



Full Lowering Kit – Manual / Fitting Guide / Instructions



Thank you for purchasing the SUSD Full Lowering kit. Please follow this fitting guide for best practices. Your SUSD suspension kit is covered by a 2 year/60,000km warranty against defects in materials and workmanship. Go to <http://www.susd.co.nz/#!warranty-registration/c20xu> to activate your warranty or to see the full terms and conditions.

Front Spring Installation

Step 1 – Jack vehicle and remove front wheels

Lift the front of the vehicle off the ground ensuring you use chassis stands for safety. Remove both front wheels.

Note: When using spring tensioners shown in Fig 1. To remove the spring from the strut, we recommend fitting them prior to jacking the vehicle off the ground. This will save you from having to screw them down as far. When using spring tensioners Fig 2. remove the strut prior to compressing the spring for removal

Fig 1.

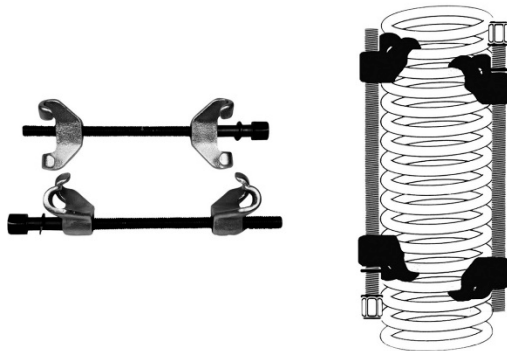


Fig 2.



Step 2 – Remove sway bar links, brake and ABS lines:

Remove both sway bar links from the strut as shown in Fig 1. (remember to torque to 110nm) and remove both brake and ABS lines from the lower control arm Fig 2.

Fig 1.



Fig 2.



Step 3 – Remove axle:

Remove both axles as shown Fig 1. from the diff end CV using a screw driver in the slots of the disk brake and caliper to stop the axle from turning. (Remember to torque bolts to 50nm)

Fig 1.



Step 4 – Remove upper control arm, and strut:

Remove upper control arm bolt Fig 1. (Remember to torque nut to 30nm) then remove lower strut bolt Fig 2. (Remember to torque bolts to 110nm) and top strut retainer washer Fig 3. (accessed from the wheel arch pushing up plastic fenders to provide access. Remember to torque nut to 25nm). Now the strut assembly can be removed from the vehicle.

Fig 1.



Fig 2.



Fig 3.



Step 5 – Remove spring and fit spacer:

Remove spring retainer nut and top hat Fig 1. (Remember to torque bolts to 25nm) and remove spring from the shock. **IMPORTANT:** Ensure this step is done with spring tensioners secured in place for prevent the spring re coiling off the strut!

Now remove standard spring and replace with new lowered springs Fig 2.

Fig 1.



Fig 2.



Now repeat steps 5 and 1 to reassemble the vehicle

Lower the vehicle to the ground, recheck each bolt/nut for tightness then start on the rear

Rear Spring / Shackle Installation:

Step 1 – Jack the rear of the vehicle:

Lift the back of the vehicle by the rear chassis cross member with a jack to take the weight off the rear suspension. By lifting from the rear chassis cross member this allows even lifting on both left and right sides of the vehicle.

Step 2 – Remove existing suspension shackles:

- First loosen and remove the top pivot bolt which goes through leaf spring #1 Fig 1. Holding the spring down will make it easier to remove bolt (Keep clear of spring when removing bolts, as the leaf spring may be under tension and could move suddenly catching fingers – correct adjustment of jack height won't allow this to happen). Then remove the lower bolt #2 Fig 1. (this bolt is threaded into the chassis) and remove shackle from the vehicle. (Remember to torque all bolts to 110nm)

Fig 1. (image shown with replacement shackle fitted). Original shackle shown bottom, SUS replacement shackle shown top in second image



Step 3 – Remove existing leaf spring:

Ensure chassis is supported with chassis stands, then remove and replace leaf spring, one side at a time so other side holds axle in place. First remove u-bolts which attached axle to leaf spring Fig 1. Then remove front bolt attaching leaf to chassis Fig 2. You'll need to remove the rubber bung from the body to allow enough room to remove bolt.

Fig 1.



Fig 2.



Step 4 – Shorten rubber bump stop:

First remove rubber bump stop from chassis Fig 1. Then using a knife, cut the upper section of the bump stop Fig 2. and fit back into chassis mount.

Fig 1.



Fig 2.



Step 5 – Fit new leaf spring:

Firstly fit the front leaf spring bolt. Secondly bolt axle to the new leaf spring using the original u-bolts. Thirdly fit shackle to chassis, fitting lower bolt first Fig 1. A screw driver or pry bar and rubber mallet is necessary to line up bolt holes when fitting leaf spring to shackle.

Fig 1.



Now repeat steps 2-5 on opposite side of vehicle:

Note: The newly installed SUS D link can sometimes appear out of alignment with the leaf spring compared to the original link. This is due to wear of the bushings in the original link and simply requires the spring to be levered back into place to fit the SUS D link (which is set to the factory settings).

We welcome all feedback, this helps us improve. Also we'd very much appreciate any testimonials, or contacts that you think might benefit from susd. Please drop us a note to getit@susd.co.nz or on our facebook page - <https://facebook.com/susdamarok/>



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