



Coil-Over Strut Installation Manual



This Manual Covers:

- Assembly of Coil-Over Struts
- Removal of Stock Struts & Spring
- Installation of Coil-Over Struts
- Adjustment of Coil-Over Struts

PLEASE READ ALL INSTRUCTIONS BEFORE ATTEMPTING TO INSTALL THESE STRUTS!
KEEP THIS MANUAL FOR FUTURE REFERENCE

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General Information

This coil-over strut kit comes with everything you need to convert your rear suspension from that old, saggy mono-leaf to FULLY ADJUSTABLE, independent coil-over strut system. The coil-over struts feature 6" of height adjustment, which allows you to raise or lower the rear of the car WITHOUT changing the ride quality. This is the safest and best way to lower the rear of your car. Contrary to some "horror" stories, the rear strut towers are more than strong enough to support the rear of the vehicle without distorting or breaking under normal driving conditions. This kit covers all W body cars with a mono-leaf rear suspension.

Because we cannot guarantee how these coil-overs will be installed or used, **FAST FORWARD PERFORMANCE WILL NOT BE HELD RESPONSIBLE FOR ANY VEHICLE DAMAGE THAT IS DIRECTLY OR INDIRECTLY CAUSED BY THE USE OF THIS PRODUCT!** By installing these coil-over struts, you understand and accept this statement.

Contents of Kit



1. KYB GR-2 Struts (2)*
2. Coil-over Springs (2)
3. Upper Spring Mount (2)
4. 7 inch Threaded Sleeve (2)
5. Lower Spring Mount (Adjuster Nut) (2)
6. Lower Washer (2)
7. Upper Washer (2)
8. Locking Washer (2)*
9. NyLock Nut (2)*
10. Polyurethane Isolator Bushing (4)

* Included only when purchased with KYB GR-2 struts

Coil-Over Assembly

Step One: Grind Down Strut Collar



Using a hand-held grinder (or a bench grinder), grind down the top strut collar so that it is slightly smaller in diameter than the body of the strut. The size is not critical; just make sure it is slightly smaller than the body of the strut. Be careful not to nick the strut rod! Doing so will result in strut failure and will not be covered under KYB's warranty!

Step Two: Install Threaded Sleeve and Lower Spring Mount



Slide the 7 inch threaded collar and the lower spring mount over the body of the strut. If you look inside the sleeve, you'll notice one end is blue and one end is silver. Slide the blue end on first.

Step Three: Install the Spring



Slide the spring over the threaded sleeve. Often times one end of the spring is cut more squarely than the other. Check to see if one end is squarer than the other and install this end down.

Step Four: Install Bushings and Upper Mount



Install the washers, polyurethane bushings and upper mount in this order (first listed goes on first):

1. Lower Washer (tapered side goes down)
2. Polyurethane Bushing
3. Upper Spring Mount
4. A Second Polyurethane Bushing
5. Flat Washer
6. Lock Washer
7. Nut

Tighten the nut until the lock washer flattens out all the way.

Removing the Stock Struts & Spring

Step One: Jack Up Rear of Car and Remove Wheels



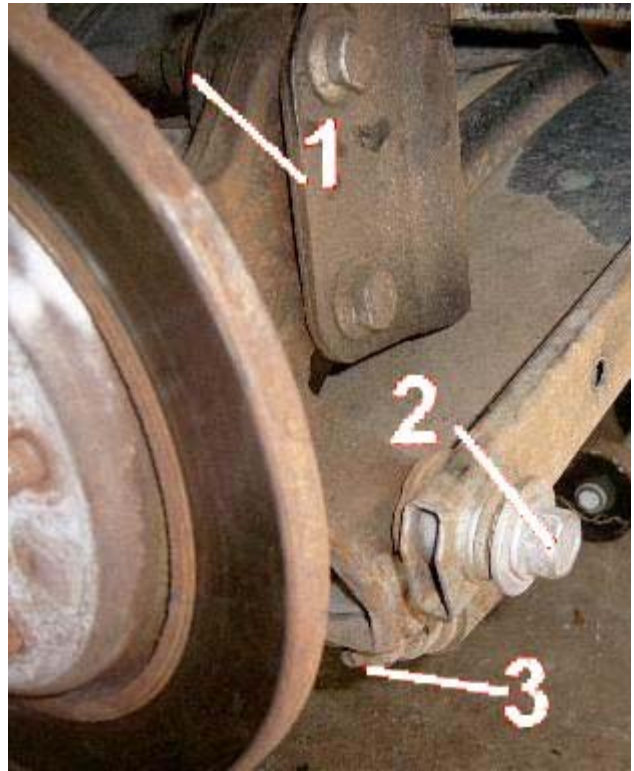
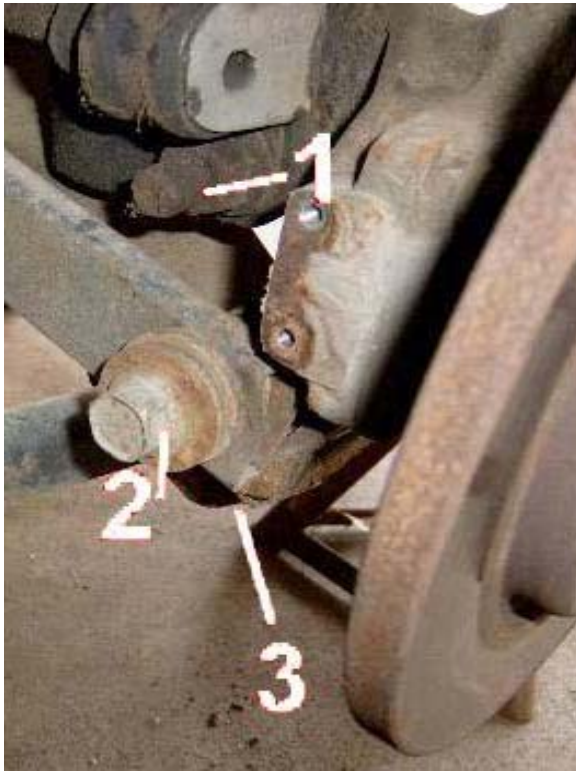
1. Jack up rear of car and support with jack stands. Make certain the car is stable before going any further!
2. Remove both rear wheels.

Step Two: Remove Brake Calipers and Rotors



1. Remove the brake calipers by removing the two 18mm bolts on the back side of the caliper. This is most easily done with a regular box/open end 18mm wrench.
2. Once the Calipers are removed, support them with either a jack stand as shown or tie them up with some wire. Do not allow the calipers to hang by the brake lines!
3. Pull the rotor straight off after the caliper has been removed.

Step Three: Loosen all Knuckle Bolts



1. Loosen and remove the nuts from the knuckle-to-strut bolts (#1). Leave the bolts through the knuckle.
2. Loosen the lateral link-to-knuckle bolts (#2). Do not remove the bolts at this point.
3. Loosen the trailing arm-to-knuckle bolts (#3).
4. After all the bolts have been loosened, remove the lateral link and trailing arm bolts (#2 and #3).
5. After the bolts have been removed, pull the bottom of the strut away from the car to release the spring from the knuckle.

Step Four: Remove the Strut and Knuckle Assembly



Once the leaf has been released from the knuckles, remove the two 15mm bolts that hold the upper strut mount to the strut tower. Once the bolts are removed, remove the knuckle and strut assembly.

The strut will drop once the bolts are removed; you may want to have a friend help hold the strut up while the bolts are being removed. Be careful, the struts are heavy!

Step Five: Removing Mono-Leaf Spring



Under the car, remove the two spring support brackets. There are two 10mm bolts in each bracket. In some cars, the right side (passenger side) bracket is also an exhaust hanger.

After both brackets have been removed, the spring can be pulled out through either side of the car, or dropped straight down. Replace the brackets after the spring has been removed.

Installing the Coil-Over Struts

Installation of the new coil-over struts is reverse of the removal of the stock struts.



1. Install the coil over strut and knuckle by first loosely installing the two 15mm upper bolts. Do not tighten yet!
2. Next install the lateral links with the original bolts.
3. Then connect the trailing arms with the original bolts.
4. Install the sway bar bracket and bushing and then install the knuckle nuts.
5. After all bolts have been started, torque them to proper torque specs. Check your shop manual for proper torque specs as they vary from year to year.

Install brake Rotors and Calipers



1. First install rotor. Simply slide over wheel studs
2. Next install the caliper with original bolts.
3. Make certain the brake lines and parking brake cables are not kinked or twisted.
4. Remember to clean of both sides of the rotors with brake cleaner and a clean cloth. The rotors must be free of all oils and dirt!
5. Double check that all bolts are properly torqued!
6. Install wheels and properly torque lug nuts.
7. Have the rear suspension aligned by a qualified alignment shop as soon as possible.

Adjusting the Coil-Over Struts



1. Raise the rear of the vehicle so that ALL the weight is off the tires. DO NOT ADJUST THE COIL-OVERS WITH THE WEIGHT OF THE VEHICLE ON THE WHEELS!
2. Loosen the small set screw in the lower spring mount (arrow)
3. Turn the mount either clockwise or counterclockwise to lower or raise the ride height.
4. Once you have the coil-overs adjusted to the desired ride height, gently tighten the set screw. The set screw has a nylon tip on it and must not be over tightened! Stop tightening once you feel the screw touch the sleeve!