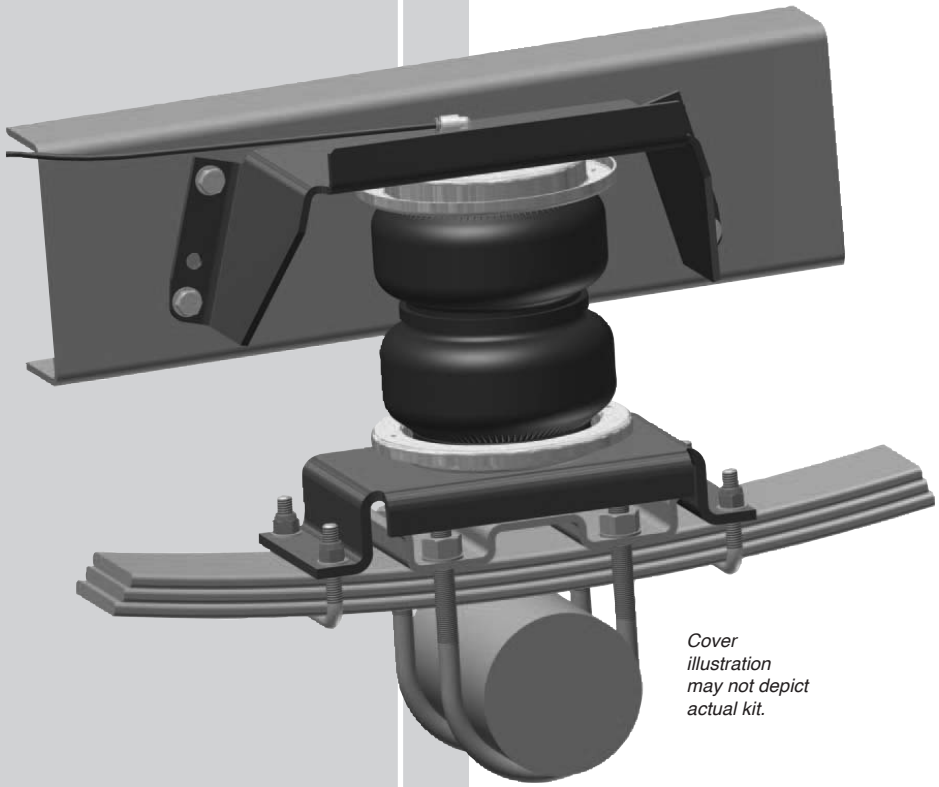
LoadLifter 5000™ Kit 57237



Cover illustration may not depict actual kit.

AIR LIFT®

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.

MN-391 • (052306) • ECR 9821

Protect your Air Lift Purchase by Completing your Warranty Registration

Thank you for purchasing an Air Lift load support product!

Take a photo of your sales receipt and then scan the QR code to complete your online warranty registration.

TABLE OF CONTENTS

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 kits are recommended for most 3/4 and 1-ton pickups and SUVs with leaf springs and provide up to 5,000 lbs. of load-leveling support with air adjustability from 5-100 PSI. The kits are used in motor home rear applications and various front applications where leaf springs are used.

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 our website at www.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 that 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.

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

⚠ CAUTION 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

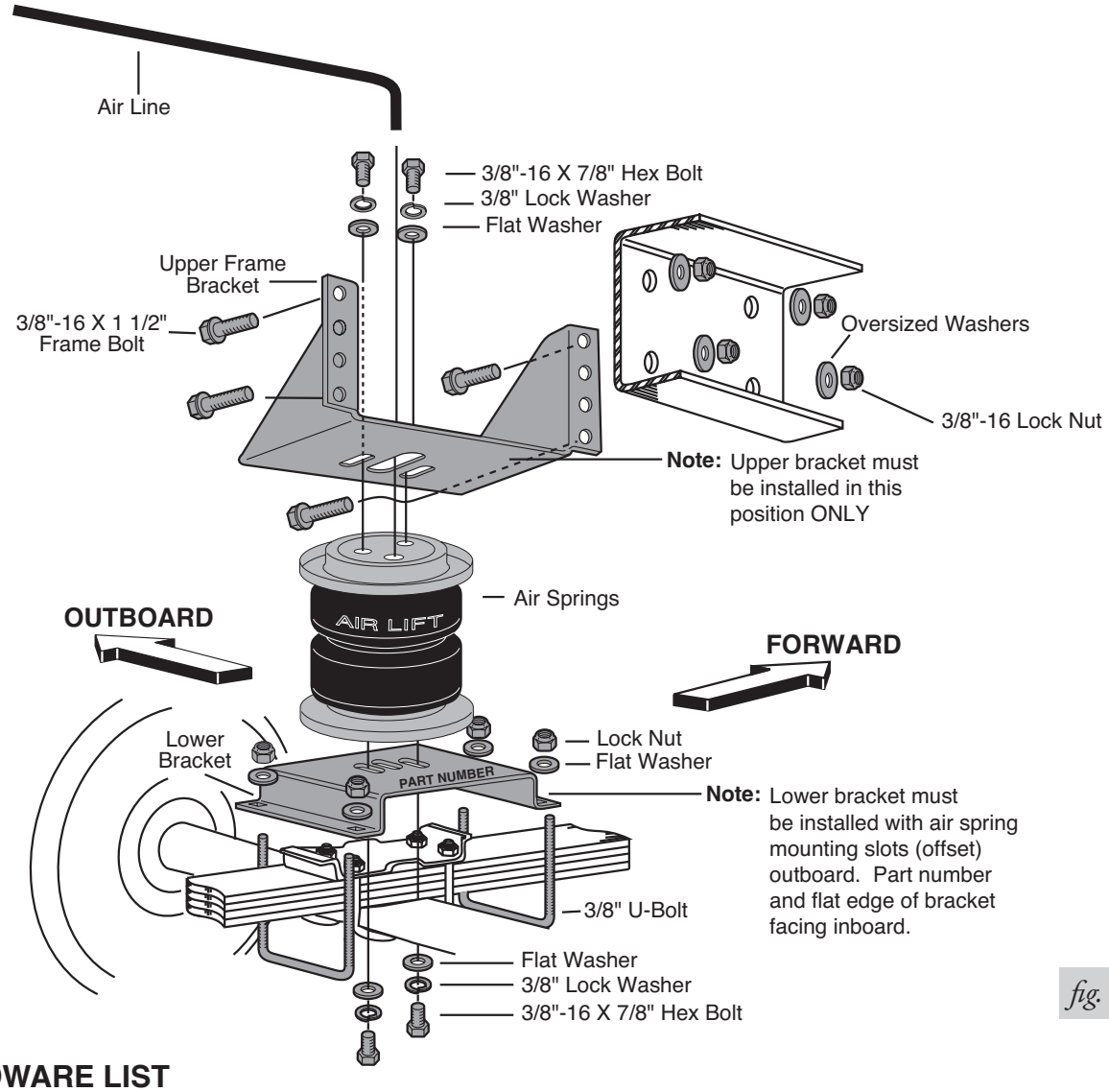


fig. 1

HARDWARE LIST

Item	Part No.	Description	Quantity
A	03102	Lower Bracket	2
B	07130	Upper Bracket	2
C	58437	Air Spring	2
D	11951	Roll Plate	4
E	10583	4 1/2" U-Bolt	4
F	17159	3/8" x 1 1/2" WHFB	8
G	18435	Nylon Lock Nut	16
H	18444	3/8" Flat Washer	24
I	18447	3/8" Large Flat Washer	8
J	21837	Swivel Head Elbow Fitting	2
K	17203	3/8" x 7/8" HHCS	8
L	18427	3/8" Lock Washer	8

Air Line Assembly Parts

Item	Part No.	Description	Quantity
AA	20086	Air Line Assembly	1
BB	10466	Zip Tie	6
CC	21230	Valve Caps	2
DD	18501	M8 Flat Washer	2
EE	21234	Rubber Washer	2
FF	18411	Small Star Washer	2
GG	21233	5/16" Hex Nut	4

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

Installing the LoadLifter 5000 System

⚠ CAUTION THE AIR LINE MUST BE INSERTED INTO THE AIR FITTING OR THE AIR FITTING MUST BE COVERED BEFORE DRILLING HOLES TO PREVENT ANY DEBRIS OR METAL SHAVINGS FROM CONTAMINATING THE AIR FITTING.

GETTING STARTED

1. Raise the vehicle, remove the wheels, and obtain normal ride height (Figs. 2 & 3).

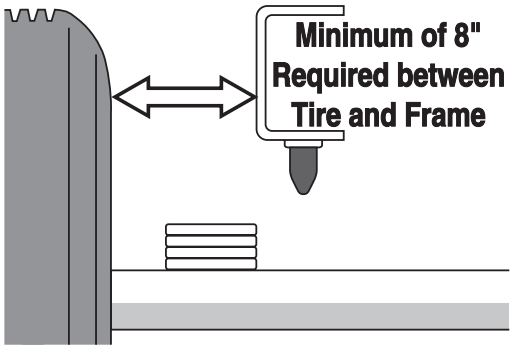


fig. 2

NORMAL RIDE HEIGHT: *Normal ride height (no load) is defined as the distance between the bottom edge of the wheel-well to the center point of the hub with the vehicle in an "as delivered condition" (without a load, i.e. toolbox, camper, etc.). Measurements should be taken before beginning the installation. The distance from the bottom edge of the wheel well to the center point of the hub should be recorded. All Air Lift kits are designed to be installed and operated at normal ride height.*

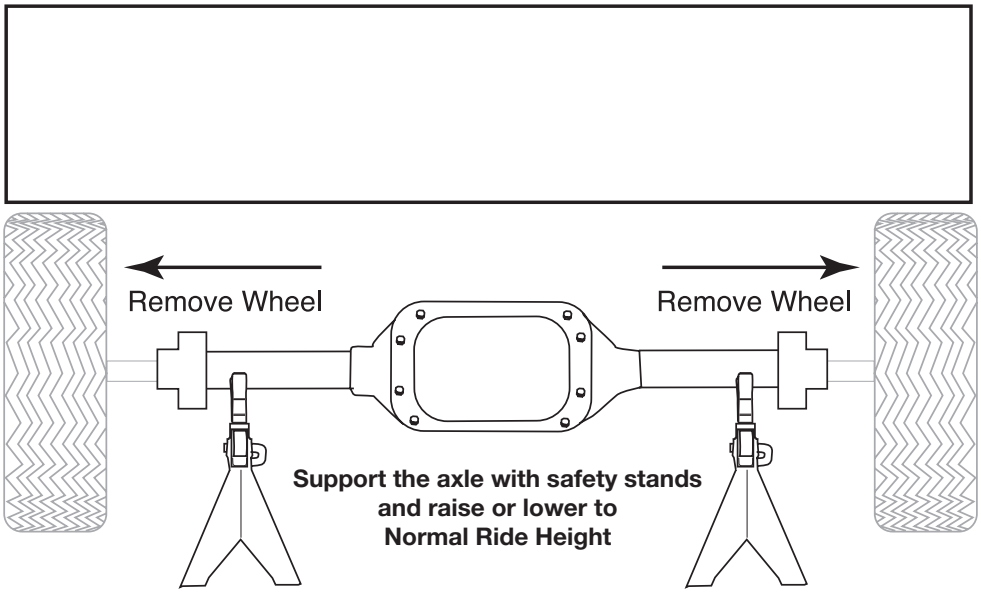


fig. 3

ATTACHING THE UPPER BRACKET

1. Set a roll plate on both ends of the air spring. 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 (Figs. 1,4 & 5).
2. Align the holes in the roll plate with the holes in the air spring and loosely attach the upper bracket with the “legs up” using (2) 3/8"-16 x 7/8" bolts, lock washers, and flat washers (Fig. 4). The upper bracket must be installed in this position.

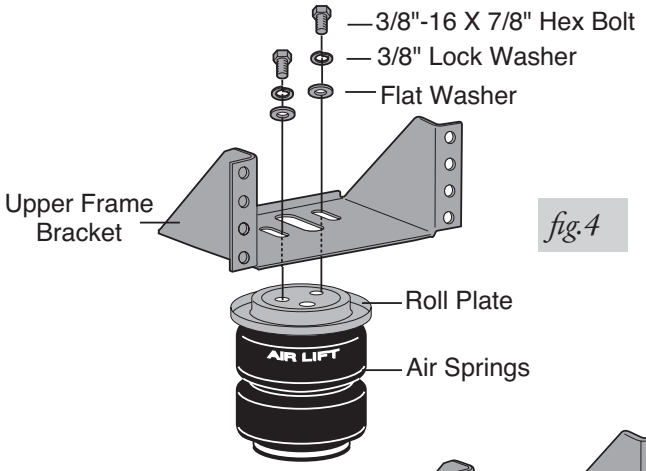


fig.4

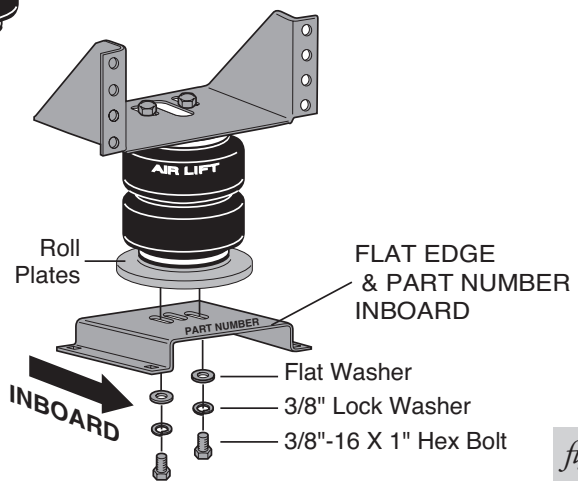


fig. 5

ATTACHING THE LOWER BRACKET

1. Make sure that the holes in the air spring, roll plate and lower bracket are properly aligned and that the flat edge of the lower bracket is facing inboard.
2. Attach the lower bracket to the air springs with the (2) 3/8"-16 x 7/8" bolts, lock washers, and flat washers (Fig. 5).
3. Tighten the air spring to both brackets to 20 lb.-ft.

INSTALLING THE AIR SPRING ASSEMBLY

1. Set the air spring assembly on the leaf spring over the axle.

NOTE

Some vehicles may require the leaf spring U-bolts to be trimmed to allow the bottom bracket to fit properly (Fig. 7).

2. Attach the lower bracket to the leaf spring using provided U-bolts, flat washers and lock nuts as shown in Figure 1.
3. Torque to 20 lb.-ft.

ADJUSTING YOUR KIT

1. Align the assembly vertically and horizontally (Fig. 7). There must be sufficient clearance between the air springs, the frame, and the tire and brake drum at the maximum inflated diameter (7.0"). Tighten the upper bracket and mounting bolts for the air spring to 20 lb.-ft.
2. On some vehicles the outer flange of the axle jounce bumper bracket extends out from the frame rail. Trim the outer flange of the bracket or remove the bracket assembly entirely to provide sufficient clearance from the air spring to the frame for the maximum inflated diameter (7.0").
3. Position the upper bracket so that it is parallel with the lower bracket.

NOTE *The kit mounts so that it follows the angle of the leaf springs.*

4. Align the assembly vertically and horizontally. The distances between points X and Y (Figs. 6 & 7) should be approximately equal, between 5" and 7" at normal ride height.
5. Adjust the upper bracket so that at least four bolt holes (two on each side) will be on a flat section of the frame rail. Use the widest bolt spacing possible. Do not drill on the radiused edges of the frame. Clamp the upper bracket to the frame rail with a C-clamp or welding clamp. Before marking any holes, check the following:
   a. Are four holes in the upper bracket positioned on flat section of the frame rail?
   b. Are the upper and lower brackets aligned vertically with each other?
   c. Are the distances between points X and points Y equal?
   d. Is the distance between the upper and lower brackets between 5" and 7"?

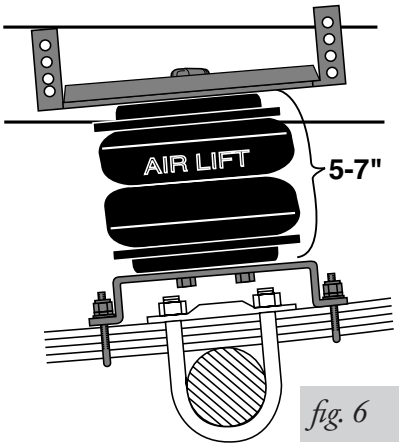


fig. 6

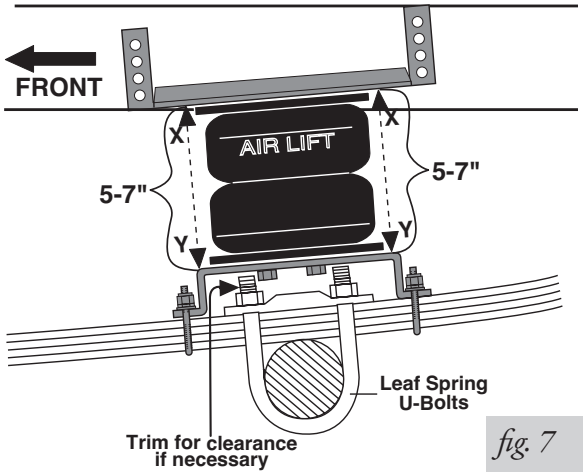


fig. 7

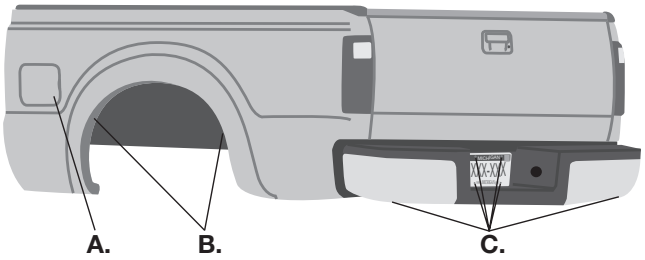
⚠ CAUTION DO NOT DRILL HOLES INTO THE FRAME UNTIL HYDRAULIC LINES, GAS LINES AND ELECTRICAL WIRES HAVE BEEN MOVED ASIDE ON BOTH SIDES OF THE FRAME.

6. Center punch and drill (1) 3/8" locator hole through the frame at one bolt location and install (1) 1 1/2" washer head frame bolt, over-sized washer, and lock nut.
7. Check the alignment of the upper and lower bracket once again to be sure that the distances between points X and points Y are equal and between 5" and 7". Center punch and drill (1) more 3/8" hole on the opposite side, install (1) 1 1/2" washer head frame bolt, over-sized washer and lock nut.
8. Remove the clamps and drill the remaining (2) holes. Install the remaining hardware and tighten all nuts to 20 lb.-ft.
9. Using the slots in the upper bracket, align the air springs both inboard and outboard. Tighten the air springs to the brackets to 20 lb.-ft.
10. Repeat the procedure for the other side of the vehicle.

Installing the Air Lines

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

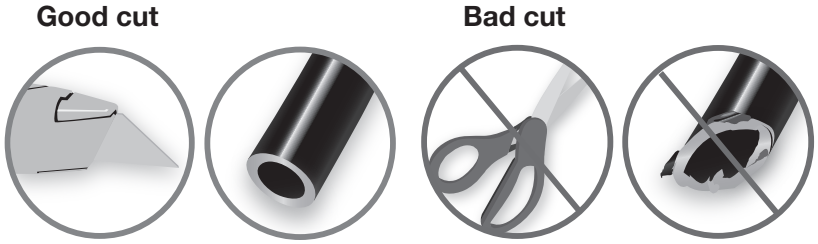
A. Inside fuel tank filler door
B. Inside rear wheel wells
C. License plate or rear bumper area



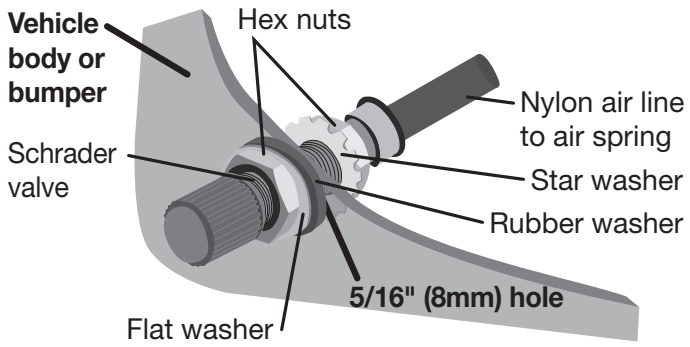
⚠ CAUTION KEEP AT LEAST 6" (150MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

The nylon air lines are routed from the air springs to the Schrader valves.

1. It is recommended that the air line be routed along the top of the frame, forward of the axle, and then down to the fitting. After cutting the air line to length, install the air line thermal sleeve over the air line on the passenger's (right) side before inserting into the fitting. Secure the air lines to the upper coil spring mount with the supplied zip ties (BB).
2. Make clean, square cuts with a razor blade or hose cutter when cutting the air line. Do not use scissors or wire cutters.



3. Use zip ties to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. The minimum bend radius for the air line is 1" (25mm). Leave at least 2" (50mm) of slack in the air line to allow for any movement that might pull on the air line.
4. Install the Schrader valve in the chosen location.



Before Operating

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, from the date of original purchase, 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.

*Full Limited Warranty and Return Policy are available at www.airliftcompany.com/warranty and are subject to change.

WARRANTY REGISTRATION & CLAIMS

- To register your warranty, please visit https://www.airliftcompany.com/support/warranty/register/
- To submit a warranty claim, please visit https://www.airliftcompany.com/support/warranty/submit-claim/

Need Help?

Contact our customer service department by calling (800) 248-0892, Monday through Friday. For calls from outside the USA or Canada, our local number is +1 (517) 322-2144.

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

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

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