



# INSTALLATION MANUAL

C-5689

Arnott Rear Coil Spring Conversion Kit  
BMW X5 (F15/F85) & X6 (F16/F86) 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.

**NOTE: UPON COMPLETION OF INSTALLATION, A 4-WHEEL ALIGNMENT IS RECOMMENDED.**

## REAR AIR SPRING REMOVAL

1. Disable the air suspension system and deflate the applicable air spring according to the manufacturer's instructions.
2. Raise the vehicle. Ensure both sides of the vehicle are raised to allow extension.
3. Remove the applicable rear wheel. (Figure 1)



FIGURE 1

4. Turn the air spring counterclockwise to disengage the top from its locked position (Figure 2). Additional figures are included to show the locking mechanism from above, in the trunk (Figures 3, 4).



FIGURE 2



FIGURE 3

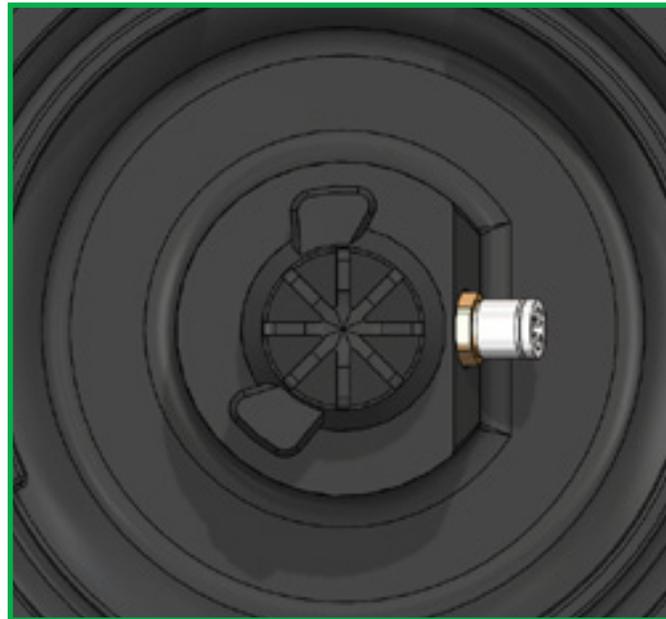


FIGURE 4

5. Remove the air spring by lowering it out and toward the front of the vehicle. Avoid tugging on the air line. (Figure 5)



FIGURE 5

6. Remove the air line. (Figures 6, 7)



FIGURE 6



FIGURE 7

7. Place the unused air line in a suitable location away from friction or heat sources.
8. Rear air spring removal is complete.

# REAR COIL SPRING CONVERSION INSTALLATION

**NOTE:** Steps 2 and 3 loosen the control arm to allow for more space to install the coil spring. These steps can be substituted by using an appropriate coil compressor with caution and in accordance with safety protocols.

1. Support the rear axle with an appropriate jack or stand.
2. Remove the height sensor bolt at the control arm mounting point (Figure 8). Carefully move the height sensor arm to the side to avoid damage. (Figure 9)



FIGURE 8



FIGURE 9

3. Remove the sway bar link nut and lower strut bolt. (Figure 10)



FIGURE 10

4. Assemble the provided lower coil spring perch and hardware onto the frame of the vehicle. Do not fully tighten yet. (Figures 11, 12, 13, 14)



FIGURE 11



FIGURE 12

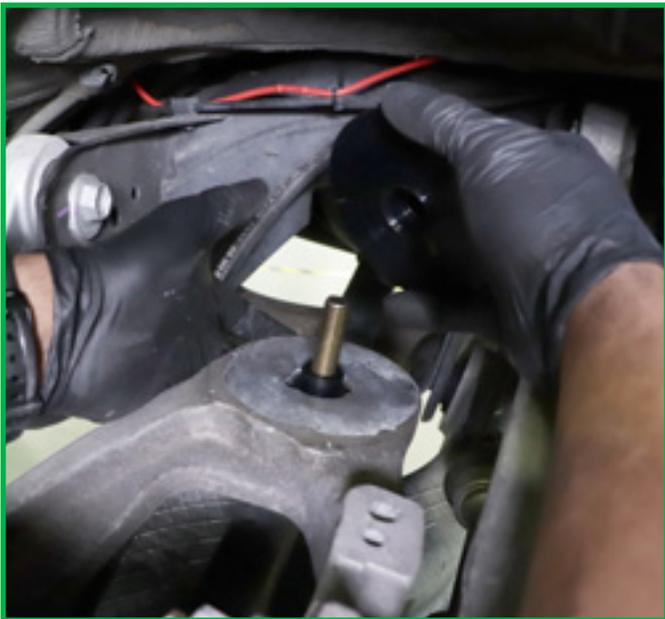


FIGURE 13



FIGURE 14

5. Place the upper coil spring perch at the top of the spring as shown. (Figures 15, 16)



FIGURE 15



FIGURE 16

6. Place the spring into the mounting position. (Figures 17, 18)



FIGURE 17



FIGURE 18

7. Torque the fastener to 80ft/lbs. (Figure 19)



FIGURE 19

8. Reinstall the lower strut bolt, sway bar link nut, and height sensor arm bolt. (Figure 20)



**WARNING:**

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



FIGURE 20

9. Reinstall the applicable rear wheel.
10. Repeat the removal and installation steps for the other rear spring.
11. Lower the vehicle.
12. Rear coil spring conversion installation is complete.

**NOTE: UPON COMPLETION OF INSTALLATION, A-4 WHEEL ALIGNMENT IS RECOMMENDED.**

## ELECTRONIC BYPASS MODULE INSTALLATION

1. Remove the right trunk panel to access the fuse box. (Figure 21)



FIGURE 21

2. Unplug the air suspension control module. (Figures 22, 23)



FIGURE 22



FIGURE 23

3. Install the three (3) heat-shrink butt splice connectors to the wire harness using the diagram provided. (Figures 24)

	FROM	TO	PIN LOCATION
<b>ARNOTT ELECTRONIC BYPASS MODULE</b>	Brown	Black	6
	Yellow/Red	Blue	24
	Yellow/Brown	Green	25

FIGURE 24

4. Remove the fuse at fuse 154 mini 5A and connect the provided fuse holder. Install the removed fuse into the fuse holder. (Figure 25)



FIGURE 25

5. Connect the EBM (Electronic Bypass Module). (Figures 26, 27)



FIGURE 26

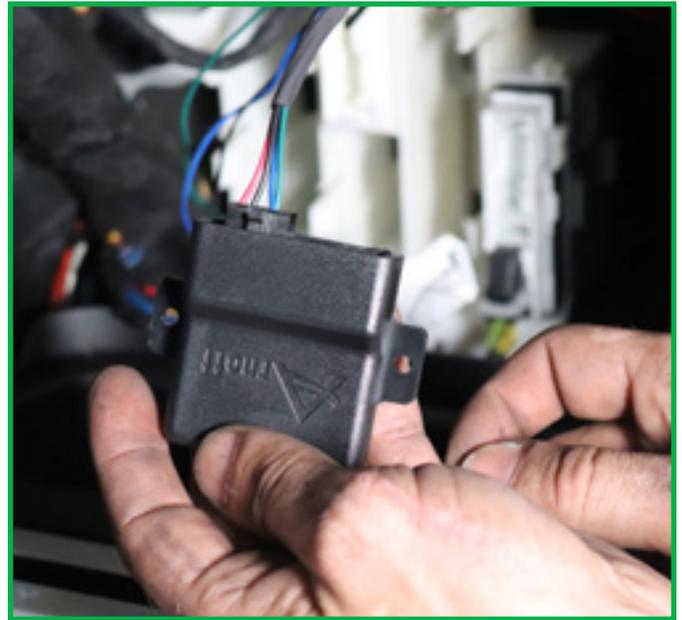


FIGURE 27

6. Do not plug the air suspension control module back in.
7. Place the EBM in a suitable location.
8. Replace the right trunk panel.
9. EBM installation complete.

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## 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)

Industrieweg 19  
5145 PD, Waalwijk (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

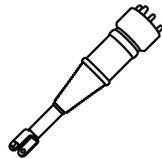
**ES Phone:** +34 91 901 10 56

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

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



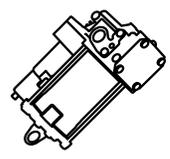
Air Springs



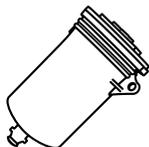
Struts



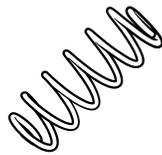
Shocks



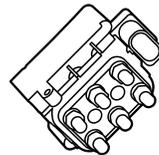
Compressors



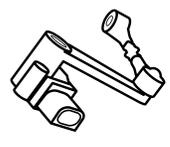
Dryers



Coil Spring  
Conversion Kits



Valve Blocks



Ride Height  
Sensors