

SPL Rear Midlinks for 350Z/G35

Begin by placing the car on a lift or jack stands, remove rear wheels and remove stock rear midlink, spring and upper perch.

The SPL midlink consists of 4 separate pieces, the arm itself, the threaded cup, and the lower spring perch that sits in the cup, and a solid aluminum upper spring perch.



The first step is to install the SPL solid aluminum upper perch. Bend in the tabs that catch on the stock rubber upper perch, to provide a smooth surface for the solid aluminum upper perch. The aluminum upper perch should slide or press/hammer into place, try to line up the bolt hole on the perch with the hole on the chassis. Make sure the perch presses in fully and flat against the chassis.

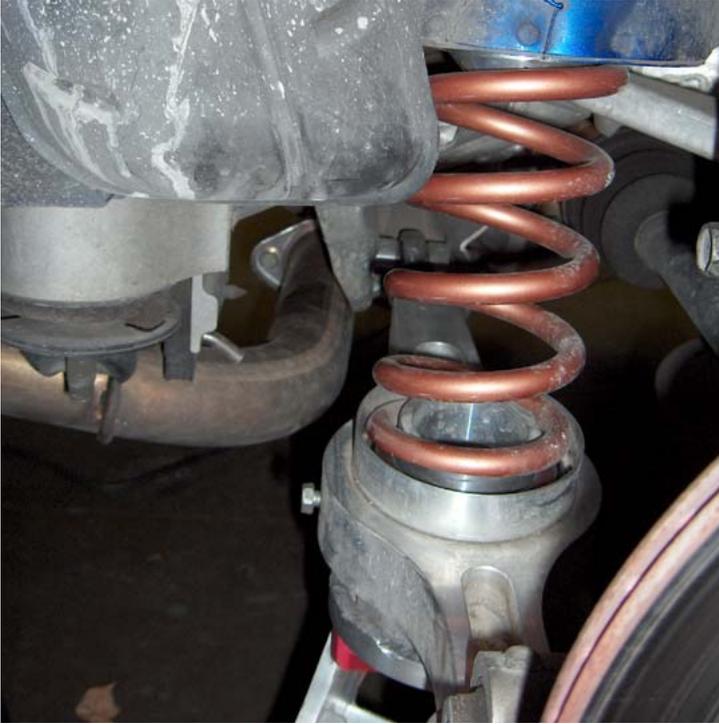
Install and tighten a retaining bolt and nut. The retaining bolt just prevents the perch from falling off during install, once the suspension is loaded the retaining bolt serves no structural purpose as the perch will be pushed up against the chassis by the spring.

Install the end of the midlink that goes on the subframe, do not install the fork/clevis end onto the spindle yet.



Place the supplied Swift spring thrust washer on the upper perch (carbon washer, then steel washer on top), and hold the spring in place on the upper perch.

Place the Swift spring thrust washer (carbon washer followed by steel washer on top) on the lower spring perch. Next, swivel the midlink up to catch the bottom of the spring. Place a floor jack under the midlink and slowly jack it up, keeping the lower spring perch properly centered in the threaded cup. Install the bolt on the clevis end of the midlink and the spindle.



It is normal if the lower spring perch is tilted such that only one end of the perch seems to be sitting on the threaded cup. When the suspension gets compressed the perch will then sit flat on the cup. However make sure the perch is not actually cocked, you want to make sure that the perch will sit properly on the machined opening of the threaded cup when the suspension is compressed.

Setting up ride height

Ride height is set by raising or lowering the lower spring perch by threading up/down the threaded cup. This will take a little trial and error to establish your desired height.

Begin by disconnecting one rear endlink, this is to prevent the sway bar preload from affecting your ride height adjustment.

It is easier to lower the spring perch than to raise it, because you are acting against the weight of the car. We recommend that you start with the spring perch threaded all the way up and adjusting down from there.

Once the midlink and springs are installed, place the car down on level ground and measure the ride height. There is approximately a 1.7 to 1 ratio between the ride height and the height of the spring perch. ie. if you want to lower the car by 1.7 inches, then you need to lower the spring perch by 1 inch. Calculate the amount of adjustment you need to make, place the car on jack stands, and adjust the spring perch accordingly. Then repeat as necessary.

Note that if you are getting the car corner weighted, ride height need not be exactly the same left to right.

Setting up suspension droop

The following is an important step if you have aftermarket coilovers. Setting the rear suspension droop is one of the primary advantages of using aftermarket coilovers, where the shock length can be adjusted.

Place the car on jack stands and measure the length of the shock piston with the suspension fully unloaded. As seen in the picture below, this particular shock has slightly over 5" of travel (slightly over 3" before hitting the bump stops). Next, using the floor jack, slowly jack up on the midlink (using a piece of wood to avoid marking up the midlink) until the car **just begins to lift** from the jackstand/lift at that corner. Measure the length of the shock piston again. The difference is the length of the droop.



We recommend about 0.5" of droop to start with. If you have too much droop, shorten the shock assembly by turning the threaded shock into the lower bracket. For example, if you have 1.25" of droop and want 0.5" of droop, then you need to thread the shock into the lower bracket an additional 0.75". Double check the droop by jacking on the midlink again, adjust as necessary.

SPL HYBRID ADJUSTER

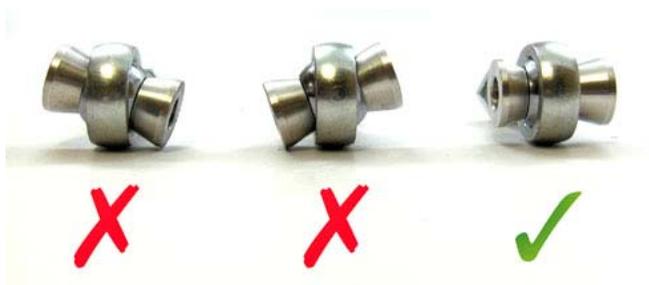
The hybrid adjuster is what is known as a **double adjuster**. On one side the thread is left-handed and on the other side the thread is right-handed. So when the suspension arm is installed, turning the hybrid adjuster will allow you to lengthen/shorten the assembly.

When lengthening/shortening, be sure to keep the arm and rod end from freely rotating when you turn the adjuster. Do not make the following mistakes (threading out **only** the adjuster or threading out **only** the rod end):



This picture shows a properly threaded adjuster. The rod end (heim joint) will thread out about 2/3 the length of the adjuster. Note also the maximum adjustment limits shown in the picture.

This jam nut should be tightened against the body of the arm. To properly tighten the jam nut, hold the adjuster hex with a wrench, then use a second wrench to tighten the jam nut.



The advantage of the hybrid adjuster is that you can easily keep the rod end bearing centered during and after alignment. Make sure to keep the bearing centered as shown.

