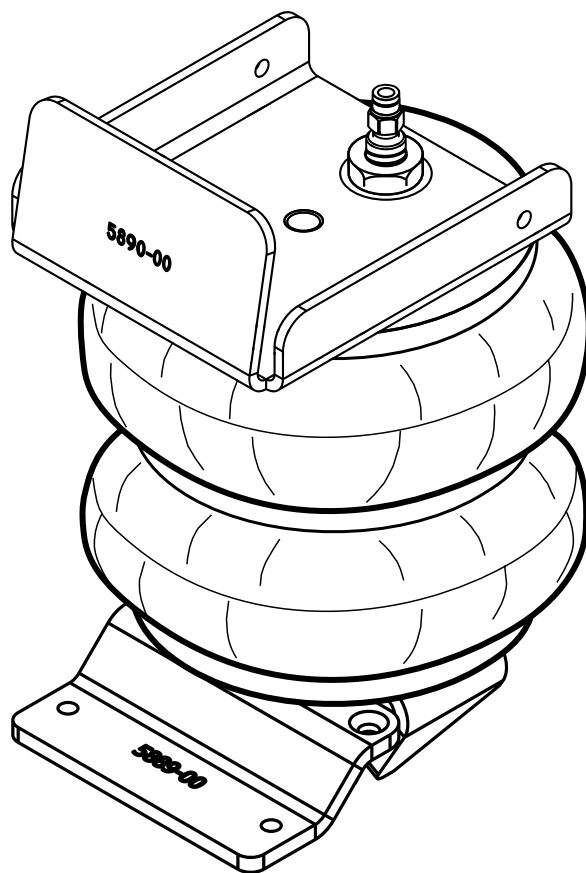




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INSTALLATION INSTRUCTIONS



Firestone

Firestone Industrial Products

! IMPORTANT

PLEASE DON'T HURT YOURSELF, YOUR KIT OR YOUR VEHICLE. TAKE A MINUTE TO READ THIS IMPORTANT INFORMATION.

*This kit is to be used on a **pickup truck only**, and **DOES NOT INCREASE YOUR VEHICLE'S MAXIMUM LOAD**.*

SAFE INSTALLATION

Please take all safety precautions during installation. A hydraulic jack can fail, and if that happens, you can be seriously hurt, or worse, if you are relying on it to hold up the vehicle. If you use a hydraulic jack, secure jack stands in the appropriate locations and chock any tires still touching the ground.

Wear safety glasses or goggles. Your eyes may be lower than some parts and pieces, and you don't want to lose an eye.

Remove the possibility of any electrical issues by disconnecting the negative battery cable.

KIT CLEARANCE

There must be a minimum of 1/2" clearance around all installed components when the air springs are inflated and under a load. The air springs must flex and expand during operation, so the clearance keeps the kit from rubbing against parts of the vehicle.

VEHICLE GVWR

NEVER exceed the maximum load recommended by the vehicle manufacturer (GVWR). The GVWR can be found in your vehicle's owner's manual or on the data plate on the driver's side door. Consult your local dealership for additional GVWR specifications.

INFLATING THE AIR SPRINGS

When inflating air springs, add air pressure in small quantities, checking air pressure frequently. The air springs have much less air volume than a tire, so they inflate much more quickly.

PRESSURE TO LOAD

The air 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 springs.

APPROPRIATE AIR PRESSURE

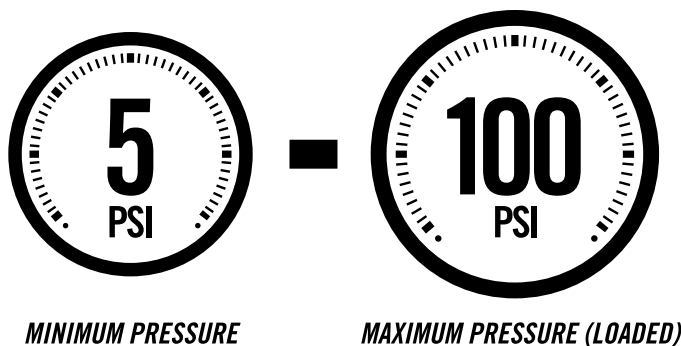
For best ride, use only enough air pressure in the air springs to level the vehicle when viewed from the side (front to rear). This will vary, depending on the load, location of the load, condition of the existing suspension, and personal preference.

OPTIONAL T-FITTING



This kit includes inflation valves and air line tube for each air spring, allowing you to compensate for unbalanced loads. If you prefer a single inflation valve system to provide equal pressure to both air springs, your dealer can supply the optional "T" fitting (Part # 3025 or WRI-760-3461 retail pack).


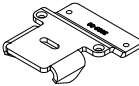

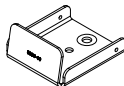

ONCE INSTALLED SUCCESSFULLY, FOLLOW THESE PRESSURE REQUIREMENTS FOR THE AIR SPRINGS:





PARTS

Compare the parts below to your kit. Ensure you have all pieces, and organize them for an easier installation.


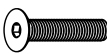


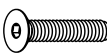
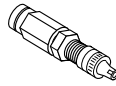




MAIN KIT CONTENTS

PT # 6397	 x 2 AIR SPRING	PT # 5889	 x 2 LOWER BRACKET	PT # 1004	 x 1 HEAT SHIELD
PT # 5890	 x 2 UPPER BRACKET			PT # 9414	 x 1 AIR LINE TUBE (18 FEET)

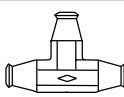
A24-760-7560 INFLATION VALVE BRACKET KIT

PT # 9483	 x 1 NO-DRILL INFLATION VALVE BRACKET	PT # 9488	 x 2 LARGE NYLON TIE
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A21-760-2609 HARDWARE PACK

PT # 3033	 x 4 5/16" FLAT WASHER	PT # 3358	 x 2 M10 x 1.5" x 50mm FLAT HEAD SCREW	PT # 3510	 x 12 1/4" - 20 FLANGE NUT
PT # 3069	 x 2 3/8" - 16 x .75" FLANGE BOLT	PT # 3508	 x 4 1/4" - 20 x 1 1/2" FLAT HEAD SCREW	PT # 3032	 x 2 INFLATION VALVE AND VALVE CAP ASSEMBLY
PT # 3332	 x 2 5/8" - 18 NYLON JAM NUT	PT # 3509	 x 4 1/4" - 20 x 3/4" HEX HEAD SCREW	PT # 3055	 x 2 1/8" NPT MALE CONNECTOR
				PT # 9036	 x 6 RED NYLON TIE

OPTIONAL ITEMS

PT # 3025	 x 1 T-FITTING
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Visit riderite.com to find the perfect air accessories.

CONTENTS AND OVERVIEW

PAGE **4** REMOVE JOUNCE BUMPER & INSTALL UPPER BRACKET

PAGE **5** PREP LOWER BRACKET ASSEMBLY & AIR SPRING

PAGE **6** INSTALL AIR SPRING TO LOWER BRACKET ASSEMBLY

PAGE **7** SEAT TOP OF AIR SPRING INTO UPPER BRACKET

PAGE **8** SECURE AIR SPRING TO UPPER BRACKET

PAGE **9** FINISH FASTENING THE AIR SPRING ASSEMBLY

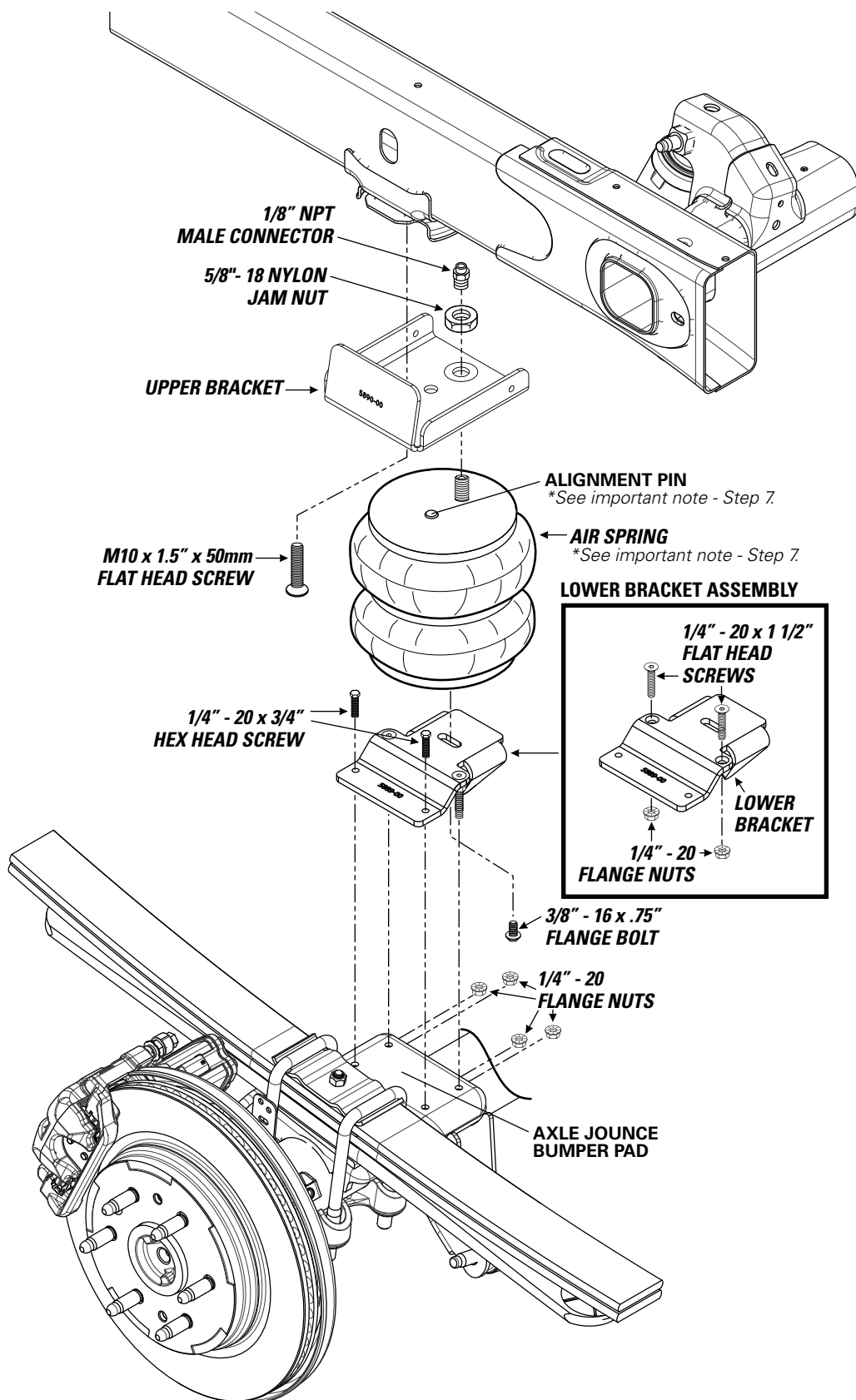
PAGE **10** AIR LINE TUBE & INFLATION VALVE INSTALLATION

PAGE **11** INSTALL & ROUTE AIR LINE TUBE

PAGE **12** CHECKING THE SYSTEM

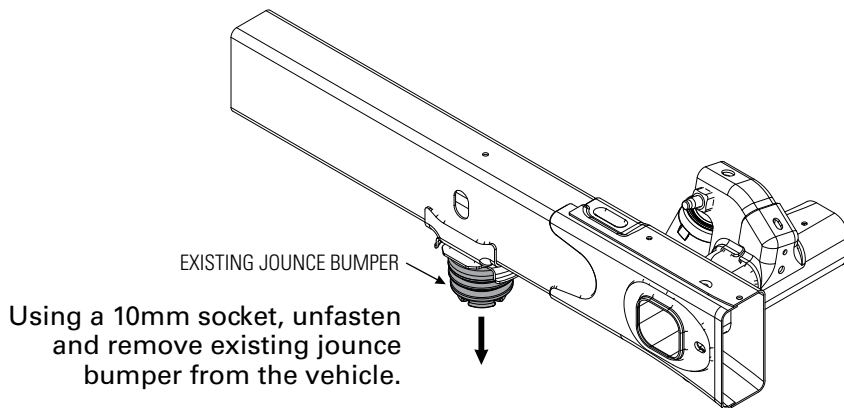
PAGE **13** FIXING AN AIR LEAK

PAGE **14** FINISHING THE INSTALLATION



REMOVE EXISTING JOUNCE BUMPER

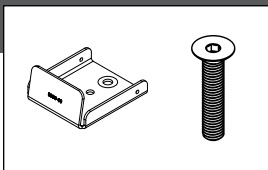
1



START THE INSTALLATION ON THE RIGHT SIDE OF THE VEHICLE WHEN FACING FORWARD.

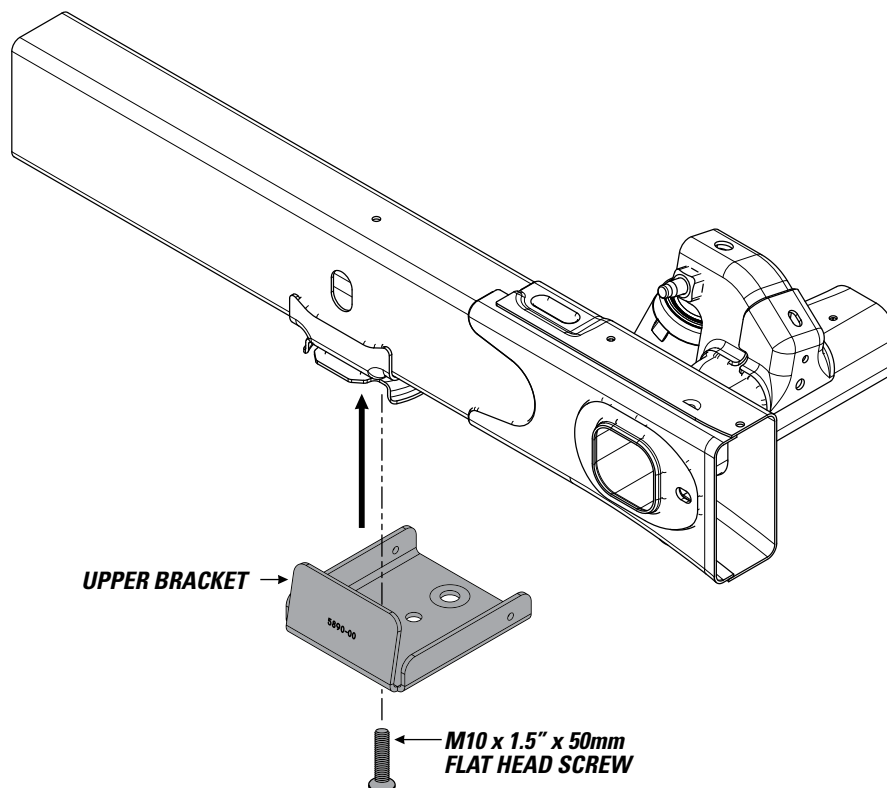
INSTALL UPPER BRACKET

2



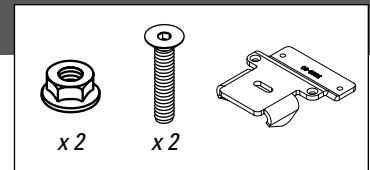
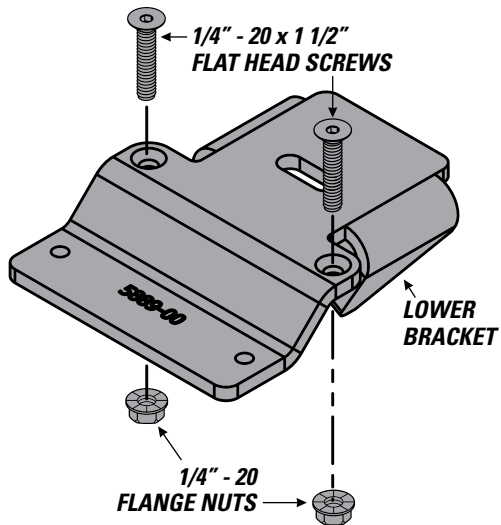
1 Place upper bracket against frame where jounce bumper was installed, assuring that the tab is on the outside of the frame.

2 Attach the upper bracket, as shown. Thread the flat head screw into the original jounce bumper bolt threaded hole and tighten to factory torque specifications.



3

PREP LOWER BRACKET ASSEMBLY

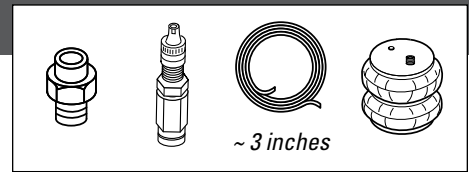


- 1 Prep the lower bracket by installing the flat head screws and flange nuts, as shown.

4

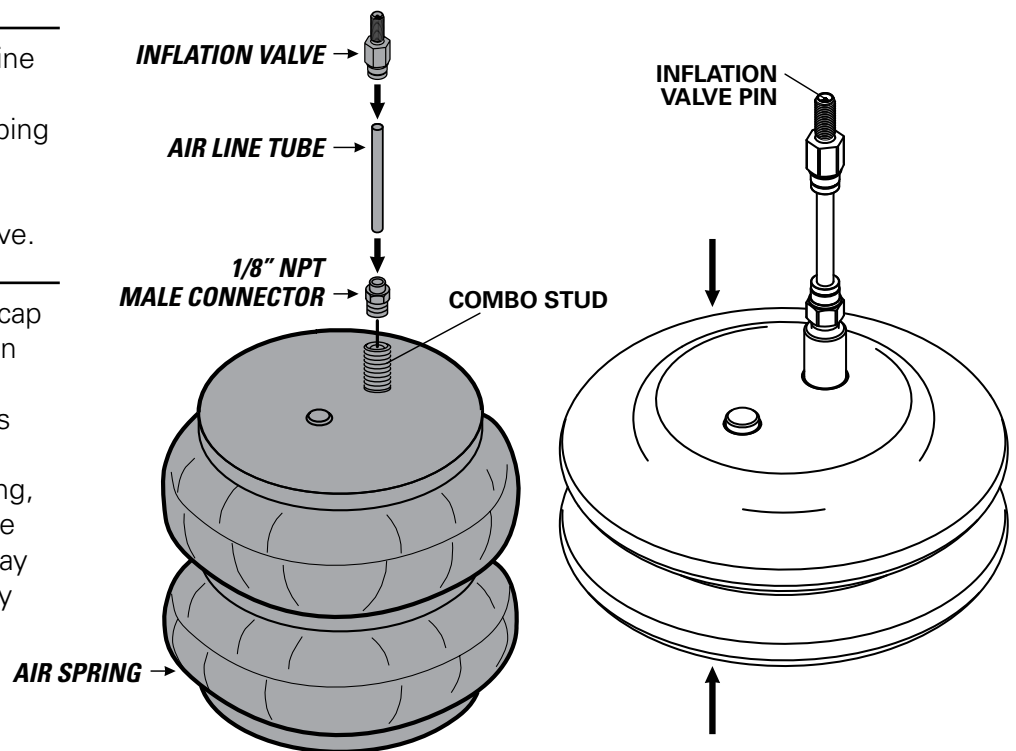
PREP AIR SPRING

- 1 Thread the 1/8" male connector into the combo stud on the air spring.



- 2 Cut a short piece of air line tube (approx. 3 inches). Insert one end of the tubing into the 1/8" NPT male connector and the other end into the inflation valve.

- 3 Using the inflation valve cap tool, depress the inflation valve pin and compress the air spring as much as possible. While holding the compressed air spring, release the inflation valve pin. The air spring will stay compressed and is ready for installation.

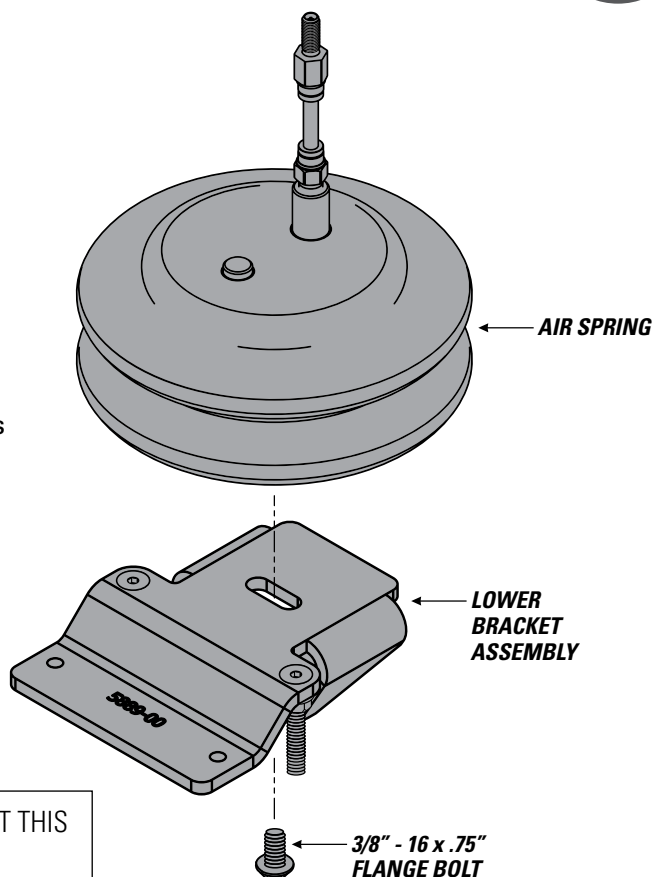




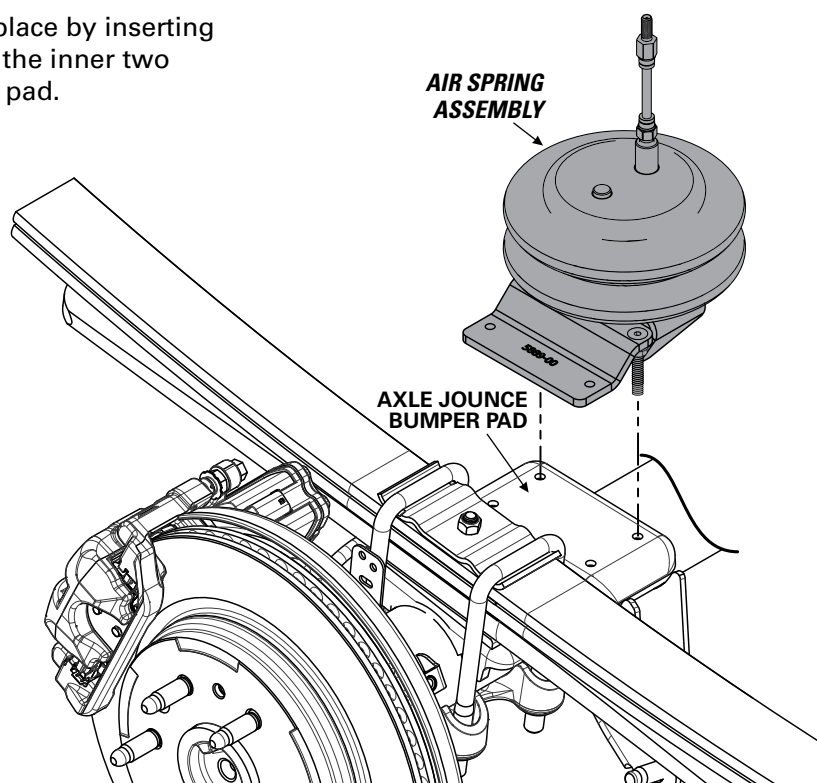
- 1 Attach the air spring to the lower bracket, as shown. **DO NOT FULLY TIGHTEN THE BOLT.**



DO NOT FULLY TIGHTEN THE BOLT AT THIS STAGE. TORQUE TO SPEC IN STEP 8.



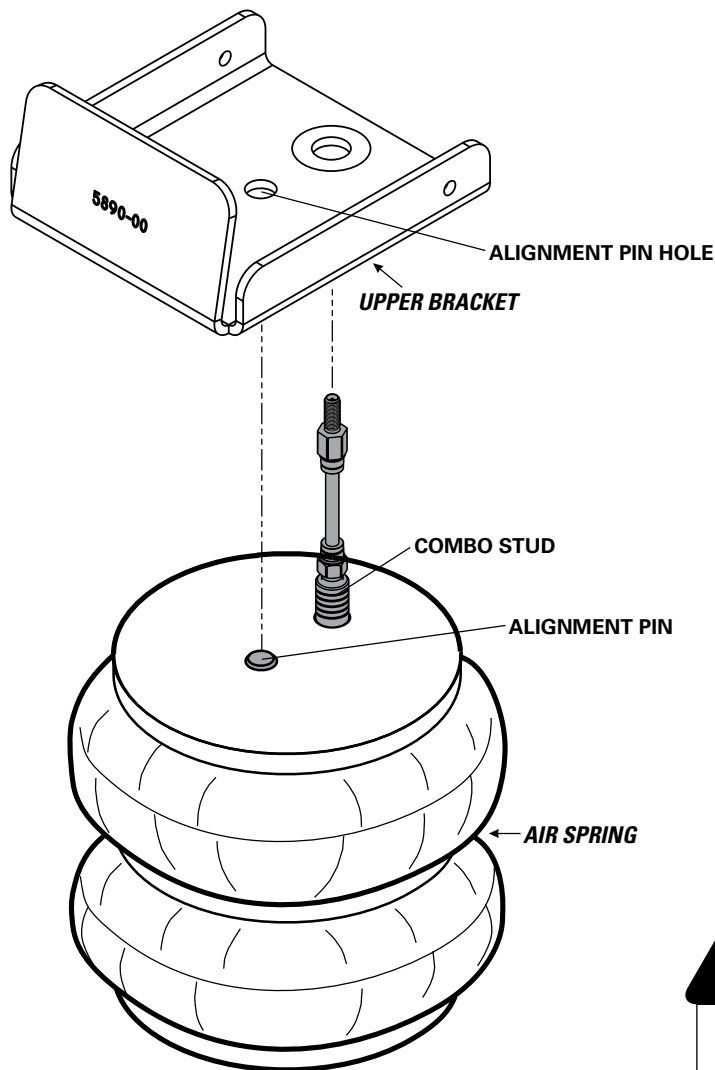
- 2 Set the air spring assembly into place by inserting the two pre-installed screws into the inner two holes on the axle jounce bumper pad.



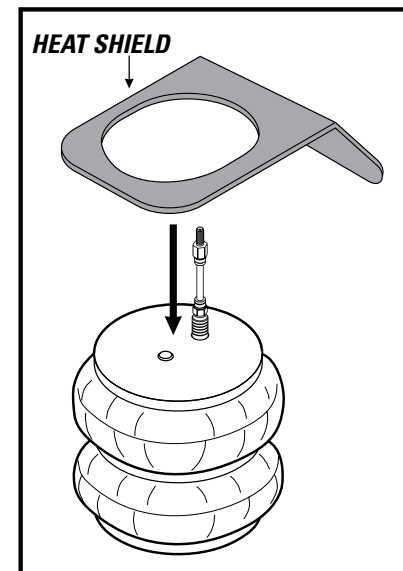


Right side only

- 1** If installing the right side, install the heat shield, as shown. Position the heat shield so it is between the air spring and the nearest heat source.
- 2** Guide the inflation valve and air line tube through the large hole in the upper bracket.
- 3** While depressing the inflation valve pin to allow air into the air spring, rotate the air spring, if necessary, until the combo stud is fitted through the large hole in the upper bracket.



RIGHT SIDE ONLY - INSTALL HEAD SHIELD



USE YOUR HAND TO CHECK FOR THE PROPER CLEARANCE AROUND THE AIR SPRING. IF YOUR HAND DOES NOT FIT BETWEEN THE AIR SPRING AND OTHER COMPONENTS, IT WILL RUB!

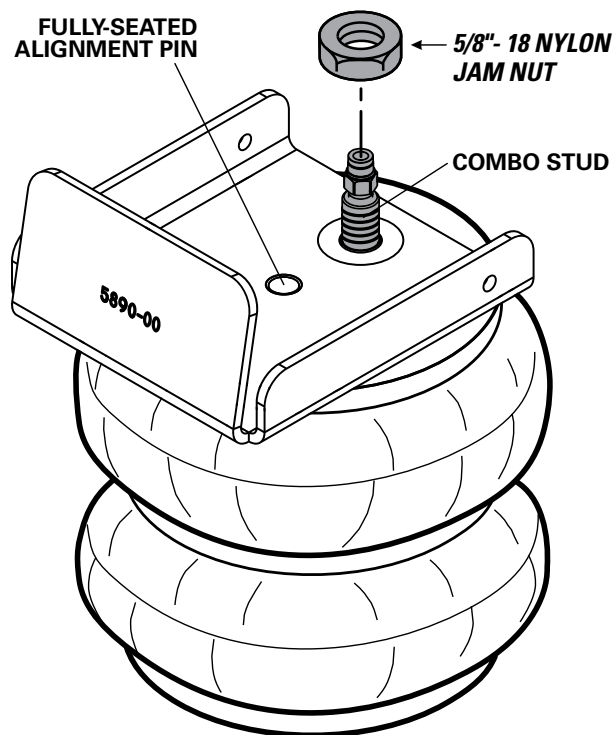
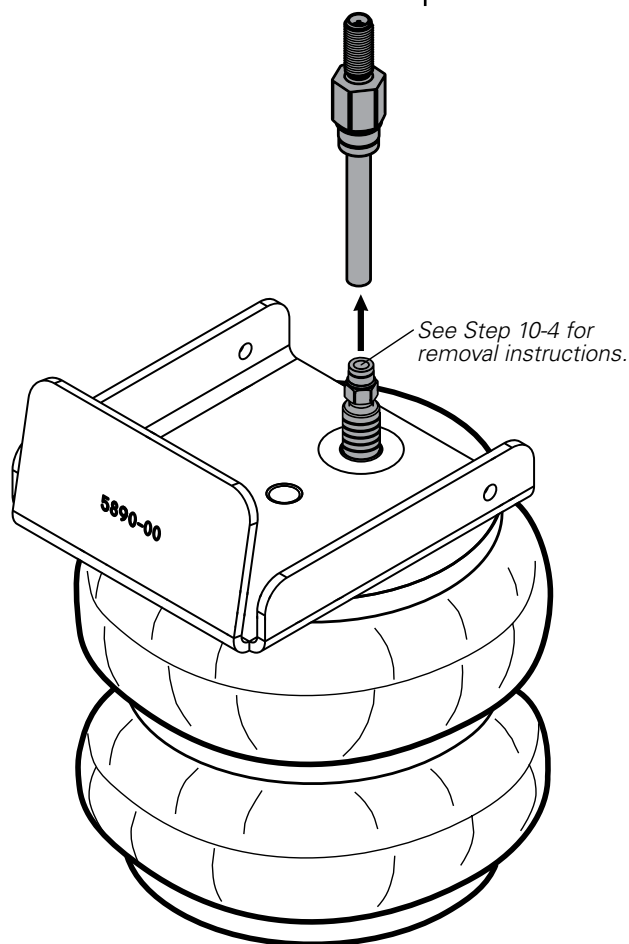




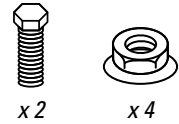
1 Make sure that the alignment pin on top of the air spring has fully seated into the alignment pin hole in the upper bracket.

2 Remove the air line tube from the air fitting on top of the air spring (see Step 10-4 for removal instructions).

3 Fully tighten the nut to the combo stud.



ALIGNMENT PIN ON AIR SPRINGS MUST BE INSTALLED TO FULLY SEAT INTO ONE OF THE ALIGNMENT HOLES IN THE UPPER BRACKET. FAILURE TO DO SO WILL CAUSE IT TO BE PUSHED INTO THE BEAD PLATE, CREATING AN AIR LEAK, AND RESULTING IN AN AIR SPRING FAILURE THAT IS **NOT WARRANTABLE. THE ALIGNMENT PIN CANNOT HOLD 2,500 LBS! IT IS USED FOR ALIGNMENT ONLY!**



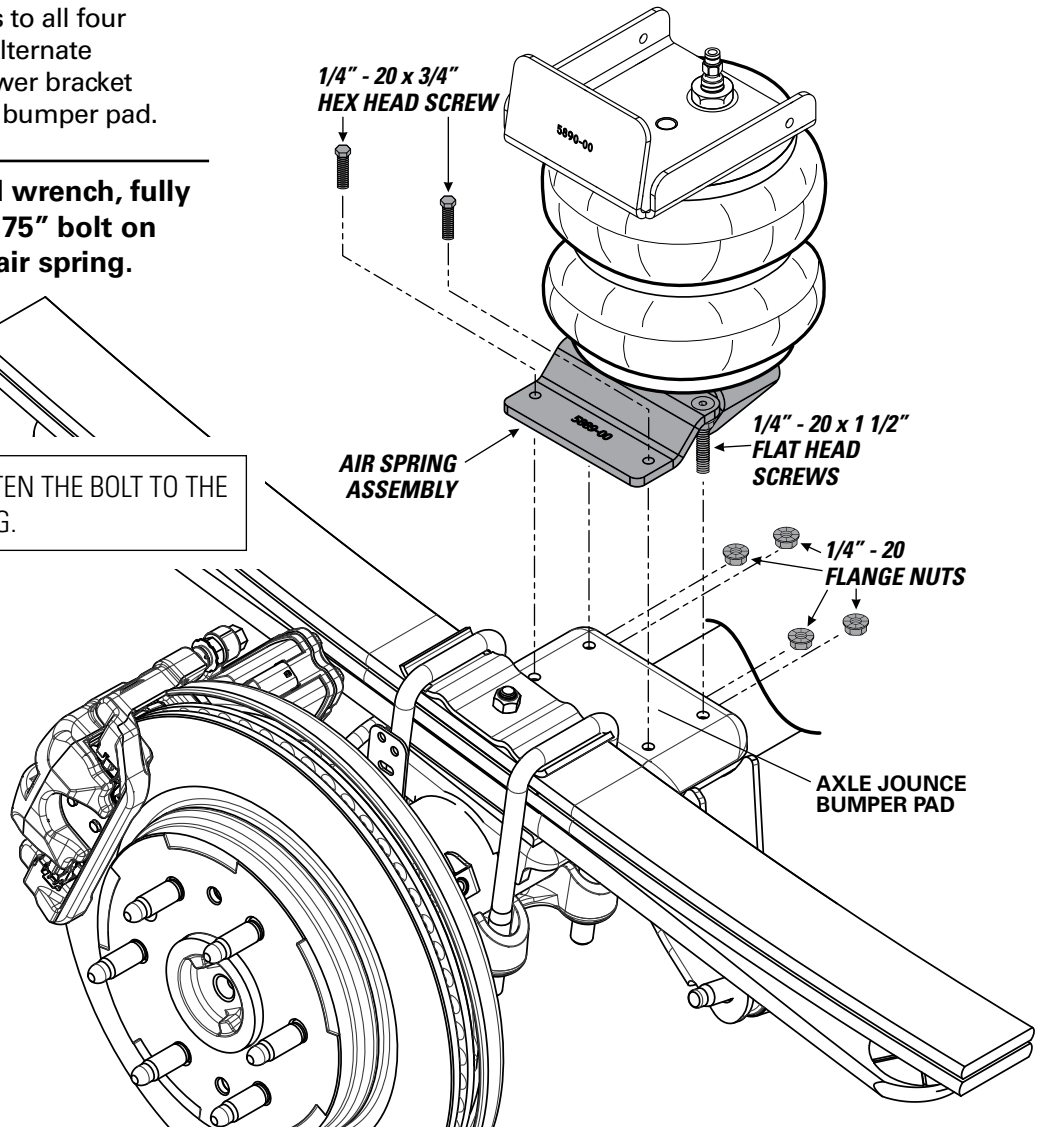
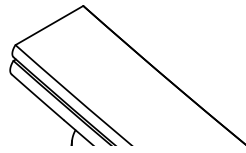
1 Install the hex head screws into the two remaining outside holes in the axle jounce bumper pad, as shown.

2 Attach the flange nuts to all four screws and tighten. Alternate tightening to draw lower bracket evenly to axle jounce bumper pad.

3 Using an open-end wrench, fully tighten 3/8" - 16 x .75" bolt on the bottom of the air spring.



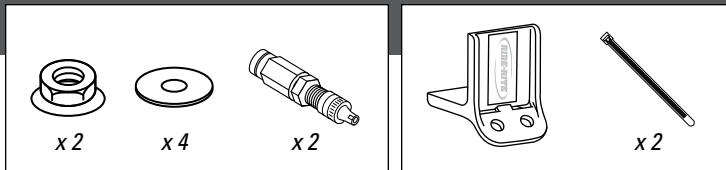
REMEMBER TO FULLY TIGHTEN THE BOLT TO THE BOTTOM OF THE AIR SPRING.



The factory rear brake line guard may be repositioned to gain better access to lower bracket fasteners. To perform this step, remove the three button-head fasteners using a T40 Torx bit. Gently release the plastic retainers on the guard from the brake line and carefully reposition it as needed for access to the bracket fasteners. Once the bracket fasteners are tightened (in this step), reposition the brake line guard, reinstall the Torx fasteners, and tighten them to the factory recommended torque specification.

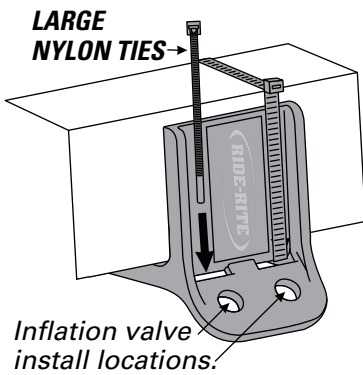


AWESOME! You're done with the right side. Repeat Steps 1-8 for the left side, then continue to Step 9.



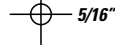
IF USING THE OPTIONAL NO-DRILL INFLATION VALVE BRACKET, CHOOSE OPTION 1. IF DRILLING, CHOOSE OPTION 2. **INFLATION VALVES MUST BE ACCESSIBLE BY AN AIR CHUCK.**

1 Secure the air Inflation valve bracket to a protected, secure location. **PROCEED TO STEP 3.**

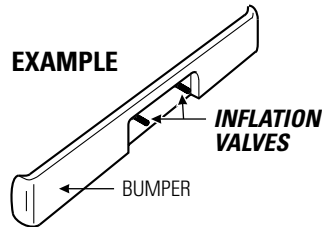


2 Select a protected location to install the inflation valves, such as the bumper or the body of the vehicle.

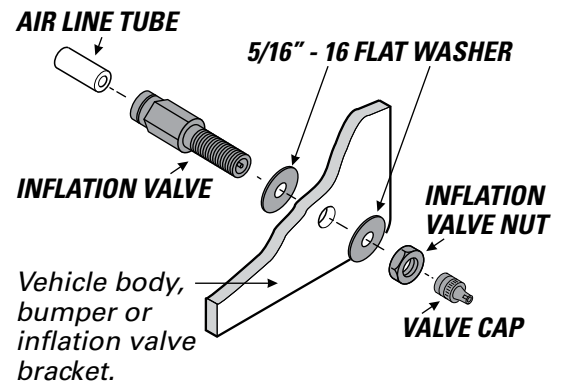
Drill two 5/16" holes for inflation valve install locations.



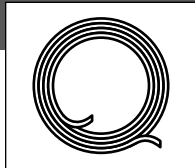
EXAMPLE



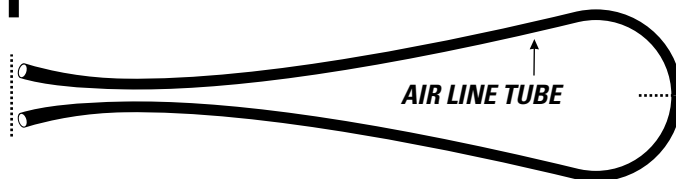
3 Install inflation valve assembly as shown.



CUT THE AIR LINE TUBE INTO TWO EQUAL LENGTHS



1 Match air line tube ends.



2 Find center of air line tube, make a square cut with tube cutter or sharp utility knife.

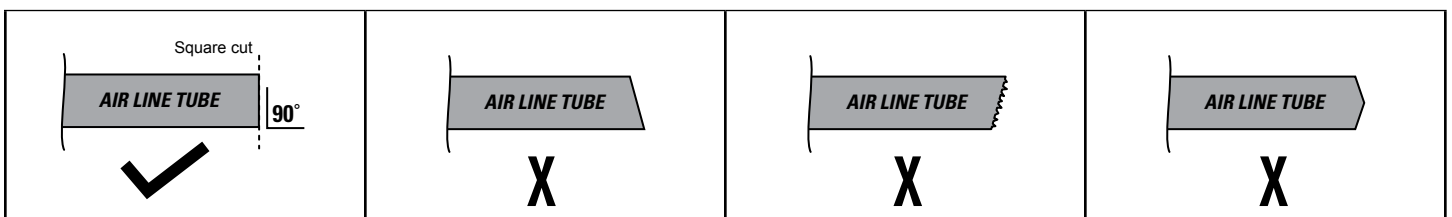
DO

Make sure the cut is as square as possible. Use a tube cutter or sharp utility knife.

DON'T

Fold or kink the air line tube. Cut the air line tube at an angle. Use pliers, scissors, snips, saws, or side cutters.

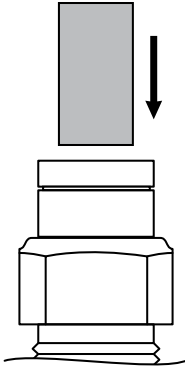
PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE



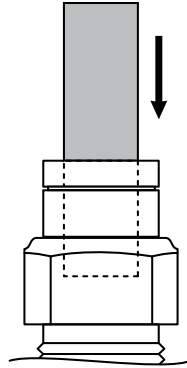
11

INSTALLING AIR LINE TUBE INTO AIR FITTINGS AND INFLATION VALVE

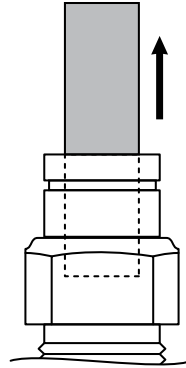
1 Insert end of air line tube into air fitting.



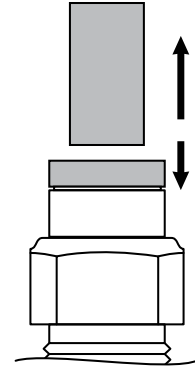
2 Push air line tube into air fitting as far as possible.



3 Gently pull on the air line tube to check for a secure fit.



4 To remove, push down collar and gently pull air line tube away.

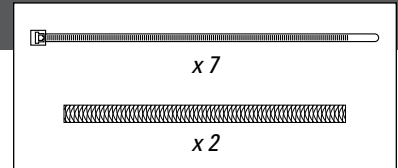


Removal Tip: Use a 1/4", 5/16", or 6mm open-ended wrench to push the collar down.

12

ROUTE AND SECURE AIR LINE TUBES

Air line tube routes will vary, depending on your truck, and requires you to choose the best path from the air springs to the inflation valves. Use the instructions below to help you choose.



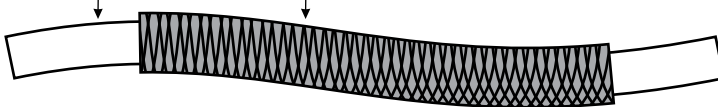
DO

Select routes protected from heat, debris, and sharp edges. Use thermal shields near heat sources. Use Nylon ties to secure the air line tube.

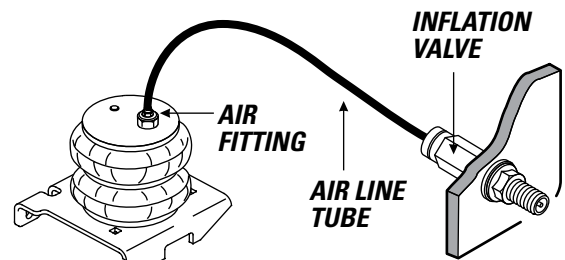
DON'T

Bend or sharply curve air line tubes. Leave air line tube exposed to sharp edges. Use unnecessary lengths of air line tube. Route air line tube near moving parts. Let air line tube hang unsecured from vehicle. Scar air line tube while routing.

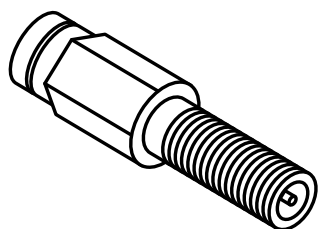
AIR LINE TUBE **THERMAL SHIELD**



USE SUPPLIED THERMAL SHIELDS WHEN AIR LINE TUBE RUNS **WITHIN 6 INCHES** OF HEAT SOURCES.



- 1** Place an air chuck onto the inflation valve and fill the system to **70 PSI**.

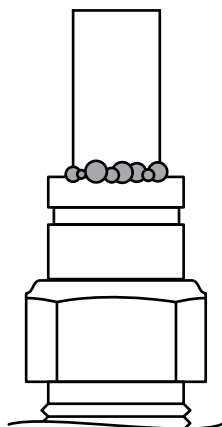


AIR SPRINGS INFLATE QUICKLY. CHECK AIR PRESSURE WHILE INFLATING.

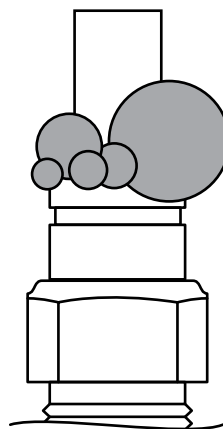
- 2** Spray fittings with soap and water mixture.



- 3** Observe bubbles.



**SMALL SOAP BUBBLES
THAT DO NOT EXPAND**



**SOAP BUBBLES
THAT EXPAND**



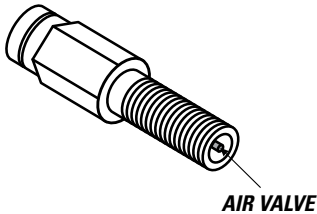
NO LEAKS?

Congratulations! Continue to Step 15 to finish installation. Review the Operating Instructions.

LEAK?

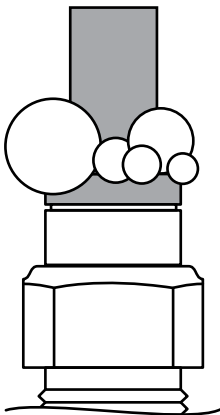
Bummer. Continue to Step 14 to fix the leak.

- 1** Press the air valve on end of inflation valve to release all air pressure.



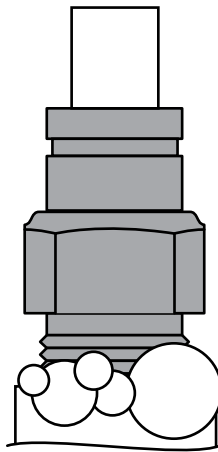
EXHAUST ALL AIR FROM THE SYSTEM PRIOR TO RELEASING AIR LINE TUBES FROM AIR FITTINGS.

LEAK AT AIR LINE TUBE AND AIR FITTING



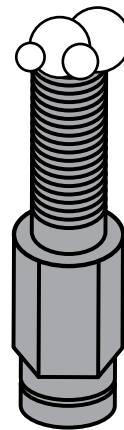
Release air line tube (see page 12). Review proper cuts and procedures in Step 10. Repeat Steps 11 and 13.

LEAK AT BASE OF AIR FITTING ON AIR SPRING



Tighten air fitting one turn or until leak stops.

LEAK OUT OF THE VALVE CORE ON INFLATION VALVE



Tighten valve core with valve core wrench on inflation valve cap.

STILL HAVE A LEAK?

Refer to the Troubleshooting section of the Instruction Manual. If the leak persists, or if there is an issue with a leaking part, call 1-800-888-0650; Option 1; Option 1 for Tech Support.

SAFELY RETURN VEHICLE TO OPERATIVE STATE

If you removed any wheels during installation, install the wheels and torque the lug nuts to the manufacturer's specifications.

Safely remove any jack stands and wheel chocks used during installation.

Re-attach the negative battery cable.

DOUBLE-CHECK AIR SPRING CLEARANCE

Check the air springs once again for the proper 1/2" minimum clearance. Perform clearance check again when vehicle is under load.

VEHICLE GVWR

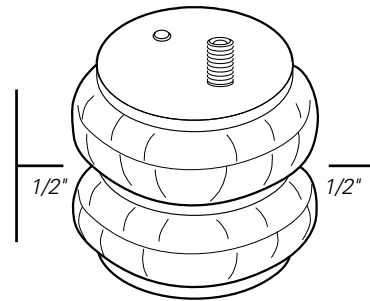
NEVER exceed the maximum load recommended by the vehicle manufacturer (GVWR). The GVWR can be found in your vehicle's owner's manual or on the data plate on the driver's side door. Consult your local dealership for additional GVWR specifications.

READ AND UNDERSTAND THE OPERATING INSTRUCTIONS

The Ride-Rite system can improve handling and comfort. Take the time to learn how to properly use and maintain your investment by reading the Operating Instructions.



USE YOUR HAND TO CHECK FOR THE PROPER CLEARANCE AROUND THE AIR SPRING. IF YOUR HAND DOES NOT FIT BETWEEN THE AIR SPRING AND OTHER COMPONENTS, IT WILL RUB!



! IMPORTANT

A MINIMUM OF 5 PSI MUST BE MAINTAINED IN THE AIR SPRINGS AT ALL TIMES

Too much air pressure in the air springs will result in a firmer ride, while too little air pressure will allow the air springs to bottom out over rough conditions, and will not provide the improvement in handling that is possible.



MINIMUM PRESSURE

-



MAXIMUM PRESSURE (LOADED)

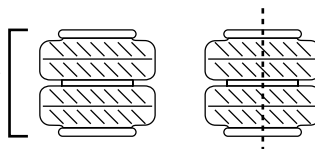


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BEFORE YOU DRIVE, CONFIRM THE FOLLOWING:

- ☐ Do you have a minimum of 5PSI in your air springs?
- ☐ Are your air springs standing 5 1/2" - 6 1/2" tall?
- ☐ Are your air springs properly aligned, left-to-right and front-to-back?
- ☐ Are your nuts and bolts tight?
- ☐ Put your paper work back into the sleeve and keep it in your glove compartment for future reference.
- ☐ You've been bagged...and now your suspension is Airide equipped! Show it off with the supplied decal!

5 1/2" - 6 1/2"



NEED INSTALLATION HELP? 1-800-888-0650

Select Option 1 for Ride-Rite; Select Option 1 for Technical Support.

Or, email us at rtech@fsip.com. Please include photos to help us better diagnose and understand any problems you may be experiencing.

Firestone

Firestone Industrial Products

CONNECT WITH US



FirestoneIP



Firestone Ride-Rite