

LoadLifter 5000™ SERIES



Installation Guide



GM 2500-3500HD

Kits 57341 | 88341 | 89341

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.

Installation Diagram

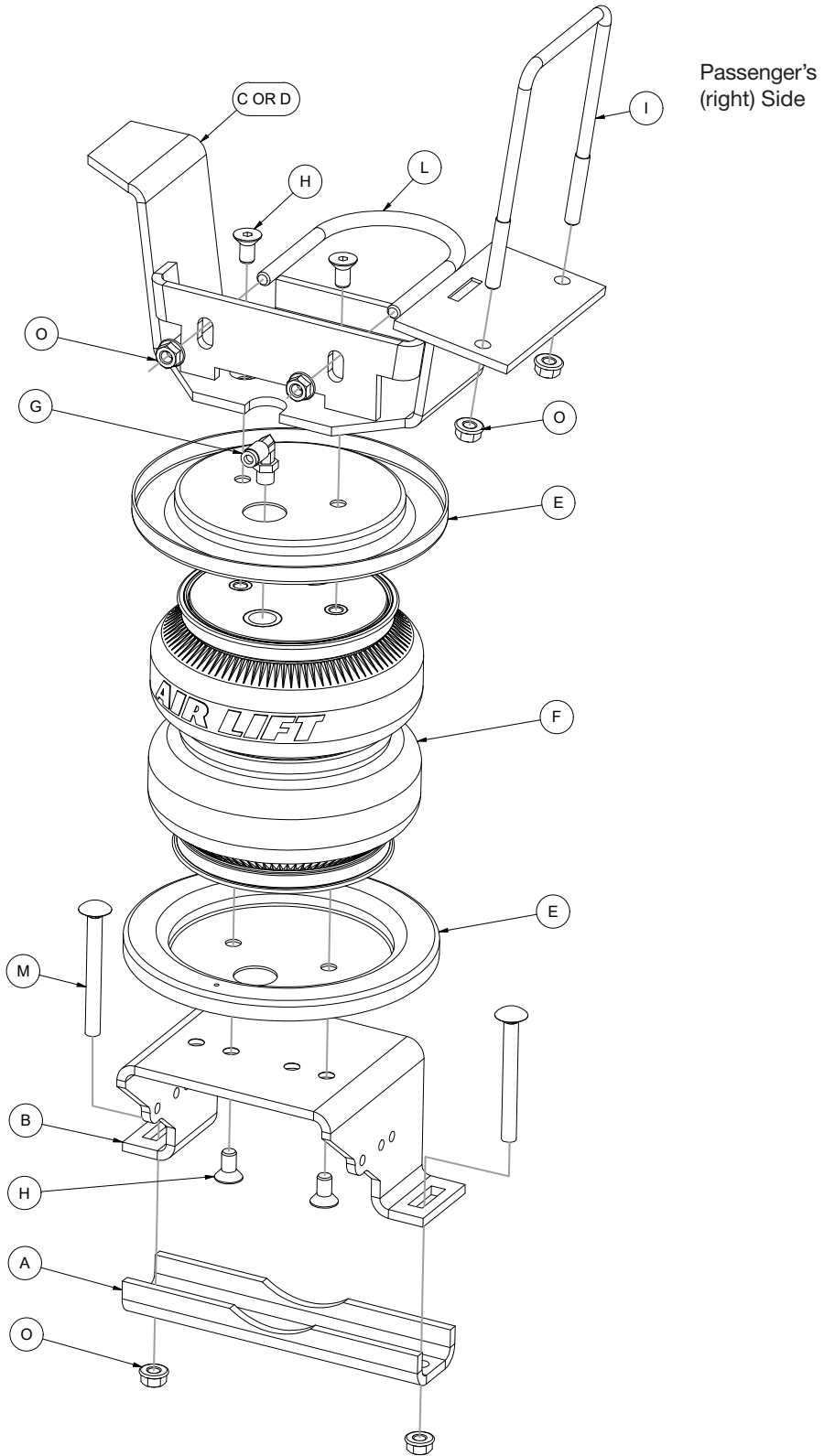


Fig. 1

Hardware and Tools Lists

Common Parts Included in All 3 Kits

Item	Part#	Description	Qty
A	01851	Clamp bar	2
B	03702	Lower bracket	2
C	07808	R.H. Upper bracket	1
D	07902	L.H. Upper bracket	1
I	11046	3/8"-16 U-bolt (square)	2
J*	11315	L.H. ABS loom bracket	1
K*	11320	R.H. ABS loom bracket	1
L	11771	3/8"-16 U-bolt (round)	2
M	17142	3/8"-16 X 3 1/2" Carriage bolts	4
N*	17449	M8-1.25 X 10 Hex cap screws	2
O	18422	3/8"-16 Serrated flange lock nuts	14
P*	18501	M8 Flat washers	4
BB*	10466	Zip ties	12
DD*	18411	Star washer	2

* These parts are not shown in the Installation Diagram (Fig.1).

TOOLS LIST

Description	Qty
Standard and metric open-end or box wrenches	Set
Ratchet	1
Standard and metric, regular and deep-well sockets	Set
7/32" Hex-key wrench	1
5/16" Drill bits (very sharp)	1
Heavy duty drill	1
Torque wrench	1
Large screwdriver or small pry bar	1
Hose cutter, razor blade or sharp knife	1
Hoist or floor jack	1
Safety stands	1
Safety glasses	Pair
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution	1

INSTALLATION IMAGES IN THIS GUIDE

The images in this installation guide show the installation of a LoadLifter 7500 XL kit. The air springs in your kit may appear smaller and your roll plates may have a different finish (see page 4), but the installation process is the same.

Unique Parts in Each Kit

LoadLifter 5000™ KIT 57341

Item	Part#	Description	Qty
E	11951	Roll plate	4
F	58437	Air spring	2
G	21848	90 degree Swivel push to connect fitting	2
H	17215	3/8"-24 X 3/4" Flat head screw	8
AA*	20086	Air line	1
CC*	21230	Valve cap	2
EE*	21233	5/16" Hex nut	4

LoadLifter 5000™ ULTIMATE KIT 88341

Item	Part#	Description	Qty
E	11967	Roll plate	4
F	58496	Air spring with jounce bumper	2
G	21848	90 degree Swivel push to connect fitting	2
H	17215	3/8"-24 X 3/4" Flat head screw	8
AA*	20086	Air line	1
CC*	21230	Valve cap	2
EE*	21233	5/16" Hex nut	4

LoadLifter 5000™ ULTIMATE PLUS+ KIT 89341

Item	Part#	Description	Qty
E	11880	Roll plate (stainless steel)	4
F	58496	Air spring with jounce bumper	2
G	21815	AN-type fitting	2
H	17363	3/8"-24 X 3/4" Stainless steel flat head screw	8
AA*	20987	Stainless steel braided air line	2
FF*	21709	Schrader valve with cap & nut	2
GG*	21813	AN to PTC fitting	2
HH*	20084	Air line assembly	1

Introduction

The purpose of this publication is to assist with the installation and maintenance of the LoadLifter 5000 series air spring kits. All LoadLifter 5000 series kits utilize sturdy, reinforced, commercial-grade single or double, depending on the kit, convolute bellows.

The air springs are manufactured like a tire with layers of rubber and cords that control growth. LoadLifter 5000 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.

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.

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, LoadLifter 5000 Ultimate or LoadLifter 5000 Ultimate Plus. The kits are easily identifiable by looking at the roll plates and air lines.

- Standard **LoadLifter 5000** — Zinc-plated steel roll plates and black nylon air lines.
- LoadLifter 5000 Ultimate** — Black powder-coated roll plates and black nylon air lines.
- LoadLifter 5000 Ultimate Plus** — Stainless steel roll plates, braided stainless steel air lines, stainless steel air spring mounting hardware.



LoadLifter 5000
silver zinc-plated steel
roll plate



LoadLifter 5000
nylon air line



LoadLifter 5000 Ultimate
black powder-coated roll plate



LoadLifter 5000 Ultimate
nylon air line



LoadLifter 5000 Ultimate Plus
stainless steel roll plate



LoadLifter 5000 Ultimate PLUS
braided stainless steel air line

Air Lift offers two Ultimate Plus upgrade kits:

52300 - Braided stainless steel air line and fittings.

52301 - Stainless steel roll plates, air spring mounting hardware, braided stainless steel air lines and fittings.

Installing the System

PREPARING THE VEHICLE

1. Raise the frame and support the frame with safety stands. Lower the axle as far as it can go (Fig. 2).

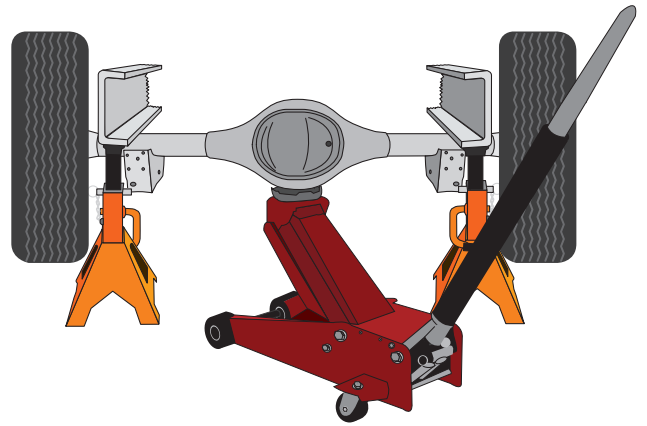
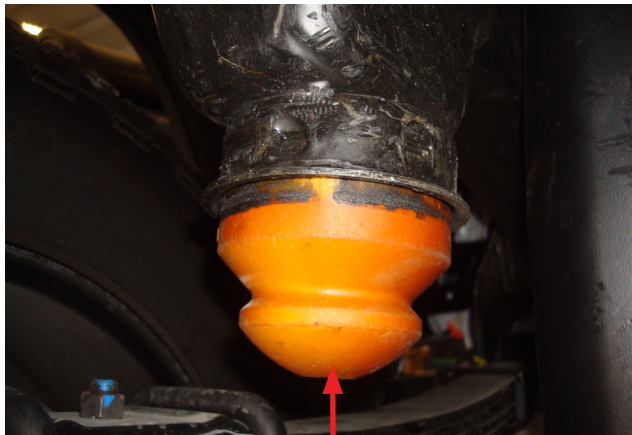


Fig. 2

2. Remove the jounce bumpers from the jounce bumper brackets on both sides by prying them out with a pry bar or large screwdriver (Fig. 3 & Fig. 4).



**Jounce bumper in
mounting cup**

Fig. 3



**Jounce bumper
removed**

Fig. 4

- Remove the two bolts that hold the brake/ABS line bracket onto the back side of the jounce bumper strike plate (Fig. 5 & Fig. 6). Pull the bracket away from the jounce bumper strike plate to make room for the lower bracket to be installed later.



Remove bolt holding bracket

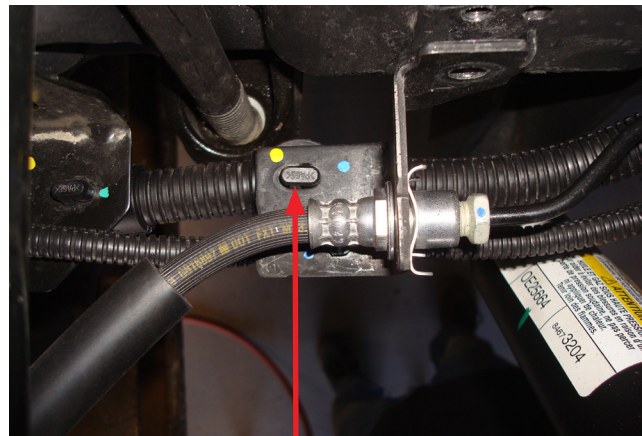
Fig. 5



Pull bracket away from jounce bumper strike plate

Fig. 6

- Squeeze the two locking tabs on the large ABS wiring harness loom holder that is attached to the stock brake/ABS line bracket and pull out, disconnecting it from the bracket (Fig. 7 & Fig. 8). Detach the opposite side and leave loose for now.



Carefully remove from bracket

Fig. 7

Loom holder shown removed

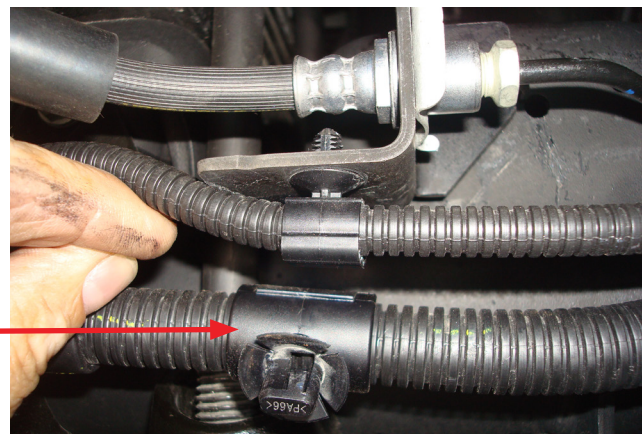


Fig. 8

ASSEMBLING THE AIR SPRINGS

1. Place the roll plates (E) on the air springs (F). Install the 90 degree swivel elbow fitting (G) onto the air springs (Fig. 9). Tighten the air fittings finger-tight plus 1 1/2 turns.

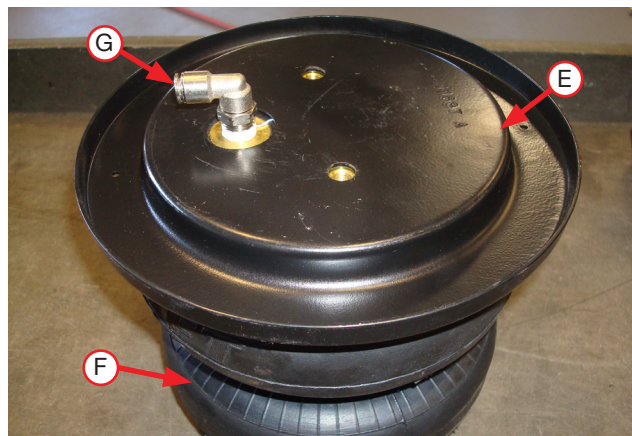


Fig. 9

2. Install both upper brackets (C & D) onto the air spring assemblies using the 3/8" flat head screws (H) (Fig. 10). Torque hardware to no more than 20 lb.-ft. (27Nm).
3. To determine which holes in the lower bracket (B) to use for installing on the air spring assemblies, set them next to each other with the angled sections pointing toward each other (Fig. 1, Fig. 11 & Fig. 12). Use the first and the third holes on each bracket to attach to the air springs. Set a roll plate (E) onto the air spring assembly and attach the lower bracket onto the air spring with two 3/8" flat head screws (H) and torque to no more than 20 lb.-ft (27Nm).

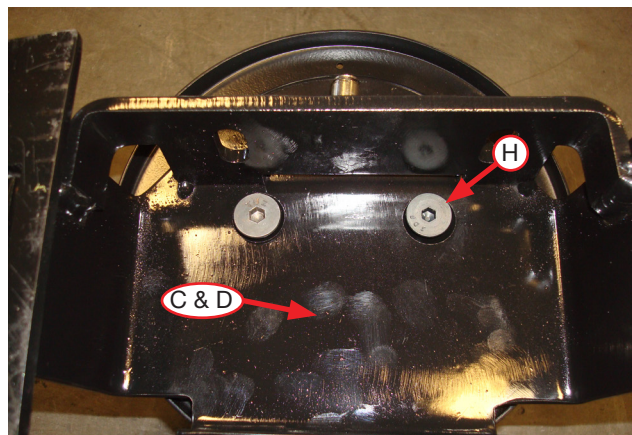


Fig. 10

NOTE

THE ANGLED SIDE OF THE LOWER BRACKET WILL BE ON THE FITTING SIDE OF THE AIR SPRING (FIGS. 1, 11 & 12).

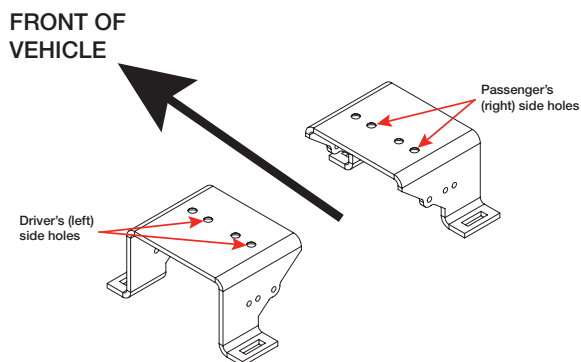


Fig. 11

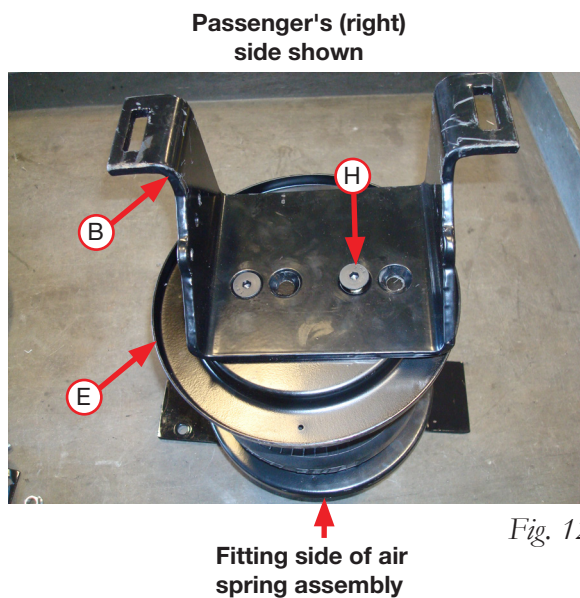


Fig. 12

4. Fig. 13 shows driver's (left) and passenger's (right) side assemblies.

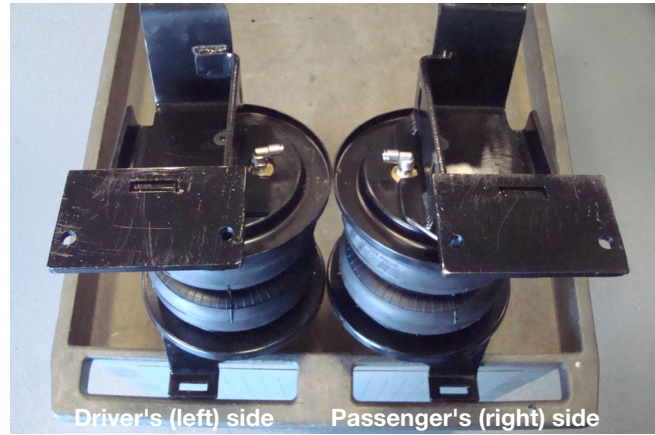
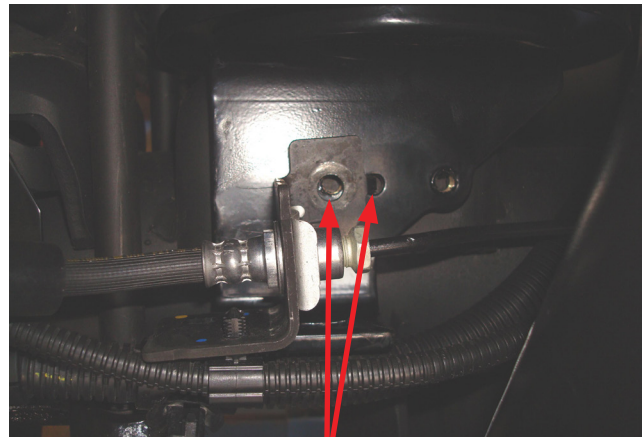


Fig. 13

INSTALLING THE AIR SPRING ASSEMBLIES

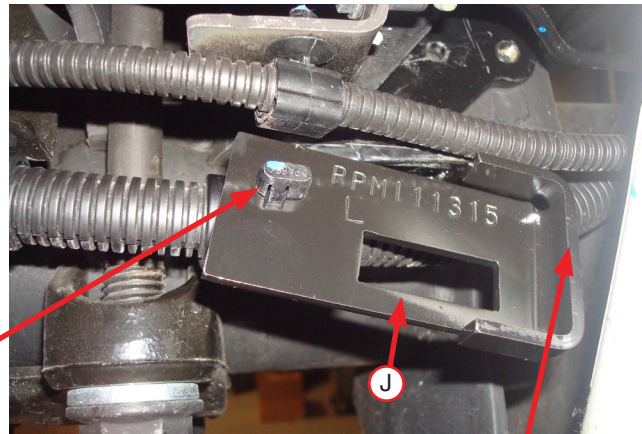
1. With the suspension at full extension, set the driver's (left-hand) and passenger's (right-hand) side assemblies over the axle jounce bumper strike plates making sure the fitting is pointing to the inside of the frame. Push the lower bracket down flush to the strike plate and by moving the air spring assembly in and out, align the lower bracket until the tab and the hole on the brake line/ABS bracket aligns with the holes in the lower bracket (Fig. 14).



Align brake/ABS bracket hole and tab with holes in the lower bracket

Fig. 14

2. Attach the ABS loom holder (previously removed) to the underside of each ABS loom bracket (J & K) supplied (Fig. 15). The left-hand side is for the driver's (left) side, the right-hand side is for the passenger's (right) side. Once installed, the brackets will nest around the bottom of the lower bracket (Fig. 16).

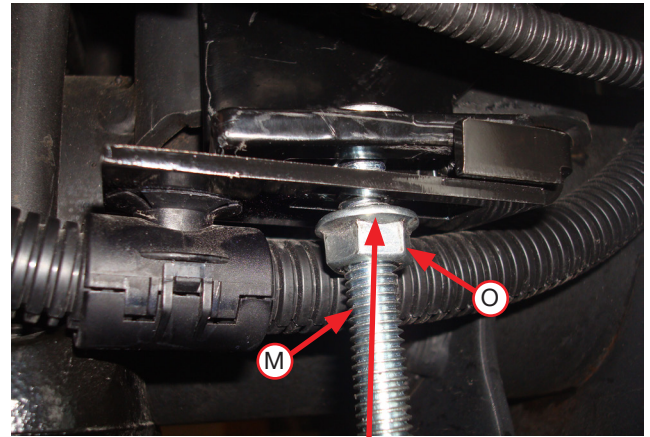


Insert tab on ABS wire loom here

Tab on ABS bracket must be facing up and will nest around the lower bracket when installed

Fig. 15

3. Insert a 3/8" carriage bolt (M) through the lower bracket and ABS loom holder previously installed (Fig. 16). Install a 3/8" serrated flange lock nut (O) onto the carriage bolt with the flat portion of the nut facing up. Tighten nut up enough to nest the ABS bracket around the lower bracket, but do not tighten yet. Repeat for both sides.



Install nut with
flange facing up

Fig. 16

NOTE

IF WIRE LOOM DOES NOT ALIGN CORRECTLY, UNCLIP LINE HOLDER, ADJUST, THEN RE-CLIP LINE HOLDER BACK ONTO LOOM.

4. Install the remaining 3/8" carriage bolts on the front side of the lower brackets and install the clamp bars (A) over the carriage bolts. Secure the clamp bar with the 3/8" serrated lock nuts (O) (Fig. 17). Align the clamp bar so that it is somewhat centered between the shock bracket and leaf spring retainer. Torque clamp bar hardware evenly to 16 lb.-ft. (22Nm). Repeat for both sides.

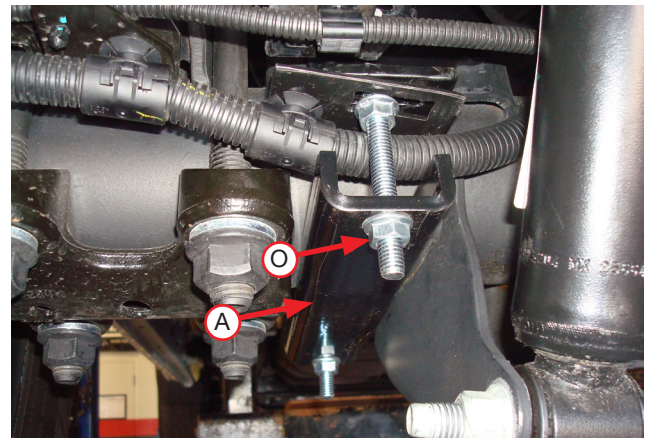


Fig. 17

5. Securely tighten the ABS bracket nut on both sides (Fig. 18).

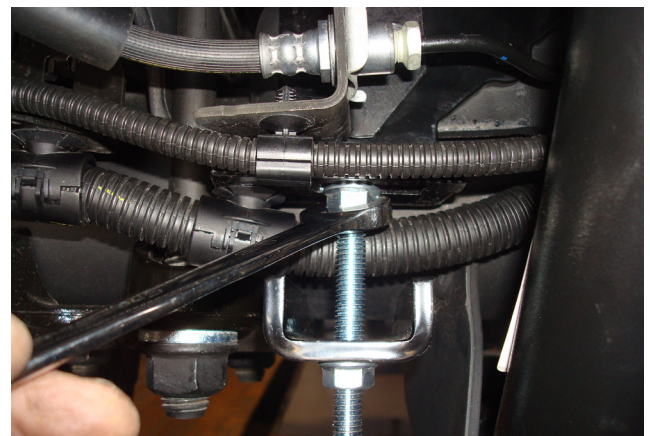
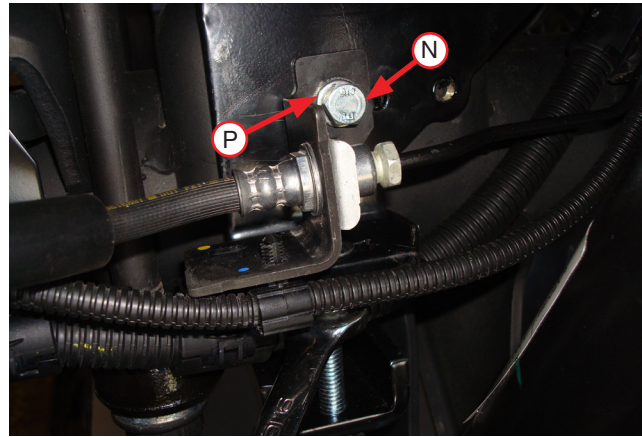


Fig. 18

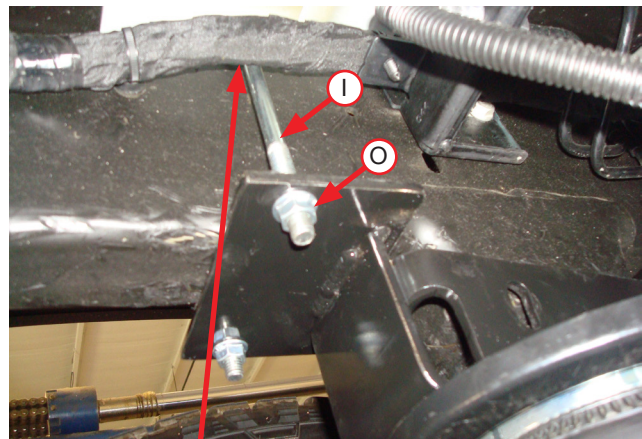
- Reattach the stock brake line/ABS brackets removed in the *Preparing the Vehicle* section using the M8 hex cap screws (N) and M8 flat washers (P) (Fig. 19). Tighten both sides securely.


Fig. 19

- Position the upper bracket to nest around the jounce bumper mount attached to the bottom of the frame. Insert a U-bolt (I) over the frame and through the mounting holes of the upper bracket, behind the axle (Fig. 20).

CAUTION

THE DRIVER'S (LEFT) SIDE HAS A WIRING HARNESS RUNNING ALONG THE TOP OF THE INSIDE OF THE FRAME. MAKE SURE THE U-BOLT IS IN BETWEEN THE WIRING HARNESS AND THE FRAME (DO NOT PINCH THE HARNESS).



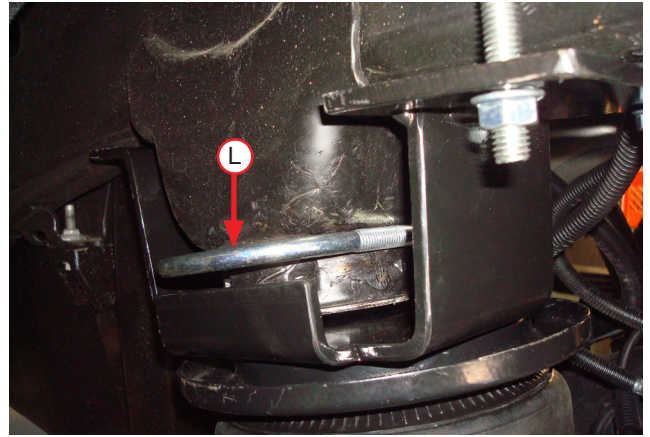
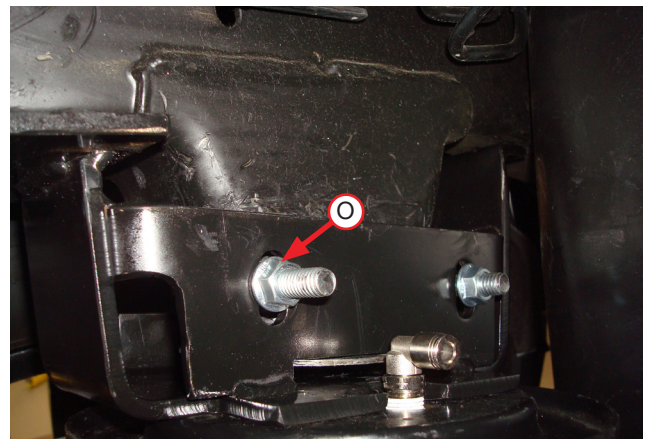
Do not pinch the wiring harness when installing the U-bolt

Fig. 20

8. Install the 3/8" serrated lock nuts (O) onto the U-bolt and leave both sides loose at this time.
9. Install the U-bolt (L) from the outside of the frame, over the jounce bumper mounting cup and through the upper bracket on the inside of the frame. Attach the U-bolt with the 3/8" serrated flange nuts (O) and leave loose at this time (Fig. 21 & Fig. 22).

NOTE

IT MAY BE NECESSARY TO TAP THE U-BOLT INTO POSITION BECAUSE OF THE WELDS AROUND THE JOUNCE BUMPER CUP.

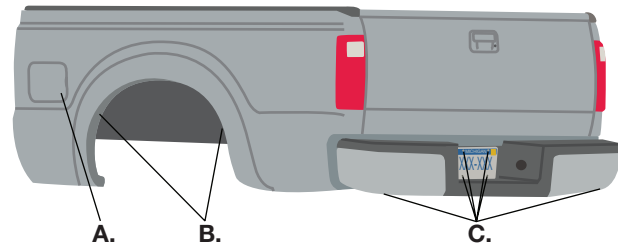
*Fig. 21**Fig. 22*

Installing the Air Lines

Air lines are routed from the air springs to Schrader valves. LoadLifter 5000 series air lines come in two styles: nylon and braided stainless steel. Begin by choosing locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (Fig. 23).

CAUTION

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



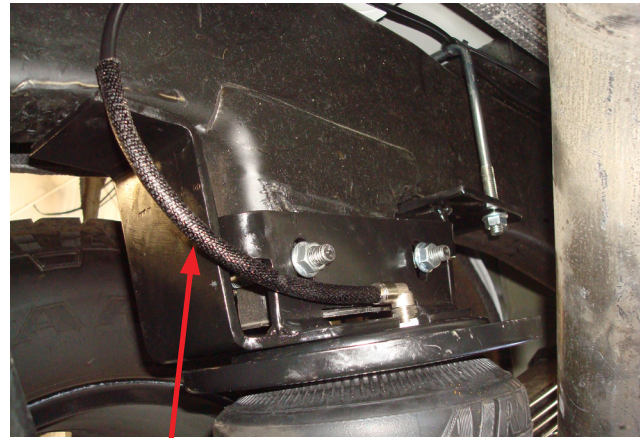
* For LoadLifter 5000 Ultimate Plus kits, the recommended location for the Schrader valves is the rear bumper area or license plate.

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

Fig. 23

INSTALLING NYLON AIR LINES

1. For nylon air line, it is recommended that the air line be routed along the top of the frame, forward of the axle, then down to the fitting (Fig. 24). 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 zip ties (BB) supplied.



Thermal sleeve

Fig. 24

2. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 25). Do not use scissors or wire cutters.

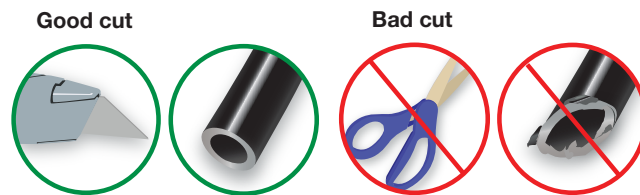


Fig. 25

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 (Fig. 26).

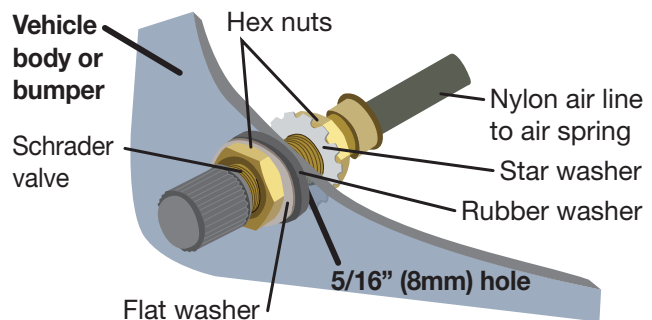


Fig. 26

INSTALLING BRAIDED STAINLESS STEEL AIR LINES

CAUTION

KEEP THE AIR LINE AWAY FROM THE FUEL LINE, BRAKE LINES AND ELECTRICAL WIRES.

NOTE

The braided stainless steel air line must be routed to the rear of the vehicle. Install the air line along the frame and then back to the rear where the inflation valves will be mounted (Fig. 23).

1. Use zip ties to secure the air line to fixed points along the chassis every 6" to 8" (150-200mm). Leave at least 2" (50mm) of slack to allow for any movement that might pull on the air line.
2. Tighten the air line hex nut finger tight, then use 2 wrenches to turn 1 additional flat (1/6 of one full turn). Do not overtighten (Fig. 27 or Fig. 28). The easiest way to tighten the fitting is off the vehicle. Install the Schrader valve in the chosen location.
3. Coil and secure any excess air line in an area where it will not be susceptible to damage. The braided stainless steel air line cannot be trimmed.

FINISHING THE INSTALLATION

1. Once the hose is installed, inflate the system to 10 PSI and torque both upper bracket U-bolts to 10 lb.-ft. (14Nm) starting with the square U-bolt first.
2. Bend tabs to provide a dead air space between exhaust pipe and heat shield. (Fig. 29) Attach the heat shield to the exhaust pipe using the clamps. Bend the heat shield for maximum clearance to the air spring.
3. Fig. 30 shows heat shield installed.

Air Line Setup Without Compressor System

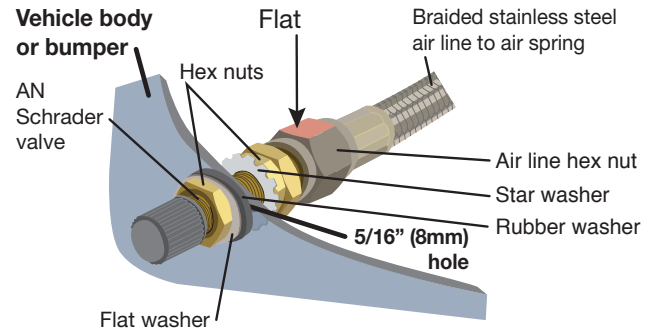


Fig. 27

Air Line Setup for Compressor Integration

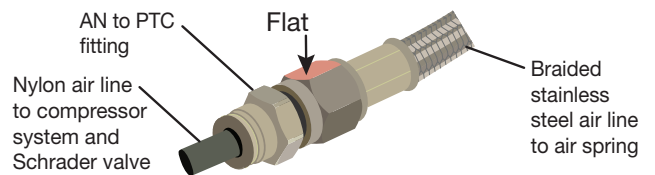


Fig. 28

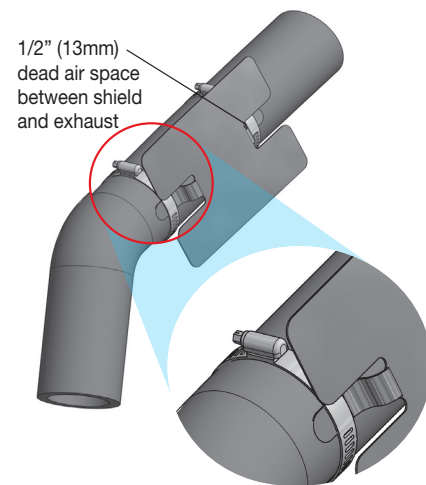


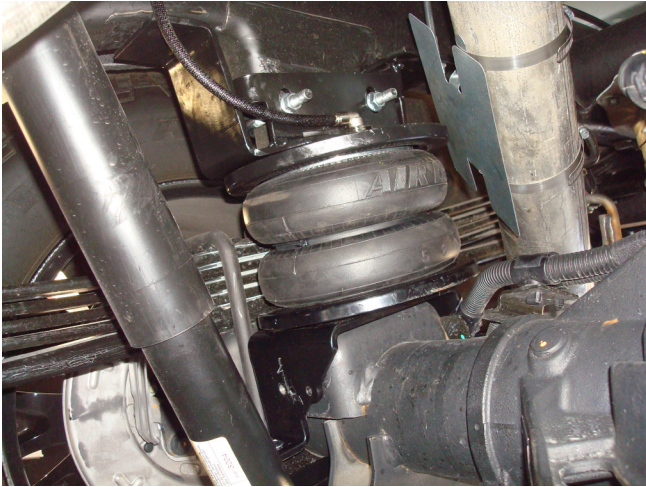
Fig. 29



Fig. 30

Finished Installation

The images show the finished installation of both sides (Fig. 31 - Fig. 34).



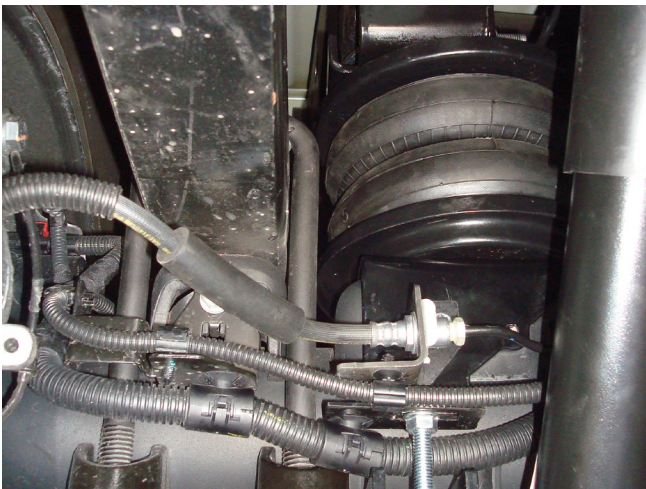
Inside, forward of axle view of driver's (left) side installation.

Fig. 31



Inside, forward of axle view of passenger's (right) side installation.

Fig. 32



Inside, rear of axle view of driver's (left) side installation.

Fig. 33



Inside, over axle view of passenger's (right) side installation.

Fig. 34

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.
- 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 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
5 PSI (.34BAR)

Maximum Air Pressure
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. 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.

Load**Lifter**[™] series

Ride**Control**[™]

Air Lift **1000** HD[™]

Air Lift **1000**[™]



User Guide

INTRODUCTION

Thank you for purchasing an Air Lift product. It is important to read and understand the entire User Guide before operating the Air Lift system.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time.

NOTATION EXPLANATION

This kit does not alter the gross vehicle weight rating (GVWR) or payload of the vehicle. Check the vehicle's safety compliance certification

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

Gross vehicle weight rating (GVWR): 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 vehicle is designed to carry. Payload is GVWR minus the base curb weight.

 **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.

IMPORTANT SAFETY NOTICE

 **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.

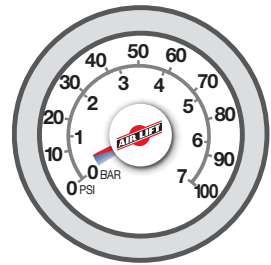
LOADLIFTER, RIDECONTROL PRESSURE SETTINGS

Minimum Air Pressure	Maximum Air Pressure*
5 PSI (.34BAR)	100 PSI (7BAR)
<div style="display: flex; align-items: center;"> <div style="background-color: #ffff00; padding: 5px; margin-right: 10px;"> CAUTION </div> <p>FAILURE TO MAINTAIN CORRECT MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) COULD LEAD TO PREMATURE AIR SPRING FAILURE AND WILL VOID THE WARRANTY.</p> </div>	

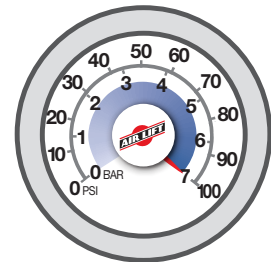
* Check Installation Guide for maximum pressure for this kit.

GUIDELINES FOR USE

1. Check air pressure weekly.
2. Never inflate to more than 100 PSI (7BAR).
3. Operating the vehicle below the minimum air spring pressure will void the Air Lift warranty.
4. Always add pressure to the air springs in small quantities, checking the pressure frequently.
5. When increasing load, always adjust pressure to maintain normal or desired ride height. Increase or decrease pressure from the system as necessary to attain normal ride height for optimal ride and handling.




Minimum pressure **5 PSI**
at all times **.34BAR**

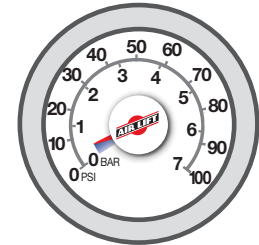


Max **100 PSI**
pressure **7BAR**

AIR LIFT 1000HD, AIR LIFT 1000 PRESSURE SETTINGS

Minimum Air Pressure	Maximum Air Pressure*
5 PSI (.34BAR)	35 PSI (2.4BAR) OR 50 PSI (3.5BAR)
 CAUTION	FAILURE TO MAINTAIN CORRECT MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) COULD LEAD TO PREMATURE AIR SPRING FAILURE AND WILL VOID THE WARRANTY.

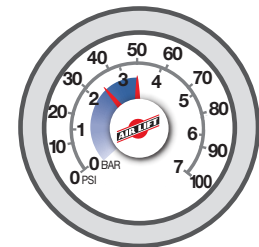
* Check Installation Guide for maximum pressure for this kit.



Minimum pressure **5 PSI**
at all times **.34BAR**

GUIDELINES FOR USE

1. Check air pressure weekly.
2. Never inflate to more than the recommended maximum air pressure.
3. Operating the vehicle below the minimum air spring pressure will void the Air Lift warranty.
4. Always add air to springs in small quantities, checking the pressure frequently.
5. When increasing load, 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.

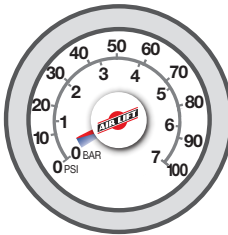


Max pressure **35 or 50 PSI**
2.4 or 3.5BAR

POST-INSTALLATION CHECKLIST



24-HOUR
Pressure check



Minimum
pressure
at all times

5 PSI
.34BAR

- 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), there could be a leak that may need to be fixed. See page 8 for tips on finding air leaks.
- Air pressure requirements** — It is important to understand the air pressure requirements of the air spring system. Regardless of load, the air pressure should be adjusted to maintain

MAINTENANCE GUIDELINES

1. Periodically check the air spring system fasteners for tightness (torque specifications can be found in the Installation Guide). Also, check the air springs for any signs of rubbing. Realign the air spring components, if necessary.

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. Consult the installation guide for the kit for proper torque specifications if any fasteners have loosened.

00050mi

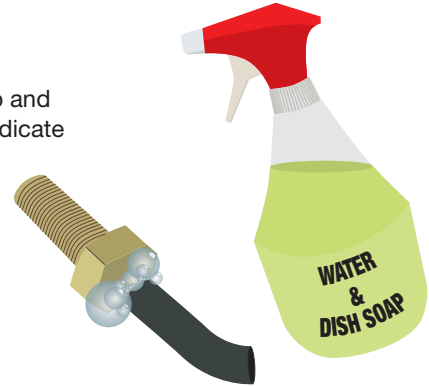
OR



2. On occasion, give the air springs a hard spray with water to remove mud or other debris.
3. Should it be necessary to raise the vehicle by the frame, make sure the system is at minimum pressure (5 PSI [.34BAR]) to reduce tension on air spring and kit components.

FINDING AIR LEAKS

1. Inflate the air springs to 30 PSI (2.1BAR).
2. Spray all connections with a solution of liquid dish soap and water. Wait 30 seconds and check for bubbles which indicate leaks.
3. 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).
4. After checking for leaks, deflate the air springs to the minimum pressure required to restore the system to normal ride height.



FIXING AIR LEAKS ON BARBED FITTINGS

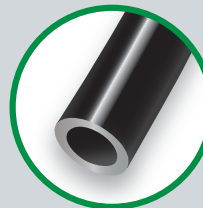
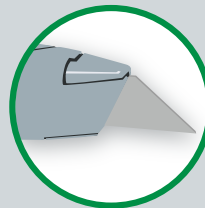
1. If there is a leak at the Schrader valve, tighten the valve with a valve core tool.
2. If there is a leak at any barbed fitting, cut the air line 1 1/2" (38mm) behind the fitting. Use a pair of pliers or locking pliers to twist and pull the air line off of the fitting. Do not cut the air line lengthwise at the fitting because this could nick the barbs, likely causing it to leak.
3. Reinstall the air line and the air line clamp if the fitting has one. Make sure the air line covers all barbs.
4. See "Cutting Air Lines," page 9. For push-to-connect (PTC) fittings and stainless steel braided air lines, see page 10.



CUTTING AIR LINES

When cutting air lines, use a sharp knife or a hose cutter and make clean, square cuts. Do not use scissors or wire cutters because these tools will deform the air line, causing it to leak around fittings. Do not cut the lines at an angle.

The maximum bend radius for 1/4" air line is 1" (25mm). Do not bend the air line more than the maximum bend radius or side load the fitting connections. Air lines are to be installed straight into fittings.



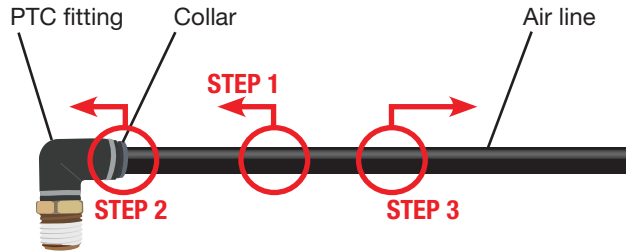
FIXING AIR LEAKS ON PTC FITTINGS

After insertion, check the PTC fitting connection by pulling on each line to verify a robust connection.

To release the air line from the connection, first release all air from the system. Push in on the air

line (step 1), push the collar in (step 2), and with the collar depressed, pull the air line out of the fitting (step 3).

To reconnect, push the air line into the fitting and pull to verify a robust connection.

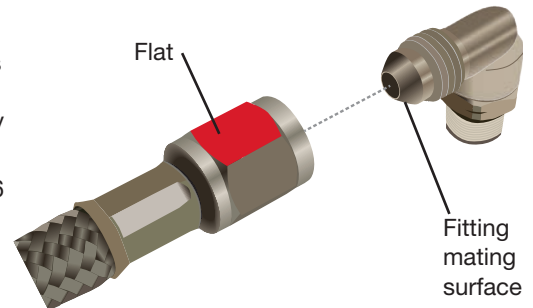


Tips

- To ensure a proper seal, cut off the end of the air line just beyond the witness mark before reinstalling in the fitting.
- If fitting is leaking at the threads, it may be necessary to remove and re-apply thread sealant on the threads and re-install 1 1/2 turns beyond finger tight.

FIXING AIR LEAKS ON BRAIDED STAINLESS STEEL AIR LINES

1. Disconnect the air line where it is leaking.
2. Check the mating surface on the fitting for burrs and remove if possible. If there are dings or indentations on the fitting mating surface, it may continue to leak and may need to be replaced.
3. To re-assemble, tighten the fitting one flat — or 1/6 of a full rotation — past finger tight.
4. Contact Air Lift customer service if the fitting continues to leak.



ADJUSTING AIR PRESSURE

The air springs should be adjusted for three factors: stability, level vehicle, ride comfort.

Stability

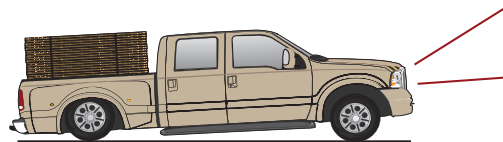
Stability translates into safety and should be the priority, meaning the driver may need to sacrifice a level and comfortable ride. Stability issues include roll control, bounce, dive during braking and sponginess. Tuning out these problems usually requires an increase in pressure.



Sway and body roll

Level vehicle

Use air pressure to raise the end of the vehicle that is squatting back to its normal ride height. It may be necessary to apply more air pressure to one side if the load is uneven. If the vehicle has a single-path air control system, redistribute the load side to side.



Bad headlight aim

Ride comfort

If the vehicle has a rough ride, it may be due to either too much air pressure or not enough. Experiment with different ride pressures, so long as it doesn't impact vehicle stability.

- If the vehicle feels like it is bottoming out, increase air pressure.
- If the headlights are aimed too high, try increasing air pressure in the rear air springs.
- When in doubt, add air.
- If the front of the vehicle dives while braking, increase the pressure in the front air springs, if equipped.

CHOOSING THE RIGHT ON-BOARD AIR COMPRESSOR SYSTEM

Add an on-board air compressor system to inflate and deflate the air springs with the touch of a button — from inside of the vehicle or outside (wireless systems).

- For convenient, on-the-go control of the air springs, add an Air Lift on-board air compressor system.
- Air Lift on-board air compressor systems eliminate the search for gas stations that have a working compressor, saving time, energy and money.
- All systems include a compressor, controller and all parts needed for easy installation.

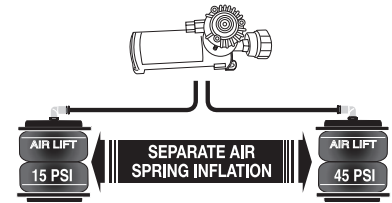
1. Choose single- or dual-path inflation

2. Choose wireless or analog or automatic control

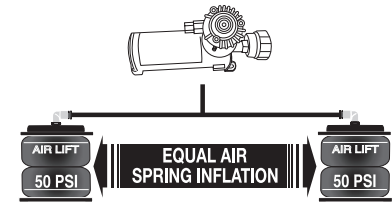
- **Wireless:** Control the air springs from inside or outside the vehicle. Easiest installation — no wires or hoses to the cab.
- **Automatic:** Air spring pressure is automatically adjusted based on ride height.
- **Analog:** In-cab control of the air springs. Economically priced.

3. Choose heavy- or standard-duty compressor

- **Standard duty:** A standard-duty compressor will work well for most customers who use their system on an intermittent basis.
- **Heavy duty:** For daily use, consider the heavy-duty compressor — it inflates faster and more quietly than the standard compressor.



Dual-path systems: Air springs are controlled separately to allow for different air pressure from side to side. Perfect for uneven or top-heavy loads.



Single-path systems: Two springs will inflate at the same time. Good for loads that are evenly distributed from left to right.

ON-BOARD AIR COMPRESSOR SYSTEMS

WIRELESS CONTROL



WirelessONE™
No wires or hoses to
the inside of the cab
Single Path **P/N 25870**



WirelessAIR™
Premium system for independent
control of each side
Dual Path **P/N 72000**

AUTOMATIC LOAD LEVELING



SmartAir II™
Level every time
Single Path **P/N 25490**
Dual Path **P/N 25491**

ANALOG LOAD LEVELING



LoadController™
Analog in-cab control
Single Path
SD **P/N 25850**
HD **P/N 25854**
Dual Path
SD **P/N 25852**
HD **P/N 25856**

TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
System won't maintain pressure overnight	Improperly installed air line, air line has holes or cracks, hole in air spring	Leak test all air line connections, threaded connections (if equipped), and all fittings in the control system (if equipped). Contact customer service regarding air spring failure.
Air spring or air line leak	Fitting seal or air line is compromised	Check to make sure air lines are seated in the fittings. Inspect fittings with soapy water. Trim hose or re-seal fitting. Ensure lines are cut straight.
One or more air springs won't inflate	Kink or fold in the air line, control system malfunction, inflation valve plugged	Replace any air line that has been kinked. Check control system function by disconnecting an air line, operating the system and checking for air pressure.

FREQUENTLY ASKED QUESTIONS

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

No. Adding air springs will not change the gross vehicle weight rating (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?

The recommended minimum air pressure is 5 PSI (.34BAR) for all air springs. This helps the air spring maintain its shape and, on some kits, prevents bottoming out.

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 air springs. Even a bicycle tire pump can be used.

Q. How long should air springs last?

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

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

No. For short-term service work such as tire rotation or oil changes, the vehicle can be lifted on a frame hoist with the air springs set to their minimum pressure. 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.