## LoadLifter 5000 series



## **Installation Guide**



2001 - Chevrolet Silverado/GMC Sierra 3500 Commercial Cab and Chassis

Kits 57286 | 88286

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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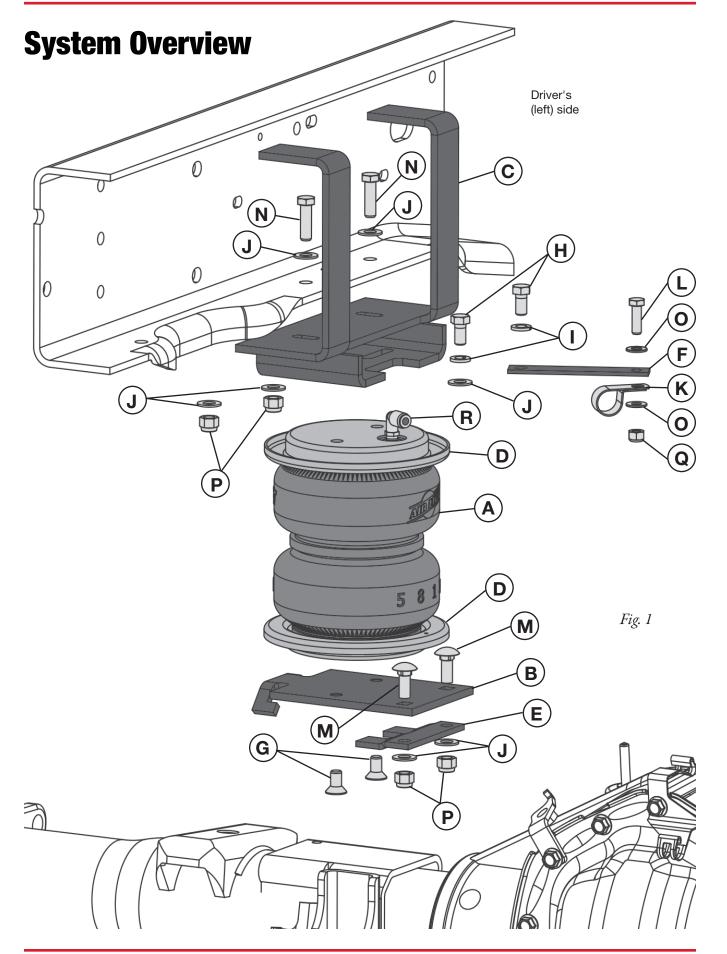
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## **Hardware and Tools**

#### **HARDWARE LIST**

Itom	Part #	DescriptionQty
A	58437	Kit #57286 air spring
A	58496	Kit #88286 air spring (w/ integrated jounce bumper)2
В	03253	Lower bracket
C	07990	Upper bracket
D	11951	Kit #57286 zinc-coated roll plate
D	11967	Kit #88286 black powder coated roll plate4
F	03267	Clamp
F	11041	Emergency brake cable bracket1
G	17215	3/8"-24 x 3/4" Flat head screw
H	17203	3/8"-24 x 7/8" Hex cap screw4
I 1	18427	3/8" Lock washer
J	18444	3/8" Flat washer
K	10465	5/8" Clip
L	17103	5/16"-18 x 1" Hex cap screw1
М	17134	3/8"-16 x 1" Carriage bolt4
N	17188	3/8"-16 x 1 1/4" Hex cap screw4
0	18433	5/16" Flat washer2
Р	18435	3/8"-16 Nylon lock nut8
Q	18438	5/16"-18 Nylon Lock Nut1
R	21837	90-degree Swivel elbow fitting2
S*	20086	Air line assembly1
T*	10466	Zip tie6
U*	18501	M8 Stainless steel flat washer2
V*	18411	Stainless steel star washer2
W*	21230	Valve caps2
Χ*	21233	5/16" Hex nut4
Y*	21234	Rubber washer2
Z*	34365	Heat shield1

#### **TOOLS NEEDED**

DescriptionStandard and metric open-end or boxed wrenchesStandard and metric regular and deep-well sockets	Set
Drill and 5/16" drill bit	1
Hose cutter, razor blade, or sharp knife	1
Hoist or floor jack	1
Safety stands	
Safety glasses	
Air compressor or compressed air source	
Spray bottle with dish soap/water solution	1

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



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



### 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 HAZ-ARDS 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.



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 LoadLifter 5000 Ultimate Plus. 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

Air Lift offers two Ultimate Plus upgrade kits:

52300 - Braided stainless steel air line and fittings.

52301 - Stainless steel roll plates, air spring mounting hardware, braided stainless steel air lines and fittings.



## **Installing the System**

#### PREPARING THE VEHICLE

- 1. Lift the vehicle and support the frame with safety stands. Drop the axle down low enough to provide clearance for the air springs (Fig. 2).
- 2. Remove the jounce bumpers from the frame that are above the axle.

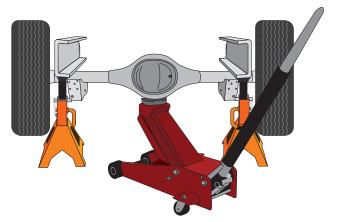
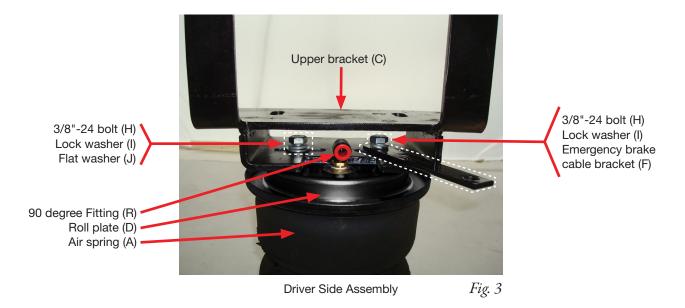


Fig. 2

#### ASSEMBLING THE AIR SPRING

- 1. Set the roll plates (D) on both sides of the air spring (A). The radius (rounded edge) of the roll plate will be towards the air spring, so both ends are seated in both roll plates (Fig. 1).
- 2. Install the 90 degree swivel elbow fitting (R) to the top of the air spring (A). Tighten finger-tight plus 1 and a 1/2 turns. Be careful to only tighten on the hex nut. Do not over tighten.
- 3. Driver Side: Install the upper bracket to the air spring assembly using two 3/8" bolts (H), lock washers (I), with one flat washers (J) on the rear bolt, and the emergency brake cable bracket (F) on the forward bolt (Fig. 3). Leave bolts loose at this time.



4. **Passenger Side:** Install the upper bracket to the air spring assembly using two 3/8" bolts (H), lock washers (I), flat washers (J). Leave the bolts loose at this time.

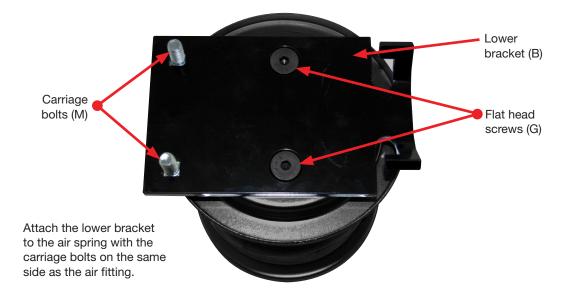
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5. Insert two 3/8" carriage bolts (M) into the lower bracket (B) opposite end of the "tabs" that are on one end. Attach the lower bracket to the air spring assembly using two 3/8" flat head screws (G) and tighten securely.



The end with the carriage bolts in the lower bracket will be on the same side as the fitting (Fig. 4).



#### Fig. 4

#### SETTING THE ASSEMBLY IN PLACE

The assembly with the emergency brake cable bracket mounts on the driver's (left) side. Install both sides together throughout the installation (not one at a time).

1. Set the clamp (E) into position under the jounce bumper strike plate that is welded to the axle (Fig. 5).



It may be necessary to pry the bracket into position.





2. Set the driver's (left) side assembly in place over the axle. The "tabs" that are on the outside of the lower bracket will index under the jounce bumper strike plate (Fig. 6).



It may be necessary to pry the bracket into position.

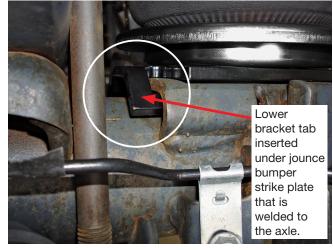
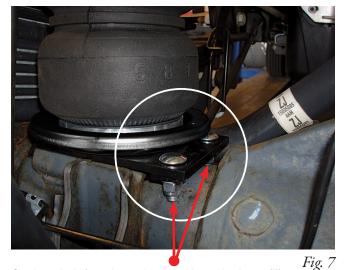


Fig. 6

 While setting the lower bracket into position, insert the lower bracket carriage bolts into the holes in the clamp (E). Cap with two 3/8" flat washers (J) and nylon lock nuts (P) and tighten both nuts evenly until tight (Fig. 7).



Carriage bolt from lower bracket through clamp (E) and capped with flat washer (J) and nylon lock nut (P). Tighten both nuts evenly until tight.

4. The upper bracket will set under the bottom frame flange. Lift the axle up just far enough for the upper bracket to touch the frame.



The upper brace also fits under the top flange of the frame (Fig. 8).





Brace on upper bracket fits under the top of the frame flange

Fig. 8



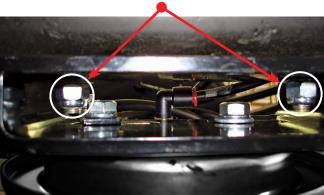
5. Using the existing holes that the jounce bumper was removed from, attach the upper bracket to the frame by using two 3/8" bolts (N) four flat washers (J) and nylon lock nut (P).



Set the nut inside, on the bracket while holding the washer onto the underside of the bolt. Push the bolt down into the nut, and then turn the bolt to get it to start. With the air spring mounting bolts still loose, it may be necessary to push the air spring forward or back to gain clearance to start the nut (fig. 9).

- 6. Align the air spring by moving the upper bracket inward or outward and by moving the air spring forward and back so that the air spring is perpendicular to both brackets. Then tighten the upper bracket mounting bolts to 31 lb.-ft.
- 7. Raise the suspension back up to stock ride height. Make sure the air spring is still aligned. Push the emergency bracket (F), on the driver's (left) side only, as far forward as possible and tighten the upper air spring mounting bolts securely. Do not over tighten.

Flat washer (J) and Nylon lock nut (P)



While holding the flat washer up on the bolt that is through the frame/bracket, set the nylon lock nut in place on the bracket and slide it into position under the bolt. Push the bolt into the nylon lock nut and turn the bolt to start it into the nut.

Fig. 9

#### SECURING THE EMERGENCY BRAKE CABLE

To keep the emergency brake cable from rubbing a hole in the side of the air spring, it will be necessary to secure it to the emergency brake cable mounting bracket.

1. Install a clip (K) to the cable and attach the clip to the bracket using a 5/16" hex cap screw (L), two flat washers (O), and a nylon lock nut (Q). Install the cable so it is on the air spring side of the mounting hardware (fig. 10).

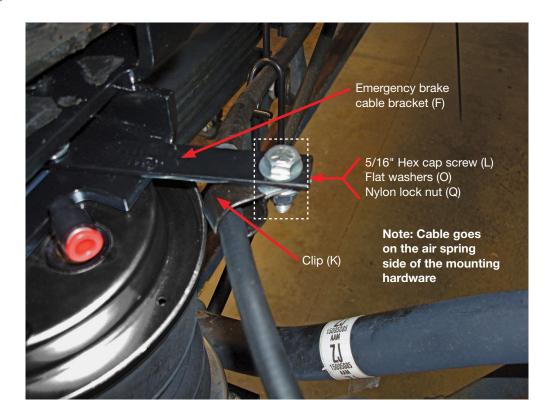


Fig. 10

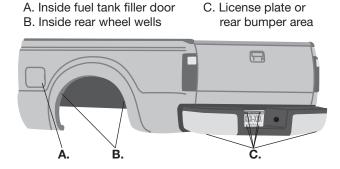
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## **Installing the Air Lines**

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





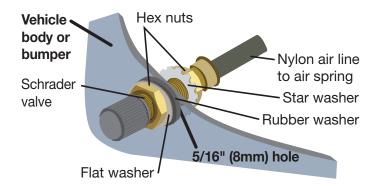
KEEP AT LEAST 6" (150MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

#### **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. 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. 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.

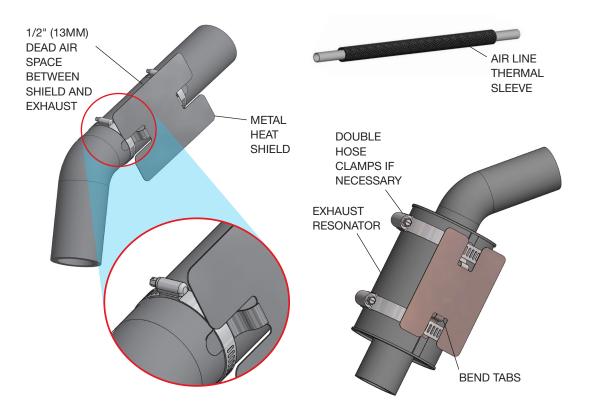


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#### **INSTALLING THE HEAT SHIELD**

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.





## **Before Operating**

#### INSTALLATION CHECKLIST

- □ Clearance test Inflate the air springs to 75-90 PSI (5.2-6.2BAR) 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 75-90 PSI (5.2-6.2BAR) 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.







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.

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## **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.



### **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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