Air Lift™
PERFORMANCE

Kit 75558

Audi A4 (B8 platform)

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.

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

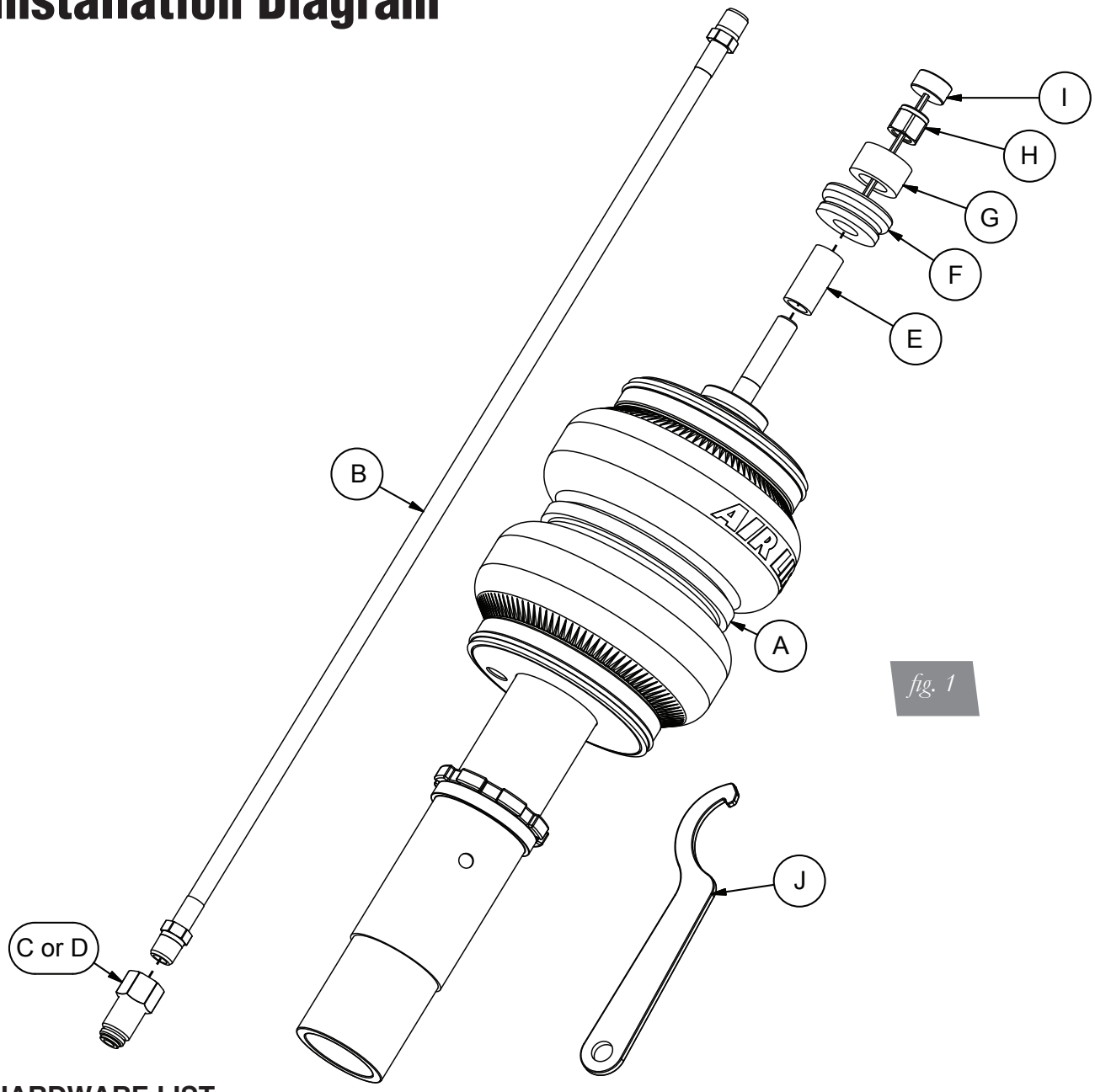


fig. 1

HARDWARE LIST

Item	Part #	Description	Qty
A	35232	Shock, Audi B8 Front	1
B	20997	Leader Hose, 1/4” ID	1
C	21810	Union, 1/4”FNPT X 1/4” PTC, DOT	1
D	21987	Union, 1/4”FNPT X 3/8” PTC, DOT	1
E	26989-004	Shock Spacer	1
F	26989-005	Shock Isolator	1
G	26989-006	Upper Bracket Spacer	1
H	26989-007	Nyloc Nut	1
I	26989-008	Shock Adjuster	1
J		Spanner Wrench	1

Installing the Air Suspension

PREPARING THE VEHICLE

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

fig. 2

STOCK SHOCK REMOVAL

NOTE *If equipped with a headlight alignment system, disconnect range control linkage first.*

1. Support the hub assembly to prevent over extension of suspension components.
2. Disconnect the stabilizer bar (fig. 3).

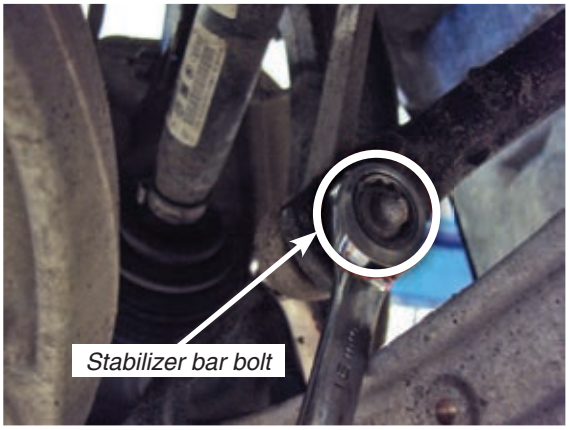


fig. 3

3. Remove the lower shock bolt and track control link bolt from the subframe (figs. 4-7).

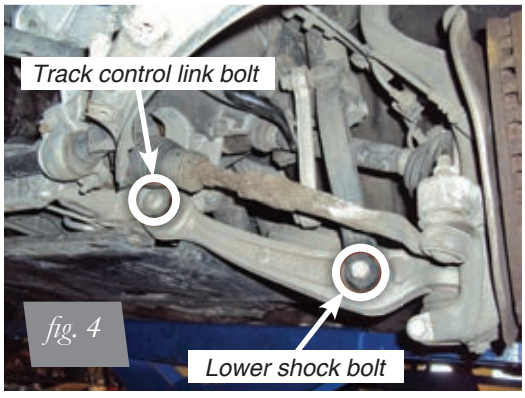


fig. 4

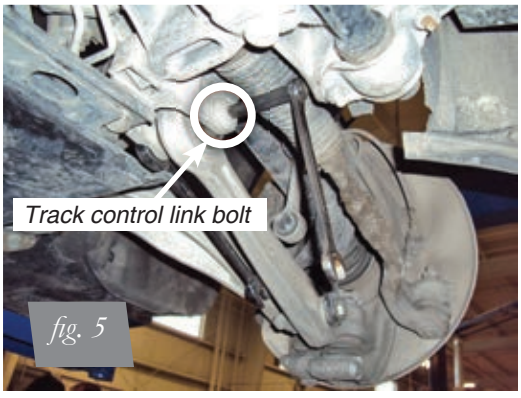
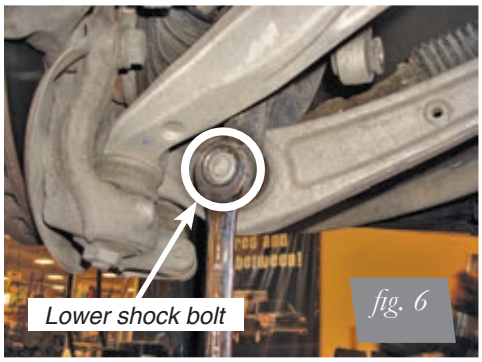
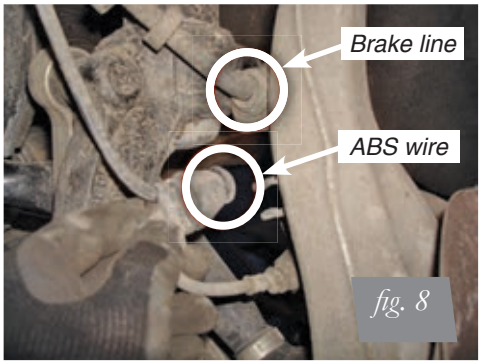
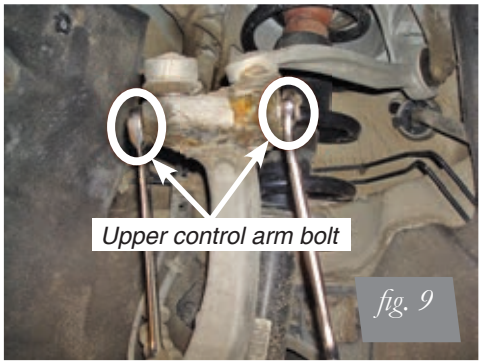


fig. 5



4. Disconnect the brake line and ABS wire from the steering knuckle (fig.8). Remove the bolt from the upper control arms to the adjoining steering knuckle (fig. 9). Carefully pull the upper control arms free from the steering knuckle (fig. 10).





5. Remove the plenum chamber cover from below the windshield (figs. 11-14).


fig. 13


fig. 14

6. Unbolt and remove the washer fluid filler neck with tube (fig. 15).

NOTE

The washer fluid will spill out during this procedure if the fluid level is full by approximately 75% or more.

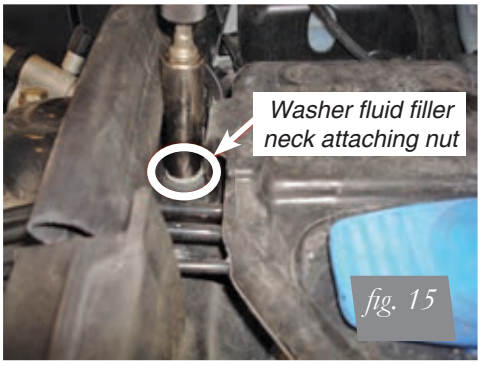


fig. 15

7. Unclip the coolant hose and remove it from the coolant reservoir (fig. 16). Remove all four shock upper bracket bolts (figs. 17-19) and remove the shock assembly from the vehicle (fig. 20).

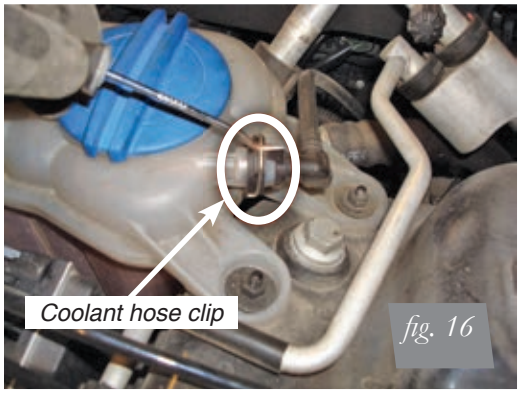


fig. 16

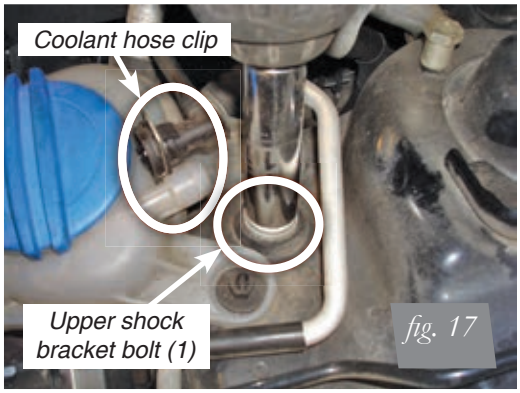


fig. 17

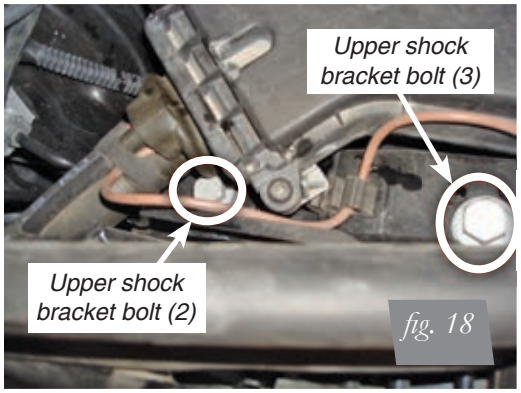


fig. 18

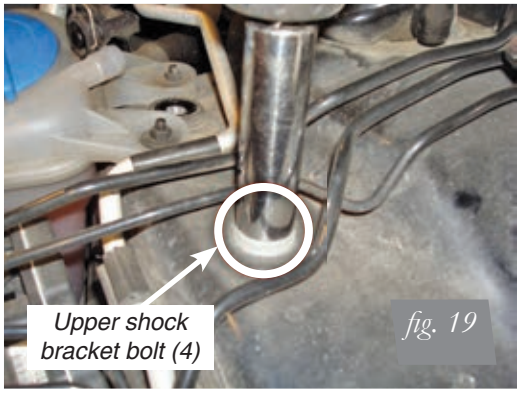
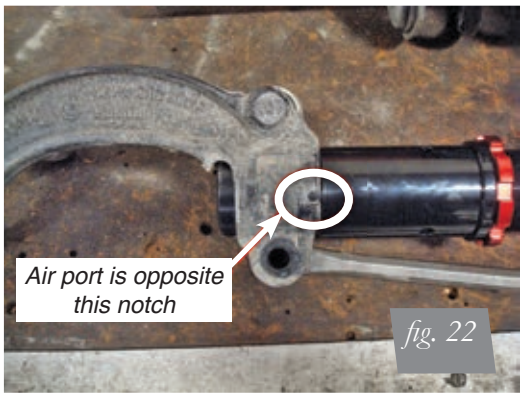


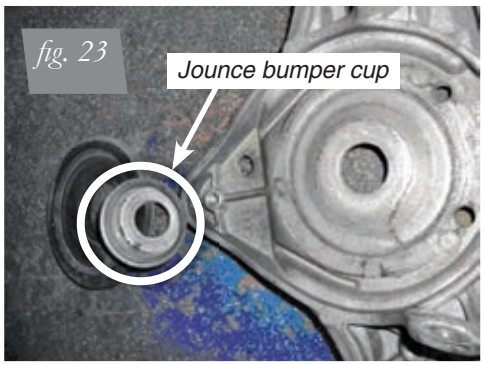
fig. 19

AIR SUSPENSION INSTALLATION

1. Remove the lower attaching bolt from the lower fork/shock mount. Use a spreader tool to separate the lower fork from the original/OE shock and insert the supplied shock with the air-port opposite the notch in the fork (figs. 21 and 22).



2. Remove the jounce bumper cup from the upper bracket (fig. 23). Either grind the innermost lip away from the bracket or use a punch and hammer to bend the lip away from the upper bracket. Do not increase the diameter of the center hole.



3. Insert the shock rod through the upper bracket. Apply the stock isolator over the rod and thread the lock nut on top.

NOTE

Tighten the nut onto the rod using hand tools only. An impact wrench may not fully seat the nut before the rod starts to spin. If the nut is not tight, you will hear a rattling noise.

⚠ CAUTION

DO NOT USE AN IMPACT WRENCH FOR THIS STEP AS DAMAGE WILL OCCUR TO THE SHOCK.

4. Tighten the nyloc nut on the shock rod to 27Nm (20lbs-ft).


fig. 24


fig. 25


fig. 26


fig. 27


fig. 28

5. Center punch and drill a 3/8” hole through the center of the suspension shock dome (fig. 29). This hole will be used as an access port for damping adjustments.


fig. 29

6. Begin by installing the leader line into the air spring (fig. 30). Wrap the threads of the leader hose with Teflon tape or thread sealant. Tighten the appropriate fitting to the air line 1 ¾ turns beyond hand tight. Tighten the leader line into the air spring 1 ¾ turns beyond hand tight.

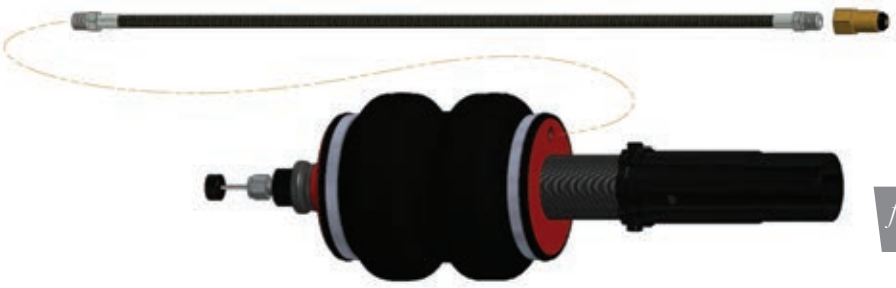


fig. 30

7. Install the upper bracket and tighten the four upper bracket bolts to 40Nm + 90 degree turn (29.5lb-ft + 90 degree turn). Torque in the following order-1-2-3-4 (fig. 31).

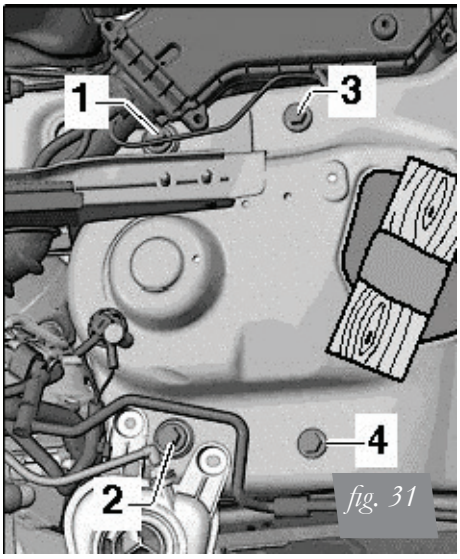


fig. 31

fig. 32

8. Reattach the upper control arm ball joints to the steering knuckle (fig. 33). Make sure the joints are fully seated as the bolt is slid through. Torque to 40Nm (29.5lb-ft).

fig. 33

9. Loosely install the lower fork/shock mount bolt into the lower control arm bushing. Also, loosely reinstall the track link to chassis bolt as well as the sway bar end link (figs. 34 and 35).

NOTE *Do not tighten at this time. These bolts should be tightened when the vehicle is at ride height.*


fig. 34


fig. 35

10. Make sure the lower fork/shock mount is fully seated against the shock adapter, install the nut and bolt and torque to 40Nm + 180 degree turn (29.5lb-ft + 180 degree turn) (fig. 36).


fig. 36

POST INSTALLATION

1. With the suspension fully compressed, take a measurement from the fender to some reference point, typically the center of the axle. Record this as Max Compression. Cycle the suspension to Max Extension and record the measurement from the same reference points. Take the difference between the two numbers and divide by two. Add that value to the Max Compression number and then set the suspension to that point. This position gives 50% stroke in either position and is a great starting point for ride height. At this position torque the lower clevis bolt, upper and lower control arm bolts to manufacturer's specifications (Table 1).

Torque Specifications		
Location	Nm	Lb-ft
Upper bracket to chassis	40 + 90° turn	29.5 + 90° turn
Upper control arms to bracket	50 + 90° turn	37 + 90° turn
Upper control arms to steering knuckle	40	29.5
Shock to lower fork/shock mount	40 + 180° turn	29.5 + 90° turn
Track control link to lower fork/shock mount	90	66
Track control link to subframe	70 + 180° turn	52 + 180° turn
Guide link to subframe	70 + 180° turn	52 + 180° turn
End link to sway bar	40 + 90° turn	25.9 + 90° turn
Wheels (except RS2 and RS4 type 8D)	120	89

Table 1

Formula for calculating ride height:

fig. 37

Step 1:	*Step 2:*	*Step 3:*	*Answer:*
$\frac{ME - MC}{X}$	$\frac{X}{2} = Y$	$\frac{Y + MC}{Z}$	**Z = DESIGN HEIGHT**

2. Reinstall wheels, retake the Max Compression and Extension measurements from the fender to lower wheel lip. Recalculate the ride height at 50% stroke and set the vehicle to that height. Enjoy the new look and handling!

DAMPING ADJUSTMENT

The shocks in this kit have 30 settings, or “clicks”, of adjustable compression and rebound damping characteristics. Damping is changed through the shock rod using the supplied adjuster or a 3mm allen wrench. Turn the adjuster clockwise and the damping settings are hardened. Turn the adjuster counterclockwise and the damping is softened. Each shock is preset to “-12 clicks”. This means that the shock is adjusted 12 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 the different vehicles and driving characteristics.

fig. 38

fig. 39

ADJUSTING EXTENDED OR DROP HEIGHT USING LOWER MOUNT

Your struts 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. 40)

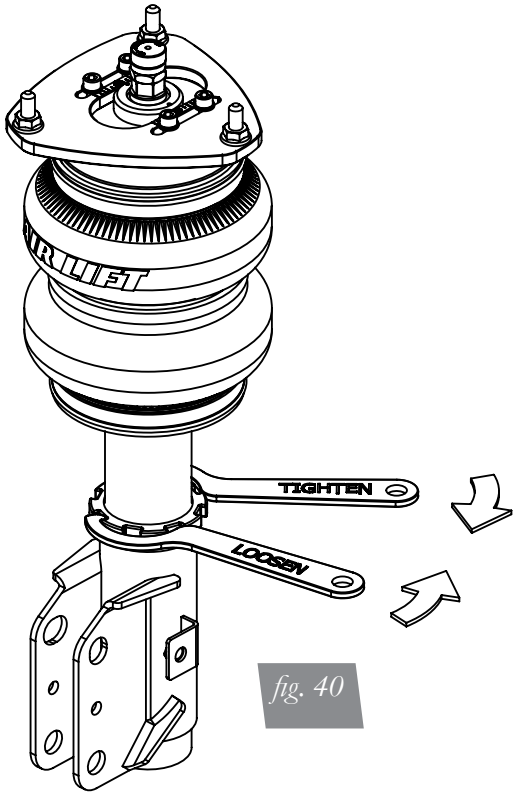


fig. 40

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 STRUT BODY ENGAGES ALL THE THREADS OF THE LOWER MOUNT. (FIG. 41) 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 STRUT! DOING SO MAY CAUSE AN AIR LEAK AND COMPROMISE THE ASSEMBLY.

FOR STRUTS: ***FOR SHOCKS:***

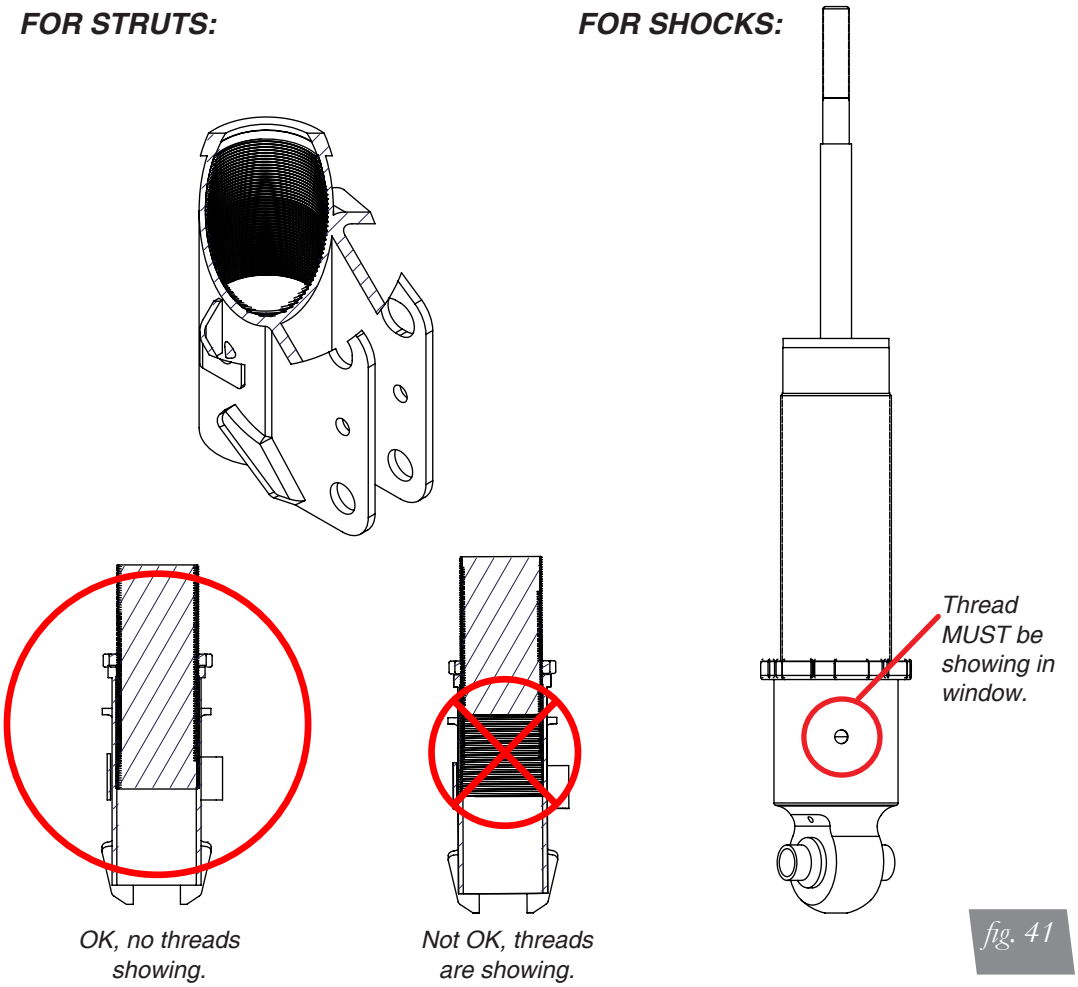


fig. 41