

Air Lift 1000™



Installation Guide



Toyota Rav4



Watch the video
Info on Table of Contents page

Kit 60842

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

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Hardware and Tools Lists

HARDWARE LIST

Item	Part#	Description	Qty
A	46135	Air spring.....	2
B	09112	Lower protector.....	2
C	20937	Air line	15'
D	10466	Zip ties	6
E	20230	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 fitting.....	1
K	21455	Schrader valve	2
L	10638	Air line clamp	6

TOOLS LIST

Description.....	Qty
Needle nose pliers.....	1
5/16 Drill bit	1
Drill	1
Hose cutter, razor blade or sharp knife	1
Hoist or floor jack	1
Safety stands.....	2
Safety glasses	1
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution.....	1
Tire spoon or blunt instrument	1



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 an air spring that provides up to 1,000 pounds (454kg) of load-leveling support when installed into the vehicles coil springs. Each air spring 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.



INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



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

Installing the System

PREPARING THE VEHICLE

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.

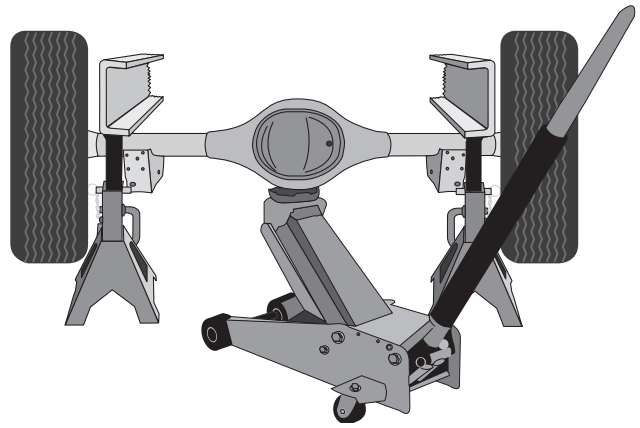


Fig. 1

2. Remove the plastic cap from the barbed stem on the end of the air spring. Exhaust the air from the air spring by rolling it up toward the barbed stem.
3. Reinstall the cap on the stem to allow the air spring to hold the flat shape. Fold the spring into a hotdog shape as shown (Fig. 2).

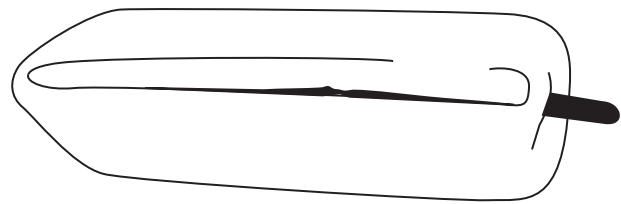


Fig. 2

4. Push the air spring through the hole in the lower control arm while twisting simultaneously (Fig. 3). Make sure the stem is facing down when the air spring is installed.

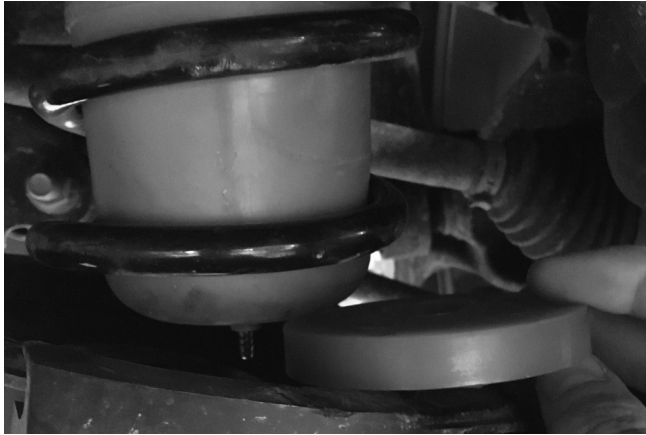
NOTE

You can follow the manufacturer's instructions for removing the coil spring from the vehicle. Once removed, insert the air spring into the coil. Make sure to follow the manufacturer's torque specifications for all removed hardware when replacing the coil spring assembly.



Fig. 3

5. After installing the air spring into the coil, slide the lower protector through the side of the coil, under the air spring (Fig. 4). After the protector is in place, align the air spring so that the barbed stem lines up with the inner hole on the protector (Fig. 5).

*Fig. 4**Fig. 5*

6. Cut the air line in half. Install a clamp on each end of the air line halves, approximately 2" from the edge. Install the air line onto the barbed stem and ensure the hose completely covers the barbed stem (Fig. 6). Using a pair of needle nose pliers, slide the clamp up the air line and over the barbed stem on the air spring (Fig. 7).

*Fig. 6**Fig. 7*

7. Route the air lines through the control arms as shown (Fig. 8) and route up to a proper location for the tee fitting (see page 7). Ensure the air lines are secured away from any pinch points and sharp edges. See *Installing the Air Lines* for further air line routing and installation instructions.



Fig. 8

8. Figure 9 shows finished installation of air spring.

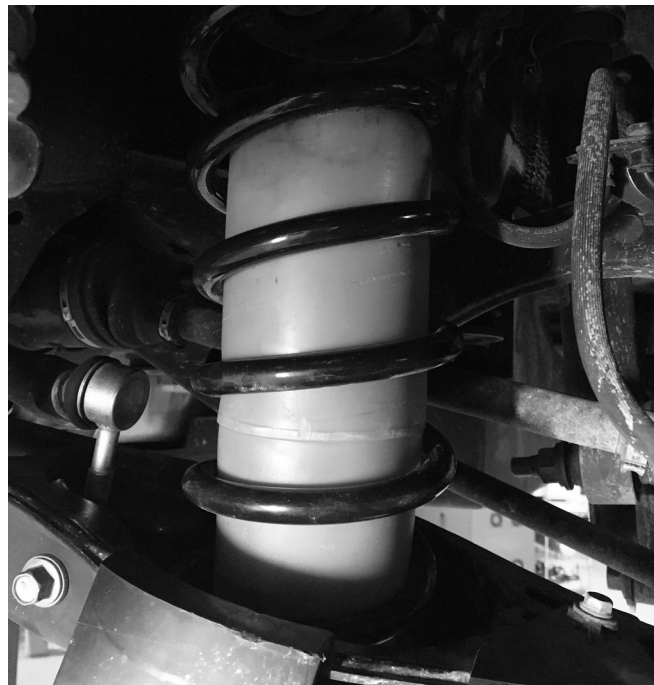
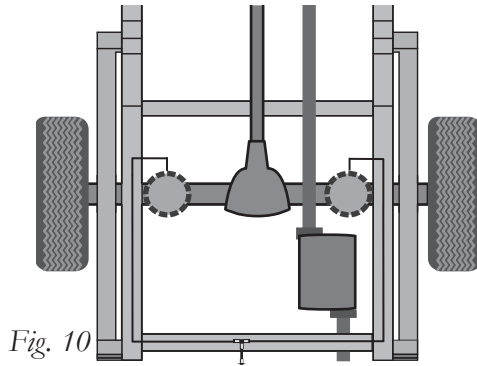


Fig. 9

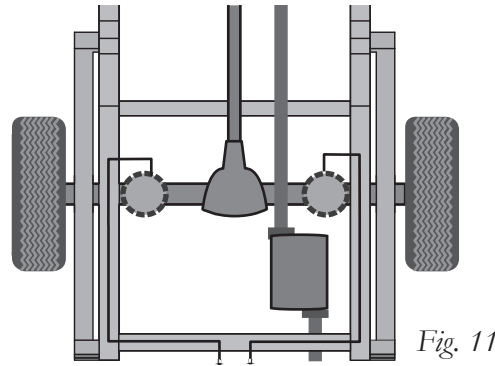
Installing the Air Lines

1. 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 (J) and route separate air lines for both air springs (Fig. 11).

Single-Path Air Line Routing



Dual-Path Air Line Routing



CAUTION

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

2. 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. 12). Do not use scissors or wire cutters.
3. Leave sufficient air line slack to prevent any strain on the fitting during axle motions.

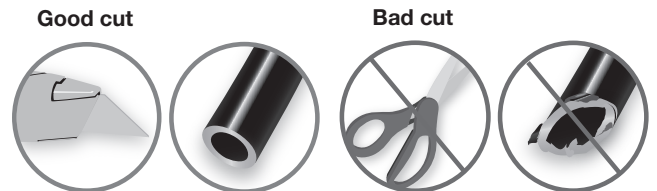


Fig. 12

4. Use this procedure (Fig. 13) 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.

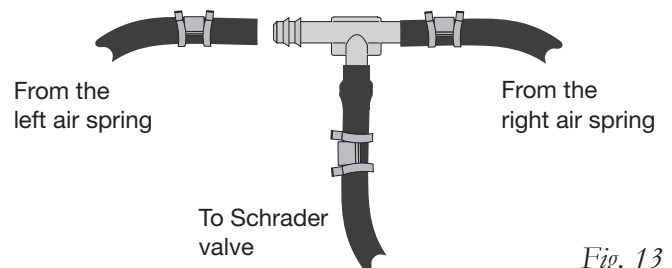


Fig. 13

5. Select a location for the Schrader valve (K), ensuring that the valve will be protected and accessible with an air hose (Fig. 14). 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.

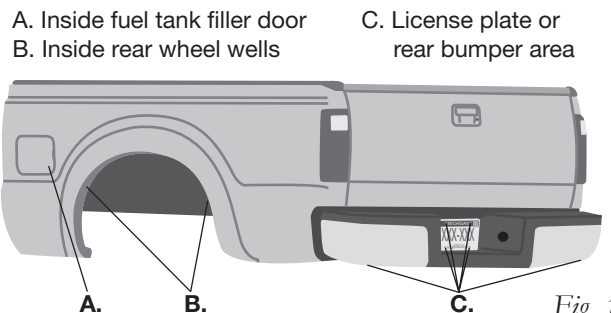


Fig. 14

6. Mount the Schrader valve (K) as shown (Fig. 15). 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.

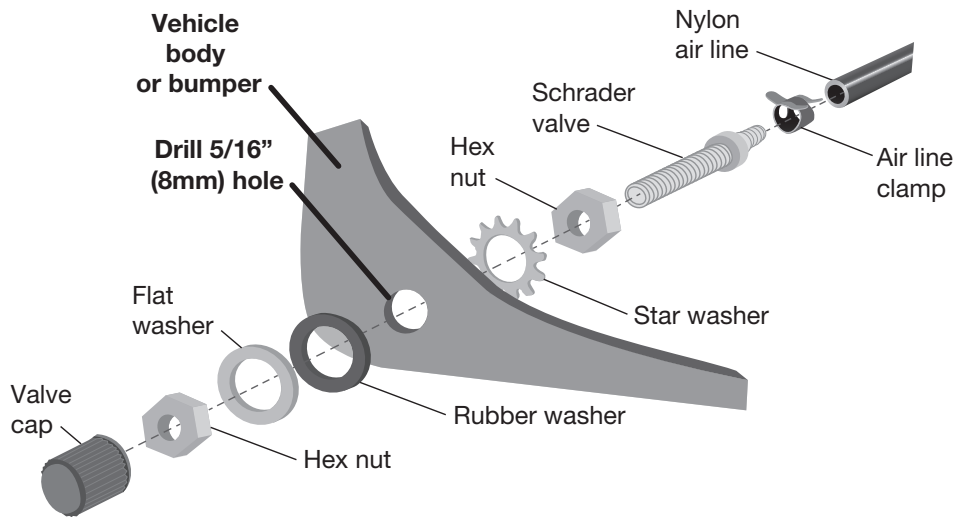


Fig. 15

COMPLETE THE INSTALLATION

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).

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, 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.



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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