AIR LIFT® Since 1949

LoadLifter 5000™ SERIES

Installation Guide

Multiple Chevrolet, Dodge, Ford and GMC trucks

Kits 57215 | 88215 | 89215

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

MN-1046 • (031908) • ECR 9350

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

IDENTIFYING THE DIFFERENCES BETWEEN KITS

Should you need to contact Air Lift customer service, you will need to know which kit you are inquiring about: standard LoadLifter 5000, 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 Ultimate
black powder-coated
roll plate

LoadLifter 5000 Ultimate Plus
stainless steel
roll plate

LoadLifter 5000
nylon air line

LoadLifter 5000 Ultimate
nylon air line

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.

TABLE OF CONTENTS

Installation Diagram

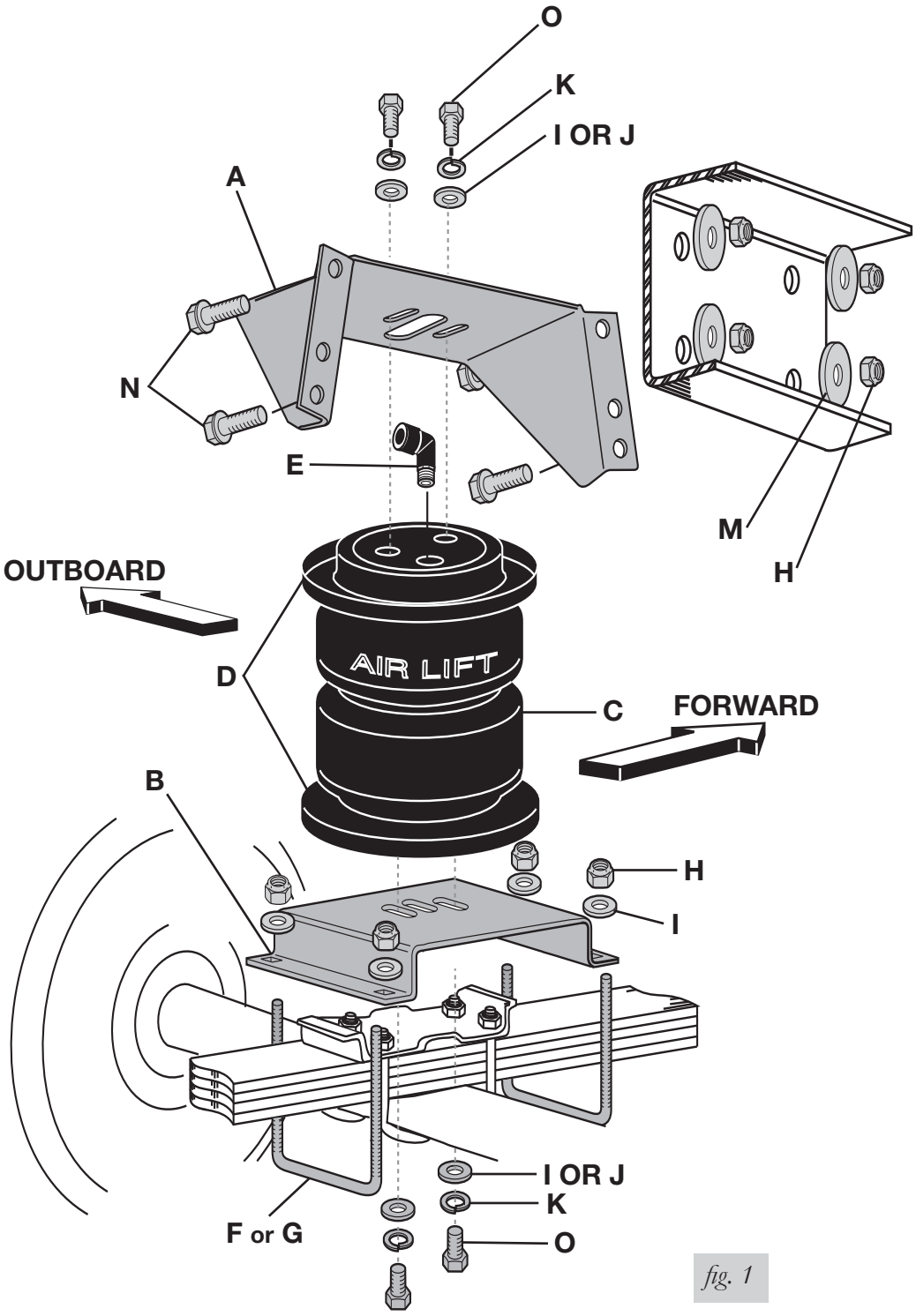


fig. 1

Hardware and Tools Lists

Common Parts Included in All 3 Kits

Item	Part#	Description	Qty
A	07475	Upper bracket	2
B	03102	Lower bracket	2
F	10594	2” U-bolt	4
G	10583	4 1/2” U-bolt	4
H	18435	Nylon lock nut	16
L*	13377	Upper bracket spacer	8
M	18447	3/8” Flat washer	8
N	17159	3/8” x 1 1/2” Washer-head frame bolt	8
P*	01525	Spacer bar	4
Q*	17182	1/4” Hex-head cap screw	2
R*	20947	Fender well liner spacer	2
S*	18419	10/32” Flat washer	6
T*	18425	1/4” Nylon lock nut	2
EE*	21234	Rubber washer	2
FF*	18501	M8 Stainless steel flat washer	2
HH*	18411	Stainless steel star washer	2

* Not pictured in the Installation Diagram

TOOLS LIST

Description	Qty
Standard and metric open-end or box wrenches	SET
Adjustable wrench	1
Ratchet	1
Standard and metric, regular and deep well sockets	SET
3/8” and 5/16” drill bits (very sharp)	1
Heavy-duty drill	1
Center punch	1
Hammer	1
Rubber mallet	1
Torque wrench	1
Hose cutter, razor blade, or sharp knife	1
Hoist or floor jacks	1
Safety stands	2
Safety glasses	1
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution	1

Unique Parts in Each Kit

LoadLifter 5000™ KIT 57215

Item	Part#	Description	Qty
C	58437	Air spring	2
D	11951	Roll plate (silver zinc-plated)	4
E	21837	Push-to-connect (PTC) fitting	2
I	18444	3/8” Flat washer	16
K	18427	3/8” Lock washer	8
O	17203	3/8” x 7/8” Hex-head cap screw	8
AA*	20086	Air line	1
BB*	10466	Zip tie	6
CC*	21230	Valve cap	2
GG*	21233	5/16” Hex nut	4

LoadLifter 5000™ ULTIMATE KIT 88215

Item	Part#	Description	Qty
C	58496	Air spring with internal jounce bumper	2
D	11967	Roll plate (black powder coated)	4
E	21837	Push-to-connect (PTC) fitting	2
I	18444	3/8” Flat washer	16
K	18427	3/8” Lock washer	8
O	17203	3/8” x 7/8” Hex-head cap screw	8
AA*	20086	Air line	1
BB*	10466	Zip tie	6
CC*	21230	Valve cap	2
GG*	21233	5/16” Hex nut	4

LoadLifter 5000™ ULTIMATE PLUS+ KIT 89215

Item	Part#	Description	Qty
C	58496	Air spring with internal jounce bumper	2
D	11880	Roll plate (stainless steel)	4
E	21815	AN-type fitting	2
I	18444	3/8” Flat washer	8
J	18507	3/8” Stainless steel flat washer	8
K	18504	3/8” Stainless steel lock washer	8
O	17284	3/8” x 7/8” Stainless steel hex-head cap screw	8
AA*	20987	Stainless steel braided air line	2
BB*	10466	Zip tie	12
DD*	21709	Schrader valve with cap & nut	2
II*	21813	PTC to AN adapter fitting	2
JJ*	20084	Air line assembly	1

STOP! 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.

⚠ CAUTION INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.

⚠ WARNING INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE MACHINE OR MINOR PERSONAL INJURY.

Installing the LoadLifter 5000 Series System

DANGER

COMPRESSED AIR CAN CAUSE INJURY AND DAMAGE TO THE VEHICLE AND PARTS IF IT IS NOT HANDLED PROPERLY. FOR YOUR SAFETY, DO NOT TRY TO INFLATE THE AIR SPRINGS UNTIL THEY HAVE BEEN PROPERLY SECURED TO THE VEHICLE.

GETTING STARTED

1. There must be 8” clearance between the frame and the rear tire for this kit to fit (fig. 2). Confirm clearance before proceeding.

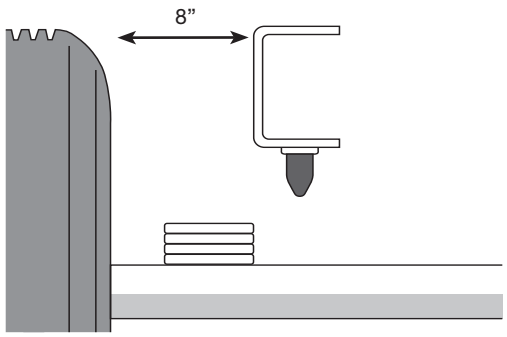


fig. 2

2. Support the vehicle with safety stands, remove the wheels and raise or lower to obtain normal ride height (figs. 2 & 3).

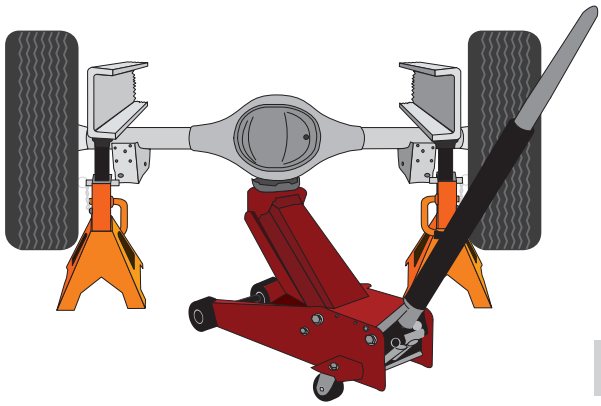


fig. 3

SPECIAL APPLICATION INSTRUCTIONS

1. **1994 and newer model Dodge 4WD pickups only**:
   It will be necessary to remove the inner fender well liner on late-model 4WD Dodge trucks. This is done by carefully driving the pin through the fasteners with a center punch (fig. 4). These fasteners will be reused along with a special spacer to reattach the liner and provide clearance for the air spring (See page 12 for reinstallation instructions).

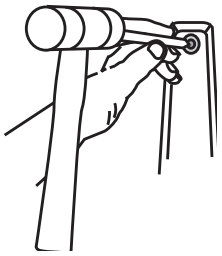


fig. 4

2. **Ford trucks only**:
   When installing the upper bracket on an F-250 or F-350, the mounting bolt holes can line up directly over the indent in the frame. This is an acceptable situation and is an approved method of installation for the product (fig. 5). Torque the mounting hardware to specifications, as noted. Do not over torque.

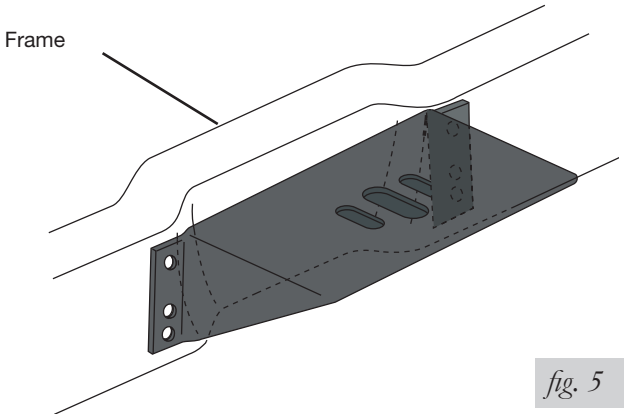


fig. 5

3. **For 1999 and later Super Duty F-250 and F-350 trucks**:
   Remove the bolt that holds the emergency brake cable to the outside of the frame rail. Reinstall the bolt in the reverse order, with the nut on the inside of the frame rail, to prevent rubbing against the air spring (fig. 6).

⚠ CAUTION

FAILURE TO SWITCH THIS BOLT WILL CAUSE AIR SPRING TO RUPTURE.

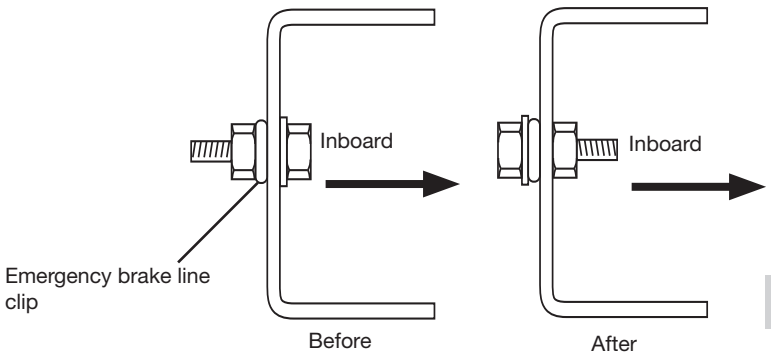


fig. 6

ASSEMBLING THE AIR SPRING

See fig. 7 below for assembly.

1. Set a roll plate (D) on both ends of the air spring (C). The radiused (rounded) edge of the roll plate will be toward the air spring so that the air spring is seated in both roll plates.
2. Install a 90-degree swivel air fitting. It should only be finger tight plus 1 1/2 turns. Do not overtighten.
3. Place the upper bracket (A) onto the top of the air spring and roll plate with the legs facing down.
4. Set the air spring on the lower bracket (B) aligning the two holes in the base of the air spring with the two outer slots in the top of the lower bracket.
5. Loosely attach the upper bracket to the assembly using flat washers (I), lock washers (K), and hex-head screws (O). Remember that the bracket legs face down.
6. Loosely attach the lower bracket to the assembly using flat washers, lock washers, and hex-head bolts.

NOTE *The flange on the bracket must face the outside (tire side) of the vehicle.*

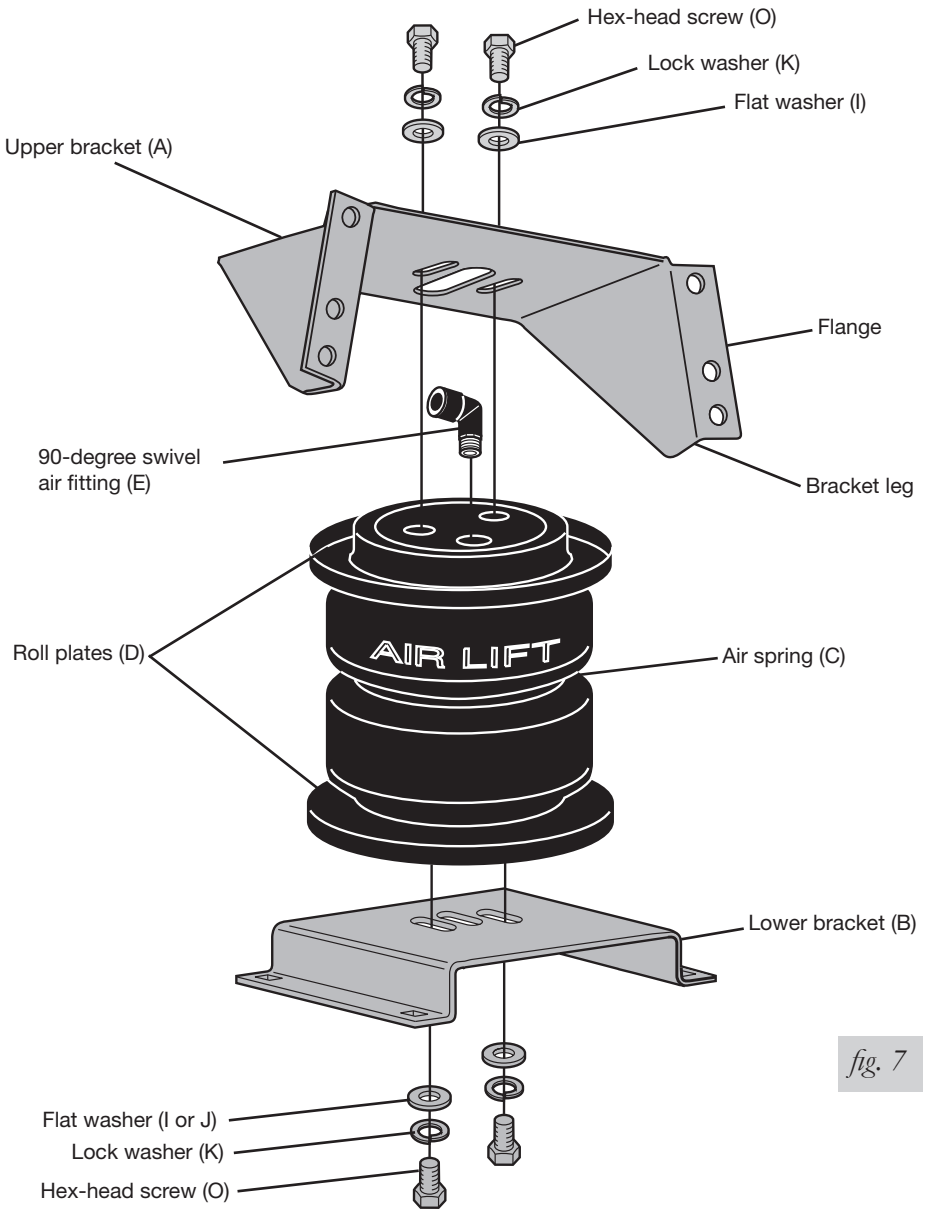


fig. 7

POSITIONING THE BRACKETS

1. The air spring must be installed between 5” and 7” from both the upper bracket to the lower bracket (fig. 8). It is best to position the upper bracket as high as possible.

NOTE

Failure to mount the air spring at the recommended height can result in the air spring bottoming out.

The top rear mounting hole may be above the frame rail. If this condition exists, use the two lower mounting holes to mount the bracket.

2. Set the air spring assembly on the leaf spring over the axle (fig. 8).
3. Position the upper bracket so that at least four bolt holes (two on each side) will be on the flat section of the frame rail. Keep the edge of drilled holes no closer than 3/4” from the top or bottom radius of the frame rail.
4. In some cases, it may be necessary to use the optional spacers (P) to achieve the 5”-7” space. For example, if only the top two holes contact above the lower radius edge of the frame rail, it may be necessary to move up the spacers under the lower bracket to achieve mounting height.

NOTE

If the lower bracket needs to set flat on the leaf spring in order to achieve the correct height and the stock U-bolts are too high to allow this, it will be necessary to trim the stock U-bolts.

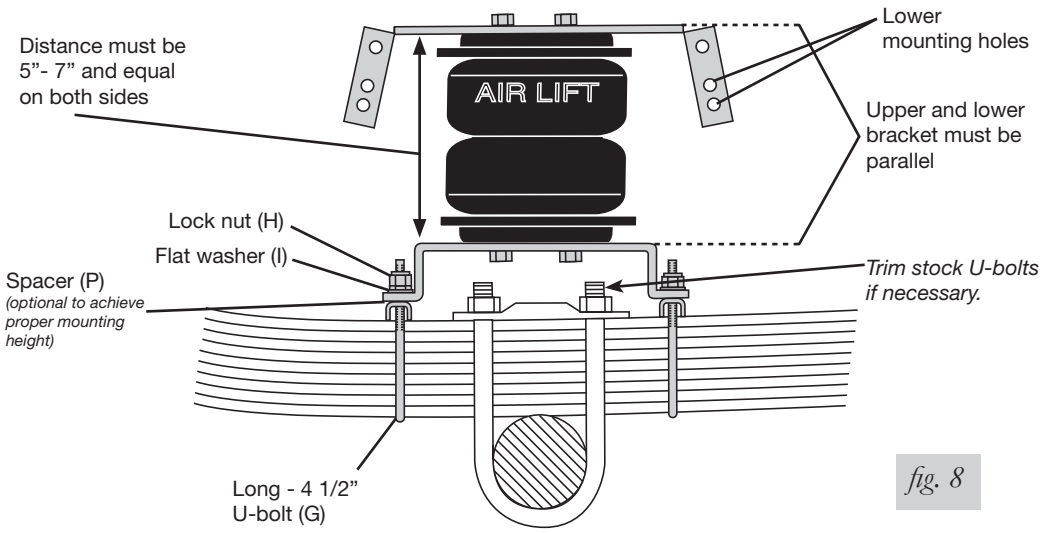


fig. 8

ATTACHING THE LOWER BRACKET

1. If the spacer is not used, attach the lower bracket securely using the provided U-bolts, flat washers, and lock nuts. Torque nuts to 16 lb.-ft. (22Nm).
2. If the spacer is used, place the spacers legs down on the leaf spring and attach the lower bracket securely using the provided U-bolts, flat washers, and lock nuts. Torque nuts to 16 lb.-ft. (22Nm) (fig. 9).

NOTE

Use shorter 2” U-bolts (F) when attaching to frame contact overload springs (fig. 9).

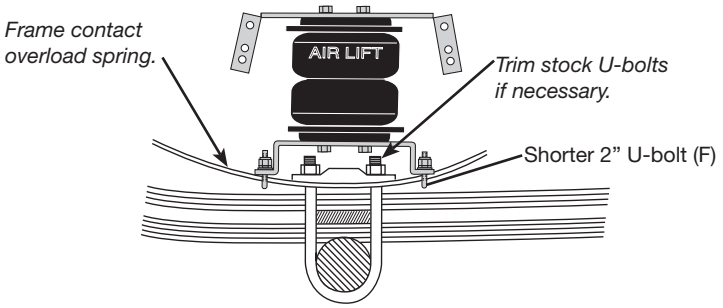


fig. 9

ATTACHING THE UPPER BRACKET

⚠ CAUTION

BEFORE DRILLING, CHECK THE BACK-SIDE OF THE FRAME FOR CLEARANCE ISSUES WITH THE BRAKE LINES, GAS LINES, AND ELECTRICAL LINES. ANY OBSTACLES WILL NEED TO BE TEMPORARILY RELOCATED TO CLEAR THE AREA.

1. Position the upper bracket so that it is parallel with the lower bracket and align the assembly vertically and horizontally.
2. Using the upper bracket as a template, center punch and drill one 3/8” locator hole through the frame at one of the top bolt holes (fig. 10).

NOTE *After achieving the proper alignment, repeat for the opposite side of the bracket.*

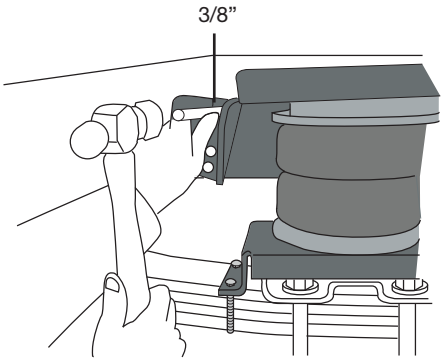


fig. 10

3. Except for Dodge vehicles, loosely install a washer-head frame bolt, oversized flat washer, and lock nut (fig. 11).

   For Dodge trucks with Ditch: The top two, or the bottom two, holes (depending on the model of the truck) will fall into a horizontal indentation. Spacers are provided to compensate for the indentation. Loosely install a washer-head frame bolt (N), two upper bracket spacers (L), an oversized flat washer (S), and a lock nut (H) for such instances (fig. 12).

All models, except some late model Dodge trucks

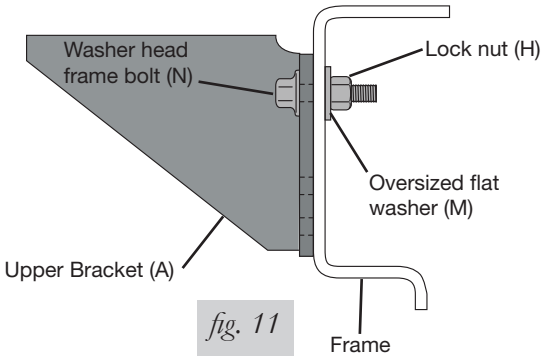


fig. 11

Dodge trucks with Ditch

(Ditch can be on top or bottom portion of the frame, depending on vehicle model)

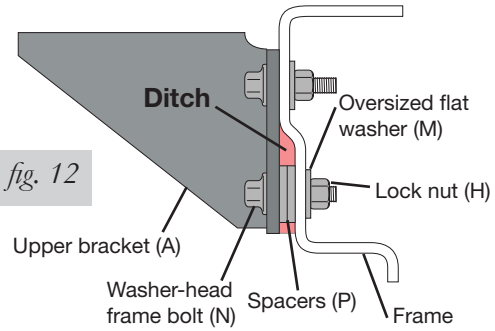


fig. 12

4. Drill the remaining two holes. Install the appropriate hardware and torque the nuts to 44 lb.-ft. (60Nm).
5. Align the air spring uniformly between the upper and lower brackets and check the air spring alignment (fig. 13).

Move the air spring in the slots of the upper and lower brackets to align. Make sure there is at least a thumb’s width of clearance between the uninflated bag and the frame.

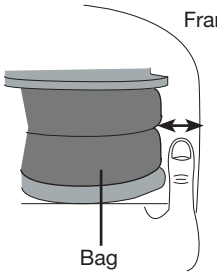


fig. 13

SECURING THE AIR SPRING TO THE BRACKETS

1. Secure the air spring to the upper and lower brackets using an open ended 9/16” wrench by tightening the two bolts on the top and the two bolts on the bottom of the air spring assembly.

⚠ CAUTION

DUE TO THE THICKNESS OF THE LEAF SPRING STACK, TRIM ALL FOUR U-BOLT ENDS ON EACH SIDE OF THE VEHICLE TO PREVENT BOTTOMING OUT ON THE UPPER BRACKET (FIG. 14).

2. Check bolts and connectors to ensure that all hardware is secure and repeat the process for the other side of the vehicle (fig. 14).

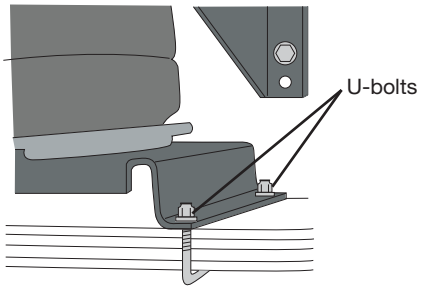
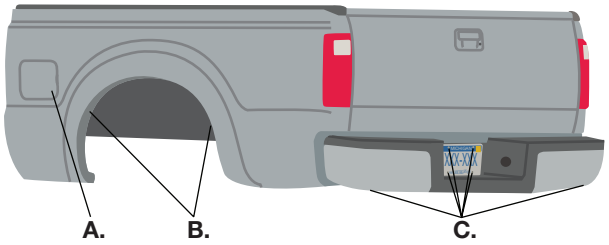


fig. 14

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. 15).



A. Inside fuel tank filler door

B. Inside rear wheel wells

C. License plate or rear bumper area*

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

fig. 15

⚠ CAUTION

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

INSTALLING NYLON AIR LINES

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (fig. 16). Do not use scissors or wire cutters.

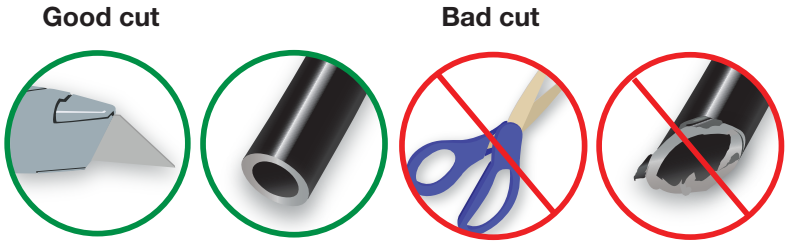


fig. 16

2. Use zip ties to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. The minimum bend radius for the air line is 1" (25mm). Leave at least 2" (50mm) of slack in the air line to allow for any movement that might pull on the air line.
3. Install the Schrader valve in the chosen location (fig. 17).

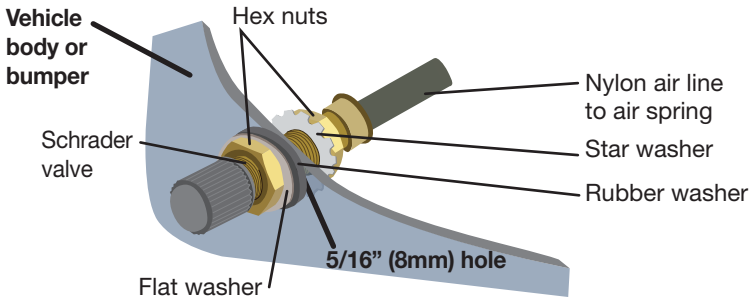


fig. 17

INSTALLING BRAIDED STAINLESS STEEL AIR LINES

⚠ CAUTION

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

1. Use zip ties to secure the air line to fixed points along the chassis every 6" to 8". Leave at least 2" 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** (figs. 18 or 19). 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.

Air Line Setup Without Compressor System

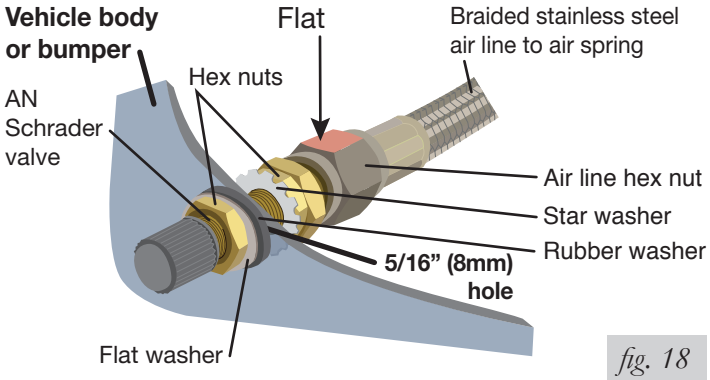


fig. 18

Air Line Setup for Compressor Integration

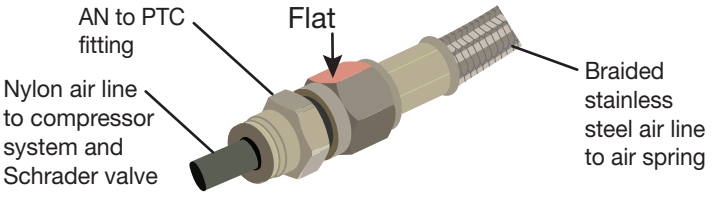


fig. 19

Reinstalling the Fender Well Liner — Late Model 4WD DODGE ONLY

1. If this installation was on a late-model 4WD Dodge truck, reinstall the inner fender well liner using the original fasteners and provided spacers to allow for air spring clearance (fig. 20).

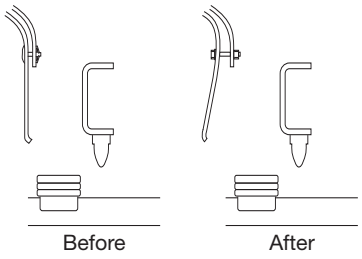


fig. 20

2. Place the spacer between the fender well liner and the fender well at the center hole in the fender well liner (the hole nearest the air spring). Attach using the 1/4" hex-head cap screw (Q), the 10/32" flat washers (S), and 1/4" nylon lock nut (T) provided (fig. 21).

NOTE

Fasten the 1/4" hex-head cap screw with the washer and nut behind the fender well (fig. 21). Tighten securely.

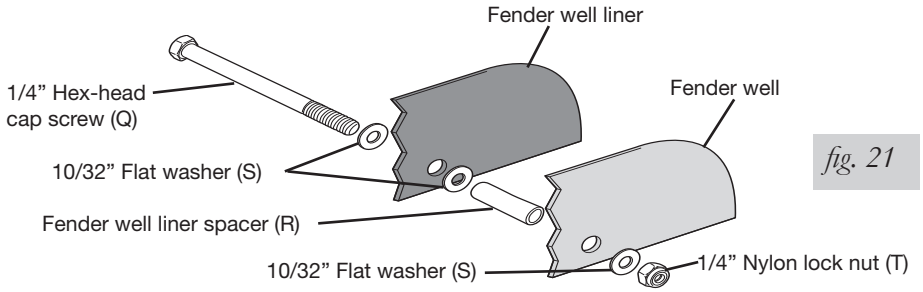


fig. 21

3. Replace the remaining fender well liner rivets carefully. Push the rivets through the fender well liner by hand. They should push through completely (fig. 22).
4. From the opposite side, use a rubber mallet and carefully tap the rivet posts back into the rivets in order to secure them properly (fig. 23). Repeat this process for all remaining rivets.

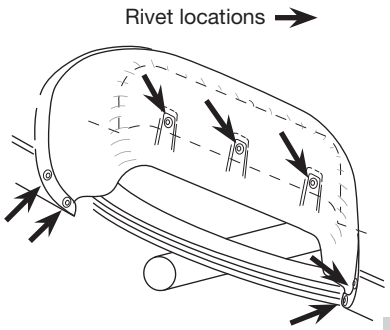


fig. 22

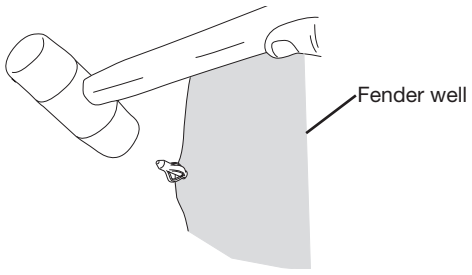


fig. 23

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** — 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.

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

⚠ CAUTION

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**.

For additional warranty information contact Air Lift Company customer service.

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

Need Help?

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

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

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