Installation Manual

C-2242
ARNOTT COIL SPRING CONVERSION KIT FOR 1999-2006 MERCEDES-BENZ S-CLASS (W220 CHASSIS)

Arnott® Air Suspension Products

Congratulations on your purchase of an Arnott® air suspension product. We at Arnott 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 hand, ear, and eye protection when servicing the air suspension system.*

Arnott® is committed to the quality of its products. If you have a question or problem with any Arnott product, please contact Arnott by calling 800-251-8993 during normal business hours or email techassistance@arnottinc.com.

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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.

- Not to be stored below 5°F (-15°C) or 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 AIR STRUT REMOVAL

1. Set steering to straight ahead.
2. Raise the vehicle.
3. Remove front wheels.
4. Disconnect the shock control cable connector located in the fender well. (FIGURE 10-1)

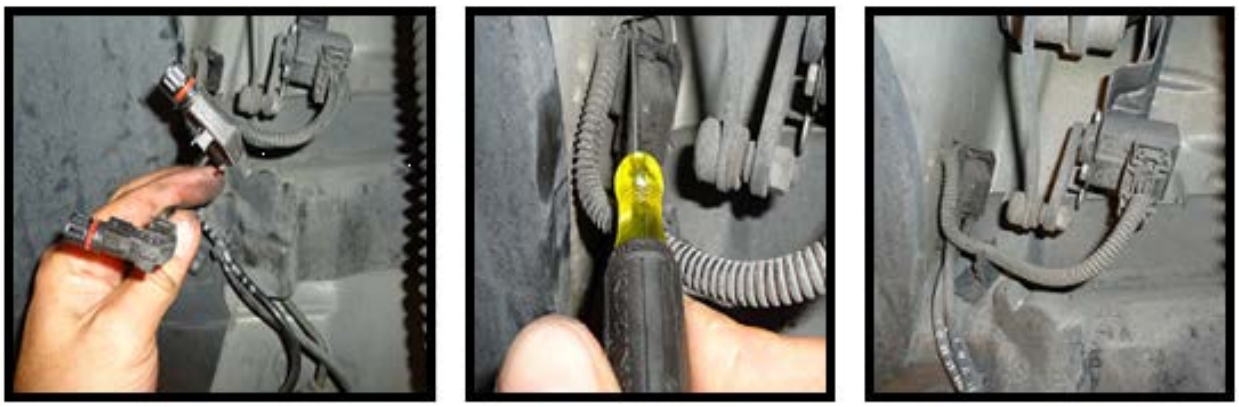

FIGURE 10-1

5. Loosen the two (2) set screws (180 degrees apart) located on the bottom of the strut assembly. (FIGURE 10-2)

FIGURE 10-2

6. Raise hood and disconnect the air supply line to the strut assembly. (FIGURE 10-3)

FIGURE 10-3

7. Remove the three (3) nuts holding the top mount of the strut. (FIGURE 10-4)

FIGURE 10-4

8. Separate upper control arm ball joint from the spindle assembly and remove the air strut. (FIGURE 10-5)

FIGURE 10-5

9. Removal complete.

FRONT COIL STRUT INSTALLATION

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

1. Installation is in reverse order of front air strut removal.

REAR AIR STRUT REMOVAL

1. Remove rear wheels.

2. Remove the side cover of the rear dash panel to expose the top of the air strut (located in the rear window area). (FIGURE 20-1)

FIGURE 20-1

3. Disconnect the airline and remove the three (3) mounting nuts from the top of the air strut. (FIGURE 20-2)

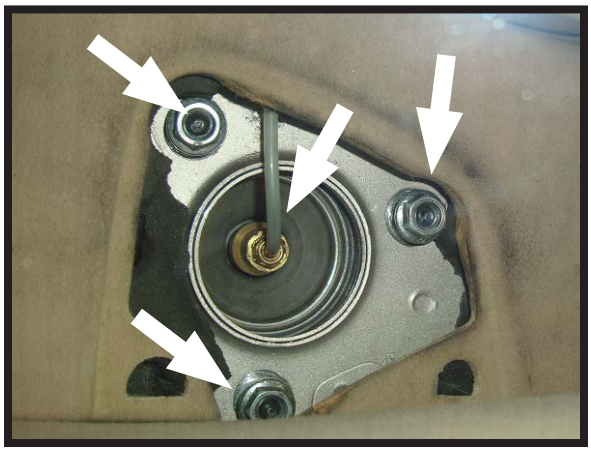

FIGURE 20-2

4. Remove rubber boot and disconnect electrical connector leading to the shock damper solenoid. (FIGURES 20-3, 20-4)

FIGURE 20-3

FIGURE 20-4

5. Remove the brake caliper retaining clip. (FIGURE 20-5)

FIGURE 20-5

6. Loosen the two (2) bolts on the backside of the caliper. (FIGURE 20-6)

FIGURE 20-6

7. Disconnect the sensor connector and remove the sensor bracket. (FIGURES 20-7, 20-8)

FIGURE 20-7

FIGURE 20-8

8. Secure the caliper. (FIGURE 20-9)

FIGURE 20-9

9. Disassemble the outer suspension arm. (FIGURE 20-10)

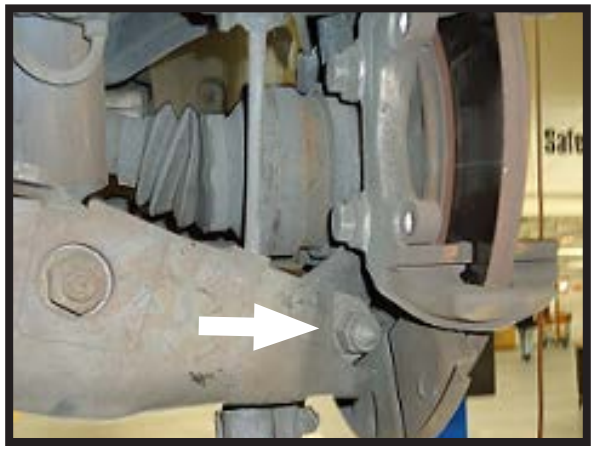

FIGURE 20-10

10. Disassemble the stabilizer bar link. (FIGURES 20-11, 20-12)

FIGURE 20-11

FIGURE 20-12

11. Remove the nut and bolt connecting the strut assembly to the suspension arm. (FIGURE 20-13)

FIGURE 20-13

12. Loosen the lower control arm nut slightly (this will allow the lower control arm to swing down). (FIGURE 20-11)

FIGURE 20-11

13. Remove strut assembly from the vehicle. (FIGURE 20-12)

FIGURE 20-12

14. Removal complete.

REAR COIL STRUT INSTALLATION

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

1. Installation is in reverse order of rear air strut removal.

ELECTRONIC BYPASS MODULE INSTALLATION

1. Locate the N51 control module (located in the left side fuse box) verify that it reads "Temic". (FIGURE 1A)

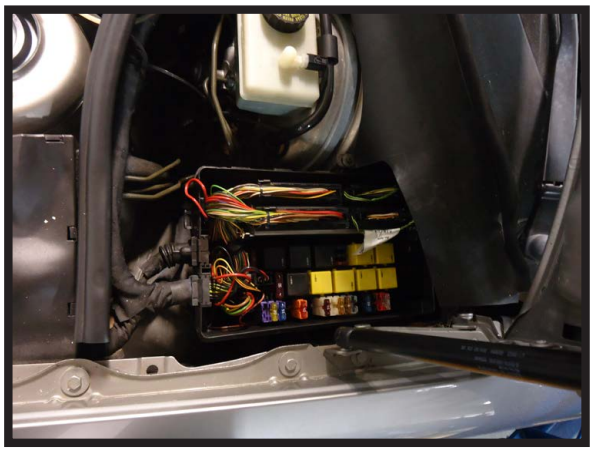

FIGURE 1A

2. After verifying computer, disconnect all three (3) multi-pin connectors permanently. (FIGURE 1B)

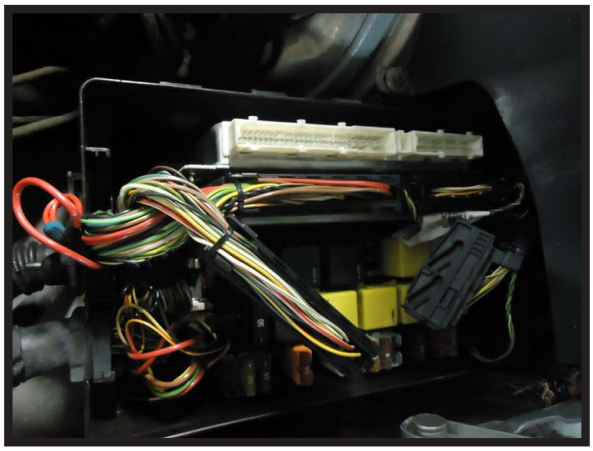

FIGURE 1B

3. Connect light blue connector from Electronic Bypass Module to the wire harness side of the vehicle N-51 can-bus 2 pin connector. (FIGURE 1C)

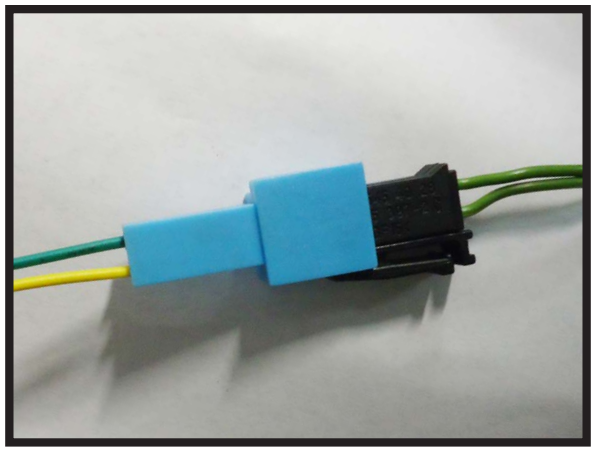

FIGURE 1C

4. Run the ground wire from the Electronic Bypass Module to the nearest vehicle ground terminal. (FIGURE 1D)

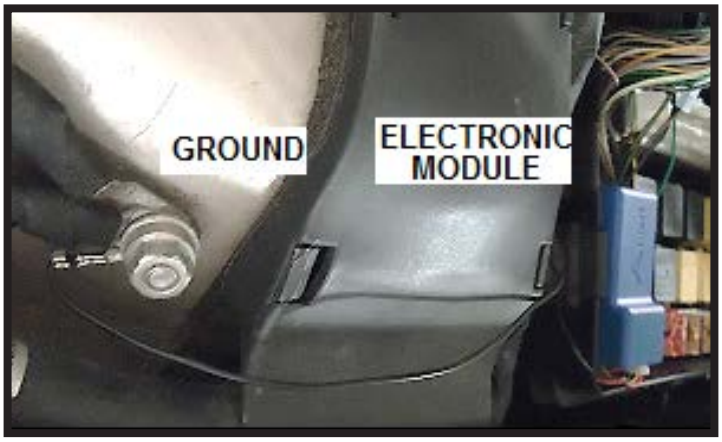

FIGURE 1D

5. Locate an open power terminal in the fuse panel, install the fuse holder (12+ V). (FIGURE 1E)

FIGURE 1E

6. Re-install fuse box cover. (FIGURE 1F)

FIGURE 1F

7. Installation complete.