74560

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.

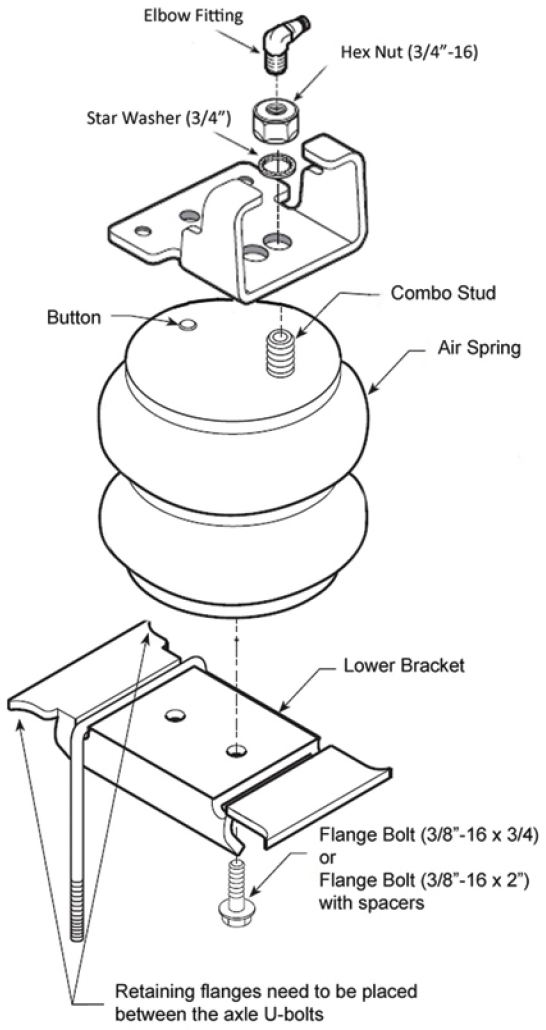
• Do not inflate the air springs without restricting/securing the whole kit. The kit assembly must be restricted by the suspension or other adequate structure.

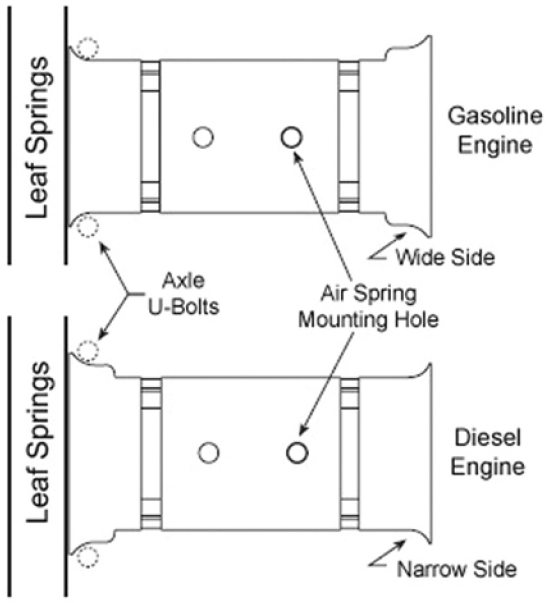
• Do not inflate beyond 100 psi. Improper use or over inflation may cause property damage or severe personal injury.

PARTS LIST:

Air Spring - TR6401	2	Flange Nut (3/8”-16”)	4
Upper Bracket	2	Hex Nut (3/4”-16)	2
Lover Bracket	2	Star Washer (3/4”)	2
Axle Clamp Bracket	2	Flat Washer (5/16”)	4
Heat Shield	1	Inflation Valve	2
Tubing - 16ft	1	Elbow Fitting	2
Bail Clamp (3/8”-16)	2	Thermal Sleeve	2
Flat Head Bolt (10mm x 30mm)	4	Nylon Tie	6
Flange Bolt (3/8”-16 x 3/4”)	2		

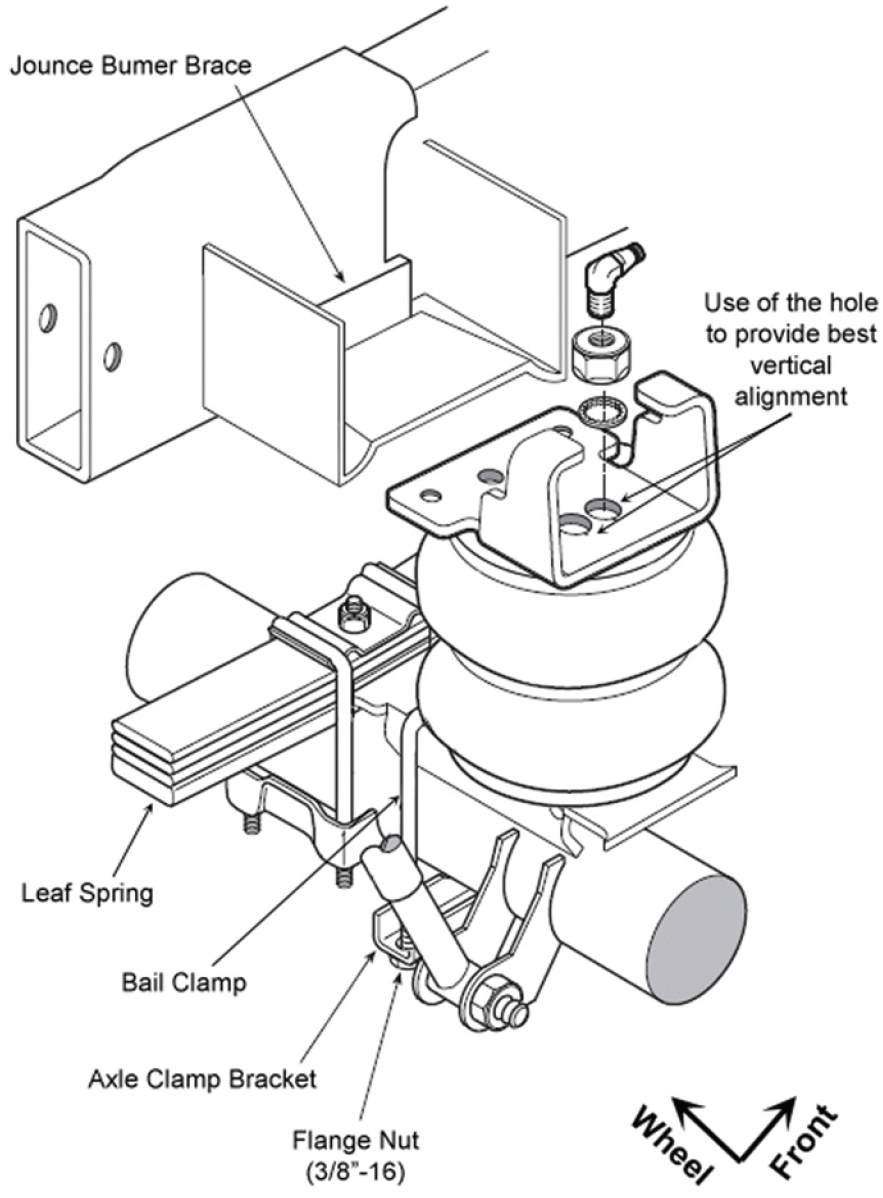
Figure 1





Lower Bracket Orientation

NOTE: Drawings are for driver side of the vehicle. Reverse any orientations when installing passenger side.



1. PREPARATION

It is not necessary to remove the wheels for installation of this kit. Chock the front wheels of the vehicle on level and solid surface. Bed of the truck must be empty without any load when installing this kit. Locate the rubber jounce bumpers that are attached to the frame directly above the axle. Remove these bumpers by unbolting them from the frame. These bumpers will not be reused and they will be replaced the kit.

2. PREASSEMBLING THE KIT

Select a lower bracket from your kit and determine which side of the bracket fits most tightly between the axle U-bolts as shown in Figure 1. NOTE: The smaller side is for the gasoline engine axle and the larger side is for Diesel engine axle. Select one bail clamp, air spring and lower bracket from your kit. Place the bail clamp in the correct position in the slot of the lower bracket for your vehicle. Install the air spring to the lower bracket using the hole for your vehicle with a 3/8"-16 x 3/4" flange head bolt that is mounted finger tight. Please see the lower right section of Figure 1. The bolt will be tightened up in STEP 5.

3. INSTALLING KIT TO THE VEHICLE

Install the upper bracket to the frame using two 10 mm x 30 mm flat head bolts, see Figure 1. Position the lower bracket and air spring assembly from STEP 2 on the axle as shown in Figure 1. Put the large threaded stud though the large hole on the upper bracket and the locating pin of the air spring in the small hole on the upper bracket as shown in Figure 1. Make sure the aliment pin is in the locating hole before fasting air spring to the upper bracket. Fasten the air spring to the upper bracket using ¾"-16 hex head nut and ¾" star washer. Fasten the lower bracket to the axle housing using the bail clamp and the axle clamp bracket and two 3/8"-16 locking flange nuts securely. Once the lower bracket orientation has been set, tighten the 3/8"-16 x ¾" flange bolt that was installed in STEP 2.

Heat shield must be mounted between the upper bracket assembly and the top plate of the air spring before the installation of the passenger's side kit. See Figure 2. Position the heat shield directly between the closest heat source and the air spring by making sure that the heat shield will not interfere with normal operation of the air spring or the vehicle's suspension. Don't position the heat shield directly above the axle, as it may contact the axle on full suspension travel.

4. INSTALLING THE AIR LINE

Cut the air line tubing into two equal lengths without folding or twisting it. Cut should be as even as possible. Insert one end of the tubing into the male fitting installed on the top of the air spring. Inflation valves are push to connect so all you need to do is to insert the air line inside these valves. Push the tubing into the fitting as far as possible. Select a location on the vehicle for the air inflation valves, this could be on the bumper or the body of the vehicle, as long as the valve is not in a place that it could get damaged. Valves should be accessible for inflation. See Figure 3. Drill a 5/16" hole and install the air inflation valve using two 5/16" flat washers per valve as supports, see Figure 4. Run the tubing from the air spring to the inflation valve, make sure it is not exposed to direct heat from the engine, exhaust pipe, and it is away from sharp edges. You can use the thermal sleeves that are inside the kit for additional protection against heat. If a thermal sleeve is necessary 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. You can secure the tubing in place with the nylon ties provided with the kit. Push the end of the air line tubing into the inflation valve as illustrated, see Figure 4.

5. CHECKING THE AIR SYSTEM

Inflate the air springs to 60 psi and check the fittings for air leaks by applying a mix of soap and water. If a leak is detected at a tubing connection then check to make sure that the tube is cut as even/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 re-inflate the air springs and check for leaks as noted above.

Once the system is leak proof 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 that there is proper clearance around the air springs. With a load on your vehicle and the air springs inflated, you must have at least 1/2" clearance around the air springs.

As a general rule, the air springs will support approximately 40 lbs. of load for each psi of inflation pressure (per pair). For example, 60 psi of inflation pressure will support a load of 2400 lbs. per pair of air springs.

Use only enough air pressure in the air 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.

WARNING:

- TO PREVENT POSSIBLE DAMAGE MAINTAIN A MINIMUM OF 5 psi IN THE AIR SPRINGS AT ALL TIMES.
- Too little air pressure will allow the air spring to bottom out. Too little air pressure will also not provide the improvement in handling that is possible.
- Too much air pressure in the air springs will result in a firmer ride also air springs should never be inflated beyond 100psi.

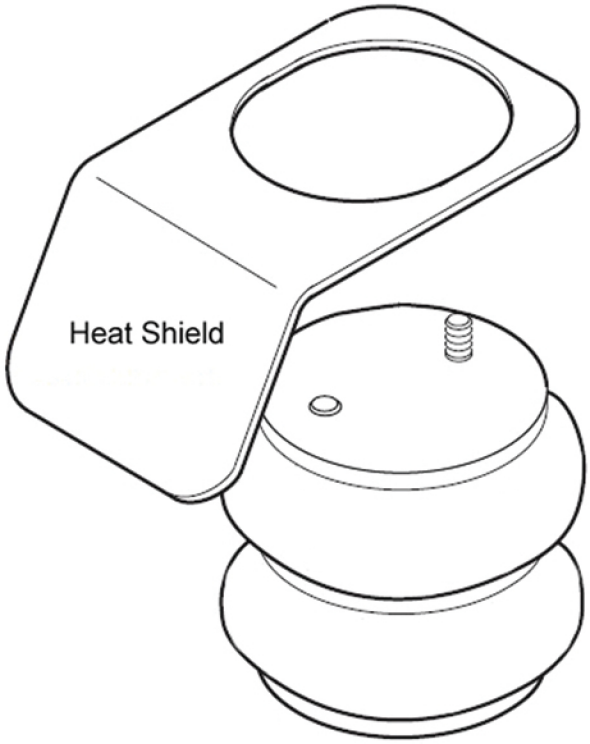


Figure 2

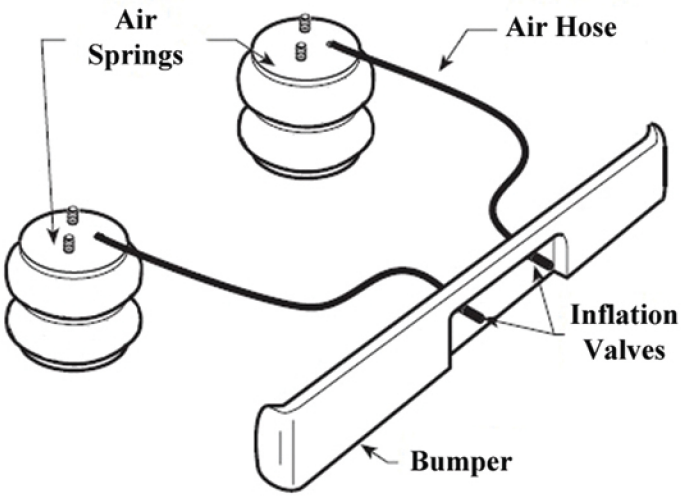


Figure 3

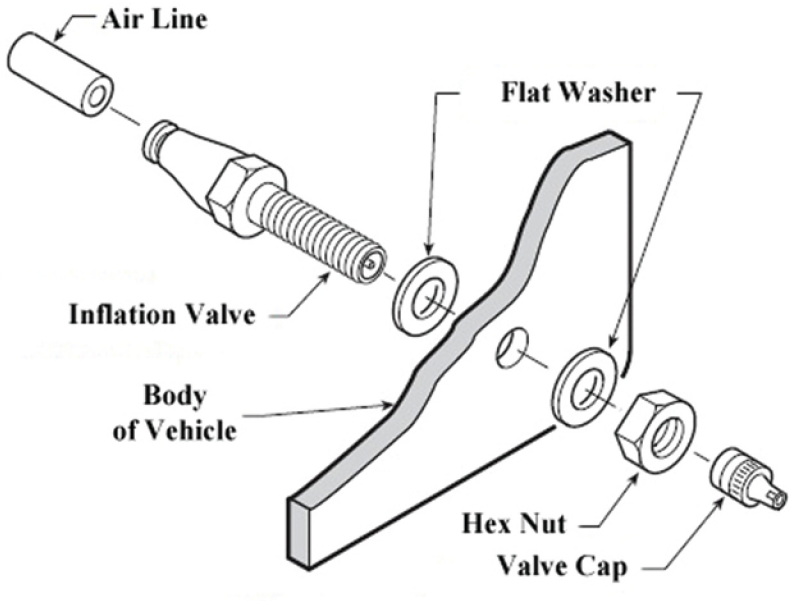


Figure 4