SlamAir

by AIR LIFT

MN-220
(13010)
ECN 3265

Kit No. 59102 *(Fits 2" & 4" Drops)*

NOTE: If the bottom of the frame to the leaf spring is between 7.0 & 8.5 use kit #59104.

Please read these instructions completely before proceeding with installation.

NOTE: Figure 1 represents a TYPICAL installation. Your vehicle may look slightly different due to make, model or year.

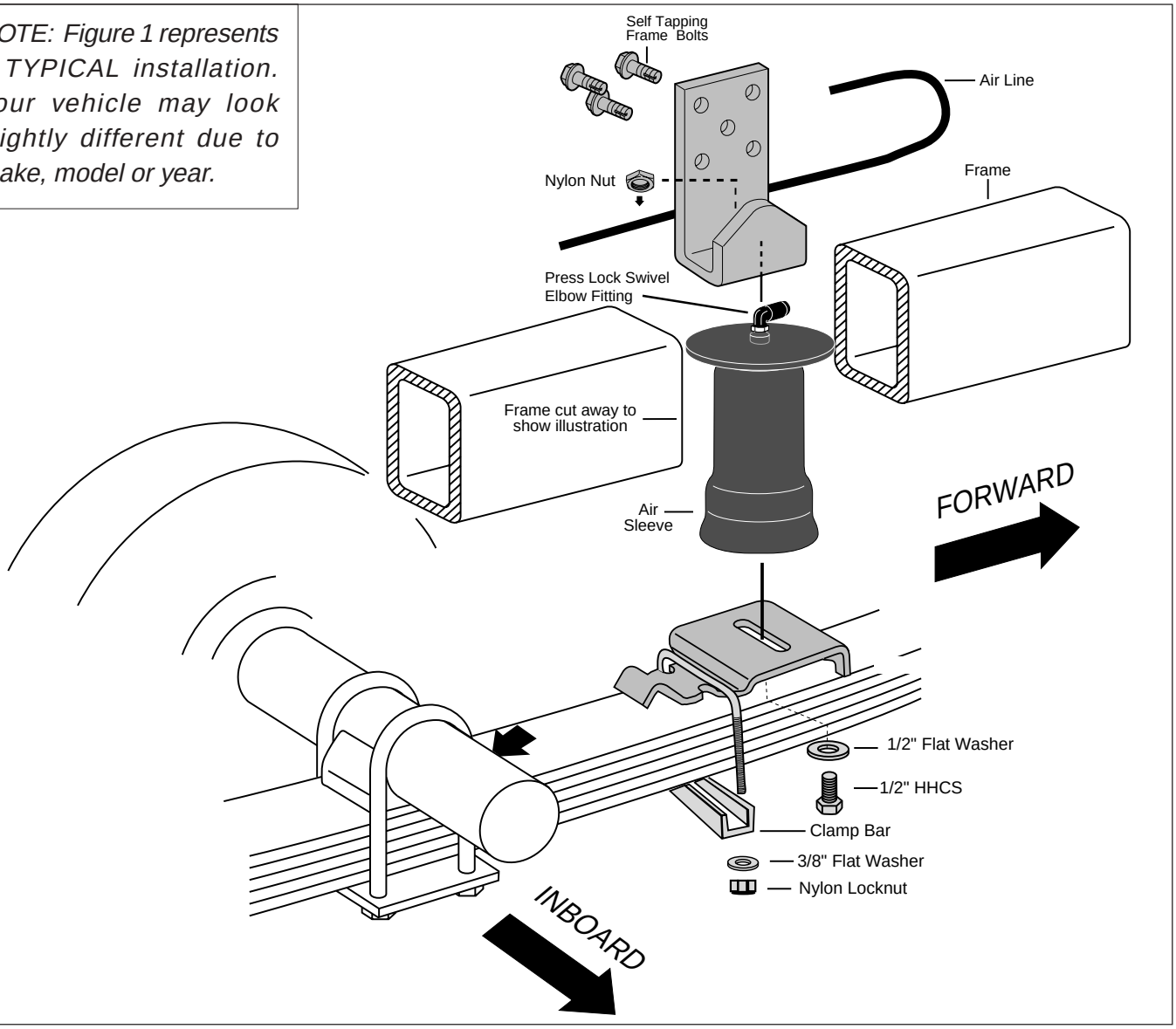


Figure 1

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.

IMPORTANT: 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. All AIR LIFT kits are designed to be installed and operated at Ride Height.

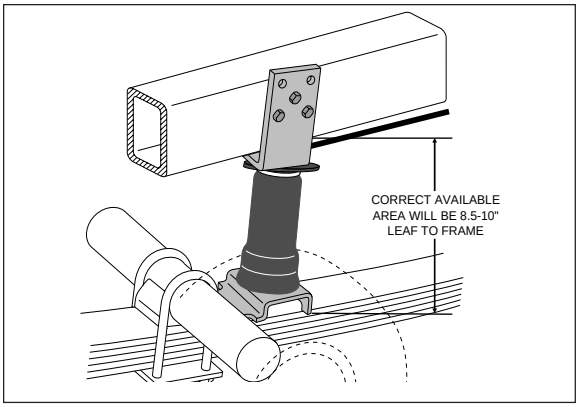


Figure 2

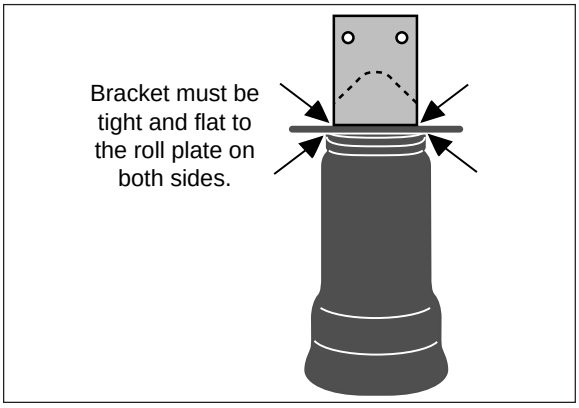


Figure 3

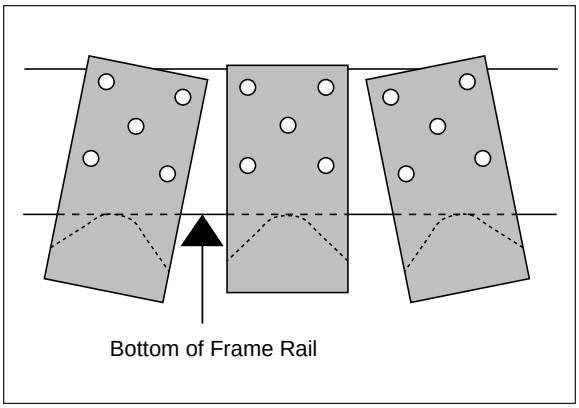


Figure 4

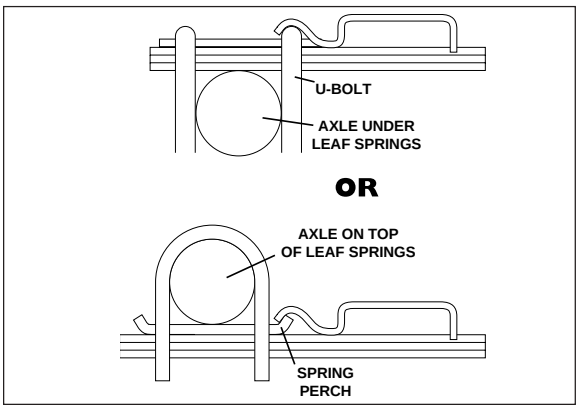


Figure 5

Please read these instructions completely before attempting the installation.

This kit is designed to fit most down sized pick ups and sport utility vehicles that have been lowered where the leaf springs are located directly below the frame rail. Kit #59102 is an under the frame kit which means that the kit mounts from the bottom of the frame rail to the top of the leaf spring. 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. This will not void the warranty. The sleeve must be mounted between 7" and 9" at ride height. To achieve this dimension, you will need 8.5"–10" of space between the top of the leaf spring and the bottom of the frame rail in front or behind the axle (Figure 2). If you find the space between the spring and frame rail is 7.0" to 8.5", you will need to exchange this kit for kit #59104 or call Air Lift Customer Service at 1-800-248-0892. If measurement is below 7.0" we do not fit your application.

NOTE: This is a universal kit for custom applications. In no way should the sleeve or any of the kit's components be the suspension limiter in compression or extension. This air spring can compress to 3.0" and extend to 11". Regardless of load, the air pressure should be adjusted so that the ride height is maintained at all times. The shock absorber is usually the limiter on extension. If this is not the case, you should consider the use of limiting straps. For technical assistance call Air Lift Technical Service at 1-800-248-0892.

1. After recording the ride height, jack up rear of vehicle or raise on hoist and remove rear wheels.

2. Install swivel air fitting to the top of the sleeve and tighten finger tight plus 1 $^{1}/_{2}$ turns. Use a $^{7}/_{16}$" open end wrench being careful to tighten on the metal hex nut only. *Do not overtighten*. This fitting is pre-coated with thread sealant. Now set the upper bracket onto the thread post of the air spring. Thread nylon nut onto the thread post with the flat side up. The bracket must be tight and flat to the roll plate on both sides. Hand tight is sufficient (Figure 3). Be sure the swivel air fitting faces the front of the vehicle. *Loosely* attach the lower bracket to the bottom of the air spring (Figure 1).

3. Set the assembly on the leaf spring in front or behind depending on what would interfere with function of kit. It is permissible to stagger kit also, in case shocks or brake lines that interfere with kit. The lower bracket has a "finger" that is designed to "hook" around something like a U-bolt, spring retainer, or spring perch (Figure 5). This keeps the lower bracket from "walking" up the spring which would cause damage to the air springs. If the vehicle does not have something for the "finger" to "hook" to, install the L-bracket supplied in this kit for that function. Refer to SB-171 for instructions on how to install the L-bracket. With lower bracket in place install U-bolt, clamp bar, flat washer and locknut. Torque to 16 ft-lbs (Figure 1).

4. The upper bracket must be parallel and perpendicular to the lower bracket (Figure 6). The upper bracket is designed so that it can be "titled" for the proper angle (Figure 4). The bottom of the upper bracket must fit tight to the bottom of the frame rail (Figure 7). It is necessary to use at least three of the five predrilled mounting holes in the upper bracket. Any combination of three is permissible. *CAUTION: Do not drill any holes into the frame until all hydraulic lines, gas lines, and electrical wires have been moved aside on both sides of the frame rail.* Using the bracket as a template, center punch and drill three $^{5}/_{16}$" holes. *NOTE: The holes must be no larger than $^{5}/_{16}$".* Attach the upper bracket using the self-tapping frame bolts and tighten securely (Figure 1). *Do not over tighten.*

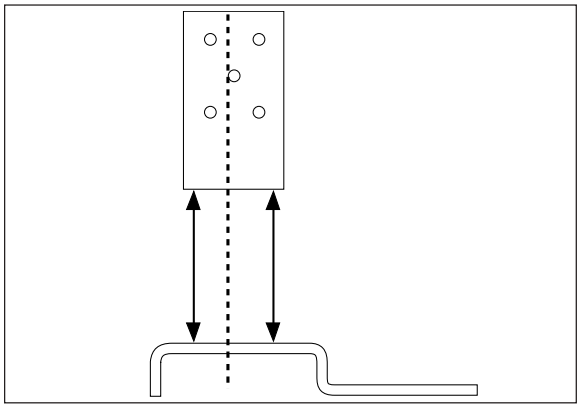


Figure 6

5. 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 8).

6. Use a standard tube cutter, a razor blade, or very sharp knife to cut the air line in two equal lengths. A clean square cut will ensure against leaks. Drill a $^{5}/_{16}$" hole for inflation valve and mount as illustrated. The rubber washer on the outside is for weather seal (Figure 9).

7. Route air line along frame from desire location valve location to the air fitting (Figure 8). Attach air line to chassis with the provided plastic straps.

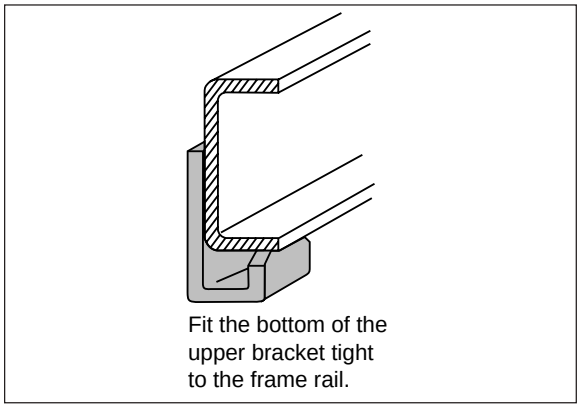
   IMPORTANT: To prevent air line from melting, keep it at least 12" from the exhaust system.

8. Cut off excess air line squarely and 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. A definite "click" can be heard/felt when the air line is seated. The air line will go into the fitting about $^{9}/_{16}$".

9. Repeat process for right side.

10. *IMPORTANT:* With the bottom still loose, inflate the air spring to approximately 10 p.s.i. By using the slotted adjustments, center the air spring so that it is in line with the upper and lower bracket and that there is a symmetrical cushion of air around the lower pedestal of the air spring to prevent side load wear (Figure 10). Air spring diameter grows to 4.6" at maximum inflation, check to be sure there is sufficient clearance around the air spring when it is inflated. Tighten the lower air spring mounting bolt to 10 ft-lbs.

11. Inflate to 30 p.s.i. Check all fittings and valve core with a soapy water solution for leaks. 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, then retest for leaks with a solution of $^{1}/_{5}$ dish soap to $^{4}/_{5}$ water. Please read and follow the Maintenance and Operating Tips.



Fit the bottom of the upper bracket tight to the frame rail.

Figure 7

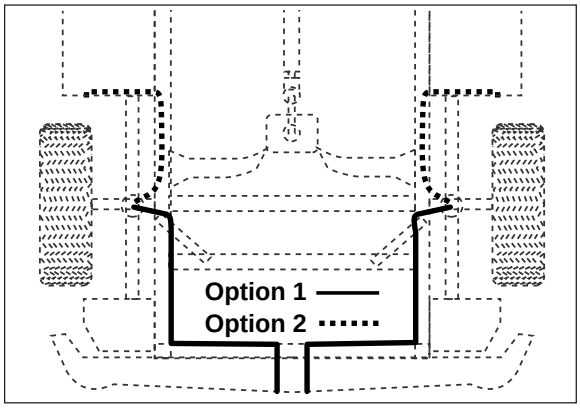


Figure 8

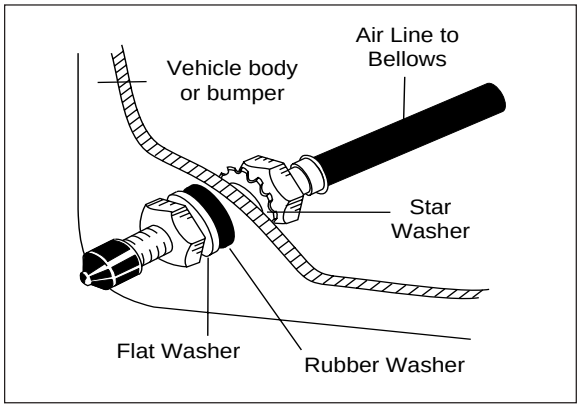
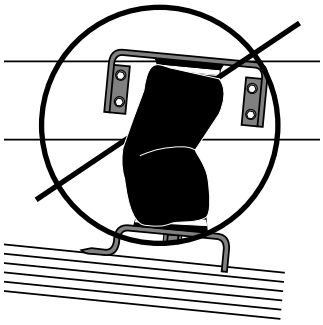
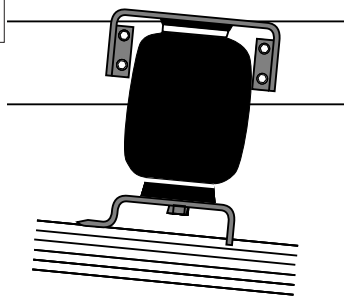


Figure 9

Finished Installation



Not Correct, Misaligned or under-inflated
(ok during assembly)



Correct Finished Installation
(Inflated)

FIgure 10

Maintenance and Operation:

Minimum Pressure	*Maximum Pressure*
5 p.s.i	*100 p.s.i.*

Failure to maintain correct minimum pressure (or pressure proportional to load), bottoming out, overextension, or rubbing against another component will void the warranty.

By following these steps, vehicle owners should obtain the longest life and best results from their air springs.

1. Check the air pressure in the air springs weekly.
2. Always maintain Ride Height. Never inflate beyond 100 p.s.i.
3. If you develop an air leak in the system, use a soapy water solution to check all air line connections and the inflation valve core before deflating and removing the air spring.
4. Inflate your air springs to 60 p.s.i. before adding the payload. After vehicle is loaded, adjust your air pressure to level the vehicle and for ride comfort.
5. When you are carrying a payload it will be helpful to increase the tire inflation pressure in proportion to any overload condition. We recommend a 2 p.s.i. increase above normal (not to exceed tire manufacturer maximum) for each 100 lbs. total overload on the axle.
6. Always adjust the air pressure to maintain Ride Height. Increase or decrease pressure from the system as necessary to attain Ride Height for optimal ride and handling. Remember that loads carried behind the axle (including tongue loads) require more leveling force (pressure) than those carried directly over the axle.
7. *IMPORTANT*: For your safety and to prevent possible damage to your vehicle, *do not exceed Maximum Gross Vehicle Weight Rating (GVWR), as indicated by the vehicle manufacturer.* Although your air springs are rated at a maximum inflation pressure of 100 p.s.i. The air pressure actually needed is dependant on your load and GVWR, which may be less than 100 p.s.i. Check your vehicle owners manual and do not exceed the maximum load listed for your vehicle.
8. Always add air to springs in small quantities, checking the pressure frequently. Air springs require less air volume than a tire and inflate quickly.
9. Should it become necessary to raise the vehicle by the frame or do any service work, make sure the system is at minimum pressure (5 p.s.i.) for safety and to reduce the tension on the suspension/brake components.

Thank you for purchasing Air Lift Products

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"The Choice of the Professional Installer"

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