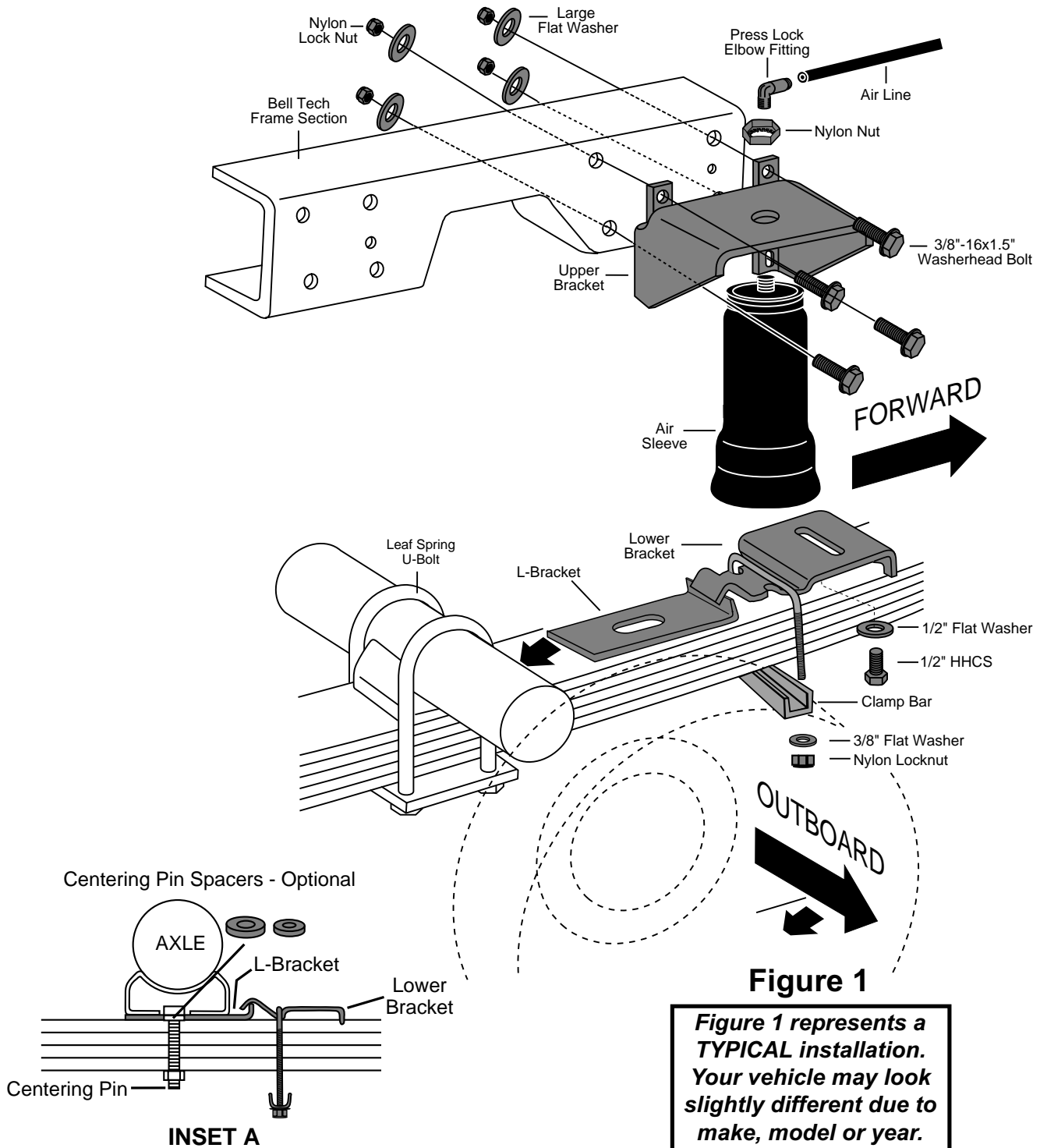


## Kit No. 59106BT

### FOR 6" "C" NOTCH BELL TECH

*Please read these instructions completely before proceeding with installation.*



### WARNING

DO NOT INFLATE ASSEMBLY WHEN IT IS UNRESTRICTED. ASSEMBLY MUST BE RESTRICTED BY SUSPENSION OR OTHER ADEQUATE STRUCTURE. DO NOT INFLATE BEYOND 100 P.S.I. IMPROPER USE OR OVER INFLATION MAY CAUSE ASSEMBLY TO BURST CAUSING PROPERTY DAMAGE OR SEVERE PERSONAL INJURY.

**Please read these instructions completely before attempting the installation.**

**This kit is designed to bolt onto the Bell Tech notched frame section through existing holes forward of the axle.**

**RIDE HEIGHT:**

Ride height (no load)- This is the distance between the bottom of the bumper and a flat road surface with the vehicle in its "lowered" condition without anything in the bed of the truck. Take a measurement *before* installation and note it.

This kit is designed to fit where the leaf springs are offset outboard of the frame rail. 59106BT is a side mount kit- between the frame and tire. Due to the wide variety of lowering kits on the market, Air Lift cannot guarantee that this kit will fit every vehicle. You may need to modify the upper bracket, or even weld it, depending on the type of kit the vehicle was lowered with or optional equipment present. This will not void the warranty.

**Failure to maintain minimum air pressure of 10 p.s.i. in the air sleeve, bottoming out or over extension will void the warranty.**

**IMPORTANT:**

Your vehicle may be equipped with a rear brake proportioning valve. Any type of load assist suspension 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 proportioning valve or is equipped with an anti-lock brake system, no adjustment or modification is required.

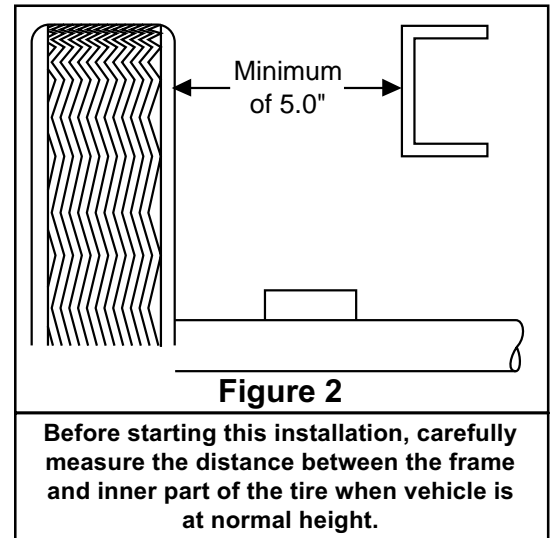
**REQUIRES MINIMUM CLEARANCE OF 5.0" BETWEEN TIRE AND FRAME (Figure 2).**

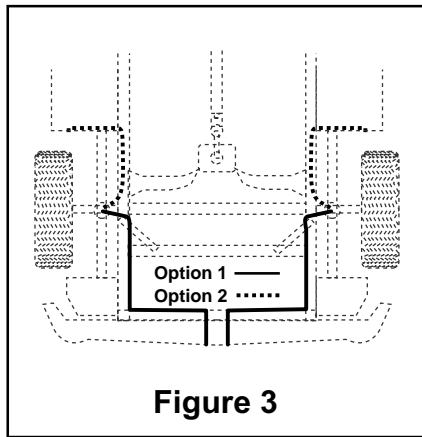
1. Jack up rear of vehicle or raise on hoist and remove rear wheels.
2. Loosely attach the lower bracket to the sleeve using the 1/2" flat washer and 1/2" HHCS bolt (Figure 1).
3. Support frame and drop rear axle all the way until axle is hanging. If the shocks stop the axle from hanging remove lower shock bolts. Remove leaf spring retaining U-bolts on one side and, with a floor jack, raise axle to clear leaf spring centering pin leaf stack. A spacer is provided to accommodate the increased thickness caused by the lower bracket. Clamp the leaf spring together with a C-clamp so leaf center pin can be removed. Remove centering pin and install one spacer per pin. (NOTE: There are two different sizes, use the one that fits pin, discard other size.) Reinstall pin. If nut does not have full thread contact, replace centering pin. Set lower L-bracket on leaf, make sure centering pin goes through slot on L-bracket, drop axle down, and reinstall U-bolts. Slightly tighten U-bolts so that lower bracket can be adjusted later. Install L-bracket on other side in same manner. See Inset A and Figure 1 on front page.
4. Simulate RIDE HEIGHT (see definition above) by raising the axle or lowering the frame (Figure1).

**IMPORTANT- In no case should the air sleeve be the suspension limiter in either extension or compression. Most vehicles will have a hard rubber compression stop on the rear suspension. The shock absorber is usually the limiter in full extension. The maximum extended length of the sleeve is 11.5" and the minimum compressed height is 3.00".**

Sleeve diameter grows to 4.6" maximum at high pressure. Take this diameter into consideration when checking for possible interference in the mounting area.

**Failure to maintain minimum air pressure of 10 p.s.i. in the air sleeve, bottoming out or over extension will void the warranty.**





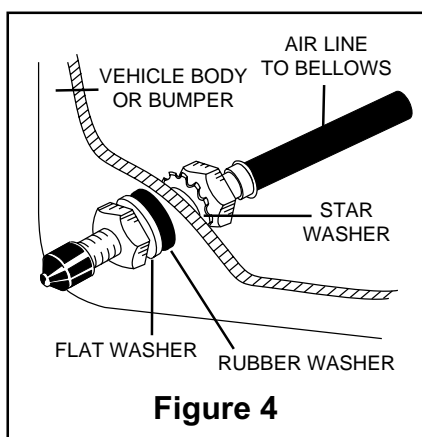
5. Install the air fitting finger tight plus two turns. Use a 7/16" open end wrench being careful to tighten on the metal hex nut only. DO NOT OVER TIGHTEN. This fitting is pre-coated with thread sealant.
6. Assemble upper bracket onto the sleeve and tighten the mounting nut to 4 ft-lbs.
7. Attach lower bracket to the sleeve using 1/2" bolt and washer (Figure 1).
8. Set assembly on leaf spring with the "finger" of the lower bracket over the post of the "L" bracket mounted in step 3 (Figure 1). Insert U-bolt over bracket, slide lower clamp bar on U-bolt, attach with 3/8" nylon nut and flat washer. Leave loose for final adjustment (Figure 1).
9. Install the upper bracket onto the notched section with the provided bolts, washers and locknuts, and tighten 20 ft-lbs. (Figure 1).
10. Select a location for the inflation valves in the rear bumper area or rocker panel flange insuring that each valve will be protected and accessible with an air hose (Figure 3).
11. Use a standard tube cutter, a razor blade, or a very sharp knife to cut the air line in two equal lengths. A clean square cut will ensure against leaks. Drill 5/16" hole for inflation valve and mount as illustrated. Rubber washer on outside is for weather seal (Figure 4).

**CAUTION: LEAVE SUFFICIENT AIR LINE SLACK TO PREVENT ANY STRAIN ON VALVE STEM DURING NORMAL AXLE MOTIONS.**

12. Route air line along frame to desired inflation valve location (Figure 3). Attach air line to chassis with the provided plastic straps.

**TO PREVENT AIR LINE FROM MELTING, KEEP IT AT LEAST TWELVE INCHES FROM EXHAUST SYSTEM.**

13. Cut off excess air line squarely. Install the air line into the fitting. This is a self locking fitting. Push and slightly turn the cut end of the air line into the fitting as far as it will go. You will hear/feel a definite "click" when the air line is seated. The air line is now installed. Air line should go in approximately 3/4".
14. Repeat process for right side.
15. **VERY IMPORTANT**– With the bottom still loose, inflate the sleeve to approximately 10 p.s.i. By using the slotted adjustments in both brackets, align the sleeve so that there is a symmetrical cushion of air around the lower base of the sleeve to prevent side load wear. (Figure 6) Tighten the axle U-bolts to 45 ft-lbs. Tighten lower bracket U-bolt to 16 ft-lbs. Tighten the lower sleeve mounting bolt to **10 ft-lbs.** (Figure 1)
16. Inflate to 30 p.s.i. Check all fittings and valve core with a soapy water solution for leaks. Check once again to be sure you have proper clearance around the sleeve. When the sleeve is inflated there must be sufficient clearance all around the sleeve.
17. Recheck air pressure after 24 hours. A 2-4 p.s.i. loss after initial installation is normal. If pressure has dropped more than 5 lbs. re-test for leaks with soapy water solution. Please read and follow the Maintenance and Operation Tips. Check to see that the sleeve rolls back down over the bottom piston after the vehicle is lowered.





# 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**

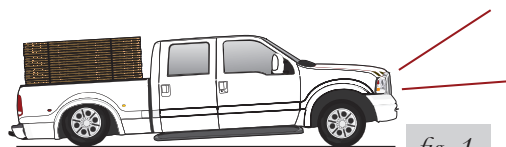
If the vehicle's headlights are shining into the trees or the vehicle is leaning to one side, then it is not level (fig. 1). Raise the air pressure to correct either of these problems and level the vehicle.

**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



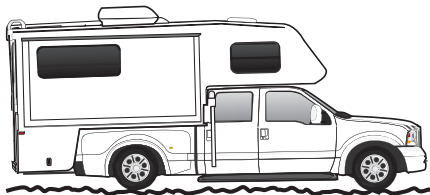
Sway and body roll



Rough ride

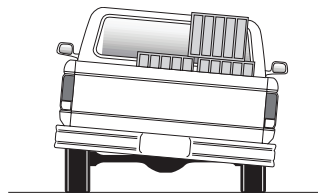
### Guidelines for adding air:

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.

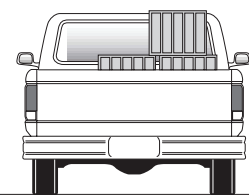


Bottoming out

*fig. 4*



Unlevel



Level

*fig. 5*