

Installation Manual

C-2130 ARNOTT COIL SPRING CONVERSION KIT FOR 1999-2005 AUDI ALLROAD



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.

KIT CONTAINS:

PARTS LIST

P/N	QTY	DESCRIPTION
21-3552	1	ARNOTT FRONT COIL SPRING CONVERSION
21-3553	1	ARNOTT REAR COIL SPRING CONVERSION
21-6583	1	ACCESSORY KIT

Arnott® 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) 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.

FRONT AIR STRUT REMOVAL

1. SET THE STEERING TO STRAIGHT AHEAD.
2. RAISE THE VEHICLE.
3. REMOVE FRONT WHEELS.
4. START BY REMOVING THE REMAINING AIR PRESSURE FROM THE FRONT AIR SPRING. TO DEFLATE THE AIR SPRING, CAREFULLY UNSCREW THE AIR FITTING FROM THE TOP OF THE AIR SPRING.
5. LOOSEN AND REMOVE THE LOWER SHOCK BOLT. (FIGURE 10-1)

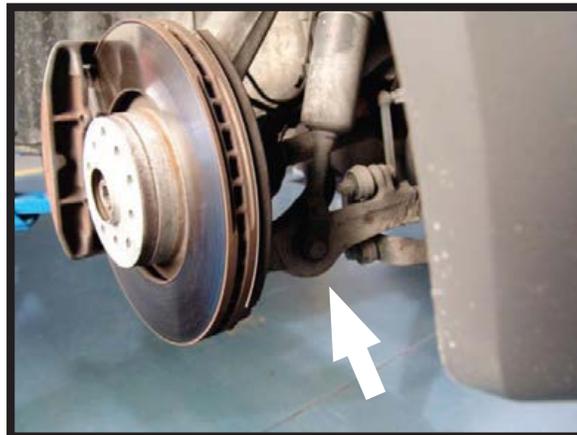


FIGURE 10-1

6. REMOVE THE PINCH BOLT AND BOTH BALL JOINTS FROM THE SPINDLE ASSEMBLY. (FIGURE 10-2)

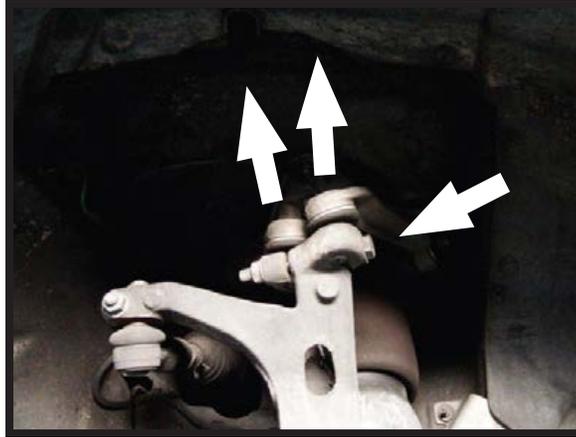


FIGURE 10-2

7. MAKE SURE TO SECURE THE FRONT HUB ASSEMBLY TO ELIMINATE ANY STRESS ON THE BRAKE LINES AND FRONT DRIVE SHAFTS. LOOSEN THE 3 TOP BOLTS UNDER THE HOOD. LEAVE ONE BOLT FINGERTIGHT TO PREVENT THE ASSEMBLY FROM FALLING OUT. (FIGURE 10-3)

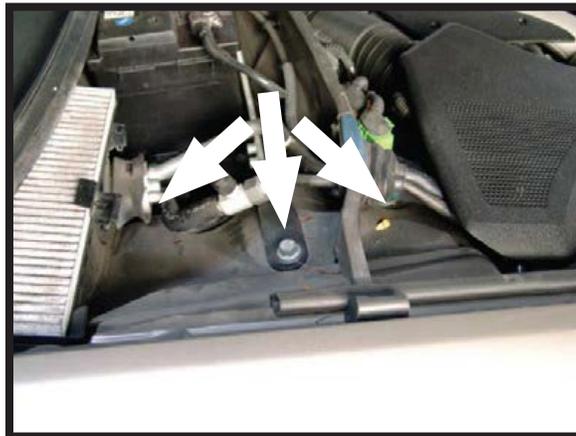


FIGURE 10-3

8. CAREFULLY REMOVE THE AIR STRUT ASSEMBLY FROM THE VEHICLE. (FIGURE 10-4)



FIGURE 10-4

9. USING A 12 POINT TRIPLE SQUARE BIT, REMOVE THE 6 UPPER STRUT MOUNTING BOLTS HOLDING THE AIR STRUT TO THE TOP CAST ALUMINUM MOUNT. (FIGURE 10-5)



FIGURE 10-5

10. REMOVE THE AIR STRUT FROM THE UPPER MOUNT. (FIGURE 10-6)



FIGURE 10-6

11. REMOVAL COMPLETE.

FRONT COIL STRUT INSTALLATION



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

1. ALIGN THE COIL SPRING TO THE UPPER MOUNT IN SAME ORIENTATION THE AIR STRUT WAS REMOVED. THEN INSTALL AND SECURE 6 TOP MOUNTING BOLT SUPPLIED. (FIGURE 20-1)



FIGURE 20-1

2. INSTALL THE COIL SPRING ASSEMBLY ONTO THE VEHICLE IN REVERSE ORDER OF AIR STRUT REMOVAL. (FIGURE 20-2)



FIGURE 20-2

3. INSTALLATION COMPLETE.

REAR AIR STRUT REMOVAL

1. START BY REMOVING THE REMAINING AIR PRESSURE FROM THE REAR AIR SPRING. TO DEFLATE THE AIR SPRING, CAREFULLY REMOVE THE AIR FITTING FROM THE BOTTOM OF THE AIR SPRING.
2. LOOSEN AND REMOVE THE UPPER MOUNTING PLATE BOLTS. (FIGURE 30-1)



FIGURE 30-1

3. REMOVE THE LOWER STRUT BOLT CONNECTING THE STRUT TO THE LOWER CONTROL ARM. (FIGURE 30-2)



FIGURE 30-2

4. WITH THE SHOCK LOOSE, COLLAPSE THE SHOCK ABSORBER BY PUSHING DOWNWARD ON THE UPPER PLATE TO ALLOW YOU TO DISLOCATE THE UPPER MOUNT FROM ITS MOUNTING PERCH. PULL THE AIR STRUT ASSEMBLY UP AND OUT OF THE LOWER CONTROL ARM. (FIGURE 30-3)



FIGURE 30-3

5. WITH THE AID OF A LARGE PAIR OF PLIERS, COMPRESS THE PARKING BRAKE LEVER AND REMOVE THE CABLE. (FIGURE 30-4)



FIGURE 30-4

6. REMOVE THE PARKING BRAKE CABLE RETAINING CLIP, AND SLIDE THE CABLE OUT OF ITS MOUNT. (FIGURE 30-5)

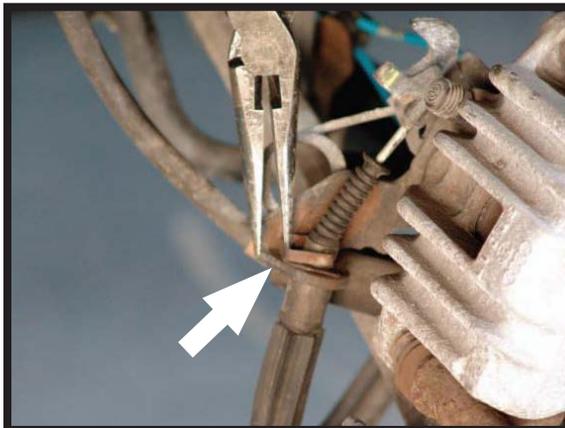


FIGURE 30-5

7. REMOVE THE BOLT SECURING THE WHEEL SPEED SENSOR ON THE FRONT SIDE OF THE WHEEL HUB. (FIGURE 30-6)



FIGURE 30-6

8. LOCATE THE HEIGHT SENSOR BRACKET ON THE BACK LEFT OF THE LOWER CONTROL ARM AND REMOVE ITS MOUNTING NUT FROM THE INSIDE OF THE CONTROL ARM TO FREE THE HEIGHT SENSOR. (FIGURE 30-7)

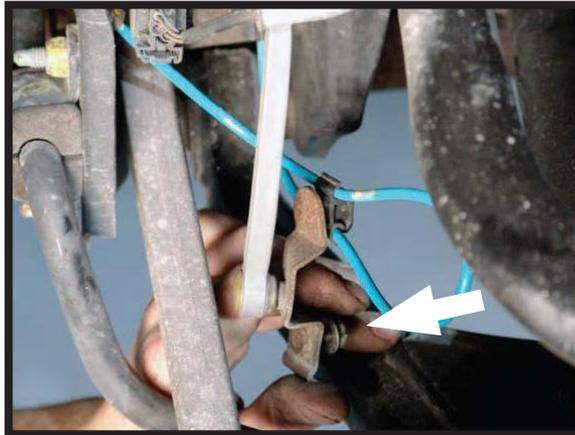


FIGURE 30-7

9. NEXT, LOOSEN BUT DO NOT REMOVE THE LOWER CONTROL ARMS REAR MOST BOLTS TO ELIMINATE BINDING DURING INSTALLATION. (FIGURE 30-8)

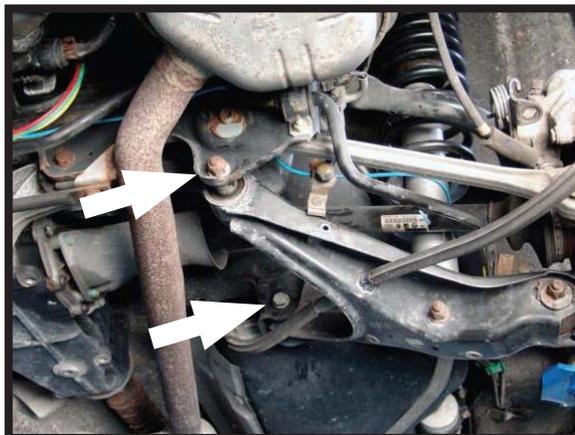


FIGURE 30-8

10. USING A PAINT MARKER, MARK THE ECCENTRIC BOLTS ALIGNMENT AT THE KNUCKLE AND REMOVE IT BEING SURE TO TURN THE NUT ON THE BACKSIDE. (FIGURE 30-9)



FIGURE 30-9

11. AFTER ALL FASTENERS ARE REMOVED, THE LOWER CONTROL ARM SHOULD HANG FREE.

REAR COIL STRUT INSTALLATION



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

1. INSTALL THE REAR COIL STRUT UP FROM THE BOTTOM, MAKING SURE THE LOCATING PINS ARE FACING OUTWARD. INSTALL THE TWO (2) FACTORY UPPER MOUNTING BOLTS AND TIGHTEN. (FIGURE 40-1)



FIGURE 40-1

2. SWING THE CONTROL ARM UP TO ALIGN THE SHOCK BUSHING TO ITS MOUNTING HOLE. SECURE WITH THE FACTORY HARDWARE.

3. USING A FLOOR JACK, LIFT DIRECTLY UNDER THE SHOCK MOUNT UNTIL YOU CAN ALIGN THE BOTTOM MOUNTING BOLT. (FIGURE 40-2)



FIGURE 40-2

4. ALIGN THE MARKS PREVIOUSLY MADE ON THE ECCENTRIC BOLT AND TIGHTEN. AT THIS POINT, GO BACK AND TIGHTEN THE REARMOST BOLTS OF THE LOWER CONTROL ARM. (FIGURE 40-3)



FIGURE 40-3

5. FINISH BY REINSTALLING THE WHEEL SPEED SENSOR, PARKING BRAKE CABLE, AND HEIGHT SENSOR MOUNTING BRACKET.
6. INSTALLATION COMPLETE.



It is necessary to have your vehicle aligned after installing this kit.

ELECTRONIC BYPASS MODULE INSTALLATION

1. REMOVE THE DOOR COVER LOCATED ON THE LEFT SIDE OF THE CARGO AREA TO EXPOSE THE VEHICLE'S AIR SUSPENSION WIRING HARNESS AND CONTROL MODULE. (FIGURE 1A)



FIGURE 1A

2. REMOVE BOTH PLUGS LOCATED ON THE CONTROL MODULE. (FIGURE 1B)



FIGURE 1B

3. REMOVE THE COVER OF THE LARGER PLUG BY SLIDING IT OFF OF THE END. (FIGURE 1C)



FIGURE 1C

4. LOCATE THE FOLLOWING WIRES IN THE CHART BELOW FROM THE VEHICLE'S WIRING HARNESS.

ELECTRONIC BYPASS MODULE	FROM	PIN#	VEHICLE'S WIRING HARNESS
	BLUE	20	
	GREEN	21	
	RED	25	
	BLACK	1	

5. SEPARATE THE LOCATED WIRES AND CUT, LEAVING A SUITABLE LENGTH TO WORK WITH. (FIGURE 1D)

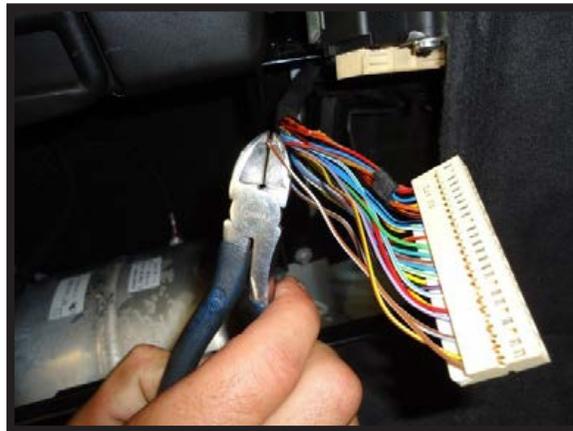


FIGURE 1D

6. STRIP THE ENDS OF THE WIRES. USING THE SUPPLIED BUTT CONNECTORS, CRIMP THE ELECTRONIC BYPASS MODULE TO THE VEHICLE SIDE OF THE WIRING HARNESS. (FIGURE 1E)



FIGURE 1E

7. CONNECT THE NEW PLUG TO THE ELECTRONIC BYPASS MODULE AND SECURE IT IN A SUITABLE LOCATION. (FIGURE F)

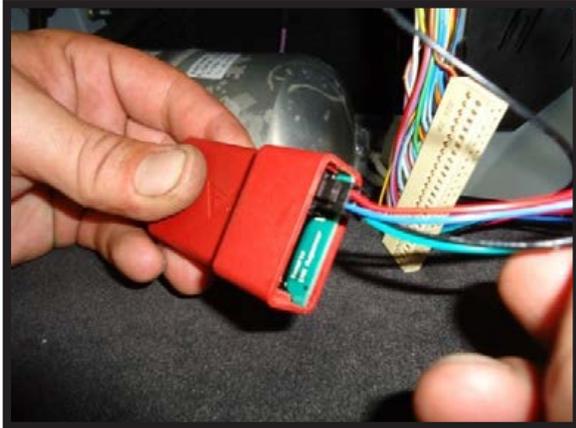


FIGURE F

8. DO NOT PLUG WIRING HARNESS BACK INTO THE VEHICLE'S AIR SUSPENSION CONTROL MODULE. REPLACE THE DOOR COVER. (FIGURE G)



FIGURE G

9. INSTALLATION COMPLETE.