

# Installation Manual

## C-2835 ARNOTT COIL SPRING CONVERSION KIT FOR 2007-2014 VARIOUS SHORT 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](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) 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.*

## COIL STRUT REMOVAL

1. RAISE VEHICLE AND REMOVE FRONT WHEELS TO EXPOSE THE FRONT COIL STRUTS.  
(FIGURES 1, 2)



FIGURE 1

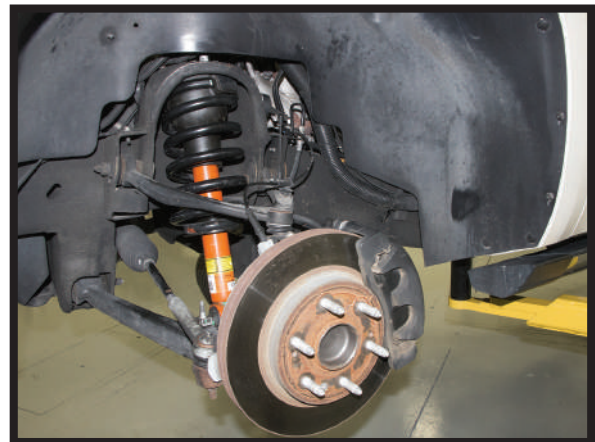


FIGURE 2

2. LIFT THE HOOD TO EXPOSE THE TOP OF THE COIL STRUTS. LOCATE AND DISCONNECT THE ELECTRICAL CONNECTORS. SECURE THE HARNESS IN A WAY NOT TO INTERFERE WITH ANY MOVING PARTS OR COMPONENTS WITH EXCESSIVE HEAT. (FIGURES 3, 4)



FIGURE 3



FIGURE 4

3. REMOVE THE WIRE CLIPS AND TOP MOUNTING NUTS. (FIGURES 5, 6, 7)



FIGURE 5



FIGURE 6

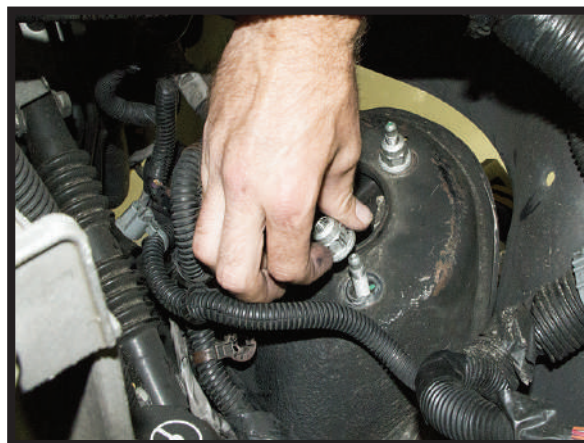


FIGURE 7



4. REMOVE THE LOWER MOUNTING BOLTS. (FIGURES 8, 9)



FIGURE 8



FIGURE 9

5. LOOSEN, DO NOT REMOVE, THE SWAY BAR END LINK HARDWARE. (FIGURE 10)



FIGURE 10

6. CAREFULLY REMOVE COIL STRUTS FROM THE VEHICLE. (FIGURE 11)



FIGURE 11



*Use a spring compressor tool for the following removal steps.*

## COIL STRUT DISASSEMBLY

1. RELEASE CLIP AND REMOVE THE TOP ELECTRICAL CONNECTOR AND SHOCK ROD STEM.  
(FIGURES 12, 13, 14 ,15)



FIGURE 12

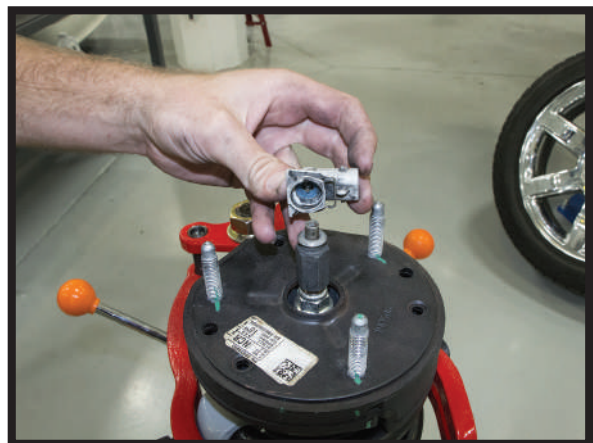


FIGURE 13



FIGURE 14



FIGURE 15



2. COMPRESS THE COIL SPRING AND REMOVE THE TOP SHOCK ROD NUT. (FIGURES 16, 17)



FIGURE 16

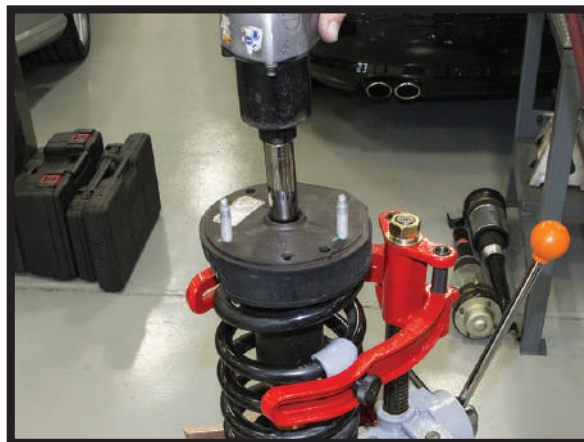


FIGURE 17

3. REMOVE TOP MOUNT PLATE, OFFSET PLATE AND RUBBER ISOLATOR. (FIGURES 18, 19)



FIGURE 18



FIGURE 19

4. CAREFULLY RELEASE SPRING PRESSURE AND REMOVE THE COIL SPRING, SPACER WASHER, BUMP STOP, BUMP STOP CAP, AND SPRING SEAT. (FIGURES 20, 21)



FIGURE 20



FIGURE 21

## COIL STRUT REASSEMBLY



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

1. INSTALL THE OEM SPRING SEAT, MAKING SURE THE FLANGED END OF THE SPRING SEAT IS DOWN, FOLLOWED BY THE BUMP STOP CAP ONTO THE NEW SHOCK ABSORBER. (FIGURE 22)

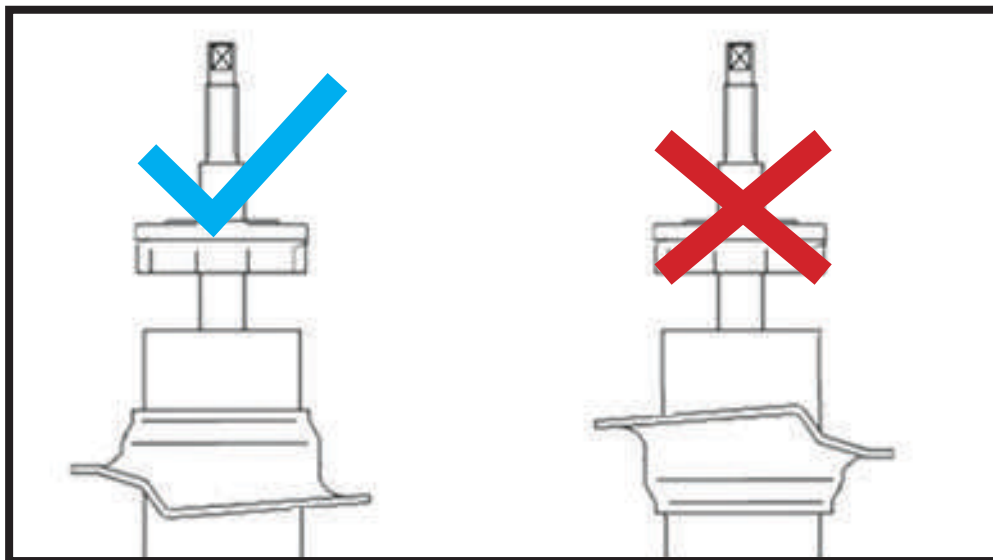


FIGURE 22

2. PROPERLY ALIGN THE STRUT BEFORE INSTALLING IT ON THE VEHICLE, MAKING SURE THE BOLT MOUNTS ARE FACING DOWNWARD AS SHOWN BELOW. (FIGURES 23, 24)

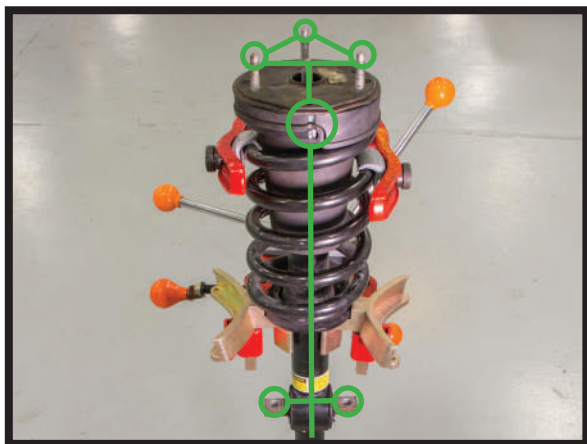


FIGURE 23

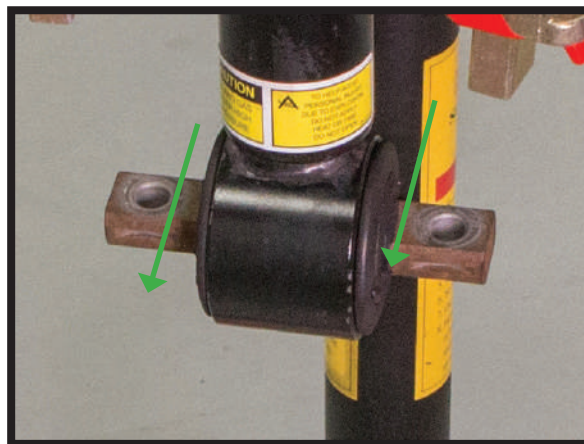


FIGURE 24

3. REMAINING ASSEMBLY IS IN THE REVERSE ORDER OF SHOCK REMOVAL.

## COIL STRUT INSTALLATION



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

1. INSTALLATION IS IN REVERSE ORDER OF SHOCK REMOVAL.
2. POSITION THE T-BAR ON TOP OF THE CONTROL ARM TO ENSURE PROPER MOUNTING. (FIGURE 25)

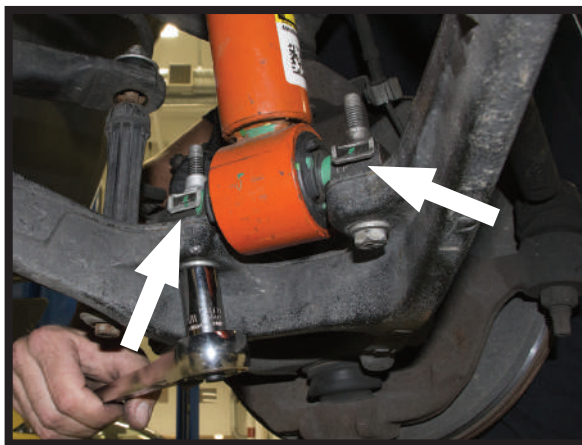


FIGURE 25

## REAR AIR SHOCK/COIL SPRING REMOVAL

1. SET STEERING TO STRAIGHT.
2. RAISE VEHICLE.
3. REMOVE THE REAR WHEELS. (FIGURE 26)

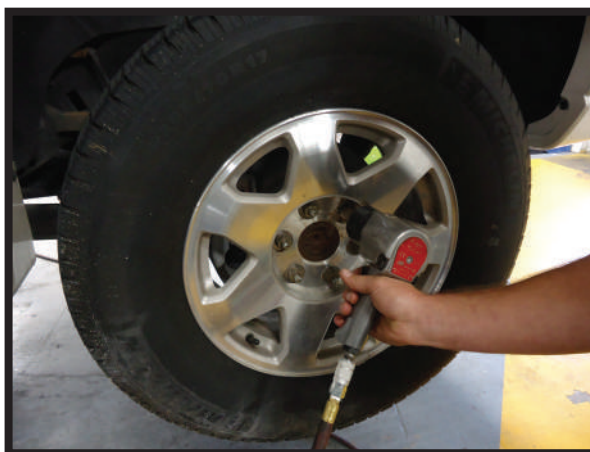


FIGURE 26



4. LOCATE AND REMOVE THE AIR LINES TO DEFLATE THE AIR SHOCKS. TURN THE METAL CLIP APPROXIMATELY 90° TO REMOVE THE AIR LINE FITTING FROM THE AIR SHOCK. (FIGURE 27)



FIGURE 27

5. LOCATE AND REMOVE THE ELECTRICAL CONNECTORS FROM THE TOP OF THE AIR SHOCKS. (FIGURE 28)



FIGURE 28

6. LOOSEN AND REMOVE THE UPPER AND LOWER SHOCK MOUNTING NUTS. (FIGURES 29, 30)



FIGURE 29



FIGURE 30

7. SUPPORT THE AXLE TO RELIEVE PRESSURE FROM THE AIR SHOCKS MOUNTING POINTS. REMOVE THE UPPER AND LOWER AIR SHOCK MOUNTING BOLTS. (FIGURE 31)



FIGURE 31

8. REMOVE THE AIR SHOCKS FROM THE VEHICLE. (FIGURE 32)



FIGURE 32

9. REMOVE THE BOLTS AND RIDE HEIGHT SENSORS FROM THE UPPER CONTROL ARMS. (FIGURES 33, 34)



FIGURE 33



FIGURE 34



10. REMOVE THE BOLT AND BRACKET HOLDING THE BRAKE LINE TO THE REAR DIFFERENTIAL. (FIGURES 35, 36)



FIGURE 35



FIGURE 36

11. REMOVE THE NUTS ON THE UPPER SWAY BAR END LINKS. (FIGURE 37)



FIGURE 37

12. 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 38, 39)



FIGURE 38



FIGURE 39



13. SLOWLY LOWER THE AXLE AND REMOVE THE COIL SPRINGS. (FIGURE 40)



FIGURE 40

## REAR COIL SPRING INSTALLATION



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

1. INSTALL THE REAR COIL CONVERSION IN THE REVERSE ORDER OF REMOVAL.

### **NOTE:**

*Secure the air lines and electrical connectors in suitable locations as they are not used for this kit.*

## ELECTRONIC BYPASS MODULE INSTALLATION

1. LOCATE AND REMOVE THE SPARE TIRE UNDER THE REAR OF THE TRUCK.
2. LOCATE SUSPENSION MODULE ABOVE SPARE TIRE CORNER BRACKET. RELEASE CLIP ATTACHING WIRE HARNESS TO MODULE. (FIGURES 41, 42)



FIGURE 41



FIGURE 42

3. ONCE WIRE HARNESS CLIP IS REMOVED, UNPLUG HARNESS. ALLOW WIRE HARNESS PLUG TO HANG DOWN. (FIGURES 43, 44)



FIGURE 43



FIGURE 44

### NOTE:

Wire Harness will NOT be reconnected to suspension control module.  
Be sure to leave this connection disconnected.

4. LOCATE RED W/BLACK STRIPE, SOLID BLACK, SOLID TAN, TAN W/ BLACK STRIPE. CUT EACH WIRE ABOUT 2 INCHES BACK FROM THE PLUG. STRIP ALL 4 WIRES ON THE WIRE HARNESS SIDE (NOT THE PLUG SIDE). (FIGURES 45, 46, 47)

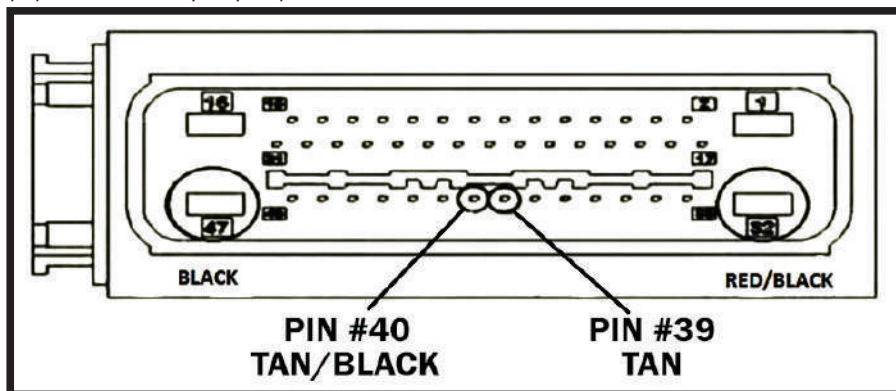


FIGURE 45

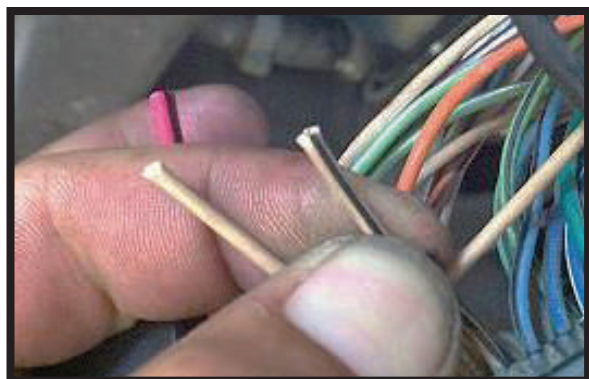


FIGURE 46

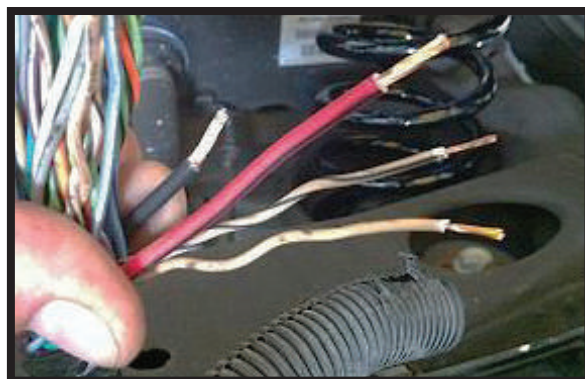


FIGURE 47

5. USING THE WIRING DIAGRAM, MATCH UP THE WIRES AND CONNECT THEM TOGETHER WITH THE BUTT CONNECTORS. (FIGURE 48, 49)

ELECTRONIC BYPASS MODULE	FROM	TO	VEHICLE'S WIRING HARNESS
	BLUE	TAN/BLACK STRIPE (Pin 40)	
	RED	RED/BLACK STRIPE (Pin 32)	
	GREEN	TAN (Pin 39)	
	BLACK	BLACK (Pin 47)	

FIGURE 48

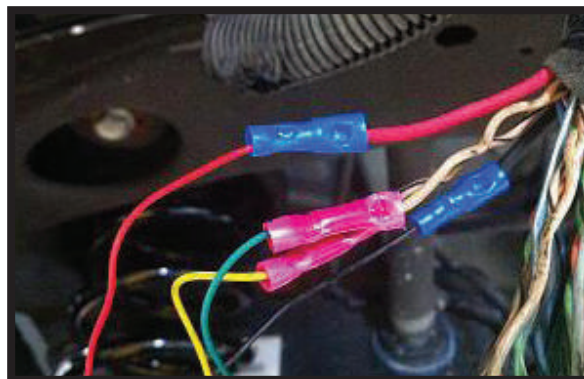


FIGURE 49



6. ONCE ALL THE WIRES HAVE BEEN CONNECTED YOU WILL NEED TO SECURE THE EBM TO THE WIRE HARNESS AS SHOWN. (FIGURE 50)

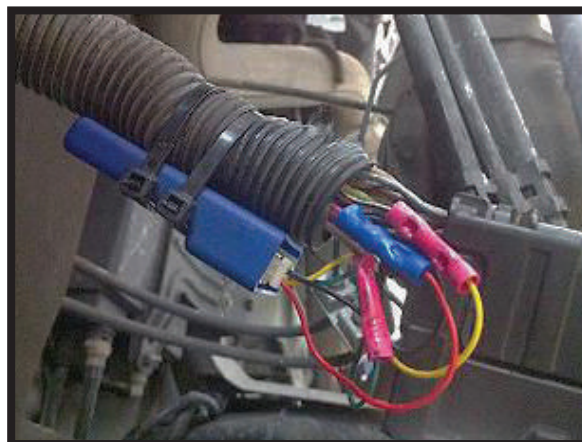


FIGURE 50

7. LOCATE THE FUSE BOX UNDER THE HOOD. (FIGURE 51)



FIGURE 51

8. REPLACE THE 30 AMP FUSE WITH A 5 AMP FUSE. (FIGURES 52, 53)

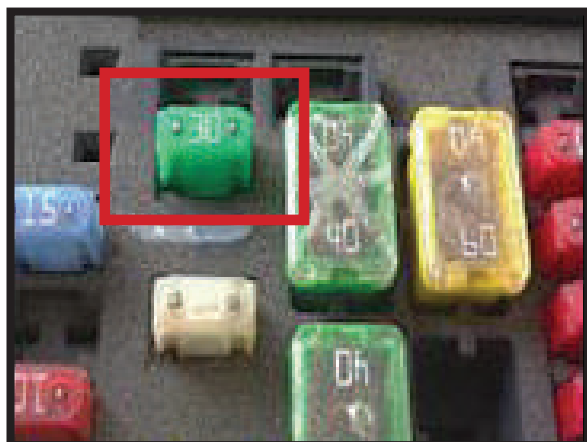


FIGURE 52

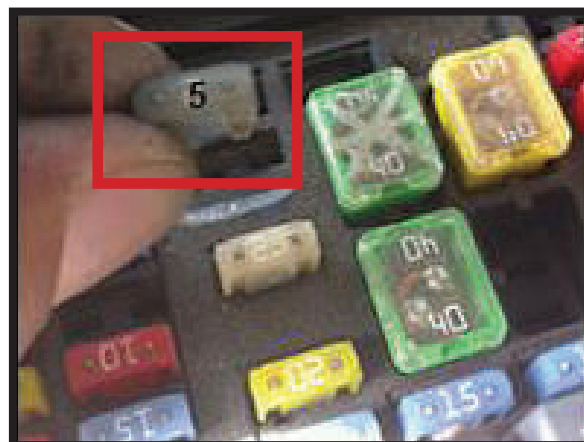


FIGURE 53

9. REPLACE SPARE TIRE. INSTALLATION COMPLETE.