



# INSTALLATION MANUAL

**SK-4085**

**Arnott Front Right Shock  
BMW X3/X4 (F25/F26 Chassis),  
with VDC, RWD, and AWD**



**Engineered to Ride, Built to Last<sup>®</sup>**

# CONGRATULATIONS ON YOUR PURCHASE OF AN ARNOTT® SUSPENSION PRODUCT

WE AT ARNOTT LLC ARE PROUD TO OFFER A HIGH QUALITY PRODUCT WITH ALL THE TECHNICAL SUPPORT YOU NEED. THANK YOU FOR YOUR CONFIDENCE IN US AND OUR PRODUCT.

Proper installation is essential to experience and appreciate the benefits of this system. Please take a moment to review these installation instructions before you begin to install these components on your vehicle. The removal and installation of air suspension products should only be performed by a fully qualified and certified automotive professional.

It is equally important to be aware of all necessary safety measures while installing your new Air Suspension System. This includes proper lifting and immobilizing of the vehicle and isolation of any stored energy to prevent personal injury or property damage.

## GENERAL INFORMATION

Reading this manual signifies your agreement to the terms of the general release, waiver of liability, and hold harmless agreement, the full text of which is available at [www.arnottinc.com](http://www.arnottinc.com) and [www.arnotteurope.com](http://www.arnotteurope.com).



### WARNING:

The air suspension system is under pressure (up to 10 bar, or 150 lbf/in). Verify pressure has been relieved and disconnect power to the air suspension system prior to disassembly. Do not allow dirt or grease to enter the system. Always wear standard hand, ear, and eye protection when servicing the air suspension system.

- Not to be stored below 5°F (-15°C) and above 122°F (50°C).
- Avoid damage to air lines and cables.
- Removal and installation is only to be performed by fully qualified personnel.
- Use car manufacturer's diagnostic software.

### CAUTION:

Damage to the vehicle and air suspension system can be incurred if work is carried out in a manner other than specified in the instructions or in a different sequence.

To avoid the possibility of short circuits while working with electric components consult your owner's manual on how to disconnect your battery.

Consult your vehicle owner's manual, service manual, or car dealer for the correct jacking points on your vehicle and for additional care, safety and maintenance instructions. Under no circumstances should any work be completed underneath the vehicle if it is not adequately supported, as serious injuries and death can occur.

For vehicles with a "Closed Air Supply System," replacement of components requires proper adherence to procedures set forth within OE servicing literature. Failure to comply with the OE prescribed procedures can result in component damage and/or failure.

# COIL STRUT REMOVAL

1. Raise the vehicle and remove the front wheel to expose the front coil strut. (Figure 1)



FIGURE 1

2. Disconnect the acceleration sensor from the bracket on the coil strut. (Figure 2)

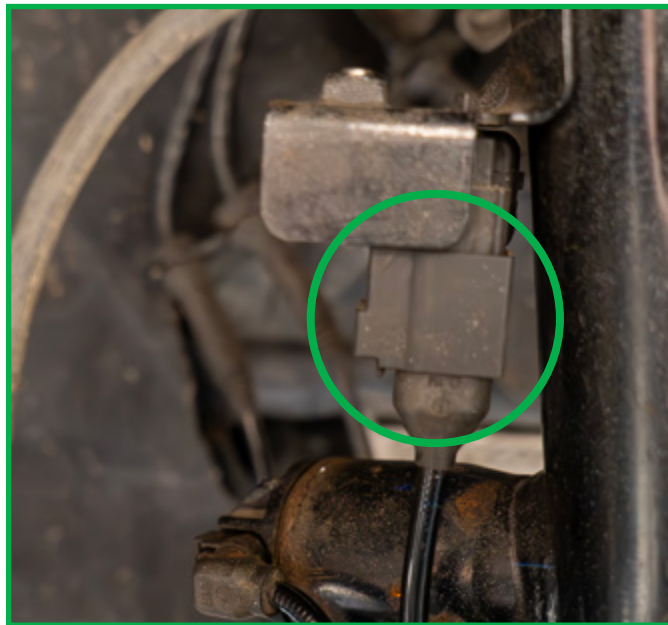


FIGURE 2

3. Disconnect the coil sensor from the coil strut. (Figures 3, 4)



FIGURE 3

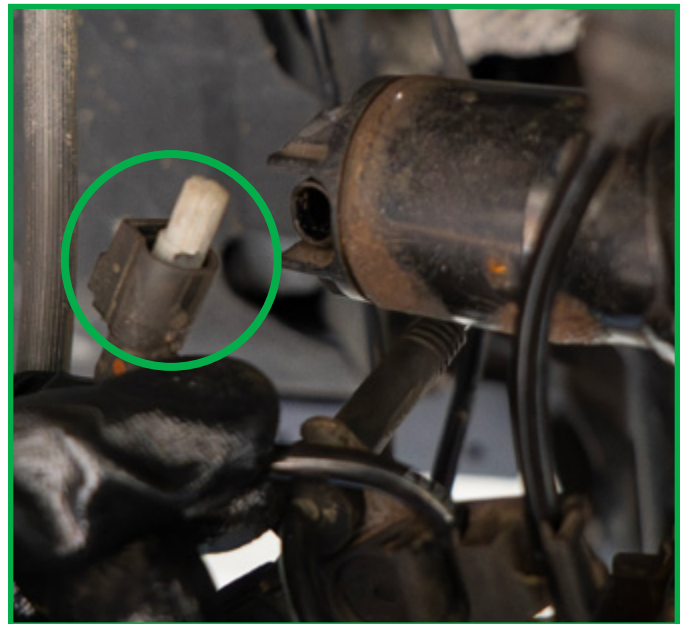


FIGURE 4

4. Disconnect the sway bar link and the brake hose from the strut tab. (Figures 5, 6, 7)

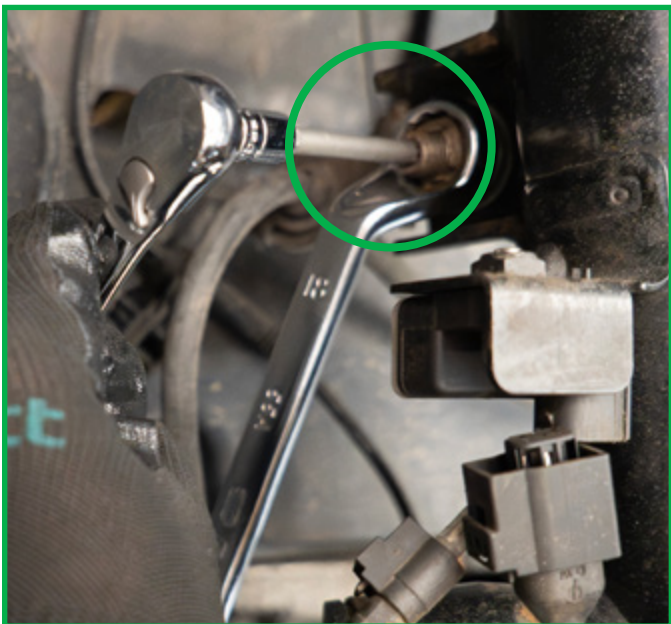


FIGURE 5



FIGURE 6



FIGURE 7

5. Remove the strut pinch bolt securing the strut to the wheel hub carrier. (Figure 8)



FIGURE 8

6. Tap the wheel hub carrier slightly with a hammer to separate the strut from the wheel hub carrier. (Figures 9, 10)

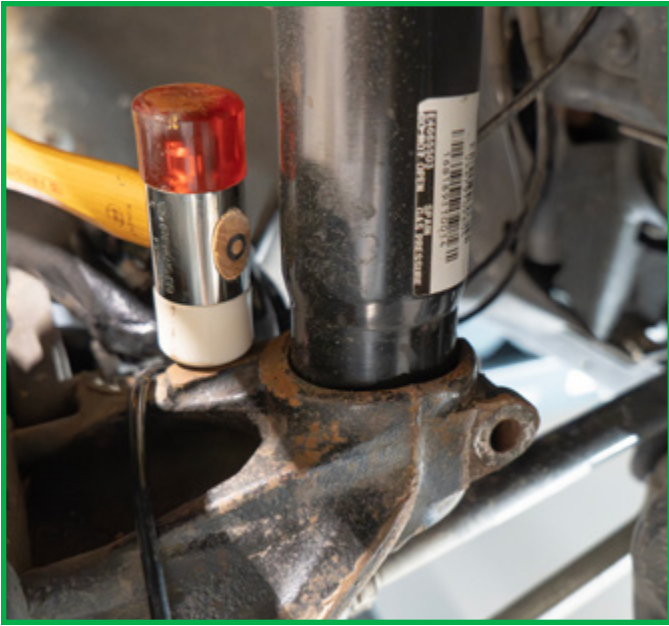


FIGURE 9



FIGURE 10

7. Remove the bolt from the strut bar. (Figures 11, 12)



FIGURE 11



FIGURE 12

8. Remove the three (3) top bolts from the top strut mount. (Figures 13, 14)



FIGURE 13



FIGURE 14

9. Remove the coil strut assembly from the vehicle. (Figure 15)



FIGURE 15

10. Removal complete.

# COIL STRUT DISASSEMBLY



**WARNING:**

Use a spring compressor tool for the following removal steps.

1. Remove the bolt and the acceleration sensor from the old strut. Then, mount it to the new strut. (Figures 16, 17, 18)



FIGURE 16



FIGURE 17



FIGURE 18

- Put the coil strut assembly into the coil compressor tool to loosen tension on the top mount. (Figures 19, 20)

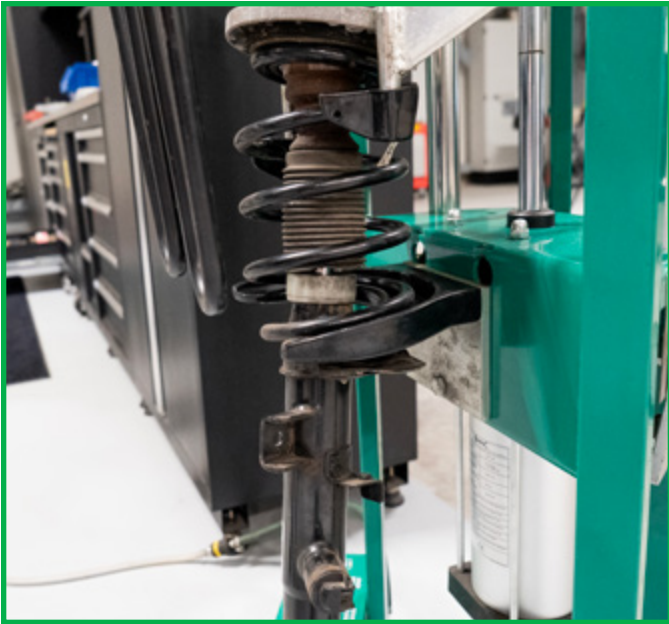


FIGURE 19



FIGURE 20

- Remove the lock nut from the top of the strut to remove the top mount. (Figures 21, 22)



FIGURE 21



FIGURE 22

4. Remove the strut from the coil spring. (Figure 23)



FIGURE 23

5. Remove the top mount, bump stop, and rubber spring isolator from the old strut for reuse on the new strut. Discard the old top lock nut. (Figure 24)



FIGURE 24

6. Coil strut disassembly complete.

# COIL STRUT REASSEMBLY



**WARNING:**

Tighten all nuts and bolts to the manufacturer's specifications during the assembly process.

1. Install the rubber spring isolator from the previous strut and align the rubber point with the respective hole on the spring seat. (Figures 25, 26)



FIGURE 25



FIGURE 26

2. Install the bump stop and dust cover from the old strut on the new strut. (Figure 27)



FIGURE 27

3. Remove the top lock nut from the new Arnott strut to be used later. (Figure 28)



FIGURE 28

4. Add the new strut to the coil spring in the spring compressor tool. (Figure 29)



FIGURE 29

5. Mount the old top mount on the new strut by using the new top lock nut and tighten to the manufacturer's specifications. (Figures 30, 31, 32)



FIGURE 30



FIGURE 31



FIGURE 32

- Align the lower coil winding with the rubber spring isolator before releasing tension from the coil spring. (Figure 33)



FIGURE 33

- Now use the compressor tool to release tension from the coil spring, making sure the lower coil winding is properly seated in the rubber isolator. (Figures 34, 35)

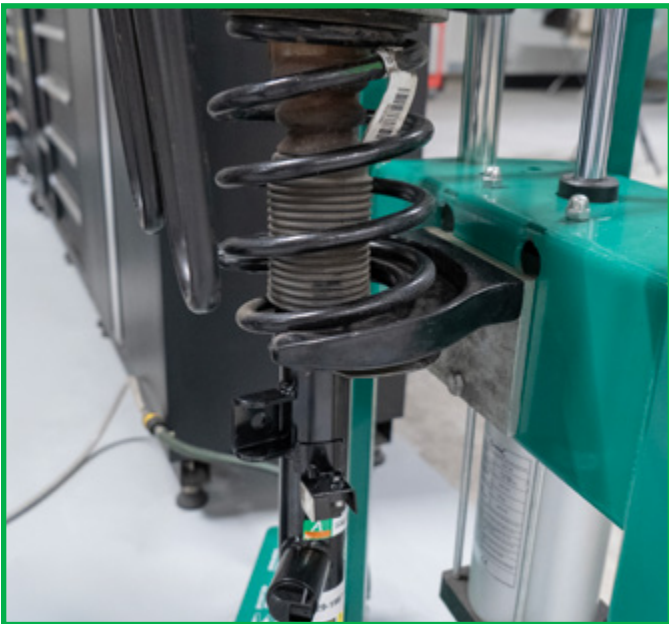


FIGURE 34



FIGURE 35

8. Push the bump stop and dust cover back into the top mount. (Figures 36, 37)



FIGURE 36



FIGURE 37

9. Coil strut reassembly complete.

# COIL STRUT INSTALLATION



**WARNING:**

Tighten all nuts and bolts to the manufacturer's specifications during the installation process.

1. Place the assembled Arnott coil strut into the vehicle. (Figure 38)



FIGURE 38

2. Align the top mount to the holes in the strut tower. (Figure 39)

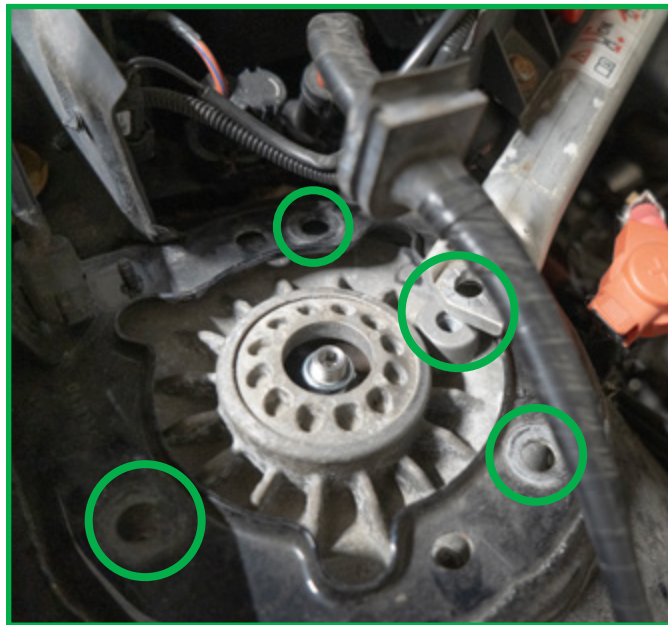


FIGURE 39

3. Reinstall the 3 top bolts on the top strut mount to the strut tower and tighten to the manufacturer's specifications. (Figure 40)

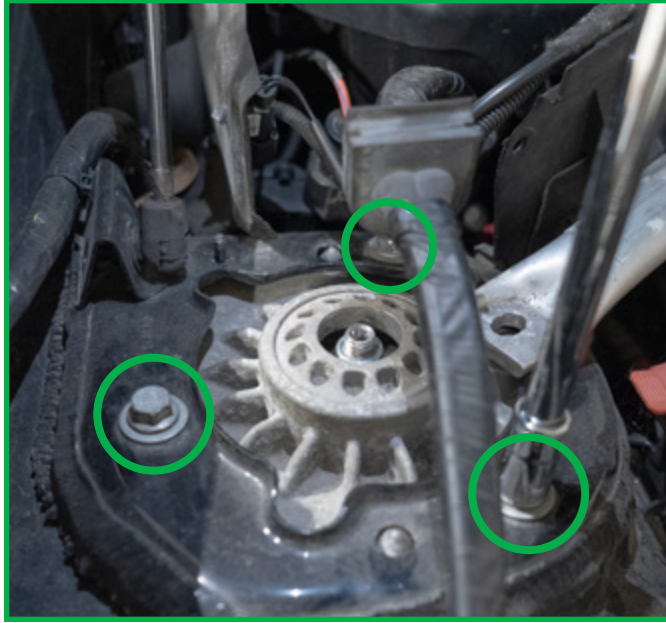


FIGURE 40

4. Connect the strut bar by reinstalling the bolt to the strut's top mount. (Figure 41)



FIGURE 41

5. Align the locating pin to the center of the wheel hub carrier. (Figure 42) Make sure that it is fully mounted into the strut seat of the wheel hub carrier. (Figures 43, 44)



FIGURE 42



FIGURE 43



FIGURE 44

6. Remount the lower bolt that secures the strut to the wheel hub carrier. Ensure that the wire bracket is securely seated. (Figure 45) Use a torque wrench to tighten the lower bolt. (Figure 46)



FIGURE 45



FIGURE 46

7. Reconnect the sway bar link and the brake hose, and reinstall and tighten the nut. (Figure 47)



FIGURE 47

8. Reconnect the coil sensor. (Figures 48, 49)

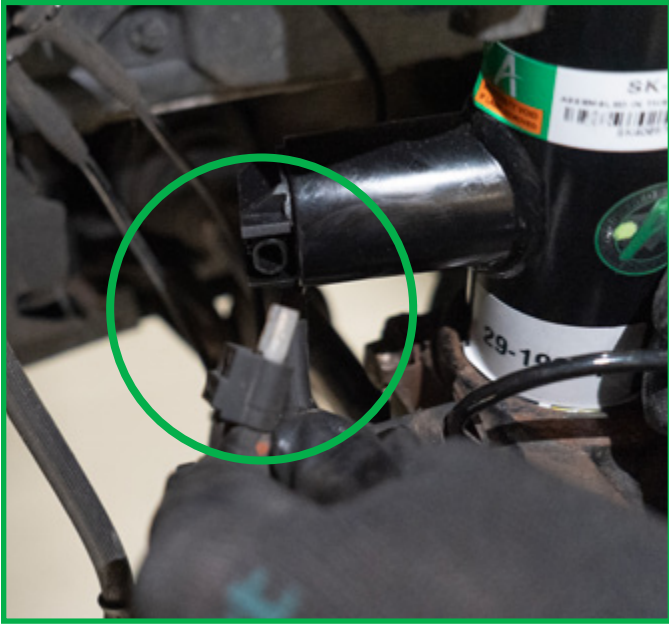


FIGURE 48

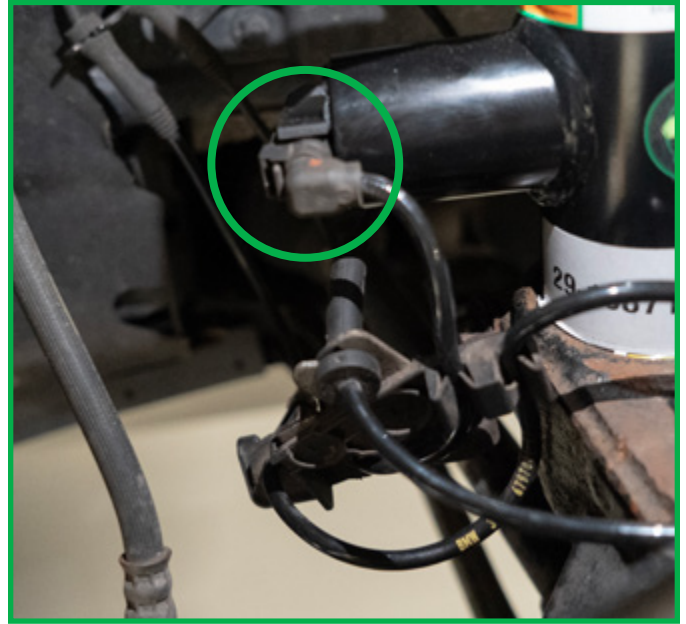


FIGURE 49

9. Reconnect the acceleration sensor. (Figure 50)



FIGURE 50

10. Installation complete.



**WARNING:**

A wheel alignment is strongly recommended after installation.

# Arnott®

## Suspension Products

### Arnott US Business Office:

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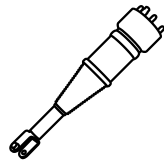
**ES Phone:** +34 91 901 10 56

**FR Phone:** +32 78 48 46 93

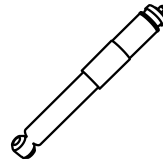
**Email:** [info@arnotteurope.com](mailto:info@arnotteurope.com)



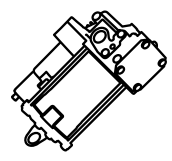
Air Springs



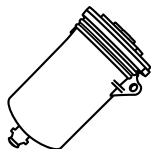
Struts



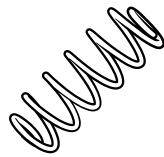
Shocks



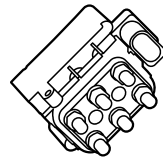
Compressors



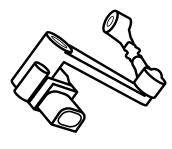
Dryers



Coil Spring  
Conversion Kits



Valve Blocks



Ride Height  
Sensors