

# LoadLifter 5000™ SERIES



## Installation Guide



*Ford F-150 PowerBoost*

**Kits 57389 | 88389**

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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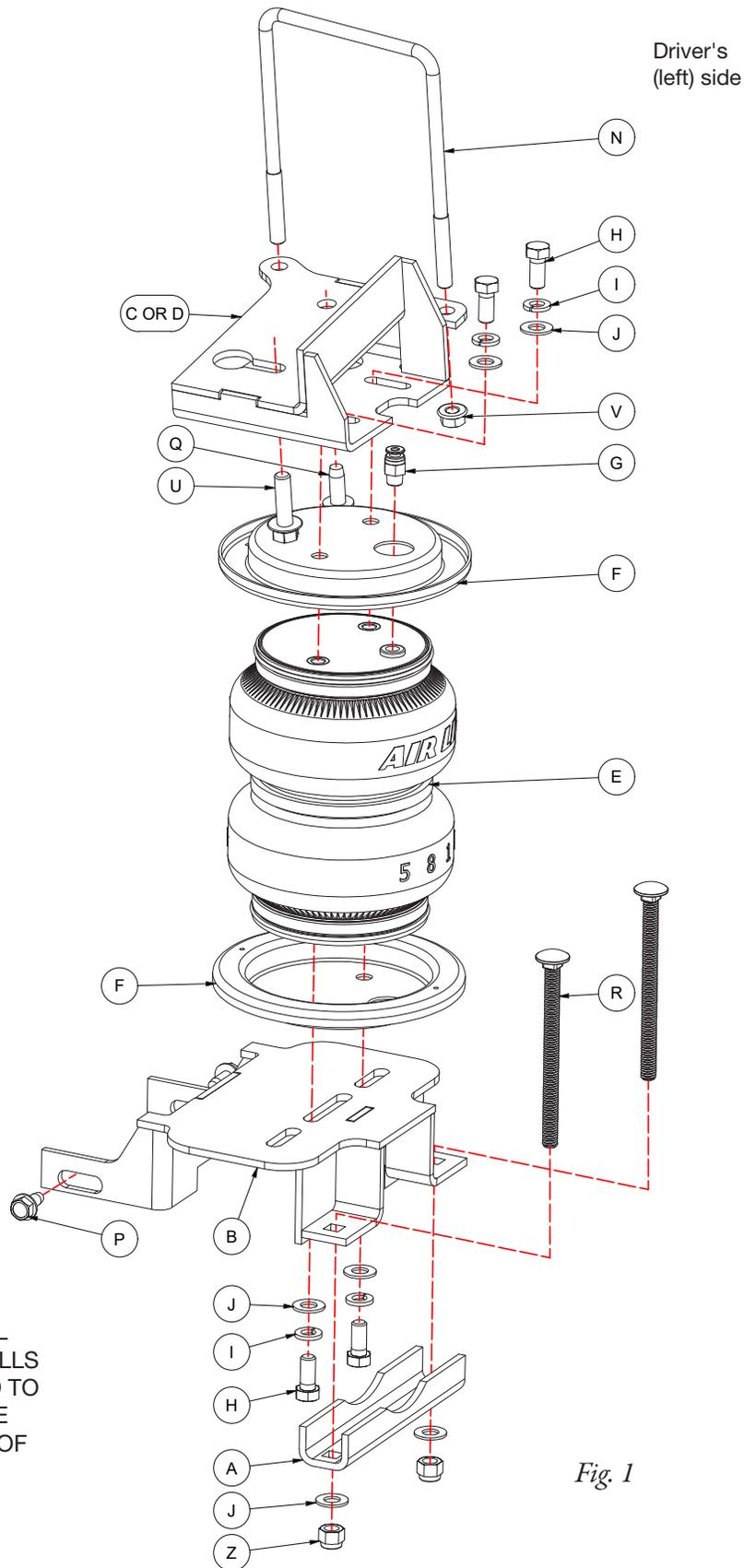
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# System Overview



*Fig. 1*



PROFESSIONAL MECHANIC SKILLS ARE REQUIRED TO COMPLETE THE INSTALLATION OF THIS KIT.

# Hardware and Tools

## Hardware List

Item	Part#	Description	Qty
A	01531	Lower clamp bar	2
B	03946	Lower bracket	2
C	07728	Upper bracket left hand side	1
D	07828	Upper bracket right hand side	1
E	58437	Kit #57389 air spring	2
E	58496	Kit #88389 air spring	2
F	11951	Kit #57389 roll plate	4
F	11967	Kit #88389 roll plate	4
G	21839	1/4" Air fitting	2
H	17203	3/8"-24 x 7/8" Hex head bolt	8
I	18427	3/8" Lock washer	8
J	18444	3/8" Flat washer	13
K*	09484	Thermal sleeve	1
L*	11149	Left hand ABS wiring harness bracket	1
M*	11150	Right hand ABS wiring harness bracket	1
N	11325	3/8"-16 U-bolt	2
O*	11728	ABS wiring harness bracket	1
P	17102	5/16"-18 x 3/4" Self -threading screw	4
Q	17129	3/8" Self-tapping screw	2
R	17168	3/8"-16 x 5 Carriage bolt	4
S*	17175	1/4-20 x 3/4" Hex cap screw	2
T*	17187	3/8"-16 x 7/8" Hex cap screw	1
U	17268	M10-1.5 x 35 Flange head bolt	2
V	18422	3/8"-16 Serrated flanged lock nuts	4
W*	18419	#12 Flat washer	2
X*	18425	1/4" Nylon insert lock nut	2
Z	18435	3/8"-16 Nylon insert lock nut	5
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	2
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 boxed wrenches	Set
Standard and metric regular and deep-well sockets	Set
Ratchet	1
Torque wrench	1
7/32" Hex-key wrench (socket preferable)	1
Hose cutter, razor blade, or sharp knife	1
Cutoff wheel, air reciprocating saw or a hacksaw	1
Treemount removal tool or screwdriver	1
Hoist or floor jack	1
Safety stands	2
Safety glasses	1
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution	1

The photos in this manual show the LoadLifter 5000 Ultimate kit.



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, 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 VEHICLE OR MINOR PERSONAL INJURY.



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

## 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  
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

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. Lift the vehicle and support the frame with safety stands. Drop the axle down low enough to provide clearance for the air springs (Fig. 2).

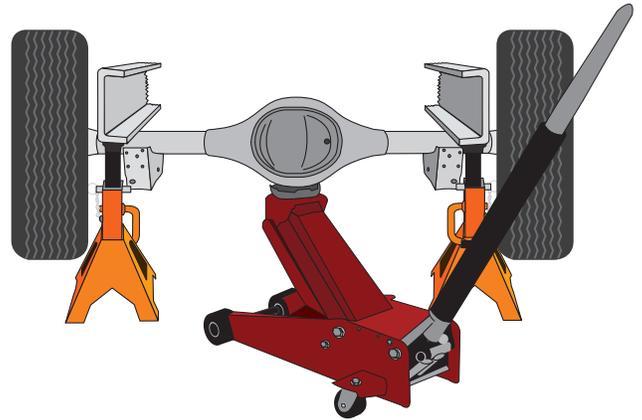


Fig. 2

2. Remove the factory jounce bumpers using a 13mm socket and an extension (Fig. 3).



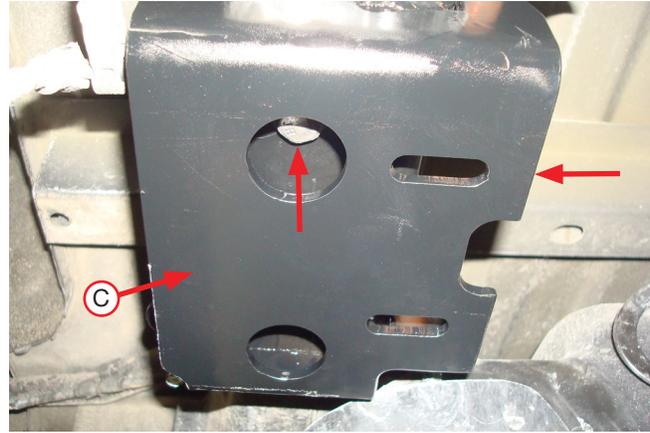
Fig. 3

3. Thread the included M10 flange head bolt (U) into the threaded holes from removing the jounce bumpers. Leave approximately a 1/2" (13mm) gap between the bolt flange and the frame (Fig. 4).



Fig. 4

4. Install the upper brackets (C-left and D-right) by pushing the bracket up against the bottom of the frame so the flange bolt passes through the keyway hole in the bracket. When the bracket is against the frame, push the bracket outward to “lock” into the keyway. Tighten the flanged bolt (U), making sure the vertical portion of the bracket is touching the inside side of the frame (Fig. 5). Torque the bolt to 30 lb.-ft. (41Nm).

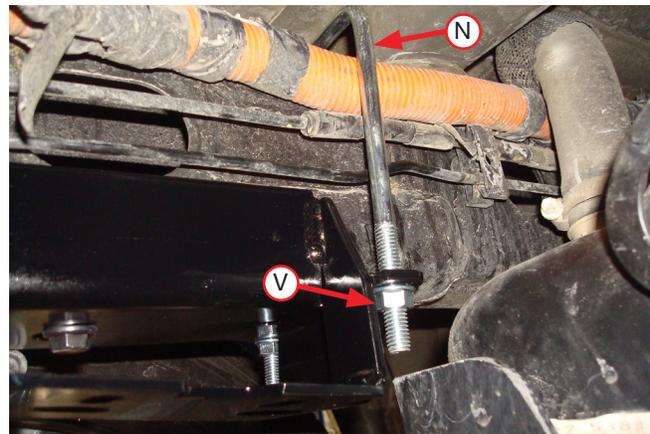

*Fig. 5*

For installations not equipped with a 5th wheel hitch side mount bracket, proceed with the following. For all 5th wheel hitch side mount installations, skip this step and move to Step 6 to complete the upper bracket installation.



**ON DRIVER'S (LEFT) SIDE, ENSURE PROPER CLEARANCE BETWEEN THE U-BOLT AND THE BRAKE LINES TO PREVENT DAMAGE TO THE BRAKE LINES.**

5. Place the U-bolt (N) over the top of the frame and through the holes in forward side of the upper bracket. Thread the serrated flange lock nuts (V) onto the U-bolt and evenly torque to 10 lb.-ft. (14Nm) (Fig. 6). Repeat for passenger's (right) side.


*Fig. 6*


Place a rag between the gas tank and the gas tank shield (on the inside of the frame) so the nut does not accidentally fall in between them when threading the nut onto the U-bolt.

Upper bracket installation for most 5th wheel hitch side mount equipped vehicles:

6. Center punch the frame using the forward hole in the upper bracket as a template. Drill a 5/16" hole through the bottom of the frame (Fig. 7).


*Fig. 7*

7. Install the self-tapping screw (Q) into the hole previously drilled and torque to 30 lb.-ft. (41Nm) (Fig. 8).



TRIM A SMALL PORTION OF THE BRAKE LINE BRACKET ON THE LEFT SIDE OF THE AXLE TO MAKE PROPER CLEARANCE FOR THE LOWER BRACKET.

8. Pull up on the locking tab of the right-side connector and pull the connector off the ABS/Brake line axle junction bracket (Fig. 9). Pull the left side "cup" on the harness off of the ABS/Brake line axle junction bracket (Fig. 10). Secure the harness out of the way for the next step.

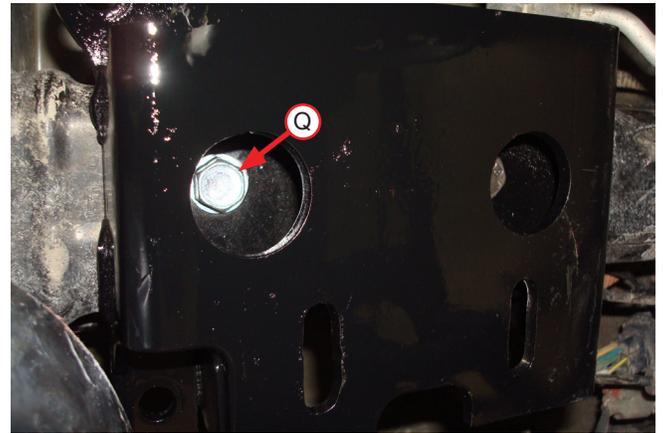


Fig. 8

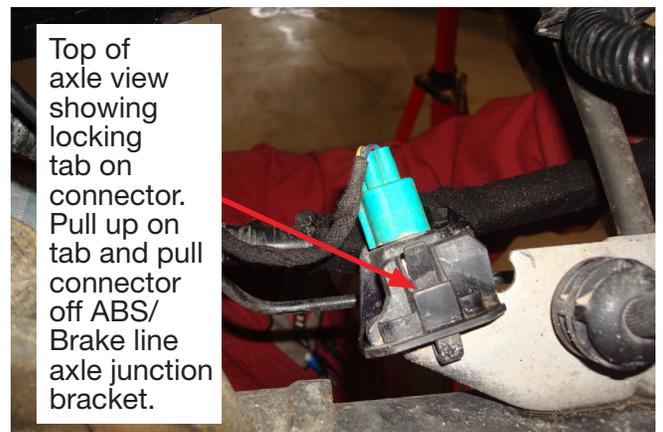


Fig. 9

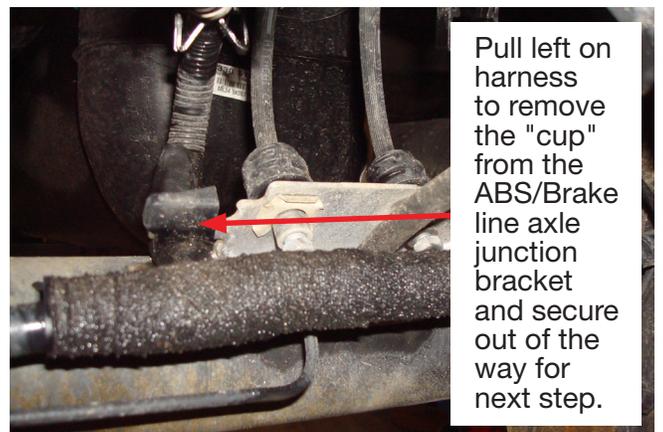
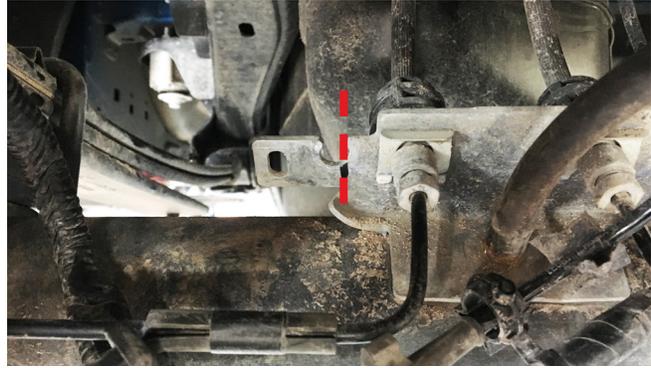


Fig. 10



USE CAUTION WHILE CUTTING THE BRAKE LINE BRACKET. ENSURE THE BRAKE LINE AND WIRE HARNESS HAVE PROPER CLEARANCE TO AVOID DAMAGE FROM THE SAW OR GRINDING WHEEL.

9. Measure approximately 1.375" (35mm) from the edge of the bracket (this may vary depending on the truck). Use the dashed line on Fig. 11 as a reference. Make the cut to the bracket using a cutoff wheel, air reciprocating saw or a hack saw.



*Fig. 11*

10. Remove the brake line tabs attached to both sides of the leaf spring perch with a 10mm socket (Fig. 12). On the right side of the axle, pull the plastic clip on the ABS line out of the bracket (Fig. 13). Leave loose at this time.



*Fig. 12*



*Fig. 13*

11. Set the lower brackets (B) onto the axle (Fig. 14) with the tabs wrapping around the leaf spring perch. Push the brackets up against the stock U-bolt/leaf springs so the lower brackets lock into position (circled).



*Fig. 14*

12. Set the stock ABS/Brake line tabs back into position and reattach with the 5/16" self-tapping screws (P). (Fig. 15). Snug bolt, but do not tighten yet.

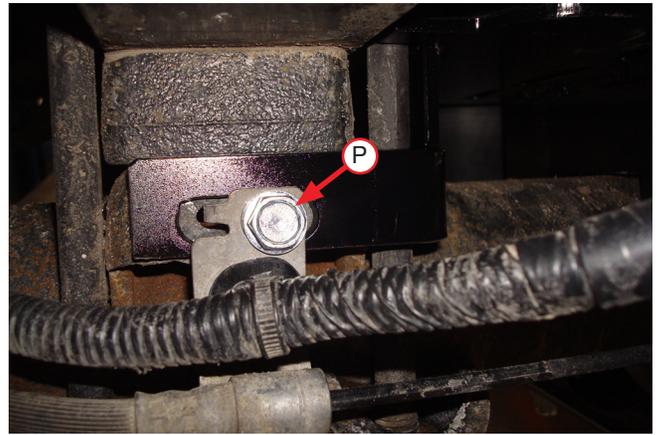


Fig. 15

13. Attach the front tab on the lower bracket to the front side of the spring perch with the 5/16" self-tapping screw (P) (Fig. 16). Snug bolt, but do not tighten yet.



Fig. 16

14. Insert the 3/8" carriage bolts (R) through the lower brackets (Fig. 17). Install the clamp bars (A) over the carriage bolts. Cap the carriage bolts with 3/8" flat washers (J) and 3/8" nylon insert lock nuts (Z). Torque the 5/16" self-tapping screws first, then evenly torque the 3/8" clamp bars hardware to 16 lb.-ft. (22Nm).

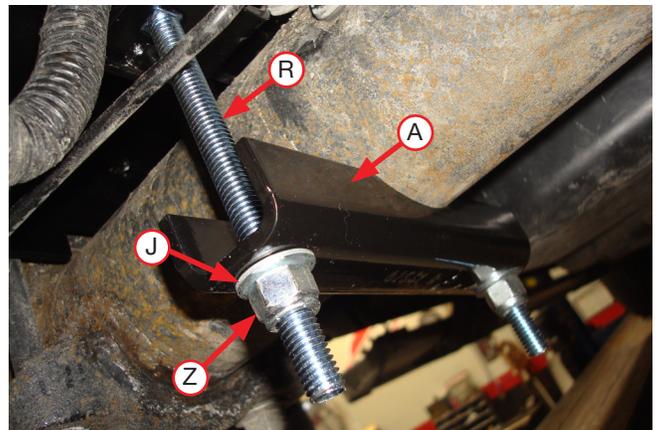


Fig. 17

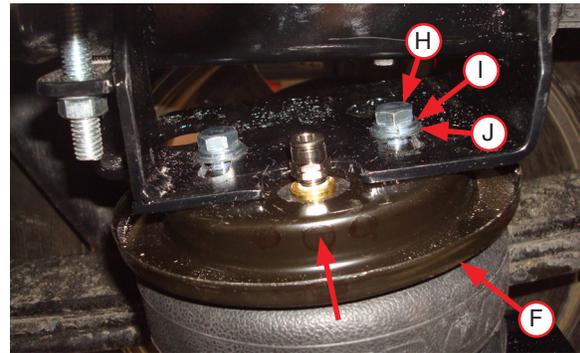
## ASSEMBLING AND INSTALLING THE AIR SPRINGS

1. Install the fitting (G) into the airport on top of the air spring (E) (Fig. 18). Tighten finger-tight plus 1 1/2 turns.



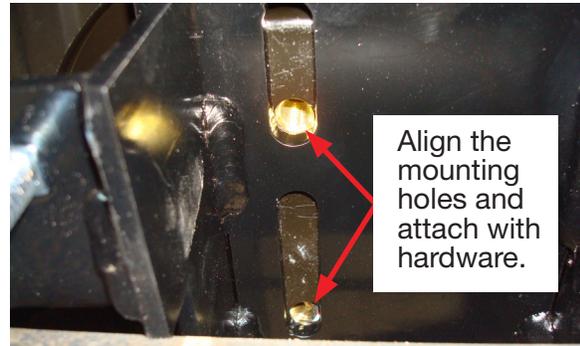
*Fig. 18*

2. With the axle still hanging, set a roll plate (F) on top of the air spring and attach the top of the air spring to the upper bracket using the 3/8" hex head bolts (H), lock washers (I) and flat washers (J) (Fig. 19). Once the air spring is loosely attached, push the air spring outboard (towards the leaf springs) in the slots and tighten the upper hardware to no more than 20 lb.-ft. (27Nm). Repeat for both sides.



*Fig. 19*

3. Set a roll plate under the bottom of the air spring and lower the frame or raise the axle up just far enough for the air spring/roll plate assembly to touch the lower bracket. Looking below the lower bracket, align the roll plate and air spring mounting holes up with the slots (Fig. 20) and attach using the 3/8" hex head cap screws (H), lock washers (I) and flat washers (J). Leave loose at this time.



*Fig. 20*

4. By pushing the air spring assembly front or back, align the air spring so that it is as perpendicular to the upper and lower brackets as possible. Torque the lower mounting hardware to no more than 20 lb.-ft. (27Nm) (Fig. 21). Repeat for both sides.



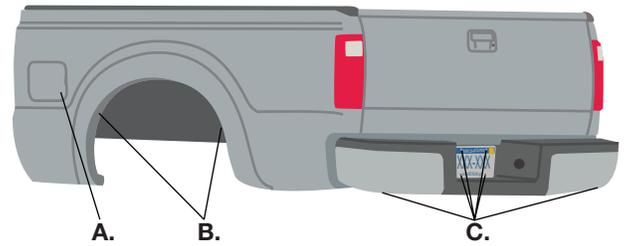
*Fig. 21*

# Installing the Air Lines

Air Lines are routed from the air springs to Schrader valves. begin by choosing locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (Fig. 22).



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



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

Fig. 22

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter. Do not use scissors or wire cutters (Fig. 23).



Fig. 23

2. It is recommended that the air line be routed along the top of the frame then down to the fitting. After cutting the air line to length, install the air line thermal sleeve (K) over the air line on the passenger's (right) side before inserting into the fitting. Tie off the air line, using zip ties (BB), to the frame so it is not loose around the exhaust pipe (Fig. 24).
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.

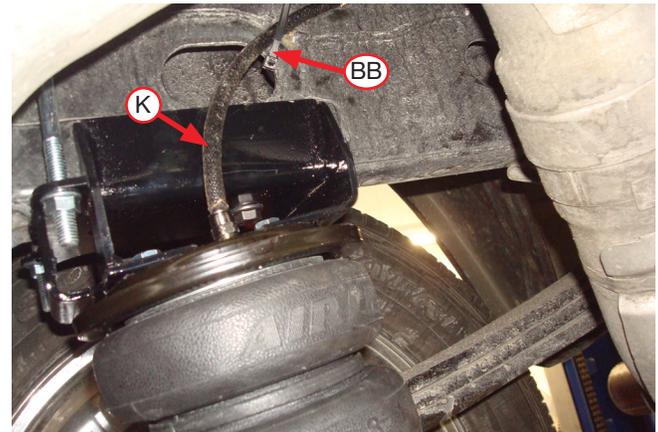


Fig. 24

4. Install the Schrader valve in the chosen location (Fig. 25).

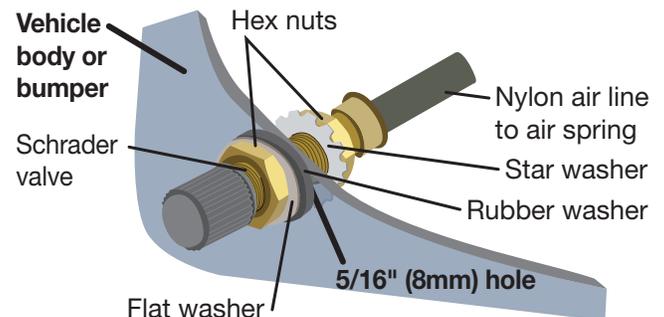


Fig. 25

## FINISHING THE INSTALLATION

1. Insert the left-hand ABS harness bracket (L) into the “cup” of the ABS wiring harness and secure to the lower bracket (B) with 3/8" hex cap screw (T), 3/8" flat washer (J) and 3/8" nylon insert lock nut (Z) (Figs. 26 & 27). Tighten securely.



It may be easier to use a pair of needle nose pliers to hold the hex cap screw when tightening.

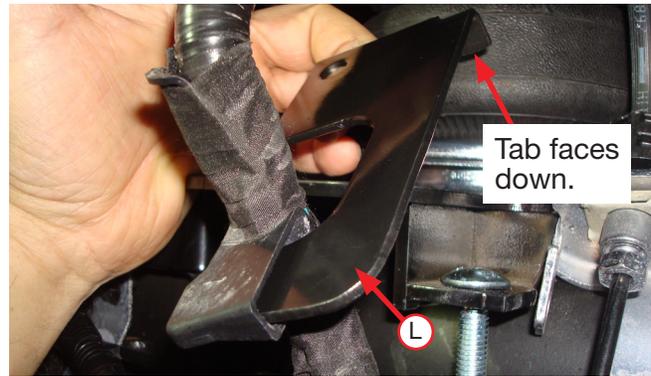


Fig. 26

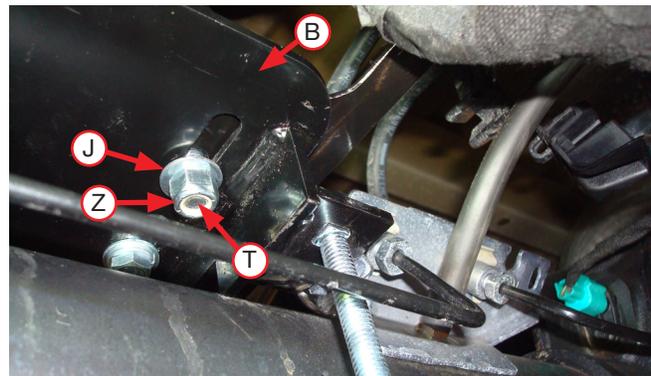


Fig. 27

2. Install the right-hand wiring harness connector onto the right-hand wiring harness bracket (M), making sure the locking tab locks the connector into position (Fig. 28). Secure to the ABS/Brake line axle junction bracket with 1/4" hex cap screw (S), 1/4" flat washer (W) and 1/4" nylon insert lock nut (X) (Fig. 29). Tighten securely.

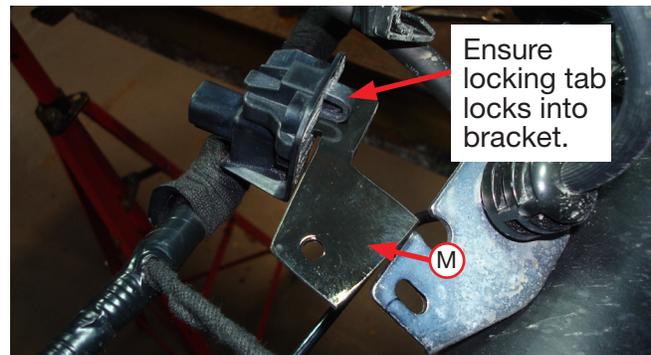
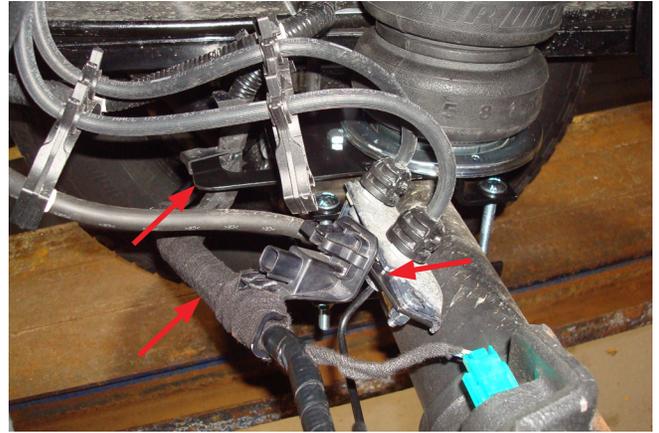


Fig. 28

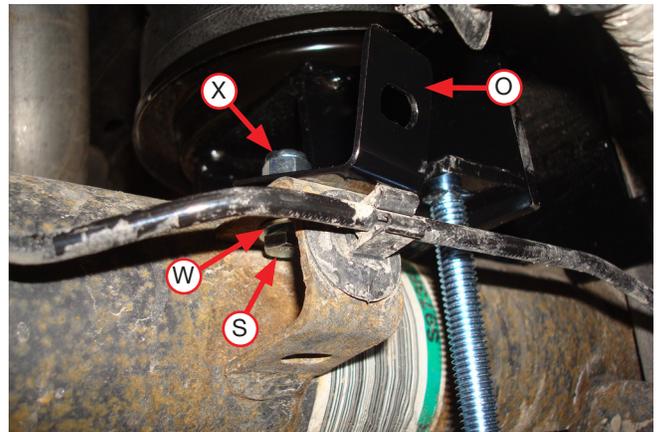


Fig. 29

3. Fig. 30 shows a finished photo of how the ABS wiring harness is secured.

*Fig. 30*

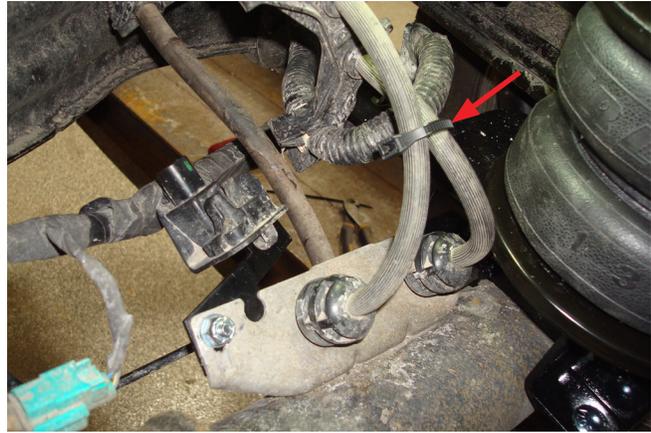
4. Install the ABS wiring harness bracket (O) onto the ABS/Brake bracket on the right side (passenger) axle with 1/4" hex cap screw (S) flat washer (W) and nylon insert lock nut (X). Tighten hardware making sure the slot in the bracket is facing the rear (Fig. 31).

*Fig. 31*

5. Attach the ABS line removed in step 11 (Fig. 32).

*Fig. 32*

6. Lightly zip tie the two soft lines coming off the front of the ABS/Brake line bracket (Fig. 33).

*Fig. 33*

7. Lightly zip tie the axle vent tube hose to the brake line (Fig. 34).

*Fig. 34*

## Finished Installation

The image shows a completed inside frame view of the driver's (left) side installation.



## Congratulations!

You are now the proud owner of an industry leading 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.

## Limited Warranty and Return Policy

Air Lift Company provides a limited lifetime warranty to the original purchaser of its load support products, that the products will be free from defects in workmanship and materials when used on cars and trucks as specified by Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth in the full Limited Warranty and Return Policy that is available at [www.airliftcompany.com/warranty](http://www.airliftcompany.com/warranty).

For additional warranty information contact Air Lift Company customer service.



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

## Need Help?

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

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



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