Arnott®
Suspension Products

INSTALLATION MANUAL

C-2271
Arnott Coil Spring Conversion Kit
Mercedes-Benz S-Class
(W220 Chassis, w/4MATIC, w/o ABC)

Engineered to Ride, Built to Last®

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 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. (Figures 1, 2, 3)

FIGURE 1

FIGURE 2

FIGURE 3

5. Loosen and remove the two (2) bolts holding the bottom of the air strut to the lower bracket. (Figures 4, 5)

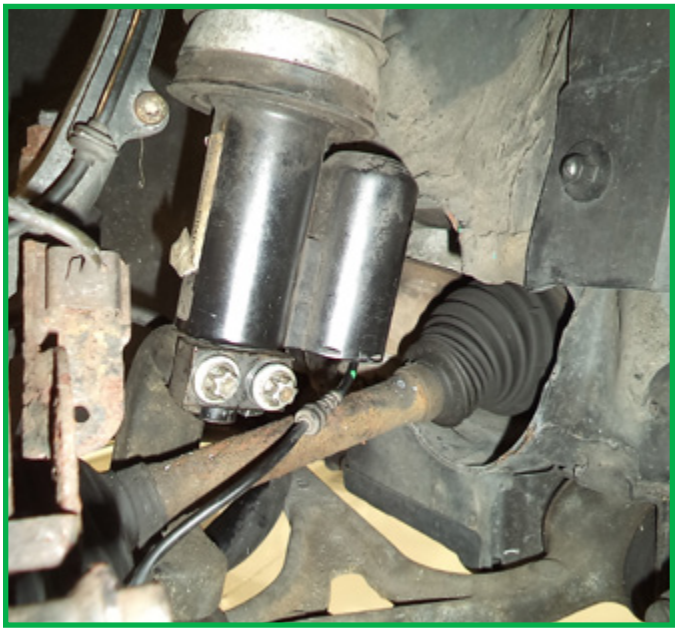

FIGURE 4

FIGURE 5

6. Raise hood and disconnect the air supply line to the strut assembly. (Figure 6)

FIGURE 6

7. Remove the three (3) nuts holding the top mount of the strut. (Figure 7)

FIGURE 7

8. Separate upper control arm ball joint from the spindle assembly and remove the air strut. (Figure 8)

FIGURE 8

9. Removal complete.

FRONT AIR STRUT INSTALLATION

WARNING:

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

1. Install the strut into the vehicle, being sure to seat the shock's lower mounting post into the reused clevis mount. (Figures 9, 10)

FIGURE 9

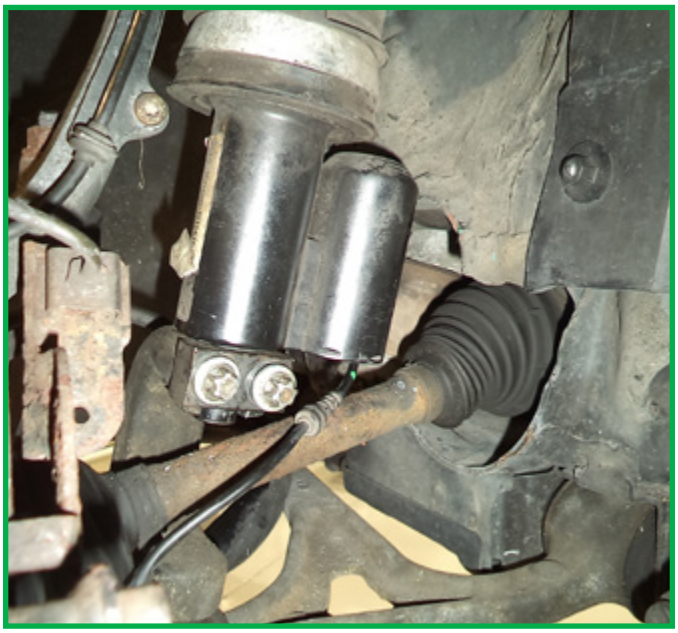

FIGURE 10

2. Reattach the upper control arm to the spindle assembly and reinstall the nut, tightening to manufacturer's specifications. (Figures 11, 12)

FIGURE 11

FIGURE 12

3. Reinstall the three top shock mounting nuts and tighten to manufacturer's specifications. (Figure 13)

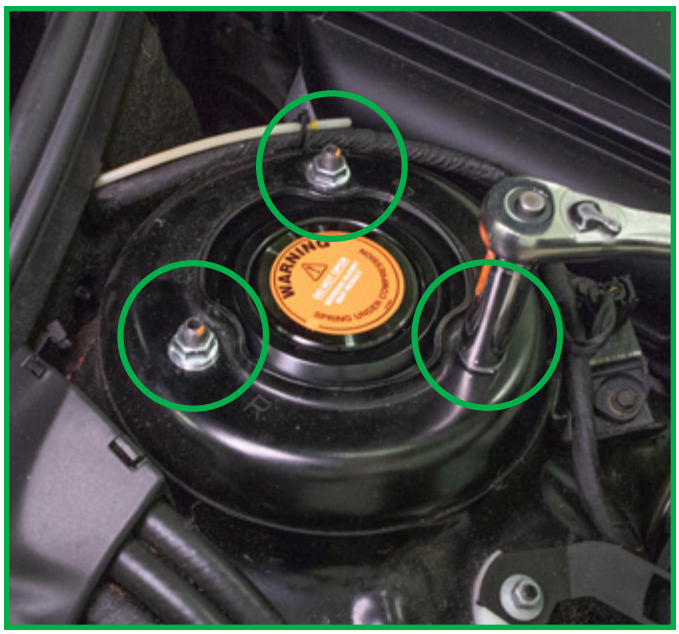

FIGURE 13

4. Tighten the two set bolts to manufacturer's specifications. (Figure 14)

FIGURE 14

5. Installation complete.

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 15)

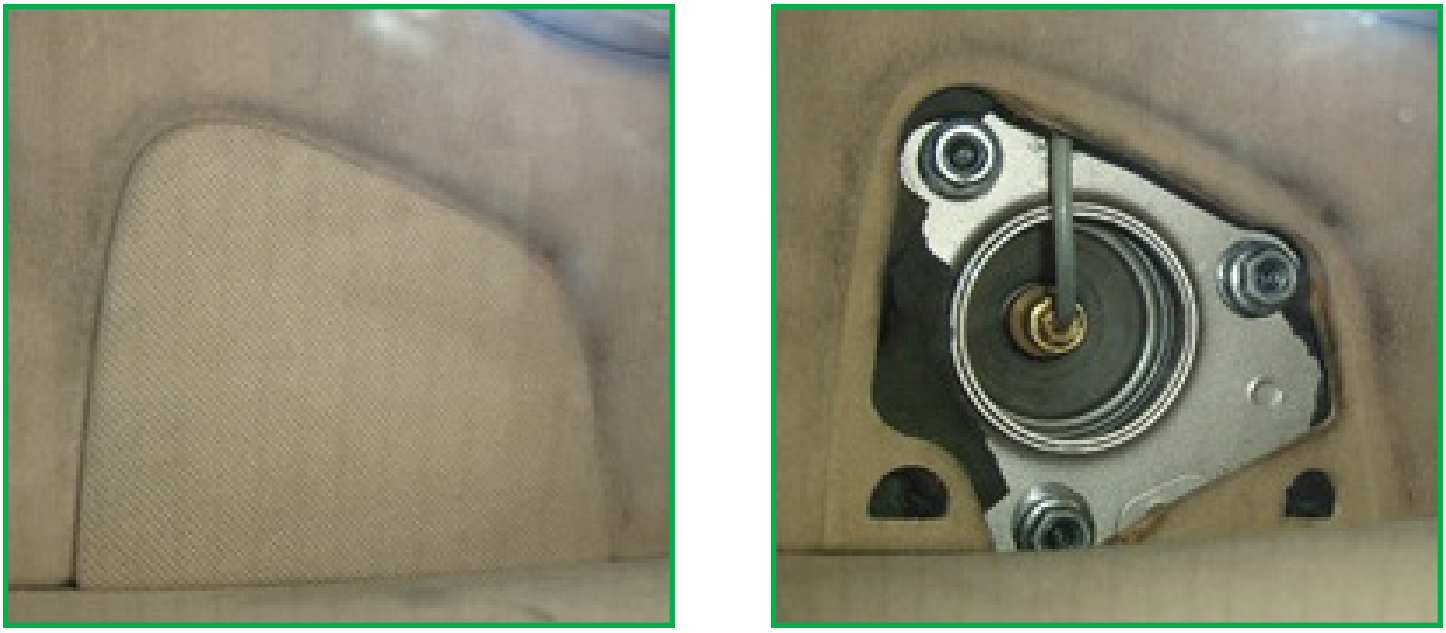

FIGURE 15

3. Disconnect the airline and remove the three (3) mounting nuts from the top of the air strut. (Figure 16)

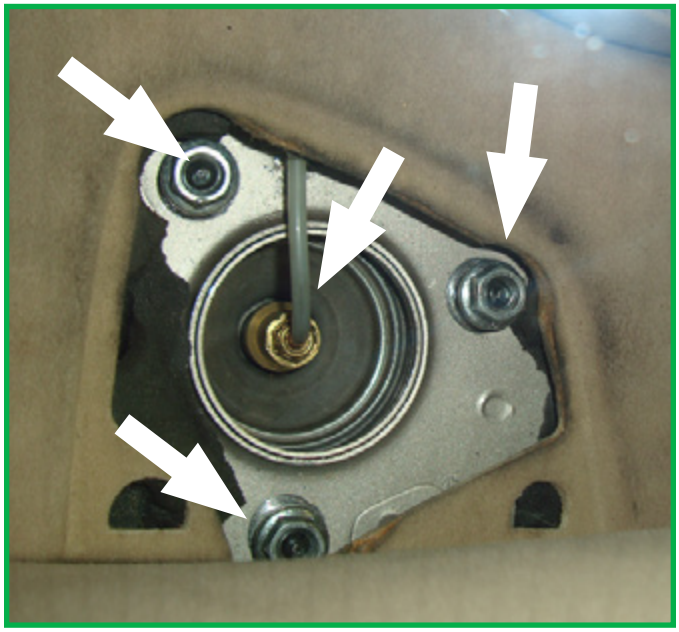

FIGURE 16

4. Remove rubber boot and disconnect electrical connector leading to the shock damper solenoid. (Figures 17, 18)

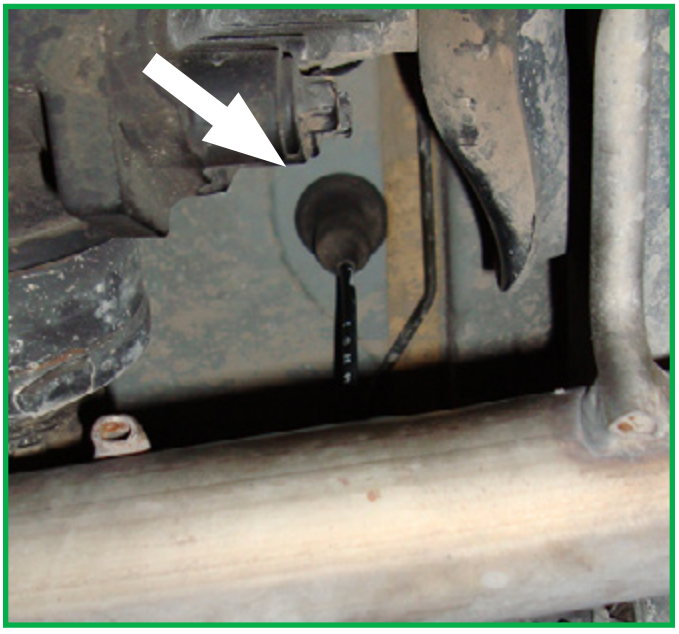

FIGURE 17

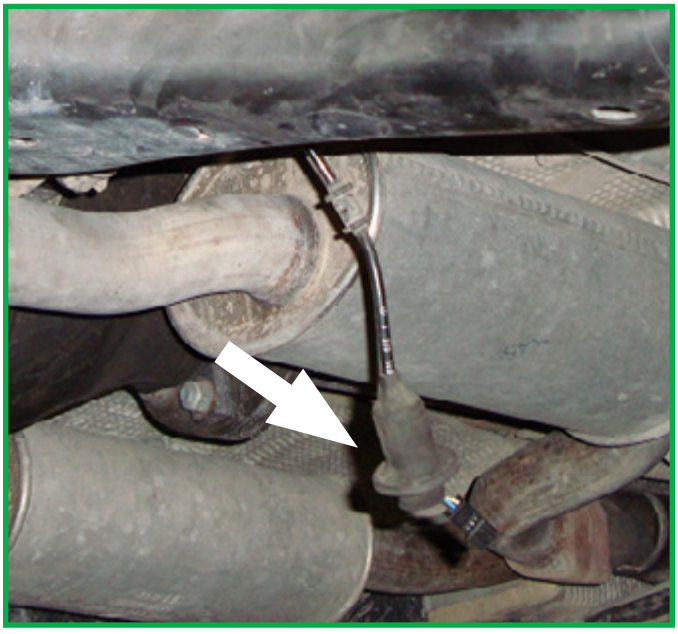

FIGURE 18

5. Remove the brake caliper retaining clip. (Figure 19)

FIGURE 19

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

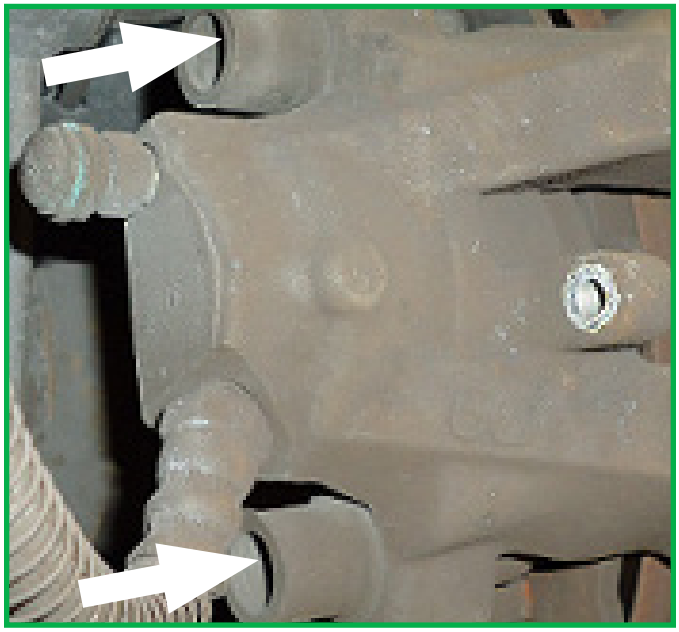

FIGURE 20

7. Disconnect the sensor connector and remove the sensor bracket. (Figures 21, 22)

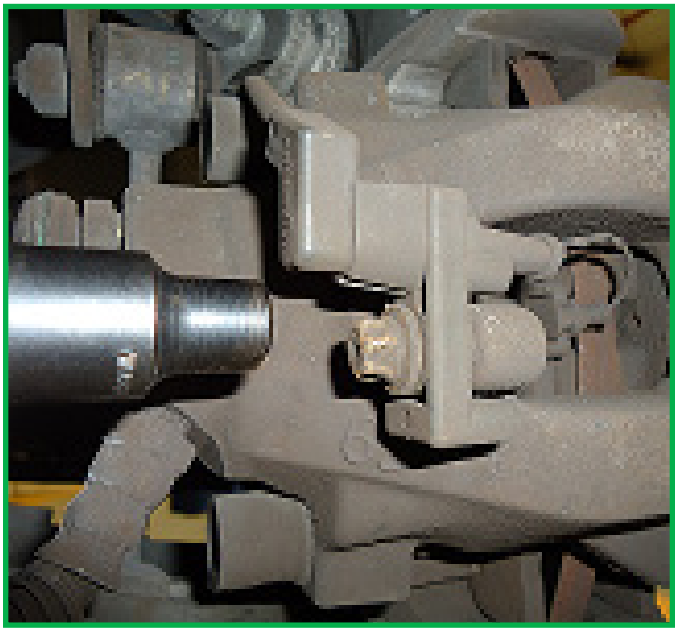

FIGURE 21

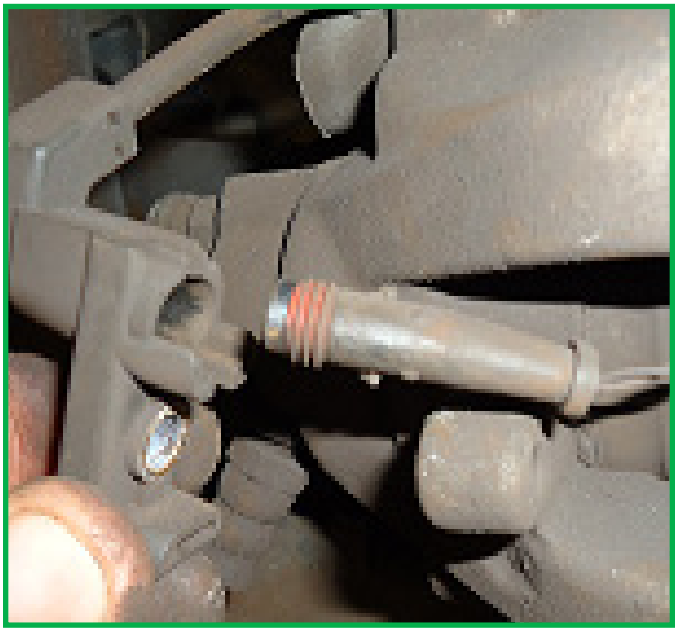

FIGURE 22

8. Secure the caliper. (Figure 23)

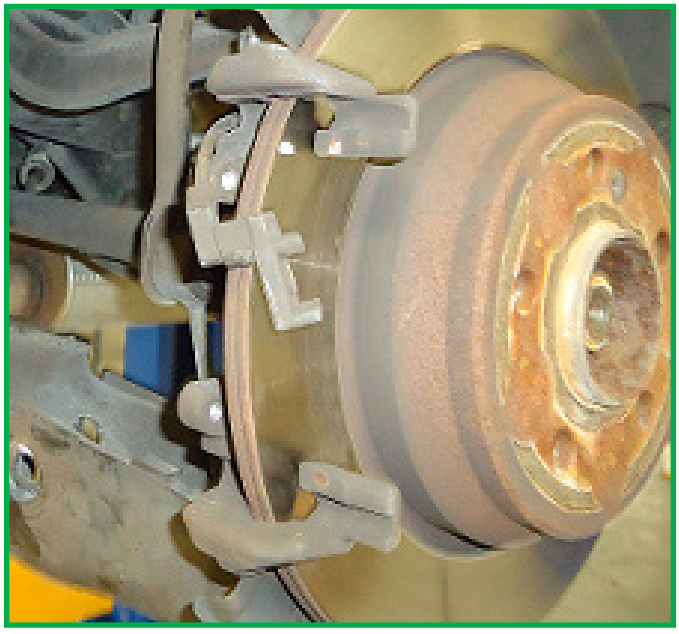

FIGURE 23

9. Disassemble the outer suspension arm. (Figure 24)

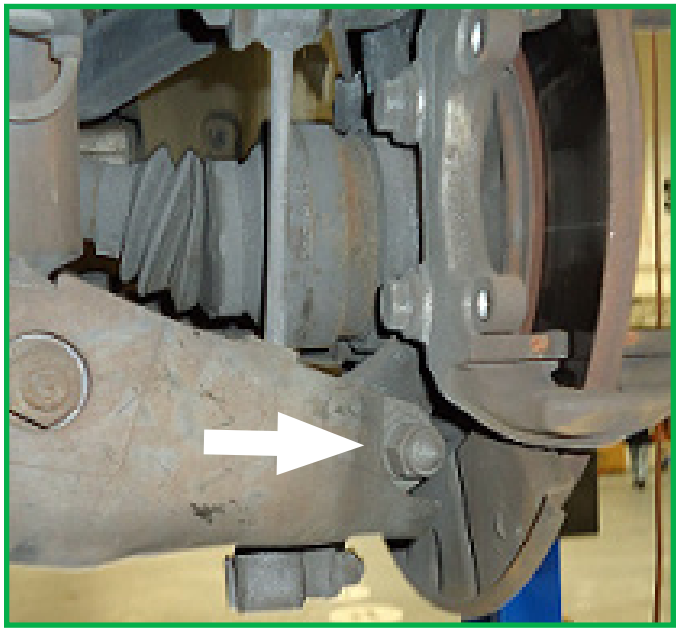

FIGURE 24

10. Disassemble the sway bar end link. (Figures 25, 26)

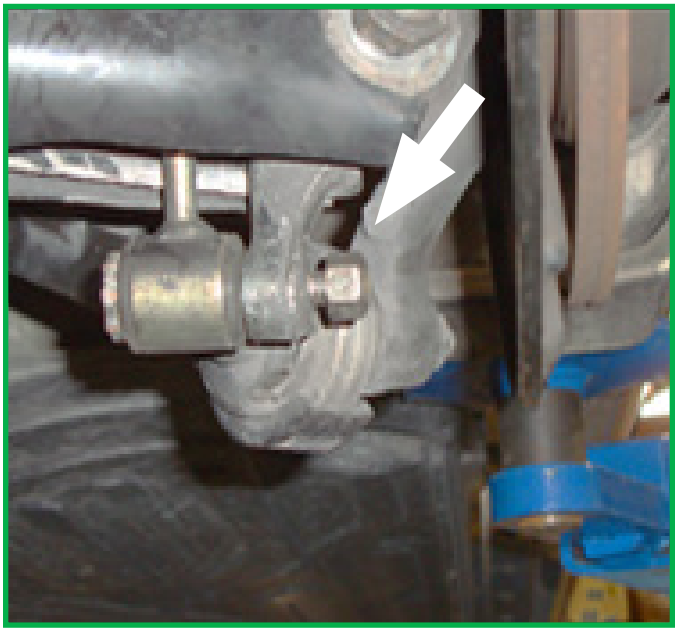

FIGURE 25

FIGURE 26

11. Remove the nut and bolt connecting the strut assembly to the suspension arm. (Figure 27)

FIGURE 27

12. Loosen the lower control arm nut slightly (this will allow the lower control arm to swing down). (Figure 28)

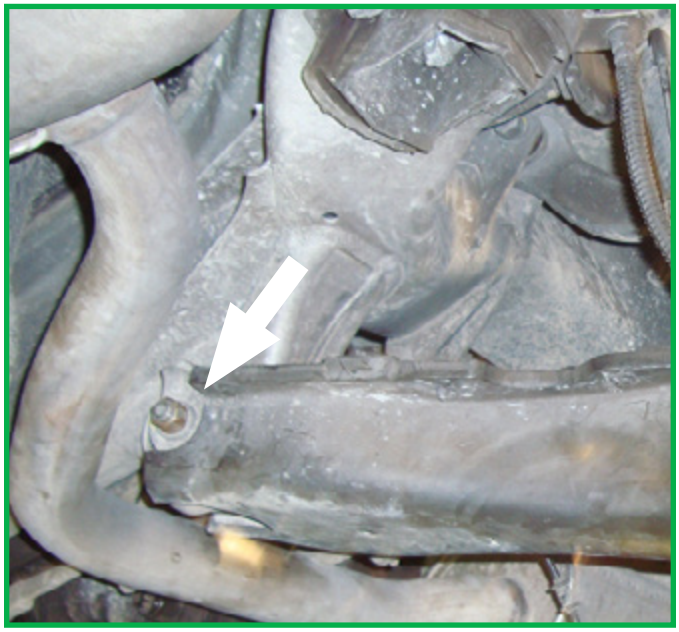

FIGURE 28

13. Remove strut assembly from the vehicle. (Figure 29)

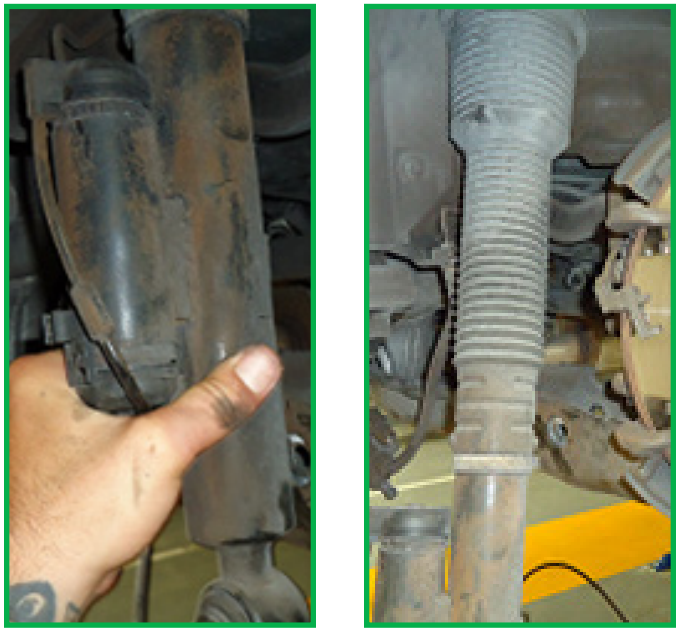

FIGURE 29

14. Removal complete.

REAR AIR STRUT INSTALLATION

WARNING:

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

1. Install the shock into the vehicle. (Figure 30)

FIGURE 30

2. Install the lower shock mounting bolt and nut and tighten to manufacturer's specifications. (Figure 31)

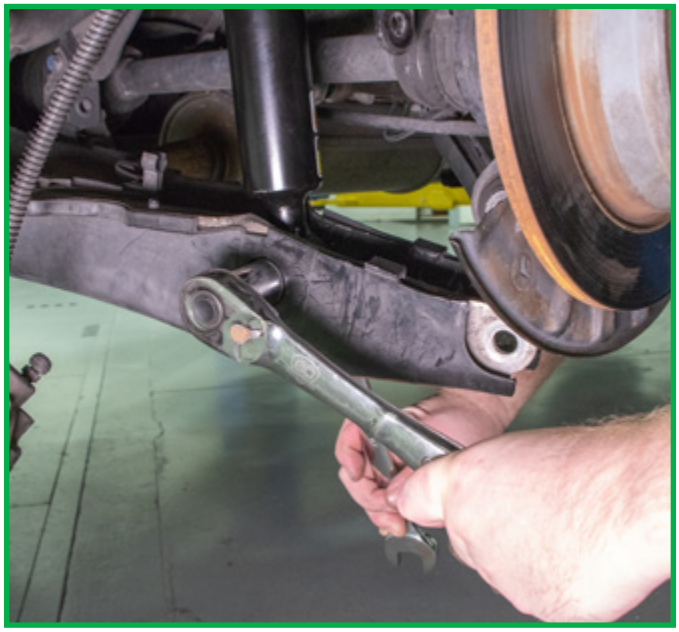

FIGURE 31

3. Reinstall the three top shock mounting nuts and tighten to manufacturer's specifications. (Figure 32)

FIGURE 32

4. Reinstall the lower control arm nut and bolt and tighten to manufacturer's specifications. (Figure 33)

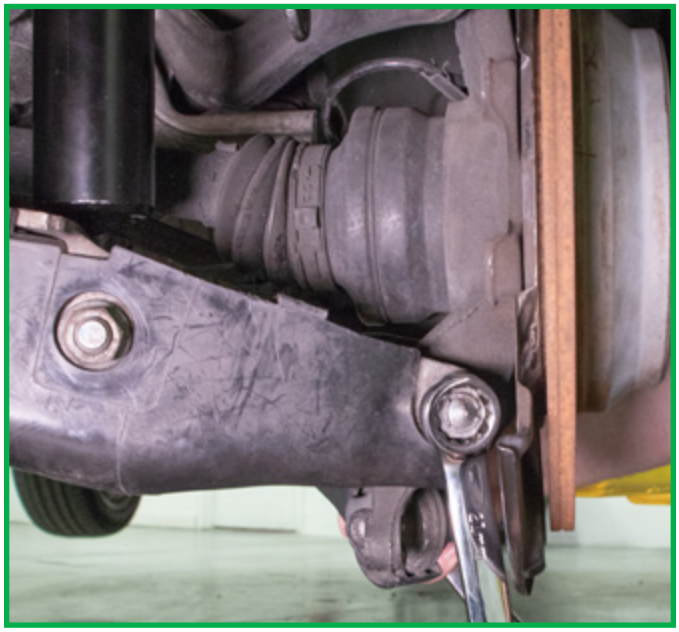

FIGURE 33

5. Reinstall the upper and lower sway bar end link nuts and tighten to manufacturer's specifications. (Figures 34, 35)

FIGURE 34

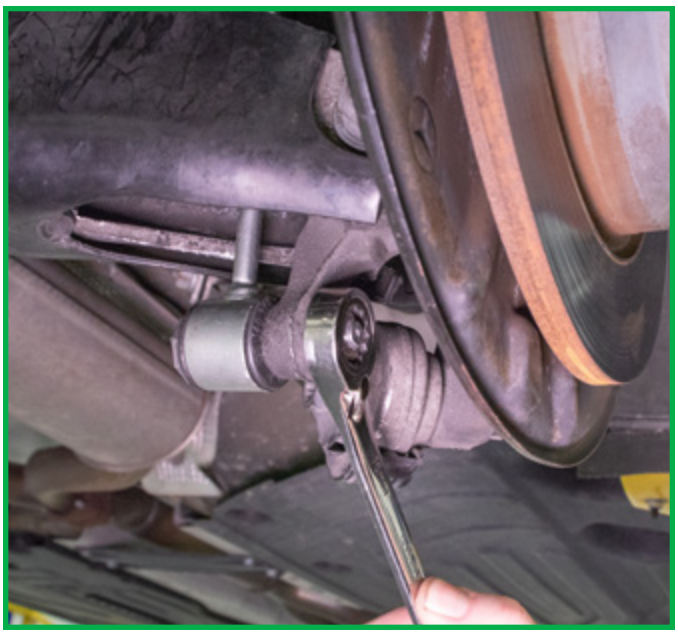

FIGURE 35

6. Retighten the outer suspension arm nut and tighten to manufacturer's specifications. (Figure 36)

FIGURE 36

7. Reinstall the brake caliper. (Figure 37)

FIGURE 37

8. Install the brake caliper bolts and tighten to manufacturer's specifications. (Figure 38)

FIGURE 38

9. Install the brake caliper clip. (Figure 39)

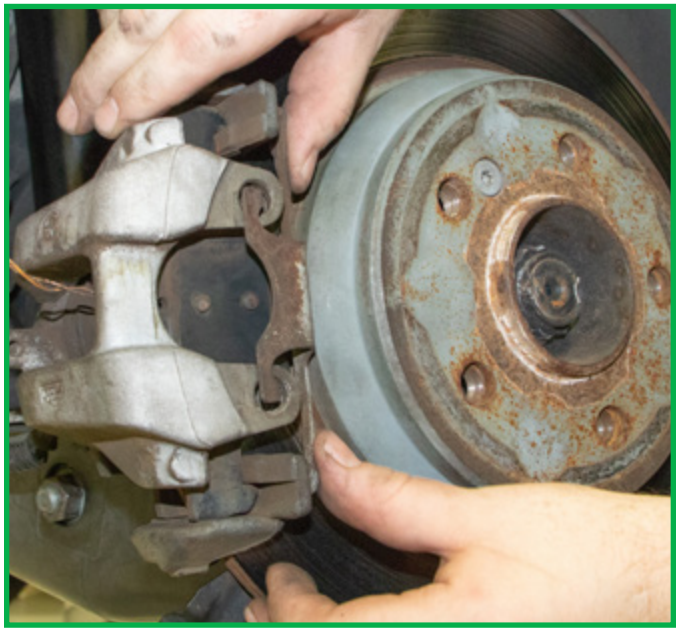

FIGURE 39

10. Install the sensor bracket. (Figures 40, 41)

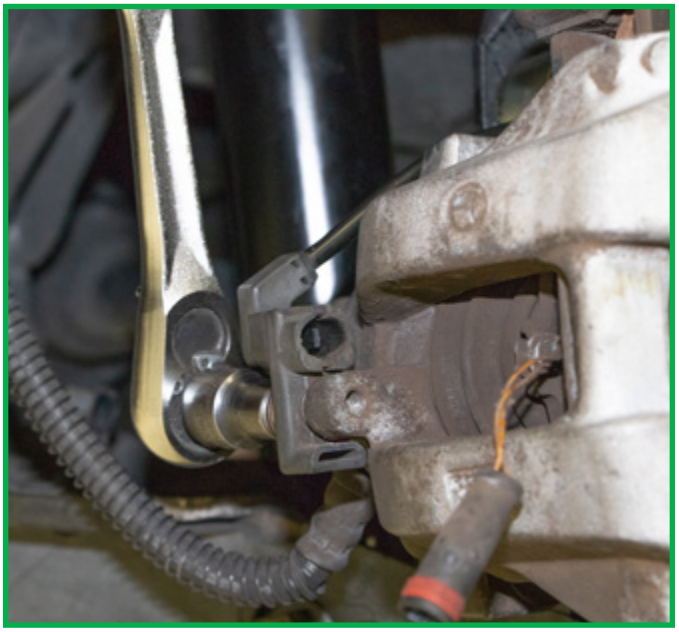

FIGURE 40

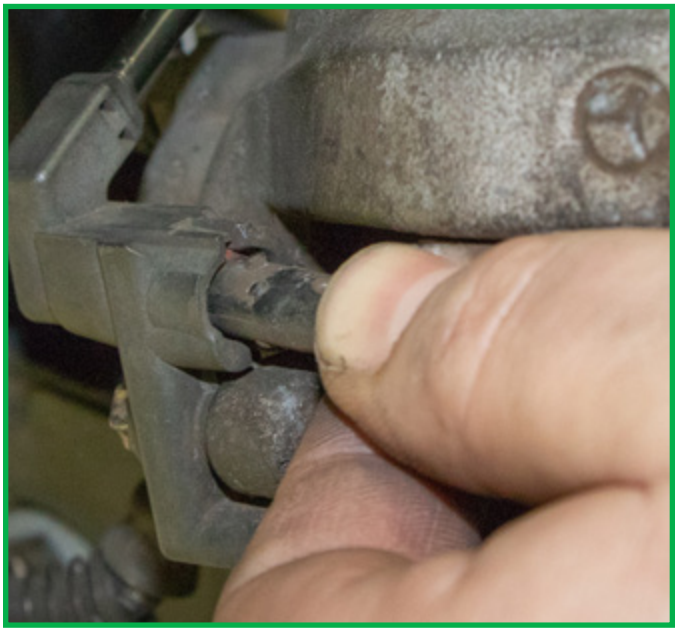

FIGURE 41

11. Reinstall the wheel.
12. Lower the vehicle.
13. Installation complete.

ELECTRONIC BYPASS MODULE INSTALLATION

1. Locate the N51 control module (located in the left side fuse box) verify that it reads "Temic". (Figures 42, 43)

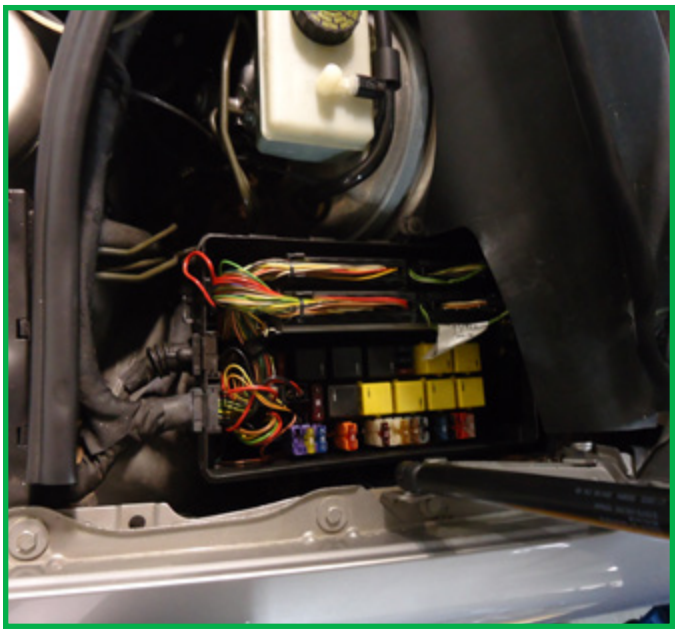

FIGURE 42

FIGURE 43

2. After verifying computer, disconnect all three (3) multi-pin connectors permanently. (Figures 44, 45)

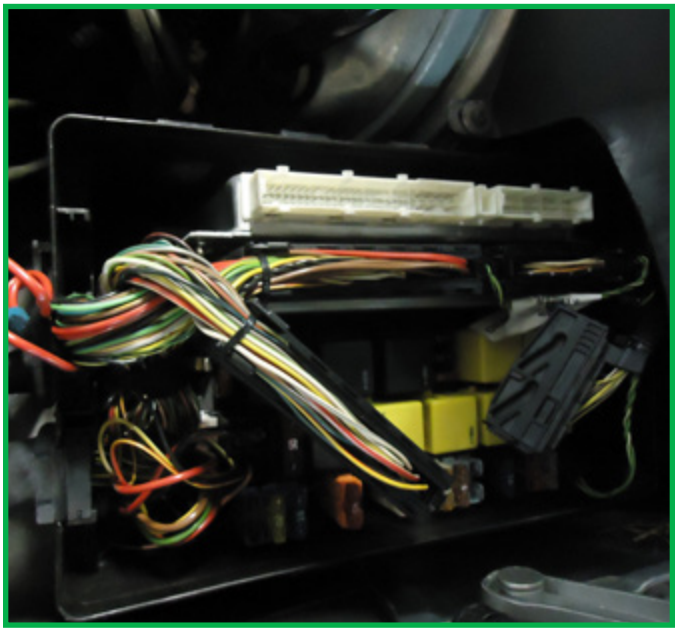

FIGURE 44

FIGURE 45

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 46)

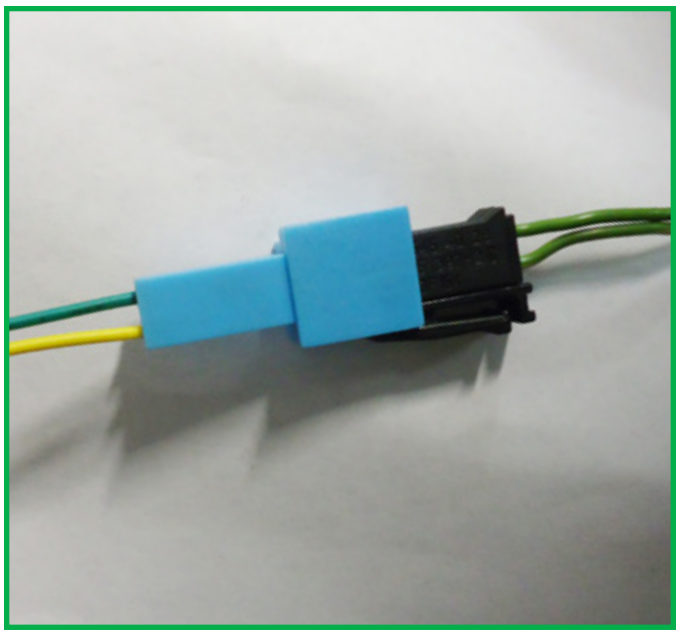

FIGURE 46

4. Run the ground wire from the electronic bypass module to the nearest vehicle ground terminal. (Figure 47)

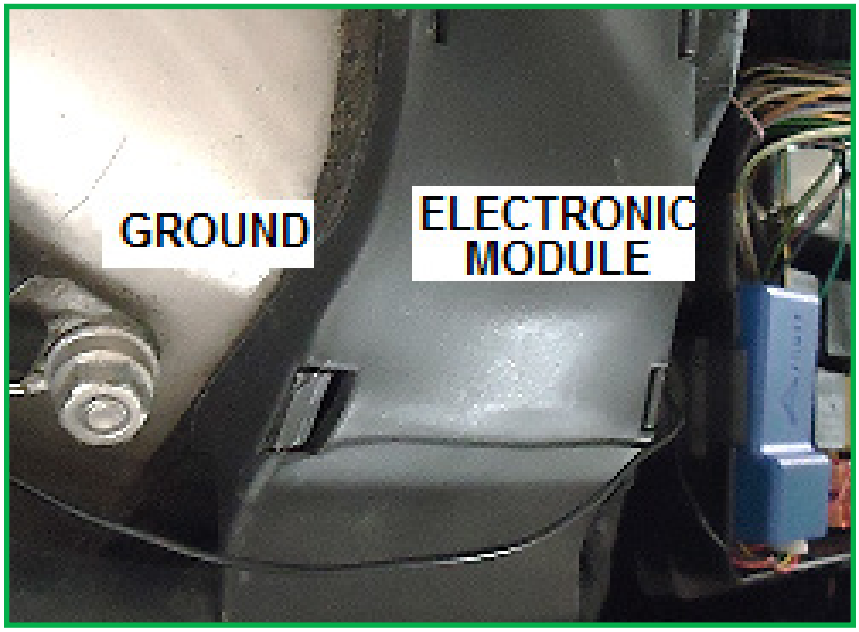

FIGURE 47

5. Locate an available switched ignition power source in the fuse panel, and install the fuse holder (12+v). (Figure 48)

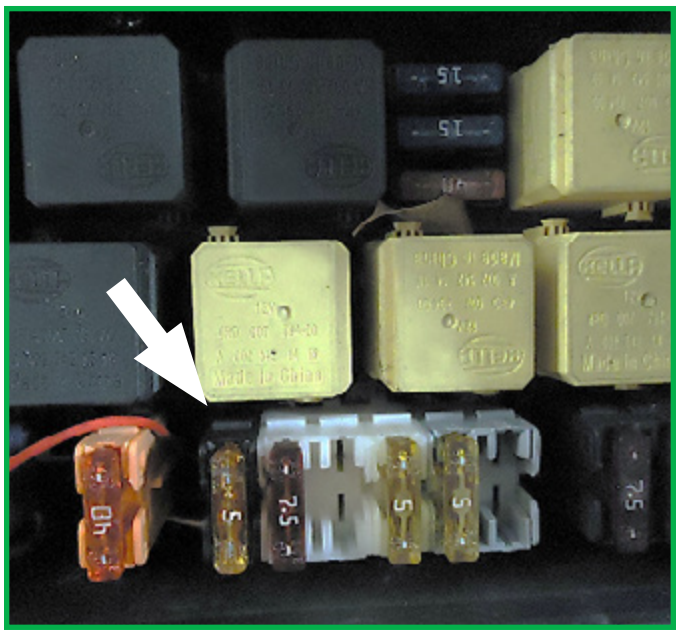

FIGURE 48

6. Re-install fuse box cover. (Figure 49)

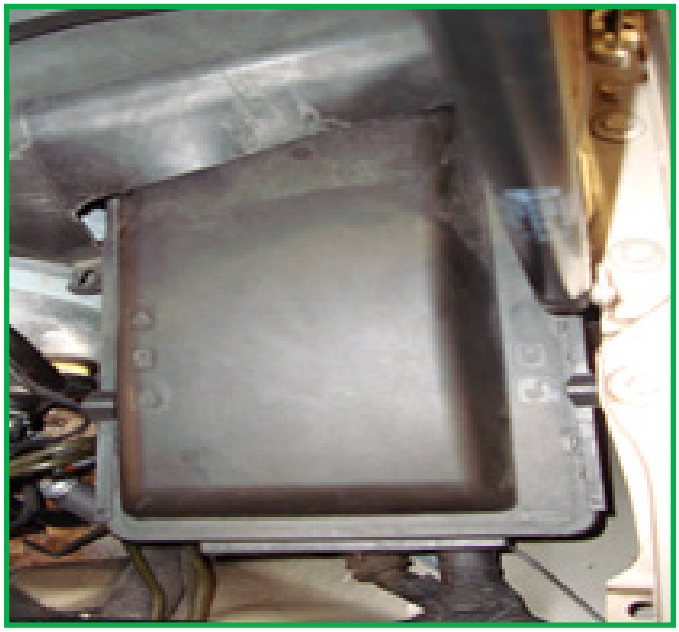

FIGURE 49

7. Installation complete.

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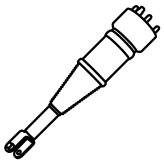
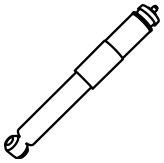
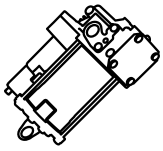
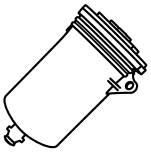
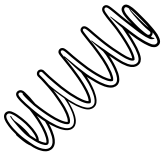
Air Springs

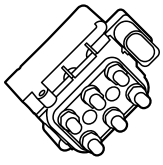

Struts

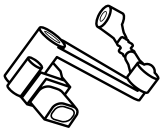

Shocks


Compressors


Dryers


Coil Spring Conversion Kits


Valve Blocks


Ride Height Sensors