



# INSTALLATION MANUAL

## C-3550 Arnott New Coil Spring Conversion Kit Mercedes-Benz CLS-Class (W218)



**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.

# FRONT REMOVAL

1. Set steering to straight ahead.
2. Raise vehicle.
3. Disable air suspension system and deflate all air springs per manufacturer's specifications.
4. Remove the front wheels. (Figure 1)



FIGURE 1

5. Loosen and remove the air line fitting from the top of the strut. (Figures 2, 3)



FIGURE 2

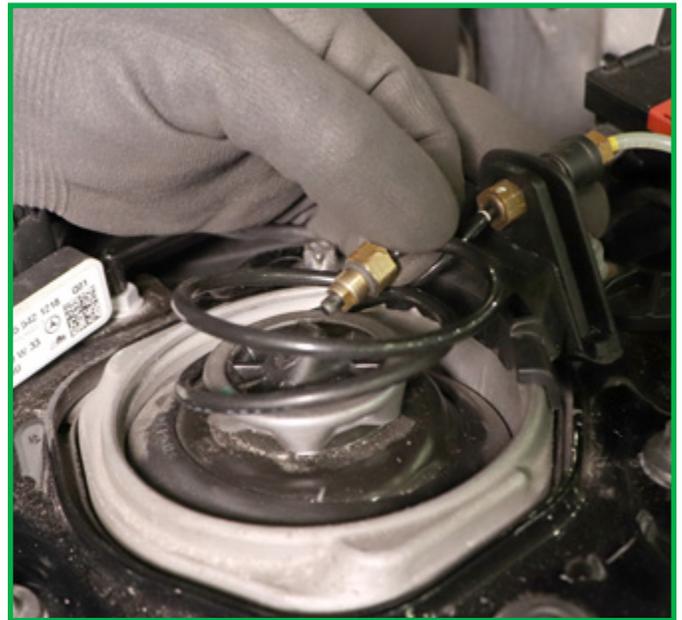


FIGURE 3

6. Loosen and remove the three (3) top mounting bolts. (Figures 4, 5)



FIGURE 4

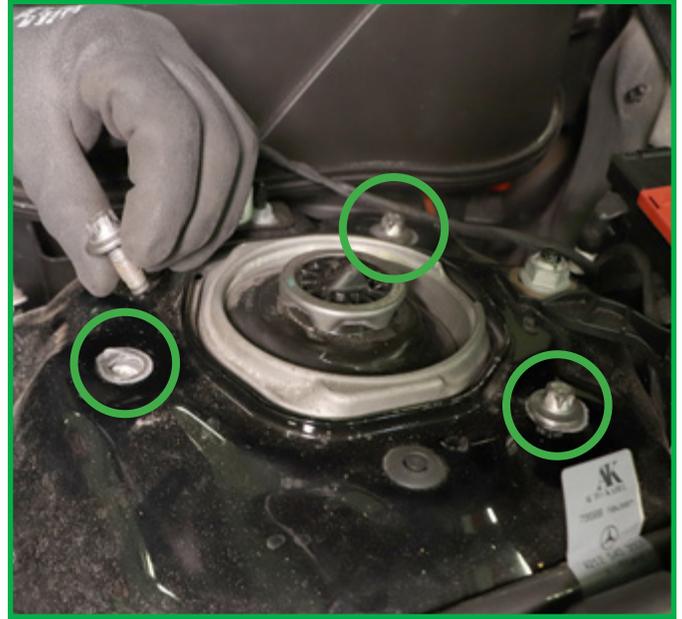


FIGURE 5

7. Disconnect electrical connection on the bottom mount of the strut. (Figure 6)

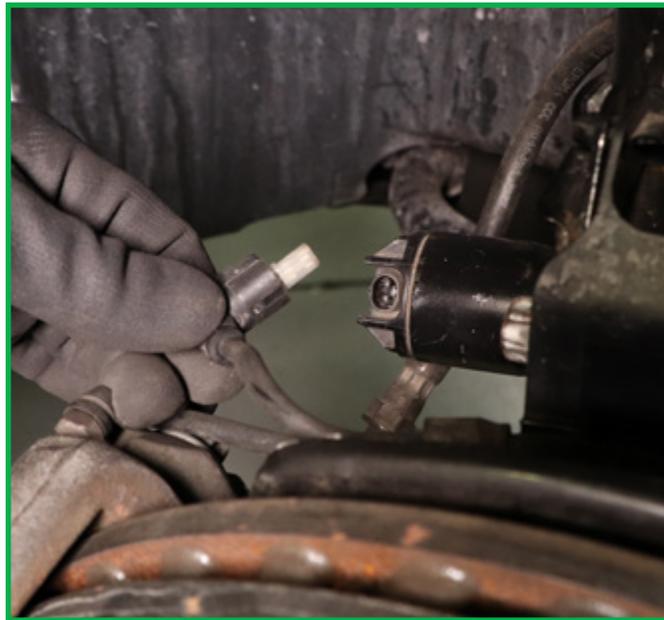


FIGURE 6

8. Unclip and unroute electrical and brake lines from the strut wire mounting bracket. (Figures 7, 8, 9)



FIGURE 7



FIGURE 8



FIGURE 9

9. Remove the strut wire mounting bracket. This bracket will be reused for installation. (Figures 10, 11, 12)

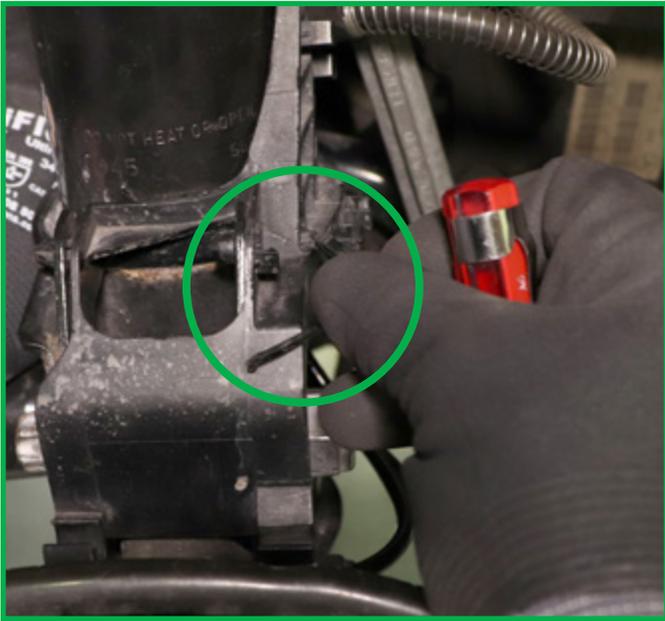


FIGURE 10

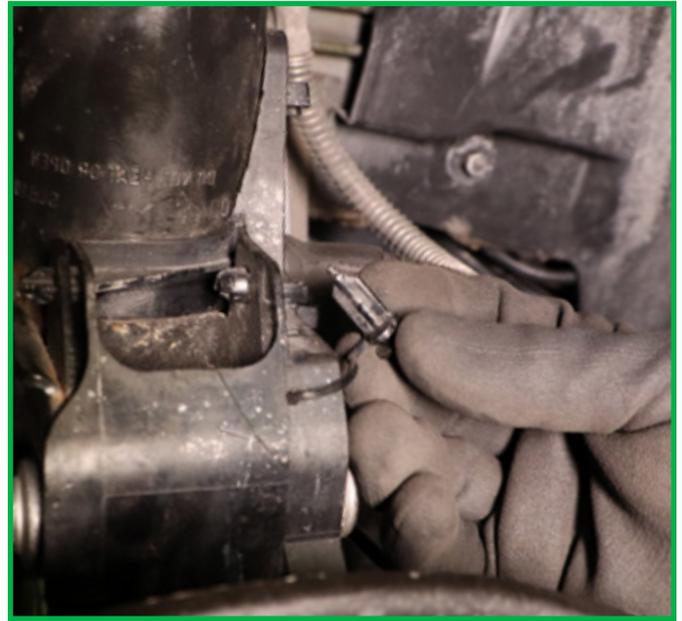


FIGURE 11



FIGURE 12

10. Remove the sway arm link nut and disconnect the sway arm from the strut. (Figures 13, 14)



FIGURE 13



FIGURE 14

11. Remove the two (2) strut bottom mount bolts. (Figures 15, 16, 17)



FIGURE 15

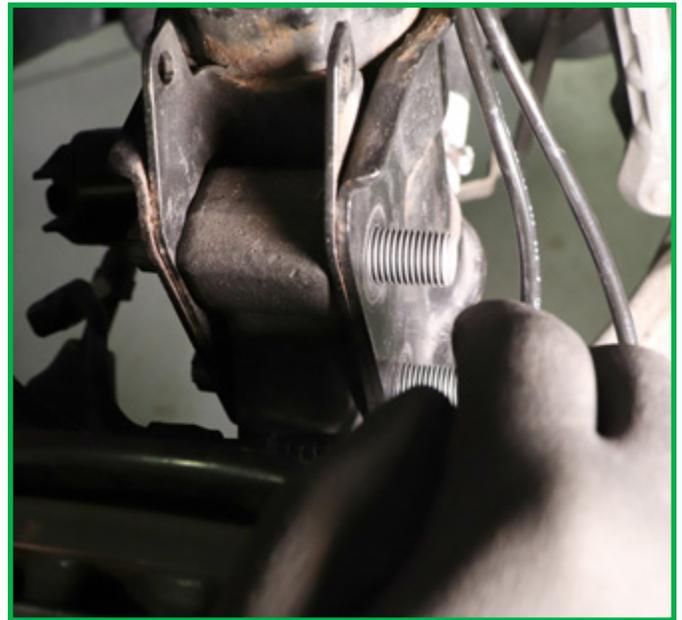


FIGURE 16



FIGURE 17

12. Remove the air strut from the vehicle. (Figure 18)



FIGURE 18

13. Removal complete.

# FRONT INSTALLATION

1. Install the plastic bracket removed from the OEM strut. (Figure 19)



FIGURE 19

2. Install the coil strut into the vehicle. Ensure that the wires and brake lines are routed to the correct side of the strut. (Figure 20)

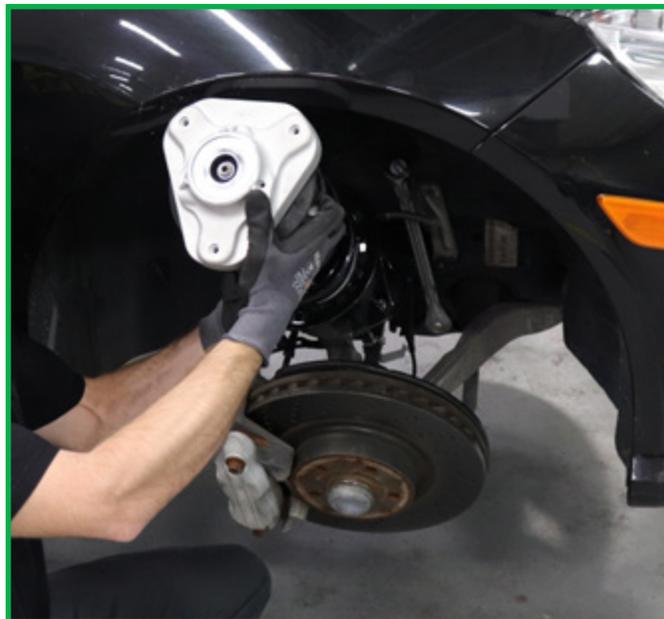


FIGURE 20

3. Install the three (3) new included top mount nuts. Tighten to manufacturer's specifications. (Figure 21)



FIGURE 21

4. Install the lower strut mount bolts. Tighten to manufacturer's specifications. (Figure 22)



FIGURE 22

5. Connect the sway bar link and install the nut. Tighten to manufacturer's specifications. (Figure 23)



FIGURE 23

6. Seal off and secure in a suitable location the air lines and strut electrical connectors.
7. Reinstall the wheels and tighten to manufacturer's specifications.
8. Front installation complete.

## REAR REMOVAL

1. Remove the rear wheels. (Figure 24)



FIGURE 24

2. Ensure all air springs have been deflated per manufacturer's specifications.
3. Disconnect the air line from the air spring. (Figure 25)

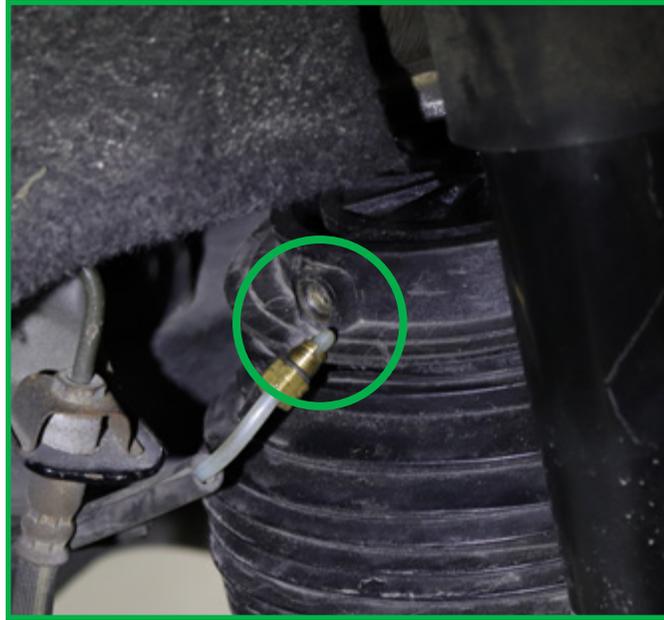


FIGURE 25

4. Disconnect the electrical connector from the shock solenoid. (Figure 26)



FIGURE 26

5. Remove the lower shock mount bolt. (Figure 27)



FIGURE 27

6. Remove necessary trim inside the luggage compartment to access the upper shock mount. (Figure 28)



FIGURE 28

7. Remove the upper shock mount nuts. (Figure 29)



FIGURE 29

8. Remove the shock from the vehicle. (Figure 30)



FIGURE 30

9. Remove the air spring from the vehicle. (Figure 31)



FIGURE 31

10. Removal complete.

## REAR INSTALLATION

1. Remove the lower sway bar link bolt. (Figure 32)



FIGURE 32

2. Remove the spring arm to wheel knuckle bolt. (Figure 33)



FIGURE 33

3. Loosen the spring arm to subframe bolt just enough to allow the spring arm to be repositioned. (Figures 34, 35)

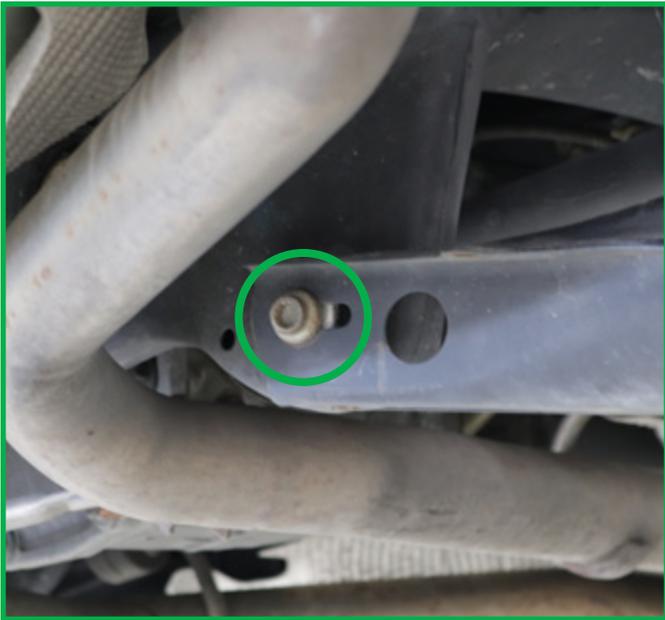


FIGURE 34

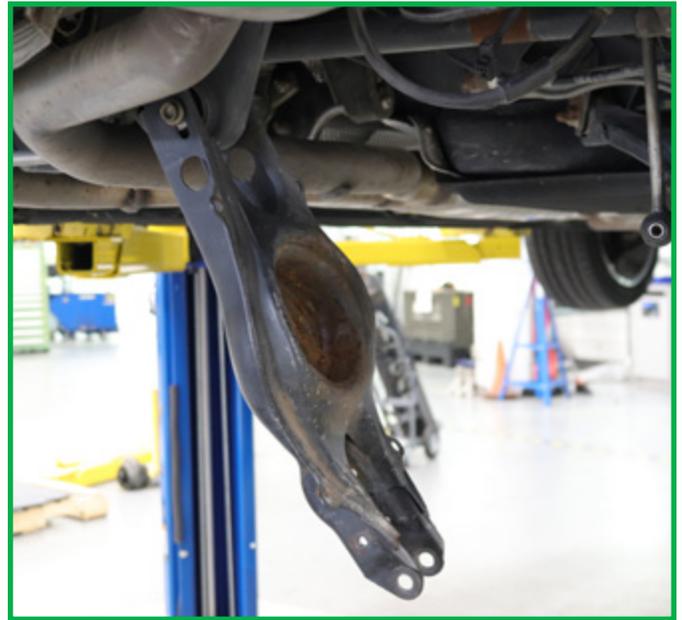


FIGURE 35

4. Remove the retaining clip from the upper spring seat mount stud. It will not be used. Ensure the isolator pad remains, re-seat the pad as necessary. (Figures 36, 37)

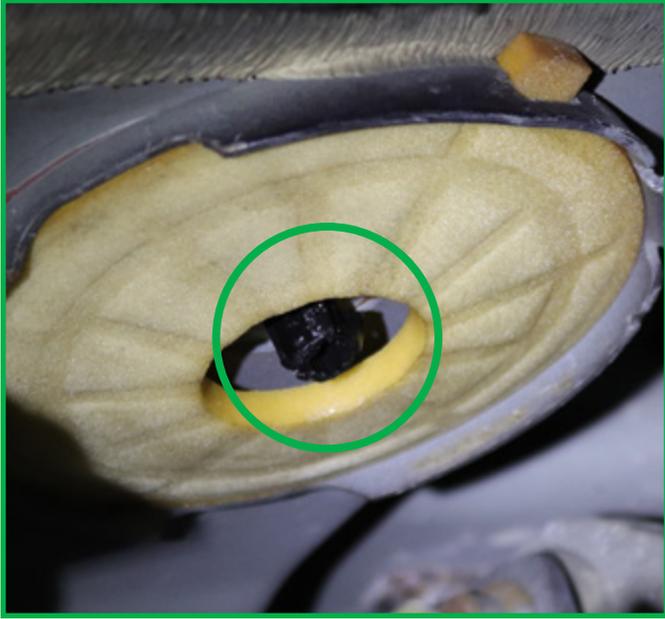


FIGURE 36

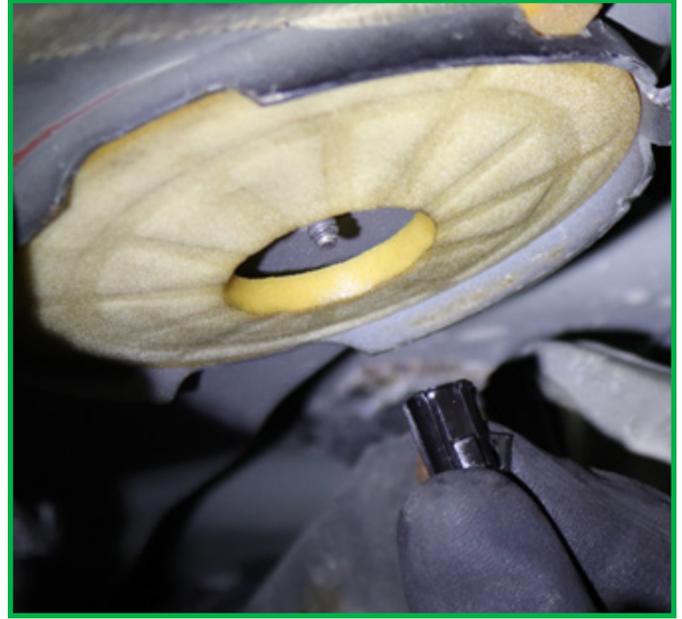


FIGURE 37

5. Identify the upper spring seat (Figure 38) and the lower spring seat. (Figures 39)



FIGURE 38



FIGURE 39

6. When installing the upper spring seat, ensure the stud locates to the hole in the spring seat. (Figure 40)



FIGURE 40

7. Insert the lower spring seat into the lower spring pocket. Insert the spring and upper spring seat into the vehicle. (Figure 41)



FIGURE 41

8. Ensure that the spring ends are seated properly in the rubber spring isolators. (Figure 42)



FIGURE 42

9. Using an appropriate jack, carefully move the spring arm into trim height position. Install the lower sway bar link bolt and tighten to manufacturer's specifications. (Figure 43)

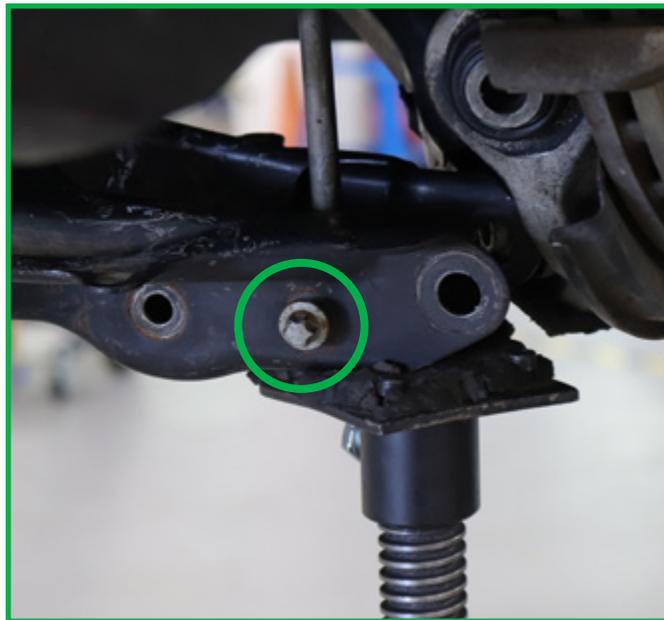


FIGURE 43

10. Install the spring arm to wheel knuckle bolt and tighten to manufacturer's specifications. (Figure 44)

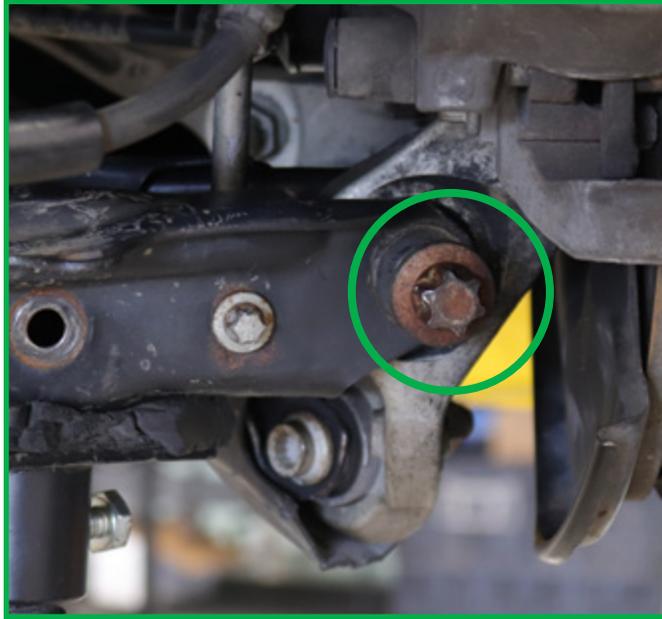


FIGURE 44

11. Tighten the spring arm to subframe bolt to manufacturer's specifications. (Figure 45)



FIGURE 45

12. Install the new shock into the vehicle. (Figure 46)



FIGURE 46

13. Install the lower shock bolt and tighten to manufacturer's specifications. (Figure 47)



FIGURE 47

14. Install the upper shock nuts and tighten to manufacturer's specifications. (Figure 48)



FIGURE 48

15. Rear installation complete.

## EBM INSTALLATION

1. Pull back the carpet in the passenger side footwell to gain access to the kick panel. (Figure 49)



FIGURE 49

2. Remove the three (3) nuts retaining the kick panel. (Figure 50)

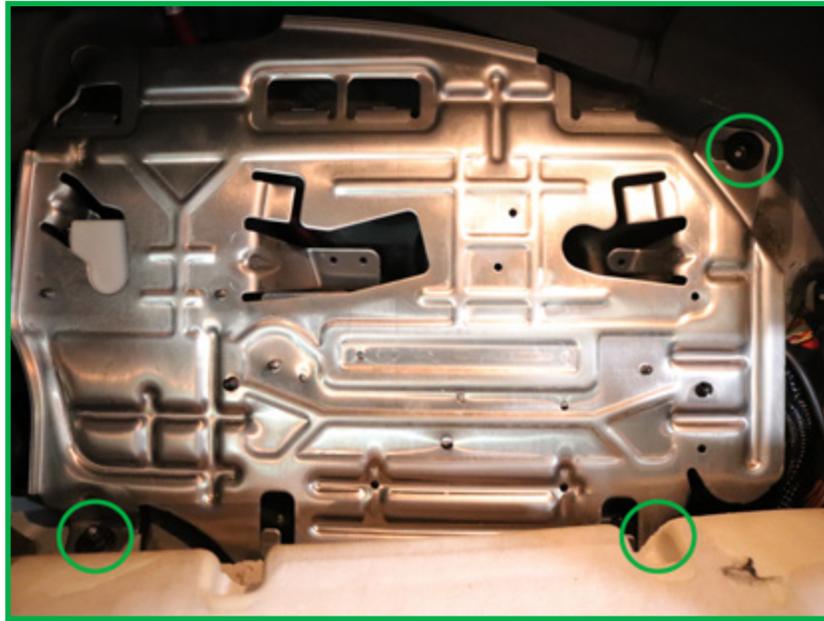


FIGURE 50

3. Locate the Air Suspension Control Module and remove the three (3) connectors. (Figures 51, 52)



FIGURE 51

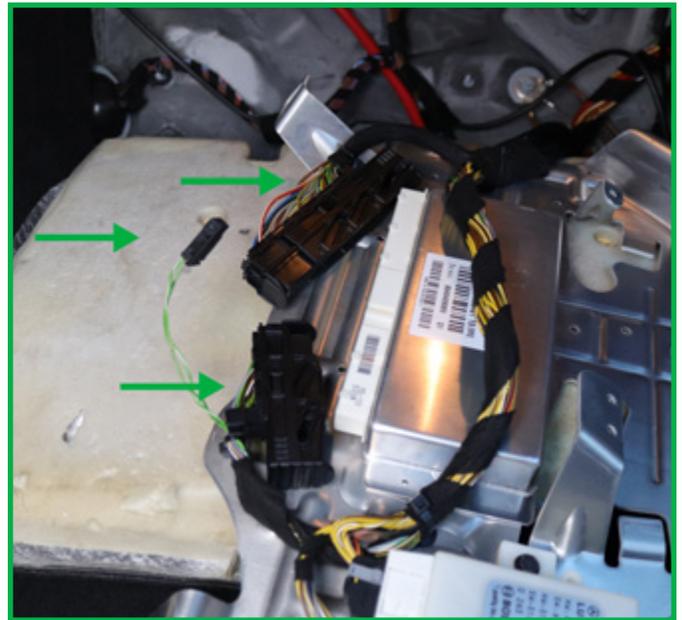


FIGURE 52

4. Locate connectors C1 (the larger connector) and C2 (the small two-pin connector). Using the table below, attach the yellow T-Taps to the indicated wires on connector C1. Attach the red T-Taps to the wires indicated on connector C2. (Figures 53, 54)

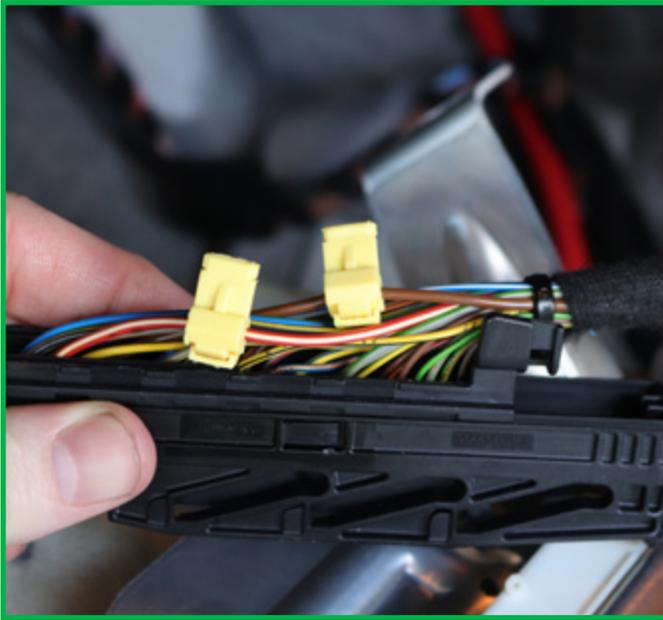


FIGURE 53

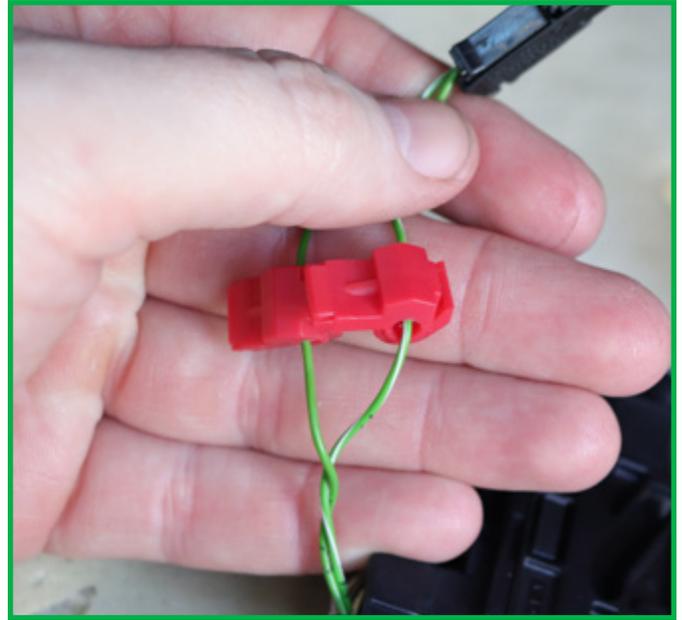


FIGURE 54

5. Attach the spade connectors on the included EBM wire harness to the installed T-Taps following the table below. (Figures 55, 56)

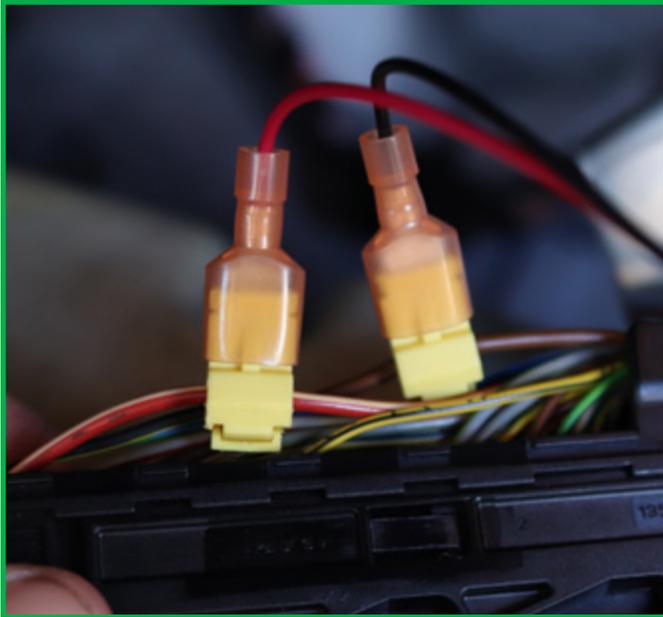


FIGURE 55

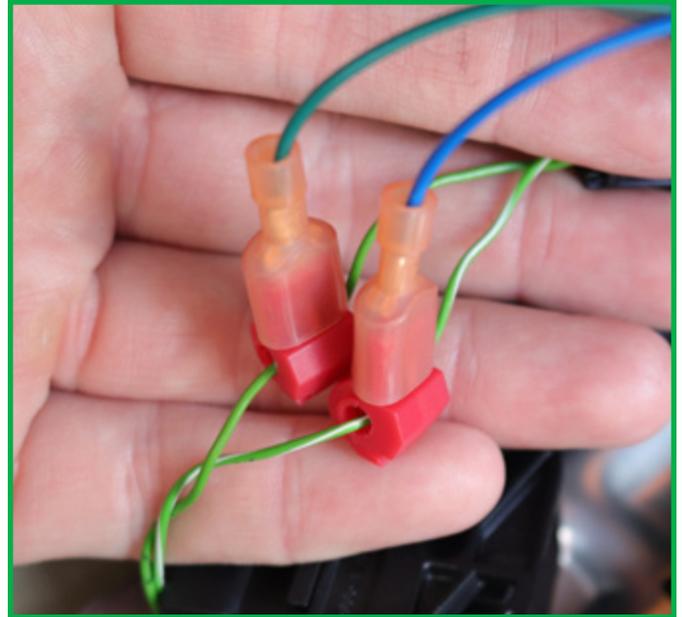


FIGURE 56

	FROM	TO	CONNECTOR #	PIN #	
EBM HARNESS	Red	Red/White Stripe	C1	47	VEHICLE'S WIRING HARNESS
	Black	Brown	C1	21	
	Blue	Green/White	C2	H	
	Green	Green	C2	L	

6. Connect the EBM to the EBM harness. Secure the EBM in a suitable location. (Figure 57)

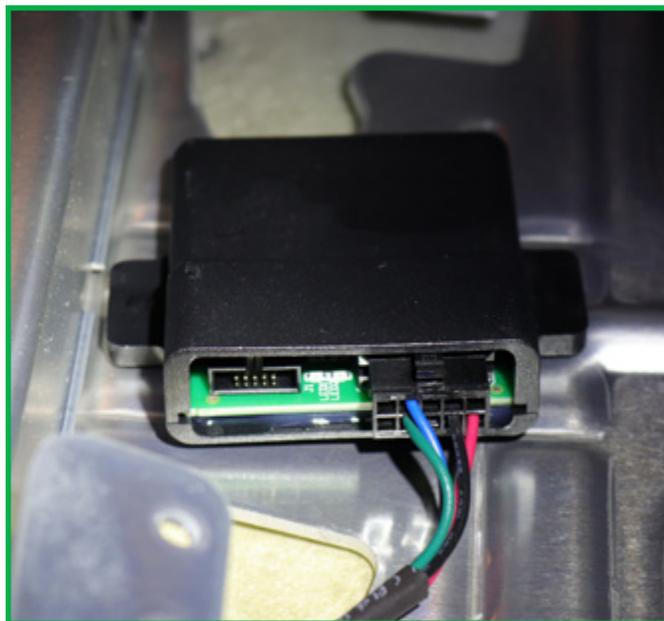


FIGURE 57

- 7. Do not plug the Air Suspension Control Module harnesses back in.
- 8. Installation complete.

# Arnott™

## Suspension Products

### Arnott US Business Office:

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

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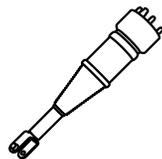
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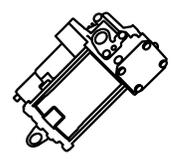
Air Springs



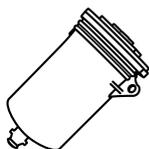
Struts



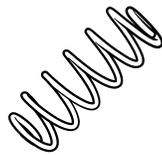
Shocks



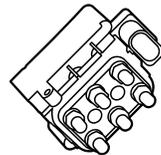
Compressors



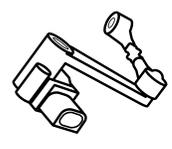
Dryers



Coil Spring  
Conversion Kits



Valve Blocks



Ride Height  
Sensors