

INSTALLATION MANUAL

C-3547
Arnott New Coil Spring Conversion Kit
Mercedes-Benz GL-Class/ML-Class (X164/W164)



Engineered to Ride, Built to Last®

1 REV 01 May 22, 2023

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.

FRONT REMOVAL

- 1. Set steering to straight ahead.
- 2. Raise vehicle.
- 3. Deflate and disable the air suspension per manufacturer's instructions.
- 4. Remove front wheel.
- 5. Disconnect the sway bar linkage. (Figure 1)



FIGURE 1

6. Remove the nut from the ball joint and separate from the spindle assembly. (Figures 2, 3)







7. Cut the cable tie securing the wire harness mount, then remove the wire harness mount from shock. Disconnect the ADS damping coil connector if applicable. (Figure 4)



FIGURE 4

8. Disconnect the air line by unscrewing the brass fitting from the strut's top mount. (Figure 5)



FIGURE 5

9. Remove the three (3) upper mount flange nuts. (Figure 6)

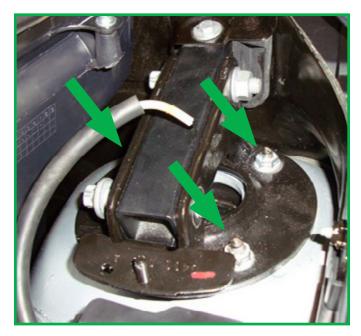


FIGURE 6

10. Remove the lower shock mount nut, followed by the bolt and remove the strut from the vehicle. (Figure 7)



FIGURE 7

11. Removal complete.

FRONT INSTALLATION



WARNING:

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

- 1. Install the replacement strut onto the vehicle in the same orientation as removed.
- 2. Reconnect the sway bar link. Tighten hardware to manufacturer's specifications.
- 3. Install the lower shock mount bolt and nut, tighten to manufacturer's specification. (Figures 8, 9)



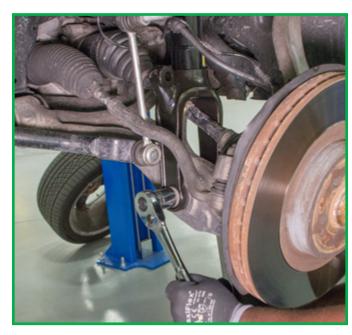


FIGURE 8 FIGURE 9

4. Reattach the spindle assembly and install the nut onto the ball joint. Tighten to manufacturer's specification.

5. Using the supplied cable tie, secure the wire harness mount to the shock. (Figures 10, 11)



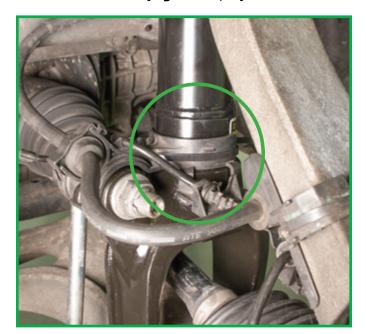


FIGURE 10 FIGURE 11

6. Using the supplied hardware, install and tighten the top mounting nuts to manufacturer's specification. (Figure 12)



FIGURE 12

- 7. Seal off and secure unused air lines and electrical connections.
- 8. Installation complete.

REAR REMOVAL

- 1. Set steering to straight.
- 2. Raise vehicle.
- 3. Remove rear wheel from the applicable side being replaced. (Figure 13)



FIGURE 13

4. Locate and disconnect the air spring's air line connection. Remove the air spring from the vehicle. (Figure 14)



FIGURE 14

5. In the rear cargo area, remove all applicable trim panels to gain access to the upper shock mounting fasteners. Reference manufacturer's instructions for removal of interior paneling. (Figures 15, 16)





FIGURE 15 FIGURE 16

6. With the trim panels removed, lift the insulation to gain access to the top mount nuts. Loosen and remove. (Figures 17, 18)





FIGURE 17 FIGURE 18

 Disconnect the shocks dampening solenoid electrical connector, located just behind the shock, on the control arm. (Figure 19)



FIGURE 19

8. Loosen and remove the lower shock mounting bolt, followed by the old shock. (Figure 20)



FIGURE 20

9. Removal complete.

REAR INSTALLATION



WARNING:

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

- 1. Install the new shock into the vehicle. Install the top nuts and tighten to manufacturer's specifications.
- 2. Install the shock lower mount bolt. Tighten to manufacture's specifications. (Figure 21)



FIGURE 21

3. Install the new retaining clip to the upper spring seat. (Figure 22)



FIGURE 22

4. Place the upper spring isolator and lower spring perch onto the spring. (Figures 23, 24)





FIGURE 23 FIGURE 24

5. Attach the upper spring seat to the upper spring retainer. (Figures 25, 26)







FIGURE 26

6. Using an appropriate spring compressor, compress the spring and install into the spring seat. (Figures 27, 28)





FIGURE 27 FIGURE 28

- 7. Reassemble the cargo area trim.
- 8. Seal off and secure unused air lines and electrical connections.
- 9. Tighten all hardware to manufacturer's specifications.
- 10. Installation complete.

ELECTRONIC BYPASS MODULE INSTALLATION

1. Remove the applicable trim around the driver's seat footwell. Peel back the insulation and remove the panel to gain access to the suspension control module. (Figures 29, 30)





FIGURE 29 FIGURE 30

- 2. Disconnect the three harnesses from the suspension control module.
- 3. Using the table below, splice the included T-Taps into the indicated wires. Connect the EBM harness to the T-Taps. Harness C3 is the 2-pin harness. Harness C2 is the 48-pin harness.

EBM WIRE	VEHICLE HARNESS	HARNESS PIN #	PIN WIRE COLOR
Blue	СЗ	Н	Green/White
Green	СЗ	L	Green
Red	C2	PIN 43	Black/White
Black	Ground Terminal	-	Brown

- 4. Do not plug the module back in.
- 5. Connect the EBM to the EBM harness. Secure the EBM in a suitable location.
- 6. Reassemble the footwell.
- 7. Installation complete.



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Air Springs



Struts



Shocks



Compressors



Dryers



Coil Spring Conversion Kits



Valve Blocks



Ride Height Sensors