# Load**Lifter 5000**°°

# Kit 57286

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

rear application



MN-721 • (021811) • ECR 9053

Failure to read these instructions can result in an incorrect installation.

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#### HARDWARE LIST

Item A B C D E F G H I J K L M N O P Q R S	Part # 58437 03253 07990 11951 03267 11041 17215 17203 18427 18444 10465 17103 17134 17188 18433 18435 18438 21837 20086	Description   Qty     Air spring.   2     Lower Bracket.   2     Upper Bracket.   2     Roll Plate.   4     Clamp   2     Emergency Brake Cable Bracket.   1     3/8"-24 x 3/4" Flat Head Screw.   4     3/8"-24 x 7/8" Hex Cap Screw.   4     3/8" Lock Washer   4     3/8" Flat Washer   15     5/8" Clip.   1     5/16"-18 x 1" Hex Cap Screw   1     3/8"-16 x 1 1/4" Hex Cap Screw   4     3/8"-16 x 1 1/4" Hex Cap Screw   4     3/8"-16 x 1 1/4" Hex Cap Screw   4     5/16" Flat Washer   2     3/8"-16 Nylon Lock Nut   8     5/16"-18 Nylon Lock Nut   1     90-degree Swivel Elbow Fitting   2     Air Line Assembly   1
•		
-		
_		
N	17188	
0	18433	5/16" Flat Washer2
Р	18435	-
Q	18438	
R	21837	90-degree Swivel Elbow Fitting2
-	20086	Air Line Assembly1
Т	10466	Zip Tie6
U	18501	M8 Stainless Steel Flat Washer2
V	18411	Stainless Steel Star Washer2
W	21230	Valve Caps2
Х	21233	5/16" Hex Nut4
Y	21234	Rubber Washer2
Z	34365	Heat Shield1

#### **TOOLS LIST**

#### Description

Safety Glasses Hoist or Floor Jack Safety Stands Standard & Metric Sockets and Wrenches Air Compressor or Compressed Air Source Spray Bottle with Dish Soap/Water Solution Hose Cutter, Razor Blade or Sharp Knife Drill and 5/16" Drill Bit

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

## Introduction

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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, commercialgrade single or double, depending on the kit, convolute bellows. They also incorporate an internal jounce bumper.

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.

INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY DANGER OR DEATH. INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE WARNING PERSONAL INJURY OR DEATH.

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



# **Installing the LoadLifter 5000 System**

#### **GETTING STARTED**

1. Raise the vehicle and support the frame with safety stands. Lower the axle as far as it can go (Fig. 2).



2. Remove the jounce bumpers from the frame that are above the axle.

#### 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 toward 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 1/2 turns. Be careful to only tighten on the hex nut. Do not over tighten.
- 3. Driver's (left) 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.



Upper bracket (C)

Driver's (left) side assembly

4. Passenger's (right) 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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 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.

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



#### **INSTALLING THE ASSEMBLIES**

It may be necessary to pry the bracket into position.

The assembly with the emergency brake cable bracket mounts on the driver 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).

NOTE



P Jounce bumper strike plate

fig. 5

 Clamp (E) inserted under strike plate



2. Set the driver 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.

NOTE



 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.

NOTE

NOTE

axle up so that

touches

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



fig. 9

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.



- 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 31lb.-ft. (42Nm).
- 7. Raise the suspension back up to stock ride height. Make sure air spring is still aligned. Push the emergency bracket (F), on the driver's side only, as far forward as possible and tighten the upper air spring mounting bolts securely. Do not over tighten.

#### 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.

 Installing 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).



5/16" Hex cap screw (L) Flat washers (O) Nylon lock nut (Q)

fig. 10

Emergency brake Clip (K) cable bracket (F)

Note: Cable goes on the air spring side of the mounting hardware

fig. 11

C. License plate or

XX-XX

**Bad cut** 

rear bumper area

## **Installing the Air Lines**

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A CAUTION

Choose the locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (Fig. 11).

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 12). Do not use scissors or wire cutters.

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

- 2. Use zip ties to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. Leave at least 2" 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).
- 3. Install the Schrader valve in the chosen location (Fig. 13).



A. Inside fuel tank filler door

B. Inside rear wheel wells



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

1. Attach the metal heat shield to the exhaust where it is closest to the passenger's (right) side air spring. Slide the air line thermal sleeve over the air line and position it where the air line is closest to the exhaust. (Fig. 14).





#### **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** Recheck all bolts for proper torque.
- □ **Road test** The vehicle should be road tested after the preceding tests. Inflate the 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.

	Minimum Recommended Pressure	Maximum Air Pressure		
	5 PSI (.34BAR)	100 PSI (7BAR)		
▲ CAUTION	FOR SAFETY AND TO PREVENT POSSIBLE DAMAGE TO THE VEHICLE, DO NOT EXCE MAXIMUM GROSS VEHICLE WEIGHT RATING (GVWR) OR PAYLOAD RATING, AS INDIC ED BY THE VEHICLE MANUFACTURER.			

**CAUTION** 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.

## **Need Help?**

Contact Air Lift Company customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, dial (517) 322-2144.



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

Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or P.O. Box 80167 • Lansing, MI 48908-0167 Toll Free (800) 248-0892 • Local (517) 322-2144 • Fax (517) 322-0240 • www.airliftcompany.com



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