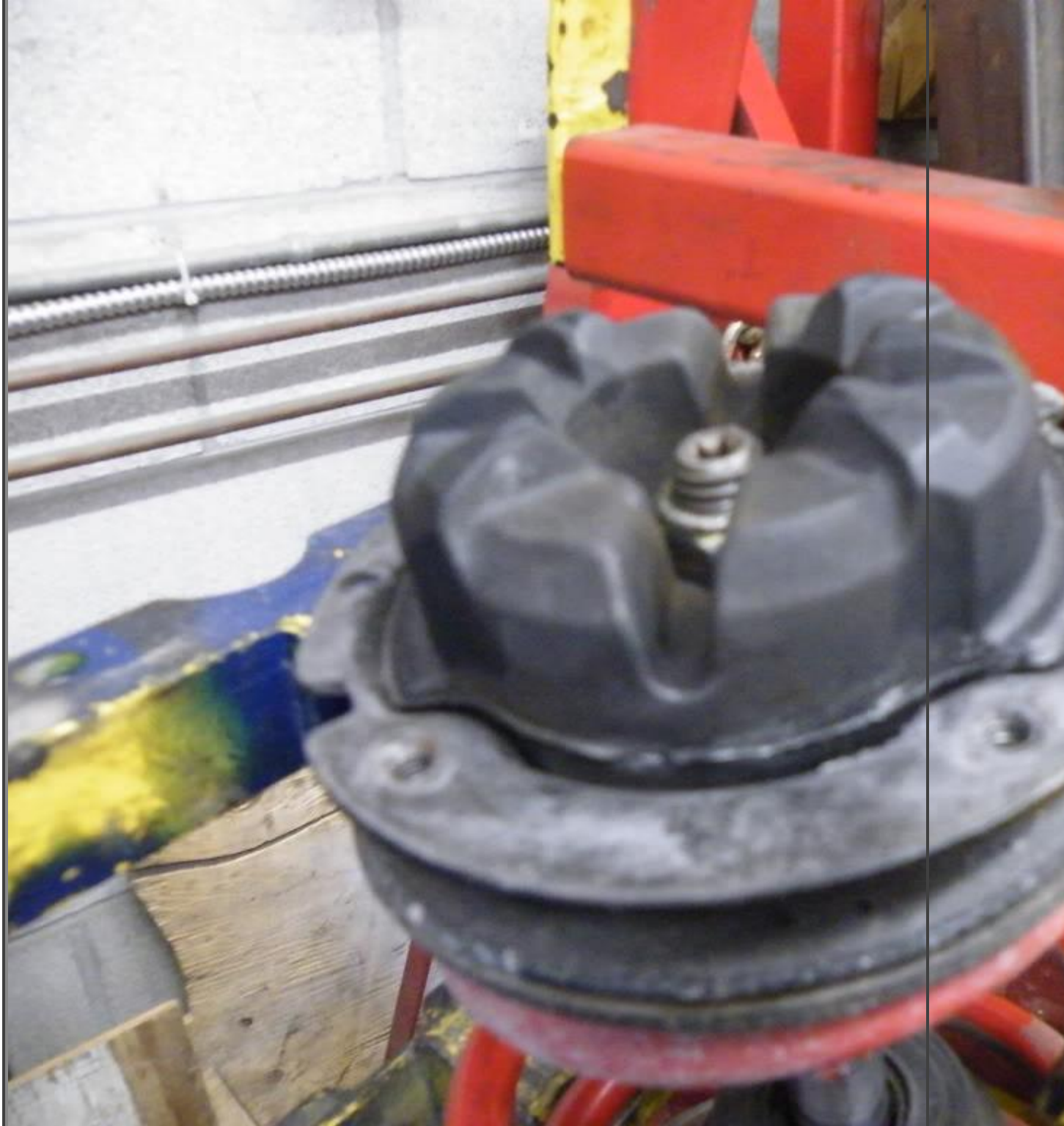


remove strut to knuckle cross bolts (takes a hammer to knock them out as they are a spline fit in the knuckle dont damage the

threads, put the nut back on if you are a clumsy ijiit or use a center punch) undo abs connector remove abs wire retainer plate and remove strut. Be carefull not to pull back on rotor as you will pop the axle out of the trans and spill fluid like I did. (Put a drain pan out next time , Qwik)

Step 4. Go to spring compressor place strut assembly in it, compress spring, and remove top mount.





This is a modified strut with Cobalt top plate but the spacer was

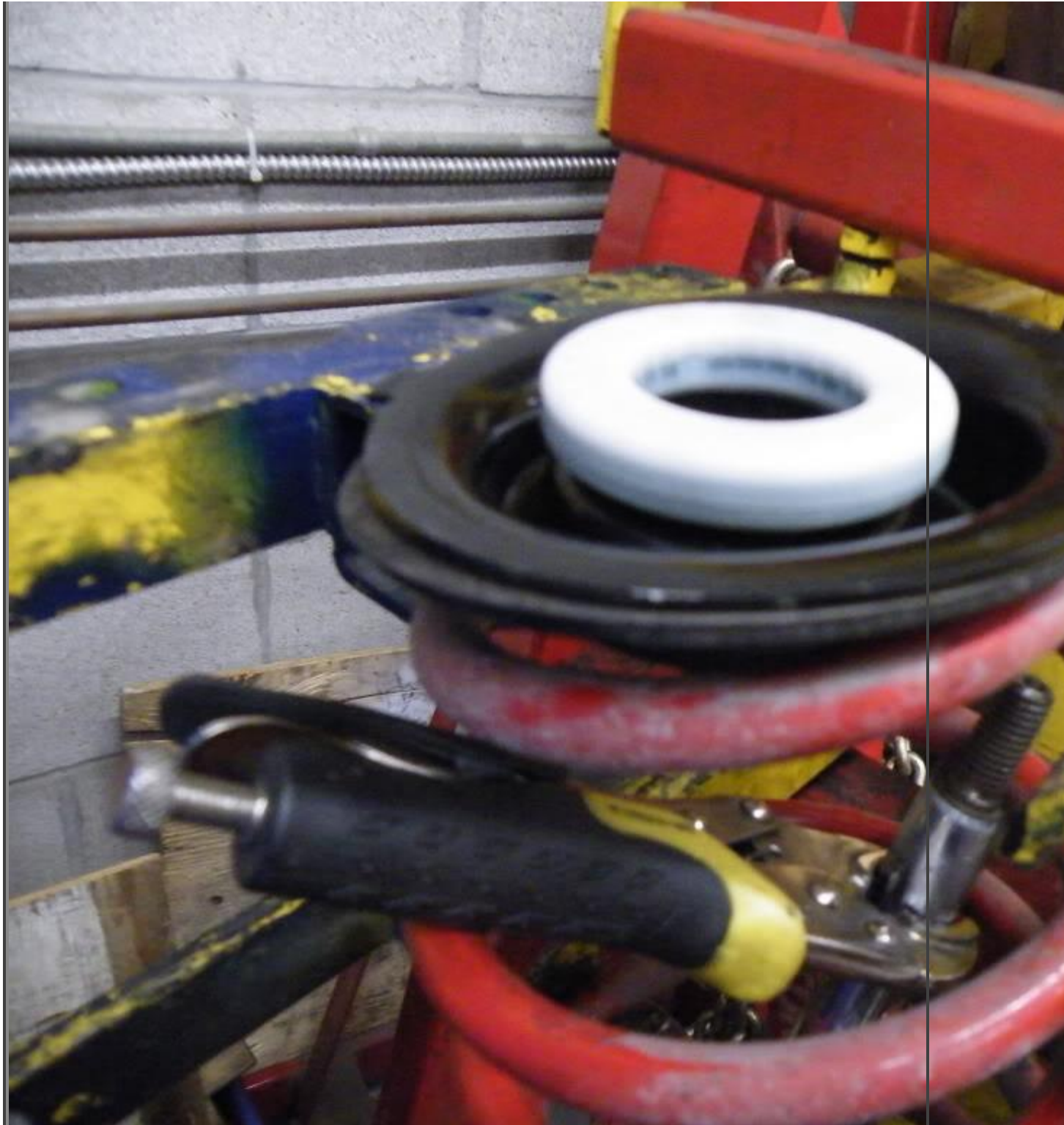
not enough. So the top mount rubs on the spring hat; see the witness marks.



If there was no spacer there is brutal big spring clanking and banging.

Step 5. Install new shims (as of 2013 we now use one shim, .125 thick so only one shim not two is required,) a new bearing is worth it onto new hat, and new spring rubber isolator. Install new hat with shims under the bearing. If using two shims, I prefer to put the thin spacer down first and the thick one second then the bearing. Or the thin one on top of the bearing. You have to place them so that they cannot be displaced when assembling the top mount...

Make sure the bearing is not displaced when you install the top strut mount, and then release the spring compressor. Rotate the top strut mount assembly so that you can ensure it is centered and not binding on the hat, before you remove the spring compressor. If it is not right, compress spring and check your work.



Try to ignore the soft jawed vice grips to hold the strut up while I took pictures....no helper.....

Step 4 . Line up the top spring hat tab with the end of the top spring coil. VIP.



Torque stuff up. On the Redline the top strut mount is a simple stud so it dont take big torque if you reef on it you will pull the stud out. 81 ft lbs

The nut to shaft takes the big torque (56 ft lbs then the rubber isolator goes on. Use anti seize on the threads of the little torx bolts. DONT overtighten these little suckers. Do them up with a 1/4 drive ratchet....torque value is 89 inch lbs.

Step 5 Put the sucker back in the car.

You are done.

Rear:

Need: heat gun, silicone spray, bfh (deadblow if possible)

Also for the rear pedders: the end with a "D" shaped loop put in the black lower isolator, do it this way:

Place isolator on floor nipple up: Heat black isolator nipple with heat gun, concentrate on the top, circular motion, a minute or two then spray with silicone, insert end of "D" pigtail in between the vertical ribs and press down.

Turn spring upside down to install the top isolator. Early redlines had an all brownish red one with a hard disc pellet inside.

Remove disc carefully with flat screwdriver, then place isolator on floor nipple up. Heat a little, silicone , insert spring and push. May need a tap with bfh to finish. Install spring into twbeam,

lower first. Both sides/ then raise twisting beam carefully, springs can get cocked and not insert right.

Install shock be careful the lower mount (21 mm socket) bolt does not go in parallel to the ground. Then insert top shock mount. 66ft lbs top mount, 81 lower mount. U be done!

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