

Air Lift 1000™



Installation Guide



2014-2020 Nissan Rogue



Watch the video

Info on Table of Contents page

Kit 60836

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.

Protect your Air Lift Purchase by Completing your Warranty Registration



Thank you for purchasing an Air Lift load support product!

Take a photo of your sales receipt and then scan the QR code to complete your online warranty registration.

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Video-enhanced installation guides

Visit airliftcompany.com/workshop/category/install-videos to access our installation video archive*.

Hardware and Tools

HARDWARE LIST

Item	Part#	Description	Qty
A	46137	Air spring.....	2
B	09112	Protector	2
C	20937	Air line	15'
D	10466	Zip ties	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 fitting.....	1
K	21455	Schrader valve	2
L	10638	Air line clamp	6

TOOLS NEEDED

Description.....	Qty
Pliers.....	1
5/16" Drill bits.....	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 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.



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 VEHICLE OR MINOR PERSONAL INJURY.



NOTE

Used to help emphasize areas of procedural importance and provide helpful suggestions.

Installing the System

PREPARE THE VEHICLE

1. Jack up the rear of the vehicle or raise on 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). Remove both wheels.

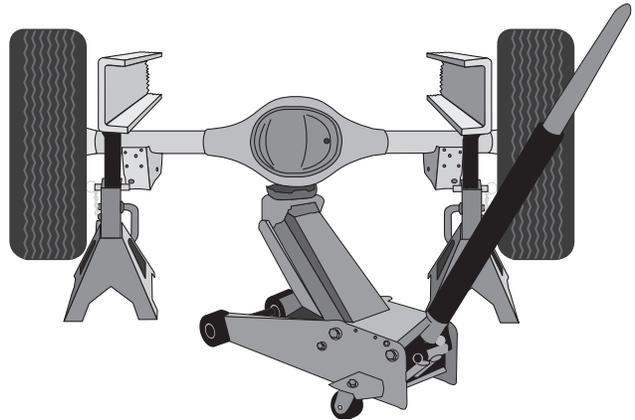


Fig. 1

INSTALL THE AIR SUSPENSION

1. Remove the black 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 barbed stem. Replace the cap on the stem to hold its flat shape. Fold the air spring into a “hot dog bun shape” (Fig. 2).



Fig. 2

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



Valve stem on cylinder points down.

Fig. 3

3. When the air spring is completely in the coil, remove the black plastic cap and allow the air spring to assume its “as-molded” shape. Push the cylinder to the top of the coil spring (Fig. 4).
4. From the bottom up, insert the air line (C) through the outside hole in the lower spring seat, then up through the center spring seat hole (Fig. 4).



Before starting on the passenger's (right) side, please review *Installing the Air Lines* section.

5. Insert the air line through the center of one protector (B). Install an air line clamp (L) onto the end of the air line (Fig. 5) and push the air line onto the barbed stem of the cylinder until the air line completely covers the barbs. Once the air line is installed onto the stem, using a pair of pliers, slide the air line clamp completely over the barbs.

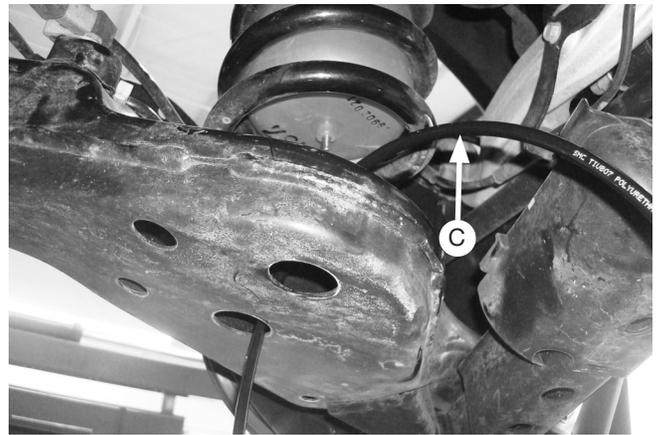


Fig. 4

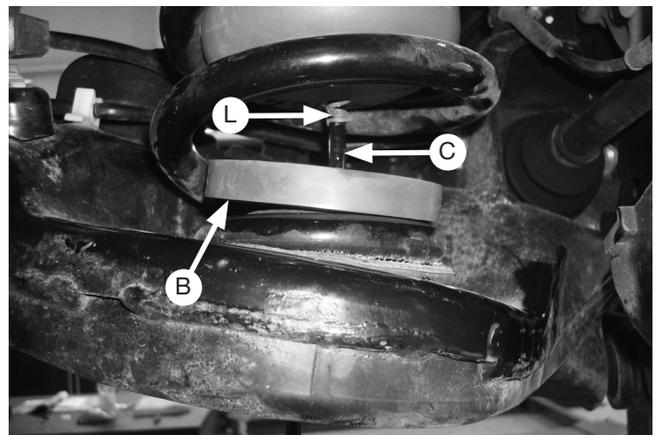


Fig. 5

6. Route the air line up and back attaching it to the brake line bracket on the upper control arm using a zip tie (D) (Fig. 6). Repeat the installation for the other side.

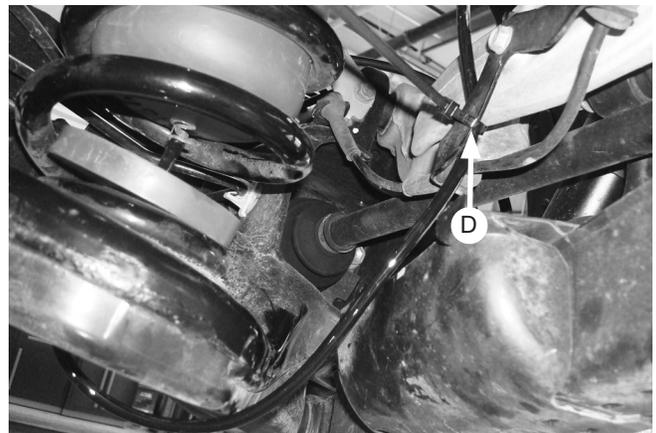
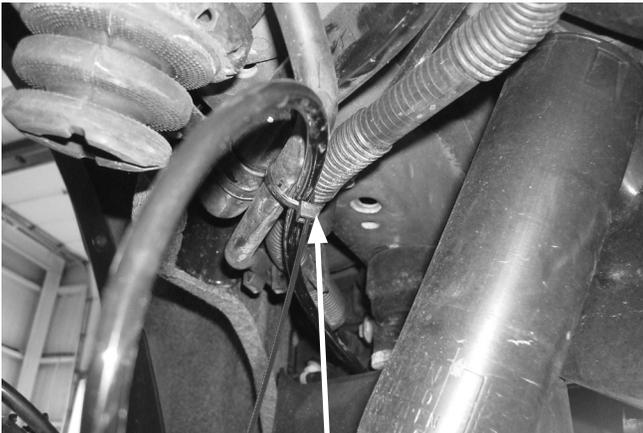
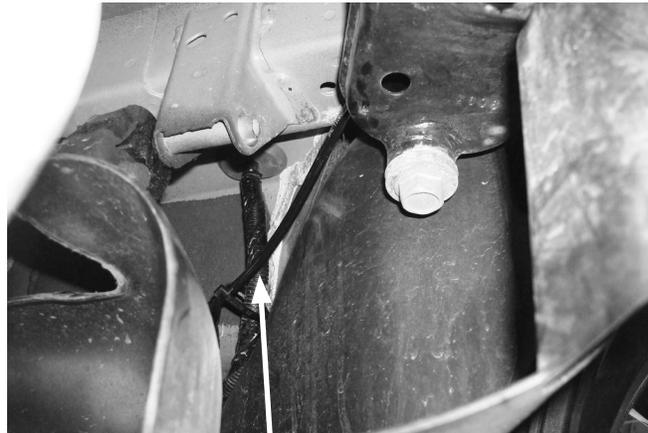


Fig. 6

7. Continue routing the air line up and back. Tie off the air line to the wiring harness on the passenger's (right) side and the wiring harness behind the rear wheel well on the driver's (left) side (Fig. 7 & Fig. 8).



Passenger's (right) side: attach to the fuel vent tube or wiring harness just behind rear axle shafts. *Fig. 7*



Driver's (left) side: route air line over crossmember and out to the wiring harness behind the wheel well. *Fig. 8*

8. The following is an example of where you can install the Schrader valve (K). We recommend using the push pin hole that is under the passenger's (right) side bumper, to mount the Schrader valve (Fig. 9).

NOTE Tee installation shown.

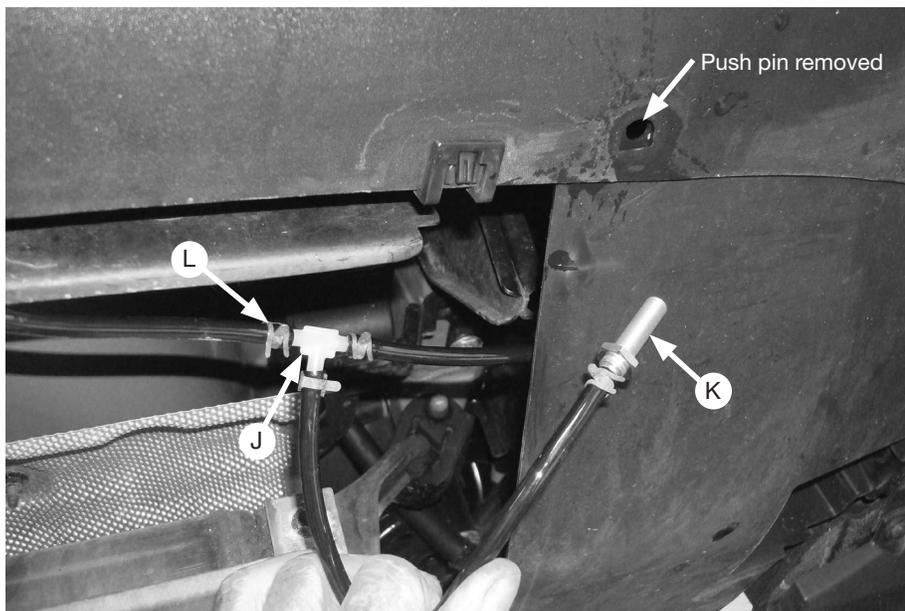


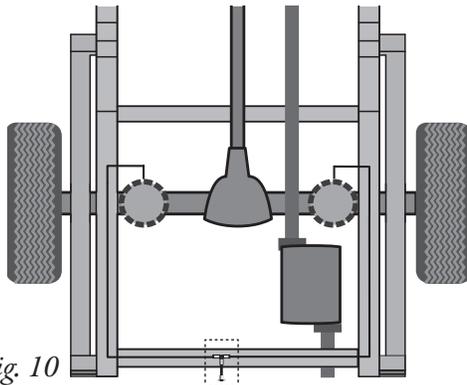
Fig. 9

9. Continue routing the driver's (left) side air line back to the back bumper cover and across the back, to the Schrader valve mounting location. Do the same with the passenger's (right) side air line (Fig. 9).
10. Remove the stock push pin and, using the air line instructions as a guide, install the tee (J), four air line clamps (L) and the Schrader valve (K) (Fig. 9).

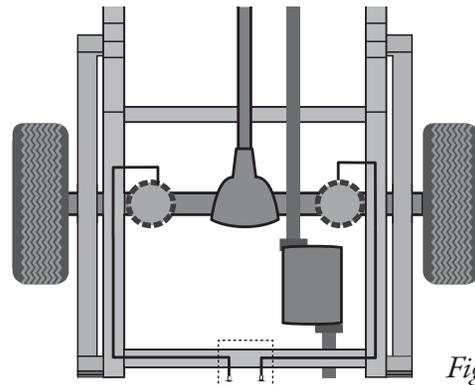
Installing the Air Lines

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

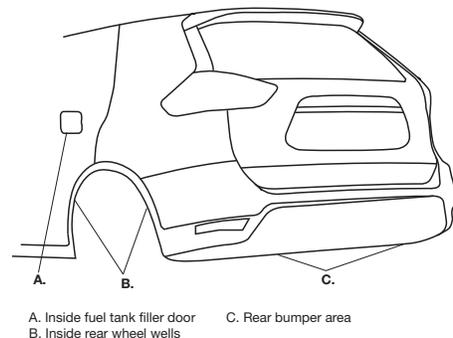
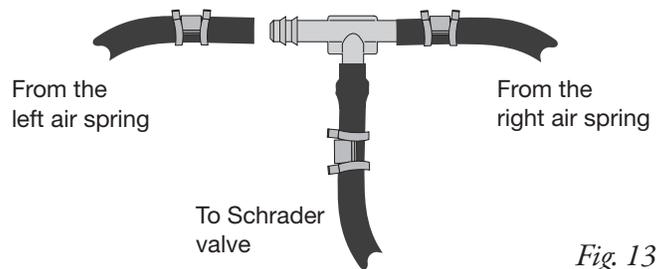


Dual-Path Air Line Routing



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 cross member as noted in step 6. Determine and cut adequate length of air line (C) to reach 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.
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 (L) 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 line (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.



- Drill a 5/16" (8mm) hole for the Schrader valve (K) and mount as shown (Fig. 15). Install the air line on the Schrader valve first. The rubber washer 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.

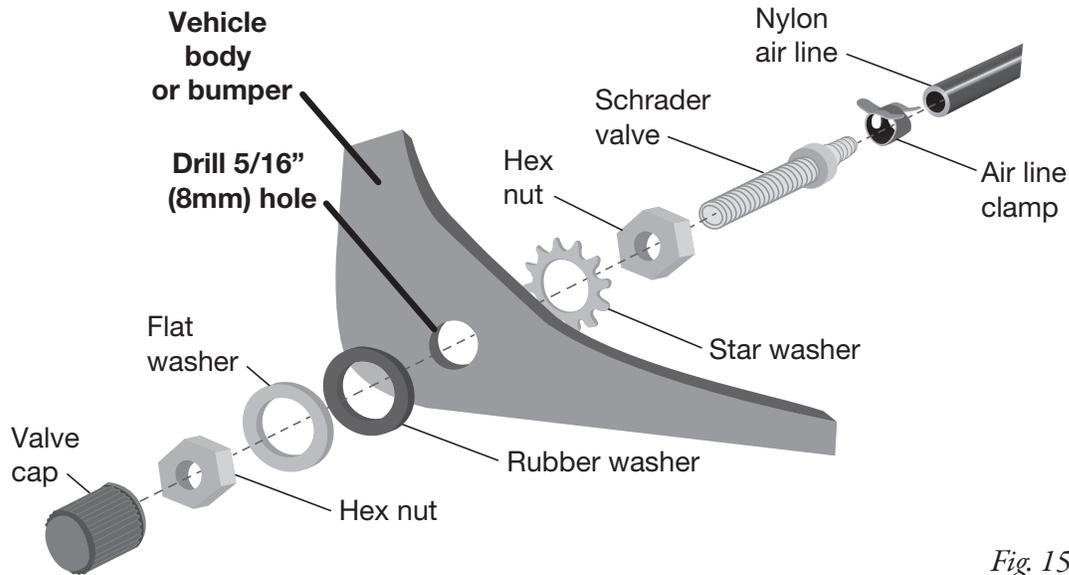


Fig. 15

- Fig. 16 shows the inflation valve installed.



Fig. 16

- Finish the installation by installing the rear wheels and torquing them to the recommended factory specifications.

COMPLETE THE INSTALLATION

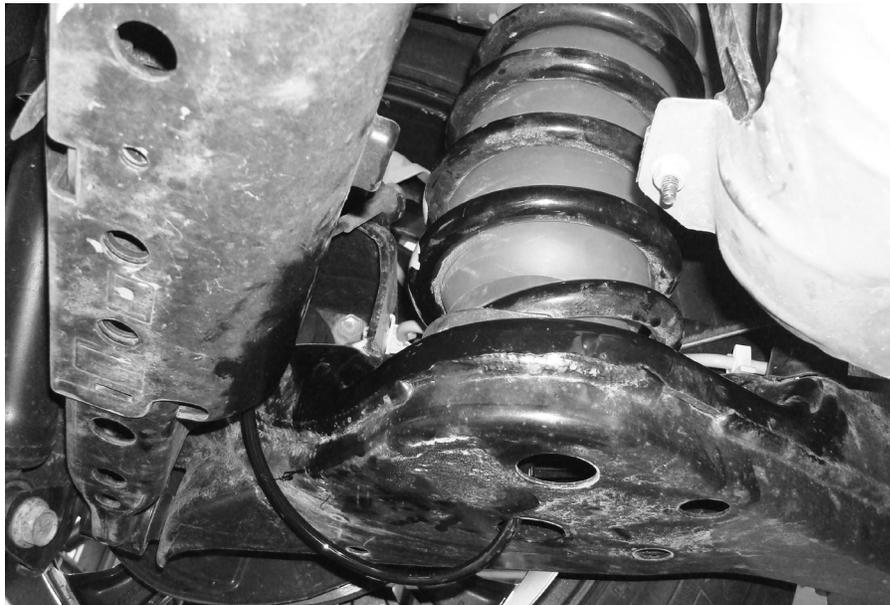
- Once the air line has been installed, raise the suspension, or lower the body completely and remove the safety stands. Inflate the air springs as stated in the *Maintenance and Use Guidelines* section and check for leaks.

Finished Installation

The images show the finished installation of both sides.



Inside, forward of axle view of
passenger's (right) side installation



Inside, forward of axle view of
driver's (left) side installation

Congratulations!

You are now the proud owner of an industry leading Air Lift air suspension system. Enjoy!

Before Operating

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.
4. Upon successful completion of the installation, follow these pressure requirements for the air springs.



**Minimum Recommended
Air Pressure**



Maximum Air Pressure



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.

Notes



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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WITH GLOBAL
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