

LoadLifter 5000™ SERIES



Installation Guide



Nissan Frontier

Kit 57244

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

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

Protect your Air Lift Purchase by Completing your Warranty Registration



Thank you for purchasing an Air Lift load support product!

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

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Video-enhanced installation guides

Visit airliftcompany.com/workshop/category/install-videos to access our installation video archive.*

System Overview

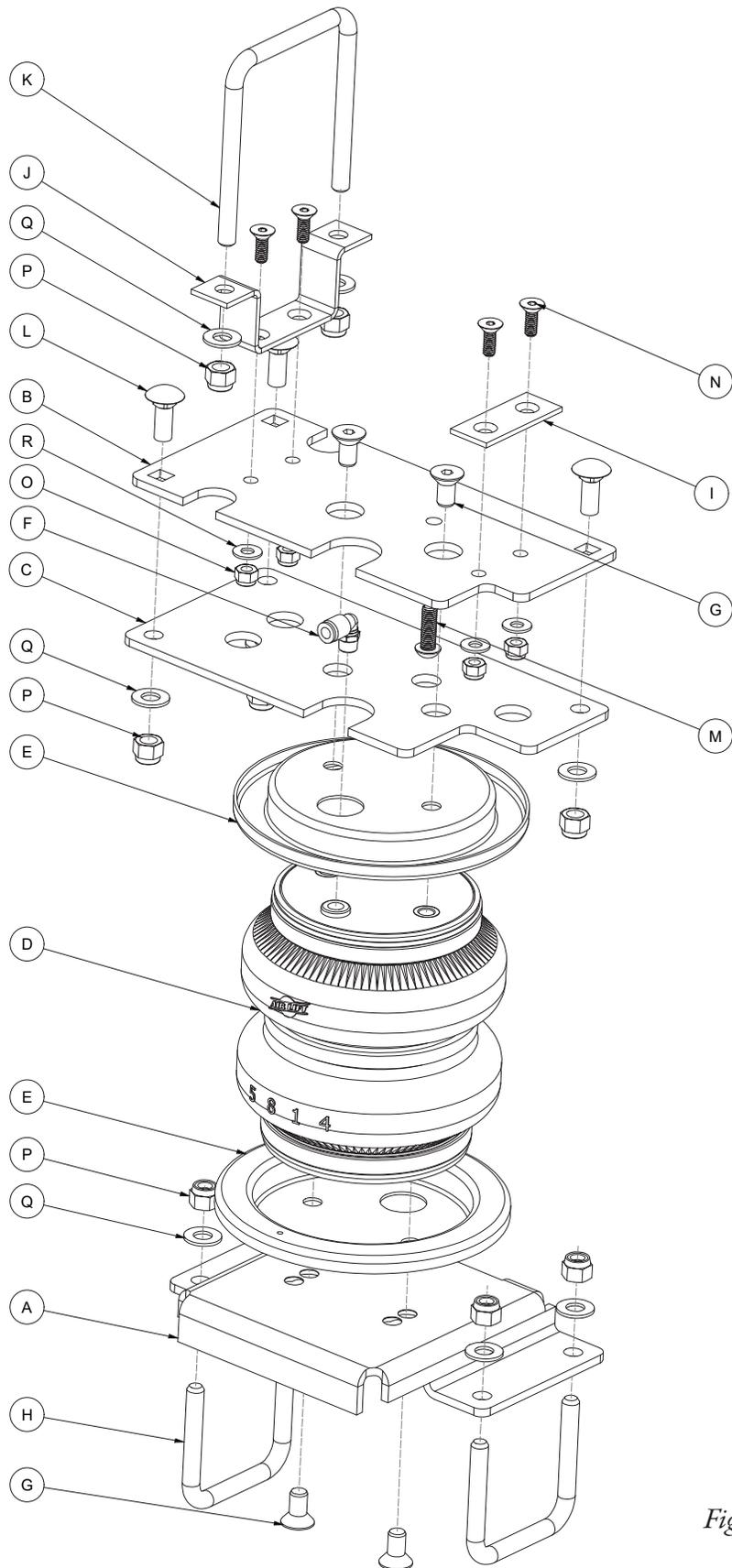


Fig. 1

Hardware and Tools

HARDWARE LIST

Item	Part#	Description	Qty
A	03034	Lower bracket	2
B	07063	Frame bracket.....	2
C	07066	Air spring bracket.....	2
D	58439	Air spring.....	2
E	11951	Roll plates	4
F	21837	1/4" 90 degree Swivel air fitting.....	2
G	17215	3/8"-24 X 3/4" Flat head socket cap screw.....	8
H	11161	U-bolt, lower bracket	4
I	11187	Spacer.....	2
J	11188	Mounting bracket.....	2
K	11521	U-bolt, frame attachment.....	2
L	17134	3/8"-16 X 1" Carriage bolt.....	6
M	17937	M8 X 25mm Button head cap screw	2
N	17938	1/4"-20 X 3/4" Flat head socket cap screw	8
O	18425	1/4"-20 Nylon lock nut.....	8
P	18435	3/8"-16 Nylon lock nut.....	18
Q	18444	3/8" Flat washer.....	18
R	18541	1/4" Flat washer.....	8
AA*	20086	Air line assembly	1
BB*	10466	Zip ties	6
CC*	18411	5/16" Lock washer	2
DD*	21234	Rubber washer.....	2
EE*	18501	M8 Flat washer.....	2
FF*	21233	5/16" Hex nut.....	4
GG*	21230	Valve cap.....	2

* These parts are not shown in the System Overview (Fig.1).

TOOLS NEEDED

Description.....	Qty
Standard and metric open-end or box wrenches	Set
9/16 ratchet wrench	1
Ratchet	1
Standard and metric regular and deep-well sockets	Set
5/32" & 5mm Metric and standard hex-key wrenches.....	1 ea.
Torque wrench.....	1
7/32" hex-key wrench (socket preferable).....	1
Needle nose pliers.....	1
Hose cutter, razor blade, or sharp knife	1
Hoist or floor jack	1
Safety glasses	1
Safety stands.....	2
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution.....	1



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 and maintenance of the LoadLifter 5000 series air spring kits. All LoadLifter 5000 series kits utilize sturdy, reinforced, commercial-grade single or double convolute bellows depending on the kit.

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 VEHICLE OR MINOR PERSONAL INJURY.



Used to help emphasize areas of procedural importance and provide helpful suggestions.

Installing the System

PREPARE THE VEHICLE

1. Lift the vehicle and support the frame with safety stands. Drop the axle down low enough to later set the air springs into position between the frame and axle (Fig. 2).

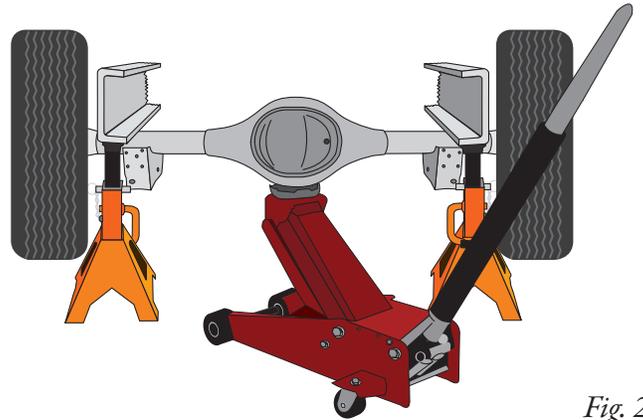


Fig. 2

2. Pull the factory jounce bumpers out of the cups, then remove the cups from the frame by removing the M8 bolt. (Figs. 3 & 4).

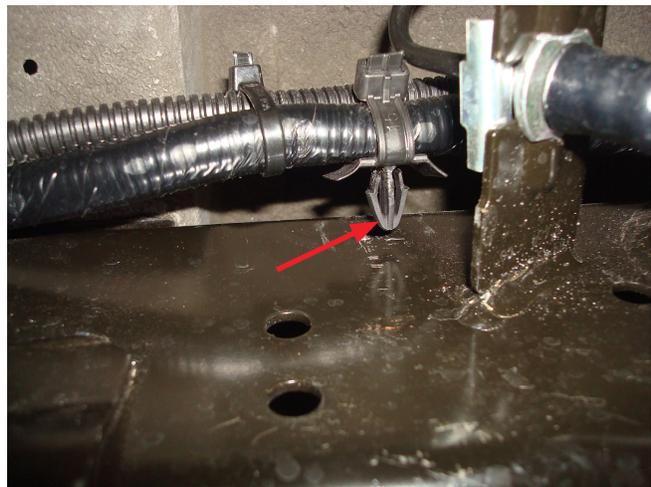


Fig. 3



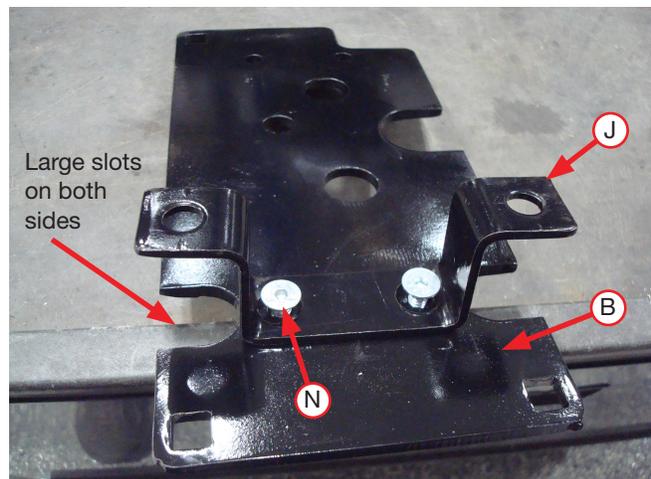
Fig. 4

- Two harness holders will need to be removed in order to attach the upper bracket. These can be found forward of the rear brake line brackets, on the inside of the frame rail, just behind the axle (Fig. 5). Using a pair of needle nose pliers between the frame and the harness, squeeze the wire holders together and pull the holders out of the frame (Fig. 6). Repeat for the other side.


Fig. 5

Fig. 6

ASSEMBLE AND INSTALL THE FRAME BRACKET

- Install a mounting bracket (J) onto the frame bracket (B) using the holes that are adjacent to the large slots in the side of the bracket with the 1/4" flat head screws (N) (Fig. 7). Flip the bracket over and cap the 1/4" flat head screws with 1/4" flat washers (R) and nylon lock nuts (O) (Fig. 8). On the other end of the frame bracket, and on the same side as the mounting bracket, install a spacer (I) onto the frame bracket using the same 1/4" hardware as what was used for the mounting bracket (Figs. 1 & 9). Torque all hardware to 100 lb.-in. (11Nm).


Fig. 7

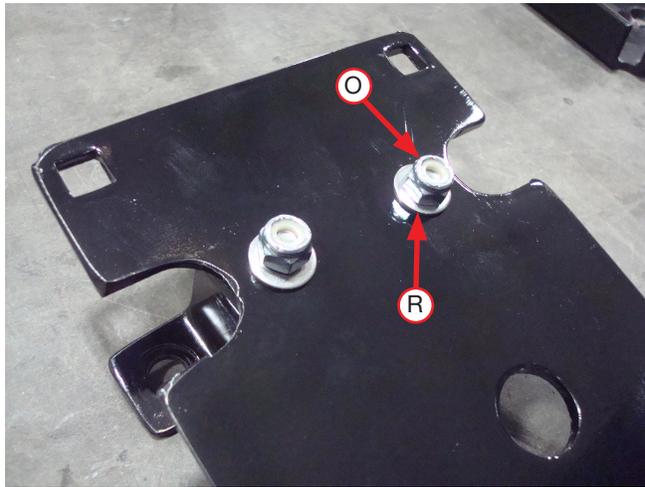


Fig. 8

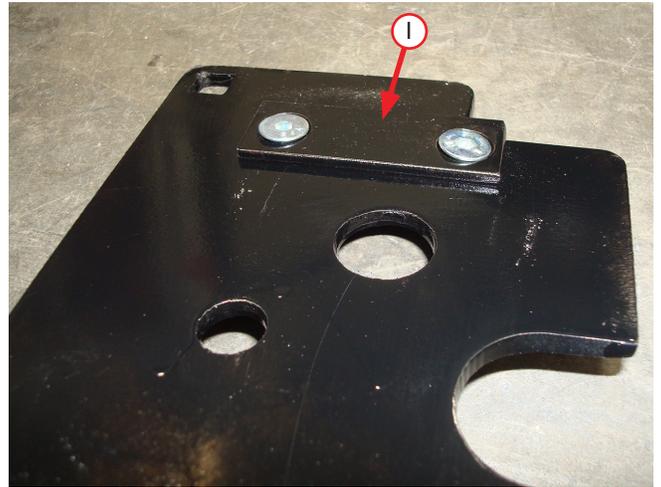


Fig. 9

2. Install all the components listed in Step 1 to the second frame bracket, however; before doing so, flip this bracket over on the other side so it is a mirror image of the first assembly (Fig. 10). This will make a left- and right-hand specific bracket to be mounted under the frame.



Left (driver's) side frame bracket assembly Right (passenger's) side frame bracket assembly Fig. 10

3. Attach both frame brackets to the underside of the frame with the notch in the corner facing inboard and forward (Fig. 11) with the M8 button head cap screw (M). Snug the screw but do not torque at this time.

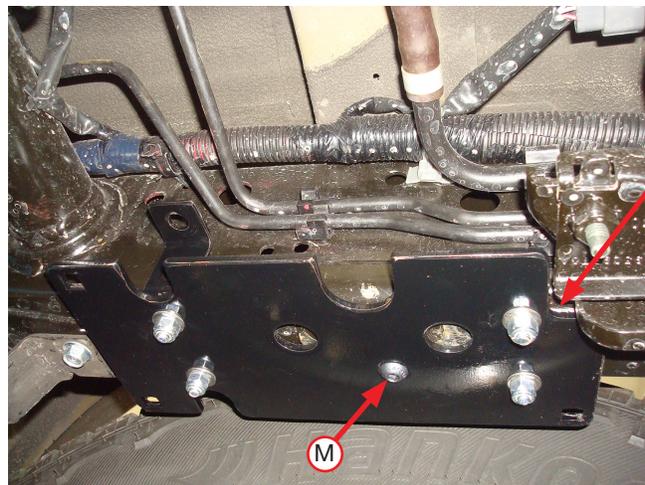


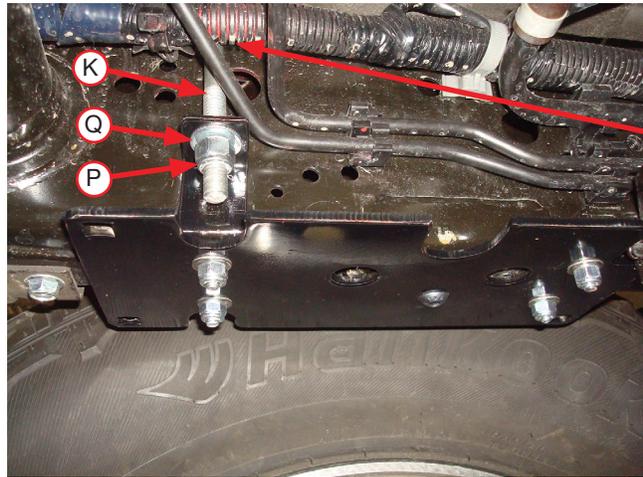
Fig. 11

The notch in the bracket is inside and forward to clear the emissions bracket. The inside frame view of left (driver's) side installation. The right (passenger's) side will be a mirror image when installed.

4. Install the frame attachment U-bolts (K) around the top of the frame and through the frame bracket mounting holes, making sure the U-bolt goes between the wiring harness and frame (Figs. 12 & 13). Cap with 3/8" flat washers (Q) and nylon lock nuts (P). Tighten the 3/8" nuts evenly and torque to 6 lb.-ft. (8Nm).

NOTE

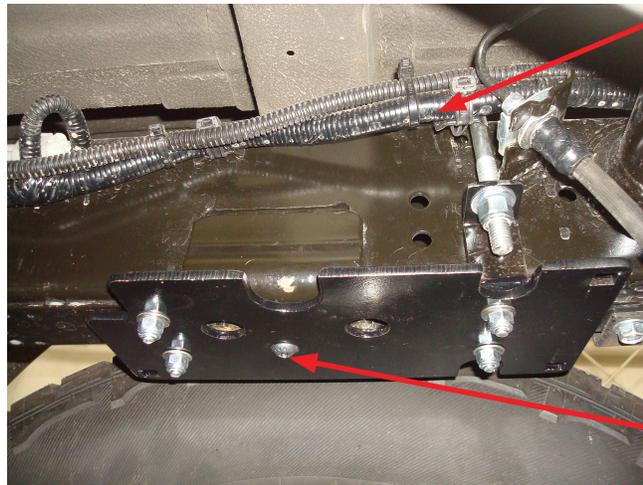
Move the hard line slightly away from the U-bolt if the U-bolt is touching it.



Make sure not to pinch harness between U-bolt and frame

Fig. 12

5. Torque the 8mm bolts previously installed to 18 lb.-ft. (25Nm). The right (passenger's) side is shown in Figure 13.



Make sure not to pinch harness between U-bolt and frame

Tighten last. Torque to 18 lb.-ft. (25Nm)

Fig. 13

ASSEMBLE AND INSTALL THE AIR SPRING

1. Set the roll plates (E) on top of the air springs (D). Thread the fittings (F) into the air springs finger-tight, then tighten one and a half turns. With the fittings facing each other on both air springs (Fig. 14), set the air spring brackets (C) on top of the assemblies making sure the notches on the brackets are facing each other. Install the 3/8" flat head screws (G) finger-tight, then torque to no more than 20 lb.-ft. (27Nm).

NOTE

The holes are oversized intentionally. Tighten the hardware as specified.

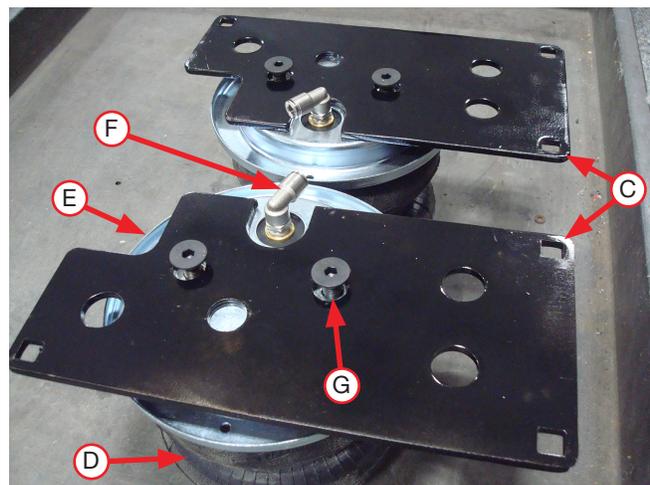


Fig. 14

2. Flip the assemblies upside down and set a roll plate (E) over both air spring assemblies. Set the lower brackets (A) onto the air spring assemblies so the flange on the bracket is on the opposite side of the notch and fittings that are on the top (Fig. 15). Attach the lower brackets, making sure to use the holes closest (marked "A") to the flange with the cutout, using the 3/8" flat head screws (G). Torque the screws to no more than 20 lb.-ft. (27Nm).

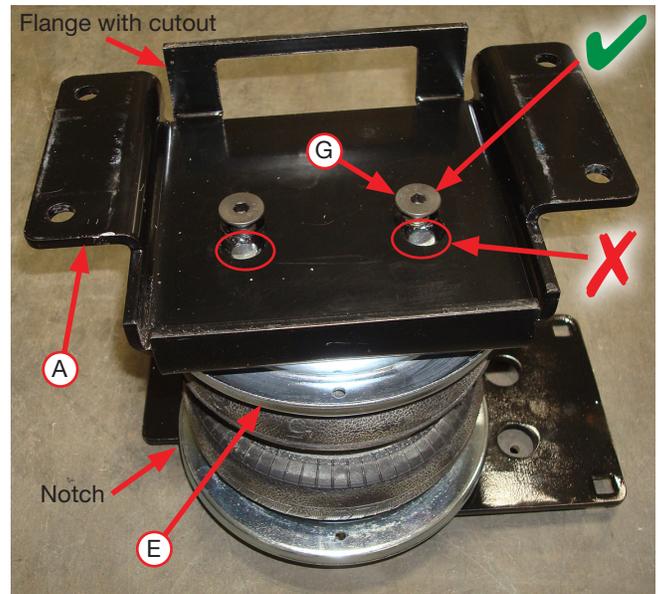


Fig. 15

3. Figure 16 shows both left (driver's) side and right (passenger's) side assemblies.



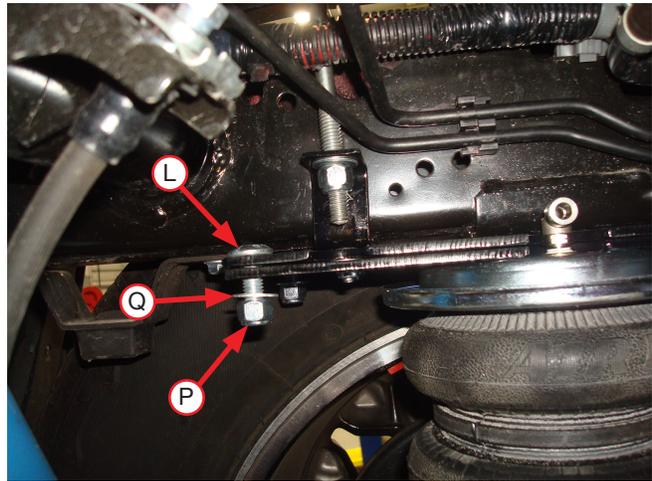
Fig. 16

4. With the axle lowered, set the left- and right-hand assemblies onto the leaf springs. Make sure that the fittings have been turned inboard to not pinch them when lifting the axle up (Fig. 17).

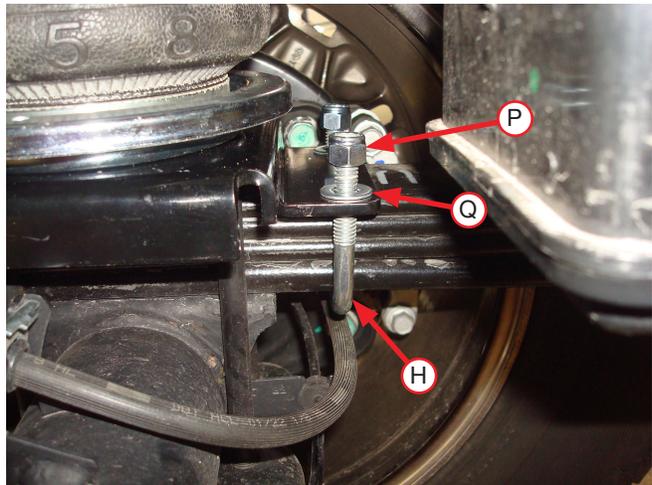


Fig. 17

5. Raise the axle up until the air spring bracket comes in contact with the frame bracket. Attach the two brackets together on both sides with (6) 3/8" carriage bolts (L), flat washers (Q) and nylon lock nuts (P) (Figs. 1 & 18). Torque hardware to 16 lb.-ft. (21Nm).


Fig. 18

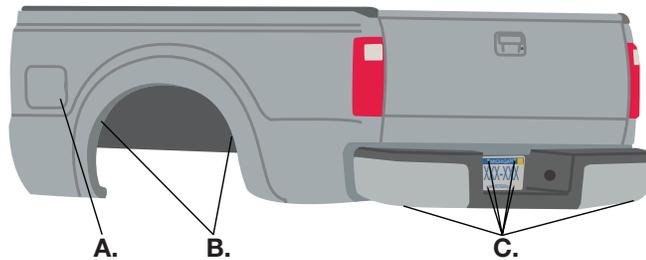
6. Attach the lower brackets to the leaf springs with the lower bracket U-bolts (H), 3/8" flat washers (Q) and nylon lock nuts (P). Torque the hardware evenly to 16 lb.-ft. (21Nm) (Fig. 19).


Fig. 19

7. Raise the axle all the way up and remove the jack stands and jack.

Installing the Air Lines

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



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



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

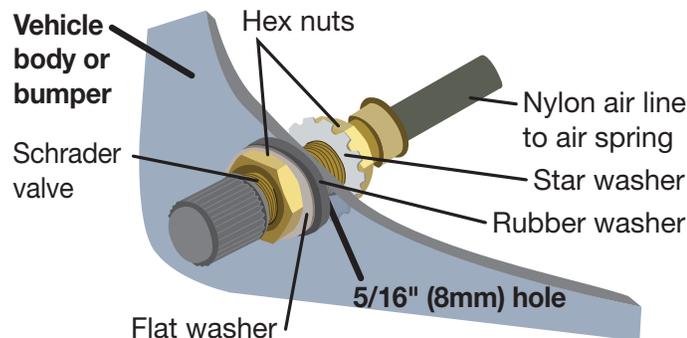
INSTALLING NYLON AIR LINES

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

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

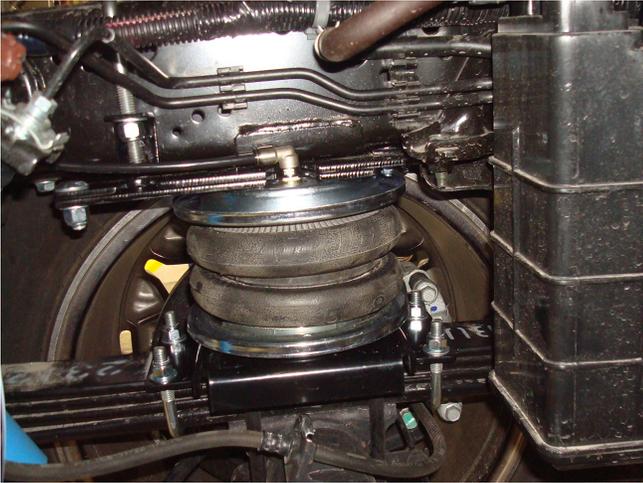


3. Use zip ties to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. The minimum bend radius for the air line is 1" (25mm). Leave at least 2" (50mm) of slack in the air line to allow for any movement that might pull on the air line.
4. Install the Schrader valve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



Finished Installation

The images show the finished installation of both sides.



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



Back, inside view of passenger's (right) side installation.



Valve location we used in our installation.



Back view showing valve locations and air spring assembly installed.

Congratulations!

You are now the proud owner of an Air Lift air suspension system. Enjoy!

Before Operating

INSTALLATION CHECKLIST

- ❑ **Clearance test** — Inflate the air springs to 40-60 PSI (2.8-4.1BAR) and make sure there is at least 1/2" (13mm) clearance from anything that might rub against each sleeve. Be sure to check the tire, brakes, frame, shock absorbers and brake cables.
- ❑ **Leak test before road test** — Inflate the air springs to 40-60 PSI (2.8-4.1BAR) and check all connections for leaks. All leaks must be eliminated before the vehicle is road tested.
- ❑ **Heat test** — Be sure there is sufficient clearance from heat sources, at least 6" (152mm) for air springs and air lines. If a heat shield was included in the kit, install it. If there is no heat shield, but one is required, call Air Lift customer service at (800) 248-0892.
- ❑ **Fastener test** — After 500 miles (800km), recheck all bolts for proper torque.
- ❑ **Road test** — The vehicle should be road tested after the preceding tests. Inflate the air springs to recommended driving pressures. Drive the vehicle 10 miles (16km) and recheck for clearance, loose fasteners and air leaks.
- ❑ **Operating instructions** — If professionally installed, the installer should review the operating instructions with the owner. Be sure to provide the owner with all of the paperwork that came with the kit.

MAINTENANCE AND USE GUIDELINES

1. Check air pressure weekly.
2. Always maintain normal ride height. Never inflate beyond 100 PSI (7BAR).
3. If the system develops an air leak, use a soapy water solution to check all air line connections and the inflation valve core before deflating and removing the air spring.
4. Upon successful completion of the installation, follow these pressure requirements for the air springs.



**Minimum Recommended
Air Pressure**



Maximum Air Pressure



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.



Notes

Notes

Limited Warranty and Return Policy

Air Lift Company provides a Limited Lifetime Warranty* to the original purchaser of its load support products, from the date of original purchase, that the products will be free from defects in workmanship and materials when used on cars and trucks as specified by Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth in the full Limited Warranty and Return Policy.

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

Warranty Registration & Claims

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



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