

LoadLIFTER5000

Kit No. 57250/57252



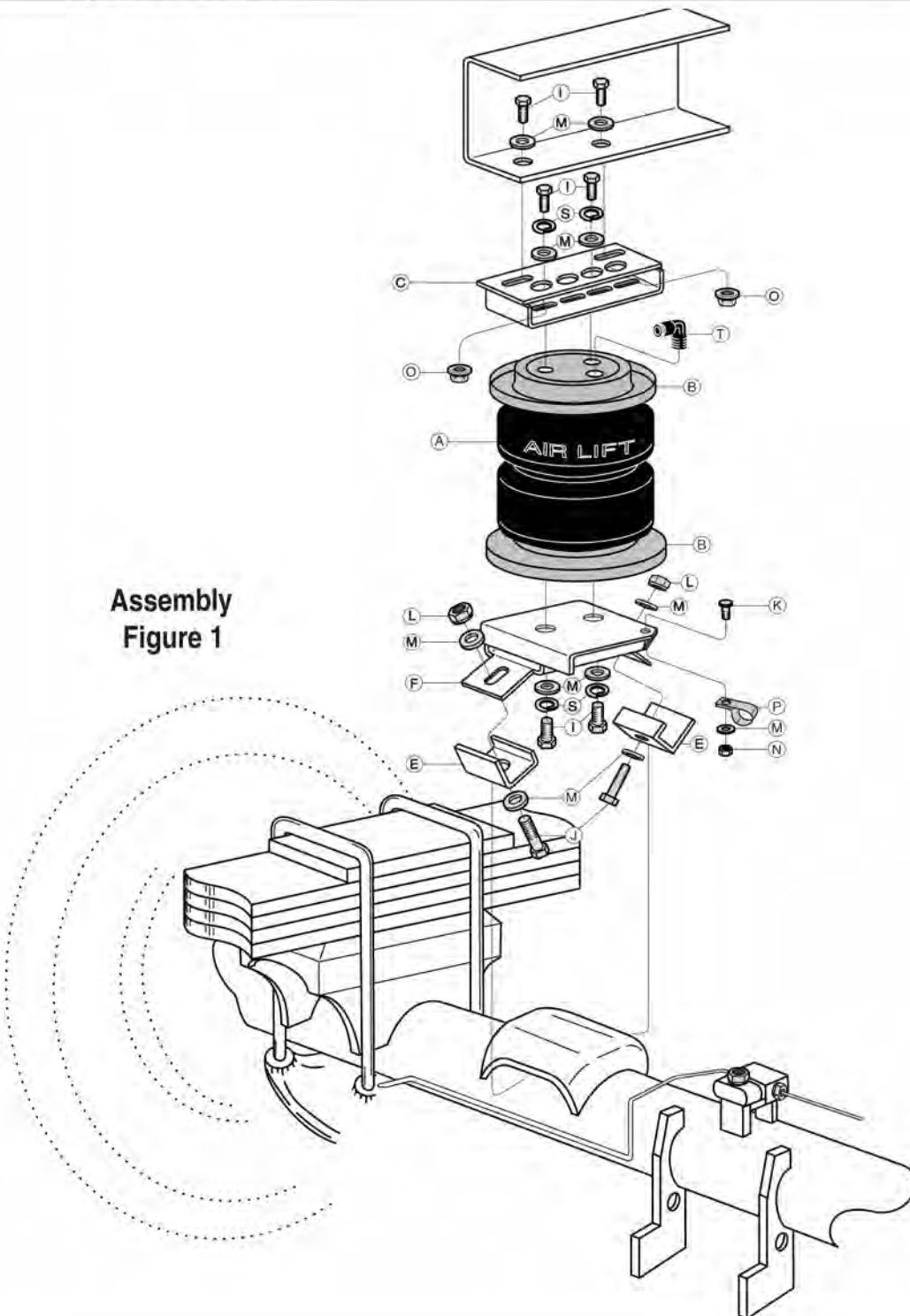
MN-404
(12610)
ECR 5826

Please read these instructions completely before proceeding with installation



IMPORTANT: The 57250/57252 kit has been designed to fit the Chevrolet 1500 HD and standard 2500 (not HD) models only. The 57250/57252 kit has not been designed to fit any standard duty 1500 models. This kit should not be used for these applications.

Assembly
Figure 1



Hardware List

Item	Description	Quantity
A	Air Springs	2
B	Roll Plates	4
C	Upper Bracket	2
E	Retaining Brackets	4
F	Lower Brackets	2
G	Heat Shield Kit	1
I	3/8" x 7/8" Hex Head Bolts	12
J	3/8" x 2" Hex Head Bolts	4
K	5/16" Clinch Bolt (Driver's Side Only)	1
L	3/8" Lock Nut	4
M	Flat Washer	21
N	5/16" Lock Nut (Driver's Side Only)	1
O	3/8" Whiz Nut	4
P	Hose Clip (Driver's Side Only)	1
S	Lock Washers	8
T	90° Swivel Fitting	2
AA	Air Line Assembly	1
BB	Tie Strap	6
CC	Valve Caps	2
DD	5/16" Flat Washers	2
EE	Rubber Washer	2
FF	Star Washer	2
GG	5/16" Hex Nut	4
HH	Thermal Sleeve	2

Tools Needed

9/16" open-end or box wrenches
Ratchet with 15mm, 7/16", 9/16"
and 1/2" deep well sockets
3/8" and 5/16" drill bits (very sharp)
Heavy Duty Drill
Torque Wrench

Hose Cutter, Razor Blade, or Sharp
Knife
Hoist or Floor Jacks
Safety Stands
Safety Glasses
Air Compressor, or Compressed Air
Source
Spray Bottle with Dish Soap/Water
Solution

Before You Start

You need to determine Normal Ride Height. Normal Ride Height is the distance between the bottom edge of the wheel well and the center of the hub with the vehicle in the "as delivered" condition. In some cases, Normal Ride Height is not perfectly level.



Figure 2

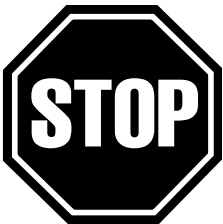
Remove unusual loads and examine your vehicle from the side to ensure it is on a level surface. If necessary (in cases where your leaf springs are sagging badly), use a jack to raise the rear end so that the vehicle achieves the original "as delivered" ride height.



Figure 3

Measure the distance between the center of the hub and the bottom edge of the wheel well. This is the Normal Ride Height. Enter the measurement below:

**NORMAL
RIDE HEIGHT:** _____ inches



IMPORTANT: Your vehicle may be equipped with a rear brake proportioning valve. Any type of load assist product could affect brake performance. We recommend that you check with your dealer before installing this type of product. If your vehicle **DOES NOT** have a rear brake proportioning valve or is equipped with an anti-lock type brake system, installation of a load assist product will have **NO EFFECT ON BRAKE SYSTEM PERFORMANCE.**



CAUTION: Compressed air can cause injury and damage to the vehicle and components 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 Unit

Set a roll plate (B) on both ends of the air spring (A). The radiused (rounded) edge of the roll plate will be towards the air spring, so that the air spring is “seated” in both roll plates (Fig. 4).

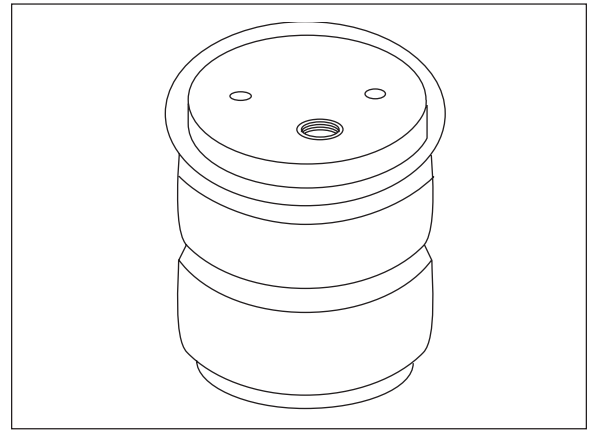


Figure 4

Attach the upper brackets (C) to the air springs with two 3/8-24x7/8” hex head bolts (I), lockwashers(S) and flat washers (M). Leave loose at this time (Fig. 5).

Note: It will be necessary to use the correct holes for driver and passenger side mounting. See diagram to correctly index the bellows and the upper bracket (Fig. 6).

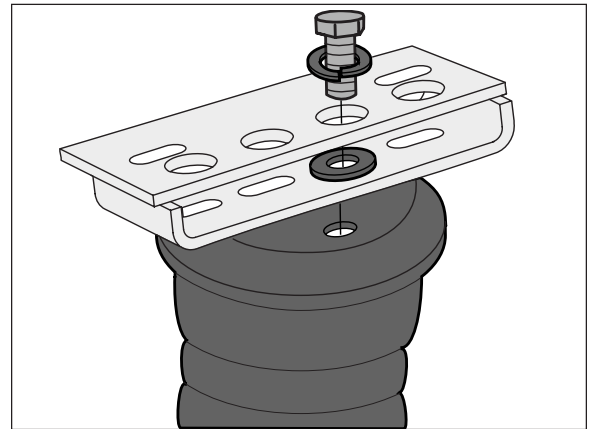


Figure 5

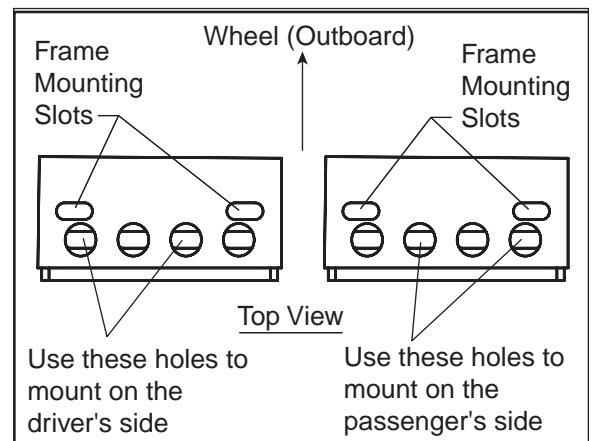


Figure 6

DRIVERS SIDE ONLY - Insert 5/16 clinch bolt (K) into the small hole of the lower bracket before attaching the lower bracket to the air spring. Supporting the lower bracket will ease installation of the clinch bolt. Use a hammer to drive the bolt into the hole in the lower bracket (Fig. 7).

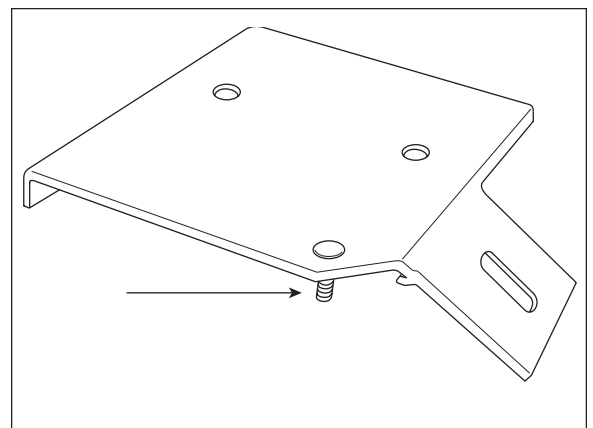


Figure 7

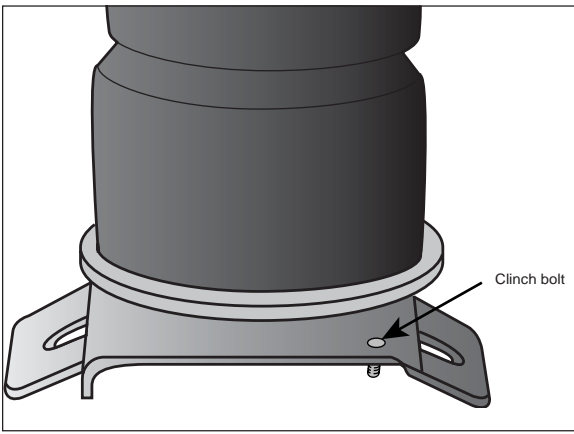


Figure 8

The lower bracket must be attached with the small hole in the lower bracket on the same side as the air port in the air spring.

Note: Be sure to install the assembly with the clinch bolt on the driver side. Refer to diagram (Fig. 7) on page 4.

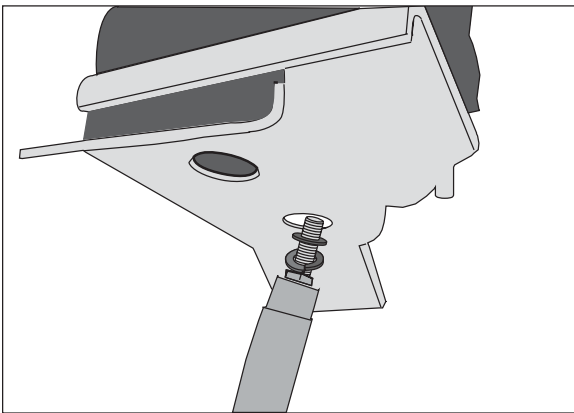


Figure 9

Attach the air spring to the lower bracket. Secure the lower bracket (F) to the air spring (A) with two 3/8-16x7/8" hex head bolts (I), lockwashers (S) and flat washers (M).

Torque to 20 ft. lbs. It may be helpful to use a socket to install the mounting hardware.

CAUTION-Do not cross thread the bolt.

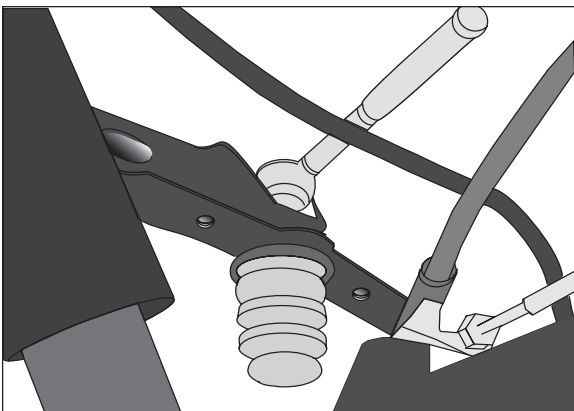


Figure 10

Removing Jounce Bumper

Using a 15mm Socket, remove the jounce bumper from the frame rail (Fig. 10).

The style of jounce bumper will vary depending on the model of the truck.

On some models the jounce bumper may be attached to the frame with a bracket.

Remove the entire jounce bumper bracket and the jounce bumper from the frame rail (Fig. 11).

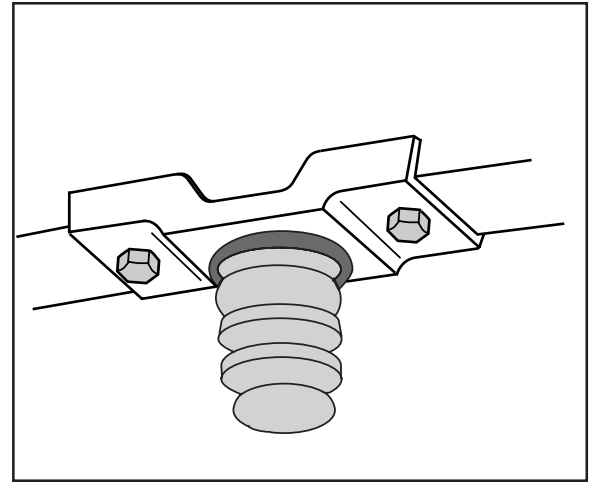


Figure 11

Attaching the Air Spring Assembly

Set assembly on the axle with the air port on top of the bellows toward the inside of the frame rail (Figure 1).

Note: Reference Assembling the Air Spring Unit (page 4), Attaching the Upper Bracket, for driver side and passenger side assemblies.

Set whiz nut (O) up inside of the upper bracket (Fig. 12 & 13) with flange up (Fig. 12).

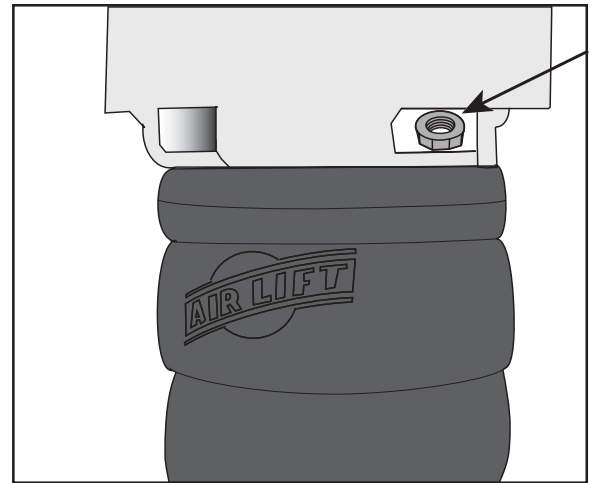


Figure 12

Hold in place with an open end 9/16" wrench.

Put 3/8"x7/8" hex head bolts (I) with flat washers (M) down through the existing jounce bumper hole from the inside of the frame, and attach to the whiz nuts (Fig. 13). Leave loose for adjustment later.

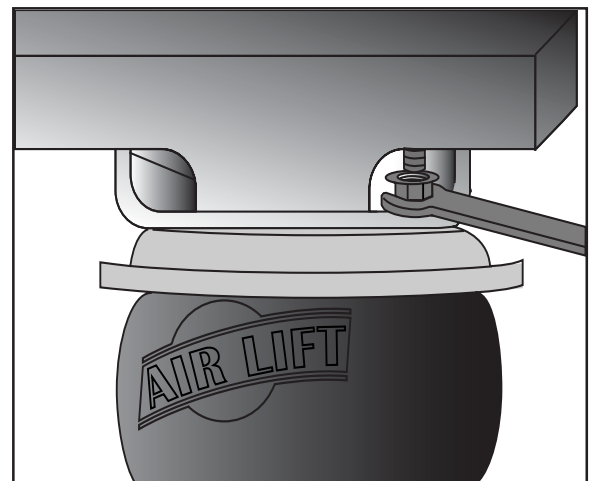


Figure 13

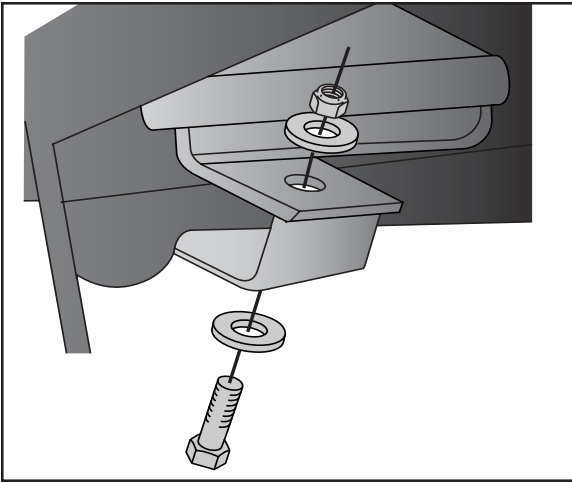


Figure 14

Secure the lower bracket to the jounce bumper strike pad using the retaining bracket (E), 3/8"x2" hex head bolt (J), flat washers (M) and 3/8" lock nut (L) (Fig. 14).

The short leg of the retaining bracket must be under the edge of the jounce bumper strike pad.

Tighten evenly front to back to keep the lower bracket flat and centered on the jounce bumper pad.

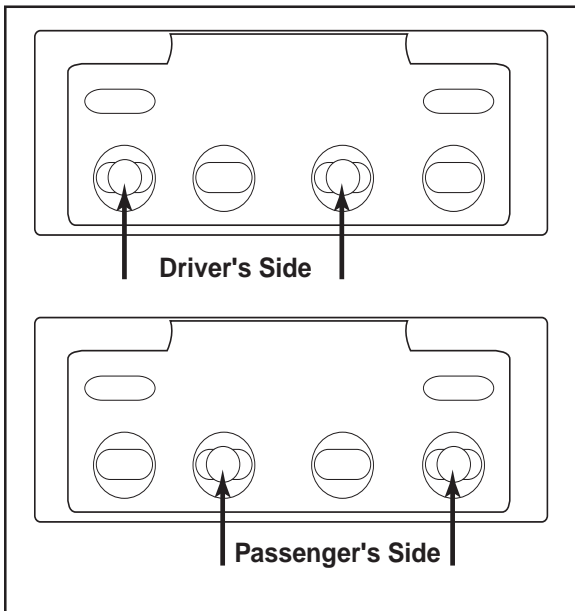


Figure 15

Center the upper bracket, so the bolts are in the center of the slots (Fig. 15).

Adjust bellows at top so bellows is perpendicular to both upper and lower brackets.

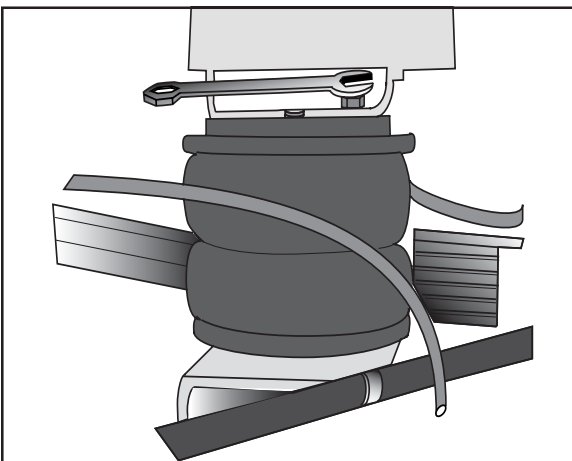


Figure 16

Tighten both bellows to top bracket mounting bolts (Fig. 16).

Tighten bracket to frame mounting hardware.

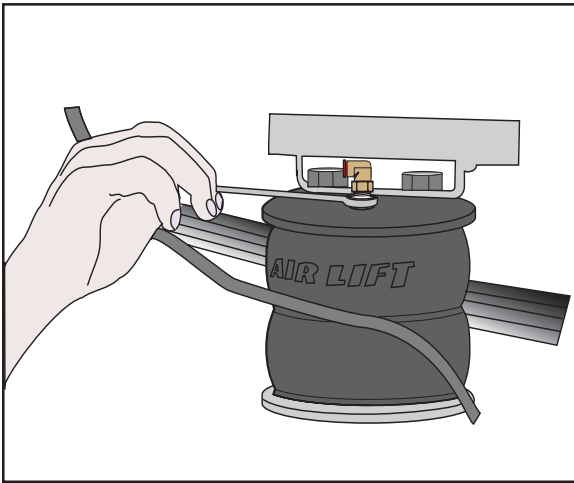


Figure 17

Install the swivel air fitting (T) into the top of the air spring (A). This fitting is pre-coated with sealant. Fingertight plus two full turns with an open-end wrench will seal the fitting (Fig. 17).

Use a 7/16" open end wrench being careful to tighten on the metal hex nut only.

DO NOT OVERTIGHTEN.

DRIVERS SIDE ONLY - Secure Brake Line

Slide the provided clip (P) onto the rubber coated brake line (Fig. 18). Secure the clip (P) to the clinch bolt already installed on the lower bracket (F) with a flat washer (M) and 5/16" nut (N).

BE SURE THE CLIP IS UNDER THE LOWER BRACKET.

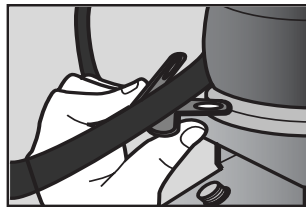


Figure 18

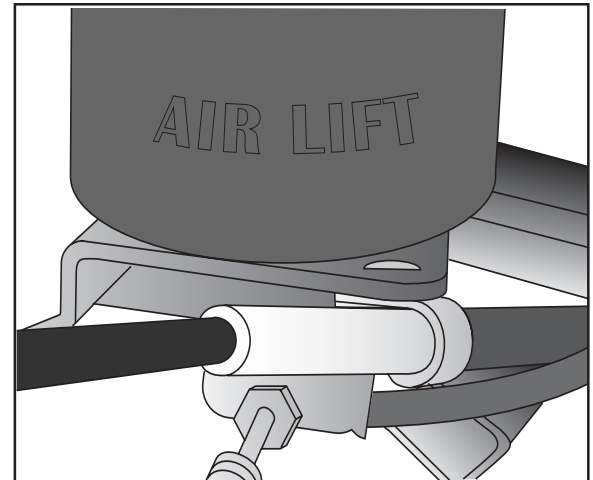


Figure 19

Install the Other Air Spring

You have now completed the installation for one air spring. Repeat the steps on pages 4 through 8 for the other side of the vehicle before you proceed to page 9.

Installing the Air Lines

Choose a convenient location for mounting the inflation valves. Make sure there is enough clearance around the inflation valves for an air chuck. Drill a 5/16" hole to install the inflation valves.

Recommended location is in the wheel well, license plate area or lower body ahead of rear wheel. One on each side provides ease of filling, checking and measuring body height to compensate for side to side lean and sag.

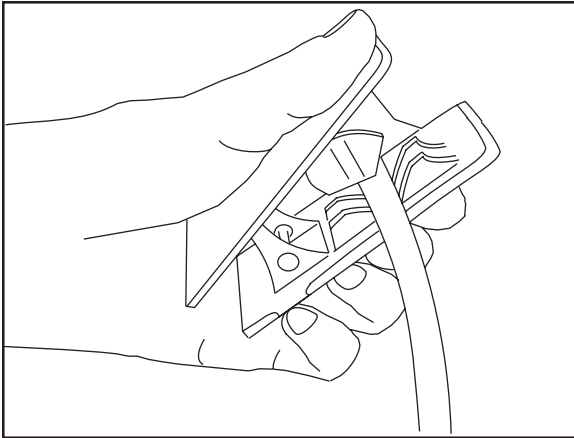


Figure 20

Cut the air line assembly (AA) in two equal lengths (Fig. 20).

When cutting or trimming the air line, use a hose cutter (Air Lift P/N 10530), a razor blade or a sharp knife. A clean, square cut will ensure against leaks (Fig. 21).



Do not use wire cutters or scissors to cut the air line. These tools may flatten or crimp the air line, causing it to leak around the O-ring seal inside the elbow fitting (Fig. 22).

Good cut - clean and square

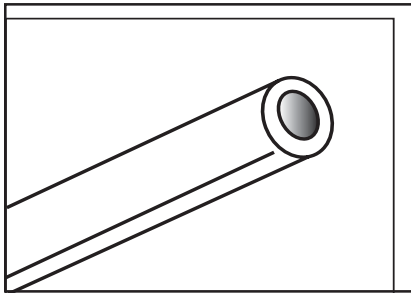


Figure 21

Bad cut - flattened

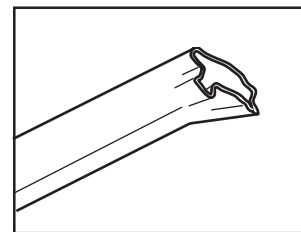


Figure 22

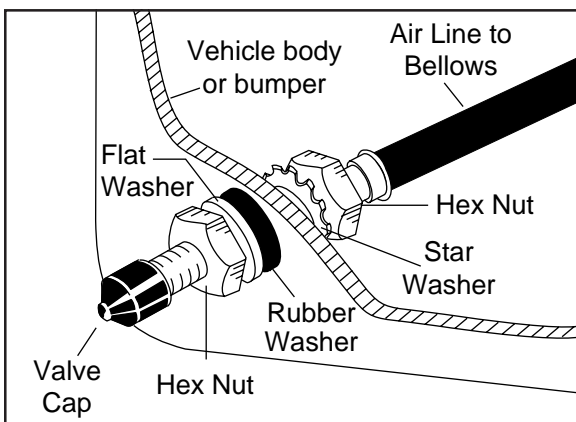


Figure 23

Place a 5/16" nut (GG) and a star washer (FF) on the air valve. Leave enough of the inflation valve in front of the nut to extend through the hole and have room for the rubber washer (EE), flat washer (DD), and 5/16" nut (GG) and cap (CC). There should be enough valve exposed after installation - approximately 1/2" - to easily apply a pressure gauge or an air chuck (Fig. 23).

Route the air line along the frame to the air spring location on the leaf spring, behind the axle. Keep at least 6" of clearance between the air line and heat sources, such as the exhaust pipes, muffler, or catalytic converter.

Avoid sharp bends and edges.

Use the plastic tie straps (BB) to secure the air line to fixed, non-moving points along the chassis. Be sure that the tie straps are tight, but do not pinch the air line.

Leave at least 2" of slack to allow for any movement that might pull on the air line.

PASSENGER SIDE ONLY - Before installing the air line, place a thermal sleeve (HH) on the air line near the exhaust.

Trim the excess air line before inserting it into the air fitting.
Using a standard tube cutter, a razor blade, or very sharp knife to cut the air line. Cut off air line leaving approximately 12 inches of extra air line.
A clean square cut will ensure against leaks (Fig. 21).

Insert the air line into the air fitting (Fig. 24). This is a push to connect fitting. Simply push the air line into the fitting until it bottoms out (**9/16" of air line should be in the fitting**).

Maintain a smooth bend from the air spring.

Do not kink the air line.

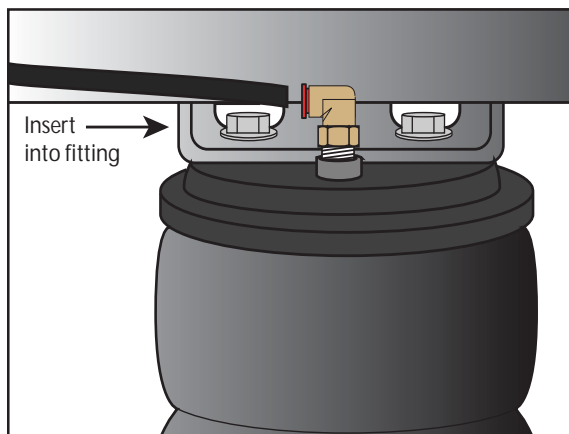


Figure 24

Installing Heat Shield



Bend tabs to provide a 1/2" dead air space between exhaust pipe and heat shield (Fig.25).

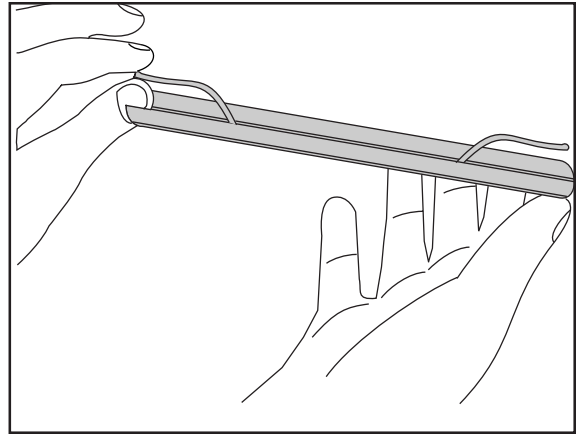


Figure 25

Attach the heat shield (G) to the exhaust pipe using the provided clamps. Bend the heat shield for maximum clearance to the air spring (Fig. 26).

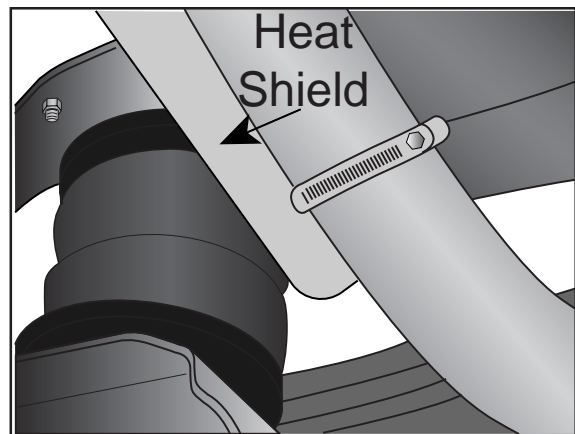


Figure 26

Inflation Decal

Install the minimum/maximum air pressure decal in a highly visible location. We suggest placing it on the driver's side window, just above the door handle.

Checking for Leaks

Inflate the air spring to 60 p.s.i.. Spray all connections and the inflation valves with a solution of 1/3 dish soap and 2/3 water to check for leaks. You should be able to spot leaks easily by looking for bubbles in the soapy water. After the tests, deflate the springs to the minimum pressure required to restore the Normal Ride Height, but do not go below 5 p.s.i.



Check the air pressure again after 24 hours. A 2 to 4 p.s.i. loss after initial installation is normal. Retest for leaks if the loss is more than 5 lbs.

Fixing Leaks

Air Line Connection

Deflate the spring and remove the line by pushing the collar against the fitting and pulling the air line straight out. Trim 1" off the end of the air line. Be sure the cut is clean and square. Reinsert the air line into the push to connect fitting.

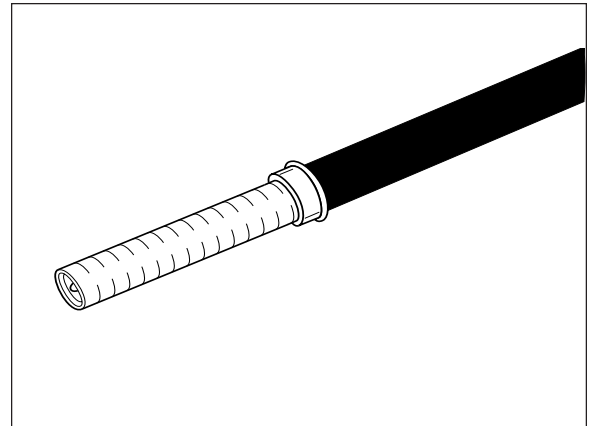
Inflation Valve

1. Valve Core

Tighten the valve core with a valve core tool.

2. Air Line Connection

When removing air line from a barbed type fitting, **DO NOT CUT IT OFF** as this will usually nick the barb and render the fitting useless. Cut air line off a few inches in front of the fitting and use a pair of pliers or vise-grips to pull/twist the air line off the fitting.



Troubleshooting Guide

1. Problems maintaining air pressure

WITHOUT ON-BOARD COMPRESSOR



Leak test the air line connections and threaded connection of the elbow into the air spring. See page 12 to repair.



Leak test the inflation valve for leaks at the air line connection or dirt or debris in the valve core. See page 12 for repair.



Inspect air lines to be sure it is not pinched. Tie straps may be too tight. Loosen or replace strap. Replace leaking components.



Inspect air line for holes and cracks. Replace as needed.



A kink or fold in the air line. Re-route as needed.



Product Use Information

Frequently asked questions

Q. Will installing air springs increase the weight ratings of a vehicle?

No. Adding air springs will not change the weight ratings (GAWR, GCWR and/or GVWR) of a vehicle. Exceeding the GVWR is dangerous and voids the Air Lift warranty.

Q. Is it necessary to keep air in the air springs at all time and how much pressure will they need?

The minimum air pressure should be maintained at all times. The minimum air pressure keeps the air spring in shape, ensuring that it will move throughout its travel without rubbing or wearing on itself.

Q. Is it necessary to add a compressor system to the air springs?

No. Air pressure can be adjusted with any type of compressor as long as it can produce sufficient pressure to service the springs. Even a bicycle tire pump can be used, but it's a lot of work.

Q. How long should air springs last?

If the air springs are properly installed and maintained they can last indefinitely.

Q. Will raising the vehicle on a hoist for service work damage the air springs?

No. The vehicle can be lifted on a hoist for short-term service work such as tire rotation or oil changes. However, if the vehicle will be on the hoist for a prolonged period of time, support the axle with jack stands in order to take the tension off of the air springs.

Tuning the air pressure

Pressure determination comes down to three things — level vehicle, ride comfort, and stability.

1. Level vehicle

If the vehicle's headlights are shining into the trees or the vehicle is leaning to one side, then it is not level (fig. 1). Raise the air pressure to correct either of these problems and level the vehicle.

2. Ride comfort

If the vehicle has a rough and harsh ride it may be due to either too much pressure or not enough (fig. 2). Try different pressures to determine the best ride comfort.

3. Stability

Stability translates into safety and should be the priority, meaning the driver may need to sacrifice a perfectly level and comfortable ride. Stability issues include roll control, bounce, dive during braking and sponginess (fig. 3). Tuning out these problems usually requires an increase in pressure.



Bad headlight aim



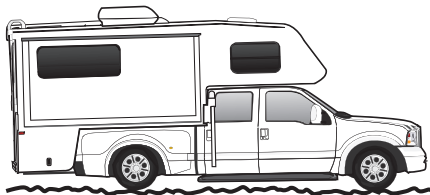
Sway and body roll



Rough ride

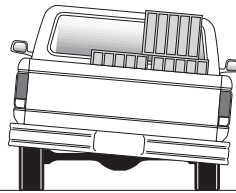
Guidelines for adding air:

1. Start with the vehicle level or slightly above.
2. When in doubt, always add air.
3. For motorhomes, start with 50-100 PSI in the rear because it can be safely assumed that it is heavily loaded.
4. If the front of the vehicle dives while braking, increase the pressure in the front air bags, if equipped.
5. If it is ever suspected that the air bags have bottomed out, increase the pressure (fig. 4).
6. Adjust the pressure up and down to find the best ride.
7. If the vehicle rocks and rolls, adjust the air pressure to reduce movement.
8. It may be necessary to maintain different pressures on each side of the vehicle. Loads such as water, fuel, and appliances will cause the vehicle to be heavier on one side (fig. 5). As much as a 50 PSI difference is not uncommon.

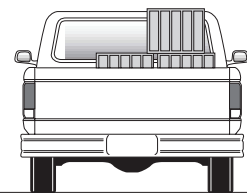


Bottoming out

fig. 4



Unlevel



Level

fig. 5