

# Installation Manual

**C-3080  
ARNOTT  
REAR COIL SPRING CONVERSION KIT  
MERCEDES-BENZ E-CLASS WAGON W/O ADS  
(W211)**



Congratulations on your purchase of an Arnett® air suspension product. We at Arnett Incorporated are proud to offer a high quality product at the industry's most competitive pricing. 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, ASE Certified, 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.

**"Engineered to Ride, Built to Last™"**



**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 protective hand, ear, and eye protection when servicing the air suspension system.*

Arnett® is committed to the quality of its products. If you have a question or problem with any Arnett product, please contact Arnett by calling **800-251-8993** during normal business hours or email [techassistance@arnottinc.com](mailto:techassistance@arnottinc.com). (In the EU please call +31 (0)73 7850 580 or email [info@arnotteurope.com](mailto:info@arnotteurope.com))

## 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).

- 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 SPRING REMOVAL

 The air spring(s) contain a solenoid valve. Once inflated, only the "Mercedes DAS Star" diagnostic computer can deflate the air spring(s).

1. SET THE STEERING TO STRAIGHT AHEAD.
2. RAISE THE VEHICLE.
3. REMOVE THE REAR WHEELS. (FIGURE 10-1)



FIGURE 10-1

4. LOCATE AND REMOVE THE ELECTRICAL PLUG FROM THE AIR SPRINGS TOP MOUNT. (FIGURE 10-2)



FIGURE 10-2

5. LOCATE AND REMOVE THE AIR LINE FROM THE AIR SPRINGS TOP MOUNT. (FIGURE 10-3)



FIGURE 10-3

6. LOOSEN AND REMOVE THE LOWER SHOCK MOUNTING NUT AND BOLT. (FIGURE 10-4)

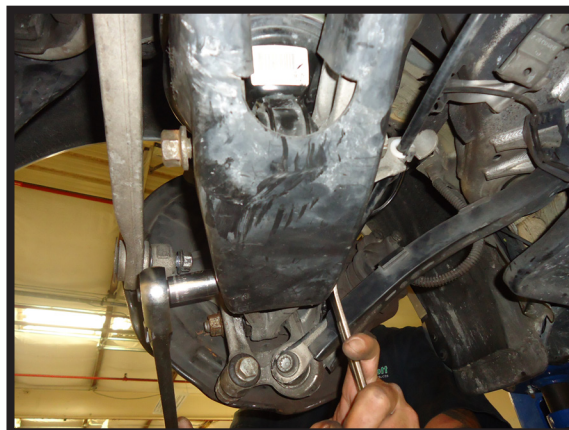


FIGURE 10-4

7. LOOSEN AND REMOVE THE REAR CONTROL ARM NUT AND BOLT. (FIGURE 10-5)



FIGURE 10-5

8. DISLOCATE THE AIR SPRING'S TOP MOUNT FROM THE VEHICLE. (FIGURE 10-6)



FIGURE 10-6

9. LOOSEN AND REMOVE THE AIR SPRING'S LOWER MOUNTING NUT AND BOLT. (FIGURE 10-7)



FIGURE 10-7

10. REMOVE FACTORY AIR SPRING FROM THE VEHICLE. (FIGURE 10-8)



FIGURE 10-8

11. REMOVE BRAKE PAD CLIP AND CALIPER. HANG IN A SUITABLE LOCATION. (FIGURE 10-9)



FIGURE 10-9

12. REMOVE THE LOWER SWAY BAR END LINK BOLT. (FIGURE 10-10)

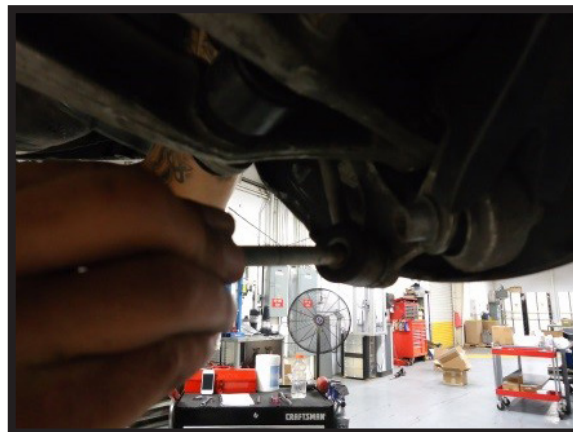


FIGURE 10-10

13. LOOSEN AND REMOVE THE FRONT CONTROL ARM BOLT. (FIGURE 10-11)



FIGURE 10-11

14. LOOSEN AND REMOVE UPPER CONTROL ARM BOLT. (FIGURE 10-12)



FIGURE 10-12

15. LOOSEN AND REMOVE LOWER CONTROL ARM BOLT. (FIGURE 10-13)

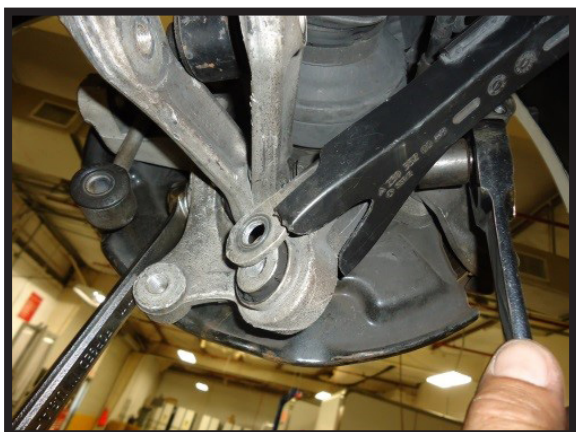


FIGURE 10-13

16. REMOVAL COMPLETE.

## COIL SPRING INSTALLATION



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

1. INSTALL THE LOWER SPRING PERCHES INTO THE LOWER CONTROL ARMS, AND SECURE. (FIGURE 20-1)



FIGURE 20-1

2. REMOVE OLD TOP MOUNT CLIPS AND REPLACE WITH THE ONES PROVIDED IN THE KIT. (FIGURE 20-2)



FIGURE 20-2

3. INSTALL THE UPPER SPRING PERCHES ONTO THE NEW CLIPS. (FIGURE 20-3)



FIGURE 20-3

4. PULL DOWN ON LOWER CONTROL ARM AND INSTALL SPRING INTO THE TOP SPRING PERCH. (FIGURE 20-4)



FIGURE 20-4

5. SLIDE SPRING OVER THE HUMP OF THE LOWER SPRING PERCH. (FIGURE 20-5)



FIGURE 20-5

6. USING A STAND OR JACK, RAISE THE LOWER CONTROL ARM TO COMPRESS THE SPRING AND INSTALL THE LOWER SHOCK BOLT TO HOLD IN PLACE. (FIGURE 20-6)

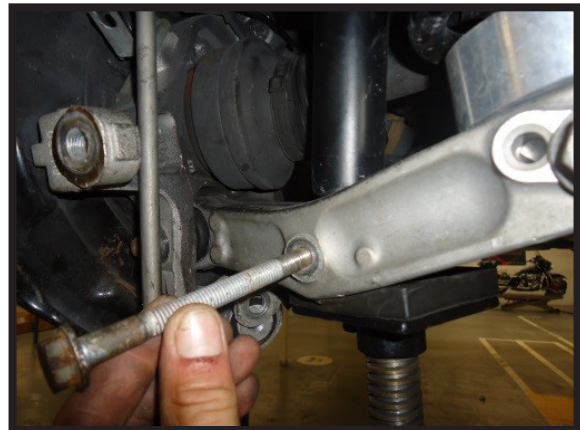


FIGURE 20-6



7. INSTALLATION OF CONTROL ARMS, SWAY BAR END LINK, BRAKE CALIPERS AND WHEELS IS IN REVERSE ORDER OF REMOVAL.

**NOTE:** THE LOWER CONTROL ARM BOLT SLEEVE MAY NEED TO BE ADJUSTED WHEN INSTALLING THE LOWER CONTROL ARM.



8. INSTALLATION OF REAR SPRINGS COMPLETE.



*It is necessary to have your vehicle aligned after installing this kit.*

## EBM INSTALLATION

1. REMOVE THE FUSE BOX COVER PLATE ON THE SIDE OF THE DASHBOARD, THEN REMOVE THE 5 AMP FUSE IN THE GRAY FUSE HOLDER. (FIGURES 1-4)



FIGURE 1



FIGURE 2



FIGURE 3

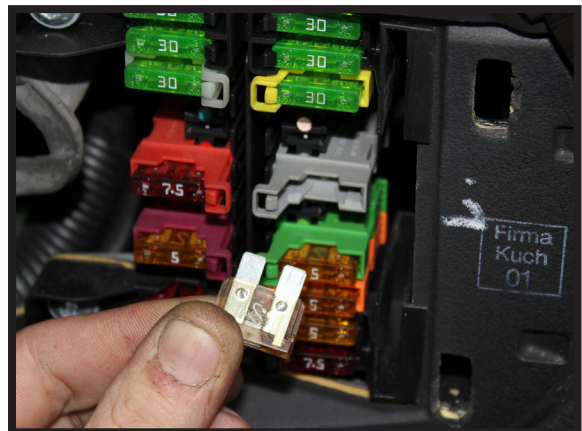


FIGURE 4

2. REMOVE THE FRONT PASSENGER SIDE FLOOR MAT. (FIGURE 5)



FIGURE 5

3. PULL BACK THE KICK PANEL AND REMOVE THE FOAM INSULATION BENEATH. (FIGURE 6)

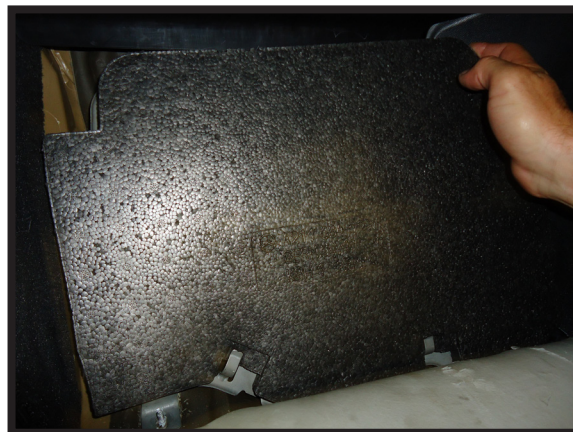


FIGURE 6

4. LOCATE AND REMOVE THE THREE NUTS HOLDING THE METAL SHIELD. (FIGURE 7)



FIGURE 7

5. REMOVE THE METAL SHIELD AND REST IT ON THE FLOOR TO EXPOSE THE VEHICLES AIR SUSPENSION CONTROL MODULE. (FIGURE 8)



FIGURE 8

6. REMOVE THE CONNECTOR FROM THE AIR SUSPENSION MODULE AND THE TAPE AROUND THE WIRING. MAKE SPACE FOR CUTTING. CUT WIRE POSITIONS NO.4 GREEN, AND NO.14 GREEN/WHITE. (FIGURES 9-11)

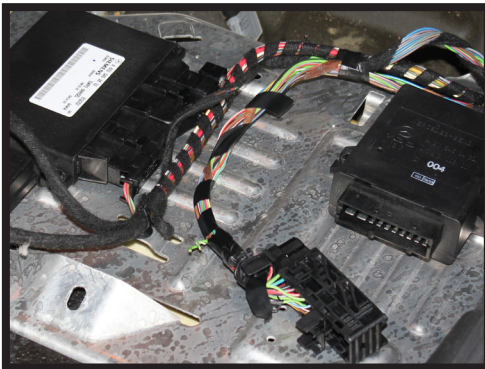


FIGURE 9

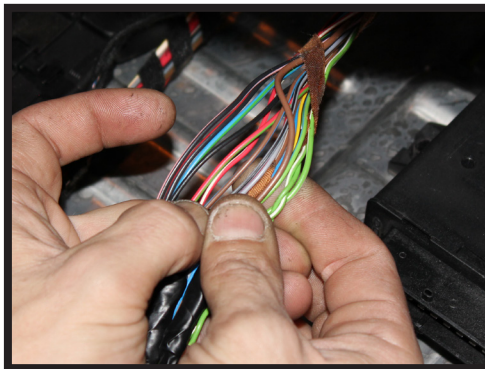


FIGURE 10

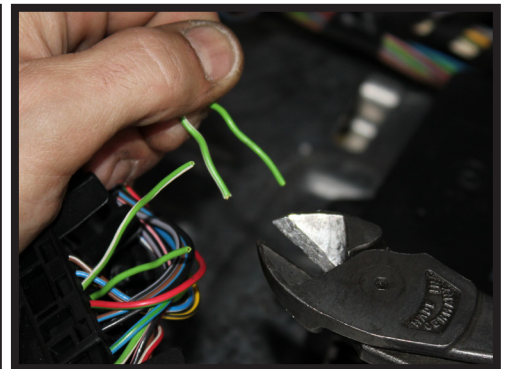


FIGURE 11

7. TAKE THE EBM AND TWIST THE WIRING FROM THE EBM WITH THE COLOR GREEN AND YELLOW TOGETHER. THIS PREVENTS INTERFERENCE IN CANBUS SIGNAL. (FIGURES 12, 13)

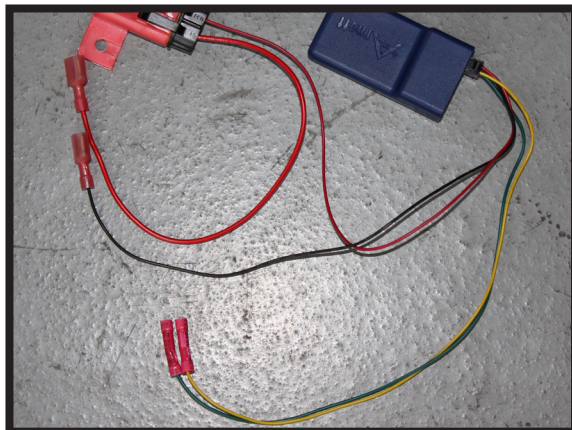


FIGURE 12

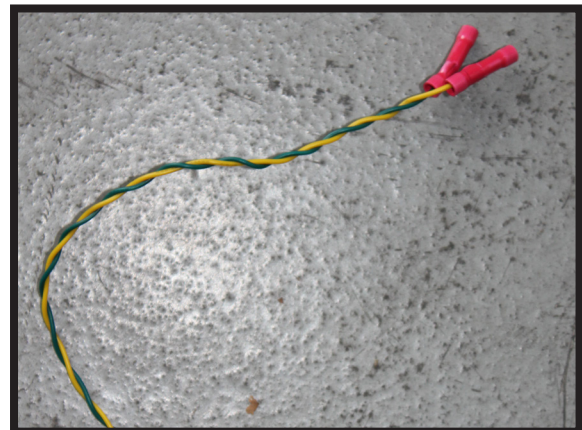


FIGURE 13

8. CONNECT WIRING OF THE EBM TO THE WIRING HARNESS OF THE CAR. NO.4 GREEN COLOR FROM CAR WIRE HARNESS TO EBM CABLE COLOR GREEN. NO.14 GREEN/WHITE COLOR FROM CAR WIRE HARNESS TO EBM CABLE COLOR YELLOW. (FIGURES 13-15)



FIGURE 13

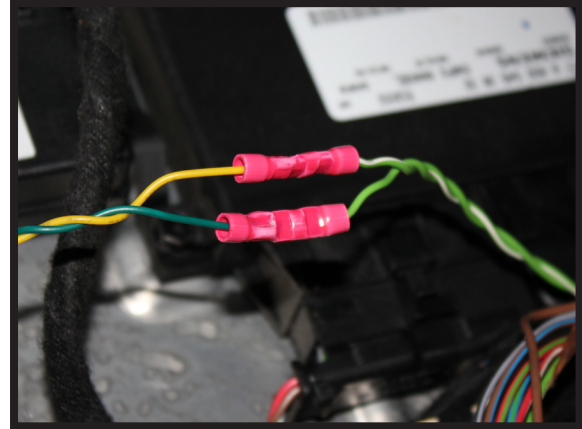


FIGURE 14

ELECTRONIC BYPASS MODULE	<b>FROM</b>	<b>TO (PIN)</b>	VEHICLE'S WIRING HARNESS
	GREEN	NO.4 GREEN	
	YELLOW	NO.14 GREEN/WHITE	

FIGURE 15

9. TAKE THE SUPPLIED WIRE CONNECTORS AND ATTACH THEM TO WIRE NO.10 BROWN AND NO.20 RED/WHITE OF THE CAR'S WIRE HARNESS. THEN CONNECT THE WIRES OF THE EBM TO THE WIRE HARNESS OF THE CAR. NO.10 BROWN OF THE CAR WIRE HARNESS TO EBM COLOR BLACK AND NO.20 RED/WHITE OF THE CAR WIRE HARNESS TO EBM COLOR RED. (FIGURES 16-19)

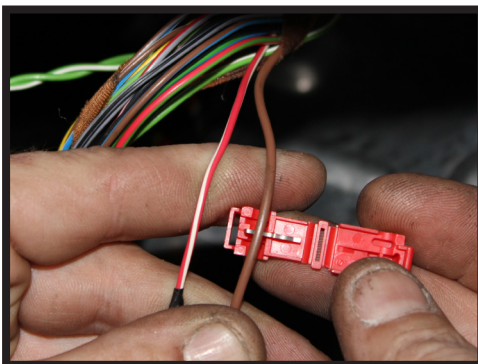


FIGURE 16

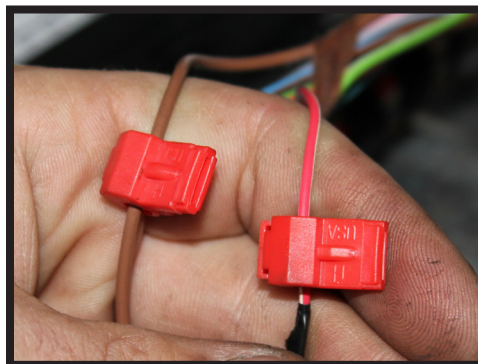


FIGURE 17

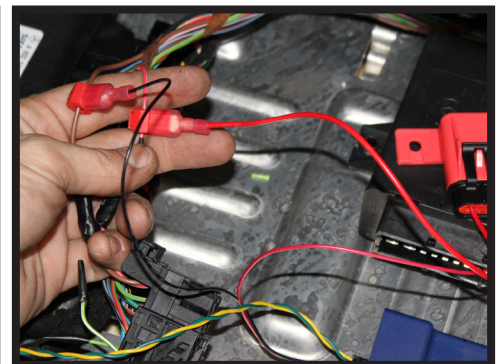


FIGURE 18

ELECTRONIC BYPASS MODULE	<b>FROM</b>	<b>TO (PIN)</b>	VEHICLE'S WIRING HARNESS
	BLACK	NO.10 BROWN	
	RED	NO.20 RED/WHITE	

FIGURE 19

10. REMOVE PROTECTIVE FILM FROM ADHESIVE STRIPS ON THE BACK OF THE EBM AND FUSE HOLDER AND PASTE IT AT THE LOCATION INDICATED IN THE PHOTO. THEN, TAPE THE WIRE HARNESS BACK NEATLY SO THERE ARE NO LOOSE OR UNPROTECTED CABLES. (FIGURES 20-22)

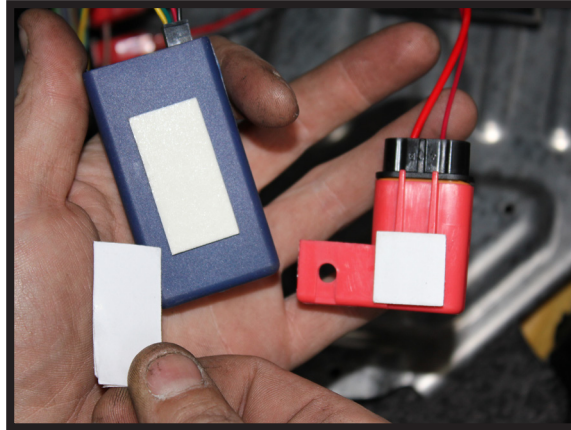


FIGURE 20

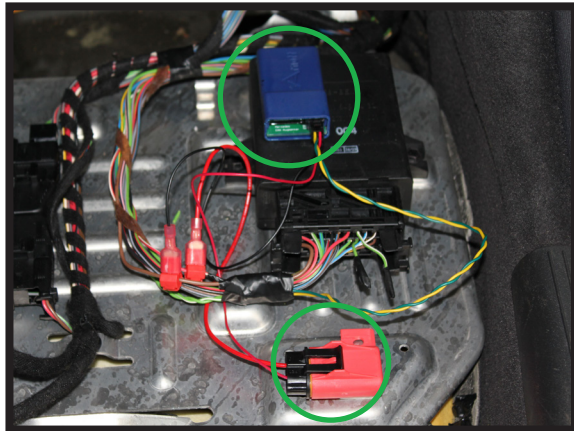


FIGURE 21

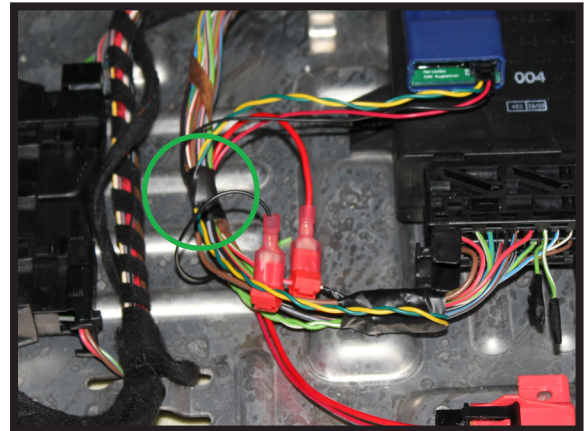


FIGURE 22

11. REPLACE THE FUSE FROM STEP 1 ALONG WITH THE COVER. START THE CAR AND CHECK IF THE HEADLIGHTS MOVE UP AND DOWN. IF THEY DO NOT, PUT LIGHT SWITCH ON AUTO AND RESTART THE CAR. (FIGURES 23-25)



FIGURE 23

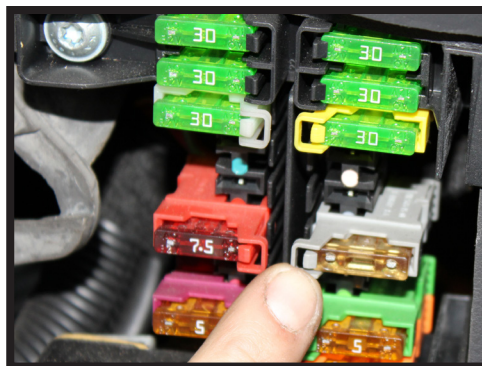


FIGURE 24



FIGURE 25

12. INSTALLATION COMPLETE