



# INSTALLATION MANUAL

## SK-5084 Arnott New Front Right Shock BMW X5/X6 (F15/F16 Chassis, w/VDC)



**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.

# SHOCK REMOVAL

1. Raise the vehicle and remove the front wheel. (Figure 1)

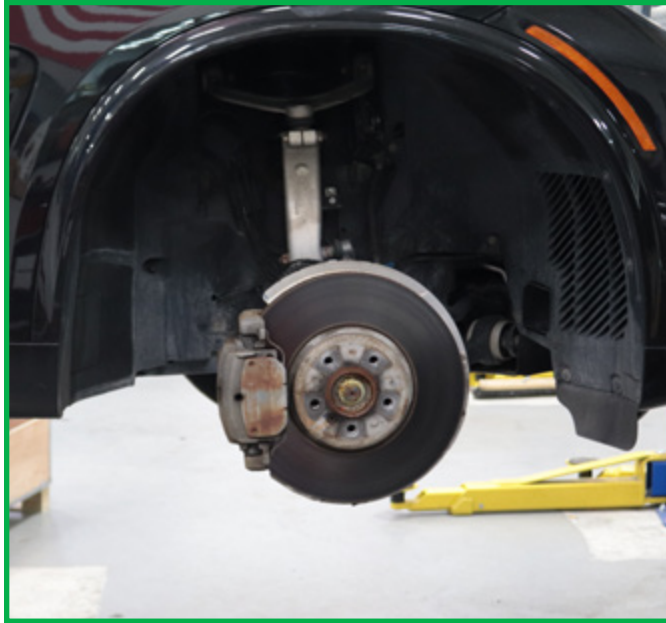


FIGURE 1

2. Locate the wiring harness connector box and disconnect the strut's wire. (Figures 2, 3)



FIGURE 2



FIGURE 3

3. Disconnect the acceleration sensor bracket from the strut. (Figures 4, 5)



FIGURE 4



FIGURE 5

4. Un-route the wires from the brackets on the strut body. (Figures 6, 7)



FIGURE 6



FIGURE 7

5. Remove the bolt from the lower strut mount tube clamp. (Figures 8, 9)



FIGURE 8



FIGURE 9

6. Remove the lower strut mount bolt at the lower spring arm. (Figure 10)



FIGURE 10

7. Disconnect the spindle from the upper wishbone. (Figures 11, 12)

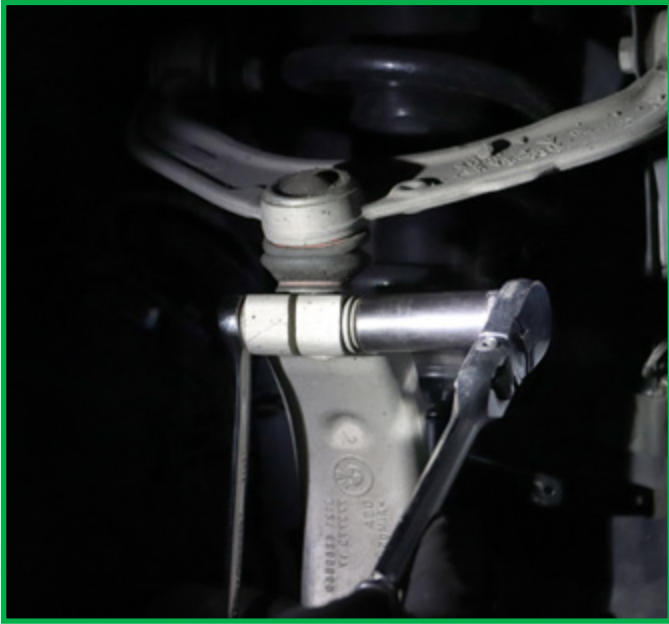


FIGURE 11

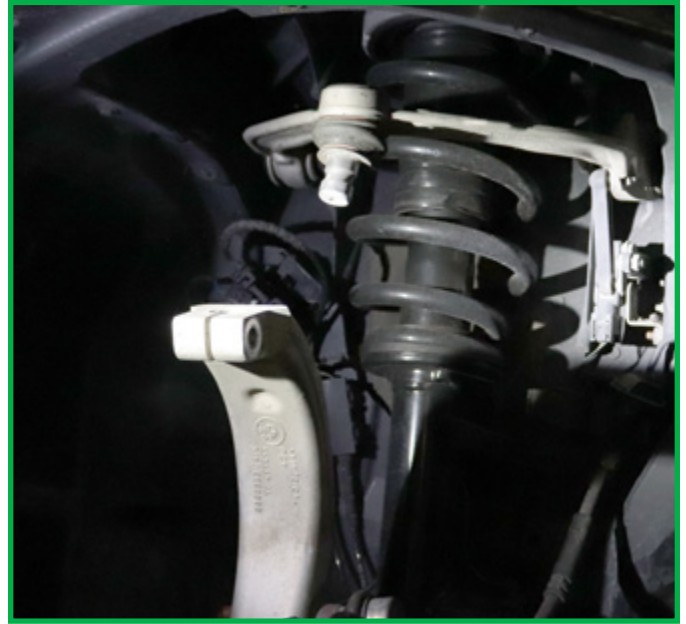


FIGURE 12

8. Use an appropriate tool to spread the tube clamp and separate the strut from the lower mount. (Figure 13)



FIGURE 13

9. Remove applicable trim in the engine bay to gain access to the top mount nuts. Remove the nuts. (Figures 14, 15)



FIGURE 14

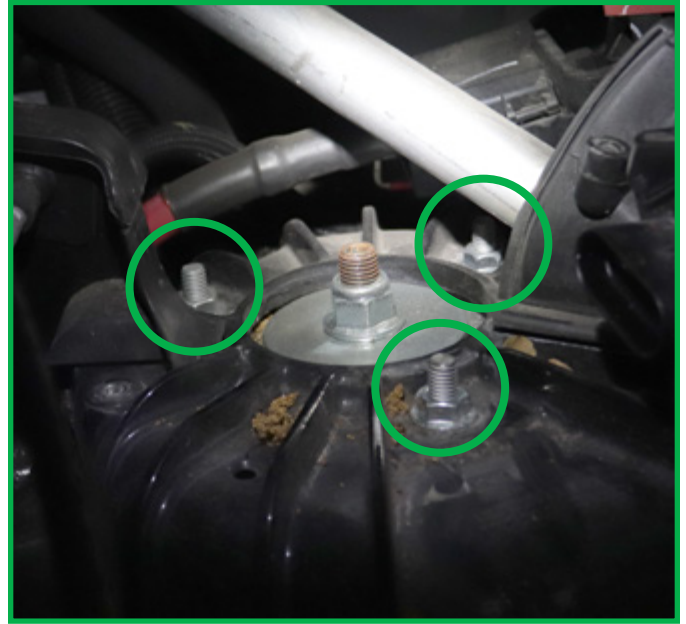


FIGURE 15

10. Remove the strut from the vehicle. (Figure 16)



FIGURE 16

11. Removal complete.

# SHOCK TEAR DOWN

1. Mark the coil and top mount for alignment. (Figures 17, 18)



FIGURE 17



FIGURE 18

2. Use an appropriate Coil Compressor to disassemble the strut.
3. Remove the top mount, spring, and bump stop/dust shield. (Figures 19, 20)



FIGURE 19



FIGURE 20



4. Remove the spring seat and the spring seat collar. (Figure 21)



FIGURE 21

5. Set aside the top mount, spring, spring seat, spring seat collar, and bump stop/dust shield for later use. (Figure 22)



FIGURE 22

6. Tear down complete.

# STRUT ASSEMBLY



**WARNING:**

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

1. Insert the new Arnott strut into a Coil Compressor.
2. Install the OEM spring seat collar, and spring seat onto the strut. (Figure 23)



FIGURE 23

3. Install the OEM spring onto the strut. (Figure 24)



FIGURE 24

4. Install the bump stop/dust shield onto the strut. (Figure 25)



FIGURE 25

5. Align the coil from previous marks.
6. Compress the coil. (Figure 26)

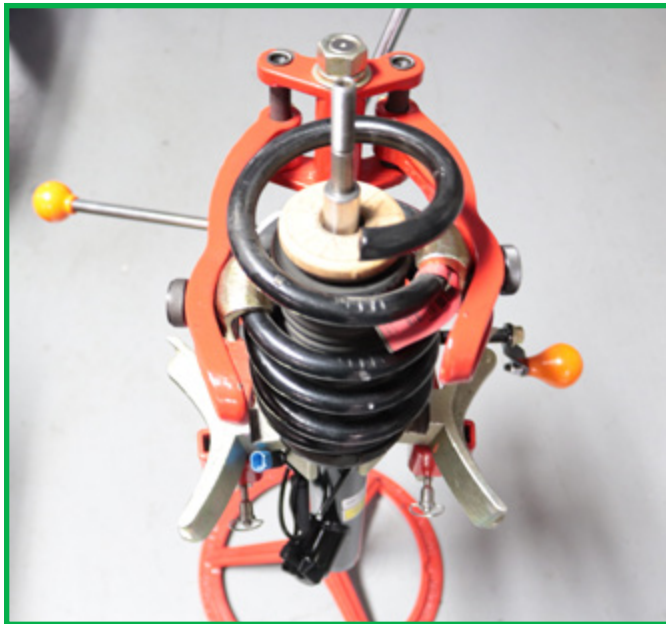


FIGURE 26

7. Install the top mount onto the strut with the threads protruding through the top mount. (Figure 27)



FIGURE 27

8. Tighten the new top nut to manufacturer's specification utilizing the appropriate tool and follow manufacturer's service procedures. (Figure 28)



FIGURE 28

9. Strut assembly complete.

# STRUT INSTALLATION



**WARNING:**

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

1. Install the new Arnott strut into the vehicle. Loosely thread on the included top mount nuts. (Figure 29)



FIGURE 29

2. Seat the strut into the tube clamp. Do not install the bolt at this point. (Figure 30)



FIGURE 30

3. Connect the lower strut mount to the lower spring arm with the bolt. Do not tighten at this point. (Figure 31)



FIGURE 31

4. Reconnect the spindle to the upper wishbone. Tighten hardware to manufacturer's specification. (Figures 32, 33)

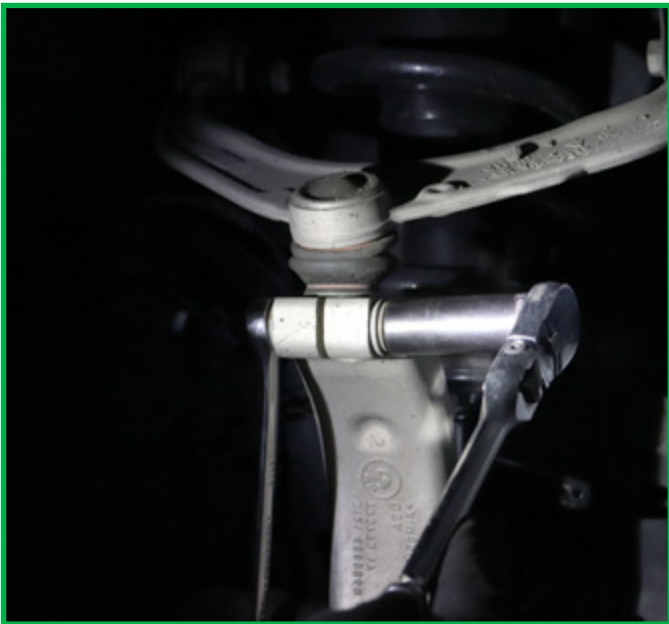


FIGURE 32

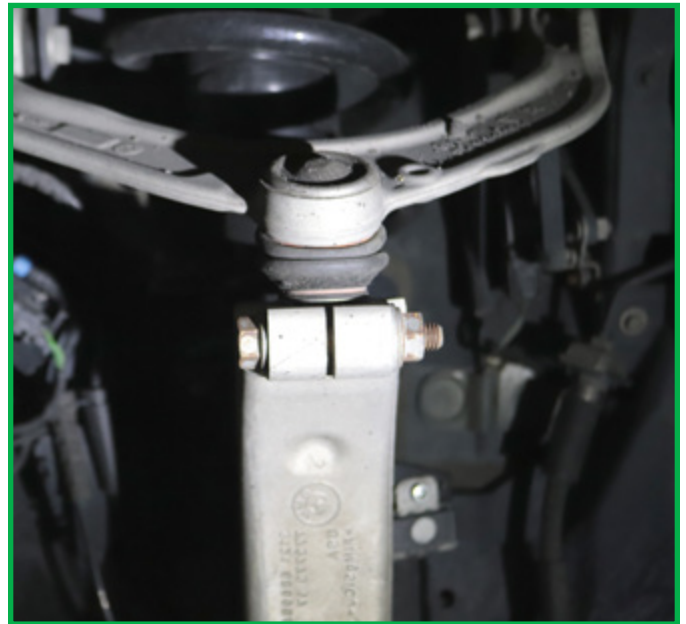


FIGURE 33

5. Use an appropriate jack, or other means, to raise the wheel hub to standard trim height. Use an appropriate tool to spread the tube clamp to relieve any binding, and then install the tube clamp bolt. Tighten the tube clamp and lower mount bolt to manufacturer's specification. (Figures 34, 35)



FIGURE 34

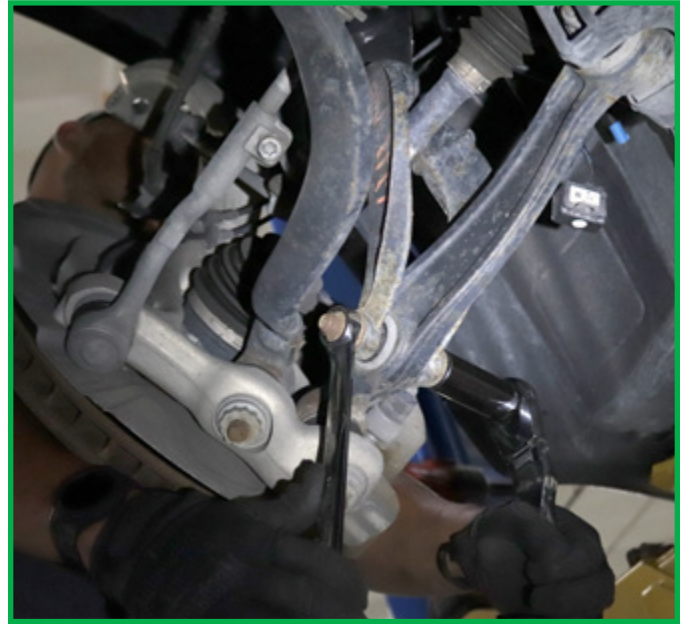


FIGURE 35

6. Tighten the top mount nuts to manufacturer's specification. (Figure 36)



FIGURE 36

7. Reroute the wires through the brackets on the strut. Install the acceleration sensor bracket to the strut. (Figures 37, 38)



FIGURE 37



FIGURE 38

8. Connect the strut's wire harness to the vehicle. (Figures 39, 40)



FIGURE 39



FIGURE 40



9. Reinstall the wheel. (Figure 41)



FIGURE 41

10. Installation complete.

# Arnott™

## Suspension Products

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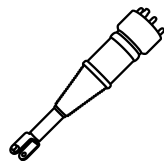
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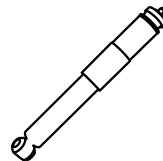
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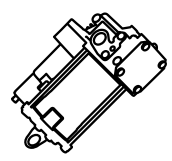
Air Springs



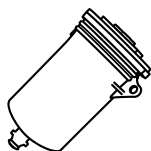
Struts



Shocks



Compressors



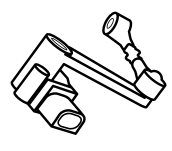
Dryers



Coil Spring  
Conversion Kits



Valve Blocks



Ride Height  
Sensors