Arnott P-3283

Arnott P-3283 Air Suspension Compressor User Manual

For 2012-2016 Tesla Model S Vehicles

Introduction

This manual provides essential information for the installation, operation, and maintenance of your Arnott P-3283 Air Suspension Compressor. This compressor is designed as a direct replacement for the original equipment (OE) compressor in 2012-2016 Tesla Model S vehicles. It is engineered to meet original equipment specifications, ensuring compatibility and reliable performance.
Please read this manual thoroughly before attempting any installation or operation to ensure proper function and safety.

Safety Information

- **Professional Installation Recommended:** Installation of air suspension components can be complex and may require specialized tools and knowledge. It is highly recommended that this product be installed by a qualified automotive technician.
- **Vehicle Support:** Always ensure the vehicle is properly supported on a lift or jack stands before working underneath it. Never rely solely on a jack.
- **Disconnect Power:** Before beginning any work, disconnect the vehicle's battery to prevent accidental activation of electrical systems.
- **Wear Protective Gear:** Always wear appropriate personal protective equipment, including safety glasses and gloves, during installation.
- **Air Pressure:** Air suspension systems operate under high pressure. Exercise caution when disconnecting air lines.
- **Electrical Connections:** Ensure all electrical connections are secure and free from corrosion. Incorrect wiring can lead to system malfunction or damage.

Package Contents

Verify that all components are present and undamaged before proceeding with installation.

- Arnott P-3283 Air Suspension Compressor
- Mounting Bracket (pre-attached or included)
- Intake Air Hose
- Relay
- Dryer

Image: The Arnott P-3283 Air Suspension Compressor shown next to its product packaging box, illustrating the typical contents.

Setup and Installation

The Arnott P-3283 compressor is designed for direct replacement. While specific steps may vary based on the vehicle's current condition and previous modifications, the general procedure involves:

1. **Prepare Vehicle:** Park the vehicle on a level surface, engage the parking brake, and disconnect the negative terminal of the battery.
2. **Access Compressor:** Locate and access the existing air suspension compressor. This typically involves removing underbody panels or other components.
3. **Disconnect Old Compressor:** Carefully disconnect the electrical connector, air lines, and mounting hardware from the old compressor. Be mindful of residual air pressure in the system.
4. **Remove Old Compressor:** Remove the old compressor unit from the vehicle.
5. **Install New Compressor:** Position the Arnott P-3283 compressor in the mounting location. Secure it using the appropriate mounting bracket and hardware.
6. **Connect Air Lines:** Connect the vehicle's air lines to the new compressor. Ensure connections are tight and leak-free.
7. **Connect Electrical:** Connect the electrical connector to the new compressor. Install the new relay as specified by the vehicle's service manual or Arnott's specific instructions (if provided separately).

8. **Reconnect Battery:** Reconnect the vehicle's battery.
9. **System Test:** Start the vehicle and allow the air suspension system to pressurize. Check for proper operation and any error codes. It may be necessary to perform a system calibration using appropriate diagnostic tools.

Image: A detailed front view of the Arnott P-3283 Air Suspension Compressor, highlighting its compact design and integrated electrical connectors.

Image: A side view of the Arnott P-3283 Air Suspension Compressor, illustrating the various air line connection points and overall component layout.

Image: The Arnott P-3283 Air Suspension Compressor displayed with the accompanying electrical relay, which is part of the installation kit.

Operating Instructions

The Arnott P-3283 Air Suspension Compressor operates automatically as part of the vehicle's air suspension system. Its primary function is to maintain the correct air pressure in the air springs to ensure optimal ride height and comfort.

- **Automatic Operation:** The compressor is controlled by the vehicle's suspension control module, which monitors ride height sensors and activates the compressor as needed to inflate or deflate the air springs.
- **Normal Sounds:** It is normal to hear the compressor activate periodically, especially after the vehicle has been parked for some time, or when loading/unloading passengers or cargo.
- **System Monitoring:** Pay attention to any warning lights or messages on your vehicle's dashboard related to the air suspension system. These may indicate a need for inspection.

Maintenance

The Arnott P-3283 Air Suspension Compressor is designed for durability and minimal maintenance. However, periodic checks can help ensure its longevity and proper function.

- **Visual Inspection:** Periodically inspect the compressor, air lines, and electrical connections for any signs of damage, wear, or leaks.
- **Cleanliness:** Keep the area around the compressor free from excessive dirt, debris, and moisture.
- **Dryer Function:** The integrated dryer helps remove moisture from the air system. While designed for long life, a failing dryer can lead to system issues. If you suspect moisture in the system (e.g., freezing in cold weather), consult a professional.
- **Professional Check-ups:** Include the air suspension system in your vehicle's routine maintenance checks performed by a qualified technician.

Troubleshooting

If you experience issues with your air suspension system, consider the following common troubleshooting steps. For complex problems, professional diagnosis is recommended.

- **Compressor Not Activating:**
  - Check the relay: Ensure the new relay is correctly installed and functioning.
  - Check electrical connections: Verify all wiring is secure and free from corrosion.
  - Check fuses: Consult your vehicle's manual for the location of the air suspension system fuse and check if it's blown.
- **Vehicle Not Reaching Correct Ride Height:**
  - Check for air leaks: Listen for hissing sounds around air lines and air springs. Leaks can prevent the system from building sufficient pressure.
  - System calibration: The vehicle's suspension control module may require recalibration after compressor replacement.
  - Sensor issues: Ride height sensors may be faulty, providing incorrect readings to the control module.
- **Excessive Compressor Noise:**

- Mounting: Ensure the compressor is securely mounted and not vibrating against other components.
- Internal issue: If the noise is unusual or very loud, the compressor may have an internal fault.

- **Warning Lights On Dashboard:**
  - Diagnostic scan: Use an OBD-II scanner to retrieve diagnostic trouble codes (DTCs) from the vehicle's suspension control module. These codes can pinpoint the exact issue.

If troubleshooting steps do not resolve the issue, contact a qualified technician or Arnott customer support for further assistance.

Specifications

Feature	Detail
Model Number	P-3283
Brand	Arnott
Compatibility	2012-2016 Tesla Model S
OEM Part Number	600640300A
Item Weight	8 pounds
Product Dimensions	12 x 9 x 8 inches
Exterior Finish	Machined, Epoxy Electro-coated
Features	Includes dryer & intake air hose, Heavy-duty motor, Thermal overload protection
UPC	815710018531

Warranty and Support

Arnott stands behind the quality of its products. For specific warranty details pertaining to your P-3283 Air Suspension Compressor, please refer to the warranty documentation included with your purchase or visit the official Arnott website.
For technical support, installation assistance, or warranty claims, please contact Arnott customer service through their official channels. Have your product model number (P-3283) and purchase information ready when contacting support.
Arnott Official Website: www.arnottinc.com

Related Documents - P-3283

	[Arnott Air Suspension Compressor Relay Service Bulletin 21-8695] Technical service bulletin from Arnott regarding the mandatory replacement of the air suspension compressor relay for various Audi, Jaguar, Mercedes-Benz, Land Rover, BMW, Volkswagen, and Porsche models to prevent damage and warranty issues. Includes specific relay locations for each vehicle model.
	[Arnott Compressor Relay Service Bulletin 29-9694 for BMW Vehicles] Technical service bulletin from Arnott detailing the 29-9694 compressor relay replacement for various BMW models, emphasizing warranty and damage prevention. Includes relay locations for BMW 5 Series, X5, X6, and 7 Series.
	[Arnott Air Suspension Parts Catalog 2020 | Premium Auto Parts] Explore the Arnott Air Suspension 2020 Parts Catalog, featuring a comprehensive range of air springs, struts, compressors, and conversion kits for luxury vehicles. Trusted quality and innovation for over 30 years.
	[Arnott AS-3285 Rear Air Shock Installation Manual for Infiniti QX56/QX80 & Nissan Armada] Detailed installation manual for the Arnott AS-3285 New Rear Air Shock, designed for Infiniti QX56/QX80 (Z62) and Nissan Armada (Y62) vehicles. Includes step-by-step removal and installation instructions.
	[Arnott Rear Air Spring A-2220 Installation Manual for Lincoln Town Car, Ford Crown Victoria, Mercury Grand Marquis] Installation manual for Arnott Rear Air Spring model A-2220, compatible with 1990-2011 Lincoln Town Car and 1992-2011 Ford Crown Victoria/Mercury Grand Marquis. Includes removal and installation instructions, safety precautions, and contact information.
	[Arnott AS-2786 Front Left Air Strut Installation Manual for Mercedes-Benz E-Class (W211) and CLS-Class (W219)] Comprehensive installation guide for the Arnott AS-2786 front left air strut, designed for Mercedes-Benz E-Class (W211) and CLS-Class (W219) vehicles equipped with AIRMATIC suspension (excluding 4MATIC and AMG models). Includes detailed removal steps, safety precautions, and contact information.