

# Load**LIFTER** 5000™ **ULTIMATE**

ADJUSTABLE AIR HELPER SPRINGS

TOW AND HAUL WITH SAFETY AND COMFORT™

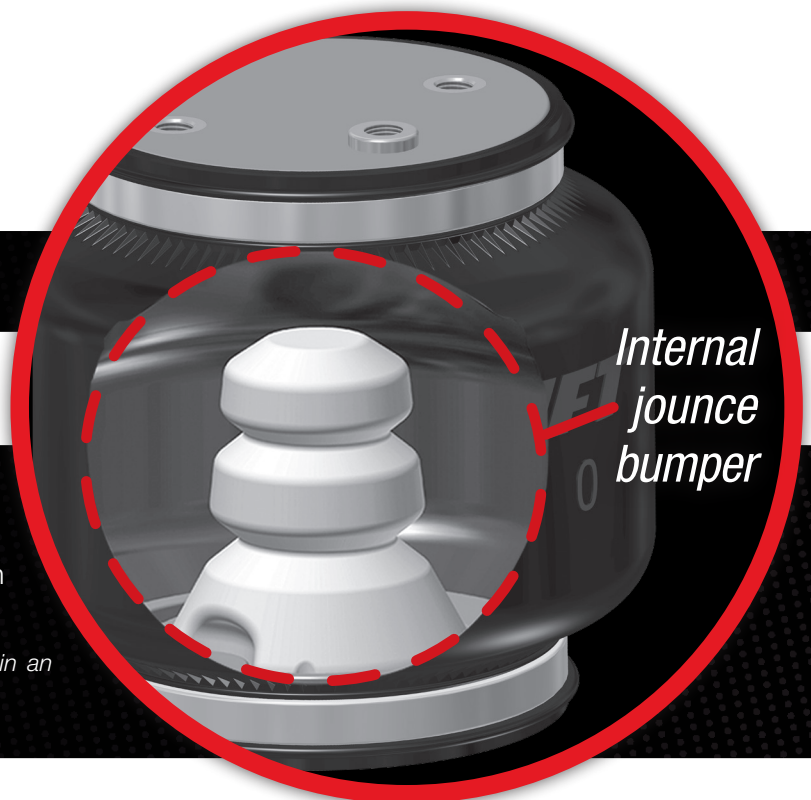


Kit Number  
**88205**

## 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 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.

 **DANGER**

INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.

 **CAUTION**

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

 **WARNING**

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

# Installation Diagram

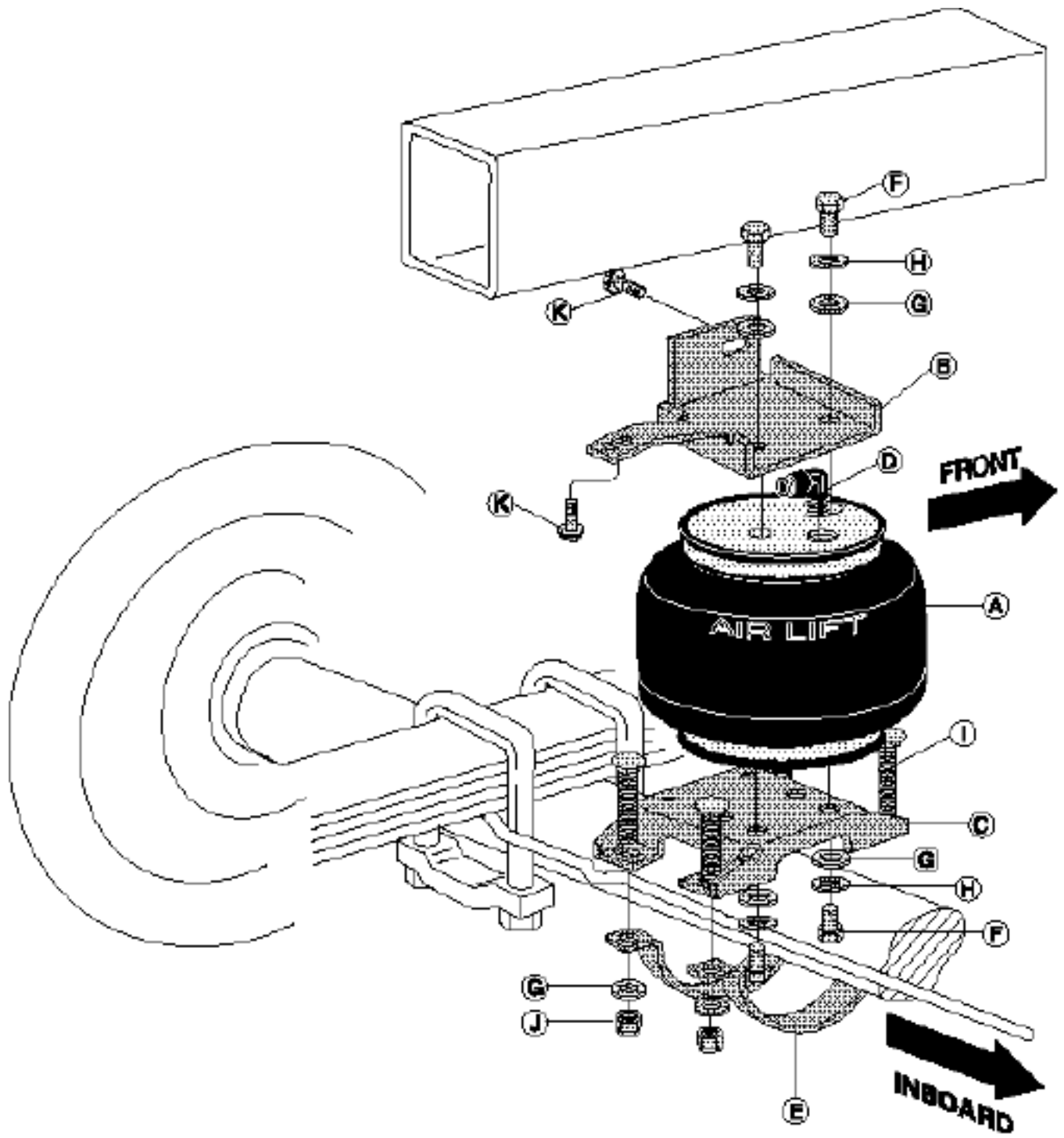


fig. 1

# Hardware List

Item	Description .....	Qty	Item	Description .....	Qty
A	Air spring .....	2	M	Thermal sleeve .....	1
B1	Upper bracket (Right) .....	1	N	Heat shield clamp.....	2
B2	Upper bracket (Left) .....	1	AA	Air line assembly .....	16'
C	Lower bracket.....	2	BB	Zip tie.....	6
D	Elbow fitting.....	2	CC	Valve cap .....	2
E	Axle strap .....	4	DD	M8 Flat washer .....	2
F	3/8"-24 x 7/8" Bolt .....	8	EE	Rubber washer .....	2
G	3/8" Flat washer .....	16	FF	Small star washer .....	2
H	3/8" Lock washer .....	8	GG	5/16" Hex nut .....	4
I	3/8"-16 x 2 1/2" Carriage bolt .....	8	HH	Hose clip .....	4
J	3/8" Nylon lock nut.....	8	II	Self-tapping screw .....	4
K	3/8" x 1" Self-tapping screw .....	4	JJ	Spacer .....	1
L	Heat shield .....	1	KK	M8-1.25 x 35 Bolt.....	1



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

# Installing the LoadLifter 5000 Ultimate System

## ASSEMBLING THE AIR SPRING

1. Install 90 degree air swivel elbow fitting (D) to the top of the air spring. This fitting is precoated with sealant. Using an open-end wrench, tighten 1 1/2 turns (Figs. 1 & 2a).

### NOTE

*Tighten on the metal hex nut only. Do not over tighten.*

2. Attach the upper bracket to the top plate (label end) of the air springs with two bolts (F), lock washers (H), and flat washers (G). Torque to 20 lb.-ft. (27Nm) Assemble both units (Figs. 1 & 2a) in this manner. There are left and right hand units (indicated by "LH" or "RH" stamped in the bracket).
3. Insert two carriage bolts in the lower, inboard holes of the lower bracket before attaching the air spring (Fig. 2a).

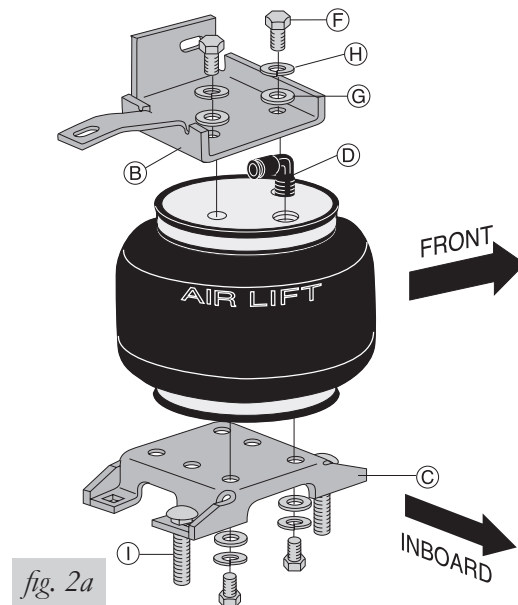


fig. 2a

### Lower Bracket Template

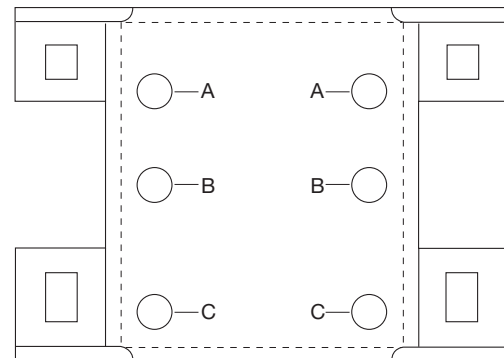


fig. 2b

- Use the lower bracket template (Fig. 2b) to determine the proper mounting location for the air spring. Use the holes marked "A" for mounting. Attach the lower bracket to the air spring assembly using two bolts (F), two lock washers (H), and two flat washers (G). Torque to 20 lb.-ft. (27Nm).

**NOTE**

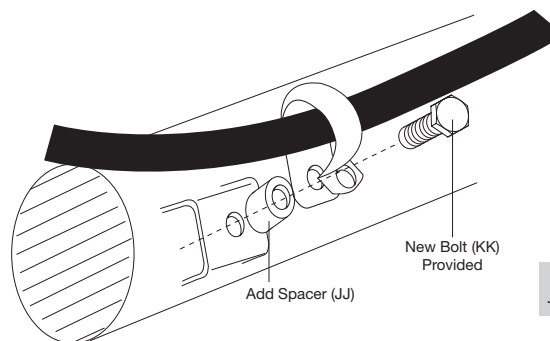
*On some models, it may be necessary to use holes "C" for mounting.*

## INSTALLING THE AIR SPRING ASSEMBLY

- Jack up rear of vehicle or raise on hoist. Place safety jack stands under axle.
- Remove the rubber jounce bumper by pulling it out of the slotted track or by prying it out with a screwdriver. This will not be reused.
- Models with disc brakes: Remove the bolt holding the cable onto the back-side of the passenger's side axle. Install the supplied spacer (JJ) between the bracket and the emergency brake cable clip. Insert the supplied bolt (KK) and tighten the cable down securely (Fig. 3).

**NOTE**

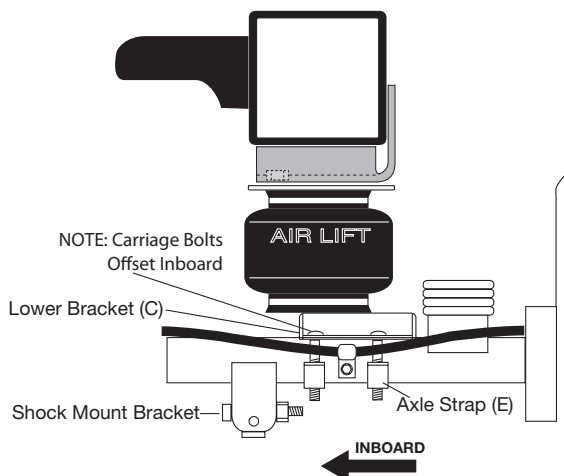
*Models with Disc Brakes: The inside strap on the passenger's side goes between the emergency brake cable bracket and the shock bracket on the axle.*

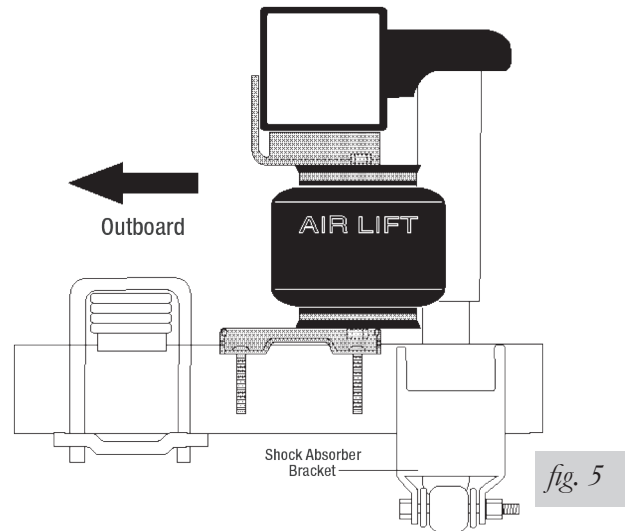


- Set the assembly on the axle housing between the shock absorber bracket and the leaf spring (Fig. 4). Loosely attach lower bracket and straps around the axle using carriage bolts (I), flat washers (G) and lock nuts (J) (Fig. 4).

**NOTE**

*Non-disc brake models only: The brake line should be between the carriage bolt and the axle housing (Fig. 6).*

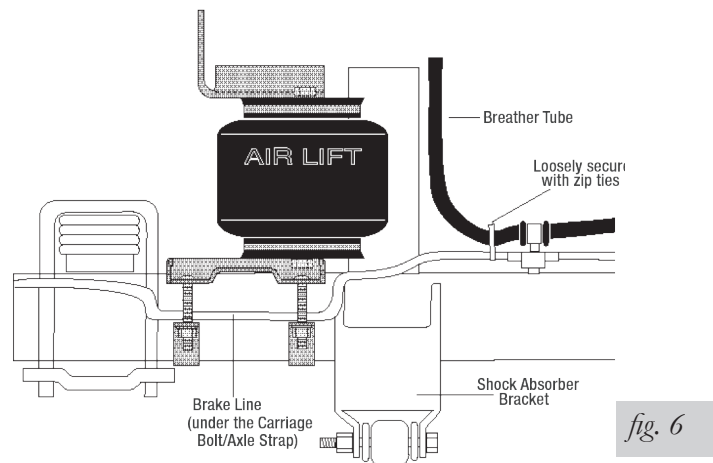




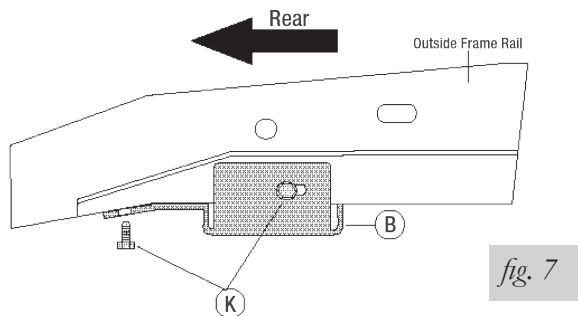
5. On the driver's side only: Secure the breather tube away from the air springs using provided zip ties (BB). Refer to Figure 6.
6. With the unit aligned vertically and horizontally, tighten the lower assembly to the axle housing. It is important to tighten the forward straps to the lower bracket first, and then the back. Tighten the lock nuts (J) to 16 lb.-ft. (22Nm).

**CAUTION**

DO NOT PINCH THE BRAKE LINE UNDER THE STRAP OR CARRIAGE BOLT.



7. Using the holes in the upper bracket as a template, drill two 5/16" holes into the frame. Insert and tighten the self tapping screws (K) and torque to 15 lb.-ft. (20Nm) (Figs. 1 & 7).





# 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.

**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).

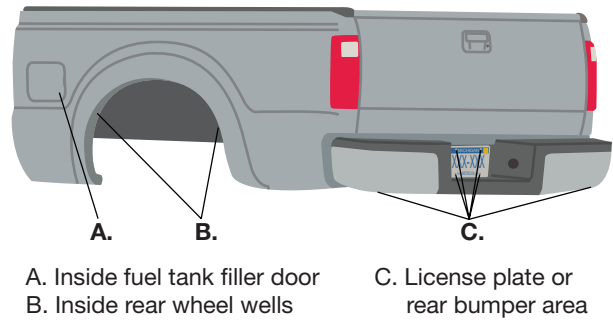


fig. 8

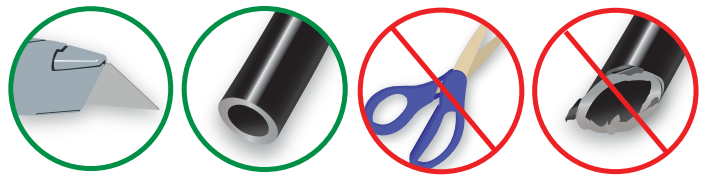


fig. 9

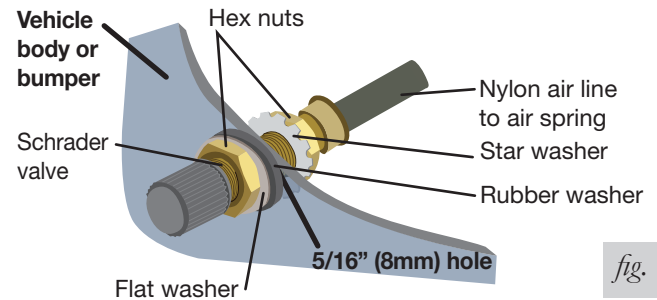


fig. 10

## 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. 11).

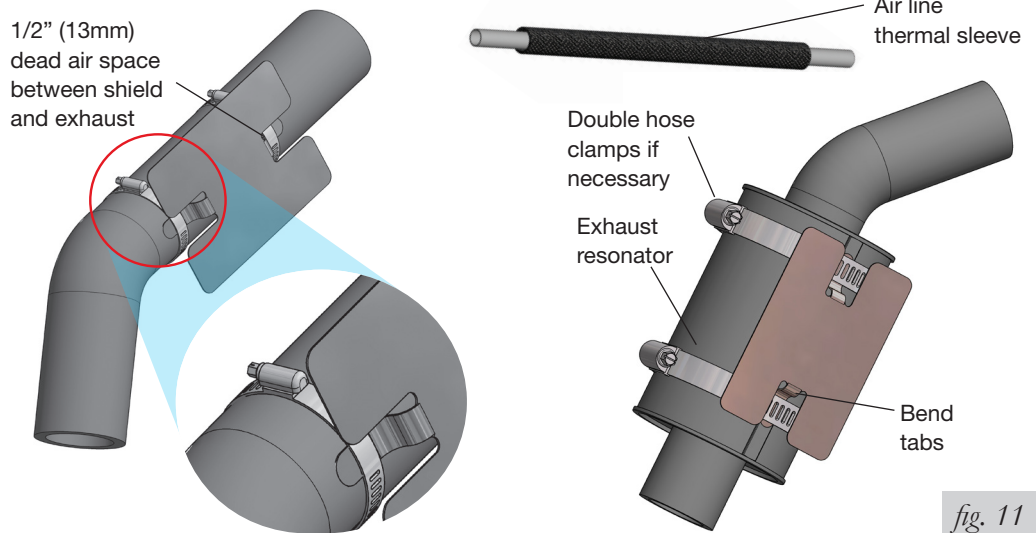


fig. 11

## 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 EXCEED MAXIMUM GROSS VEHICLE WEIGHT RATING (GVWR) OR PAYLOAD RATING, AS INDICATED 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](http://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](http://www.airliftcompany.com)

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