

Air lift 1000 HD

Kit 60829

Jeep Wrangler JL



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 HD 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, tools list, step-by-step installation information, maintenance guidelines and a checklist for after completing the installation.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. Contact Air Lift Company at **(800) 248-0892** or go online at **www.airliftcompany.com** for the latest version of this manual.

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. 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.

Installing the Air Lift 1000 HD Kit

HARDWARE LIST

Item	Part #	Description	Qty
A	46127	Air spring.....	2
B	09116	Air spring spacer (black)	2
C	09447	Air spring spacer (red).....	2
D	20937	Air line	15 ft
E	10466	Zip ties	6
F	21230	Valve cap.....	2
G	21233	5/16" Hex nut.....	4
H	21234	Rubber washer.....	2
I	18411	Star washer.....	2
J	18501	M8 Flat washer	2
K	21236	Tee fitting.....	1
L	21455	Schrader valve	2
M	10638	Air line clamp	6

TOOLS LIST

Description.....	Qty
Ratchet	1
Pliers.....	1
Standard & metric, regular & deep-well sockets.....	SET
5/16" drill bit (very sharp)	1
Heavy-duty drill	1
Hose cutter, razor blade, or sharp knife	1
Hoist or Jack	1
Safety stands.....	2
Safety glasses	1
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution.....	1



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

GETTING STARTED

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

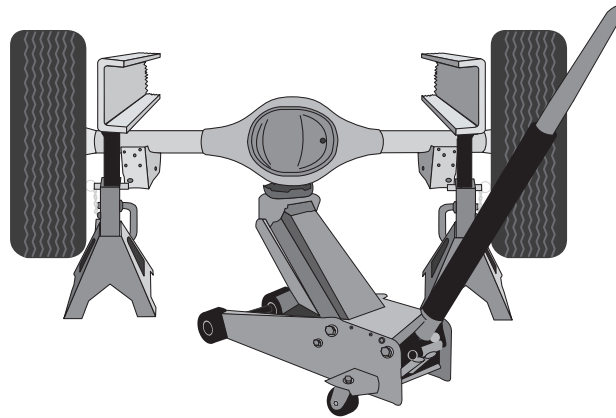


fig. 1

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



fig. 2

3. Insert the flattened air spring into the coil spring through the side. Make sure the stem is pointing up (Fig. 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. Push the air spring down to the bottom of the coil spring so that the stem at the top can be accessed for attaching the hose.

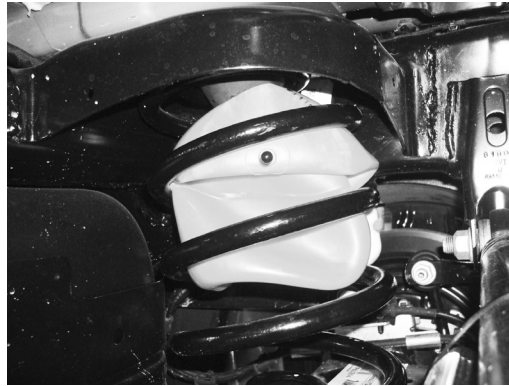
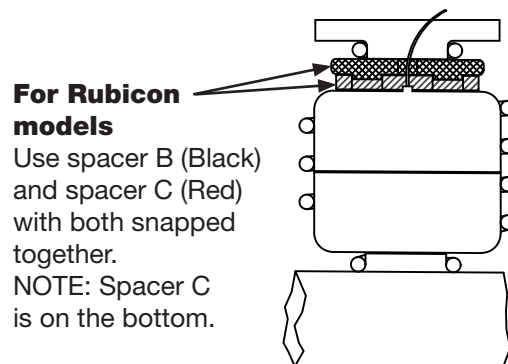
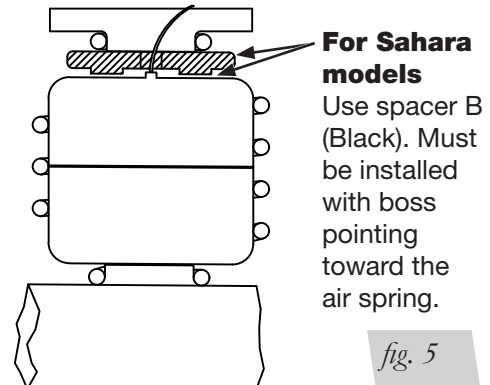
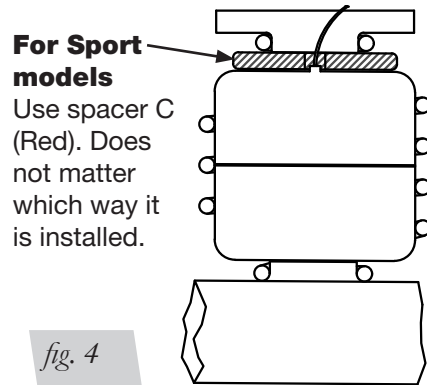


fig. 3

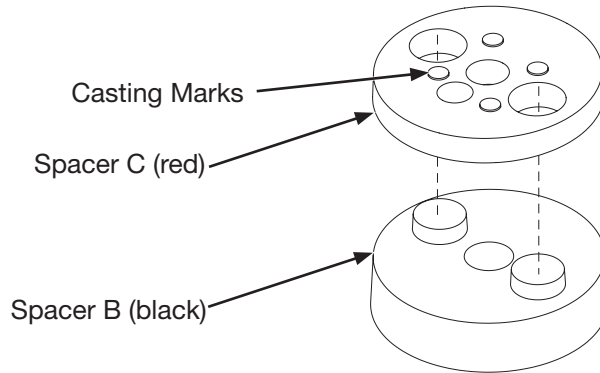
NOTE

Depending on the model you have, the correct air spring spacer (B & C) or combination of both, must be installed at the top of the air spring. Figures 4, 5 and 6 are sectional views showing the different combinations of spacers per Sport, Sahara, and Rubicon models offered.



NOTE

On the Rubicon models, the spacers **MUST** be snapped together until you hear an audible snap. Stack them together so the boss on spacer B (black) snaps into the holes of spacer C (red). The raised casting marks on spacer C will face away from spacer B. A vise or other appropriate tool may be required to snap the spacers together (Fig. 7).



There must be an audible snap when stacking spacers B & C. The raised casting marks on spacer C will face away from spacer B

fig. 7

5. Cut the air line (D) into two equal lengths. Install an air line clamp (M) on one end of both air lines and feed the air lines through the top of the spring seat, down and out the side of the coil spring. Insert the hose with the clamp through the spacer(s) and insert the spacer(s) through the side of the coil spring. Push spacer up to the top of the coil spring and push the air line over the barbs on the air springs covering all the barbs. Using a pair of pliers, install the air line clamp over the barbed stem (Fig. 8).



Install hose over barbed stem of air spring and clamp in position as specified.

Sahara Model

Bosses on spacer must point to air spring.

fig. 8

6. While the suspension is still hanging, on the driver's (left) side, slide the air line thermal heat shield over the air line and push the air line thermal heat shield toward the air spring until it is over the top of the upper spring seat (Fig. 9).

With the wheels still hanging, install the heat shield on the driver's (left) side air line. Position it over the top spring seat.



fig. 9

7. Zip tie (E) both sides of the air lines to the frame just behind the coil spring mounts and route hose to the back of the vehicle or the side depending on where you want to mount the Schrader valves.

Installing the Air Lines

A single-path air line installation is recommended for vehicles that typically have even weight distribution (Fig. 10). 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 (K) and route separate air lines for both air springs (Fig. 11).

Single-path Air Line Routing

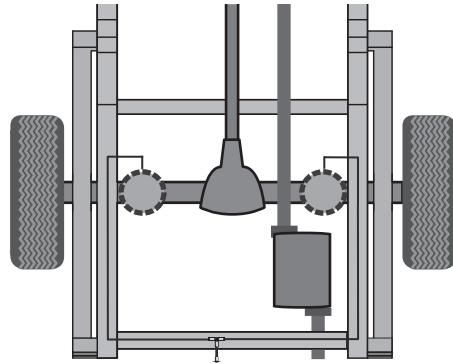


fig. 10

Dual-path Air Line Routing

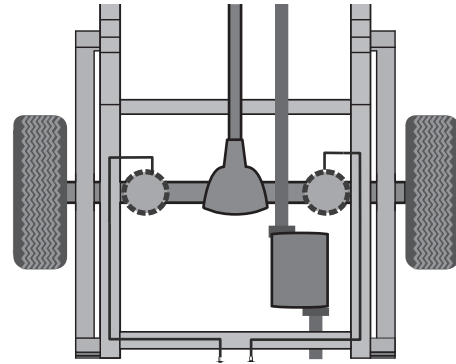


fig. 11

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 (K) on the wheel well or rear bumper. Determine and cut adequate length of air line (D) to reach to the tee from 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. 12) for all air line connections:
 - a. Slide the air line clamp (M) onto the air line (D).
 - 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.
3. Select a location for the Schrader valve (L), ensuring that the valve will be protected and accessible with an air hose (Fig. 13). 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.

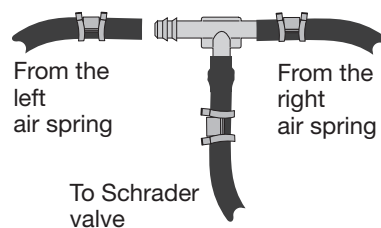


fig. 12

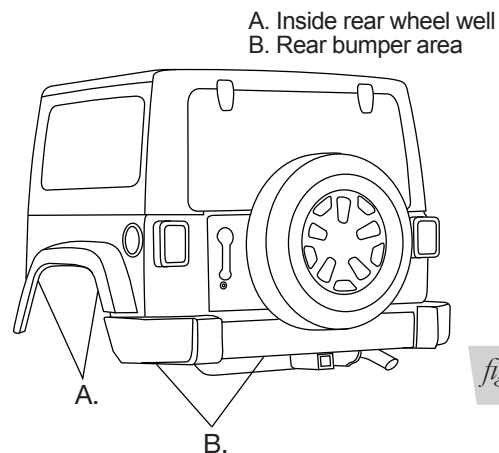


fig. 13

4. Drill a 5/16" (8mm) hole for the Schrader valve (L) and mount as shown (Fig. 14). Install the air line on the Schrader valve first. The rubber washer (H) serves as an outside weather seal.

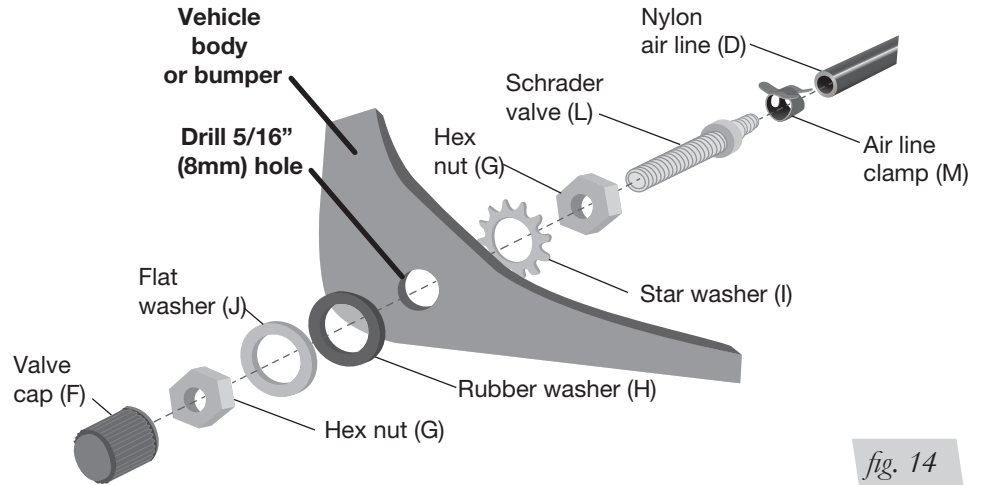


fig. 14

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.

INSTALLING THE HEAT SHIELD

1. Attach the metal heat shield to the exhaust where it is closest to the driver's (left) side air spring (Fig. 15).

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).

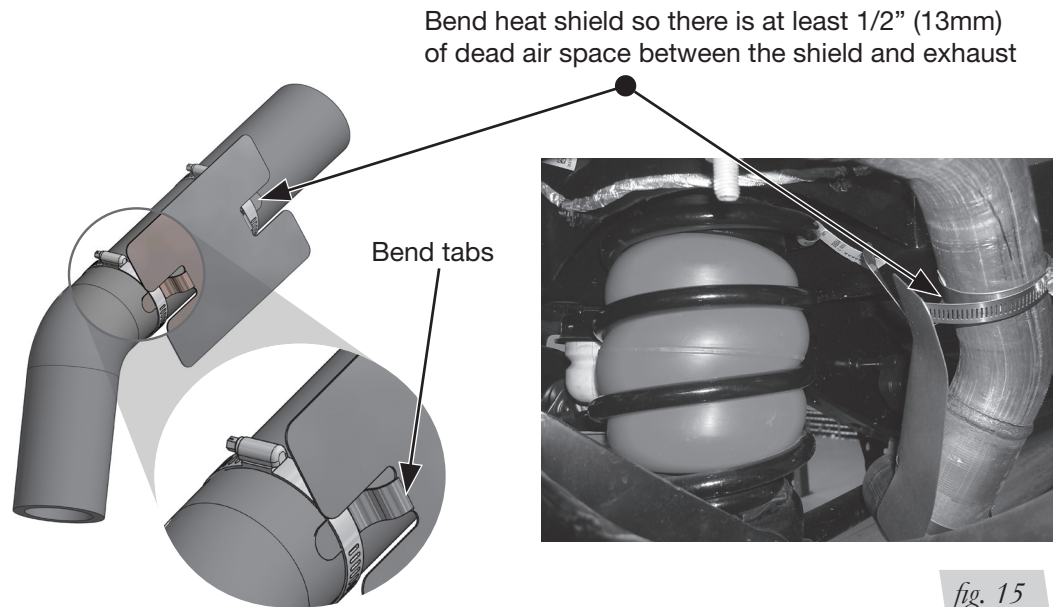


fig. 15

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. For calls from outside the USA or Canada, our local number is (517) 322-2144.

**Register your warranty online at
www.airliftcompany.com/warranty**



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

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Printed in the USA
JJC-1118

