## Load**Lifter 5000**°°

# Kit 57213 *Ford Transit*

*(Single Rear Wheel) 2-Wheel Drive* 



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.

# TABLE OF CONTENTS

Installation Diagram. Hardware List Tools List	<b>2</b> 3 3
Introduction Important Safety Notice Notation Explanation	<b>4</b> 4
Installing the LoadLifter 5000 System	<b>5</b> 7 9 11
Installing the Air Lines	<b>12</b> 13 14
Installing the Air Lines Installing the Heat Shield. Photos of Finished Assemblies. Before Operating Installation Checklist	<b>12</b> 13 14 <b>15</b> 15
Installing the Air Lines Installing the Heat Shield. Photos of Finished Assemblies. Before Operating Installation Checklist Maintenance and Use Guidelines Minimum and Maximum Pressure.	<b>12</b> 13 14 <b>15</b> 15 15

0



ARLEI



### **Hardware and Tools Lists**

#### HARDWARE LIST

Item	Part #	DescriptionQty	Item	Part #	DescriptionQty
А	01531	Clamp bar2	Μ	17133	3/8"-16 x 6" Carriage bolt4
В	07954	Frame bracket2	Ν	17361	3/8"-16 x 1 1/4" Carriage bolt4
С	07956	Air spring bracket2	0	17366	M10-150 x 35 Button-head screw2
D	03906	Lower bracket2	Р	18435	3/8" Nylon lock nut8
Е	58437	Air spring2	AA*	20086	Air line assembly1
F	11951	Roll plate4	BB*	10466	Zip tie6
G	21848	90 degree swivel fitting2	CC*	21230	Valve cap2
Н	17215	3/8"-24 x 7/8" flat-head screw4	DD*	18501	5/16" flat washer2
I	17203	3/8"-24 x 7/8" hex cap screw4	EE*	21234	Rubber washer2
J	18427	3/8" lock washer4	FF*	18401	Star washer2
К	18444	3/8" flat washer12	GG*	21233	5/16" hex nut4
L	10778	P clamp2	*Not sh	own in fig.	1.



STOP! Missing or damaged parts? Call Air Lift customer service at (800) 248-0892 for a replacement part.

#### **TOOLS LIST**

Description	Qty
Hoist or floor jacks	1
Safety stands	2
Safety glasses	1
Torque wrench	1
Standard open-end combo wrenches	SET
Medium size adjustable wrench	1
Ratchet	1
Metric and standard sockets	SET

Description	Qty
6mm hex wrench (socket if available)	1
7/32" hex wrench (socket if available)	1
5/16" drill bit (very sharp)	1
Heavy duty drill	1
Hose cutter, razor blade, or sharp knife	1
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution	1

### Introduction

AIRLIE

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.

#### **IMPORTANT SAFETY NOTICE**

The installation of this kit does not alter the gross vehicle weight rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

**Gross vehicle weight rating:** The maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

**Payload:** The combined, maximum allowable weight of cargo and passengers that the truck is designed to carry. Payload is GVWR minus the base curb weight.

#### 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.

 NOTE
 Indicates a procedure, practice or hint which is important to highlight.



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

#### **GETTING STARTED**

#### 🛕 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.

1. Raise the vehicle and support it, using safety stands or equivalent, so that the axle can be safely dropped away from the frame (Fig. 2). This will need to be done in order for the air spring assembly to be positioned between the axle and frame.



2. Unbolt and remove the stock jounce bumpers from under the frame rails on both sides (Figs. 3 & 4). This is a necessary step to install the kit.



3. Insert two 3/8"-16 x 1 1/4" carriage bolts (N) through the frame bracket (B). The heads of the bolts should be on the flange side of the bracket (Fig. 5).



4. Install the upper frame bracket assembly onto the frame using the M10-150 x 35 button head screw (O) making sure the flange on the bracket is on the inside of the frame rail and pointing up (Figs. 6 & 7). Push the flange on the bracket up against the frame and torque screw to 30 lb.-ft. (41Nm)



AIRLIEI



1. Set a roll plate (F) over the top of the air spring (E) (Fig. 8).

**NOTE** The radius (rounded) edge of the roll plate (F) will be towards the air spring, so that the air spring is seated inside both roll plates.

2. Install the 90 degrees swivel fitting (G) into the top of the air spring, finger-tight plus 1 1/2 turns.



3. Set the air spring bracket (C) over the air spring and roll plate and attach with the 3/8"-24 x 7/8" flat-head screws (H) (Fig. 9). Torque to no more than 20 lb.-ft. (27Nm). Repeat for the other air spring.



fig. 9

ALLEI

4. Insert two 3/8"-13 x 6" carriage bolts (M) through the lower bracket (Fig. 10). Assemble the lower bracket onto the air spring assembly so the carriage bolts are on the opposite side of the fittings (Fig. 11). Leave them loose at this time. Attach the lower bracket to the air spring assembly with two 3/8"-24 x 7/8" hex cap screws (I), two 3/8" lock washers (J) and two 3/8" flat washers (K) (Fig. 12). Leave them loose at this time.



fig. 10



Attach the lower brackets so the carriage bolts are opposite of the fitting on the air spring assembly.



ARLEI



- 1. If not already done, lower the axle enough for clearance to install the assemblies into position.
- 2. Set the driver's (left) and passenger's (right) side assemblies into position making sure that the long carriage bolt in the rear of the lower bracket, fits between the brake/ABS lines and the axle (Fig. 13).

The lower bracket will be nested over the jounce bumper strike plate.



Driver's (left) side shown: set one of the assemblies into position making sure that the carriage bolt goes in between the brake/ABS lines and the axle as shown.

AIRLI

3. Raise the axle or lower the body of the vehicle making sure that the carriage bolts - previously installed in the frame bracket — nests into the holes of the air spring bracket (Fig. 14). On the back carriage bolts only, it will be necessary to install the P clamps (L) on both sides of the assemblies (the driver's [left] and passenger's [right]). Cap all the carriage bolts with 3/8" flat washers (K) and a 3/8" nylon lock nut (P). Leave them loose at this time.



fig. 14

NOTE

 Set the axle clamp bar (A) over the long carriage bolts onto the lower bracket, under the axle and cap with two 3/8" flat washers (K) and a 3/8" nylon lock nut (P) (Fig. 15). Leave loose at this time.



- 5. The air spring bracket is slotted so it can be adjusted forward or rearward. Move the air spring assembly so that the air spring is parallel to the upper and lower bracket. Torque the upper hardware to 15 lb.-ft. (20Nm).
- 6. Once the lower bracket (D) is parallel to the upper bracket, the axle clamp bar (A) on the lower bracket can be torqued evenly to 10 lb.-ft. (14Nm) (Fig. 16).

It may be necessary to pull the brake line away from the carriage bolt slightly on the right hand side to gain clearance so the line will not rub on the bolt.



7. Once the upper and lower brackets are tight, it will be necessary to tighten the lower air spring mounting hardware on the lower brackets. Slide the air spring along the slots of the lower bracket for the final alignment of the air spring and torque the lower mounting hardware to no more than 20 lb.-ft. (27Nm) (Fig. 17).



fig. 17

ARUPI



1. On the driver's (left) side behind the axle, the ABS line will need to be adjusted so that it will not rub on the lower bracket (Fig. 18).



line on the driver's (left) side will need to be moved so that it does not rub on the lower bracket.

ALLEL

2. To do this just pull the line out of the holder on the axle and rotate it 180 degrees, then push it back into the holder (Fig. 19). This will change the position of the line so that it will not come in contact with the lower bracket.



### **Installing the Air Lines**

Choose the locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (Fig. 20).

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 21). Do not use scissors or wire cutters.

**CAUTION** 

AIRLIEI

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

- 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) (Fig. 23 & 24).
- 3. Install the Schrader valve in the chosen location (Fig. 22).





fig. 23



Tie off air line so as not to come in contact with HVAC lined if so equipped.

fig. 24



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. 25).



AIRLIN

#### PHOTOS OF FINISHED ASSEMBLIES

- 1. Safely remove the safety stands by lowering or raising the vehicle.
- 2. Figure 26 shows the rear view of the driver's (left) side completed installation.



3. Figure 27 shows the rear view of the passenger's (right) side completed installation.



fig. 27

AIRLIHT



### **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** 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

5 PSI (.34BAR)

**Maximum Air Pressure** 

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.

**<u>A</u>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.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Company at **(800) 248-0892** or visit our website at **www.airliftcompany.com**.



### **Notes**

### **Need Help?**

#### Contact Air Lift Company customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, dial (517) 322-2144.



Thank you for purchasing Air Lift products – the professional installer's choice!

Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or P.O. Box 80167 • Lansing, MI 48908-0167 Toll Free (800) 248-0892 • Local (517) 322-2144 • Fax (517) 322-0240 • www.airliftcompany.com

Printed in the USA California: AWARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov JJC-0819



MADE IN USA WITH GLOBAL COMPONENTS