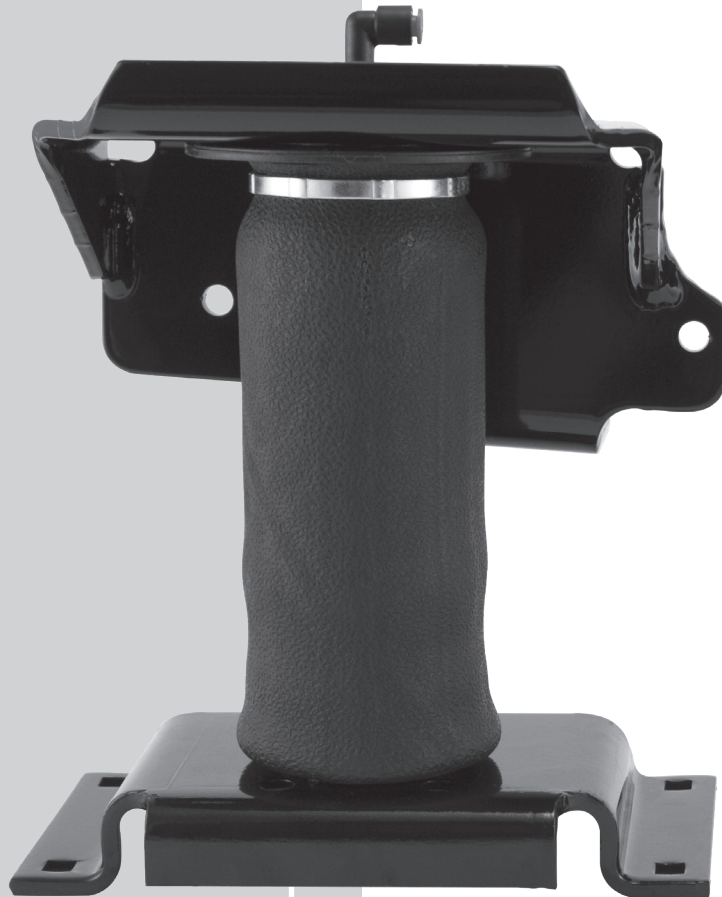


RideControl™

Kits

59544/59568

*Ford F-150 Pickup &
Lincoln Mark LT*



59544 shown here

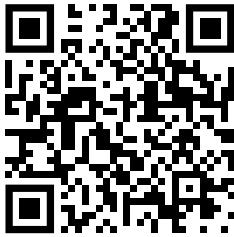


INSTALLATION GUIDE

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.

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.



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Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of the RideControl air spring kit.

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 tips, safety information and a troubleshooting guide.

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 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.

 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

Driver Side Shown

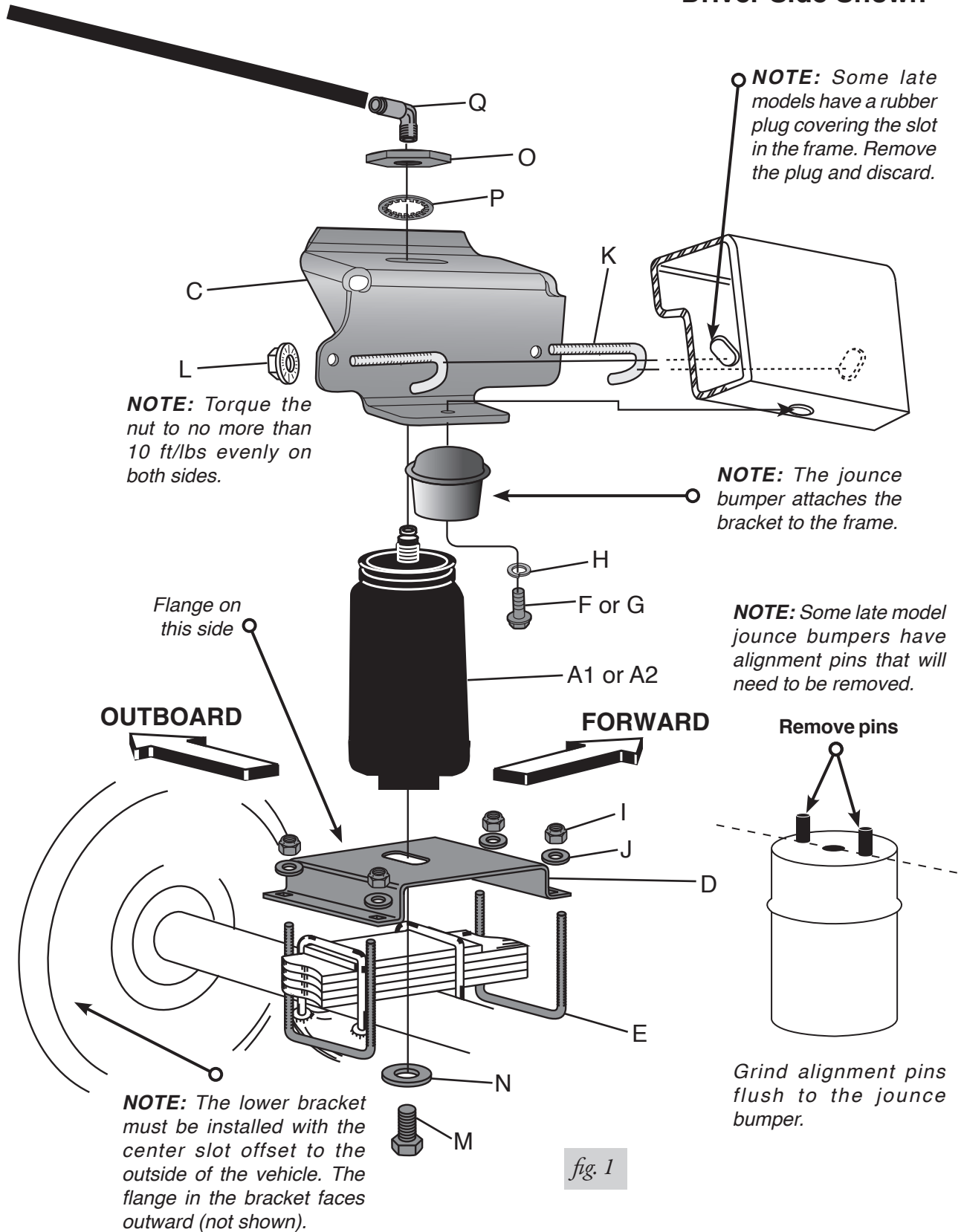


fig. 1

HARDWARE LIST

Item	Part #	Description.....Qty	Item	Part #	Description.....Qty
A1	58486	Air spring.....2	M	17124	1/2" Bolt.....2
A2	58571	Air spring.....2	N	18414	1/2" Flat washer.....2
B	07028	Right upper bracket.....1	O	18454	3/4" Nylon nut.....2
C	07329	Left upper bracket.....1	P	18450	3/4" Lock washer.....2
D	03008	Lower bracket.....2	Q	21837	1/4" Elbow.....2
E	10583	3/8" U-bolt.....4	AA	20086	Air line assembly.....1
F	17297	M10-1.25 x 45 Bolt.....2	BB	10466	Zip tie.....6
G	17330	M10-1.50 x 45 Bolt.....2	CC	21230	Valve cap.....2
H	18540	M10 Lock washer.....2	DD	18501	5/16" Flat washer.....2
I	18435	3/8" Nylon lock nut.....8	EE	21234	Rubber washer.....2
J	18444	3/8" Flat washer.....8	FF	18411	Star washer.....2
K	17309	3/8" J-bolt.....4	GG	21233	5/16" Hex nut.....4
L	18422	3/8" Serrated flange nut.....4			



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

TOOLS LIST

Description.....Qty	Description.....Qty
Hoist or floor jacks.....1	Adjustable wrench.....1
Safety stands.....2	Ratchet with 9/16", metric, & 1/2" deep well sockets.....1
Safety glasses.....1	Hose cutter, razor blade, or sharp knife.....1
Torque wrench.....1	Air compressor or compressed air source.....1
5/16" open-end or box wrench.....1	Spray bottle with dish soap/water solution.....1
7/16" open-end or box wrench.....1	
9/16" open-end or box wrench.....1	

Installing the RideControl System

INSTALLING THE AIR SPRING KIT

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 performance.



DANGER

UNBOLT THE LOWER BRACKET FROM THE LEAF SPRING IF THE VEHICLE IS TO BE SERVICED BY A FRAME CONTACT HOIST.

1. Remove the stock jounce bumper from under the frame (fig. 1).

NOTE

Some late model jounce bumpers have alignment pins that will need to be removed (fig. 1). Grind pins flush to the jounce bumper once removed.

2. Insert the J-bolts (K) through the upper bracket (B or C) with the curved part facing inboard.
3. Attach the lower portion of the upper bracket (B or C) to the frame using the stock jounce bumper. Secure in place with the supplied M10-1.25 x 45 bolt (F) or M10-1.50 x 45 bolt (G) and M10 lock washer (H).

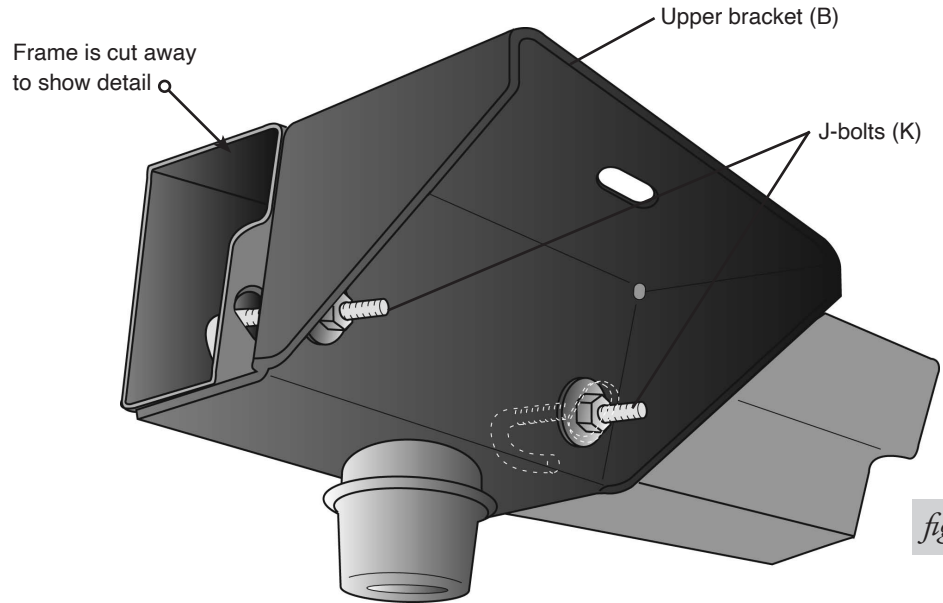
NOTE

The upper brackets are left- and right-side specific, designated by a "L" and "R" label.

4. Insert the curved part of the J-bolts (K) into the existing slots in the frame. Be sure the J-bolts lock onto the frame securely (fig. 2). Tighten the 3/8" serrated flange nut to attach.

NOTE

Some late models have a rubber plug covering the slot in the frame. Remove the plug and discard.

**NOTE**

Torque the bolts to no more than 10 lb.-ft. evenly on both sides.

5. Cut the forward bolt flush to the nut.
6. Install the elbow fitting (Q) into the air port of the air sleeve. The fitting is pre-coated with thread sealant. Tighten finger-tight plus two turns. Use a 7/16" open end wrench being careful to tighten on the metal hex nut only.

**CAUTION**

DO NOT OVERTIGHTEN.

7. Attach the air spring (A1 or A2) to the lower bracket (D) with the 1/2" flat washer (N) and lower mounting bolt (M). Leave loose for later adjustment.
8. Set the lower bracket on the leaf spring above the axle and attach using the supplied U-bolts (E), 3/8" flat washers (J), and 3/8" nylon lock nuts (I) (fig. 1).
9. Guide the threaded post of the air fitting through the slot in the upper bracket.
10. Install the 3/4" nylon lock nut (O) and lock washer (P) onto the upper threaded post of the air spring. Leave loose for final adjustment.
11. Repeat steps 1-10 for the other side of the vehicle.

INSTALLING THE AIR LINES

1. Choose a convenient location for mounting the inflation valves. Popular locations for the inflation valve are:
 - a. The wheel well flanges.
 - b. License plate recess in bumper.
 - c. Under the gas cap access door.
 - d. Through license plate itself.

NOTE

What ever the chosen location is, make sure there is enough clearance around the inflation valves for an air chuck.

2. Drill a 5/16" hole to install the inflation valves.
3. Cut the air line assembly (AA) in two equal lengths.

CAUTION

WHEN CUTTING OR TRIMMING THE AIR LINE, USE A HOSE CUTTER, A RAZOR BLADE OR A SHARP KNIFE. A CLEAN, SQUARE CUT WILL ENSURE AGAINST LEAKS. DO NOT USE WIRE CUTTERS OR SCISSORS TO CUT THE AIR LINE. THESE TOOLS MAY FLATTEN OR CRIMP THE AIR LINE, CAUSING IT TO LEAK AROUND THE O-RING SEAL INSIDE THE ELBOW FITTING (FIG. 3)

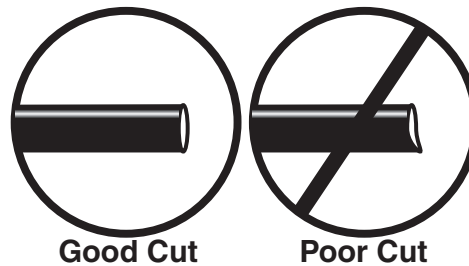


fig. 3

4. Place a 5/16" nut (GG) and a star washer (FF) on the air valve. Leave enough of the inflation valve in front of the nut to extend through the hole and have room for the rubber washer (EE), flat washer (DD), and 5/16" nut (GG) and cap (CC). There should be enough valve exposed after installation - approximately 1/2" - to easily apply a pressure gauge or an air chuck (fig. 4).
5. Push the inflation valve through the hole and use the rubber washer (EE), flat washer (DD), and another 5/16" nut (GG). Tighten the nuts to secure the assembly in place (fig. 4).

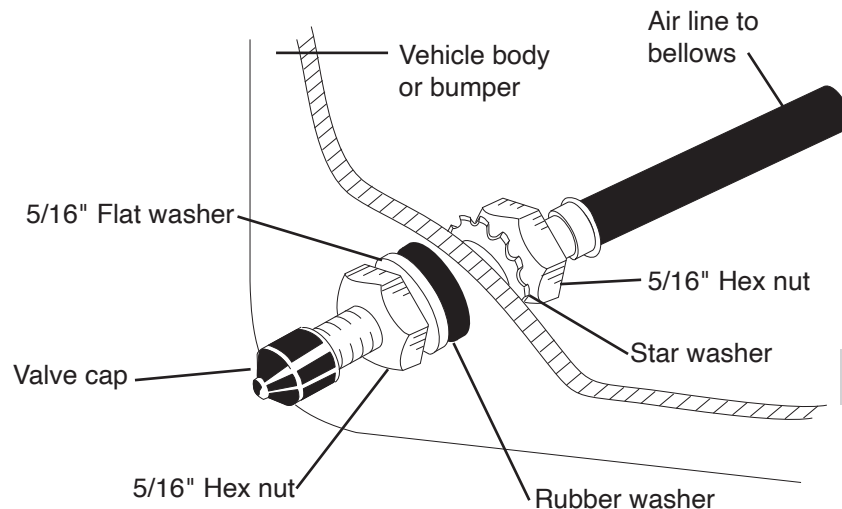
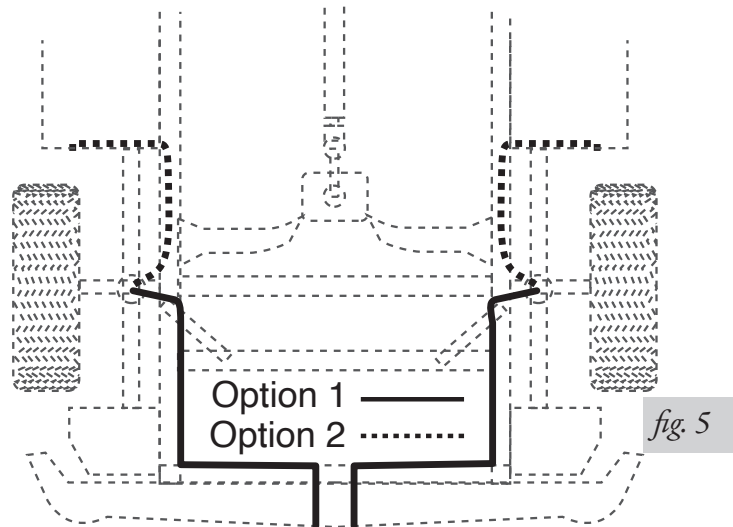


fig. 4

- Route the air line along the frame to the air fitting on the air spring (fig. 5). Keep AT LEAST 6" of clearance between the air line and heat sources, such as the exhaust pipes, muffler, or catalytic converter. Avoid sharp bends and edges. Use the plastic zip ties (BB) to secure the air line to fixed, non-moving points along the chassis. Be sure that the zip ties are tight, but do not pinch the air line. Leave at least 2" of slack to allow for any movement that might pull on the air line.



- Cut off air line leaving approximately 12" of extra air line. A clean square cut will ensure against leaks (see fig. 3). Insert the air line into the air fitting. This is a push to connect fitting. Simply push the air line into the 90 degree swivel fitting until it bottoms out (9/16" of air line should be in the fitting).
- IMPORTANT:** With the top and bottom still loose, inflate the air springs to approximately 10 PSI. Use the slots in the brackets to correctly align the air spring between the upper and lower brackets. this can be accomplished by tapping it inboard or outboard for proper alignment. There should be a symmetrical cushion of air around the base of the air spring when correctly positioned.

THE ADDITION OF LIMITING STRAPS

If you intend to use the truck off-road or in situations where the suspension is extended, it will be necessary to install limiting straps due to the long extension travel of the rear suspension.

CAUTION

IF LIMITING STRAPS ARE NOT INSTALLED FOR VEHICLES USED OFF-ROAD, THE SUSPENSION COULD PULL THE AIR SPRINGS APART. THE DAMAGE TO THE AIR SPRINGS WILL NOT BE COVERED BY THE WARRANTY.

To determine the type of limiting straps needed for your vehicle:

- Jack the vehicle up using the hitch or frame.
- Measure the distance between the upper and lower air spring mounting brackets. (Maximum extension on the air spring is 10" or slightly longer.)
- Then measure from the center of one shock bolt to the center of the other. (This is a common place to mount the limiting straps). This is the length needed to limit the suspension from overextension.
- Contact a local auto parts retailer to purchase limiting straps in the correct length for your vehicle.
- Follow the manufacturer's directions on installing the limiting straps.

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 air spring. 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, 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 our customer service department by calling (800) 248-0892, Monday through Friday. For calls from outside the USA or Canada, call (517) 322-2144.

Register warranty online at
www.airliftcompany.com/warranty



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

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