

# LoadLifter 5000™ SERIES



## Installation Guide



*Ram Promaster*



**Watch the video**  
Info on Table of Contents page

# Kits 57233 | 88233

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 before scanning the QR code as it is required to complete the warranty registration. Scan the QR code to register the warranty online.

Your registration also helps us to keep you up to date on product information and offers.

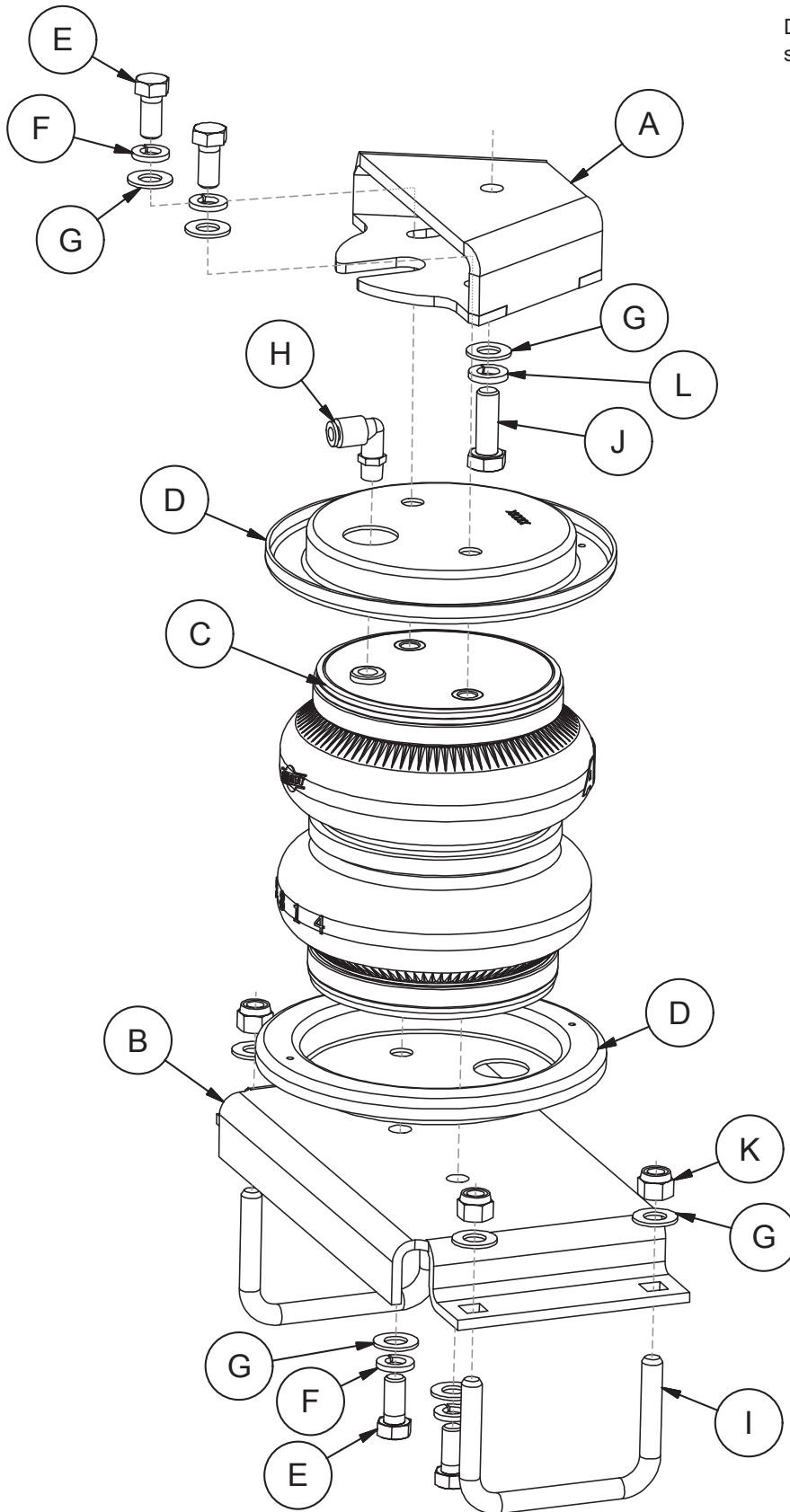
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## Video-enhanced installation guides

Visit [airliftcompany.com/workshop/category/install-videos](http://airliftcompany.com/workshop/category/install-videos) to access our installation video archive\*.

# Installation Diagram



Driver's (left)  
side shown

Fig. 1



# Hardware and Tools Lists

## Common Parts Included in All 3 Kits

Item	Part#	Description .....	Qty
A	07909	Upper bracket .....	2
B	03910	Lower bracket .....	2
E	17203	3/8"-24 x 7/8" Hex cap screw.....	8
F	18427	3/8" Lock washer.....	8
G	18444	3/8" Flat washer.....	18
H	21837	90-degree Swivel elbow fitting.....	2
I	10594	U-bolt .....	4
J	17160	M10-1.25 x 30 Hex cap screw.....	2
K	18435	3/8"-16 Nylon lock nut .....	8
L	18540	M10 lock washer.....	2
M*	20086	Hose assembly .....	1
N*	10466	Zip ties .....	6
O*	18501	5/16" Flat washer.....	2
P*	18411	5/16" Star washer .....	2
Q*	21230	Valve cap.....	2
R*	21233	5/16" Hex nut.....	4
S*	21234	Rubber washer.....	2

\* These parts are not shown in the Installation Diagram (Fig. 1).

## Unique Parts in Each Kit

### LoadLifter 5000™ KIT 57233

Item	Part#	Description .....	Qty
C	58439	Air spring.....	2
D	11951	Roll plate.....	4

### LoadLifter 5000™ ULTIMATE KIT 88233

Item	Part#	Description .....	Qty
C	58494	Air spring.....	2
D	11967	Roll plate.....	4

## TOOLS LIST

Description.....	Qty
Metric & STD open-end box wrenches .....	set
Ratchet with metric and STD sockets.....	set
Drill and 5/16" drill bit.....	1
Torque wrench.....	1
Hose cutter, razor blade or sharp knife .....	1
Hoist or floor jack .....	1
Safety stands.....	2
Safety glasses .....	1
Air compressor or compressed air source .....	1
Spray bottle with dish soap/water solution.....	1

The photos in this manual show the LoadLifter 5000 Ultimate kit.



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 series air spring kits. All LoadLifter 5000 series 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 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.

## IDENTIFYING THE DIFFERENCES BETWEEN KITS

Should you need to contact Air Lift customer service, you will need to know which kit you are inquiring about: standard LoadLifter 5000 or LoadLifter 5000 Ultimate. The kits are easily identifiable by looking at the roll plates and air lines.

- Standard **LoadLifter 5000** — Zinc-plated steel roll plates and black nylon air lines.
- LoadLifter 5000 Ultimate** — Black powder-coated roll plates and black nylon air lines.



LoadLifter 5000  
silver zinc-plated steel  
roll plate



LoadLifter 5000  
nylon air line



LoadLifter 5000 Ultimate  
black powder-coated roll plate



LoadLifter 5000 Ultimate  
nylon air line

# Installing the System

## PREPARING THE VEHICLE

1. Raise the vehicle and support it in a way, using safety stands or equivalent, that the axle can be safely lowered away from the frame. This will need to be done in order for the air spring assembly to be put into position between the axle and frame (Fig. 2).

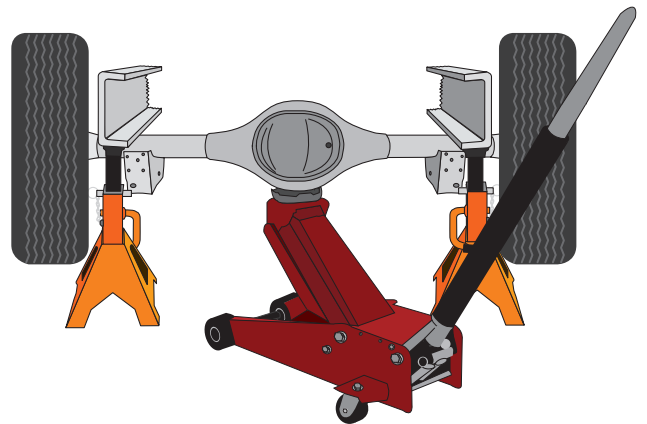


Fig. 2

2. Remove the jounce bumper assembly from the frame using a large spanner wrench (Fig. 3).

### NOTE

*Use a chisel and hammer to rotate the jounce bumper if a spanner wrench is not available. A large monkey wrench would also work.*

3. Remove the rear spring clips that hold the emergency brake cables onto the spring, rear of the axle (Fig. 3).



Fig. 3

## ASSEMBLING THE AIR SPRING

1. Set a roll plate (D) on top of the air spring (C). The radiused, or rounded, edge of the roll plate will be toward the air spring so that it is seated inside the roll plate (Fig. 4). Install the 90-degree swivel fitting (H) into the top of the air spring, finger-tight plus 1 1/2 turns.

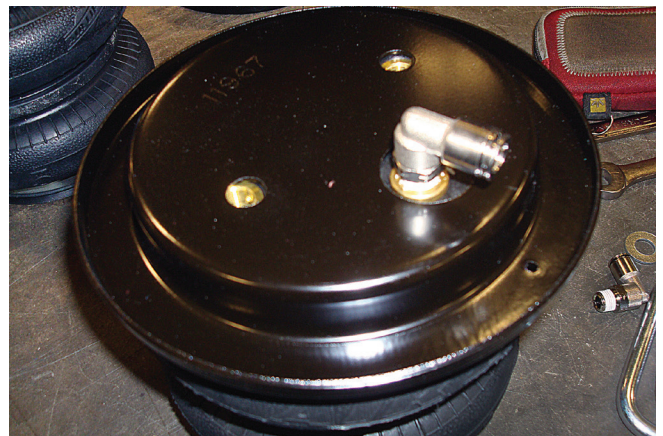
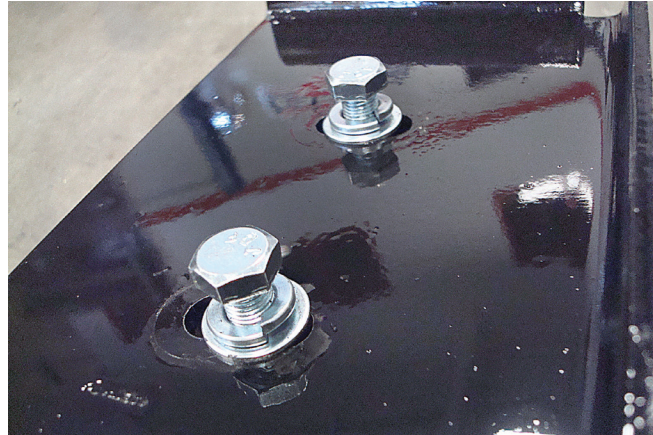


Fig. 4



- Flip the assembly over and set a roll plate (D) on the bottom of the air spring. Install the lower bracket onto the assembly, making sure the flange of the lower bracket is on the fitting side of the air spring assembly. Attach the lower bracket with two 3/8"-24 x 7/8" hex cap screws (E), 3/8" lock washers (F) and 3/8" flat washers (G) (Fig. 5). Torque the mounting hardware to no more than 20 lb.-ft. (27Nm).


*Fig. 5*

- Fig. 6 shows both assemblies.


*Fig. 6*

## INSTALLING THE ASSEMBLIES

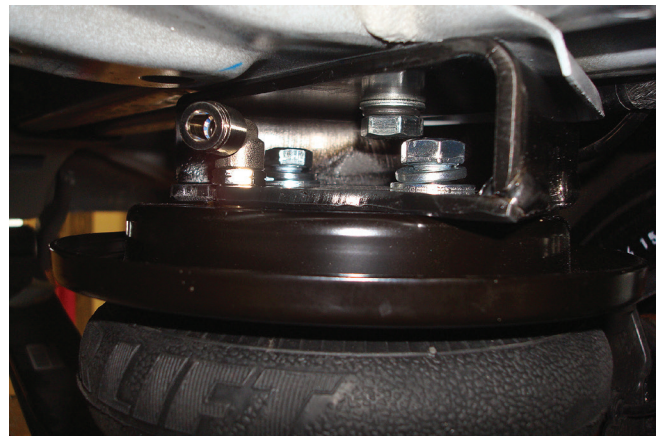
- Install the upper bracket (A) onto the frame, using the mounting location where the jounce bumper was previously removed, with the M10-1.25 x 30 hex cap screw (J), M10 lock washer (L) and 3/8" flat washer (G). Align the bracket so that it is parallel to the frame then torque the hardware to 36 lb.-ft. (50Nm) (Fig. 7).


*Fig. 7*

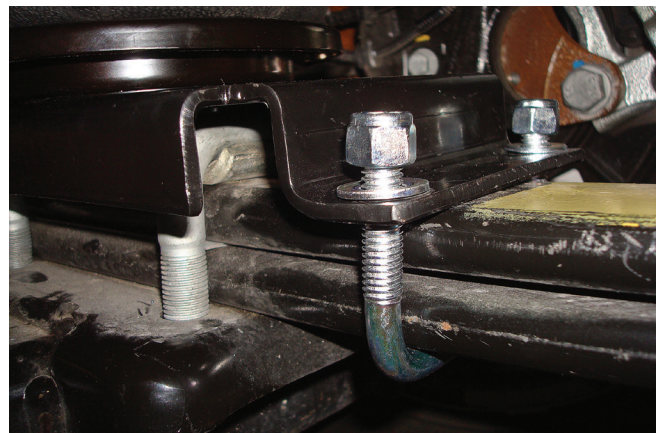
2. Insert two 3/8"-24 x 7/8" hex head cap screws (E) with two 3/8" lock washers (F) and two 3/8" flat washers (G) into the slots in the upper bracket so they face down (Fig. 8 & Fig. 9).

*Fig. 8**Fig. 9*

3. Set the assembly onto the leaf springs with the fitting facing inboard. Raise the axle up so that the top of the air spring assembly is just below the upper bracket. Thread the upper hardware through the roll plate and into the upper spring mount, then tighten to finger-tight only at this time (Fig. 10).

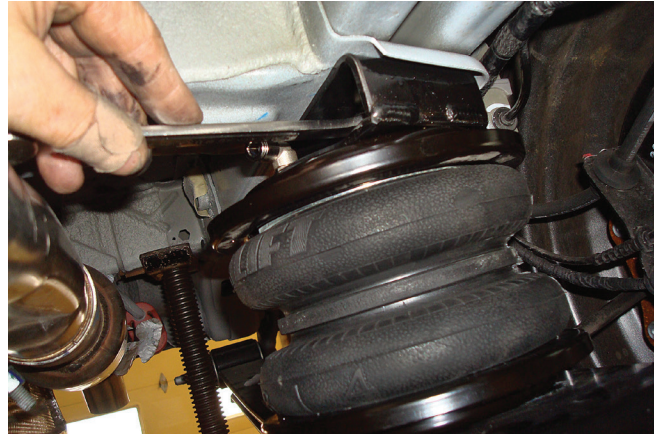
*Fig. 10*

4. Attach the lower bracket to the leaf springs by inserting two U-bolts (I) around the leaf springs and through the lower bracket. Cap with 3/8" flat washers (G) and 3/8" nylon lock nuts (K) (Fig. 11). Push the assembly back or forward to align the air spring perpendicular to the upper mounting and torque the U-bolt hardware to 16 lb.-ft. (22Nm).

*Fig. 11*

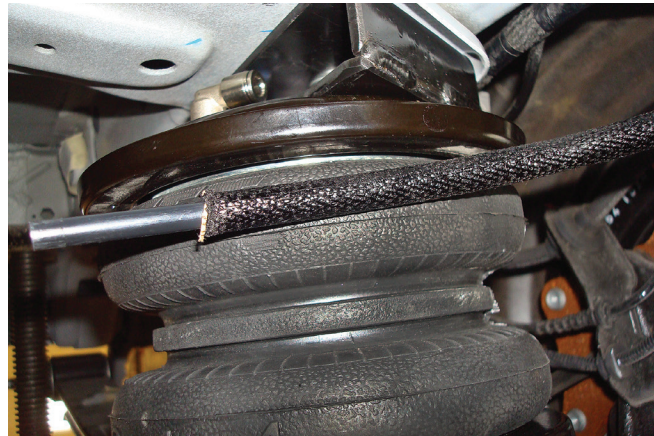


5. Push the top of the air spring assembly in and out to align the air spring perpendicular to the lower bracket, then torque the 3/8"-24 x 7/8" hex cap screws (E) to no more than 20 lb.-ft. (27Nm) (Fig. 12).

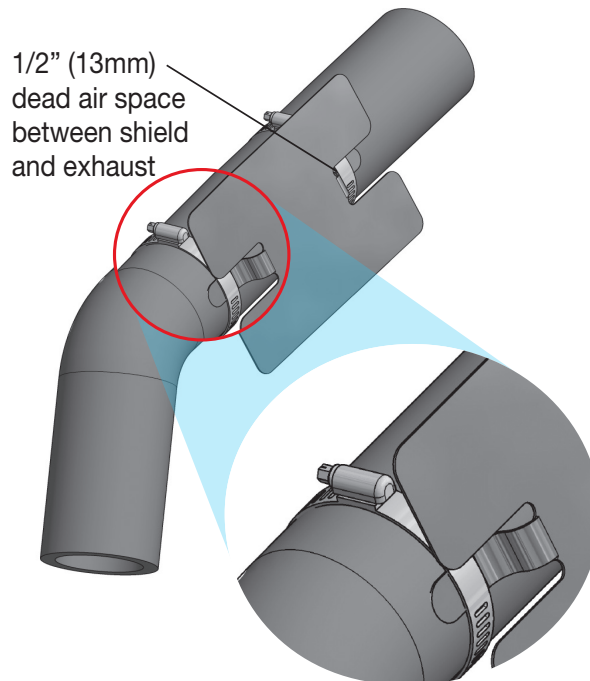

*Fig. 12*

## INSTALLING THE THERMAL SLEEVE AND HEAT SHIELD

1. On the driver's (left) side air line installation, insert the air line into the thermal sleeve, leaving two inches of air line past the sleeve at this point (Fig. 13). Once the air line is routed and the valve is installed, trim to length, leave a little slack, and insert the air line into the fitting at the top of the air spring assembly on the driver's (left) side. Once inserted, push the thermal sleeve up to the fitting, making sure to completely cover the air line.


*Fig. 13*

2. Attach the metal heat shield to the exhaust where it is closest to the passenger's (right) side air spring (Fig. 14).


*Fig. 14*

# Installing the Air Lines

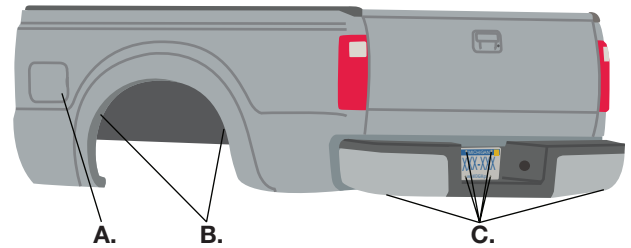
Air lines are routed from the air springs to Schrader valves. Begin by choosing locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (Fig. 15).

## CAUTION

KEEP AT LEAST 6" (150MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

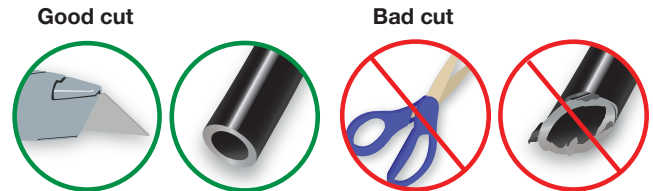
## INSTALLING NYLON AIR LINES

1. For nylon air line, it is recommended that the air line be routed along the top of the frame, forward of the axle, then down to the fitting.
2. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 16). Do not use scissors or wire cutters.
3. Use zip ties (N) to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. The minimum bend radius for the air line is 1" (25mm). Leave at least 2" (50mm) of slack in the air line to allow for any movement that might pull on the air line.
4. Install the Schrader valve in the chosen location (Fig. 15).



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

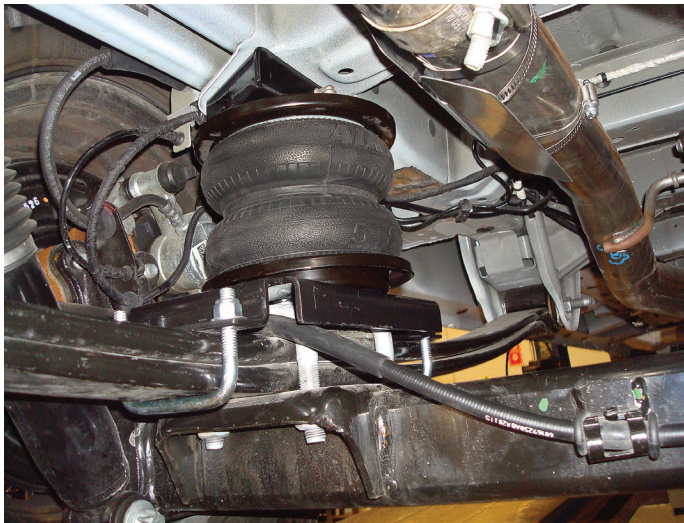
*Fig. 15*



*Fig. 16*

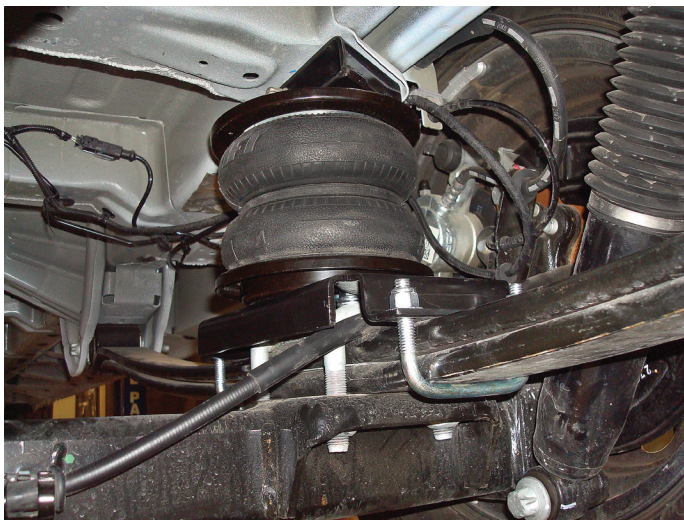
# Finished Installation

The following images show the finished installation of both sides (Figs. 17, 18 & 19).



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

*fig. 17*



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

*fig. 18*



Front view of the passenger's (right) side installation.

*fig. 19*



## 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 preceding 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**

### CAUTION

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, 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 that is available at [www.airliftcompany.com/warranty](http://www.airliftcompany.com/warranty).

For additional warranty information contact Air Lift Company customer service.





*Thank you for purchasing Air Lift Products — the Authorized Installer's choice!*

## Need Help?

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

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



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