

# **INSTALLATION MANUAL**

## AS-3403 New Front Left Air Strut BMW 7 Series (G11/G12 Chassis, w/RWD)



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### CONGRATULATIONS ON YOUR PURCHASE OF AN ARNOTT<sup>®</sup> 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.

### FRONT AIR STRUT REMOVAL

- 1. Set steering to straight ahead.
- 2. Raise vehicle.
- 3. Remove front left wheel. (Figure 1)



FIGURE 1

4. Disconnect the air line from the strut. (Figure 2)



FIGURE 2

5. Disconnect and unroute the two (2) electrical connections to the strut. (Figures 3, 4)

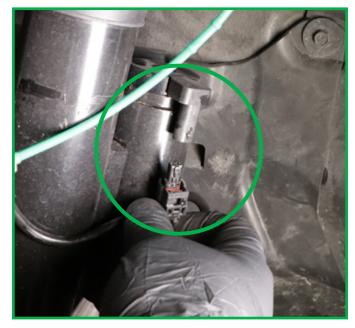


FIGURE 3



FIGURE 4

6. Disconnect the control arm spindle from wheel carrier assembly. (Figures 5, 6)



FIGURE 5



FIGURE 6

7. Remove the sway bar end link nut and disconnect the end link. (Figures 7, 8)



FIGURE 7



FIGURE 8

8. Remove the bottom strut mount bolt. (Figures 9, 10)



FIGURE 9



**FIGURE 10** 

9. Locate and remove the struts three (3) top mount bolts. (Figures 11, 12, 13)





FIGURE 12



FIGURE 13

10. Remove the old strut from the vehicle. (Figure 14)



FIGURE 14

11. Removal complete.

### FRONT AIR STRUT INSTALLATION



#### WARNING:

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

1. Prep the new air strut for installation by removing the silver threaded shipping plug, installing the provided VOSS fitting, and removing the white shipping pin. (Figures 15, 16, 17, 18)







**REV 01** 



FIGURE 17



FIGURE 18

2. Install the new strut into the vehicle. (Figure 19)



FIGURE 19

3. Install the three (3) top mount bolts. Tighten to manufacturer's specifications. (Figure 20)



FIGURE 20

4. Reinstall the bottom mount bolt. Tighten to manufacturer's specifications. (Figures 21, 22)



FIGURE 21



FIGURE 22

5. Install the sway bar end link nut and tighten to manufacturer's specifications. (Figures 23, 24)

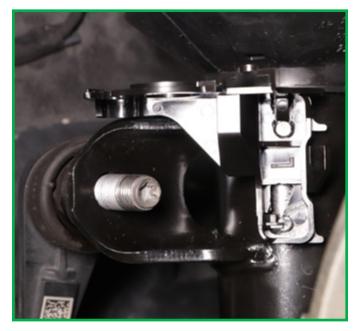


FIGURE 23

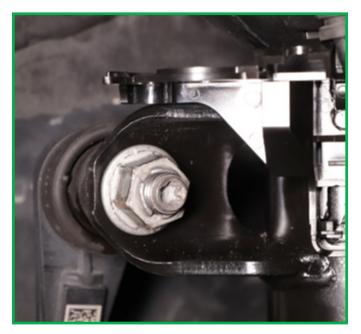


FIGURE 24

6. Reconnect the control arm spindle to the wheel carrier assembly. Tighten to manufacturer's specifications. (Figures 25, 26)



FIGURE 25



FIGURE 26

7. Connect and route the strut electrical connections. (Figures 27, 28, 29)





FIGURE 28

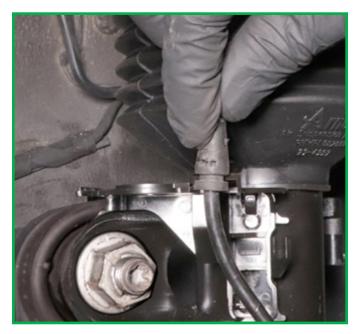


FIGURE 29

8. Prepare air line by removing old VOSS fitting using the figure below as an example. (Figure 30)

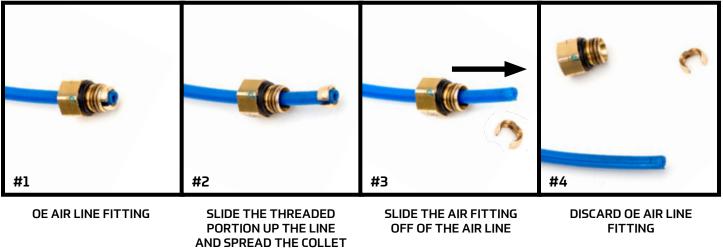
#### REMOVAL



Prior to inserting the existing air line into the new air strut you will need to remove the old original equipment air line fitting and discard.



Scratches and/or deep cuts in the air line can result in possible leaks. Inspect the air line before insertion. Air line needs to be replaced if damaged.



AND SPREAD THE COLLET OPEN TO REMOVE

FIGURE 30

9. Insert air line into strut VOSS fitting. Press air line in firmly until it is seated. (Figure 31)



FIGURE 31

- 10. Reinstall wheel.
- 11. Lower the vehicle.
- 12. Installation complete.



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