



# INSTALLATION MANUAL

## A-3636 Arnott New Rear Air Spring BMW 7 Series (F01/02/04, Incl. Hybrids)



**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](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.

# AIR STRUT REMOVAL

1. Set steering to straight ahead.
2. Raise vehicle.
3. Remove applicable rear wheel and wheel well liner. (Figures 1, 2)

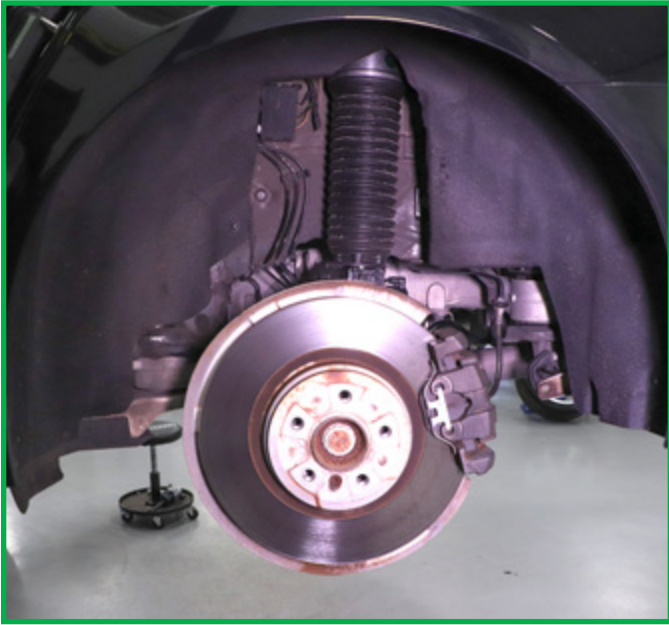


FIGURE 1

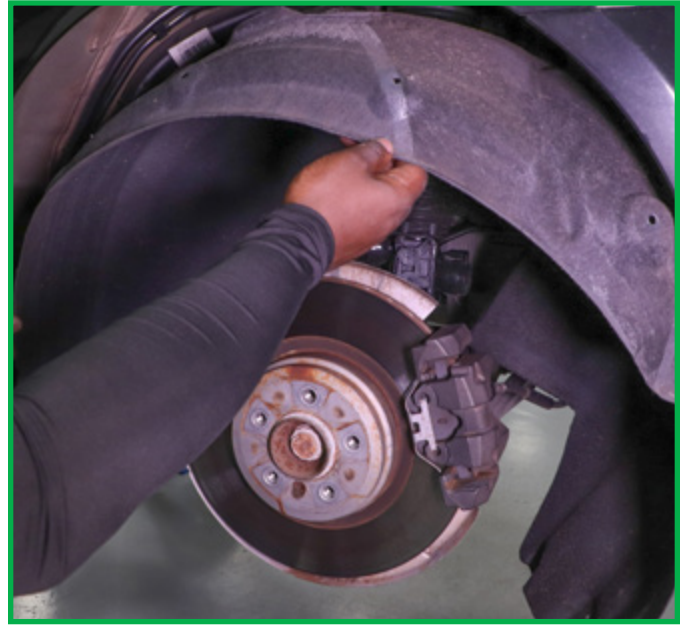


FIGURE 2

4. Remove the rear speaker cover. (Figures 3, 4)



FIGURE 3



FIGURE 4

5. Remove rear speaker and unhook. (Figures 5, 6)



FIGURE 5



FIGURE 6

6. Remove foam underneath speaker to access top mount nuts. (Figure 7)



FIGURE 7

7. Loosen and remove the three (3) top mounting nuts from the strut. (Figure 8)



FIGURE 8

8. Disconnect the strut's electrical connection. (Figures 9, 10, 11)

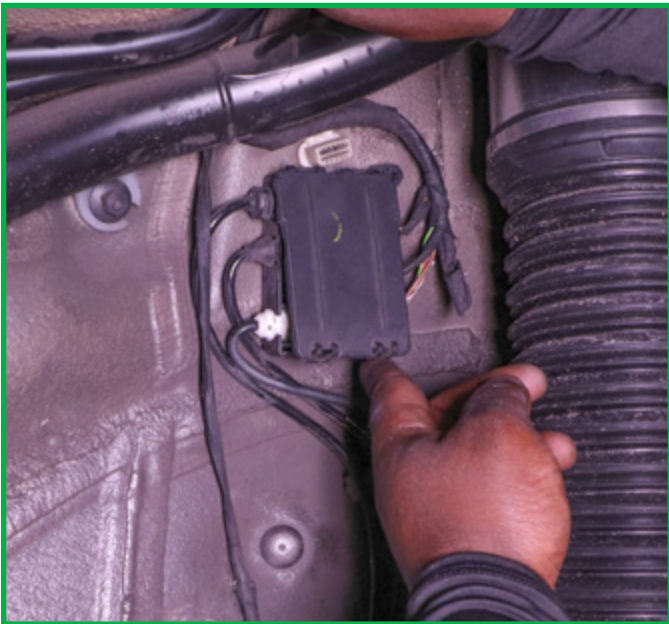


FIGURE 9

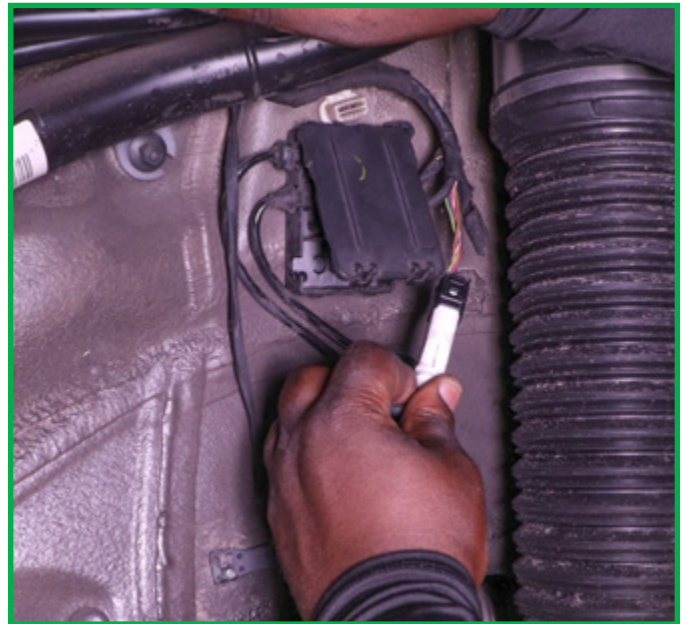


FIGURE 10



FIGURE 11

9. Remove the air line and check valve from OE strut to release air pressure. (Figures 12, 13, 14)



FIGURE 12

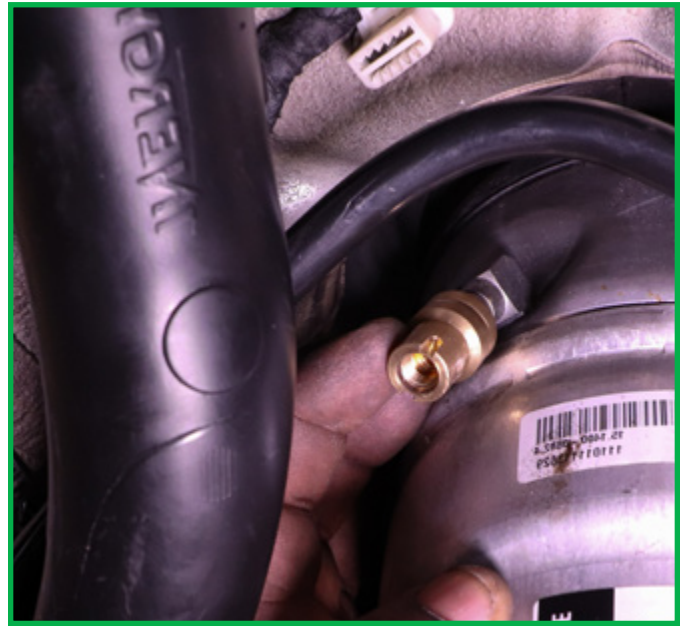


FIGURE 13

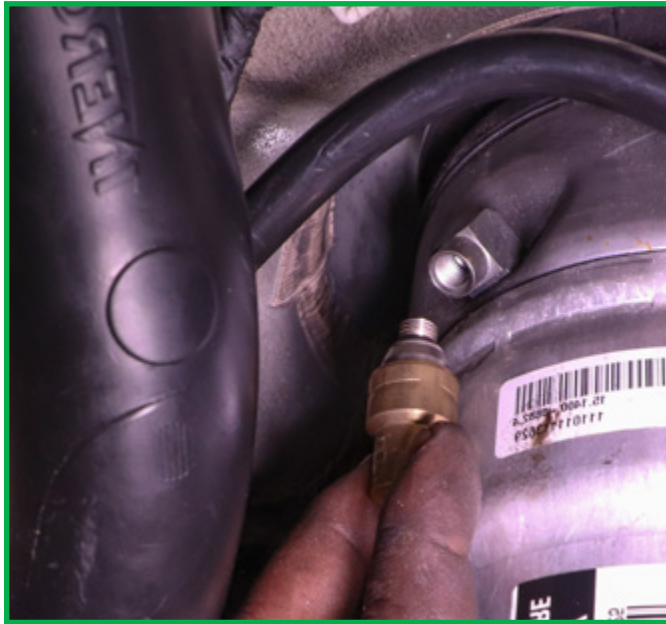


FIGURE 14

10. Remove OE air line fitting from the air line and discard. (Figure 15)

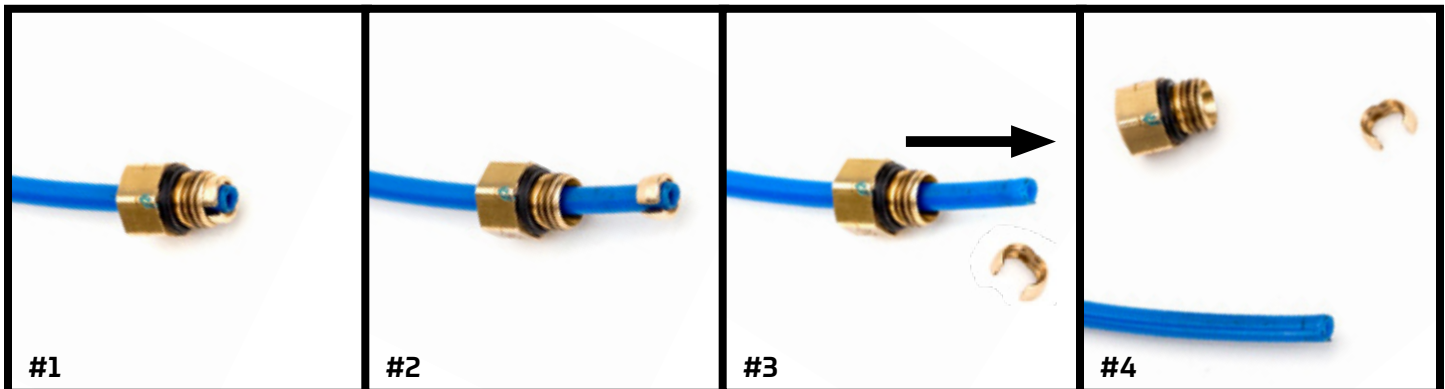
## REMOVAL



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.

## NOTE:

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.



#1  
OE AIR LINE FITTING

#2  
SLIDE THE THREADED  
PORTION UP THE LINE  
AND SPREAD THE COLLET  
OPEN TO REMOVE

#3  
SLIDE THE AIR FITTING  
OFF OF THE AIR LINE

#4  
DISCARD OE AIR LINE  
FITTING

FIGURE 15

11. Loosen and remove the bottom mount bolt. (Figures 16, 17)



FIGURE 16

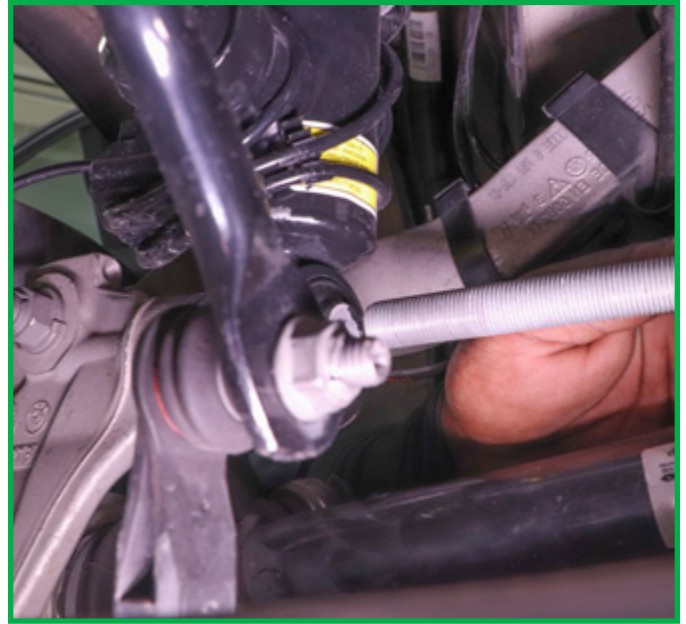


FIGURE 17

12. Remove the shock from the vehicle. (Figure 18)



FIGURE 18

13. Removal complete.

# AIR SPRING REPLACEMENT

1. Verify that the strut has been completely deflated prior to proceeding with disassembly. (Figure 19)



FIGURE 19

2. Use the provided shock cap tool to remove the top cap from the air spring. (Figure 20)



FIGURE 20

3. Remove the nut from the shock rod. (Figure 21)



FIGURE 21

4. Remove the air spring from the shock. (Figure 22)



FIGURE 22

5. Remove any existing O-rings and spacers. They will not be reused. (Figure 23)



FIGURE 23

6. Clean the shock body and inspect for any damage around the sealing surface. Surface damage at the piston seal area may cause the unit to leak once assembled. (Figure 24)



FIGURE 24

7. Install the new included O-rings and spacers onto the shock body, seated against the perch. Beginning with a spacer, alternate between spacer and O-ring. Lubricate the O-rings. (Figure 25)



FIGURE 25

8. Place the air spring onto the shock. Carefully guide the shock rod through the piston and isolator mounts. **Use caution when installing as to not dislodge the bump stop from the top mount.**
9. Install the included washer and top nut, tighten to manufacturers specification. (Figure 26)

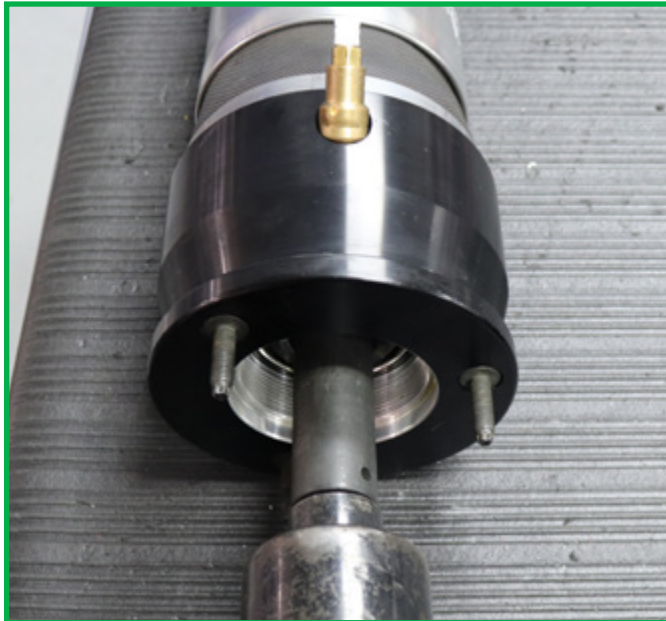


FIGURE 26

10. Install the included O-ring into the new top cap. Lubricate the O-ring. (Figure 27)

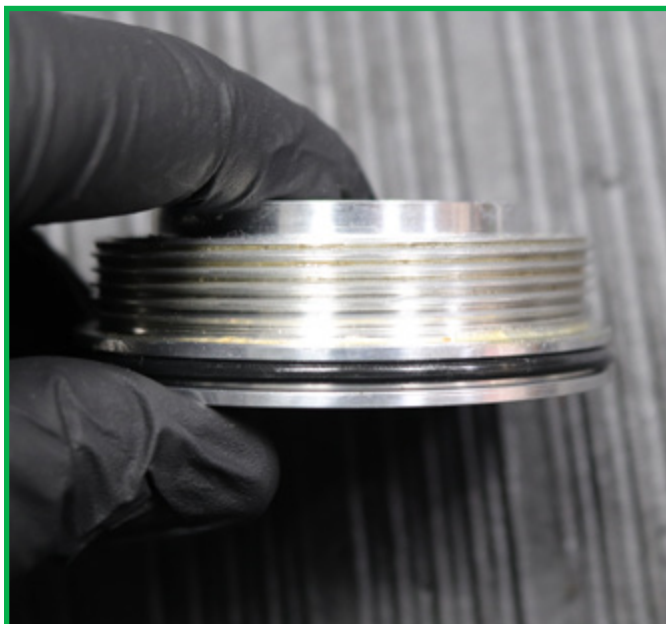


FIGURE 27

11. Thread the cap into the top mount and secure using the included top cap tool. (Figure 28)



FIGURE 28

12. Remove the shipping pin from the air fitting. Carefully hold the piston against the O-rings to create the initial seal, and use an air gun to fill the spring with just enough air to seat the piston over the O-rings. (Figures 29, 30, 31)



FIGURE 29



FIGURE 30



FIGURE 31

13. Set the alignment of the strut by using a pair of blocks or other means to set the air fitting approximately in line with the control unit near the bottom mount. (Figures 32, 33)

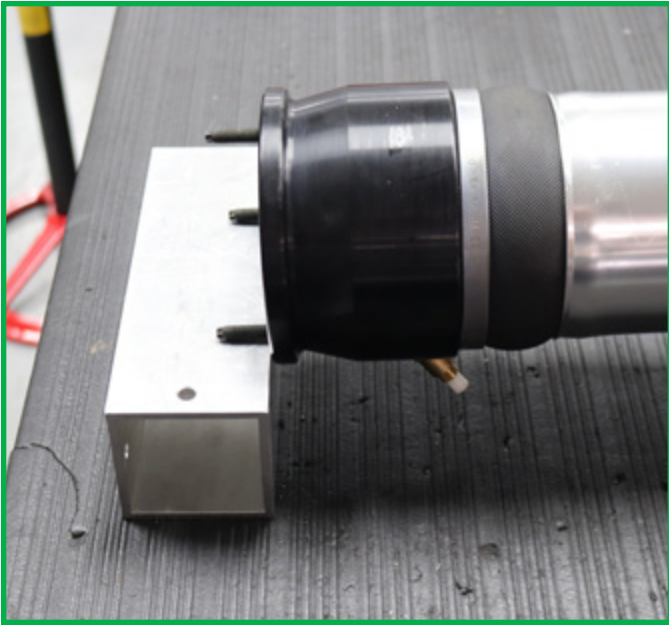


FIGURE 32



FIGURE 33

## AIR STRUT INSTALLATION



**WARNING:**

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

1. Install the new air strut into the vehicle. (Figure 34)



FIGURE 34

2. Reinstall the bottom mount bolt and tighten to manufacturer's specifications. (Figures 35, 36)



FIGURE 35



FIGURE 36

3. Remove the white shipping pin from the air fitting. (Figure 37)



FIGURE 37

4. Install the air line by pressing the line firmly into the fitting until firmly seated. (Figures 38, 39)



FIGURE 38



FIGURE 39

5. Reconnect the strut's electrical connection and clip into place. (Figures 40, 41)

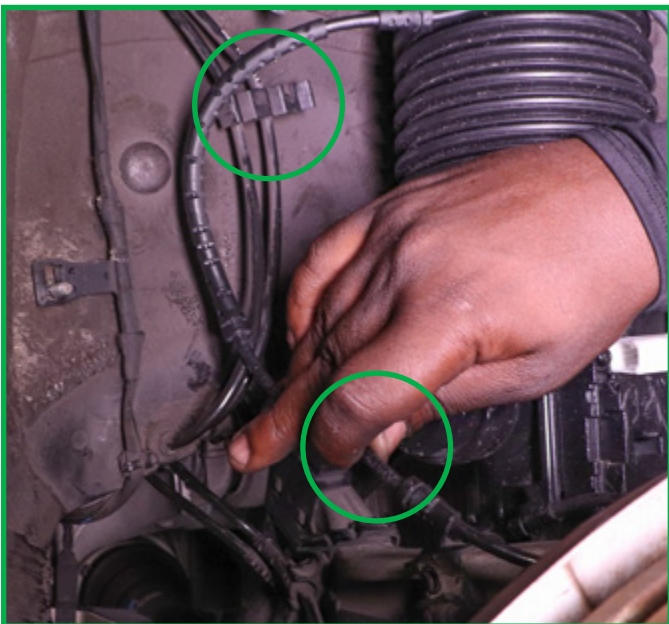


FIGURE 40



FIGURE 41

6. Install the three (3) top mount nuts from inside the vehicle and tighten to manufacturer's specifications. (Figure 42)

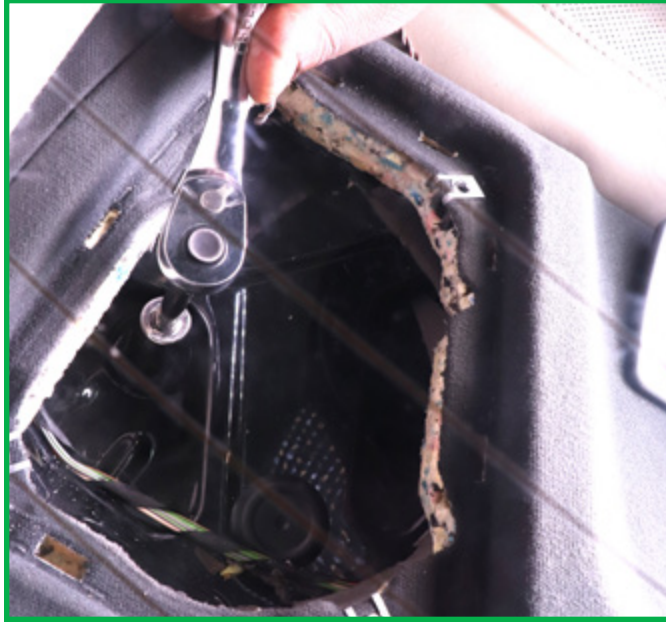


FIGURE 42

7. Reinstall speaker cavity foam (if applicable).
8. Reinstall the rear speaker and rear speaker cover.
9. Reinstall wheel well liner.
10. Reinstall the wheel.
11. Lower vehicle.
12. Installation complete.

# Arnott™

## Suspension Products

### Arnott US Business Office:

[www.arnottinc.com](http://www.arnottinc.com)

100 Sea Ray Drive  
Merritt Island, FL 32953

**Call:** 800.251.8993

321.868.3016

**Fax:** 321.868.3703

**Email:** [techassistance@arnottinc.com](mailto:techassistance@arnottinc.com)

### Arnott Europe Business Office:

[www.arnotteurope.com](http://www.arnotteurope.com)

Docterskampstraat 1E/1F, 3  
5222 AM 's-Hertogenbosch (NL)

**NL Phone:** +31 73 7850 580

**DE Phone:** +31 85 2087 438

**UK Phone:** +44 203 3186 124

**BE Phone:** +32 258 846 90

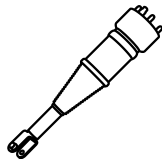
**ES Phone:** +34 91 901 10 56

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

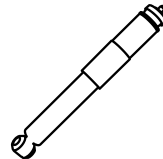
**Email:** [info@arnotteurope.com](mailto:info@arnotteurope.com)



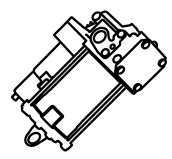
Air Springs



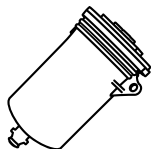
Struts



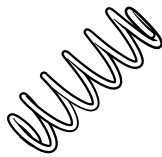
Shocks



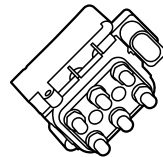
Compressors



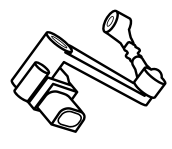
Dryers



Coil Spring  
Conversion Kits



Valve Blocks



Ride Height  
Sensors