

Air Lift 1000™



Installation Guide



Nissan Rogue



Watch the video

Info on Table of Contents page

Kit 60837

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.

TABLE OF CONTENTS

2 Hardware and Tools Lists

3 Introduction

Notation Explanation

3 Installing the System

Prepare the Vehicle
Install the Air Suspension

7 Installing the Air Lines

Single-Path Air Line Routing
Dual-Path Air Line Routing
Complete the Installation

9 Finished Installation

10 Before Operating

Installation Checklist
Maintenance and Use Guidelines

11 Limited Warranty and Return Policy

Video-enhanced installation guides

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

Hardware and Tools Lists

HARDWARE LIST

Item	Part#	Description	Qty
A	46129	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 LIST

Description.....	Qty
Needle nose and standard pliers.....	1 ea.
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).

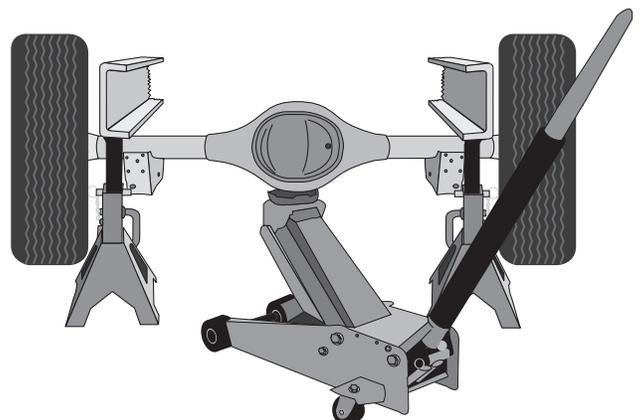


Fig. 1

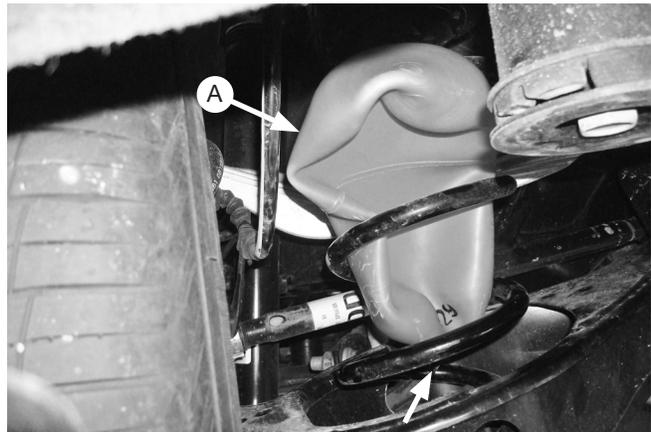
INSTALL THE AIR SUSPENSION

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.



Insert cylinder with stem pointing 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.
4. Push the cylinder up to the top of the coil spring and insert the protector (B) through the side of the coil spring and under the cylinder. Center the cylinder stem in the center hole of the lower protector and push the cylinder down to the bottom of the coil spring (Fig. 4).

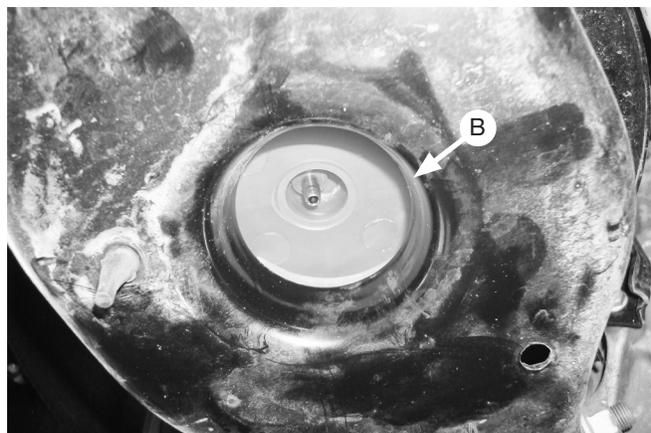


Fig. 4

Before starting on the driver's (left) side, please review *Installing the Air Lines* section on how to assemble the air line.

5. Install an air line clamp (L) onto one end of the air line (C) and install the air line onto the barbed stem of the cylinder completely covering the barb. Using a needle nose pair of pliers, position the air line clamp over the barbs (Fig. 5).

Make sure air line and clamp completely cover the barb on the end of the cylinder.

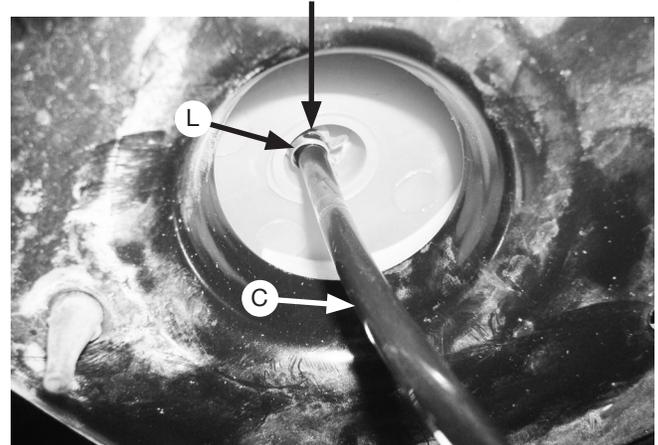


Fig. 5

6. Use a zip tie (D) and the two holes in the lower control arm (Fig. 6) to secure the air line. Leave a little slack in the line. Route the air line up through the large hole into the center of the lower control arm.

Use the two holes in the lower control arm to secure the air line. Route air line through large hole.

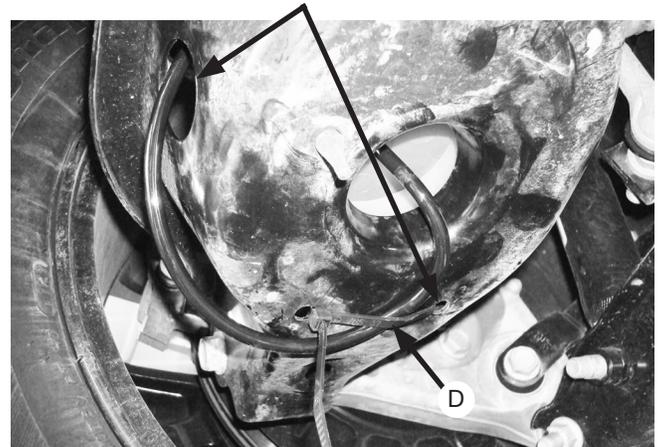


Fig. 6

7. Continue to route the air line up to the upper crossmember behind the coil spring and cut the air line as shown in Figure 8. Repeat the installation for the air line on the passenger's (right) side in the same way but route the air line above the back crossmember to the driver's (left) side (Fig. 7) just behind the coil spring as shown in Fig. 8. Secure the air line to the crossmember using the zip ties and the existing holes in the crossmember, ensuring the air line is above it.

Using existing holes in crossmember, secure air line using zip ties.

Route passenger's (right) side air line up and across the upper crossmember.



Fig. 7

8. Cut the passenger's (right side) air line as shown in Fig. 8. Install the tee fitting (J) and air line clamps (L) per the *Installing the Air Lines* section and zip tie air line/tee above the crossmember.

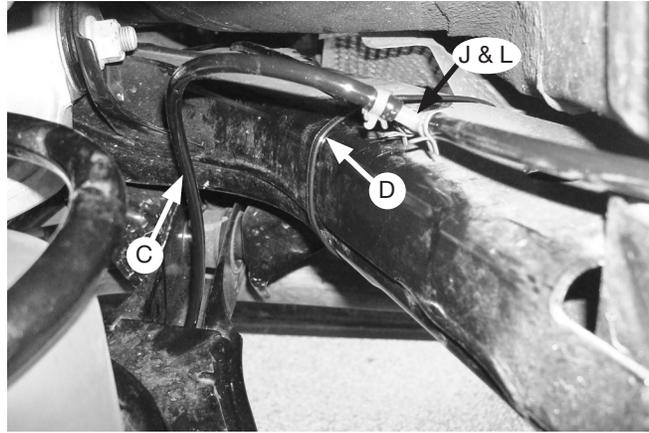


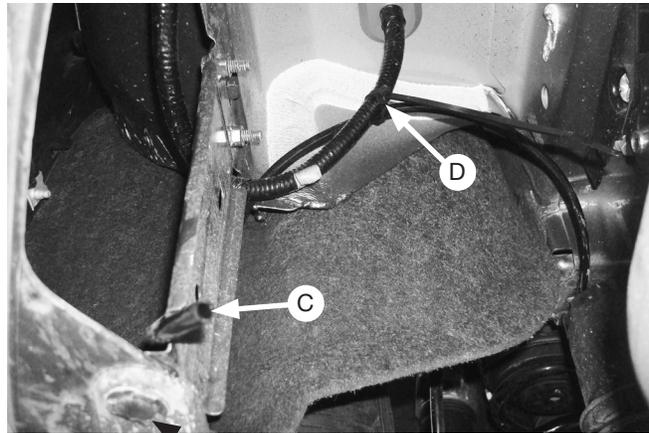
Fig. 8

The following is just an example of where you can install the Schrader valve (K).



If you choose to install the Schrader valve in this manner it is important to install and use the valve cap (E) to keep debris from the tire contaminating the valve core in the inflation valve.

9. Route the hose to the end of the crossmember and back around to the area behind the inner fender well (Fig. 9). Attach the hose to the existing wiring using a zip tie. Remove the push pin that is behind the rear wheel well area (Fig. 9 & Fig. 10).



Schrader valve (K) location.

Fig. 9

10. Install the Schrader valve (K) per the *Installing the Air Lines* section (Fig. 10).



Schrader valve (K) location.

Fig. 10

Installing the Air Lines

1. A single-path air line installation is recommended for vehicles that typically have even weight distribution (Fig. 11). 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. 12).

Single-Path Air Line Routing

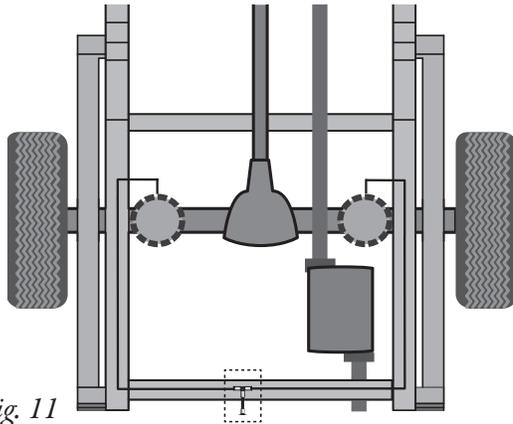


Fig. 11

Dual-Path Air Line Routing

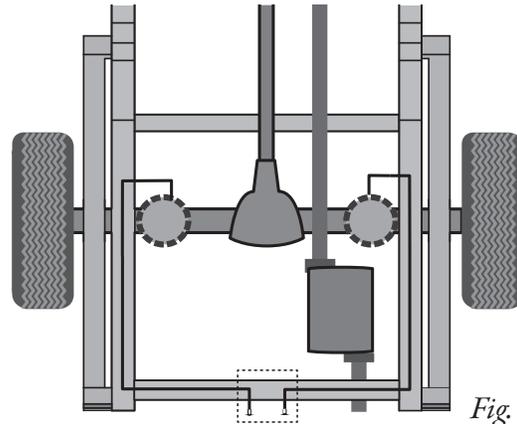


Fig. 12



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 to the tee from left and right side air springs. Make clean, square cuts with a razor blade or hose cutter (Fig. 13). Do not use scissors or wire cutters.

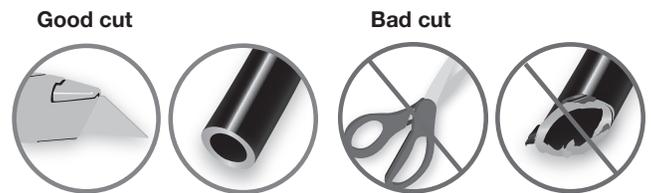


Fig. 13

3. Leave sufficient air line slack to prevent any strain on the fitting during axle motions.

4. Use this procedure (Fig. 14) 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.

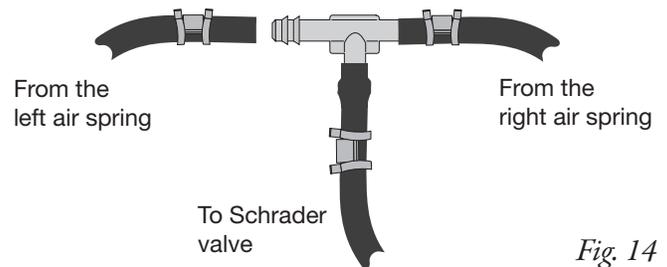


Fig. 14

5. Select a location for the Schrader valve (K), ensuring that the valve will be protected and accessible with an air hose (Fig. 15). 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.

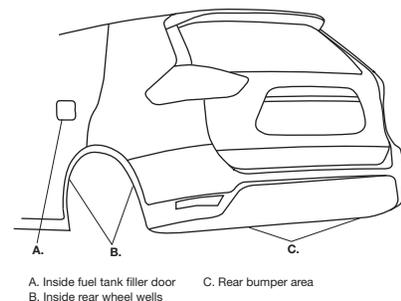


Fig. 15

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

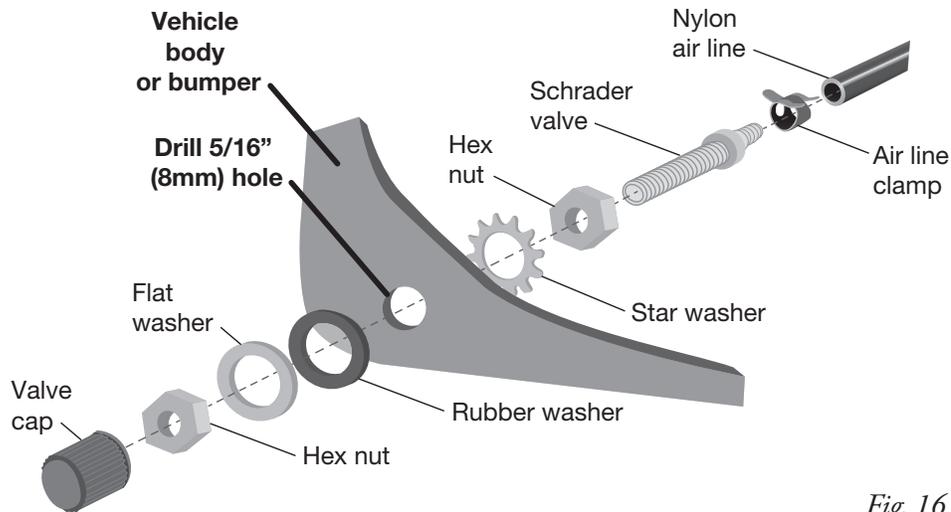


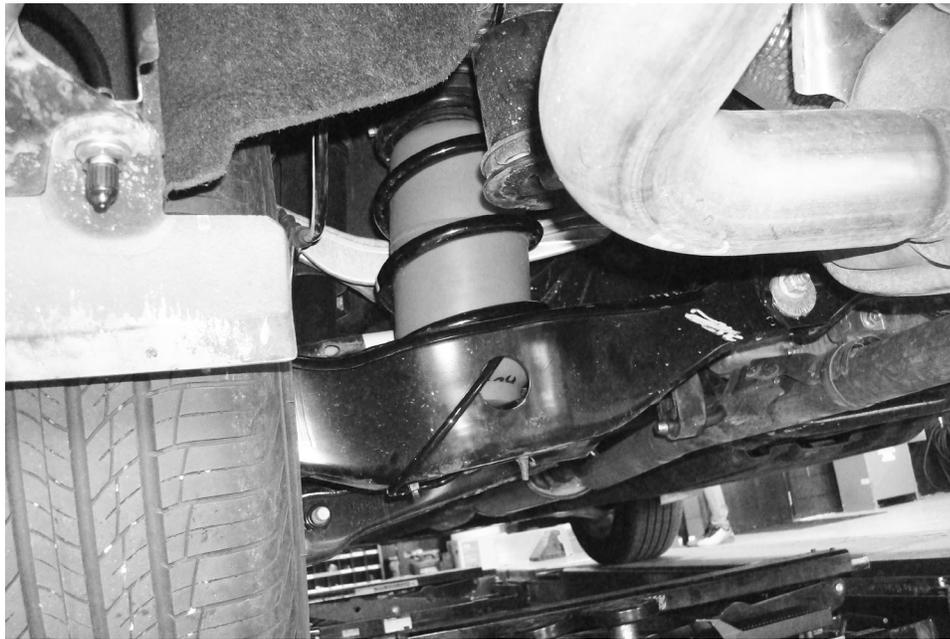
Fig. 16

COMPLETE THE INSTALLATION

1. 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 next section and check for leaks.

Finished Installation

The images show the finished installation of both sides (Fig.17 & Fig. 18).



Driver's (left) side

Fig. 17



Passenger's (right) side

Fig. 18

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.



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.



MADE IN USA
WITH GLOBAL
COMPONENTS

Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or P.O. Box 80167 • Lansing, MI 48908-0167

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 airliftcompany.com.