

# LoadLifter 5000

**Installation Guide** 

SERIES



2015-current Ford F-150 Kits 57268 | 88268

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 or LoadLifter 5000 Ultimate. The kits are easily identifiable by looking at the roll plates.

- $\square$  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 Ultimate black powder-coated roll plate



LoadLifter 5000 nylon air line



LoadLifter 5000 Ultimate nylon air line

## **TABLE OF CONTENTS**

Installation Diagram	2
Hardware and Tools Lists	3
Introduction	
Installing the LoadLifter 5000 Series System	
Assembling the Air Spring Assemblies	10 11
Installing the Air Lines	14
Installing the Heat Shield	
Before Operating	16
Limited Warranty and Return Policy	17



## **Installation Diagram**

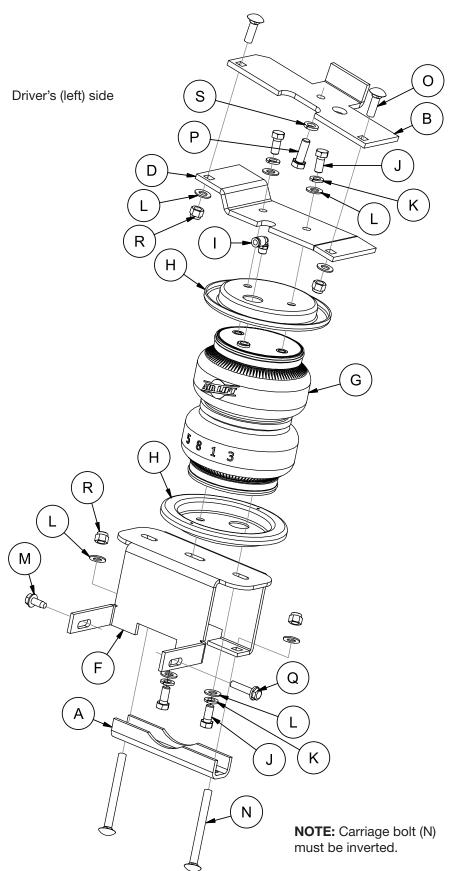


fig. 1



## **Hardware and Tools Lists**

### **Common Parts Included in Both Kits**

Item	Part#	DescriptionQty	
Α	01531	Clamp bar2	
В	07181	Left frame bracket1	
C*	07274	Right frame bracket	
D	07179	Left air spring upper bracket1	1
E*	07280	Right air spring upper bracket	
F	03023	Lower bracket (2WD) (57268, 88268)	2
M	17102	5/16"-18 x 3/4" Self-tapping screw	
N	17168	3/8"-16 x 5" Carriage bolt	1
0	17361	3/8"-16 x 1 1/4" Carriage bolt	
Р	17409	M10-1.50 x 30 Hex-cap screw2	2
Q	17469	M8-1.25 x 25 Flange bolt	
R	18435	3/8"-16 Nylon lock nut	
S	18540	M10 Lock washer2	
DD*	18501	M8 stainless steel flat washer	2
EE*	21234	Rubber washer2	2
FF*	18411	Stainless steel star washer	2

<sup>\*</sup> not pictured in the Installation Diagram

#### **TOOLS LIST**

B	01
Description	
Standard and metric open-end or box wrenches	s SET
Ratchet	1
Standard and Metric, regular and deep-well socket	
5/16" drill bit (very sharp)	1
Heavy-duty drill	
Torque wrench	
Standard and metric hex-key wrenches	
Hose cutter, razor blade, or sharp knife	1
Hoist or floor jacks	1
Safety stands	
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**

## LoadLifter 5000 KIT 57268

Item G H I J K L AA* BB* CC*	Part# 58439 11951 21837 17203 18427 18444 20086 10466 21230 21233	Description         Qty           Air spring         2           Roll plate (silver zinc plated)         4           Elbow fitting, 1/8" MNPT x 1/4" PTC         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           5/16" Hex put         4
GG*	21233	5/16" Hex nut

## LoadLifter 5000

#### ULTIMATE

## **KIT 88268**

Item G H I J K L AA* BB* CC*	Part# 58494 11967 21837 17203 18427 18444 20086 10466 21230	Description         Qty           Air spring with jounce bumper         2           Roll plate (black powder coated)         4           Elbow fitting, 1/8" MNPT x 1/4" PTC         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
		Zip tie

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.

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.





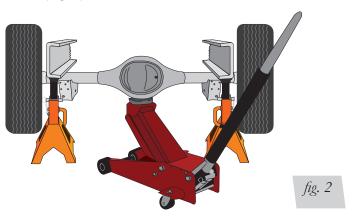




## **Installing the LoadLifter 5000 Series System**

## **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 driver's (left) side frame with the jounce bumper removed.



fig. 3



fig. 4



3. Install the driver's (left) 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 passenger's (right) 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.

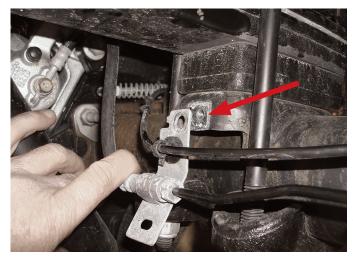


fig. 6



Emergency brake cable forward of passenger's (right) side

fig. 7



5. On the front of the driver's (left) 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 passenger's (right) side as noted (has an open hole as noted on driver's [left] 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 (F) 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 (right) 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. Insert the long 3/8" carriage bolts (N) through the lower bracket and invert the carriage bolt (install it upside down) (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.

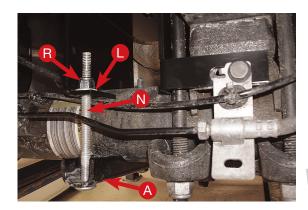


fig. 12



10. 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 13-16 show the lower bracket once it has been mounted to the axle.



Driver's (left) side rear view



Passenger's (right) side rear view



Driver's (left) side front view



Passenger's (right) side front view



#### ASSEMBLING THE AIR SPRING ASSEMBLIES

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

**NOTE** 

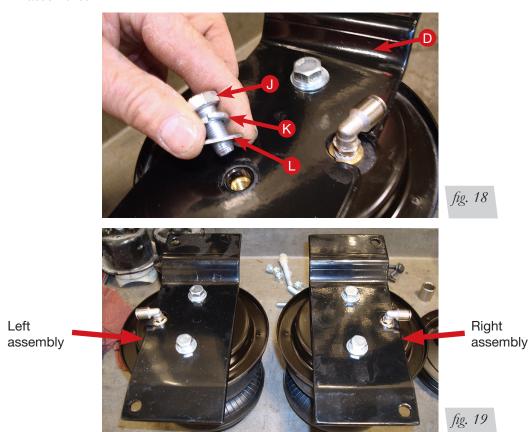
The radiused (rounded) edge of the roll plate (H) will be toward the air spring so that the air spring is seated inside both roll plates.

2. Install the swivel fitting (I) into the top of the air spring finger-tight plus one-and-a-half turns (Fig. 17). Repeat for both air springs.



fig. 17

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) (Fig. 18). Torque the mounting hardware to no more than 20 lb.-ft. (27Nm). Repeat for the opposite side. Figure 19 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. 20 & 21). Torque hardware to 20 lb.-ft. (27Nm). Repeat for the opposite side.



Driver's (left) side assembly shown.

**NOTE:** Fitting goes on the outside of the frame.

fig. 20

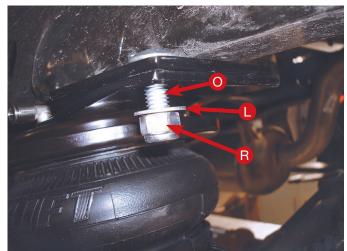


fig. 21

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. 22).

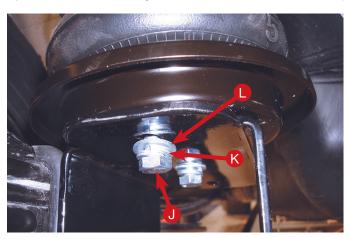


Slide the roll plate between the lower bracket and air spring while aligning the holes in all three.

fig. 22



- 3. Raise the suspension back up just enough so 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) (Fig. 23). 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 brackets. 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), (K) and (J).

fig. 23

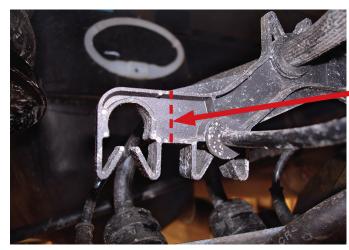
5. Remove the safety stands.



### FINISHING THE INSTALLATION

Trim the brake/ABS line holder that is closest to the axle so that it does not chafe on the driver's (left) side air spring.

1. Trim the outboard open slot on the plastic line holder off using a hack saw or side cutters (Fig. 24). Finished photo shown in Figure 25.



Trim brake/ ABS line holder off here.





fig. 25



## **Installing the Air Lines**

Choose the locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (Fig. 26).

Cut the air line in half.
 Make clean, square cuts with a razor blade or hose cutter (Fig. 27). Do not use scissors or wire cutters.

A. B. C. Liganes plate or

A. Inside fuel tank filler door B. Inside rear wheel wells

C. License plate or rear bumper area

fig. 26



KEEP AT LEAST 6" (152MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

- 2. Use zip ties to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. Leave at least 2" (51mm) of slack in the air line to allow for any movement that might pull on the air line. The minimum bend radius for the air line is 1" (25mm).
- 3. Install the Schrader valve in the chosen location (Fig. 28).



fig. 27

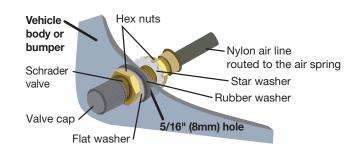
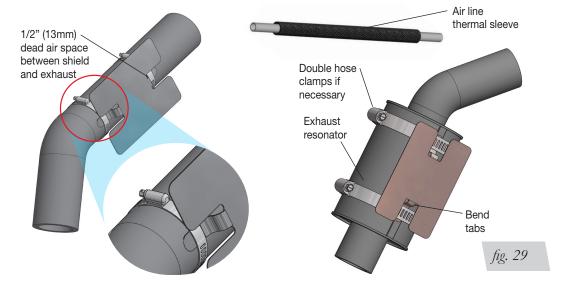


fig. 28



## **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. 29).





## **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 initial 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.







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, 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/



Thank you for purchasing Air Lift Products!

## 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 +1 (517) 322-2144.



Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or P.O. Box 80167 • Lansing, MI 48908-0167