



NC MX-5 Miata / Mazda RX-8 Shock Spacer Lift Kit



Thanks for purchasing our lift kit for NC Miatas (2006-2015) and all RX-8 models! Please read these instructions in their entirety before beginning installation. We've designed this kit to achieve the maximum amount of lift possible while retaining all factory suspension components. We recommend using factory shocks/springs with this kit, or aftermarket shocks with close-to-factory spring rates. Most aftermarket coilovers for lowering will be WAY too stiff. Depending upon your intended use for the vehicle, you may or may not choose to retain the swaybars after lifting the car. First of all, if you DO choose to keep the swaybars, we recommend ONLY using factory swaybars, as they are "softer" and will not limit the wheel travel like aftermarket stiffer swaybars will do. Some people will choose to disconnect or remove the swaybars completely. This will allow for the most independent suspension performance, which is great for all-terrain/offroad conditions, but will compromise body roll control on the street in a more traditional on-road environment. Be sure to get a safe "feel" for the car after doing any sort of suspension/wheel alignment modifications or adjustments, and allow for some "tuning" of the suspension to work best for the car's intended use. We are always happy to assist with suggestions if you get stuck - just drop us a note.

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 result in vehicle damage or injury.



Parts List:

Front Spacer Brackets - 2x

Rear Spacer Brackets - One Left and Right Pair

"PACO MOTO" Offset Brackets - 2x - (RX-8 kit ONLY)

M8x60mm bolts - 2x

M8 flat washers - 2x

M10x20mm flange bolts - 10x

Tools Required:

Socket wrench and/or combination wrenches - Sizes 10,12,14,17,19

21mm socket with breaker bar/Torque Wrench for wheel lugs

Before we begin the installation, there are three important keys to the installation which we will stress to achieve the best performance and prevent damage to the suspension:

- 1. Make sure to loosen ALL pivot points of all control arms and suspension links to allow the components to move freely to allow for easiest installation of the shock spacers.**
- 2. You MUST do a 4-wheel alignment following the installation. We recommend camber settings of around 0.5 degrees negative in front and around 1 degree negative in rear. Set front and rear toe to 1/16" "IN", and use max Caster where possible. Adjust as necessary.**
- 3. Following the wheel alignment, the suspension bolts/nuts must ONLY be tightened and torqued with the car on the ground and its weight on the wheel/tires. Tightening the bolts with the car in the air and suspension drooped will cause ride height issues and will likely damage and tear the rubber in the suspension bushings.**

OK, now that we have the basics covered, let's start by raising the car securely on jackstands or a lift and remove the wheels.

Mark all eccentric bolt locations (in the event you want to revert to stock height and roughly the same alignment)

Disconnect the swaybar endlinks from the swaybars at all four corners.

Disconnect the front AND rear suspension level sensors (both located on left side arms/links only). This will prevent damage once you drop the suspension to provide room for the lift.

As mentioned before, loosen ALL suspension pivot points so the suspension can move freely and not be bound by the torsion of the rubber bushings.

Loosen and prepare to remove the all four lower shock bolts.

In front, remove the two upper control arm inner pivot bolts to allow easier manipulation of the front coilover assembly.

Remove the three nuts from the top of each FRONT shock tower to allow the coilover assembly to drop down (This may require removal of shock tower bar for access). Be careful not to stress the brake lines once the suspension is able to drop so low.

Install the front spacers on the front tophats, replacing the factory plastic shims on top of the new spacer. The orientation of holes-to-studs is not important between the tophat and spacer. Use the three factory nuts to attach the spacer to the tophat and tighten to roughly 40 foot-pounds. Reposition the assembly back into place and use the supplied M10 bolts through the shock tower and into the nuts in the spacer. Tighten these bolts to 40 foot-pounds and reinstall the upper control arm bolts.

In the rear, loosen but do not remove the M8 bolt (14mm hex) that's on the exterior side of the upper shock mount.

Inside the trunk, remove the carpet/plastic trims to access the upper portion of the shock mounts.

If you're installing on an RX-8, you'll need to remove the two nuts and two bolts (all 14mm hex) holding the additional upper bracket (Not Applicable on Miata)

Still working inside the trunk, remove the two 14mm hex nuts from the top of each shock mount.

Remove the lower shock bolt and fully remove the previously loosened M8 bolt that goes up vertically through the shock mount. Carefully lower the rear shock assembly down and out of the trunk area, being once again careful not to stress the brake lines.

Install the rear spacer over the rear shock mount and secure with the factory nuts to around 40 foot-pounds.

Reposition the rear shock assembly into place in the shock tower and replace the lower shock bolt. Take your time and work slowly as things can get really tight during reassembly.

Install the supplied longer M8 bolt up through the rear tophat and spacer, into the nut in the body. Use two supplied M10 bolts per side inside the trunk to secure the assembly and torque to around 40 foot-pounds. Torque the M8 bolt underneath to 20 foot-pounds.

If you're installing on an RX-8, use the included offset plates in that version of the kit to secure the top of the shock "cups" to the chassis in their new position. (Not Applicable on Miata)

Reinstall the Wheels/Tires and lower the car to the ground. Proceed with 4-wheel alignment and ONLY fully tighten the eccentric and suspension pivot points with the car resting on it's suspension at static ride height.