



**2007-2012 MERCEDES R-CLASS
(W251) w/AIRMATIC FRONT AIR SPRING
A-2587**



Congratulations on your selection to purchase an Arnott Air Suspension System. We at Arnott Air Suspension Systems 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 this system on your vehicle.

It is equally important to be aware of all necessary safety measures while installing your new Air Ride 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”

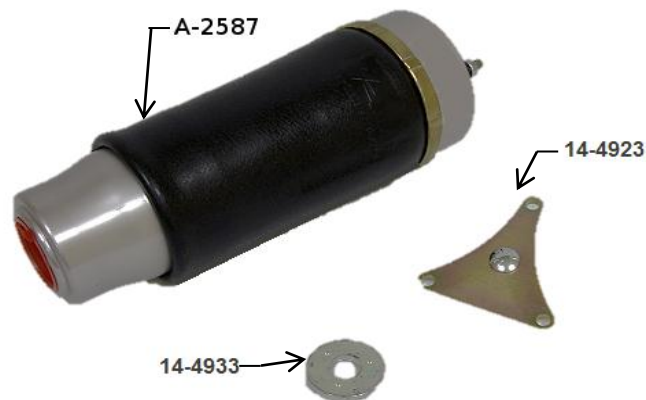


WARNING: *The air suspension system is under pressure (up to 10 bar, or 150 lbf/in) verify pressure has been relieved and disconnect power to the air ride system prior to disassembly. Do not allow dirt or grease to enter the system. Always wear standard protective hand, ear, and eye protection when servicing the air suspension system.*

Kit contains:

PARTS LIST		
P/N	QTY	DESCRIPTION
A-2587	1	AIR SPRING ASSEMBLY (SINGLE)
14-4933	1	SHOCK CAP
37-4923	1	CAP REMOVAL TOOL

Addition hardware needed that is **not** included - 8" Tie Wrap





General information:

- * *Shocks 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 full qualified personnel.*
- * *Use car manufacturer's diagnostic software.*

***CAUTION:** *Damage to the vehicle and shock assembly can be incurred if work is carried out in a manner other than specified in the instructions or in a different sequence.*

FRONT AIR SHOCK REMOVAL:



The ignition must remain switched off during the shock removal and replacement.

- 1.0 Set steering to straight ahead.
- 2.0 Locate and remove the air compressor fuse (Figure A).

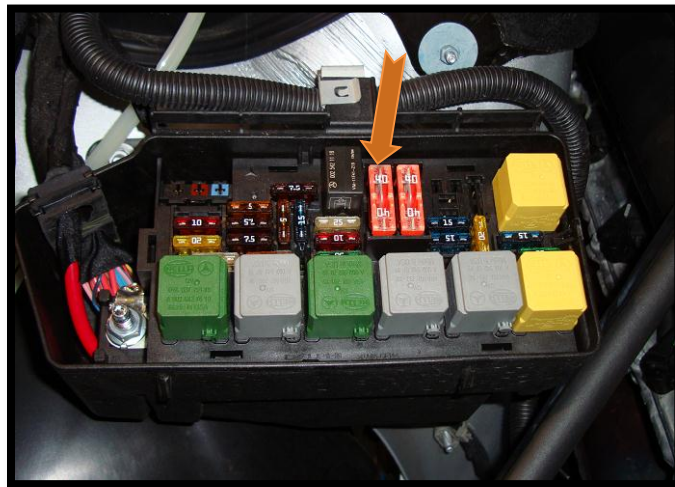


Figure A



Use lifting platform (hoist) that is capable of raising the body separately from the wheels, lift body at the lifting points prescribed by the vehicle manufacturer.

Vehicle slippage can cause danger to life and limb.

- 3.0 Raise vehicle.
- 4.0 Remove front tire.
- 5.0 Disconnect the air shock ADS control cable connector (located in the fender well).



6.0 Disconnect the sway bar arm linkage (Figure B).



Figure B

7.0 Remove the lower shock mount bolt and nut (Figure C).



Figure C



- 8.0 Remove the control arm nut and separate from the upper A arm (Figure D).

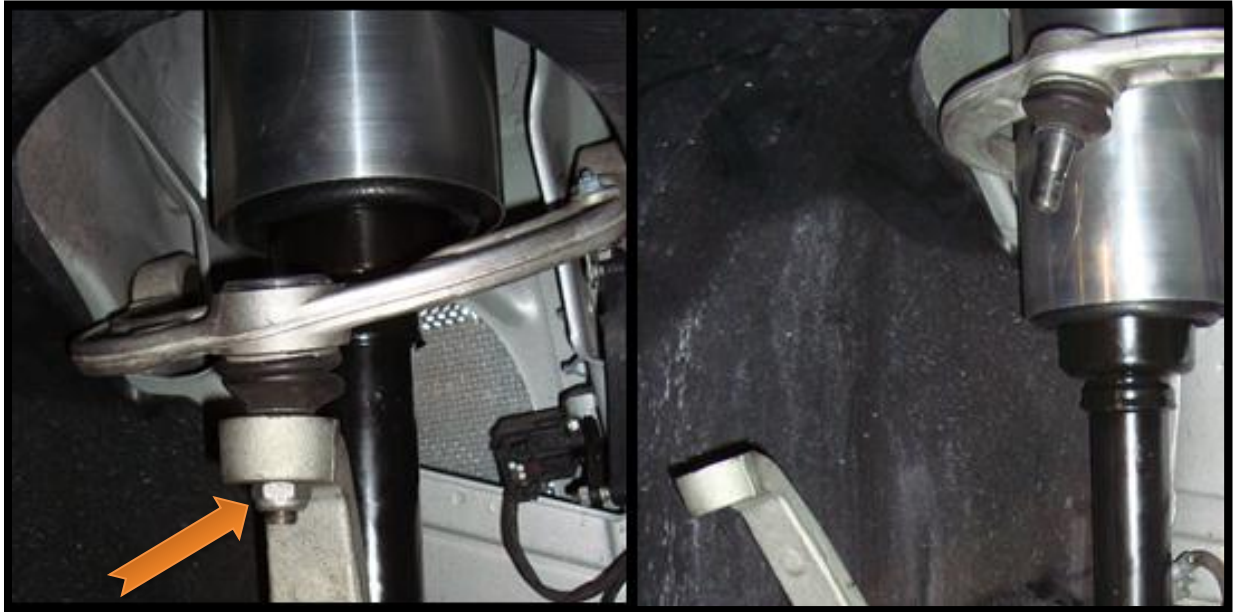


Figure D

- 9.0 Remove the wire harness mount from shock (Figure E).



Figure E



10.0 Disconnect the airline (Figure F).



Figure F

11.0 Remove the airline fitting. To do this remove the collet and the remaining fitting will slide off of the air hose (Figure G).

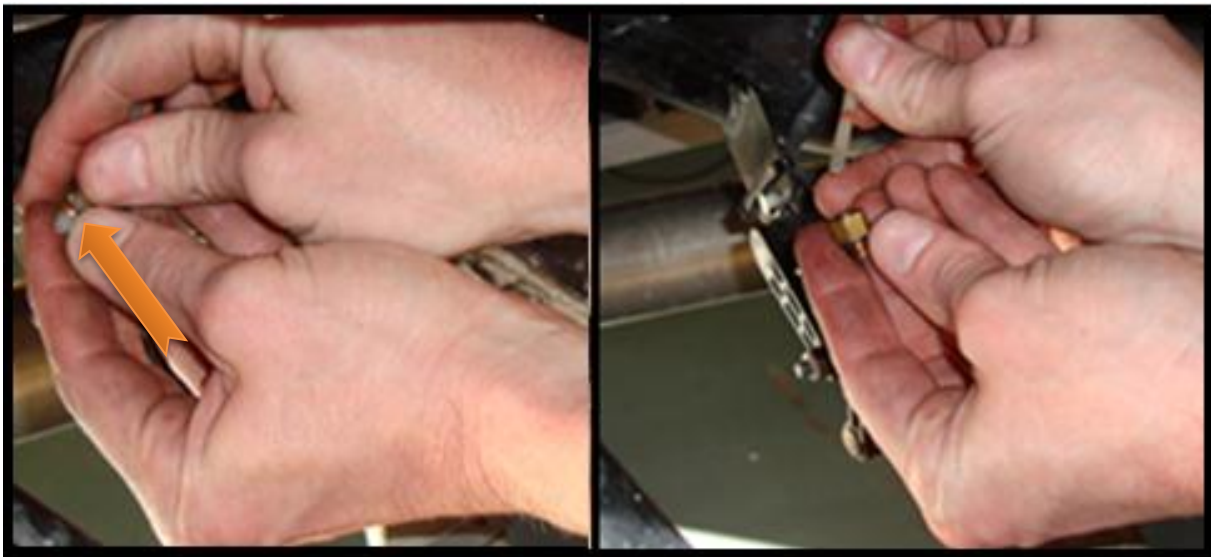


Figure G



12.0 Remove the three (3) shock top flange nuts (Figure H).



Figure H

13.0 Remove shock.

14.0 Removal Complete.



AIR SPRING REMOVAL AND INSTALLATION:

- 1.0 Obtain front shock assembly.
- 2.0 Place cap removal tool (37-4923) onto the studs of the top mount of the shock assembly (the bolt of the cap removal tool will rest on the center of the top cap), install the three (3) nuts that mount the shock to the vehicle on top of the cap removal tool (37-4923) (Figure I).



Figure I

- 3.0 Evenly tighten the three (3) nuts until the top cap moves downward (this will allow the retaining ring to be removed) (Figure J).

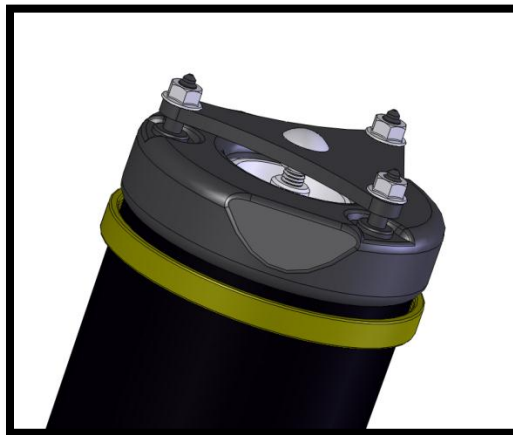


Figure J



- 4.0 With the top cap pushed down, use a small flat tip screw driver to remove the retaining ring (Figure K).

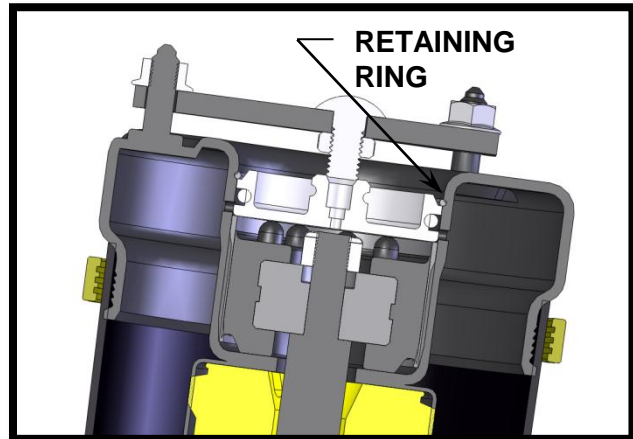
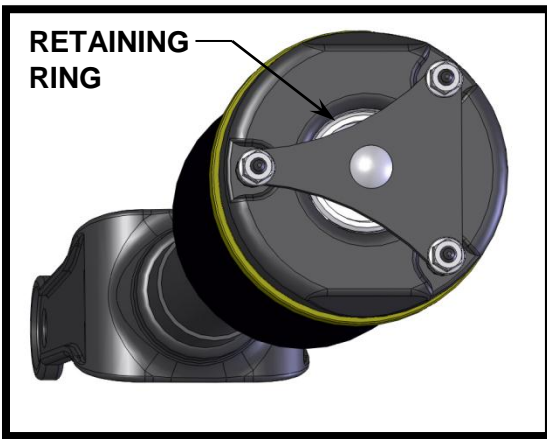


Figure K

- 5.0 Remove the cap removal tool (37-4923).
- 6.0 Using a pair of locking pliers remove the top cap (Figure L).
- 7.0 Remove the nut holding the air sleeve to the shock (Figure M).



Figure L

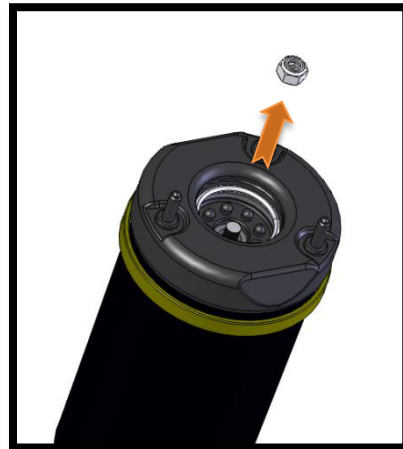


Figure M



- 8.0 Remove the old air spring and O-rings and discard. Wipe down area where the new air spring will sit. (Figure N).

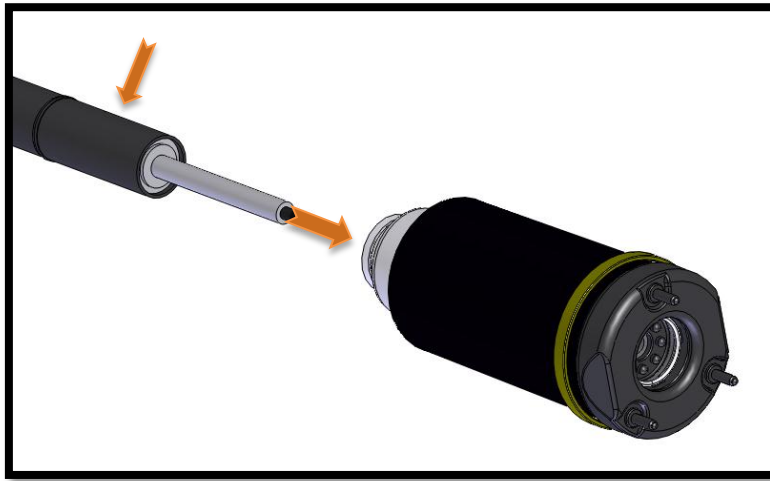


Figure N

- 9.0 Install shock cap onto shock (cap will snap onto shock) (Figure O).

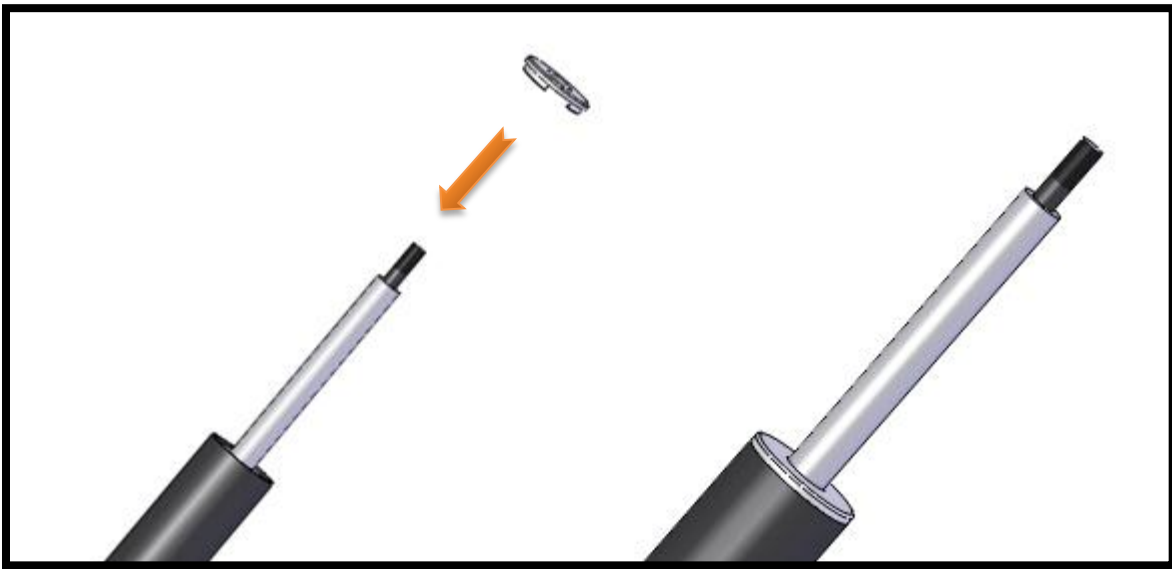


Figure O



- 10.0 Obtain the new air spring, apply a lubricant to the O-rings in the bottom of the air spring and install onto the shock (Figure P).

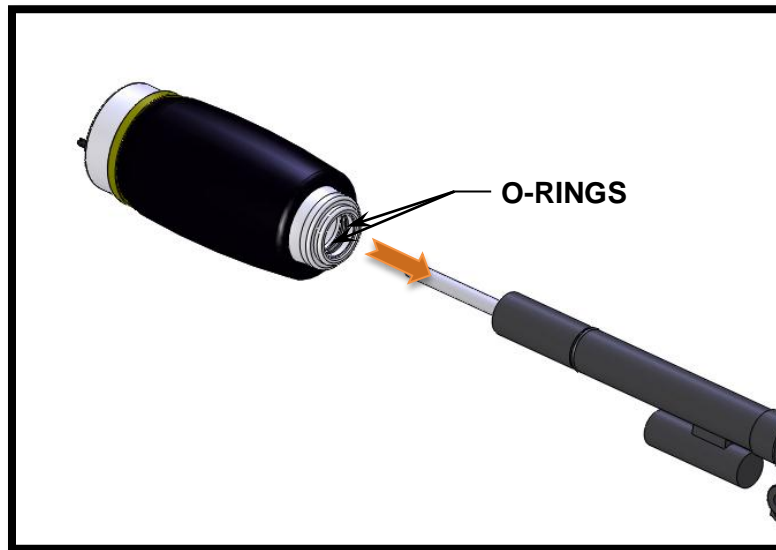


Figure P

- 11.0 Install locknut onto shaft of shock and tighten to manufactures specifications (Figure Q).

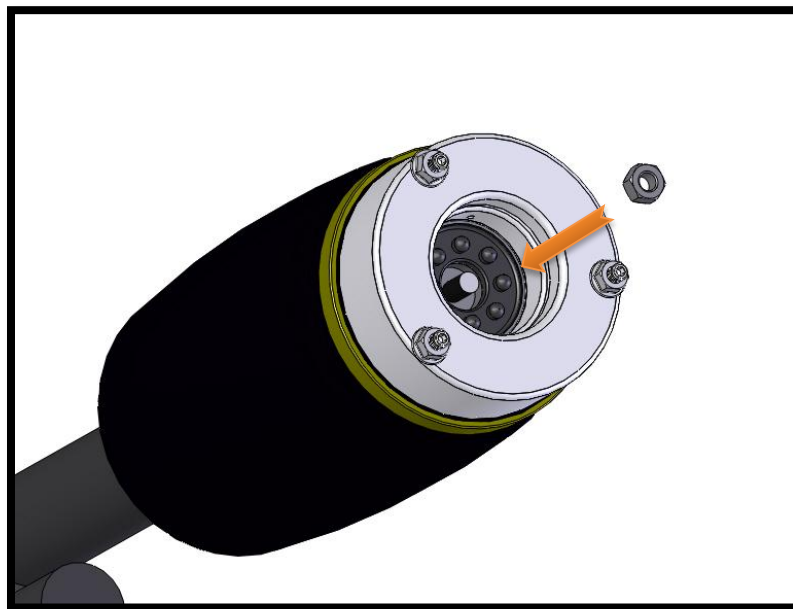


Figure Q



12.0 Apply lubricant to the O-ring and install cap into top mount, tighten snug (Figure R).

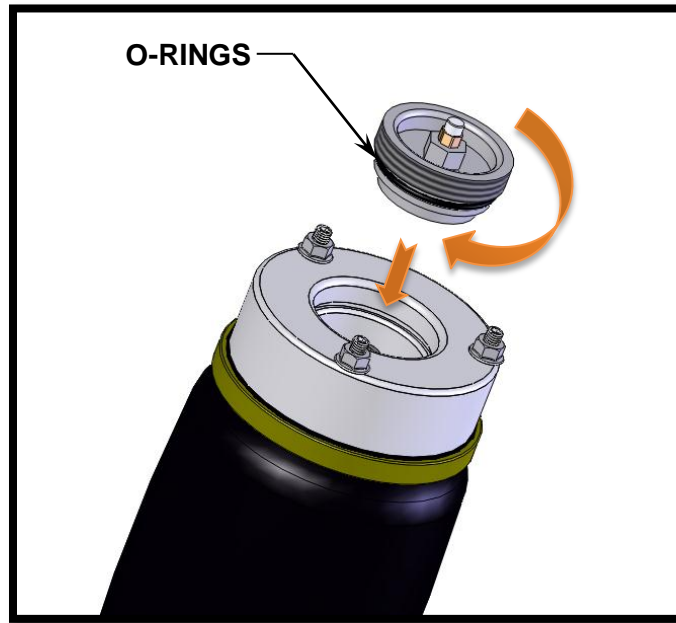


Figure R

13.0 Air sleeve/shock assembly complete.

14.0 Reverse steps for re-installation