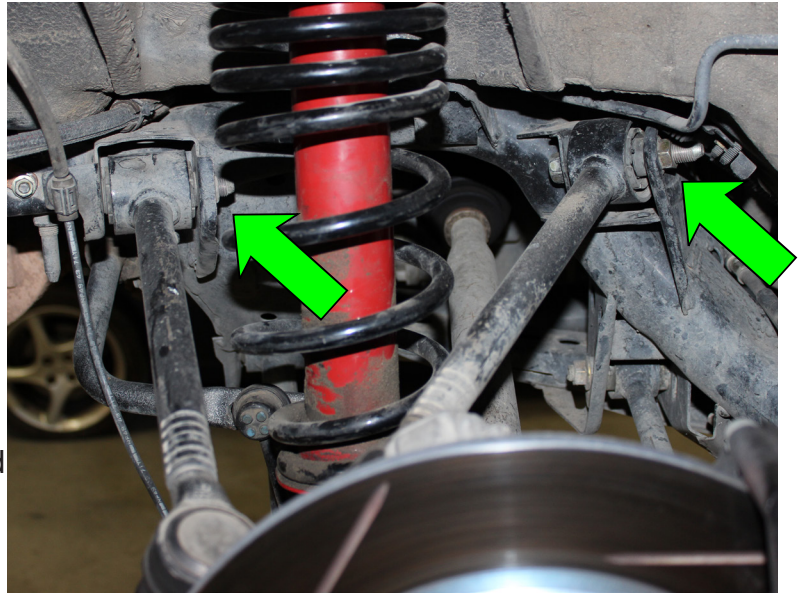


Flyin' Miata

NC shock and spring installation tips 13-16XX0

Congratulations on purchasing our NC suspension package! This will transform your car, and is almost a necessity - at least as far as we're concerned. Following are some hints to help ease the installation process. Please note that these are not step-by-step instructions, as there are only a few places where the installation of our parts deviates from the installation of the stock parts.

- You'll reuse your stock shock mounts / top hats as well as the stock bump stops.
- Unbolt the end links (all four) from the control arms or sway bars to allow the control arms to move.
- Unbolt the upper front control arm from the subframe in order to allow easier removal of the shock and spring assembly.
- Unbolt both upper links (as indicated in picture) to ease removal of the rear shock and spring assembly. The upright will fall away once these are unbolted, so pay attention.
- Access the rear shock mounts by removing the plastic trim in the trunk. There's one bolt on the rear shock mount / top hat that goes in from the bottom.
- Pay attention to the order of the bushings and such that you'll be reusing; be sure to match the order and orientation when you assemble these parts on the new shocks. You'll need to drill the washers out to 12mm (15/32") for Koni Sports.



The image below shows the assembly order of the front upper shock mount components. The factory spring isolators (rubber dust boot part that also installs above the spring) are not shown in this assembly order and are optional. Whether or not they are installed will have a subtle affect on ride height. The rear shocks will be the same other than the rear upper shock mount having a much different appearance.



- **Do NOT over tighten the nut on top of the shock! Tighten to 37 lb-ft.**
- **Do NOT tighten any of the rubber bushings (lower shock bolt, upper inner control arm bushings, etc) until the car is on the ground, with its weight on its wheels and has been rolled a few feet.** The bushings must be in their static positions when you tighten them, otherwise the ride height will be incorrect and your bushings will fail. Along those lines, loosen and re-tighten **ALL** of the rubber bushings once the car is back on its wheels. This is true with all cars, but especially NCs.
- Koni shocks are adjustable (**but not pre-set**), so you can adjust the damping to suit your driving style and preferences. We recommend that the front damping be set 3/4 of a turn from full soft and the rear damping be set at 1 1/4 turns from full soft. In other words, using the included white plastic adjuster, spin the knob in the opposite direction of the “firm” or “+” symbol, without forcing anything, then turn it back accordingly. These are just starting points for both shocks, feel free to tweak as needed.
- Our springs lower the ride height of the car, so you’ll need a new alignment. We recommend:

Front

Caster: 5.0 degrees
 Camber: 1.0 degrees negative
 Toe-in: 1/16” total

Rear

Camber: 1.5 degrees negative
 Toe-in: 1/16” total

Conversions

1/16” = .15° = 9 arcminutes

Koni part numbers:

Front shocks: 8241 1243SPORT
 Rear shocks: 8241 1244SPORT

Torque numbers

Shock shaft: 37 lb-ft
 Shock mounts (front): 34-46 lb-ft
 Shock mounts (rear, from the top): 34-46 lb-ft
 Shock mounts (rear, from the bottom): 17-23 lb-ft
 Upper front inner control arm bolts: 62-72 lb-ft
 End links: 32-45 lb-ft
 Lower shock bolts front: 58-76 lb-ft
 Lower shock bolts rear: 65-88 lb-ft
 Lower rear link (as indicated in the picture): 80-100 lb-ft