

HOW TO INSTALL YYZ SPRINGS

Cobalt/HHR and Ion are different.
with the Cobalt/HHR you can get away without a spring compressor. With an Ion its 100% not possible to do the job without a spring compressor.

For cars with Powell trailing cabs: For those who have my trailing cabs undo the leading CAB bolts as well, so you can get enough travel to remove the strut from the knuckle; the cabs have enough travel for suspension movement, but not enough over rotation travel for dropping the knuckle out of range to do the spring swap.

Ions also need a conversion package that we make up to use Cobalt YYZ smaller upper diameter front springs on an Ion. Rears are the same on either car no modification required.

Before you jack the car up, loosen off the main strut nut. If it rotates, you can ghetto the removal by using a 47mm torx through a 21 mm socket, use vice grips on the socket, and use the torx with an extension to hold the strut shaft. Or use the proper tool (50 dollars or so) If you car has Powell trailing cabs, always loosen the leading cab bolts when changing springs.

Then jack the car up. 4 stands

Remove wheels.

Remove drop link from strut only. Use rust penetrant on all threads, hold the drop link if stock with vicegrips from behind; its awful. If the end links are corroded, **allow two hours of crap dealing with this**, cutting torch works well! And replace with powergrids or moog. 18 mm socket for the nut. Its a 30 second job if the end links are okay.

No spring compressor method: NOTE cannot work on Saturn Ion strut mount spring assemblies.

remove the two strut bolt nuts, put the abs cable plate to one side; put jack under ball joint. Take up slight load. Do not drive strut bolts out if you are not using a spring compressor.. Then remove upper strut nut and lower the strut assembly carefully, lowering the control arm with the jack as you do so. When the spring pressure is released, you can now drive the strut bolts out.

Spring compressor method:

Support the lower control arm with a jack (**If you have Powell trailing cabs, also loosen off the leading cab bolts /two, 15 mm socket head**) remove the top strut mount bolts (there are three, 13 mm socket head) and lower the assembly; then drive out the lower strut bolts.

Remove strut assembly and install spring compressor and release the tension on the top mount by compressing the spring.

Clean the assembly up, install new springs with cleaned up lower isolator and use rust paint or corrosion proofing grease over all of it; place bottom spring end in slot on strut lower plate. Place upper plate and **isolator with tab in the 11 o clock position as you look at the strut in the car, OR the tab at the spring coil end of the top coil.** For Ion spring conversions, using the smaller Cobalt spring hat, place **the spacer provided underneath the bearing** before assembling the strut mount.



If you are not using a spring compressor, now install the strut carefully in the car, making sure the bearing is not displaced, and put the lower strut bolts in to the knuckle strut assembly. Dont forget with Powell trailing cabs the leading bolts must be loosened off. Then jack the arm up under the control arm carefully, making sure the bearing seats right, and moving the strut shaft by hand to go through the upper mount and catch the threads on the shaft with the nut.

Tighten the nut as much as you can by hand

Then go back and finish re-assembling the lower end. Torque the nuts to 48 ft lbs for the sway bar end link. 41 ft lns for the leading control arm bushing bolts. 89 ft lbs for the strut to knuckle bolts.



NOTE THE TAB POSITION AT THE END OF THE SPRING WIRE



EVEN THIS FAR OUT CAN LEAD TO SPRING AND BEARING ISSUES. IT MUST BE POSITIONED CORRECTLY



When the car is down on the ground tighten up the upper nut 52 ft lbs for the strut nut to shaft. **For Redlines are different; For Redlines, the strut shaft nut to mount is 52 ft lbs; the top cap small bolts are 124 inch lbs each (four 6 x 1.0 bolts) and the top strut cap to tower nut is 81 ft lbs.**



For F23 cars with no intermediate shaft on the passenger side, there is a long axle on the passenger side; releasing the lower control arm leading cable bolts will help that a bit as well. A good helper goes a long way!

For the rear springs, remove the rear wheels undo the shock from the upper bolt (19mm socket) both sides, leave the lower bolt alone people strip the threads too much. Then use a pry bar to remove the spring assembly. Remove the isolators with pry bar and clean.

Use a heat gun as shown to install the lower isolators, and place the dead coils UP, Powell YYZ print so it is upside down t.

A heat gun really makes the isolators a snap to install at the rear, compared to any other way... but the latest springs v.2 on, don't require anything other than a light press fit no more than 60 seconds of heat seems to work best, don't melt it. Rear top shock nut is 66 ft lbs (19 mm socket heat) lower is 81 ft lbs (21 mm socket head) **the lower bolt enters at an angle compared to the ground be careful not to cross thread the bolt.**



the rear upper go to the lower part of insulator sideways



then use the flat side of a bfh to get it in. put something soft under the spring to avoid abrasion

install the springs at the rear both sides, use a jack to raise the twb and have someone watch the opposite side so they both seat.



The Redline upper rear spring isolator is different and very good. Remove the internal plastic disc to remove the isolator easily, then re and re the isolator, and replace the internal plastic disc inside, once the isolator is in the spring.

torque the shock bolt to about 66 ft lbs top, 81 ft lbs lower..

u r done/. ps corrosion coat everything.

Road test to seat springs and then check front toe in. Zero to 30 minutes toed in .

Enjoy

