

## **INSTALLATION GUIDE**



Kits 78570 (53mm), 78571 (48.5mm)

# Audi B9 FRONT APPLICATION

For maximum effectiveness and safety, please read these instructions completely before proceeding with installation.

Failure to read these instructions can result in an incorrect installation which could result in damage to the vehicle, minor to severe personal injury or death.

# **Protect your Air Lift Performance Purchase by Completing your Warranty Registration**



Thank you for purchasing an Air Lift Performance product! Take a photo of your sales receipt and then scan the QR code to complete your online warranty registration.

## **TABLE OF CONTENTS**

# P.02 Introduction

Notation Explanation

# P.03 System Overview

Hardware List Torque-to-Yield Bolts

# P.04 Installing the System

Important Safety Notices
Section 1. Prepare the Vehicle
Section 2. Removal of Suspension
Section 3. Install the Air Suspension
Section 4. Route the Air Lines

# P.10 Before Operating

Set the Ride Height
Torque Specifications
Suggested Driving Air Pressure
Maximum Air Pressure
Check for Binding
Installation Checklist
Damping Adjustment

P.12
Limited Warranty
and Return Policy



## Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Audi B9. Read these installation instructions to correctly and safely set up the vehicle for a #lifeonair.

Air Lift assumes that the installer has the mechanical knowledge and ability to work on vehicle suspension systems and has basic tools necessary to complete a suspension replacement project. Special tools needed to complete the installation are noted on the *System Overview* page.

Air Lift reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Performance at **(800) 248-0892** or visit **www.airliftperformance.com**.

An Air Lift Performance air management system is highly recommended for this product. Learn more at air-lift.co/productlines.

### NOTATION EXPLANATION

Hazard notations appear in various locations in this publication. Information which is highlighted by one of these notations must be observed to help minimize risk of personal injury or possible improper installation which may render the vehicle unsafe. Notes are used to help emphasize areas of procedural importance and provide helpful suggestions. The following definitions explain the use of these notations as they appear throughout this guide.



#### **DANGER**

INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



#### WARNING

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



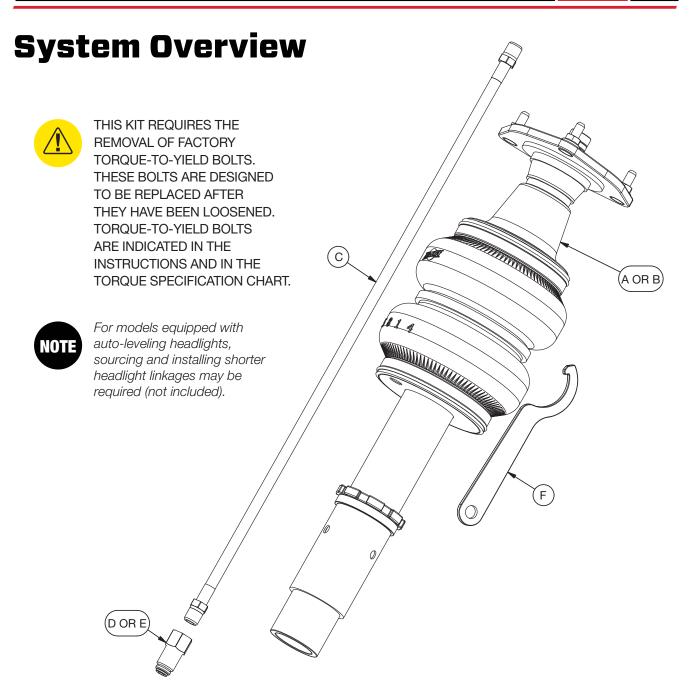
#### CAUTION

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE VEHICLE OR MINOR PERSONAL INJURY.



Used to help emphasize areas of procedural importance and provide helpful suggestions.





### **HARDWARE LIST**

Item	Part #	Description	Qty
Α	35429	Audi B9 shock (53mm)	2
В	35430	Audi B9 shock (48.5mm)	2
С	20997	Leader line, 1/4" ID	2
D	21810	Union, 1/4" FNPT x 1/4" PTC	2
E	21987**	Union, 1/4" FNPT x 3/8" PTC	2
F		Spanner wrench	1

### **TORQUE-TO-YIELD BOLTS\***

## Description

Fork to control arm bolt End link bolts

- \* These bolts are not included with this kit
- \*\* Not included with this kit



Missing or damaged parts? Call Air Lift customer service at (800) 248-0892 for a replacement part.

MN-1073



## **Installing the System**

## **IMPORTANT SAFETY NOTICES**



DO NOT INFLATE AIR SPRINGS WHILE OFF OF THE VEHICLE. DAMAGE TO ASSEMBLY MAY RESULT AND VOID WARRANTY.



DO NOT WELD TO OR MODIFY PERFORMANCE STRUTS/SHOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.



AFTER INSTALLATION, ENSURE ALL ORIGINAL EQUIPMENT VEHICLE SAFETY FEATURES ARE PROPERLY CALIBRATED BY A QUALIFIED TECHNICIAN. CHANGING VEHICLE HEIGHT MAY AFFECT FUNCTIONING OF SAFETY SENSORS AND CAMERAS.

## SECTION 1.

### PREPARE THE VEHICLE



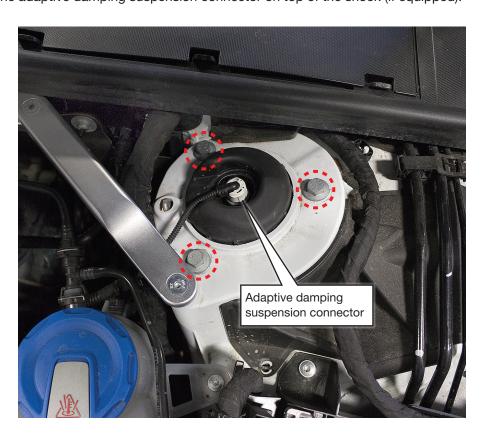
RAISE THE FRONT OF THE VEHICLE AT THE APPROVED LIFTING POINTS AND USE SAFETY STANDS TO SUPPORT THE VEHICLE.

- 1. Elevate and support the vehicle with a hoist or safety stands.
- 2. Remove the front wheel.

## SECTION 2.

## **REMOVAL OF SUSPENSION**

1. Disconnect the adaptive damping suspension connector on top of the shock (if equipped).



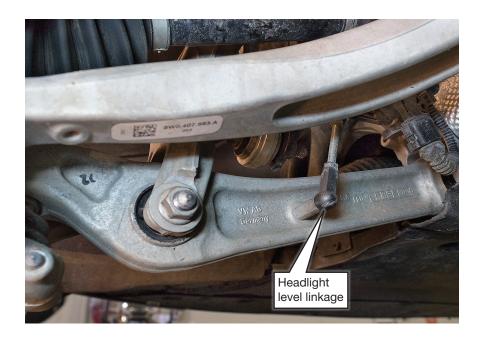
4. — MN-1073



- 2. Remove the upper shock mount bolts.
- 3. Remove the headlight level linkage (if equipped).



For models equipped with auto-leveling headlights, sourcing and installing shorter headlight linkages may be required (not included).



4. Remove the lower pinch bolt on the fork mount.





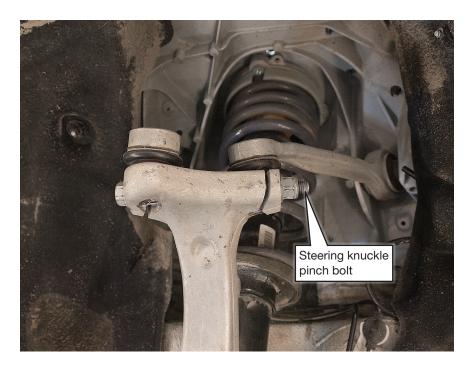
5. Remove the sway bar end link from the fork mount.



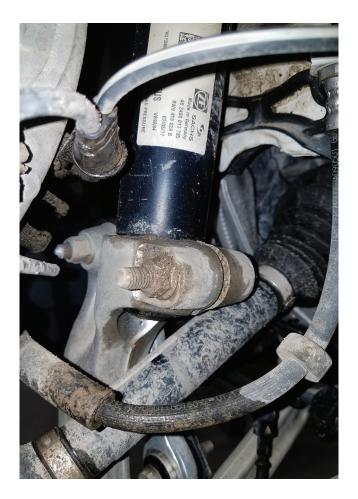
Use the jack to support the hub to relieve pressure on the end link bushing.



6. Remove the steering knuckle pinch bolt that connects to the upper control arms. Lower the hub assembly.



7. Slide the damper out of the fork mount and upper mount and remove it from the car. Make sure the shock cap comes with it.

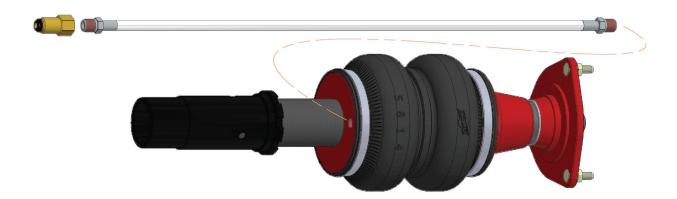




## SECTION 3.

## **INSTALL THE AIR SUSPENSION**

1. Begin by installing the leader line into the air spring. Tighten the appropriate fitting to the air line (1 3/4 turns beyond hand-tight). Tighten the leader line into the air spring 1 3/4 turns beyond hand-tight.



2. Install the shock with the air line on the inboard side.



MN-1073



3. Attach the upper mount nuts. Torque to 27Nm (20 lb.-ft.).



4. Reconnect the end link to the fork mount while inserting the lower end of the shock into the fork mount. Torque the fork mount pinch bolt to 40Nm (30 lb.-ft.).



Use the jack to assist in lining up the shock with the fork mount.





- 5. Reconnect the end link to the sway bar but do not tighten the nuts.
- 6. Reattach the upper control arms to the steering knuckle. Torque to 40Nm (30 lb.-ft.).
- 7. Snug the end link nuts. Torque at ride height.
- 8. Align and attach the fork mount with the lower control arm bushing. Torque the bolt at ride height.

## SECTION 4.

### **ROUTE THE AIR LINES**



AFTER INSTALLATION, ENSURE ALL ORIGINAL EQUIPMENT VEHICLE SAFETY FEATURES ARE PROPERLY CALIBRATED BY A QUALIFIED TECHNICIAN. CHANGING VEHICLE HEIGHT MAY AFFECT FUNCTIONING OF SAFETY SENSORS AND CAMERAS.

- 1. Fully compress the suspension using a jack. With the suspension compressed, review the best routing for the air line that is clear of all suspension and steering components.
- 2. Routing should allow for the suspension to extend and steer without kinking, pulling the line tight or rubbing on other components. Following the brake line routing is often a good place to start. Check clearances to all other components.

MN-1073 - 9



## **Before Operating**

## **SET THE RIDE HEIGHT**

1. Refer to the User Guide supplied with this kit to set up the suspension.

Torque Specifications							
Location	TTY*	Nm	Lbft.				
Upper mount nuts		27	20				
Fork to control arm bolt		90 + 90 degrees	66 + 90 degrees				
Fork to shock mount pinch bolt		40	30				
End link nuts	✓	40 + 90 degrees	30 + 90 degrees				
Upper control arms to steering knuckle bolt		40	30				
Wheel bolts		120	90				
Leader lines		1 3/4 turns beyond hand-tight					

<sup>\*</sup> Torque-to-yield bolts



THIS KIT REQUIRES THE REMOVAL OF FACTORY TORQUE-TO-YIELD BOLTS. THESE BOLTS ARE DESIGNED TO BE REPLACED AFTER THEY HAVE BEEN LOOSENED. TORQUE-TO-YIELD BOLTS ARE INDICATED IN THE INSTRUCTIONS AND IN THE TORQUE SPECIFICATION CHART.

2. Upon successful completion of the installation, follow these pressure requirements for the air springs.







FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND **WILL VOID THE WARRANTY**.

### CHECK FOR BINDING



MAKE SURE THE FRONT WHEELS ARE STRAIGHT WHEN DEFLATING AND REINFLATING THE AIR SPRINGS.

- 1. Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) to check for clearance or binding issues. With the air springs deflated, check clearances on everything so as not to pinch brake lines, vent tubes, etc. Clear lines if necessary.
- 2. Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and check all connections for leaks.

10 MN-1073



### INSTALLATION CHECKLIST

<b>Clearance</b> — Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and make sure there is at least 13mm (1/2") clearance from anything that might rub against the air spring. This should be checked with the air spring fully inflated and fully deflated.
<b>Leak</b> — Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and check all connections for leaks. All leaks must be eliminated before the vehicle is road tested.
<b>Heat</b> — Be sure there is sufficient clearance from heat sources, at least 152mm (6") from air springs and air lines. If a heat shield was included in the kit, install it. If there is no heat shield, but one is required, call Air Lift customer service at <b>(800) 248-0892</b> .
Fastener — Recheck all bolts for proper torque.
<b>Road</b> — Inflate the air springs to recommended driving pressures (see previous page). Drive the vehicle 16km (10 miles) and recheck for clearance, loose fasteners and air leaks.
<b>Operating instructions</b> — If professionally installed, the installer should review the operating instructions with the owner. Be sure to provide the owner with all paperwork that came with the kit.

### **DAMPING ADJUSTMENT**

1. The dampers in this kit have 30 settings, or "clicks," of adjustable compression and rebound damping characteristics. Damping is changed through the damper rod using the supplied adjuster (example shown here) or a 3mm hex key (not included).



- 2. Turn the adjuster clockwise (H) and the damping settings are hardened, reducing oscillations and body motion. Turn the adjuster counterclockwise (S) and the damping is softened.
- 3. Each damper in this kit is preset to "-12 clicks." This means that the damper is adjusted 12 clicks away from full stiff, which starts at 0. Counting up from full stiff is the preferred method of keeping track of, or setting, damping. This setting was developed on a 2017 Audi A4 Allroad with adaptive damping suspension.

For more information, refer to the User Guide.



## **Limited Warranty and Return Policy**

Air Lift Company provides a 1-year limited warranty\* to the original purchaser of Air Lift Performance damper kits from the date of original purchase, that the products will be free from defects in workmanship and materials when used on vehicles as specified by Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth in the full Limited Warranty and Return Policy that is available online at **www.airliftperformance.com/warranty**.

\*Official warranty details are listed at www.airliftperformance.com/support/warranty and are subject to change.

## **Need Help?**

The Air Lift Company customer service department is open from 8 a.m. to 8 p.m. ET Monday through Friday. Call (800) 248-0892 or (517) 322-2144 for calls from outside the U.S. and Canada.







CONNECT BY SEARCHING FOR **AIR LIFT PERFORMANCE** #LIFEONAIR





2727 Snow Road Lansing, MI 48917 or P.O. Box 80167 Lansing, MI 48908-0167 Toll Free (800) 248-0892 • Local (517) 322-2144 • Fax (517) 322-0240 www.airliftperformance.com

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Company at (800) 248-0892 or visit airliftperformance.com.