

# LoadLifter 5000™ SERIES + Air Lift® ProSeries



## Installation Guide



*2001-10 Chevrolet/GMC 2500/3500*



**Watch the video**

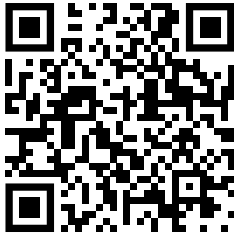
Info on Table of Contents page

# Kits 57275 | 88275 | 93275

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

# System Overview

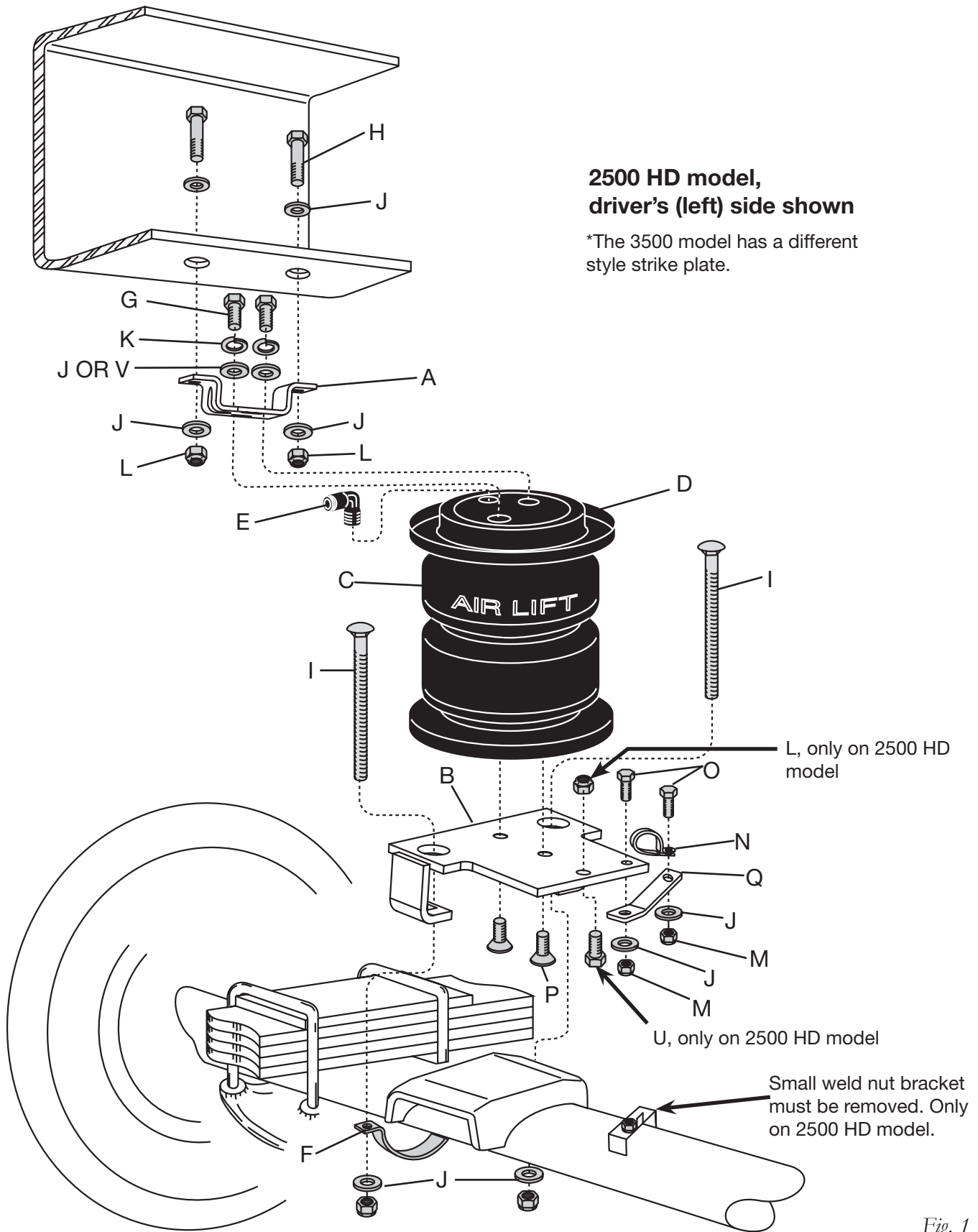


Fig. 1

# Hardware and Tools

## Common Parts Included in All 3 Kits

Item	Part#	Description .....	Qty
A	07634	Upper bracket .....	2
B	03633	Lower bracket .....	2
E	21848	Push-to-connect (PTC) fitting .....	2
F	10451	Axle strap .....	2
H	17108	3/8"-16 x 1 1/2" Bolt .....	4
I	17141	3/8"-16 x 2 1/2" Carriage bolt.....	4
J	18444	3/8" Flat washer .....	15
L	18435	3/8" Nylon lock nut .....	10
M	18438	5/16" Nylon lock nut .....	2
N	10465	5/8" Brake line clip .....	1
O	17103	5/16" -18 x 1" Bolt .....	2
Q	10421	Brake line bracket .....	1
U	17101	3/8"-16 x 3/4" Bolt .....	2
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
HH*	34365	Heat shield kit .....	1

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

## TOOLS NEEDED

Description .....	Qty
Standard and metric open-end or box wrenches .....	SET
Adjustable wrench.....	1
Ratchet .....	1
Metric, 9/16", and 1/2" deep-well sockets .....	SET
3/8" and 5/16" drill bits (very sharp).....	1
Heavy-duty drill .....	1
Torque wrench.....	1
Standard and metric hex-key wrenches .....	1
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

The photos in this manual show the LoadLifter 5000 kit.

## Unique Parts in Each Kit

### LoadLifter 5000™ KIT 57275

Item	Part#	Description .....	Qty
C	58437	Air spring .....	2
D	11951	Roll plate (silver zinc-plated).....	4
G	17203	3/8"-24 x 7/8" Bolt .....	4
J	18444	3/8" Flat washer .....	4
K	18427	3/8" Lock washer .....	4
P	17215	3/8"-24 x 3/4" Flat-head screw.....	4

### LoadLifter 5000™ ULTIMATE KIT 88275

Item	Part#	Description .....	Qty
C	58496	Air spring with internal jounce bumper.....	2
D	11967	Roll plate (black powder-coated).....	4
G	17203	3/8"-24 x 7/8" Bolt .....	4
J	18444	3/8" Flat washer .....	4
K	18427	3/8" Lock washer .....	4
P	17215	3/8"-24 x 3/4" Flat-head screw.....	4

### Air Lift® ProSeries KIT 93275

Item	Part#	Description .....	Qty
C	58937	Air spring.....	2
D	11951	Roll plate (silver zinc-plated).....	4
G	17284	3/8"-24 x 7/8" Bolt (SS).....	4
J	18507	3/8" Flat washer (SS) .....	4
K	18504	3/8" Lock washer (SS).....	4
P	17363	3/8"-24 x 3/4" Flat-head screw (SS) .....	4
II*	21838	Tee fitting .....	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 series and Air Lift ProSeries air spring kits. All LoadLifter 5000 series and Air Lift ProSeries 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 series and Air Lift ProSeries 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.



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.



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

## 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, LoadLifter 5000 Ultimate or standard Air Lift ProSeries. The kits are easily identifiable by looking at the end caps on the air spring and the roll plates.

- Standard **LoadLifter 5000™** — Plastic end cap and Zinc-plated steel roll plates.
- LoadLifter 5000™ Ultimate** — Plastic end cap and Black powder-coated roll plates.
- Standard **Air Lift® ProSeries** — Aluminum end cap and Zinc-plated steel roll plates.



LoadLifter 5000  
Plastic end cap



LoadLifter 5000  
silver zinc-plated steel roll plate



LoadLifter 5000 Ultimate  
Plastic end cap



LoadLifter 5000 Ultimate  
black powder-coated roll plate



Air Lift ProSeries  
Aluminum end cap



Air Lift ProSeries  
silver zinc-plated steel roll plate

# Install the System

## GETTING STARTED

Your vehicle may be equipped with a rear brake proportioning valve. Any type of load assist product could affect brake performance. We recommend that you check with your dealer before installing this type of product. If your vehicle DOES NOT have a rear brake proportioning valve or is equipped with an anti-lock type brake system, installation of a load assist product will have NO EFFECT on brake performance.



COMPRESSED AIR CAN CAUSE INJURY AND DAMAGE TO THE VEHICLE AND PARTS IF IT IS NOT HANDLED PROPERLY. FOR YOUR SAFETY, DO NOT TRY TO INFLATE THE AIR SPRINGS UNTIL THEY HAVE BEEN PROPERLY SECURED TO THE VEHICLE.

## PREPARE THE VEHICLE

1. Raise the vehicle and support the axle with safety stands, setting the safety stands as wide as possible on the axle (Fig. 2).

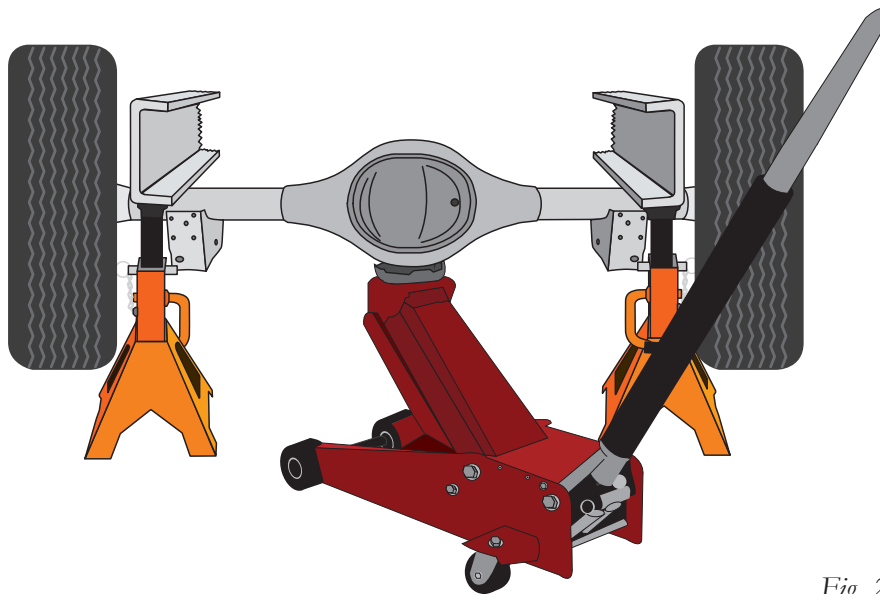


Fig. 2

2. Drop the axle or raise the frame up to make room for the assemblies to be put into position between the frame and axle.

## ASSEMBLE THE AIR SPRING ASSEMBLY

1. Set a roll plate (D) on both ends of the air spring (C). The radiused (rounded) edge of the roll plate will be toward the air spring, enabling the air spring to be seated in both roll plates (Fig. 3).

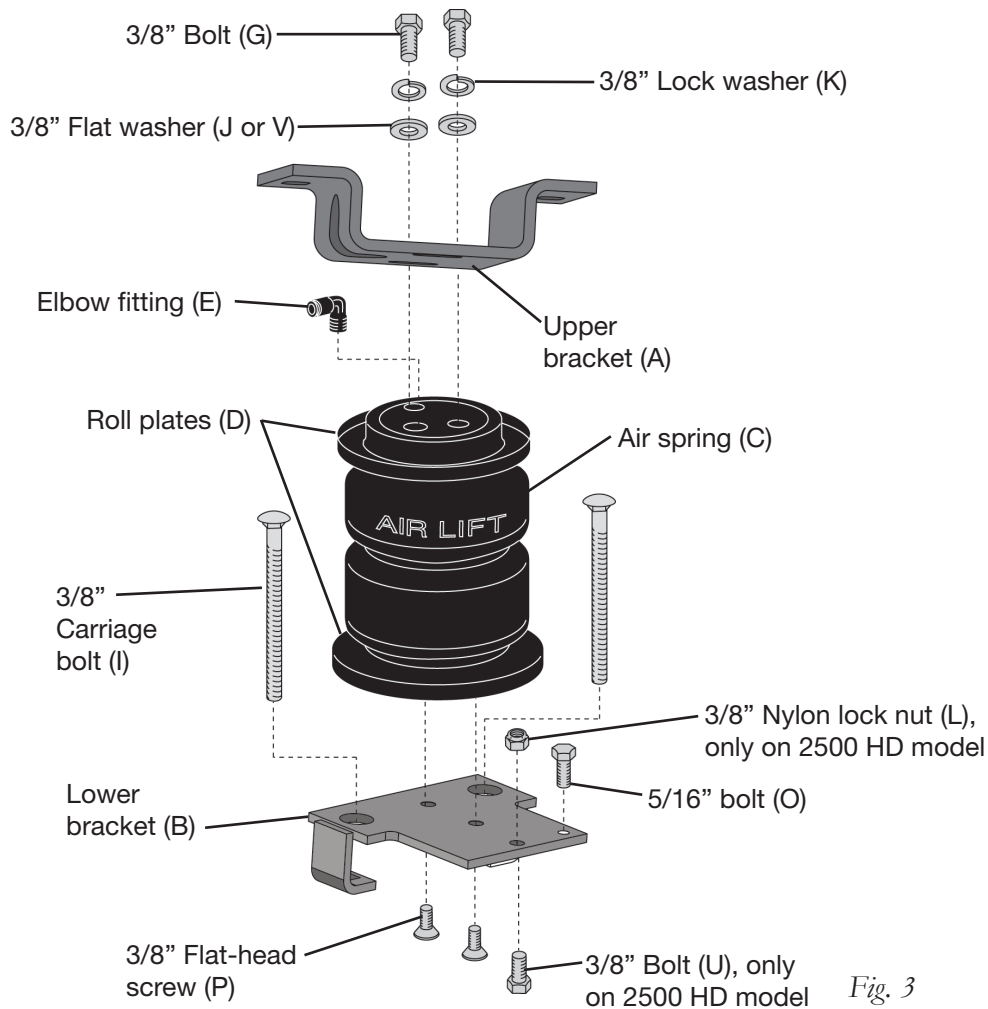


Fig. 3

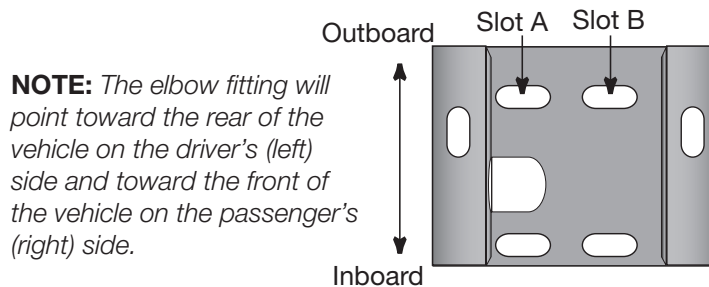


Fig. 4

**NOTE:** The elbow fitting will point toward the rear of the vehicle on the driver's (left) side and toward the front of the vehicle on the passenger's (right) side.

2. Install 90-degree elbow fitting (E) to the top of the air spring. Tighten finger-tight plus 1 1/2 turns. Be careful to only tighten on the metal hex nut. Do not overtighten (Fig. 3).
3. Install the upper bracket (A) onto the air spring assembly. Use slot "A" when installing on the driver's (left) side and use slot "B" when installing on the passenger's (right) side. Attach using two 3/8" bolts (G), lock washers (K), and flat washers (J or V). Leave the bolts loose at this time (Figs. 3 & 4).
4. **Driver's side only:** Insert a 5/16" bolt (O) into the small hole on the lower bracket (B) before attaching the lower bracket to the air spring assembly (Fig. 3).



5. **2500 HD models only:** Install a 3/8" bolt (U) and lock nut (L) through the hole in the lower bracket (Fig. 3) with the head of the bolt facing down. Tighten securely.
6. Insert two 3/8" carriage bolts (I) through the large holes and into the square holes of the legs in the lower bracket (Fig. 3).
7. Attach the lower bracket (B) to the bottom of the air spring assembly using two 3/8" flat-head screws (P). Tighten securely.

## REMOVE JOUNCE BUMPER AND POSITION THE ASSEMBLY ON THE AXLE

1. Remove both jounce bumpers under the frame rail and discard.

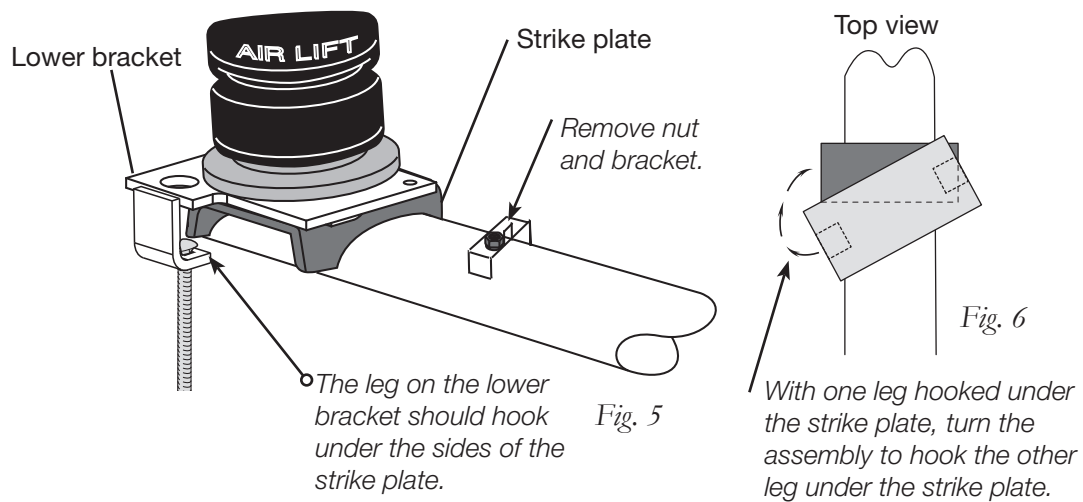
**NOTE** On the 2500 HD models only, the driver's (left) side of the axle may have a small bracket with a nut that has nothing attached to it. This bracket must be trimmed off of the axle in order to install the assembly (Fig. 5).

### 2500 HD models:

1. Set the assembly that has the cinch bolt onto the driver's (left) side.

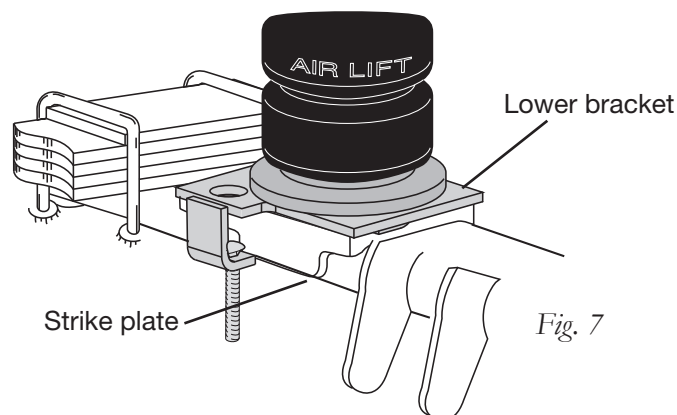
**NOTE** Index the lower legs under the jounce bumper strike plate.

2. With the lower bracket parallel to the strike plate, hook one leg under the side of the strike plate and turn the assembly until the other leg is under the strike plate on the other side (Fig. 6).
3. Once the legs are under the strike plate, proceed with the upper bracket instructions.



### 3500 models:

1. Set the assembly on the strike plate so that the legs of the lower bracket are forward and behind the axle (Fig. 6).



## ATTACH THE UPPER BRACKET

1. The elbow fitting points toward the rear of the vehicle on the driver's (left) side and toward the front of the vehicle on the passenger's (right) side.
2. Insert two 3/8" bolts (H) and flat washers (J) through the existing jounce bumper holes and through the slotted holes in the upper bracket (Fig. 8).

**NOTE** *It may be helpful to raise the axle at this point so that the upper bracket touches the frame.*

3. Attach the upper bracket using two flat washers (J) and nylon lock nuts (L) on each previously installed bolt (Fig. 8).
4. Push the bracket inboard and tighten both upper bolts.

**NOTE** *There should be a thumbs width between the air spring roll plate (D) and the leaf spring U-bolt.*

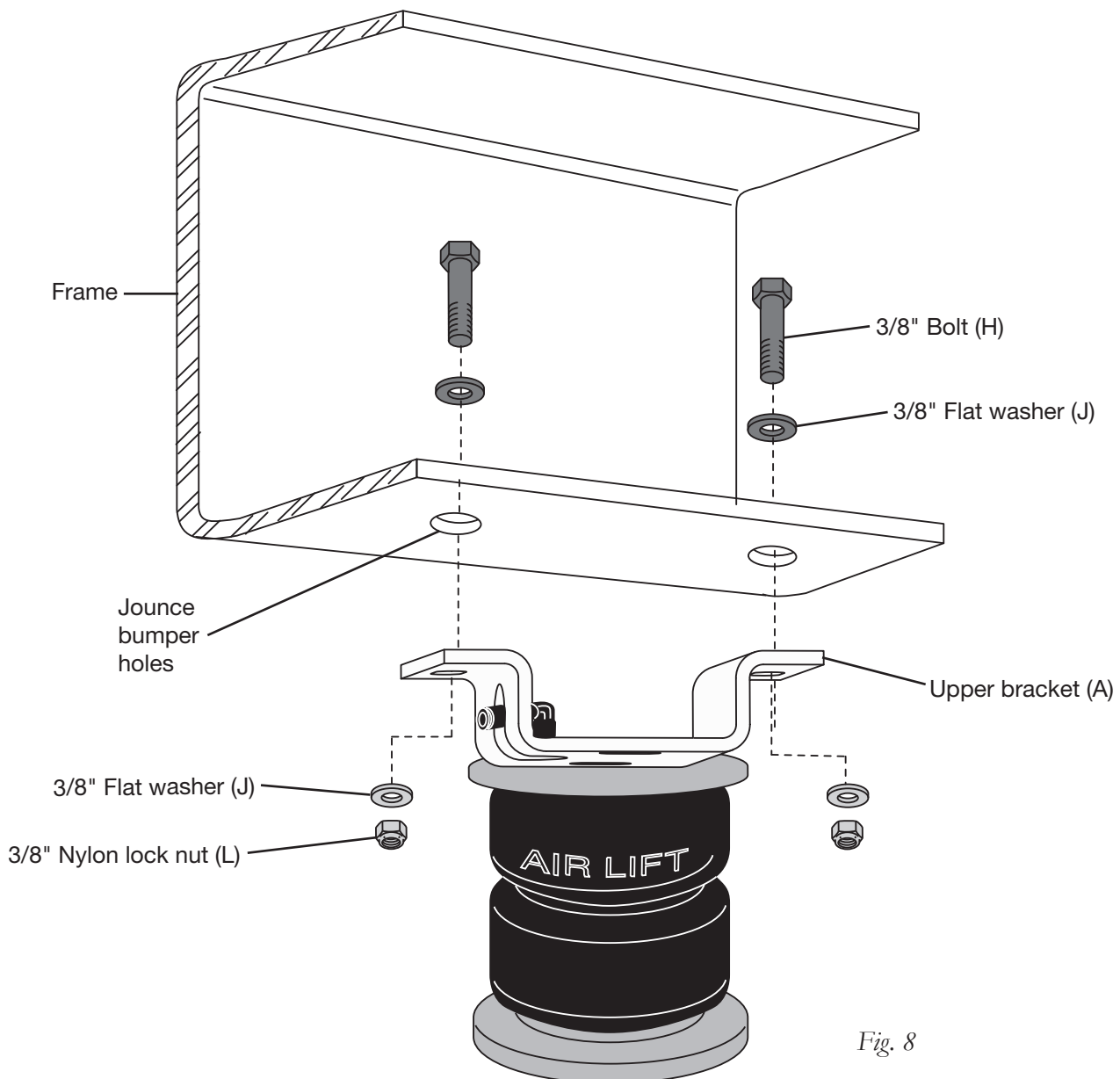


Fig. 8

## ALIGN AND ATTACH THE ASSEMBLY AND LOWER BRACKET

1. Bring the axle all the way up and remove the safety stands previously used to support the frame when removing the jounce bumper.

**NOTE** *The upper bracket is slotted for forward and backward adjustment. The bottom adjusts by moving the bracket on the axle in or out (Fig. 9).*

2. Adjust the assembly so that the air spring is perpendicular to the bottom and top mounting brackets.
3. Tighten the top mounting bolts to 20 lb.-ft. (27Nm).

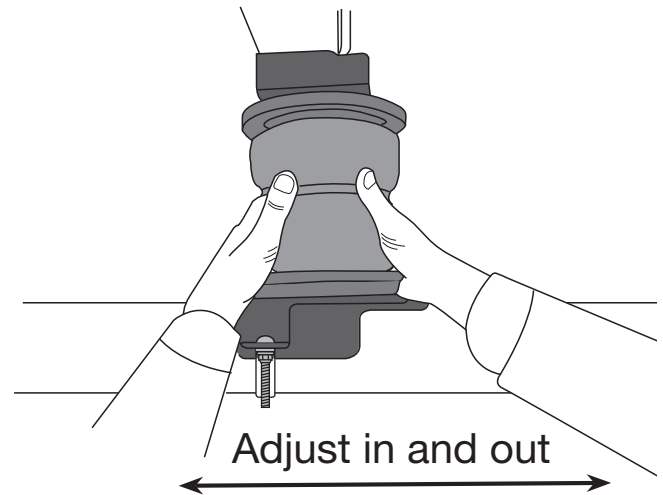


Fig. 9

4. Attach the axle strap (F) to both lower bracket carriage bolts using two flat washers (J) and two nylon lock nuts (L). Torque evenly to 16 lb.-ft. (22Nm) (Fig. 10).

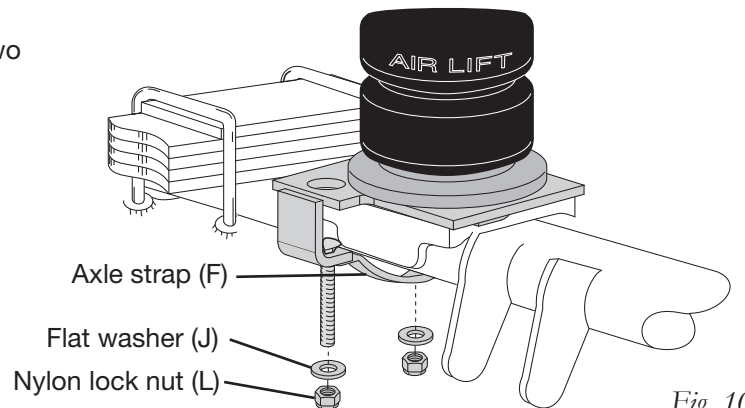


Fig. 10

## INSTALL THE EMERGENCY BRAKE LINE BRACKET AND CLIP (DRIVER'S SIDE ONLY)

1. Attach the brake line bracket (Q) to the lower bracket using the previously installed 5/16" bolt (O) with one flat washer (J) and a nylon lock nut (M) (Figs. 1 & 11).
2. Attach the brake line clip (N) onto the emergency brake line bracket (Figs. 1 & 11).
3. Attach the clip assembly to the brake line bracket using a 5/16" bolt (O), two flat washers (J), and a nylon lock nut (M) (Figs. 1 & 11).
4. Align the brake line bracket and clip assembly so that the two do not bind to the cable. Tighten all mounting hardware in this assembly securely.

**NOTE** *Be sure the cable does not rub against the air spring when it is fully inflated. If it does, adjust the assembly accordingly.*

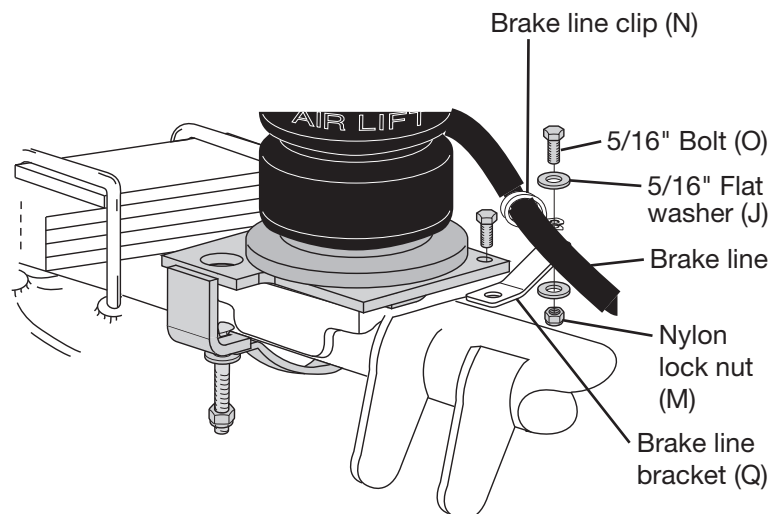
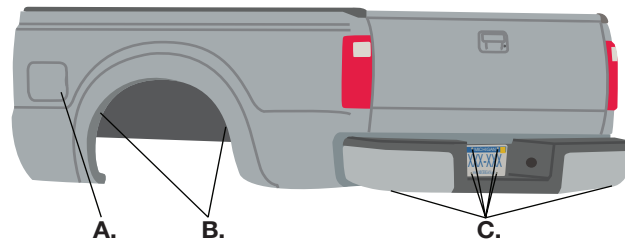


Fig. 11

# Install the Air Lines

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

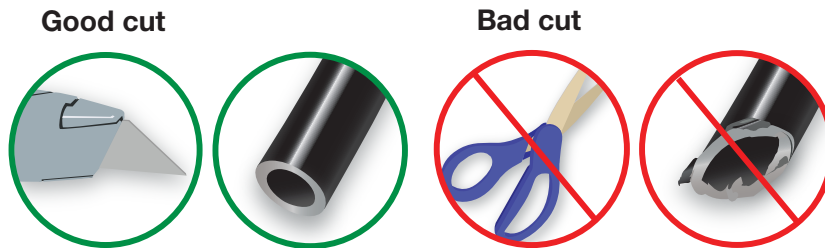


A. Inside fuel tank filler door  
 B. Inside rear wheel wells  
 C. License plate or rear bumper area



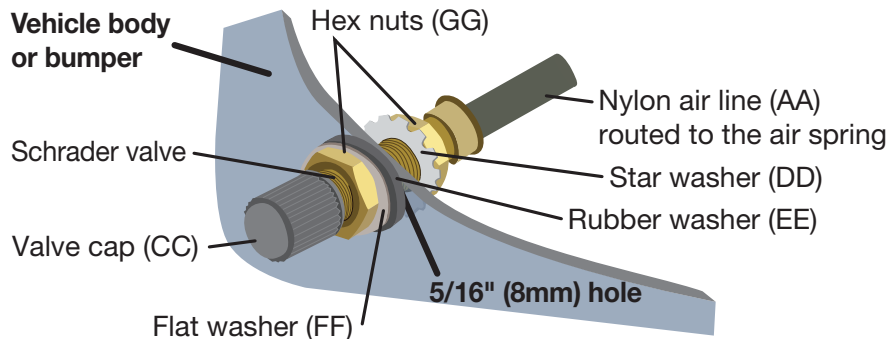
**KEEP AT LEAST 6" (152MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.**

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.



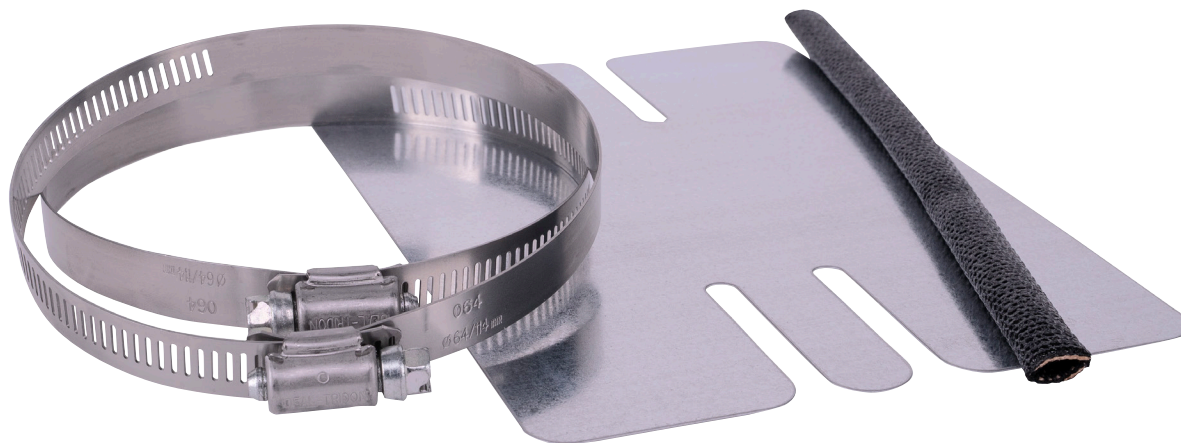
3. Use zip ties (BB) to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. Leave at least 2" (51mm) of slack in the air line to allow for any movement that might pull on the air line. The minimum bend radius for the air line is 1" (25mm).

4. Install the Schrader valve in the chosen location.

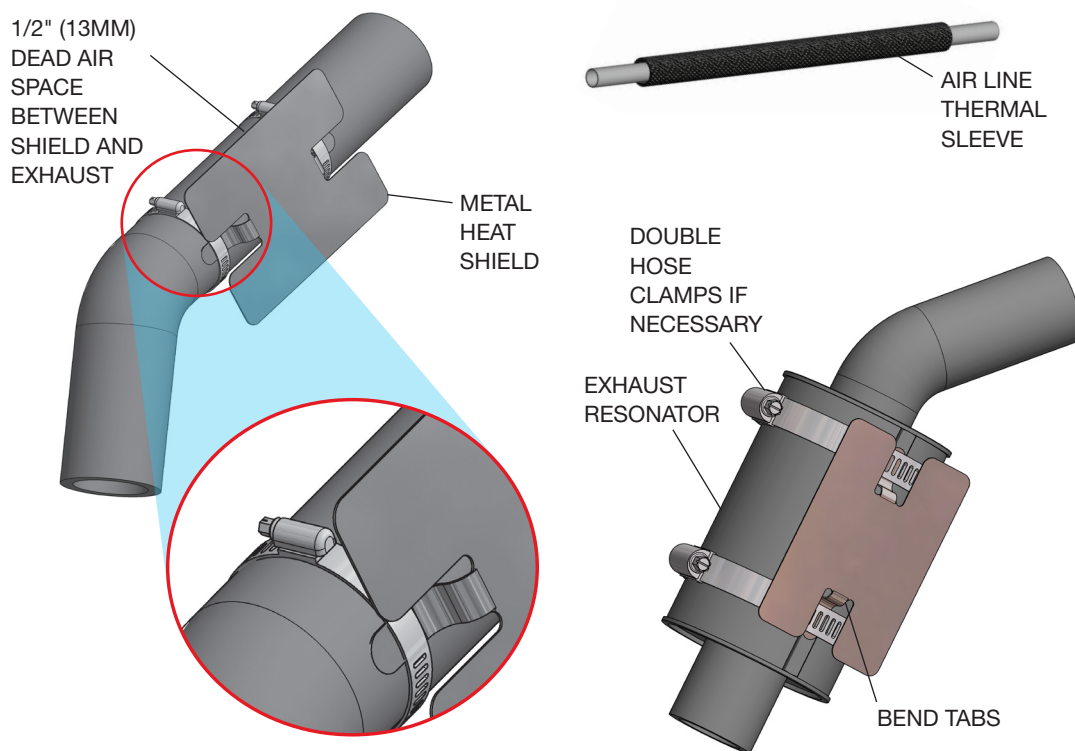


## INSTALL THE HEAT SHIELD

Heat shield kit (HH) contents - (1) Heat shield, (1) Air line thermal sleeve and (2) Hose clamps:



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



# 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](http://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!*

## 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 +1 (517) 322-2144.



Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or P.O. Box 80167 • Lansing, MI 48908-0167

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