

INSTALLATION MANUAL

C-3937 Arnott New Coil Spring Conversion Kit 16-21 Jeep Grand Cherokee (WK2)



Engineered to Ride, Built to Last®

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 REMOVAL

- 1. Lift the vehicle per manufacturer's instructions.
- 2. Deflate and disable the air suspension system per manufacturer's instructions.
- 3. Remove the wheel. (Figure 1)



FIGURE 1

4. Disconnect the air line. (Figure 2)



FIGURE 2

5. Loosen, but do not remove, the nut connecting the upper control arm to the spindle. (Figure 3)



FIGURE 3

6. Remove the steering arm from the knuckle. (Figures 4, 5)







FIGURE 5

- 7. Disconnect the sway bar from the strut.
- 8. Disconnect the wheel speed sensor and un-route the wire from the spindle. (Figures 6, 7)

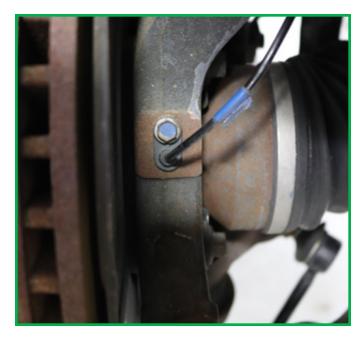




FIGURE 6 FIGURE 7

9. Remove the brake caliper from the hub. (Figure 8)



FIGURE 8

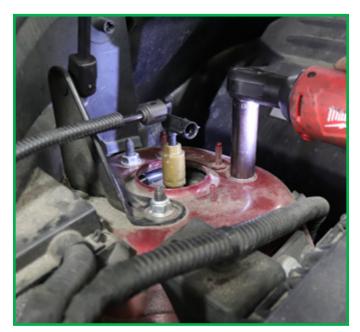
10. Remove the lower strut mount bolt. (Figures 9, 10)





FIGURE 9 FIGURE 10

11. Loosen, but do not remove, the upper strut mount nuts. (Figures 11, 12)





12. Disconnect the spindle from the upper control arm. Push down on the lower control arm to slide the strut lower mount over one side of the axle shaft. (Figures 13, 14)

NOTE: The driver's side axle shaft will need to be disconnected.



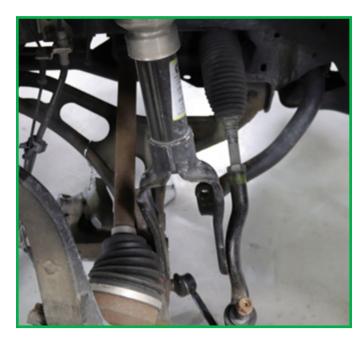
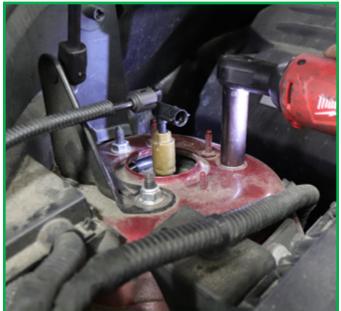


FIGURE 13 FIGURE 14

13. Remove the upper strut mount nuts and remove the strut from the vehicle. (Figures 15, 16)





FRONT INSTALLATION



WARNING:

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

1. Install the new strut into the vehicle. Loosely thread on the upper strut mount nuts to retain the strut. (Figures 17, 18)





FIGURE 17 FIGURE 18

2. Push down on the lower control arm to slide the lower strut mount over the axle shaft. (Figure 19)



FIGURE 19

3. Use a jack or other appropriate equipment to raise the lower control arm and reconnect the spindle to the upper control arm. Tighten hardware to manufacturer's specifications. (Figure 20)



FIGURE 20

4. Reinstall the lower strut mount bolt and nut. Tighten to manufacturer's specifications. (Figures 21, 22)





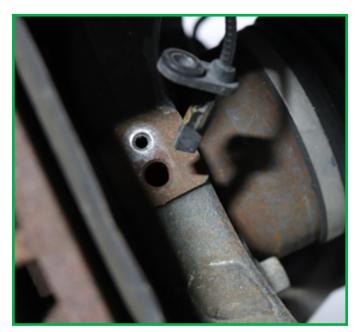
FIGURE 22

5. Reinstall the brake caliper. Tighten all hardware to manufacturer's specifications. (Figure 23)



FIGURE 23

6. Reinstall the wheel speed sensor. Tighten to manufacturer's specifications. (Figures 24, 25)





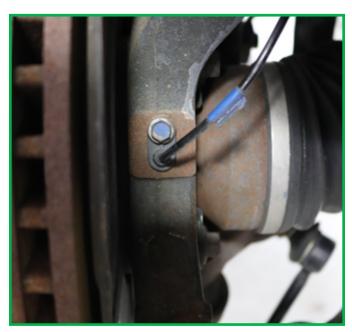


FIGURE 25

- 7. Reconnect the sway bar to the strut. Tighten to manufacturer's specifications.
- 8. Reconnect the steering arm to the knuckle. Tighten to manufacturer's specifications. (Figures 26, 27)





FIGURE 26 FIGURE 27

9. Tighten the upper strut mount nuts to manufacturer's specifications. (Figure 28)

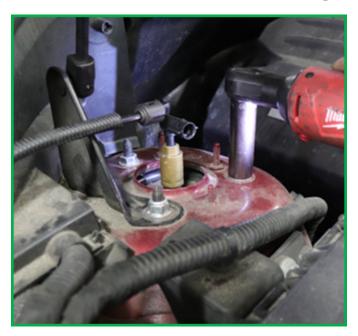


FIGURE 28

- 10. Seal off and secure the air line in a safe location.
- 11. Reinstall the wheel. Tighten to manufacturer's specifications.
- 12. Installation complete.

REAR REMOVAL

1. Remove the wheel. (Figure 29)



FIGURE 29

- 2. Ensure that the air suspension has been deactivated and deflated.
- 3. Remove the air line from the air spring. Remove the air spring. (Figures 30, 31)







4. Remove the lower shock mount bolt. (Figures 32, 33)





FIGURE 32 FIGURE 33

5. Remove the wheel well liner. (Figure 34)

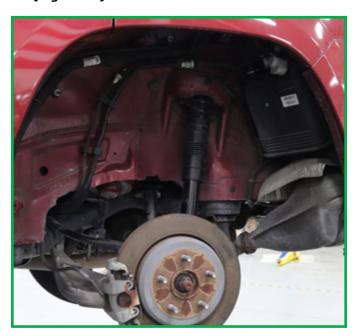


FIGURE 34

6. Remove the upper shock mount bolts and remove the shock. (Figures 35, 36)





FIGURE 35 FIGURE 36

Removal complete.

REAR INSTALLATION



WARNING:

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

1. Install the new shock into the vehicle. (Figure 37)



FIGURE 37

2. Install the upper shock mount bolts. Tighten to manufacturer's specification. (Figure 38)

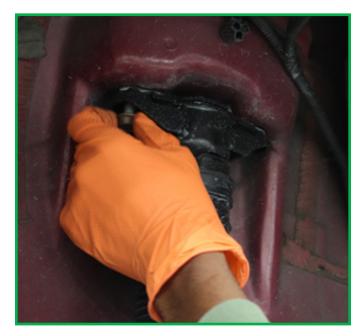


FIGURE 38

3. Install the lower shock mount bolt. Tighten to manufacturer's specification. (Figures 39, 40)





4. Using an appropriate spring compressor, install the lower spring perch, spring, upper spring isolator, and upper spring seat into the spring pocket. (Figures 41, 42)





FIGURE 41 FIGURE 42

- 5. Seal off and secure the air line in a safe location.
- 6. Reinstall the wheel well liner.
- 7. Reinstall the wheel. Tighten to manufacturer's specifications.
- 8. Installation complete.

ELECTRONIC BYPASS MODULE INSTALLATION

1. Locate the air suspension control module under the driver side seat and disconnect the two (2) harnesses. The harnesses will remain disconnected. (Figures 43, 44)





FIGURE 43 FIGURE 44

2. Using the photos and table below, match the wires from the EBM to the wiring harnesses and splice them together with the T-tap connectors. (Figures 45, 46, 47)







FIGURE 46

Electronic Bypass Module	From color	To color	Pin #	Harness Connector
	Black	Black	21	- C2
	Red	Pink/Lt. Green	14	
	Blue	Yellow/Gray	2	- C1
	Green	Yellow	1	

FIGURE 47

3. Plug in the Arnott electronic bypass module. (Figures 48, 49)





FIGURE 48 FIGURE 49

- 4. Place the EBM in a suitable spot free from friction or pinch points.
- 5. Installation complete.



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Air Springs



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Ride Height Sensors