

Kit 75583

MKII-III 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.

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Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this MKII-III 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.



INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



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.



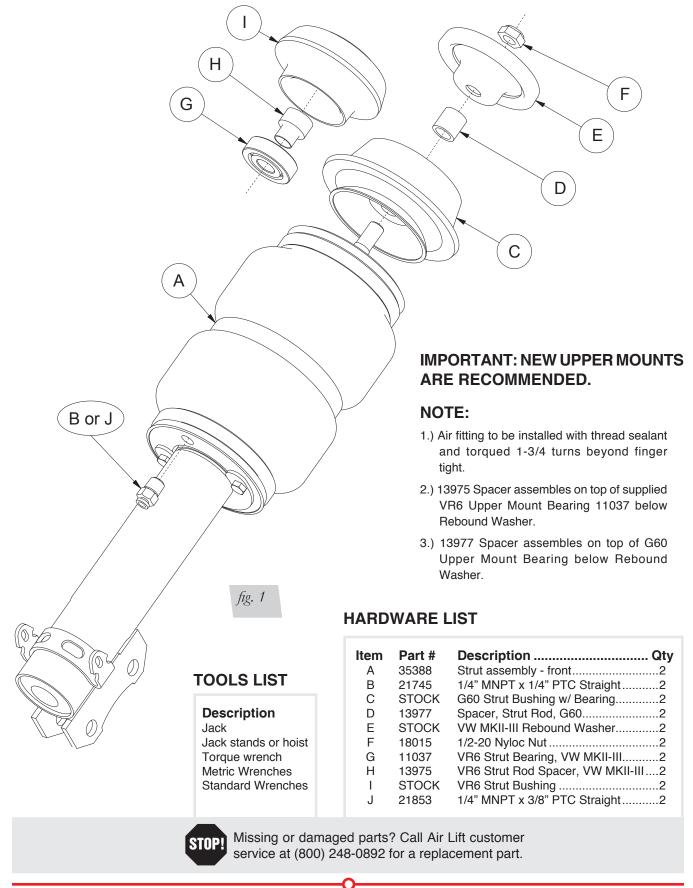
DO NOT INFLATE AIR SPRINGS WHILE OFF OF THE VEHICLE. DAMAGE TO ASSEMBLY MAY RESULT AND VOID WARRANTY.



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



Installation Diagram



Installing the Air Suspension

PREPARING THE VEHICLE

- 1. Elevate the vehicle and support the body with a hoist or jack stands.
- 2. Remove the front wheels.

REMOVING THE STRUT

1. Unbolt the brake line/ABS bracket from the strut, save for later reinstallation (Fig. 2).



fig. 2

2. Support the hub assembly. Unbolt the lower spindle mounting bolts and save for later reinstallation (Fig. 3).



fig. 3



3. Remove the upper strut mount nut within the rebound washer. Remove the strut assembly from the vehicle. Skip step 4 if using new upper mounts (Fig. 4).



fig. 4

4. Using a coil spring compressor, securely mount the assembly in the compressor and carefully apply tension to the coil spring. Once the coil spring tension is secure, unthread the upper mount nut and remove the nut and mount bushing from the assembly. Slowly release tension from the coil spring. Save the upper mount bushing for later reinstallation.

INSTALLING THE NEW STRUT ASSEMBLY

- 1. Prior to installing the strut, apply Teflon tape or thread sealant to the threads of the air fitting and thread into the lower end cap of the air spring. Torque 1-3/4 turns beyond hand tight.
- 2. **IMPORTANT**: 4 cylinder chassis vehicles will install the stock mount onto the strut rod, followed by the long 13977 spacer over the stock mount and underneath the stock rebound washer when installed (see installation diagram Fig. 1). VR6 chassis vehicles will use the supplied bearing and spacer to replace the stock bearing that is removable from the mount. VR6 mounts will need rubber removed from the top side of the mount to clear the rebound washer. Skim a layer of rubber off from this area of the mount until metal is shown approx. 1/8 inch down. See figures below (Fig. 5a and Fig. 5b).



fig. 5a

4 Cylinder Shown

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fig. 5b

VR6 Shown



fig. 6

Rubber removed from VR6 mount

- 3. Lift hub and strut assembly into the strut pocket. Align the stock upper mount with the pocket and install the stock rebound washer and supplied nyloc nut. Torque to 54Nm (44 lb.-ft.)
- 4. Reattach the ABS bracket and brake line to the tab.
- 5. Lift the hub assembly and align spindle knuckle with the spindle tabs on the strut and reinstall the previously removed bolts. 19mm head bolts are torque to 80Nm (59 lb.-ft.) while 18mm head bolts are torque to 95Nm (70 lb.-ft.).
- 6. Compress suspension fully and check for clearance issues around the axle, tie rods, control arm, brake lines and the air spring. Modify if necessary.
- 7. Install wheel and torque to 110Nm (81lb.-ft.).



ALIGNING THE VEHICLE

- 1. Using the control system set the vehicle height to the new desired ride height and align there.
- 2. If the 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.

Torque Specifications		
Location	Nm	ft. lbs.
Strut to wheel bearing housing (18mm bolt head)	95	70
Strut to wheel bearing housing (19mm bolt head)	80	59
Upper nut to strut rod	54	44
Wheels	110	81

Table 1

NOTE

It may be necessary to cycle the suspension to loosen the bushing up from its mount. This will help unload the bushing to make it last longer at its new position based on the custom ride height.

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Before Operating



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

- 1. 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.
- 2. Inflate the air springs to 75-90 PSI and check all connections for leaks.
- 3. An Air Lift Air Management System such as 3H/3P is highly recommended for this product.
- 4. Please familiarize yourself further with this product by reading the Product Use, Maintenance and Servicing section.

INSTALLATION CHECKLIST

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.
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ate

POST-INSTALLATION CHECKLIST

be fixed. Either fix the leak yourself or return to the installer for service.
Air pressure requirements — 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 — Recheck the air spring system after 30 days or 500 miles whichever comes first. If any part shows signs of rubbing or abrasion, it must be remedied immediately! Please consult installation manual and re-check your installation. Rubbing of any kind will cause failure and will not be covered under warranty. If professionally installed, the installer should be consulted. Check all fasteners for tightness.

 □ 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



Product Use, Maintenance and Servicing

Suggested Driving Air Pressure	Maximum Air Pressure
45 PSI	125 PSI
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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.



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.
- 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 safely. If equipped with a digital control system, it is recommended that the system be put in "manual mode" before lifting so the system does not try and adjust while on the hoist.

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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

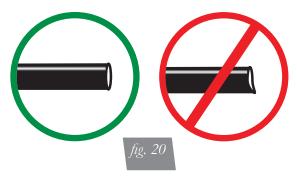
Stability translates into safety and should be the priority, meaning the driver may need to sacrifice a perfectly level and comfortable ride. Stability issues include roll control, bounce, dive during braking and sponginess. Tuning out these problems usually requires additional air pressure, strut damping,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

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. 20). Reinsert the air line into the push-to-connect fitting.
 - b. Check the threaded connection by tightening the swivel fitting another ½ 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.





Limited Warranty and Return Policy

WHAT THIS WARRANTY COVERS

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.

For all other Air Lift Performance products, Air Lift Company warrants to the original purchaser for a period of one year from the date of original purchase, that the Air Lift Performance products will be free from defects in workmanship and materials 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.

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Replacement Information

If you need replacement parts, 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 Performance 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 by calling (800) 248-0892. For calls from outside the USA or Canada, our local number is (517) 322-2144. You may also contact customer service anytime by e-mail at techsupport@airliftperformance.com.

For inquiries by mail, our address is PO Box 80167, Lansing, MI 48908-0167. Our shipping address for returns is 2727 Snow Road, Lansing, MI 48917.

You may also contact our sales team anytime by e-mail at sales@airliftperformance.com or on the web at www.airliftperformance.com.

Need Help?

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





Kit 75683

MKII-III Platform

Rear Application



INSTALLATION GUIDE

SEE PAGE 8 FOR IMPORTANT INFORMATION ABOUT SLEEVE-STYLE DAMPERS BEFORE INSTALLATION.

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

Air Lift Performance thanks you for purchasing the most complete, fully engineered highperformance air suspension made for the Volkswagen MK II-III. 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 the project. Special tools needed to complete the installation are noted on the Installation Diagram page.

Air Lift Performance 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 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.



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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



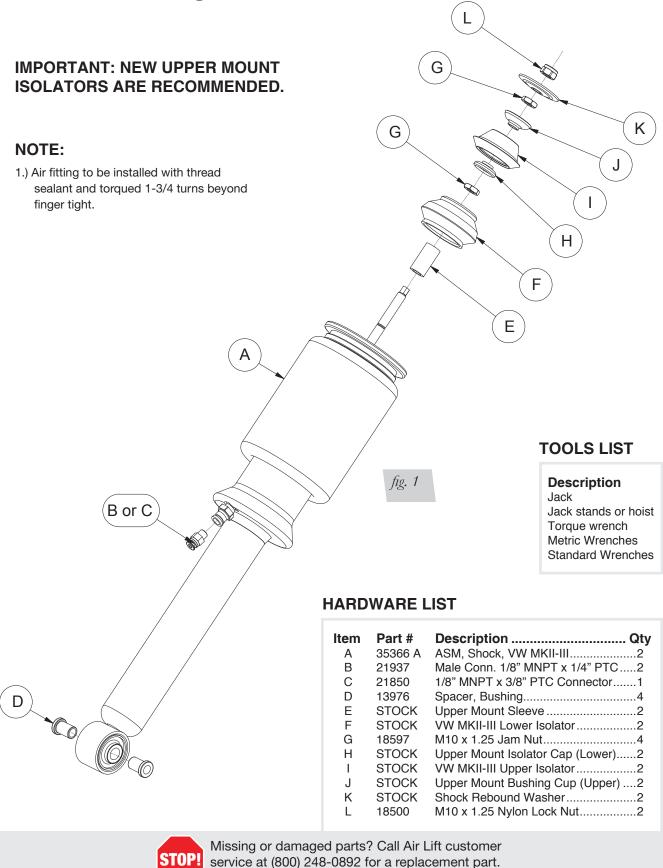
DO NOT INFLATE AIR SPRINGS WHILE OFF OF THE VEHICLE. DAMAGE TO ASSEMBLY MAY RESULT AND VOID WARRANTY.



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



Installation Diagram





Installing the Air Suspension

NOTE

See important safety notices on page 2.



THIS KIT COMES WITH SLEEVE-STYLE DAMPERS. UNDERSTANDING HOW AND WHEN TO INFLATE THE AIR BAGS IS CRITICAL. SEE PAGE 8 FOR MORE INFORMATION.

PREPARING THE VEHICLE

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

STOCK SUSPENSION REMOVAL

1. Unbolt the lower shock mounting bolt and nut, save for later reinstallation (Fig. 2).



fig. 2

2. Remove the upper shock mount nut. Remove the shock assembly from the vehicle. Take note of how the isolators are mounted within the vehicle. Remove both from the stock unit (Fig. 3).



fig. 3



INSTALLING THE KIT COMPONENTS

- 1. Prior to installing the shock, apply thread sealant to the threads of the air fitting and thread into the lower end cap of the air spring. Torque 1 3/4 turns beyond hand tight.
- 2. Insert the bushing spacers into each side of the lower shock bushing.
- 3. Apply the rod sleeve and lower isolator (D) to the rod extension on the new shock assembly. Apply the washer/cap followed by 1 supplied jam nut. Insert the assembly through the body and install the upper isolator followed by the upper washer/cap and jam nut. Finish by installing the rebound washer and nylon lock nut (Fig. 1).
- 4. Align shock so that the air fitting points away from the tire. Lift the hub assembly and align the attachment bracket with the shock bushing and reinstall the previously removed bolt and nut.
- 5. Fully compress the suspension using a jack and check for clearances. Make sure to check the shock-to-mounting bracket interface and brake line to body clearance. Modify as necessary (Fig. 4).



fig. 4

6. Install wheel and torque to 110Nm (81lb.-ft.).

ROUTING THE AIR LINES

- 1. 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 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.



Before Operating

SETTING THE RIDE HEIGHT

- 1. With the suspension fully compressed, take a measurement from the fender to a chosen reference point typically the center of the axle. Record this measurement as max compression (MC).
- 2. Cycle the suspension to max extension (ME) and record the measurement from the fender to the same reference point.
- 3. Add ME and MC, then divide the total 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. 5).

Formula for Calculating Ride Height

(ME+MC)÷2=MID STROKE



4. 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	lbft.
Upper Mount Nut	15	11
Lower Bushing Bolt/Nut	70	52
Wheels	110	81

Table 1

Suggested Driving Air Pressure	Maximum Air Pressure
45 PSI	125 PSI

FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND **WILL VOID THE WARRANTY**.

Table 2



CHECK FOR BINDING

- 1. 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.
- 2. Inflate the air springs to 75-90 PSI and check all connections for leaks.



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

ALIGNING THE VEHICLE

- 1. Set the vehicle to the height at which it will most often be driven.
- 2. If the ride height is lower than stock, Air Lift recommends 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 (Table 1).

NOTE

It may be necessary to cycle the suspension to loosen the bushing from its mount. This will help re-orient the bushing at its new position based on the chosen ride height.

3. Get a shop alignment of the vehicle at the new chosen ride height.



AFTER INITIAL INSTALLATION OF STRUTS/SHOCKS



DO NOT CYCLE THE SUSPENSION WITH THE AIR LINE CONNECTED TO THE LEADER HOSE WITHOUT FIRST ADDING AIR SPRING PRESSURE. DOING SO MAY CAUSE THE AIR SPRING TO IMPROPERLY INFLATE (FIG. 6). IT IS SAFE TO CYCLE THE SUSPENSION TO CHECK FOR CLEARANCES ETC. WITH THE LEADER HOSE OPEN TO ATMOSPHERE (DISCONNECTED FROM AIR LINE).

BEFORE SETTING VEHICLE ON THE GROUND FOR THE FIRST TIME, IT IS VERY IMPORTANT TO INFLATE THE AIR SPRINGS TO AT LEAST 50 PSI. THIS WILL PREVENT ANY POSSIBILITY OF THE AIR SPRING KICKING OUT AND CAUSING A LEAK (FIG. 7).





Caused by cycling with air line attached without pressure. Remove air-line from spring to release vacuum and re-attach. Inflate to more than 50 PSI before lowering car to ground. **Do NOT drive!**



fig. 7

Shows what spring looks like after lowering car to ground with less than 50 PSI and raising it with air pressure.

Do NOT drive!



fig. 8

Shows what spring looks like when installed correctly.



INSTALLATION CHECKLIST

	Clearance — Inflate the air springs to 75-90 PSI and make sure there is at least 1/2" 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 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" 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 — Recheck all bolts for proper torque.
	Road — 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 paperwork that came with the kit.
F	POST-INSTALLATION CHECKLIST
	Overnight leak down test — Recheck air pressure 24 hours after installation and driving of the vehicle. If the pressure has dropped more than 5 PSI, there is a leak that must be fixed.
	Air pressure requirements — It is important to understand the air pressure requirements of the 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 — 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.



Use, Maintenance and Servicing

- An Air Lift air management system is strongly recommended for this product, but it
 is possible to operate without one. The air lines can be routed to Schrader valves for
 use with a separate air compressor. Air lines and Schrader valves are not included
 with Air Lift Performance kits and would need to be purchased separately. To learn
 more about Air Lift management systems visit air-lift.co/productlines.
- 2. Check the air pressure before driving.



BEFORE SERVICING THE VEHICLE, MAKE SURE TO TURN OFF "RISE ON START" AND "PRESET MAINTAIN." THIS WILL ELIMINATE ANY UNINTENDED SUSPENSION CYCLING IF YOU NEED TO TURN THE KEY ON IN THE VEHICLE FOR ANY REASON.

TUNING THE AIR PRESSURE.

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

1. Level vehicle

Depending on load, it is possible one side will need more pressure than the other to level the vehicle.

2. Ride comfort

If the vehicle has a harsh ride, it may be due to either too much pressure or not enough causing frequent bottoming. Also, riding the vehicle at the top, or close to the top of the available stroke will cause an uncomfortable ride due to a lack of rebound travel. This situation should be avoided for driving any significant distance. Try different pressures to determine the best ride comfort. See Air Lift suggested driving air pressure for this vehicle (Table 2).

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, damping or both.



Troubleshooting Guide

PROBLEM	CAUSE	SOLUTION
Air spring won't maintain pressure.	Leak at fitting, air line not cut properly or damage to air line during installation.	Find location of leak by spraying listed components with soapy water solution and look for bubbles. Tighten air fitting, re-cut air line or replace damaged components.
	Leak at lower O-ring on damper if air spring is over the damper.	Spray bottom of air spring with soapy water solution and look for bubbles. Contact Air Lift customer service at (800) 248-0892 to determine if component should be replaced.
Knocking noise when hitting bumps.	Loose suspension component such as locking collar on damper.	Tighten lower locking collar with significant force, check and tighten suspension components to factory specs at desired ride height.
	Driving vehicle too close to maximum extension.	Check current ride height and compare to maximum height. If there is less than 1" (25mm) difference, reduce air pressure to lower ride height.
		Lengthen strut or shock to increase available up travel.
Suspension bottoms out.	Air pressure is too low, causing air springs to bottom out.	Raise air pressure.
The ride is too bouncy.	Air pressure is too high, causing air springs to be too stiff.	Lower air pressure and adjust damper length if necessary to achieve proper ride height.
	Damping is inadequate.	Increase damping with adjusters.
The ride is too soft or floaty.	Damping is inadequate.	
The ride is too harsh.	Excessive damping.	Reduce damping with adjusters.



TIPS FOR INSTALLING AIR LINES

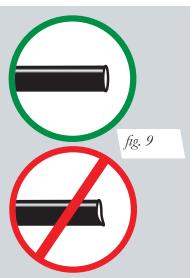
When cutting air lines, use a sharp knife or a hose cutter and make clean, square cuts (Fig. 9). Do not use scissors or wire cutters because these tools will deform the air line, causing it to leak around fittings. Do not cut the lines at an angle.

Do not bend the 1/4" hose at a radius of less than 1" and do not put side load pressure on fitting. The hose should be straight beyond the fitting for 1" before bending.

Inspect hose for scratches that run lengthwise on hose prior to installation. Contact Air Lift customer service at **(800) 248-0892** if the air line is damaged.



To watch a video demonstrating proper air line cutting, go to air-lift.co/cuttingairline



CHECKING FOR LEAKS

- 1. Inflate the air spring to at least 80 PSI.
- 2. Spray all connections with a solution of 1/5 liquid dish soap and 4/5 water. Spot leaks easily by looking for bubbles in the soapy water.
- 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 PSI.

FIXING LEAKS

- 1. Air line to PTC fitting: Try pushing the air line firmly into the fitting to ensure it is properly seated. If leak persists, deflate the spring and remove the air line by pushing the collar toward the fitting body and pulling firmly on the air line. Trim 1" off the end of the air line making sure the cut is clean and square. Reinsert air line firmly into fitting and pull back on the air line to make sure it is seated.
- 2. **Threaded connection**: If possible, tighten the fitting another half turn. If the leak persists, deflate spring, remove fitting and re-coat threads with thread sealant. Reinstall to hand tight and then use wrench to finish tightening an additional 1 3/4 turns.
- 3. Air spring O-ring seal: If a leak is found at the upper or lower air spring seal on a strut or shock, contact Air Lift customer service at (800) 248-0892.



Notes

Notes



Notes



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.



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

Mailing address P.O. Box 80167

Lansing, MI 48908-0167

Shipping address

for returns

2727 Snow Road Lansing, MI 48917

Phone Toll free: (800) 248-0892

International: (517) 322-2144

Email service@airliftcompany.com

Web address www.airliftcompany.com

Need Help?

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







Connect by searching for Air Lift Performance #LifeonAir



Thank you for purchasing Air Lift Performance products!