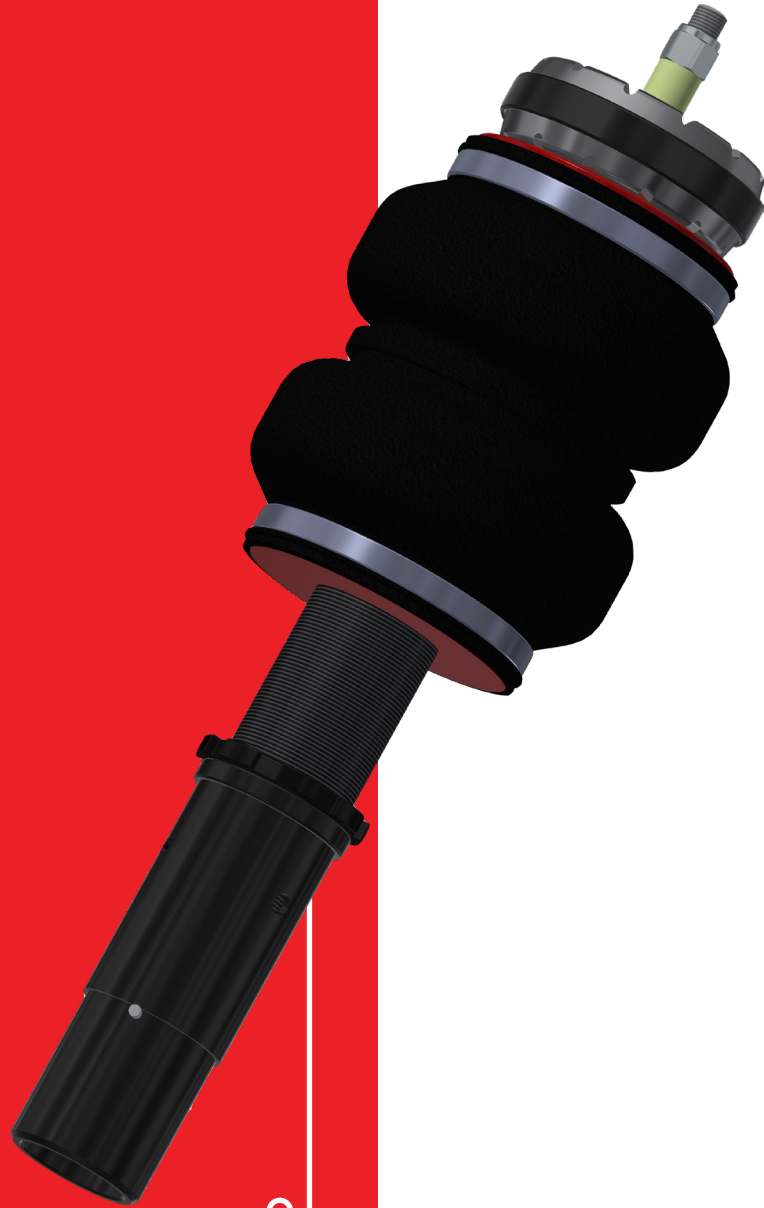




# Kit 78573

Audi C7

***Front 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.*



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## 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.



**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.

### NOTE

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

## B. Important Safety Notices



**WARNING**

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



**CAUTION**

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



**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.

# C. Installation Diagram

**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.

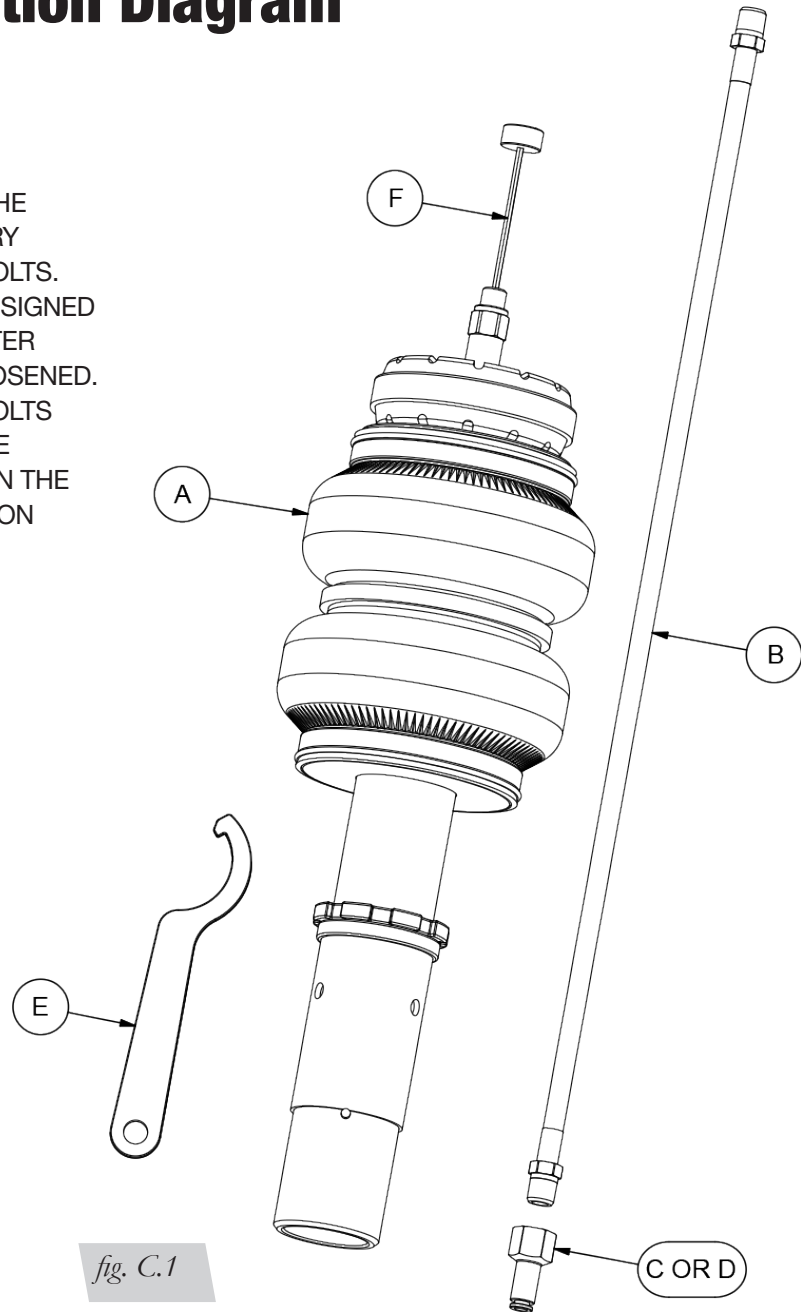


fig. C.1

**HARDWARE LIST**

Item	Part #	Description .....	Qty
A	35433	Strut, Audi C7, front.....	2
B	20997	Leader line, 1/4" ID.....	2
C	21810	Union, 1/4" FNPT x 1/4" PTC .....	2
D	21987	Union, 1/4" FNPT x 3/8" PTC.....	2
E	11289	Spanner wrench.....	1
F	11285	Slip-in knob .....	2

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

Description.....	Qty
Lower fork mount pinch bolt .....	2
Lower fork mount to control arm.....	2
Lower control arm inner pivot bolt .....	2
Upper control arm inner pivot bolts .....	2
Guide link pivot bolt .....	2

\* These bolts are not included with this kit



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.

## REMOVING THE STOCK SUSPENSION

1. Remove cowl cover and seal (Figs. D.1 & D.2).

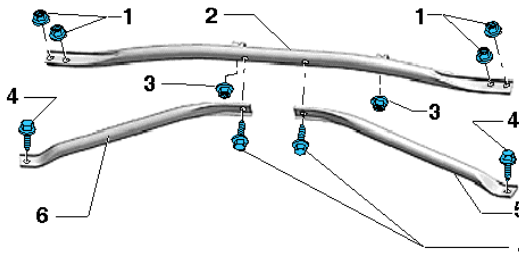


*fig. D.1*



*fig. D.2*

2. For models equipped with strut tower brace, perform the following steps. For models not equipped with strut tower brace, proceed to step 3.
  - a. Remove the 4 nuts (1) attaching the strut tower brace (2) to chassis (Figs. D.3 & D.4).
  - b. Remove the 2 nuts (3) attaching the strut tower brace (2) to the firewall (Figs. D.3 & D.4).
  - c. Remove the 4 bolts (4) attaching the additional reinforcement bars (5 & 6) to the chassis and the strut tower brace (2) (Figs. D.3 & D.4).



*fig. D.3*



*fig. D.4*

3. Elevate and support the vehicle using its approved lifting points. Remove the front wheel and support the hub assembly with safety stands (Figs. D.5 & D.6).



*fig. D.5*



*fig. D.6*

4. Unbolt sway bar end link from lower strut mount (Figs. D.7 & D.8).



*fig. D.7*



*fig. D.8*

5. Remove brake hose and ABS sensor wire from the retainer bracket on the strut body (Figs. D.9 & D.10).



*fig. D.9*



*fig. D.10*

- Remove headlight alignment sensor linkage from the lower control arm, if equipped (Figs. D.11 & D.12).



*fig. D.11*



*fig. D.12*

- Unbolt and remove outer tie rod end from the steering knuckle (Figs. D.13 & D.14).



*fig. D.13*



*fig. D.14*

- Loosen and remove lower strut fork mount bolt (Fig. D.15).



*fig. D.15*



- Loosen and remove lower control arm inner pivot bolt. Drop the lower control arm down and out of the way of the lower strut fork mount (Figs. D.16 & D.17).

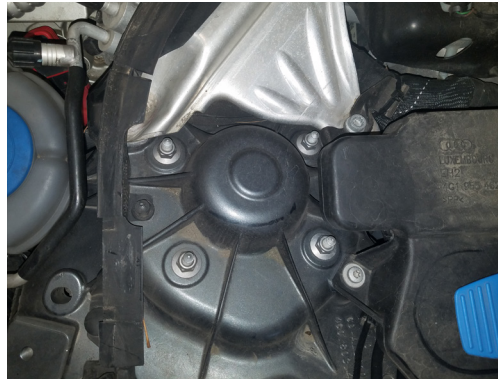


*fig. D.16*



*fig. D.17*

- Remove the four upper strut mount nuts and remove the strut from the vehicle (Figs. D.18 & D.19).



*fig. D.18*



*fig. D.19*

- Unbolt and remove the lower fork mount and brake hose bracket (Fig. D.20).



*fig. D.20*

- Remove the upper strut mount per the manufacturers recommended procedure. Set aside the rubber upper section of the mount. Pull the dust cover/jounce bumper and rubber spring isolator off the upper mount (Figs. D.21 & D.22).



*fig. D.21*



*fig. D.22*

- Using a grinder or chisel, remove the jounce bumper cup from the upper mount and discard it (Figs. D.23 & D.24).



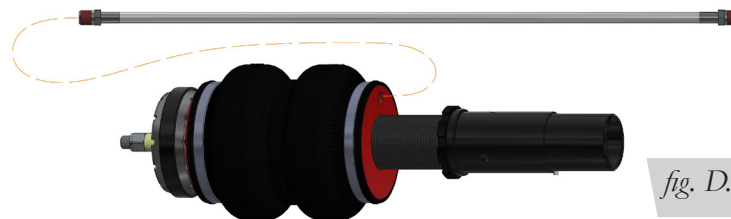
*fig. D.23*



*fig. D.24*

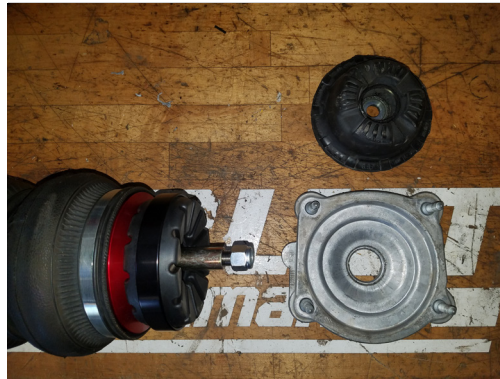
## INSTALLING THE KIT COMPONENTS

- Begin by installing the air line into the air spring. Tighten the appropriate fitting to the air line (1 3/4 turns beyond hand-tight). Tighten the air line into the air spring 1 3/4 turns beyond hand-tight (Fig. D.25).



*fig. D.25*

2. Install the rubber isolator that was set aside earlier and upper mount on the strut as shown. Torque the nut to 54Nm (40 lb.-ft.) (Figs. D.26 & D.27).



*fig. D.26*



*fig. D.27*

3. Slide the lower fork mount onto the Air Lift Performance lower strut mount. Be sure to align the pin in the Air Lift Performance lower mount with the notch in the lower fork mount. Reinstall the brake hose bracket on the lower fork mount with a new TTY bolt. Torque the bolt to 40Nm + 180 degrees (30 lb.-ft. + 180 degrees) (Figs. D.28, D.29 & D.30).

Notch



*fig. D.28*



*fig. D.29*



*fig. D.30*

4. Mark and drill a 10mm (3/8") hole in the center of the strut tower for the damping adjuster (Fig. D.31).



*fig. D.31*

5. Insert the upper mount into the chassis and install the upper mount nuts. Torque the nuts to 30Nm (22 lb.-ft.) (Figs. D.32 & D.33).



*fig. D.32*



*fig. D.33*

6. Reinstall the lower control arm into position on the chassis and also the lower strut fork mount. Insert new TTY bolts in both locations. Do not tighten the bolts at this time (Figs. D.34 & D.35).



*fig. D.34*



*fig. D.35*

7. Insert the tie rod end back into position in the steering knuckle and install the nut. Tighten to 100Nm (73 lb.-ft.) (Figs. D.36 & D.37).



*fig. D.36*



*fig. D.37*

8. Install the sway bar end link and new TTY bolt. Do not tighten the bolt at this time (Fig. D.38).



*fig. D.38*

9. Reattach the brake hose and ABS sensor wire to the bracket on the strut (Fig. D.39).



*fig. D.39*

10. Reinstall the headlight alignment sensor linkage. Torque the nut to 9Nm (7 lb.-ft.).
11. Reinstall the wheel and torque the lug studs to 120Nm (88 lb.-ft.).
12. If equipped, install strut tower brace in reverse order of removal. If not equipped, proceed to step 14.
13. Torque fasteners to the following specifications:
  - a. Strut tower brace to chassis nuts (1) - 20Nm (15 lb.-ft.)
  - b. Strut tower brace to firewall nuts (3) - 2Nm (1.5 lb.-ft.)
  - c. Left and right additional reinforcement bar bolts (4) - 20Nm (15 lb.-ft.)
14. Put the cowl cover and seal back in place.

## ROUTING THE AIR LINES

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.

 **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.

## **E. Finished Installation Photo**



*fig. E.1*

# F. Before Operating

## SETTING THE RIDE HEIGHT

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

Torque Specifications			
Location	TTY*	Nm	lb.-ft.
Wheel lug studs		120	88
Upper rod nut		54	40
Upper strut mount nuts		30	22
Lower fork mount pinch bolt	✓	40+180 degrees	30+180 degrees
Lower fork mount to control arm	✓	90+90 degrees	66+90 degrees
Lower control arm inner pivot bolt	✓	70+180 degrees	52+180 degrees
Outer tie rod end nut		100	74
Upper control arm inner pivot bolts	✓	50+90 degrees	37+90 degrees
Headlight alignment sensor nut		9	7
Guide link pivot bolt	✓	70+180 degrees	52+180 degrees
Strut tower brace to chassis		20	15
Strut tower brace to firewall nuts		2	1.5
Left and right additional reinforcement bar bolts		20	15

\* Torque-to-yield bolts

*Table 1*



TORQUE-TO-YIELD BOLTS ARE DESIGNED TO BE REPLACED AFTER THEY HAVE BEEN LOOSENED.

Suggested Driving Air Pressure	Maximum Air Pressure
<b>80 PSI (5.5BAR)</b>	<b>125 PSI (8.6BAR)</b>
FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND <b>WILL VOID THE WARRANTY.</b>	

*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.



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



## 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 (Figs. F.1 & F.2) 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 "-18 clicks." This means that the damper is adjusted 18 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.



fig. F.1



fig. F.2

## 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](http://www.airliftperformance.com/warranty).

For additional warranty information contact Air Lift Company customer service.

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 [www.airliftperformance.com](http://www.airliftperformance.com).



## 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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