

# Load**LIFTER** 5000™ **ULTIMATE**

ADJUSTABLE AIR HELPER SPRINGS

TOW AND HAUL WITH SAFETY AND COMFORT™

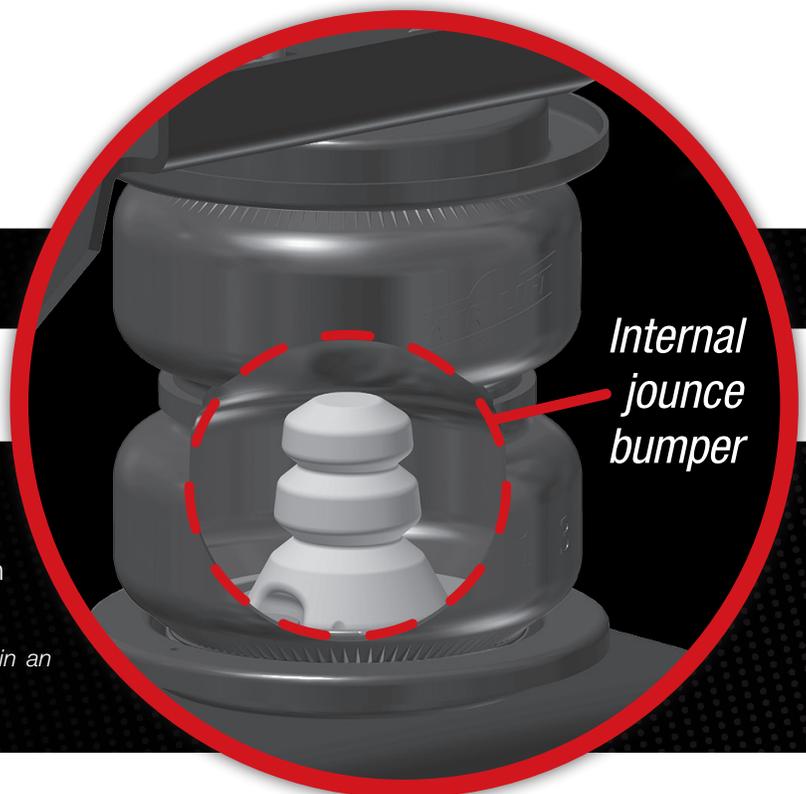


Kit Number  
**88131**

## 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, maintenance and troubleshooting of the LoadLifter 5000 Ultimate air spring kits. All LoadLifter 5000 Ultimate kits utilize sturdy, reinforced, commercial-grade 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 Ultimate 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 OR DEATH.

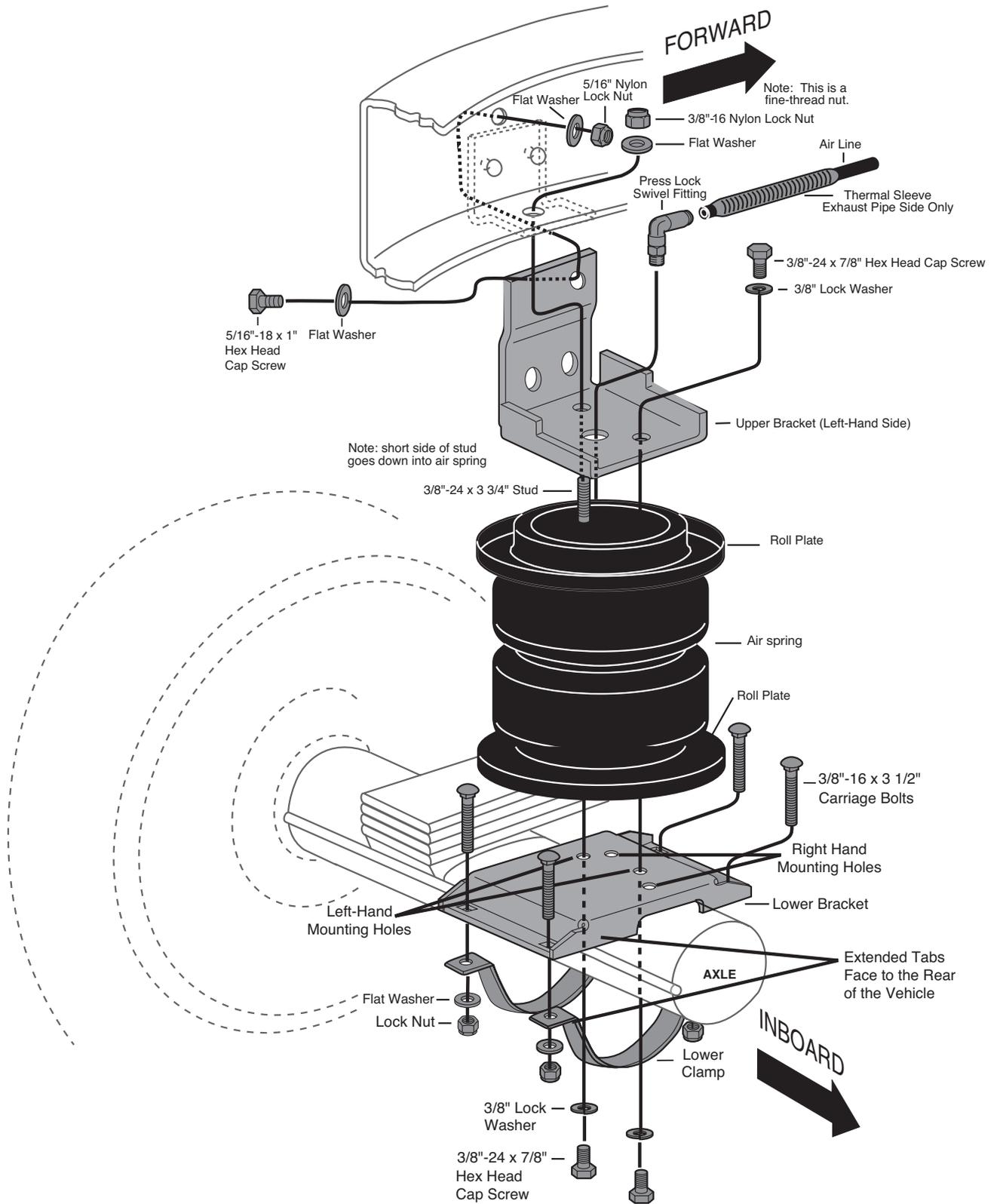


INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



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

# Installation Diagram



LEFT SIDE UNIT

fig. 1

# Installing the LoadLifter 5000 Ultimate System

DO NOT INFLATE AIR SPRING WHEN IT IS UNRESTRICTED OR NOT INSTALLED. THE AIR SPRING MUST BE CONTAINED BY SUSPENSION OR OTHER ADEQUATE STRUCTURE. DO NOT INFLATE BEYOND 100 PSI. IMPROPER USE OR OVER INFLATION MAY CAUSE ASSEMBLY TO BURST CAUSING PROPERTY DAMAGE OR SEVERE PERSONAL INJURY.

## NOTE

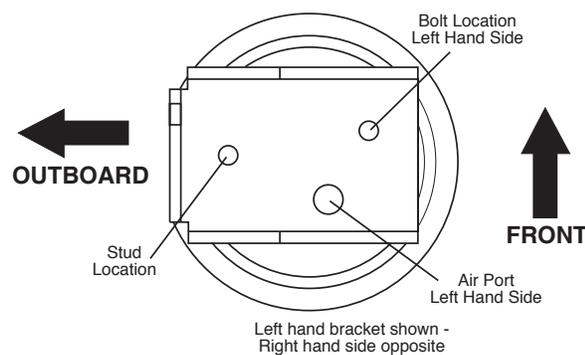
**NORMAL RIDE HEIGHT:** (no load) - This is defined as the distance between the bottom of the bumper and a flat road surface with the vehicle in an "as delivered condition" (without a load, i.e. tool box, camper, etc.). Measurements should be taken before beginning the installation. The distance from the fender well to the center point of the hub should be recorded. All of our kits are designed to be installed and operate at normal ride height.

## GETTING STARTED

1. Jack up rear of vehicle or raise on hoist. Place safety jack stands under axle and adjust so that the axle to frame distance is the same as design or normal ride height.

## ASSEMBLING THE AIR SPRING UNIT

1. Position the air spring with the air port up, to insert air fitting. Insert air fitting into air port and tighten finger-tight plus 2 turns. **Use a 9/16" open end wrench being careful to tighten on the metal hex nut only.** Do not over tighten. This fitting is precoated with thread sealant.
2. Assemble upper section of left hand unit (NOTE - Upper brackets are stamped "R" and "L"). Set roll plate on the air spring. Slip the upper bracket over the air fitting and line up the mounting holes (Figure 2). Install the 3/8"-24 x 3 3/4" stud in the outboard tapped hole (use the short threaded end of the stud on the air spring side, refer to Figure 1) and turn in carefully until it bottoms out in the tapped hole. Install the 3/8" lockwashers and 3/8"-24 x 7/8" hex-head cap screw a couple of turns to loosely assemble for installation. Assemble right hand unit also.



**UPPER BRACKET ASSEMBLY  
(Top View)**

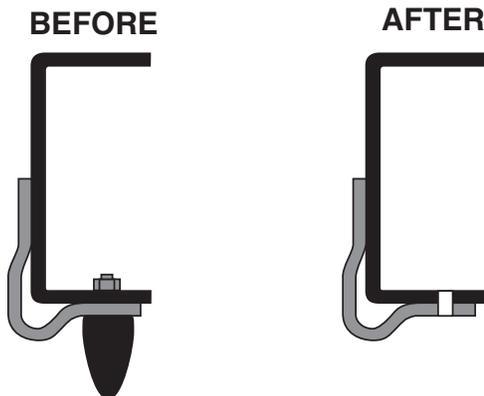
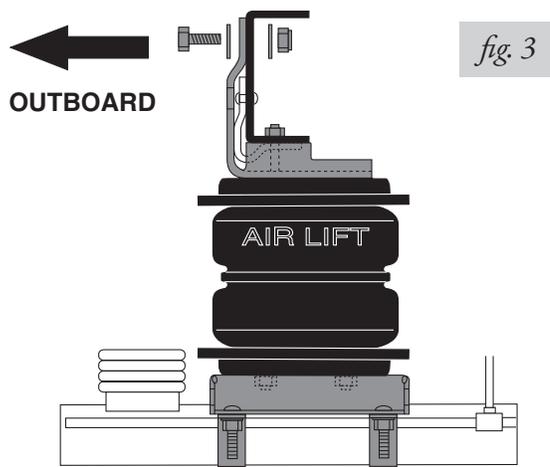
*fig. 2*

3. Set roll plate on bottom of air spring. Attach lower bracket to bottom of air spring on both units using the holes as shown (Fig. 1). The extended tabs should face rearward. Use the 3/8" lock washers and 3/8"-24 x 7/8" hex-head cap screw and a torque to 15-20 lb.-ft. (20-27Nm). Be sure that lower bracket and upper bracket are parallel to each other as shown in Figure 1.

4. Remove both rear rubber axle jounce bumpers and discard. It is not necessary to remove the metal jounce bumper bracket (Fig. 4).
5. Set the air spring assembly on the axle inboard of leaf spring (Fig. 3). Squeeze the air spring down and align the stud with the original jounce bumper mounting hole. Insert the stud through the hole and fasten with flat washer and 3/8"-24 lock nut. Fasten the side of the bracket to the frame rail as shown in figures 1 and 3, using 5/16"-18 x 1" hex-head cap screw, flat washers and 5/16" lock nut. Torque all three fasteners to 15 lb.-ft. (20Nm).

## NOTE

*On some models the hole may have a plastic stud for a wiring harness hanger protruding through it. Push the plastic stud back through the frame and use the existing hole to mount the upper bracket to the side of the frame rail.*



6. Position the lower bracket so that it sits square on the axle. Install all four of the 3/8"-16 x 3 1/2" carriage bolts through the outer holes of the lower bracket. Slide the axle straps up onto the carriage bolts. The extended end of the strap will face the rear; this will provide clearance for the carriage bolt to the brake line. **Important:** Brake line sits under the bracket between the bolts and the axle, be careful not to pinch the brake line. Hold assembly loosely in place using lower straps, flat washers and lock nuts.
7. Adjust the lower bracket assembly on the axle so that the air spring is square. While holding the bracket, tighten all four lock nuts securely. Be careful not to bend the straps to the point that they come in contact with the brake line.

8. Repeat procedure 5, 6 and 7 for other side.
9. Installation of this kit requires an exhaust heat shield (Fig. 6). The shield is attached to the exhaust pipe, with the flanges bent for component clearance. **Bend tabs to provide 1/2" dead air space between exhaust pipes and heat shield and maximum clearance with air spring.**

## NOTE

*A slight adjustment MAY be required to gain enough clearance to install the heat shield (Fig. 5). Loosen the exhaust clamp between the muffler and the catalytic converter. Push the muffler and tailpipe to the rear of the vehicle, retain a minimum of 3/4" between tail pipe and frame crossmember and retighten clamp.*

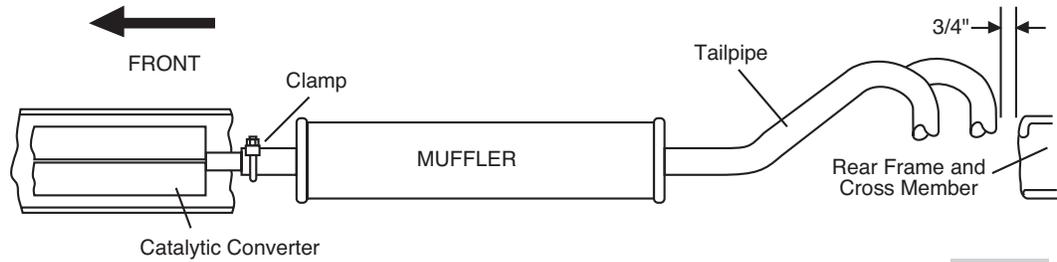


fig. 5

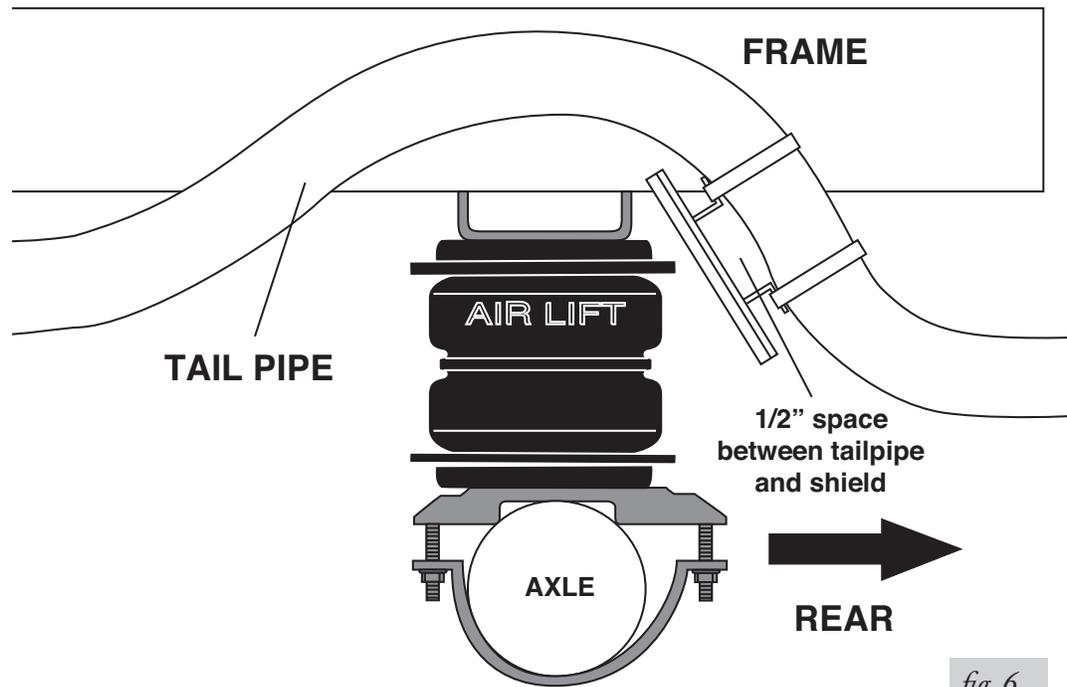


fig. 6

10. Proceed with air line installation instructions.

# Installing the Air Lines

Choose the locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (Fig. 7).

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 8). Do not use scissors or wire cutters.

**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. 9).

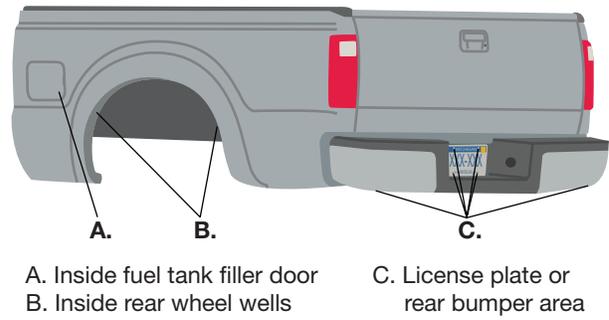


fig. 7

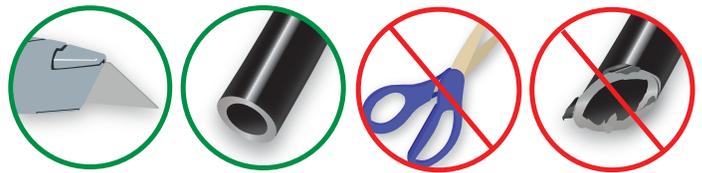


fig. 8

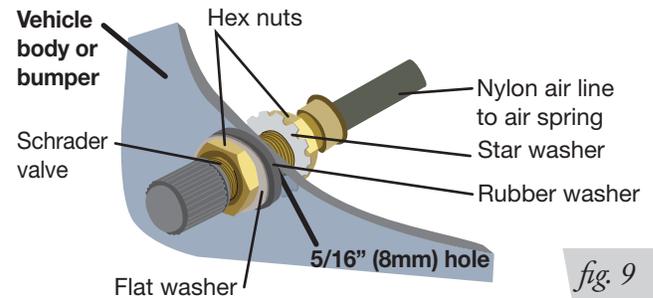


fig. 9

## INSTALLING THE THERMAL HEAT SHIELD

1. Slide the air line thermal sleeve over the air line and position it where the air line is closest to the exhaust. (Fig. 10).



fig. 10

## 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 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.

| Minimum Recommended Pressure | Maximum Air Pressure |
|------------------------------|----------------------|
| 5 PSI (.34BAR)               | 100 PSI (7BAR)       |



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](http://www.airliftcompany.com/warranty).

For additional warranty information contact Air Lift Company customer service.

## Need Help?

Contact our customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, our local number is (517) 322-2144.

**Register your warranty online at  
[www.airliftcompany.com/warranty](http://www.airliftcompany.com/warranty)**



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1949

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

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