Air Lift **1000**

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 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.

<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.
CAUTION	INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE MACHINE OR MINOR PERSONAL INJURY.



Installing the Air Lift 1000 Kit

HARDWARE LIST

Item Part # Description Qty 46127 Air spring......2 В 09116 Air spring spacer (black)2 С 09447 Air spring spacer (red)......2 D 20937 Air line15 ft Е 10466 Zip ties6 F 21230 Valve cap......2 G 21233 Н 21234 18411 Star washer.....2 J 18501 M8 Flat washer2 Κ 21236 Tee fitting......1 Schrader valve2 L 21455 10638 Air line clamp6

TOOLS LIST

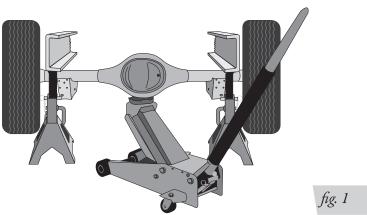
DescriptionQty
Pliers1
Standard & metric, regular & deep-well socketsSET
5/16" drill bit (very sharp) 1
Heavy-duty drill1
Hose cutter, razor blade, or sharp knife 1
Hoist or Jack1
Safety stands2
Safety glasses1
Air compressor or compressed air source1
Spray bottle with dish soap/water solution 1



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.



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.

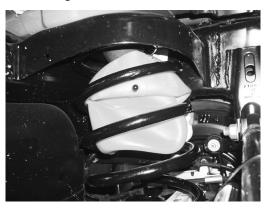
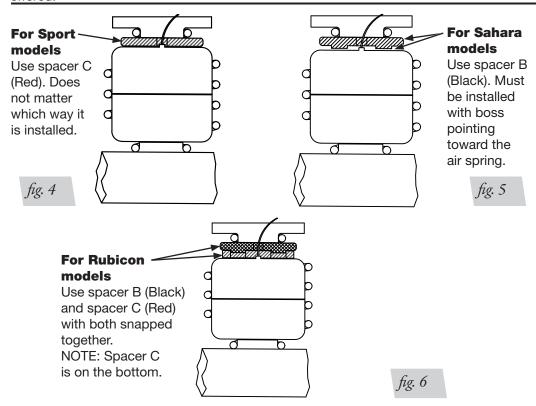


fig. 3

NOTE

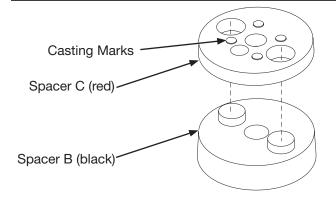
Depending on the model you have, the correct air spring spacer (B & C) or combination of both, must be installed at the top of the air spring. Figures 4, 5 and 6 are sectional views showing the different combinations of spacers per Sport, Sahara, and Rubicon models offered.





NOTE

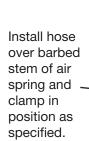
On the Rubicon models, the spacers MUST be snapped together until you hear an audible snap. Stack them together so the boss on spacer B (black) snaps into the holes of spacer C (red). The raised casting marks on spacer C will face away from spacer B. A vise or other appropriate tool may be required to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





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.



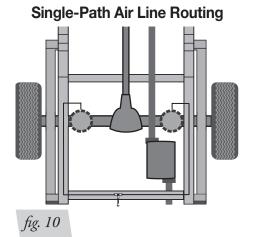
fig. 9

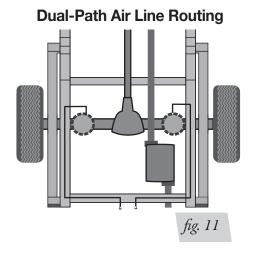
7. Zip tie (E) both sides of the air lines to the frame just behind the coil spring mounts and route hose to the back of the vehicle or the side depending on where you want to mount the Schrader valves.



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).







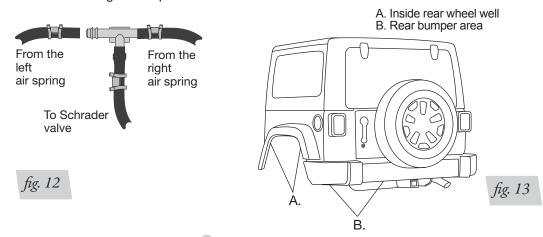
TO PREVENT THE AIR LINE FROM MELTING, MAINTAIN AT LEAST 6" (152MM) FROM THE EXHAUST SYSTEM TO THE AIR LINE.

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.



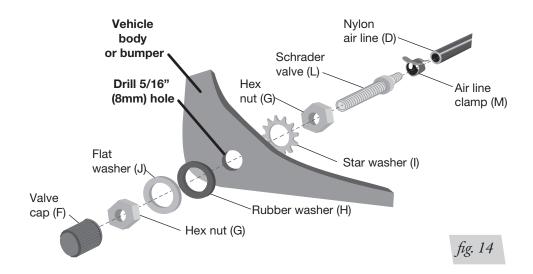
LEAVE SUFFICIENT AIR LINE SLACK TO PREVENT ANY STRAIN ON THE FITTING DURING AXLE MOTIONS.

- 2. Use this procedure (Fig. 12) for all air line connections:
 - Slide the air line clamp (M) onto the air line (D).
 - 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.





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.





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).

Bend heat shield so there is at least 1/2" (13mm)

Bend tabs

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) are 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

MAINTENANCE AND USE GUIDELINES

1. Check air pressure weekly.

that came with the kit.

- 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)



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.