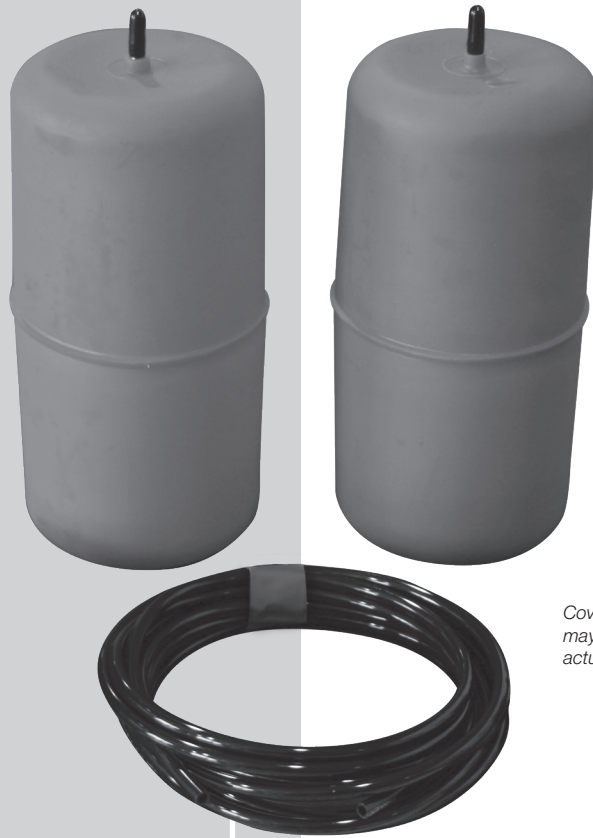


Air Lift 1000™

Multiple Applications



Cover image may not depict actual kit.



INSTALLATION GUIDE

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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Introduction

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

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information here includes a hardware list, tool list, step-by-step installation information, maintenance guidelines and operating tips.

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 www.airliftcompany.com.

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.

**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 MACHINE OR MINOR PERSONAL INJURY.

NOTE

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

Hardware and Tools Lists

HARDWARE LIST

Item	Part #	Description.....Qty
A	*	Air spring.....2
B	*	Upper & lower protectors.....2
C	20086	Air line assembly.....1
D	10466	Zip tie.....6
E	21230	Valve cap.....2
F	21233	5/16" Hex nut.....4
G	21234	Rubber washer.....2
H	18411	Star washer.....2
I	18501	M8 Flat washer.....2
J	21236	Tee.....1
K	21455	Valve.....2
L	34363	Heat shield kit.....1
M	10638	Clamp.....6

TOOLS LIST

Description.....Qty
Hoist or floor jacks.....1
Safety stands.....2
Safety glasses.....1
Air compressor or compressed air source.....1
Spray bottle with dish soap/water solution.....1

*Part number varies by kit number.



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

Installing the Air Lift 1000 System

KIT NUMBERS

NOTE

This manual is used in reference to the following kit numbers:

- | | | | | |
|-------|-------|-------|-------|-------|
| 60714 | 60744 | 60769 | 60786 | 60810 |
| 60733 | 60755 | 60779 | 60792 | |

IMPORTANT NOTES

If your vehicle is equipped with vibration dampers between the turns of the coil, it is necessary that these be removed before installing the air springs. Their function will be replaced by the air spring.

Some mid-size GM vehicles have a solid cup located on the lower spring seat which will not allow the air line to exit the coil. It is necessary to remove this cup before installing the air spring.

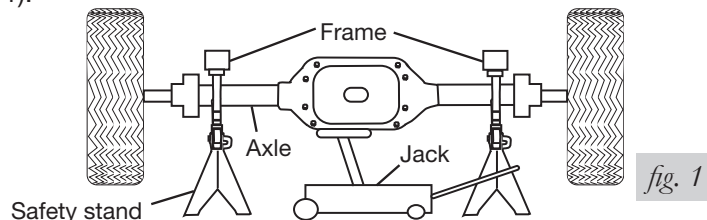
For Suburban, Tahoe, Yukon, TrailBlazer, Envoy, Bravada, Avalanche, Hummer H2, Pathfinder and Escalade it will be necessary to trim the rubber isolator at the top of the coil spring to ensure adequate valve stem clearance. Also, some models have a plastic vibration damper snapped around the coil of the coil spring (blue in color). This must be removed before inserting the spring.

GETTING STARTED

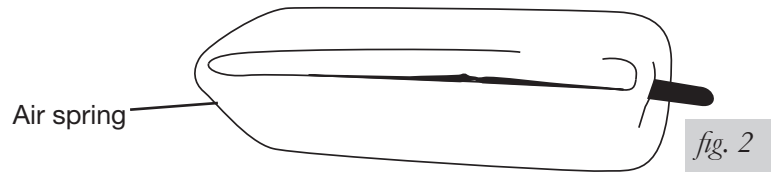
NOTE

Before beginning the installation, check the clearance from coil spring to exhaust. It is common in your application for the exhaust to be very close to the coil. If there is less than 2" of clearance, you will need to install a heat shield (if supplied).

1. Jack up the rear of the vehicle or raise on a hoist. Support the frame with safety stands. Lower the axle or raise the body of the vehicle until the suspension is fully extended (fig. 1).



2. Install heat shield kit, if supplied. Separate instructions are included in the heat shield package.
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 the flat shape (fig. 2).



4. If necessary, additional clearance between the coil turns may be obtained by removing the shock absorbers from the lower shock mountings and lowering the suspension an additional one to two inches.

CAUTION

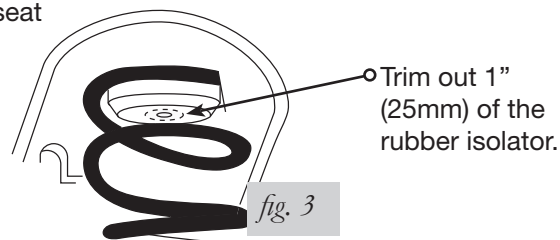
OBSERVE TENSION ON BRAKE AIR LINE. DO NOT STRAIN.

INSTALLING THE AIR SPRING

NOTE

For Suburban, Tahoe, Yukon, Trailblazer, Envoy, Bravada, Avalanche, H2 Hummer and Escalade it will be necessary to trim the rubber isolator at the top of the valve stem for additional clearance (fig. 3).

Top of spring seat

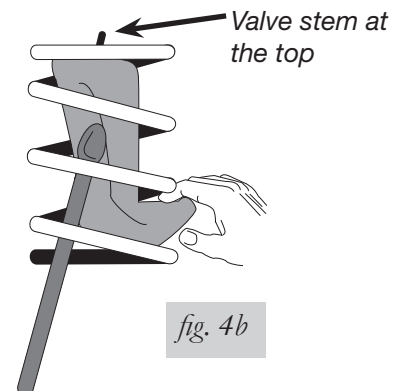
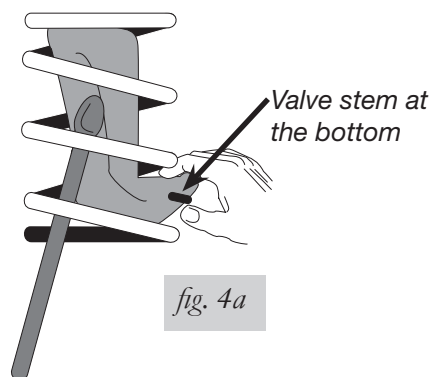


1. Insert the flattened air spring into the coil spring through the lowest opening with the stem at the bottom (fig. 4a).

NOTE

For installing the air spring in 1991 and up Crown Victoria, Mercury Grand Marquis, Suburban, 4DR-4WD Tahoe-Yukon, Trailblazer, Envoy, Bravada, Avalanche, Kia Sorrento, Hummer H2, Pathfinder and Escalade insert the flattened air spring through the lowest opening with the stem at the TOP (fig. 4b).

2. Push the air spring up or down within the coil by hand or with a blunt instrument such as a spoon-type tire iron.
3. When the air spring is completely within the coil, remove the cap and allow the air spring to assume its "as molded" shape.



4. Insert the protector (see vehicle specific application below):

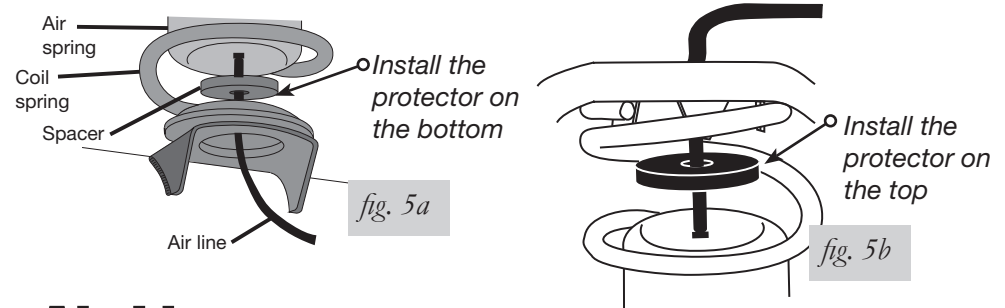
NOTE

The protector always goes on the stem side of the air spring (figs. 5a and 5b).

- a. **1962 and up GM vehicles and 1966–1990 Ford vehicles:** Push the air spring to the top of the coil and insert protector on top of lower spring seat (fig. 5a).
- b. **1991 and up Crown Victoria, Mercury Grand Marquis, 2000 Suburban, 4DR-4WD Tahoe and Yukon, Trailblazer, Envoy, Bravada, Avalanche, Kia Sorento, Hummer H2, Pathfinder and Escalade:** Push air spring to the bottom of the coil and insert protector at the top (fig. 5b).

NOTE

The protector can be inserted into the coil facing either direction.



Installing the Air Line

A single-path air line installation is recommended for vehicles that typically have even weight distribution (Fig. 6). 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 (J) and route separate air lines for both air springs (Fig. 7).

Single-path Air Line Routing

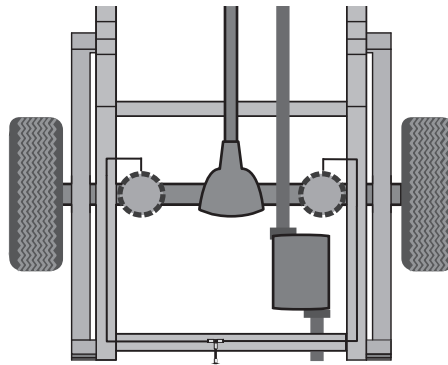


fig. 6

Dual-path Air Line Routing

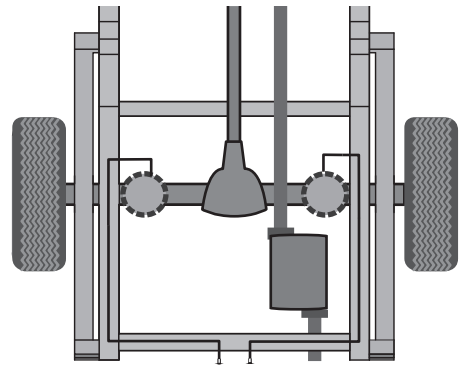


fig. 7

CAUTION

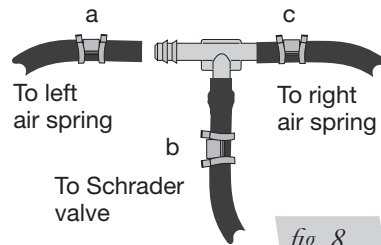
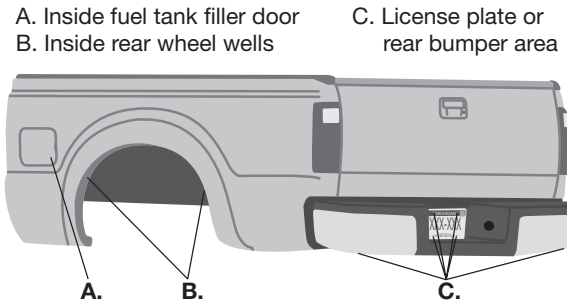
TO PREVENT THE AIR LINE FROM MELTING, MAINTAIN AT LEAST 6" (152MM) FROM THE EXHAUST SYSTEM TO THE AIR LINE.

- 1. If installing a single-path air line, choose a location for the tee fitting (J) on the frame rail or crossmember. Determine and cut adequate length of air line (C) to reach from tee to the left and right side air springs.

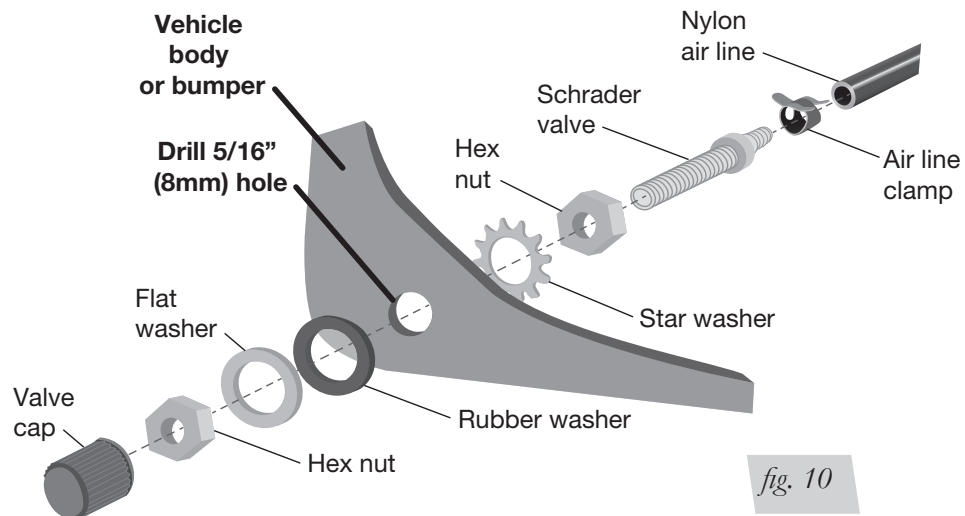
CAUTION

LEAVE SUFFICIENT AIR LINE SLACK TO PREVENT ANY STRAIN ON THE FITTING DURING AXLE MOTIONS.

2. Use this procedure (Fig. 8) 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.


fig. 8

fig. 9

3. Select a location for the Schrader valve, ensuring that the valve will be protected and accessible with an air hose (Fig. 9). Determine and cut adequate length of air line to reach from the tee to the Schrader valve or from the air springs to the valve if using a dual-path installation.
4. Drill a 5/16" (8mm) hole for the Schrader valve and mount as shown (Fig. 10). Install the air line on the Schrader valve first. The rubber washer serves as an outside weather seal.


fig. 10

- From the tee, route the air line along the top of the frame on both sides to, and down through the top spring seats, through an air spring protector (B) to the air springs (Fig. 11). Leave sufficient slack to prevent any strain on the fitting during axle motions. Cut the air line to length using a sharp knife.

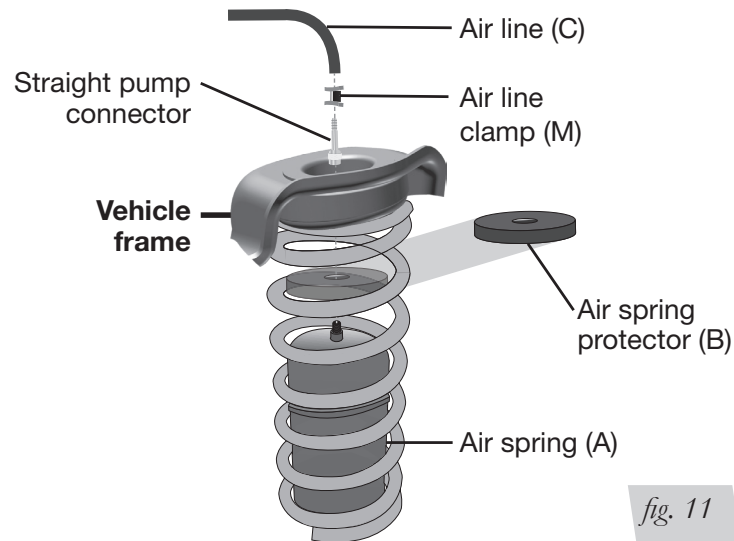


fig. 11

- Attach the straight pump connector to the air line (Fig. 11). Attach the straight pump connector to the air spring fitting. Do not use any tools to tighten the fitting.

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.

COMPLETE THE INSTALLATION

- Once the air lines have been installed, raise the suspension or lower the body so that the air spring just touches the top and the bottom of the upper and lower spring mounts. Inflate the air springs to 5 PSI (.34BAR).
- Remove the safety stands and lower the vehicle.

Before Operating

Consult the included User Guide for information about fixing air leaks along with more tips for maintenance and use before using the product.

INSTALLATION CHECKLIST

- Clearance test** — Inflate the air springs to 25-35 PSI (1.7-2.4BAR) and make sure there is at least 1/2" (13mm) clearance from anything that might rub against each air spring.
- Leak test before road test** — Inflate the air springs to 25-35 PSI (1.7-2.4BAR) and use a soapy water solution to 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**.
- Road test** — The vehicle should be road tested after the preceding tests. Inflate the air springs so that the vehicle is level. 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 User Guide 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	Maximum Air Pressure
5 PSI (.34BAR)	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.

CAUTION

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.

Notes

Need Help?

Contact our customer service department by calling (800) 248-0892, Monday through Friday. For calls from outside the USA or Canada, our local number is (517) 322-2144.



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