# **Air Lift 1000**<sup>™</sup>



## **Installation Guide**



Ford Edge



## Kit 60854

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.

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## Video-enhanced installation guides Visit airliftcompany.com/workshop/category/install-videos to access our installation video archive\*.



## **Hardware and Tools Lists**

#### **HARDWARE LIST**

Item	Part#	Description Qty	,
Α	46172	Air spring2	
В	09112	Lower protector2	
С	20937	Air line	
D	10466	Zip tie6	i
Е	21230	Valve cap2	
F	21233	5/16" Hex nut	
G	21234	Rubber washer2	
Н	18411	Star washer2	
1	18501	M8 Flat washer2	
J	21236	Tee fitting1	
K	21455	Schrader valve2	
L	10638	Air line clamp6	,

#### **TOOLS LIST**

DescriptionQty
Pliers, needle nose and regular
5/16 Drill bit
Drill
Hose cutter, razor blade or sharp knife1
Hoist or floor jack1
Safety stand2
Safety glasses1
Air compressor or compressed air source1
Spray bottle with dish soap/water solution1
Tire spoon or blunt instrument



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 Air Lift 1000 air spring kit.

Air Lift 1000 kits utilize a cylindrical 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.

<u> </u>	INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.
<u> </u>	INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.
<b><u>^</u></b> CAUTION	INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE MACHINE OR MINOR PERSONAL INJURY.

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## **Installing the System**

#### **!** CAUTION

BE AWARE OF SHARP EDGES ON VEHICLE COMPONENTS, LIKE LOWER CONTROL ARM AND HEAT SHIELDS ON THE EXHAUST, WHEN WORKING UNDER THE VEHICLE DURING THIS INSTALLATION.

- 1. Jack up the rear of the vehicle or raise on a hoist. Support the frame with safety stands (Fig. 1).
- 2. Lower the axle or raise the body until the coil springs are completely extended (wheels hanging).

#### **!** CAUTION

OBSERVE TENSION ON BRAKE LINES. DO NOT STRAIN OR OVEREXTEND.

3. Remove the plastic cap from the barbed stem on the end of the air spring. Exhaust the air from the air spring by rolling it up toward the barbed stem. Replace the cap on the stem to hold its flat shape (Fig. 2). Fold the air spring into a "hot dog bun shape".

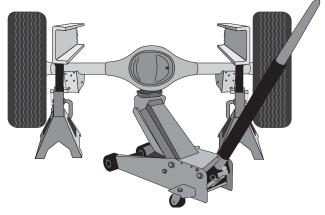


Fig. 1



Fig. 2

4. Insert the flattened end of the air spring into the top opening of the coil spring, with the stem at the bottom (Fig. 3). Push the spring down into the cylinder by hand or with a blunt instrument such as a spoon-type tire iron.

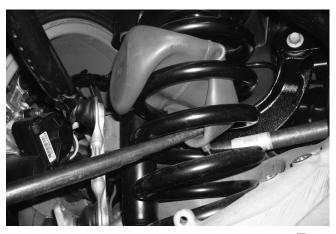


Fig. 3



- 5. When the air spring is completely in the coil, remove the cap and allow the air spring to assume its "as molded" shape.
- 6. Push the air spring to the top of the coil spring and insert the protector on the bottom between the lower spring seat and air spring (Fig. 4).



Fig. 4

7. With the protector in place, push the air spring down so the stem is in the center of the protector's hole (Fig. 5). Install an air line clamp (L) on each end of the air line. Push the air line over the barbed stem, completely covering all the barbs. Install the clamp over the barbed stem using a pair of needle nose pliers.

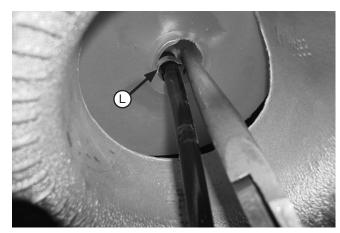


Fig. 5

- 8. Route the air line inboard and attach to the lower control arm using a zip tie (D) on both sides (Fig. 6). Leave a little slack so the air line will not pull off the stem when the suspension is in full extension.
- 9. Route the air line to the top of the crossmember, avoiding the exhaust on the passenger's (right) side, and follow the air line installation instructions.

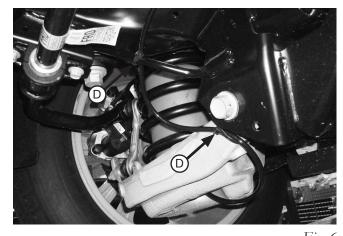


Fig. 6

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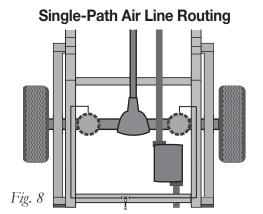
10. Figure 7 shows an example of air line installation. A tee location was used above the crossmember and the air line was routed to the left side, behind the fender well, then continued back to a valve location using one of the existing holes in the bottom of the bumper cover.

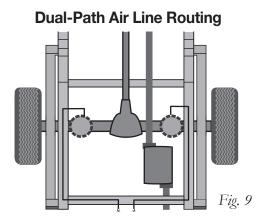


Fig. 7

## **Installing the Air Lines**

1. A single-path air line installation is recommended for vehicles that typically have even weight distribution (Fig. 8) 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 (J) and route separate air lines for both air springs (Fig. 9).





#### **CAUTION**

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

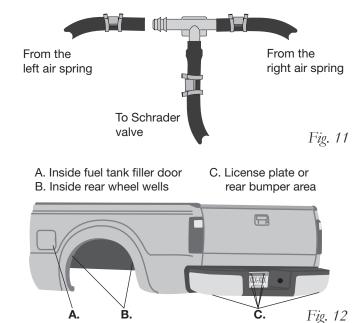
- If installing a single-path air line, choose a location for the tee fitting (J) on the wheel well or rear bumper. Determine and cut adequate length of air line (C) to reach to the tee from left and right side air springs. Make clean, square cuts with a razor blade or hose cutter (Fig. 10). Do not use scissors or wire cutters.
- 3. Leave sufficient air line slack to prevent any strain on the fitting during axle motions.



Fig. 10



- Use this procedure (Fig. 11) for all air line connections:
  - a. Slide the air line clamp 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 (K), ensuring that the valve will be protected and accessible with an air hose (Fig. 12). Drill a 5/16" (8mm) hole, if necessary. Determine and cut adequate length of air line (C) 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 (K) and mount as shown (Fig. 13). Install the air line on the Schrader valve first. The rubber washer (G) serves as an outside weather seal.

#### **!** CAUTION

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.

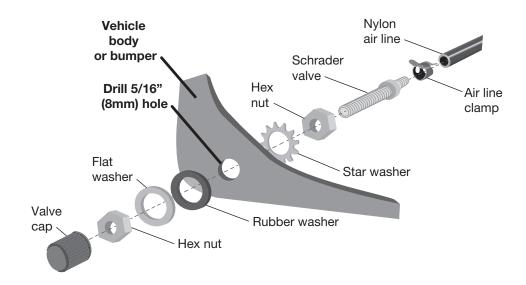


Fig. 13

#### COMPLETE THE INSTALLATION

1. Once the air lines have been installed, raise the suspension or lower the body completely and remove the safety stands. Inflate the air springs to 5 PSI (.34BAR).

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#### 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.

- ☐ Fastener test After 500 miles (800km), 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 35 PSI (2.4BAR).
- 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
35 PSI (2.4BAR)

#### **!** 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.

ALTHOUGH THE AIR SPRINGS ARE RATED AT A MAXIMUM INFLATION PRESSURE OF 35 PSI (2.4BAR), 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.



## 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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