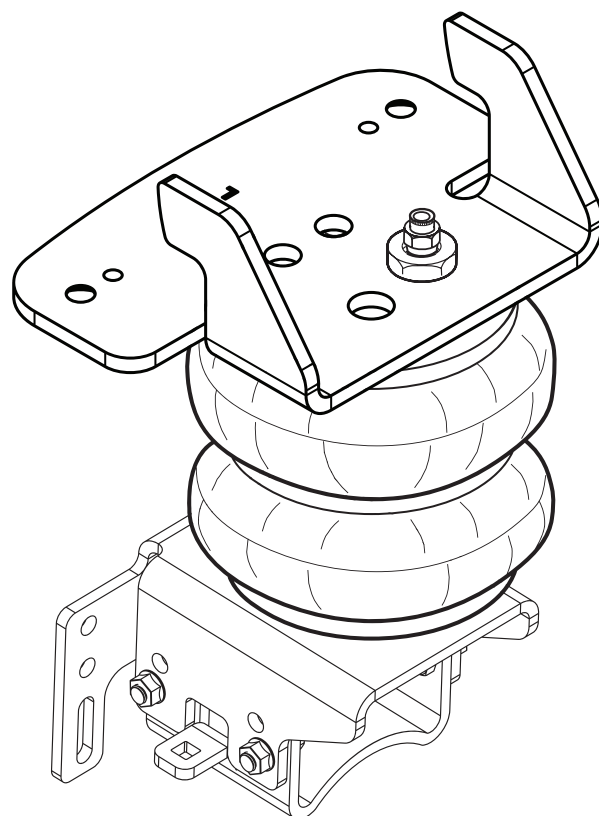




riderite.com

INSTALLATION INSTRUCTIONS



Firestone

Firestone Industrial Products

CONTENTS AND OVERVIEW

PAGE **4** REMOVE JOUNCE BUMPER & INSTALL FRAME NUTS

PAGE **5** INSTALL UPPER BRACKET

PAGE **6** FASTEN AIR SPRING TO UPPER BRACKET

PAGE **7** INSTALL LOWER BRACKET ASSEMBLY

PAGE **8** SECURE LOWER BRACKET ASSEMBLY

PAGE **9** HEAT SHIELD & PASSENGER SIDE

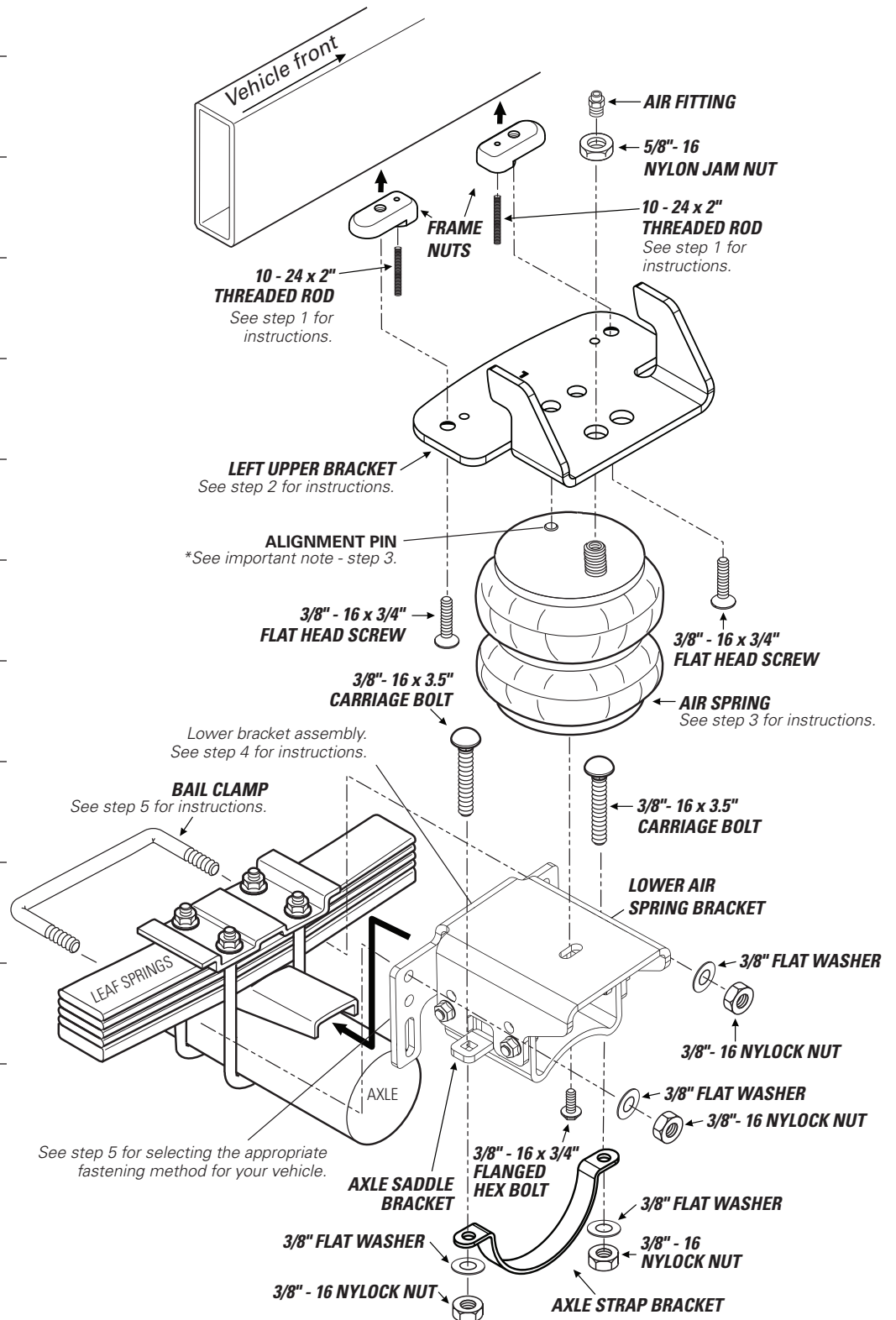
PAGE **10** AIR LINE TUBE & INFLATION VALVE INSTALLATION

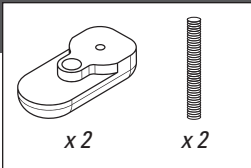
PAGE **11** INSTALL & ROUTE AIR LINE TUBE

PAGE **12** CHECKING THE SYSTEM

PAGE **13** FIXING AN AIR LEAK

PAGE **14** FINISHING THE INSTALLATION



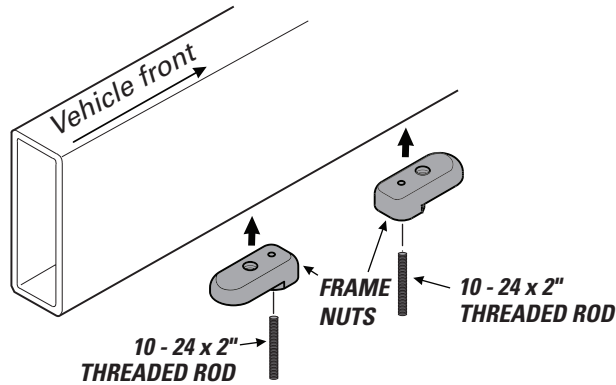


START THE INSTALLATION ON THE LEFT SIDE OF THE VEHICLE WHEN FACING FORWARD.

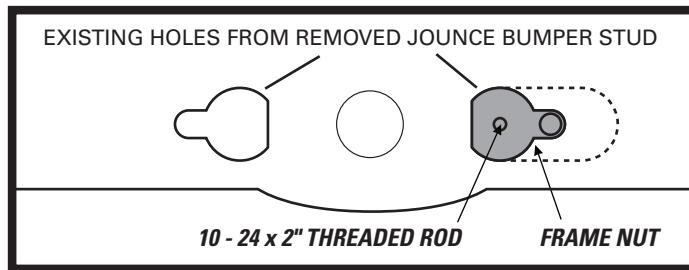
1 Remove the jounce bumper and the two studs holding it on. The two studs can be pried out with a flat head screw driver.

2 Thread the 10 - 24 x 2" threaded rods onto the frame nuts. These act as a grip to assist in installation.

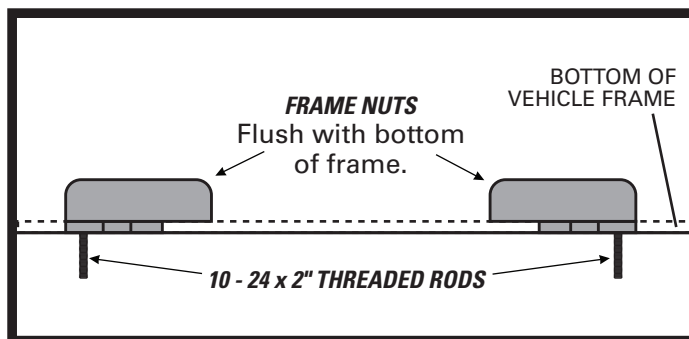
3 Insert the frame nuts into the hole in the frame where you removed the jounce bumper studs, seating the frame nuts so they are flush with the vehicle frame.



VIEW FROM BELOW

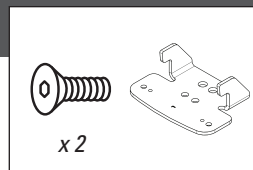


VIEW FROM SIDE



2

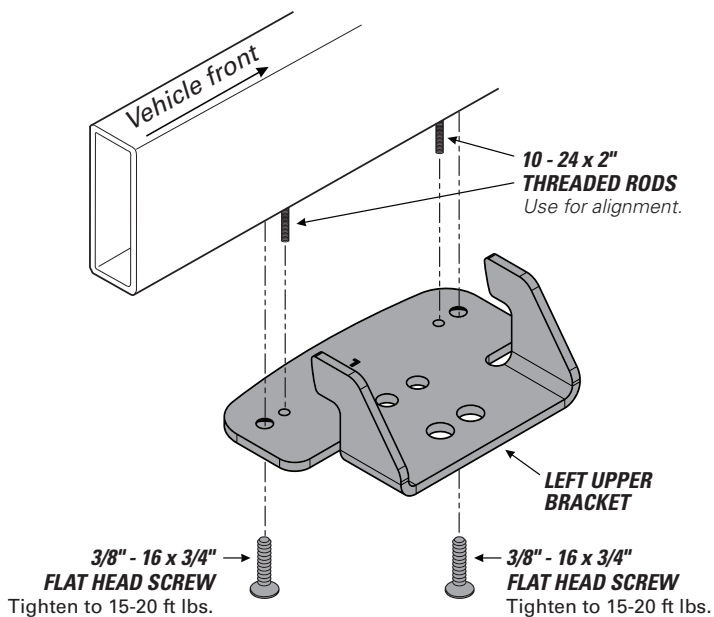
INSTALL UPPER BRACKET



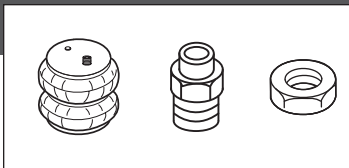
1 Using the threaded rods as guides, slide the upper bracket into place, secure against the bottom of the vehicle frame.

2 Fasten upper bracket to the frame using the flat head screws, as shown.

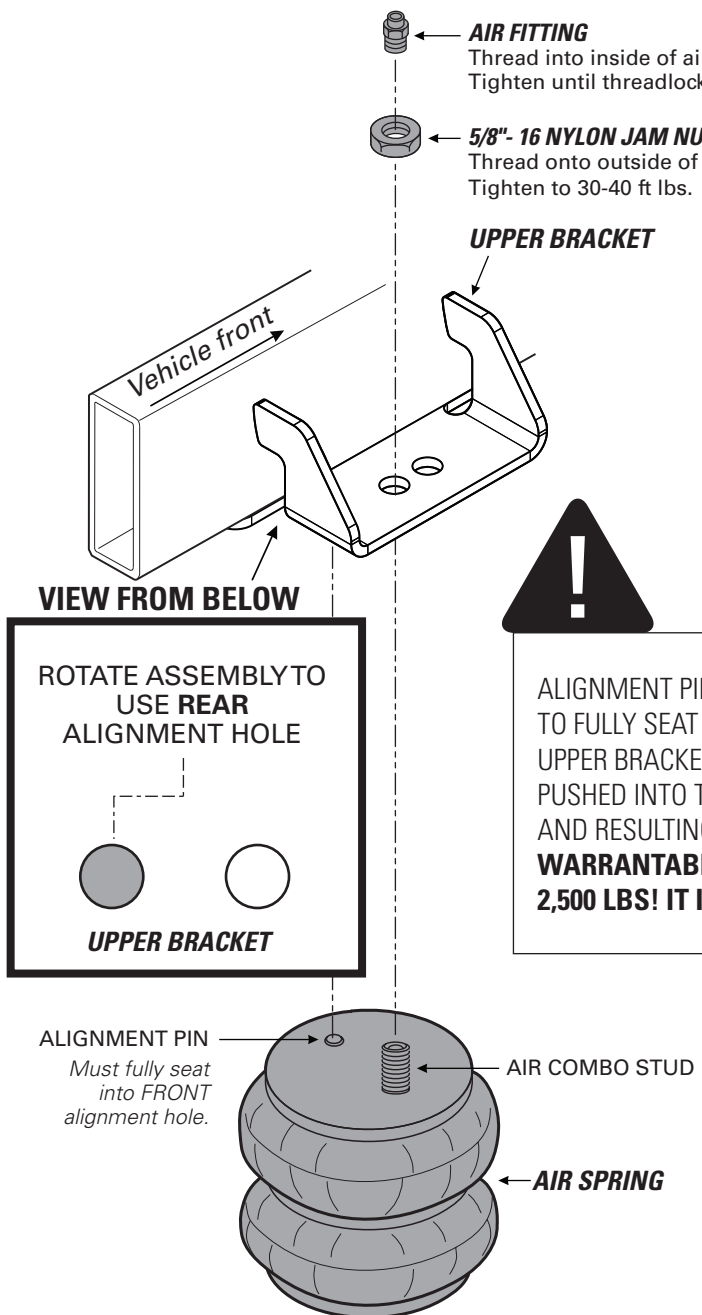
3 Remove the threaded rods and save them for installation on the other side of the vehicle.



REMOVE THREADED RODS AFTER SECURING THE UPPER BRACKET. FAILURE TO DO SO COULD CAUSE THEM TO PUNCTURE THE AIR SPRING, RESULTING IN AN AIR SPRING FAILURE THAT IS **NOT WARRANTABLE.**



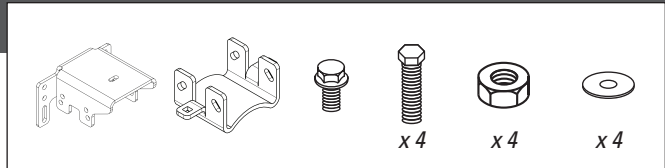
INSTALLING THE RIGHT SIDE? REMEMBER TO INSTALL THE HEAT SHIELD IN STEP 7 FIRST!



ALIGNMENT PIN ON AIR SPRINGS MUST BE INSTALLED TO FULLY SEAT INTO THE FRONT ALIGNMENT HOLE 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!**

4

INSTALL LOWER BRACKET ASSEMBLY

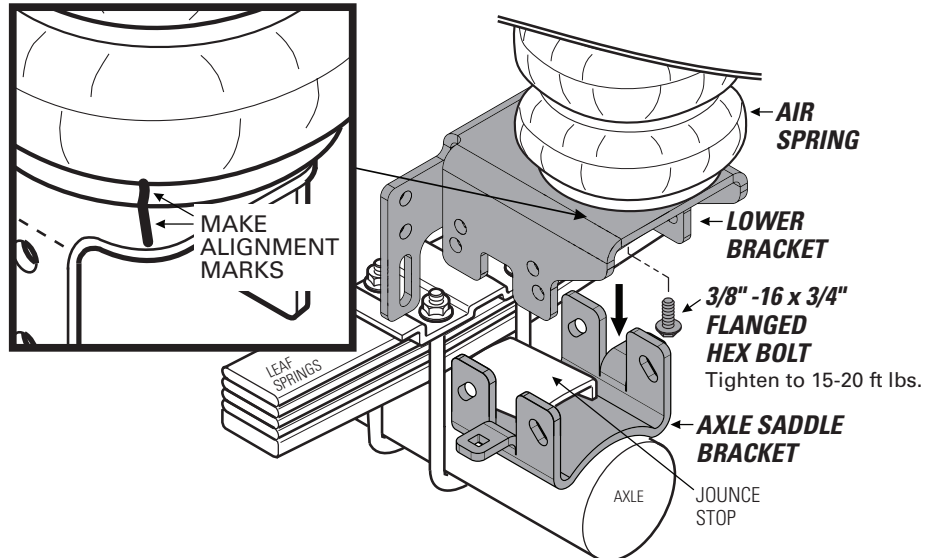


1 Follow steps below to dry fit assembly. Make alignment marks as shown.

2 Place bottom of axle saddle bracket on the axle of the vehicle.

3 Place the upper bracket above the axle saddle bracket as shown. Assure both are tight against the leaf spring stack.

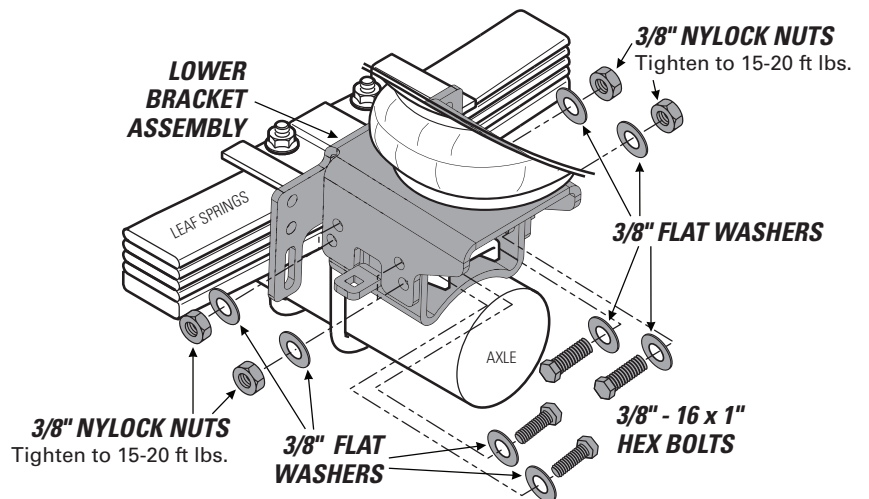
4 Match the alignment marks and secure the air spring to the upper bracket, as shown.



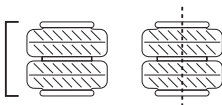
5 Position the lower bracket as low as possible, while still clearing the jounce stop on the vehicle. See figure below for design height.

6 Making sure the lower bracket is parallel to the ground, insert the bolts from the inside of the lower bracket assembly.

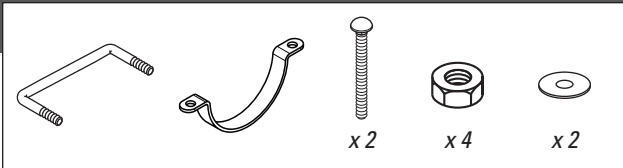
7 Use supplied fasteners to secure the lower bracket to the axle saddle bracket for form the lower bracket assembly.



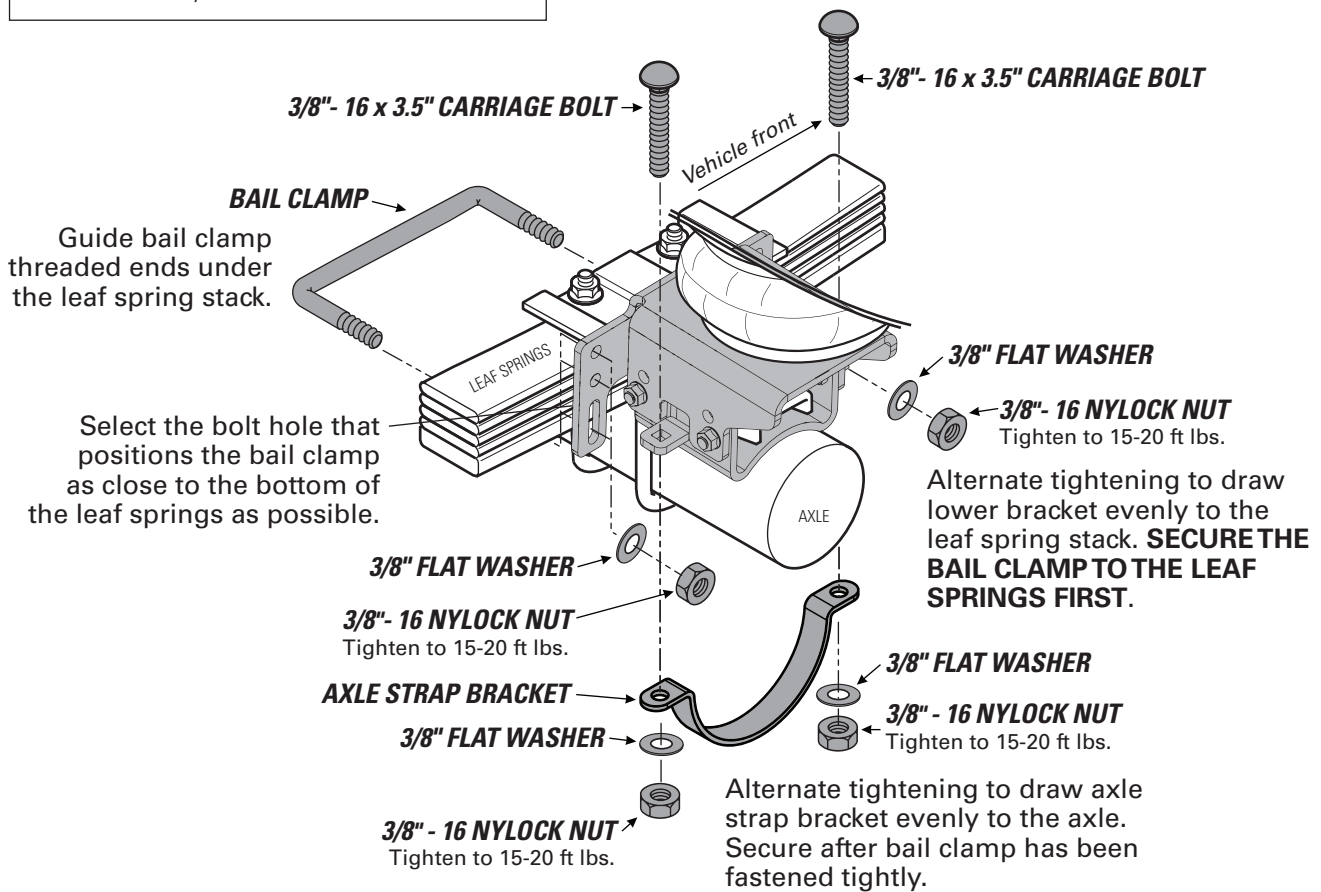
5 1/2" - 6 1/2"



AIR SPRING DESIGN HEIGHT



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!



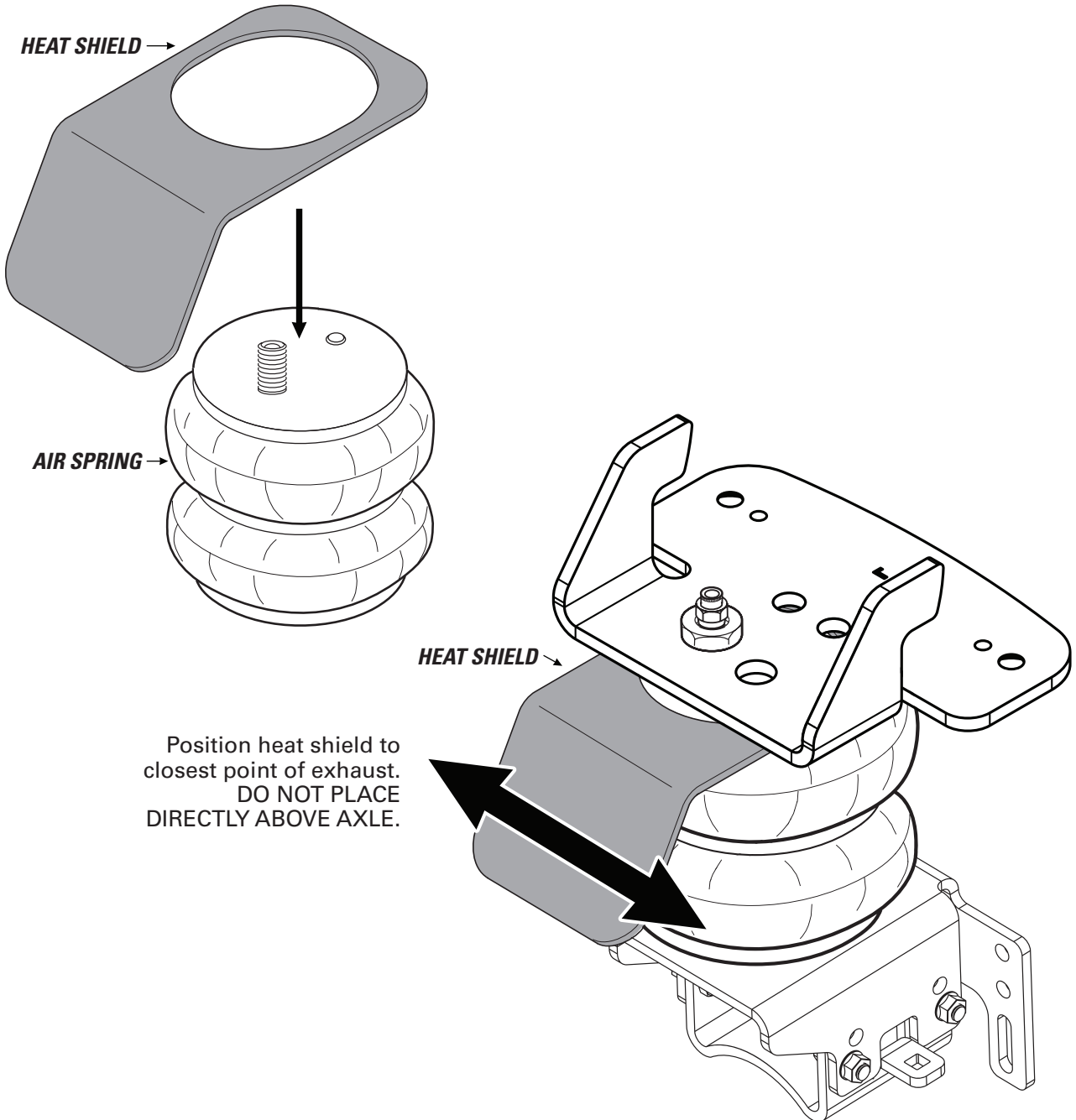
AWESOME! You're done with the left side. The right side is the same, with the addition of the heat shield. See step 7, then complete the steps for the right side installation.

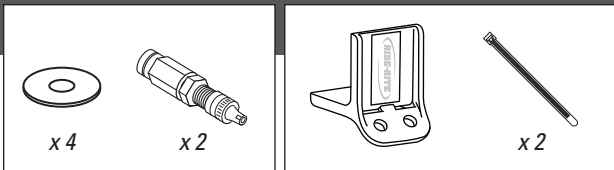
6

INSTALL RIGHT SIDE WITH HEAT SHIELD



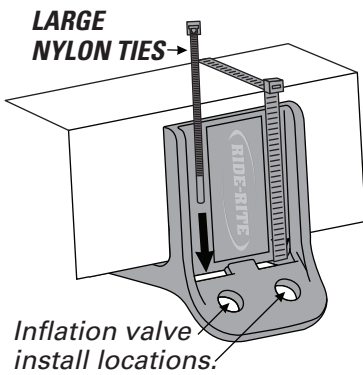
RIGHT SIDE INSTALLATION MUST INCLUDE HEAT SHIELD!





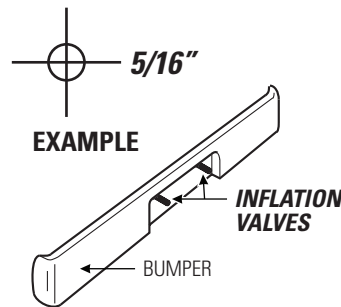
IF USING THE OPTIONAL NO-DRILL INFLATION VALVE BRACKET, CHOOSE OPTION 1. IF DRILLING, CHOOSE OPTION 2. **INFLATION VALVES MUST BE ACCESSIBLE BY AN AIR CHUCK.**

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

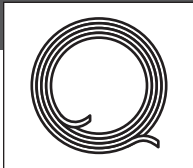
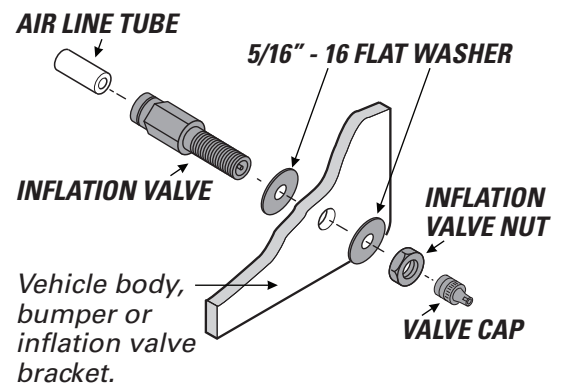


2 Select a protected location to install the inflation valves, such as the bumper or the body of the vehicle.

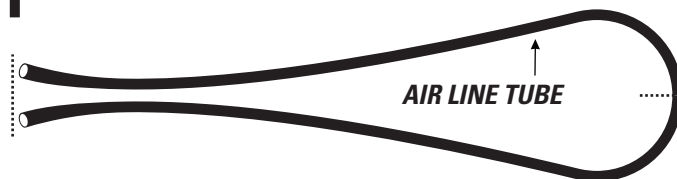
Drill two 5/16" holes for inflation valve install locations.



3 Install inflation valve assembly as shown.



1 Match air line tube ends.



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

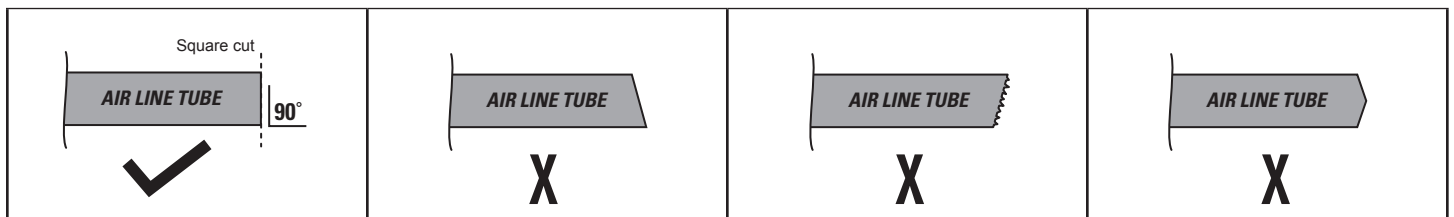
DO

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.

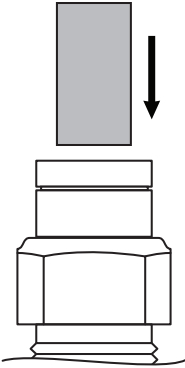
PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE



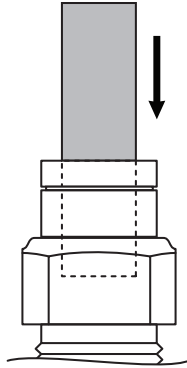
9

INSTALLING AIR LINE TUBE INTO AIR FITTINGS AND INFLATION VALVE

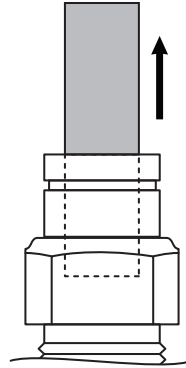
1 Insert end of air line tube into air fitting.



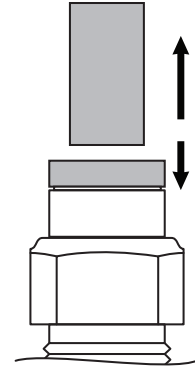
2 Push air line tube into air fitting as far as possible.



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.

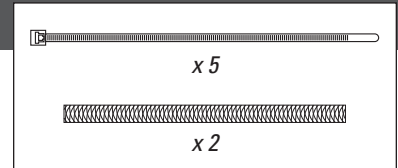


Removal Tip: Use a 1/4", 5/16", or 6mm open-ended wrench to push the collar down.

10

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.



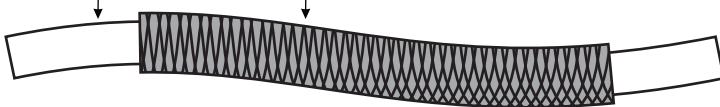
DO

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

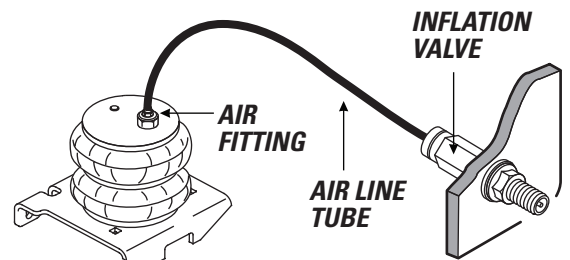
DON'T

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.

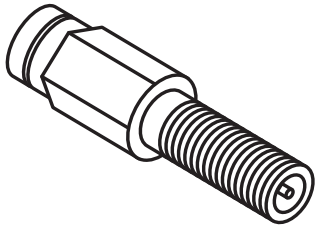
AIR LINE TUBE **THERMAL SHIELD**



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**.

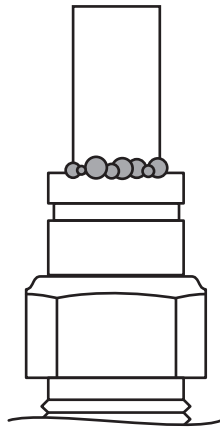


AIR SPRINGS INFLATE QUICKLY. CHECK AIR PRESSURE WHILE INFLATING.

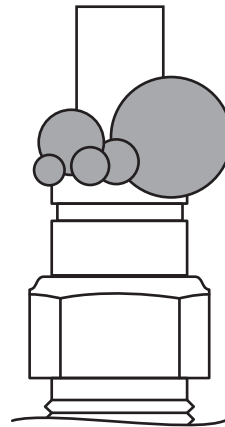
- 2** Spray fittings with soap and water mixture or glass cleaner.



- 3** Observe bubbles.



**SMALL SOAP BUBBLES
THAT DO NOT EXPAND**



**SOAP BUBBLES
THAT EXPAND**



NO LEAKS?

Congratulations! Continue to step 13 to finish installation. Review the Operating Instructions.

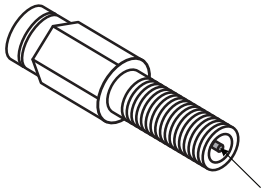
LEAK?

Bummer. Continue to step 12 to fix the leak.

12

FIXING AN AIR LEAK

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

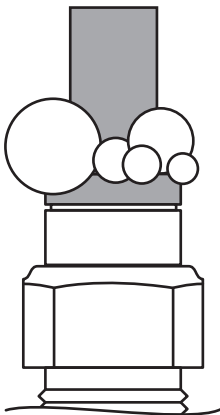


AIR VALVE



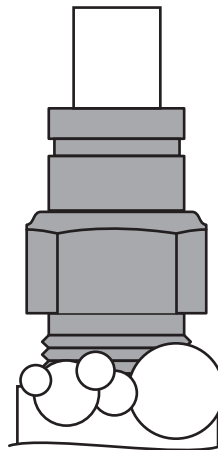
EXHAUST ALL AIR FROM THE SYSTEM PRIOR TO RELEASING AIR LINE TUBES FROM AIR FITTINGS.

LEAK AT AIR LINE TUBE AND AIR FITTING



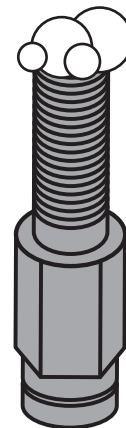
Release air line tube (see page 11). Review proper cuts and procedures in step 8. Repeat steps 9 and 11.

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.

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

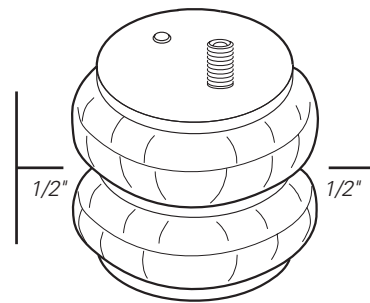
NEVER exceed the maximum load recommended by the vehicle manufacturer (GVWR). The GVWR can be found in your vehicle's owner's manual or on the data plate on the driver's side door. Consult your local dealership for additional GVWR specifications.

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



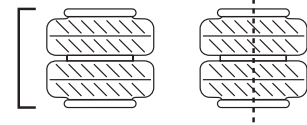
MAXIMUM PRESSURE (LOADED)



riderite.com

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!



NEED INSTALLATION HELP?

Email us at rrtech@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



FirestoneIP