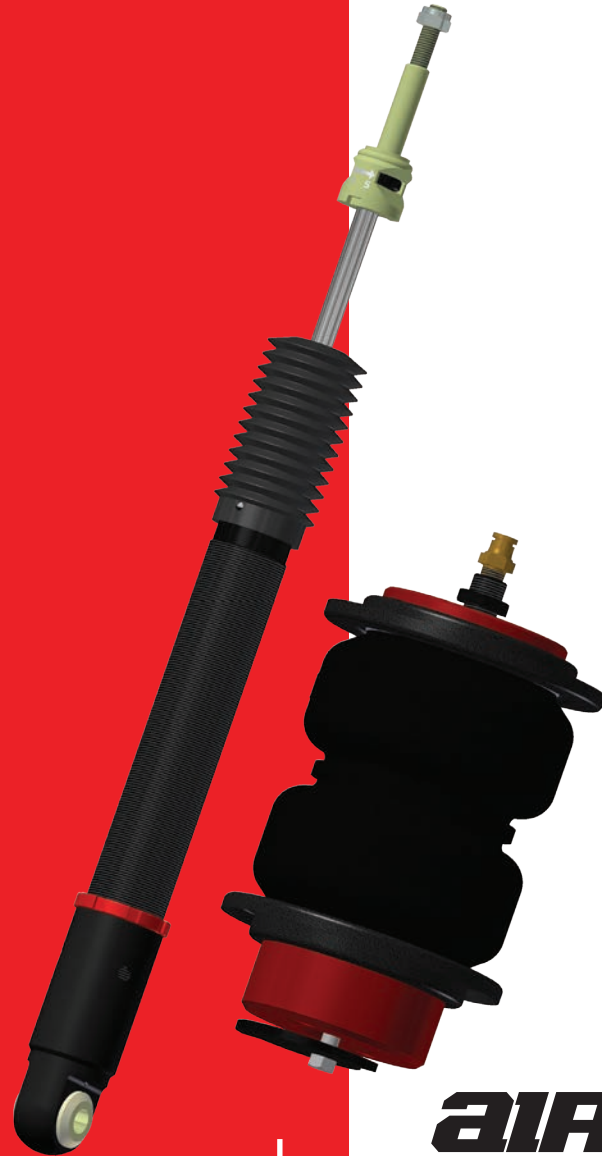


Air Lift[™]
PERFORMANCE

Kits
75658/78634
Audi A4 (B8 platform)
Rear Application
(With and Without Shocks)



AIR LIFT
PERFORMANCE[™]

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.

PERFORMANCE SUSPENSION PARTS

Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this Audi A4 B8 Performance kit.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information includes a hardware list, tool list, step-by-step installation information, maintenance tips, safety information and a troubleshooting guide.

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 MACHINE OR MINOR PERSONAL INJURY.

NOTE

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

IMPORTANT SAFETY NOTICES

The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

Gross Vehicle Weight Rating: The maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

Payload: The combined, maximum allowable weight of cargo and passengers that the vehicle is designed to carry. Payload is GVWR minus the Base Curb Weight.

 **WARNING**

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

 **CAUTION**

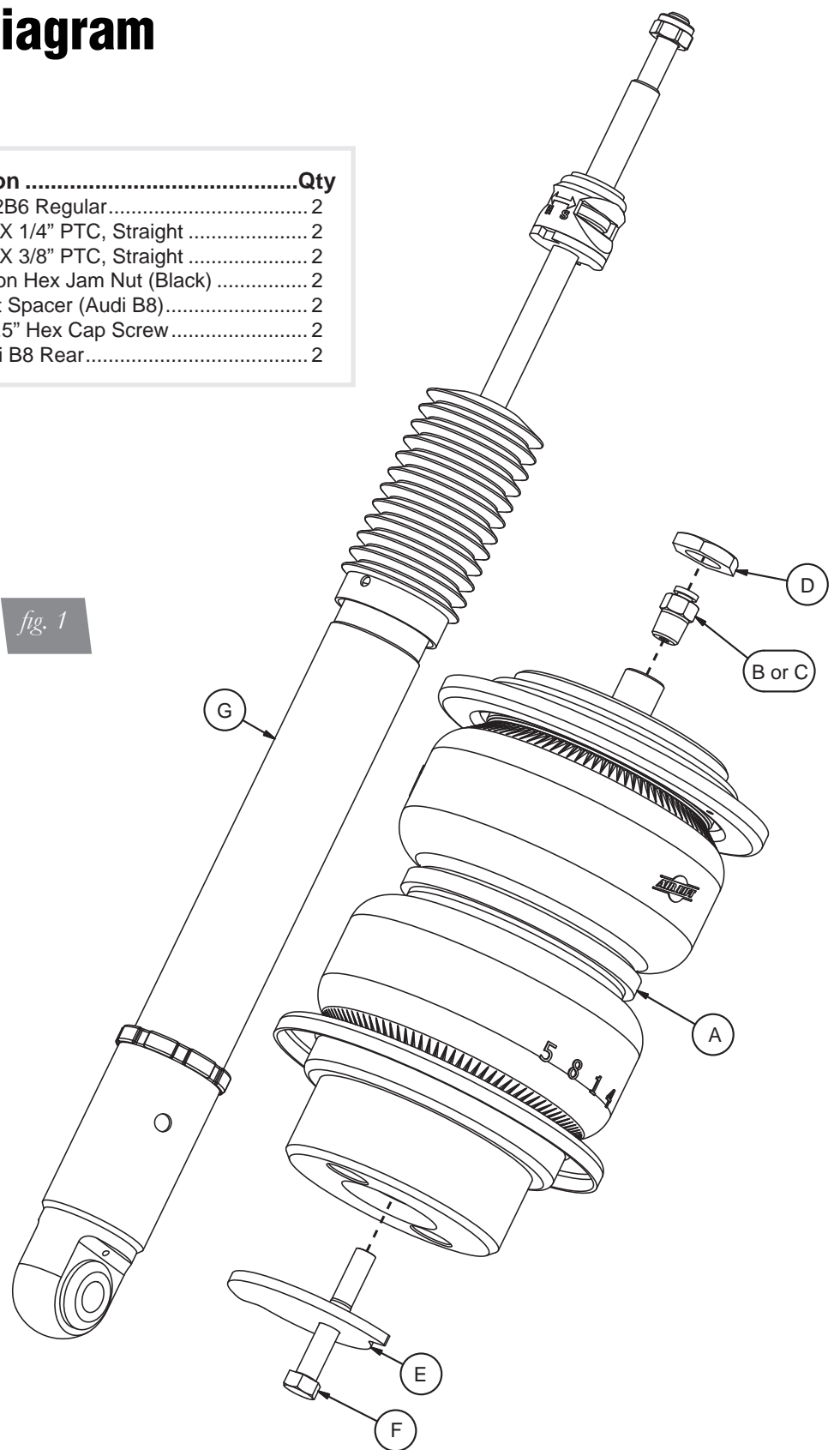
DO NOT WELD TO, OR MODIFY PERFORMANCE STRUTS/SHOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.

Installation Diagram

HARDWARE LIST

Item	Part #	Description	Qty
A	58526	Air spring, 2B6 Regular	2
B	21745	1/4" MNPT X 1/4" PTC, Straight	2
C	21853	1/4" MNPT X 3/8" PTC, Straight	2
D	18454	3/4"-16 Nylon Hex Jam Nut (Black)	2
E	13986	Spring Seat Spacer (Audi B8)	2
F	17454	3/8"-24 X 2.5" Hex Cap Screw	2
G	26990	Shock, Audi B8 Rear	2

fig. 1



Installing the Air Suspension

PREPARING THE VEHICLE

1. Support the vehicle with jack stands or a hoist at approved lifting points.
2. Remove rear wheels (fig. 2).

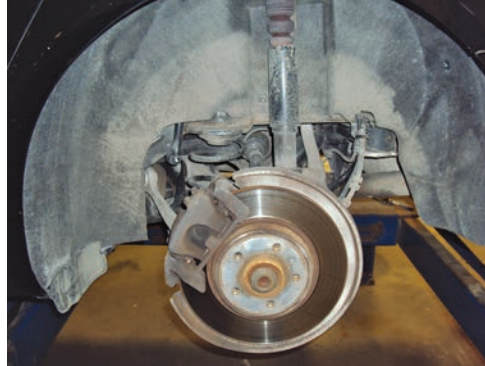


fig. 2

3. Disconnect the headlight alignment sensor linkage from the lower control arm (fig. 3).

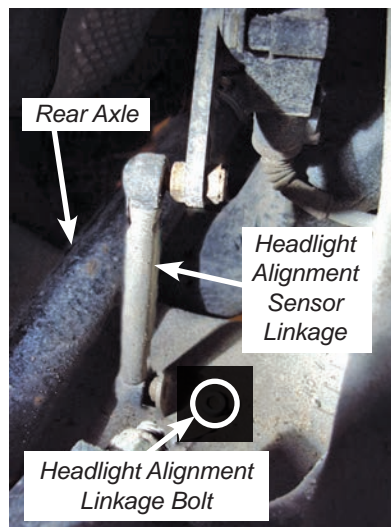


fig. 3

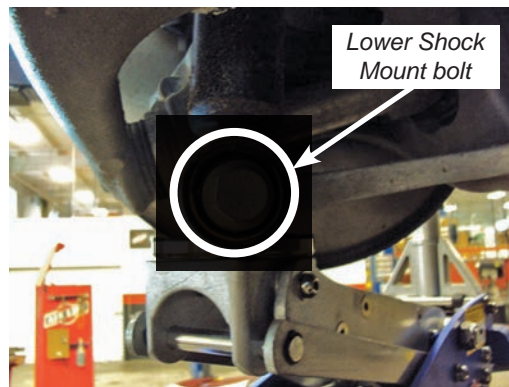
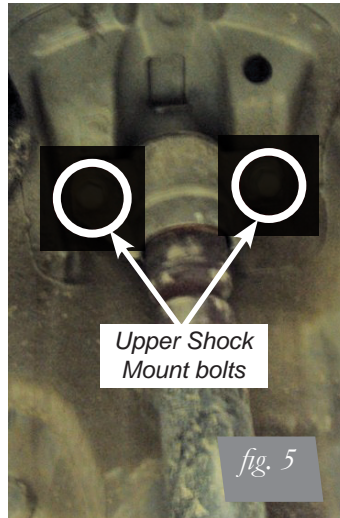
STOCK SUSPENSION REMOVAL

1. Support the hub assembly before beginning work.
2. Remove the inner fender liners from both sides (fig. 4).



fig. 4

3. Unbolt the upper and lower shock mounts and remove from the vehicle (figs. 5-7).



4. Using a coil spring compressor, remove the rear coil springs along with upper and lower isolators (fig. 8).



5. Directly above the upper coil spring perch, remove the rubber plug (figs. 9 and 10).



AIR SUSPENSION INSTALLATION

1. If retaining the factory shocks, continue on to step 4. Remove the upper bracket from the OE shock and install on to the new shock (figs. 11 and 12). **DO NOT USE AN IMPACT WRENCH!**

CAUTION

DAMAGE MAY OCCUR TO THE SHOCK IF AN IMPACT WRENCH IS USED.



fig. 11



fig. 12

2. Tighten the nyloc nut on the shock rod to 27Nm (20lb-ft).
3. Attach the shock to the vehicle chassis and torque upper bracket bolts to 50Nm + 45 degree turn (37lbs-ft + 45 degree turn). Install but do not tighten the lower shock mount bolt at this time.
4. Cut a vertical line from the hole where the rubber plug was down 37-50mm (1.5"-2") and across 25mm (1"). Fold this material outward to gain access to the top side of the spring perch (fig. 13).

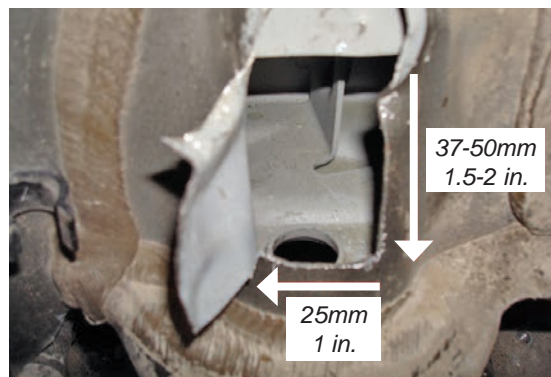


fig. 13

5. If using 1/4" air line, 1/4" PTC fittings can be installed now. Wrap the fitting threads with Teflon tape or thread sealant. Torque fitting 1 3/4 turns beyond hand tight. If using 3/8" PTC fittings, move to the next step (fig. 14).



fig. 14

6. Collapse the air spring and install over the lower coil spring perch with the threaded boss going through the vehicles upper coil spring perch (figs. 15-18). With the air spring assembly fully seated at the upper spring seat, check the clearance around the roll plate. Some vehicles may need a slight clearance modification to the chassis.



fig. 15



fig. 16



fig. 17



fig. 18

7. Thread the plastic nut onto the threaded boss (fig. 19). If using 3/8" air line, install the fitting after the plastic nut is installed.



fig. 19

8. The supplied washer is shaped to fit with the contour of the underside of the lower control arm. The bolt hole of this washer is not on the center. This hole must be installed so that it is closest to the front of the vehicle (fig. 20). Thread the supplied bolt through this washer and into the air spring assembly through the lower control arm. Torque to 20Nm (15ft lbs).

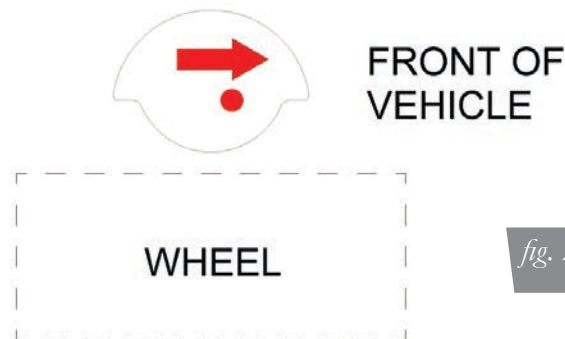


fig. 20

9. Insert air line through the hole into the air spring fitting. At this point, securely route the air line away from heat sources and suspension components (fig. 21). Best practice is to route the air line behind the fender liner paying close attention to shock travel. Failure to protect the line from the shock may result in kinked hose. Fold the bent sheet metal into position while being cautious not to pinch the air line. Seal the cut edges with silicone.



fig. 21

10. Compress the suspension fully and check clearance around the air spring and air line.
11. Reattach the inner fender liners and wheels.

12. Fully compress the suspension using a jack. With the suspension compressed, review the best routing for the leader hose 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.
13. With the suspension fully compressed, take a measurement from the fender to some reference point – typically the center of the axle. Record this measurement as Max Compression.
14. Cycle the suspension to Max Extension and record the measurement from the same reference points.
15. Add ME and MC then divide by 2. Set the suspension to this point. This position will give 50% stroke in either direction and is a starting point for ride height (fig. 22).

Formula for Calculating Ride Height

$$(ME+MC)\div 2=MID\ STROKE$$

fig. 22

16. With the suspension at this position, loosen, then re-torque the lower control arm bolts to manufacturer's specifications (Table 1).

Torque Specifications		
Location	Nm	ft. lbs.
Upper shock absorber mount to body bolt	50 + 45°	37
Shock absorber to wheel bearing housing bolt	150 + 180°	111
Level control system sensor to body bolt	5	3.68
Level control system sensor to lower transverse link bolt	9	6.63
Lower transverse link to subframe bolt	70 + 180°	52
Lower transverse link to wheel bearing housing nut	120 + 360°	88
Tie rod to subframe nut	95	70
Tie rod to wheel bearing housing bolt	90 + 90°	66

Table 1

DAMPING ADJUSTMENT

The shocks in this kit have 30 settings or “clicks” of adjustable compression and rebound damping characteristics. Damping is changed by turning the integrated adjuster knob on top of the shock. Turn the adjuster clockwise when looking from the top, and the damping settings are hardened. Turn the adjuster counterclockwise and the damping is softened. Each shock is preset to “-16 clicks”. This means that the shock is adjusted 16 clicks away from full stiff. Counting down from full stiff is the preferred method of keeping track/setting of damping. This setting was developed on a 2009 A4 2.0T Quattro and may need to be adjusted to different vehicles and driving characteristics. (Fig. 23)

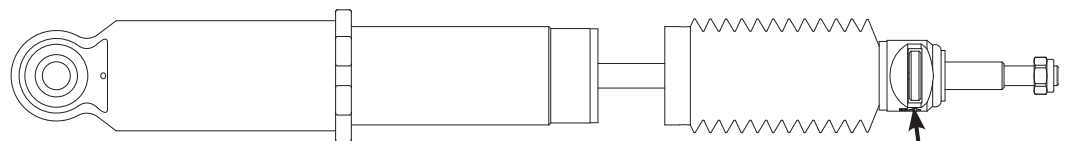


fig. 23

Damping Adjuster

ALIGNING THE VEHICLE

1. Using the control system, set the vehicle height to the new custom ride height.
2. If the custom ride height is lower than stock, we recommend loosening all pivot points (bolts, nuts) on any control arm, strut arm or radius rod that contains bushings. Once they have been loosened, re-torque to stock specifications.

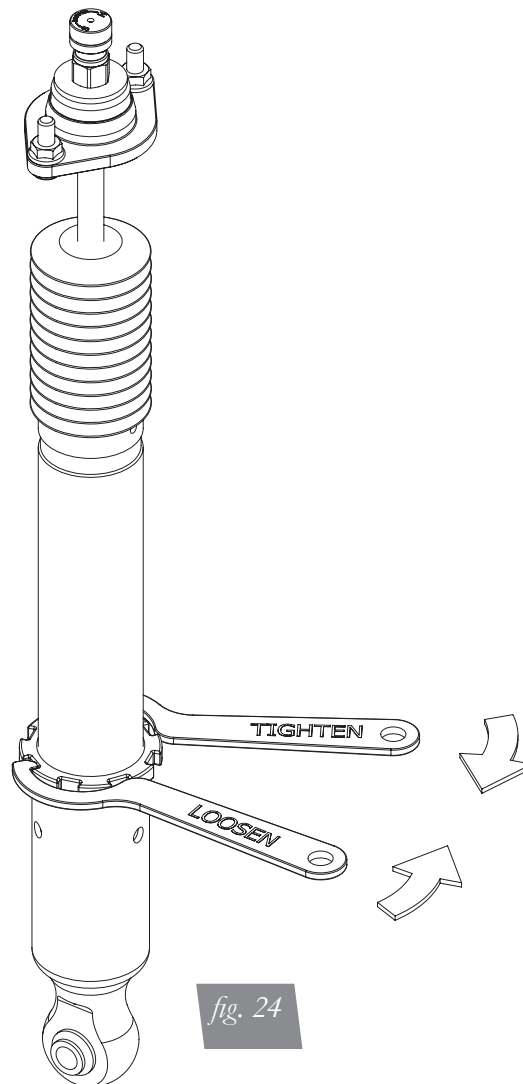
NOTE

It may be necessary to cycle the suspension to loosen the bushing up from its mount. This will help re-orient the bushing at its new position and increase life of the bushings based on the custom ride height.

ADJUSTING EXTENDED OR DROP HEIGHT USING LOWER MOUNT

Your shocks have been pre-set at the factory to provide maximum drop height while maintaining adequate tire clearance to the air spring. If you wish to gain more extended height (lift), which is the same as reducing drop height, or want to lower the chassis further and there is still adjustment available at the lower mount, please use the following procedure:

1. Support the vehicle with jack stands or a hoist at approved lifting points.
2. Remove the wheel.
3. Using the supplied spanner wrench, loosen the lower locking collar (fig. 24).



4. Deflate the air spring to 0 PSI on the corner you are adjusting.
5. Disconnect lower mount from suspension.
6. Spin the lower mount to the desired location.

NOTE

Not all models will have further drop height available.

7. Re-install lower mount to suspension and torque fasteners.
8. Tighten the lower locking collar to the lower mount using significant force.

CAUTION

WHEN ADJUSTING HEIGHT UPWARDS, MAKE SURE THAT THE DAMPER BODY ENGAGES ALL THE THREADS OF THE LOWER MOUNT (FIG. 25). WHEN ADJUSTING DOWNWARDS, MAKE SURE THERE IS ADEQUATE AIR SPRING CLEARANCE TO THE TIRE/WHEEL ASSEMBLY. CLEARANCE MUST BE CHECKED WITH SYSTEM FULLY DEFLATED AS WELL AS FULLY INFLATED TO ENSURE THAT NO RUBBING OCCURS. FAILURE TO MAINTAIN ADEQUATE CLEARANCE CAN RESULT IN AIR SPRING FAILURE AND WILL NOT BE COVERED UNDER WARRANTY.

CAUTION

DO NOT ADJUST HEIGHT BY SPINNING AIR SPRING ON DAMPER! DOING SO MAY CAUSE AN AIR LEAK AND COMPROMISE THE ASSEMBLY.

FOR STRUTS:

FOR SHOCKS:

