

INSTALLATION INSTRUCTIONS

Congratulations - your new Air Helper Springs are quality products capable of improving the handling and comfort of your vehicle. As with all products, proper installation is the key to obtaining all of the benefits your kit is capable of delivering. Please take a few minutes to read through the instructions to identify the components and learn where and how they are used. It is a good idea to start by comparing the parts in your kit with the parts list below.

The heart of the air spring kit is, of course, the air helper springs. Remember that the air helper springs must flex and expand during operation, so be sure that there is enough clearance to do so without rubbing against any other part of the vehicle.

Be sure to take all applicable safety precautions during the installation of the kit. The instructions listed in this brochure and the illustrations all show the left, or driver's side of the vehicle. To install the right side assembly simply follow the same procedures.

WARNING:

Do not inflate this assembly when it is unrestricted. The assembly must be restricted by the suspension or other adequate structure. Do not inflate beyond 100 psi. Improper use or over inflation may cause property damage or severe personal injury.

This kit includes inflation valves and air lines for each air spring. This will allow you to compensate for unbalanced loads. If you would rather have a single inflation valve system to provide equal pressure to both air springs, your dealer can supply the optional "T" fitting.

IMPORTANT!

For your safety and to prevent possible damage to your vehicle, do not exceed the maximum load recommended by the vehicle manufacturer (GVWR). Although your Air Helper Springs are rated at a maximum inflation pressure of 100 psi, this pressure may allow you to carry too great a load on some vehicles. It is best to have your vehicle weighed once it is completely loaded and compare that weight to the maximum allowed. Check your vehicle owner's manual or data plate on driver side door for maximum loads listed for your vehicle.

When inflating your Air Helper Springs, add air pressure in small quantities, checking pressure frequently during inflation. The air spring requires much less air volume than a tire and, therefore, inflates much quicker.

PARTS LIST

AIR SPRING	6781	2	5/16" FLAT WASHER	4
UPPER BRACKET	5579	2	18 ft. TUBING	0938 1
3/8"-16 X 3/4" HEX HEAD BOLT		2	INFLATION VALVE	3032 2
3/8"-16 X FLANGE LOCK NUT		4	ELBOW FITTING	3031 2
3/4"-16 X 4-1/2" HEX HEAD BOLT		2	THERMAL SLEEVE	2
3/4"-16 HEX NUT		2	NYLON TIE WRAP	6
3/4" FLAT WASHER		4	CAUTION TAG	2
3/4" LOCK WASHER		2		

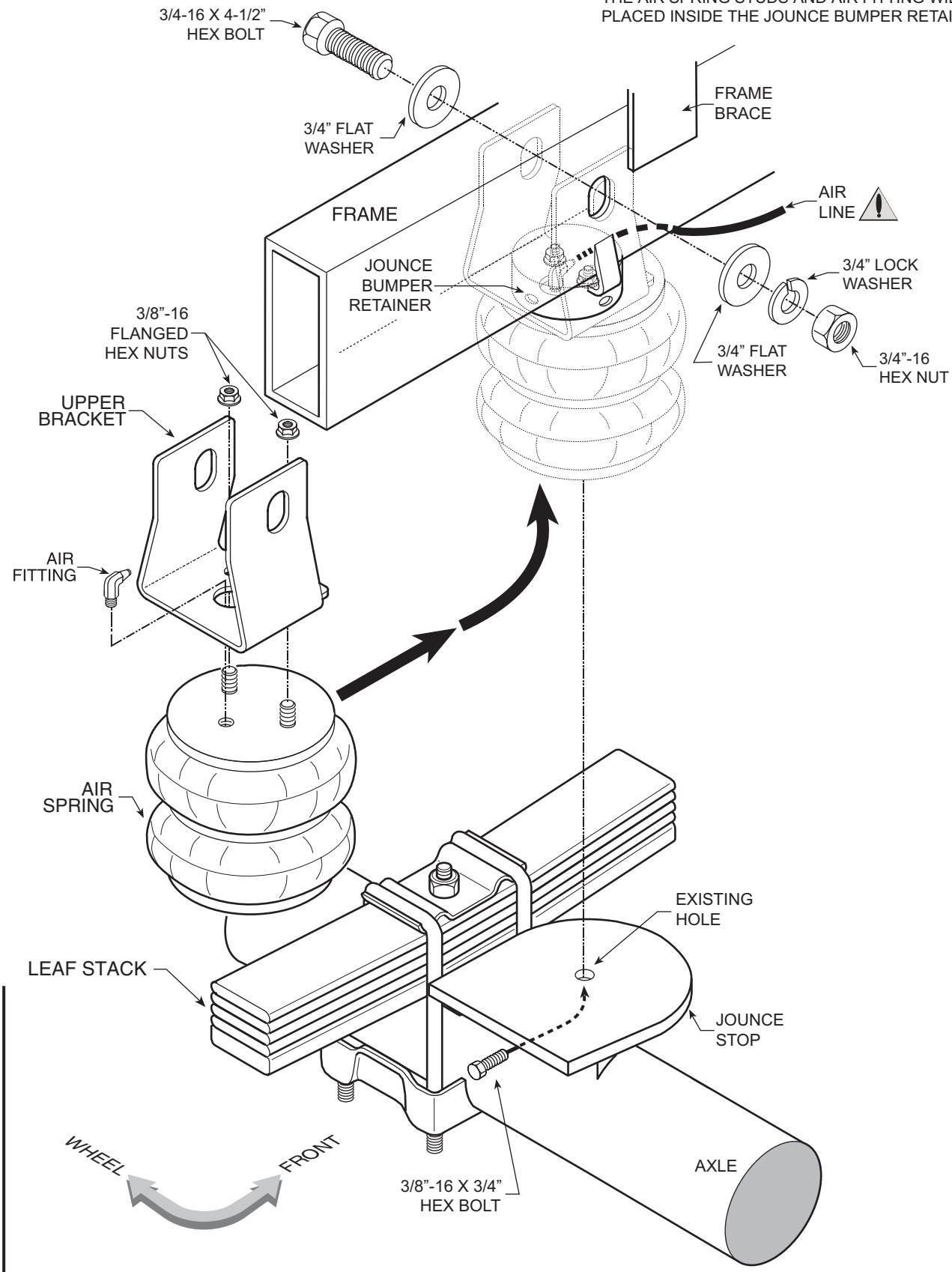
FIGURE "A"

NOTE: Both illustrations are of the left, or drivers side, of the truck.



THE AIR LINE WILL BE ROUTED THROUGH AN EXISTING HOLE IN THE JOUNCE BUMPER RETAINER AND INSERTED INTO THE AIR FITTING BEFORE THE AIR SPRING ASSEMBLY IS IN THE FINAL POSITION. AS THE ASSEMBLY IS PLACED INTO POSITION, THE EXCESS AIR LINE SHOULD BE PULLED OUT OF THE JOUNCE BUMPER RETAINER.

THE AIR SPRING STUDS AND AIR FITTING WILL BE PLACED INSIDE THE JOUNCE BUMPER RETAINER.



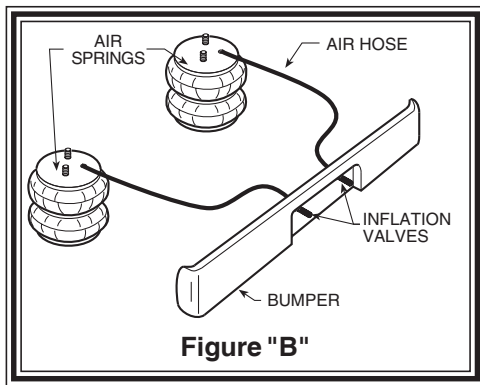


Figure "B"

NOTE:

Please read through this manual completely before installing the air spring kit to your vehicle. All illustrations reference the driver's or left side of the vehicle. Reverse all orientations for the passenger's or right side.

STEP 1 - PREPARE THE VEHICLE

Remove the jounce bumper located under the frame rail, inside the jounce bumper retainer, by pulling down at an angle. The jounce bumpers will not be reused with this kit.

STEP 2 - PRE-ASSEMBLE THE KIT

Select one air helper spring from your kit. Attach the upper bracket to the air spring using two 3/8"-16 flange lock nuts. Install the elbow fitting into the air spring. Tighten the air fitting securely to engage the orange thread sealant. Position the fitting to point to the front of the vehicle, *see Figure "A"*. **NOTE:** The upper bracket has been notched to aid in proper alignment. The notched end of the bracket will be installed towards the front of the vehicle. *See Figure "A"*.

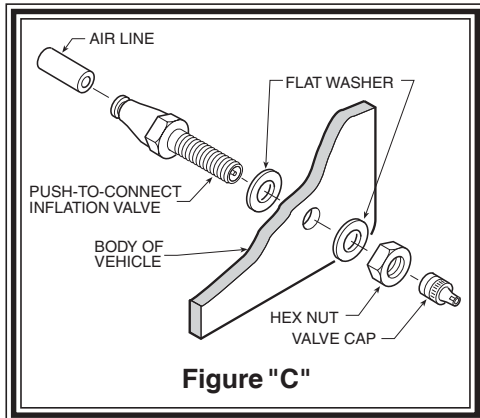


Figure "C"

STEP 3 - INSTALLING THE ASSEMBLY TO THE VEHICLE

Uncoil the airline tubing and cut it into two equal lengths. **DO NOT FOLD OR KINK THE AIRLINE TUBING.** Try to make the cut as square as possible. Insert the airline into one of the existing, forward most holes in the jounce bumper retainer. Position the kit assembly behind and below the retainer, and insert the airline tubing into the air fitting installed in the top of the air helper spring. Push the airline tubing into the fitting as far as possible *see Figure "A"*. Next, slide the kit assembly forward and up onto the frame, at the same time pulling out the excess air line. *See Figure "A"*. **NOTE:** The air fitting and the studs will be placed into the jounce bumper retainer.

Insert the 3/4" hex bolt, with two flat washers and one lock washer, into the large hole in the bracket and frame. **DO NOT TIGHTEN.** *See Figure "A"*. Next, install the 3/8"-16 X 3/4" hex bolt through the existing hole in the jounce stop and into the bottom of the air spring and tighten. Install the 3/4" hex nut on the 3/4" bolt previously installed and tighten, as shown in *Figure "A"*.

STEP 4 - PASSENGER'S SIDE INSTALLATION

Follow steps 1-3 for assembly and installation of the passenger's side.

STEP 5 - INSTALL THE AIR LINE AND INFLATION VALVE

Select a location on the vehicle for the air inflation valves. The location can be on the bumper or the body of the vehicle, as long as it is in a protected location so the valve will not be damaged, but maintain accessibility for the air chuck, *see Figure "B"*. Drill a 5/16" hole and install the air inflation valve using two 5/16" flat washers per valve as supports, *see Figure "C"*.

Route the airline tubing from the air helper spring to the valve, avoiding direct heat from the engine, exhaust pipe, and away from sharp edges. Thermal sleeves have been provided for these conditions. The airline tubing should not be bent or curved sharply as it may buckle. Secure the airline tubing in place with the nylon ties provided. Push the end of the airline tubing into the inflation valve as illustrated *see Figure "C"*.

STEP 6 - CHECK THE AIR SYSTEM

Once the inflation valves are installed, inflate the air helper springs to *70 psi* and check the fittings for air leaks. Using a spray bottle, apply a solution of soap and water to the fittings. If a leak is detected at an airline tubing connection then check to make sure that the airline tube is cut as square as possible and that it is pushed completely into the fitting. The airline tubing can easily be removed from the fittings by exhausting all the pressure in the air springs and then pushing the collar towards the body of the fitting and then, with a gentle pull, remove the airline tubing. If a leak is detected where the air fitting screws into the spring, deflate the air springs and remove the tubing, then screw the air fitting into the air spring one additional turn or until the leak stops. Reinstall the tubing and re-inflate the air springs and check for leaks as noted above. This now completes the installation. With a load on your vehicle and the air helper springs inflated, you must have at least 1/2" clearance around the air springs. As a general rule, the air helper springs will support approximately 50 lbs. of load for each 1 psi of inflation pressure (per pair). For example, 50 psi of inflation pressure will support a load of 2500 lbs. per pair of air helper springs. **FORBESTRIDE** use only enough air pressure in the air helper springs to level the vehicle when viewed from the side (front to rear). This amount will vary depending on the load, location of load, condition of existing suspension and personal preference.

NOTE: Too much air pressure in the air helper springs will result in a firmer ride, while too little air pressure will allow the air helper spring to bottom out over rough conditions. Too little air pressure will not provide the improvement in handling that is possible. **TO PREVENT POSSIBLE DAMAGE MAINTAIN A MINIMUM OF 5 psi IN THE AIR HELPER SPRINGS AT ALL TIMES.**

NOTE:

MIN PRESSURE

5 PSI

MAX PRESSURE (LOADED) 100 PSI

NOTE:

Should it become necessary to raise the vehicle by the frame, deflate both air helper springs completely. Reinflate the air springs after the vehicle is lowered to the ground.

