

LoadLIFTER 5000°

Installation Guide



2015-current Ford F-150

Kits 57268 | 88268 57284 | 88284 | 89284

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

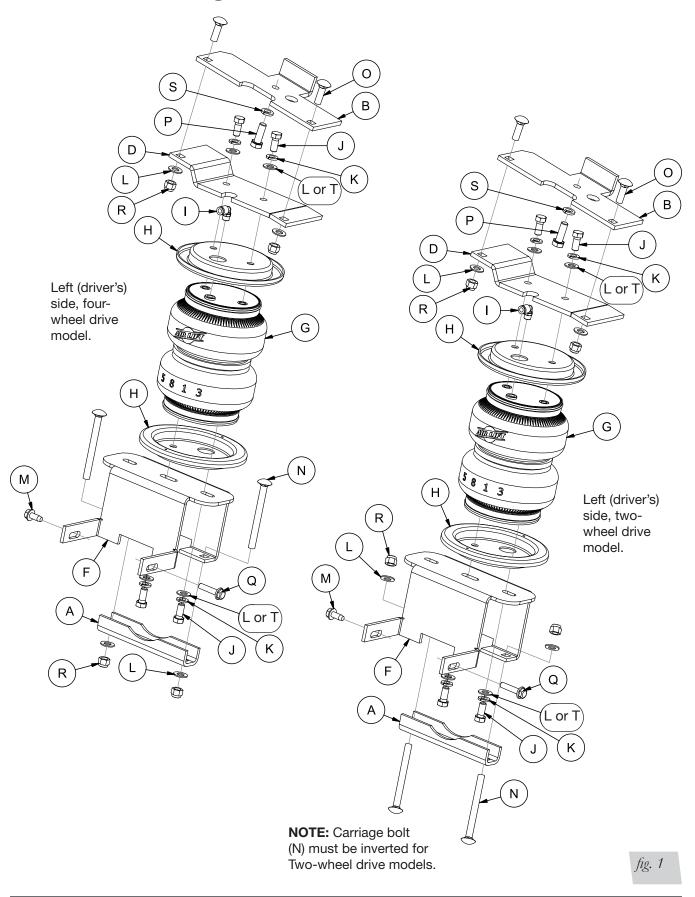
- 52300 Braided stainless steel air line and fittings.
- 52301 Stainless steel roll plates, air spring mounting hardware, braided stainless steel air lines and fittings.

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Installation Diagrams





Hardware and Tools Lists

Common Parts Included in All 3 Kits

	m	Part#	Description	
	A	01531	Clamp bar	
	В	07181	Left frame bracket	
) *	07274	Right frame bracket	1
	D	07179	Left air spring upper bracket	1
E	=*	07280	Right air spring upper bracket	1
F	1	03023	Lower bracket (2WD) (57268, 88268)	2
F	2	03024	Lower bracket (4WD) (57284, 88284, 89284)	
	M	17102	5/16"-18 x 3/4" Self-tapping screw	2
	N	17168	3/8"-16 x 5" Carriage bolt	4
	0	17361	3/8"-16 x 1 1/4" Carriage bolt	
	Ρ	17409	M10-1.50 x 30 Hex-cap screw	2
	Q	17469	M8-1.25 x 25 Flange bolt	3
	R	18435	3/8"-16 Nylon lock nut	8
	S	18540	M10 Lock washer	
DE)*	18501	M8 stainless steel flat washer	2
E	= *	21234	Rubber washer	2
FF	=*	18411	Stainless steel star washer	2

^{*} not pictured in the Installation Diagrams

TOOLS LIST

DescriptionQty
Standard and metric open-end or box wrenches
Ratchet1
Standard and Metric, regular and deep-well socketsSET
5/16" drill bit (very sharp)1
Heavy-duty drill1
Torque wrench1
Standard and metric hex-key wrenches
Hose cutter, razor blade, or sharp knife
Hoist or floor jacks1
Safety stands2
Safety glasses
Air compressor or compressed air source
Spray bottle with dish soap/water solution

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

Unique Parts in Each Kit

Load**Lifter 5000**°

KIT 57268 KIT 57284

Item G H I J K L AA* BB* CC*	Part# 58439 11951 21848 17203 18427 18444 20086 10466 21230	Description Qty Air spring 2 Roll plate (silver zinc plated) 4 Push-to-connect (PTC) fitting 2 3/8"-24 x 7/8" Hex-head bolt 8 3/8" Lock washer 8 3/8" Flat washer 16 Air line 1 Zip tie 6 Valve cap 2
		·

Load**Lifter 5000**

ULTIMATE

KIT 88268 KIT 88284

Item	Part#	DescriptionQty
G	58494	Air spring with jounce bumper2
Н	11967	Roll plate (black powder coated)4
- 1	21848	Push-to-connect (PTC) fitting2
J	17203	3/8"-24 x 7/8" Hex-head bolt8
K	18427	3/8" Lock washer8
L	18444	3/8" Flat washer16
AA*	20086	Air line1
BB*	10466	Zip tie6
CC*	21230	Valve cap2
GG*	21233	5/16" Hex nut

Load Lifter 5000

ULTIMATE PLUS+

KIT 89284

Item G H I J K	Part# 58494 11880 21815 17284 18504	DescriptionQtyAir spring with jounce bumper2Roll plate (stainless steel)4AN-type fitting23/8"-24 x 7/8" Stainless steel hex-head bolt83/8" Stainless steel lock washer8
ï	21815	AN-type fitting2
		3/8" Stainless steel lock washer 8
L	18444 18507	3/8" Flat washer
AA* BB*	20987 10466	Stainless steel braided air line
HH*	21709 21813	Fill valve with cap & nut
JJ*	20084	Air line assembly 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, 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.

INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.

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

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





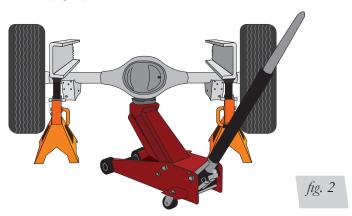




Installing the LoadLifter 5000 Series System

GETTING STARTED

1. Lift the vehicle and support the frame with safety stands. Leave enough room to drop the axle down low enough to install the air spring assemblies into position between the axle and the frame (Fig. 2).



2. Remove the jounce bumpers and cups (Fig. 3). Figure 4 shows the left (driver's) side frame with the jounce bumper removed.

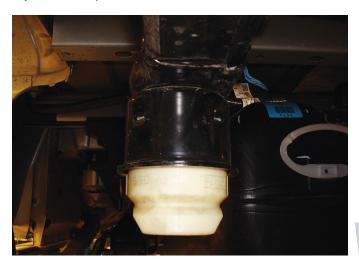


fig. 3

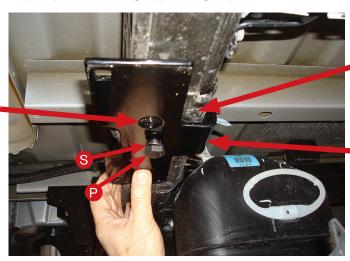


fig. 4



3. Install the left (driver's) side frame bracket (B) onto the frame, ensuring that the flange is on the inside of the frame. The large hole under the bracket will be behind the axle as shown (Fig. 5). Attach with the M10 hex cap screw (P) and lock washer (S), making sure that the bracket is parallel to the ridge that is under the frame rail. Torque to 35 lb.-ft. (47Nm). Repeat for the right (passenger's) side.

The large hole in the upper bracket will be behind the axle.



The frame has a ridge; the bracket must be parallel to this ridge.

The flange on the bracket must be inboard of the frame.

fig. 5

4. In order to install the lower brackets, remove the stock M8 hardware holding the brake/ABS and emergency brake line brackets to the spring perches (Figs. 6 & 7) and pull the brackets slightly away from the spring perch.



fig. 6



Emergency brake cable forward of passenger's side

fig. 7



5. On the front of the driver's side spring perch there is a hole and a slot (Fig. 8). In order to mount the lower bracket, it will be necessary to tap the hole using the 5/16" self-tapping screw (M) by starting the bolt making sure it is perpendicular to the perch. Use a ratchet and socket to drive the bolt in, creating the threads in the spring perch (Fig. 9). Remove the bolt for later use.

NOTE

If this truck does not have an emergency brake cable bracket and mounting bolt on the right (passenger's) side as noted (has an open hole as noted on driver's side) Follow step 5 for this side by self-tapping the hole.



It will be necessary to tap the round hole in the forward driver's side spring perch. If there is no emergency brake cable bracket and mounting bolt as specified in Fig. 7 on the passenger's side, repeat and tap the round hole as instructed.





fig. 9

6. Set the lower bracket (F1 or F2) on the axle, making sure the tabs wrap around the spring perch (Fig. 10). Repeat for the other side.



Note: Four-wheel drive installation shown.

fig. 10



7. Index the brake line/ABS bracket alignment tabs through the lower bracket on the back of the spring perch, and reattach using the M8 flange bolt (Q) provided (Fig. 11). Also, attach the emergency brake line bracket on the front of the passenger's side spring perch in the same manner. Finish by installing the 5/16" bolt previously used to tap the forward spring perch hole and LEAVE ALL HARDWARE LOOSE AT THIS TIME.



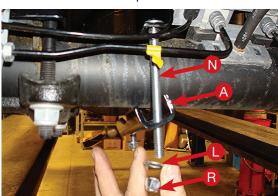
fig. 11

8. For the **4WD models**, insert the long 3/8" carriage bolts (N) through the lower bracket (Fig. 12).

NOTE

Due to the tight clearance for the U-bolt to be positioned into place, it may be necessary to "rotate" or "screw" the carriage bolt into the square hole in the bracket.

9. Slide the clamp bar (A) over the carriage bolts and cap with a 3/8" flat washer (L) and nylon lock nut (R) (Fig. 12). Snug the nylon lock nuts evenly until the clamp bar just makes contact with the axle. Do not torque at this time.

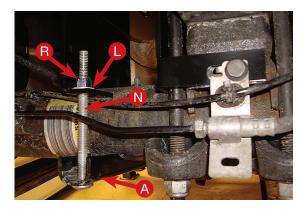


Note:

Four-wheel drive installation shown.

fig. 12

10. For the **2WD models,** it will be necessary to invert the carriage bolt (install it upside down) (Fig. 13).



Note:

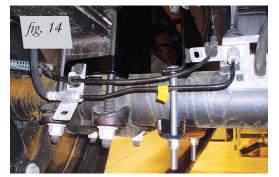
Two-wheel drive installation shown.

fig. 13



11. Once the clamp bar is snug to the axle, torque all the spring perch hardware to 20 lb.-ft. (27Nm) Then torque the axle clamp hardware to 15 lb.-ft. (20Nm). Figures 14-17 (four-wheel drive) and 18-21 (two-wheel drive) show the lower bracket once it has been mounted to the axle.

Four-wheel drive models with lower bracket installed:







Passenger's side rear view



Driver's side front view



Passenger's side front view

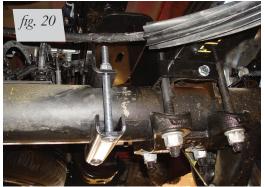
Two-wheel drive models with lower bracket installed:



Driver's side rear view



Passenger's side rear view



Driver's side front view



Passenger's side front view

fig. 22



ASSEMBLING THE AIR SPRING ASSEMBLIES

1. Set a roll plate (H) over the air spring (G).

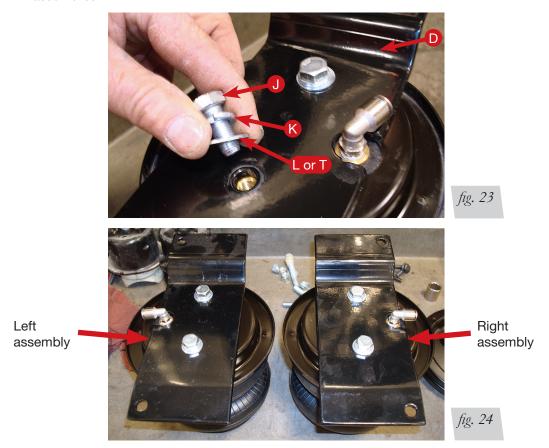
NOTE

The radiused (rounded) edge of the roll plate (H) will be toward the air spring, so that the air spring is seated inside both roll plates.

2. Install the swivel fitting (I) into the top of the air spring finger-tight plus one-and-a-half turns (Fig. 22). Repeat for both air springs.



3. Set the upper left air spring bracket (D) onto the air spring so that the slot is on the fitting side (it will only bolt on one way) and attach with two 3/8" screws (J), two lock washers (K) and two flat washers (L or T) (Fig. 23). Torque the mounting hardware to no more than 20 lb.-ft. (27Nm). Repeat for the opposite side. Figure 24 shows the left and right assemblies.





INSTALLING THE AIR SPRING ASSEMBLIES

1. With the axle dropped low enough to put the assemblies into position, set the left and right assemblies on the previously installed lower brackets, making sure that the fittings are on the outside of the frame as shown. Lift and attach the air spring upper bracket to the frame bracket using two 3/8" carriage bolts (O), two flat washers (L) and two nylon lock nuts (R) (Figs. 25 & 26). Torque hardware to 20 lb.-ft. (27Nm). Repeat for the opposite side.



Driver's side (left) assembly shown.

NOTE: Fitting goes on the outside of the frame.

fig. 25



fig. 26

2. Set a roll plate in between the air spring and the lower bracket. Align the holes in the lower bracket and roll plate to the threaded inserts in the air spring (Fig. 27).

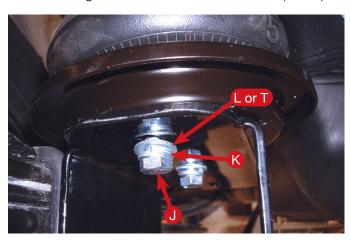


Slide the roll plate between the lower bracket and air spring while aligning the holes in all three.

fig. 27



- 3. Raise the suspension back up just enough so that the air spring comes in contact with the roll plate and the lower bracket. Align the holes again and attach the lower air spring to the lower bracket using two 3/8" hex-head bolts (J), two lock washers (K) and two flat washers (L or T) (Fig. 28). Repeat for the opposite side.
- 4. Raise the axle all the way up and adjust the air spring by pushing it forward in the slot. Make sure it is aligned so that it is perpendicular to the upper and lower bracket. Torque the lower mounting bolts to no more than 20 lb.-ft. (27Nm).



Align the holes in the lower bracket and roll plate to the threaded insert in the air spring and attach with (L or T), (K) and (J).

fig. 28

- 5. Remove the jack stands.
- 6. Figures 29, 30 & 31 show the finished installation of both left and right assemblies (four-wheel models shown).



Back view of left-side mounted assembly

fig. 29



Front view of left-side mounted assembly

fig. 30





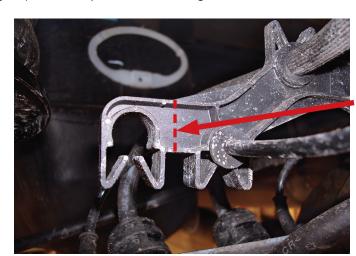
Inside view of right-side mounted assembly

fig. 31

FINISHING THE INSTALLATION

For 2WD models it will be necessary to trim the brake/ABS line holder that is closest to the axle so that it does not chafe on the driver's side air spring.

1. Trim the outboard open slot on the plastic line holder off using a hack saw or side cutters (Fig. 32). Finished photo shown in Figure 33.



Trim brake/ ABS line holder off here.

fig. 32

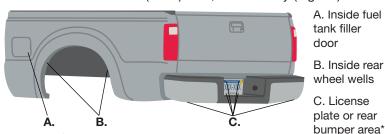


fig. 33



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. 34).



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

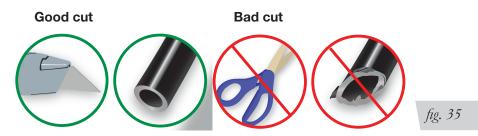
fig. 34



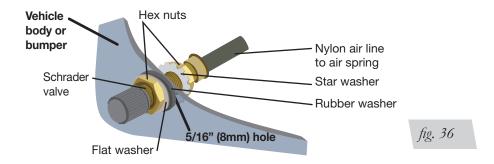
KEEP AT LEAST 6" (150MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

INSTALLING NYLON AIR LINES

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 35). Do not use scissors or wire cutters.



- 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. 36).





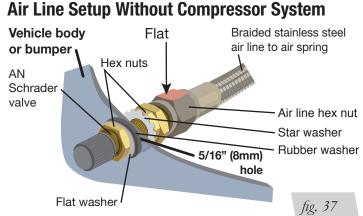
CAUTION

INSTALLING BRAIDED STAINLESS STEEL AIR LINES

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

- Use zip ties to secure the air line to fixed points along the chassis every 6" to 8" (150-200mm). Leave at least 2" (50mm) of slack to allow for any movement that might pull on the air line.
- 2. Tighten the air line hex nut finger tight, then use 2 wrenches to turn 1 additional flat (1/6 of one full turn). Do not overtighten (Figs. 37 or 38). 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 syster area where it will not be susceptible to damage.

 The braided stainless steel air line cannot be trimmed.



easiest way to tighten the Air Line Setup for Compressor Integration

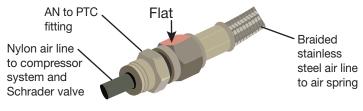
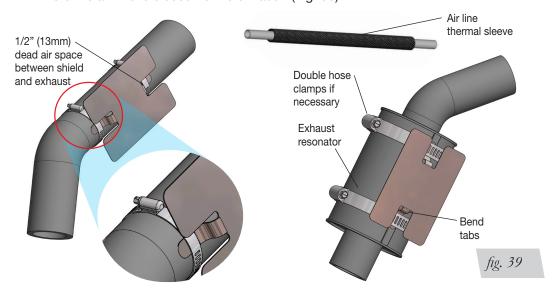


fig. 38

INSTALLING THE HEAT SHIELD

1. Attach the metal heat shield to the exhaust where it is closest to the passenger's (right) side air spring. Slide the air line thermal sleeve over the air line and position it where the air line is closest to the exhaust. (Fig. 39).





Maintenance and Use Guidelines

Minimum Recommended Pressure

Maximum Air Pressure

5 PSI (.34BAR)

100 PSI (7BAR)

- 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.

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.

INSTALLATION CHECKLIST

Clearance test — Inflate the air springs to 75-90 PSI (4.8-6.2BAR) 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 75-90 PSI (4.8-6.2BAR) 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" (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 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.



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 Authorized 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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