LoadLifter 5000™

AIR LIFT® Since 1949

Installation Guide

Watch the video
Info on Table of Contents page

Mercedes Sprinter 2500 RWD & AWD

Kits 57811 | 57812

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.

MN-1208 • Revision 012501 • ERN 10413

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 System Overviews

4 Hardware and Tools

5 Introduction

Notation Explanation

6 Install the System

Getting Started
Assemble the Air Springs/Upper Brackets
Positioning the Lower Bracket
Install the Upper Air Spring Assemblies
Attach the Lower Brackets

13 Install the Air Lines

Install the Heat Shield

15 Finished Installation

16 Before Operating

Installation Checklist
Maintenance and Use Guidelines

17 Limited Warranty and Return Policy

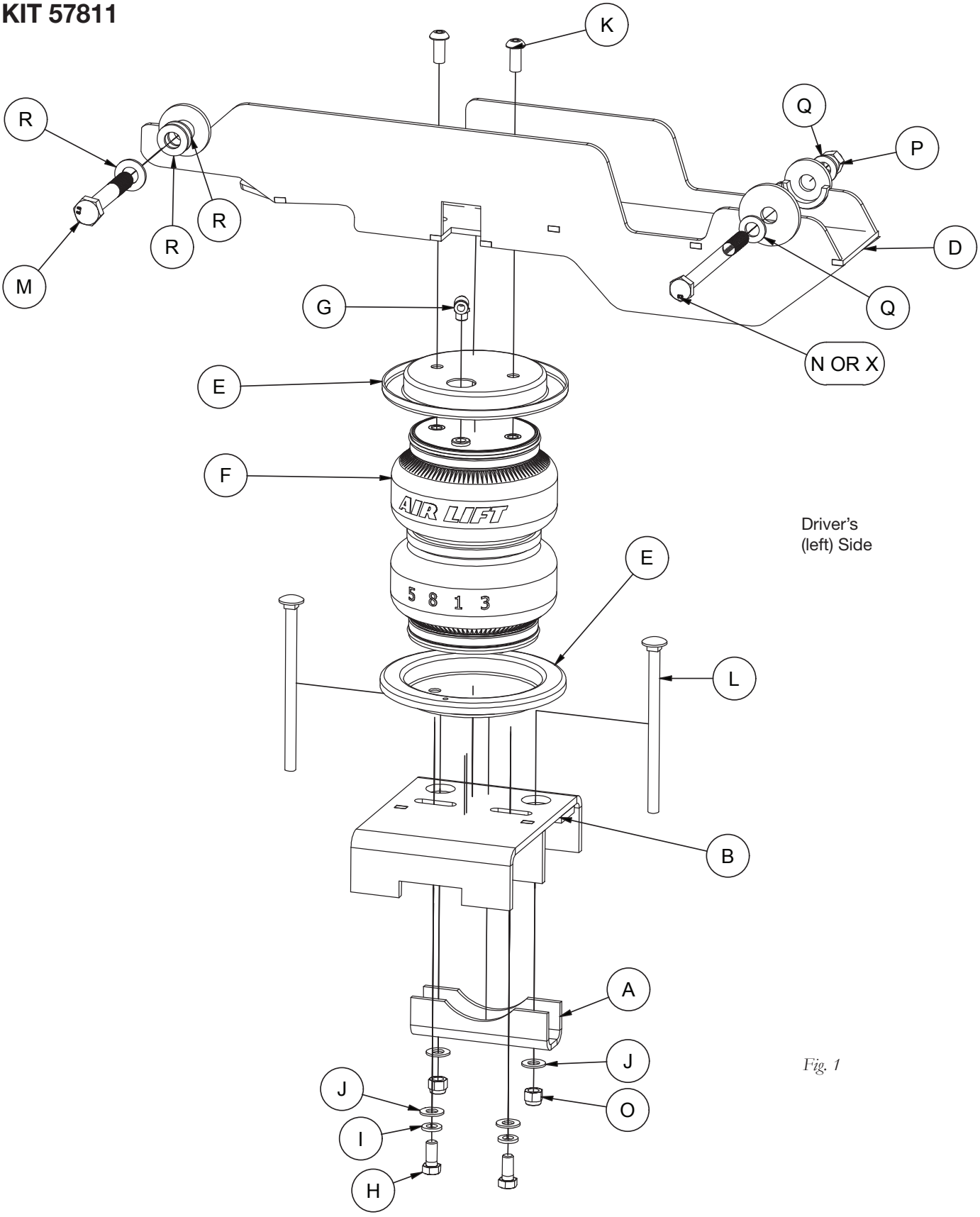
Video-enhanced installation guides

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

* Subject to availability

System Overviews

KIT 57811



Driver's
(left) Side

Fig. 1

KIT 57812

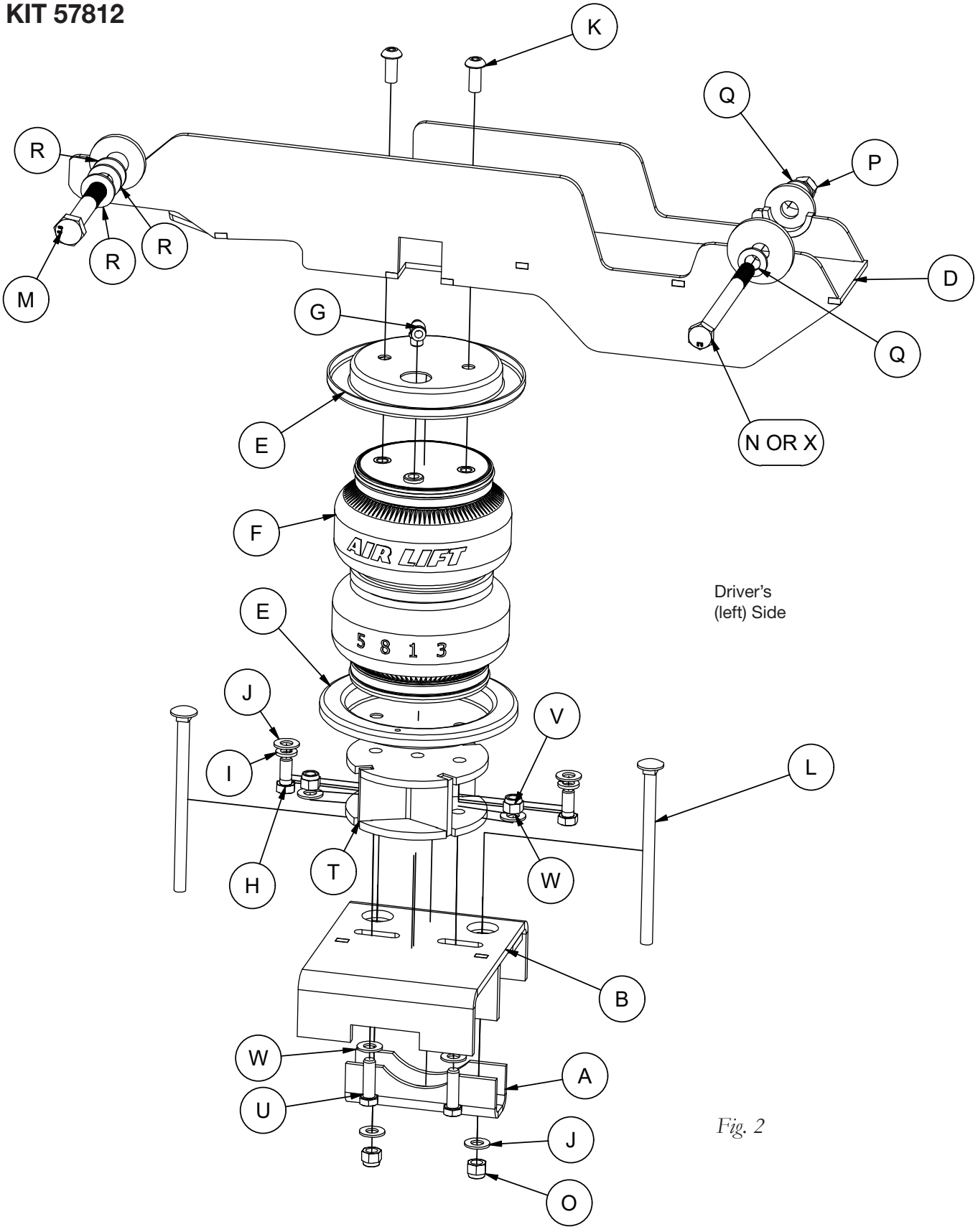


Fig. 2

Hardware and Tools

HARDWARE LISTS

57811

Item	Part#	Description	Qty
A	01853	Clamp bar	2
B	03059	Lower bracket	2
C*	07180	Upper bracket, Passenger's (right) side	1
D	07169	Upper bracket, Driver's (left) side	1
E	11951	Roll plates	4
F	58437	Air springs	2
G	21848	90-degree Swivel air fitting	2
H	17203	3/8-24 X 7/8" Hex cap screw	4
I	18427	3/8" Lock washer	4
J	18444	3/8" Flat washer	8
K	17527	3/8-24 X 3/4" Button-head cap screw	4
L	17133	3/8-16 X 6" Carriage bolt	4
M	17939	M14-1.5 X 90 Hex cap screw	2
N	17941	M12-1.75 X 150 Hex cap screw	2
O	18435	3/8-16" Nylon lock nut	4
P	18546	M12 X 1.75 Nylon lock nut	2
Q	18547	M12 Flat washer	4
R	18663	M14 Flat washer	6
S*	34365	Heat shield kit	1
X	17944	M12-1.75 X 125 Hex cap screw	2

57812

Item	Part#	Description	Qty
A	01853	Clamp bar	2
B	03059	Lower bracket	2
C*	07180	Upper bracket, Passenger's (right) side	1
D	07169	Upper bracket, Driver's (left) side	1
E	11951	Roll plates	4
F	58437	Air springs	2
G	21848	90-degree Swivel air fitting	2
H	17203	3/8-24 X 7/8" Hex cap screw	4
I	18427	3/8" Lock washer	4
J	18444	3/8" Flat washer	8
K	17527	3/8-24 X 3/4" Button-head cap screw	4
L	17133	3/8-16 X 6" Carriage bolt	4
M	17939	M14-1.5 X 90 Hex cap screw	2
N	17941	M12-1.75 X 150 Hex cap screw	2
O	18435	3/8-16" Nylon lock nut	4
P	18546	M12 X 1.75 Nylon lock nut	2
Q	18547	M12 Flat washer	4
R	18663	M14 Flat washer	6
S*	34365	Heat shield kit	1
T	13420	2" Lift spacer	2
U	17188	3/8-16 X 1.25" Hex cap screw	4
V	18435	3/8-16" Nylon lock nut	4
W	18444	3/8" Flat washer	8
X	17944	M12-1.75 X 125 Hex cap screw	2

PARTS SUPPLIED FOR AIR LINE INSTALLATION

Item	Part#	Description	Qty
AA*	20086	Air line assembly	1
BB*	10466	Zip ties	6
CC*	21230	Valve cap	2
DD*	18411	5/16" Lock washer	2
EE*	21234	Rubber washer	2
FF*	18501	M8 Flat washer	2
GG*	21233	5/16" Hex nut	4

* These parts are not shown in the System Overviews Section

TOOLS NEEDED

Description	Qty
Standard and metric open-end or box wrenches	Set
9/16 ratchet wrench	1
Ratchet	1
Standard and metric regular and deep-well sockets	Set
Torque wrench	1
T-55 Torx bit (socket preferred, kit 57812 only)	1
7/32 Hex key (socket preferred)	1
Pry bar or large screwdriver	1
Hose cutter, razor blade, or sharp knife	1
Hoist or floor jack	1
Safety glasses	1
Safety stands	2
Air compressor or compressed air source	1
Spray bottle with dish soap/water solution	1

STOP! 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 air spring kits. 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 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 and Tech Tips 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.

TECH TIP

Used to provide helpful tips to ease the installation process.

Install the System

GETTING STARTED

1. Lift the vehicle and support the frame with safety stands. Drop the axle down low enough to later set the air springs into position between the frame and axle (Fig. 3).

NOTE

If equipped with a height sensor that attaches to the frame and axle, use caution not to overextend the lever arm on the sensor when dropping the axle down.

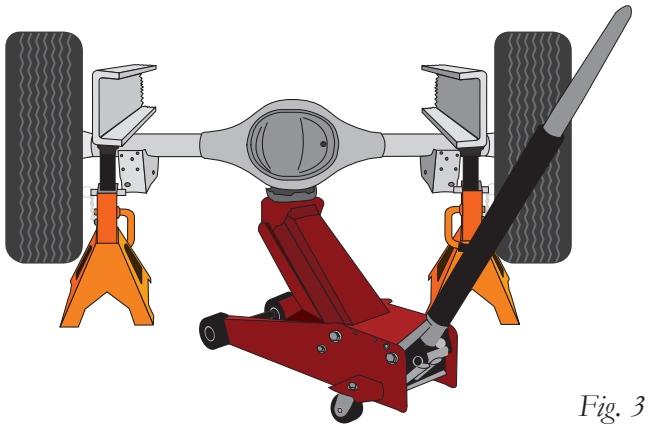


Fig. 3

2. Remove both jounce bumpers from under the frame, over the axle (Fig. 4). On the driver's (left) side frame rail, pry the wiring harness clips out of the frame above, in front and behind the axle. A large screwdriver and/or pry bar would assist in the removal of both.

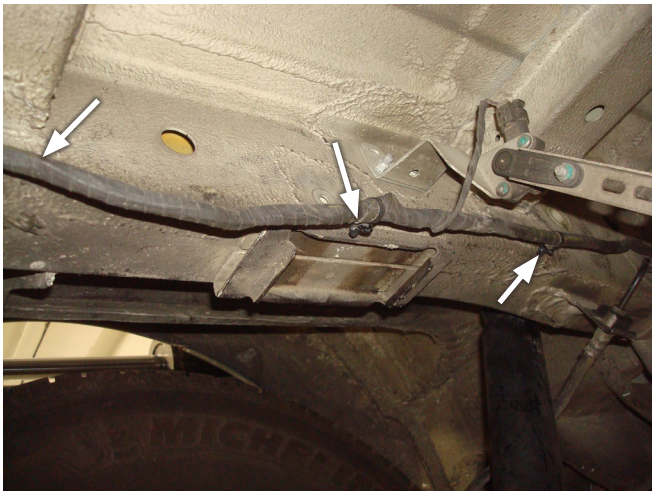


Fig. 4

3. Remove the upper shock bolt and, if equipped, remove the upper sway bar link bolts and nuts (Figs. 5 & 6).

Fig. 5

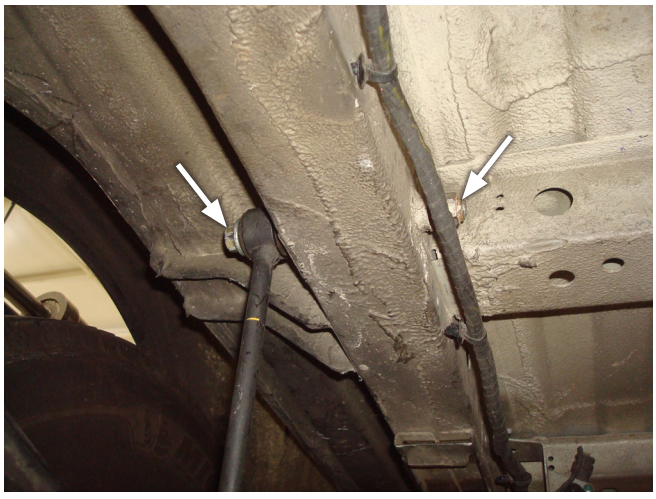


Fig. 6

ASSEMBLE THE AIR SPRINGS/UPPER BRACKETS

1. Place roll plates (E) over the air springs (F) and install the air fittings (G) finger-tight plus one and a half turns, as shown in Figure 7.

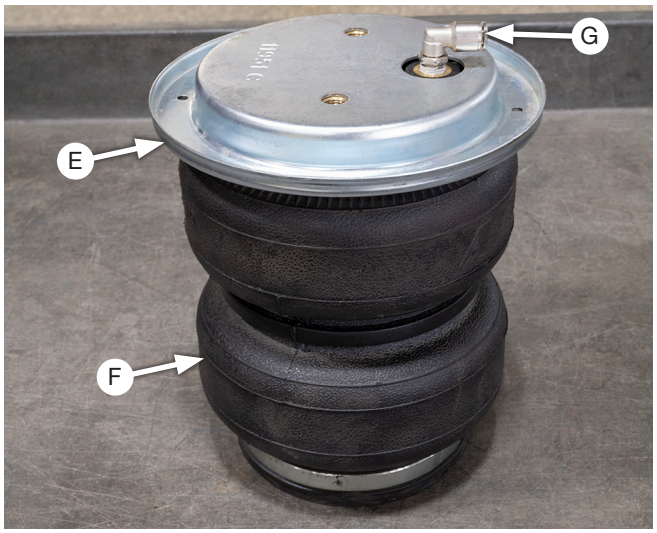


Fig. 7

ALL-WHEEL DRIVE MODELS ONLY (57812):

2. Flip the air spring assemblies over and set roll plates over the bottom of the air springs (Fig. 8). Install the lift spacers (T) onto each air spring with two 3/8" Hex screws (H), lock washers (I) and flat washers (J) as shown in Figure 8. Torque hardware to no more than 20 lb.-ft. (27Nm).

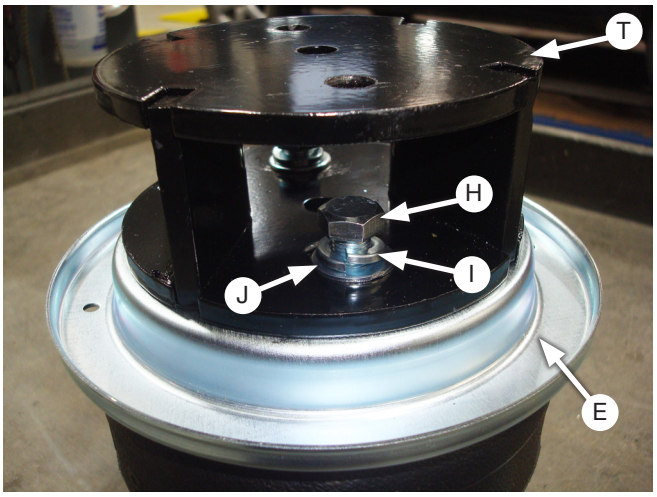
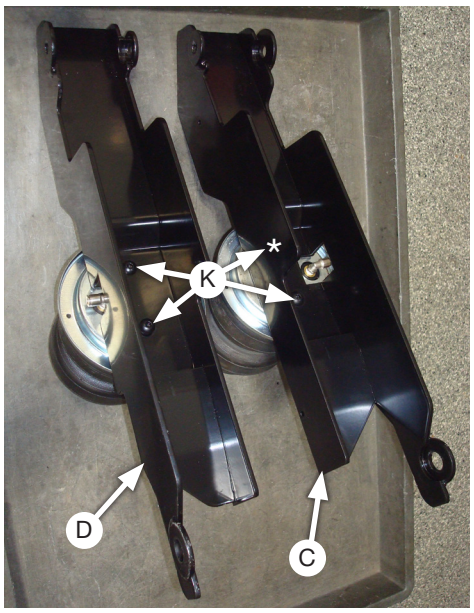


Fig. 8

3. Install the upper brackets (C & D) onto the air springs with 3/8" button-head screws (K). Torque hardware to no more than 20 lb.-ft. (27Nm) (Fig. 9).



* Button-head screw is hidden behind the bracket

Fig. 9

4. Figure 10 shows both left-hand and right-hand upper air spring assemblies.

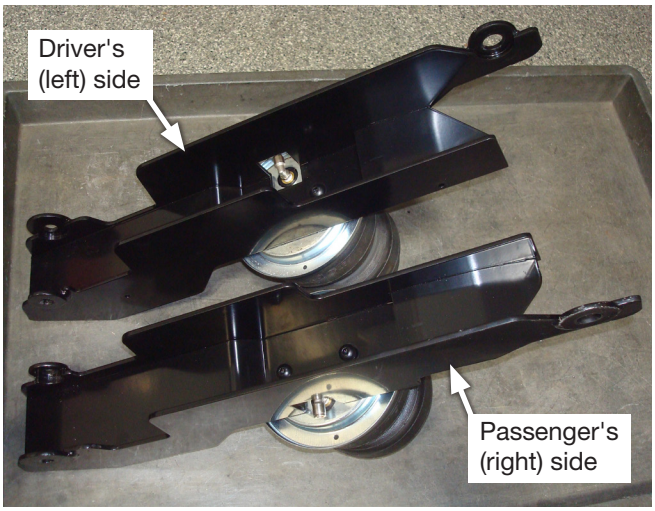


Fig. 10

POSITIONING THE LOWER BRACKET

1. Insert two 3/8" carriage bolts (L) through the top of the lower bracket, as shown (Fig. 11).

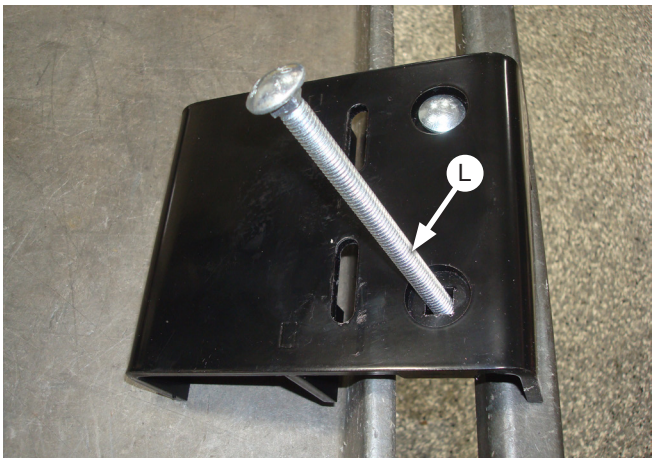


Fig. 11

2. **ALL-WHEEL DRIVE MODELS ONLY (57812):** It will be necessary to remove the jounce bumper spacer block. Using a T-55 Torx socket, remove the spacer block from the axle before placing the lower bracket into position (Fig. 12).

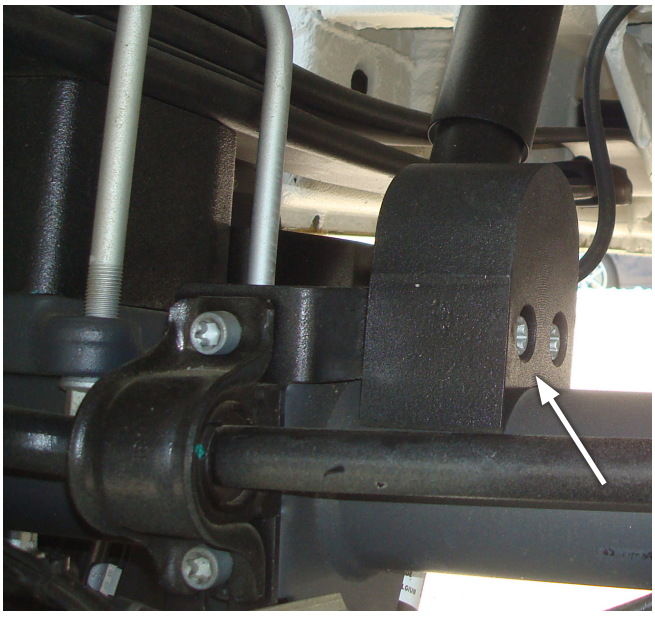


Fig. 12

3. Set the lower brackets into position on the axle (Fig. 13).

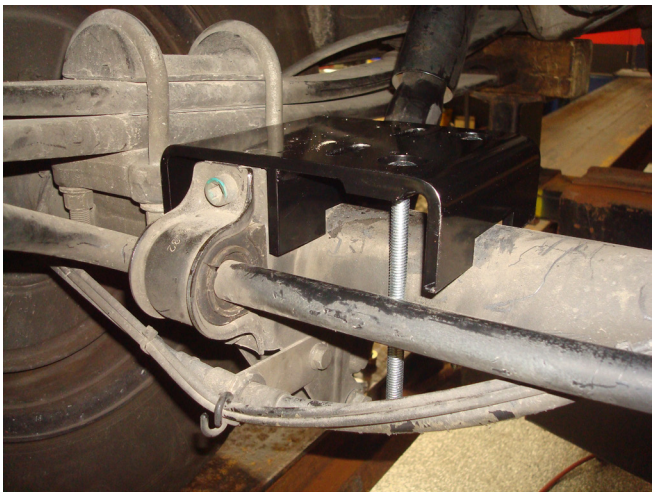


Fig. 13

INSTALL THE UPPER AIR SPRING ASSEMBLIES

1. With the axle dropped down in step one from the back of the vehicle, set the left- and right-hand assemblies into position under the frame above the axle (Fig. 14). Push the assemblies forward until the upper bracket nests flat over the frame.

NOTE

It may be necessary to compress the air springs slightly to get them to sit on top of the lower brackets as you push the assembly into position.

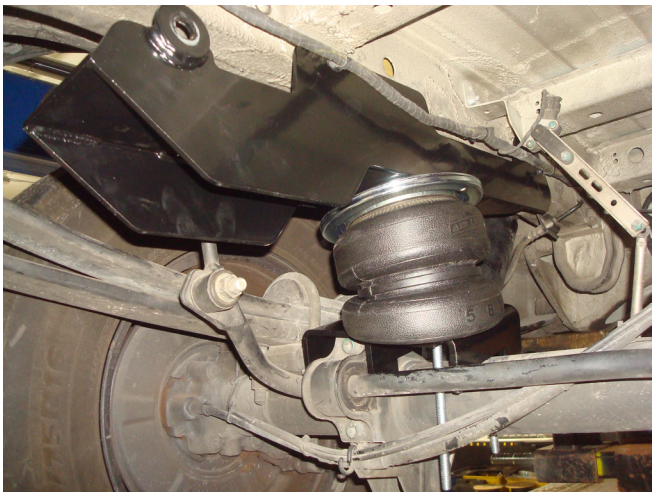


Fig. 14

2. Align the front holes in the upper bracket with the shock mounting holes and insert an M14-1.50 X 90 hex cap screw (M) through an M14 flat washer (R), then through the shock, two more M14 flat washers, through the bracket and screw into the threaded sleeve inside the frame. Leave loose at this time (Fig. 15).

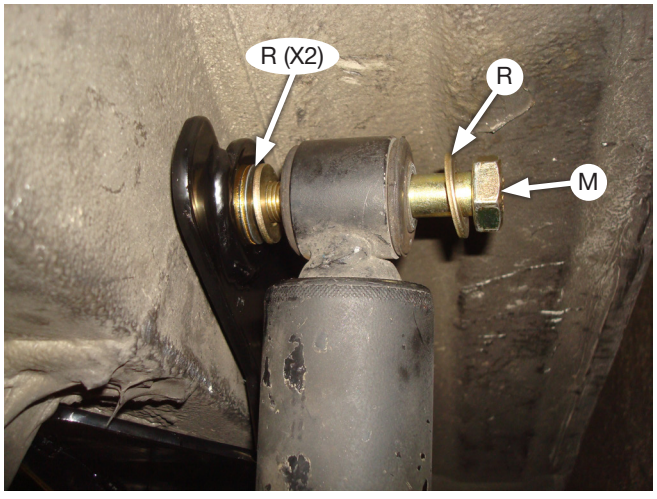


Fig. 15

3. Push the upper bracket up against the back of the frame, and depending on if your model is equipped with a sway bar, insert the M12 hex cap screw (N or X) through an M12 flat washer (Q), through the upper sway bar link (if equipped), through the frame and out the back side through the upper bracket (Fig. 16). Cap with the M12 flat washer (Q) and M12 nylon lock nut (P) (Fig. 17). Leave loose at this time.

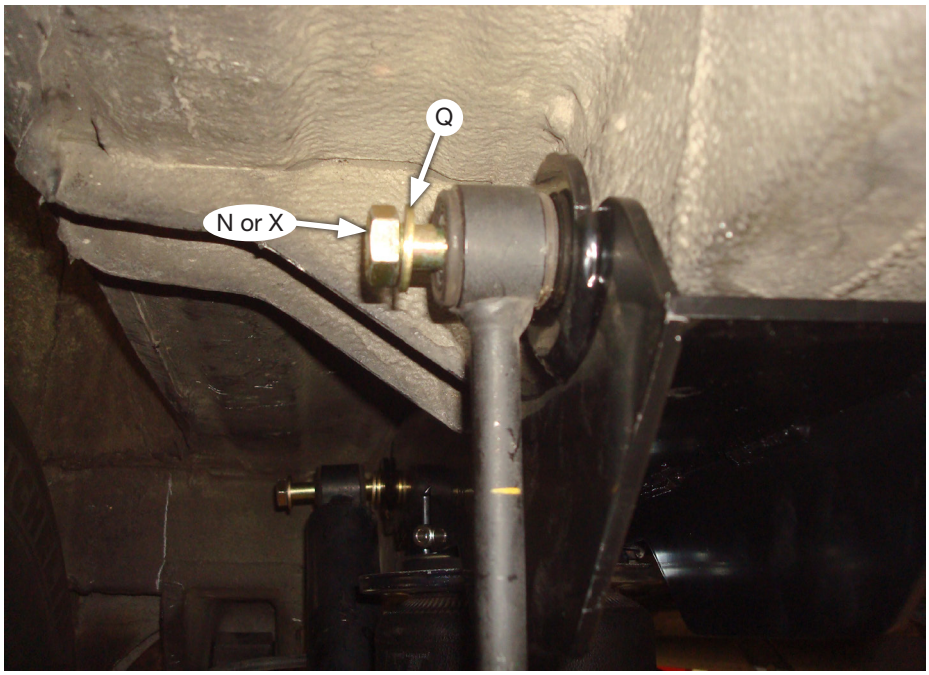


Fig. 16

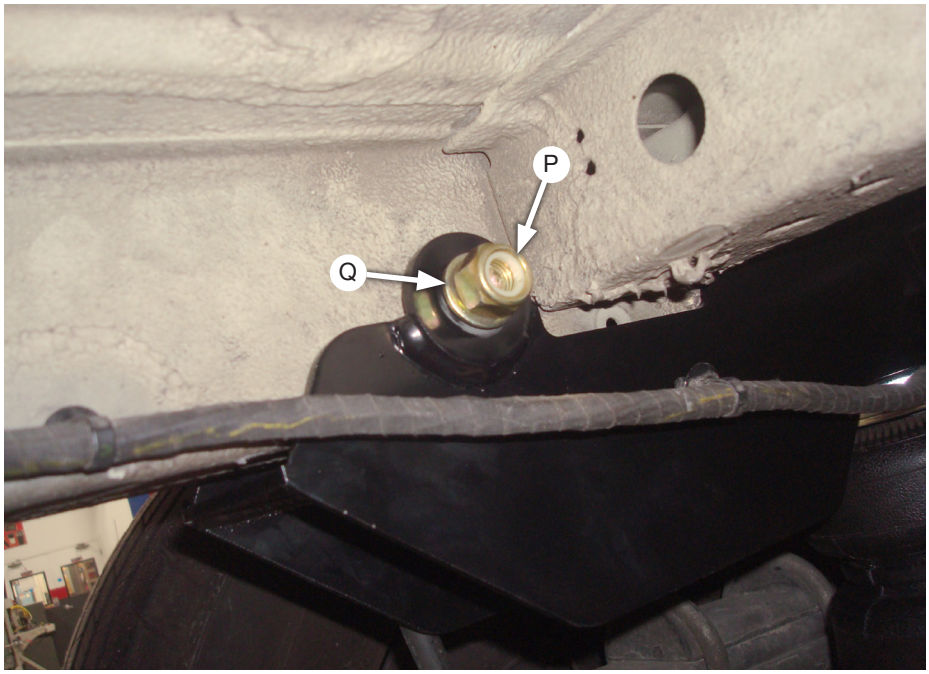


Fig. 17

ATTACH THE LOWER BRACKETS

1. With the axle still hanging, lift the air spring up and slide a roll plate (E) into position underneath the air spring. Align the air spring mounting holes, roll plate holes, and lower bracket slotted holes. Attach the air springs to the lower brackets with two 3/8" hex screws (H), lock washers (I), and flat washers (J) (Fig. 18). Leave loose at this time.

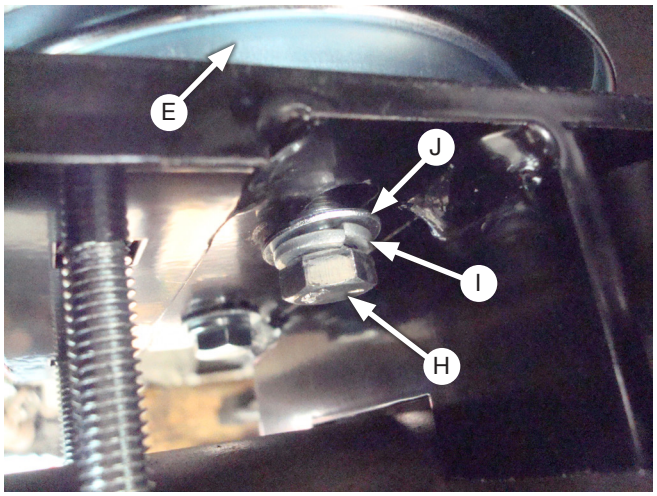


Fig. 18

ALL-WHEEL DRIVE MODELS ONLY (57812):

2. Attach the lower lift spacer previously attached to the lower bracket with the 3/8" hex cap screws (U), flat washers (W), and nylon lock nuts (V) (Figs. 19 & 20). Leave loose at this time.

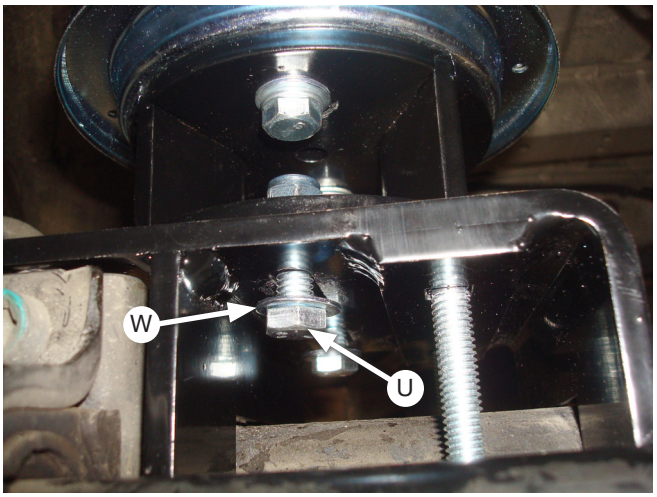


Fig. 19

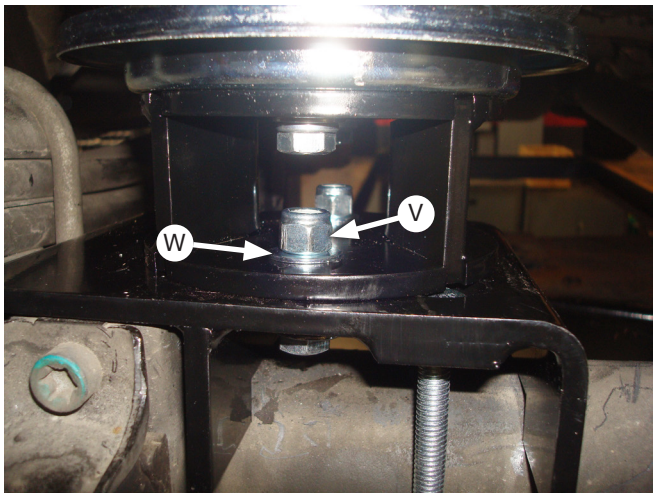


Fig. 20

3. Install the clamp bars (A) over the carriage bolts in the lower bracket. Cap with 3/8" nylon lock nut (O) and flat washer (J) (Fig. 21). Lift the axle all the way back up to normal curb height and align the upper and lower brackets so they are parallel, then evenly torque the mounting hardware to 16 lb.-ft. (22Nm).

4. Using the slots in the lower bracket, adjust the air springs so they are as perpendicular as possible. **For rear-wheel-drive models**, torque the lower mounting hardware to no more than 20 lb.-ft. (27Nm). **For all-wheel-drive models**, torque the lift spacer/lower bracket mounting hardware to 31 lb.-ft. (42Nm).

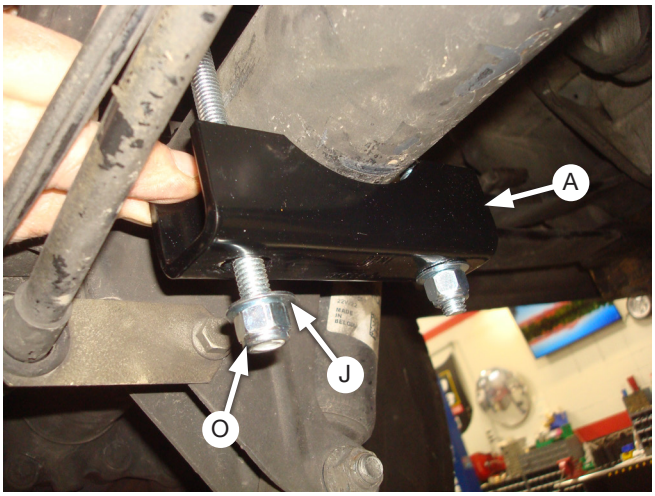


Fig. 21

5. Insert the wiring harness mounts previously removed into the holes in the upper bracket and zip tie the wiring harness to the sensor bracket (if equipped) (Fig. 22).

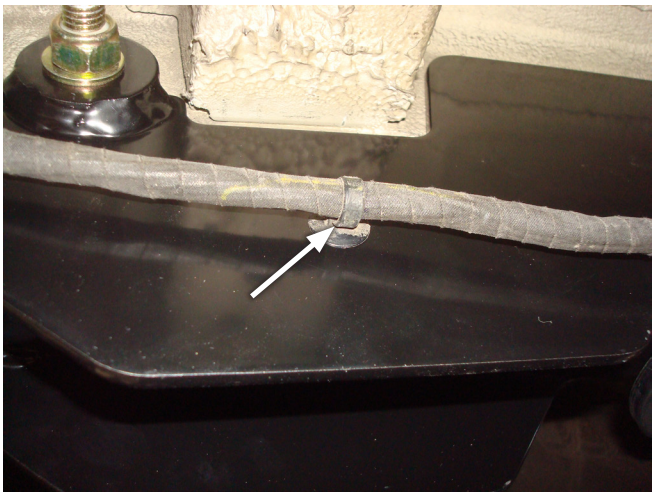
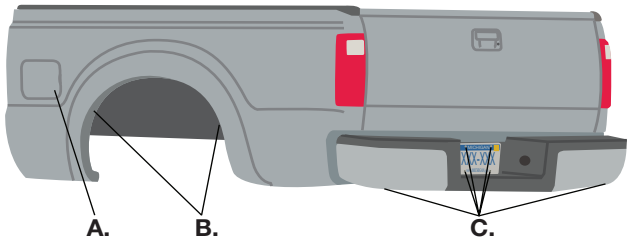


Fig. 22

Install the Air Lines

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

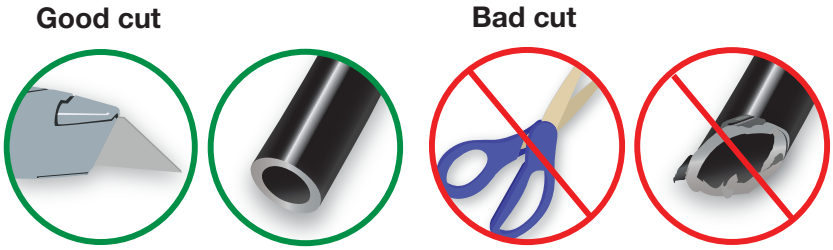


A. Inside fuel tank filler door
B. Inside rear wheel wells
C. License plate or rear bumper area

CAUTION

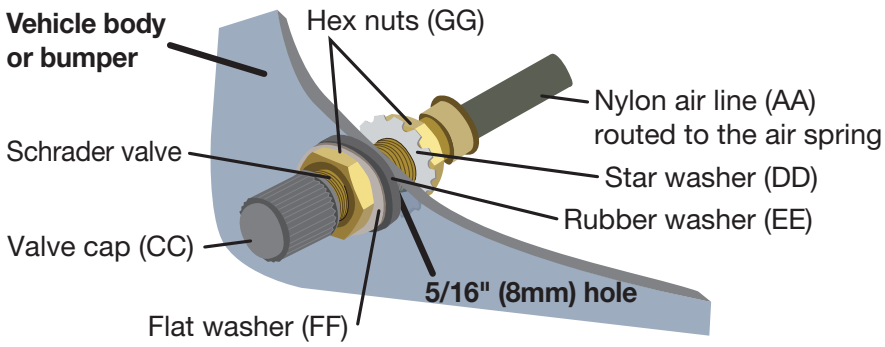
KEEP AT LEAST 6" (152MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

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.



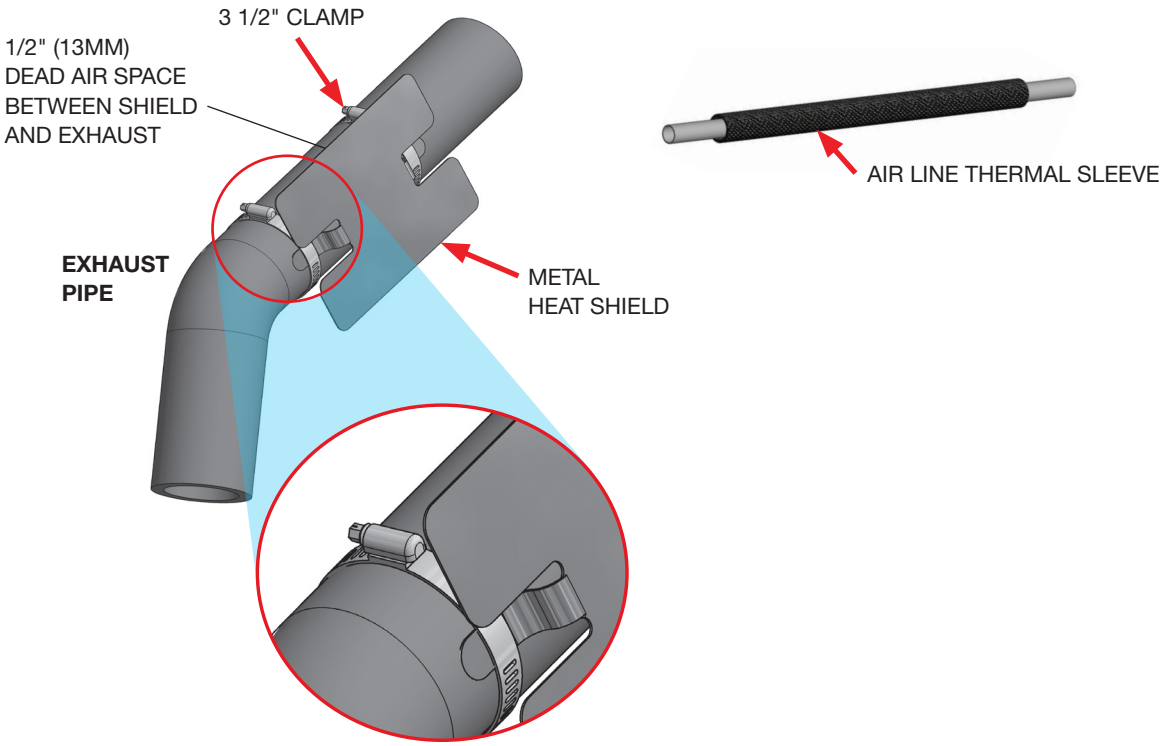
3. Use zip ties (BB) to secure the air line to fixed points along the chassis. Do not pinch or kink the air line. Leave at least 2" (51mm) of slack in the air line to allow for any movement that might pull on the air line. The minimum bend radius for the air line is 1" (25mm).

4. Install the Schrader valve in the chosen location.



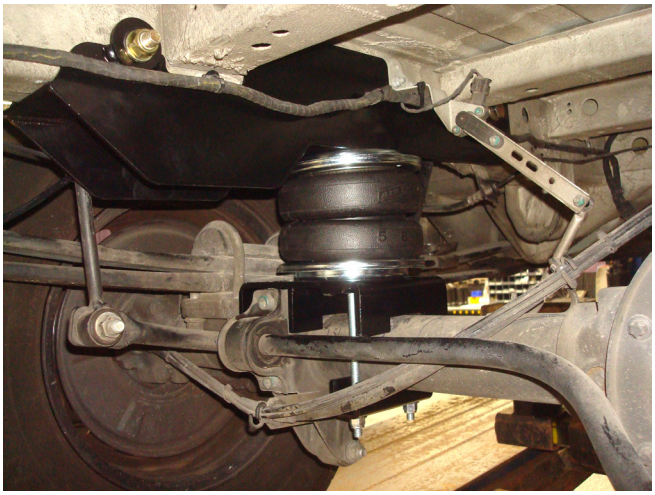
INSTALL THE HEAT SHIELD

1. Attach the metal heat shield to the exhaust pipe using the hose clamps. Slide the air line thermal sleeve over the air line and place it where the air line is closest to the exhaust.

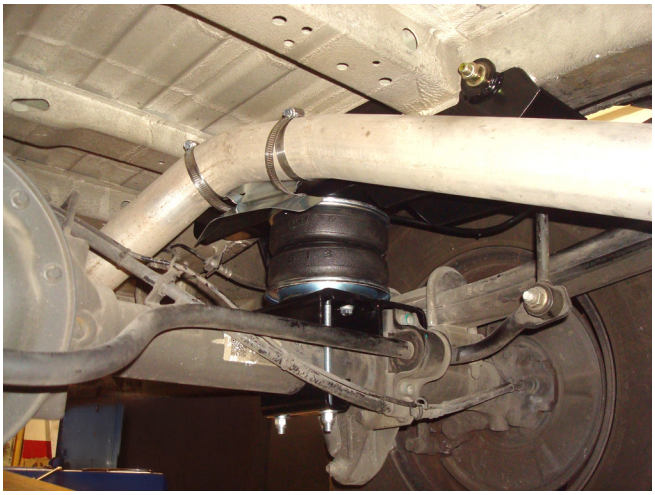


Finished Installation

The images show the finished installation for 144" Wheelbase, Rear-Wheel-Drive Model.



Rear, inside driver's (left) side view.



Rear, inside passenger's (right) side view.

Forward, inside driver's (left) side view.

Forward, inside passenger's (right) side view.

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 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** — 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.

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 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, 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/

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.

MADE IN USA WITH GLOBAL COMPONENTS

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

Printed in the USA JJC-0125