

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 protective 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](tel: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.

## FRONT AIR STRUT REMOVAL



These air springs contain a solenoid valve. Once inflated, only the "Mercedes DAS Star" diagnostic computer can deflate the air springs.

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



FIGURE 10-1



FIGURE 10-2

4. LOCATE AND REMOVE THE UPPER CONTROL ARM BALL JOINT NUT. (FIGURE 10-2, 10-3)



FIGURE 10-2



FIGURE 10-3

5. SEPARATE THE BALL JOINT FROM THE SPINDLE ASSEMBLY. (FIGURE 10-4)



FIGURE 10-4

6. REMOVE THE SENSOR LINES FROM BRACKETS. (FIGURE 10-5)

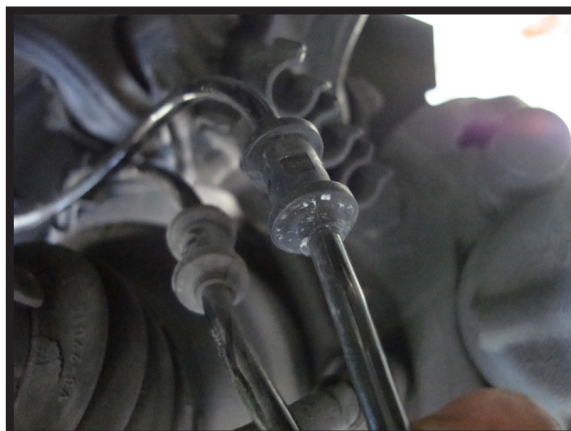


FIGURE 10-5

7. REMOVE THE INNER FENDER WELL SCREWS. (FIGURE 10-6, 10-7)



FIGURE 10-6



FIGURE 10-7

8. DISCONNECT THE STRUT'S ELECTRICAL PLUG LOCATED BEHIND THE INNER FENDER WELL. (FIGURE 10-8)



FIGURE 10-8

9. LOOSEN BUT DO NOT REMOVE THE LOWER STRUT MOUNTING BOLT. (FIGURE 10-9)

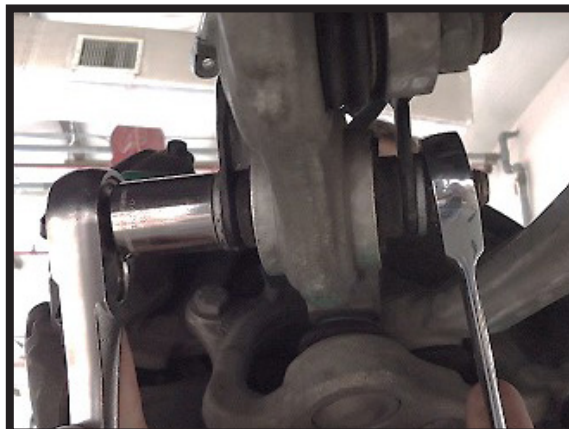


FIGURE 10-9



10. REMOVE THE AIR LINE. (FIGURE 10-10)

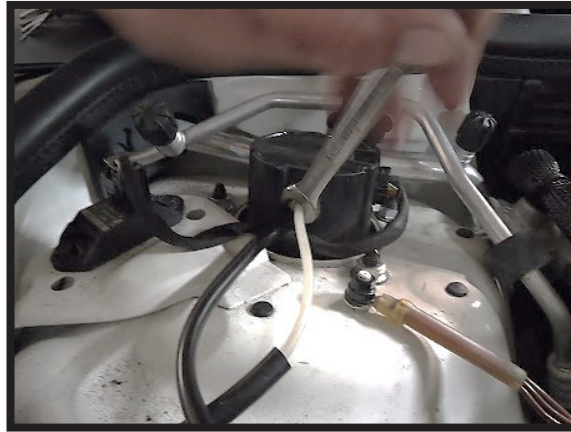


FIGURE 10-10

11. UNPLUG THE ELECTRICAL CONNECTOR. (FIGURE 10-11)



FIGURE 10-11

12. REMOVE THE THREE TOP MOUNTING BOLTS. (FIGURE 10-12, 10-13)



FIGURE 10-12



FIGURE 10-13

13. REMOVE THE LOWER STRUT MOUNTING BOLT. (FIGURE 10-14, 10-15)



FIGURE 10-14



FIGURE 10-15


14. REMOVE THE STRUT ASSEMBLY FROM THE VEHICLE. (FIGURE 10-16)



FIGURE 10-16

15. AIR STRUT REMOVAL COMPLETE.

## REAR AIR SPRING REMOVAL

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

1. REMOVE THE REAR WHEELS. (FIGURES 20-1, 20-2)



FIGURE 20-1



FIGURE 20-2

2. LOCATE AND REMOVE THE ELECTRICAL PLUG FROM THE AIR SPRINGS TOP MOUNT. (FIGURE 20-3)



FIGURE 20-3



3. LOCATE AND REMOVE THE AIR LINE FROM THE AIR SPRINGS TOP MOUNT. (FIGURES 20-4, 20-5)



FIGURE 20-4



FIGURE 20-5

4. LOOSEN AND REMOVE THE LOWER SHOCK MOUNTING NUT AND BOLT. (FIGURE 20-6)



FIGURE 20-6

5. LOOSEN AND REMOVE THE REAR CONTROL ARM NUT AND BOLT. (FIGURE 20-7)



FIGURE 20-7



6. DISLOCATE THE AIR SPRING'S STOP MOUNT FROM THE VEHICLE. (FIGURE 20-8)



FIGURE 20-8

7. LOOSEN AND REMOVE THE AIR SPRING'S LOWER MOUNTING NUT AND BOLT. (FIGURE 20-9)



FIGURE 20-9

8. REMOVE FACTORY AIR SPRING FROM THE VEHICLE BY DISCONNECTING THE FACTORY RUBBER HOSE LEADING FROM THE AIR SPRING TO THE AIR SPRING'S RESERVOIR. SECURE THE HOSE IN A SUITABLE LOCATION AWAY FROM ANY MOVING PARTS OR COMPONENTS WITH EXCESSIVE HEAT. (FIGURE 20-10)



FIGURE 20-10

9. REMOVAL COMPLETE.

## FRONT COIL STRUT INSTALLATION



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

1. INSTALL THE STRUT INTO THE UPPER MOUNT CAVITY. (FIGURE 30-1)



FIGURE 30-1

2. POSITION THE BOTTOM MOUNT ONTO THE CONTROL ARM. (FIGURE 30-2)



FIGURE 30-2

3. INSTALL THE BOTTOM MOUNT NUT AND BOLT. (FIGURES 30-3, 30-4)



FIGURE 30-3

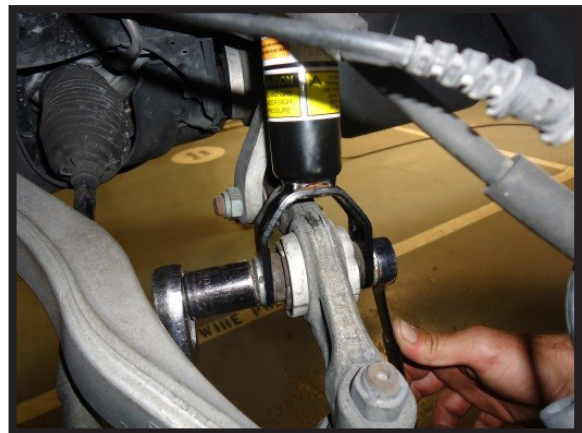


FIGURE 30-4

4. RECONNECT THE BALL JOINT TO SPINDLE ASSEMBLY. (FIGURE 30-5)

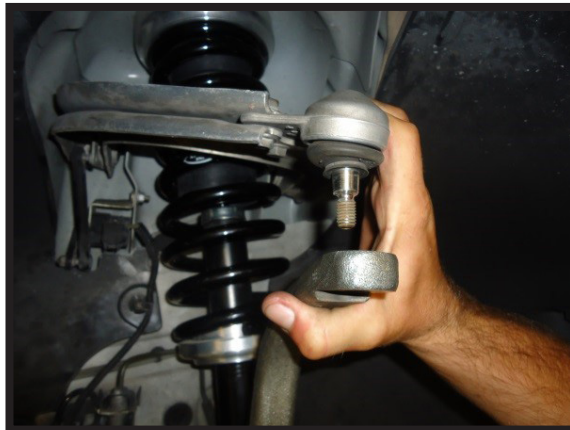


FIGURE 30-5

5. INSTALL THE BALL JOINT NUT. (FIGURE 30-6)



FIGURE 30-6

6. INSTALL THE THREE TOP MOUNTING NUTS. (FIGURE 30-7)



FIGURE 30-7

7. FRONT STRUT INSTALLATION COMPLETE.



## REAR COIL SPRING AND SHOCK INSTALLATION



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

1. INSTALL THE NEW SHOCKS INTO THE TOP MOUNTS AND SECURE. (FIGURE 40-1)



FIGURE 40-1

2. REMOVE OLD TOP MOUNT CLIPS AND REPLACE WITH THE ONES PROVIDED IN THE KIT. (FIGURE 40-2, 40-3)



FIGURE 40-2



FIGURE 40-3

3. INSTALL THE UPPER SPRING SEATS ONTO THE NEW CLIPS. (FIGURE 40-4, 40-5)



FIGURE 40-4



FIGURE 40-5

4. INSTALL THE LOWER SPRING PERCHES INTO THE LOWER CONTROL ARMS, AND SECURE. (FIGURE 40-6, 40-7)

**NOTE:** PAY SPECIAL ATTENTION TO THE "FACING WHEEL" LABEL ON THE PERCHES TO ORIENT THEM PROPERLY WITHIN THE LOWER CONTROL ARMS.



FIGURE 40-6



FIGURE 40-7

5. LOOSEN AND REMOVE THE LOWER SWAY BAR END LINK BOLT. (FIGURE 40-8, 40-9)

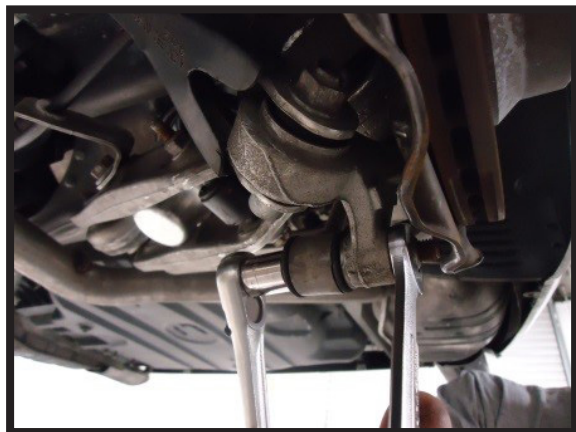


FIGURE 40-8

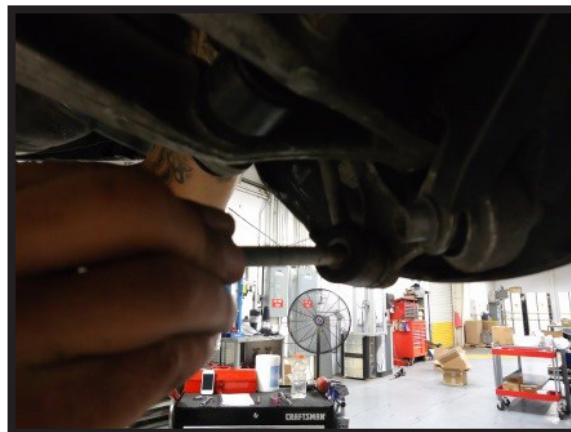


FIGURE 40-9



7. LOOSEN AND REMOVE REAR TRAILING ARM BOLT. (FIGURE 40-10, 40-11)

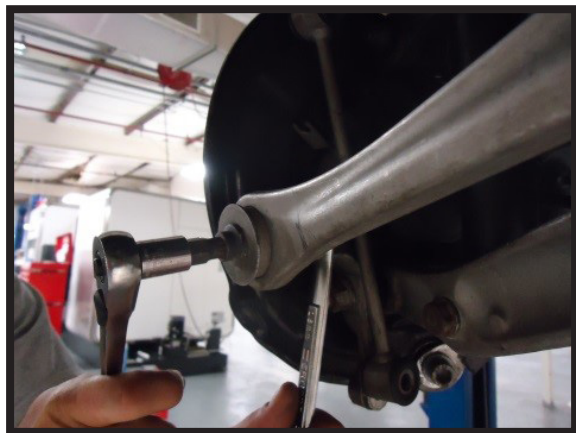


FIGURE 40-10



FIGURE 40-11

8. LOOSEN AND REMOVE THE FRONT TRAILING ARM BOLT. (FIGURE 40-12, 40-13)



FIGURE 40-12



FIGURE 40-13

9. LOOSEN AND REMOVE THE UPPER CONTROL ARM BOLT FROM THE SPINDLE ASSEMBLY. (FIGURE 40-14)



FIGURE 40-14



10. LOOSEN AND REMOVE LOWER CONTROL ARM BOLT. (FIGURE 40-15, 40-16)

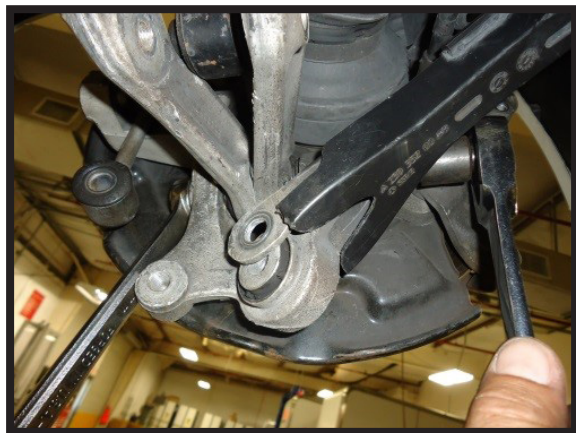


FIGURE 40-15



FIGURE 40-16

11. PULL DOWN ON LOWER CONTROL ARM AND INSTALL THE SPRING INTO THE TOP SPRING SEAT. (FIGURE 40-17)



FIGURE 40-17

12. SLIDE THE SPRING OVER THE HUMP OF THE LOWER SPRING PERCH. (FIGURE 40-18)



FIGURE 40-18

13. 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 40-19, 40-20)



FIGURE 40-19



FIGURE 40-20

14. INSTALL THE SUPPLIED BUSHING AND WASHER ONTO THE TOP OF THE DAMPER TENNION. (FIGURES 40-21, 40-22)



FIGURE 40-21



FIGURE 40-22



15. REINSTALL THE PROVIDED TOP NUT ONTO THE DAMPER AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURE 40-23)



FIGURE 40-23

16. INSTALLATION OF CONTROL ARMS, TRAILING ARMS, TIE ROD END LINKS, ELECTRICAL PLUGS, WHEEL WELLS, WHEELS AND TIRES, ECT. ARE IN REVERSE ORDER OF WHICH THEY WERE DISASSEMBLED.

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



17. INSTALLATION OF REAR SPRINGS AND SHOCKS COMPLETE.



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



## ELECTRONIC BYPASS MODULE INSTALLATION

1. BEGIN BY REMOVING THE FRONT PASSENGER SIDE FLOOR MAT. (FIGURE 50-1)

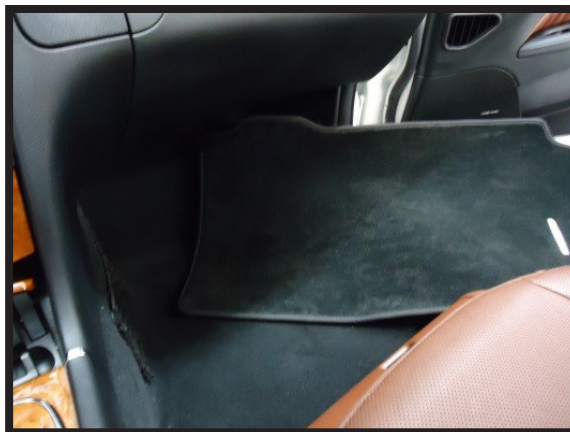


FIGURE 50-1

2. PULL BACK THE KICK PANNEL AND REMOVE THE FOAM INSULATION BENEATH. (FIGURE 50-2, 50-3)



FIGURE 50-2



FIGURE 50-3

3. LOCATE AND REMOVE THE THREE NUTS HOLDING THE METAL SHIELD. (FIGURE 50-4)

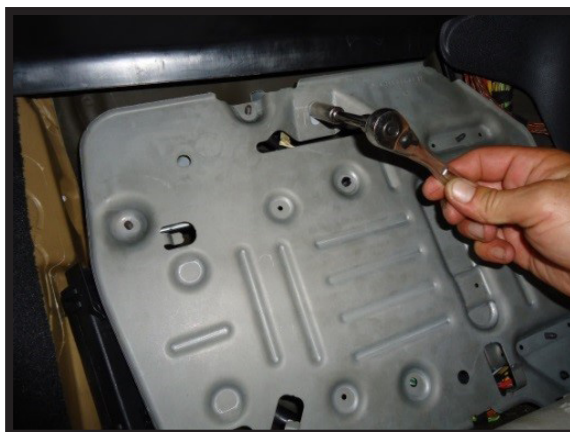


FIGURE 50-4

4. REMOVE THE METAL SHIELD AND REST IT ON THE FLOOR TO EXPOSE THE VEHICLES AIR SUSPENSION CONTROL MODULE. (FIGURE 50-5)



FIGURE 50-5

5. LOCATE THE VEHICLES AIR SUSPENSION CONTROL MODULE MOUNTED ON THE METAL SHIELD. DISCONNECT ALL THREE (TWO LARGE AND ONE SMALL) PLUGS CONNECTED TO THE SIDE. (FIGURE 50-6, 50-7)



FIGURE 50-6



FIGURE 50-7

6. LOCATE A SUITABLE GROUND AND INSTALL THE BLACK WIRE FROM THE ELECTRONIC BYPASS MODULES WIRING HARNESS. (FIGURE 50-8, 50-9)



FIGURE 50-8

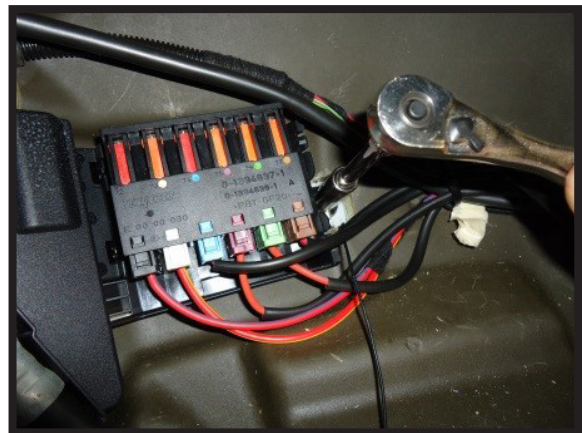


FIGURE 50-9



7. LOCATE THE POSITIVE 12 VOLT POWER SOURCE AND INSTALL THE RED WIRE FROM THE ELECTRONIC BYPASS MODULES WIRING HARNESS. (FIGURE 50-10, 50-11, 50-12)



FIGURE 50-10



FIGURE 50-11



FIGURE 50-12

8. LOCATE THE SMALL, TWO WIRE PLUG FROM THE VEHICLE'S WIRING HARNESS AND PLUG IT INTO THE ELECTRONIC BYPASS MODULES WIRING HARNESS. (FIGURE 50-13)

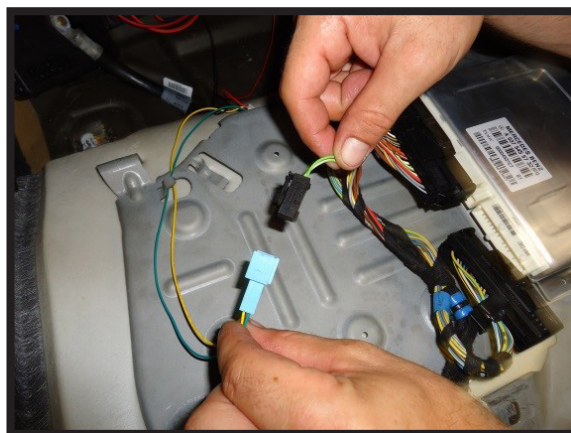


FIGURE 50-13



9. PLUG THE NEW WIRING HARNESS INTO THE ELECTRONIC BYPASS MODULE. (FIGURE 50-14)

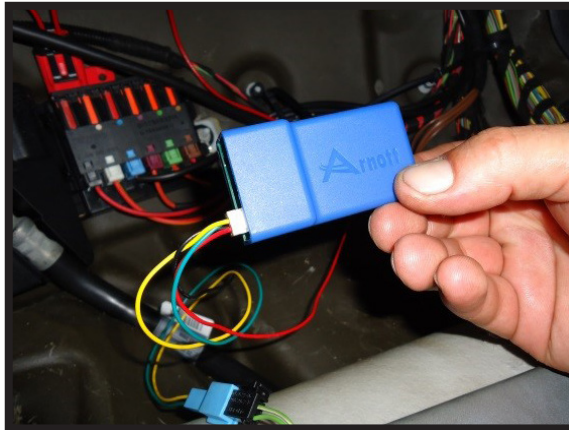


FIGURE 50-14

10. SECURE THE ELECTRONIC BYPASS MODULE IN A SUITABLE LOCATION AND REINSTALL ALL PANELS IN REVERSE ORDER OF WHICH THEY WERE DISASSEMBLED. (FIGURE 50-15)

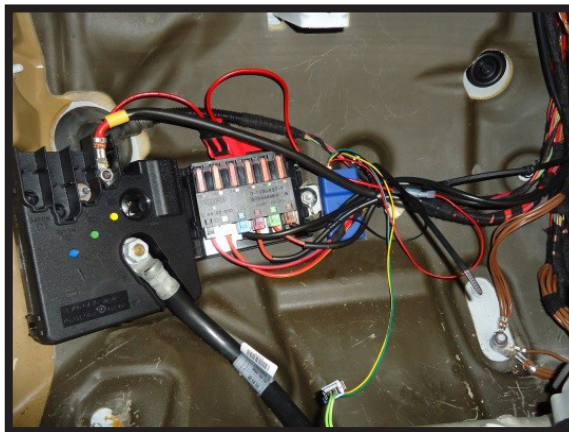


FIGURE 50-15

11. ELECTRONIC BYPASS MODULE INSTALLATION COMPLETE.

**NOTE:** DO NOT PLUG THE FACTORY WIRING HARNESS BACK INTO THE VEHICLE'S AIR SUSPENSION CONTROL MODULE.