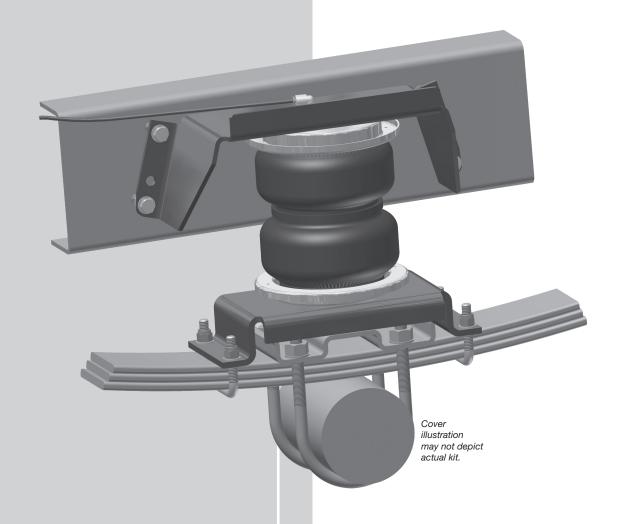
Load**Lifter 5000**

Kit 57105





INSTALLATION GUIDE

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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Introduction

The purpose of this publication is to assist with the installation and maintenance of the LoadLifter 5000 air spring kit. All LoadLifter 5000 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 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.

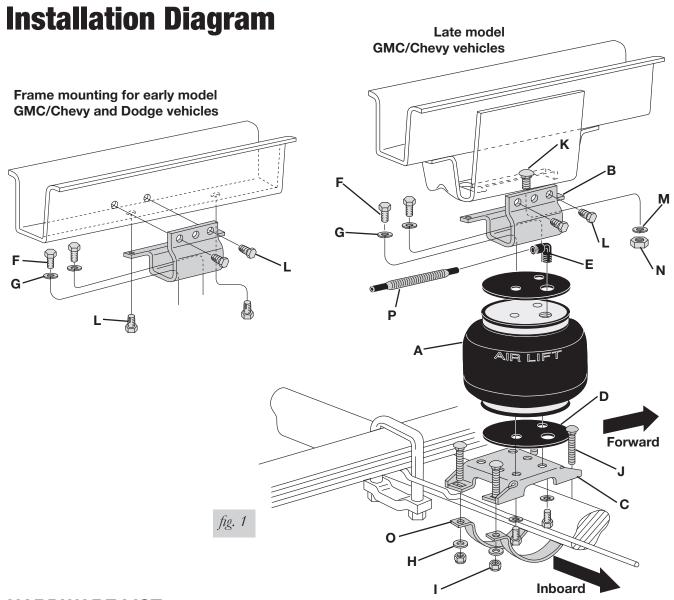


INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE MACHINE OR MINOR PERSONAL INJURY.

NOTE

Indicates a procedure, practice or hint which is important to highlight.





HARDWARE LIST

ltem	Part #	DescriptionQty	Item	Part #	DescriptionQty
Α	58736	Air spring2	Ν	18431	1/2" Hex nut2
В	07875	Upper bracket2	0	01815	Axle strap4
С	03230	Lower bracket2	Р	09484	Thermal sleeve1
D	10485	Roll plate4	Q*	10613	Heat shield1
E	21837	Elbow fitting2	R*	10741	Heat shield clamp2
F	17203	3/8"-24 x 7/8" Bolt8	S*	10551	Hose clip4
G	18427	3/8" Lock washer8	AA*	20086	Air line assembly1
Н	18444	3/8" Flat washer8	BB*	10466	Zip tie6
I	18435	3/8" Nylon lock nut8	CC*	21230	Valve cap2
J	17141	3/8"-16 x 2 1/2" Carriage bolt8	DD*	18501	M8 Flat washer2
K	17150	1/2"-13 x 1" Carriage bolt2	EE*	21234	Rubber washer2
L	17129	3/8" x 1" Self tapping bolt8	FF*	18411	Star washer2
M	18429	1/2" Lock washer2	GG*	21233	5/16" Hex nut4

*Not shown in Figure 1



Missing or damaged parts? Call Air Lift customer service at (800) 248-0892 for a replacement part.



TOOLS LIST

Description Qty Hoist or floor jacks 1 Safety stands 2 Safety glasses 1 Torque wrench 1 7/16" and 9/16" open-end or box wrench 1	3/8" and 5/16" Drill bits (very sharp)
7/16" and 9/16" open-end or box wrench 1 Adjustable wrench 1 3/8" Nut driver 1	Air compressor or compressed air source1

Installing the LoadLifter 5000 System



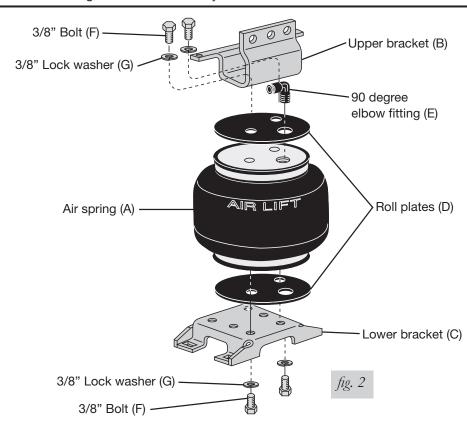
COMPRESSED AIR CAN CAUSE INJURY AND DAMAGE TO THE VEHICLE AND PARTS IF IT IS NOT HANDLED PROPERLY. FOR YOUR SAFETY, DO NOT TRY TO INFLATE THE AIR SPRINGS UNTIL THEY HAVE BEEN PROPERLY SECURED TO THE VEHICLE.

ASSEMBLING THE AIR SPRING

- 1. Place a roll plate (D) on the top of the air spring (A).
- 2. Install 90 degree elbow fitting (E) to the top of the air spring. Tighten finger tight plus 1 1/2 turns. Be careful to only tighten on the metal hex nut. Do not over tighten.
- 3. Set the upper bracket (B) onto the air spring. Make sure that the air fitting port is on the same side as the vertical leg. Attach the upper bracket using 3/8" bolts (F) and 3/8" lock washers (G). Tighten to 20 lb.-ft. (27Nm) (fig. 2).
- 4. Place a roll plate (D) on the bottom of the air spring (A).
- 5. Place the lower bracket (C) onto the air spring assembly in an offset position (fig. 2).

NOTE

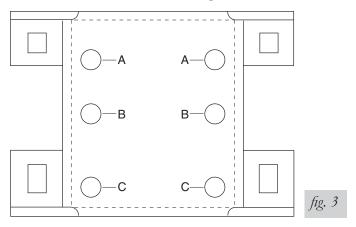
The air spring assembly will offset (over hang) the lower bracket. Make sure that the offset is on the air fitting side of the assembly.





- 6. Use the template (fig. 3) to determine the correct holes for mounting. Use the holes marked by an "A" for air spring mounting.
- 7. Insert a 3/8" bolt (F) and a 3/8" lock washer (G) through the holes marked with an "A" to attach the lower bracket and roll plate to the assembly. Again, be sure that the air spring is offset to the fitting side. Tighten hardware to 20 lb.-ft. (27.1Nm) (fig. 2).

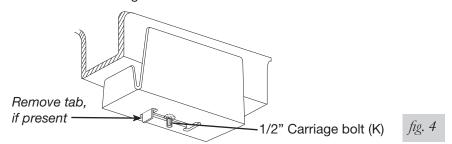
Lower Bracket Template



REMOVING THE JOUNCE BUMPER

1. Late Model GMC/Chevy

- a. Use a screwdriver to remove/pry the rubber jounce bumper from the metal bracket on the frame rail.
- b. Insert a 1/2" carriage bolt (K) into the jounce bumper track with the carriage head inside of the track (fig. 4).
- c. Some models may have a small tab at the end of the slot that will interfere with upper bracket mounting (fig. 4). This tab will need to be removed. Either bend it back with a hammer or grind it off.



2. All Dodge and early model GMC/Chevy

- a. Some early GMC/Chevy models have the jounce bumper on the side of the frame rail. The entire jounce bumper and bracket assembly must be removed in order to mount the upper bracket. Unbolt, chisel, or grind off so that the bottom of the frame rail is smooth.
- b. On all Dodge vehicles, remove the two bolts holding the jounce bumper to the frame rail and remove the jounce bumper and bracket. Be sure that the bottom of the frame rail is smooth.



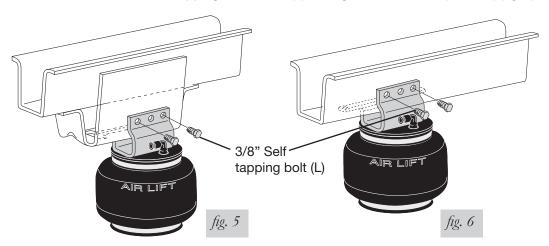
ATTACHING THE UPPER BRACKET

1. Late Model GMC/Chevy

- a. Set the air spring assembly on the axle housing and guide the carriage bolt (K) through the large center hole in the upper bracket.
- b. Loosely attach with a 1/2" lock washer (M) and 1/2" hex nut (N). See fig. 1. The mounting holes on the end of the extended tabs on the upper bracket are not used on the late model GM applications.
- c. Adjust the assembly in the slot of the upper bracket so that the top is aligned with the lower bracket. Tighten the 1/2" hex nut with an open end wrench.
- d. Using the upper bracket as a template, center punch and drill two of the three holes on the inside of the frame rail. Use a 5/16" bit, no larger.
- e. Install two 3/8" self tapping frame bolts (L) and tighten to 15 lb.-ft. (20.3Nm) (fig. 5). The upper bracket is now attached.

2. All Dodge and Early Model GMC/Chevy

- Set the assembly on the axle housing and align the lower bracket to the upper bracket.
- b. Using the upper bracket as a template, center punch and drill two of the three holes on the inside of the frame rail. Use a 5/16" bit, no larger.
- c. Install two 3/8" self tapping frame bolts (L) and tighten to 15 lb.-ft. (20.3Nm) (fig. 6).





ATTACHING THE LOWER BRACKET

1. Insert four 3/8" carriage bolts (J) into the holes in the lower bracket (C) (fig. 7).

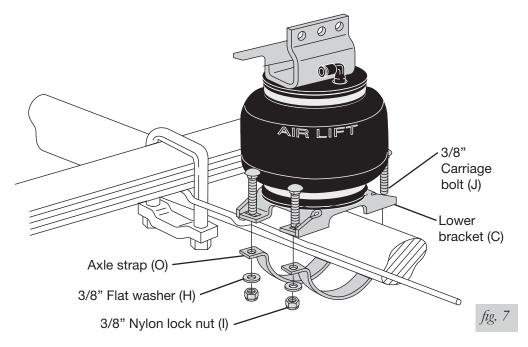
NOTE

Late model Dodge will have a tapered axle. The outboard edge of the lower bracket will rest on the tapered end of the axle. The inboard edge will rest on the non-tapered part of the axle. This will put the lower bracket in a slightly tilted position, but will not effect the function of the kit.

2. Secure the lower bracket (C) to the axle using the axle straps (O), flat washers (H), and lock nuts (I). Refer to fig. 7.



DO NOT PINCH THE BRAKE LINE UNDER THE AXLE CLAMP. IN SOME CASES THE AXLE CLAMP WILL GO BEHIND THE BRAKE LINE. IT MAY BE NECESSARY TO TIGHTEN THE STRAP ON THE OPPOSITE SIDE OF THE AXLE FIRST SO THAT THE STRAP WILL BE BELOW THE BRAKE LINE.



- 3. Tighten lock nuts to 20 lb.-ft. (27.1Nm), being sure to cross tighten.
- 4. Repeat installation on the other side of the vehicle.



Installing the Air Lines

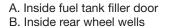
Choose the locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (fig. 8).

 Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (fig. 9). Do not use scissors or wire cutters.

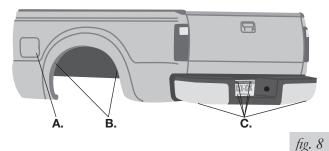
A CAUTION

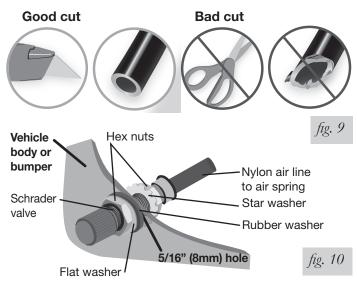
KEEP AT LEAST 6" (152MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

- 2. Use zip ties 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).
- 3. Install the Schrader valve in the chosen location (fig. 10).



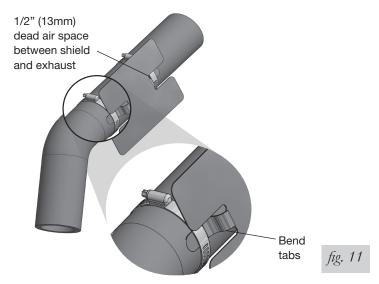
C. License plate or rear bumper area





INSTALLING THE HEAT SHIELD

1. Attach the metal heat shield to the exhaust where it is closest to the passenger's (right) side air spring. (fig. 11).





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" clearance from anything that might rub against each sleeve. Be sure to check the tire, brake drum, 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" 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 Recheck all bolts for proper torque.

3/8" Hex head bolts	20 lbft.
Carriage bolt lock nuts	20 lbft.
Self tapping frame bolts	15 lbft.

- □ Road test The vehicle should be road tested after the preceding tests. Inflate the springs to 10 PSI (0.7BAR) for a van, 40 PSI (2.8BAR) for a motorhome or until the vehicle is level. 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 the air pressure weekly.
- 2. Always maintain normal ride height. Never inflate beyond 100 PSI (7BAR).
- 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 Air Pressure	Maximum Air Pressure		
Motorhomes and Commercial Chassis			
40 PSI (2.8BAR)	100 PSI (7BAR)		
Passenger Vans			
5 PSI (.34BAR)	100 PSI (7BAR)		



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.

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.

Need Help?

Contact Air Lift Company customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, dial (517) 322-2144.



Thank you for purchasing Air Lift products — the professional installer's choice!

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