

Air Lift 1000™



Installation Instructions



Honda CR-V

Kit 60834

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.

TABLE OF CONTENTS

Hardware and Tools Lists	2
Introduction	3
Notation Explanation3
Installing the System	4
Preparing the Vehicle4
Installing the Air Lift 1000 System5
Installing the Air Lines	7
Complete the Installation8
Finished Installation	9
Installation Checklist9
Maintenance and Use Guidelines9

Hardware and Tools Lists

HARDWARE LIST

Item	Part#	Description	Qty
A	46142	Air spring.....	2
B	20937	Air line	15'
C	10466	Zip ties	6
D	21230	Valve cap.....	2
E	21233	5/16" Hex nut.....	4
F	21234	Rubber washer.....	2
G	18411	Star washer	2
H	18501	M8 flat washer.....	2
I	21236	Tee fitting.....	1
J	21455	Schrader valve	2
K	10638	Air line clamp	6

TOOLS LIST

Description.....	Qty
Pliers.....	1
5/16" drill bits	1
Drill	1
3/4" Drill bit, or 1/2" drill bit and die grinder with an aggressive burr	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

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 vehicle's coil springs. Each cylinder is rated at a maximum of 50 PSI (3.4BAR).

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 MACHINE OR MINOR PERSONAL INJURY.

Installing the System

PREPARING 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).

CAUTION

OBSERVE TENSION ON BRAKE LINES. DO NOT STRAIN OR OVEREXTEND.

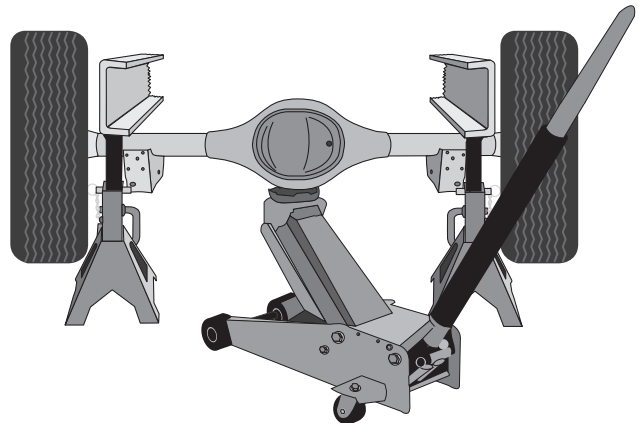


Fig. 1

3. The air line will need to be routed down through the lower A-arm. A hole will have to be made in the lower rubber spring seat (Fig. 2) to create access to the air spring barbed fitting (Fig. 2 & Fig. 3). Drill a hole in the center of the lower A-arm and through the lower spring seat rubber mount using a 3/4" drill bit.

TECH TIP

If you do not have access to a 3/4" drill bit, drill out the lower rubber spring seat using a 1/2" drill bit, then grind the material away using a die grinder with an aggressive burr. Make the hole as close to 3/4" and center the hole as much as possible.



Fig. 2

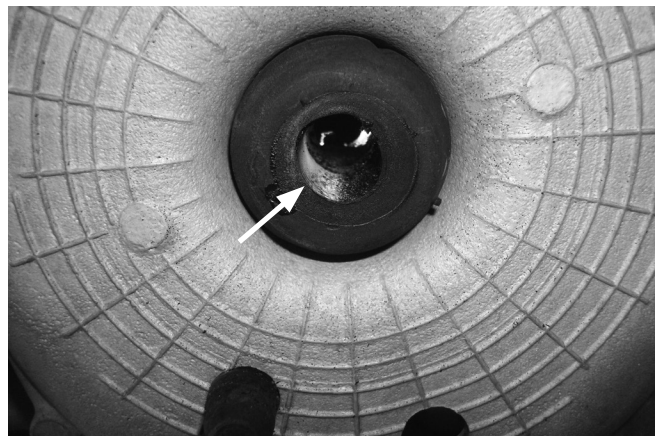


Fig. 3

INSTALLING THE AIR LIFT 1000 SYSTEM

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 (Fig. 4). Fold the air spring into a “hot dog bun shape”.



Fig. 4

2. Insert the flattened end of the air spring (A) into the bottom opening of the coil spring, with the stem at the bottom (Fig. 5). Push the air spring up into the coil spring by hand or with a blunt instrument such as a spoon-type tire iron.
3. When the air spring is completely in the coil, remove the cap and allow the air spring to assume its “as-molded” shape.



Fig. 5

4. Using a pair of pliers, slide an air line clamp (K) over one end of the air line (B) and insert the air line through the previously drilled hole in the lower rubber spring seat. Push the air line completely over the barbed stem of the air spring and slide the clamp over the barbed stem area (Fig. 6).

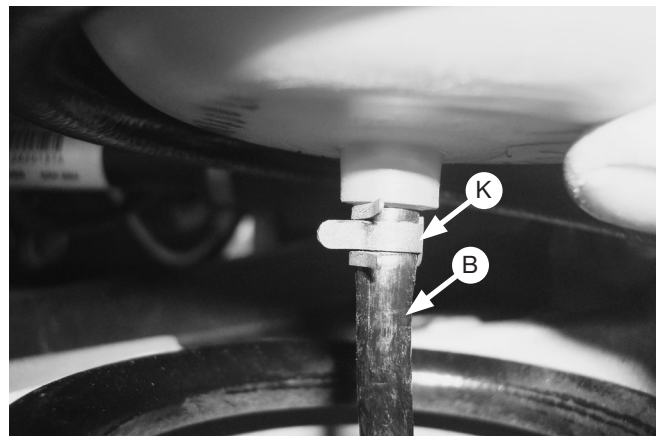


Fig. 6

- Push the air spring to the bottom of the coil spring and route the air line as shown in Fig. 7. Secure the air line with zip ties (C) to the back of the lower control arms and route air line up to the upper rear crossmember. Zip tie to the upper crossmember. Review air line installation instructions and repeat for the other side.

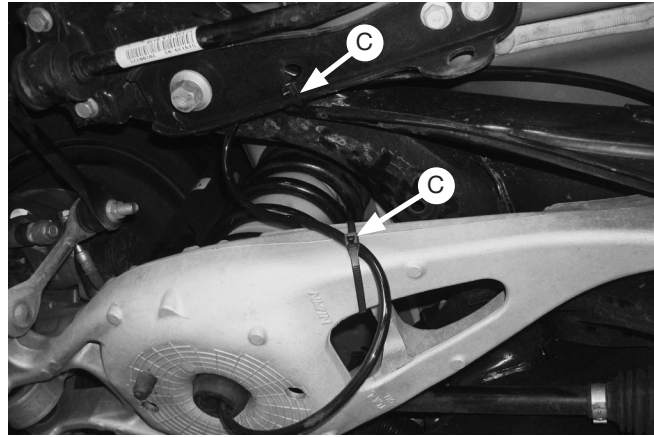


Fig. 7

- Run the air line to the center of the rear crossmember and attach to the crossmember with zip ties (Fig. 8). Install the tee fitting (I) if a single fill is required (single fill shown in Fig. 8) or route both air lines to the back above the crossmember as shown.

Route air line or air lines forward, up, and back over the rear crossmember

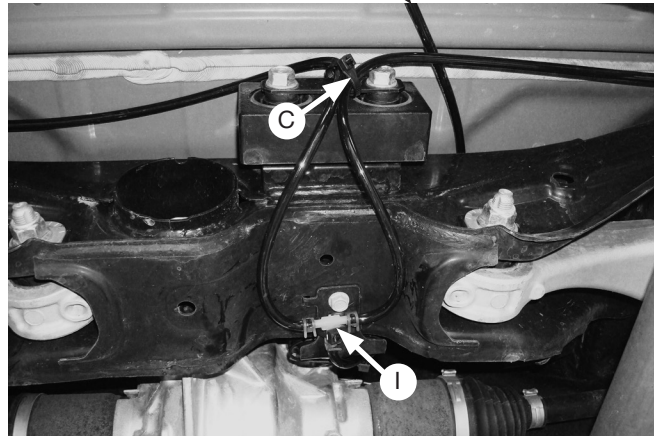
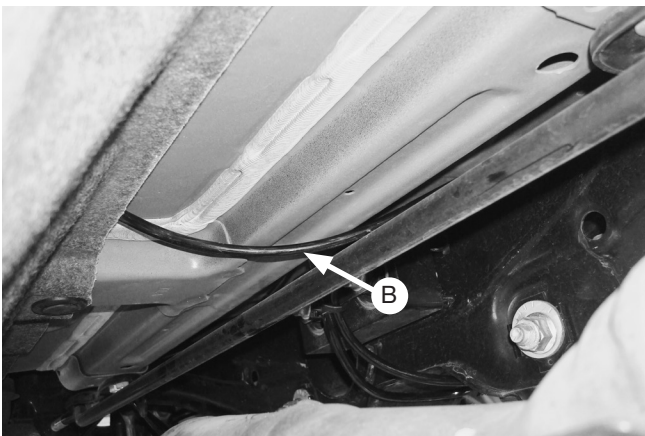


Fig. 8

- Continue routing the air line, or air lines, back and under the lower stowage area cover (if equipped) (Fig. 9) and keep routing air line to the back area under the rear bumper cover (Fig. 10). Follow the rest of the air line installation instructions in the next section.



Rear cover under stowage area

Fig. 9



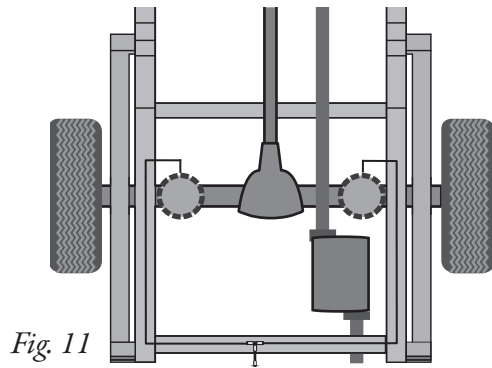
Suggested single fill inflation assembly location shown

Fig. 10

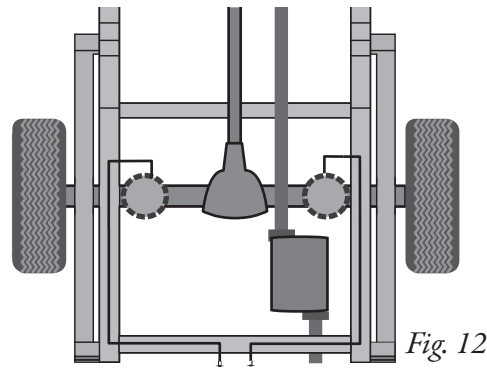
Installing the Air Lines

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 (I) and route separate air lines for both air springs (Fig. 12).

Single-Path Air Line Routing



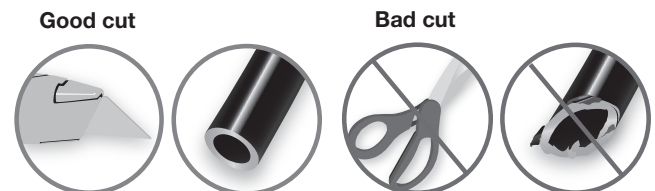
Dual-Path Air Line Routing



CAUTION

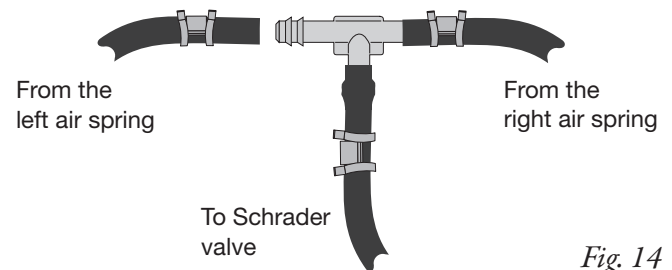
TO PREVENT THE AIR LINE FROM MELTING, MAINTAIN AT LEAST 6" (152MM) FROM THE EXHAUST SYSTEM TO THE AIR LINE.

2. If installing a single-path air line, choose a location for the tee fitting (I) on the cross member as noted in step 6. Determine and cut adequate length of air line (B) 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.

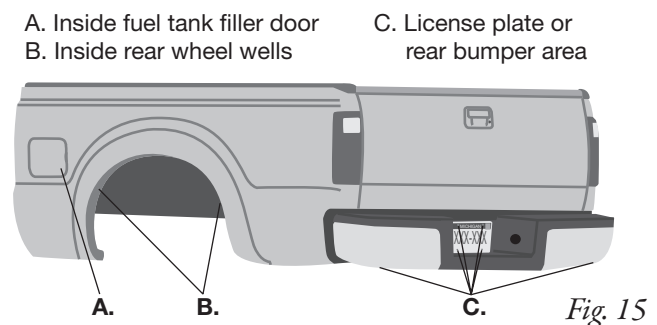


3. Leave sufficient air line slack to prevent any strain on the fitting during axle motions.
4. Use this procedure (Fig. 14) for all air line connections:

- a. Slide the air line clamp onto the air line.
- b. Push the air line and air line clamp (K) 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 (J), 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 (B) 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 (J) and mount as shown (Fig. 16). Install the air line on the Schrader valve first. The rubber washer (F) 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.

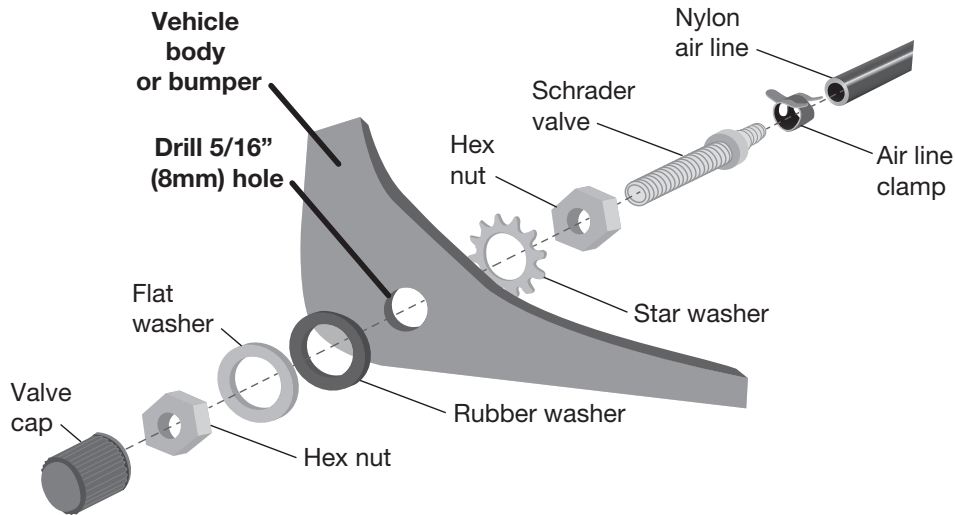


Fig. 16

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 next section and check for leaks.

IMPORTANT

BECAUSE THE AIR SPRING IS SLIGHTLY UNDERSIZE FOR THE INTERNAL DIAMETER OF THE COIL SPRING, IT WILL BE NECESSARY TO INFLATE THE AIR SPRINGS TO THE MAXIMUM PSI AND LET SET OVERNIGHT FOR A FEW NIGHTS. THIS WILL STRETCH THE AIR SPRINGS OUT TO CONTACT THE SIDES OF THE COIL SPRING, THUS IMPROVING THE PERFORMANCE OF THE AIR SPRING FOR LOAD SUPPORT.

Finished Installation

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.
- 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 50 PSI (3.4BAR).
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)	50 PSI (3.4BAR)

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 50 PSI (3.4BAR), THE AIR PRESSURE ACTUALLY NEEDED IS DEPENDENT ON LOAD AND GROSS VEHICLE WEIGHT RATING.