

Kit 78673

Audi C7

Rear Application



INSTALLATION GUIDE

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.

Α.	Introduction	. 2
	Notation Explanation	
B.	Important Safety Notices	. 2
C.	Installation Diagram	.3
	Tool List	3
	Hardware List	
	Torque-to-Yield Bolts	3
D.	Installing the Air Suspension	. 4
	Removing the Stock Suspension	4
	Installing the Air Suspension	
	Routing the Air Lines	9
E.	Before Operating	10
	Torque Specifications	. 10
	Suggested Driving Air Pressure and Maximum Air Pressure	
	Check for Binding	
	Installation Checklist Damping Adjustment	
	Limited Warranty and Return Policy	12

A. Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Audi C7. 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 Installation Diagram 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.



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



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



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

NOTE

Indicates a procedure, practice or hint which is important to highlight.

B. Important Safety Notices



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

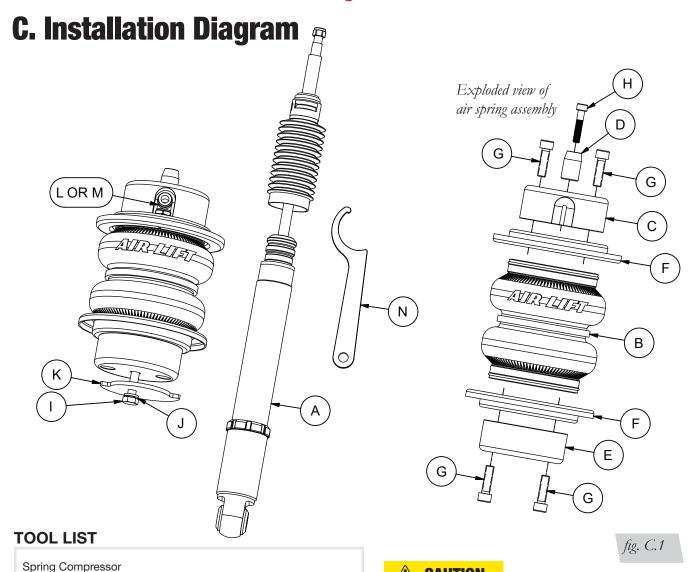


DO NOT WELD TO OR MODIFY PERFORMANCE STRUTS/SHOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.



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.





HARDWARE LIST

Item	Part #	Description Qty
Α	26879	Shock, Audi C7, rear2
В	58550	Air spring 2
С	07049	Upper bracket2
D	13325	Upper pilot2
E	13309	Lower bracket2
F	11801	Roll plate4
G	17516	M10 - 1.5 x 25 socket head cap screw . 8
Н	17927	M8 - 1.25 x 40 socket head cap screw . 2
1	17928	M10 - 1.5 x 80 hex cap screw 2
J	18628	M10 Split lock washer2
K	13999	Spacer Plate, Audi C7, Rear2
L	21779	1/4 MNPT x 1/4 PTC elbow-DOT 2
М	21851	1/4 MNPT x 3/8 PTC elbow-DOT 2
N	11291	M44 Spanner 1

CAUTION

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.

TORQUE-TO-YIELD BOLTS*

Description

Upper shock mount bolts
Lower shock mount bolt
Rear tie rod outer pivot bolt
Upper transverse link inner pivot bolt
Lower transverse link inner pivot bolts
Lower transverse link outer pivot bolt

* These bolts are not included with this kit

STOP!

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

D. Installing the Air Suspension

NOTE

See "Important Safety Notices" on page 2.



RAISE THE REAR OF THE VEHICLE WITH A JACK AT THE APPROVED LIFTING POINTS AND USE SAFETY STANDS TO SUPPORT THE VEHICLE.

REMOVING THE STOCK SUSPENSION

1. Remove the wheel and support the suspension with a safety stand (Figs. D.1 & D.2).





fig. D.2

2. Remove lower shock mount stone chip protector and lower shock mount bolt. Keep the washer to reuse for assembly (Figs. D.3 & D.4).





fig. D.3



3. Remove upper shock mount bolts and then remove shock from vehicle (Figs. D.5 & D.6).





fig. D.5

fig. D.6

4. Loosen upper shock mount nut and remove the upper mount, jounce bumper, and dust cover from the shock. Separate the jounce bumper and dust cover from the upper mount. Set the upper mount aside for reinstallation (Fig. D.7).



fig. D.7

5. Loosen and remove the rear tie rod outer pivot bolt. Loosen the rear tie rod inner pivot bolt and swing the rear tie rod down out of the way (Figs. D.8 & D.9).





fig. D.8

fig. D.9





THE COIL SPRING IS UNDER COMPRESSION. THE COIL SPRING SHOULD BE REMOVED USING FACTORY PRESCRIBED GUIDELINES.

6. Using Audi VAS6274 or similar spring compressor, compress and remove the rear coil spring and isolators (Fig. D.10).

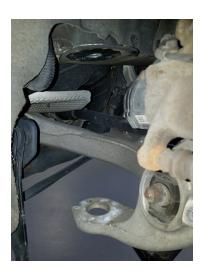


fig. D.10

INSTALLING THE AIR SUSPENSION

1. Take the air spring preassembly (B, E, F, G) and choose the appropriate swivel fitting (L or M) for the application. Tighten the fitting to the air spring 1 3/4 turns beyond hand-tight positioning it outboard. Set the roll plate (F) overtop of the fitting/air spring as shown and install the upper bracket (C) using screws (G) and torque to 28Nm (21 lb.-ft.). Install the pilot (D) with screw (H) and torque to 19Nm (14 lb.-ft.) (Fig. D.11).

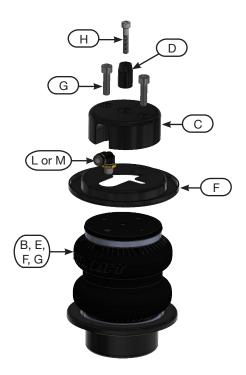


fig. D.11



2. Set the rear air spring assembly in place of the coil spring. Raise the suspension until the pilot seats into the hole in the chassis (Figs. D.12 & D.13).





fig. D.12

fig. D.13

3. Install the bolt and lower mount retainer plate through the lower control arm into the air spring. Align the retainer plate with the cutout in the control arm with the proper orientation shown below. Torque the bolt to 28Nm (21 lb.-ft.) (Figs. D.14, D.15 & D.16).





fig. D.14

fig. D.15

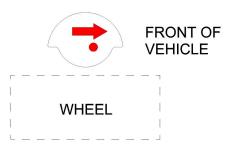


fig. D.16

MN-1084 7

4. Raise the rear tie rod into place and thread a new TTY bolt into the rear knuckle. Do not tighten at this time (Fig. D.17).



fig. D.17

5. Install the previously removed upper shock mount onto the Air Lift Performance shock. For vehicles equipped with electronic damping control, use the rod sleeve included with the Air Lift Performance shock. If not equipped with electronic damping control, then discard it. Torque the pin mount lock nut to 35Nm (26 lb.-ft.) (Figs. D.18 & D.19).

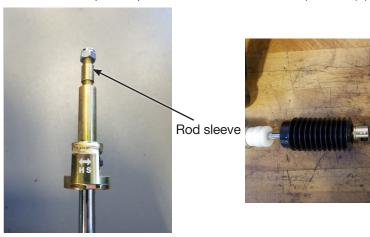


fig. D.19



6. Insert the upper mount into the chassis with new TTY bolts. Torque the bolts to 50Nm+90 degrees (37 lb.-ft.+90 degrees) (Fig. D.20).



fig. D.20

7. Attach the lower shock mount to the chassis with a new TTY bolt and the previously removed washer. Do not tighten at this time (Fig. D.21).



fig. D.21

- 8. Reinstall the wheel and torque the lug studs to 120Nm (88 lb.-ft.).
- 9. At this time the vehicle should be set at ride height. All bolts at suspension pivot points left loose should be torqued per the torque specifications in Table 1. Any pivot points with bonded rubber bushings untouched during installation should be loosened and retorqued at this time.
- 10. Reinstall the stone chip protector over the lower shock mount (Fig. D.3).

ROUTING THE AIR LINES

- 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 components and axle.
- Routing should also allow for the suspension to extend without kinking or 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.

! WARNING

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.

MN-1084 9



E. Before Operating

Read the User Guide that came with this kit to set up the suspension.

Torque Specifications				
Location	TTY*	Nm	Lbft.	
Upper shock mount bolts	✓	50+90 degrees	37+90 degrees	
Lower shock mount bolt	✓	150+180 degrees	110+180 degrees	
Rear tie rod outer pivot bolt	✓	90+90 degrees	66+90 degrees	
Rear tie rod inner pivot eccentric bolt		95	70	
Upper transverse link outer pivot eccentric bolt		95	70	
Upper transverse link inner pivot bolt	✓	70+180 degrees	52+180 degrees	
Lower transverse link inner pivot bolt	✓	70+180 degrees	52+180 degrees	
Lower transverse link outer pivot bolt	✓	120+360 degrees	88+360 degrees	
Shock rod nut		35	26	
Pilot bolt		19	14	
Upper bracket bolts		28	21	
Lower bracket bolts		28	21	
Air fittings	1 3/4 turns beyond hand tight			
Wheel lug studs		120	88	

^{*} Torque-to-yield bolts

Table 1



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.

Suggested Driving Air Pressure	Maximum Air Pressure
45-55 PSI (3.1-3.8BAR)	125 PSI (8.6BAR)

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

Table 2

CHECK FOR BINDING

- 1. Inflate and deflate the system (do not exceed 125 PSI [8.6BAR]) 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 75-90 PSI (5.2-6.2BAR) and check all connections for leaks.



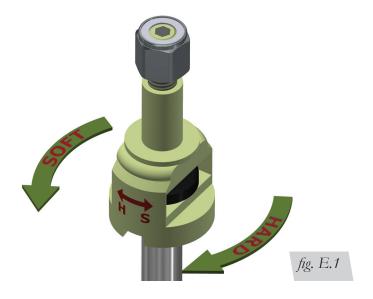
INSTALLATION CHECKLIST

□ Clearance — Inflate the air springs to 75-90 PSI (5.2-6.2BAR) and make sure there is at least 1/2" (13mm) clearance from anything that might rub against the air spring. This should be checked with the air spring fully inflated and fully deflated.
 □ Leak — Inflate the air springs to 75-90 PSI (5.2-6.2BAR) and check all connections for leaks. All leaks must be eliminated before the vehicle is road tested.
 □ Heat — Be sure there is sufficient clearance from heat sources, at least 6" (152mm) 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 (800) 248-0892.
 □ Fastener — Recheck all bolts for proper torque.
 □ Road — Inflate the springs to recommended driving pressures (Table 2). Drive the vehicle 10 miles (16km) and recheck for clearance, loose fasteners and air leaks.
 □ Operating instructions — 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 (Fig. E.1) 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 2012 Audi C7.

For more information, refer to the User Guide.



MN-1084 **11**



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.

For additional warranty information contact Air Lift Company customer service.

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.







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