



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<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 800-251-8993 during normal business hours or email techassistance@arnottinc.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.

- 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.

NOTE: In the information center, locate and turn off the air suspension.

#### **REAR AIR STRUT REMOVAL**

- 1. RAISE THE VEHICLE.
- 2. REMOVE THE REAR WHEELS. (FIGURE 10-1)



FIGURE 10-1





3. UNPLUG THE ELECTRICAL CONNECTOR FROM THE AIR SPRING'S SOLENOID. (FIGURE 10-2)



FIGURE 10-2

4. REMOVE THE AIR LINE FROM THE AIR SPRINGS SOLENOID. PUSH THE COLLAR IN TO RELEASE AND PULL THE AIR LINE OUT. (FIGURE 10-3)



FIGURE 10-3

5. REMOVE THE RETAINING CLIP, ROTATE THE SOLENOID A QUARTER-TURN AND PULL DOWN TO RELEASE. (FIGURES 10-4)



3



FIGURES 10-4





6. DISCONNECT THE RIDE HEIGHT SENSOR. (FIGURE 10-5)



FIGURE 10-5

7. REMOVE THE LOWER SHOCK MOUNTING NUT AND BOLT. (FIGURE 10-6)



FIGURE 10-6

8. REMOVE THE INNER LOWER CONTROL ARM NUT AND BOLT. (FIGURES 10-7)





FIGURES 10-7





9. LOOSEN AND REMOVE THE TOP THREE (3) MOUNTING NUTS. (FIGURE 10-8)



FIGURE 10-8

10. REMOVE THE AIR STRUT FROM VEHICLE. (FIGURE 10-9)



FIGURE 10-9

11. REMOVAL COMPLETE.

5





# **REAR COIL SPRING INSTALLATION**



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

1. INSTALL THE COIL SPRING ASSEMBLY ONTO THE VEHICLE. (FIGURE 20-1)



FIGURE 20-1

2. INSTALL THE LOWER SHOCK MOUNTING NUT AND BOLT. (FIGURE 20-2)



FIGURE 20-2





3. INSTALL AND TIGHTEN THE (3) MOUNTING NUTS. (FIGURE 20-3)



FIGURE 20-3

4. ALIGN THE CONTROL ARM. (FIGURE 20-4)

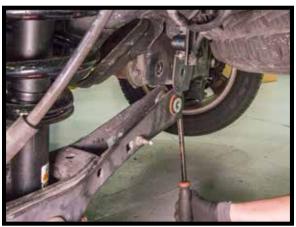


FIGURE 20-4

5. USING A FLOOR JACK, INSTALL THE INNER LOWER CONTROL ARM NUT AND BOLT.
SECURE THE AIR HOSE AND ELECTRICAL CONNECTOR IN A SUITABLE LOCATION. (FIGURES 20-5)





FIGURES 20-5



8

## C-2529 ARNOTT COIL SPRING CONVERSION KIT FORD EXPEDITION/LINCOLN NAVIGATOR (U354/U418)



3. RECONNECT THE RIDE HEIGHT SENSOR. (FIGURE 20-6)



FIGURE 20-6

4. REMAINDER OF INSTALLATION IS IN REVERSE ORDER OF REMOVAL.





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

1. LOCATE AIR SUSPENSION MODULE UNDER THE LEFT SIDE OF DASH BETWEEN THE EMERGENCY BRAKE AND THE STANDARD BRAKE PEDALS. (FIGURE A)



FIGURE A

2. UNPLUG THE TWO MULTI PIN CONNECTORS FROM THE AIR SUSPENSION MODULE AND LEAVE DISCONNECTED. (FIGURES B, C)



FIGURE B



FIGURE C



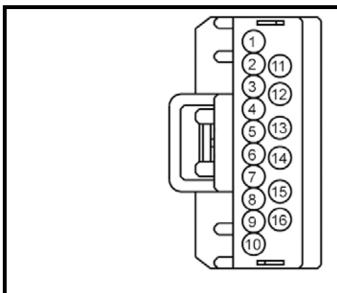


**NOTE:** 

All connections to the EBM will be made to the wire harness side of larger 16 pin connector.

3. USE CHARTS BELOW TO PROPERLY CONNECT EBM WIRING TO VEHICLE HARNESS SIDE OF THE 16 PIN SUSPENSION MODULE CONNECTOR.

ЕВМ	SIGNAL NAME	NAVIGATOR SUSPENSION MODULE CONNECTOR (16 PIN CONNECTOR)
1 (Blue)	Can High +	10
2 (Green)	Can High -	9
3 (Red)	Battery	3
4 (Black)	Ground	5



-	01 1:			
Pin	Circuit	Gauge	Circuit Function	Qualifier
1	*	*	not used	
2		×	not used	
3	CBB53 (GY-BN)	20	VOLTAGE SUPPLIED IN START AND RUN (OVERLOAD PROTECTED)	
4	×	×	not used	
5	GD120 (BK-GN)	18	GROUND	
6	CCL01 (WH-VT)	20	REAR AIR SUSPENSION RELAY CONTROL	
7	CCL14 (BN-VT)	18	AIR SUSPENSION PUMP VENT CONTROL	
8		×	not used	
9	VDB05 (WH)	20	HS CAN -	
10	VDB04 (WH-BU)	20	HS CAN +	
11	SBB48 (VT-RD)	14	VOLTAGE SUPPLIED AT ALL TIMES (OVERLOAD PROTECTED)	
12	SBB48 (VT-RD)	14	VOLTAGE SUPPLIED AT ALL TIMES (OVERLOAD PROTECTED)	
13		*	not used	
14	9D120 (BK-9N)	14	<b>GROUND</b>	
15	×	*	not used	
16	*	×	not used	

**NOTE**:

Leave two multi pin connectors disconnected while EBM is installed.