Arnott®
Suspension Products

INSTALLATION MANUAL

SK-4087
Arnott Rear Shock
BMW X3/X4 (F25/F26 Chassis), with VDC, RWD, and AWD

Engineered to Ride, Built to Last®

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 and 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. Remove the cargo area paneling for access to the three (3) top-mount bolts of the coil strut. (Figures 1, 2, 3)

FIGURE 1

FIGURE 2

FIGURE 3

2. Raise the vehicle and remove the applicable rear wheel. (Figure 4)

FIGURE 4

3. Remove the three (3) top-mount bolts from the coil strut. (Figure 5)

FIGURE 5

4. Disconnect the coil sensor from the strut bracket and the coil strut. (Figures 6, 7)

FIGURE 6

FIGURE 7

5. Remove the bottom mount nut that secures the control arm to the coil strut, but leave the bolt in place. (Figures 8, 9)

FIGURE 8

FIGURE 9

6. Remove the control arm pivot bolt. (Figures 10, 11)

FIGURE 10

FIGURE 11

7. Disconnect and lower the control arm from the bracket to lower the coil strut. (Figure 12)

FIGURE 12

8. Fully remove the bottom mount bolt that secures the control arm to the coil strut while holding the coil strut, and remove the coil strut from the vehicle. (Figures 13, 14)

FIGURE 13

FIGURE 14

9. Removal complete.

COIL STRUT DISASSEMBLY

WARNING:

Use a spring compressor tool for the following removal steps.

1. Mark the old coil strut by drawing a line from the center of the coil sensor up to the top of the coil strut. This will help you align the strut's top mount with the lower shock eye during reassembly and installation. (Figure 15)

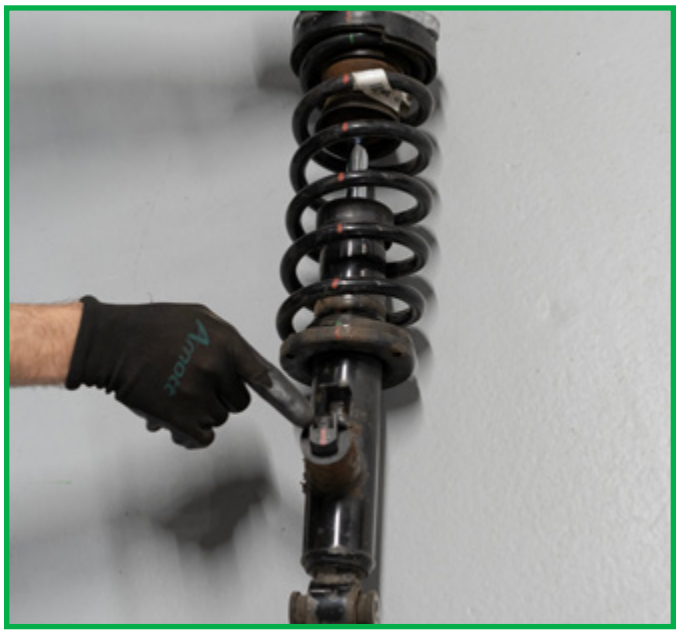

FIGURE 15

2. Put the coil strut assembly into the coil compressor tool to loosen tension on the top mount. (Figures 16, 17)

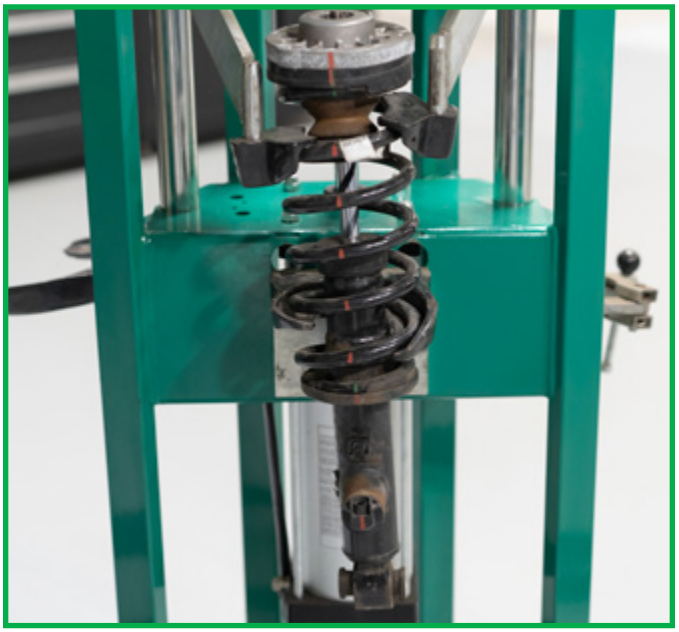

FIGURE 16

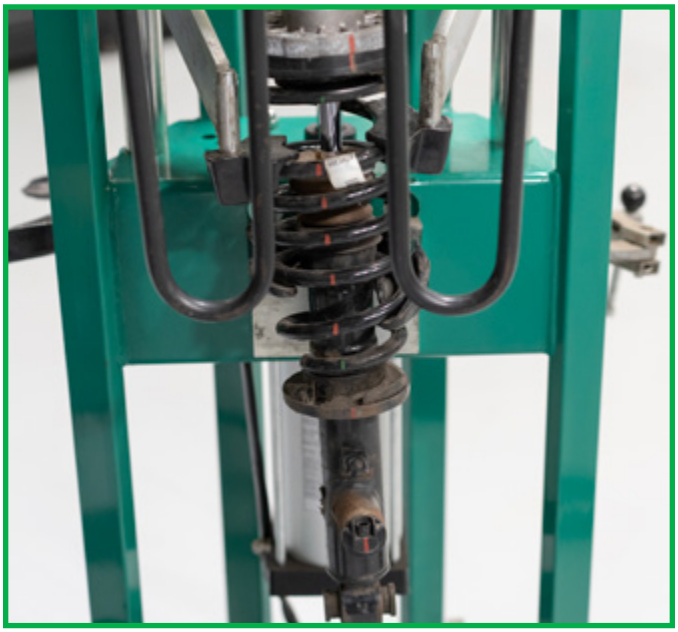

FIGURE 17

3. Remove the lock nut from the top of the coil strut to remove the top mount and remove the strut from the coil spring. (Figure 18)

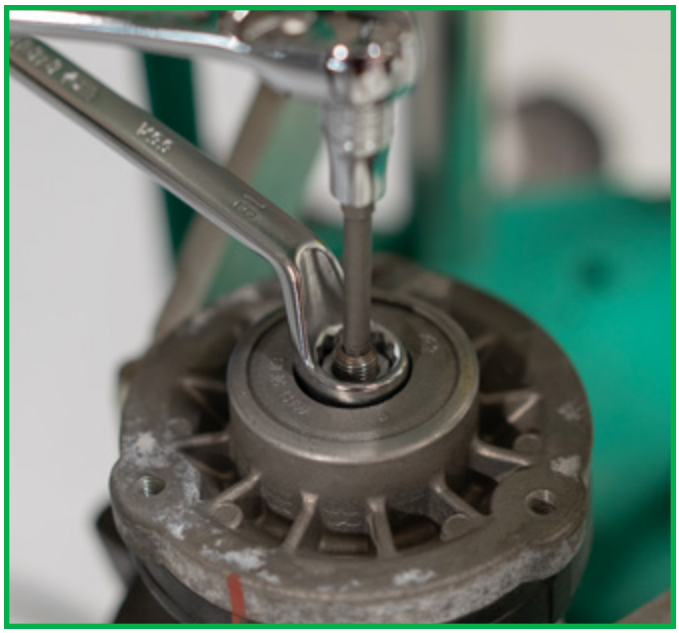

FIGURE 18

4. 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 19)

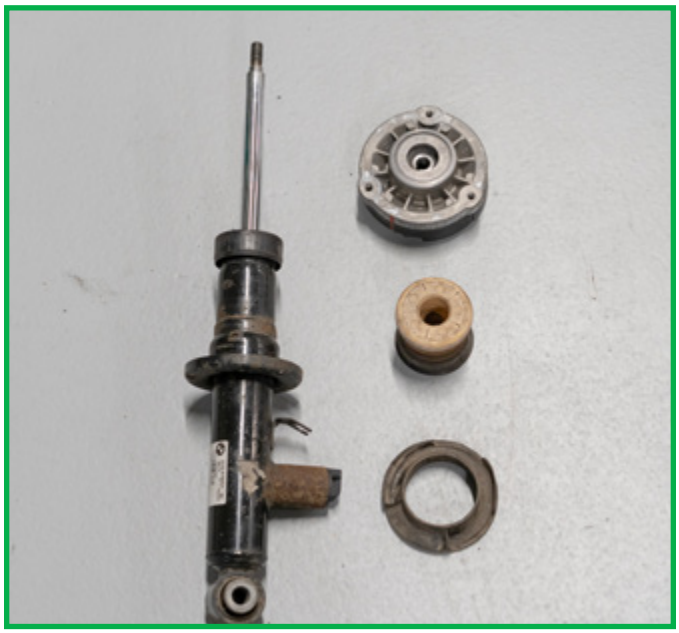

FIGURE 19

5. Coil strut disassembly complete.

COIL STRUT REASSEMBLY

WARNING:

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

1. Remove the top lock nut from the new Arnott strut to be used later. (Figure 20)

FIGURE 20

2. Install the rubber spring isolator from the previous strut on the spring seat of the new strut. (Figure 21)

FIGURE 21

3. Install the bump stop and dust cover from the old strut onto the new strut. (Figure 22)

FIGURE 22

4. Draw a centerline on the coil sensor of the new strut to align it with the coil spring. (Figure 23)

FIGURE 23

5. Add the new strut to the coil spring in the spring compressor tool. (Figure 24)

FIGURE 24

6. Mount the old top mount on the new strut by using the new top lock nut. Tighten to the manufacturer's specifications. (Figure 25)

FIGURE 25

7. Check the alignment of the coil winding with the strut's top mount seat. (Figure 26)

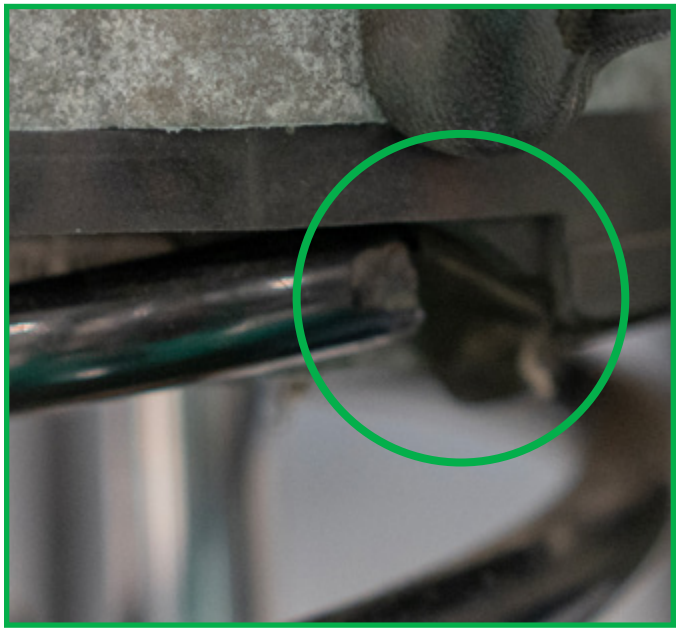

FIGURE 26

8. Position the lower coil winding so it aligns correctly with the rubber isolator. (Figure 27)

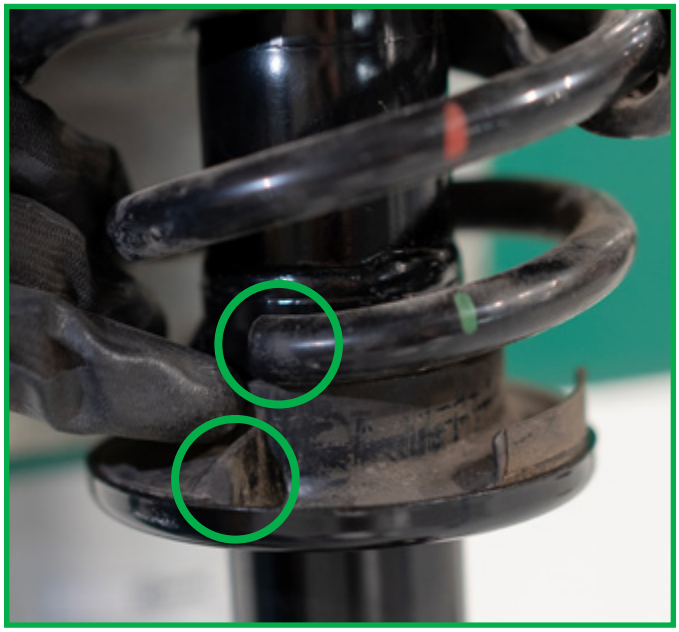

FIGURE 27

9. Use the compressor tool to release tension from the coil spring, making sure the lower coil winding is properly seated in the rubber isolator. (Figure 28)

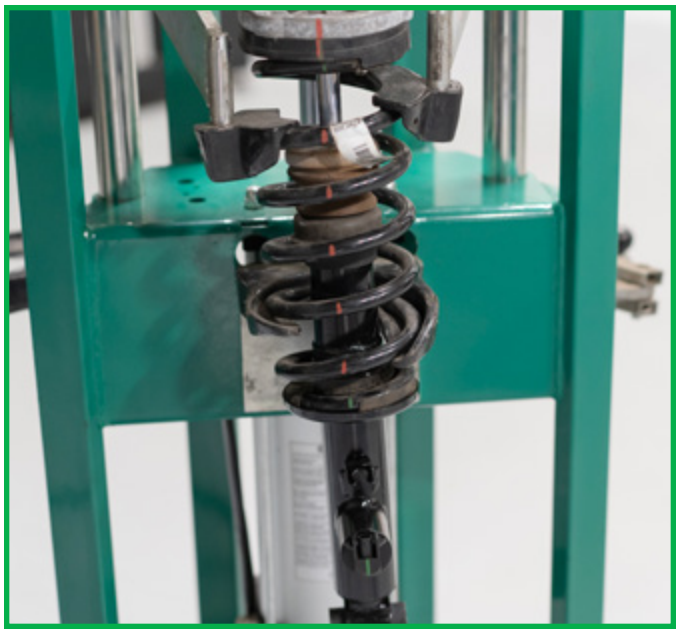

FIGURE 28

10. Push the bump stop and dust cover into the top mount. (Figures 29, 30)

FIGURE 29

FIGURE 30

11. Coil strut reassembly complete.

COIL STRUT INSTALLATION

WARNING:

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

1. Place the assembled Arnott coil strut in the control arm and reinstall the lower shock mount bolt. Don't tighten it yet. (Figure 31)

FIGURE 31

2. Bring the control arm back in position and reinstall the control arm pivot bolt. Don't tighten it yet. (Figures 32, 33)

FIGURE 32

FIGURE 33

3. Reconnect the coil sensor to the strut bracket and the strut. (Figure 34)

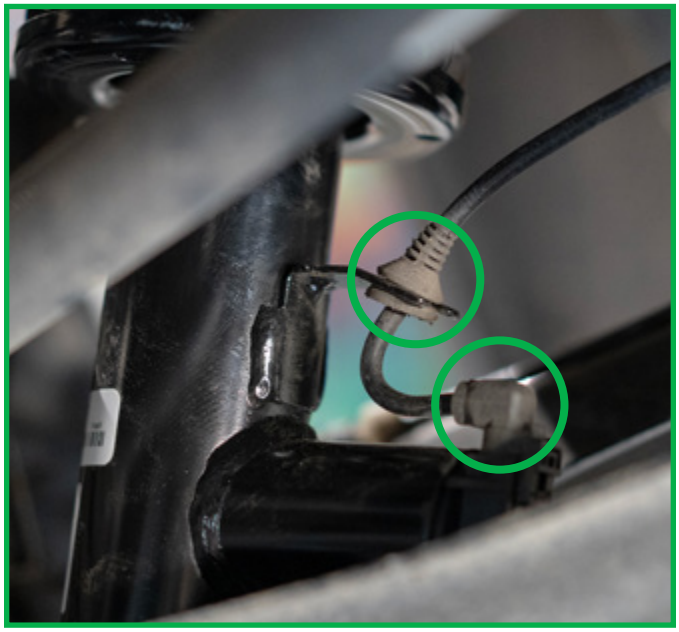

FIGURE 34

4. Reinstall the three (3) top mount bolts to the strut tower. Tighten to the manufacturer's specifications. (Figure 35)

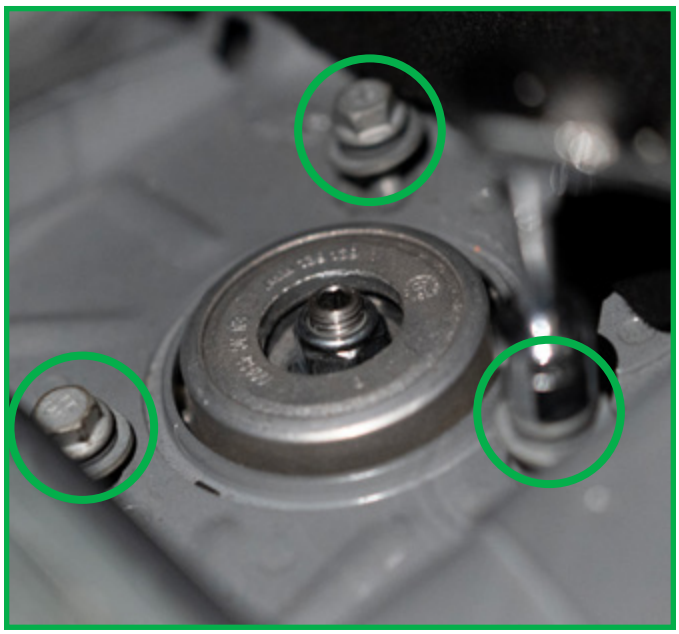

FIGURE 35

5. Reinstall the cargo paneling. (Figure 36)

FIGURE 36

6. Reinstall the applicable wheel and lower the vehicle to normal ride height. (Figure 37).

FIGURE 37

7. Tighten the lower shock mount bolt and the control arm pivot bolt to the manufacturer's specifications. (Figures 38, 39)

FIGURE 38

FIGURE 39

8. Installation complete.

WARNING:

Wheel alignment after installation is strongly advised.

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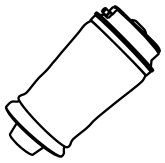
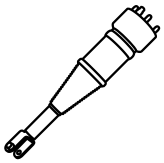
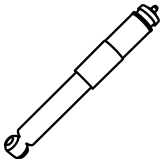
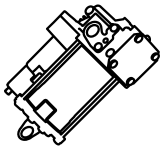
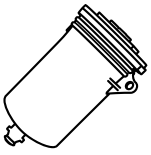
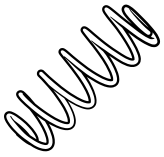

Air Springs

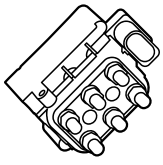

Struts

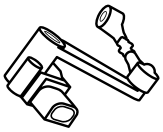

Shocks


Compressors


Dryers


Coil Spring Conversion Kits


Valve Blocks


Ride Height Sensors