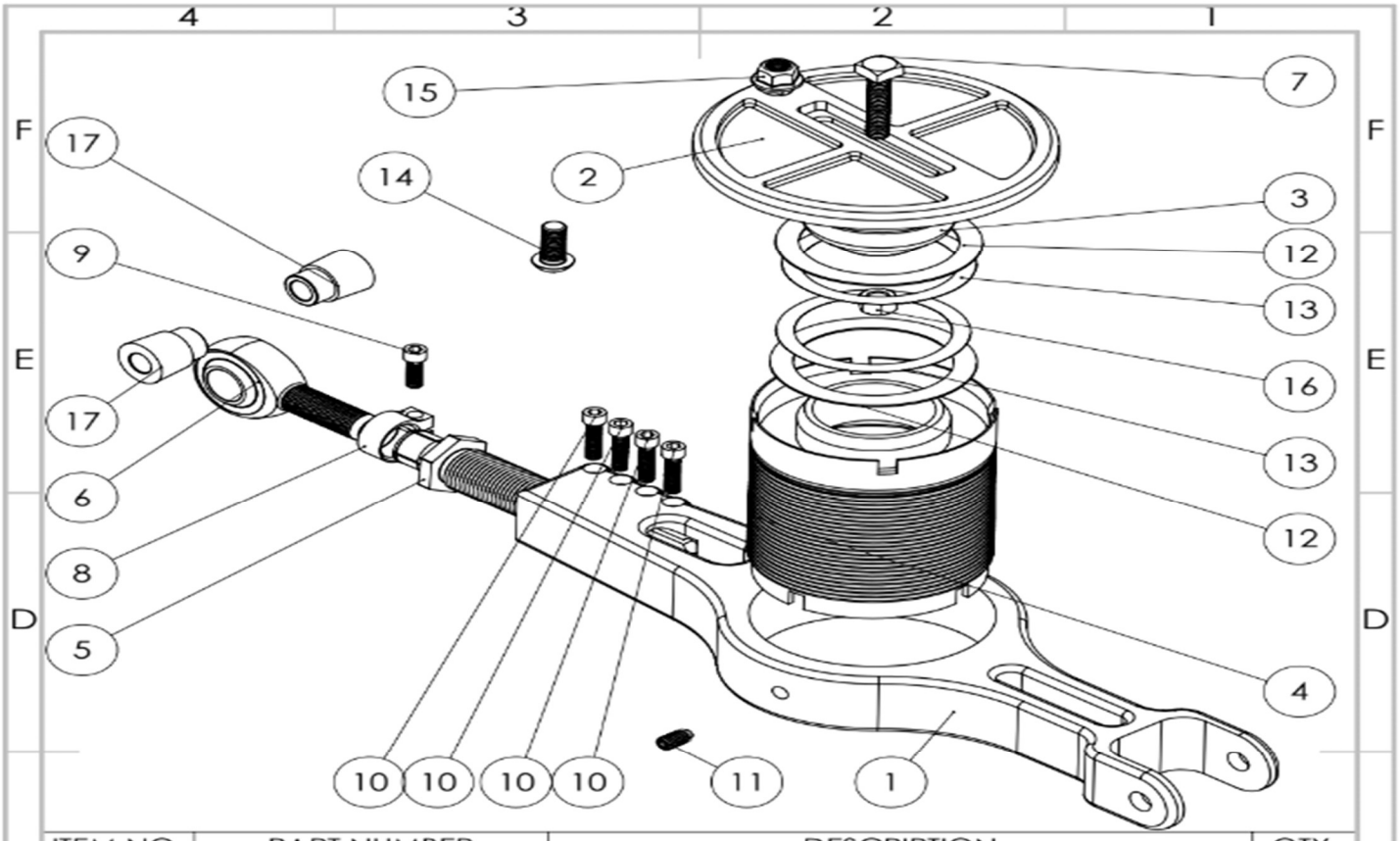
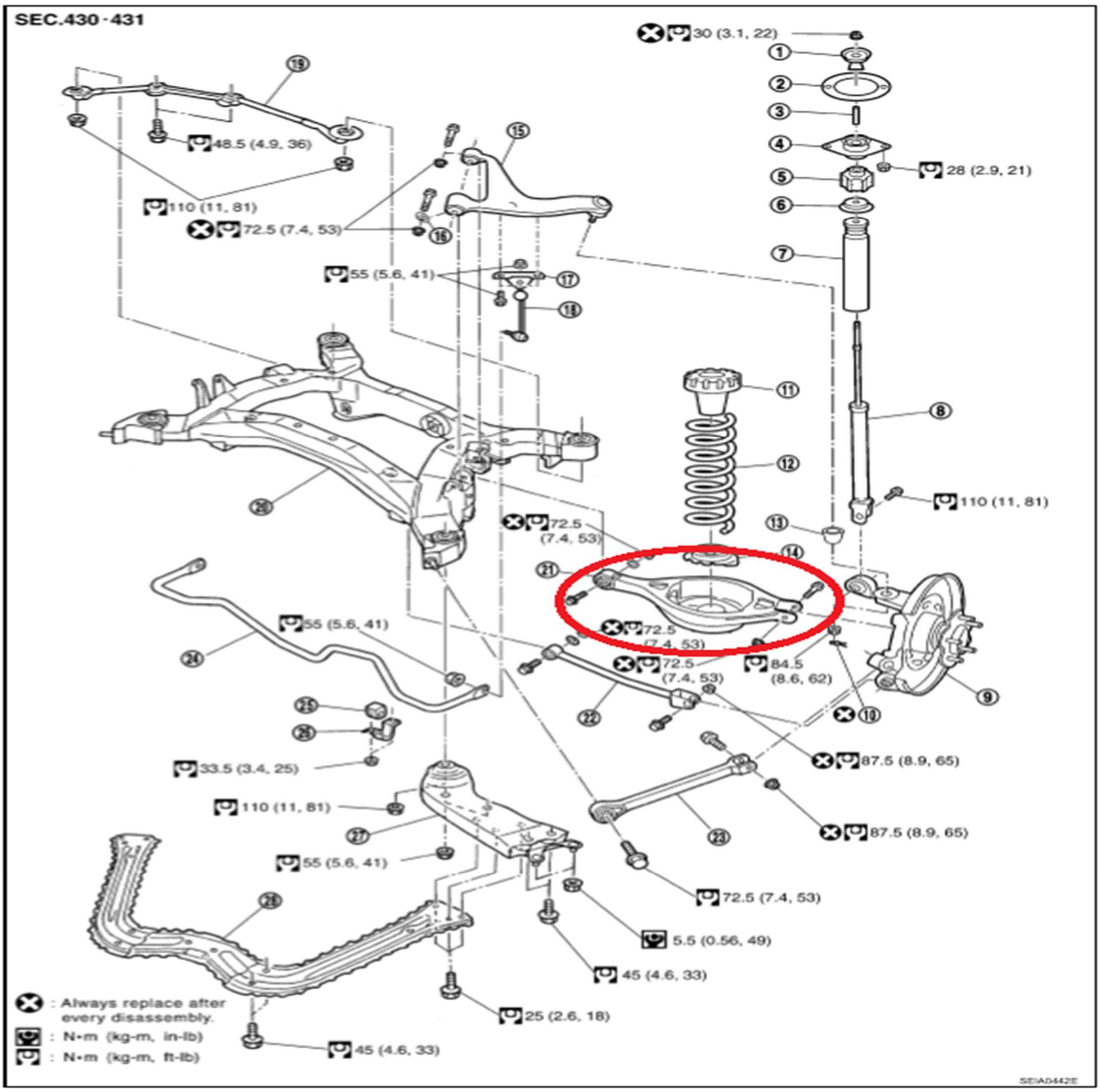
Rear Mid Links Kit
Installation Instructions
SPL RML Z34



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	11200	Anodized Aluminum Arm	2
2	11201	PLATE, SPRING PERCH	2
3	11203	BUSHING, SPRING PERCH	2
4	11202	Spring Perch	2
5	90011	Double Adjuster	2
6	JM12MT-5/8-18	FK Rod End	2
7	37C175BSQ5Z	Square Head Bolt	2
8	90010	Aluminum Clamp	2
9	1/4-20-75SCHS Ti	0.75" Titanium Socket Head Cap Screw	2
10	1/4-20-1SCHS Ti	1" Titanium Socket Head Cap Screw	8
11	90291A578	Nylon Tip Stainless Steel Set Screw	2
12	Swift Thrust Sheet 1	Nylon Thrust Sheet	4
13	Swift Thrust Sheet 2	Metal Thrust Sheet	4
14	F18548	SS Button Socket Head Cap Screw	2
15	FZM10CNWF	Serrated Hex Flange Nut M10	2
16	37C175BSQZ	Nylock Insert Flange Nut	2
17	90039	Aluminum Spacer	4

Z34 RML Assembly



Thank you for your purchase of this SPL performance suspension product. Please follow these instructions exactly to ensure that the product is able to function to the best of its ability, and you can achieve the most performance out of your vehicle.

SPL PARTS

The SPL mid link consists of four separate pieces: the arm itself, the threaded cup, the lower spring perch that sits in the cup, and a solid adjustable aluminum upper spring perch.

1. Apply the parking brake and place your vehicle in park for an automatic transmission or 1st gear for a manual transmission.

2. Jack up the rear of your vehicle so that the rear tires are no longer touching the ground. Place jack stands in factory recommended locations to safeguard both the vehicle and yourself from harm.

3. Remove the rear wheels off of the vehicle and place them to the side.

4. Install the Upper Spring Perch Plate (2). Bend in the tabs that catch on the stock rubber upper perch to provide a smooth surface for the solid aluminum upper perch. The upper spring 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.

5. Install and tighten a retaining bolt and nut (15,16). 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.

6. Install the end of the anodized aluminum arm (1) that goes on the subframe. Do **NOT** install the fork/clevis end onto the spindle yet. Make sure the FK Rod End (7) is in the middle of its articulation. More information on this is at the double adjuster section.

7. Place the supplied Swift spring thrust washer on the upper perch (carbon washer (12) on top against the perch, metal washer (13) on top of the spring), and hold the spring in place on the upper perch.

8. Place the Swift spring thrust washer (carbon washer (12) in the bucket followed by the metal washer (13) on top of the carbon washer) on the lower spring perch.

9. Swivel the anodized aluminum arm (1) up to catch the bottom of the spring. Place a floor jack under the arm and slowly jack it up, keeping the lower spring perch properly centered in the threaded cup.

10. Install the bolt on the clevis end of the anodized aluminum arm (1) and the spindle. To reiterate, starting at the upper perch, the order of washers/spring top to bottom (top end at upper perch (2), bottom at cup (4)) is: carbon washer (12), metal washer (13), spring, metal washer (13), carbon washer (12). With the Spring Plate Bushing (3), you can align the spring with the arm/bucket. At full droop (no weight on suspension) the spring will have a curve to it. This is **NORMAL.** See the accompanying picture below left. Once aligned, secure the spring locator as shown. Under compression, the spring will straighten as shown in the final picture.



11. Using the double adjuster, tighten all of the titanium bolts. Tighten each one a bit at a time, until all are tightened to 150 **in-lb**. **DO NOT OVERTORQUE!**
SPL Parts is not liable for any issues due to overtorque.

12. Take your car to a professional alignment shop. Make sure to bring these instructions to confirm that the arm is adjusted correctly.

13. Be safe, and enjoy your new SPL Parts upgrade!

Ride Height Setup

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.

1. Disconnect one rear end link. This is to prevent the sway bar preload from affecting your ride height adjustment.

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

3. Place the car down on level ground and measure the ride height once the mid link and springs are installed.

4. Calculate the amount of adjustment you need to make. 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.)

5. Place the car on jack stands, and adjust the spring perch accordingly, and repeat as necessary.

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

Suspension Droop Setup

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.

1. Place the car on jack stands and measure the length of the shock piston with the suspension fully unloaded. As seen in the picture to the left, this particular shock has slightly over 5" of travel (slightly over 3" before hitting the bump stops).

2. Using the floor jack, slowly jack up on the mid link (using a piece of wood to avoid marking up the mid link) until the car **just begins to lift** from the jackstand/lift at that corner.

3. 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 mid link again, and adjust as necessary.

SPL Double Adjuster

The hybrid adjuster is what is known as a **double adjuster**. On the outside, the thread is left-handed. On the inside, the thread is right-handed. 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):

Overextended adjuster.

Overextended rod end.

Properly adjusted.

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

You'll notice in the pictures that the threads of the rod end and the adjuster have some dark material on them. That is anti-seize compound we apply to all of our products so that adjustments should be easy and trouble free for quite some time.

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.