

# Installation Manual

C-2836  
ARNOTT COIL SPRING CONVERSION KIT  
FOR 2007-2014  
VARIOUS LONG WHEELBASE GM SUVs



Congratulations on your purchase of an Arnett® air suspension product. We at Arnett 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.*

## GENERAL INFORMATION:

- 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 10-1, 10-2)



FIGURE 10-1



FIGURE 10-2

2. Lift the hood to expose the top of the coil struts. Locate and disconnect the electrical connectors. (FIGURES 10-3, 10-4)



FIGURE 10-3



FIGURE 10-4

3. Remove the wire clips and top mounting nuts. (FIGURES 10-5, 10-6, 10-7)



FIGURE 10-5



FIGURE 10-6



FIGURE 10-7



4. Remove the lower mounting bolts. (FIGURES 10-8, 10-9)



FIGURE 10-8



FIGURE 10-9

5. Loosen, DO NOT REMOVE, the sway bar end link hardware. (FIGURE 10-10)



FIGURE 10-10

6. Carefully remove coil struts from the vehicle. (FIGURE 10-11)



FIGURE 10-11



Use a spring compressor tool for the following removal steps.

## SHOCK REMOVAL

1. Release clip and remove the top electrical connector and shock rod stem. (FIGURES 20-1, 20-2, 20-3, 20-4)



FIGURE 20-1



FIGURE 20-2



FIGURE 20-3



FIGURE 20-4

2. Compress the coil spring and remove the top shock rod nut. (FIGURES 20-5, 20-6)



FIGURE 20-5



FIGURE 20-6

3. Remove top mount plate, offset plate and rubber isolator. (FIGURES 20-7, 20-8)



FIGURE 20-7



FIGURE 20-8



4. Carefully release spring pressure and remove coil spring, spacer washer and bump stop. (FIGURES 20-9, 20-10, 20-11)



FIGURE 20-9



FIGURE 20-10



FIGURE 20-11

## SHOCK INSTALLATION



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

1. Installation is in 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 coil strut removal.

## REAR AIR SHOCK/COIL SPRING REMOVAL

1. Set steering to straight.
2. Raise vehicle.
3. Remove the rear wheels. (FIGURE 40-1)



FIGURE 40-1

4. 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 40-2)



FIGURE 40-2



5. Locate and remove the electrical connectors from the top of the air shocks. (FIGURE 40-3)



FIGURE 40-3

6. Loosen and remove the upper and lower shock mounting nuts. (FIGURES 40-4, 40-5)



FIGURE 40-4



FIGURE 40-5

7. Support the axle to relieve pressure from the air shocks mounting points. Remove the upper and lower air shock mounting bolts. (FIGURE 40-6)



FIGURE 40-6

8. Remove the air shocks from the vehicle. (FIGURE 40-7)



FIGURE 40-7

9. Remove the bolts and ride height sensors from the upper control arms. (FIGURES 40-8, 40-9)



FIGURE 40-8



FIGURE 40-9

10. Remove the bolt and bracket holding the brake line to the rear differential. (FIGURES 40-10, 40-11)



FIGURE 40-10



FIGURE 40-11

11. Remove the nuts on the upper sway bar end links. (FIGURE 40-12)



FIGURE 40-12

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 40-13, 40-14)



FIGURE 40-13



FIGURE 40-14

13. Slowly lower the axle and remove the coil springs. (FIGURE 40-15)



FIGURE 40-15

## 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 50-1, 50-2)



FIGURE 50-1



FIGURE 50-2

3. Once wire harness clip is removed, unplug harness. Allow wire harness plug to hang down. (FIGURES 50-3, 50-4)



FIGURE 50-3



FIGURE 50-4

### NOTE:

WIRE HARNESS WILL NOT BE RECONNECTED TO SUSPENSION CONTROL MODULE.  
BE SURE TO LEAVE THIS CONNECTION DISCONNECTED.



6. Once all the wires have been connected you will need to secure the ebm to the wire harness as shown. (FIGURE 50-10)



FIGURE 50-10

9. Locate the fuse box under the hood. (FIGURE 50-11)



FIGURE 50-11

10. Replace the 30 amp fuse with a 5 amp fuse. (FIGURES 50-12, 50-13)

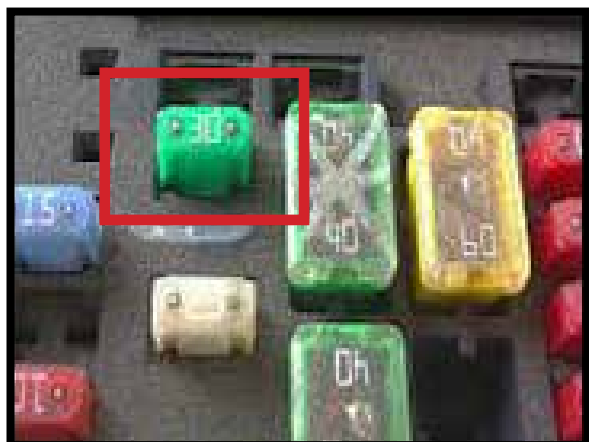


FIGURE 50-12

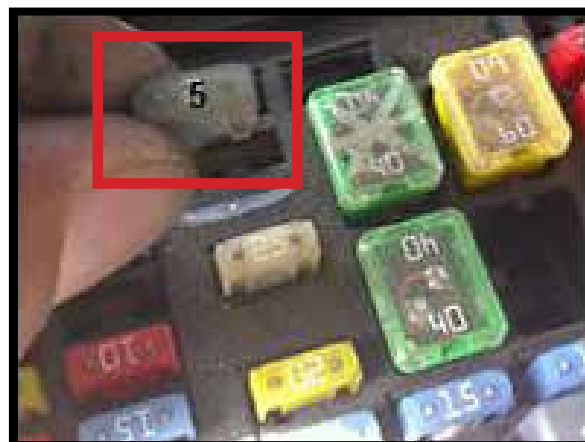


FIGURE 50-13

11. Replace spare tire. Installation complete.