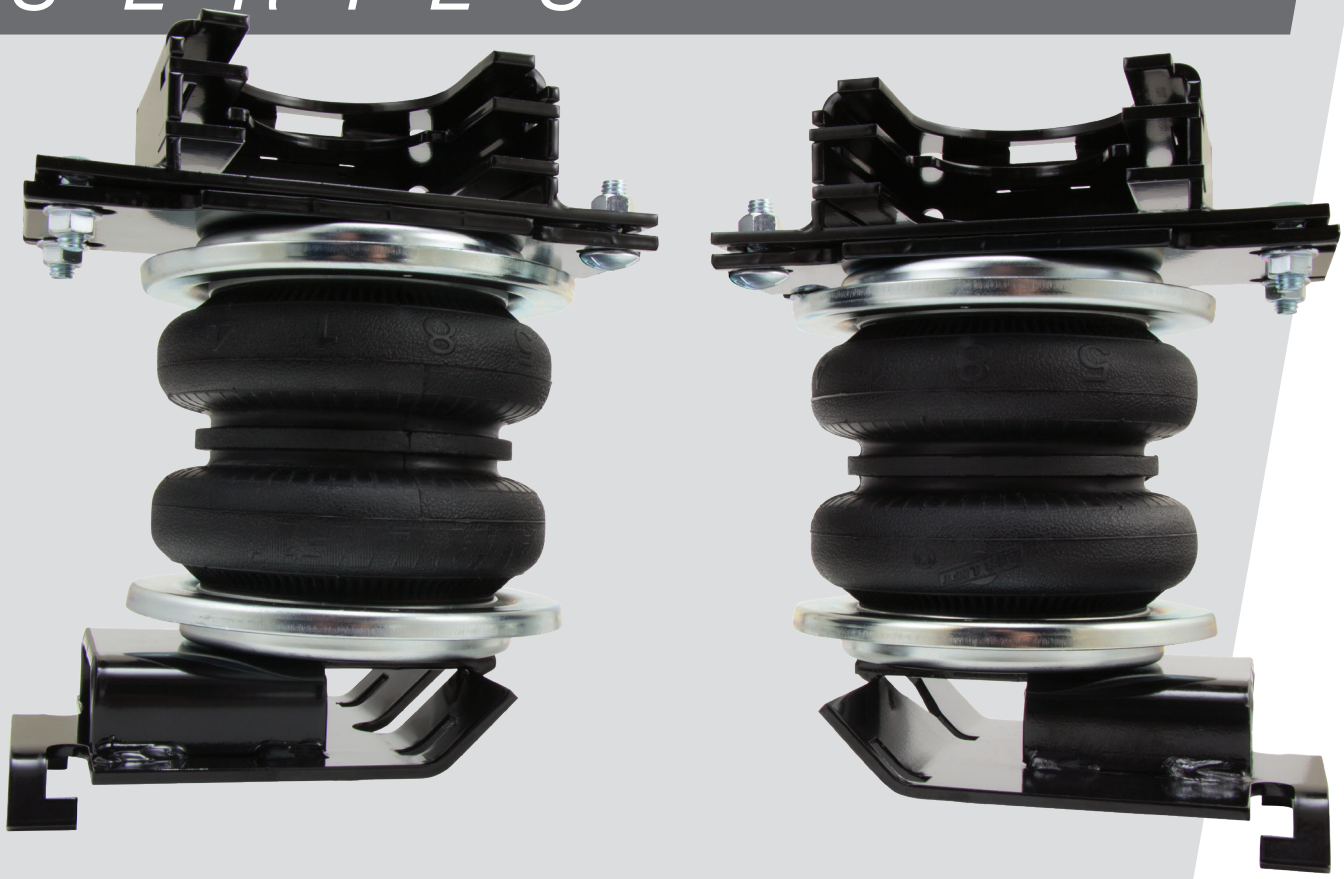
AIR LIFT™
Since 1949

LoadLIFTER 5000™ SERIES

Installation Guide



Dodge/RAM 1500 2WD and 4WD

Kits 57370 | 88370 | 89370

For maximum effectiveness and safety, please read these instructions completely before proceeding with installation.

MN-1070 • (011803) • ERN 8875

Failure to read these instructions can result in an incorrect installation.

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 LoadLifter 5000 Ultimate Plus. The kits are easily identifiable by looking at the roll plates and air lines.

☐ Standard **LoadLifter 5000** — Zinc-plated steel roll plates and black nylon air lines.

☐ **LoadLifter 5000 Ultimate** — Black powder-coated roll plates and black nylon air lines.

☐ **LoadLifter 5000 Ultimate Plus** — Stainless steel roll plates, braided stainless steel air lines, stainless steel air spring mounting hardware.

Air Lift offers two Ultimate Plus upgrade kits:

52300 - Braided stainless steel air line and fittings.

52301 - Stainless steel roll plates, air spring mounting hardware, braided stainless steel air lines and fittings.

LoadLifter 5000
silver zinc-plated steel
roll plate

LoadLifter 5000 Ultimate
black powder-coated
roll plate

LoadLifter 5000 Ultimate Plus
stainless steel
roll plate

LoadLifter 5000
nylon air line

LoadLifter 5000 Ultimate
nylon air line

LoadLifter 5000 Ultimate PLUS
braided stainless steel air line

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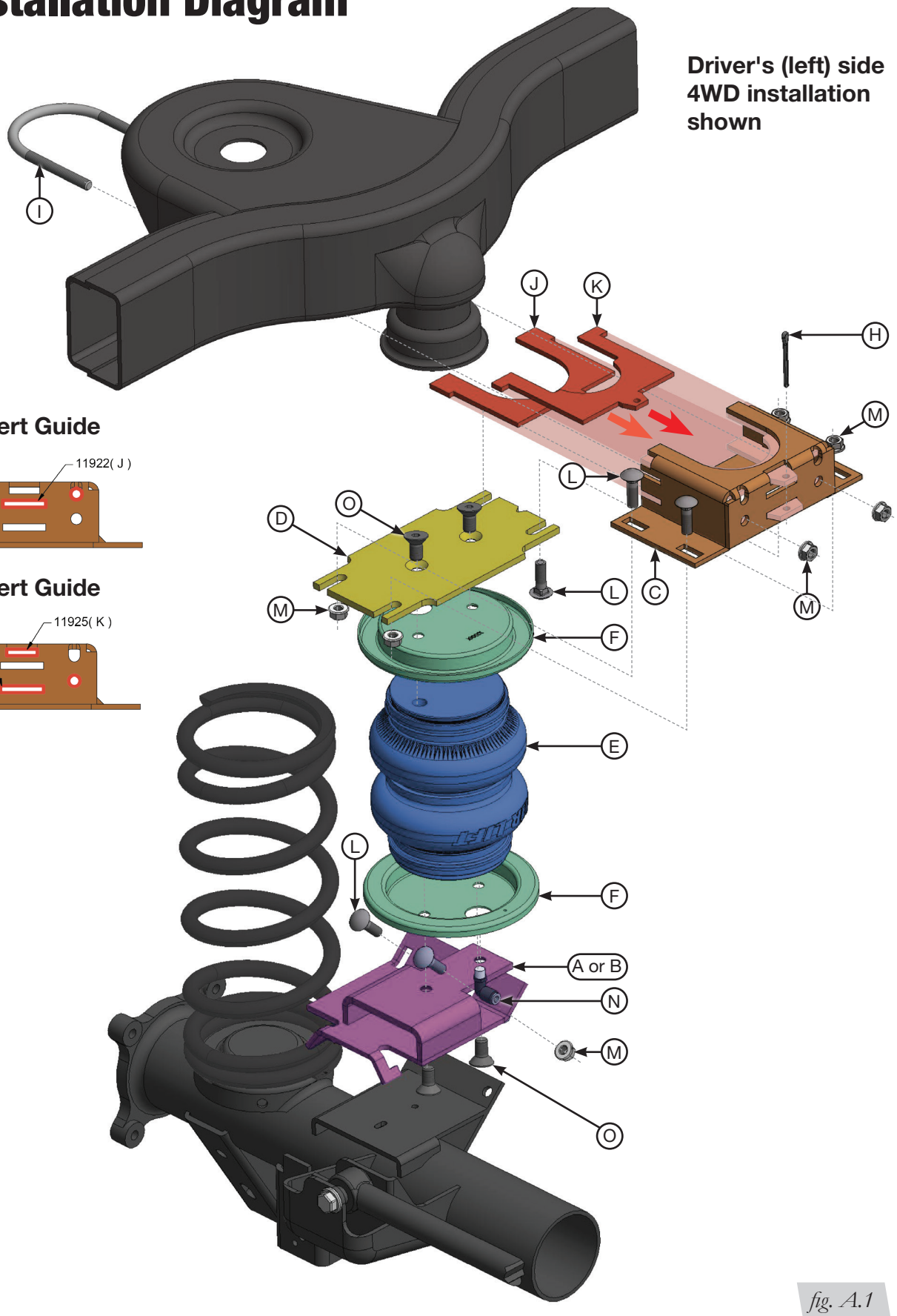
A. Installation Diagram

Driver's (left) side 4WD installation shown



2WD Insert Guide

4WD Insert Guide

fig. A.1

B. Hardware and Tools Lists

Common Parts Included in All 3 Kits

Item	Part#	Description	Qty
A	03036	Lower left bracket	1
B	03037	Lower right bracket	1
C	07874	Upper frame bracket	2
D	07878	Upper air spring bracket	2
H	11410	1/8” x 2” Cotter pins	2
I	11771	3/8”-16 U-bolt	2
J	11922	Upper insert A	2
K	11925	Upper insert B	2
L	17134	3/8”-16 x 1” Carriage bolt	12
M	18422	3/8”-16 Serrated-flange lock nut	16
FF*	21234	Rubber washer	2

* These parts are not shown in the Installation Diagram (Fig. A.1).

Unique Parts in Each Kit

LoadLIFTER 5000™ KIT 57370

Item	Part#	Description	Qty
E	58439	Air spring	2
F	11951	Zinc-coated roll plate	4
G*	09484	Air line thermal heat shield	2
N	21837	90-degree Swivel elbow fitting	2
O	17215	3/8”-24 x 3/4” Flat-head socket screw	8
AA*	20086	Nylon air line	1
BB*	10466	Zip ties	6
CC*	18411	5/16” Lock washer	2
DD*	21230	Valve cap	2
EE*	21233	5/16”-32 Hex nut	4
GG*	18501	Flat washer	2

LoadLIFTER 5000™ ULTIMATE KIT 88370

Item	Part#	Description	Qty
E	58494	Air spring with integrated jounce bumper	2
F	11967	Black powdercoated roll plate	4
G*	09484	Air line thermal heat shield	2
N	21837	90-degree Swivel elbow fitting	2
O	17215	3/8”-24 x 3/4” Flat-head socket screw	8
AA*	20086	Nylon air line	1
BB*	10466	Zip ties	6
CC*	18411	5/16” Lock washer	2
DD*	21230	Valve cap	2
EE*	21233	5/16”-32 Hex nut	4
GG*	18501	Flat washer	2

LoadLIFTER 5000™ ULTIMATE PLUS KIT 89370

Item	Part#	Description	Qty
E	58494	Air spring with integrated jounce bumper	2
F	11880	Stainless steel roll plate	4
N*	21815	AN-type fitting	2
O	17363	3/8”-24 x 3/4” Stainless steel flat-head socket screw	8
AA*	20084	Nylon air line	1
BB*	10466	Zip ties	12
CC*	18623	Stainless steel lock washer	2
EE*	21233	5/16”-32 Hex nut	4
GG*	18572	Stainless steel flat washer	2
HH*	20988	Braided stainless steel air line	2
II*	21813	AN to PTC fitting	2
JJ*	21709	Schrader valve with cap & nut	2

TOOLS LIST

Description	Qty
Standard open-end wrenches	SET
Standard, regular and deep-well sockets	SET
Standard hex key sockets	SET
Ratchet & extensions	1
5/16” drill bit (very sharp) and heavy duty drill	1
9/16” Crowsfoot adapter	1
Torque wrench	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

The photos in this manual show the LoadLifter 5000 kit.

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

C. Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of the standard 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. LoadLifter 5000 Ultimate kits add internal jounce bumpers and black powder-coated roll plates. LoadLifter 5000 Ultimate Plus kits also have internal jounce bumpers, but add stainless steel roll plates, air lines and air spring mounting hardware.

The air springs are manufactured like a tire with layers of rubber and cords that control growth. LoadLifter 5000 series kits are available for most 1/2-, 3/4- and 1-ton vehicles with leaf springs and 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.

⚠ 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.

MAINTENANCE AND USE GUIDELINES

Minimum Recommended Pressure	Maximum Air Pressure
5 PSI (.34BAR)	100 PSI (7BAR)

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.

⚠ 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.

⚠ CAUTION 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.

D. Assembling the Air Springs

1. Install the elbow swivel air fittings (N) on the air springs (E). Position the roll plates (F) on the air springs. (Fig. D.1). Tighten the air fittings finger tight plus 1 1/2 turns.

NOTE *These assemblies will be left- and right-hand specific once assembled.*

2. For LoadLifter 5000 Ultimate Plus, install the braided stainless steel air line (HH). Tighten the air line hex nut finger tight, then use 2 wrenches to turn 1 additional flat (1/6 of one full turn). **Do not overtighten.** For additional information on installing the braided stainless steel air line, see **"**F. Installing the Air Lines — Installing Braided Stainless Steel Air Lines.**"**
3. Use two 3/8"-24 x 3/4" flat-head socket screws (O) to attach the lower air spring brackets (A and B) to each of the air springs on the same side as the air fitting (Fig. D.1). Torque the screws to no more than 20 lb.-ft. (27Nm).
4. Use two 3/8"-24 x 3/4" flat-head socket screws to install the upper spring brackets (D) on the top of the air springs. The short side of the brackets with the notches need to point in the same direction as the angled flanges on the lower brackets. (Fig. D.1) Torque the screws to no more than 20 lb.-ft. (27Nm).

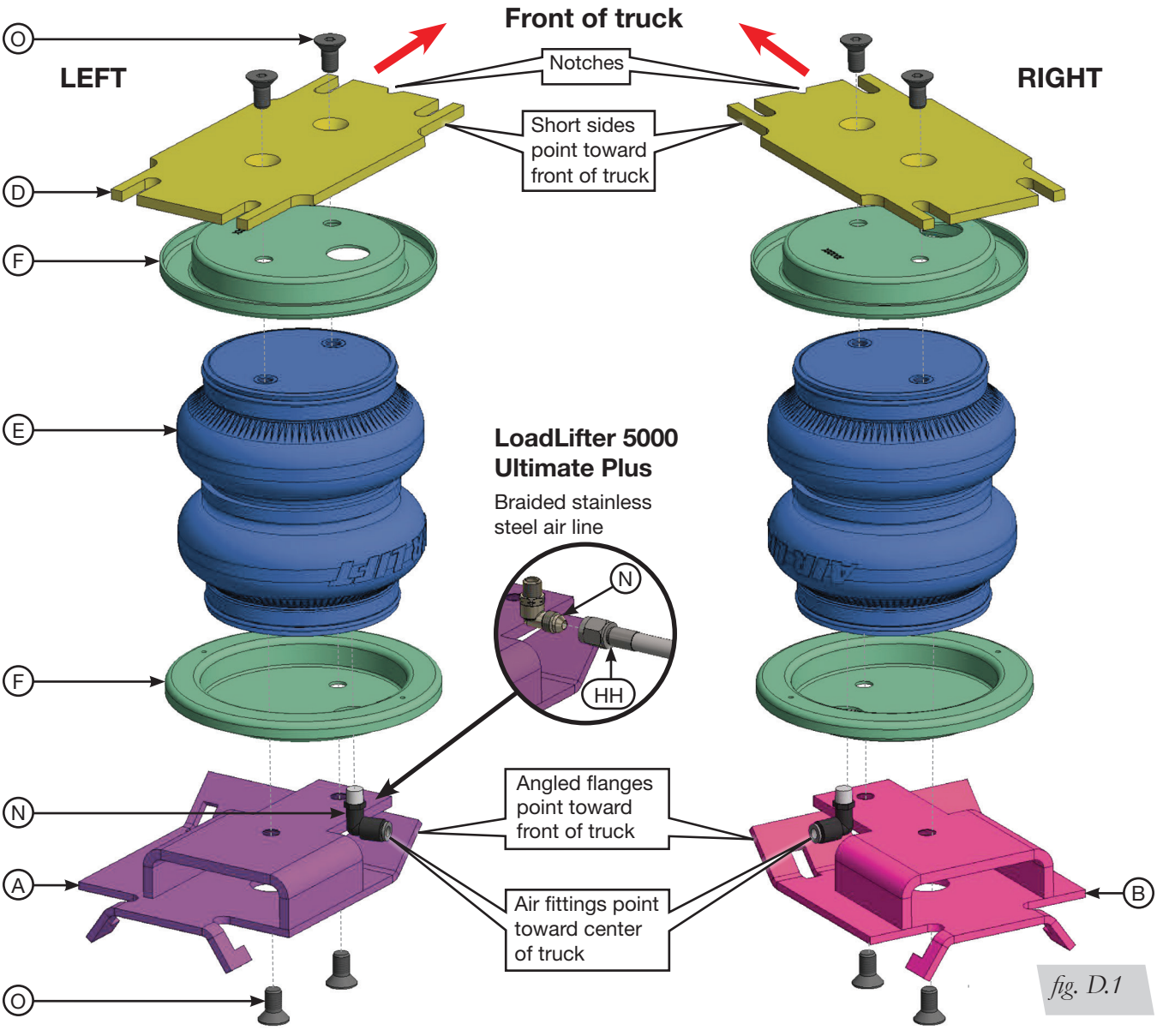


fig. D.1

5. Fig. D.2 shows the completed air spring assemblies for LoadLifter 5000 and LoadLifter 5000 Ultimate kits. LoadLifter Ultimate Plus kits would have the braided stainless steel air line.

Driver's (left) side

Passenger's (right) side

fig. D.2

E. Installing the LoadLifter 5000 Series System

PREPARING THE VEHICLE

1. Lift the vehicle and support the frame with jack stands. Leave enough room to drop the axle down low enough to set the previously assembled air spring into position (Fig. E.1).

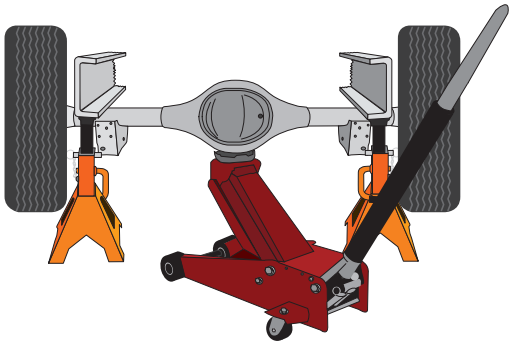


fig. E.1

2. Twist and pull the jounce bumpers to remove them from the mounting cups (Fig. E.2).

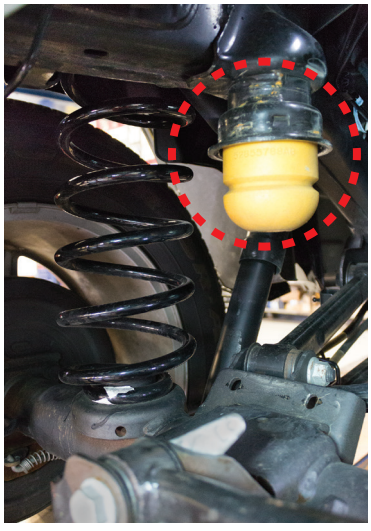


fig. E.2

INSTALLING THE ASSEMBLIES

1. Insert the 3/8”-16 x 1” carriage bolts (L) into the openings of the lower bracket on the front of the driver's side assembly as shown (Fig. E.3).

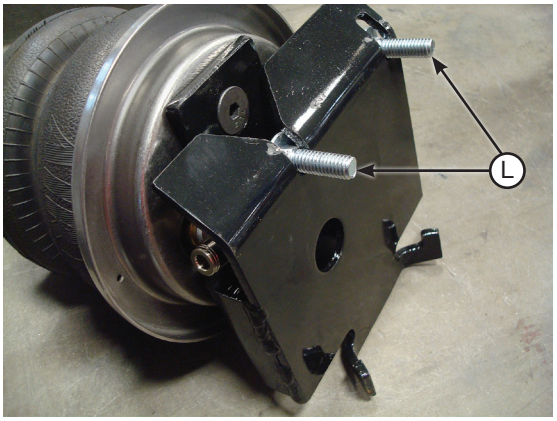


fig. E.3

2. If not already done so, drop the axle in order to gain clearance to put the two assemblies into position on the axle.
3. Set the passenger’s (right) side assembly on the jounce bumper strike plate with the previously installed carriage bolts still in the slots. The air fitting (or air fitting and braided stainless steel air line on Ultimate Plus kits) will point to the center of the vehicle. Hook the tabs on the bracket below the strike plate behind the axle. Push the assembly forward while lining up the carriage bolts with the existing holes in the front of the lower jounce bumper strike plate (Fig. E.4).

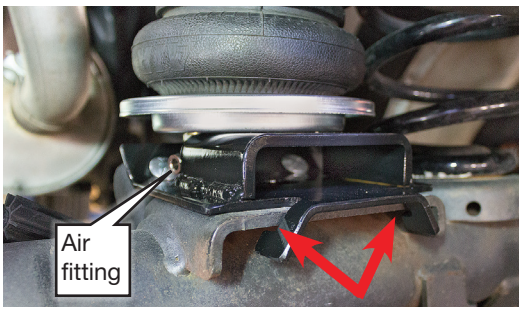


fig. E.4

4. Fasten the carriage bolts with the 3/8”-16 serrated-flange lock nuts (M), but tighten them after both nuts have been installed (Fig. E.5) on each side. It will be necessary on the outside bolt (under the control arm) to use a long socket and extension to reach in and start the nut (Figs. E.5 & E.6).

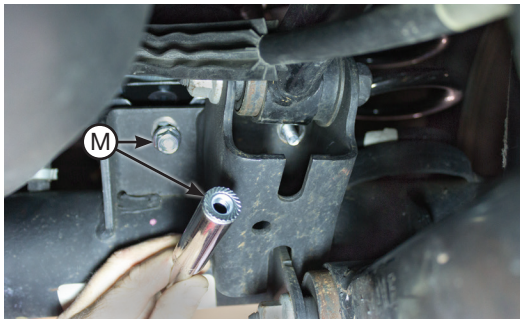


fig. E.5

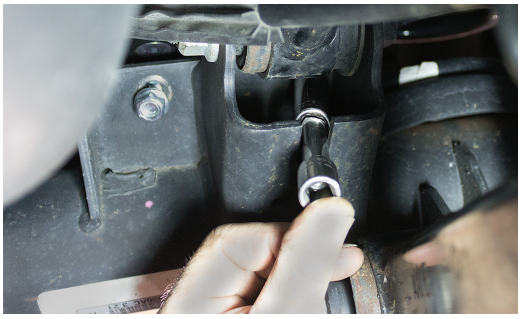


fig. E.6

5. Install the driver’s (left) side in the same way and torque all of the lower hardware to 31 lb.-ft. (42Nm).

ASSEMBLING THE UPPER FRAME BRACKET

There are two sets of assembly instructions for the upper frame bracket — one for 2WD trucks, the other for 4WD trucks.

2WD Upper Frame Bracket Assembly

1. Insert the upper bracket insert A (J) (large tab) into the middle slot on the upper frame brackets (C) and secure with the 1/8" x 2" cotter pins (H) (Figs. E.7a & E.7b). Upper bracket insert B (K) (small tab) will not be used and can be discarded.

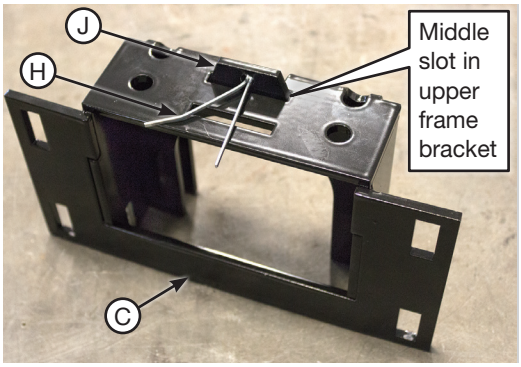
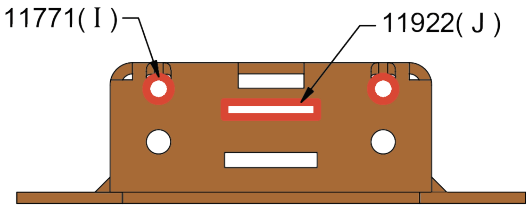


fig. E.7a

2WD Insert Guide



The threaded ends of the U-bolt will be inserted into the holes marked in red in 2WD trucks.

fig. E.7b

4WD Upper Frame Bracket Assembly

1. Insert the upper bracket insert A (J) (large tab) into the bottom slots on the upper frame bracket (C), then insert the upper bracket insert B (K) (small tab) into the top slot on the upper frame bracket (Figs. E.8a & E.8b) and secure with a cotter pin (H).

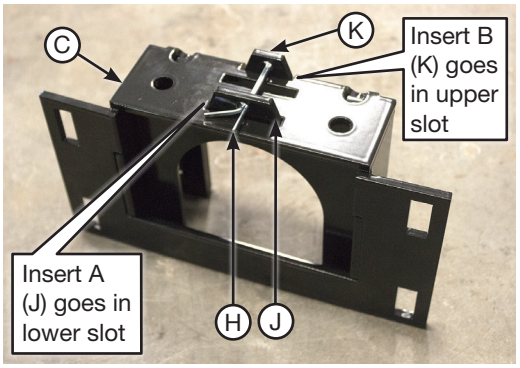
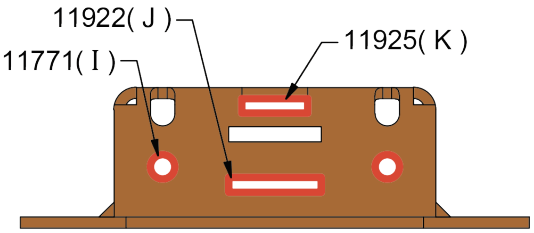


fig. E.8a

4WD Insert Guide



The threaded ends of the U-bolt will be inserted into the holes marked in red in 4WD trucks.

fig. E.8b

2. Figure E.9 shows a bottom view of the upper frame bracket assembled for a 4WD installation.

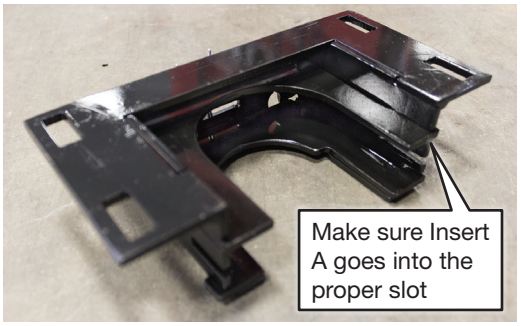


fig. E.9

INSTALLING THE UPPER FRAME BRACKET

1. Install a 3/8”-16 U-bolt (I) around the stock jounce bumper cup with the threaded ends pointing inward toward the center of the truck (Fig. E.10).

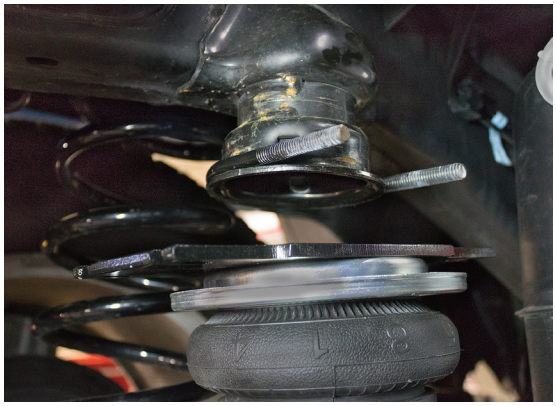


fig. E.10

2. Slide the upper frame bracket assemblies over the jounce bumper cups so that the U-bolt threads insert into the brackets (Fig. E.11a & E11b). Place 3/8”-16 serrated-flange lock nuts (M) on the ends of the U-bolt. Leave loose at this time.

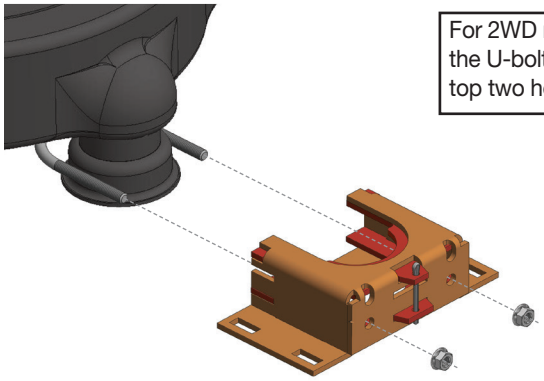
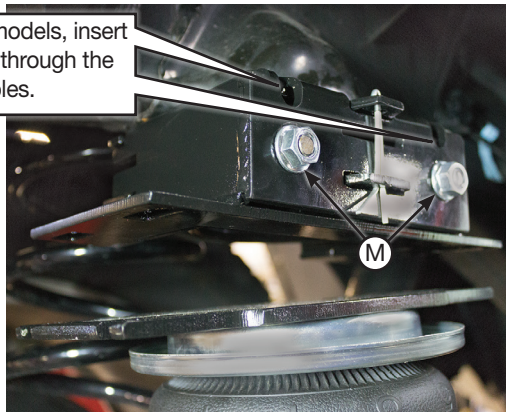


fig. E.11a



For 4WD models, insert U-bolt through lower holes as shown.

fig. E.11b

3. Raise the axle so that the air spring upper bracket contacts the upper frame bracket.
4. Insert two 3/8”-16 x 1” carriage bolts (L) from the top in the rear holes (behind the axle) of the upper brackets (Fig. E.12). Insert the 3/8”-16 x 1” carriage bolts (L) from the bottom in the front holes (forward of the axle) of the upper brackets (Fig. E.13). Place 3/8”-16 serrated-flange lock nuts (M) on each of the four bolts, but leave all of them loose at this time.

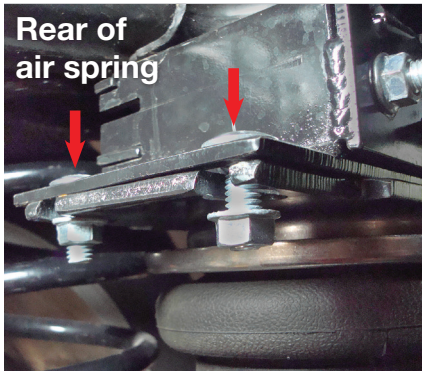
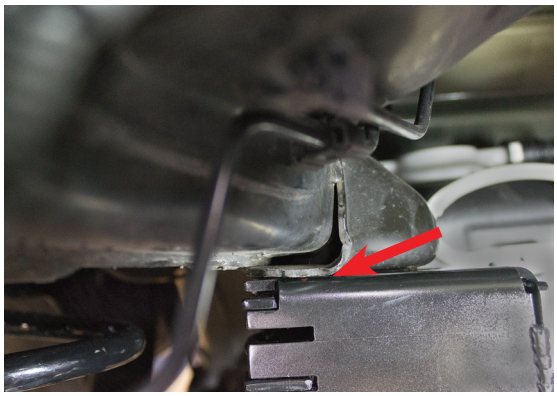


fig. E.12

fig. E.13

5. Move the top of the air spring assembly forward or back, inward or outward to align the air spring by using the slots of the upper air spring brackets and snug the upper bracket hardware at this time. The goal is for the air spring to be as close to perpendicular to the bracket mounting surfaces as possible.
6. With the axle raised, make sure the upper frame bracket is in contact with the frame (Fig. E.14) and torque the U-bolt hardware to 31 lb.-ft. (42Nm).



Make sure the upper frame bracket is in contact with the frame before torquing U-bolt hardware.

fig. E.14

7. Torque the rest of the upper bracket hardware to 31 lb.-ft. (42Nm).

ROUTING THE AIR LINES

Air Lift recommends running the air lines from the license plate or the area around the licence plate back over the spare tire and crossmembers, then down the middle over the center of the axle, to the emergency brake cables then to the fittings on the air springs.

For Ultimate Plus kits, the air line is already attached to the air spring, so the routing will be from the air spring to the Schrader valve rather than the reverse.

NOTE

Since the air line is dynamic (moves with the axle) it will be necessary to drop the axle once again to make sure the air line length is sufficient so as not to "pull" the air line out of the fitting when the suspension is fully extended, before the air line (nylon) is cut to length.

1. Before attaching the air line to the fittings (standard and Ultimate kits only), slide the two air line thermal heat shields (G) supplied, over the air lines (for both sides) before inserting into the fittings. Position the air line thermal shields so that they are in the area around the air line that is closest to the exhaust. No thermal shield is necessary for braided stainless steel air lines.
2. Attach all the air lines to the emergency brake cables and vent tube with zip ties (BB) as shown (Fig. E.15).

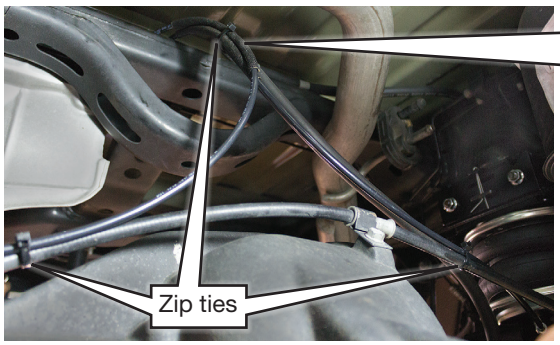


fig. E.15

F. Installing the Air Lines

Air lines are routed from the air springs to Schrader valves. LoadLifter 5000 series air lines come in two styles: nylon and braided stainless steel. Begin by choosing locations for the Schrader valves and drill a 5/16” (8mm) hole, if necessary (Fig. F.1).

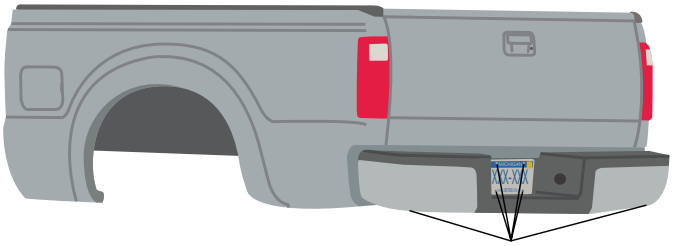


fig. F.1

⚠ CAUTION

KEEP AT LEAST 6” (150MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

INSTALLING NYLON AIR LINES

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. F.2). Do not use scissors or wire cutters.

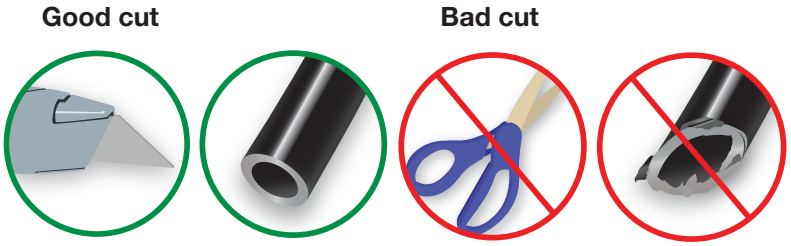


fig. F.2

2. Use zip ties to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. The minimum bend radius for the air line is 1” (25mm). Leave at least 2” (50mm) of slack in the air line to allow for any movement that might pull on the air line.
3. Install the Schrader valve in the chosen location (Fig. F.3).

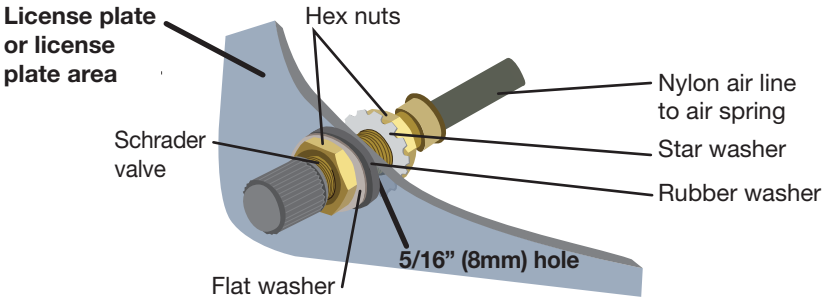


fig. F.3

INSTALLING BRAIDED STAINLESS STEEL AIR LINES

⚠ CAUTION

KEEP THE AIR LINE AWAY FROM THE FUEL LINE, BRAKE LINES AND ELECTRICAL WIRES.

1. Use zip ties to secure the air line to fixed points along the chassis every 6” to 8” (150-300mm). Leave at least 2” (50mm) of slack to allow for any movement that might pull on the air line.
2. Tighten the air line hex nut finger tight, then use 2 wrenches to turn 1 additional flat (1/6 of one full turn). **Do not overtighten** (Figs. F.4 or F.5). The easiest way to tighten the fitting is off the vehicle. Install the Schrader valve in the chosen location.
3. Coil and secure any excess air line in an area where it will not be susceptible to damage. The braided stainless steel air line cannot be trimmed.

Air Line Setup Without Compressor System

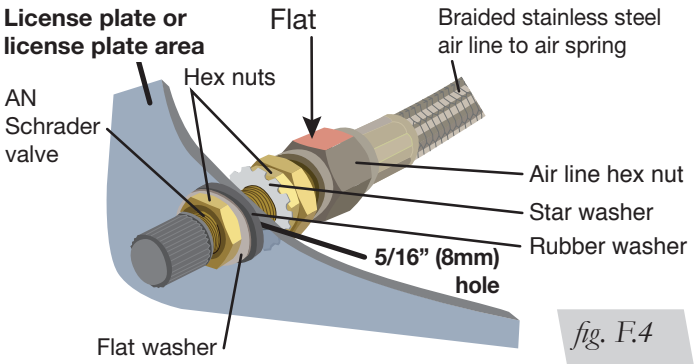


fig. F.4

Air Line Setup for Compressor Integration

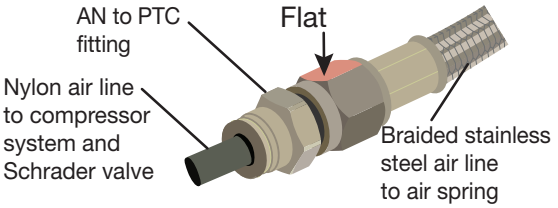


fig. F.5

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. F.6).

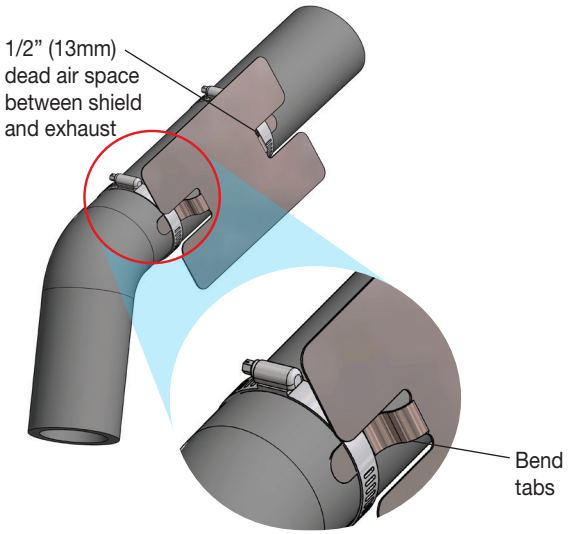


fig. F.6

G. Finished Installation Photos

1. The following images show the finished installation of both sides (Figs. G.1, G.2, G.3 & G.4).

Inside view of driver's (left) side (Fig. G.1).

fig. G.1

Front view of the passenger's (right) side (Fig. G.2).

fig. G.2

Rear view of driver's (left) side (Fig. G.3).

fig. G.3

Rear view of the passenger's (right) side (Fig. G.4).

fig. G.4

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 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 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** — Recheck all bolts for proper torque.
- ☐ **Road test** — The vehicle should be road tested after the preceding tests. Inflate the 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.

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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