



Congratulations on your purchase of an Arnott<sup>®</sup> 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<sup>®</sup> is committed to the quality of its products. If you have a question or problem with any Arnott product, please contact Arnott by calling <u>800-251-8993</u> during normal business hours or email <u>techassistance@arnottinc.com</u>. (In the EU please call +31 (0)73 7850 580 or email <u>info@arnotteurope.com</u>)

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## **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 <u>www.arnottinc.com.</u>

- 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.

#### **AIR STRUT REMOVAL**

- 1. SET STEERING TO STRAIGHT AHEAD.
- 2. RAISE VEHICLE.
- 3. REMOVE FRONT WHEEL.
- 4. REMOVE THE BRAKE HOSE FROM THE RETENTION BRACKET ON THE STRUT. (FIGURE 1)



FIGURE 1





5. DISCONNECT THE SWAY BAR LINK BY REMOVING THE NUT HOLDING THE BALL JOINT TO THE STRUT. YOU MAY NEED TO HOLD THE BALL JOINT FROM SPINNING BY PLACING A WRENCH ON THE TWO FLATS OF THE BALL JOINT ON THE BACK SIDE OF THE BRACKET. (FIGURE 2)



FIGURE 2

6. OPEN THE HOOD AND REMOVE THE THREE (3) UPPER MOUNT NUTS. (FIGURE 3)



FIGURE 3

Installation

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REMOVE THE TWO LARGE BOLTS THAT HOLD THE STRUT TO THE SPINDLE ASSEMBLY. (FIGURE 4) WITH THE NUTS AND BOLTS REMOVED FROM THE SPINDLE ASSEMBLY, PULL THE SPINDLE OUTWARD WHILE PUSHING THE STRUT. (FIGURES 4, 5)



Installation

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Manual

FIGURE 4



FIGURE 5

8. WITH THE AIR STRUT REMOVED YOU CAN NOW GAIN ACCESS TO ITS HOSE CONNECTION, SLOWLY REMOVE THE FITTING TO DEFLATE AND FREE THE ASSEMBLY. REMOVE THE AIR LINE FITTING FROM THE AIR HOSE AND DISCARD. ONCE DISCONNECTED, REMOVE AIR STRUT FROM VEHICLE. (FIGURE 6)



FIGURE 6





### AIR SPRING DISASSEMBLY/ASSEMBLY

1. REMOVE THE M14X1.5MM LOCK-NUT, TOP WASHER AND TOP SEALING WASHER FROM THE TOP OF THE SHOCK, DISCARD TOP SEALING WASHER. (FIGURE 7)



FIGURE 7

2. REMOVE THE PLASTIC RETAINING PIN AT THE BOTTOM OF THE AIR SLEEVE ASSEMBLY. SAVE THE PLASTIC RETAINING PIN FOR AIR SPRING INSTALLATION. (FIGURE 8)

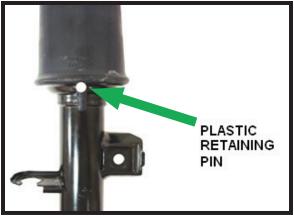
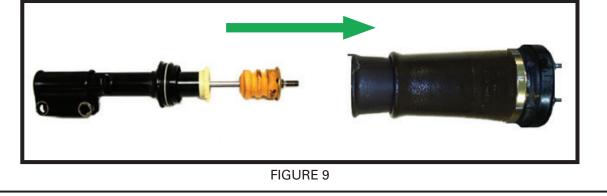


FIGURE 8

3. REMOVE THE AIR SLEEVE ASSEMBLY FROM THE TOP OF THE SHOCK SHAFT AND DISCARD. NOTE THE ORIENTATION OF THE ALIGNMENT PIN TO THE SHOCK BEFORE REMOVAL.(FIGURE 9)



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4. REMOVE AND DISCARD THE TWO (2) O-RINGS, TWO (2) BACK-UP RINGS, BUMP STOP AND GOLD WASHER FROM THE TOP OF THE SHOCK SHAFT. (FIGURE 10)

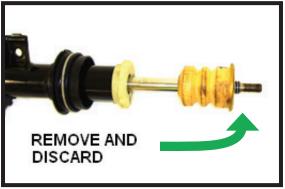


FIGURE 10

5. INSTALL THE NEWLY SUPPLIED BUMP STOP, BLACK WASHER AND FOUR (4) O-RINGS. (FIGURE 11) APPLY A SILICONE BASED LUBRICANT ON THE O-RINGS PRIOR TO INSTALLING AIR SLEEVE ASSEMBLY. INSTALL THE NEW ARNOTT® AIR SLEEVE ASSEMBLY ONTO SHOCK WITH THE ALIGNMENT PIN IN THE SAME ORIENTATION AS THE OLD AIR SPRING. (FIGURE 12)

When installing the black washer make sure that the cupped edge is down and facing toward the bump stop. Improper installation can cause damage to the shock assembly and void warranty.

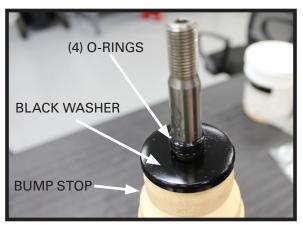


FIGURE 11

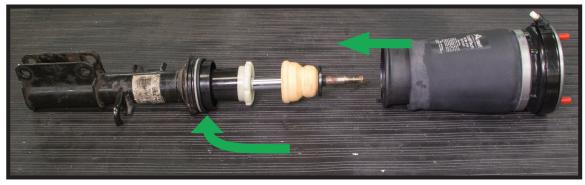


FIGURE 12

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6. SLIDE AIR SLEEVE ASSEMBLY ONTO THE SHOCK UNTIL LOWER PISTON SEATS ONTO THE 2 (TWO) LOWER O-RINGS. ALIGN THE HOLE IN THE ALIGNMENT TAB ON THE PISTON WITH THE HOLE ON THE SHOCK, REINSTALL THE PLASTIC RETAINING PIN. FAILURE TO DO SO MAY CAUSE THE AIR SLEEVE ASSEMBLY TO NOT SEAL OR INFLATE. (FIGURE 13)



FIGURE 13

7. RE-INSTALL THE PLASTIC RETAINING PIN AT THE BOTTOM OF THE AIR SLEEVE ASSEMBLY THAT WAS SAVED FROM THE AIR SPRING DISASSEMBLY. (FIGURE 14)

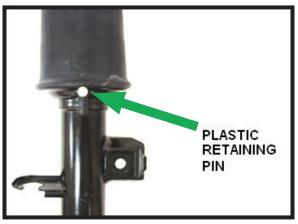


FIGURE 14

Installation

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#### **AIR STRUT INSTALLATION**



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



Do not remove the air fitting from the air strut. Doing so may cause damage and/or void warranty. Remove the white shipping pin from the new air fitting and insert the air line until fully seated.

1. INSTALL THE NEW AIR STRUT ONTO THE VEHICLE. (FIGURE 16)



**FIGURE 16** 

2. REMOVE THE WHITE SHIPPING PIN FROM THE AIR STRUT. INSERT THE AIR LINE INTO THE VOSS FITTING ON THE STRUT. (FIGURES 17, 18)



FIGURE 17









3. INSTALL THE TWO LARGE BOLTS AND NUTS THAT HOLD THE STRUT TO THE SPINDLE ASSEMBLY. TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 19, 20)



FIGURE 19



FIGURE 20

4. REATTACH THE BRAKE HOSE TO THE RETENTION BRACKET ON THE AIR STRUT. (FIGURE 21)





5. ATTACH THE ELECTRICAL WIRE TO THE RETENTION BRACKET ON THE AIR STRUT. (FIGURE 22)



FIGURE 22





6. INSTALL THE NUT THAT HOLDS THE BALL JOINT TO THE STRUT AND TIGHTEN TO MANUFACTURER'S SPECIFICATIONS. (FIGURES 23, 24)

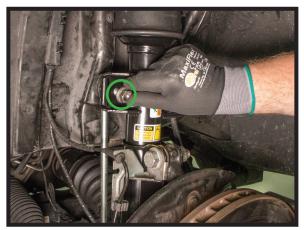


FIGURE 23



FIGURE 24

7. OPEN THE HOOD AND INSTALL THE THREE (3) UPPER MOUNT NUTS. (FIGURE 25)



FIGURE 25

- 8. CLOSE THE HOOD.
- 9. REINSTALL THE WHEEL.
- 10. INSTALLATION COMPLETE.