LoadLifter™ series

RideControl™

Air Lift 1000 HD™

Air Lift 1000™

User Guide

Which kit is on the vehicle?

LoadLifter 5000 Ultimate Plus
Stainless steel roll plates, braided stainless steel air lines

LoadLifter 5000 Ultimate
Black powder-coated steel roll plates

LoadLifter 5000
Zinc-coated steel roll plates

LoadLifter 7500XL
"5815" on side of air springs

RideControl
Sleeve-style air springs

Air Lift 1000HD
Black air springs inside coil springs

Air Lift 1000
Red air springs inside coil springs

MY PRESSURE SETTINGS	Left	Right	Both
Camper			
Boat trailer			
Utility trailer			
Work trailer			

Max pressure _____

Vehicle Ex. 2017 Ford F-250 Super Duty

Installed kit Ex. LoadLifter 5000 Ultimate

Index

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. For the latest version of this User Guide, contact Air Lift Company at **(800) 248-0892** or visit **www.airliftcompany.com**.

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

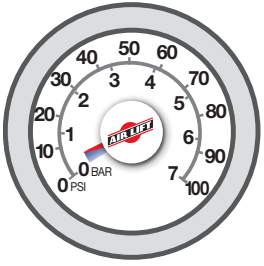
CAUTION FOR SAFETY AND TO PREVENT POSSIBLE DAMAGE TO THE VEHICLE, DO NOT EXCEED MAXIMUM GROSS VEHICLE WEIGHT RATING (GVWR), AS INDICATED BY THE VEHICLE MANUFACTURER.

LOADLIFTER, RIDECONTROL PRESSURE SETTINGS

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

⚠ CAUTION FAILURE TO MAINTAIN CORRECT MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) COULD LEAD TO PREMATURE AIR SPRING FAILURE AND WILL VOID THE WARRANTY.

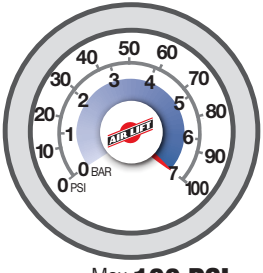
* Check Installation Guide for maximum pressure for this kit. The Installation Guide can be obtained at **www.airliftcompany.com**.



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

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 air 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.

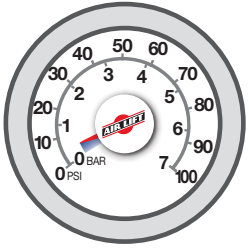


Max pressure **100 PSI 7BAR**

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.	

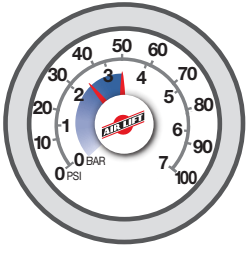
* Check Installation Guide for maximum pressure for this kit. The Installation Guide can be obtained at **www.airliftcompany.com**.



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

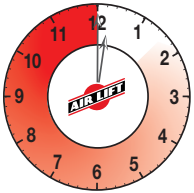
GUIDELINES FOR USE

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.

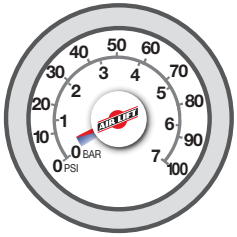


Max pressure **35 or 50 PSI 2.4 or 3.5BAR**

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 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.

OR

MAINTENANCE GUIDELINES

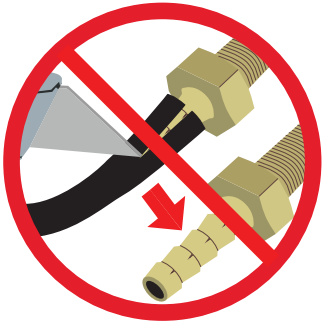
1. Periodically check the air spring system fasteners for tightness (torque specifications can be found in the Installation Guide). Also, check the air springs for any signs of rubbing. Realign the air spring components, if necessary.
2. On occasion, give the air springs a hard spray with water to remove 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.

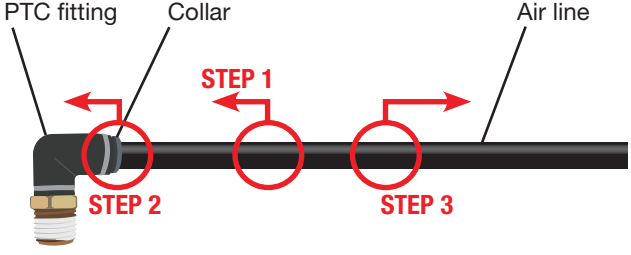
Go to **air-lift.co/cuttingairline** to watch a video on proper air line cutting.

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.

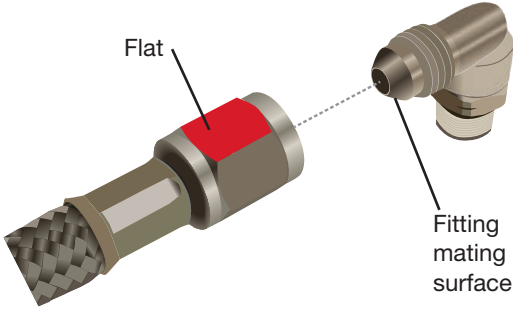


Tips

- 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 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.

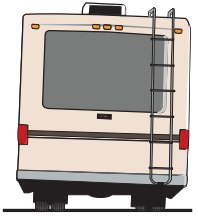


ADJUSTING AIR PRESSURE

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

Stability

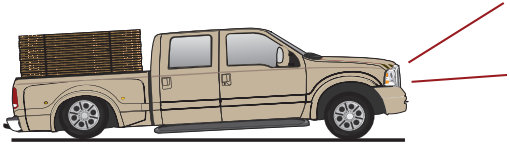
Stability translates into safety and should be the priority, meaning the driver may need to sacrifice a level and comfortable ride. Stability issues include roll control, bounce, dive during braking and sponginess. Tuning out these problems usually requires an increase in pressure.



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.

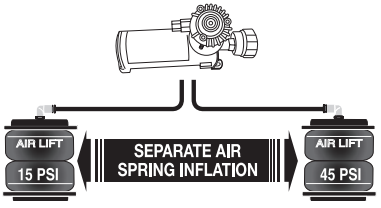
- If the vehicle feels like it is bottoming out, increase air pressure.
- If the headlights are aimed too high, try increasing air pressure in the rear air springs.
- When in doubt, add air.
- If the front of the vehicle dives while braking, increase the pressure in the front air springs, if equipped.

CHOOSING THE RIGHT ON-BOARD AIR COMPRESSOR SYSTEM

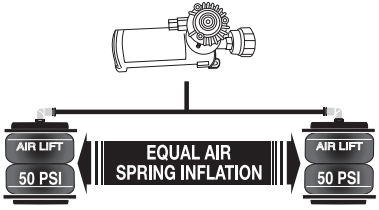
Add an on-board air compressor system to inflate and deflate the air springs with the touch of a button — from inside of the vehicle or outside (wireless systems).

- 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

Wireless**ONE**™

No wires or hoses to the inside of the cab

Single Path **P/N 25870**

Wireless**AIR**™

Premium system for independent control of each side

Dual Path **P/N 72000**

AUTOMATIC LOAD LEVELING

Smart**Air**^{II}™

Level every time

Single Path **P/N 25490**

Dual Path **P/N 25491**

ANALOG LOAD LEVELING

Load**Controller**™

Analog in-cab control

Single Path	Dual Path
SD **P/N 25850**	SD **P/N 25852**
HD **P/N 25854**	HD **P/N 25856**

Learn more about Air Lift on-board air compressor systems at **airliftcompany.com**

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.

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 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

Need Help?

Contact Customer Service
(800) 248-0892
service@airliftcompany.com

Air Lift Company
2727 Snow Road
Lansing, MI 48908-0167

*Air Lift has the answer to squat with more than 450 vehicle applications! Go to **AirLiftCompany.com** to learn more and meet the Lumberman.*

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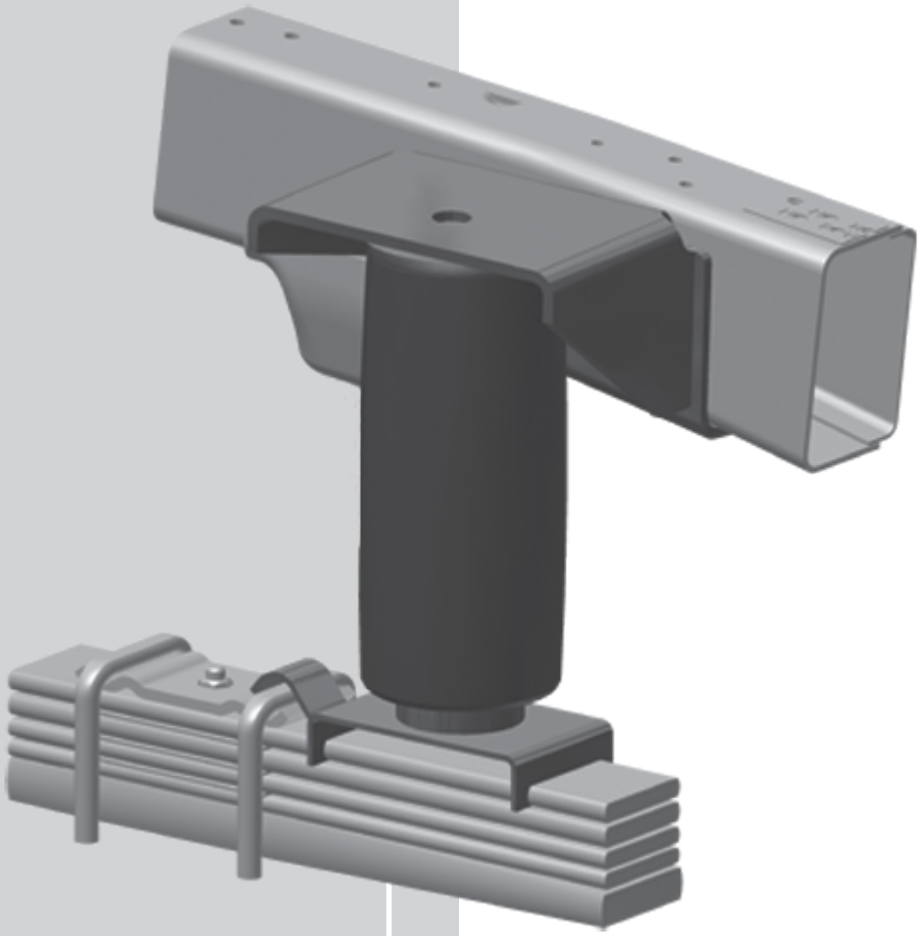
California: ⚠WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

RideCONTROL™
by AIR LIFT®

Kit 59565, 59567

Chevrolet Silverado 1500 and GMC Sierra 1500



AIR LIFT™

INSTALLATION GUIDE

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

Failure to read these instructions can result in an incorrect installation.

MN-670 • (061706) ECR 8870

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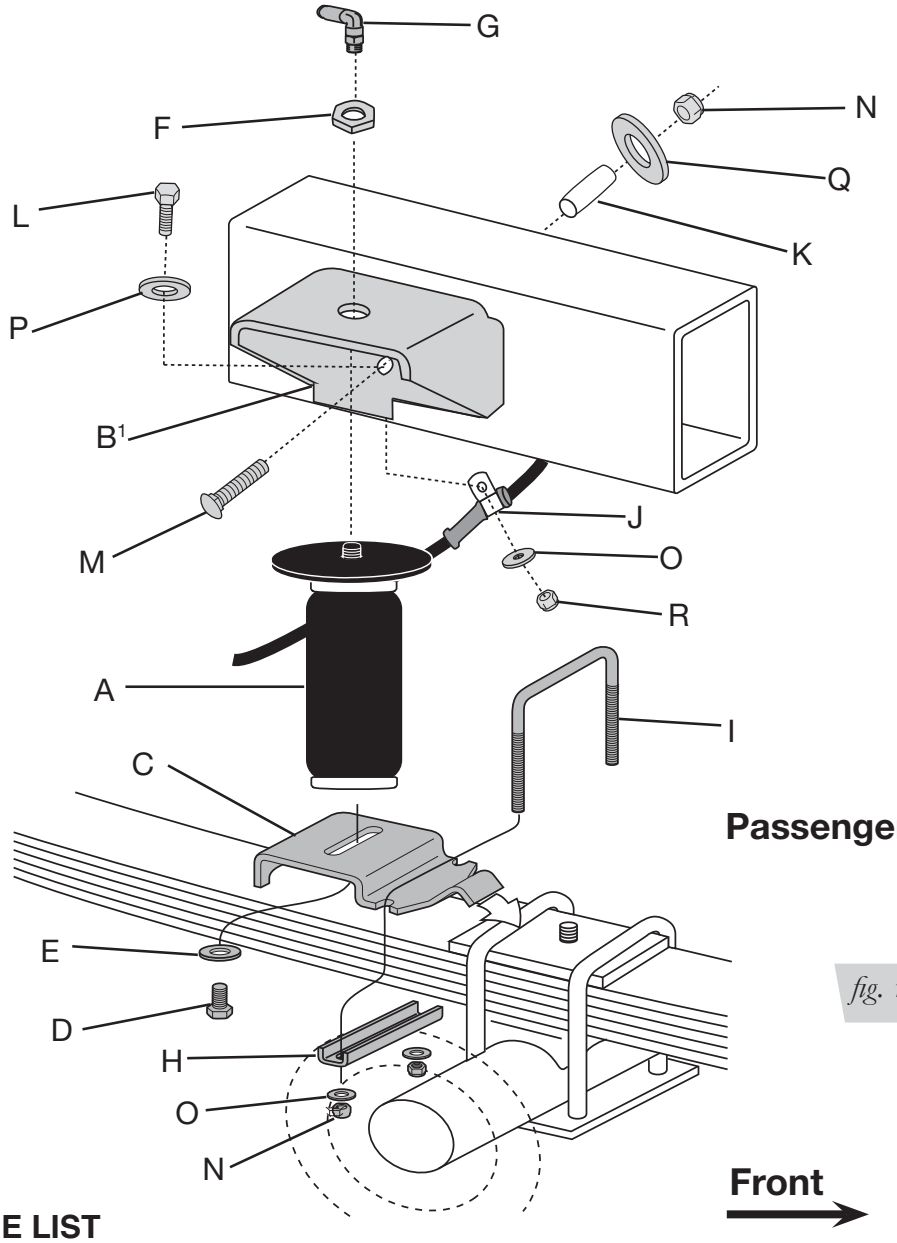
Installation Diagram



Passenger's side shown

fig. 1

HARDWARE LIST

Item	Part #	Description	Qty
A	58571	Air sleeve	2
B[1]	07234	Passenger's (right) side upper bracket (59565)	1
B[2]	07375	Driver's (left) side upper bracket (59565)	1
B[3]	07262	Passenger's (right) side upper bracket (59567)	2
B[4]	07335	Driver's side (left) upper bracket (59567)	2
C	03616	Lower bracket	2
D	17124	1/2"-13 x 7/8" Bolt	2
E	18414	1/2" Flat washer	2
F	18454	3/4"-16 Nylon nut	2
G	21837	90° Swivel elbow fitting	2
H	01426	Clamp bar	2
I	10583	U-bolt	2
J	10778	ABS sensor harness clip	2
K	13967	Frame spacer	2
L	17106	3/8"-16 x 1 1/2" Bolt	2
M	17362	3/8"-16 x 5" Carriage bolt	2
N	18435	3/8"-16 Nylon lock nut	6
O	18444	3/8" Flat washer	6
P	18447	Medium OD washer	2
Q	10956	Large OD washer	2
R	18476	3/8" Nylon lock nut G8 (gold)	2
*AA	20086	Air line assembly	1
*BB	10466	Zip tie	6
*CC	21230	Valve caps	2
*DD	18501	Flat washer	2
*EE	21234	Rubber washer	2
*FF	18411	Small star washer	2
*GG	21233	5/16" Hex nut	4

*Not shown in fig. 1.

Introduction

The purpose of this publication is to assist with the installation and maintenance of the RideControl air spring kit for the Chevrolet Silverado 1500 and GMC Sierra 1500. The air springs used in RideControl kits are designed and manufactured like a tire. The air springs have layers of rubber and cords that control the bag's growth and funnel it in one direction. The bags do not require a coil spring for control. RideControl kits utilize a sleeve-style air bag that provides up to 2,000 pounds (907kg) of load-leveling support. Each sleeve is rated at a maximum of 100 PSI (7BAR).

It is important to read and understand the entire installation guide before beginning installation or performing maintenance, service or repair. The information here includes a hardware list, tool list, step-by-step installation information, maintenance tips and safety information.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. Contact Air Lift Company at **(800) 248-0892** or visit **www.airliftcompany.com** for the latest version of this manual.

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

Installing the RideControl System

⚠ CAUTION

DO NOT INFLATE ASSEMBLY WHEN IT IS UNRESTRICTED. ASSEMBLY MUST BE RESTRICTED BY SUSPENSION OR OTHER ADEQUATE STRUCTURE. DO NOT INFLATE BEYOND 100 PSI (7BAR). IMPROPER USE OR OVER-INFLATION MAY CAUSE ASSEMBLY TO BURST CAUSING PROPERTY DAMAGE OR SEVERE PERSONAL INJURY.

IMPORTANT: Your vehicle may be equipped with a rear brake proportioning valve. Any type of load assist product could affect brake performance. If equipped with a brake proportioning valve, 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 system performance.

GETTING STARTED

1. Raise the vehicle and support the axle with jack stands, setting the jack stands as wide as possible on the axle (Fig. 2).
2. Remove the wheels.

NOTE

Some late models are equipped with inner fender wells. It will be necessary to remove or trim the area out, where the air spring assembly mounts, in order to obtain clearance between the air spring assembly and inner liner.

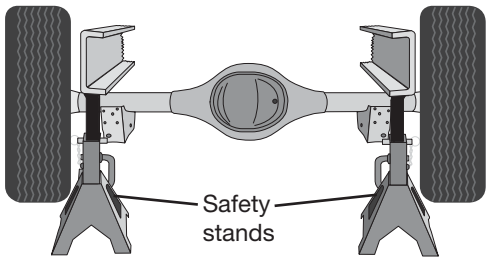


fig. 2

ATTACHING THE UPPER BRACKET TO THE FRAME

1. If equipped, pry the stock anti-lock brake system (ABS) sensor harness clamp out from the bottom of the frame and remove the stock sensor harness clip from the ABS sensor harness (Fig. 3).
2. Attach the supplied sensor harness clip to the sensor harness (Fig. 4).
3. Disconnect the ABS sensor at the connector on top of the frame. Move the ABS sensor harness from the outside of the frame to the inside of the frame and reconnect the ABS sensor back into the wiring harness (Figs. 3 & 4).

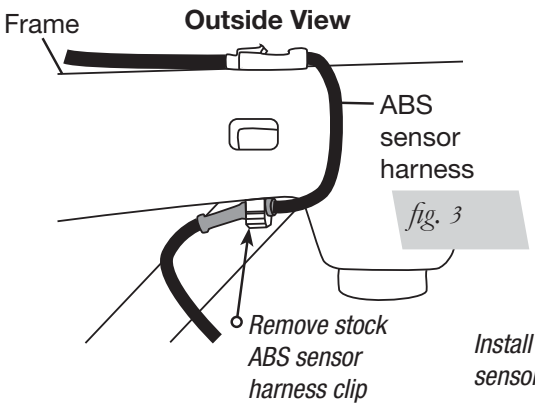


fig. 3

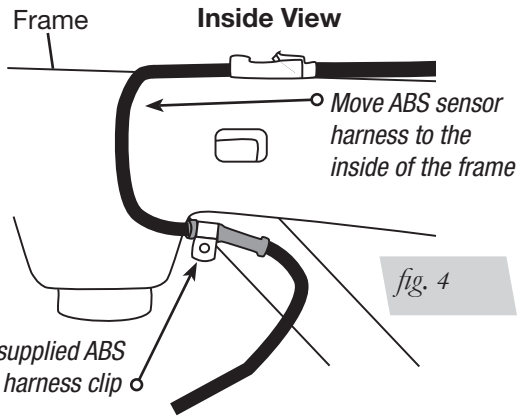


fig. 4

4. Insert a 3/8” bolt and medium OD washer into the frame, using the large slot behind the axle, so that the bolt extends through the bottom frame hole (Fig. 5).

NOTE

This is the ABS sensor harness hole from which the stock ABS sensor harness clip was previously removed.

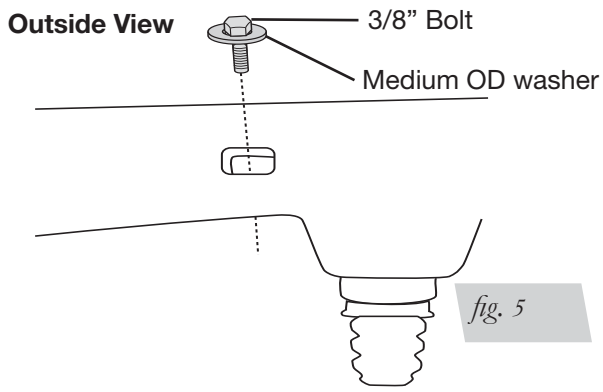


fig. 5

5. Attach the upper bracket to the frame behind the axle, making sure the previously inserted bolt goes through the hole on the bottom of the bracket (Fig. 6).
6. Attach the brake line clip, 3/8” flat washer and nylon lock nut to the bottom of the bolt. While holding the bolt and washer through the frame hole with a wrench. Torque to 44 lb.-ft. (60Nm) (Fig. 6).

⚠ CAUTION

TIGHTEN NUT WHILE KEEPING THE ABS LINE PARALLEL TO THE FRAME SO THE LINE DOES NOT RUB ON THE AIR SPRING.

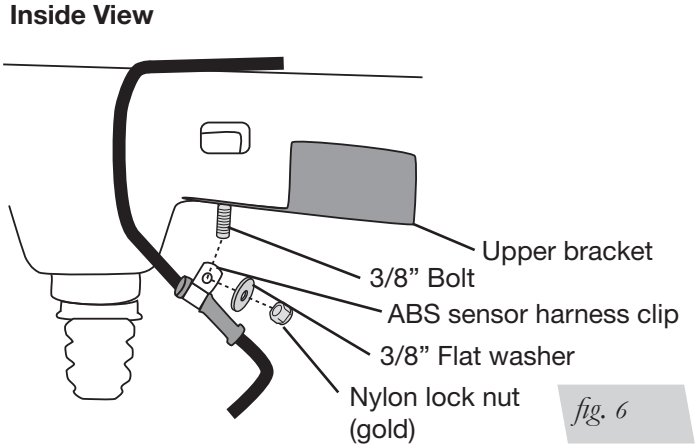


fig. 6

7. Insert the long 3/8” carriage bolt through the center of the upper bracket, into the frame, through a spacer, and out the back side of the frame. Attach a large OD washer and nylon lock nut over the protruding bolt (Fig. 7). Tighten securely.

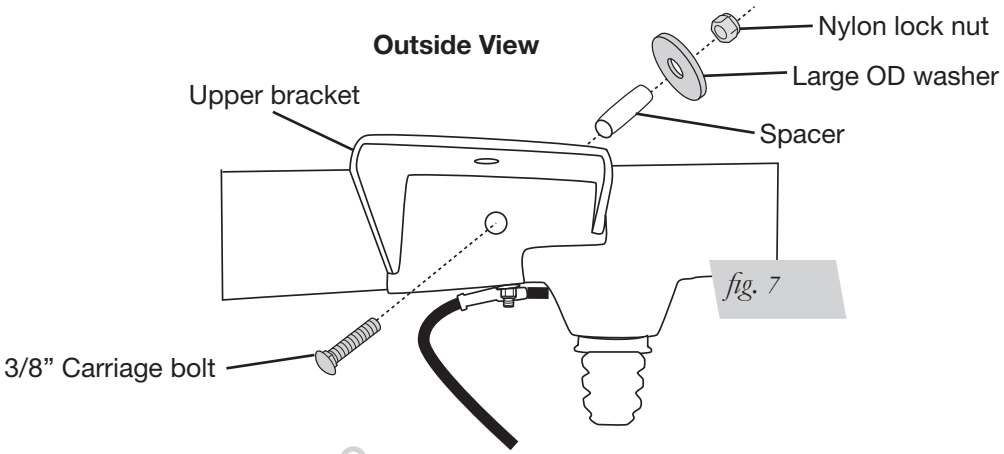


fig. 7

ASSEMBLING THE AIR SLEEVE

1. Install the swivel air fitting onto the air sleeve finger tight plus 1-1/2 turns (Fig. 8). Do not overtighten.
2. Attach the lower bracket to the bottom of the air sleeve with a flat washer and 1/2" bolt (Fig. 8). Leave loose at this time.

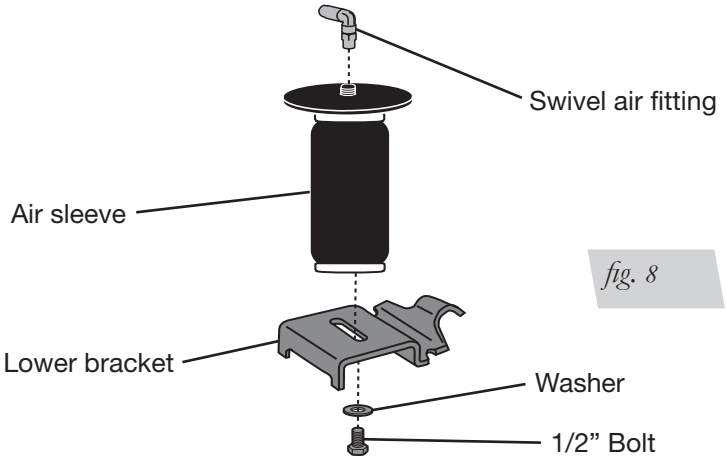


fig. 8

INSTALLING THE AIR SPRING ASSEMBLY

1. Attach the assembly to the upper bracket, allowing the swivel air fitting to go through the top of the bracket (Fig. 9). Attach the air sleeve to the top bracket using a 3/4" nylon nut. Tighten nut. DO NOT torque over 4 lb.-ft. (5Nm).
2. Set assembly onto the leaf springs so that the lip on the front side of the lower bracket hooks over the rear stock U-bolt (Fig. 9).
3. Attach the supplied U-bolt over the lower bracket and leaf springs and into the clamp bar. Cap with flat washers and nylon lock nuts (Fig. 9). Torque to 16 lb.-ft. (22Nm).

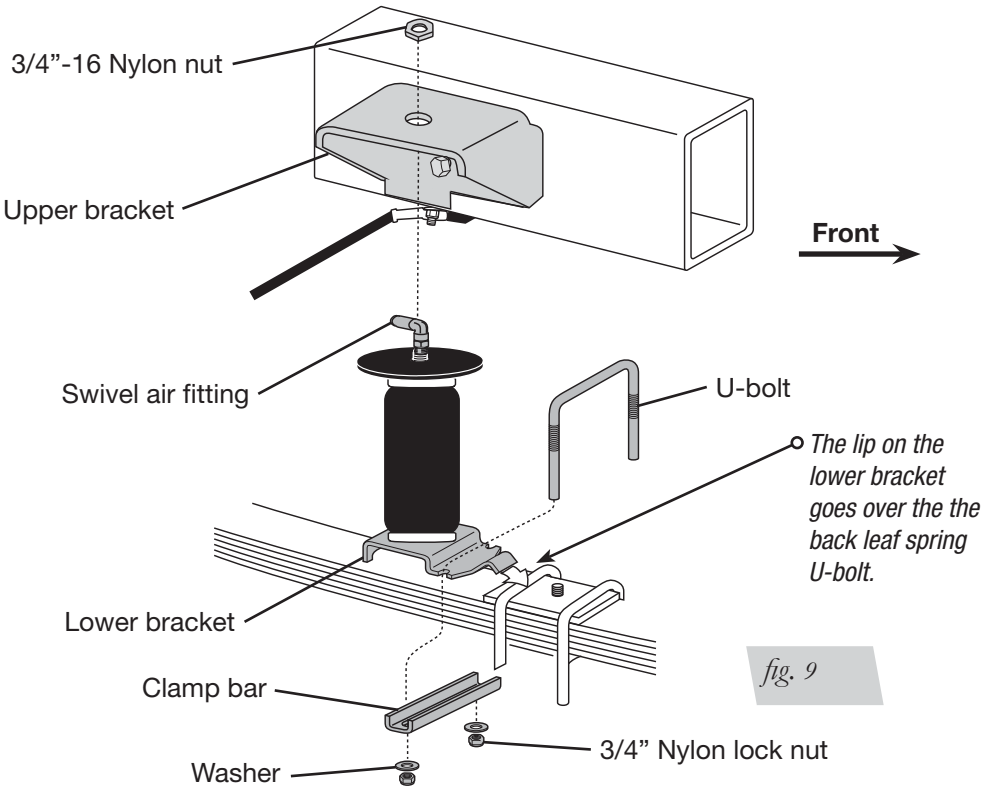


fig. 9

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. The license plate recess in bumper
   c. Under the gas cap access door
   d. Through the license plate

NOTE

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

2. Drill two 5/16” (8mm) holes to install the inflation valves.
3. Cut the air line assembly in two equal lengths.

TIPS FOR INSTALLING AIR LINES

When cutting air lines, use a sharp knife or a hose cutter and make clean, square cuts (Fig. 10). Do not use scissors or wire cutters because these tools may deform the air line, causing it to leak around fittings. Do not cut the lines at an angle.

Do not bend the 1/4” hose at a radius of less than 1” (25mm) or bend the 3/8” hose at a radius of less than 1-1/2” (38mm). Do not put side load pressure on fitting. The hose should be straight beyond the fitting for 1” before bending.

Inspect hose for scratches that run lengthwise on hose prior to installation. Contact Air Lift customer service at **(800) 248-0892** if the air line is damaged.

Go to air-lift.co/cuttingairline to watch a video demonstrating proper air line cutting.

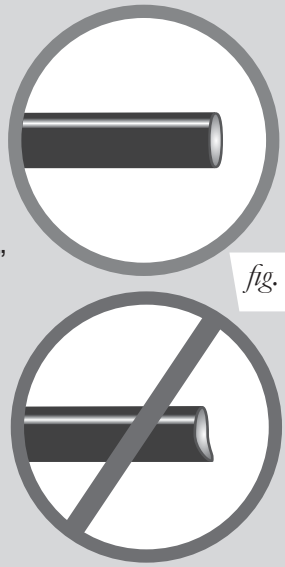


fig. 10

4. Place a 5/16” nut and star washer 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, flat washer, and 5/16” nut and cap. There should be enough valve exposed after installation – approximately 1/2” (13mm) – to easily apply a pressure gauge or an air chuck (Fig. 11).

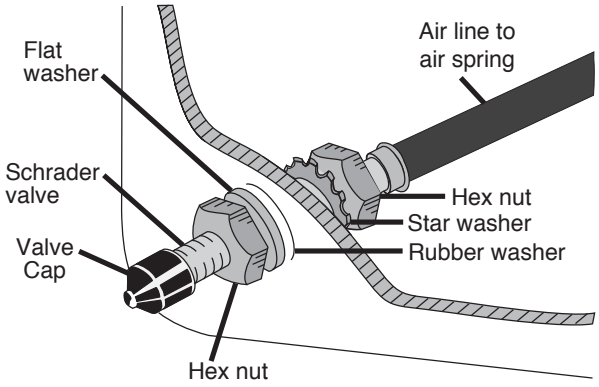


fig. 11

5. Push the inflation valve through the hole and use the rubber washer, flat washer and another 5/16” nut to secure it in place. Tighten the nuts to secure the assembly.

6. Route the air line along the frame to the air fitting on the air spring (Fig. 12). Keep AT LEAST 6” (150mm) of clearance between the air line and heat sources, such as the exhaust pipes, muffler, or catalytic converter. Avoid sharp bends and edges. Use plastic zip ties to secure the air line to fixed points along the chassis. Be sure that the zip ties are tight, but do not pinch the air line. Leave at least 2” (50mm) of slack to allow for any movement that might pull on the air line.

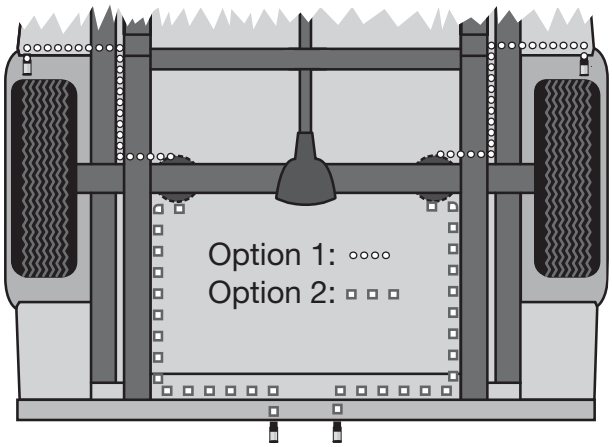


fig. 12

7. Cut off the air line, leaving approximately 12” (300mm) of extra air line. A clean square cut will prevent leaks. 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” [14mm] of air line should be in the fitting).
8. Repeat the installation procedure for the remaining side of the vehicle. Inflate the sleeves to 10 PSI (.7BAR) and adjust the sleeve in the lower bracket slot so the sleeve is perpendicular to the mounting brackets. Tighten the 1/2” bottom bolt securely. Reinstall the wheels.

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. 10). 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 type 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 OFF THE AIR LINE COMPLETELY AS THIS WILL USUALLY 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 75-90 PSI and make sure there is at least 1/2” 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 75-90 PSI (5.2-6.2BAR) 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)

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 you develop an air leak in the system, 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, THE AIR PRESSURE ACTUALLY NEEDED IS DEPENDENT ON LOAD AND GVWR.

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 become 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**

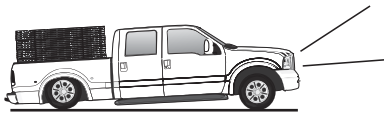
   If the vehicle's headlights are shining into the trees or the vehicle is leaning to one side, then it is not level (Fig. 13). Raise the air pressure to correct either of these problems and level the vehicle.

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. 14). 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. 15). Tuning out these problems usually requires an increase in pressure.

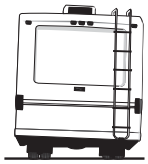


Bad headlight aim

fig. 13

Rough ride

fig. 14



Sway and body roll

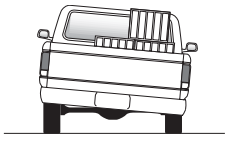
fig. 15

Guidelines for Adding Air

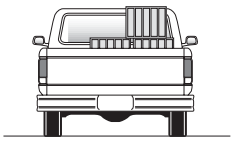
1. Start with the vehicle level or slightly above.
2. When in doubt, always add air.
3. If the front of the vehicle dives while braking, increase the pressure in the front air bags, if equipped.
4. If it is ever suspected that the air bags have bottomed out, increase the pressure (Fig. 16).
5. Adjust 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. 17). As much as a 50 PSI (3.5BAR) difference is not uncommon.

Bottoming out

fig. 16



Unlevel



Level

fig. 17

Frequently Asked Questions

Q. The system won't maintain pressure overnight. What could be wrong?

One of the air lines may be improperly installed or a line may have a hole or crack. Start by leak testing the air line connections. If no leaks are found, look for leaks in the rest of the air lines. Follow the steps in "Fixing Leaks."

Q. One of the corners won't rise.

Look for a kink or fold in the air line going to that air spring. Replace any line that has been kinked.

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?

The recommended minimum air pressure is 5 PSI (.34BAR).

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.

Notes

Notes

Notes

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

Need Help?

Contact Air Lift Company customer service department by calling (800) 248-0892.
For calls from outside the USA or Canada, dial (517) 322-2144.

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

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