# Load**Lifter 5000**\*\*

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## **Kit 57154** Ford Excursion, F-250/F-350 Super Duty, F-450/F-550 Commercial



# **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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STOP!

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, maintenance and troubleshooting of the LoadLifter 5000 air spring kit. LoadLifter 5000 utilizes sturdy, reinforced, commercial grade single or double, depending on the kit, convolute bellows. The bellows are manufactured like a tire with layers of rubber and cords that control growth. LoadLifter 5000 Ultimate kits are recommended for most 3/4- and 1-ton pickups and SUVs with leaf springs and provide up to 5,000 pounds of load leveling support with air adjustability from 5-100 PSI.

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 guidelines and operating tips.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Company at **(800) 248-0892** or visit **airliftcompany.com**.

### **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.

NOTE	Indicates a procedure, practice or hint which is important to highlight.
AUTION	INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE MACHINE OR MINOR PERSONAL INJURY.
<b>MARNING</b>	INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.
🛕 DANGER	INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



## **Installing the LoadLifter 5000 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.

### **DANGER**

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.
  - 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.



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

#### NORMAL

RIDE HEIGHT: \_\_\_\_\_ inches





### **ASSEMBLING THE AIR SPRING**

1. Loosely attach the driver's (left) side upper bracket (B) to the air spring with two 3/8"-24 x 7/8" bolts (K), lock washers (L), and flat washers (J) (Fig. 3).



2. There are driver's (left) and passenger's (right) side units. Attach the air spring to the inboard holes of the lower bracket with the vertical flange of the upper bracket outboard (Fig. 4).



- 3. With the "hook" of the lower bracket forward, the vertical legs of the upper bracket outboard, attach the lower bracket to the air spring in the inboard holes. The vertical legs of the upper bracket must be opposite the lower bracket attaching holes (Fig. 3).
- Secure the lower bracket (D) to the air spring with two 3/8"-24 x 7/8" hex head bolts (K), lock washers (L) and flat washers (J). Torque to 20 lb.-ft (27Nm).

### INSTALLING THE ASSEMBLY

- 1. Remove the rear jounce bumper bracket bolt. This bolt will be reused to attach the upper bracket.
- 2. Loosen the front jounce bumper bracket bolt. Do not remove this bolt.
- 3. Set the air spring assembly on the leaf spring behind the axle, with the "hook" of the lower bracket around the rear U-bolt. Using the slots in the upper bracket adjust the upper bracket to the frame rail and tighten the front bolt. Remove the assembly and tighten the rear bolt. Torque to 10 lb.-ft. (14Nm) (Fig. 5).



- 4. Set the assembly back in place on the leaf spring. Place the forward tab of the upper bracket between the frame rail and the jounce bumper bracket. Loosely attach the brackets using the original jounce bumper bracket hardware.
- Attach the upper bracket to the outside of the frame rail. Loosely install two 1 1/2" hex head bolts (G), 3/8" flat washers (J), oversized flat washers (I) and 3/8" lock nuts (H) through existing holes in the frame. Be sure the oversized flat washers are on the inside of the frame rail. Tighten all mounting hardware securely.
- 6. Insert U-bolt (E) down through the holes in the bracket. Slide the clamp bar (F) over U-bolt. Install two 3/8" nylon lock nuts (H). Torque to 16 lb.-ft. (22Nm) (Fig. 6).



7. Install air fitting (M) into air spring (Fig. 7) finger-tight plus 1 1/2 turns.



fig. 7

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## **Installing the Air Lines**

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

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 9). Do not use scissors or wire cutters.

A CAUTION

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" (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).
- 3. Install the Schrader valve in the chosen location (Fig. 10).

XXX-XXX B. С fig. 8 **Bad cut** Good cut fig. 9 Hex nuts Vehicle • body or bumper Schrader valve 5/16" (8mm) hole Flat washer

A. Inside fuel tank filler door

B. Inside rear wheel wells

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C. License plate or

R

rear bumper area



## **Before Operating**

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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** 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.



A 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.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Company at **(800) 248-0892** or visit our website at **www.airliftcompany.com**.

# **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!

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