



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 industries 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:**

<b>PARTS LIST</b>		
<b>P/N</b>	<b>QTY</b>	<b>DESCRIPTION</b>
AS-2193	1	FRONT SHOCK ASSEMBLY





### 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 SHOCK REMOVAL:

**NOTE: FRONT SHOCK REMOVAL/INSTALLATION IS FOR BOTH THE FRONT RIGHT AND LEFT SHOCK ASSEMBLIES.**



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

- 1.0 Set steering to straight ahead.
- 2.0 Remove the air compressor fuse (located on the passenger's side fuse box (f32 in K40/7 fuse and relay module) in engine compartment) (Figure A).

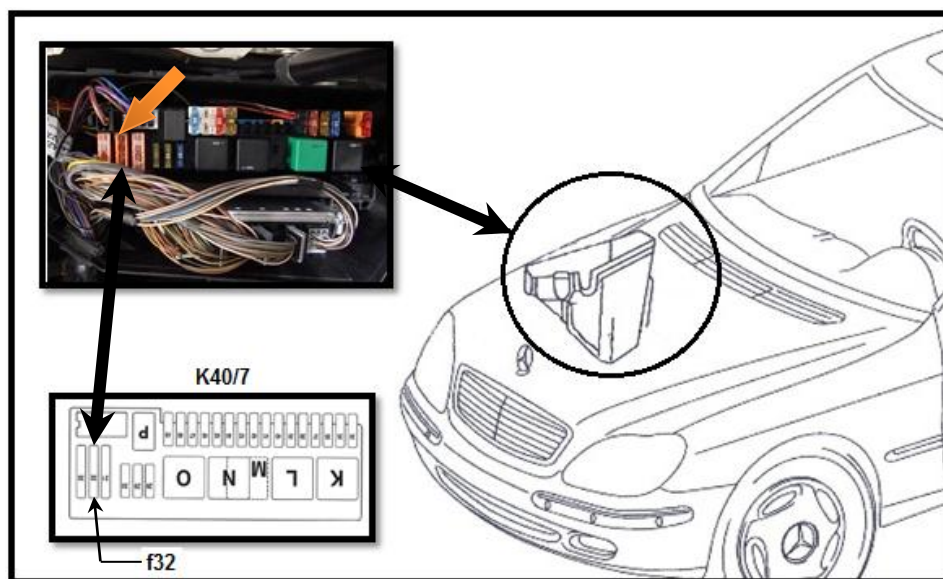


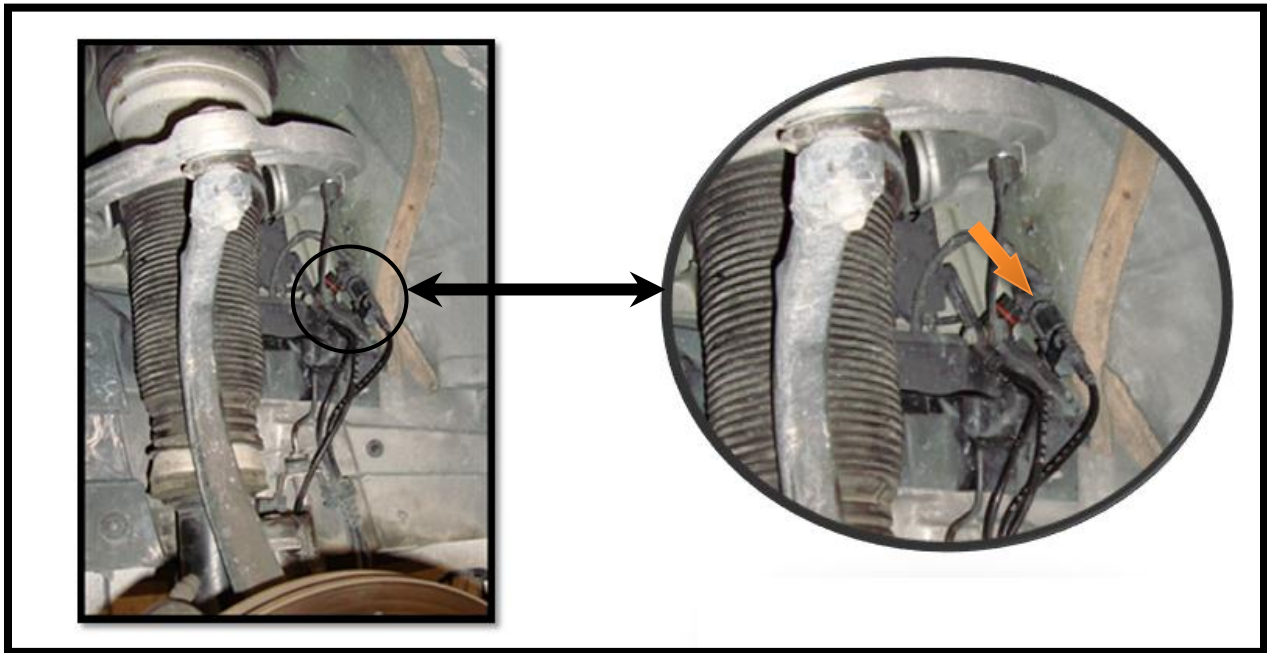
Figure A



*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 shock control cable connector located in the fender well (Figure B).



**Figure B**

- 6.0 Loosen the two (2) set screws (180° apart) located on the bottom of the shock assembly (Figure C).
- 7.0 Raise the hood.



8.0 Disconnect the air supply line to the shock assembly (figure D).



**Figure C**



**Figure D**

9.0 Remove the three (3) nuts holding the top mount of the shock (figure F).



**Figure F**



**1999-2006 MERCEDES-BENZ S-CLASS (W220 CHASSIS)  
AS-2193 FRONT SHOCK REPLACEMENT**

10.0 Remove the ball joint at the upper control arm; remove shock assembly (Figure E).



**Figure E**

11.0 Removal complete.



## **FRONT SHOCK INSTALLATION:**



***Torque nuts and bolts to the manufactures specification.***

- 1.0 Install the new AS-2193 shock assembly into the upper and lower shock mounts.
- 2.0 Tighten the top 3 nuts to the manufacturers' specification.
- 3.0 Connect air supply line, tighten to 17.7 IN/LBS (2 Nm).
- 4.0 Tighten the 2 (two) set screws equally on the bottom of the shock assembly.
- 5.0 Re-install the upper ball joint at the upper control arm.
- 6.0 Connect shock control cable connector.
- 7.0 Install tire, tighten lug nuts to manufacturers' specification.



***Never under any circumstances allow the vehicle to be fully lowered from the lifting platform (hoist) with the air suspension depressurized.***

- 8.0 Re-install the air compressor fuse.
- 9.0 Lower vehicle to standard vehicle height from the lifting platform.
- 10.0 Start engine, wait 2 minutes, operate the raising function of the cars electronics.
- 11.0 Initially lower lifting platform slowly and only completely when the vehicle rises of its own accord.
- 12.0 Check shock for leaks.
- 13.0 Installation complete.