

Installation Manual

**C-3183
ARNOTT
PREMIUM COIL SPRING CONVERSION KIT w/EBM
FOR 2000-2006
VARIOUS LONG WHEELBASE GM SUVs**



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. (In the EU please call +31 (0)73 7850 580 or email 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.

- 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 SHOCK REMOVAL

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



FIGURE 1

4. LOCATE AND REMOVE THE UPPER SHOCK SENSOR PLUG. TURN THE PLUG COUNTER CLOCKWISE TO UNLOCK IT FROM THE STRUT. (FIGURES 2, 3)



FIGURE 2



FIGURE 3

5. SUPPORT THE LOWER A-ARM WITH A JACK OR OTHER SUITABLE DEVICE TO RELIEVE PRESSURE FROM THE SHOCK'S MOUNTING POINTS. (FIGURE 4)



FIGURE 4

6. REMOVE THE UPPER MOUNTING NUT, WASHER, AND RUBBER ISOLATOR. (FIGURES 5, 6)



FIGURE 5



FIGURE 6

7. REMOVE THE LOWER SHOCK MOUNTING NUT AND BOLT. (FIGURES 7, 8)



FIGURE 7



FIGURE 8

8. REMOVE THE SHOCK FROM THE VEHICLE. (FIGURE 9)



FIGURE 9

9. REMOVAL COMPLETE.

FRONT SHOCK INSTALLATION



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

1. REMOVE THE TOP NUT, WASHER, AND BUSHING FROM THE TOP OF THE SHOCK. (FIGURES 10, 11)



FIGURE 10



FIGURE 11

2. INSTALL THE SHOCK INTO THE VEHICLE. (FIGURE 12)



FIGURE 12

3. REINSTALL THE LOWER SHOCK MOUNTING NUT AND BOLT AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 13)



FIGURE 13

4. REINSTALL THE BUSHING, WASHER AND NUT ONTO THE TOP OF THE SHOCK, TIGHTENING TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 14, 15)



FIGURE 14



FIGURE 15

5. INSTALLATION COMPLETE.

NOTE:

Secure the sensor harness in a way not to interfere with any moving parts or components with excessive heat.

REAR AIR SHOCK/COIL SPRING REMOVAL

1. REMOVE THE REAR WHEELS. (FIGURE 16)



FIGURE 16

2. LOCATE AND REMOVE THE AIR LINES TO DEFLATE THE AIR SHOCKS. TURN THE METAL CLIP APPROX. 90° TO REMOVE THE AIR LINE FITTING FROM THE AIR SHOCK. (FIGURE 17)



FIGURE 17

3. LOCATE AND REMOVE THE ELECTRICAL CONNECTORS FROM THE TOP OF THE AIR SHOCKS. (FIGURE 18)



FIGURE 18

4. LOOSEN AND REMOVE THE UPPER AND LOWER SHOCK MOUNTING NUTS. (FIGURES 19, 20)



FIGURE 19



FIGURE 20

5. SUPPORT THE AXLE TO RELIEVE PRESSURE FROM THE AIR SHOCKS MOUNTING POINTS. REMOVE THE UPPER AND LOWER AIR SHOCK MOUNTING BOLTS. (FIGURE 21)

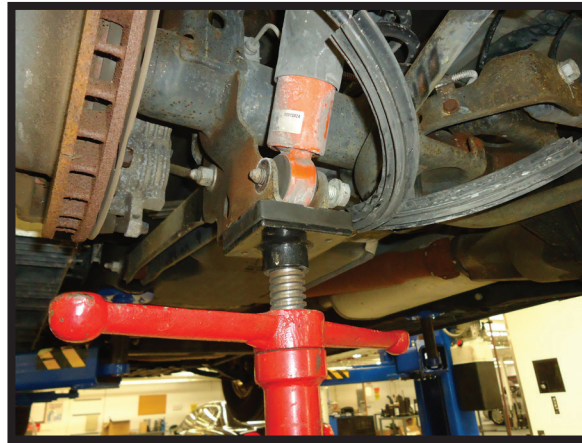


FIGURE 21

6. REMOVE THE AIR SHOCKS FROM THE VEHICLE. (FIGURE 22)



FIGURE 22

7. REMOVE THE BOLTS AND RIDE HEIGHT SENSORS FROM THE UPPER CONTROL ARMS. (FIGURES 23, 24)



FIGURE 23



FIGURE 24

8. REMOVE THE BOLT AND BRACKET HOLDING THE BRAKE LINE TO THE REAR DIFFERENTIAL. (FIGURES 25, 26)



FIGURE 25



FIGURE 26

9. REMOVE THE NUTS ON THE UPPER SWAY BAR END LINKS. (FIGURE 27)



FIGURE 27

10. USING A JACK OR OTHER SUITABLE DEVICE, SUPPORT THE AXLE TO RELEASE PRESSURE FROM THE SWAY BAR END LINKS. REMOVE THE SWAY BAR END LINK BOLTS. (FIGURES 28, 29)



FIGURE 28



FIGURE 29

11. SLOWLY LOWER THE AXLE AND REMOVE THE COIL SPRINGS. SAVE THE RUBBER COIL SPRING SEAT FOR REINSTALLATION.(FIGURE 30)



FIGURE 30

12. REMOVAL COMPLETE.

REAR COIL SPRING INSTALLATION



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

1. REINSTALL THE RUBBER COIL SPRING SEATS ONTO THE NEW COIL SPRINGS. (FIGURES 31)



FIGURE 31

2. INSERT THE COIL SPRING WITH SEATS BACK INTO THE MOUNTING LOCATION. (FIGURES 32)



FIGURE 32

3. RAISE THE REAR AXLE BACK UP TO ALIGN THE SWAY BAR END LINK. REINSTALL THE UPPER SWAY BAR END LINK BOLT AND NUT AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 33, 34)



FIGURE 33



FIGURE 34

4. REINSTALL THE BOLT AND BRACKET THAT HOLDS THE BRAKE LINE TO THE REAR DIFFERENTIAL. (FIGURE 35)



FIGURE 35

5. REINSTALL THE BOLTS AND RIDE HEIGHT SENSORS TO THE UPPER CONTROL ARMS AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURE 36)



FIGURE 36

6. INSTALL THE SHOCK INTO THE VEHICLE. (FIGURE 37)



FIGURE 37

7. INSTALL THE LOWER SHOCK MOUNTING BOLT AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURE 38)



FIGURE 38

8. INSTALL THE UPPER SHOCK MOUNTING BOLT AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURE 39)



FIGURE 39

9. INSTALLATION COMPLETE.

NOTE: *Secure the sensor harness in a way not to interfere with any moving parts or components with excessive heat.*

ELECTRONIC BYPASS MODULE INSTALLATION

1. REMOVE THE TRIM PANEL IN ORDER TO ACCESS THE AIR SUSPENSION CONTROL MODULE IN THE REAR RIGHT SIDE OF THE CARGO AREA. (FIGURE 40)



FIGURE 40

2. REMOVE (3) CONNECTORS FROM AIR SUSPENSION CONTROLLER. (FIGURE 41)



FIGURE 41

3. LOCATE PINS 'D' AND 'E' ON THE GRAY CONNECTOR AND CUT THE WIRES. (FIGURE 42)

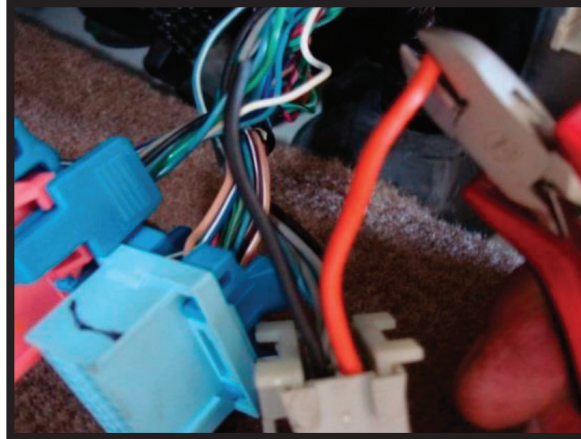


FIGURE 42

4. LOCATE PIN B-8 ON THE PINK 24 PIN CONNECTOR AND CUT WIRE. (FIGURE 43)

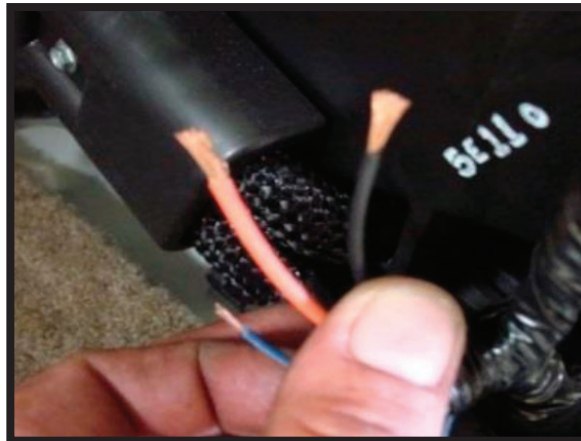


FIGURE 43

5. CONNECT TO THE WIRING HARNESS SIDE (FIGURES 44, 45)

ELECTRONIC BYPASS MODULE	FROM	TO	VEHICLE'S WIRING HARNESS
	BLUE	PIN B-8	
	RED	PIN D	
	BLACK	PIN E	

FIGURE 44

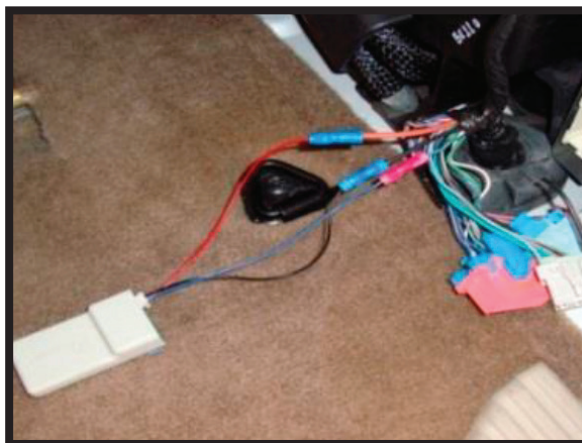


FIGURE 45

6. CONTROLLER AND CONTROLLER I.D. PLATE. (FIGURES 46, 47)

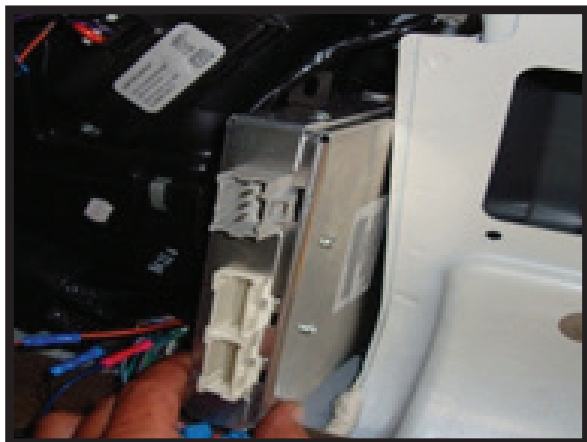


FIGURE 46



FIGURE 47

7. **DO NOT** RECONNECT AIR RIDE CONTROLLER.
8. REPLACE THE FACTORY 'RTD' 30A FUSE WITH SUPPLIED 5A FUSE.
9. EBM INSTALLATION COMPLETE.