

Installation Instructions

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Eibach Multi Pro R1 Coilovers - #82105.712

2013+ Subaru, BRZ, 2.0L 4 cyl.

2013+ Scion FR-S, 2.0L 4 cyl.

Kit Contents	Description	Part Number	Qty
	Front Coilover, Right	82105.8500R	1
	Front Coilover, Left	82105.8500L	1
	Rear Coilover, Right	82105.8600R	1
	Rear Coilover, Left	82105.8600L	1
	Height adjustment tool	PDK4.TOOL	1
	Height adjustment tool	PDK6.TOOL	1
	Rebound adjustment tool	PDR.TOOL	1

NOTES: Read All Instructions Before Beginning Installation

- **Installation of a *Eibach Multi Pro Coil-Over*** set should only be performed by a qualified mechanic experienced in the installation and removal of suspension componentry.
- **Use of a hoist** is highly recommended and will substantially reduce installation time.
- **Never work on or under a vehicle** unless it is properly supported by safety stands and wheels are blocked.
- **Never use impact wrenches or guns** to install or remove shock absorber piston components, shafts and piston rod nuts.
- **Never disassemble or** cut open shock absorbers and/or shock absorber inserts. They contain oil and gas under high pressure.
- **After installation**, it is always important to inspect and adjust the following if necessary:
 - Wheel alignment such as camber, caster & toe.
 - Tire and/or wheel fender clearance.
 - Brake line clearance and attachments.
 - Brake anti-locking and anti-skid system sensors.
- **Height Adjustment** – Should be performed with the wheels completely off the ground and with the springs fully unloaded.



Tightening torque for piston rod nut								
Thread Size	Nm	ft-lb	Thread Size	Nm	ft-lb	Thread Size	Nm	ft-lb
M8	25	18	M12 x 1.25	35	26	M14 x 1.50	50	37
M10 x 1.0	20	15	M12 x 1.50	40	29	M14 x 2.00	50	37
M10 x 1.25	20	15	M12 x 1.75	40	29	M16 x 1.50	50	37
M10 x 1.50	20	15						

Height adjustment instructions

1. Front Height adjustment:

"A" dimension-20mm (See front coilover illustration below) = approx. **345mm wheel center to fender lip**.

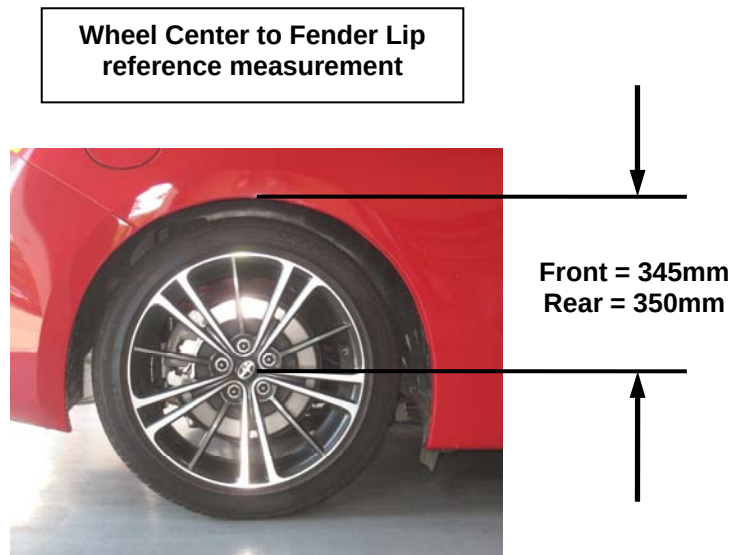
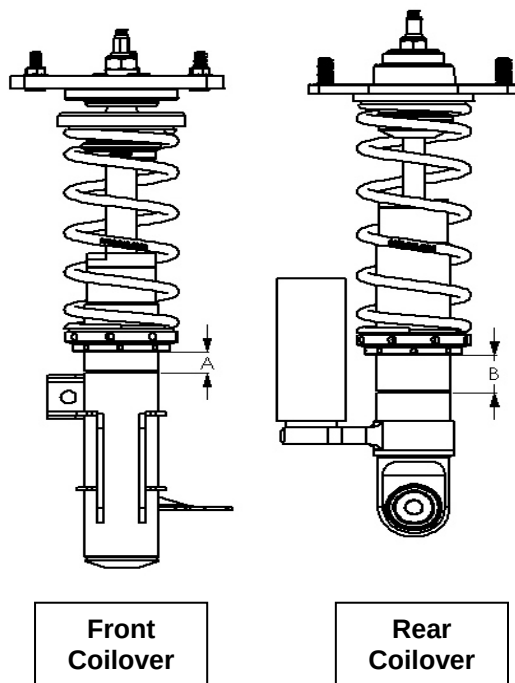
- This is the maximum amount of lowering suggested by Eibach, using the springs that are included in the Multi Pro Coilover Kit. Going beyond this amount will cause a rough ride due to limited bump travel

2. Rear Height adjustment:

"B" dimension-25mm (See rear coilover illustration below) = approx. **350mm wheel center to fender lip**.

- This is the maximum amount of lowering suggest by Eibach, using the springs that are included in the Multi Pro Coilover Kit. Going beyond this amount will cause a preload issue at full droop.

Note: Height adjustment should be performed with the wheels completely off the ground and with the springs fully unloaded.



FRONT SUSPENSION REMOVAL

1. Raise the vehicle off the ground and firmly support it with safety stands, then, remove the front tires.
NOTE: Do not work on or underneath the car without the proper safety equipment



Photo 1

2. Loosen and remove the nut that secures the anti roll bar end link to the strut. **(See Photo 1)**

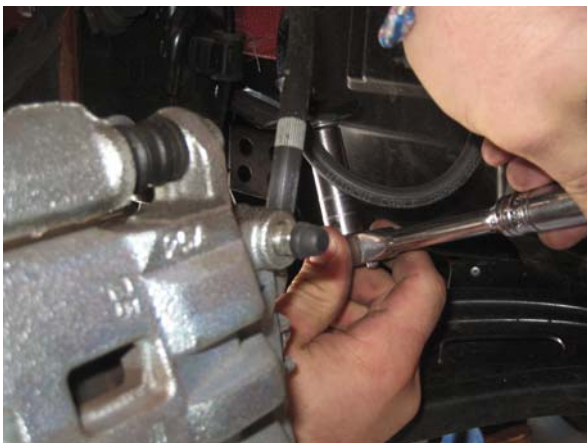


Photo 2

3. Loosen and remove the screw that secures the brake line to the strut. **(See Photo 2)**



Photo 3

4. Unclip/Remove the wheel speed sensor from the side of the strut. **(See Photo 3)**

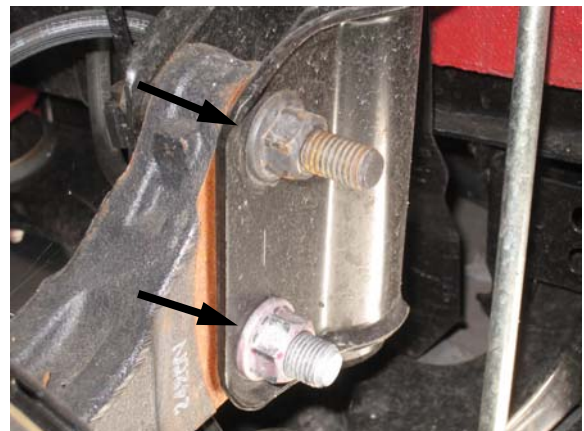


Photo 4



Photo 5

5. Loosen and remove the OE hardware that secures the lower strut mount to the knuckle, then, lower the knuckle downward. **Note: Support the knuckle**

to keep tension off of the brake line. (See Photos 4 & 5)

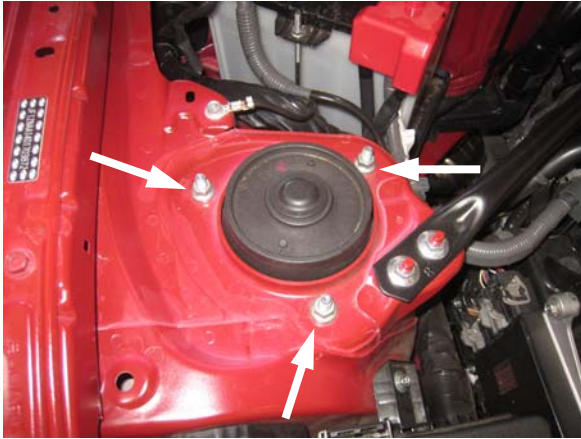


Photo 6



Photo 7

6. Loosen and remove the three upper strut mount nuts, then, remove the strut from the vehicle. (See Photos 6 & 7)

FRONT SUSPENSION INSTALLATION



Photo 8



Photo 9

7. Install the Eibach Multi Pro coilover and secure it to the strut tower using the provided hardware. **Note: The front Coilovers are left and right side specific and are designated as right and left according to the part number description at the beginning of this instruction sheet. (See Photos 8 & 9)**

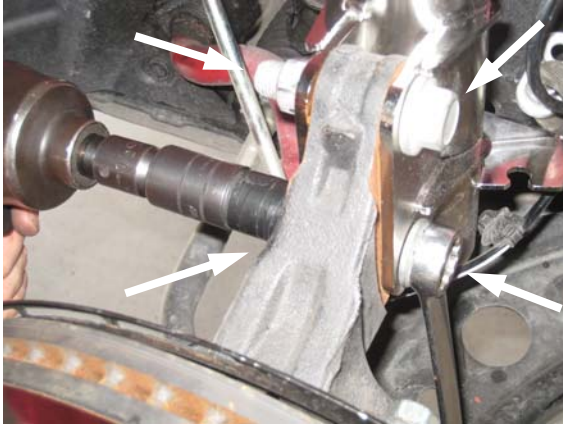


Photo 10

8. Secure the lower strut mount to the knuckle using the OE hardware. **(See Photo 10)**



Photo 11

9. Secure the anti roll bar end link to the coilover using the OE hardware. **(See Photo 11)**



Photo 12

10. Secure the wheel speed sensor to the bracket on the coilover. **(See Photo 12)**



Photo 13

11. Secure the brake line to the bracket using the OE bolt and the supplied nylock nut. **(See Photo 13)**

REAR SUSPENSION REMOVAL



Photo 14



Photo 15

1. Remove the trunk lining to gain access to the upper strut mount nuts, then, remove the nuts that secure the upper strut mounts. **(See Photos 14 & 15)**



Photo 16

2. Loosen and remove the lower shock mount bolt and nut. **(See Photo 16)**



Photo 17

3. Loosen and remove the anti roll bar end link bolt and nut. **(See Photo 17)**



Photo 18



Photo 19

4. Loosen and remove the bolt and nut that secures the control arm to the knuckle. **(See Photos 18 & 19)**



Photo 20

5. Pull the control arm downwards, then, remove the rear strut from the vehicle. **(See Photo 20)**

REAR SUSPENSION INSTALLATION



Photo 21



Photo 22



Photo 23

6. Install the Eibach Multi Pro coilover, and secure it to the lower control arm using the OE hardware, making sure the reservoir is towards the rear of the car and offset towards the wheel. **Note: The rear coilovers are right and left side specific and are designated as right and left according to the part number description at the beginning of this instruction sheet. Note: Do not tighten at this time. (See Photos 21, 22, & 23)**



Photo 24

7. Secure the lower control arm to the knuckle using the OE hardware. **Note: Do not tighten at this time. (See Photo 24)**



Photo 25

8. Secure the anti roll bar end link to the lower control arm using the OE hardware. **Note: Do not tighten at this time. (See Photo 25)**

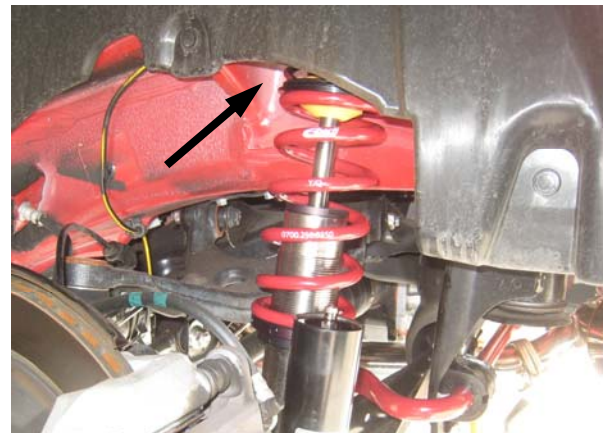


Photo 26



Photo 27

9. Using a floor jack raise the suspension upwards, while guiding the upper strut mount studs into the chassis, then, secure the upper strut mount using the provided hardware. **(See Photos 26 & 27)**



Photo 28

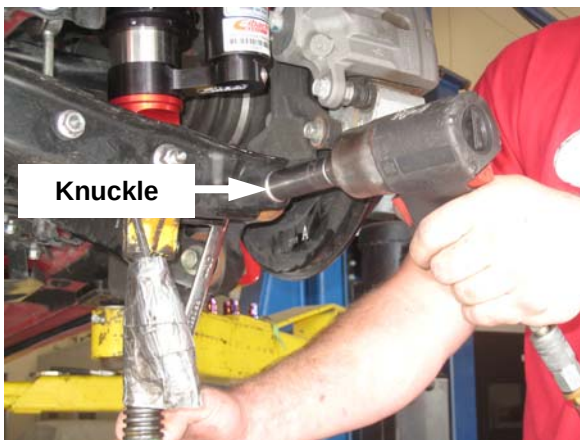


Photo 29



Photo 30

10. Preload the suspension using a screw jack or floor jack, then, tighten all the lower control arm hardware. **(See Photos 28, 29, & 30)**

COMPRESSION AND REBOUND SETTINGS

1. The shocks in this kit are adjustable for compression and rebound dampening forces. The following steps explain the adjustable features of this kit.

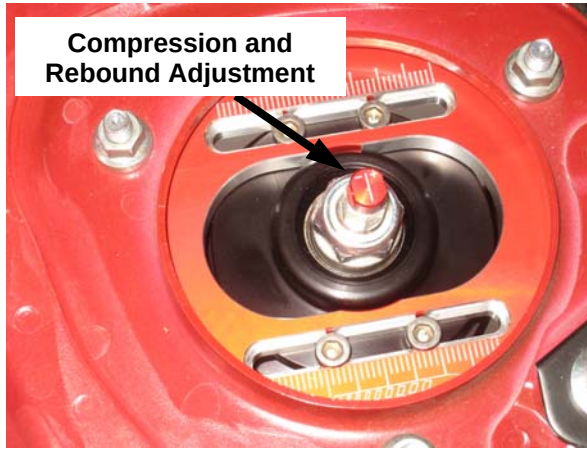


Photo 31

2. Front Adjustment: Turning the compression/rebound adjustment in a clockwise or (+ pos.) direction increases the compression/rebound forces and turning the adjustment in a counterclockwise or (– neg.) direction decreases the compression/rebound forces. **Note: The front adjustment is located on the top of the coilover shaft. (See Photo 31)**

- a. **Note:** Eibach sets compression/rebound to full open from factory. This setting is recommended for street use. If a more aggressive / track oriented performance is desired the compression/rebound can be increased per the instructions above. A certain strong resistance will be felt when full open and/or full closed is reached. **Do not force the knob to turn past those points; damage will occur to the system.**

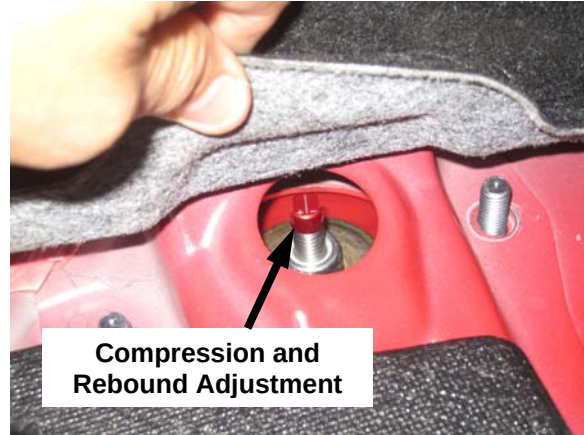


Photo 32

3. Rear Adjustment: Turning the compression/rebound adjustment in a clockwise or (+ pos.) direction increases the compression/rebound forces and turning the adjustment in a counterclockwise or (– neg.) direction decreases the compression/rebound forces **Note: The rear adjustment is located on the top of the coilover shaft. (See Photo 32)**

- a. **Note:** Eibach sets the compression/rebound to full open from factory. This setting is recommended for street use. If a more aggressive / track oriented performance is desired, the compression/rebound can be increased per the instructions above. A certain strong resistance will be felt when full open and/or full closed is reached. **Do not force the knob to turn past those points; damage will occur to the system.**

