Flyin' Miata Installations



NB KONI STR.T SUSPENSION INSTALL TIPS 13-58319



Thank you for purchasing our Flyin' Miata suspension kit for your 1999-2005 Miata! These directions are not intended to replace a shop manual and don't attempt to cover the whole installation. They will, hopefully, give you a few pointers specific to our setup. If you have any questions during installation or suggestions for improvement to the product or the instructions - please don't hesitate to call or email.



WARNING: Not everyone can perform every installation. It is critical that you be honest with yourself in regards to your ability. We're more than happy to help, but there are only so many things we can do from the other end of a phone / computer. If in doubt, discuss the install with us before you dive in. Improper installation could cause injury and / or death!

Front shock part number: 8050 1043

Rear shock part number: 8050 1044

- First you need to remove the stock shocks and springs (as an assembly) from your car.
 Disconnecting the sway bar end links will make this process much easier, as will removing the bolt holding the upper front control arm to the subframe. Use a lever to move the rear control arms down.
- Once the assemblies are out, you'll need to remove the shock mounts / top hats. Be sure to use a spring compressor (carefully!) to safely do this..
- Our bump stops do have a top and a bottom. Be sure the tapered end points down.
- Because of their valving, we do not recommend these shocks for cars with aftermarket springs. They do not have sufficient damping to control a spring with a higher spring rate, and the car will pogo around as if it had bad shocks.
- Be very careful tightening the nut on the top of the shock shaft! It's
 possible to over-tighten this nut. Be sure the threads are clean and
 lift the lower control arm with a jack. Tighten the nut to 37 ft-lbs and
 do NOT over-torque. A broken shaft (much like a scratched shaft) is
 not a warranty, and you'll have to purchase another shock. Be sure
 to install the supplied lock washer before you install the nut.
- Tip: It is common to have the shock shaft rotate while trying to torque the nut at the top of the shock shaft. If this happens to you, we recommend installing the shock assembly into the car and setting the car onto its wheels so that the suspension is loaded. This usually is enough to allow the top nut to be tightened to spec.
- Any rubber bushings in the suspension system that are loose will need to be tightened
 while your car is at its ride height. Since the STR.T perch heights match those of your
 factory shocks, you only need to worry about the lower shock bushings as well as any
 bushing loosened for the install.



Our alignment recommendations are below. Negative toe (toe-out) in front will give a slightly faster turn-in, may make the car a little darty for daily use and will wear tires faster. For a street car I would stick to a little positive toe (toe-in).

Front

Caster: 5.0 degrees

Camber: 1.0 degrees negative Toe-in: 1/16" total (1/32" per side)

Rear

Camber: 1.5 degrees negative Toe-in: 1/16" total (1/32" per side)

Conversions:

1/16" toe = 0.15° = 9 arcminutes

Torque Specs:

Upper shock nut: not to exceed 37 lb-ft

End links: 32-44 lb-ft

Front lower shock bolts: 69-86 lb-ft Rear lower shock bolts: 54-70 lb-ft Upper shock mount nuts: 22-27 lb-ft

Front upper inner control arm bolts: 87-101 lb-ft Front lower inner control arm bolts: 69-83 lb-ft

Rear upper control arm bolts: 40-56 lb-ft Rear lower inner control arm bolts: 54-70 lb-ft Rear lower outer control arm bolts: 47-54 lb-ft

