Load Lifter 5000

Kit 57292

2004–2006 Chevrolet 5500 Cutaway





INSTALLATION GUIDE

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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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.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information here includes a hardware list, tool list, step-by-step installation information, maintenance tips, safety information and a troubleshooting guide.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. Contact Air Lift Company at (800) 248-0892 or visit us online at www.airliftcompany.com for the latest version of this manual.

IMPORTANT SAFETY NOTICE

The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

Gross Vehicle Weight Rating: The maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

Payload: The combined, maximum allowable weight of cargo and passengers that the truck is designed to carry. Payload is GVWR minus the Base Curb Weight.

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.



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.



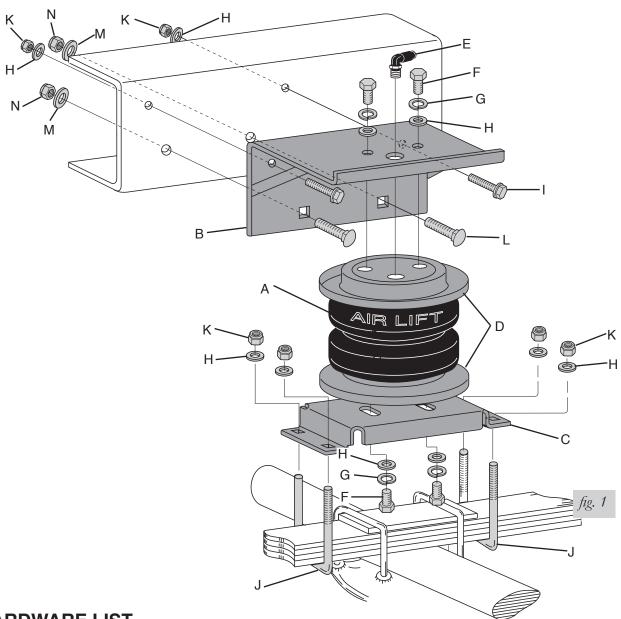
INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE MACHINE OR MINOR PERSONAL INJURY.

NOTE

Indicates a procedure, practice or hint which is important to highlight.



Installation Diagram



HARDWARE LIST

Item	Part #	DescriptionQty	Item	Part #	DescriptionQty
Α	58116	Air spring2	L	17238	1/2"-13 x 1 1/2" Carriage bolt4
В	07129	Upper bracket2	M	18485	1/2" Flat washer4
С	03260	Lower bracket2	Ν	18460	1/2"-13 Nylon lock nut4
D	11897	Roll plate4	AA	20086	Air line assembly1
Ε	21837	Elbow fitting2	BB	10466	Zip tie6
F	17187	3/8"-16 x 7/8" bolt8	CC	21230	Valve cap2
G	18427	3/8" Lock washer8	DD	18501	M8 Flat washer2
Н	18444	3/8" Flat washer20	EE	21234	Rubber washer2
1	17159	3/8"-16 x 2" Frame bolt4	FF	18411	Star washer2
J	10561	U-bolt4	GG	21233	5/16" Hex nut4
K	18435	3/8"-16 Nylon lock nut12			

STOP!

Missing or damaged parts? Call Air Lift customer service at (800) 248-0892 for a replacement part.

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TOOLS LIST

DescriptionQty	DescriptionQty
Hoist or floor jacks1	Ratchet with 9/16", metric, & 1/2" deep well
Safety stands2	sockets 1
Safety glasses 1	5/16" Drill bits (very sharp)
Torque wrench1	Heavy duty drill1
1/2" open-end or box wrench	Hose cutter, razor blade, or sharp knife 1
5/16" open-end or box wrench 1	Air compressor or compressed air source 1
Adjustable wrench 1	Spray bottle with dish soap/water solution 1

Installing the LoadLifter 5000 System

GETTING STARTED

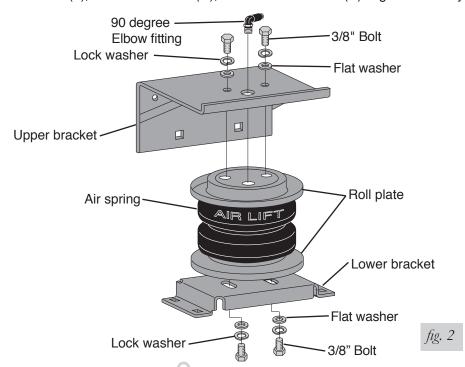
Your vehicle may be equipped with a rear brake proportioning valve. Any type of load assist product could affect brake performance. We recommend that you check with your dealer before installing this type of product. If your vehicle DOES NOT have a rear brake proportioning valve or is equipped with an 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.

ASSEMBLING THE AIR SPRING ASSEMBLY

- 1. Set a roll plate (D) on both ends of the air spring (A). The radiused (rounded) edge of the roll plate will be towards the air spring, so that the air spring is seated in both roll plates (fig. 2).
- 2. Install 90 degree elbow fitting (E) to the top of the air spring. Tighten finger-tight plus 1 and 1/2 turns. Be careful to only tighten on the metal hex nut. Do not over tighten.
- 3. Set the upper bracket (B) over the top of the air spring. Attach the upper bracket using two 3/8" bolts (F), two lock washers (G), and two flat washers (H). Tighten securely (fig. 2).





4. Set the lower bracket (C) on to the bottom of the air spring (fig. 2).

NOTE

The bracket will be offset to the outside of the vehicle.

5. Attach using two 3/8" bolts (F), two lock washers (G), and two flat washers (H). Leave loose at this time for later adjustment (fig. 2).

REMOVING THE JOUNCE BUMPER

- 1. Remove the bolts that hold the jounce bumper bracket on.
- 2. Remove the jounce bumper bracket from the side of the frame.

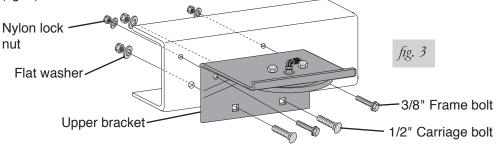


THERE ARE LINES ON THE INSIDE OF THE FRAME ON THE PASSENGER'S (RIGHT) SIDE. USE EXTREME CAUTION TO AVOID DAMAGING THESE LINES IN ANY WAY DURING THE REMOVAL PROCESS.

3. Drill the two bottom holes out with a 1/2" drill bit. If unable to drill from the outside in, then drill the holes from the inside of the frame out.

INSTALLING THE ASSEMBLY

- 1. Set the assembly on the leaf spring and insert two 1/2" carriage bolts (L) through the bottom holes in the upper bracket and then through the frame. Install a flat washer (M) and nylon lock nut (N) to each bolt. Leave loose for adjustment (fig. 3).
- 2. Insert two 3/8" frame bolts (I) through the top holes in the upper bracket and frame. Secure using two flat washers (H) and two nylon lock nuts (K) to the inside of the frame (fig. 3).

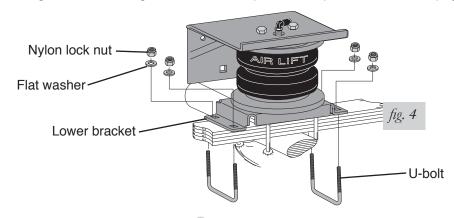


- 3. The lower bracket is slotted for in and out alignment of the air spring. Align the air spring so that it is parallel and perpendicular to the top and bottom. Tighten the lower air spring/bracket mounting hardware to 10 lb.-ft. (13.6Nm)
- 4. Tighten all upper bracket mounting hardware at this time.
- 5. Attach the lower bracket to the leaf spring with the long u-bolts (J) provided. Cap with flat washer (H) nylon lock nut (K) provided (fig. 4).

NOTE

If necessary, trim u-bolts above nylon lock nut.

6. Tighten all mounting hardware to the specified torque value found on page 8.



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INSTALLING THE AIR LINES

- Choose a convenient location for mounting the inflation valves. Popular locations for the inflation valve are:
 - a. The wheel well flanges.
 - b. License plate recess in bumper.
 - c. Under the gas cap access door.
 - d. Through license plate itself.

NOTE

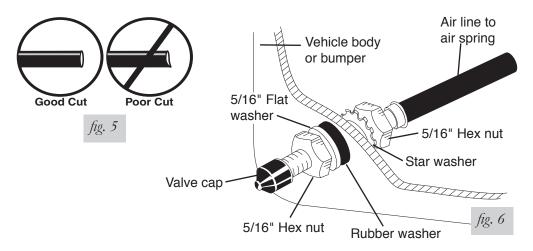
What ever the chosen location is, make sure there is enough clearance around the inflation valves for an air chuck.

- 2. Drill a 5/16" hole to install the inflation valves.
- 3. Cut the air line assembly (AA) in two equal lengths.



WHEN CUTTING OR TRIMMING THE AIR LINE, USE A HOSE CUTTER, A RAZOR BLADE OR A SHARP KNIFE. A CLEAN, SQUARE CUT WILL ENSURE AGAINST LEAKS. DO NOT USE WIRE CUTTERS OR SCISSORS TO CUT THE AIR LINE. THESE TOOLS MAY FLATTEN OR CRIMP THE AIR LINE, CAUSING IT TO LEAK AROUND THE O-RING SEAL INSIDE THE ELBOW FITTING (FIG. 5)

4. Place a 5/16" nut (GG) and a star washer (FF) on the air valve. Leave enough of the inflation valve in front of the nut to extend through the hole and have room for the rubber washer (EE), flat washer (DD), and 5/16" nut (GG) and cap (CC). There should be enough valve exposed after installation - approximately 1/2" - to easily apply a pressure gauge or an air chuck (fig. 6).



- 5. Push the inflation valve through the hole and use the rubber washer (EE), flat washer (DD), and another 5/16" nut (GG). Tighten the nuts to secure the assembly in place.
- 6. Route the air line along the frame to the air fitting on the air spring. Keep AT LEAST 6"(150mm) of clearance between the air line and heat sources, such as the exhaust pipes, muffler, or catalytic converter. Avoid sharp bends and edges. Use the plastic zip ties (BB) to secure the air line to fixed, non-moving points along the chassis. Be sure that the tie straps are tight, but do not pinch the air line. Leave at least 2" (50mm) of slack to allow for any movement that might pull on the air line.
- 8. Cut off air line leaving approximately 12" (300mm) of extra air line. A clean square cut will ensure against leaks (see fig. 5). Insert the air line into the air fitting. This is a push to connect fitting. Simply push the air line into the 90 degree swivel fitting until it bottoms out (9/16" of air line should be in the fitting).

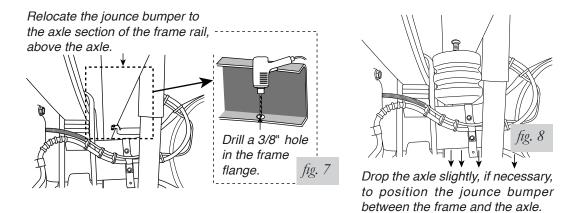


RELOCATING THE JOUNCE BUMPER

- 1. The jounce bumper must be relocated under the frame above the axle. First, remove the jounce bumper from the stock bracket.
- 2. Drill a 3/8" hole above the axle, in the bottom of the frame flange (fig. 7).
- 3. Mount the jounce bumper under the frame using O.E.M. hardware. Tighten securely (fig. 8).

NOTE

Drop the axle slightly if necessary to position the jounce bumper between the frame and axle (fig. 8).



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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.





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.



Notes

Need Help?

Contact our customer service department by calling (800) 248-0892, Monday through Friday, 8 a.m. to 5 p.m. Eastern Time. For calls from outside the USA or Canada, our local number is (517) 322-2144.

Register your warranty online at www.airliftcompany.com/warrantyreg.htm



Thank you for purchasing Air Lift products — the professional installer's choice!

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