Product:

Lowering Springs

Part Numbers:

410-503003-N

Applications:

BMW E90, 335I 2007-2013

Contents in the box:

Qty	Part #	Description
2	00P-0P2360-N	Front Coil Spring
2	00P-0P2361-N	Rear Coil Spring

Difficulty of Installation: Beginner |----------x----------| **Advanced**
Reason: This is a fairly straight forward installation that does require some automotive skill, and adequate tool availability.
Expected Installation Time: 4 Hours

Recommended Tools:

- 16mm box end
- 13mm thin wall socket
- 13 mm deep socket
- 8, 10, 13, 15, 16, 17, 18, 21 mm sockets
- 3/8” drive ratchet
- 3/8” drive extension
- Allen Wrench Set
- Complete Male & Female Metric Torx Socket Set
- 3/8” drive Torque Wrench
- 2 Post Lift and Screw Jack (preferred)

This procedure is best performed on a vehicle lift by qualified mechanics, however it is possible to install these springs using a floor jack and jack however it is not recommended.

Front OEM Strut Removal

1. Using proper jacking points, lift and support the front of the car on jack stands.
2. Using a 17mm socket remove the front wheels.
3. Unbolt the sway bar end links from OEM Strut using a 16mm wrench and 17mm wrench. If the vehicle is equipped with ride height sensors, disconnect the sensor from the driver's side control arm.

4. Position a screw, or floor jack under the front control arm to hold in place.
5. Using a 18 mm socket and wrench, remove the pinch bolt that holds the OEM strut into the upright. Slowly lower the jack and slide strut free from upright. You might need to use a pry bar to open up the split in the upright.

6. Using a 13 mm socket, remove the (3) bolts that hold the strut housing into the vehicle. Be careful to use a helper to hold the strut from the bottom of the car.

7. Using a strut compressor, remove the factory springs from the strut, by removing the top nut, using a 18mm 12 point socket.

Front aFe Control Coil Spring Installation

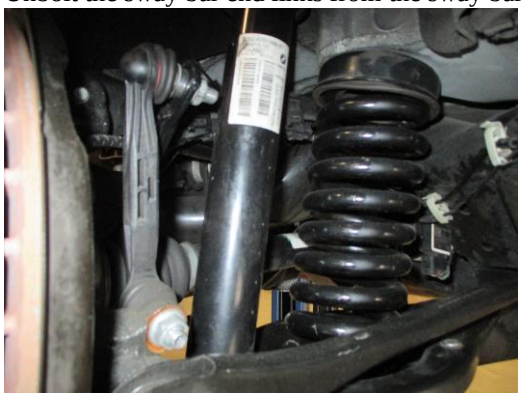
1. Using a strut compressor install the stock upper spring mount, rubber isolator, and bearing onto the new coil spring, and OEM strut. Using an 18 mm 12 point socket, tighten the top nut while still in strut compressor by using a impact driver.

2. Install the strut assembly into the vehicle by lifting into place, and positioning the upper mount to the body. Note there are positioning pins to pilot into the body. Having a helper on hand, reinstall the (3) upper bolts using a 18 mm socket. Torque to 25 lb-ft.

3. Slide the upright, over the strut tube. Using a floor or screw jack, raise the lower control arm until the upright bottoms on the tapered stop on the strut tube. Approximately ¾" of strut tube will protrude from bottom. If too tight, use a pry bar to slightly pry the split open further.
4. Torque pinch bolts to 20 lb-ft using a 18 mm socket.
5. Re-attach sway bar end link and torque to 25 lb-ft
6. Re-attach any brake line clips, and electrical connectors, that were moved during installation.
7. If the vehicle was equipped with accelerometers, re-attach to factory location.
8. Move to other side of vehicle and repeat process.
9. Reinstall the front wheels using a 17mm socket and torque to 90 lb-ft.
10. Reinstall the plastic cowl cover by reinstalling the plastic clips and 10 mm bolts.

Rear OEM Coil Spring Removal

1. Using proper jacking points, lift and support the rear of the car on jack stands.
2. Using a 17mm socket remove the wheels.
3. Unbolt the sway bar end links from the sway bar using a 16mm wrench and 17mm wrench



4. Disconnect the ride height sensor located on the driver's side lower rear control arm.

5. Using either a floor jack, or a screw jack, support the lower control arm.
6. Remove the rear shock mount bolts using a E12 socket.

7. Using a 21 mm wrench and socket, remove the bolt holding the lower control arm at the upright. Slowly lower the control arm to release tension on the OEM springs, and remove spring from vehicle.

Rear aFe Coil Spring Installation

1. Install the factory upper spring seat, onto the new coil spring. Correct orientation would have the part number right side up. Raise the coil into the vehicle, positioning the upper seat into the hole in the chassis.

2. Be careful to properly index the spring in the lower mount.

3. Using a screw, or floor jack, raise the lower control arm into position, and align the control arm bolt to the upright. Using a 21 mm socket, and open wrench, torque bolts to 56 ft-lbs

4. Install the lower shock bolts. Torque the E12 nut to 25 ft-lbs.

5. Reinstall the ride height sensor, and any other connectors that might have been disconnected.
6. Re-attach the end links to the sway bar and torque to 25 lb-ft.
7. Reinstall the rear wheels using a 17mm socket and torque to 90 lb-ft.

When complete take the vehicle to alignment shop for a proper alignment.