



Kit 75687

Scion tc
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.

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Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this Scion Air Lift 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.

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 our website at www.airliftcompany.com.

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.

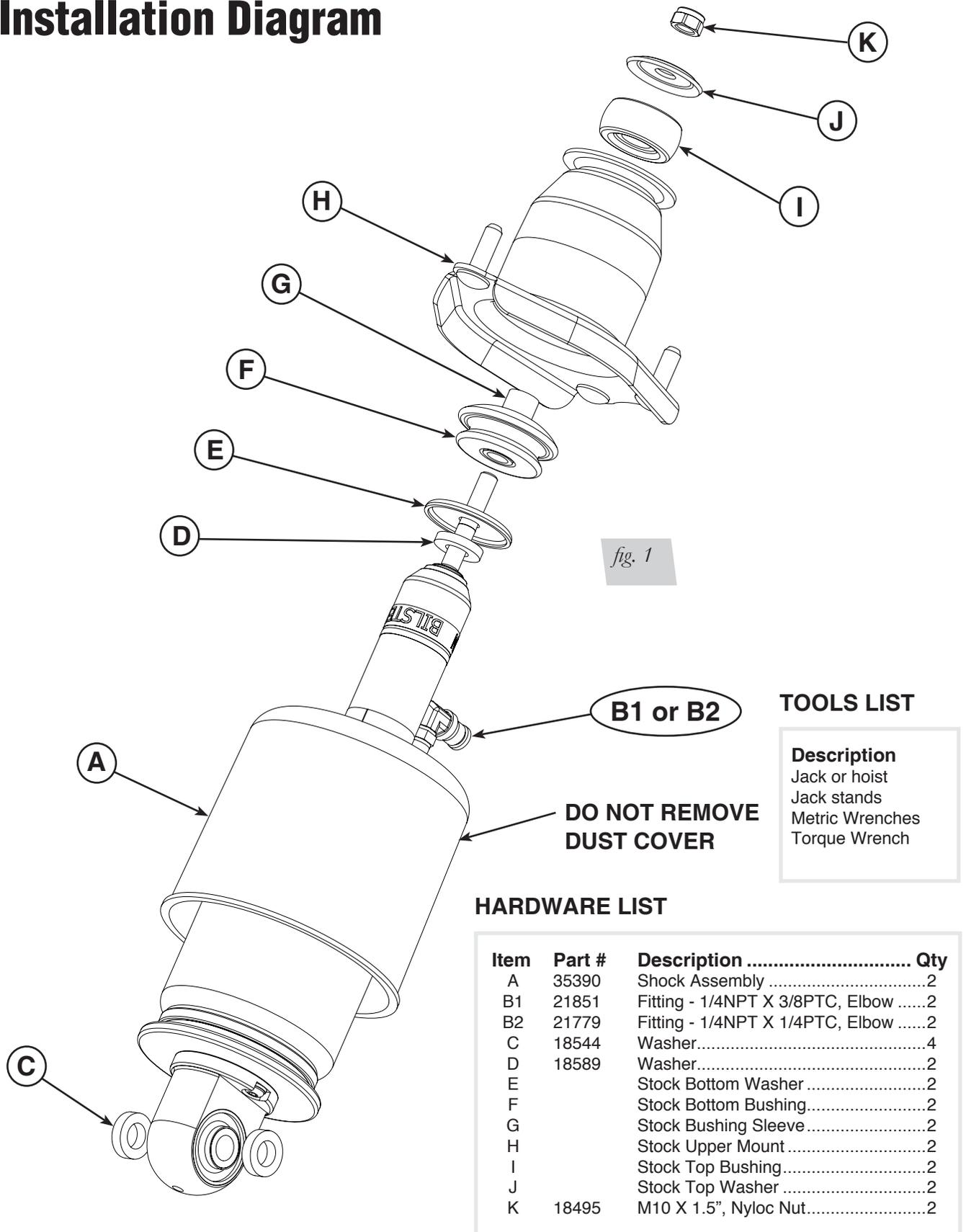
WARNING

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/SOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.

Installation Diagram



TOOLS LIST

Description
Jack or hoist
Jack stands
Metric Wrenches
Torque Wrench

HARDWARE LIST

Item	Part #	Description	Qty
A	35390	Shock Assembly	2
B1	21851	Fitting - 1/4NPT X 3/8PTC, Elbow	2
B2	21779	Fitting - 1/4NPT X 1/4PTC, Elbow	2
C	18544	Washer.....	4
D	18589	Washer.....	2
E		Stock Bottom Washer	2
F		Stock Bottom Bushing.....	2
G		Stock Bushing Sleeve	2
H		Stock Upper Mount	2
I		Stock Top Bushing.....	2
J		Stock Top Washer	2
K	18495	M10 X 1.5", Nyloc Nut.....	2



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

Installing the Air Lift Performance Kit

PREPARING THE VEHICLE

1. Remove the tonneau cover and floor matting from the trunk compartment. Fold the rear seats flat.
2. Unclip the plastic tabs on the tie hooks on the floor behind the rear seat. Remove the bolts underneath the clip and remove deck floor.
3. Remove the foam floor compartments by removing the plastic rivets.
4. Lift up and remove the rear trim piece where the hatch latch is located.
5. Unthread the hex bolt and Phillips screws from the trunk side panels. Pull the plastic storage hooks from the top of the panels. Carefully pull at the rear of the panel and unclip as you move forward. The trunk light needs to be unclipped from its connector during this process. The front of the panel hooks into the joining backseat panel. Rotate the end of the panel towards the center of the vehicle. The front of the panel should now be unhooked. Remove the panels from the trunk.
6. Lift the rear of the vehicle with either a hoist or lift-jack in the approved lift points found in your vehicle owners manual. Once the wheels are off the ground, support the vehicle with the jack stands.

REMOVING THE SHOCK

1. Disconnect the skid control sensor from the connector. Unthread the bolt from the sensor wire and remove bracket (fig. 2).

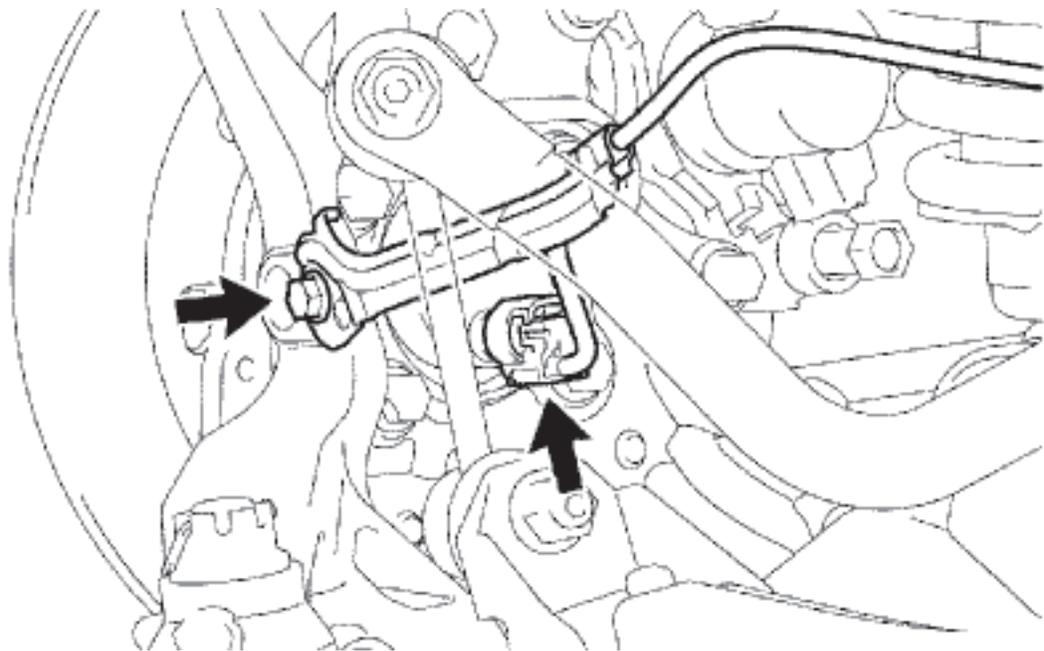


fig. 2

2. Separate the rear stabilizer end links from the stabilizer bar. Support the suspension arm.

3. Unbolt the lower shock mount and remove bolt (fig. 3)

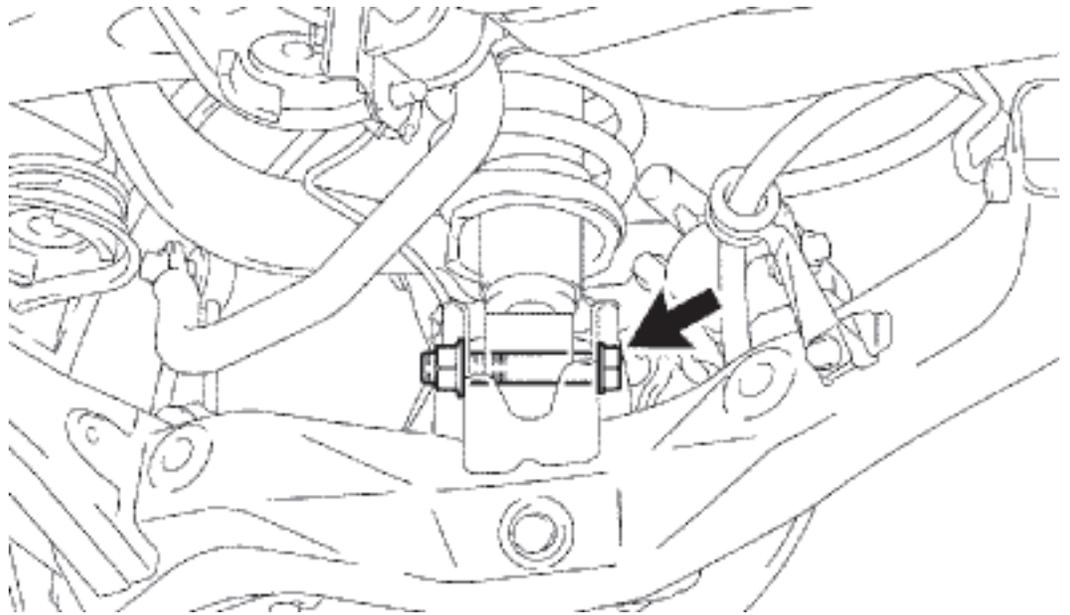


fig. 3

4. Inside the trunk, unthread the three upper mount nuts (fig. 4).

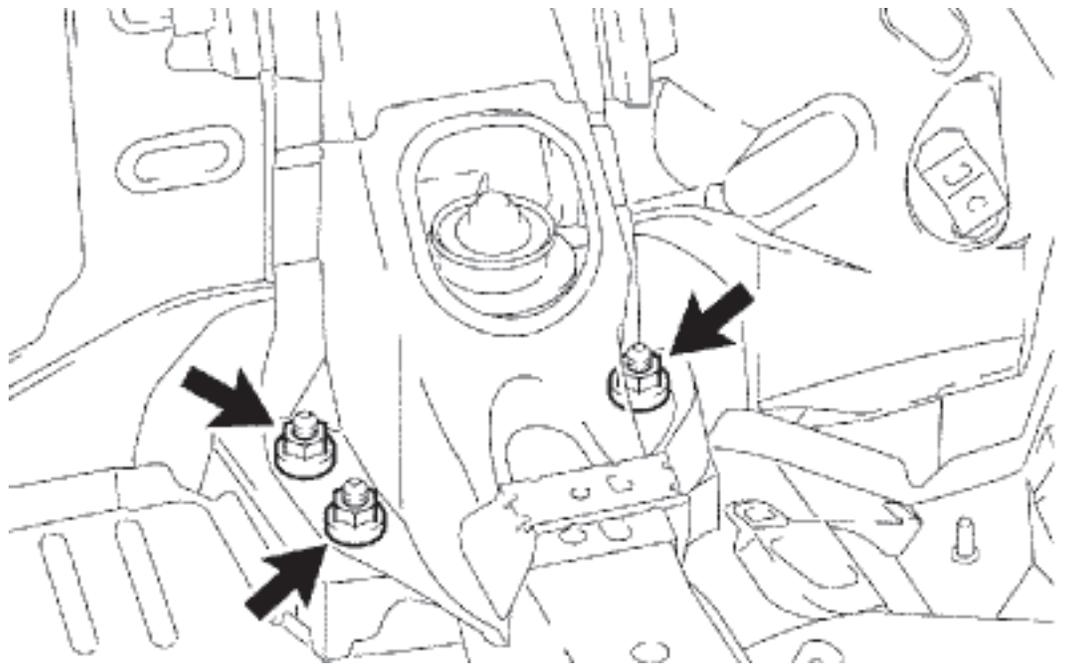


fig. 4

5. Clear the shock eye from its mount toward the stabilizer bar end link and remove the assembly.

STOCK UPPER MOUNT REMOVAL AND INSTALL

1. Secure the shock assembly into a coil spring compressor and compress the spring.
2. Insert a hex wrench into the end of the shock rod, unthread nut from rod.
3. Slowly remove pressure from the assembly and remove upper bracket, bushings, bushing sleeve and washers. Remove the washer from the jounce bumper. Note the orientation of the washers and bushings for reinstallation.
4. Reinstall the upper mount with the previously removed upper nuts. Torque to 80 Nm (59 ft./lbs.).

AIR ASSEMBLY INSTALL

1. Apply Teflon tape or thread sealant to the fitting threads and install into the top of the air spring. Thread fitting in hand tight and torque 1-3/4 turns beyond hand tight. Do not remove the dust cover.

CAUTION

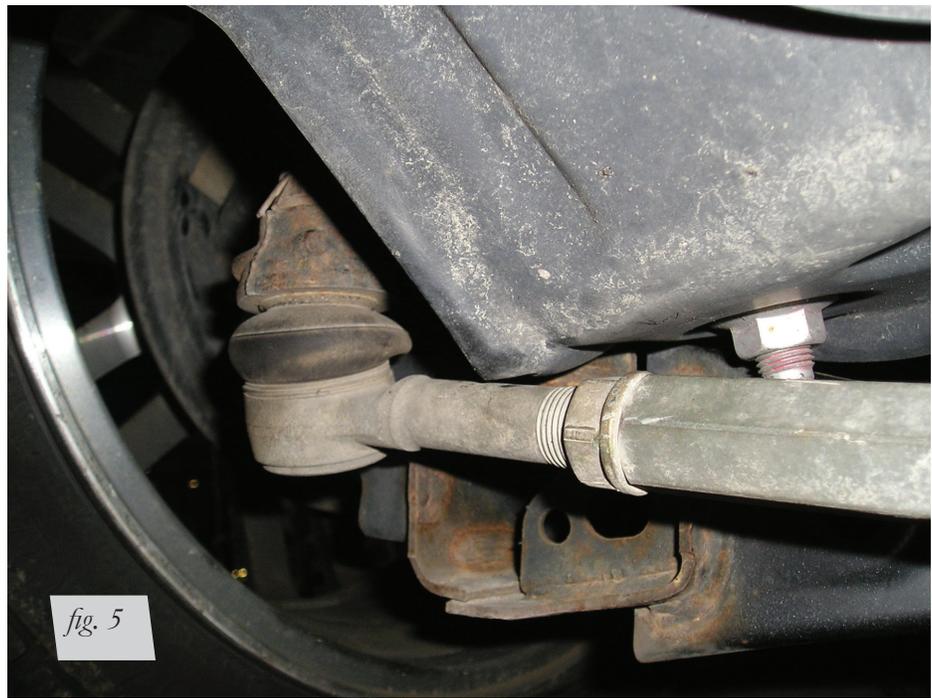
FOR THIS APPLICATION THE SLEEVE TYPE AIR SPRING IS MOUNTED UPSIDE DOWN REQUIRING A DUST COVER TO KEEP DEBRIS FROM COLLECTING IN THIS ROLLING SLEEVE. REMOVAL OF THIS COVER COULD SIGNIFICANTLY REDUCE THE LIFE OF THE AIR SPRING AND WILL VOID THE WARRANTY. SO PLEASE DO THE WISEST THING AND LEAVE THE DUST COVER ON!

2. Assemble the supplied washer (D), the stock jounce bumper washer (E) followed by the bushing (F) and sleeve (G) (fig. 1).

CAUTION

FAILURE TO INCLUDE THIS PART COULD CAUSE AIR FITTING FAILURE AND PREMATURE WEAR OF THE UPPER BUSHING.

3. Insert shock assembly into upper mount and locate the lower shock eye into the lower suspension arm bracket.
4. With the end of the shock rod showing through the upper mount (H), install the bushing (I) and retaining washer (J) in its previous orientation. Thread the supplied nut (K) to the shock rod end, securing the upper mount assembly. Torque to 41 Nm (30 ft./lbs.).
5. Insert spacers (C) on each side shock eye bushing and reinstall the shock bolt and nut. Do not torque at this point. Please read "Aligning the Vehicle".
6. Reinstall the skid control sensor bracket and connection. Torque the bracket to 5 Nm (44 inch/lbs.)
7. Reattach the sway bar link. Torque to 44 Nm (32 ft./lbs.).
8. Install air line into the fitting and inflate to 60psi. Check for leaks.
9. Lower vehicle down from lift-jack and set to the new ride height.
10. Some vehicles may experience toe link interference to the rear suspension member sub-assembly (chassis reinforcement bracket). If a snapping noise is heard while traversing large bumps, clearancing of the rear suspension member sub-assembly may be required. (fig. 5)



ALIGNING THE VEHICLE

1. Using the control system, set the vehicle height to the new custom ride height.
2. If the new 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 (fig. 6).

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.

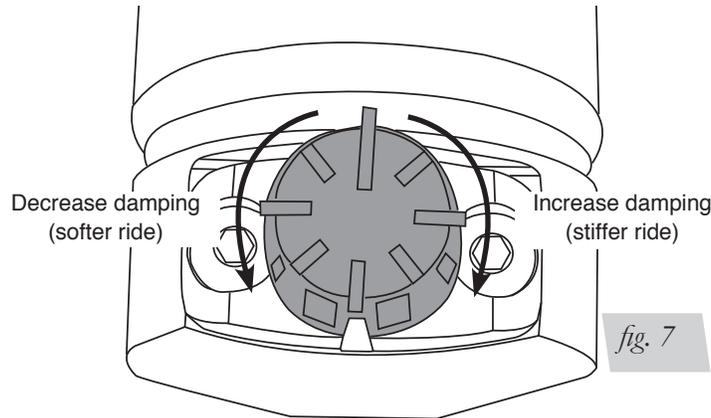
Description	Nm	ft./lbs.	inch/lbs.
Upper Mount Nuts (3 per side)	80	59	
Stabilizer Link	44	32	
Skid Control Bracket	5		44
Shock Eye Bolt	140	103	
Suspension Arm Bushing (3 bolts per side)	65	48	

fig. 6

Before Operating

1. Some struts for this vehicle come with a nine-position damping dial for added adjustability (fig. 7). If not, proceed to 2.

Before driving your vehicle, set the new struts to their highest setting by turning the black dial on the shaft of the strut as far as it will go to the right (position 9).



2. Next, completely deflate and reinflate the air bags 2-3 times. This procedure will purge any trapped air in the dampers and allow for maximum performance. For ride performance and the most versatility, Air Lift recommends setting the strut dial (if equipped) to position 6 or higher.

CAUTION

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

3. Inflate and deflate the system (do not exceed 125 PSI) 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.
4. Inflate the air springs to 75 PSI - 90 PSI and check all connections for leaks.
5. An Air Lift air management system such as 3H/3P is highly recommended for this product.
6. Please continue by reading the Product Use, Maintenance and Servicing section.

INSTALLATION CHECKLIST

- Clearance test — Inflate the air springs to 75-90 PSI and make sure there is at least ½” clearance from anything that might rub against each sleeve. Be sure to check the tire, brake drum, frame, shock absorbers and brake cables.

- Leak test before road test — Inflate the air springs to 75PSI - 90PSI and check all connections for leaks. All leaks must be eliminated before the vehicle is road tested.

- Heat test — Be sure there is sufficient clearance from heat sources, at least 6” for 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 test — Recheck all bolts for proper torque.

- Road test — The vehicle should be road tested after the preceding tests. Inflate the springs to recommended driving pressures. Drive the vehicle 10 miles 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 of the paperwork that came with the kit.

Technician's Signature _____

Date _____

POST-INSTALLATION CHECKLIST

- Overnight leak down test — Recheck air pressure after the vehicle has been used for 24 hours. If the pressure has dropped more than 5 PSI, then there is a leak that must be fixed. Either fix the leak yourself or return to the installer for service.

- Air pressure requirements — I understand the air pressure requirements of my air spring system. Regardless of load, the air pressure should always be adjusted to maintain adequate ride height at all times while driving.

- Thirty day or 500 mile test — I understand that I must recheck the air spring system after 30 days or 500 miles, whichever comes first. If any part shows signs of rubbing or abrasion, the source should be identified and moved, if possible. If it is not possible to relocate the cause of the abrasion, the air spring may need to be remounted. If professionally installed, the installer should be consulted. Check all fasteners for tightness.

Product Use, Maintenance and Servicing

Suggested Driving Air Pressure	Maximum Air Pressure
75 PSI	125 PSI
FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) WILL RESULT IN BOTTOMING OUT, OVER-EXTENSION OR RUBBING AGAINST ANOTHER COMPONENT AND WILL VOID THE WARRANTY.	

MAINTENANCE GUIDELINES

NOTE

By following these steps, vehicle owners will obtain the longest life and best results from their air spring.

1. Check the air pressure before driving.
2. Never inflate beyond 125 PSI.
3. If you develop an air leak in the system, use a soapy water solution to check all air line connections, before deflating and removing the spring.
4. When increasing load, always adjust the air pressure to maintain normal ride height. Increase or decrease pressure from the system as necessary to attain normal ride height for optimal ride and handling. Remember that loads carried behind the axle (including tongue loads) require more leveling force (pressure) than those carried directly over the axle.

CAUTION

FOR YOUR SAFETY AND TO PREVENT DAMAGE TO YOUR VEHICLE, DO NOT EXCEED MAXIMUM GROSS VEHICLE WEIGHT RATING (GVWR), AS INDICATED BY THE VEHICLE MANUFACTURER. ALTHOUGH YOUR AIR SPRINGS ARE RATED AT A MAXIMUM INFLATION PRESSURE OF 125 PSI, THE AIR PRESSURE ACTUALLY NEEDED IS DEPENDENT ON YOUR LOAD.

5. Always add air to the springs in small quantities, checking the pressure frequently. Sleeves require less air volume than a tire and inflate quickly.
6. Should it become necessary to raise the vehicle by the frame, make sure the control system is turned off before lifting.

Troubleshooting Guide

1. Leak test the air line connections, the threaded connection into the air spring, and all fittings in the control system.
2. Inspect the air lines to be sure none are pinched. Tie straps may be too tight. Loosen or replace the strap and replace leaking components.
3. Inspect the air line for holes and cracks. Replace as needed.
4. Look for a kink or fold in the air line. Reroute as needed.

If the preceding steps do not solve the problem, it is possibly caused by a failed air spring — either a factory defect or an operating problem. Please call Air Lift at (800) 248-0892 for assistance.

Frequently Asked Questions

Q. Will installing air springs increase the weight ratings of a vehicle?

No. Adding air springs will not change the weight ratings (GAWR, GCWR and/or GVWR) of a vehicle. Exceeding the GVWR is dangerous and voids the Air Lift warranty.

Q. How long should air springs last?

If the air springs are properly installed and maintained they can last indefinitely.

Q. Will raising the vehicle on a hoist for service work damage the air springs?

No. The vehicle can be lifted on a hoist for short-term service work such as tire rotation or oil changes. However, if the vehicle will be on the hoist for a prolonged period of time, support the axle with jack stands in order to take the tension off of the air springs.

Tuning the Air Pressure

Pressure determination comes down to three things — level vehicle, ride comfort, and stability.

1. Level vehicle

If the vehicle's headlights are shining into the trees or the vehicle is leaning to one side, then it is not level. Raise the air pressure to correct either of these problems and level the vehicle.

2. Ride comfort

If the vehicle has a rough or harsh ride it may be due to either too much pressure or not enough. Try different pressures to determine the best ride comfort. See Air Lift suggested driving air pressure.

3. Stability

Stability translates into safety and should be the priority, meaning the driver may need to sacrifice a perfectly level and comfortable ride. Stability issues include roll control, bounce, dive during braking and sponginess. Tuning out these problems usually requires additional air pressure, strut damping, or both.

Checking for leaks

1. Inflate the air spring to 80 PSI.
2. Spray all connections and the inflation valves with a solution of 1/5 liquid dish soap and 4/5 water. Spot leaks easily by looking for bubbles in the soapy water.
3. After the test, deflate the springs to the minimum pressure required to restore the system to normal ride height.
4. Check the air pressure again after 24 hours. A 2-4 PSI loss after initial installation is normal. Retest for leaks if the loss is more than 5 lbs.

Fixing Leaks

1. If there is a problem with a swivel fitting:
 - a. Check the air line connection by deflating the spring and removing the line by pulling the collar against the fitting and pulling firmly on the air line. Trim 1" off the end of the air line. Be sure the cut is clean and square (see fig. 8). Reinsert the air line into the push-to-connect fitting.

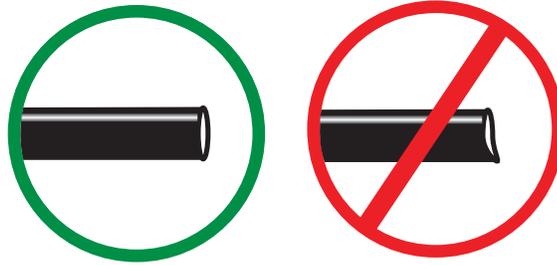


fig. 8

- b. Check the threaded connection by tightening the swivel fitting another $\frac{1}{2}$ turn. If it still leaks, deflate the air spring, remove the fitting, and re-coat the threads with thread sealant. Reinstall by hand tightening as much as possible and then use a wrench for an additional two turns.
2. If the preceding steps have not resolved the problem, call Air Lift customer service at (800) 248-0892.

Replacement Part Information

If replacement parts are needed, contact the local dealer or call Air Lift customer service at (800) 248-0892. Most parts are immediately available and can be shipped the same day.

Contact Air Lift Company customer service at (800) 248-0892 first if:

- Parts are missing from the kit.
- Need technical assistance on installation or operation.
- Broken or defective parts in the kit.
- Wrong parts in the kit.
- Have a warranty claim or question.

Contact the retailer where the kit was purchased:

- If it is necessary to return or exchange the kit for any reason.
- If there is a problem with shipping if shipped from the retailer.
- If there is a problem with the price.

Contact Information

If you have any questions, comments or need technical assistance contact our customer service department at (800) 248-0892, Monday through Friday. For calls from outside the USA or Canada, dial (517) 322-2144.

Air Lift's mailing address is P.O. Box 80167, Lansing, MI 48908-0167. The shipping address for returns is 2727 Snow Road, Lansing, MI 48917.

Contact Air Lift Company anytime by email at sales@airliftcompany.com or visit www.airliftcompany.com.

Limited Warranty and Return Policy

WHAT THIS WARRANTY COVERS

Air Lift Company, for all Air Lift Performance products, except its Air Lift Performance 3H™ and 3P™ systems, warrants to the original purchaser for a period of one year from the date of original purchase that the Air Lift Performance damper kits will be free from defects in workmanship and materials for the normal expected life of the part when used on cars and trucks as specified by Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth below.

Air Lift Company provides a Limited Lifetime Warranty to the original purchaser of its Air Lift Performance 3H™ and 3P™ Control/Air Management Systems, that the Air Lift Performance products will be free from defects in workmanship and materials for the normal expected life of the part when used on cars and trucks as specified by Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth below.

WHAT THIS WARRANTY DOES NOT COVER

The warranty does not apply to products that have been improperly applied, improperly installed, or which have not been maintained in accordance with installation instructions furnished with all products. This warranty does not apply and is void if damage or failure is caused by: accident, abuse, misuse (including but not limited to racing or off-road activities or commercial use), abnormal use, faulty installation, liquid contact, fire, earthquake or other external cause; operating the product outside Air Lift Company's instructions, specifications or guidelines; or service, alteration, maintenance or repairs performed by anyone other than Air Lift Company to the product from its purchased condition. This warranty also does not apply to: Universal Air (Fabricator Kits), consumable parts, such as batteries; cosmetic damage, including but not limited to scratches or dents; defects caused by normal wear and tear or otherwise due to the normal aging of the product, or if any serial or identification number has been removed or defaced from the product. Air Lift Company reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

LIMITATION OF LIABILITY

To the extent permitted by law, this warranty and the remedies set forth herein are exclusive and in lieu of all other warranties, remedies and conditions, whether oral, written, statutory, express or implied. AIR LIFT COMPANY DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS TO THE EXTENT PERMITTED BY LAW. To the extent such warranties cannot be disclaimed, such implied warranties shall apply only for the warranty period specified above. Please note that some states do not allow limitation on how long an implied warranty (or condition) lasts. So the above limitation may not apply to you.

Except as provided in this warranty and to the extent permitted by law, Air Lift Company shall not be liable for any direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or arising in connection with the sale, use or repair of air lift products, or under any other legal theory, including but not limited to loss of use, loss of revenue, loss of actual or anticipated profits, loss of the use of money, loss of business, loss of opportunity, loss of goodwill, and loss of reputation. Air Lift Company's maximum liability shall not in any case exceed the purchase price paid by you for the Air Lift product. Please note that some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

HOW TO GET SERVICE

If a defect in workmanship or materials causes your Air Lift Performance product to become inoperable within the warranty period, before returning any defective product, call Air Lift Company at (800) 248-0892 in the U.S. and Canada (elsewhere, (517) 322-2144) to obtain a Returned Materials Authorization (RMA) number. The consumer shall be responsible for removing (labor charges) the defective product from the vehicle and returning it, shipping costs prepaid, to Air Lift Company for verification. Returns to Air Lift Company must be postage prepaid and sent to: Air Lift Company • 2727 Snow Road • Lansing, MI • 48917. You must prove to the satisfaction of Air Lift Company the date of original purchase of your Air Lift Performance product. You must also enclose the RMA number and a return address. A minimum \$10 shipping and handling charge will apply to all warranty claims. You must also pack the product to minimize the risk of it being damaged in transit. If we receive a product in damaged condition as the result of shipping, we will notify you and you must seek a claim with the shipper.

WHAT AIR LIFT COMPANY WILL DO

If you submit a valid claim to Air Lift Company during the warranty period, Air Lift Company will, at its option, repair your Air Lift Performance product or furnish you with a new or rebuilt product. Air Lift Company will not reimburse you for repairs or replacement parts provided by other parties. Your repaired or replacement Air Lift Performance product will be returned to you (subject to payment of the required warranty claim shipping and handling charge) and it will be covered under the warranty for the balance of the warranty period, if any. When a product or part is replaced, any replacement item becomes your property and the replaced item becomes property of Air Lift Company. You are responsible for installation/reinstallation (labor charges) of the product.

HOW THE LAW RELATES TO THIS WARRANTY

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. By this warranty, Air Lift Company does not limit or exclude your rights except as allowed by law. To fully understand your rights, you should consult the laws of your state.

Need Help?

Contact our customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, dial (517) 322-2144.



Thank you for purchasing Air Lift Performance products!

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