

# **INSTALLATION MANUAL**

# C-4424 Arnott New Coil Spring Conversion Kit Various GM SUVs (GMT K2UC/UG, SWB)



Engineered to Ride, Built to Last®

REV 01 March 30, 2023

# 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 SHOCK REMOVAL

1. Lift vehicle and remove applicable front wheel. (Figure 1)



FIGURE 1

2. Unroute and disconnect the electrical connection. (Figures 2, 3)

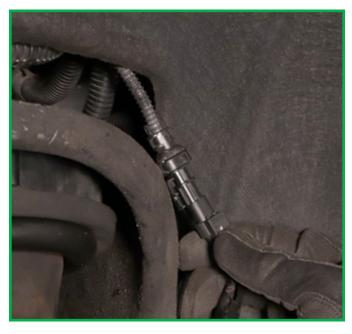




FIGURE 2 FIGURE 3

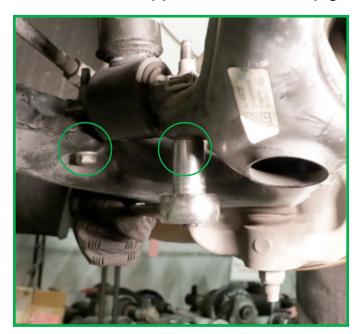
# 3. Remove the three (3) top mount nuts. (Figures 4, 5)





FIGURE 4 FIGURE 5

#### 4. Remove the two (2) bottom mount bolts. (Figures 6, 7)







5. Remove the shock assembly from the vehicle. (Figure 8)



FIGURE 8

6. Removal complete.

# FRONT SHOCK INSTALLATION



WARNING:

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

1. Install the assembled shock on to the vehicle. (Figure 9)



FIGURE 9

2. Reinstall the two (2) bottom mount bolts. Tighten to manufacturer's specifications. (Figure 10)



FIGURE 10

3. Reinstall the three (3) top mount nuts. Tighten to manufacturer's specifications. (Figures 11, 12)



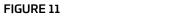




FIGURE 12

4. Reroute and connect the electrical connection. (Figures 13, 14)





FIGURE 13 FIGURE 14

- 5. Reinstall the applicable front wheel.
- 6. Lower the vehicle.
- 7. Installation complete.

# REAR AIR SHOCK/COIL SPRING REMOVAL

- 1. Set steering to straight.
- 2. Raise vehicle.
- 3. Remove the rear wheels. (Figure 15)



FIGURE 15

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 16)



FIGURE 16

5. Locate and remove the electrical connectors from the top of the air shocks. (Figure 17)



FIGURE 17

6. Loosen and remove the upper and lower shock mounting nuts. (Figures 18, 19)





FIGURE 18 FIGURE 19

7. Support the axle to relieve pressure from the air shocks mounting points. Remove the upper and lower air shock mounting bolts. (Figure 20)



FIGURE 20

8. Remove the air shocks from the vehicle. (Figure 21)

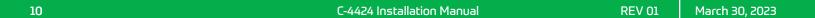


FIGURE 21

9. Remove the bolts and ride height sensors from the upper control arms. (Figures 22, 23)







10. Remove the bolt and bracket holding the brake line to the rear differential. (Figures 24, 25)



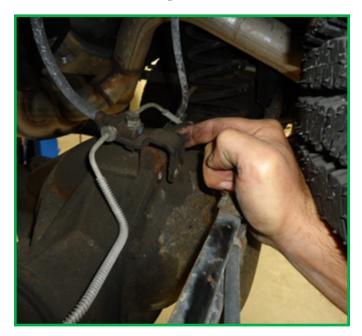


FIGURE 24 FIGURE 25

11. Remove the nuts on the upper sway bar end links. (Figure 26)

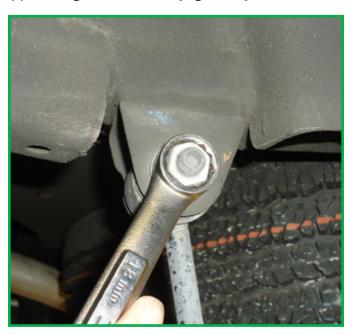


FIGURE 26

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 27, 28)





FIGURE 27 FIGURE 28

13. Slowly lower the axle and remove the coil springs. (Figure 29)



FIGURE 29

14. Removal complete.

# **REAR COIL SPRING INSTALLATION**



**WARNING:** 

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

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

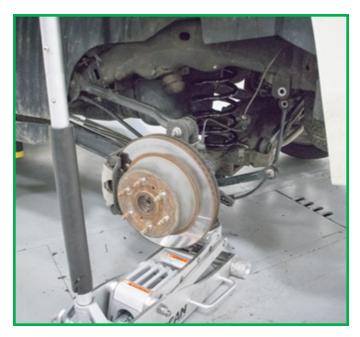
1. Place the rubber isolator onto the axle and install the coil spring into the vehicle. Be sure to keep the isolator properly aligned with the coil strut. (Figures 30, 31)





FIGURE 30 FIGURE 31

2. Using a jack or other suitable device, raise the axle until the sway bar end link is realigned with the bolt holes. Reinstall the sway bar end link bolts. (Figures 32, 33)



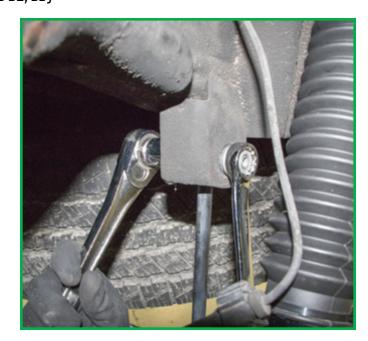


FIGURE 32 FIGURE 33

3. Install the shock into the vehicle. (Figure 34)

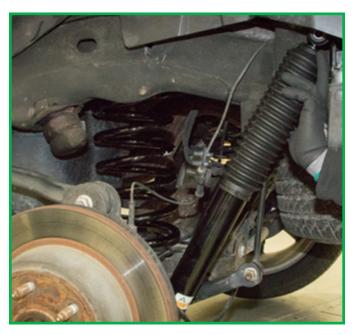


FIGURE 34

4. Install the upper and lower shock mounting hardware and tighten to manufacturer's specifications. (Figures 35, 36)

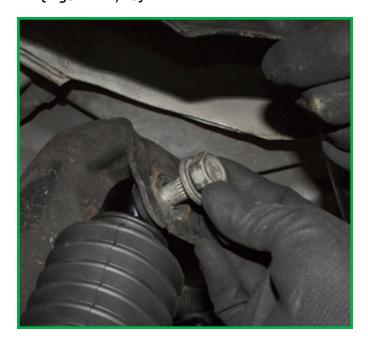




FIGURE 35 FIGURE 36

5. Reinstall the brake line bracket and ride height sensors, tightening to manufacturer's specifications. (Figures 37, 38, 39)



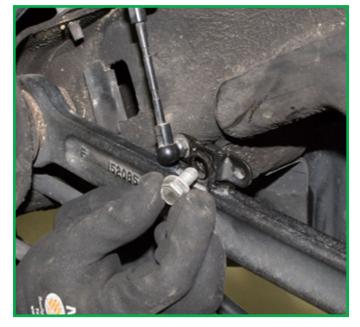


FIGURE 37 FIGURE 38



FIGURE 39

- 6. Reinstall the wheel.
- 7. Lower the vehicle.
- 8. Installation complete.

#### **ELECTRONIC BYPASS MODULE INSTALLATION**



#### **WARNING:**

To avoid the possibility of short circuits while working with electric components consult your owner's manual on how to disconnect your battery.



#### **WARNING:**

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.

1. Locate BCM beneath the driver's side of the dash behind the OBD connector. (Figure 40)



FIGURE 40

2. Using the wiring diagram, match the wires and splice them together with the T-Tap connectors. (Figures 41, 42)

ELECTRONIC BYPASS MODULE	BCM PLUG	BCM PIN#	BCM WIRE/COLOR
Red	Green	6	Violet/Black
Black	Blue	2	Black
Blue	Natural	25	Blue
Green	Natural	24	White

FIGURE 41



FIGURE 42

- 3. Once all the wires have been connected you will need to secure the EBM under the dash and away from any source of heat and/or any moving parts.
- 4. EBM installation complete.
- 5. Remove the cover from the fuse box in the engine compartment. (Figure 43)



FIGURE 43

6. Remove the 30-amp fuse in location #24 labeled as "RTD". (Figures 44, 45)

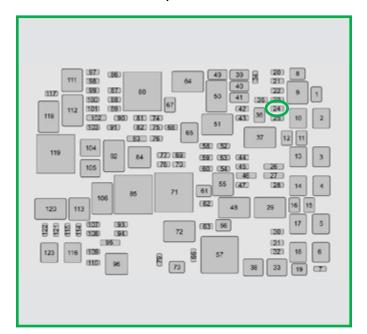




FIGURE 44 FIGURE 45

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

- 7. Reinstall the fuse box cover.
- 8. Installation complete.



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