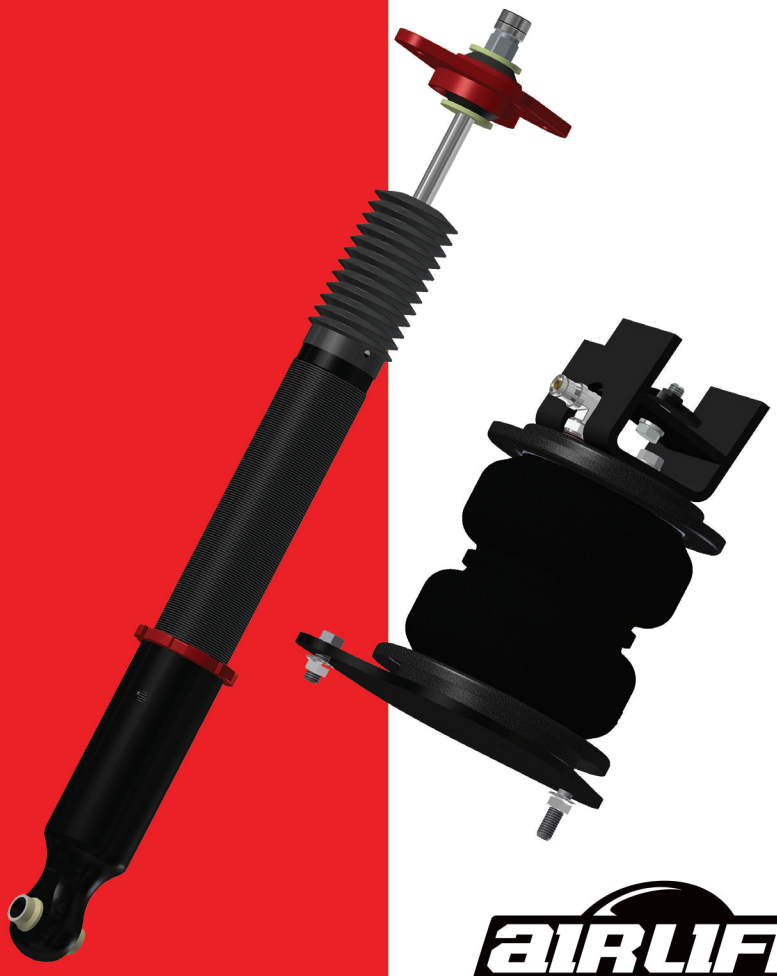
Air Lift™
PERFORMANCE

Kit 75627

Chrysler LX, LD, LC Platform
300C, Charger, Challenger
and Magnum

(includes SRT 8 models,
excludes AWD models)

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.

PERFORMANCE SUSPENSION PARTS

Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this Chrysler LX, LD, LC Platform 300C, Charger, Challenger, and Magnum 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, 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

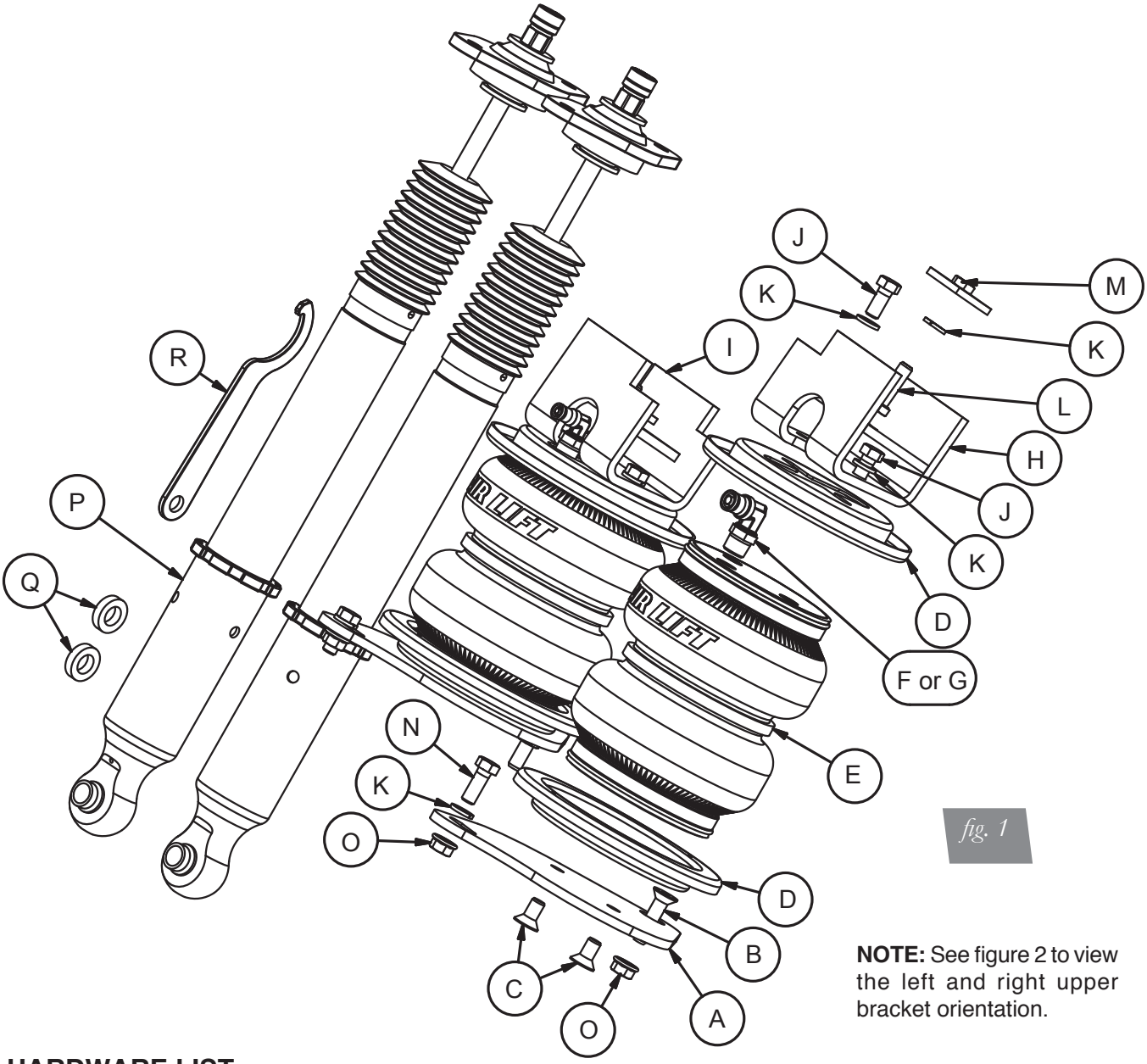


fig. 1

NOTE: See figure 2 to view the left and right upper bracket orientation.

HARDWARE LIST

Item	Part #	Description	Qty	Item	Part #	Description	Qty
A	03614	Rear Bottom Bracket	2	J	17203	3/8”-24 X 7/8” Hex Bolt	4
B	17206	3/8”-16 X 1.5” Flat Head Screw	2	K	18427	3/8” Lock Washer	8
C	17215	3/8”-24 X 3/4” Flat Head Screw	4	L	17188	3/8”-16 X 1.25” Hex Bolt	2
D	11801	Roll Plate	4	M	10814	Clamp Plate	2
E	58449	Air Spring	2	N	17107	3/8”-16 X 1” Hex Bolt	2
F	21846	3/8”MNPT X 1/4”PTC, 90˚	2	O	18422	3/8” Flange Nut	4
G	21867	3/8”MNPT X 3/8”PTC, 90˚	2	P	26711	Shock, LX/LD/LC Rear	2
H	07416	Upper Bracket, Right Rear	1	Q	18544	1/4” Spacer	2
I	07325	Upper Bracket, Left Rear	1	R		Spanner Wrench	1

Installing the Air Suspension

PREPARING THE VEHICLE

1. Elevate the vehicle and support the vehicle with a hoist or jack stands.
2. Remove the rear tire and support the hub assembly.

REMOVING THE REAR SHOCK AND SPRING

1. With the hub supported, unbolt the upper and lower shock mount bolts and remove the shock.
2. Remove the rear coil spring (see vehicle manufacturers detailed process for removal).

PREPARING THE AIR SUSPENSION

1. Apply thread sealant to the threads of the appropriate fitting and install into the air spring air-port 1 and 3/4 turns beyond hand tight.

NOTE

Determine where the air line will route. When routing 1/4" air line, the fitting can face inboard allowing the bracket to protect the connection.

2. Insert flat head bolt (B) through the rear bottom bracket (A) prior to installing the air spring to the bracket.
3. Apply a roll plate (D) to the bottom side of the air spring (E) with the lower air spring bolt holes accessible. Align these holes with the bottom bracket holes (make sure the flat head bolt [B] is still installed) and thread screws (C) through the bottom bracket and into the air spring. Torque to 27 Nm (20lb-ft).
4. Attach the corresponding upper bracket (left [I] and right [H] specific) and roll plate to the air spring using the supplied fine thread hex bolts (J) and washers (K). Please note the upper bracket orientation as shown in figure 2. Torque bolts to 27Nm (20lb-ft).

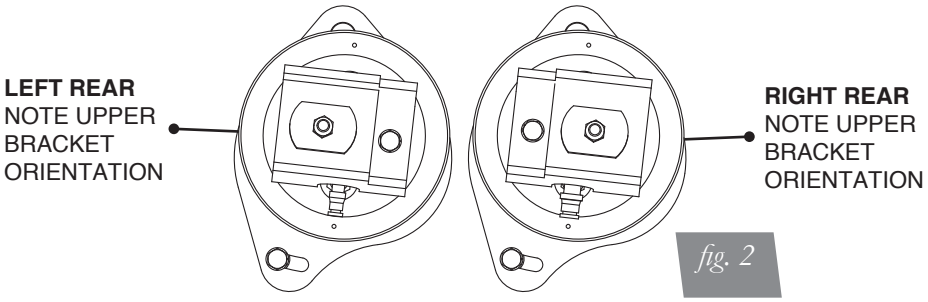


fig. 2

INSTALLING THE AIR SUSPENSION

1. Insert the clamp plate (M) into upper spring perch with the nut facing upward (fig. 3).

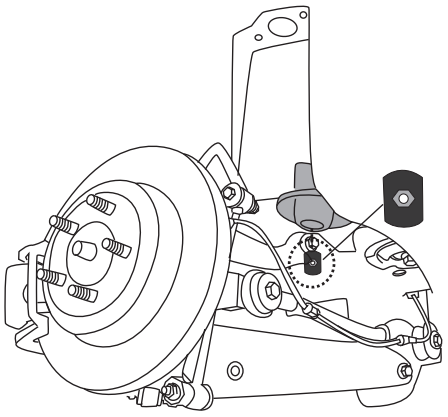


fig. 3

2. Collapse the assembly and slide into the stock spring location. The air fitting faces outboard of the vehicle.
3. Insert and snug nut and bolts into existing holes required for lower spring link (fig. 4).

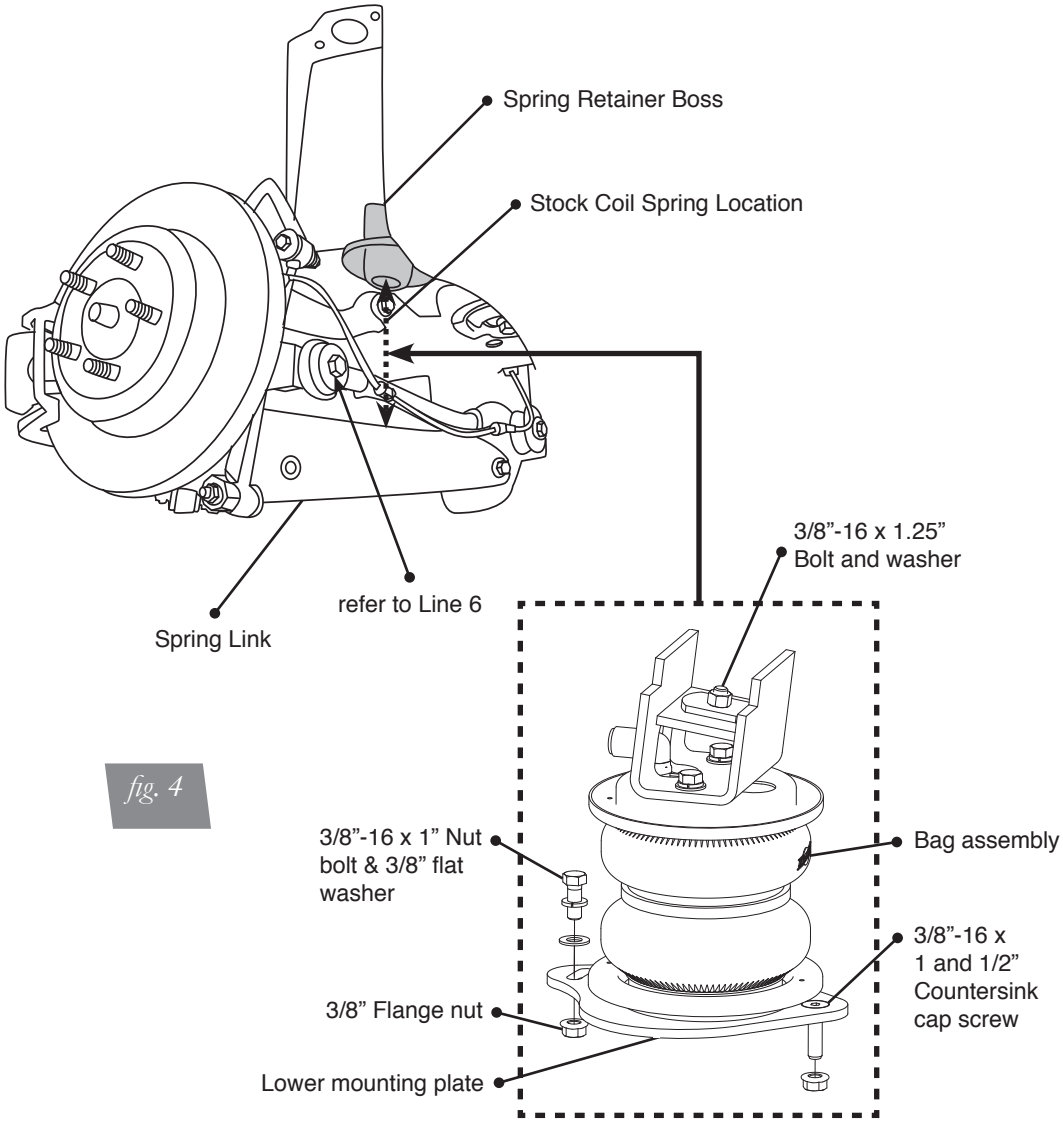


fig. 4

4. Raise the hub so that the upper bracket assembly locates around the upper spring perch.
5. Apply a washer (K) to bolt (L) and insert through the slot within the upper bracket and thread into the clamp plate within the spring perch. Torque only finger tight at this time.
6. Unthread the rear lateral link bolt from the knuckle. Place the spacer (Q) in-between the lateral link and knuckle and reinstall the lateral link bolt (fig. 5). Do not torque at this time.

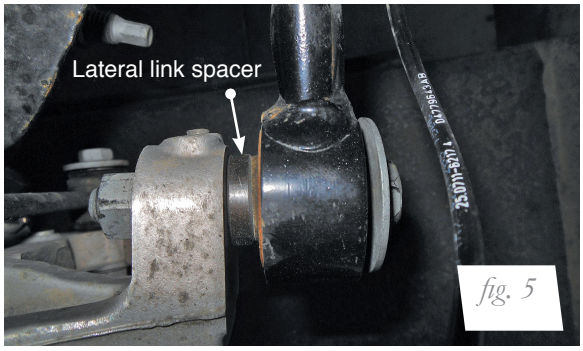


fig. 5

7. Rotate the bag assembly and lower mounting plate as necessary to achieve proper air spring alignment.

NOTE

There should be 1/2" clearance between the completed assembly and the drive shaft and rear lateral link. Cycle suspension through its travel and check clearances throughout. Adjust accordingly.

8. Deflate the assembly, making adjustments as needed (fig. 6). Torque the upper and lower air spring-to-chassis/control arm assembly bolts at this time to 27Nm (20lb-ft).

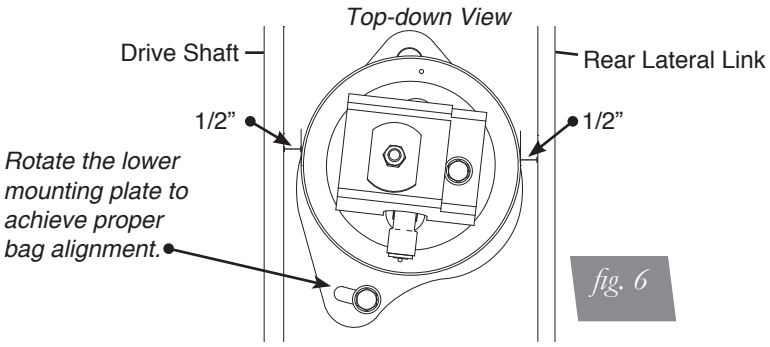


fig. 6

9. Place the new shock (P) into the shock tower and attach the upper and lower mounting bolts. Torque the upper bolts to 52Nm (38lb-ft).
10. 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 the line or rubbing on other components. Check clearances to all other components.
11. 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.
12. Cycle the suspension to Max Extension and record the measurement from the same reference points.
13. Take the difference between the two numbers and divide by two. Add that value to the original Max Compression number. Set the suspension to this point. This position will give 50% stroke in either position and is a starting point for ride height.
14. With the suspension at this position, torque the lower shock bolt and upper and lower control arm bolts to manufacturer's specifications (Table 1).

Formula for calculating ride height (fig. 7):

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

fig. 7

Torque Specifications		
Location	Nm	lb-ft
Camber Link Crossmember Bolt	85	63
Camber Link Knuckle Bolt	98	72
Compression Link Crossmember Bolt	85	63
Compression Link Knuckle Bolt	81	60
Shock Absorber Mounting Bolts (Upper)	52	38
Shock Absorber Mounting Bolt Nut (Lower)	72	53
Spring Link Crossmember Bolt	108	80
Spring Link Knuckle Nut	138	102
Stabilizer Link Nuts	61	45
Tension Link Crossmember Bolt	85	63
Tension Link Knuckle Bolt	98	72
Lateral Link Crossmember Nut	108	80
Lateral Link Knuckle Bolt	95	70

Table 1

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 “-15 clicks”. This means that the shock is adjusted 15 clicks away from full stiff. Counting down from full stiff is the preferred method of keeping track of, or setting, damping. This setting was developed on a 2012 Dodge Charger SE and may need to be adjusted to different vehicles and driving characteristics.

fig. 8

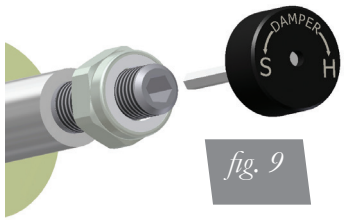


fig. 9

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 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. 10).
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.

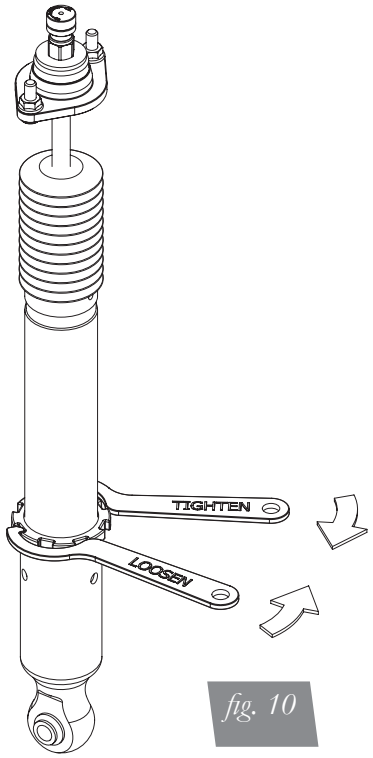


fig. 10

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 SHOCK BODY ENGAGES ALL THE THREADS OF THE LOWER MOUNT. (FIG. 11) 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 SHOCKS:

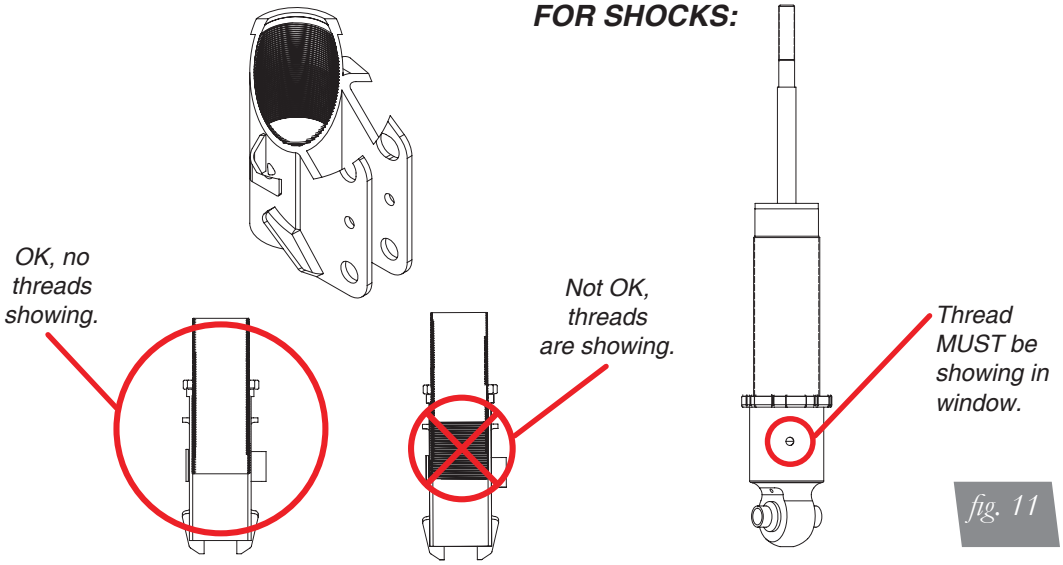


fig. 11