



LoadLIFTER 5000™

S E R I E S

Installation
Guide



1999-2004 Ford F-250 and F-350 Super Duty

Kits 57390 | 88390

4WD (Single and dual rear wheel)

For maximum effectiveness and safety, please read these instructions completely before proceeding with installation.

IDENTIFYING THE DIFFERENCES BETWEEN KITS

Should you need to contact Air Lift customer service, you will need to know which kit you are inquiring about: standard LoadLifter 5000 or LoadLifter 5000 Ultimate. The kits are easily identifiable by looking at the roll plates.

- Standard **LoadLifter 5000** — Zinc-plated steel roll plates.
- LoadLifter 5000 Ultimate** — Black powder-coated roll plates.



LoadLifter 5000
silver zinc-plated steel
roll plate



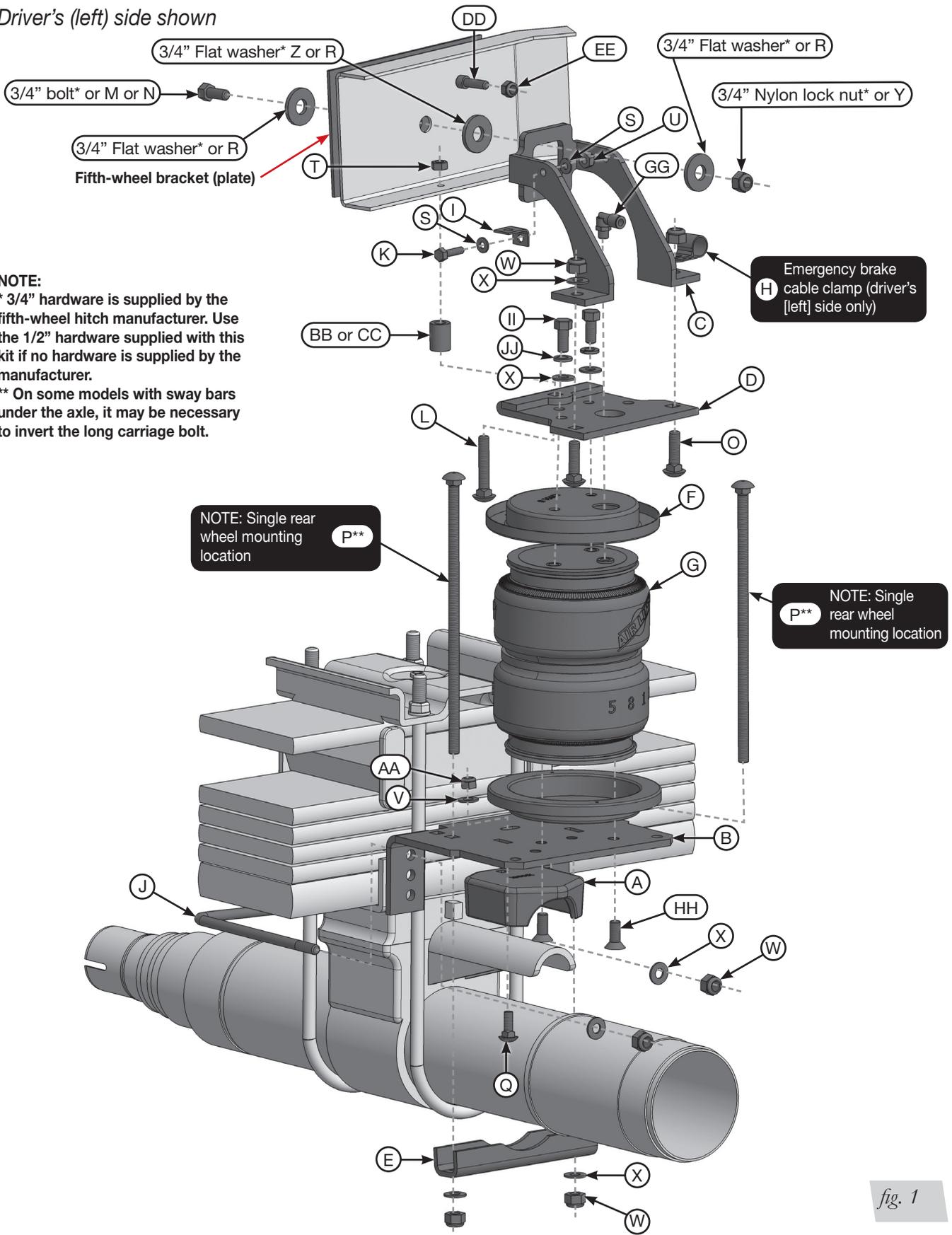
LoadLifter 5000 Ultimate
black powder-coated
roll plate

TABLE OF CONTENTS

Installation Diagram	2
Hardware and Tools Lists	3
Introduction	4
Important Safety Notice	4
Notation Explanation	4
Installing the LoadLifter 5000 Series System	5
Getting Started	5
For Vehicles Equipped with Emission Lines	6
Upper Brace Installation	6
Air Spring and Bracket Assembly	7
Attaching the Assemblies to the Frame	9
Attaching the Lower Bracket	11
Installing the Air Lines	13
Installing Nylon Air Lines	13
Installing the Heat Shield	14
Finished Installation Photos	15
Before Operating	16
Checking for Leaks	16
Fixing Leaks	16
Installation Checklist	17
Post-Installation Checklist	17
Product Use, Maintenance and Servicing	18
Minimum and Maximum Pressure	18
Maintenance Guidelines	18
Tuning the Air Pressure	19
Guidelines for Adding Air	19
Troubleshooting Guide	20
Frequently Asked Questions	20
Limited Warranty and Return Policy	21
Replacement Part Information	21
Contact Information	21

Installation Diagram

Driver's (left) side shown



NOTE:
 * 3/4" hardware is supplied by the fifth-wheel hitch manufacturer. Use the 1/2" hardware supplied with this kit if no hardware is supplied by the manufacturer.
 ** On some models with sway bars under the axle, it may be necessary to invert the long carriage bolt.

fig. 1

Hardware and Tools Lists

Common Parts Included in Both Kits

Item	Part#	Description	Qty	Item	Part#	Description	Qty
A	03998	Lower bracket cup	2	W	18435	3/8"-16 Nylon lock nut	12
B	03999	Lower bracket main plate	2	X	18444	3/8" Flat washer	15
C	07996	Upper brace	2	Y	18460	1/2"-13 Nylon lock nut	2
D	07997	Upper bracket	2	Z	18556	3/4" Flat washer	2
E	01531	Clamp bar	2	AA	18613	5/16"-18 Thin nylon lock nut	2
H	10181	Emergency brake cable P-clamp	1	BB	13964	Spacer	2
I	10886	"L" Bracket	1	CC	13978	Spacer	2
J	11717	U-bolt	2	DD	18443	7/16" Spacer	1
K	17135	1/4"-20 x 1" Hex-head cap screw	1	EE	18495	M10-1.5 Nylon lock nut	1
L	17141	3/8"-16 x 2 1/2" Carriage bolt	2	FF	20086	Air line assembly	1
M	17208	1/2"-13 x 2" Hex-head cap screw	2	GG	21837	90-degree Swivel elbow air fitting	2
N	17271	1/2"-13 x 3" Hex-head cap screw	2	HH	17215	3/8"-24 x 3/4" Flat-head socket cap screw	4
O	17361	3/8"-16 x 1 1/4" Carriage bolt	4	II	17203	3/8"-24 x 7/8" Hex-head cap screw	4
P	17387	3/8"-16 x 10" Carriage bolt	4	JJ	18427	3/8" Split lock washer	4
Q	17500	5/16"-18 x 3/4" Carriage bolt	2	KK	10466	Zip ties	6
R	18207	1/2" Thick flat washer	6	LL	18411	5/16" Lock washer	2
S	18419	#12 Flat washer	2	MM	21230	Valve cap	2
T	18422	3/8"-16 Serrated-flange lock nut	2	NN	21233	5/16"-32 Hex nut	4
U	18425	1/4"-20 Nylon lock nut	1	OO	21234	Rubber washer	2
V	18433	5/16" Flat washer	2	PP	18501	Flat washer	2

Tools List

Description	Qty
Standard and metric open-end or box wrenches	2
Adjustable wrench	1
Ratchet with 3/8", 9/16", & 1/2" deep well sockets	1
5/16" (8mm) drill bits (very sharp)	1
Standard hex keys	Set
Die grinder	1
Hacksaw	1
Heavy duty drill	1
Torque wrench	1
Standard, metric and SAE sockets and wrenches	1
Hose cutter, razor blade, or sharp knife	1
Hoist or floor jacks	1
Safety stands	1
Safety glasses	1
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution	1

Unique Parts in Each Kit

LoadLIFTER 5000™ KIT 57390

Item	Part#	Description	Qty
F	11951	Zinc-plated silver roll plate	4
G	58437	Air spring	2

LoadLIFTER 5000™ ULTIMATE KIT 88390

Item	Part#	Description	Qty
F	11967	Black painted roll plate	4
G	58496	Air spring with jounce bumper	2

The photos in this manual show the LoadLifter 5000 and LoadLifter 5000 Ultimate kits.



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 standard LoadLifter 5000 or LoadLifter 5000 Ultimate air spring kits. All LoadLifter 5000 series kits utilize sturdy, reinforced, commercial-grade single or double, depending on the kit, convolute bellows. LoadLifter 5000 Ultimate kits add an internal jounce bumper and black powder-coated roll plates.

The air springs are manufactured like a tire with layers of rubber and cords that control growth. LoadLifter 5000 series kits are recommended for most 3/4- and 1-ton pickups and SUVs with leaf springs and 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.

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 the vehicle's owner's manual and do not exceed the maximum load listed for this 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.



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.

NOTE

Indicates a procedure, practice or hint which is important to highlight.

Installing the LoadLifter 5000 Series System

GETTING STARTED

1. Raise the vehicle and support it in a way, using jack stands or equivalent, so that the axle can be safely dropped away from the frame. This needs to be done in order for the air spring assembly to be put into position between the axle and frame (Fig. 2).

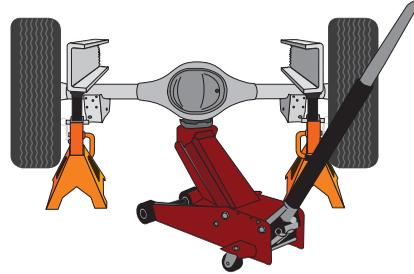


fig. 2

2. Remove the jounce bumpers from under the frame, over the axle (Fig. 3).



fig. 3

3. For dual-rear-wheel vehicles (DRW) it may be necessary to remove the sway bar bolts and straps holding the sway bar to the axle because the strap might interfere with the air spring assembly's lower bracket. If removed, retain for reinstallation.
4. Disconnect the wiring harness from the driver's (left) side frame rail to gain clearance for the upper brace (Fig. 4).

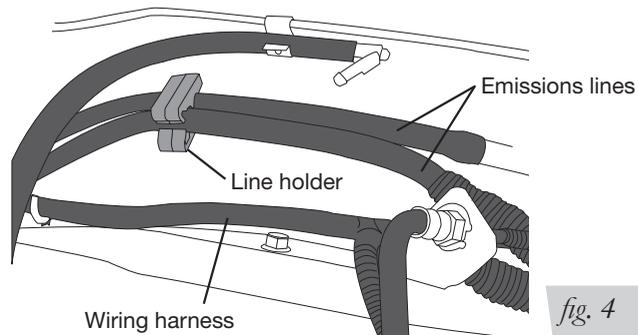


fig. 4

5. In order to obtain clearance between the upper brace and the emergency brake cable bolt, on the inside of the frame, it will be necessary to remove the bolt and reinsert through the emergency cable bracket, from the outside of the frame in. Install the 7/16" spacer (DD) on the bolt and cap with the new M10-1.5 nylon lock nut (EE) (Fig 1). Tighten hardware securely.
6. If the truck has a fifth-wheel hitch already installed, it will be necessary to remove the 3/4" hardware that bolts the side bracket to the outside of the frame above the axle (Figs. 1 & 5).

NOTE

Some hitch models have a spacer between the bracket and the frame rail. Be sure to reinstall the spacer when attaching the upper bracket.

FOR VEHICLES EQUIPPED WITH EMISSIONS LINES

1. If the truck has emissions lines running along the inside frame rail on the driver's (left) side, it will be necessary to move the lines to create space for the upper brace. If not equipped, skip to the Upper Brace Installation.
2. Carefully push the line holder out of the frame above the axle. Try to minimize damage because it will be reused. It may also be helpful to remove any holders forward or rearward of the axle to aid in positioning the lines once the upper brace has been installed (Fig. 4).

UPPER BRACE INSTALLATION

Set the upper frame brace (C) against the driver's side of the frame (Fig. 5). Once the following procedure has been completed for the driver side, repeat for the passenger's side.

Fifth-Wheel Hitches

No Fifth-wheel Hitch Plate

If the truck has no fifth-wheel hitch or a hitch that does not have a plate running alongside the full length of the frame (these will have an "L" bracket forward and behind the axle, leaving the middle frame open) use the 1/2"-13 x 2" hex-head cap screw (M) with a flat washer (R) through the slot in the side of the frame, then through another flat washer (R) and finally through the upper frame brace. Cap with a flat washer (R) and a 1/2"-13 nylon lock nut (Y) (Fig. 5). Leave loose at this time.

Fifth-wheel Hitch Using Frame Slot

If the truck has an aftermarket fifth-wheel hitch that has a bracket (plate) running alongside of the frame and it uses this slot to secure the bracket to the frame with existing hardware, install the existing hardware previously removed in the "Getting Started Section" from the fifth-wheel installation for securing the brace (Fig. 5). Make sure to install the large 3/4" flat washer (Z) between the brace and frame (Fig. 5). Do not tighten at this time.

Fifth-wheel Hitch Plate Not Using Frame Slot

If the truck has an aftermarket fifth-wheel hitch that has a bracket (plate) running alongside of the frame and it does not have any attaching hardware on the side where the slot in the frame is, it will be necessary to drill a 1/2" hole through the plate using the slot in the frame as a template.

It may be necessary to mark and remove the bracket (plate) from the side of the frame in order to drill the hole correctly. Re attach once the hole is drilled.

Insert a 1/2"-13 x 3" hex-head cap screw (N) with a 1/2" thick flat washer (R) through the fifth-wheel plate previously drilled, the frame, then through another 1/2" flat washer (R) and finally the upper frame brace. Cap with a 1/2" thick flat washer (R) and a 1/2"-13 nylon lock nut (Y) (Fig. 5). Leave loose at this time.

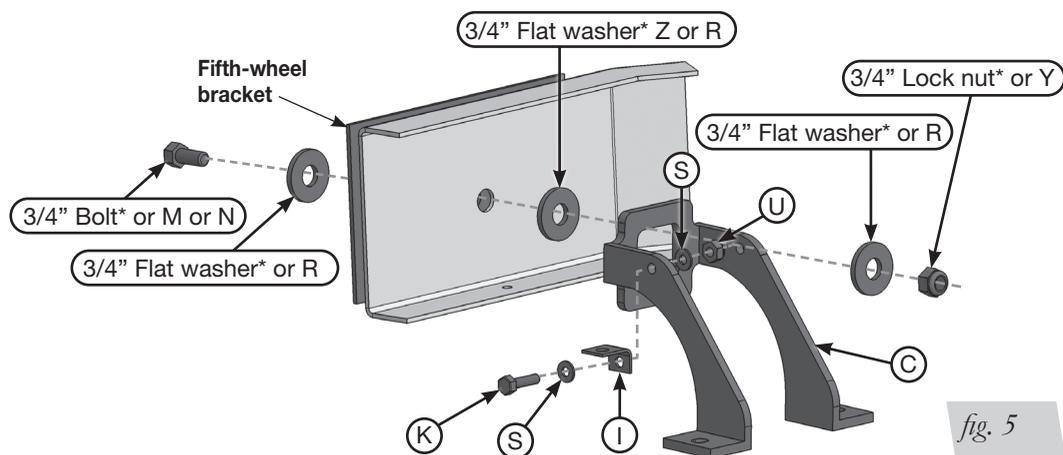


fig. 5

AIR SPRING AND BRACKET ASSEMBLY

1. Set roll plates (F) over the top and bottom of the air spring (G) (Fig. 1).

NOTE

The radiused (rounded) edge of the roll plate (F) will be toward the air spring so that the air spring is seated inside both roll plates.

2. Install the swivel elbow fitting (GG) into the top of the air spring finger tight plus 1 1/2 turns.
3. Insert a 5/16"-18 x 3/4" carriage bolt (Q) through the square hole in the lower bracket cup (A). Make sure to insert the carriage bolt on the flanged side of the bracket. Set the assembly onto the lower bracket main plate (B) making sure the lower bracket cup is on the flanged side of the bracket (Fig. 7).

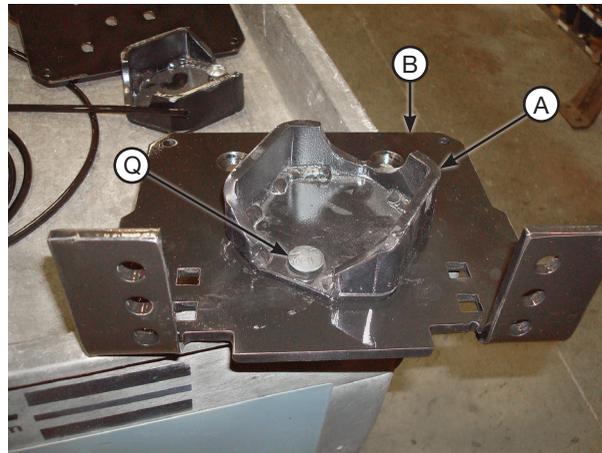


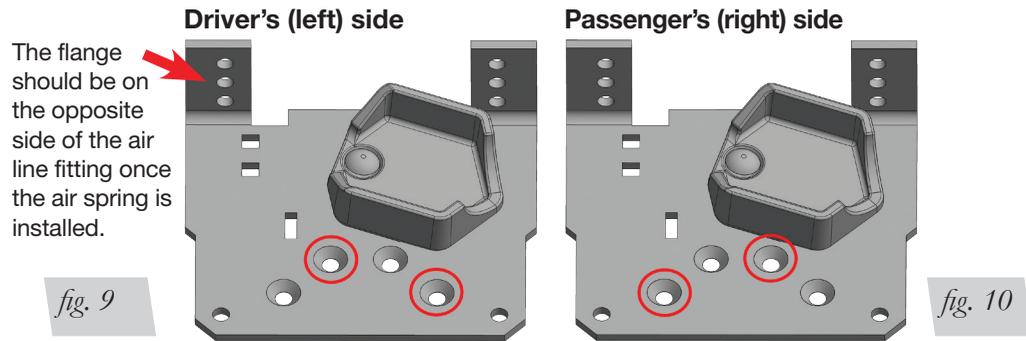
fig. 7

4. Turn the lower bracket main plate over and cap the carriage bolt with a 5/16"-18 thin lock nut (AA) and a 5/16" washer (V). Tighten the nut only tight enough so that the cup swivels on the lower bracket main plate (fig 8).



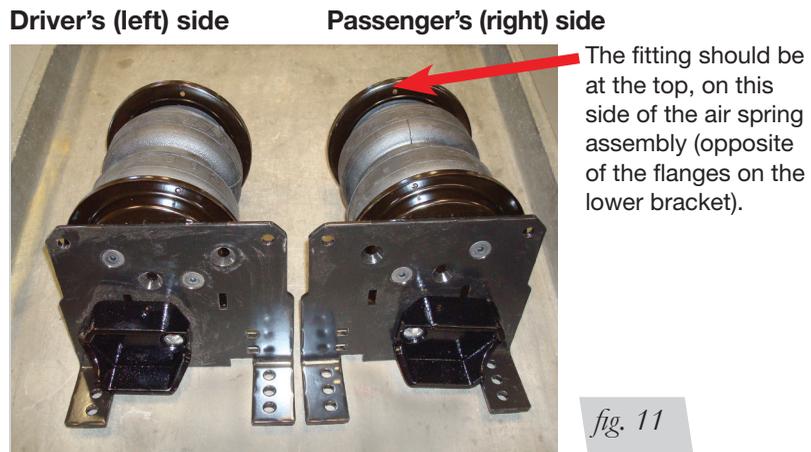
fig. 8

- The lower bracket (B) has two sets of air spring mounting holes. Using the corresponding holes in the lower bracket designated (Figs. 9 & 10), attach the air spring to the brackets using the 3/8"-24 x 3/4" flat-head socket cap screw (HH). Torque mounting screws to no more than 20 lb.-ft. (27Nm).

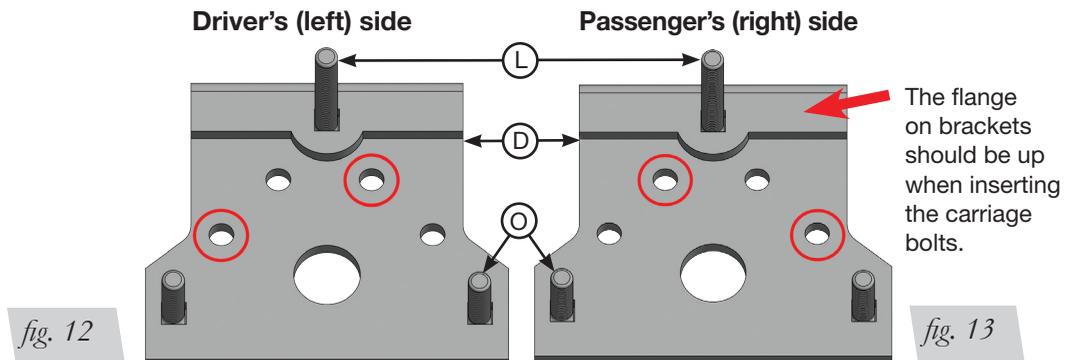


When installing on the air spring, make sure the bracket edge facing you is on the fitting side of the air spring.

- Figure 11 shows the driver's (left) and passenger's (right) side lower bracket assemblies.



- Set the lower bracket assemblies aside. Insert two 3/8"-16 x 1 1/4" carriage bolts (O) up through the two square holes in both upper brackets (D) (Figs. 12 & 13). Also install one 3/8"-16 x 2 1/2" carriage bolt (L) through the remaining hole. The head of this carriage bolt will be hidden once the upper bracket is mounted to the air springs.



8. Make sure the roll plates (F) are on top of both air spring assemblies previously assembled. Set the driver's (left) side upper bracket onto the driver's (left) side air spring assembly using the holes in the upper bracket designated (Figs. 11 & 12) and attach to the air spring with two 3/8" flat washers (X), split lock washers (JJ) and 3/8"-24 x 7/8" hex-head cap screws (II). Torque the hardware to no more than 20 lb.-ft. (27Nm).
9. Repeat the above process for the passenger's (right) side assembly (Figs. 11 & 13). Figure 14 shows the finished assemblies.

NOTE

One of the 3/8"-16 x 1 1/4" carriage bolts (O) will not be covered by the roll plate and may fall out. If so, retain for use in the "Attaching the assemblies to the frame" section later in this manual.

Driver's (left) side Passenger's (right) side



fig. 14

ATTACHING THE ASSEMBLIES TO THE FRAME

1. If not done so yet, drop the axle or raise the frame to make room for the assemblies to be put into position.
2. Two spacer (BB or CC) lengths are supplied to properly fit between the frame jounce bumper bracket and frame. Which one is used depends on the model. Use the spacer that can be inserted where the stock jounce bumper was removed, which when butted against the frame, will be flush (or close to) the bottom of the jounce bumper bracket that is riveted to the frame (Figs. 15a, 15b & 15c).

NOTE

There is a possibility that the stock spacer will remain in the jounce bumper bracket. It can be left there and reused.

Spacer is too short. Use the longer one.

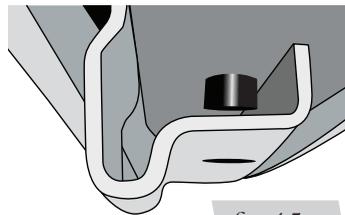


fig. 15a

Spacer is too long. Use the shorter one.

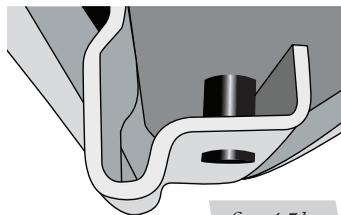


fig. 15b

Spacer is the right length if it is flush with the bottom of the jounce bumper bracket.

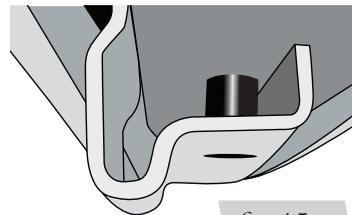


fig. 15c

- Set the driver's (left) side assembly onto the jounce bumper strike plate (Fig. 17). Raise the axle up just enough to insert the long carriage bolt (L) and correct spacer (BB or CC) that is installed in the upper bracket through the existing jounce bumper hole in the bottom of the frame (Fig. 16). At the same time, line up the upper brace previously installed onto the remaining two carriage bolts (O) in the upper bracket. Do this just enough for the carriage bolt to hold the assembly into position on the jounce bumper strike plate.

NOTE

The upper bracket should rest on the spacer and the stock jounce bumper bracket.

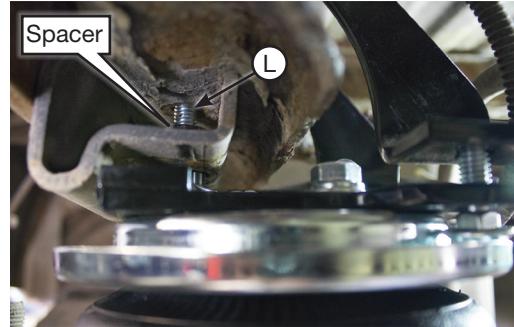
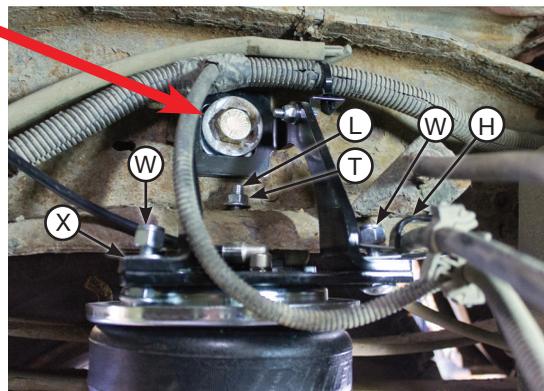

fig. 16
Driver's (left) side

fig. 17
Passenger's (right) side

fig. 18

- Repeat for the passenger's (right) side. (Fig. 18).
- Install the 3/8"-16 serrated lock nut (T) on the carriage bolt (L) that went through the existing jounce bumper hole. Leave loose at this time (Fig. 19).

Torque the upper hardware, torque to 44 lb.-ft. (60Nm).



Torque 3/8" hardware, torque to 35 lb.-ft. (47Nm).

fig. 19
CAUTION

BE SURE NOT TO PINCH THE PREVIOUSLY MOVED WIRING OR LINES INSIDE THE LEFT FRAME RAIL.

6. Install the emergency brake cable P-clamp (H) over the emergency brake cable and attach to the forward brace/upper bracket bolt (O) (Fig. 19) on the driver's (left) side. Cap with a 3/8"-16 nylon lock nut (W).
7. Both sides: Cap the remaining brace/upper bracket bolts (O) with 3/8" flat washers (X) and 3/8"-16 nylon insert lock nuts (W). Torque all 3/8" hardware attaching the upper bracket to the frame to 35 lb.-ft. (47Nm) (Fig. 19).
8. With the spacers (BB or CC) on the upper brackets tight to the bottom of the frame and the braces tight to the upper bracket, tighten the 1/2" or 3/4" hardware, previously installed, that hold the brace to the frame. Torque the hardware to 44 lb.-ft. (60Nm) (Fig. 19).
9. If the truck is equipped with the emissions line previously removed, attach the L-bracket (I) to the back or front leg of the frame brace using the 1/4"-20 x 1" hex-head cap screw (K), flat washers (S) and 1/4"-20 nylon lock nut (U) supplied (Figs. 5 & 20).
10. Insert the line holder post into the L-bracket (I) attached to the front or back leg of the upper left brace (C) (Fig. 20). It may be necessary to move the line holder post forward or back on the lines to line up correctly with the L-bracket hole. Reattach any line holders removed forward or behind the axle, if possible, that were removed to aid in positioning the upper brace.

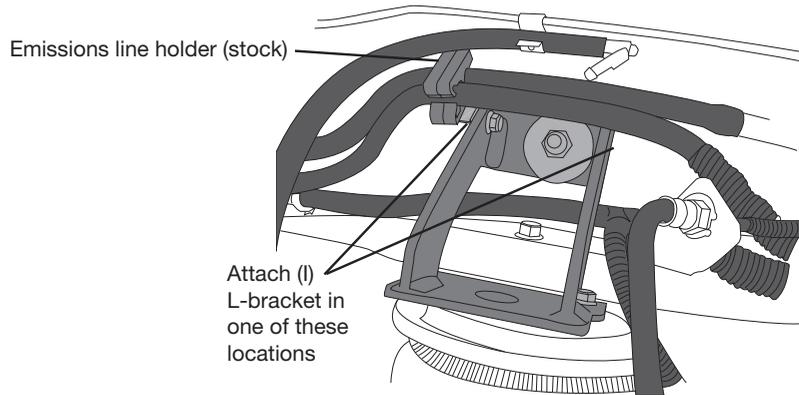


fig. 20

ATTACHING THE LOWER BRACKET

1. Determine which bolt holes to use for the 3/8"-16 x 10" carriage bolts (P) based on the type of truck (Fig. 21 & 22):
 - **Single-rear-wheel (SRW) trucks:** inside holes
 - **Double-rear-wheel (DRW) trucks:** outside holes

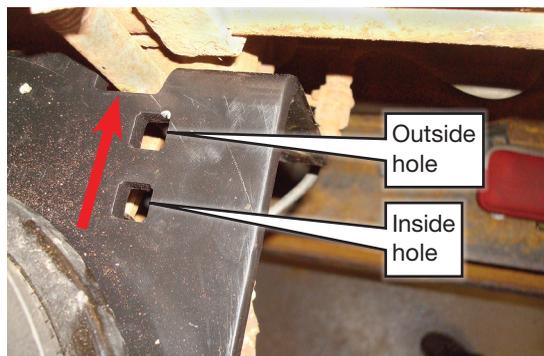


fig. 21

2. Push the lower bracket (B) up against the stock U-bolts so that the flanges are locked into position around the stock U-bolts (Fig. 21). It may be necessary to rotate the lower bracket cup (A) on the jounce bumper strike plate (Fig. 22).

Push the lower bracket against the stock U-bolts, with the bracket flanges locked around the U-bolts

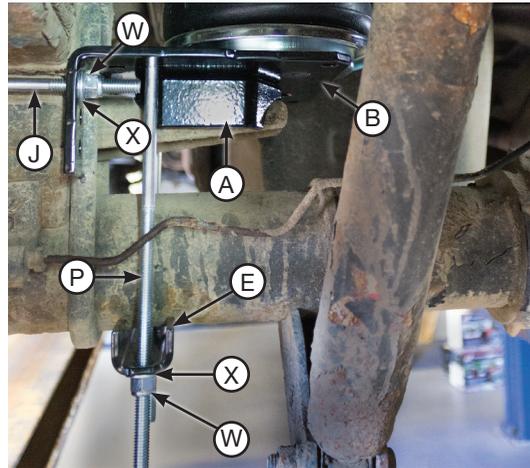


fig. 22

CAUTION

WHEN ATTACHING THE LOWER BRACKET ASSEMBLY, PLACE THE CARRIAGE BOLT IN BETWEEN OR BEHIND THE HARD BRAKE LINE, BEHIND THE AXLE. IT MAY BE NECESSARY TO ADJUST THE BRAKE LINE SLIGHTLY TO PROVIDE PROPER CLEARANCE. THE BRAKE LINE MUST NOT TOUCH THE CARRIAGE BOLT.

3. Position the U-bolt (J) around the leaf spring assembly and insert into the lower bracket (B) hole closest to the leaf spring stack (Fig. 22). The lower bracket flanges must be locked on the front and rear of the stock U-bolts that hold the leaf springs to the axle.
4. Cap the U-bolts with two 3/8" flat washers (X) and two 3/8"-16 nylon lock nuts (W) and evenly tighten only enough to draw the bracket up against the stock U-bolt (Fig. 22).
5. Set the clamp bar (E) over the long carriage bolts below the axle and cap with two 3/8" flat washers (X) and two 3/8"-16 nylon lock nuts (W) (Fig. 22).

NOTE

If the truck has a sway bar and the carriage bolt (P) interferes, invert the carriage bolt.

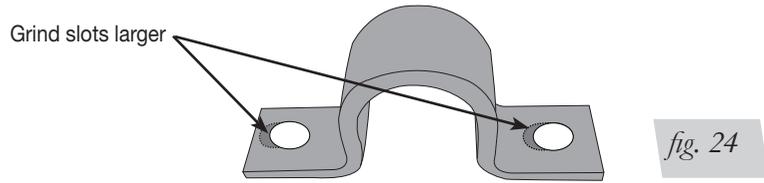
6. Tighten the axle clamp bar hardware evenly until it touches the axle. Torque the axle clamp bar bolts to 16 lb.-ft. (22Nm). Trim the 3/8"-16 x 10" carriage bolts below the nylon lock nuts if necessary.
7. Torque the leaf spring U-bolt nuts to 10 lb.-ft. (13Nm). Once tight, the upper and lower brackets will not be parallel and may look like they are out of alignment. This condition is considered normal because of the way the lower bracket and upper bracket mounts are designed. Some variance from one unit to another is to be expected.
8. Once the lower bracket hardware is tight, snug the lower mounting plate/swivel cup bracket mounting hardware with an open-end wrench (Fig. 23).



fig. 23

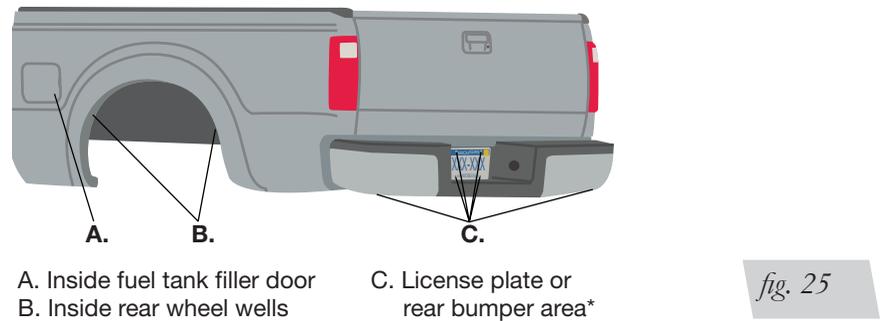
NOTE

If the sway bar straps were removed during installation and they interfere with the lower bracket when trying to reinstall them, it may be necessary to slot the straps before reinstalling (Fig. 24).



Installing the Air Lines

Air lines are routed from the air springs to Schrader valves. Begin by choosing locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (Fig. 25).

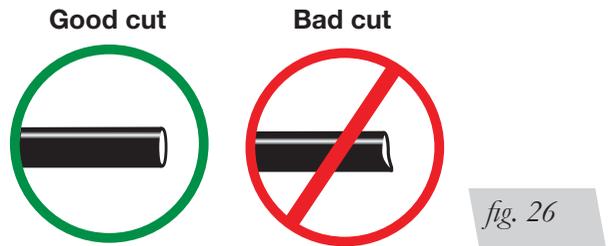


CAUTION

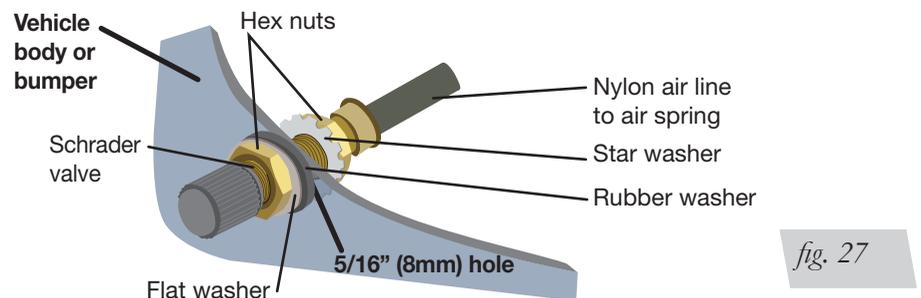
KEEP AT LEAST 6" (150MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

INSTALLING NYLON AIR LINES

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 26). Do not use scissors or wire cutters.

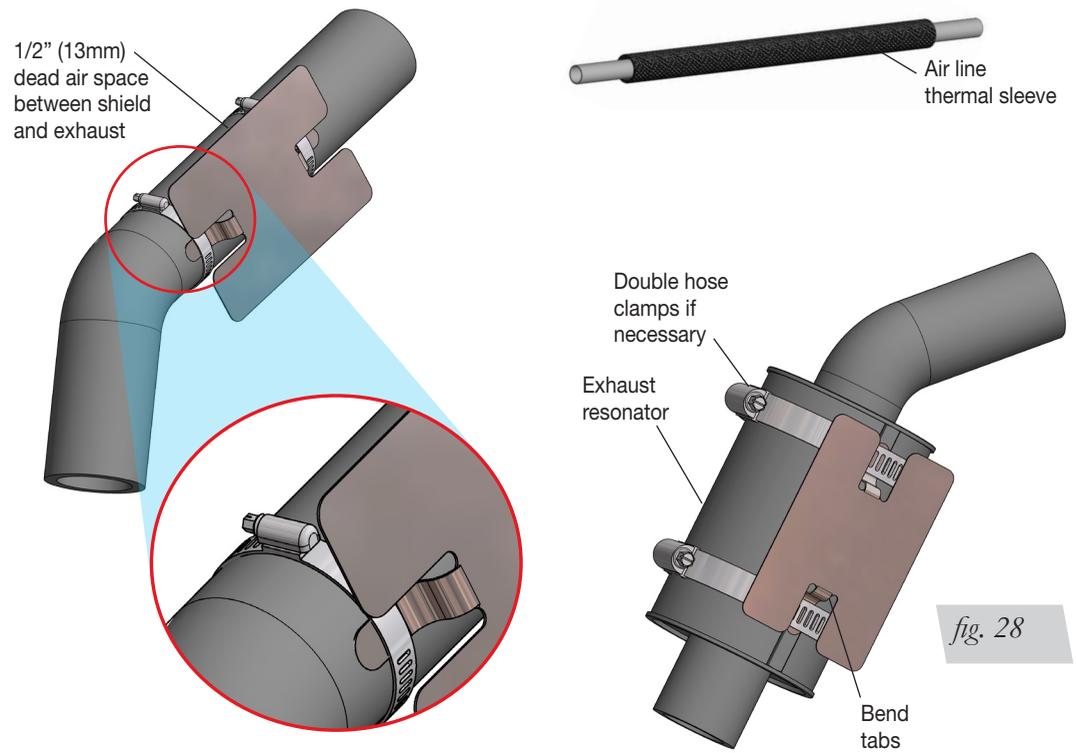


2. Use zip ties to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. The minimum bend radius for the air line is 1" (25mm). Leave at least 2" (50mm) of slack in the air line to allow for any movement that might pull on the air line.
3. Install the Schrader valve in the chosen location (Fig. 27).



INSTALLING THE HEAT SHIELD

1. Attach the metal heat shield to the exhaust where it is closest to the air spring. Slide the air line thermal sleeve over the air line and place it where the air line is closest to the exhaust (Fig. 28).

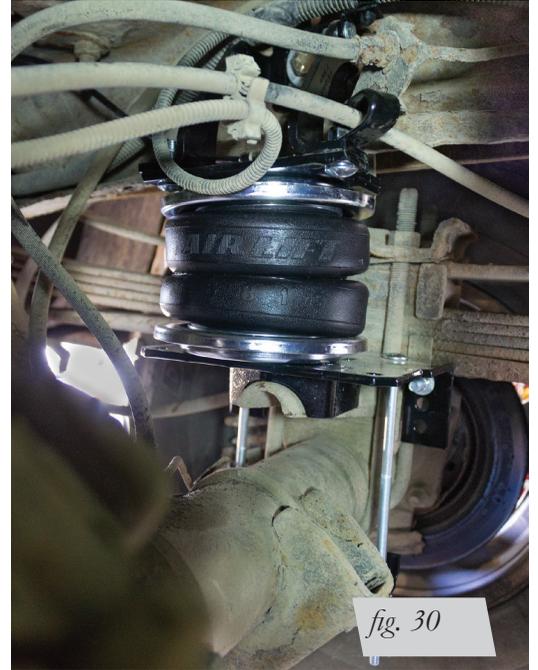


Finished Installation Photos

1. The following images show the finished installation of both sides (Figs. 29, 30, 31 & 32).



Driver's (left) side as seen from rear.



Driver's (left) side as seen from the middle of the truck.



Passenger's (right) side as seen from rear.



Passenger's (right) side as seen from the front.

Before Operating

CHECKING FOR LEAKS

1. Inflate the air spring to 30 PSI (2BAR).
2. Spray all connections and the inflation valves with a solution of liquid dish soap and water. Spot leaks easily by looking for bubbles in the soapy water.
3. After the test, deflate the springs to the minimum pressure required to restore the system to normal ride height. Do not deflate to lower than 5 PSI (.34BAR).
4. Check the air pressure again after 24 hours. A 2-4 PSI (.14-.28BAR) loss after initial installation is normal. Retest for leaks if the loss is more than 5 PSI (.34BAR).

FIXING LEAKS

1. If there is a problem with the swivel fitting:
 - a. Check the air line connection by deflating the spring and removing the line by pulling the collar against the fitting and pulling firmly on the air line. Trim 1" (25mm) off the end of the air line. Be sure the cut is clean and square (see Fig. 26). Reinsert the air line into the push-to-connect fitting.
 - b. Check the threaded connection by tightening the swivel fitting another half turn. If it still leaks, deflate the air spring, remove the fitting, and re-coat the threads with thread sealant. Reinstall by hand tightening as much as possible and then use a wrench for an additional two turns.
2. If there is a problem with the inflation valve:
 - a. Check the valve core by tightening it with a valve core tool.
 - b. Check the air line by removing the air line from the barbed fitting. Cut the air line off a few inches in front of the fitting and use a pair of pliers or vice grips to pull/twist the air line off of the fitting.

**CAUTION**

DO NOT CUT THE AIR LINE OFF AT THE FITTING BECAUSE THIS COULD NICK THE BARB AND RENDER THE FITTING USELESS.

3. If the preceding steps have not resolved the problem, call Air Lift customer service at **(800) 248-0892**.

INSTALLATION CHECKLIST

- Clearance test** — Inflate the air springs to 40-50 PSI (2.8-3.5BAR) 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 40-50 PSI (2.8-3.5BAR) 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" (150mm) 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.

POST-INSTALLATION CHECKLIST

- Overnight leak down test** — Recheck air pressure after the vehicle has been used for 24 hours. If the pressure has dropped more than 5 PSI (.34BAR), then there is a leak that must be fixed. Either fix the leak yourself or return to the installer for service.
- Air pressure requirements** — It is important to understand the air pressure requirements of the air spring system. Regardless of load, the air pressure should always be adjusted to maintain adequate ride height at all times while driving.
- Thirty-day or 500-mile (800km) test** — Recheck the air spring system after 30 days or 500 miles (800km), whichever comes first. If any part shows signs of rubbing or abrasion, the source should be identified and moved, if possible. If it is not possible to relocate the cause of the abrasion, the air spring may need to be remounted. If professionally installed, the installer should be consulted. Check all fasteners for tightness.

Product Use, Maintenance and Servicing

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

MAINTENANCE GUIDELINES

NOTE

By following the steps below, vehicle owners will obtain the longest life and best results from their air springs.

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.

CAUTION

FOR SAFETY AND TO PREVENT POSSIBLE DAMAGE TO THE VEHICLE, DO NOT EXCEED MAXIMUM GROSS VEHICLE WEIGHT RATING (GVWR), 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 .

4. Loaded vehicles require at least 25 PSI (1.7BAR). A “loaded vehicle” refers to a vehicle with a heavy bed load, a trailer or both. Never exceed GVWR, regardless of air spring, air pressure or other load assist. The springs in this kit will support approximately 40 pounds (18kg) of load (combined on both springs) for each 1 PSI (.07BAR) of pressure. The required air pressure will vary depending on the state of the original suspension. Operating the vehicle below the minimum air spring pressure will void the Air Lift warranty.
5. When increasing load, always adjust air pressure to maintain normal ride height. Increase or decrease pressure from the system as necessary to attain normal ride height for optimal ride and handling. Remember that loads carried behind the axle (including tongue loads) require more leveling force (pressure) than those carried directly over the axle.
6. Always add air to springs in small quantities, checking the pressure frequently.
7. Should it be necessary to raise the vehicle by the frame, make sure the system is at minimum pressure (5 PSI [.34BAR]) to reduce the tension on the suspension/ brake components. Use of on-board leveling systems do not require deflation or disconnection.
8. Periodically check the air spring system fasteners for tightness. Also, check the air springs for any signs of rubbing. Realign if necessary.
9. On occasion, give the air springs a hard spray with a garden hose to remove mud, sand, gravel or other debris.

TUNING THE AIR PRESSURE

Pressure determination comes down to three things — level vehicle, ride comfort and stability.

1. Level vehicle

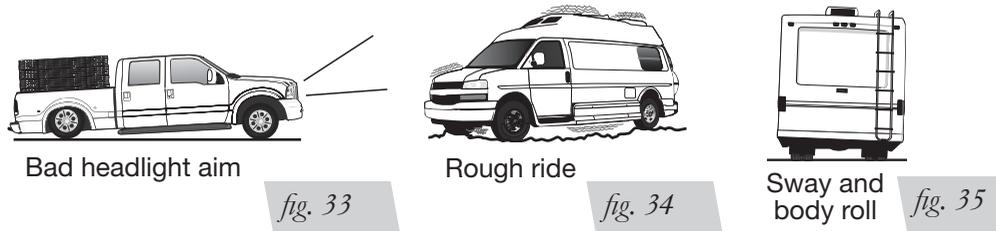
If the vehicle's headlights are shining into the trees or the vehicle is leaning to one side, then it is not level (Fig. 33). Raise the air pressure to correct either of these problems and level the vehicle.

2. Ride comfort

If the vehicle has a rough or harsh ride it may be due to either too much pressure or not enough (Fig. 34). Try different pressures to determine the best ride comfort.

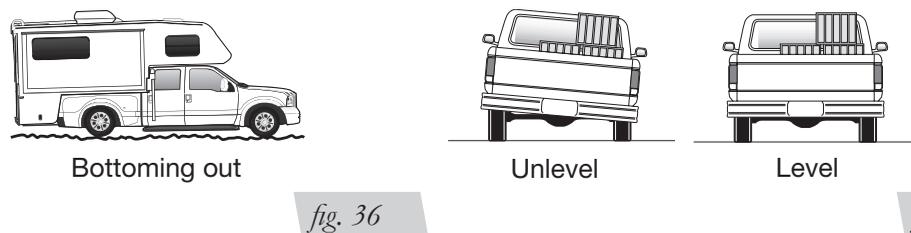
3. Stability

Stability translates into safety and should be the priority, meaning the driver may need to sacrifice a perfectly level and comfortable ride. Stability issues include roll control, bounce, dive during braking and sponginess (Fig. 35). Tuning out these problems usually requires an increase in pressure.



GUIDELINES FOR ADDING AIR

1. Start with the vehicle level or slightly above.
2. When in doubt, always add air.
3. If the front of the vehicle dives while braking, increase the pressure in the front air bags, if equipped.
4. If it is ever suspected that the air bags have bottomed out, increase the pressure (Fig. 36).
5. Adjust the pressure up and down to find the best ride.
6. If the vehicle rocks and rolls, adjust the air pressure to reduce movement.
7. It may be necessary to maintain different pressures on each side of the vehicle. Loads such as water, fuel, and appliances will cause the vehicle to be heavier on one side (Fig. 37). As much as a 50 PSI (3.5BAR) difference is not uncommon.



Troubleshooting Guide

PROBLEM	CAUSE	SOLUTION
System won't maintain pressure overnight.	Improperly installed air line, air line has holes or cracks.	Leak test the air line connections, the threaded connection into the air spring, and all fittings in the control system.
Air spring or air line leak.	Fitting seal or air line is compromised.	Check to make sure air lines are seated in connectors. Inspect fittings with soapy water. Trim hose or re-seal fitting. Ensure lines are cut straight.
Corner won't raise or air leak develops.	Look for a kink or fold in the air line.	Replace any air line that has been kinked.

FREQUENTLY ASKED QUESTIONS

Q. Will installing air springs increase the weight ratings of a vehicle?

No. Adding air springs will not change the weight ratings (GAWR, GCWR and/ or GVWR) of a vehicle. Exceeding the GVWR is dangerous and voids the Air Lift warranty.

Q. Is it necessary to keep air in the air springs at all times and how much pressure will they need?

For LoadLifter 5000 standard and LoadLifter 5000 Ultimate, the recommended minimum air pressure is 5 PSI (.34BAR), but it can safely be run at zero air pressure unladen (no load).

Q. Is it necessary to add a compressor system to the air springs?

No. Air pressure can be adjusted with any type of compressor as long as it can produce sufficient pressure to service the springs. Even a bicycle tire pump can be used, but it's a lot of work.

Q. How long should air springs last?

If the air springs are properly installed and maintained they can last indefinitely.

Q. Will raising the vehicle on a hoist for service work damage the air springs?

No. The vehicle can be lifted on a hoist for short-term service work such as tire rotation or oil changes. However, if the vehicle will be on the hoist for a prolonged period of time, support the axle with jack stands in order to take the tension off of the air springs.



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 online at www.airliftcompany.com/warranty.

For additional warranty information contact Air Lift Company customer service.

Replacement Part Information

If replacement parts are needed, contact the local dealer or call Air Lift customer service at **(800) 248-0892**. Most parts are immediately available and can be shipped the same day.

Contact Air Lift Company customer service at (800) 248-0892 first if:

- Parts are missing from the kit.
- Need technical assistance on installation or operation.
- Broken or defective parts in the kit.
- Wrong parts in the kit.
- Have a warranty claim or question.

Contact the retailer where the kit was purchased:

- If it is necessary to return or exchange the kit for any reason.
- If there is a problem with shipping if shipped from the retailer.
- If there is a problem with the price.

Contact Information

Mailing address	P.O. Box 80167 Lansing, MI 48908-0167
Shipping address for returns	2727 Snow Road Lansing, MI 48917
Phone	Toll free: (800) 248-0892 International: (517) 322-2144
Email	service@airliftcompany.com
Web address	www.airliftcompany.com



Thank you for purchasing Air Lift Products — the Authorized Installer's choice!

Need Help?

Contact Air Lift Company Customer Service at (800) 248-0892
or email service@airliftcompany.com.

For calls outside the U.S. or Canada, dial (517) 322-2144.