

LoadLifter 5000™ SERIES + Air Lift® ProSeries



Installation Guide



Dodge/RAM 1500



Watch the video
Info on Table of Contents page

Kits 57365 | 88365 | 93365

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.

Limited Warranty and Return Policy

Air Lift Company provides a Limited Lifetime Warranty* to the original purchaser of its load support products, from the date of original purchase, 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.

*Full Limited Warranty and Return Policy are available at www.airliftcompany.com/warranty and are subject to change.

WARRANTY REGISTRATION & CLAIMS

- To register your warranty, please visit:
<https://www.airliftcompany.com/support/warranty/register/>
- To submit a warranty claim, please visit:
<https://www.airliftcompany.com/support/warranty/submit-claim/>

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Video-enhanced installation guides

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

System Overview

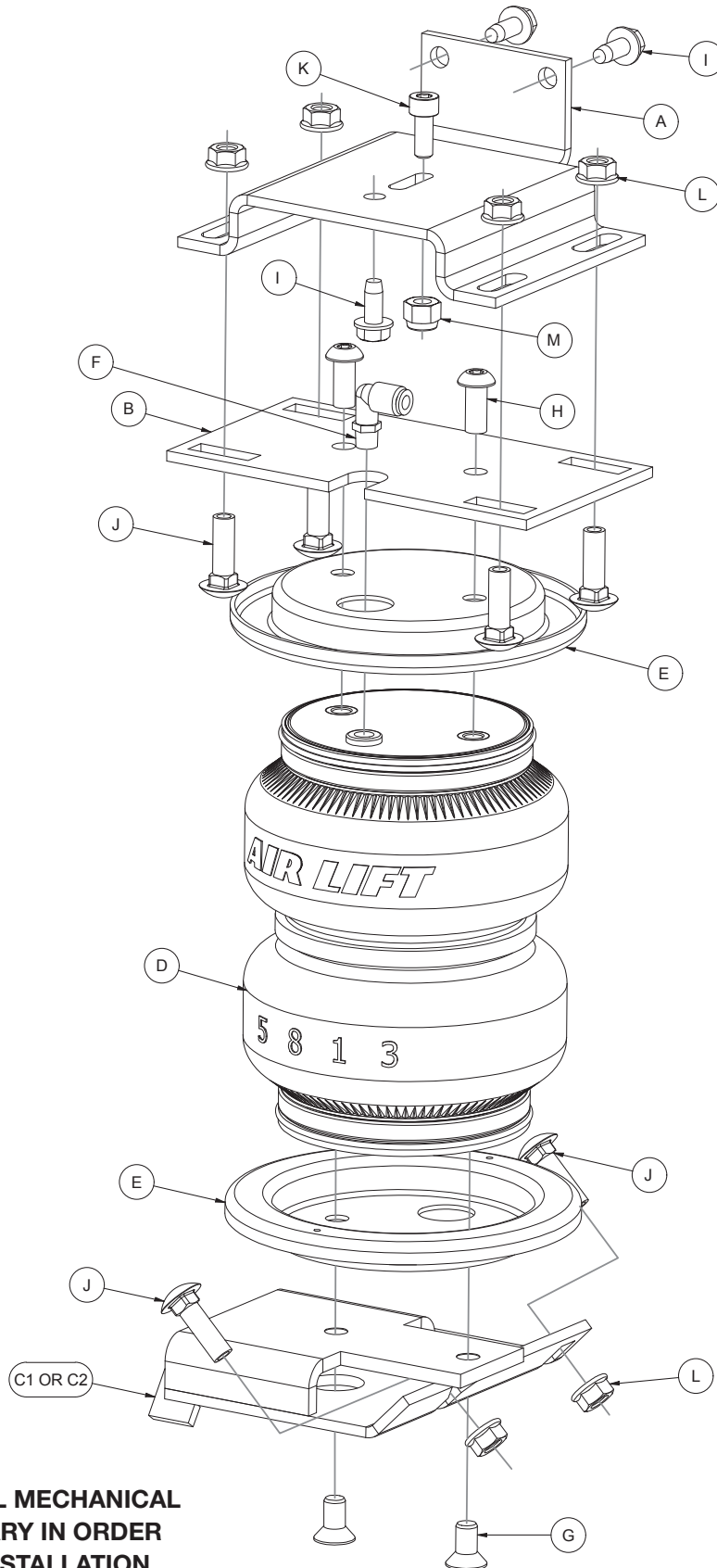


Fig. 1

NOTE: PROFESSIONAL MECHANICAL SKILLS ARE NECESSARY IN ORDER TO COMPLETE THE INSTALLATION OF THIS KIT.

Hardware and Tools

Common Parts Included in All 3 Kits

| Item | Part# | Description | Qty |
|------|-------|--|-----|
| A | 07641 | Frame bracket..... | 2 |
| B | 07561 | Air spring bracket..... | 2 |
| C1 | 03017 | LH lower bracket..... | 1 |
| C2 | 03112 | RH lower bracket | 1 |
| F | 21837 | Push-to-connect (PTC) fitting | 2 |
| I | 17102 | 5/16"-18 x 3/4" Self-tapping screw | 6 |
| J | 17361 | 3/8"-16 x 1 1/4" Carriage bolt..... | 12 |
| K | 17495 | M8-1.25 x 20mm Socket-head screw | 2 |
| L | 18422 | 3/8"-16 Serrated lock nut | 12 |
| M | 18522 | M8-1.25 Nylon lock nut..... | 2 |
| N | 18507 | 3/8" Stainless steel flat washer..... | 4 |
| AA* | 20086 | Air line assembly..... | 1 |
| BB* | 10466 | Zip ties..... | 6 |
| CC* | 21230 | Valve cap | 2 |
| DD* | 18411 | Star washer..... | 2 |
| EE* | 21234 | Rubber washer | 2 |
| FF* | 18501 | M8 Flat washer | 2 |
| GG* | 21233 | 5/16" Hex nut | 4 |
| HH* | 09484 | Thermal Sleeve | 1 |
| II* | 10613 | Heat Shield | 1 |
| JJ* | 10741 | 4 1/2" Clamp | 2 |
| KK* | 10555 | 3 1/2" Clamp | 2 |

* not pictured in the System Overview (Fig. 1)

TOOLS LIST

| Description..... | Qty |
|--|-----|
| Standard and metric open-end or box wrenches | SET |
| Adjustable wrench..... | 1 |
| Ratchet | 1 |
| Standard and metric, regular and deep-well sockets | SET |
| 1/4" and 5/16" drill bits (very sharp)..... | 1 |
| Heavy-duty drill | 1 |
| Torque wrench..... | 1 |
| 4" Grinder or metal cutting tool..... | 1 |
| Standard and metric hex-key wrenches | 1 |
| Hose cutter, razor blade, or sharp knife | 1 |
| Hoist or floor jacks | 1 |
| Safety stands..... | 2 |
| Safety glasses | 1 |
| Black paint or undercoating | 1 |
| Air compressor or compressed air source | 1 |
| Spray bottle with dish soap/water solution..... | 1 |

The photos in this manual show the LoadLifter 5000 Ultimate kit.

Unique Parts in Each Kit

LoadLifter 5000™ KIT 57365

| Item | Part# | Description | Qty |
|------|-------|---|-----|
| D | 58437 | Air spring..... | 2 |
| E | 11951 | Roll plate (silver zinc-plated)..... | 4 |
| G | 17215 | 3/8"-24 x 3/4" Flat-head screw..... | 4 |
| H | 17527 | 3/8"-24 x 3/4" Button-head cap screw..... | 4 |

LoadLifter 5000™ ULTIMATE KIT 88365

| Item | Part# | Description | Qty |
|------|-------|---|-----|
| D | 58496 | Air spring with jounce bumper | 2 |
| E | 11967 | Roll plate (black powder-coated) | 4 |
| G | 17215 | 3/8"-24 x 3/4" Flat-head screw..... | 4 |
| H | 17527 | 3/8"-24 x 3/4" Button-head cap screw..... | 4 |

Air Lift® ProSeries KIT 93365

| Item | Part# | Description | Qty |
|------|-------|--|-----|
| D | 58937 | Air spring..... | 2 |
| E | 11951 | Roll plate (silver zinc-plated)..... | 4 |
| G | 17363 | 3/8"-24 x 3/4" Stainless flat-head screw | 4 |
| H | 17376 | 3/8"-24 x 7/8" Stainless button-head cap screw.. | 4 |
| HH* | 21838 | Tee fitting..... | 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 LoadLifter 5000 series air spring kits. All LoadLifter 5000 series kits utilize sturdy, reinforced, commercial-grade single or double, depending on the kit, convolute bellows.

The air springs are manufactured like a tire with layers of rubber and cords that control growth. LoadLifter 5000 kits provide up to 5,000 pounds (2,268kg) of load-leveling support with air adjustability from 5-100 PSI (.34-7BAR).

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 highlighted by one of these notations must be observed to help minimize risk of personal injury or possible improper installation that 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.

IDENTIFYING THE DIFFERENCES BETWEEN KITS

Should you need to contact Air Lift customer service, you will need to know which kit you are inquiring about: standard LoadLifter 5000, LoadLifter 5000 Ultimate or standard Air Lift® ProSeries. The kits are easily identifiable by looking at the end caps on the air spring and the roll plates.

- Standard **LoadLifter 5000™** — Plastic end cap and Zinc-plated steel roll plates.
- LoadLifter 5000™ Ultimate** — Plastic end cap and Black powder-coated roll plates.
- Standard **Air Lift® ProSeries** — Aluminum end cap and Zinc-plated steel roll plates.



LoadLifter 5000
Plastic end cap



LoadLifter 5000
silver zinc-plated steel roll plate



LoadLifter 5000 Ultimate
Plastic end cap



LoadLifter 5000 Ultimate
black powder-coated roll plate



Air Lift® ProSeries
Aluminum end cap



Air Lift® ProSeries
silver zinc-plated steel roll plate

Installing the System

PREPARING THE VEHICLE

In order to install the upper frame brackets (A), it will be necessary to remove the coil springs as follows:

1. Lift the vehicle up and support the frame with safety stands. Leave enough room to drop the axle down low enough to remove the coil springs (Fig. 2). Remove the rear wheels.

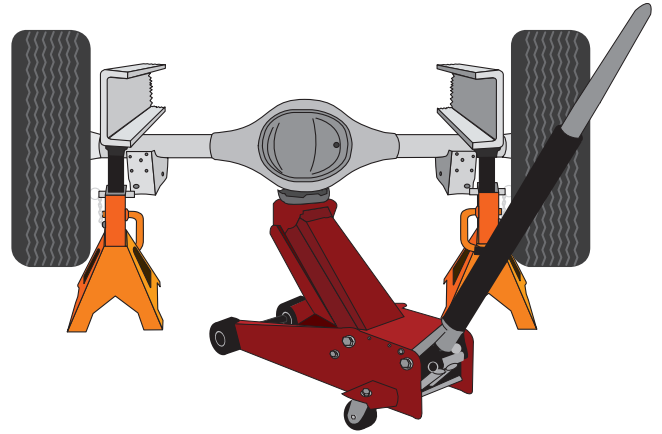


Fig. 2

2. Mark the bottom of the right-hand and left-hand coil springs and lower spring seat mounts with chalk or a paint marker to make sure the spring is put back the same way it is removed (Fig. 3).
3. Remove both lower shock bolts and slowly lower the axle until the springs can be removed.

NOTE

Lower the axle carefully and avoid putting stress on the flexible brake lines.



Fig. 3

4. Remove both jounce bumpers from both sides (Fig. 4).



Fig. 4

5. Grind the welds off the jounce bumper cups that attach them to the jounce bumper frame bracket (Fig. 5). Remove from both sides of the vehicle.

NOTE *Keep the jounce bumper bracket/cup for future use.*

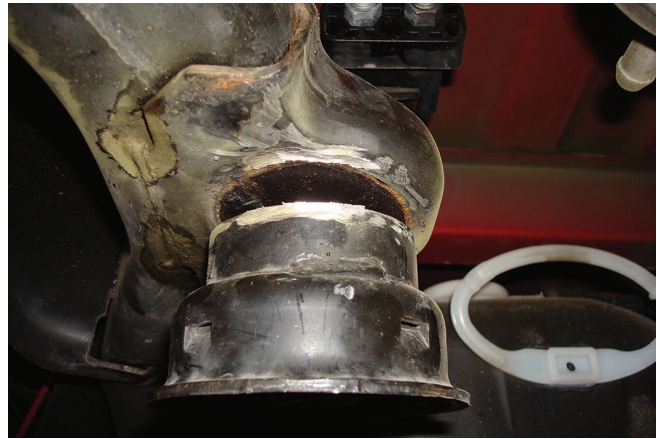


Fig. 5

6. Grind the remaining welds flush to the frame (Fig. 6). Spray the frame with paint or undercoating to cover the bare surface after grinding (Fig. 7).



Fig. 6

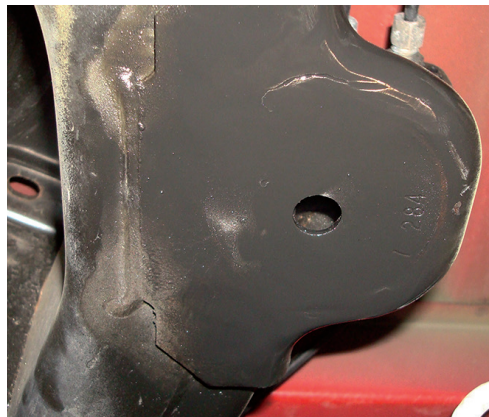


Fig. 7

7. Install the socket head M8 bolt (K) into the frame bracket (A) slot closest to the flange on the bracket (Fig. 8). Cap with the nylon lock nut (M) as shown (Fig. 9).

NOTE *The M8 bolt is used as a tool to ensure the upper bracket is aligned properly.*



Fig. 8

The bolt head points in the same direction as the flange on the bracket and is used as **a line up tool only**.

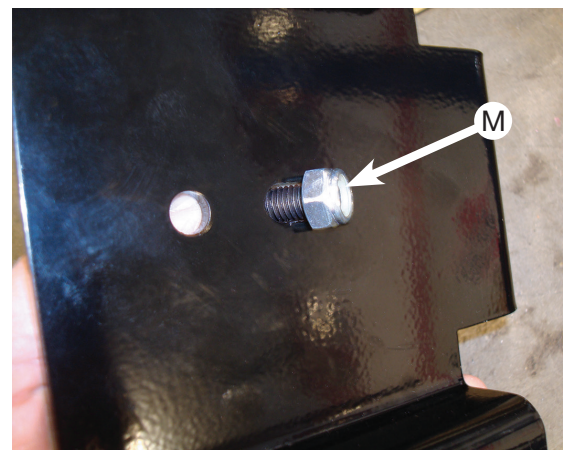


Fig. 9

8. Thread the nylon lock nut on the M8 bolt only enough to allow the bolt to slide freely into the slot. This will allow you to align the frame bracket correctly.
9. Set the frame bracket (with the socket head bolt in it), on the frame, with the flange pointing up. Insert the socket head bolt line up tool into the existing hole in the frame that was under the stock jounce bumper (Fig. 10).
10. The bracket should sit flush to the bottom of the frame. If there is any leftover weld holding the bracket off the frame, remove and grind down so the bracket is flush.

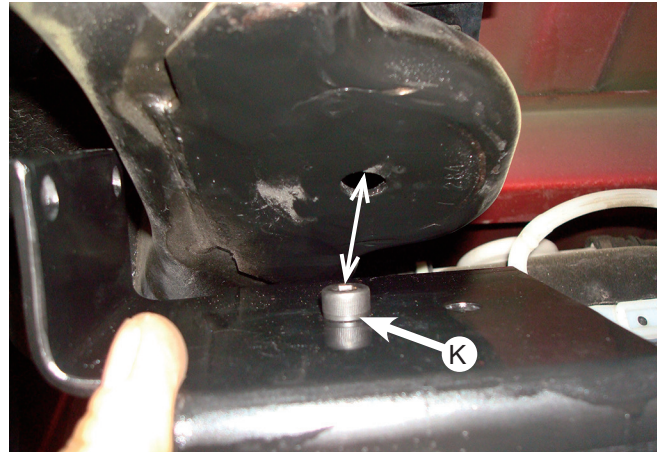


Fig. 10

11. With the socket head bolt in the hole, push the flange against the side of the frame (Fig. 11) and mark the existing hole under the frame with a paint marker (Fig. 12).

NOTE

The socket head bolt remains in place but requires no additional tightening.

NOTE

If possible, with the bracket in position, use a 21/64" (or closest) centering punch to fit into the hole and center-punch the frame for an exact center of the hole.

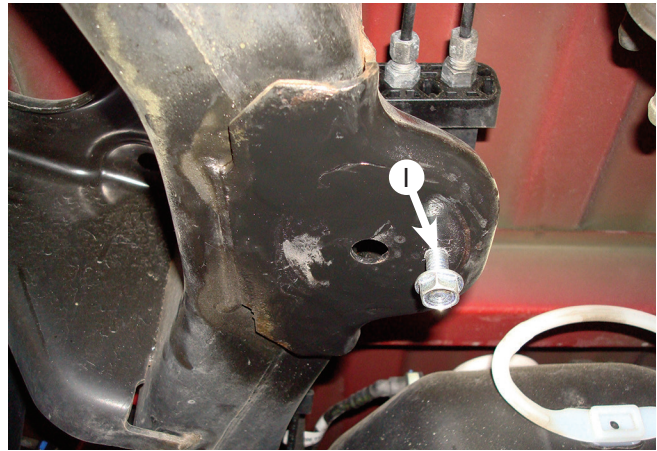


Fig. 11

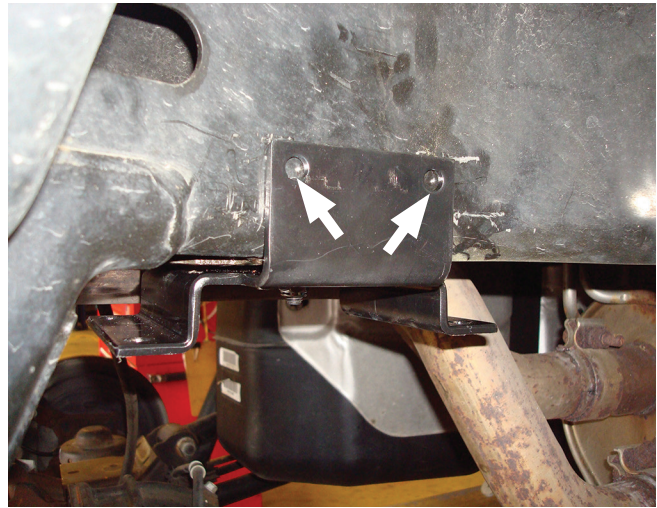


Fig. 12

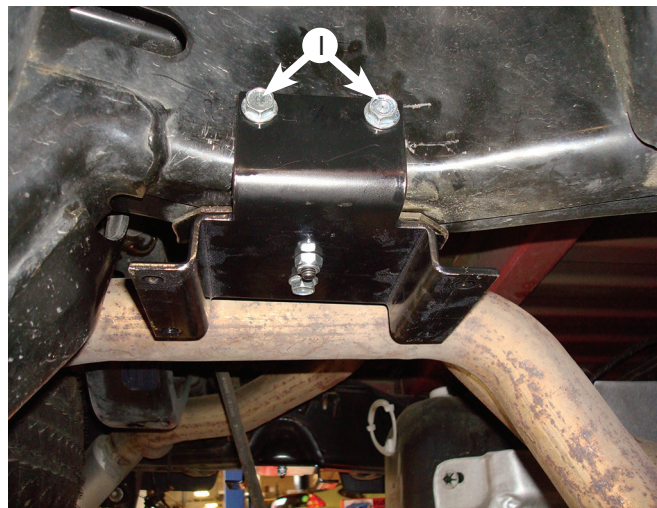
12. Center-punch the frame and drill a 1/4" hole (Fig. 13). Start a 5/16" self-tapping screw (I) into the hole, making sure it is straight, and tighten it enough to form the threads needed to set the screw (Fig. 13). Remove the screw once threads are formed.
13. Set the bracket back in place on the frame and bolt into position using the self-tapping screw previously set into the frame. Tighten the screw making sure the washer head portion of the screw is flat to the bracket, and torque to 15 lb.-ft. (20Nm).


Fig. 13

14. Make sure the bracket is flat to the bottom of the frame, center punch and drill through the frame with a 1/4" bit using the holes in the side of the flange as a guide (Fig. 14).


Fig. 14

15. Install two more self-tapping screws in the side, making sure the flat head portion of the bolt is flush to the bracket, and torque to 15 lb.-ft. (20Nm) (Fig. 15). Repeat for the other side.
16. Once the frame brackets have been installed on both sides, the stock suspension can be put back together.
17. Set the coil springs back into position using the index marks from the previous step and raise the axle back up, making sure the spring indexes into the top and bottom spring seats correctly.
18. Reinstall the wheels and lower the vehicle so the wheels rest on the ground. Torque the lug nuts to the manufacturer's torque specs.
19. Install the lower shock bolts back onto the axle and torque to 100 lb.-ft. (135Nm).


 Driver's side bracket shown mounted in place *Fig. 15* and ready for the air spring assembly.

ASSEMBLING THE AIR SPRINGS

1. Set a roll plate (E) onto the air spring (D).

NOTE

The radius (rounded) edge of the roll plate will be toward the air spring, so the air spring is seated inside both roll plates.

2. Install the swivel fitting (F) into the top of the air spring finger-tight plus 1 1/2 turns (Fig. 16).



Fig. 16

3. Insert four carriage bolts (J) into the upper air spring bracket (B) and set the upper bracket onto the air spring assembly (Fig. 17).

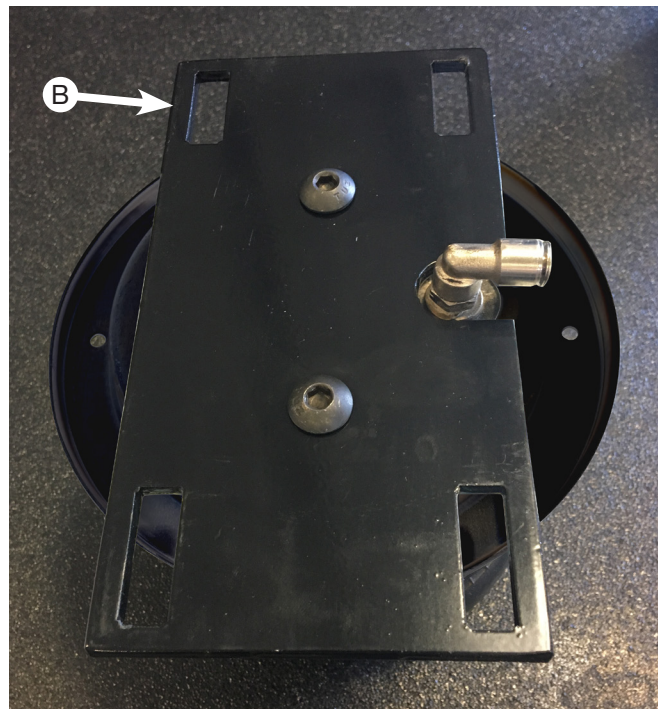


Fig. 17

4. Attach the upper air spring bracket using two 3/8" button head cap screws (H). Torque to no more than 20 lb.-ft. (27Nm) Repeat for the opposite side. Figure 18 shows both upper assemblies.

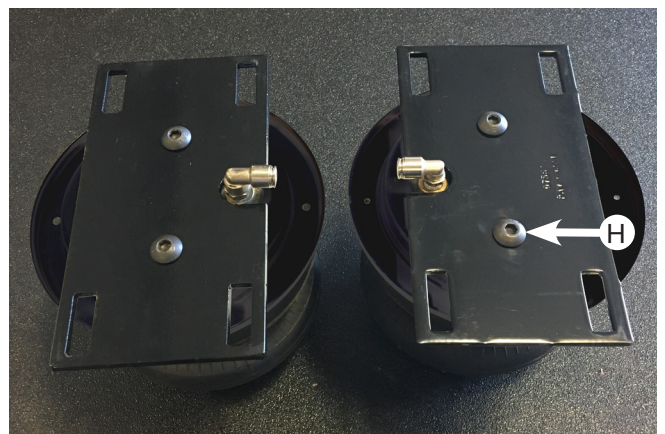


Fig. 18

5. Flip the air spring assemblies upside down and set a roll plate over the air spring (same as in step one) (Fig. 19).
6. Position the air spring assemblies so that the fittings are outboard and away from each other.

NOTE *The finished assemblies will be left- and right-hand specific, and the fittings that are on the top of the air springs should be facing the outside (tire side) of the vehicle once into position.*



Fig. 19

7. Set the left lower bracket (C1) onto the left side assembly and attach with two 3/8" flat-head screws (G). Assemble the other air spring using the right-side lower bracket (C2). Torque to no more than 20 lb.-ft. (27Nm) (Fig. 19). Figure 20 shows the completed assemblies.



Left (driver's) side assembly using lower bracket (C1).

Right (passenger's) side assembly using lower bracket (C2).

Fig. 20

INSTALLING THE ASSEMBLIES

1. Index a 3/8" carriage bolt (J) into the opening on the front of the driver's side assembly as shown (Fig. 21).
2. Drop the axle again to gain clearance to put the two assemblies into position on the axle.

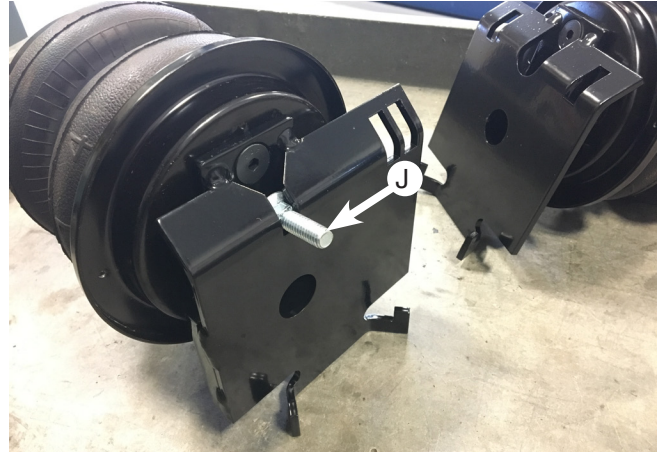


Fig. 21

3. Set the left (driver's) side assembly into position with the carriage bolt still in the slot (previously installed). Set into place on the axle, making sure the back of the bracket is "hooked" below the jounce bumper strike plate. Push the assembly forward while lining up the carriage bolt with the existing hole in the front of the lower jounce bumper strike plate (Figs. 22 & 23). Cap the carriage bolt with a 3/8" serrated lock nut (L), but leave it loose at this time.



Fig. 22



Fig. 23

4. Insert another 3/8" carriage bolt (J) through the remaining hole in the front side of the bracket (Fig. 24).



Fig. 24

- It will be necessary to use a socket with an extension to reach the inside threads on the carriage bolt previously set into position (Fig. 25). It may be helpful to pull the carriage bolt out slightly so that it can be angled enough to get started on the thread.



Use the slot in the lower control arm mount for the extension to fit through while threading the nut on the bolt.

Fig. 25

- Set the right (passenger's) side assembly into position in the same way, indexing the lower bracket with the tabs under the jounce bumper strike plate and, with the exception of using the slot for the carriage bolt in the lower bracket, installing the carriage bolts in the same manner. Torque both sides of the lower bracket hardware evenly to 31 lb.-ft. (42Nm), making sure the tabs are still indexed under the jounce bumper strike plate. Figures 26 & 27 show the assemblies bolted into position.

NOTE

Fittings should be on the outside (tire side) of the assemblies.

Left (driver's) side assembly

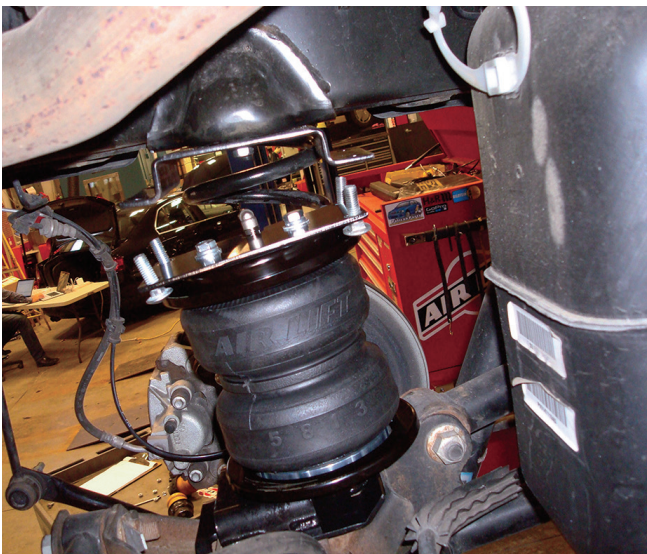


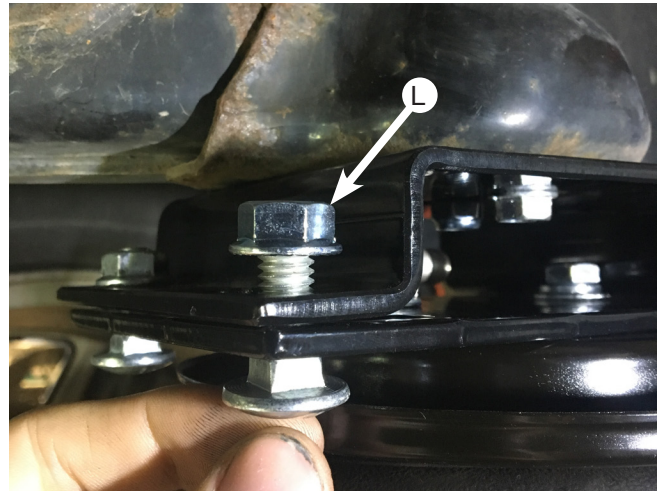
Fig. 26

Right (passenger's) side assembly



Fig. 27

7. Raise the axle back up while aligning the air spring mounting plate's carriage bolts, with the frame mounting bracket holes. Cap all carriage bolts once in position, with 3/8" serrated lock nuts (L) and tighten finger-tight but loose enough for adjustment if necessary (Fig. 28).
8. Align air spring as close to vertical as possible. After the air spring is properly aligned, torque all four flange nuts to 31 lb.-ft. (42Nm).
9. Torque all other installed nuts to 31 lb.-ft. (42Nm).

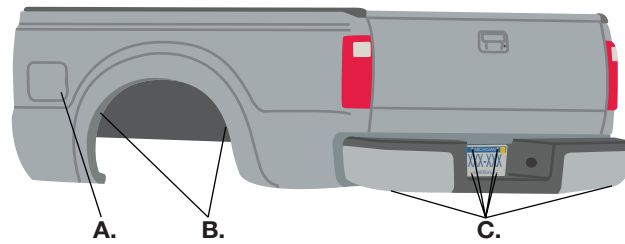
*Fig. 28*

10. Left (driver's) side shown with the assembly bolted up to the frame bracket (Fig. 29).

*Fig. 29*

Installing the Air Lines

1. Choose the locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary.

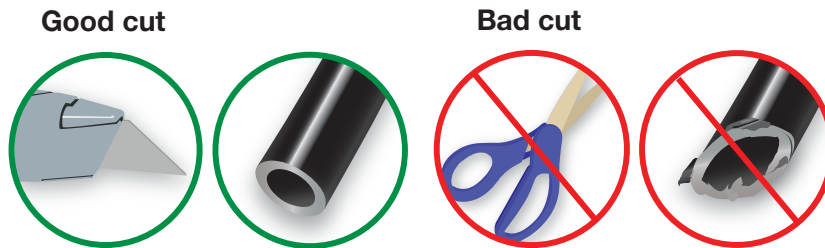


A. Inside fuel tank filler door
 B. Inside rear wheel wells
 C. License plate or rear bumper area



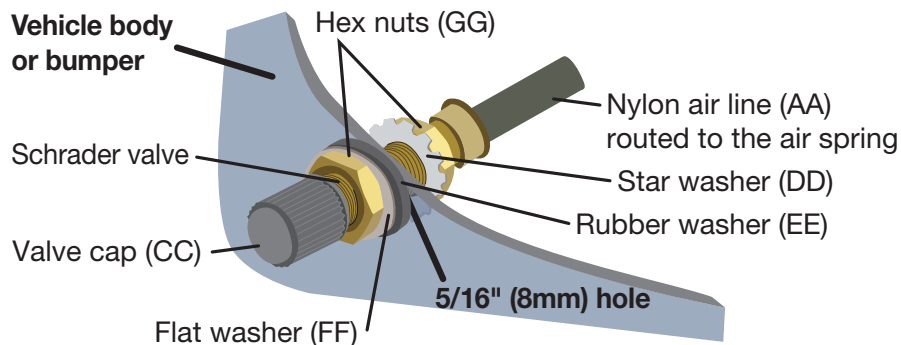
KEEP AT LEAST 6" (152MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

2. Make clean, square cuts with a razor blade or hose cutter when cutting the air line (AA). Do not use scissors or wire cutters.



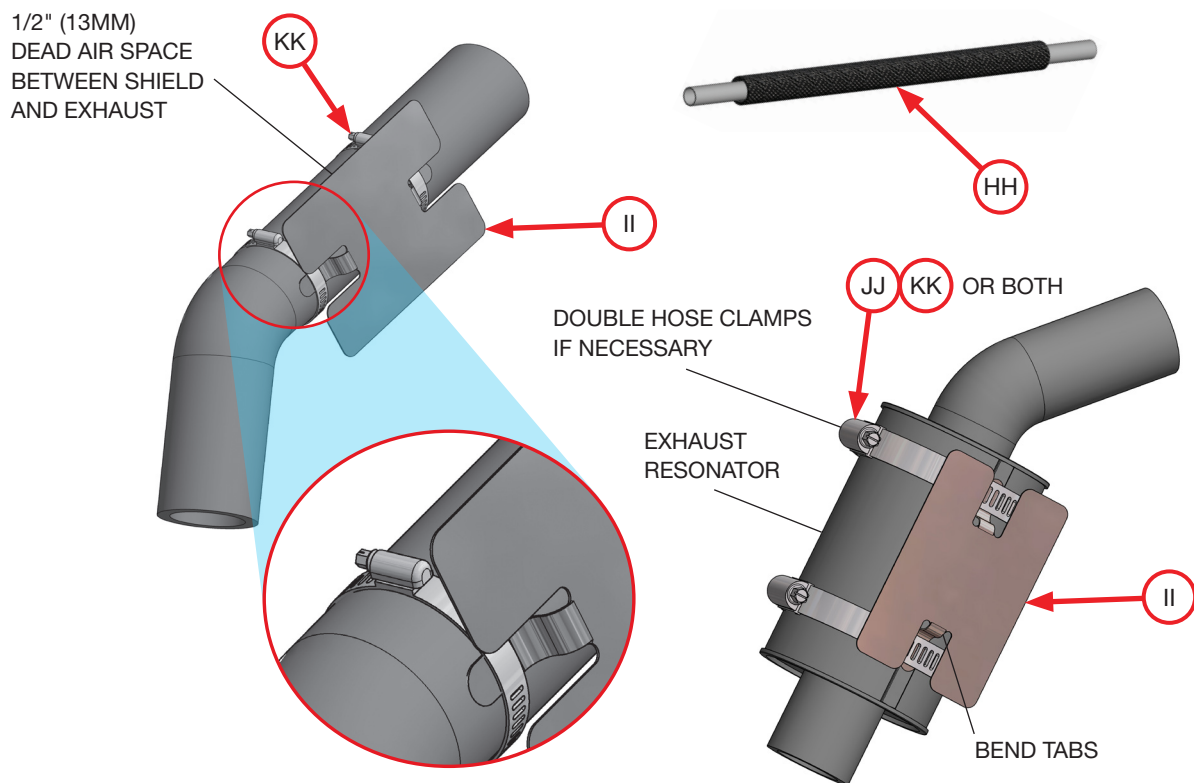
3. Use zip ties (BB) to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. Leave at least 2" (51mm) of slack in the air line to allow for any movement that might pull on the air line. The minimum bend radius for the air line is 1" (25mm).

4. Install the Schrader valve in the chosen location.



INSTALL THE HEAT SHIELD

1. Attach the metal heat shield (II) to the exhaust pipe or exhaust resonator using the hose clamps (JJ, KK or both). Slide the air line thermal sleeve (HH) over the air line and place it where the air line is closest to the exhaust.



Finished Installation

The image shows the finished installation of the driver's (left) side assembly.



Congratulations!

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

Before Operating

INSTALLATION CHECKLIST

- ❑ **Clearance test** — Inflate the air springs to 40-60 PSI (2.8-4.1BAR) and make sure there is at least 1/2" (13mm) clearance from anything that might rub against each sleeve. Be sure to check the tire, brakes, frame, shock absorbers and brake cables.
- ❑ **Leak test before road test** — Inflate the air springs to 40-60 PSI (2.8-4.1BAR) 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 initial 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 100 PSI (7BAR).
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 100 PSI (7BAR), THE AIR PRESSURE ACTUALLY NEEDED IS DEPENDENT ON LOAD AND GROSS VEHICLE WEIGHT RATING.



Thank you for purchasing Air Lift Products!

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 +1 (517) 322-2144.



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