

LoadLifter 5000™



Installation Guide



Ford F-250 & F-350 4WD Single Rear Wheel



Watch the video

Info on Table of Contents page

Kit 57409

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.

Protect your Air Lift Purchase by Completing your Warranty Registration



Thank you for purchasing an Air Lift load support product!

Take a photo of your sales receipt and then scan the QR code to complete your online warranty registration.

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Video-enhanced installation guides

Visit airliftcompany.com/workshop/category/install-videos to access our installation video archive*.

System Overview

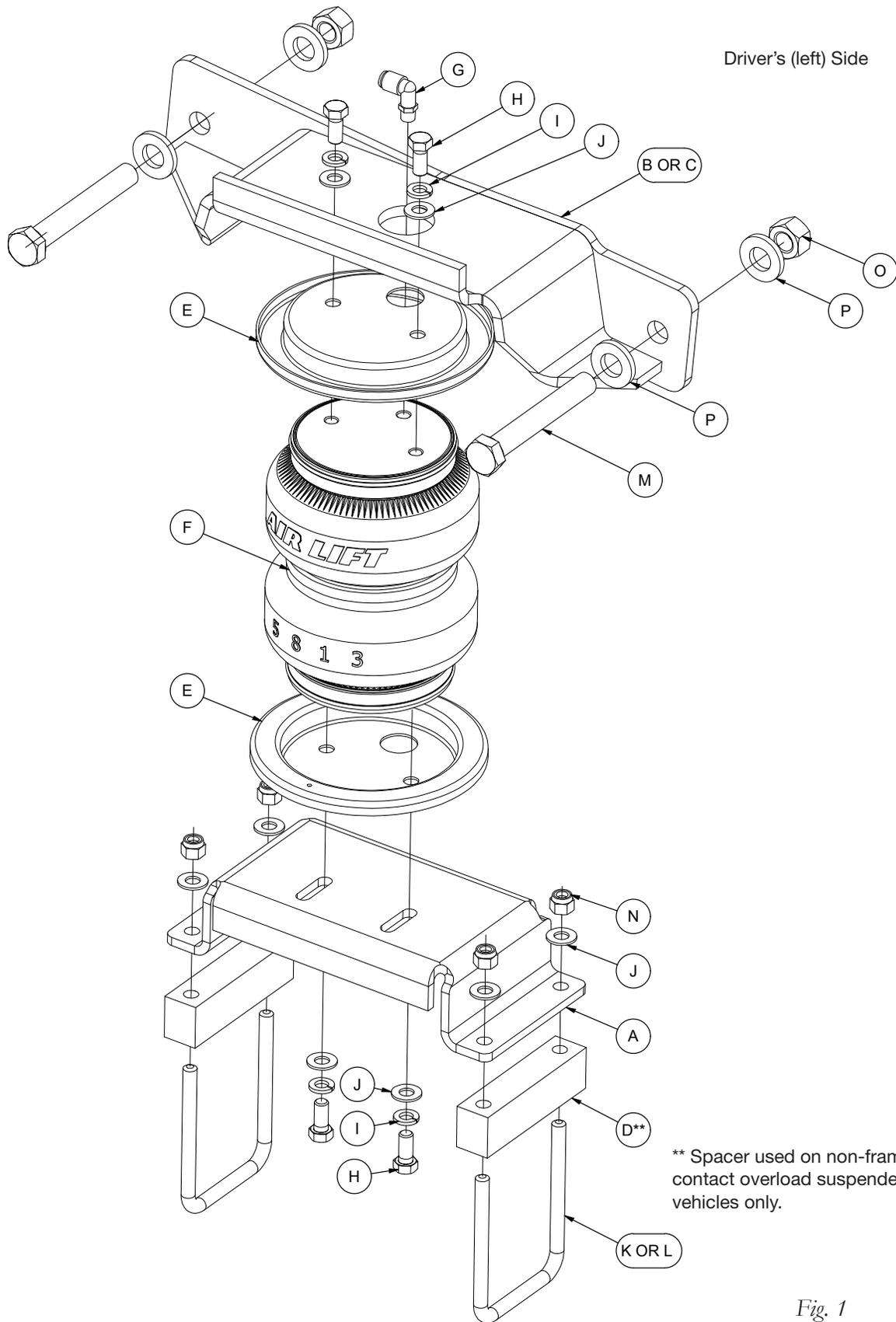


Fig. 1

Hardware and Tools

Hardware List

Item	Part#	Description	Qty
A	03965	Lower bracket	2
B	07729	Upper LH bracket	1
C	07840	Upper RH bracket	1
D	11182	Spacer bar	4
E	11951	Roll plate	4
F	58437	Air spring	2
G	21837	1/4" 90-degree Swivel air fitting	2
H	17203	3/8"-24 X 7/8" Hex cap screw	8
I	18427	3/8" Lock washer	8
J	18444	3/8" Flat washer	16
K	10561	3/8"-16 X 5 1/2" U-bolt	4
L	10594	3/8"-16 X 2" U-bolt	4
M	17348	5/8"-11 X 4 1/2" Hex cap screw	4
N	18435	3/8"-16 Nylon lock nut	8
O	18548	5/8"-11 Nylon lock nut	4
P	18449	5/8" Flat washer	8
AA*	20086	Air line assembly	1
BB*	10466	Zip ties	6
CC*	21230	Valve cap	2
DD*	18411	Star washer	2
EE*	21234	Rubber washer	2
FF*	18501	M8 Flat washer	2
GG*	21233	5/16" Hex nut	4

* These parts are not shown in the System Overview (Fig.1).

TOOLS NEEDED

Description	Qty
Hack saw or handheld grinder with cut off wheel	1
Tin snips or box cutter knife	1
Standard and metric open-end or boxed end wrenches	Set
Standard and metric regular and deep-well sockets	Set
15/16" ½ drive socket	1
15/16" open-end or boxed end wrench	1
3/8" and ½" drive ratchet	1
Torque wrench, small and large capacity	1
Hose cutter, razor blade or sharp knife	1
Hoist and axle lift or floor jack	1
Tire chocks	2
Safety stands	2
Safety glasses	1
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution	1



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

Introduction

The purpose of this publication is to assist with the installation and maintenance of the LoadLifter 5000 air spring kits. All LoadLifter 5000 kits utilize sturdy, reinforced, commercial-grade single or double, depending on the kit, convolute bellows.

The air springs are manufactured like a tire with layers of rubber and cords that control growth. LoadLifter 5000 kits provide up to 5,000 pounds (2,268kg) of load-leveling support with air adjustability from 5-100 PSI (.34-7BAR).

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair.

NOTATION EXPLANATION

Hazard notations appear in various locations in this publication. Information 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 installation 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 VEHICLE OR MINOR PERSONAL INJURY.



NOTE

Used to help emphasize areas of procedural importance and provide helpful suggestions.

Install the System

ASSEMBLE THE AIR SPRINGS

1. Set the roll plates (E) onto the top and bottom of the air springs (F) and install the fittings (G) into the top of the air spring finger-tight. Then tighten the fitting an additional 1 1/2 turns (Fig. 2).



Fig. 2

2. Set the LH and RH upper brackets (B & C) onto the air spring assemblies and attach to the air springs with 3/8" hex cap screws (H), 3/8" lock washers (I) and 3/8" flat washers (J). Torque hardware to no more than 20 lb.-ft. (27Nm) (Figs. 3 & 4).

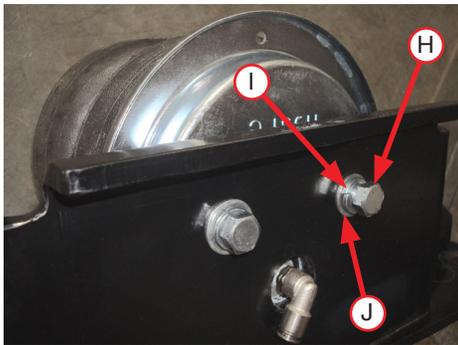


Fig. 3

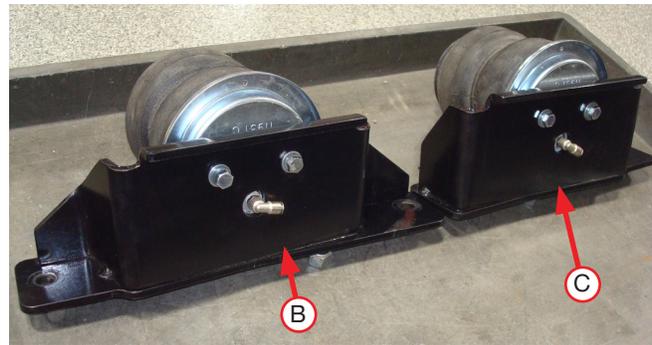


Fig. 4

3. Flip the assembly upside down and set a roll plate on both air springs. Set the lower brackets (A) onto the air springs, making sure the slots in the lower bracket are on the opposite side of the fitting at the top of the air spring (must be on tire side). Attach the lower brackets with the 3/8" hex cap screws (H), 3/8" lock washers (I) and 3/8" flat washers (J) (Fig. 5). Leave loose at this time.
4. Finished left- and right-hand air spring assemblies shown (Fig. 6).

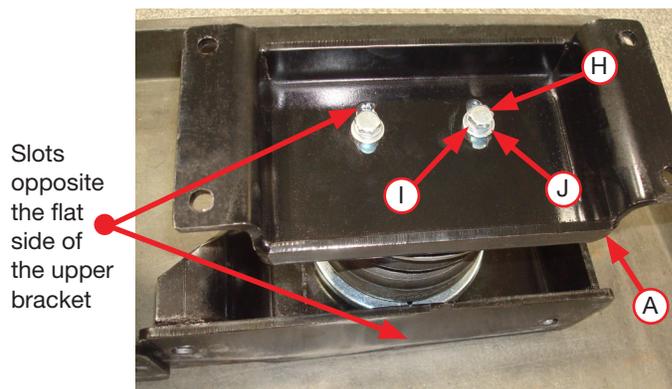


Fig. 5

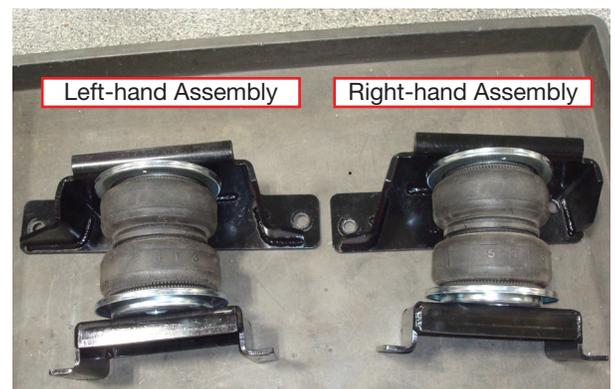


Fig. 6

INSTALL THE ASSEMBLIES

1. For models that have Ford 5th wheel brackets mounted to the side of the frame, remove the hardware that holds the brackets to the frame (Fig. 7).
2. Lower the axle or raise the frame up to obtain clearance for the air spring assemblies to be put into position. Set the left- and right-hand assemblies into position above the leaf spring retainer. Cut the air line assembly (AA) in two (see the *Installing the Air Lines* section) and insert the air line into the fitting on top of the air spring assemblies.
3. On models that have the inner fender liner, it will be necessary to trim out a small section of the fender that comes in contact with the roll plates on top of the air spring. With the assemblies set into position, raise the axle, or lower the frame down enough to align the upper bracket holes with the existing frame holes. Mark the location of where the fender liner will need to be trimmed. Then, remove the air spring assembly and trim the area, using tin snips or a box cutting knife, as needed. Then re-check the clearance and adjust as necessary (Fig. 8).



IF USING A BOX CUTTING KNIFE, USE EXTREME CAUTION SO AS NOT TO INJURE YOURSELF OR ANYONE AROUND YOU.

4. Once the inner fender (for those equipped) is trimmed for air spring roll plate clearance, attach the upper brackets to the frame with the 5/8" hex cap screws (M), 5/8" flat washers (P) and 5/8" nylon lock nuts (O). Torque the hardware to 185 lb.-ft. (250Nm) (Figs. 9 & 10). Raise the axle or lower the frame all the way back into stock position.



Fig. 7



Fig. 8

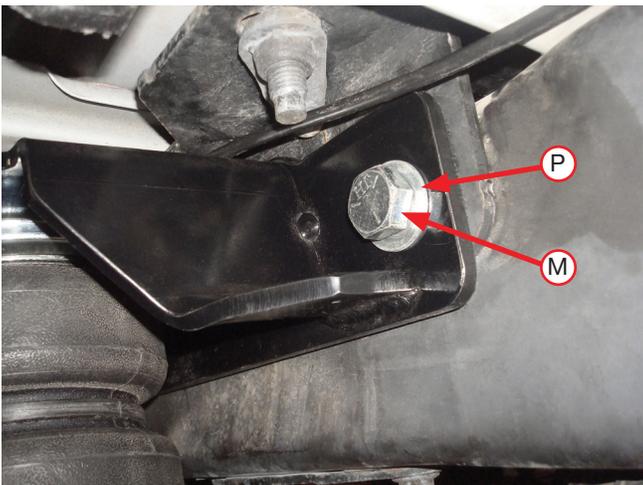


Fig. 9

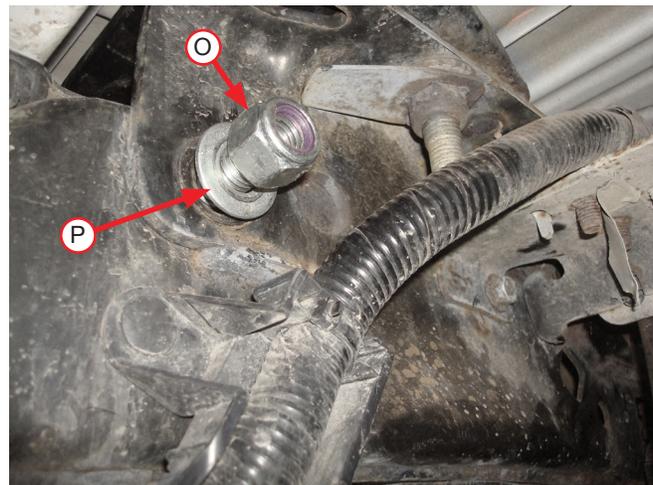


Fig. 10

There are two options for attaching the lower bracket to the leaf spring packs. On some models of F-250, the upper frame contact overloads may be an option and is standard equipment for the F-350 models. Lower bracket attachment will be different for each design.

For both options, it will be necessary to align the lower bracket properly as follows:

- Temporarily set the U-bolts (L or K) down through the top of the lower bracket (front and rear) so that it aligns the lower bracket with the leaf springs (Fig. 11). Use an open-end wrench to just snug the lower bracket mounting hardware enough to hold the lower bracket into position. Remove the U-bolts and drop the axle or raise the body once more to gain access to the lower mounting hardware and torque to no more than 20 lb.-ft. (27Nm).

For models without frame contact overloads, attach the lower bracket in the following manner:

- Set the spacer bars (D) between the lower bracket mounting legs and the leaf springs. Then, raise the axle or lower the frame back to stock height. Install the U-bolts (K) up and around the leaf spring pack, through the spacer bars (D) then through the lower bracket and attach with 3/8" flat washers (J) and cap with 3/8" nylon lock nut (N) (Fig. 12). Push the lower bracket forward or back to align the air spring and torque the hardware to 16 lb.-ft. (22Nm).

- Using a hacksaw or a grinder, trim the rear, inside leftover length of the U-bolt off to just above the nylon lock nut (Fig. 13) on both sides of the vehicle.

For models that do have the frame contact overloads, attach the lower bracket in the following manner:

- Raise the axle or lower the frame back to stock ride height and follow the same directions to secure the lower bracket as Step 6, but do not use the spacer bars under the lower bracket. Also, use the shorter U-bolts (L) to secure the lower bracket to the leaf spring pack (Fig. 14) and torque the hardware to 16 lb.-ft. (22Nm). No need to trim the U-bolts for this installation.

- Now that the upper and lower brackets are secured, cap the valves on the end of the air lines with valve caps (CC) to keep debris out of the fitting while routing and proceed to the air line installation instructions.

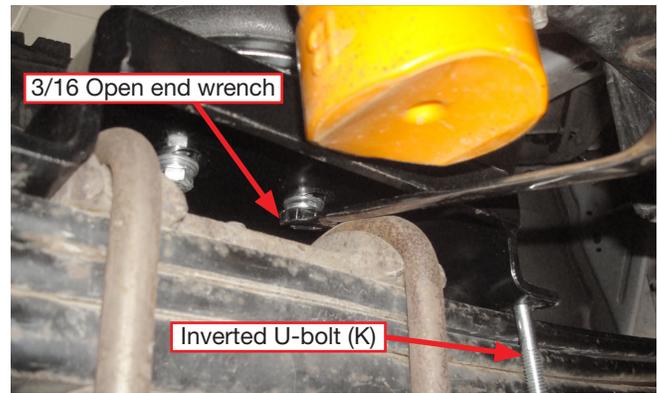


Fig. 11

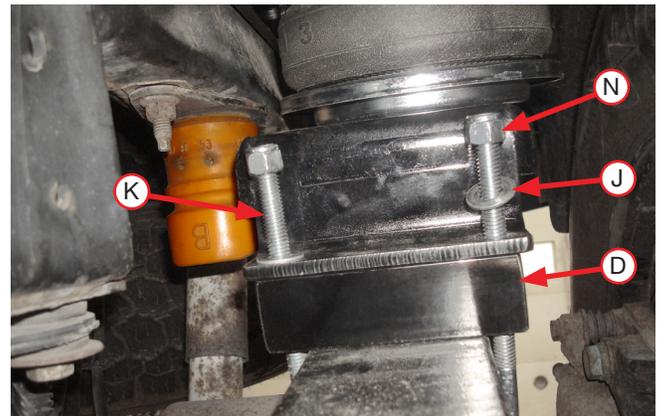
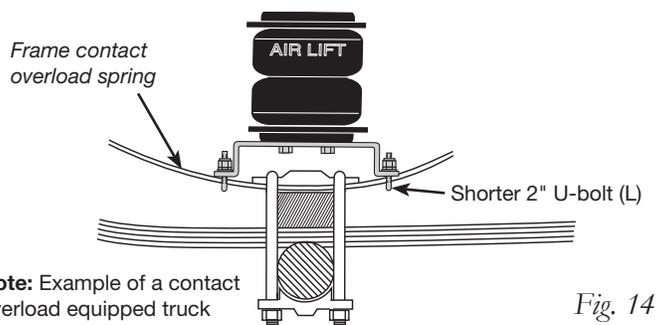


Fig. 12



Note: Non-contact overload F-250 shown here

Fig. 13

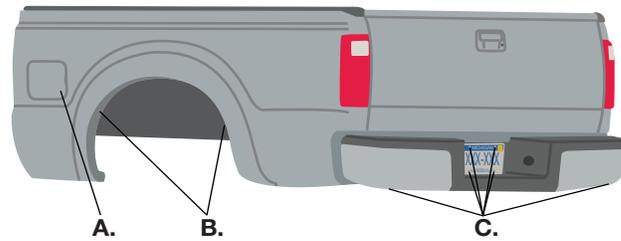


Note: Example of a contact overload equipped truck

Fig. 14

Install the Air Lines

1. Choose the locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary.

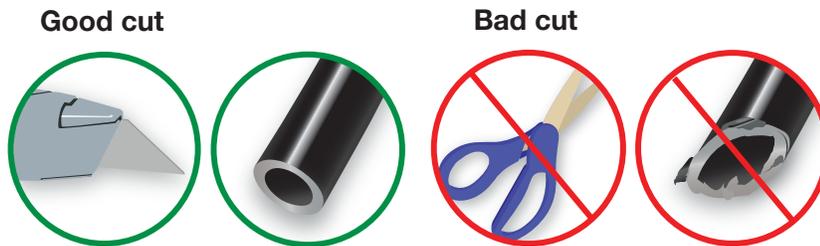


A. Inside fuel tank filler door
 B. Inside rear wheel wells
 C. License plate or rear bumper area



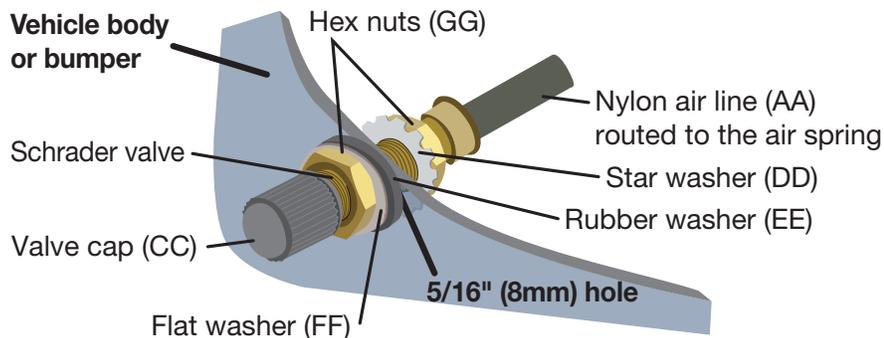
KEEP AT LEAST 6" (152MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

2. Make clean, square cuts with a razor blade or hose cutter when cutting the air line (AA). Do not use scissors or wire cutters.



3. Use zip ties (BB) to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. Leave at least 2" (51mm) of slack in the air line to allow for any movement that might pull on the air line. The minimum bend radius for the air line is 1" (25mm).

4. Install the Schrader valve in the chosen location.

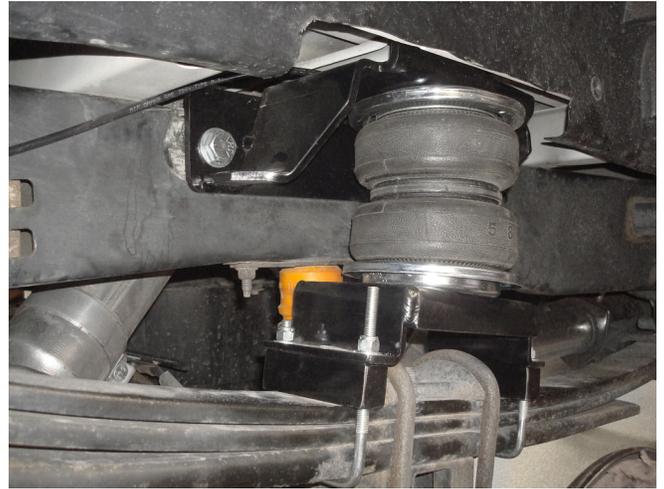


Finished Installation

The images show the finished installation of both sides **without frame contact overloads**.



Forward of axle view of passenger's (right) side installation.



Rear axle view of passenger's (right) side installation.



Forward of axle view of driver's (left) side installation.



Rear axle view of driver's (left) side installation.

Congratulations!

You are now the proud owner of an Air Lift air suspension system. Enjoy!

Before Operating

INSTALLATION CHECKLIST

- ❑ **Clearance test** — Inflate the air springs to 40-60 PSI (2.8-4.1BAR) and make sure there is at least 1/2" (13mm) clearance from anything that might rub against each sleeve. Be sure to check the tire, brakes, frame, shock absorbers and brake cables.
- ❑ **Leak test before road test** — Inflate the air springs to 40-60 PSI (2.8-4.1BAR) 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" (152mm) 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** — After 500 miles (800km), recheck all bolts for proper torque.
- ❑ **Road test** — The vehicle should be road-tested after the initial tests. Inflate the air springs to recommended driving pressures. Drive the vehicle 10 miles (16km) 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.

MAINTENANCE AND USE GUIDELINES

1. Check air pressure weekly.
2. Always maintain normal ride height. Never inflate beyond 100 PSI (7BAR).
3. If the system develops an air leak, use a soapy water solution to check all air line connections and the inflation valve core before deflating and removing the air spring.
4. Upon successful completion of the installation, follow these pressure requirements for the air springs.



**Minimum Recommended
Air Pressure**



Maximum Air Pressure



FOR SAFETY AND TO PREVENT POSSIBLE DAMAGE TO THE VEHICLE, DO NOT EXCEED MAXIMUM GROSS VEHICLE WEIGHT RATING (GVWR) OR PAYLOAD RATING, AS INDICATED BY THE VEHICLE MANUFACTURER.

ALTHOUGH THE AIR SPRINGS ARE RATED AT A MAXIMUM INFLATION PRESSURE OF 100 PSI (7BAR), THE AIR PRESSURE ACTUALLY NEEDED IS DEPENDENT ON LOAD AND GROSS VEHICLE WEIGHT RATING.

Limited Warranty and Return Policy

Air Lift Company provides a Limited Lifetime Warranty* to the original purchaser of its load support products, from the date of original purchase, that the 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 in the full Limited Warranty and Return Policy.

*Full Limited Warranty and Return Policy are available at www.airliftcompany.com/warranty and are subject to change.

WARRANTY REGISTRATION & CLAIMS

- To register your warranty, please visit <https://www.airliftcompany.com/support/warranty/register/>
- To submit a warranty claim, please visit <https://www.airliftcompany.com/support/warranty/submit-claim/>

Notes



Thank you for purchasing Air Lift Products!

Need Help?

Contact Air Lift Company Customer Service at (800) 248-0892
or email service@airliftcompany.com.

For calls outside the U.S. or Canada, dial +1 (517) 322-2144.



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