



# LoadLifter 5000™

S E R I E S

Installation  
Guide



*Ford Super Duty*

**Kits 57395 | 88395**

***Single- and dual-rear wheel 2WD***

For maximum effectiveness and safety, please read these instructions completely before proceeding with 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 or LoadLifter 5000 Ultimate. 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  
silver zinc-plated steel  
roll plate

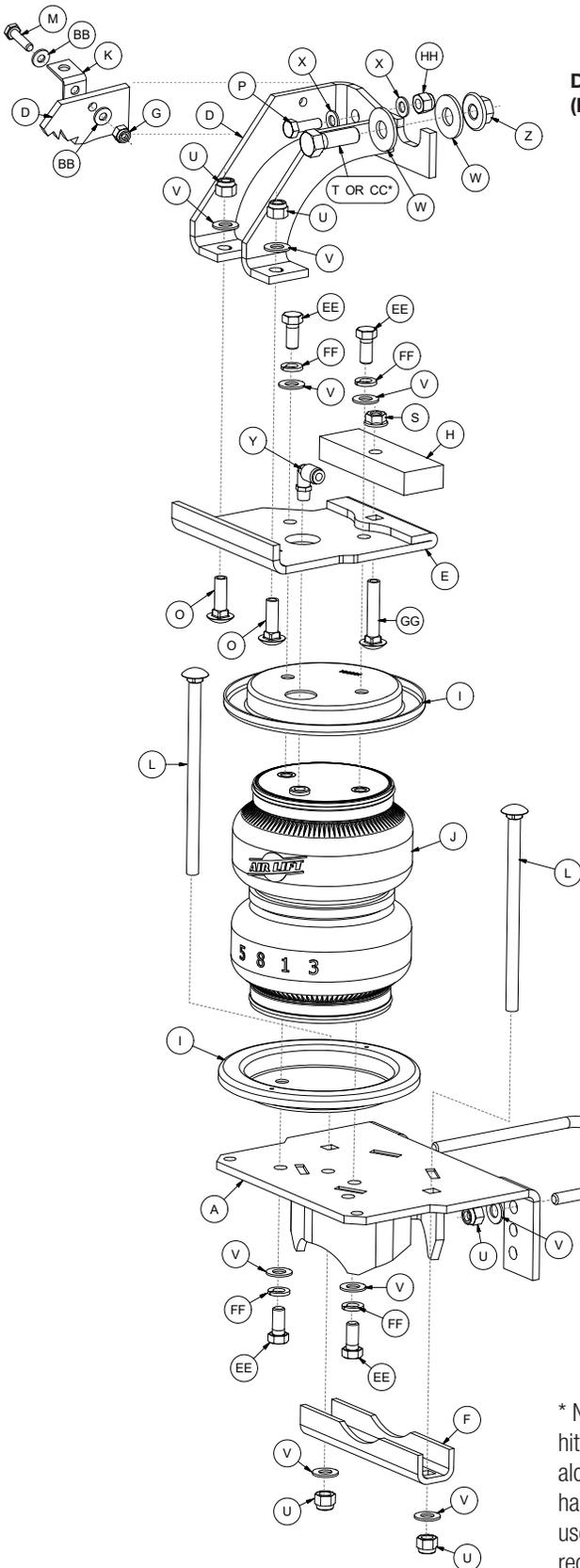


LoadLifter 5000 Ultimate  
black powder-coated  
roll plate

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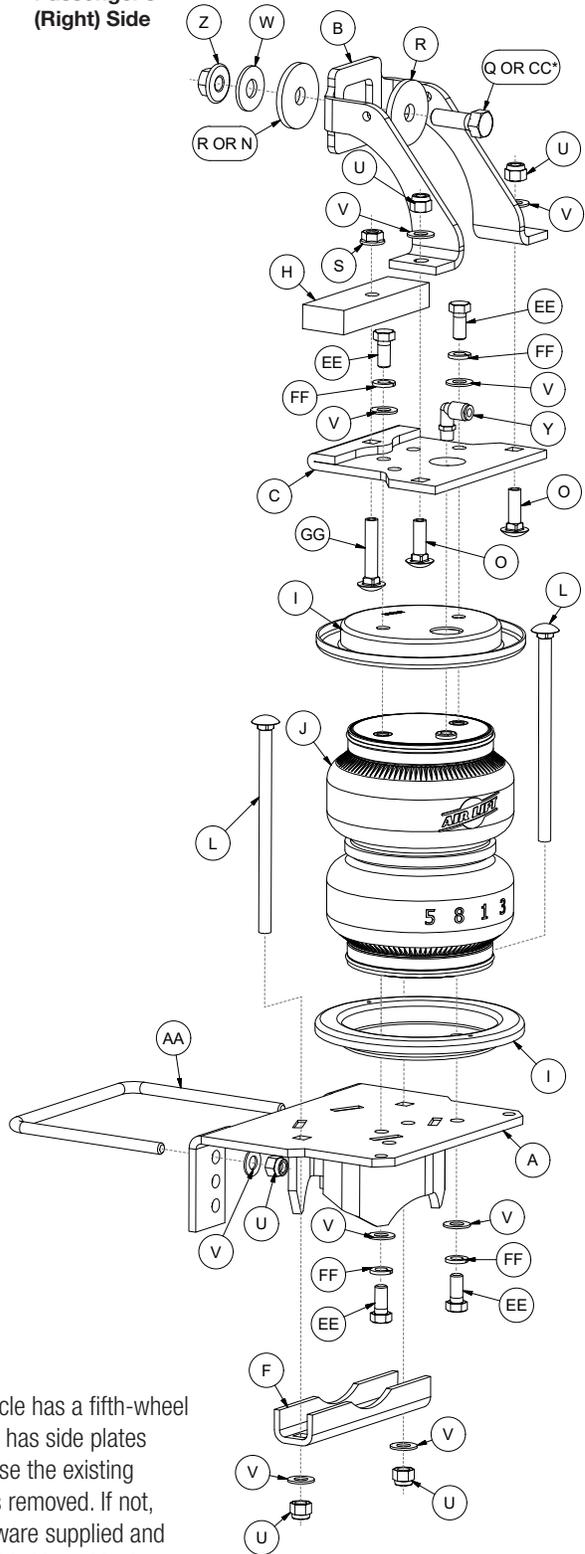
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## Installation Diagram



**Driver's  
(Left) Side**

**Passenger's  
(Right) Side**



\* NOTE: If the vehicle has a fifth-wheel hitch installed that has side plates along the frame, use the existing hardware that was removed. If not, use the 1/2" hardware supplied and recommended in this kit and in the directions in this manual.

*fig. 1*

# Hardware and Tools Lists

## 57395 HARDWARE LIST

### 88395 HARDWARE LIST

Item	Part #	Description	Qty
A	03212	Lower Bracket .....	2
B	07996	Upper Brace P.S. ....	1
C	07997	Upper Bracket P.S. ....	1
D	07994	Upper Brace D.S. ....	1
E	07995	Upper Bracket D.S. ....	1
F	01531	Clamp Bar .....	2
G	18425	1/4"-20 Nylon Lock Nut.....	1
H	13966	Spacer .....	2
I	11967	Roll Plate .....	4
J	58496	Air Spring.....	2
K	10886	"L" Bracket.....	1
L	17163	3/8"-16 x 7" Carriage Bolt.....	4
M	17135	1/4"-20 x 1" Hex Cap Screw .....	1
N	18556	3/4" Flat Washer.....	1
O	17361	3/8"-16 x 1 1/4" Carriage Bolt.....	4
P	17177	M8-1.25 x 25mm Hex Bolt .....	1
Q	17161	1/2"-13 x 1 1/2" Hex Cap Screw.....	1
R	18207	1/2" Thick Flat Washer .....	2
S	18422	3/8"-16 Serrated Flange Lock Nut ...	2
T	18412	1/2"-13 x 1 1/4" Hex Cap Screw.....	1
U	18435	3/8"-16 Nylon Lock Nut.....	12
V	18444	3/8" Flat Washer.....	24
W	18485	1/2" Flat Washer.....	3
X	18501	M8 Flat Washer .....	6
Y	21837	90 Degree Swivel Fitting.....	2
Z	18505	1/2"-13 Serrated Flange Lock Nut ...	2
AA	11717	U-Bolt .....	2
BB	18419	Flat Washer #12.....	2
CC	17271	1/2"-13 x 3" Hex Cap Screw .....	2
EE	17203	3/8"-24 x 7/8" Hex Cap Screw.....	8
FF	18427	3/8" Lock Washer.....	8
GG	17140	3/8"-16 x 2" Carriage Bolt.....	2
HH	18522	M8 x 1.25 Nylon Lock Nut.....	1
II*	10465	P-Clamp.....	1
JJ*	20086	Air Line Assembly.....	1
KK*	10466	Small Zip Ties.....	6
LL*	18411	5/16" Lock Washer.....	2
MM*	21230	Valve Cap.....	2
NN*	21233	5/16" Hex Nut.....	4
OO*	21234	Rubber Washer.....	2
PP*	17103	5/16"-18 x 1" Hex Cap Screw .....	1
QQ*	18438	5/16"-18 Nylon Lock Nut.....	1
RR*	22640	Large Zip Tie.....	1

Item	Part #	Description	Qty
A	03212	Lower Bracket .....	2
B	07996	Upper Brace P.S. ....	1
C	07997	Upper Bracket P.S. ....	1
D	07994	Upper Brace D.S. ....	1
E	07995	Upper Bracket D.S. ....	1
F	01531	Clamp Bar .....	2
G	18425	1/4"-20 Nylon Lock Nut.....	1
H	13966	Spacer .....	2
I	11951	Roll Plate .....	4
J	58437	Air Spring.....	2
K	10886	"L" Bracket.....	1
L	17163	3/8"-16 X 7" Carriage Bolt.....	4
M	17135	1/4"-20 X 1" Hex Cap Screw.....	1
N	18556	3/4" Flat Washer.....	1
O	17361	3/8"-16 x 1 1/4" Carriage Bolt.....	4
P	17177	M8-1.25 x 25mm Hex Bolt .....	1
Q	17161	1/2"-13 x 1 1/2" Hex Cap Screw.....	1
R	18207	1/2" Thick Flat Washer .....	2
S	18422	3/8"-16 Serrated Flange Lock Nut ...	2
T	18412	1/2"-13 x 1 1/4" Hex Cap Screw.....	1
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QQ*	18438	5/16"-18 Nylon Lock Nut.....	1
RR*	22640	Large Zip Tie.....	1

\* Not shown in the Installation Diagram.

**NOTE:** To determine which kit is on your vehicle, look at the roll plates. Unpainted roll plates indicate the standard LoadLifter 5000, black painted roll plates indicates LoadLifter 5000 Ultimate.

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

### TOOLS LIST

Description	Qty
Metric & STD Open-End Box Wrenches .....	set
Ratchet with Metric & STD Sockets .....	set
Drill and 5/16" Drill Bit .....	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

# Introduction

The purpose of this publication is to assist with the installation and maintenance of the LoadLifter 5000 series air spring kits. LoadLifter 5000 series air spring kits utilize sturdy, reinforced, commercial grade single or double, depending on the kit, convolute bellows. The bellows are manufactured like a tire with layers of rubber and cords that control growth. LoadLifter 5000 series kits are recommended for most 3/4- and 1-ton pickups and SUVs with leaf springs and provide up to 5,000 pounds of load leveling support with air adjustability from 5-100 PSI. The kits are also used in motor home rear applications and some front applications where leaf springs are used.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information here includes a hardware list, tool list, step-by-step installation information, maintenance guidelines and operating tips.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Company at (800) 248-0892 or visit [airliftcompany.com](http://airliftcompany.com).

## 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.

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### NOTE

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

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# Installing the LoadLifter 5000 System

## GETTING STARTED

1. Raise the vehicle and support it in a way, using safety stands or equivalent, that the axle can be safely dropped away from the frame. This will need to be done in order for the air spring assembly to be put into position between the axle and frame (Figs. 1 & 2). Figure 2 shows the frame being supported with the vehicle on a drive-on hoist.



fig. 2

2. Remove the jounce bumpers from under the frame, over the axle. (Figs. 3 & 4)

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### NOTE

*Wire brush the stud on the jounce bumper and use some penetrating oil to help in removal of the jounce bumper. Usually the socket size for the nut is a 15 mm.*

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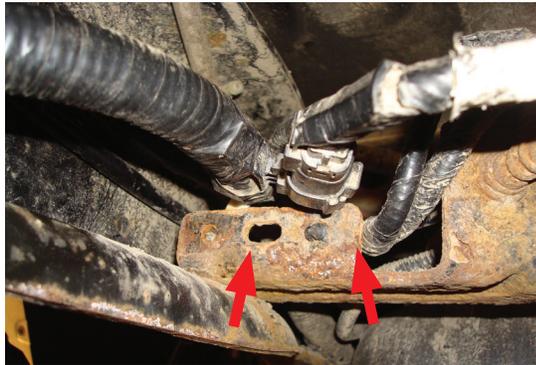


fig. 3



fig. 4

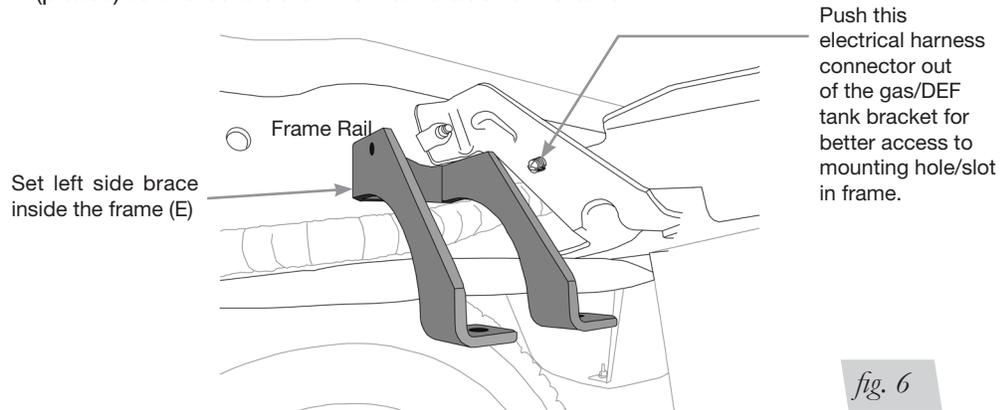
3. If necessary, disconnect the wiring harness from the driver's (left) side frame rail to gain clearance for the upper brace (Fig. 5). Also, push out the harness connector that holds the electrical lines going to the gas/DEF tank in or out of the tank bracket. This will improve socket/bolt access that will be required for installing and tightening the frame brace. (Fig. 6)



Remove the line holders from the gas/DEF tank bracket for easier access to the upper brace hardware.

*fig. 5*

4. If the truck has a fifth-wheel hitch already installed, **other than the standard factory Reese hitch**, it will be necessary to remove the hardware that bolts the side bracket (plates) to the outside of the frame above the axle.



*fig. 6*

## INSTALLING THE BRACES

Gas engine models have emission lines on the inside of the frame. If the truck has emission lines running along the inside of the frame rail (Fig. 7), it will be necessary to relocate those lines as follows:

1. Carefully push the line holder out of the frame above the axle. Try to minimize damage because it will be reused later. Remove any emissions/fuel line and electrical wire loom retaining clips forward or rearward of the axle to aid in positioning the lines once the upper brace has been installed (Figs. 7 & 8).



*fig. 7*

If equipped, this emissions/fuel line retaining clip must be pulled away from the frame in order to install the upper frame brace (D).

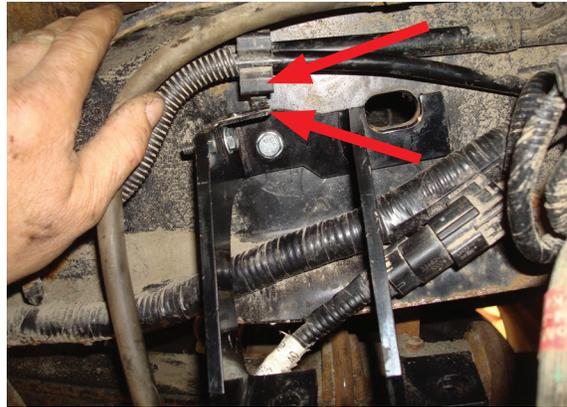


*fig. 8*

Image shows lines clear on the frame opening it up for the brace installation.

## RETAINING CLIP L-BRACKET INSTALLATION ON BRACE

1. In order to reattach the previously removed emissions line, it will be necessary to attach the provided L-bracket (K) to the back frame brace using the 1/4"-20 x 1" bolt (M), flat washers #12 (BB) and 1/4"-20 nylon lock nut (G) supplied (Fig. 6). Placing this L-bracket depends on where the line holder is on the wiring or the emissions line that was previously pulled from the frame. Set the driver's (left) side upper frame brace (D) up into the frame and insert the M8-1.25 x 25mm hex bolt (P) with an M8 flat washer (X) through the brace and into the hole in the side of the frame from which the line holder was removed (Fig. 9). This will hold the line in place. Note what side the line holder is in, in respect to the back leg of the brace. Is it forward or behind the back leg of the brace? Where the line holder lines up is the side where the L-bracket is to be installed. (Figs. 6 & 9).



Brace being temporarily held in place by the M8 bolt and washer. L-bracket is shown in location already. Note: The side the line holder is on depends on the location of the factory retaining clip.

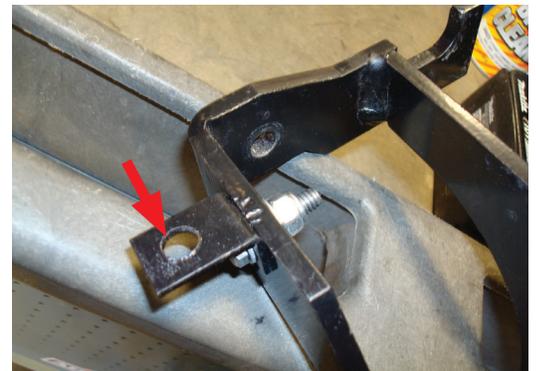
*fig. 9*

2. Pull the brace back out and attach the L-bracket onto the brace with the hardware noted above, in the proper location previously found (Figs. 10 & 11). Make sure the L-bracket faces up and tighten securely.



*fig. 10*

Attach the L-bracket to the brace in the position previously found using the hardware specified.



*fig. 11*

No matter what side the L-bracket is on, make sure it is installed so the flat side points up when tightening.

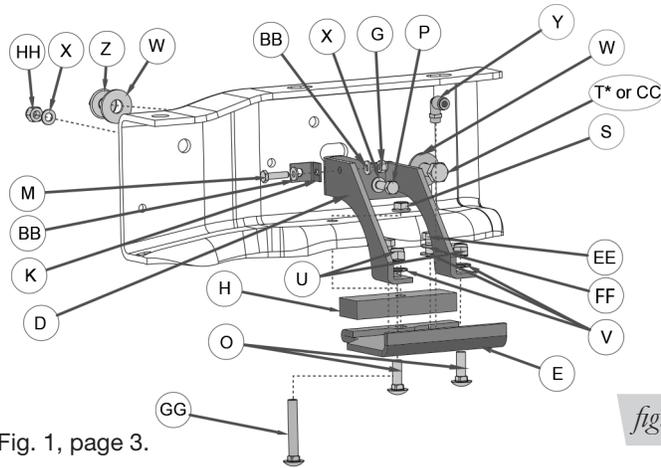
## DRIVER'S (LEFT) SIDE BRACE INSTALLATION

1. Set the left upper brace (D) into the driver's (left) side frame rail. The brace has a small hole that will line up with an existing hole in the frame. Insert the M8-1.25 x 25mm hex bolt (P) with an M8 flat washer (X) through the brace and frame (Figs. 12 & 13) and cap with M8 flat washer (X) and M8 x 1.25 nylon lock nut (HH). Leave loose at this time.



**CAUTION**

BE SURE NOT TO PINCH THE PREVIOUSLY MOVED WIRING OR LINES INSIDE THE LEFT FRAME RAIL.



\* See footnote in Fig. 1, page 3.

*fig. 12*



Attach the bracket to the frame using the M8 hardware noted.

*fig. 13*

2. If the truck has no fifth-wheel hitch or if it has the standard equipment Reese fifth-wheel hitch, in the frame there is a slot that is forward of the M8 bolt just installed, insert the 1/2"-13 x 1 1/4" hex cap screw (T) and 1/2" flat washer (W) through the brace and frame (from the inside out). Cap with a 1/2" flat washer (W) and 1/2"-13 serrated flange lock nut (Z) (Figs. 12, 14 & 15). Do not tighten at this time.



Driver's side brace shown with supplied hardware in place. Existing fifth-wheel hardware which may have been removed may look different.

*fig. 14*

If the truck has an aftermarket fifth-wheel hitch that has an outer bracket (plate) running alongside of the frame and it used this slot to secure the bracket with existing hardware, install the original fifth-wheel hardware previously removed in the “Getting Started” section from the fifth wheel installation for securing the brace (Fig. 12). Do not tighten at this time.

OR

If the truck has an aftermarket fifth-wheel hitch that has an outer bracket (plate) running alongside of the frame and it **does not have** any attaching hardware on the side where the slot in the frame is, it will be necessary to drill a 1/2” hole through the plate using the slot in the frame as a template. Drill the hole as far to the rear of the slot as possible.

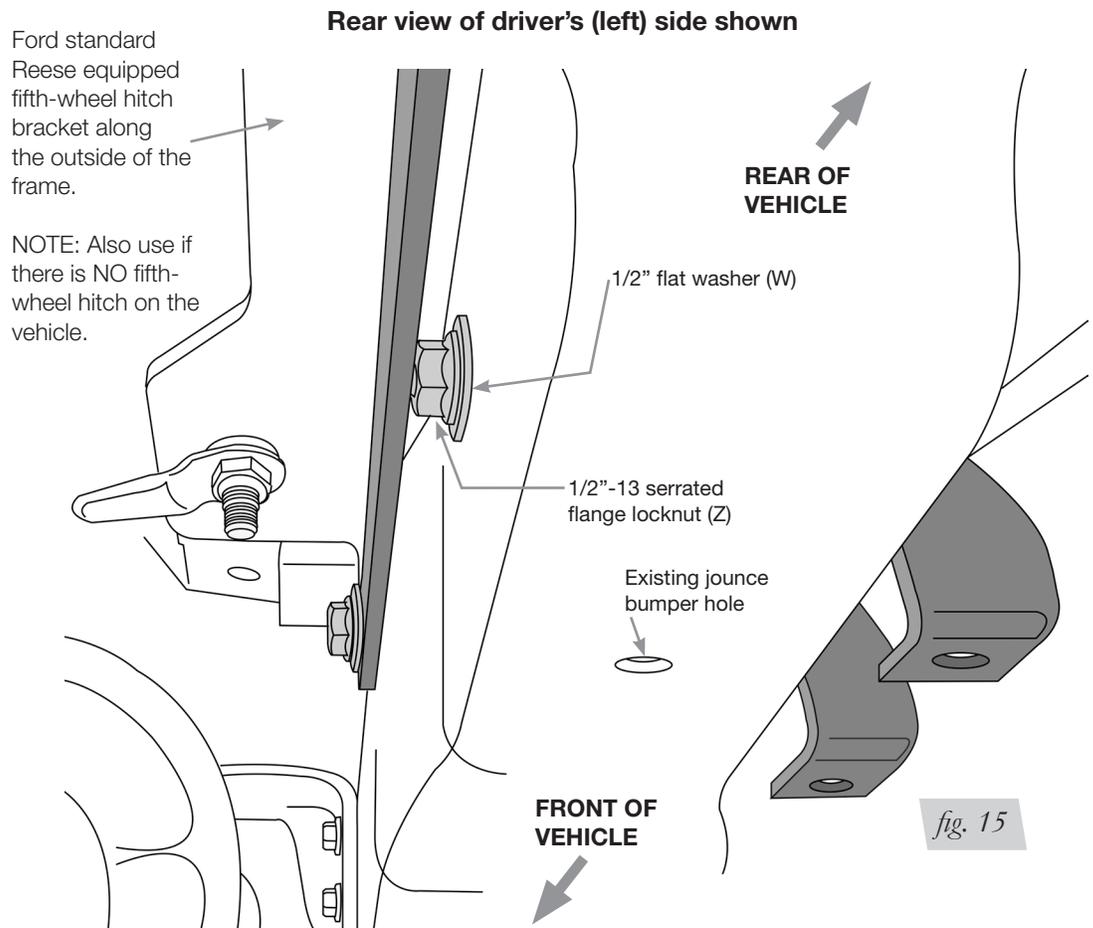
**CAUTION**

CLEAR ANY ELECTRICAL OR HARD LINES FROM THE AREA SO AS NOT TO DAMAGE THEM WHEN DRILLING THE HOLE.

**NOTE**

*It may be necessary to mark and remove the outer bracket (plate) from the side of the frame in order to drill the hole correctly. Reattach once the hole is drilled.*

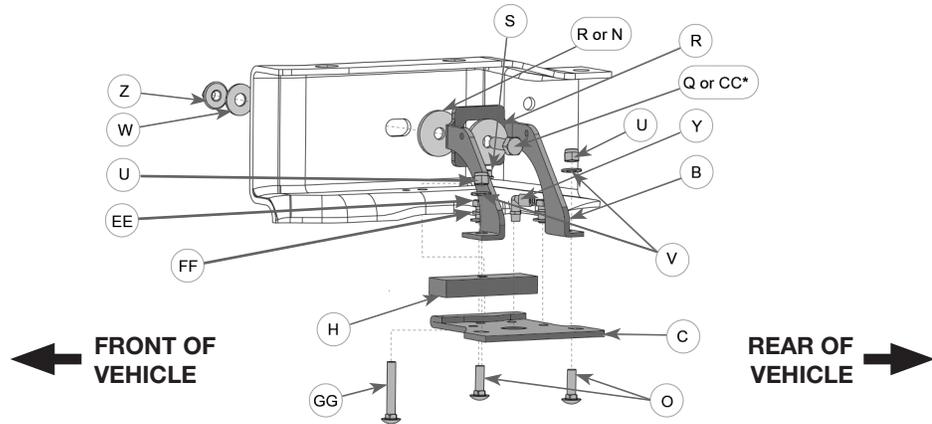
3. Insert a 1/2”-13 x 3” hex cap screw (CC) with a 1/2” flat washer (W) through the brace, frame and fifth wheel plate previously drilled. Cap with a 1/2” flat washer (W) and a 1/2”-13 serrated flange lock nut (Z) (Fig. 15). Leave loose at this time.



## PASSENGER'S (RIGHT) SIDE BRACE INSTALLATION

1. Set the right upper brace (B) into the passenger's (right) side frame rail. (Figs. 16, 17 & 18).

Inside view of passenger's (right) side frame shown



\* See footnote in Fig. 1, page 2.

*fig. 16*



For the passenger's (right) side, before inserting the upper brace hardware, make sure that the 1/2" thick washer (R) or (N) is installed in between the brace and frame (see Step 2). Note: The 1/2" thick washer (R) is not a half inch thick. It has a 1/2" hole and is a thick washer.

*fig. 17*



Passenger's (right) side upper brace shown with hardware supplied in place.

*fig. 18*

- For trucks with **no fifth-wheel or the OEM-purchased Reese fifth-wheel hitch**, insert the 1/2"-13 x 1 1/2" hex cap screw (Q) and 1/2" thick flat washer (R) through the brace, between the brace and the frame add the 1/2" thick flat washer (R) then through the frame (from the inside out).

**NOTE**

*The 1/2" thick flat washer (R) is not a half inch thick. It has a 1/2" hole and is a thick washer.*

OR

If the truck has an aftermarket fifth-wheel hitch that has an outer bracket (plate) running alongside of the frame and it used this slot to secure the bracket to the frame with existing hardware, reinstall the original hardware previously removed in the "Getting Started" section. However, add the 1/2" thick flat washer (R) or 3/4" flat washer (N) depending on whether the existing hardware is in between the brace and the frame. (Figs. 16 & 17)

OR

If the truck has an aftermarket fifth-wheel hitch that has a bracket (plate) running alongside of the frame and it **does not have** any attaching hardware on the side where the slot in the frame is, it will be necessary to drill a 1/2" hole through the plate using the slot in the frame as a template.

**NOTE**

*It may be necessary to mark and remove the bracket (plate) from the side of the frame in order to drill the hole correctly. Reattach once the hole is drilled.*

- Insert a 1/2"-13 x 3" hex cap screw (CC) with a 1/2" thick flat washer (R) through the brace. Between the brace and the frame add another 1/2" thick flat washer (R) then slide the hex cap screw through the frame and fifth-wheel plate previously drilled. Cap with a 1/2" flat washer (W) and a 1/2"-13 serrated flange lock nut (Z) (Fig. 15). Leave loose at this time.

**AIR SPRING AND BRACKET ASSEMBLY**

- Set roll plates (I) over the top and bottom of the air spring (J). (Figs. 1 & 19)

**NOTE**

*The radiused (rounded) edge of the roll plate (I) will be toward the air spring so that the air spring is seated inside the roll plates.*

- Install the swivel elbow fitting (Y) into the top of the air spring finger tight. Tighten the swivel fitting 1 1/2 turns. (Fig. 19)



Set roll plate (I) over the air spring and install the fitting (Y) as stated. Repeat for both air springs.

*fig. 19*

3. Insert one of the 3/8"-16 X 7" carriage bolts (L) through the square hole in the lower brackets (A). The driver's (left side) is shown in Figure 20. Determine which holes correspond with either side (Fig. 21). The passenger's (right) side is shown in Figure 22.

**NOTE**

The 3/8"-16 x 7" carriage bolts will be behind the axle once the assembly is installed on the axle.



fig. 20

Place 3/8"-16 x 7" carriage bolts into the square holes. (Driver's (left) side shown).

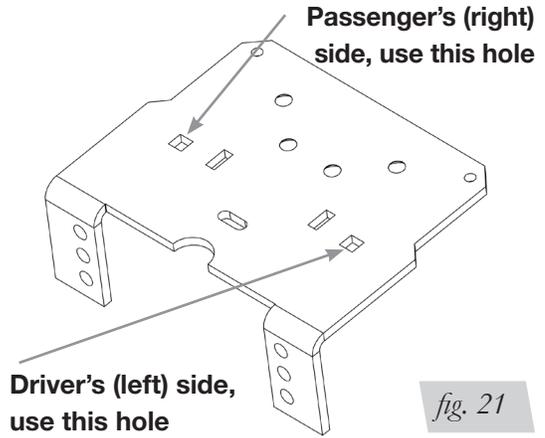


fig. 21



3/8-16 X 7" carriage bolts go into the square holes. Passenger's (right) side shown.

fig. 22

4. The lower bracket assembly has two sets of air spring mounting holes, one for the driver's (left) side, the other for the passenger's (right) side. Using the corresponding holes in the lower bracket designated (Figs. 23 & 24), attach the air spring to the bracket using two 3/8"-24 x 7/8" hex cap screws (EE), two 3/8" lock washers (FF) and two 3/8" flat washers (V). Torque to no more than 20 lb.-ft. (27Nm).

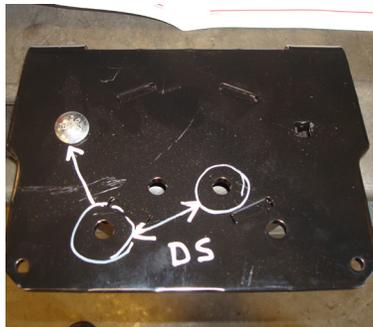


fig. 23

Driver's (left) side air spring mounting holes shown in location to the 3/8-16 x 7" carriage bolt previously installed. When installing on the air spring, make sure the bracket edge facing you is on the fitting side.



fig. 24

Passenger's (right) side air spring mounting holes shown in location to the 3/8-16 x 7" carriage bolt previously installed. When installing on the air spring, make sure the bracket edge facing you is on the fitting side.

5. Figure 25 shows the driver's (left) side and passenger's (right) side assemblies.

**NOTE**

*The 3/8"-16 x 7" carriage bolts will be behind the axle once the assembly is installed on the axle.*

Driver's (Left) Side

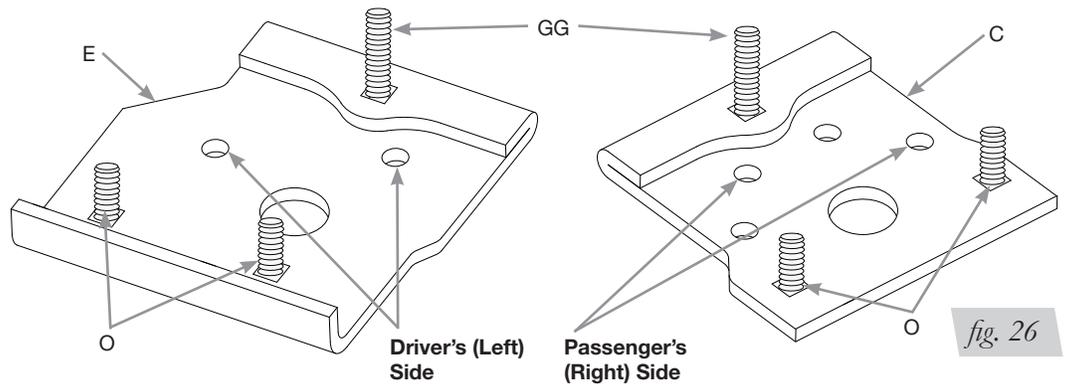


Passenger's (Right) Side

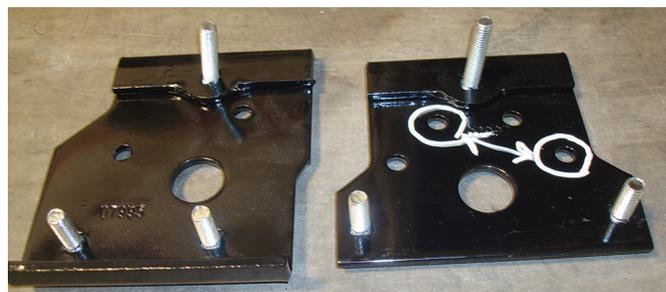
The air spring fitting must be on this side of the assembly opposite the flanges.

*fig. 25*

6. Set the lower bracket assembly aside. Pick up the driver's (left) side (E) and passenger's (right) side (C) upper brackets (Figs. 26 & 27). Insert two 3/8"-16 x 1 1/4" carriage bolts (O) up through the bottom of the driver's (left) side (E) and passenger's (right) side (C) upper brackets (Figs. 26 & 27), through the two square holes that are on the corresponding side. Also, insert one 3/8"-16 x 2" carriage bolt (GG) through the remaining hole. The head of this carriage bolt will be hidden once the upper bracket is mounted to the air spring.



*fig. 26*



*fig. 27*

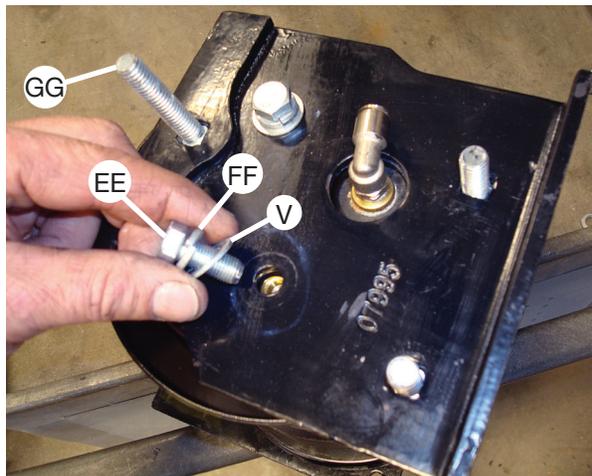
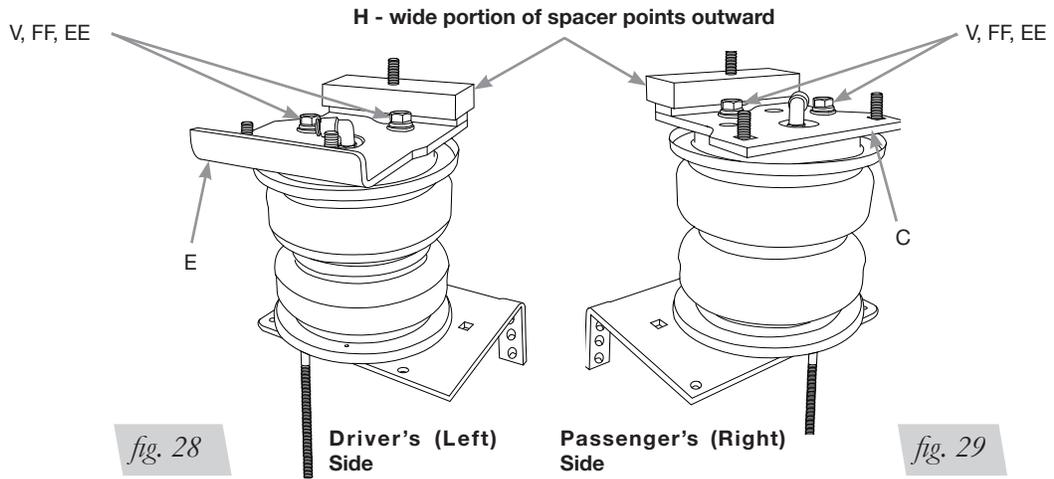
Driver's (Left) Side

Passenger's (Right) Side

**NOTE**

*One of the 3/8"-16 x 1 1/4" carriage bolts (O) will not be covered by the roll plate and may fall out. If so, retain for use in the "Attaching the Assemblies to the Frame" section later in this manual.*

- Set the driver's (left) side upper bracket onto the driver's side air spring assembly previously assembled, using the holes in the upper bracket designated (Figs. 26 & 27), and attach to the air spring with two 3/8" flat washers (V), 3/8" lock washers (FF) and 3/8"-24 x 7/8" hex cap screw (EE). Torque no more than 20 lb.-ft. (27Nm) (Figs. 28, 29, & 30).



Attach the upper bracket to the air spring assembly with two 3/8" flat washers (V), 3/8" lock washers (FF), and 3/8"-24 x 7/8" hex head cap screws (EE).

*fig. 30*

- Repeat the above process on the passenger's (right) side assembly (Fig. 29).
- Set the spacers (H) over both 3/8"-16 x 2" carriage bolts (GG). (Figs. 28, 29 & 31)



Spacer (H) set on bracket in position. The wide side of the spacer faces the outside of the vehicle.

*fig. 31*

10. Figure 32 shows the complete assemblies upside down and ready to install.

**Driver's  
(left) side  
assembly**



**Passenger's  
(right) side  
assembly**

*fig. 32*

### **ATTACHING THE ASSEMBLIES TO THE FRAME**

1. Drop the axle or raise the frame to make room to put the assemblies into position.
2. It may be necessary to move the ABS line under the hard brake line bracket that is bolted to the spring perch, behind the axle, to make room for the legs on the lower bracket (Fig. 33). Unbolt the hard brake line and slide the clamps holding the ABS lines down so that the line will be below the brake line bracket once bolted back into position. Reattach the brake line bracket back onto the spring perch using the same hardware removed (Fig. 34). Repeat for the other side.



*fig. 33*

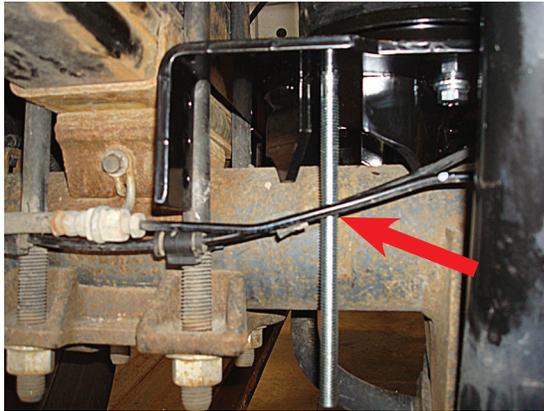
ABS line shown in stock location.



*fig. 34*

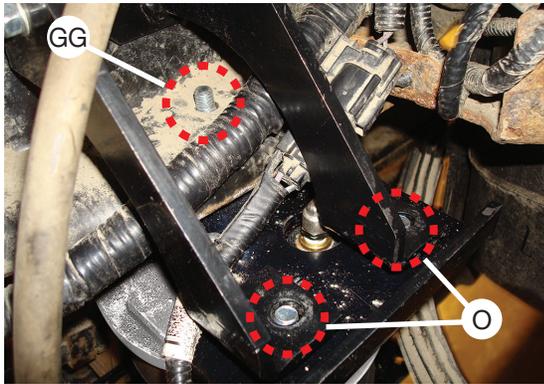
New location for ABS line.

- Set the driver's (left) side assembly onto the axle (Fig. 35). Make sure the 3/8"-16 x 7" carriage bolt (L) on the bottom bracket goes in between the hard brake line and axle, on the back side of the axle. Raise the axle just enough to insert the 3/8"-16 x 2" carriage bolt (GG) (that is installed in the upper bracket) through the existing jounce bumper hole in the bottom of the frame. At the same time, line up the upper brace into the remaining two carriage bolts in the assembly's upper bracket (Fig. 36). Do this just enough for the carriage bolts to hold the assembly into position in the frame, while resting on the axle (Fig. 35).



The long carriage bolt must go in between the axle and the hard brake/ABS line on the driver's (left) side.

*fig. 35*



Raise the axle up while aligning the 3/8"-16 x 2" carriage bolt through the frame and the two 3/8"-16 x 1 1/4" carriage bolts in the upper bracket, through the brace.

*fig. 36*

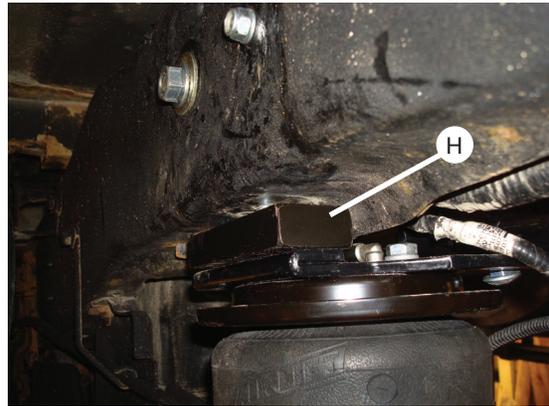
- Set the passenger's (right) side assembly into position on the axle the same way the driver's (left) side was positioned (Fig. 37). Note that the long carriage bolt goes outside of the hard brake line on the passenger's (right) side.



The long carriage bolt goes on the outside (backside) of the hard brake/ABS line on the passenger's (right) side.

*fig. 37*

5. Make sure the thick spacer (H) is parallel to the frame and bracket (Fig. 38). Finish raising the axle or lowering the frame until the spacer contacts the frame on both sides.



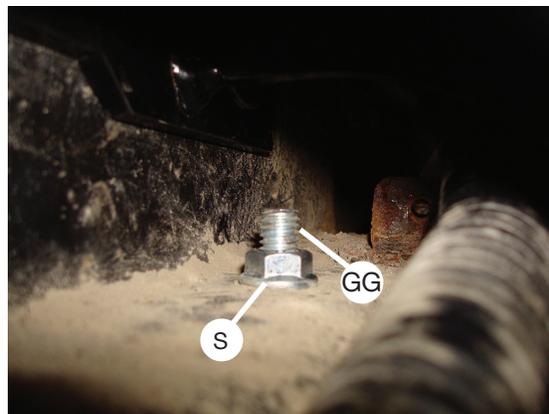
The spacer (H) must be parallel to both the frame and upper bracket. Raise axle or lower frame until the spacer touches the frame on both sides.

*fig. 38*

6. Install the 3/8"-16 serrated flange lock nut (S) on the 3/8"-16 x 2" carriage bolt (GG) that went through the existing jounce bumper hole and tighten securely on both sides (Fig. 39).

**CAUTION**

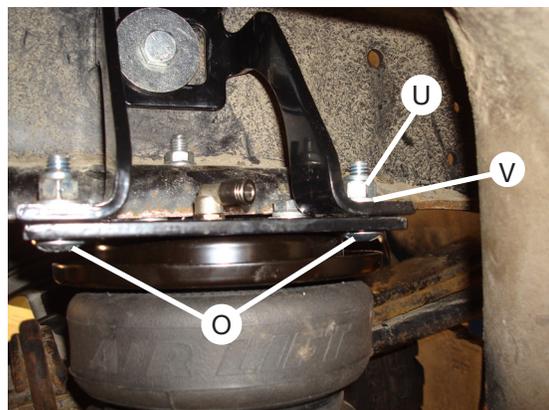
BE SURE NOT TO PINCH THE PREVIOUSLY MOVED WIRING OR LINES INSIDE THE LEFT FRAME RAIL.



Install the 3/8"-16 serrated flange lock nut (S) onto the 3/8"-16 x 2" carriage bolt (GG) that goes through the flange on the frame and tighten.

*fig. 39*

7. Cap the 3/8"-16 x 1 1/4" carriage bolts (O) with a 3/8" flat washer (V) and 3/8" nylon lock nut (U) on both sides and torque to 15 lb.-ft. (20Nm) (Fig. 40).



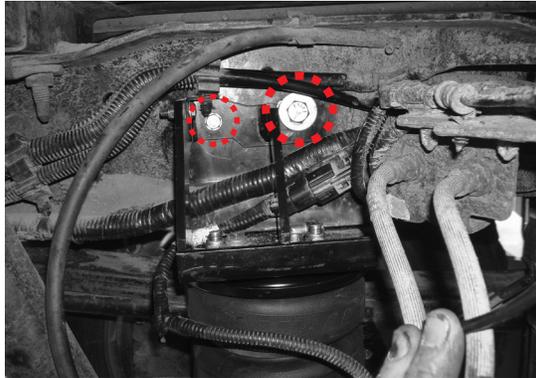
Cap the 3/8"-16 x 1 1/4" carriage bolts with 3/8" nylon lock nuts and torque to 15 lb.-ft (20Nm). Repeat for both sides.

*fig. 40*

8. With the spacers (H) on the upper brackets tight to the bottom of the frame and the braces tight to the upper brackets, tighten the M8 (driver's (left) side only) and 1/2" or 3/4" hardware previously installed, that hold the braces to the frame (Fig. 41). Tighten both sides.

**NOTE**

*If possible, use a thin-wall socket. It helps to pull back the driver's (left) side mounting hardware (T or CC) as far back in the slot as possible while tightening.*



Tighten the M8 and 1/2" (or 3/4" from the existing fifth-wheel hitch) hardware securely. Repeat for the hardware on the opposite side.

*fig. 41*

9. Once the driver's (left) side 1/2" or 3/4" hardware has been tightened, push the wiring harness connector, removed in the "Getting Started" section, back into the gas/DEF tank connector mounting hole. If the connector broke during disassembly, wire tie it to the bracket. (Figs. 5 & 6)
10. If equipped with the emissions line previously loosened from the frame, insert the line holder post into the L-bracket (K) attached to the back leg of the upper left brace (D) (Fig. 42). It may be necessary to move the line holder post forward or back on the lines to line up correctly with the L-bracket hole. Reattach any line holders removed forward or behind the axle, if possible, that were removed to aid in positioning the upper bracket.

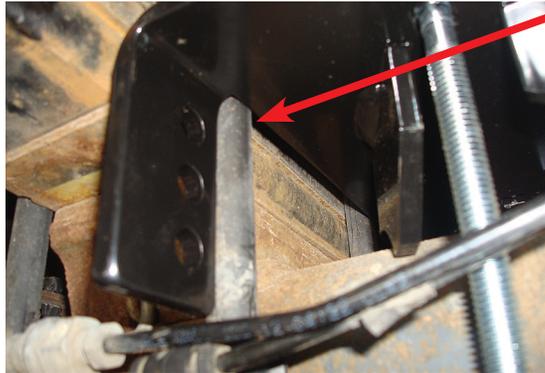


Insert the line holder previously removed into the L-bracket installed on the upper brace as shown.

*fig. 42*

## ATTACHING THE LOWER BRACKET

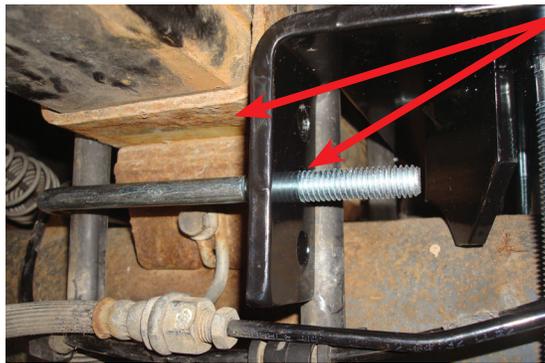
1. Push the lower bracket up against the stock U-bolts so that the legs of the bracket are locked into position around the stock U-bolts (Fig. 43).



Rotate the lower bracket on the spring perch, if necessary, and push the bracket up against the U-bolts to put the lower bracket into position.

*fig. 43*

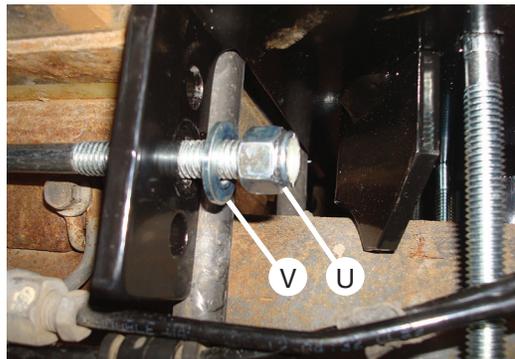
2. Position the U-bolt (AA) around the leaf spring assembly and insert in the hole closest to the leaf spring stack (Fig. 44). The lower bracket flanges must be locked on the front and rear of the stock U-bolts holding the leaf springs to the axle.



Use closest hole to the leaf spring.

*fig. 44*

3. Cap the U-bolts with two 3/8" flat washers (V) and two 3/8" nylon lock nuts (U). Evenly tighten only enough to draw the bracket up against the stock U-bolt at this time (Fig. 45). Repeat for the other side. Make sure the bracket rests against the stock U-bolts (Fig. 46).



*fig. 45*

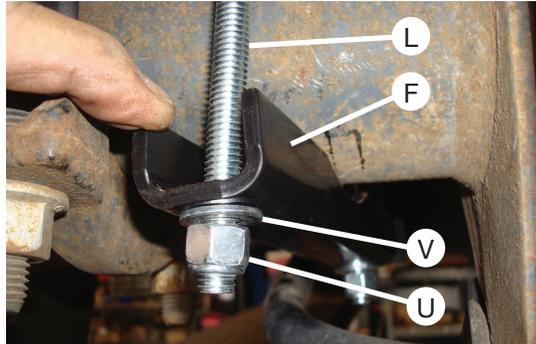
Evenly tighten only enough to draw the lower bracket to the stock U-bolts at this time.



*fig. 46*

Bracket must be up against the stock U-bolts and the flanges of the lower bracket must be locked forward and behind the stock U-bolts.

4. Insert the remaining 3/8"-16 x 7" carriage bolt (L) through the remaining square hole in the lower bracket (forward of the axle) opposite of the one previously installed during the air spring assembly. Set the clamp bar (F) over the carriage bolts (L) and cap with two 3/8" flat washers (V) and 3/8" nylon lock nuts (U) (Fig. 47). Repeat for the opposite side. Leave loose at this time.



Set the clamp bar over the 3/8"-16 x 7" carriage bolts and cap with 3/8" flat washers and 3/8" nylon lock nuts. Leave loose at this time.

*fig. 47*

5. Tighten the axle clamp bar hardware evenly until it touches the axle (see note below). Torque the axle clamp bar bolts to 16 lb.-ft. (22Nm) (Fig. 48). Repeat for the opposite side. Trim the 3/8"-16 X 7" bolts below, the nylon lock nuts if necessary.

**NOTE**

*Do not pinch the hard brake line on the passenger's (right) side while tightening.*



It may be necessary on some models to not tighten the axle clamp bar evenly on the passenger's (right) side so that the clamp bar will clear the hard brake line.

*fig. 48*

6. Torque the leaf spring U-bolt hardware to 10 lb.-ft. (14Nm). Repeat for the opposite side. Once tight, the upper and lower brackets will not be parallel and may look like they are out of alignment. This condition will be OK because of the way the lower bracket and upper bracket mounts are designed. Some variance from one unit to another is considered normal.
7. Raise the axle up all the way (if not already done so) and remove the safety stands or equivalent used during the installation.

## FINISHING THE INSTALLATION

1. Install the P-clamp (II) onto the driver's (left) side lower bracket to hold the emergency brake line away from the air spring. Set the P-clamp over the emergency brake line near the lower bracket corner on the driver's (left) side like shown (Fig. 49).



Set P-clamp over the emergency brake cable.

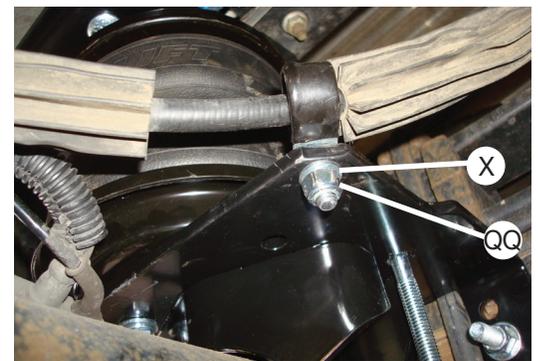
*fig. 49*

2. Set the P-clamp on the top of the lower bracket in the corner and attach to the bracket using the 5/16"-18 x 1" hex cap screw (PP), M8 flat washer (X) through the P-clamp and the hole in the corner of the lower bracket. Cap with M8 flat washer (X) and 5/16"-18 nylon lock nut (QQ) (Figs. 50 & 51). Tighten securely.



*fig. 50*

Attach P-clamp to the corner of the lower bracket.



*fig. 51*

3. Finish the installation of the air springs by tying together the soft brake/ABS lines together that are close to the air spring roll plates, above the junction block on the left side of the axle, with the large zip tie (RR) (Fig. 52).

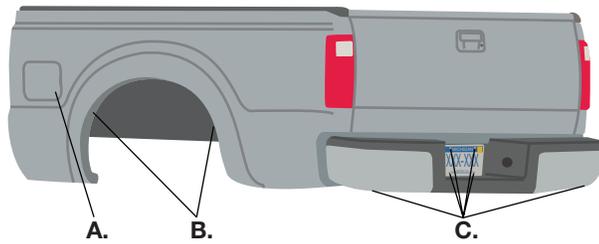


*fig. 52*

# Installing the Air Lines

Choose the locations for the Schrader valves and drill a 5/16" (8mm) hole, if necessary (Fig. 53).

1. Cut the air line in half. Make clean, square cuts with a razor blade or hose cutter (Fig. 54). Do not use scissors or wire cutters.



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

*fig. 53*

**CAUTION**

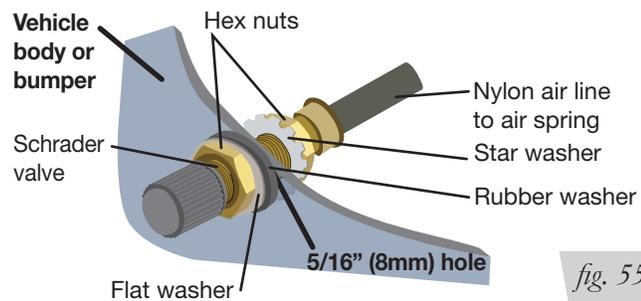
KEEP AT LEAST 6" (152MM) OF CLEARANCE BETWEEN ALL AIR LINES AND THE EXHAUST SYSTEM. AVOID SHARP BENDS AND EDGES.

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).



*fig. 54*

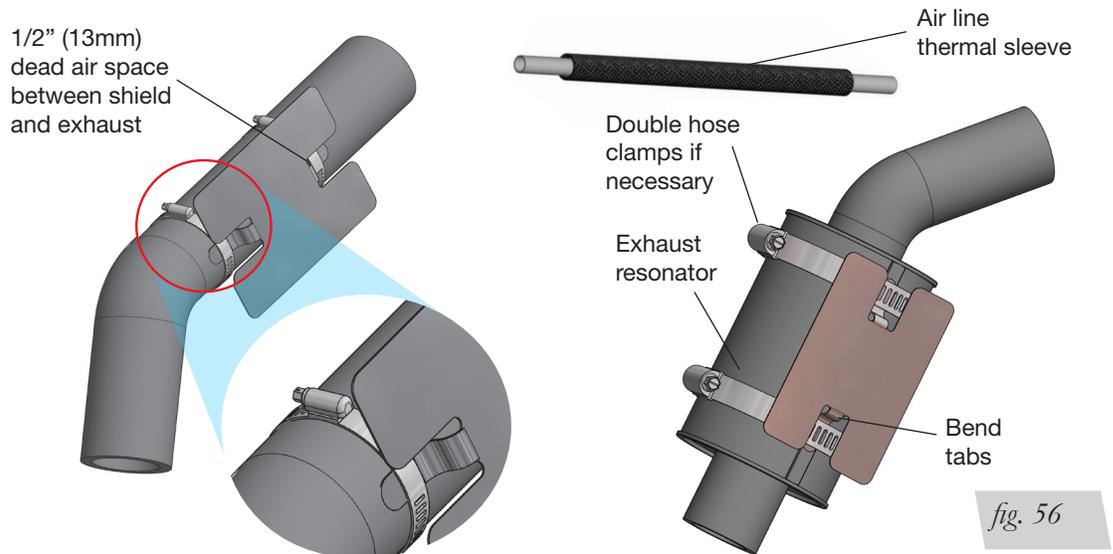
3. Install the Schrader valve in the chosen location (Fig. 55).



*fig. 55*

## 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. Slide the air line thermal sleeve over the air line and position it where the air line is closest to the exhaust. (Fig. 56).



2. Before installing the passenger's (right) side air line, install the thermal sleeve over the air line (Fig. 57). Once the air line has been inserted into the fitting, push the thermal sleeve up to the fitting.



Air line thermal sleeve shown in place on the right side (passenger) of the vehicle. Make sure thermal sleeve is pushed up against the fitting once the air line is installed.

*fig. 57*

# Finished Installation Photos

1. The following images show the finished installation of both sides (Figs. 58, 59, 60 & 61).



Driver's (left) side view of the kit installed from the rear.



Passenger's (right) side view of the kit installed.



Driver's (left) side view of the kit installed from rear center of vehicle.



Passenger's (right) side view of the kit installed from forward of the axle.

## 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** — 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.

## 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.

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

**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](http://www.airliftcompany.com/warranty).

For additional warranty information contact Air Lift Company customer service.



***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](mailto:service@airliftcompany.com).**

**For calls outside the U.S. or Canada, dial (517) 322-2144.**



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