

LoadLifter 7500 XL™ + Air Lift® ULTIMATE ProSeries XL



Installation Guide



RAM Heavy Duty



Watch the video
Info on Table of Contents page

Kits 57589 | 99589

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.

TABLE OF CONTENTS

2 System Overview

3 Hardware and Tools

4 Introduction

Notation Explanation

5 Install the System

Prepare the Vehicle
Assemble the Air Spring Assemblies
Install the Air Spring Assemblies

11 Install the Air Lines

Install the Heat Shield
Finish the Installation

13 Finished Installation

15 Before Operating

Installation Checklist
Maintenance and Use Guidelines
Minimum Recommended Air Pressure
Maximum Air Pressure

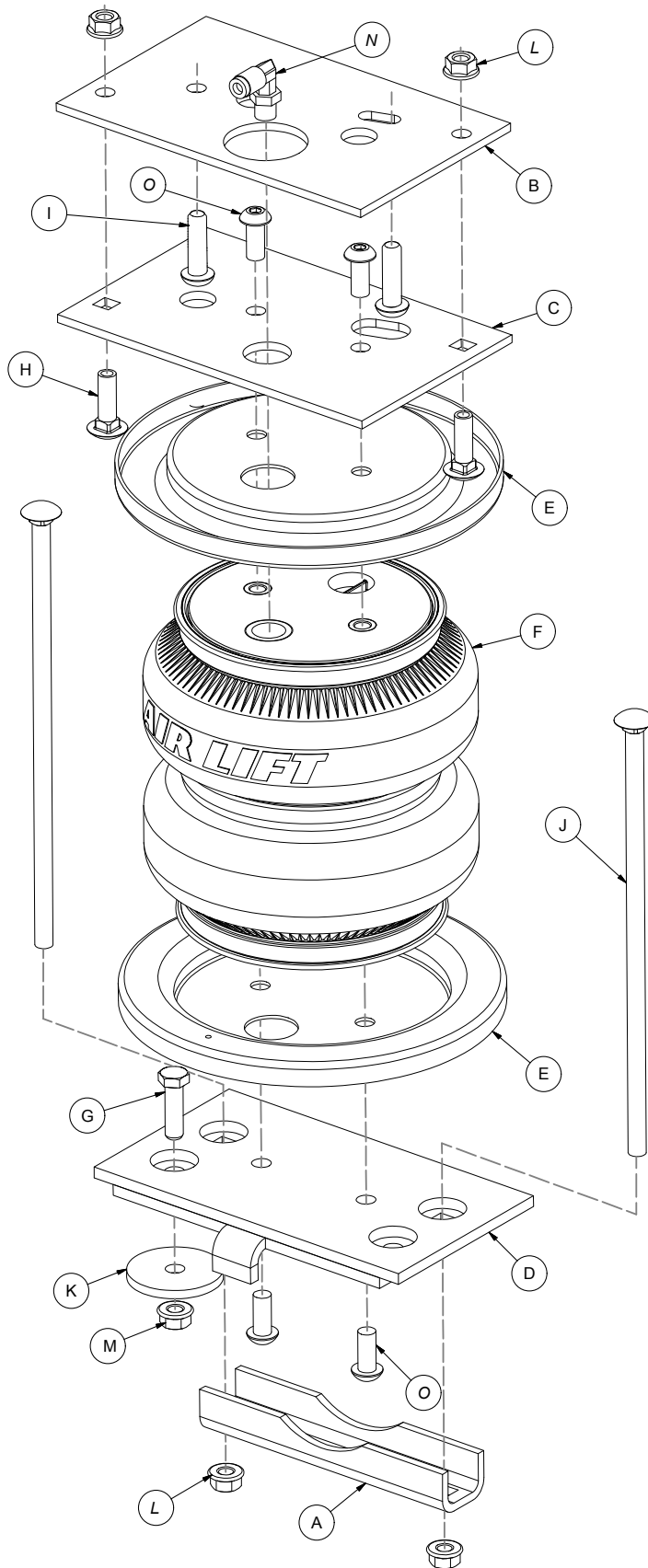
16 Limited Warranty and Return Policy

Warranty Registration & Claims

Video-enhanced installation guides

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

System Overview



Driver's
(Left) Side

Fig. 1

Hardware and Tools

COMMON PARTS INCLUDED IN BOTH KITS

Item	Part#	Description.....	Qty
A	01531	Clamp bar.....	2
B	07160	Upper frame bracket.....	2
C	07161	Upper air spring bracket.....	2
D	03038	Lower bracket.....	2
G	17188	3/8"-16 x 1 1/4" Hex-head cap screw.....	2
H	17361	3/8"-16 x 1 1/4" Carriage bolt.....	4
I	17366	M10-1.50 x 35 Button-head cap screw.....	4
J	17387	3/8"-16 x 10" Carriage bolt.....	4
K	18260	Large flat washer.....	2
L	18422	3/8"-16 Serrated flange lock nut.....	8
M	18435	3/8"-16 Nylon lock nut.....	2
N	21837	Push-to-connect (PTC) swivel fitting.....	2
O	17527	3/8"-24 x 3/4" Button-head cap screw.....	8
AA	20086*	Air line.....	1
BB	10466*	Zip tie.....	6
CC	18411*	5/16" Lock washer.....	2
DD	21230*	Valve cap.....	2
EE	21233*	5/16"-32 Hex nut.....	4
FF	21234*	Rubber washer.....	2
GG	18501*	Flat washer.....	2

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

UNIQUE PARTS IN EACH KIT

LoadLifter 7500 XL™ KIT **ULTIMATE** 57589

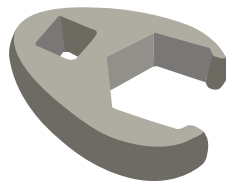
Item	Part#	Description.....	Qty
E	11897	Roll Plate.....	4
F	58120	Air Spring.....	2

Air Lift® ProSeries XL KIT 99589

Item	Part#	Description.....	Qty
E	11897	Roll Plate.....	4
F	58120	Air Spring.....	2

TOOLS LIST

Description.....	Qty
Standard and metric open-end or box wrenches.....	Set
Ratchet.....	1
Standard and metric, regular and deep-well sockets.....	Set
5/16" Drill bit (very sharp).....	1
9/16" Crows foot adapter (Fig. 2).....	1
Heavy-duty drill.....	1
Torque wrench.....	1
Standard and metric socket hex-key wrenches.....	Set
Hose cutter, razor blade or sharp knife.....	1
Hoist or floor jacks.....	1
Safety stands.....	2
Safety glasses.....	1
Air compressor or compressed air source.....	1
Spray bottle with dish soap/water solution.....	1



Crows foot adapter

Fig. 2



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 7500 XL Ultimate and Air Lift ProSeries XL air spring kits. LoadLifter 7500 XL Ultimate and Air Lift ProSeries XL air spring kits utilize sturdy, reinforced, commercial-grade double-convolute bellows.

The air springs are manufactured like a tire with layers of rubber and cords that control growth. LoadLifter 7500 XL Ultimate and Air Lift ProSeries XL air spring kits are recommended for most 3/4- and 1-ton pickups and SUVs with leaf springs and provide up to 7,500 pounds (3,402kg) 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 VEHICLE OR MINOR PERSONAL INJURY.



NOTE

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



TECH TIP

Used to provide helpful tips to ease the installation process.

Install the System

PREPARE THE VEHICLE

1. Raise the vehicle, support the frame with safety stands and remove the wheels. Drop the axle to make room for the air spring assemblies to be put into position between the frame and axle (Fig. 3).

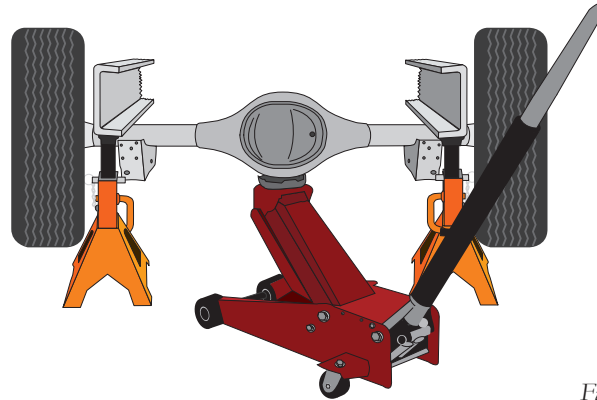


Fig. 3

2. On the driver's (left) side by the axle on some models, there is a small vent tube (Fig. 4) that needs to be tied on an angle with a zip tie (BB).

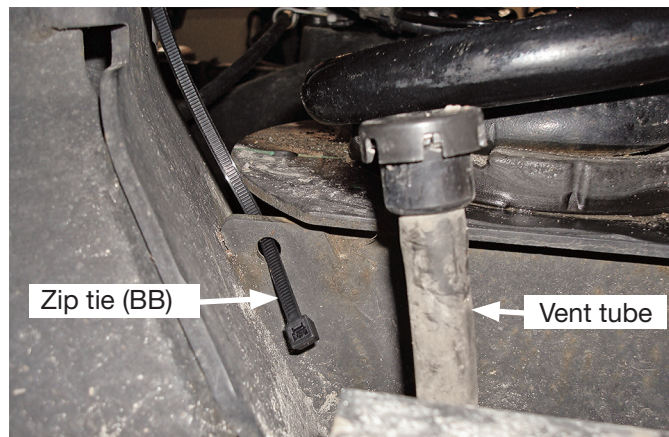


Fig. 4

3. Insert the zip tie into the small hole in the lower coil spring seat, then around the vent tube and snug the zip tie enough to angle the tube out of the way (Fig. 5).

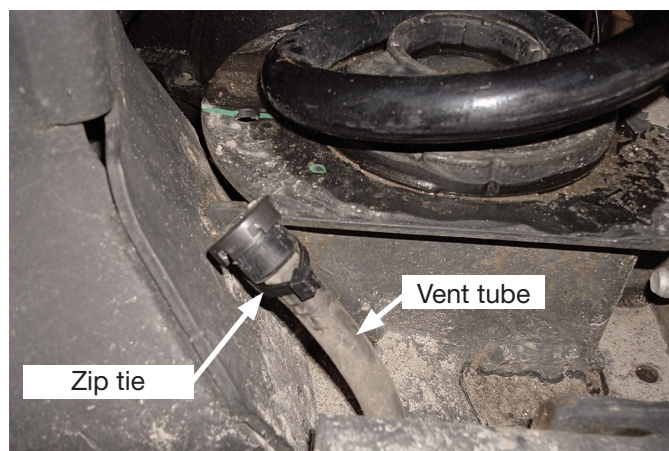


Fig. 5

- Remove the jounce bumpers from both sides (Figs. 6 & 7).

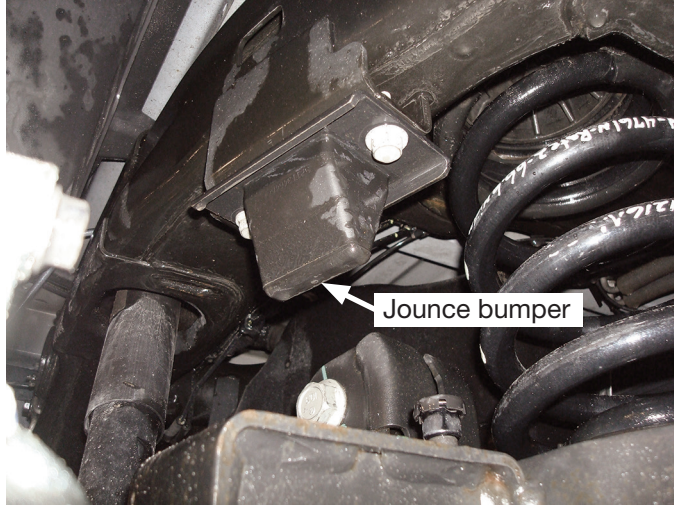


Fig. 6

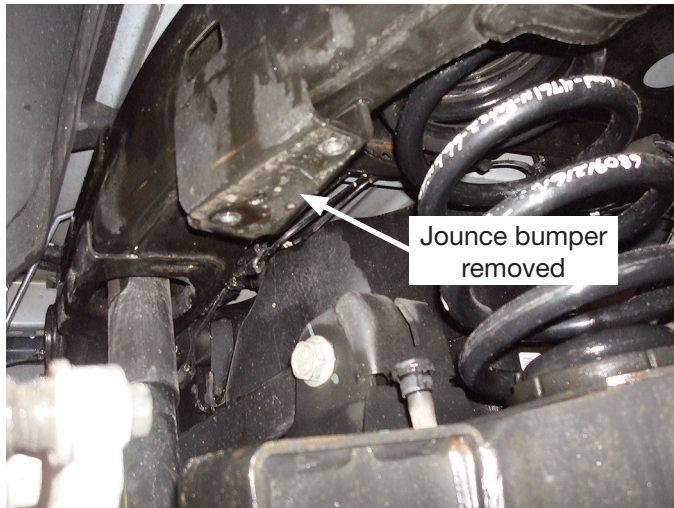


Fig. 7

- Attach the upper frame bracket (B) to the frame (Figs. 8 & 9) using the M10-1.50 x 35 button-head cap screws (I). Torque the mounting hardware to 30 lb.-ft. (41Nm).



NOTE

The large hole in the bracket goes to the outside of the frame (toward the tire).

Driver's (left) side

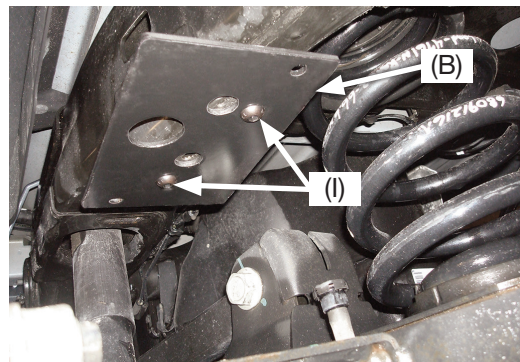


Fig. 8

Passenger's (right) side

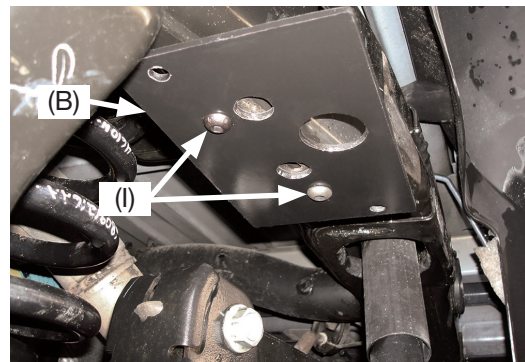


Fig. 9

ASSEMBLE THE AIR SPRING ASSEMBLIES

1. Set a roll plate (E) over the top of each air spring (F) (Fig. 10).



NOTE

The radiused (rounded) edge of the roll plate (E) will be toward the air spring so that the air spring is seated inside both roll plates.

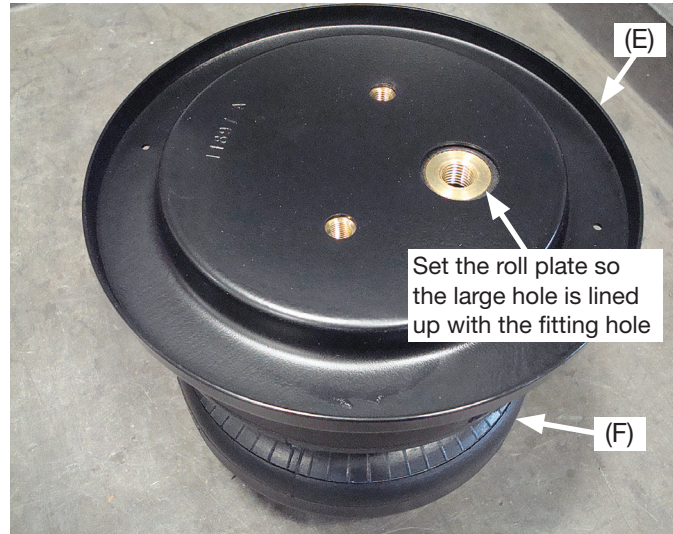


Fig. 10

2. Set both air springs in front of you with the fitting inserts pointing toward you (Fig. 11).
3. Insert the 3/8"-16 x 1 1/4" carriage bolt (H) through the upper air spring bracket (C) in the square hole on both ends (Figs. 1 & 11).



NOTE

The upper air spring brackets will be mirror images when set onto the air springs (see Fig. 11).

Driver's (left)
side assembly

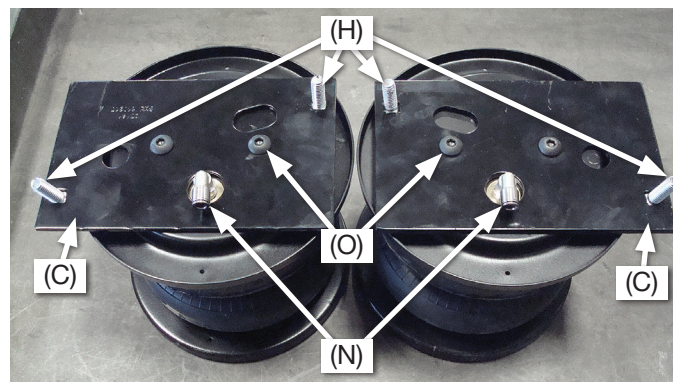


Fig. 11

4. Set both brackets onto the air springs and attach using the 3/8"-24 x 3/4" button-head cap screws (O) (Fig. 11). Torque to no more than 20 lb.-ft. (27Nm).
5. Install the swivel fitting (N) into the top of the air spring assemblies finger-tight plus 1 1/2 turns (Fig. 11). Repeat for both air springs.

6. Install the thick 3/8" large flat washer (K) onto the lower bracket (D) with 3/8"-16 x 1 1/4" hex-head cap screw (G) and 3/8"-16 nylon lock nut (M). Install the washer on the same side as the flanges (Figs. 1 & 12). Torque to 31 lb.-ft. (42Nm).

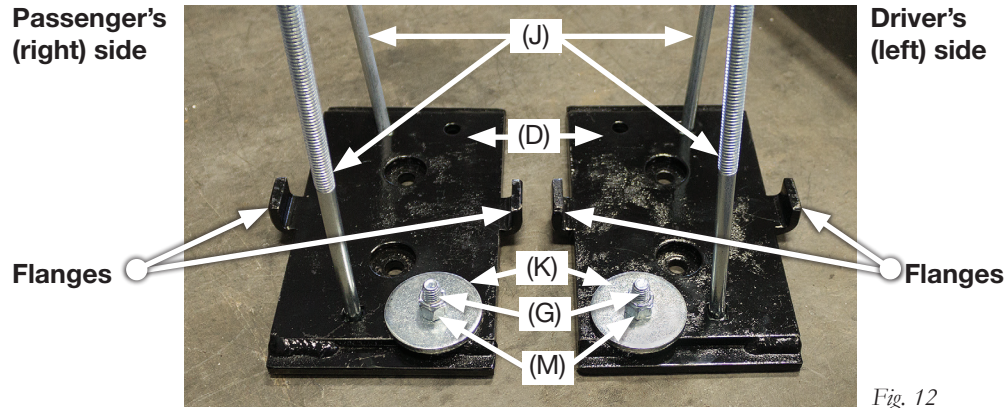
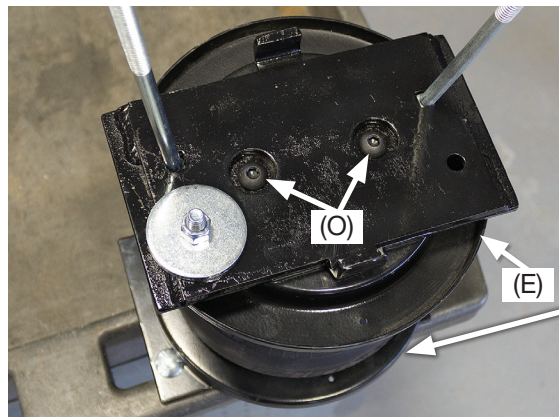


Fig. 12

7. Insert the long 3/8"-16 x 10" carriage bolts (J) into the square holes in the lower bracket from the opposite sides of the flanges (Figs. 1 & 12).
8. Set the roll plate (E) over the bottom of the air springs and install the lower brackets onto the air spring assemblies so the large washers previously installed are on the same side as the air fittings (Figs. 1 & 13).

Passenger's (right) side assembly



The large washer needs to be positioned on the lower bracket so that it is on the same side of the assembly as the air fittings.

Fig. 13

9. Once oriented correctly, attach the lower brackets to the assemblies using the 3/8"-24 x 3/4" button-head cap screws (O) (Fig. 13) and torque the hardware to no more than 20 lb.-ft. (27Nm).
10. Figure 14 shows the finished assemblies.

Passenger's (right) side assembly

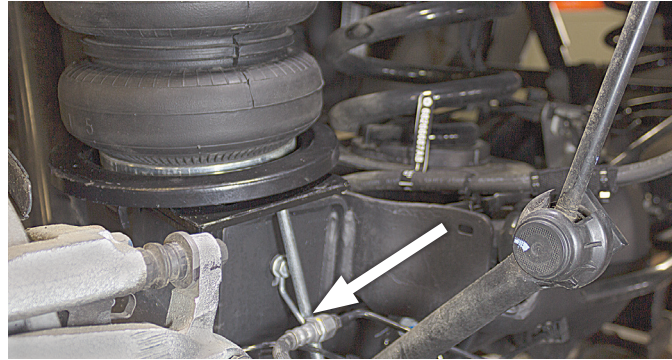


Driver's (left) side assembly

Fig. 14

INSTALL THE AIR SPRING ASSEMBLIES

1. With the axle slightly hanging and the wheels removed, set the driver's (left) side assembly on the axle, making sure that the carriage bolt (J) goes in between the brake line and the axle, on the inboard side of the brake line bracket (Fig. 15). Repeat for the opposite side.



Carriage bolt must be in between the brake line and axle, on the inside of the brake line bracket on both driver's and passenger's air springs.

Fig. 15

2. Carefully position the upper air spring brackets, making sure that the carriage bolts and fittings line up with the holes in the frame brackets (Fig. 16). If necessary, raise the axle so that the brackets come together, making sure the fittings and the carriage bolts go through the holes and do not bind.

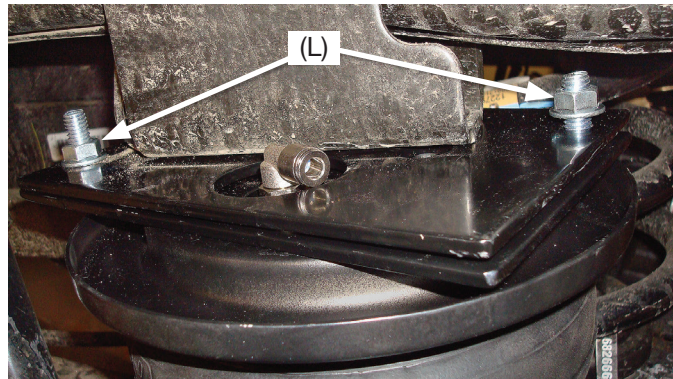


Fig. 16

3. Install the 3/8"-16 serrated flange lock nuts (L) onto the upper carriage bolts and torque to 16 lb.-ft. (22Nm) (Fig. 16).



NOTE

It may be necessary to use a 9/16" crows foot adapter (Fig. 2) to torque the nut underneath the frame.

4. Raise the axle all the way and position the lower bracket over the lower jounce bumper strike plate. The large washer on the bottom of the bracket should be positioned forward of the lower jounce bumper strike plate (Fig. 17).

**Driver's
(left) side
assembly**



Large washer forward of the lower jounce bumper strike plate

Fig. 17

- Set the clamp bar (A) over the two long carriage bolts under the axle and fasten with 3/8"-16 serrated flange lock nuts (L) (Fig. 18). Torque the hardware evenly to 10 lb.-ft. (14Nm) (Fig. 19).

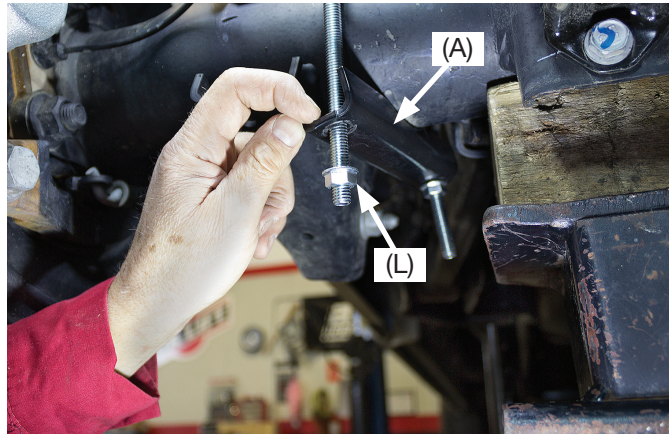


Fig. 18



Fig. 19

- Install the wheels and torque lug nuts to factory specifications. Remove the safety stands.

CAUTION

AFTER INSTALLING THE TIRES, IT WILL BE NECESSARY TO CHECK THE TIRE CLEARANCE. THERE MUST BE MORE THAN 1/2" (13MM) CLEARANCE BETWEEN THE TIRE AND THE UPPER ROLL PLATE ON THE AIR SPRING ASSEMBLY (FIG. 20). CHECK CLEARANCES IF CHANGING TIRE SIZES ON THE VEHICLES.

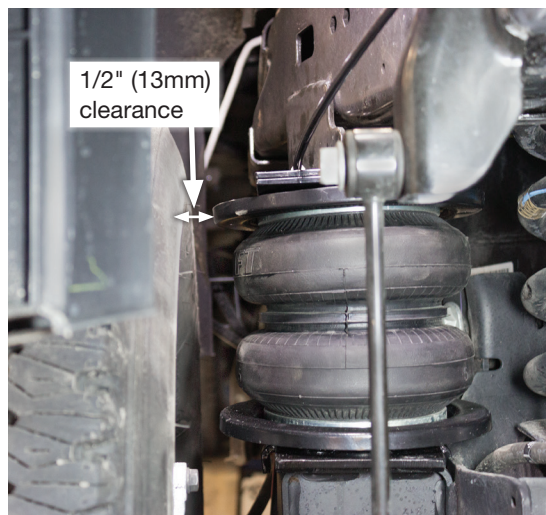
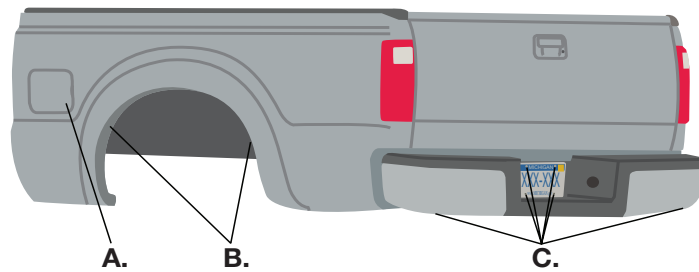


Fig. 20

Install the Air Lines

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



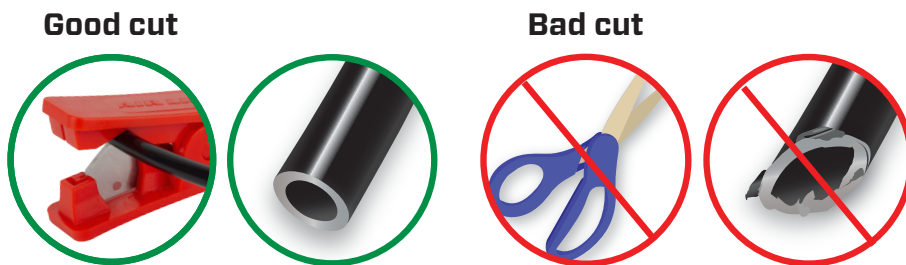
A. Inside fuel tank filler door C. License plate or rear bumper area
 B. Inside rear wheel wells



CAUTION

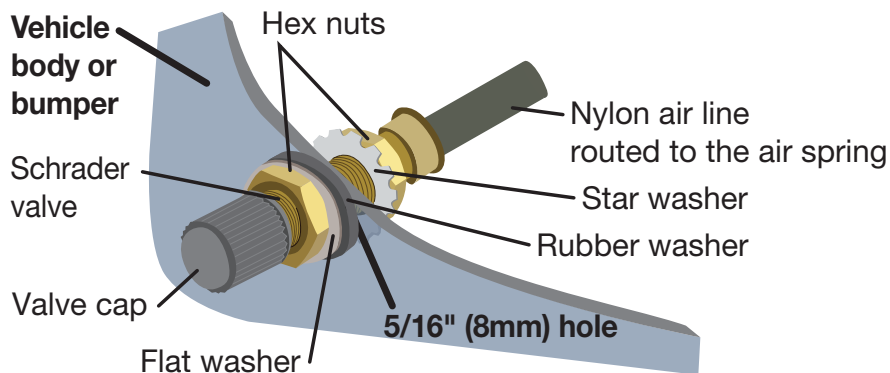
KEEP AT LEAST 6" (152MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

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



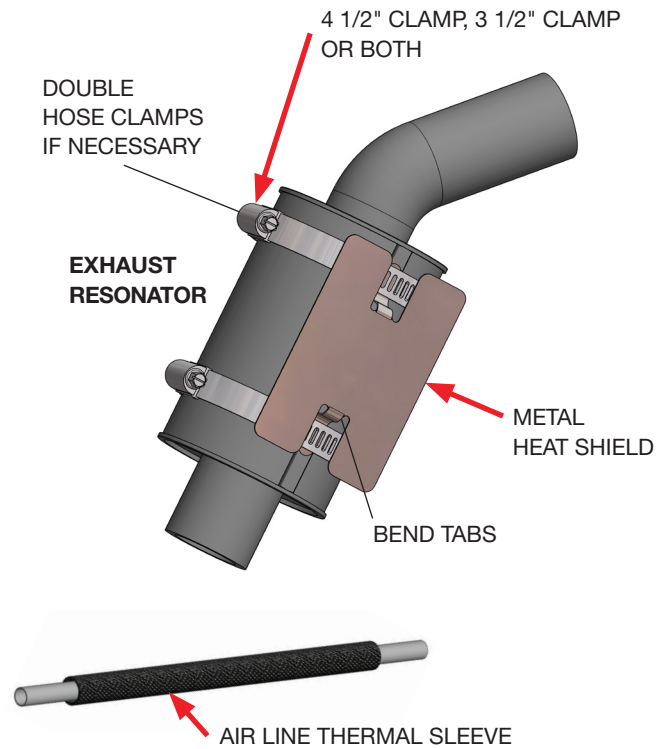
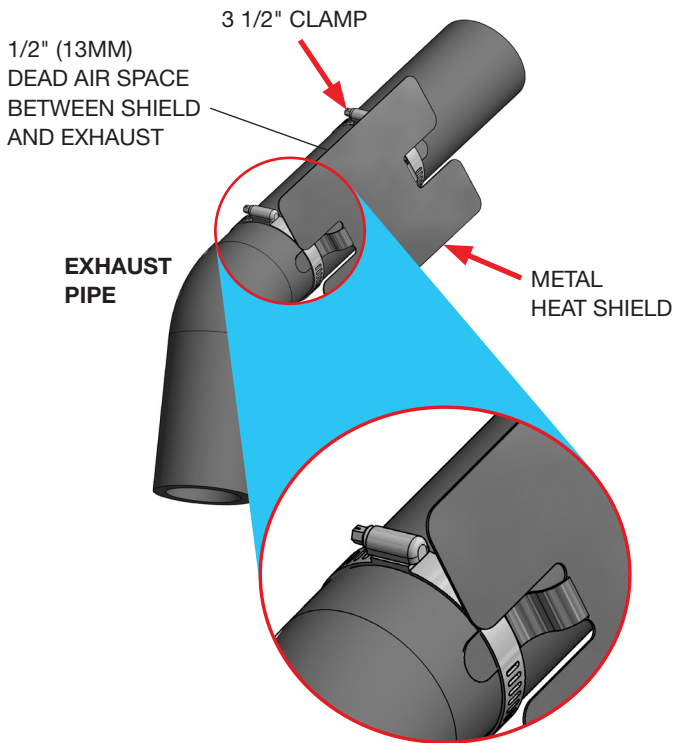
3. Use zip ties (BB) to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. Leave at least 2" (51mm) of slack in the air line to allow for any movement that might pull on the air line. The minimum bend radius for the air line is 1" (25mm).

4. Install the Schrader valve in the chosen location.



INSTALL THE HEAT SHIELD

1. Attach the metal heat shield to the exhaust pipe or exhaust resonator using the hose clamps. Slide the air line thermal sleeve over the air line and place it where the air line is closest to the exhaust.



FINISH THE INSTALLATION

1. Once the hose is installed, inflate the system to 10 PSI and torque both upper bracket U-bolts to 10 lb.-ft. (14Nm) starting with the square U-bolt first.
2. Lower the axle and remove the safety stands.

Finished Installation

The following photos shows the finished installation of both sides.



Driver's (left) side top view



Passenger's (right) front view



Driver's (left) side rear view



Passenger's (right) side view

Congratulations!

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



Notes

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 air spring. 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



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, 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/>



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.

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



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