

LoadLifter 5000™ SERIES



Installation Guide



2001-2005 Chevy Silverado 1500HD

2001-2008 GMC Sierra 1500HD

1999-2004 Chevy Silverado/GMC Sierra 2500 3/4 Ton Pickup



Watch the video
Info on Table of Contents page

Kit 57250 88250

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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Video-enhanced installation guides

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

Installation Diagram

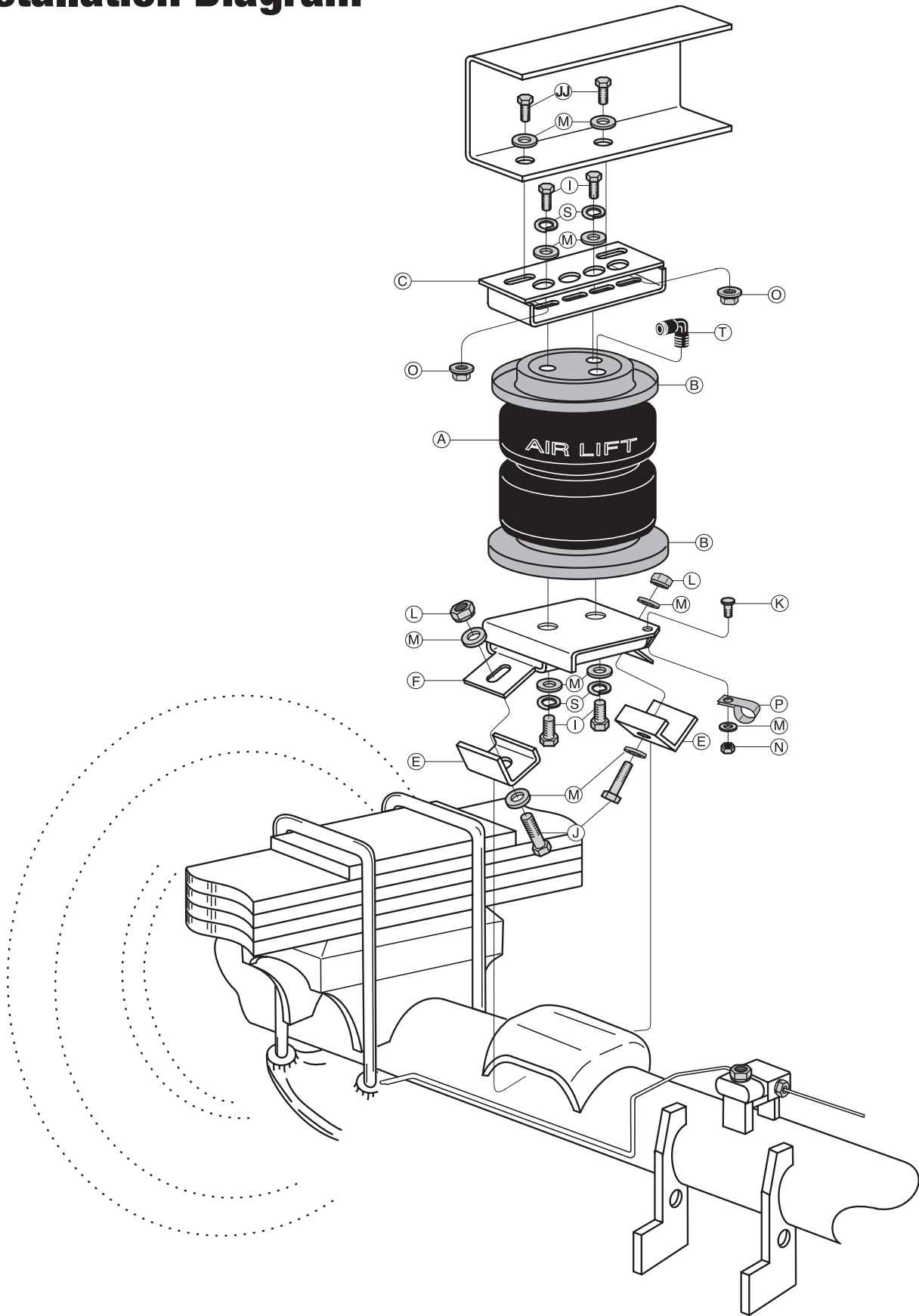


Fig. 1

Hardware and Tools Lists

HARDWARE LIST

Item	Part#	Description	Qty
C	07301	Upper bracket.....	2
E	01663	Retaining brackets.....	4
F	03441	Lower brackets.....	2
G*	34365	Heat shield kit.....	1
I	17203	3/8-24 x 7/8" Hex head bolts.....	8
J	17169	3/8-16 x 2" Hex head bolts.....	4
K	17190	5/16" Clinch bolt (driver's side only).....	1
L	18435	3/8-16 Lock nut.....	4
M	18444	Flat washer.....	21
N	18438	5/16" Lock nut (driver's side only).....	1
O	18422	3/8" Whiz nut.....	4
P	10465	Hose clip (driver's side only).....	1
S	18427	Lock washers.....	8
T	21837	90 degree Swivel fitting.....	2
AA*	20086	Air line assembly.....	1
BB*	10466	Zip tie.....	6
CC*	21230	Valve caps.....	2
DD*	18501	M8 Flat washers.....	2
EE*	21234	Rubber washer.....	2
FF*	18411	Star washer.....	2
GG*	21233	5/16" Hex nut.....	4
HH*	09484	Thermal sleeve.....	1
JJ	17187	3/8-16 x 7/8" Hex head bolts.....	4

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

TOOLS LIST

Description.....	Qty
Jack or Hoist.....	1
Safety stands.....	2
Safety glasses.....	1
Air compressor or compressed air source.....	1
Spray bottle with dish soap/water solution.....	1
9/16" open-end box wrenches.....	1
Adjustable wrench.....	1
Ratchet with 15mm, 7/16", 9/16" and 1/2" deep well sockets.....	1
3/8" & 5/16" Drill bits (very sharp).....	1
Heavy duty drill.....	1
Torque wrench.....	1
Hose cutter, razor blade, or sharp knife.....	1
3/4" Wrench.....	1

Unique Parts in Each Kit

LoadLifter 5000™ KIT 57250

Item	Part#	Description	Qty
A	58437	Air spring.....	2
B	11951	Zinc-plated silver roll plate.....	4

LoadLifter 5000™ ULTIMATE KIT 88250

Item	Part#	Description	Qty
A	58496	Air spring with jounce bumper.....	2
B	11967	Black painted roll plate.....	4

The photos in this manual show the LoadLifter 5000 and LoadLifter 5000 Ultimate kits.



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 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.

Installing the System

IMPORTANT: 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 SYSTEM PERFORMANCE.

IMPORTANT: Failure to maintain correct minimum pressure (or pressure proportional to load), bottoming out, overextension, or rubbing against another component will void the warranty.



CAUTION

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.

GETTING STARTED

1. Determine the Normal Ride Height. The Normal Ride Height is the distance between the bottom edge of the wheel-well and the center of the hub with the vehicle in the “as-delivered” condition. In some cases, Normal Ride Height is not perfectly level (Fig. 2).
 - a. Remove unusual loads and examine your vehicle from the side to ensure it is on a level surface.
 - b. If necessary (in cases where your leaf springs are sagging badly), use a jack to raise the rear end so that the vehicle achieves the original “as-delivered” ride height.



Fig. 2

2. Measure the distance between the center of the hub and the bottom edge of the wheel well (see Fig. 3). This is the Normal Ride Height. Enter the measurement below:

NORMAL
RIDE HEIGHT: _____ inches

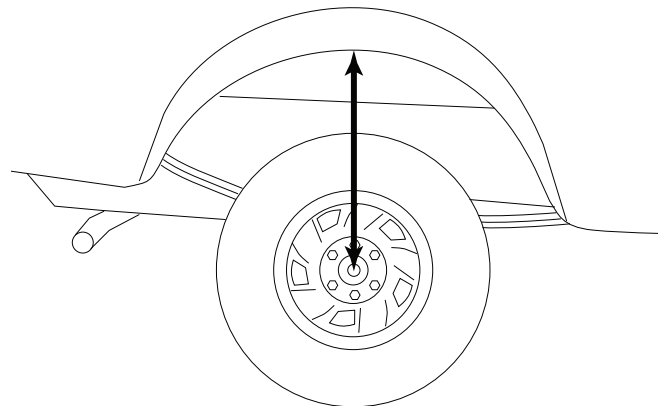


Fig. 3

ASSEMBLING THE AIR SPRING UNIT

1. Set a roll plate (B) on both ends of the air spring (A).
The radiused (rounded) edge of the roll plate will be toward the air spring, so that the air spring is “seated” in both roll plates (Fig. 4).

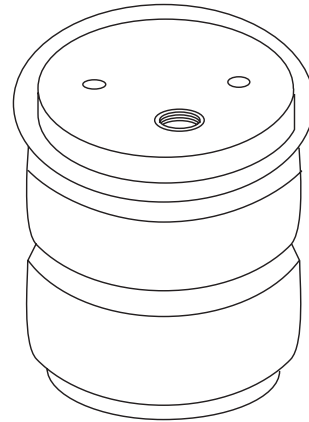


Fig. 4

2. Attach the upper brackets (C) to the air springs with two 3/8-24x7/8" hex head bolts (I), lock washers (S), and flat washers (M). Leave loose at this time (Fig. 5).

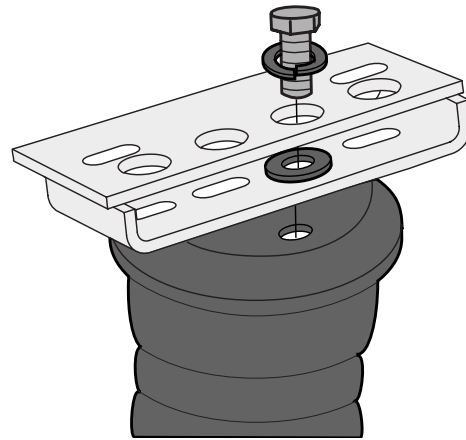


Fig. 5

NOTE

Use the correct holes for driver's (left) and passenger's (right) side mounting. See diagram to correctly index the air spring and the upper bracket (Fig. 6).

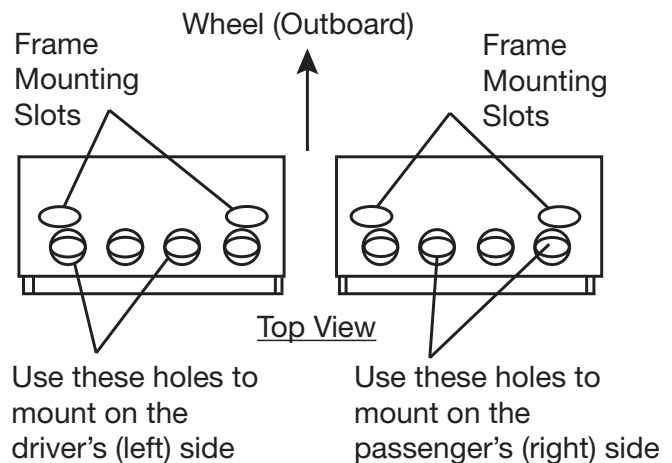


Fig. 6

DRIVERS (LEFT) SIDE ONLY - Insert 5/16" clinch bolt (K) into the small hole of the lower bracket (F) before attaching the lower bracket to the air spring. Supporting the lower bracket will ease installation of the clinch bolt. Use a hammer to drive the bolt into the hole in the lower bracket (Fig. 7).

3. The lower bracket must be attached with the small hole in the lower bracket on the same side as the air port in the air spring.

NOTE

Be sure to install the assembly with the clinch bolt on the driver's (left) side. Refer to diagram (Fig. 8).

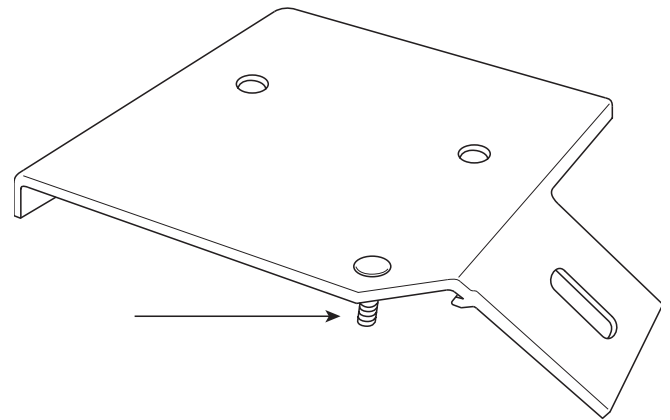


Fig. 7

4. Attach the air spring to the lower bracket (Fig. 8 & Fig. 9). Secure the lower bracket (F) to the air spring (A) with two 3/8-24x7/8" hex head bolts (I), lock washers (S), and flat washers (M) (Fig. 9).
5. Torque to 20 lb.-ft. (27.1Nm). It may be helpful to use a socket to install the mounting hardware.

CAUTION

DO NOT CROSS THREAD THE BOLT.

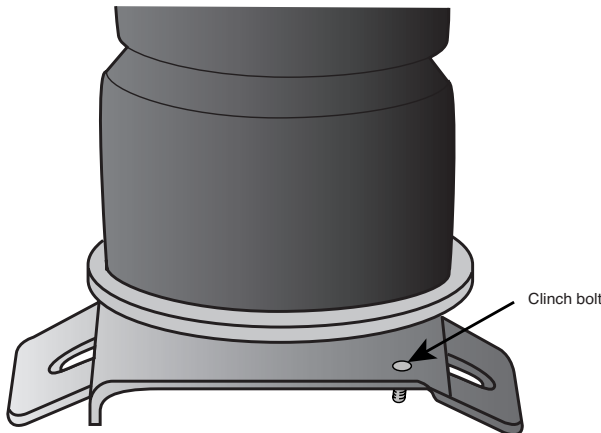


Fig. 8

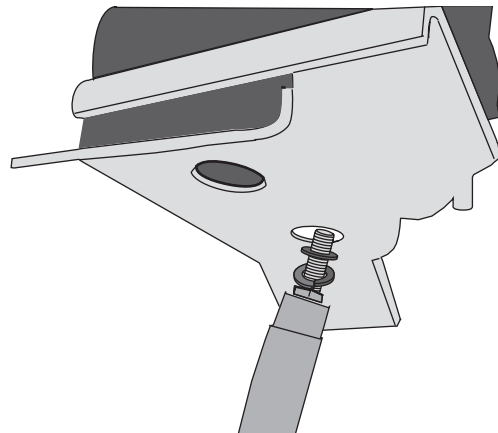


Fig. 9

REMOVING THE JOUNCE BUMPER

1. Using a 15mm Socket, remove the jounce bumper from the frame rail (Fig. 10).

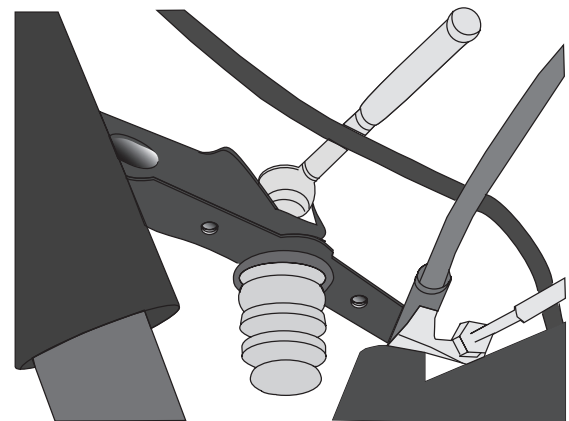
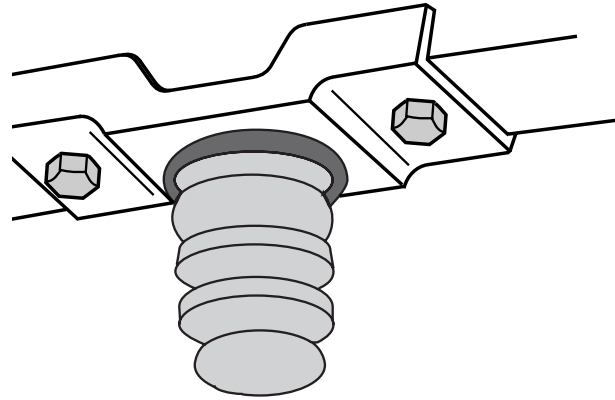


Fig. 10

2. The style of jounce bumper will vary depending on the model of the truck.
3. On some models the jounce bumper may be attached to the frame with a bracket.
4. Remove the entire jounce bumper bracket and the jounce bumper from the frame rail (Fig. 11).


Fig. 11

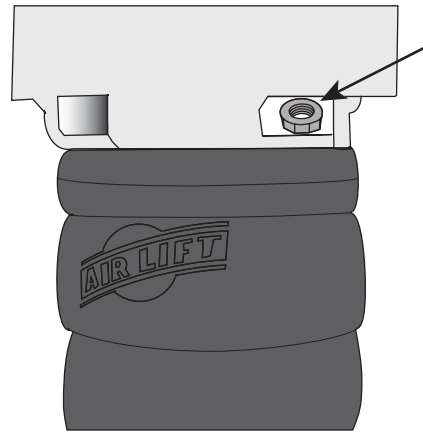
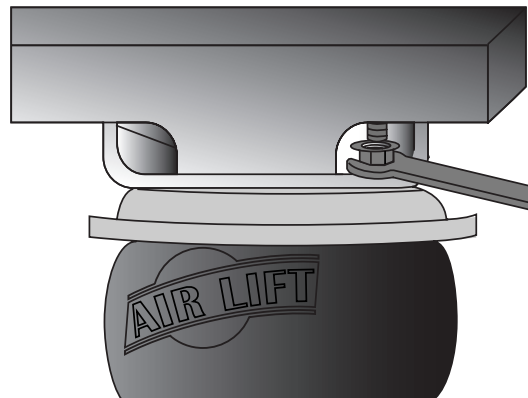
ATTACHING THE AIR SPRING ASSEMBLY

1. Set assembly on the axle with the air port on top of the air spring toward the inside of the frame rail (Fig. 1).

NOTE

Reference *Assembling the Air Spring Unit, Attaching the Upper Bracket*, for driver's (left) side and passenger's (right) side assemblies.

2. Set whiz nut (O) up inside of the upper bracket (Fig. 12 & Fig. 13) with flange up (Fig. 12).
3. Hold in place with an open end 9/16" wrench.
4. Put 3/8"x7/8" hex head bolts (I) with flat washers (M) down through the existing jounce bumper hole from the inside of the frame, and attach to the whiz nuts (Fig. 13). Leave loose for adjustment later.


Fig. 12

Fig. 13

- Secure the lower bracket to the jounce bumper strike pad using the retaining bracket (E), 3/8"x2" hex head bolt (J), flat washers (M) and 3/8" lock nut (L) (Fig. 14).

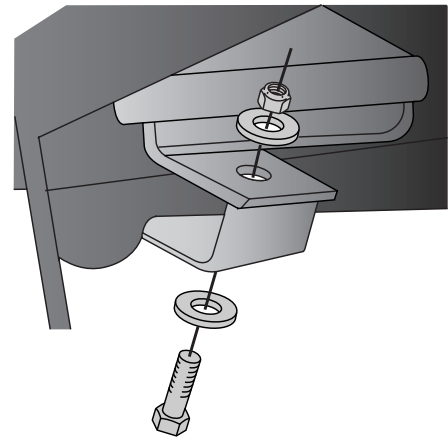


Fig. 14

- The short leg of the retaining bracket must be under the edge of the jounce bumper strike pad.
- Tighten evenly front to back to keep the lower bracket flat and centered on the jounce bumper pad.
- Center the upper bracket so the bolts are in the center of the slots (Fig. 15).
- Adjust air spring at top so air spring is perpendicular to both upper and lower brackets.

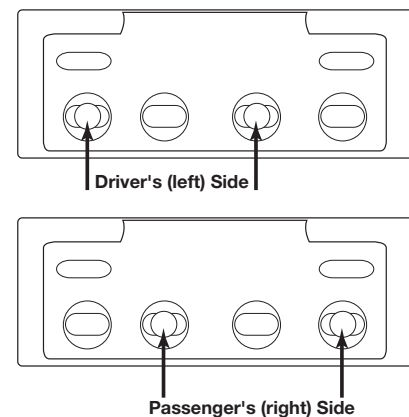


Fig. 15

- Tighten both air springs to top bracket mounting bolts (Fig. 16).

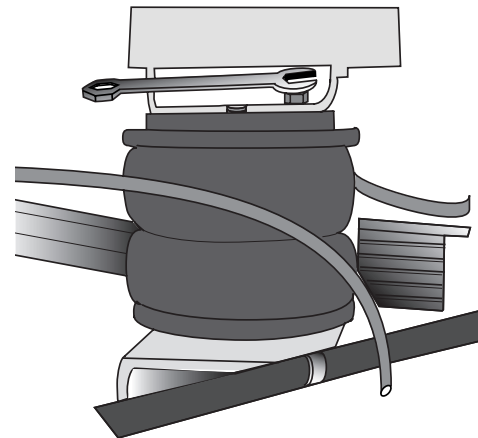


Fig. 16

11. Tighten bracket to frame mounting hardware.
12. Install the swivel air fitting (T) into the top of the air spring (A). This fitting is pre-coated with sealant. Finger-tight plus two full turns with an open-end wrench will seal the fitting (Fig. 17).
13. Use a 7/16" open end wrench, being careful to tighten on the metal hex nut only.

⚠ CAUTION

DO NOT OVERTIGHTEN.

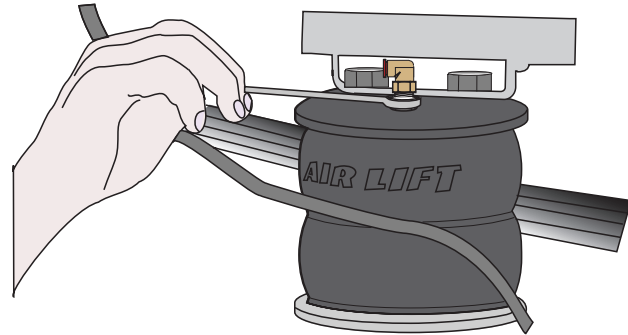


Fig. 17

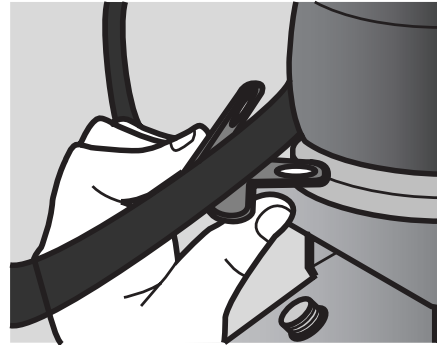


Fig. 18

DRIVER'S (LEFT) SIDE ONLY - SECURE BRAKE LINE

1. Slide the provided clip (P) onto the rubber coated brake line (Fig. 18). Secure the clip (P) to the clinch bolt already installed on the lower bracket (F) with a flat washer (M) and 5/16" lock nut (N).

⚠ CAUTION

BE SURE THE CLIP IS UNDER THE LOWER BRACKET (Fig. 19).

INSTALL THE OTHER AIR SPRING

1. You have now completed the installation for one air spring. Repeat the steps on pages 4 through 10 for the other side of the vehicle before you proceed to *Installing the Air Lines*.

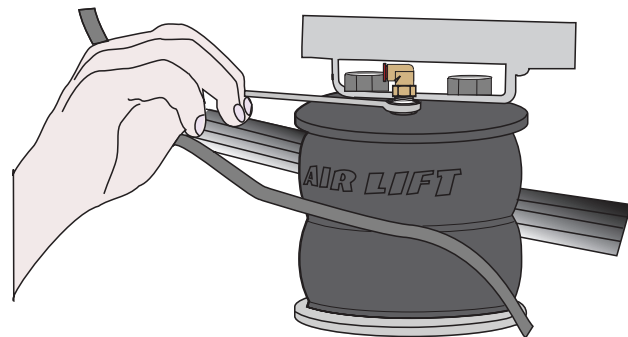


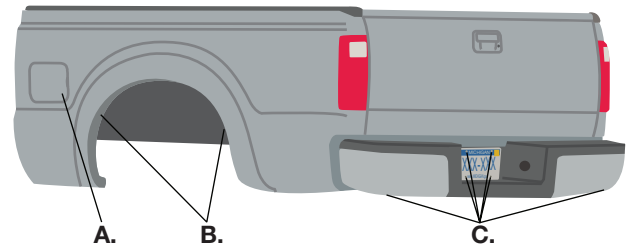
Fig. 19

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. 20).

CAUTION

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



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

Fig. 20

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. After cutting the air line to length, install the air line thermal sleeve over the air line on the passenger's (right) side before inserting into the fitting. Secure the air lines to the upper coil spring mount with zip ties (BB) supplied.
2. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 21). Do not use scissors or wire cutters.
3. Use zip ties 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. 22).

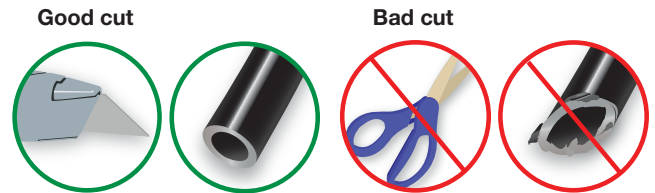


Fig. 21

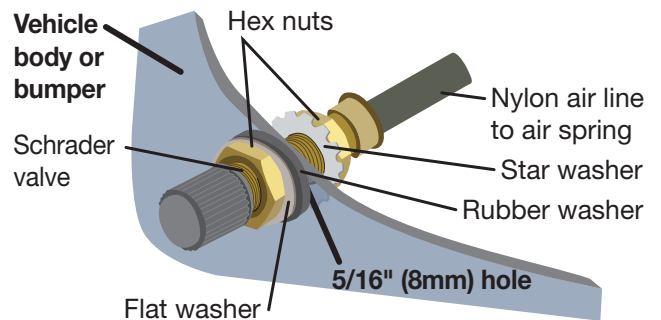


Fig. 22

INSTALLING THE HEAT SHIELD

1. Attach the metal heat shield to the exhaust 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 (Fig. 23).

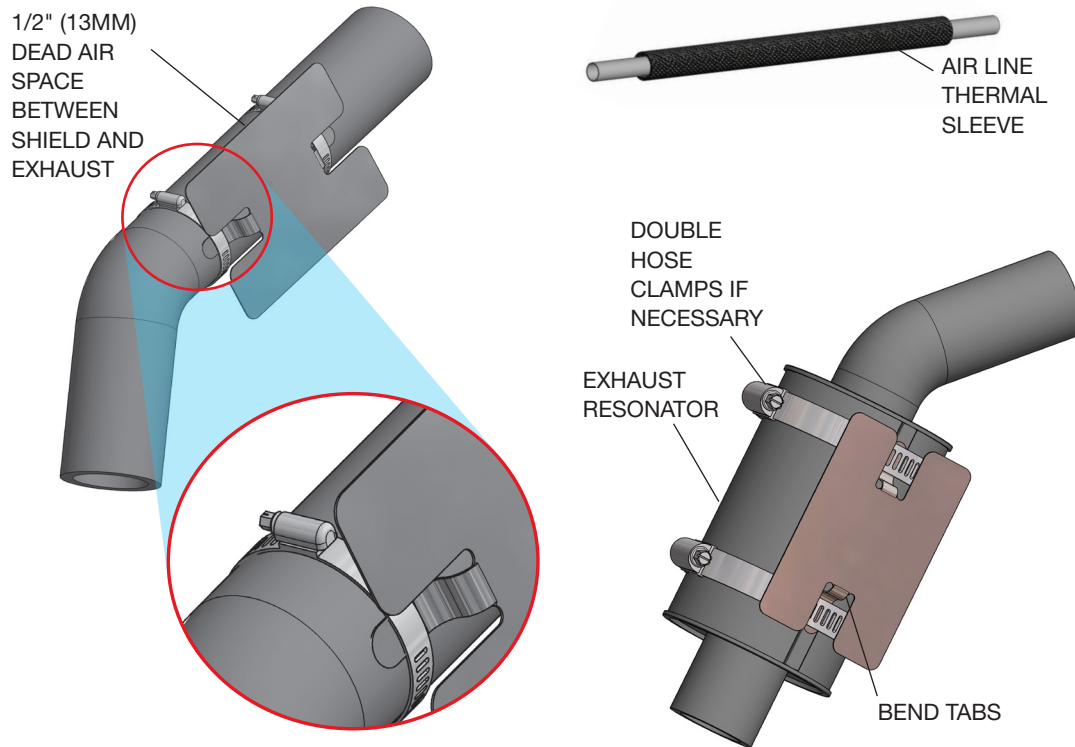


Fig. 23

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.

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.

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



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