

**THIS KIT DOES NOT REQUIRE
DRILLING INTO THE FRAME.**

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.

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.

Your kit includes separate 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

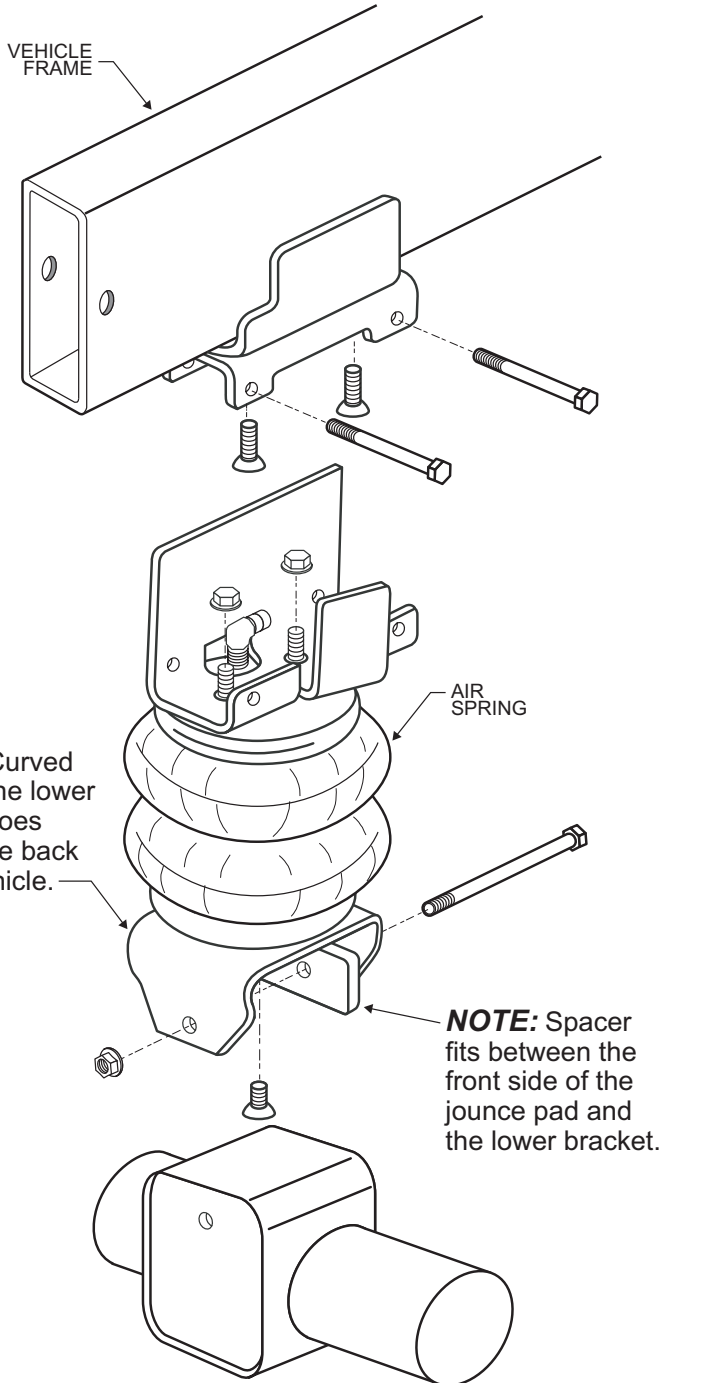
224C AIR SPRING	6873	2
FRAME BRACKET	5792	2
LEFT UPPER BRACKET	5793	1
RIGHT UPPER BRACKET	5794	1
LOWER BRACKET	5795	2
LOWER SPACER	5796	2
AIR LINE TUBING (22 FT)		1

BOLT PACK (A21-760-2580)

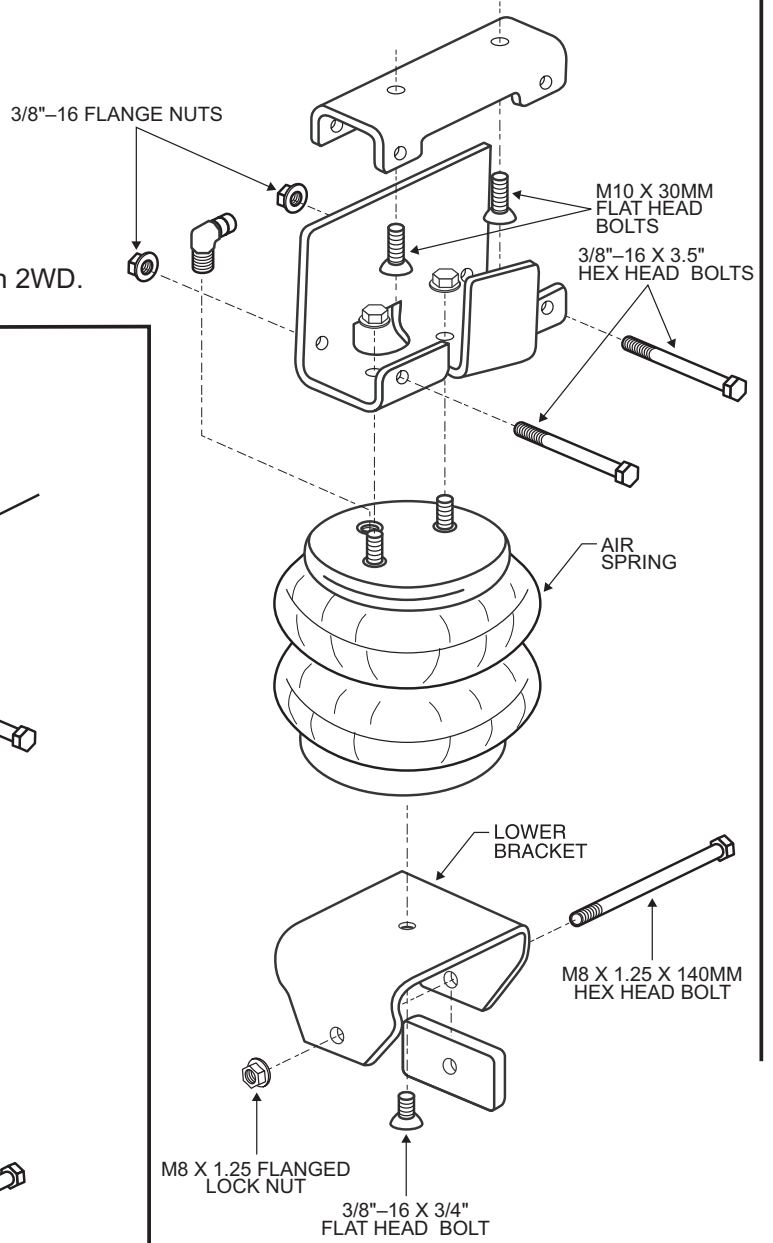
1/4 ELBOW FITTING	3031	2
INFLATION VALVE	3032	2
M8 X 1.25 X 140MM HEX HEAD BOLT		2
M8 X 1.25 FLANGED LOCK NUT		2
M10 X 30MM FLAT HEAD BOLT		4
3/8"-16 X 3/4" FLAT HEAD BOLT		2
3/8"-16 X 3-1/2" HEX HEAD BOLT		4
3/8" FLANGED LOCK NUT		8
THERMAL SLEEVE		2
NYLON TIE		6
CAUTION TAG		2

FIGURE "A"

NOTE: 4WD shown, use same procedures on 2WD.



KIT ASSEMBLY



STEP 1 — PREPARE THE VEHICLE

With the vehicle on a solid, level surface chock the front wheels. Remove the negative battery cable. Your vehicle is equipped with rubber jounce bumpers. The jounce bumpers are bolted to the frame above the rear axle. Remove the jounce bumpers from the vehicle. Remove the bolt holding the brake line bracket to the lower jounce bumper pad.

STEP 2 — PRE-ASSEMBLE THE KIT

Locate the ¼" PTC elbow fitting. Install the elbow fitting in the top of the air spring. Be sure to tighten the fitting to point in direction the air line will be installed. Locate bracket 5793, one air spring, and two 3/8"- 16 flange nuts. Attach bracket 5793 to the top of the spring so the studs go through the holes on the bracket and the hole for the air fitting is in the correct place. Install the flange nuts and tighten to hold the spring on the bracket. Locate bracket 5795 and one 3/8"- 16 X .75" flat head cap screw. Attach the bracket to the bottom of the air spring using the flat head cap screw. Leave this loose enough to allow the bracket to rotate for now. Repeat this with the second air spring using bracket 5794 for the upper bracket.

STEP 3 — INSTALLING THE UPPER BRACKETS TO YOUR VEHICLE

Locate the two brackets labeled 5792 and four M10 X 30mm flat head bolts. Install bracket 5792 with the longer side toward the back of the truck using the threaded holes left open from the jounce bumper brackets.

STEP 4 — INSTALLING THE ASSEMBLY TO THE VEHICLE

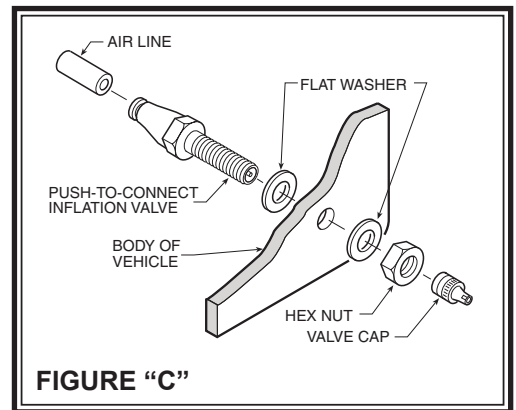
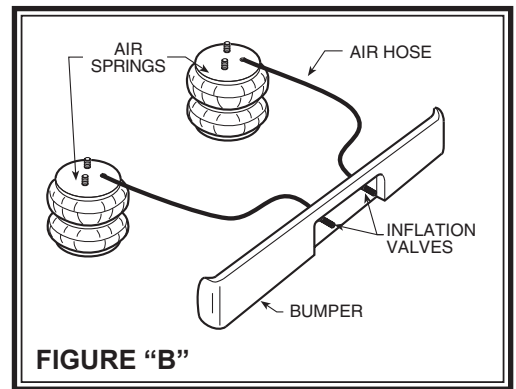
Note: *Installing the air line to the vehicle with inflation valves and connecting it to the fitting on the top of the spring is recommended at this point.*

Locate two 3/8" -16 X 3.5" hex bolts with two 3/8"-16 flange nuts. Connect the upper bracket on the spring to the frame bracket using the two bolts with flange nuts. The bracket should be installed so that the spring is offset toward the outside of the frame. Line the lower bracket up so that the curved end faces the back of the truck. Tighten the bolt holding the lower bracket to the spring once it is lined up correct. Locate the spacer (5796) and the M8 X 1.25 X 140mm bolt. Install the lower bracket over the jounce bumper pad so that the curved end is toward the back. The spacer should be placed between the front of the lower bracket and the jounce pad. Insert the 140mm bolt through the bracket from the front, through the spacer, and through the jounce pad. Thread the bolt into the back hole on the jounce pad where the brake line bracket bolt was removed. Once the bolt is through, place the brake line bracket over the bolt and secure with the m8 X 1.25 flange nut. Repeat this procedure for the right side of the truck.

STEP 5 — CHECKING 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 pull, remove the airline tubing. Re-install the tubing and reinflate the air springs and check for leaks as noted above. If a leak is detected where the air fitting screws into the spring, just screw the air fitting into the air spring until the leak stops.

This now completes the installation. Reattach the negative battery cable and remove the wheel chocks from the front 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 50 lbs. of load for each 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. 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 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: 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.

