Air Lift **1000**[™]

Since 1949

Installation Guide



Ford F250/F350

Watch the video Info on Table of Contents page

Kit 80537

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.

MN-613 • Revision 042111 • ECR 8866

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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Video-enhanced installation guides

Visit airliftcompany.com/workshop/category/install-videos to access our installation video archive*.



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Hardware and Tools

HARDWARE LIST

Item	Part#	DescriptionQty
А	46131	Air spring2
В	09119	Upper protector
С	09558	Lower protector
D*	20937	Air line
E*	10466	Zip tie6
F*	10638	Uni clamp6
G*	18501	M8 Flat washer2
H*	18411	Star washer2
 *	21230	Valve cap2
J*	21233	5/16" Hex nut 4
K*	21234	Rubber washer2
L*	21236	Tee fitting1
M*	21455	Schrader valve

*Not shown on Figure 1

TOOLS NEEDED

DescriptionQty
Hoist or floor jack1
Safety stands
Safety glasses1
Tire spoon or blunt instrument1
Air compressor or compressed air source1
Spray bottle with dish soap/water solution1



Introduction

The purpose of this publication is to assist with the installation and maintenance of the Air Lift 1000 air spring kit.

Air Lift 1000 kits utilize a cylinder-style air bag that provides up to 1,000 pounds (454kg) of load-leveling support when installed into the vehicles coil springs. Each cylinder is rated at a maximum of 35 PSI (2.4BAR).

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.



ALRULE

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.



Installing the System

PREPARE THE VEHICLE

1. Jack up the front of the vehicle or raise on a hoist. Support the frame with safety stands (Fig. 2). Disconnect the bottom shock bolts.



2. Lower the axle or raise the body of the vehicle until the springs are completely extended.



DO NOT STRAIN THE FLEXIBLE HYDRAULIC BRAKE LINE.

INSTALL THE AIR SUSPENSION

1. Install the lower protector (C) (Fig. 3) by dropping it through the upper coil spring seat with the tapered side facing down. Set the protector securely in place with a spoon-type tire iron.



- 2. Insert the air cylinder (A) into the coil spring through the top opening with the stem end up.
- 3. Push the cylinder down within the coil by hand with a twisting motion or with a blunt instrument such as a spoon-type tire iron.
- 4. Push the cylinder to the bottom of the coil.
- 5. Set the large circular upper protector (B) on top of the cylinder. Attach the air line to the top of the cylinder as noted in the next section. Repeat for the other side of the vehicle.
- 6. As you raise the axle or lower the body, reseat the springs back into the original position. Attach the shocks and torque the lower shock bolts to factory recommended torque specifications.
- 7. Proceed with the installation and routing of the air lines. There are two recommended installations; single-path using a tee fitting to connect the lines together and have one inflation value or dual-path allowing independent inflation with two inflation values. View the information in the *Installing the Air Lines* section regarding installation of both methods.

Fig. 5

Installing the Air Lines

 A single-path air line installation is recommended for vehicles that typically have even weight distribution (Fig. 4). If weight in the vehicle varies from side to side and unequal pressures are needed to level the load, use a dual-path installation. For dual-path air line installations, eliminate the tee fitting (L) and route separate air lines for both air springs (Fig. 5).







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TO PREVENT THE AIR LINE FROM MELTING, MAINTAIN AT LEAST 6" (152MM) FROM THE EXHAUST SYSTEM TO THE AIR LINE.

- If installing a single-path air line, choose a location for the tee fitting (L) on the wheel well or front bumper. Determine and cut adequate length of air line (D) to reach to the tee from left and right side air springs. Make clean, square cuts with a razor blade or hose cutter (Fig. 6). Do not use scissors or wire cutters.
- 3. Leave sufficient air line slack to prevent any strain on the fitting during axle motions.
- 4. Use this procedure (Fig. 7) for all air line connections:
 - a. Slide the air line clamp (F) onto the air line.
 - b. Push the air line and air line clamp over the barbed stem so that the air line covers all the barbs.
 - c. Compress the ears on the air line clamp with pliers and slide it forward to fully cover the barbs.
- 5. Select a location for the Schrader valve (M), ensuring that the valve will be protected and accessible with an air hose (Fig. 8). Drill a 5/16" (8mm) hole, if necessary. Determine and cut adequate length of air line (D) to reach from the tee to the Schrader valve or from the air springs to the valve if using a dual-path installation.





6. Drill a 5/16" (8mm) hole for the Schrader valve (M) and mount as shown (Fig. 9). Install the air line on the Schrader valve first. The rubber washer (K) serves as an outside weather seal.

DO NOT INFLATE THE AIR SPRINGS BEFORE READING THE MAINTENANCE AND USE GUIDELINES IN THIS INSTALLATION GUIDE AS WELL AS THE USER GUIDE INCLUDED WITH THIS KIT.



COMPLETE THE INSTALLATION

1. Raise the axle all the way up and remove the safety stands. Lower the vehicle to the ground. Read the *Maintenance and Use Guidelines* section for proper care and for setting up the proper pressure in your air suspension system.

□ Fastener test — After 500 miles (800km), recheck all

after the preceding tests. Inflate the air springs to

recommended driving pressures. Drive the vehicle

10 miles (16km) and recheck for clearance, loose

□ **Operating instructions** – If professionally installed,

the paperwork that came with the kit.

the installer should review the operating instructions

with the owner. Be sure to provide the owner with all of

□ Road test — The vehicle should be road tested

bolts for proper torque.

fasteners and air leaks.

Before Operating

INSTALLATION CHECKLIST

- Clearance test Inflate the air springs to 30 PSI (2BAR) and make sure there is at least 1/2" (13mm) clearance from anything that might rub against each air spring. Be sure to check the tire, brakes, frame, shock absorbers and brake cables.
- Leak test before road test Inflate the air springs to 30 PSI (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.

MAINTENANCE AND USE GUIDELINES

- 1. Check air pressure weekly.
- 2. Always maintain normal ride height. Never inflate beyond 50 PSI (3.5BAR).
- 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 50 PSI (3.5BAR), 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 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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Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or P.O. Box 80167 • Lansing, MI 48908-0167

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