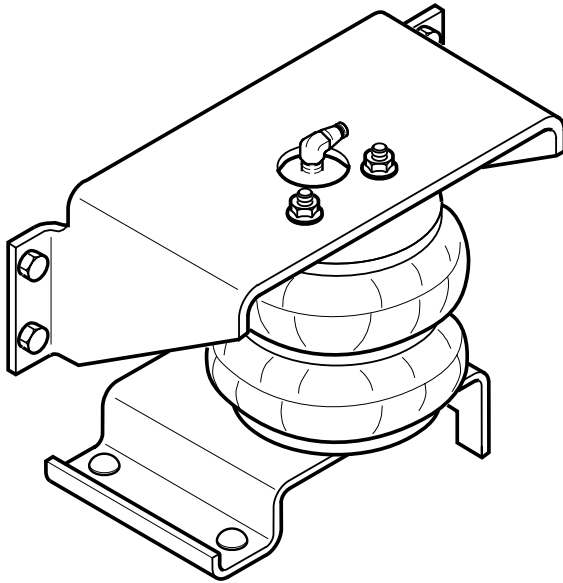


Fits 1973-1991 Suburban 4x2's and 4x4's



### 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 helper 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.

### PARTS LIST

267C AIR SPRING	6781	2	3/8"-16 X 1 1/2 HEX BOLTS	8
UPPER BRACKETS	5162	2	5/16" FLAT WASHER	4
LOWER BRACKETS	5163	2	PUSH TO CONNECT	
BRACKET STRAP	5086	2	INFLATION VALVE	2
AIR LINE TUBING		1	PUSH TO CONNECT	
3/8"-16 FLANGE LOCK NUT		16	ELBOW FITTING	2
3/8"-16 X 3/4" FLANGE HEX BOLT		2	THERMAL SLEEVE	2
3/8"-16 x 4-1/2" CARRIAGE BOLTS		4	NYLON TIE	6
3/8" SPECIAL WASHER		8		

### 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 P.S.I. Improper use or over inflation may cause property damage or severe personal injury.

***Installation of this kit requires a minimum of 7-1/2" of clearance between the tire side wall and the frame.***

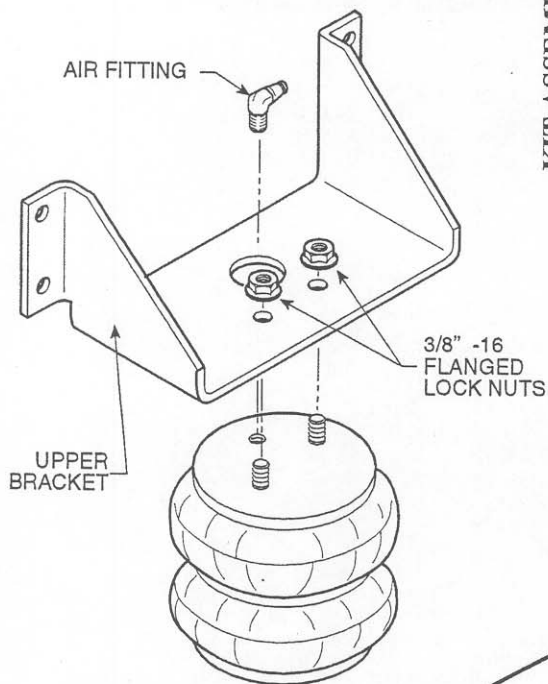
Your kit includes separate inflation valves and air lines for each air helper spring. This will allow you to level your vehicle from side to side as well as from front to back. If you would rather have a single valve inflation system, your dealer can supply the required "T" fitting.

### 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 P.S.I., this pressure may allow you to carry too great a load on some vehicles. Check your vehicle owner's manual for maximum loads listed for your vehicle.***

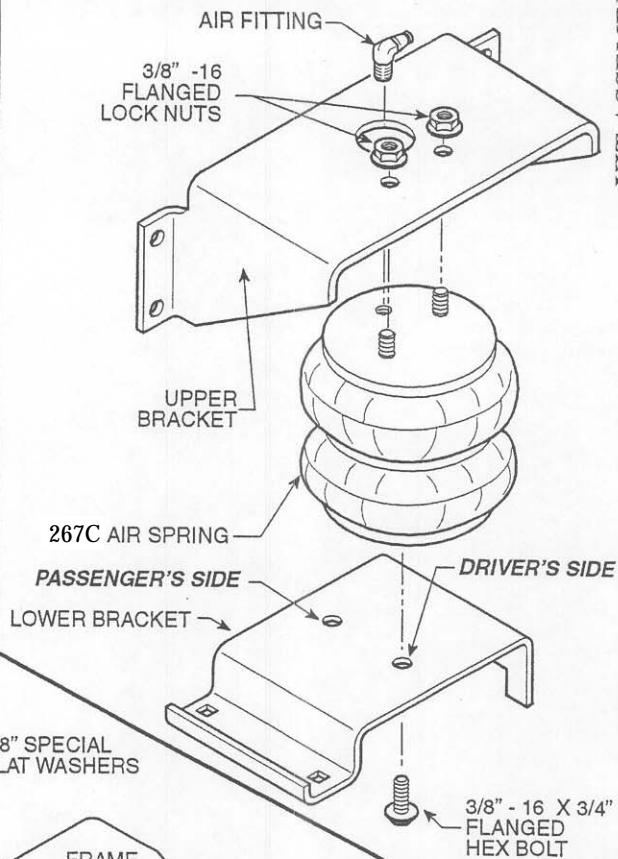
***When inflating your Air Helper Springs, add air pressure in small quantities, checking pressure frequently during inflation. The air spring requires much less air volume than a tire and, therefore, inflates much quicker.***

UPPER BRACKET ASSEMBLY FOR 4X4's



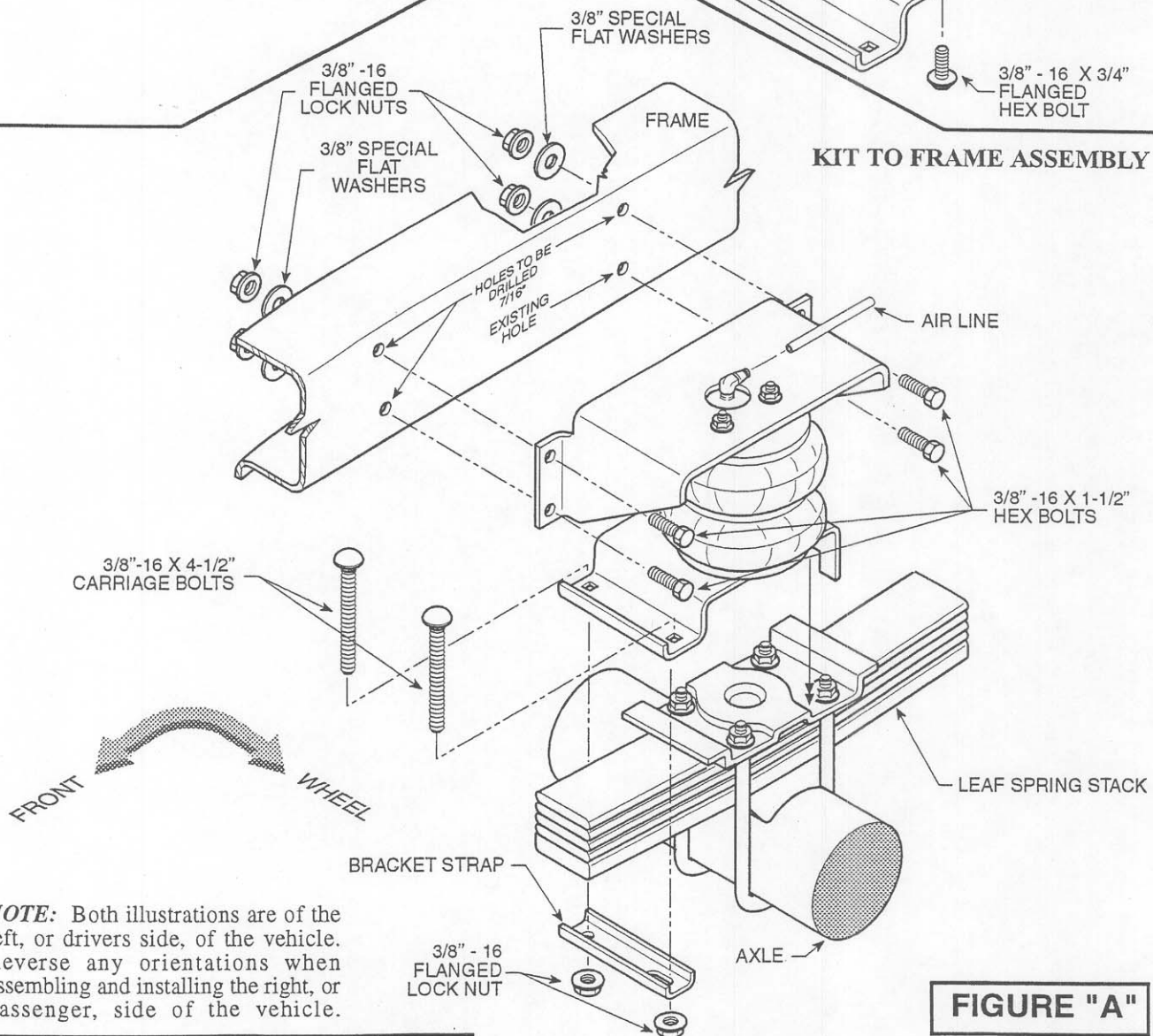
KIT ASSEMBLY

UPPER BRACKET ASSEMBLY FOR 4X2's



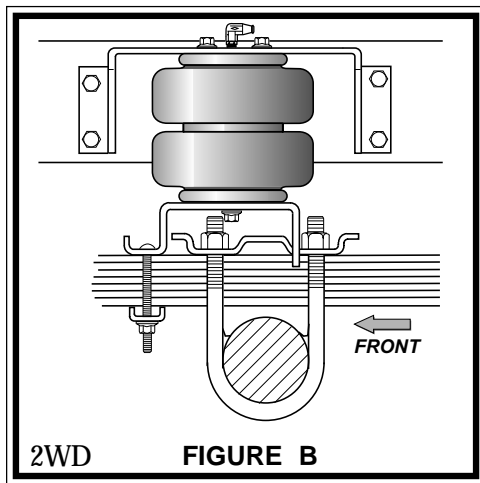
KIT ASSEMBLY

KIT TO FRAME ASSEMBLY



**NOTE:** Both illustrations are of the left, or drivers side, of the vehicle. Reverse any orientations when assembling and installing the right, or passenger, side of the vehicle.

**FIGURE "A"**



### STEP 1 - PREPARE THE VEHICLE

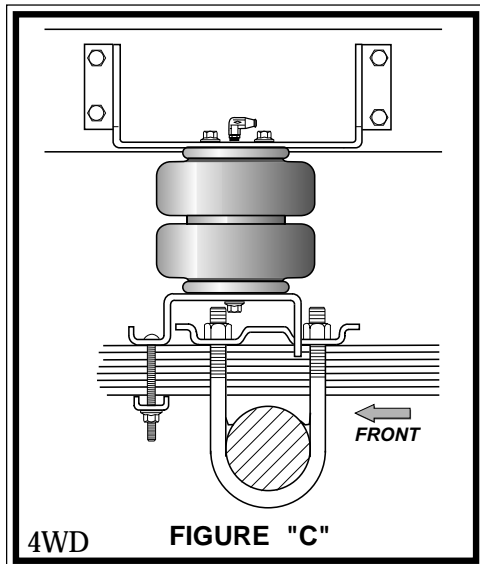
With the vehicle on a solid, level surface chock the front wheels. Raise the vehicle by the axle and remove the rear wheels. After the removal of the wheels lower the vehicle so the axle rests on jack stands rated for your vehicles weight.

### STEP 2 - INSTALL THE AIR FITTING

Install the brass elbow fitting into the air spring through the large access hole in the upper bracket. Tighten the air fitting securely to engage the orange thread sealant. Position the elbow so as to point in the anticipated location of the air inflation valve see Figure "A" & "D".

### STEP 3 - ASSEMBLE THE UPPER BRACKET TO THE AIR SPRING

This kit is designed to fit two and four-wheel-drive Suburbans. Please follow Step "3A" for two-wheel-drive vehicles and Step "3B" for four-wheel-drive vehicles.



#### STEP 3A - TWO WHEEL DRIVE MOUNTING

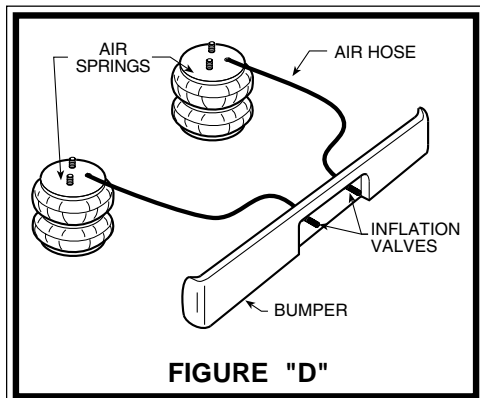
Using the air spring prepared in Step 2 and an upper bracket, position the upper bracket as shown in Figure "A" & "B". Insert the air fitting through the large hole in the bracket and align the studs as shown in Figure "A" & "B". Secure using 3/8"-16 flanged lock nuts. **Proceed to Step 4.**

#### STEP 3B - FOUR WHEEL DRIVE MOUNTING

Using the air spring prepared in Step 2 and an upper bracket, invert the upper bracket as shown in Figure "A" & "C". Insert the air fitting through the large hole and align the studs as shown in Figure "A" & "C". Secure using 3/8"-16 flanged lock nuts. The balance of the kit installation is the same as the two-wheel-drive installation.

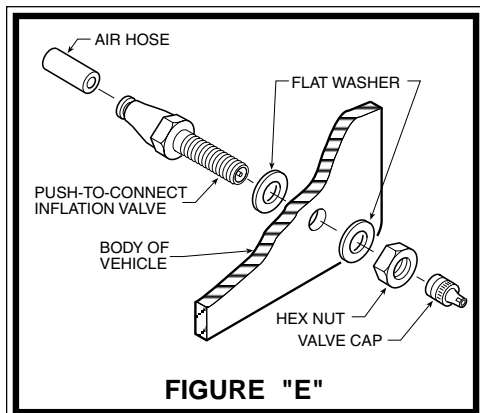
### STEP 4 - MOUNTING LOWER BRACKET

Select a lower bracket from your kit. Position the lower bracket and upper bracket as shown in Figure "A". Secure the lower bracket to the air spring using a 3/8"-16 x 3/4" flanged lock bolt through the hole in the lower bracket that will be closest to the wheel see Figures "A". Proper hole selection for mounting the air spring to the lower bracket will provide proper air spring alignment.



### STEP 5 - PRE-FIT / MARK AND DRILL HOLES

Position the assembly on the leaf spring and retainer as shown in Figure "A" & "B". The lower bracket will sit on the leaf spring retainer as shown in Figure "B". The lower bracket has been notched so that it will fit over the edges of the retainer. The opposite end of the lower bracket will fit forward of the retainer and will rest on top of the leaf spring stack see Figure "A" & "B".



Next, position the upper bracket against the frame so that the lower right-hand-mounting hole aligns with an existing 5/16" diameter hole in the frame rail. This hole must be enlarged to 7/16" diameter. Before drilling it is recommended that the positive battery cable be disconnected. **Before drilling the holes make sure all electrical, brake and fuel lines are cleared from the path of the drill.** Damage to lines can be avoided by inserting a piece of wood between the frame rail and any lines in the path of the drill. Use a 7/16" diameter drill bit and enlarge the 5/16" hole.

Install one of the 3/8"-16 x 1-1/2" hex bolts through the hole just enlarged. Install the special flat washers and 3/8"-16 flanged lock nuts behind the frame as shown in *Figure "A"* and tighten finger tight. Visually position the upper bracket so that the upper bracket is parallel with the lower bracket. Using the upper bracket as a template, mark and drill the remaining three mounting holes. Install the 3/8"-16 x 1 1/2" hex bolts, washers and nuts as shown in *Figure "A"*. Tighten all four frame-mounting bolts.

Fasten the lower bracket to the leaf spring using a bracket strap, 3/8"-16 x 4 1/2" carriage bolts and nuts as shown in *Figure "A"*. Please note that the slot in the bracket strap should be toward the wheel side of the leaf spring.

#### **STEP 6 - INSTALLATION TO THE PASSENGER'S SIDE ASSEMBLY**

Reverse any orientations when assembling and installing the right, or passenger, side of the vehicle.

#### **STEP 7 - INSTALL THE AIR LINE AND THE INFLATION VALVE**

Uncoil the air line tubing and cut it into two equal lengths. *DO NOT FOLD OR KINK THE TUBING*. Try to make the cut as square as possible. Insert one end of the tubing into the elbow fitting installed in the top of the air helper spring. Push the tubing into the fitting as far as possible *see Figure "A"*.

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 "D"*. Drill a 5/16" hole and install the air inflation valve using two 5/16" flat washers per valve as supports *see Figure "E"*. Run the tubing from the air helper spring to the inflation valve, routing it to avoid direct heat from the engine, exhaust pipe, and away from sharp edges. Thermal sleeves have been provided for these conditions. If a thermal sleeve is required simply slide the sleeve over the air line tubing to the location requiring protection. The air line tubing should not be bent or curved sharply as it may buckle. Secure the tubing in place with the nylon ties provided. Push the end of the air line tubing into the inflation valve as illustrated *see Figure "E"*.

#### **STEP 8 - CHECK THE AIR SYSTEM**

Once the inflation valves are installed inflate the air helper springs to 70 P.S.I. and check the fittings for air leaks with an applied solution of soap and water. If a leak is detected at a tubing connection then check to make sure that the tube is cut as square as possible and that it is pushed completely into the fitting. The tubing can easily be removed from the fittings by pushing the collar towards the body of the fitting and then pulling out the tube. If a leak is detected where the brass fitting screws into the spring, remove the tubing by pushing the collar towards the body of the fitting and then pulling out the tube, then screw the brass fitting into the air spring one additional turn or until the leak stops. Reinstall the tubing and reinflate the air springs and check for leaks as noted above.

This now completes the installation. Install the wheels and torque the lug nuts to the manufactures specifications. Raise the vehicle by the rear axle and remove the jack stands and lower the vehicle back onto the ground. Re-attach the positive battery cable and remove the wheel chocks from the wheels. Before proceeding, check once again to be sure you have proper clearance around the air springs. 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 40 lbs. of load for each P.S.I. of inflation pressure (per pair). For example, 50 P.S.I. of inflation pressure will support a load of 2000 lbs. per pair of air helper springs. *FOR BEST RIDE* 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 also not provide the improvement in handling that is possible. ***TO PREVENT POSSIBLE DAMAGE MAINTAIN A MINIMUM OF 5 P.S.I. IN THE AIR HELPER SPRINGS AT ALL TIMES.***

#### **NOTE:**

Once the air helper springs are installed, it is recommended that the vehicle not be lifted by the frame, as over-extension may occur, resulting in damage to the air helper springs. However, should it become necessary to raise the vehicle by the frame, deflate both air helper springs completely.