

LEVELING SOLUTIONS 74582

INSTALLATION INSTRUCTIONS

Thank you for choosing our Air Spring kit. It will improve the overall handling and comfort of your truck and provide trouble free service with proper installation. Please take a few minutes to read through and follow the instructions to identify the components by comparing the parts in your kit with the parts list below.

Please keep in mind that the air springs must expand during operation, so be sure that there is enough clearance to do so without rubbing against any other part of the vehicle. Air springs are the most important part in this kit so be sure that they have enough space and properly installed. Be sure to take all applicable safety precautions during the installation. The instructions listed in this document and the illustrations show the left, or driver's side of the vehicle. To install the passenger side simply follow the same procedures. Your kit includes two sets of inflation valves and air lines for each air spring. This will allow you to level your vehicle from side to side as well as from front to back.

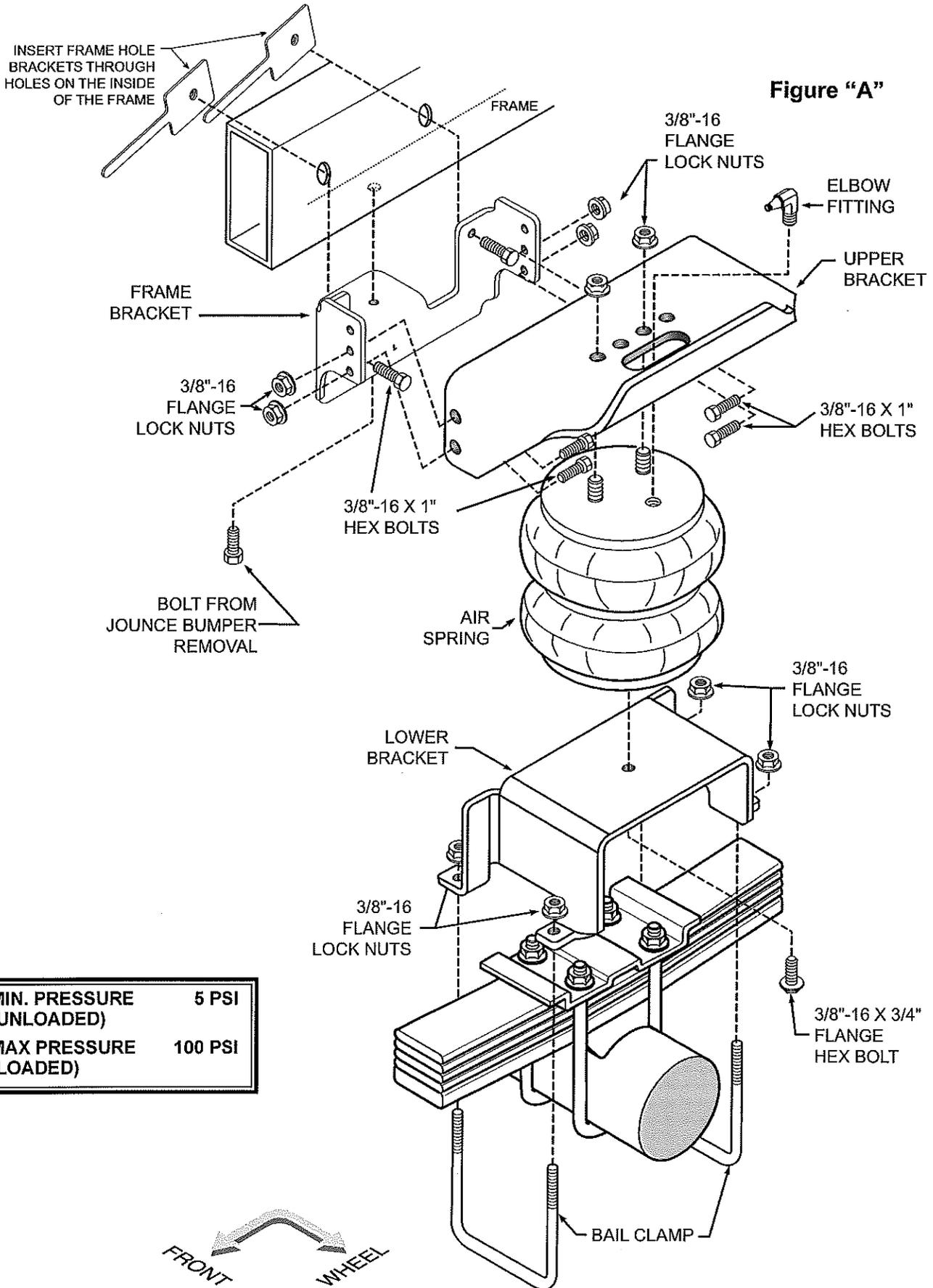
IMPORTANT!

- Do not exceed the maximum load recommended by the vehicle manufacturer (GVWR). Maximum inflation pressure of 100 psi may allow you to carry a load that might exceed this causing possible damage to your vehicle and jeopardize your safety. We recommend you 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's side door for maximum loads listed for your vehicle. When inflating your Air Springs, add air pressure in small quantities and check pressure frequently during inflation. The air springs inflate much quicker since they require much less air volume than a tire.
- Do not inflate the air springs without restricting/securing the whole kit. The kit 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.

PARTS LIST

AIR SPRING	TR6781	2	INFLATION VALVE	2
UPPER BRACKET		2	ELBOW FITTING	2
LEFT FRAME BRACKET		1	3/8"-16 FLANGE LOCK NUT	20
RIGHT FRAME BRACKET		1	3/8"-16 X 1" HEX HEAD BOLT	12
LEFT LOWER BRACKET		1	3/8"-16 X 3/4" FLANGE BOLT	2
RIGHT LOWER BRACKET		1	3/8"-16 X 2" FLANGE BOLT	2
SPACER 1.25"		2	5/16" FLAT WASHER	4
FRAME HOLE BRACKET		4	THERMAL SLEEVE	2
BAIL CLAMP 4.5 X 2.5 X 2.0		4	NYLON TIE STRAP	6
AIR LINE TUBING 18 FT.		1		

Figure "A"



MIN. PRESSURE (UNLOADED)	5 PSI
MAX PRESSURE (LOADED)	100 PSI

STEP 1 – PREPARE THE VEHICLE

With the vehicle on a solid, level surface, chock the front wheels. Raise the vehicle by the rear axle and set on jack stands rated for your vehicles weight. Remove the rear wheels. Remove the jounce bumpers from the under side of the frame rail. The jounce bumper will not be re-used with the kit, but the bolt will be re-used.

STEP 2— ATTACH THE UPPER BRACKET

Select one air helper spring and one upper bracket from your kit. Insert the studs of the air spring into the mounting holes of the upper bracket. Make sure the air inlet is visible through the large access hole. Fasten the upper bracket to the air spring using the 3/8"-16 flange nuts, see *Figure "A"*. Install the 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 fitting to point to the anticipated location of the air inflation valves.

STEP 3A— ATTACH THE LOWER BRACKET (4WD)

Select the left lower bracket and fasten it to the air spring with a 3/8"-16 x 3/4" flange bolt (finger tight). *Figure "B"*.

STEP 3B— ATTACH THE LOWER BRACKET (2WD)

Select the left lower bracket and spacer and attach them to the air spring with a 3/8"-16 x 2" flange hex bolt (finger tight). Open end of the spacer should mount towards lower bracket. See *Figure "C"*.

STEP 4— ATTACH THE FRAME BRACKET TO THE FRAME

Attach the left frame bracket to the bottom of the frame reusing the jounce bumper bolt in the hole from the jounce bumper removal. Next, insert the 3/8"-16 x 1" hex head bolts through the left frame bracket and into the holes on the outside of the frame. Secure with framehole brackets inserted through the hole on the inside of the frame. See *Figure "A"*. **DO NOT OVER TIGHTEN! 20 FT/LBS Max.**

STEP 5— INSTALLING THE ASSEMBLY TO THE VEHICLE

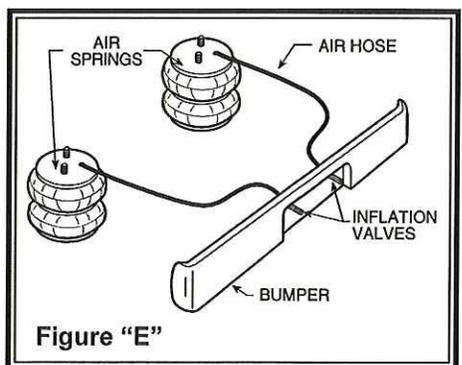
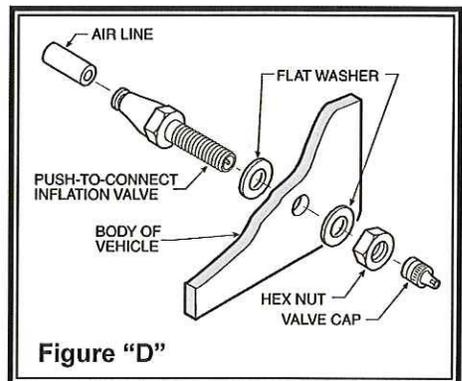
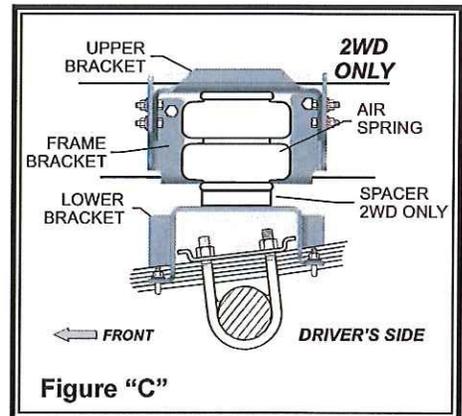
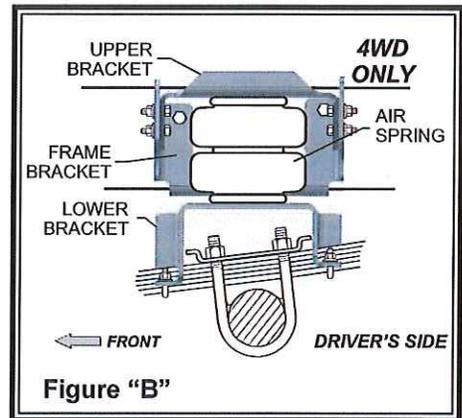
Place the assembly on the leaf stack over the spring retainer and align the holes in the upper bracket with the lower four holes in the left frame bracket. Install four, 3/8" x 1" hex head bolts and fasten using 3/8"-16 flange nuts. Secure the left lower bracket to the leaf stack using bail clamps and 3/8"-16 flange nuts. Once aligned, tighten the bolt holding the bottom of the air spring to the lower bracket. See *Figures "A", "B" & "C"*.

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. 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 "E"*. Drill a 5/16" hole and install the air inflation valve using two 5/16" flat washers per valve as supports, see *Figure "D"*. 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 "D"*.



STEP 8— 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 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 fitting screws into the spring, screw the fitting into the air spring 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 manufacturer's specifications. Raise the vehicle by the rear axle and remove the jack stands and lower the vehicle back onto the ground. Re-attach the negative 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 psi of inflation pressure (per pair). For example, 50 psi 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 psi IN THE AIR HELPER SPRINGS AT ALL TIMES.***

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.

AIR SPRING TECHNICAL DATA			
Part Number	Ride Height	Min/Max Air Pressure	Max Load @100 psi (per pair)
TR6781	5.5" - 6.5"	5 / 100 psi	4800 lbs
TR6397	5.5" - 6.5"	5 / 100 psi	4800 lbs
TR6401	5.5" - 7.0"	5 / 100 psi	5000 lbs
TR6410	5.5" - 6.5"	5 / 100 psi	4800 lbs
TR6873	5.5" - 7.0"	5 / 100 psi	5000 lbs
TR6766	4.5" - 5.5"	5 / 100 psi	3200 lbs

NOTE:	
MIN PRESSURE	5 PSI
MAX PRESSURE (LOADED)	100 PSI

TROUBLE SHOOTING GUIDE

Air spring will not inflate

Ensure that the air line tubing is inserted into the air fittings as far as possible. The tubing should go in the fitting 3/4 of an inch. You will feel some resistance when the tubing goes past the o-ring.

Clear any dirt or debris from inside the inflation valves.

Inspect the entire length of air line tubing to ensure that it is not kinked, damaged from exhaust heat, or cut due to contact with sharp edges

Air spring will not hold air

Normal pressure loss is no more than 3 - 4 psi per week when the air spring is inflated to 50 psi.

Using the inflation valve cap as a core tool, ensure that the valve stem core is installed securely.

Apply a solution of soap and water to the air fittings, air line, and air springs to check for leaks. Tighten the air fitting or re-install the tubing in the air fitting to stop the leak. Rinse the soap and water solution from the system when complete.

If a leak can not be detected with the soap and water solution, deflate the air springs and remove them from the vehicle. Re-install the tubing and inflation valve on the air spring and inflate the air spring to a maximum of 20 psi. Submerge the air spring in a bucket of water to check for leaks.

Locations of air leaks

Leaks occur most often at the threaded connection between the air fittings and the air springs. Tighten the fitting to engage the pre-applied orange thread sealant or until the nylon collar makes contact with the air spring, plus 1/2 turn, depending on which type of fitting is included in your kit. (See air fittings on page 3)

The end of the air line tubing must be cut square and clean to avoid burrs in the connection to the air fittings. The push-to-connect fittings require a square cut to properly seal. The tubing can be removed from the fitting by first releasing the air pressure from the air spring. Push the collar on the fitting toward the body of the fitting. While holding the collar in, pull out the tubing. Cut the tubing squarely and push the tubing into the fitting as far as possible.

The vehicle is not level

Check for proper inflation of the air springs on each side of the vehicle.

Check for obstructions in the air system or vehicle components that may be restricting suspension travel.

IMPORTANT

NYLON TUBE CUTTING:
FOLLOW THESE INSTRUCTIONS
TO AVOID LEAKS

