Eibach Pro-System-Plus

Tools:

- Floor Jack
- 3 Jack Stands (4 preferred)
- 2 wheel stoppers
- Car wrench set
- Fire torch
- Bolt thread locker (use on every bolt you tight)

Disclaimer: This guide is not for the faint of heart. You are going to modify the complete suspension of your car and you will need to put some serious work onto it. If you haven't access to the right tools you should not try this install. You should tight all the bolts firmly and strongly, no exceptions, so I will not repeat it everywhere, also I will not state on every bolt that you should use thread locker, put in every bolt you tight.

Time: I did work for 2 weekends for this install. I installed also the optional parts below. I will not clarify how to install these. Look the other guides on American muscle. At last I didn't had any installation guide on hand and no tips/tricks, so I made plenty of pauses to check Internet for information. Never the less, expect at least one full weekend for this install.

Upgrade suggestions: If you invest into an Eibach pro-kit I suggest you add a little more money (+500\$) and grab the parts below:

- ✓ Ball joint kit
- ✓ Bump-steer
- ✓ Caster camber plates

Replacing these extra parts at the same time as the Eibach kit is easy, as you will have direct access to the parts. Adding those three will ensure you get the best performance from your new Eibach kit.

Section 1 - Preparing the car to work on the rear

- 1.1 Engage the emergency brake and put transmission in gear.
- 1.2 Unbolt a little the rear tire bolts. You will need a 23mm cross bar to do it. Don't complete take off the bolts, just un-tight them.
- 1.2 Use the wheel stoppers to block front wheels and lift the rear of the car with 2 jack stands, one on each side. I lift the car with 4 jack stands to be sure I had the best stability, so I didn't need to block the front wheels. **Because the car has rear**

propulsion it's very important you block the front wheels if you only have 2 jack stands. Work in a very horizontal surface with very stable car. Failure to do so can result in an accident.

- 1.2 Completely unbolt both rear wheels and remove the wheels. Set them aside.
- 1.3 Open the trunk. First take out the trim over the spare tire. Then take out 4 small plastic fasteners, located on top, near the opening, and take the rear trim out. Finally left and right trims should pull out easily.

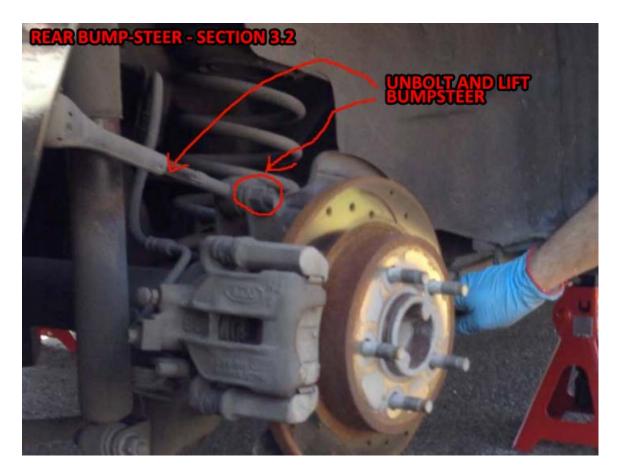
Section 2 - Removing the rear sway bar

- 2.1 The support for the rear brake cable is bolted with the sway bar. Locate it and simply disconnect the cable from his support so that you don't have it in the way.
- 2.2 Unbolt the 4 bolts that keep the sway bar in place (2 on each side, red circles in the image below). Use a 12mm wrench for this. The metal support for the break cable will be free also. You can discard the stock bolts as they will not be used (besides stating otherwise in the instructions). If the bolts are too hard to unbolt heat them up a little (be careful with the break cable).



Section 3 - Removing the rear struts

- 3.1 -Put the jack under one of the struts and jack up to release tension from the strut.
- 3.2 Use a 15mm wrench to unbolt the rear bump-steer and get it out of the way.



 $3.3\,$ – Unbolt the base of the strut. You will need a 15mm wrench and a 18 mm wrench. If it's too hard to unbolt heat it up a little.



3.4 – Unbolt the head of the strut, to do so you may need a vise grip to hold the top of the strut while you unbolt the nut. Use a 9/16 wrench.



- 3.5 Just pull out the strut. You can hit it gently a little on the head with a hammer to help it out.
- 3.6 Repeat with the other rear strut.

Section 4 - Replace the pinion

- 4.1 Locate the pinion under the car, over the rear shaft.
- 4.2 Unbolt the 3 screws in the corners using a 12 mm wrench and take out the whole pinion assembly.
- 4.3 Unbolt the pinion and bolt in the new pinion.



4.4 – Replace the pinion assembly back under the car and bolt the 3 screws with a $12\ \mathrm{mm}$ wrench.

Section 5 - Replacing the rear springs

5. 1 – To replace the springs you'll need the 3 jacks stands. 2 should be supporting the car up. You'll use the third one to keep the rear shaft up, just put it in a centered position in the rear shaft. You can leave it there to keep the car stable until you finish installing the struts and rear sway bar. If not you can use 2 jacks for this.



- 5.2 Put the jack under the spring and jack up a little.
- 5.3 Use a 15 mm wrench and unbolt the bolt at the extremity of the metal bar (the one who had the sway bar attached look the picture below). If the bolt is too hard use once again the fire torch.



5.4 – Use the jack to slowly lower the metal bar and take out the spring. Note the position of the spring.

5.5 – Take off the plastic on top of the spring and put it in the new Eibach spring.



- 5.6 Replace the new spring in exactly the same position as the old one. Check the bottom of the spring as reference.
- 5.7 With the jack pull up the metal bar compressing the spring.
- 5.8 Bolt (check section 5.3) to keep in place the spring and take out the jack. Repeat on the other side.

Section 6 - Replace the rear struts

6.1 – Prepare the struts by putting the bumper and hardware. You need to insert the yellow bump first, then the round metal washer and the black plastic washer. Check the image below to ensure the metal and black plastic washers are in the correct position.



6.2 – Align the strut with the hole. Bolt the base of the strut using 15mm and a 18mm wrenchs.



- 6.3 Use the jack to push up the base of the strut, not directly the strut of course, the metal base. Check is well aligned with the holes in the trunk.
- 6.4 Go inside the truck and put the bushing and metal washer and proceed to bolt it with the 9/16 wrench. You may need a vise grip so that the strut doesn't move. Check image in section 3.4
- 6.5 Replace the rear bump-steer and lower the jack under the strut. Repeat on the other side. Check image on section 3.2

Section 7 - Replacing the rear sway bar

- 7.1 **You will need to buy new screws and bolts for the rear sway bar**. The stock bolts can't be used on the new sway bar despite the instructions stating otherwise. 2 and half inches long bolts and nuts would be perfect.
- 7.2 Simply put back the new rear bar and attach with the new bolts. Bolt on the inside of the support bar as in the photo as otherwise the bar could move.



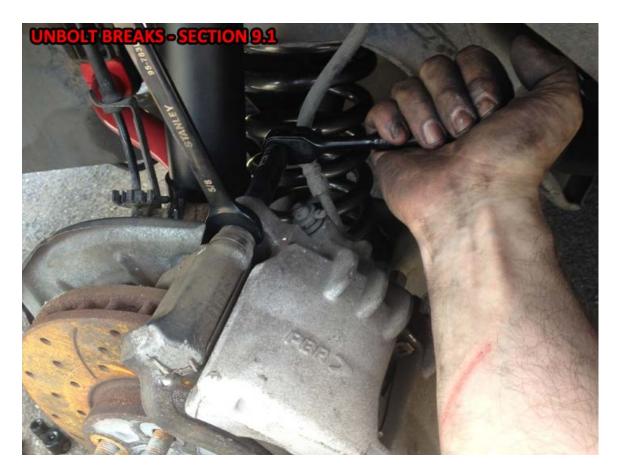
7.3 – clip back the break line

Section 8 - Preparing the car to work on the front suspension

- 8.1 Engage the emergency brake and put transmission in gear.
- 8.2 Use the 23mm crossbar to un-tight the wheel bolts. Don't remove them, just un-tight.
- 8.3 Use the wheel stoppers to block rear wheels and lift the front of the car with 2 jack stands, one on each side.
- 8.4 Unbolt both front wheels and store them.

Section 9 - Removing front struts

9.1 – The front is a little more complex than the rear. You will need to begin by unbolting the brakes. Use the 5/8 wrench and the 12mm to unbolt 2 bolts (look the image below), one on top and the one on bottom of the calliper. Be careful when handling the break calliper not to put strain in the break line. Don't twist the break line. You can put the break calliper inside the strut hole space to have it out of the way.



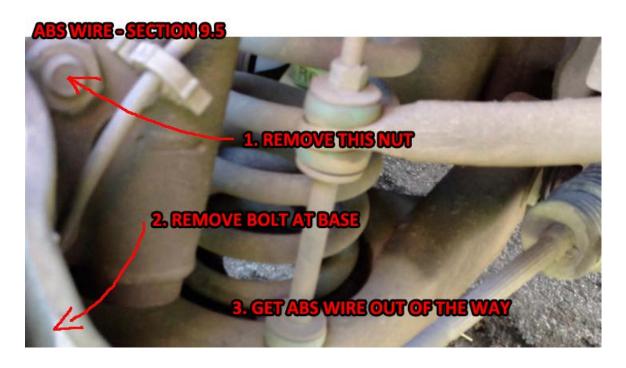
9.2 – With the break head out of the way use a 15mm wrench to remove the 2 other bolts (image below) and take out the metal handle of the breaks. The brake disk will then come out easily. Store the breaks handle and the brake disk someplace safe.



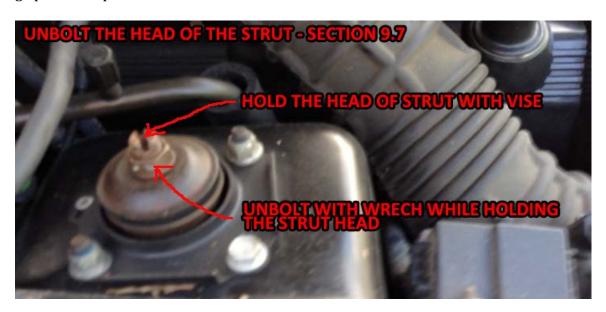
- 9.3 Put a jack under the metal axle, near the ball joint but don't put any pressure directly on the ball joint. Push up the jack a little, enough to release pressure on the strut.
- 9.4 Unbolt the bump-steer using a 19mm wrench and vise grip. You will need to straighten and remove a pin to do so. The bump-steer will be hard to get out, this is normal, use a little oil and hammer to help it out.



9.5 – Unbolt the ABS sensor wire from the strut using a 13/16 wrench, then afterwards from the rotor.



- 9.6 Proceed to unbolt the strut at his base using a 13/16 wrench. You will have 2 big bolts.
- 9.7 Unbolt the head of the strut with a 9/16 wrench, you will need to hold the head with a flat screwdriver. I was unable to do so as it was too stiff, so I did use a vise grip in the top slot.

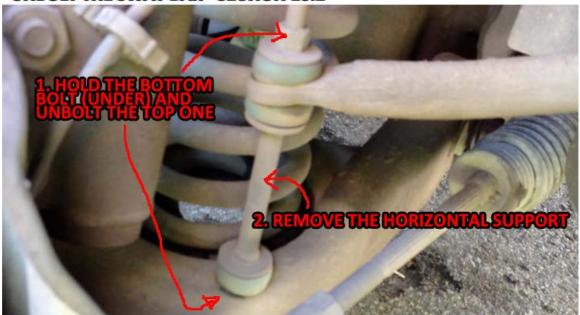


9.8 - Take out the strut Do section 10 steps then repeat section 9 and 10 on the other side of the car.

Section 10 - Removing the front springs

10.1 – Remove the bolts for the sway bar using 2 wrenchs 14mm and remove the vertical sway bar support. It should be fairly easy.

UNBOLT THE SWAY BAR-SECTION 10.1



10.2 – lower the jack slowly, the metal axle should lower enough to allow you to take out the spring. If you have a hard time you can un-screw a little the triangle base to allow it to open even more. Note the spring position with a pen, mark the bottom of the spring. You'll need to replace the new spring exactly in the same position.

Section 11 - Removing the front sway bar

11.1 – Normally the sway bar should be already a little loose. Just unbolt the bolts that attach it to the car. You will need 16 mm wrench.



11.2 – Take the sway bar out of the car and unclip both supports from the sway bar. Discard the plastic bushings.

Section 12 - Optional parts

12.1 – If you bought new ball joints, new caster camber plates and new bump-steer, then now it's the moment to replace all of them. Refer to the American muscle guides to replace them before going to section 13.

Section 13 - Replacing the sway bar

- 13.1 Clip the plastic housing into the new sway bar and put the stock metal support on it.
- 13.2 Replace the sway bar into position and bolt the metal supports to the structure of the car with 16mm wrench. The extremities of the sway bar should not be attached in this step. Read Section 15 replacing the struts for the final steps of the sway bar.

Section 14 - Replacing the front springs

- 14.1 –Replacing the spring in this step should be pretty much straightforward. Grab the plastic parts from bottom and top of the stock spring. Insert them into the new Eibach spring.
- 14.2 Insert the spring into place. Be sure to put it in the same orientation as the old spring, compare the bottom position of the spring.



14.3 – With the spring in place properly placed put a jack under the metal triangle and push up to compress the spring into place.

Section 15 - Replacing the front strut

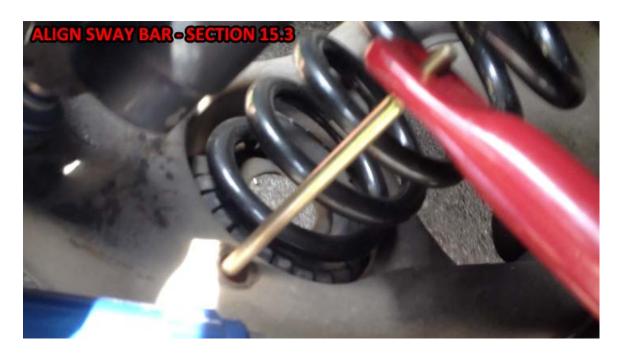
15.1 – Prepare the strut by putting the strut bumpers and hardware into place. If you got the optional caster cambers from motorsports I suggest you unbolt the head of the caster camber plates.



15.2 – Insert the top of the strut and align the bottom. Put the 2 metal bushings included in the Eibach kit. Bolt the 2 base bolts very very tight with 15 mm and 18 mm wrench.



15.3 – Take a moment to position the vertical support bar for the sway bar. Align it properly, but don't bolt it yet.



15.4 – Bolt the bump-steer into place with 19mm and vise grip.



15.5 – Put the head of the caster camber and push a little down the strut. Bolt the caster camber head into the base. Afterwards move the strut into place and bolt the

head of the strut to the head of the caster camber with 9/16 wrench. Refer to motorcraft caster camber installation guide for this.

15.6 – Bolt back the ABS sensor, check section 9.5.

15.7 – Bolt the vertical sway bar support using 2 wrenchs 14mm size. Check the image below for the bushings placement.



15.7 – Bolt back the break housing first and afterwards the break (check section 9.1 and 9.2 for this action). Repeat sections 14 and 15 on the other side of the car.

15.8 – Bolt back the wheels using 23mm cross bar and lower the car from the jacks.

ATTENTION: After this modification the car should not be driven at all. Everything will be misaligned and it can be very dangerous to drive the car. Call a truck lift and make them carry the car to a professional garage who will inspect the installation and properly align the car bump-steer and struts.

Installation Instructions written by AmericanMuscle Customer Drake Coldwinter 6.1.2013