

LoadLIFTER5000

Kit No. 57291



MN-614
(06601)
ECR 5445

Please read these instructions completely before proceeding with installation.

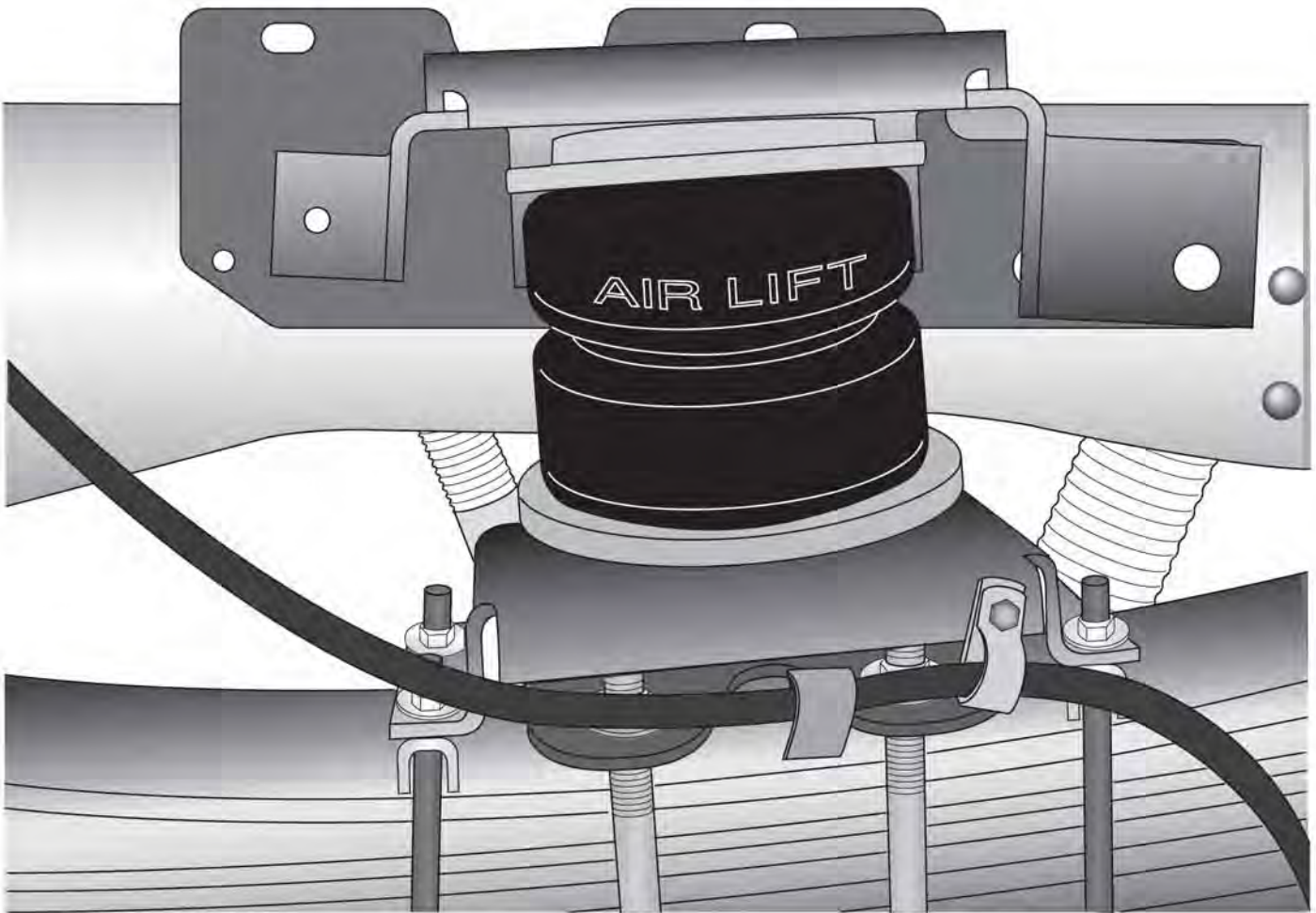


Figure 1

Hardware List

Item	Part No.	Description	Quantity
A	58437	Bellows (for kit #57291)	2
B	07437	Driver-Side Upper Bracket	1
C	07438	Passenger-Side Upper Bracket	1
D	11951	Roll Plate	4
E	03102	Lower Bracket	2
G	21837	1/8"-1/4" Swivel Elbow	2
H	10466	Black Tie Straps	6
I	18405	5/16" Flat Washer	2
J	18411	5/16" Serrated Lock Washer	2
K	21230	Poly Cap	2
L	21233	Hex Nut	4
M	21234	Rubber Washer	2
N	20086	Air Line	16'
O	17203	3/8" Bolt	8
P	18427	3/8" Lock Washer	8
Q	18444	3/8" Flat Washer	20
R	10583	3/8" x 3.5 x 4.5 U-bolt	4
S	01426	3" Spacer Bar	4
T	10594	3/8"-16 x 2 U-bolt	4
U	18435	3/8" Nyloc Nut	10
V	17159	3/8" Washer Head Bolt	2
W	18447	5/16" x 3/8" Large Washer	2
X	10465	Line Clamp	1

I. Getting Started

1. Raise the vehicle, remove the wheels, and obtain normal ride height (Figure 2, Figure 3).

II. Special Application Instructions

1. For B & W Hitch Applications:

On B & W part number 1199R, with the hitch in the 49" position only, trim $\frac{1}{4}$ " from the bottom of the center flange on the side plate and front cross member (Figure 4). Also, grind a slight chamfer on the back of the front mounting leg of the upper brackets (B or C) to clear the bend radius of the large flange on the B & W side plate (Figure 5).

Remove the hardware attaching the fifth wheel hitch frame brackets to the side of the frame.

2. On 2005 models it will be necessary to remove the top rear shock bracket rivet (on the passenger side only) to mount the upper bracket (Figure 6).
3. With the B & W Hitch bracket in the position described in step 1 above, proceed with the air spring installation instructions below.
4. Remove the emergency brake cable bracket and corresponding hardware that is attached to the lower spring retainer. Save the bolt for later use.

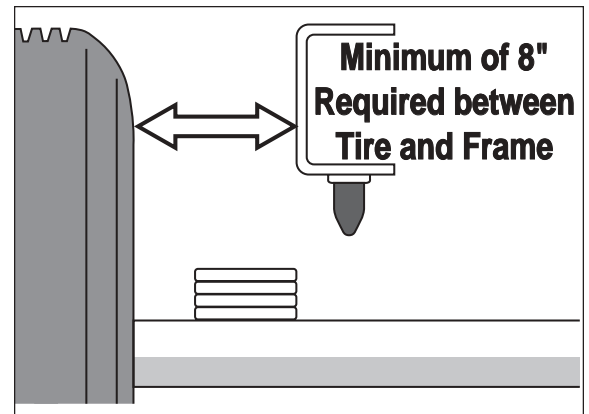


Figure 2

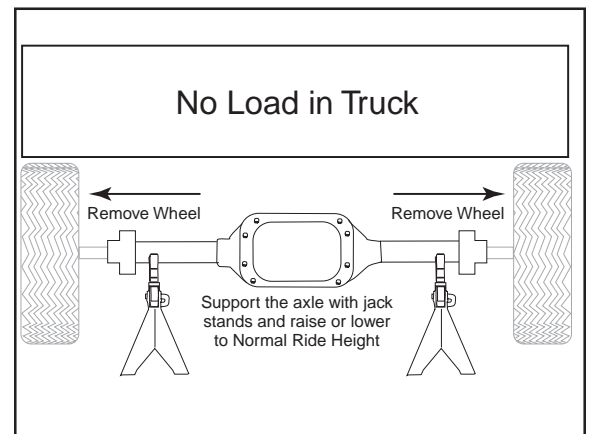


Figure 3

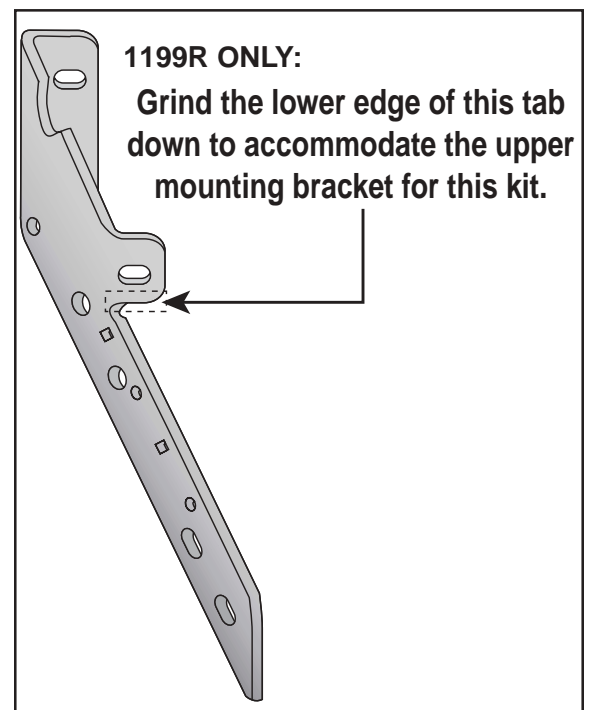


Figure 4

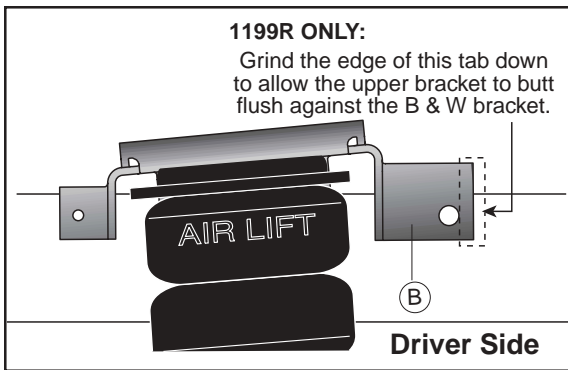


Figure 5

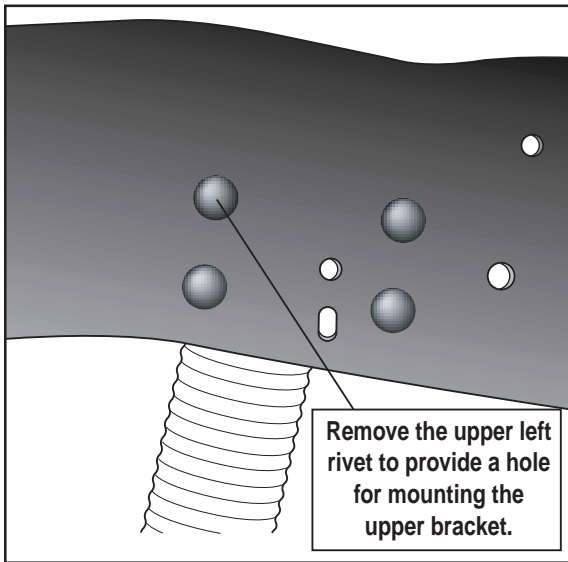


Figure 6

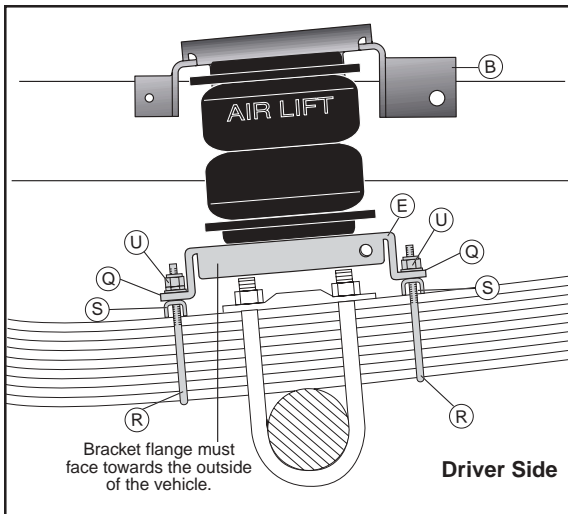


Figure 7

III. Assembling the Air Spring Unit

1. Set a roll plate (D) 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 (Figure 1).
2. Install a 90° swivel air fitting (G) finger tight plus 1½" turns (Figure 1). Do not overtighten.
3. The upper brackets (B or C) are side specific. The small mounting hole in the upper bracket faces forward.(Figure 7).
4. Place the driver-side upper bracket (B) on top of the bellow and roll plate with the legs facing down.
5. Set the air spring on the driver-side lower bracket (E) and align the two holes in the base of the air spring with the two outer slots in the top of the lower bracket (Figure 1). Repeat this procedure for the passenger-side assembly.
6. Loosely attach the upper bracket to the assembly using flat washers (Q), lock washers (P), and hex head bolts (O). Remember that the legs face down (Figure 1).
6. Loosely attach the lower bracket to the assembly using flat washers (Q), lock washers (P), and hex head bolts (O). See Figure 1.

NOTE: The flange on the lower bracket must face the outside (tire-side) of the vehicle.

IV. Removing the Passenger-Side Shock Bracket Rivet

1. Remove the rear, top shock mounting rivet on the passenger side of the vehicle to provide a mounting hole for the upper bracket (Figure 6).

V. Attaching the Lower Bracket

1. The upper brackets are left- and right-hand specific. The small mounting hole in the upper bracket will be forward of the axle on both sides (Figure 1).
2. Set the air spring over the axle (Figure 1).
3. Take two spacer bars (S) and slide one under the front leg and one under the rear leg of the lower bracket (Figure 1).
4. Depending on whether the vehicle has frame contact overloads or a regular leaf stack, attach the lower bracket to the leaf using the provided U-bolts (R or T) (Figure 7, Figure 8). Torque to 16 ft.lbs.

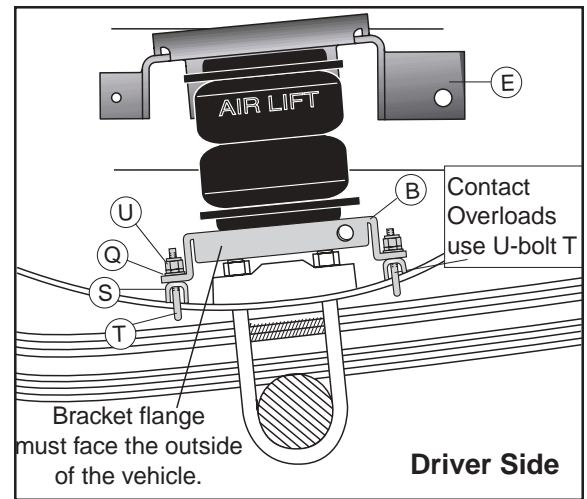


Figure 8

VI. Attaching the Upper Bracket

1. For B & W Hitch Applications:
Align the two large holes with the existing B & W Hitch frame brackets. Use the existing $\frac{3}{4}$ " hardware supplied by B & W to attach the bracket.
2. Align the upper bracket so that it is parallel to the lower bracket. Torque the $\frac{3}{8}$ " hardware to 40 ft.lbs. Torque the $\frac{3}{4}$ " hardware to 90 ft.lbs.

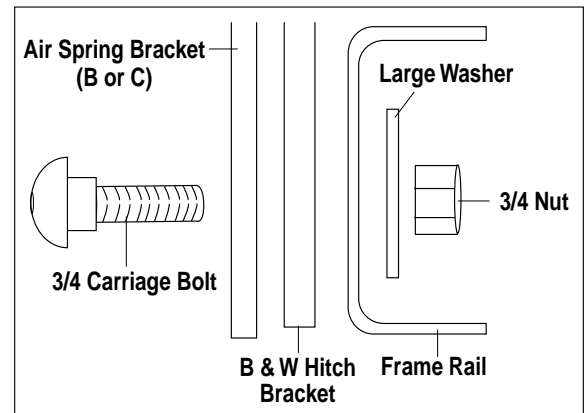


Figure 9

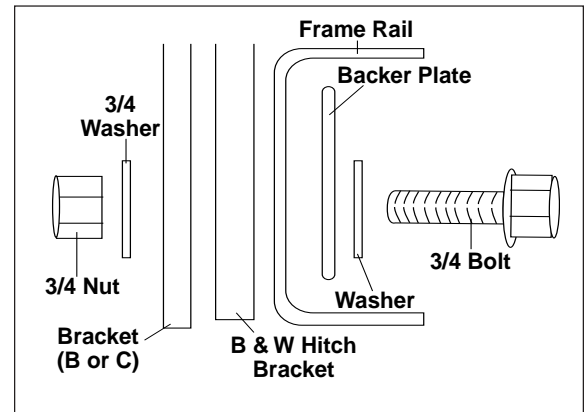


Figure 10

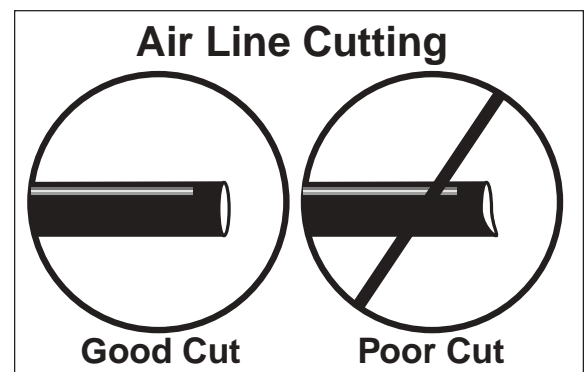


Figure 11

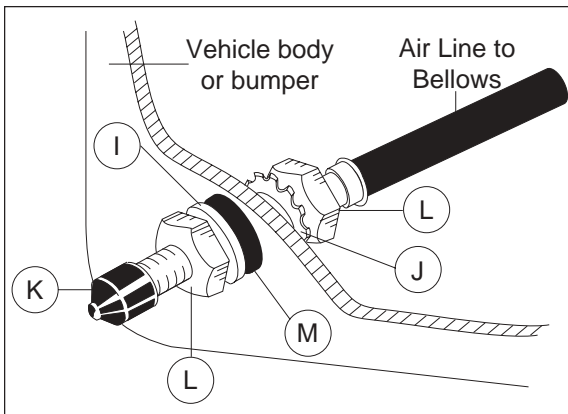


Figure 12

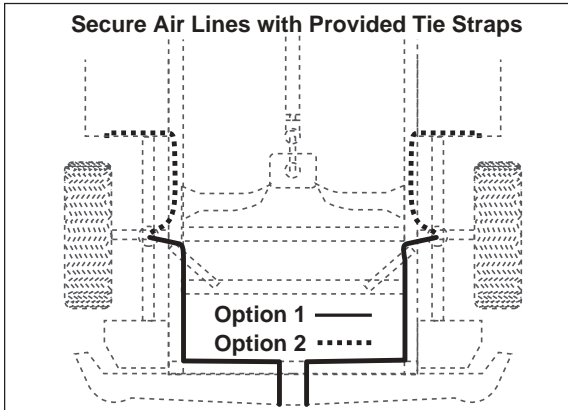


Figure 13

VII. Securing the Air Spring to the Brackets

1. The upper bracket is slotted so that the air spring can be adjusted forward and back. The bottom bracket is slotted so that the air spring can be adjusted in and out.
2. Using the slots in the top and bottom brackets, adjust the air spring so that it is perpendicular to both surfaces. Tighten top and bottom mounting hardware to no more than 10 ft.lbs.

VIII. Installing the Air Lines

IMPORTANT NOTE: When installing the air lines, there must be at least six inches of clearance between the air lines and any heat sources.

1. Choose a convenient location for mounting the inflation valves. Popular locations for the inflation valve are:

The wheel well flanges; The license plate recess in bumper; Under the gas cap access door; Through license plate (Figure 13).

NOTE: Whatever the chosen location is, make sure there is enough clearance around the inflation valves for an air chuck.

2. Drill a $\frac{5}{16}$ " hole to install the inflation valves.
3. Cut the air line assembly (N) in two equal lengths.

CAUTION: 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. 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 (Figure 11).

4. Install the inflation valves as shown in Figure 12.
5. 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. Leave at least 2" of slack when securing the air lines to allow for any movement that might pull on the air line (Figure 13).
6. Cut off air line leaving approximately 12" of extra air line. Insert the air line into the air fitting. Simply push the air line into the 90° swivel fitting until it bottoms out ($\frac{9}{16}$ " of air line should be in the fitting).

IX. Securing the Emergency Brake Cable

1. Attach the supplied clamp (X) around the emergency brake cable and secure it to the lower bracket using the previously removed stock bolt. Tighten securely (Figure 14).
2. Cut off the existing emergency brake cable bracket close to the cable (Figure 14).

X. Checking for Leaks

1. Inflate the air spring to 30 p.s.i.
2. Spray all connections and the inflation valves with a solution of $\frac{1}{5}$ liquid dish soap and $\frac{4}{5}$ water to check for leaks. You should be able to spot leaks easily by looking for bubbles in the soapy water.
3. After the test, deflate the springs to the minimum pressure required to restore the Normal Ride Height, but not less than 10 p.s.i.
4. **IMPORTANT:** 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.

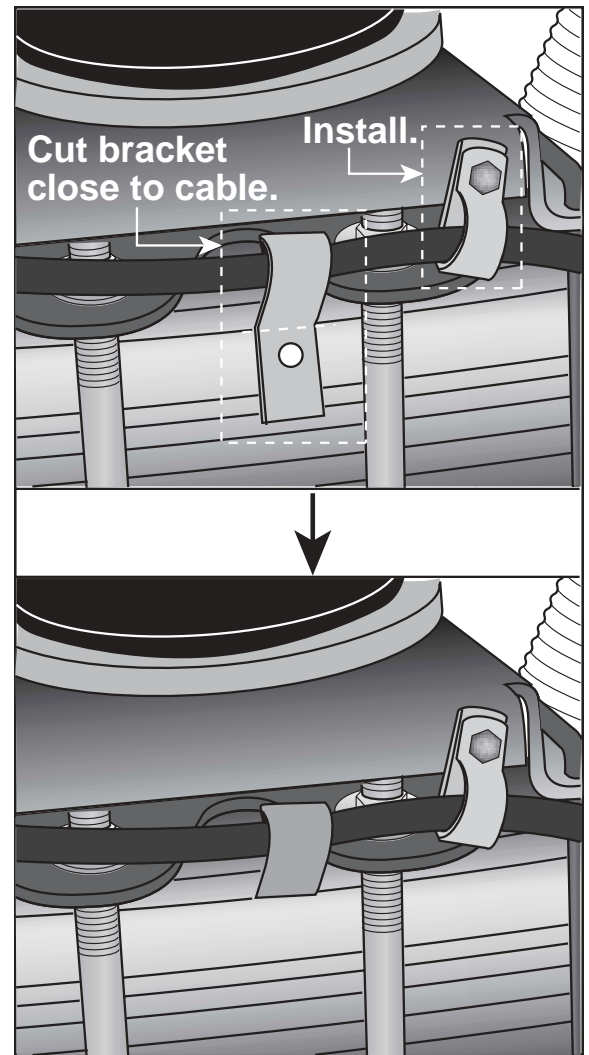
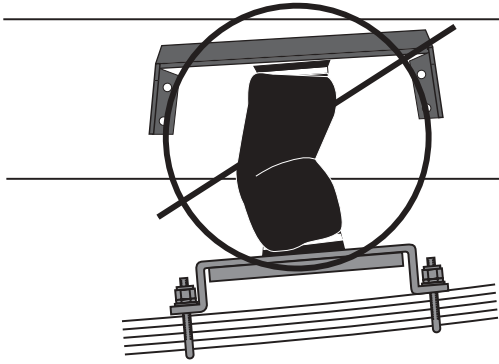
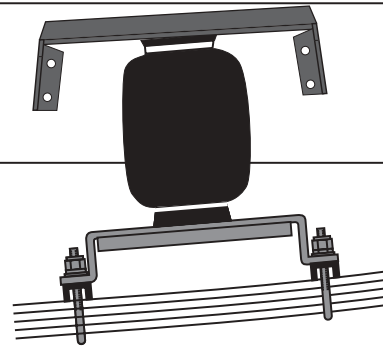


Figure 14

FINISHED INSTALLATION



Incorrect: Misaligned or under-inflated. Only OK during installation.



Correct: Sleeve is fully inflated and also properly aligned.

MINIMUM AIR PRESSURE 10 P.S.I.

**MAXIMUM AIR PRESSURE
100 P.S.I.**

**FAILURE TO MAINTAIN MINIMUM PRESSURE OR TO PREVENT BOTTOMING OUT
AND/OR OVEREXTENSION WILL VOID THE WARRANTY**



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

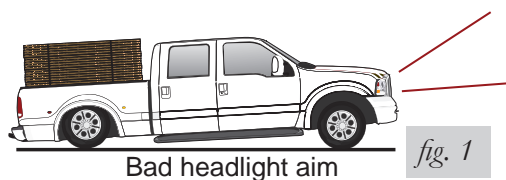
If the vehicle's headlights are shining into the trees or the vehicle is leaning to one side, then it is not level (fig. 1). Raise the air pressure to correct either of these problems and level the vehicle.

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.

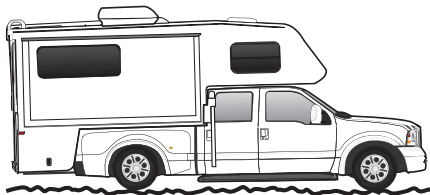
3. Stability

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.



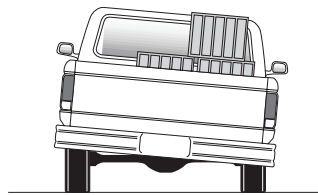
Guidelines for adding air:

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.

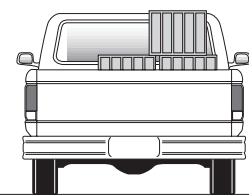


Bottoming out

fig. 4



Unlevel



Level

fig. 5