

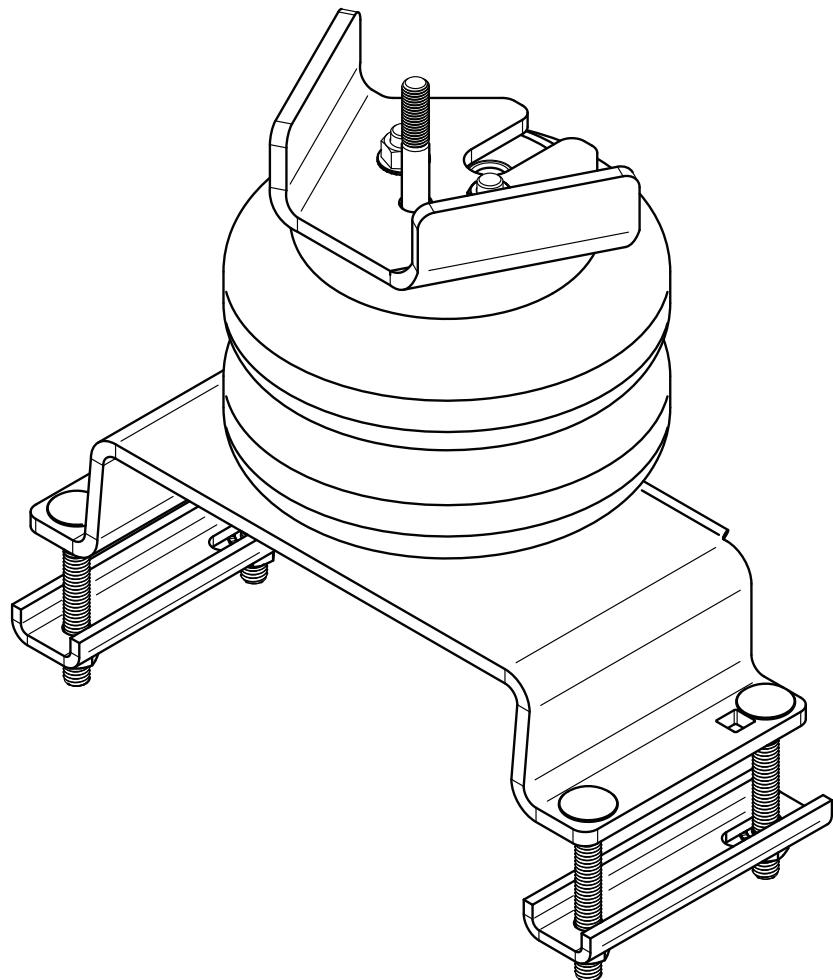
2648



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INSTALLATION INSTRUCTIONS



! IMPORTANT

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

DO NOT INSTALL IF THE TRUCK HAS BEEN LIFTED AND THE STOCK JOUNCE BUMPER SPACERS ARE NOT ON THE VEHICLE.
*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.

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 1300 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:



MINIMUM PRESSURE

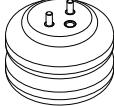
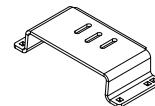


MAXIMUM PRESSURE (LOADED)

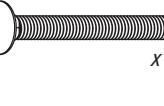
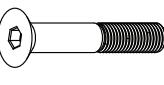
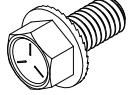
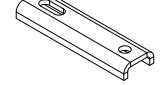
PARTS

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

MAIN KIT CONTENTS

PT # 1004	PT # 6781	 x2 AIR SPRING	PT # 5973	 x2 UPPER BRACKET	PT # 5092	 x2 LOWER BRACKET
		 x1 HEAT SHIELD	PT # 9414	 x1 RED AIR LINE TUBE (18 FEET)		

A21-760-2648 HARDWARE PACK

PT # 3128	PT # 3033	 x2 ELBOW FITTING	PT # 3481	 x8 3/8" - 16 X 3.0" CARRIAGE BOLT	PT # 3523	 x2 M10 x 1.25 x 60MM FLAT HEAD CAP SCREW
PT # 3032	PT # 9483	 x4 5/16" FLAT WASHER	PT # 3022	 x12 3/8" - 16 FLANGE LOCK NUT		 x6 RED NYLON TIE
PT # 3069	PT # 9488	 x2 INFLATION VALVE AND VALVE CAP ASSEMBLY	PT # 9036	 x2 3/8-16 x .75" HEX HEAD FLANGE SCREW	PT # 0399	 x2 THERMAL SLEEVE
		 x1 INFLATION VALVE BRACKET		 x2 LARGE NYLON TIE	PT # 5086	 x4 BRACKET STRAP

CONTENTS AND OVERVIEW

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PAGE **6** LOOSELY ATTACH LOWER BRACKET TO AIR SPRING BOTTOM

PAGE **7** ORIENT SPRING TO LOWER BRACKET

PAGE **8** INSTALL SPRING

PAGE **9** ATTACH LOWER BRACKET TO AXLE

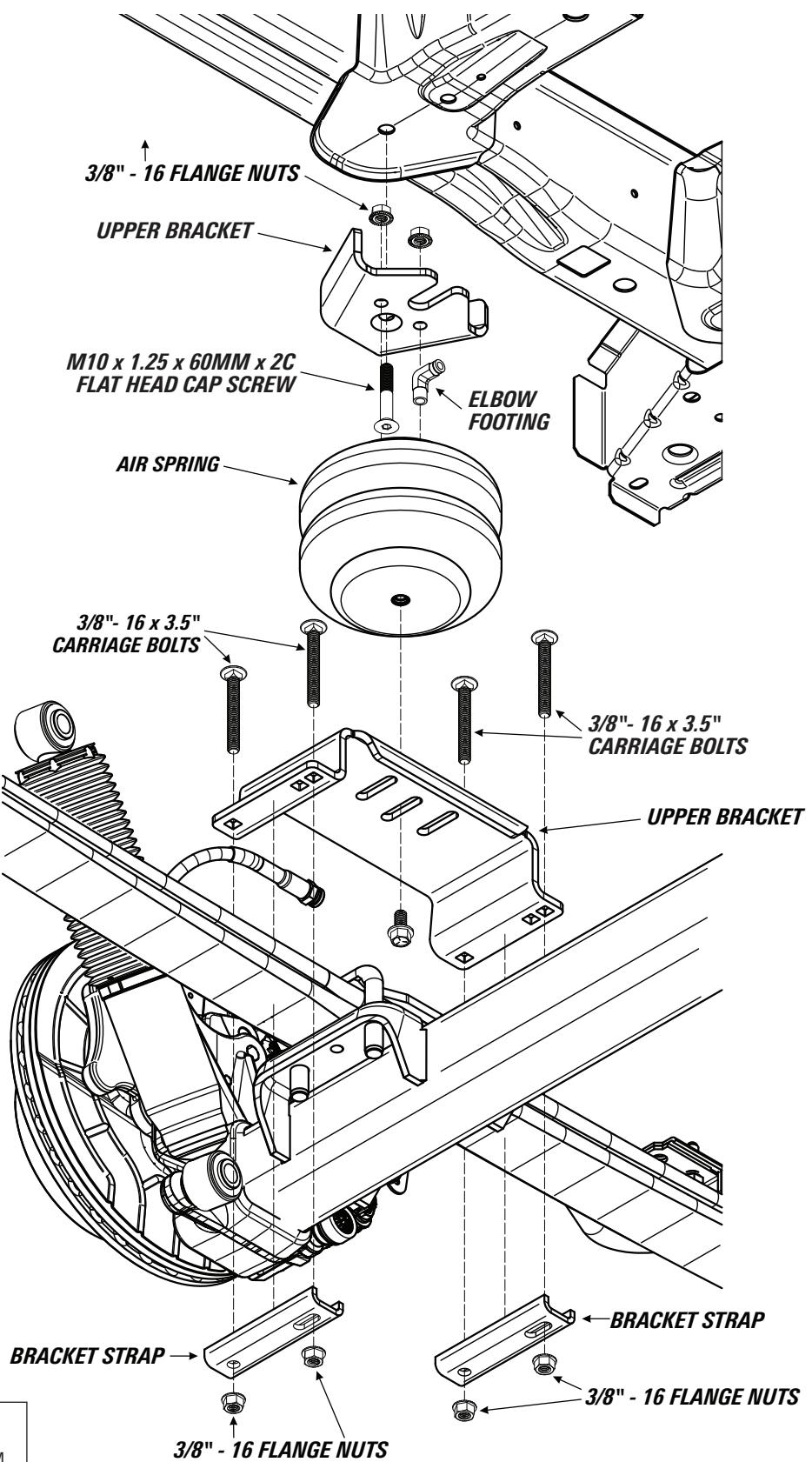
PAGE **10** INSTALL RIGHT SIDE WITH HEAT SHIELD & CUT THE AIR LINE INTO TWO EQUAL LENGTHS

PAGE **11** INSTALLING AIR LINE TUBE INTO AIR FITTINGS AND INFLATION VALVE & ROUTE AND SECURE AIR LINE TUBES

PAGE **12** CHECKING THE SYSTEM

PAGE **13** FIXING AN AIR LEAK

PAGE **14** FINISHING THE INSTALLATION



VIEW LOOKING UP AT CHASSIS FROM BOTTOM

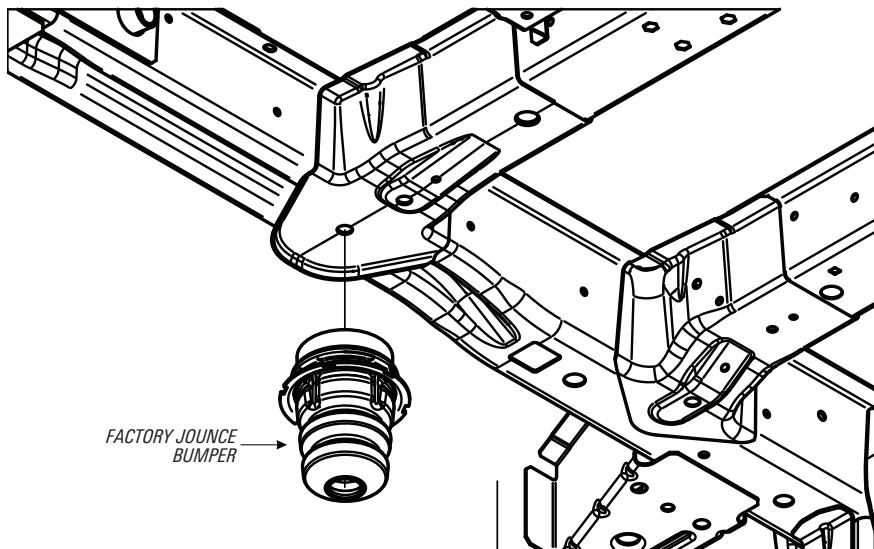
REMOVE FACTORY JOUNCE BUMPER AND CUP

1



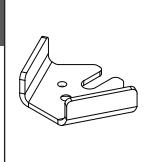
START THE INSTALLATION ON THE LEFT SIDE OF THE VEHICLE WHEN FACING FORWARD.

- 1.1 The factory jounce bumpers should be unscrewed and removed from the frame on both sides of the vehicle. Use Channellock-type pliers, pipe wrench or another suitable tool.
- 1.2 Remove the spring clips that secure the emergency brake cables to the leaf springs – these will not be reused.

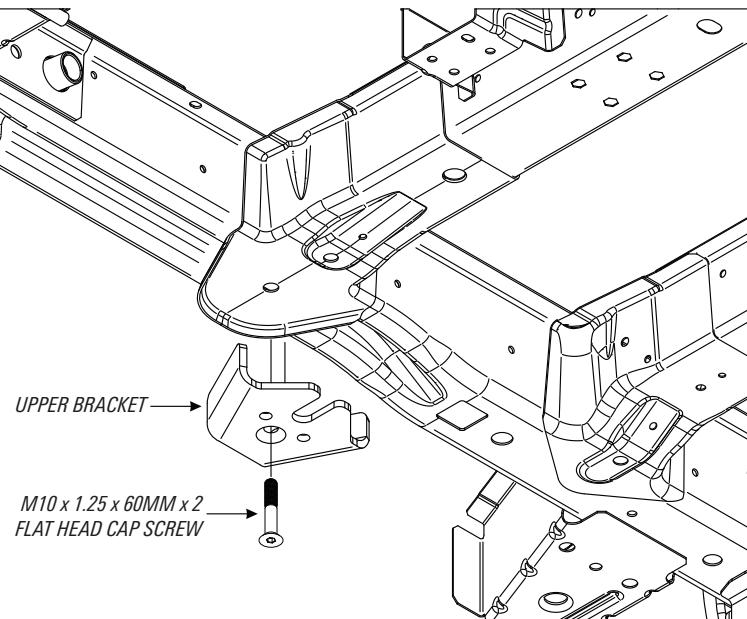


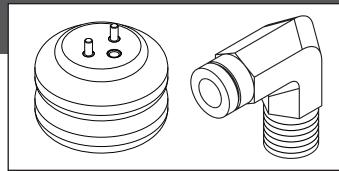
ATTACH UPPER BRACKET

2



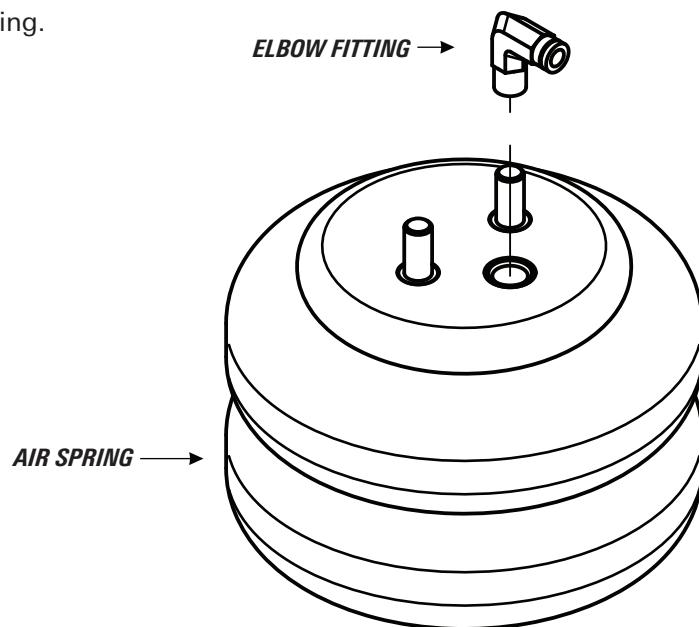
- 2.1 Thread the 3523 screw in the existing jounce bumper mounting hole (bottom of the frame rail) to attach the 5973 upper bracket
- 2.2 Tighten to 40 lb-ft with a 6mm Allen hex wrench or bit



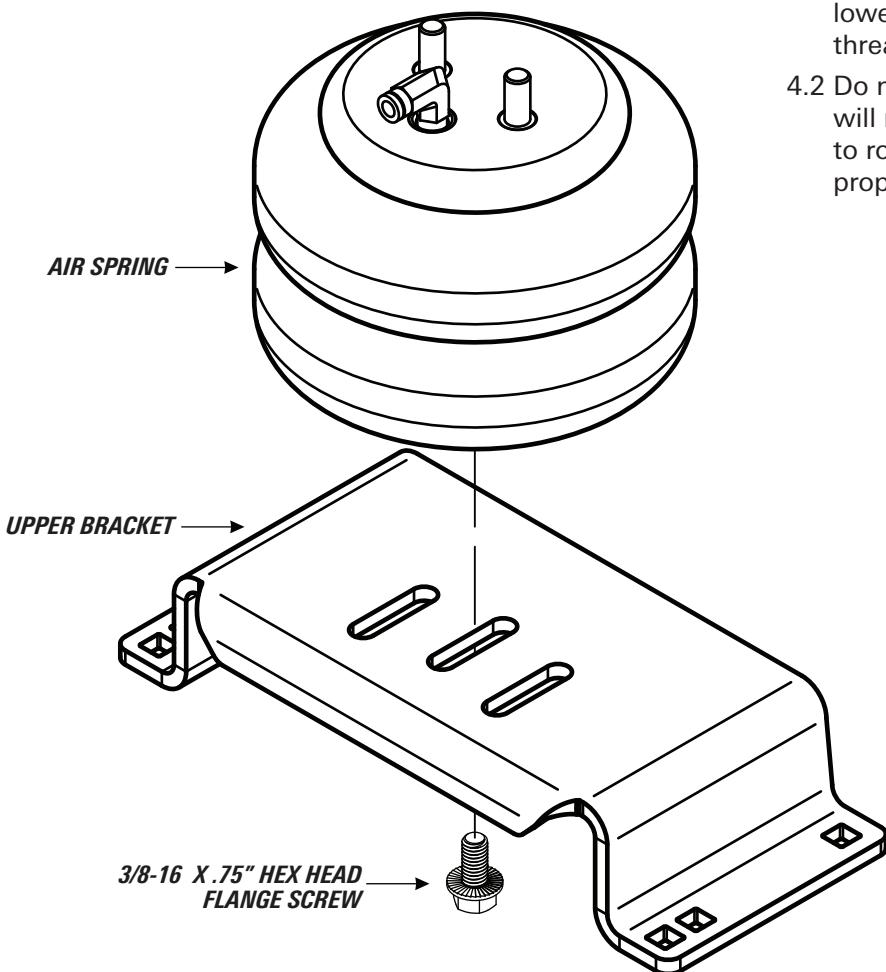
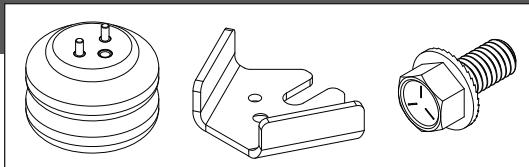


3.1 Insert 3128 air fitting into air spring.

3.2 Securely tighten air fitting.



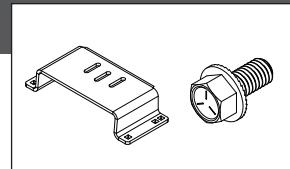
LOOSELY ATTACH LOWER BRACKET TO AIR SPRING BOTTOM



- 4.1 Insert 3069 bolt through lower bracket and into threads of spring.
- 4.2 Do not tighten – you will need to be able to rotate spring for proper orientation

5

ORIENT SPRING TO LOWER BRACKET

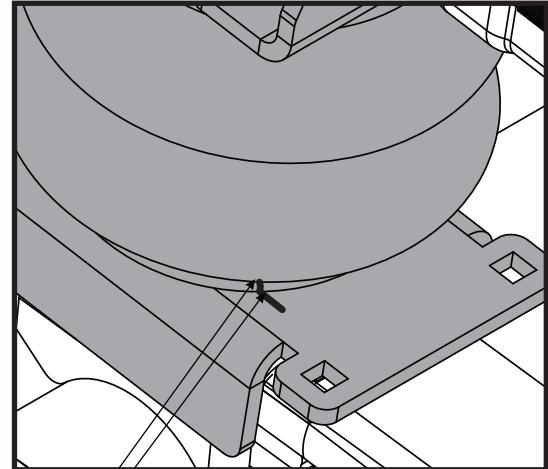


- 5.1 Temporarily insert spring into upper bracket.
- 5.2 Place lower bracket in position over leaf spring U-bolts
- 5.3 Accurately mark this position on lower spring plate and lower bracket.
- 5.4 Remove spring from upper bracket
- 5.5 With marks aligned, secure spring to lower bracket by tightening 3069 bolt to 28 lb-ft

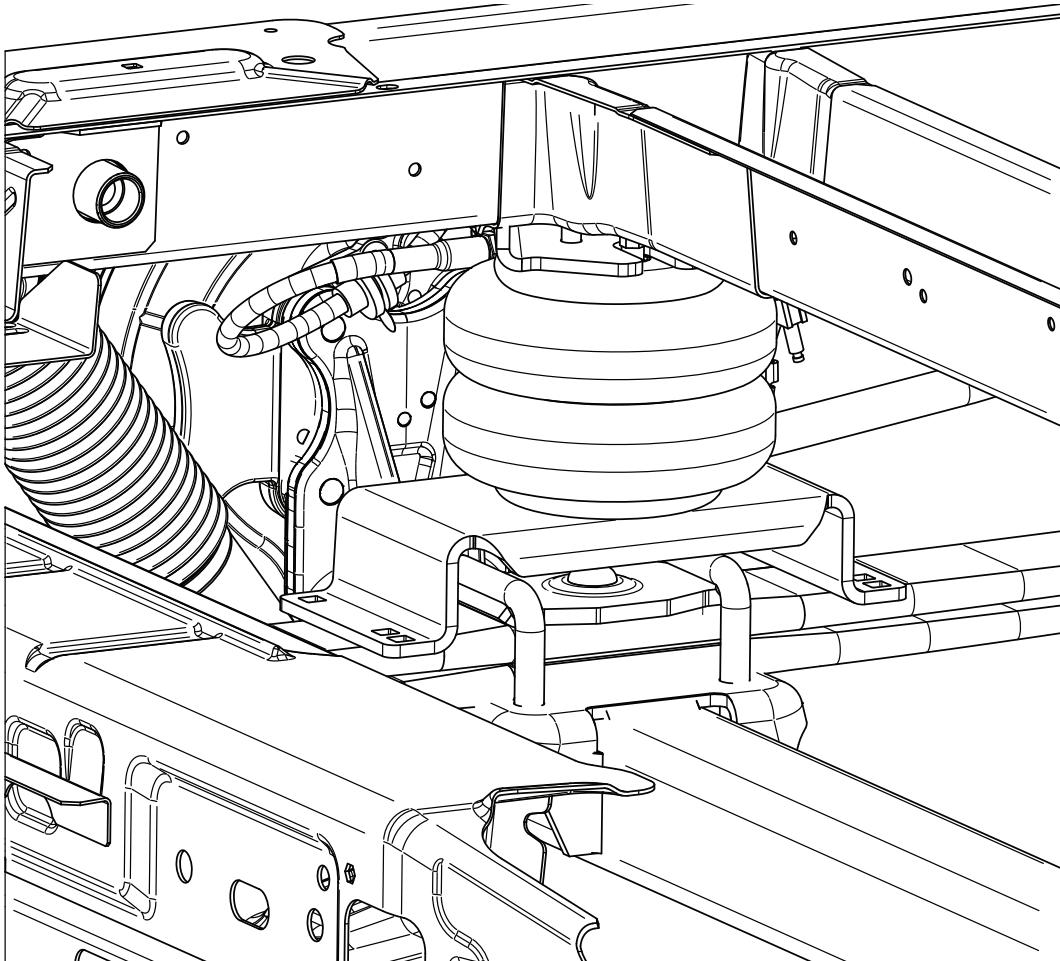


INSTALLING THE RIGHT SIDE? REMEMBER TO
INSTALL THE HEAT SHIELD IN STEP 7 FIRST!

DRY FIT ALIGNMENT (TYPICAL INSTALLATION SHOWN)



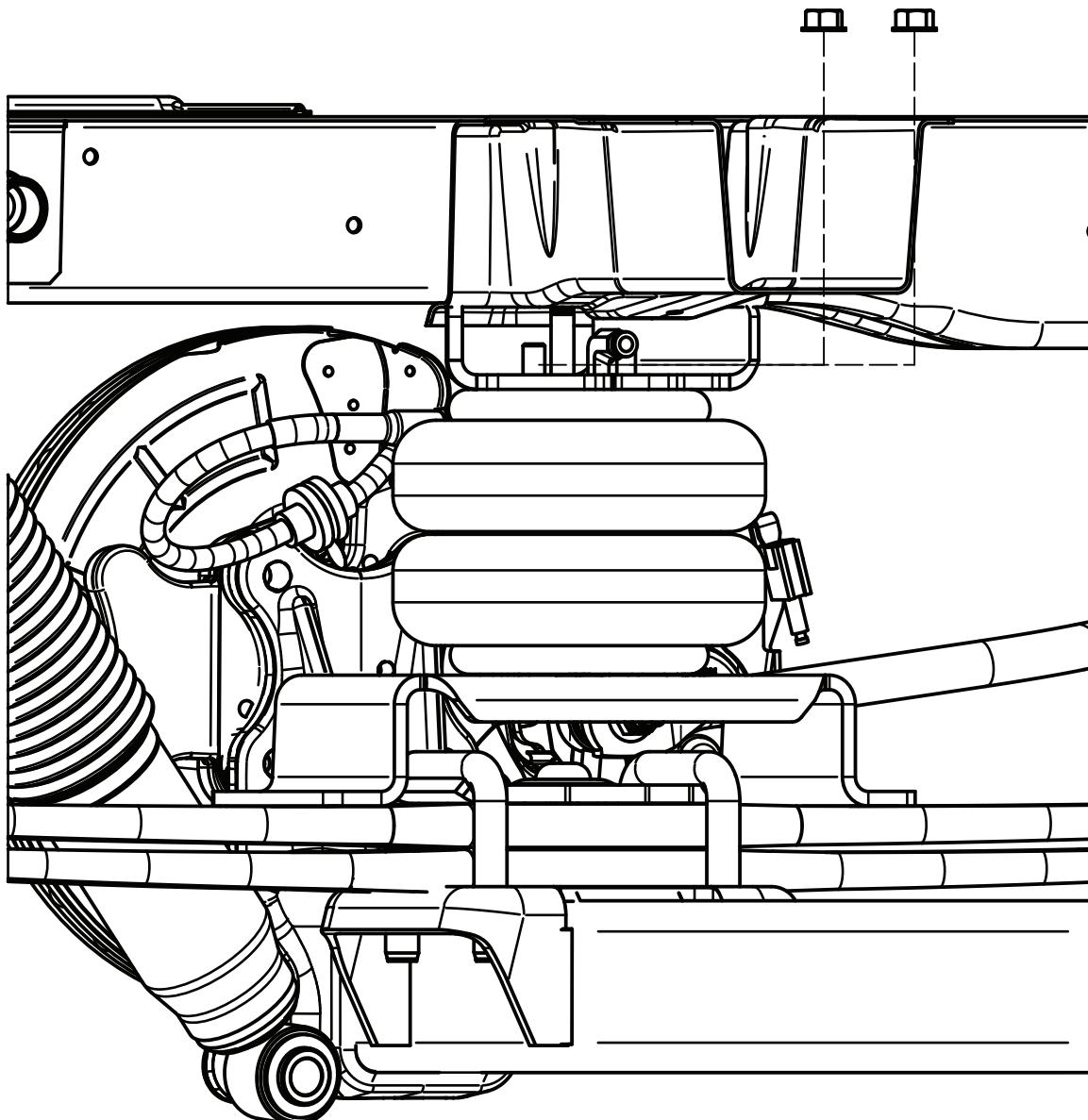
MAKE ALIGNMENT MARKS





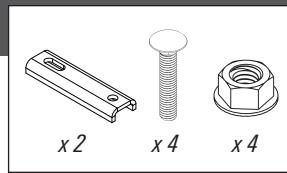
x2

- 6.1 Insert spring into upper bracket
- 6.2 Make sure air fitting is rotated towards center of vehicle
- 6.2 Secure spring to upper bracket using two 3022 lock nuts
- 6.2 Tighten both nuts to 28 lb-ft

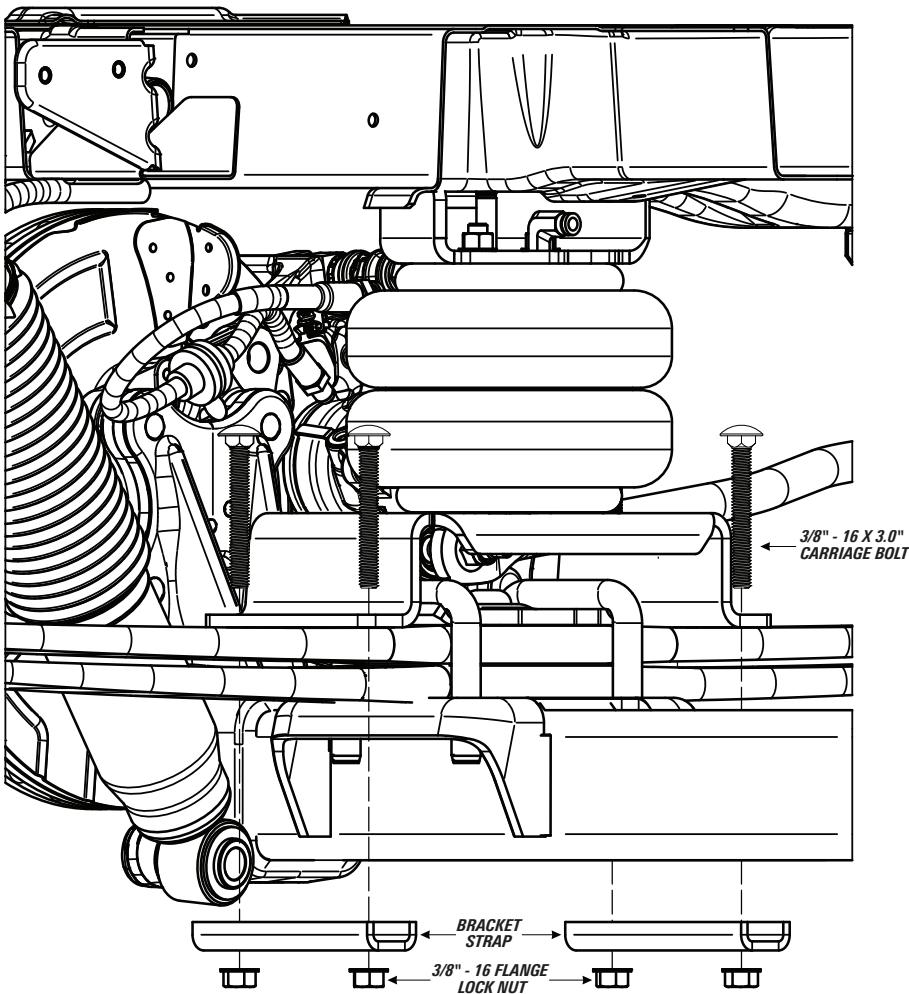


7

ATTACH LOWER BRACKET TO AXLE



- 7.1 With lower bracket in position, insert a 3481 carriage bolt into the appropriate holes on the lower bracket
- 7.2 Make sure the emergency brake cable is held in place through the open area of the lower bracket.
- 7.3 Slide a 5086 bracket strap onto each pair of carriage bolts with the flat side down
- 7.4 Attach both bracket straps with a 3022 lock nut on each carriage bolt
- 7.5 Tighten lock nuts to 28 lb-ft

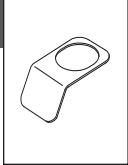


USE YOUR HAND TO CHECK FOR THE PROPER CLEARANCE AROUND THE AIR SPRING. IF YOUR HAND DOES NOT FIT BETWEEN THE AIR SPRING AND OTHER COMPONENTS, IT WILL RUB!



AWESOME! You're done with the left side. Go back to step 1 and repeat the steps for the right side installation, including step 8.

INSTALL RIGHT SIDE WITH HEAT SHIELD

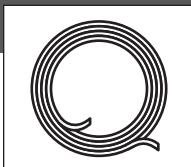
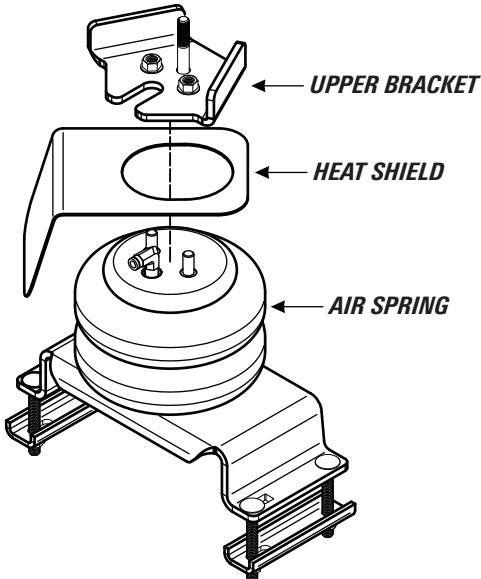


8.1 The right side installation is the mirror image of the left with an added heat shield.

8.2 Secure the heat shield by clamping it between the top of the air spring and the upper bracket.

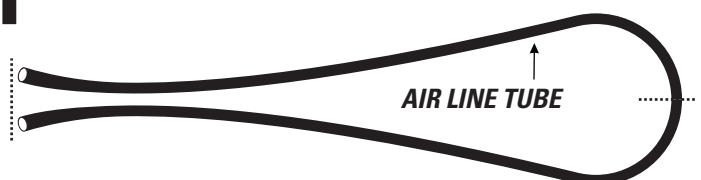


THE HEAT SHIELD IS INSTALLED ON THE RIGHT SIDE OF THE VEHICLE ONLY!



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.

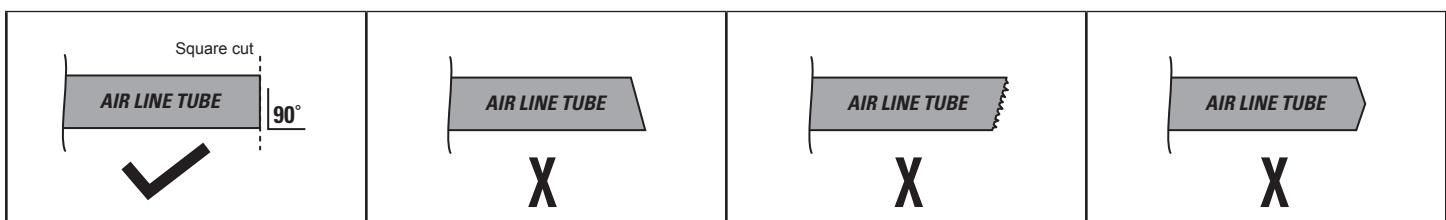
DO

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.

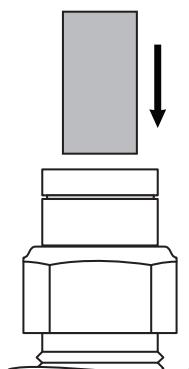
PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE



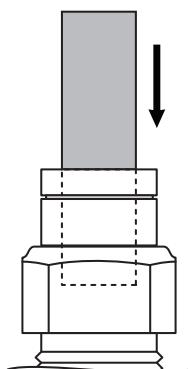
10

INSTALLING AIR LINE TUBE INTO AIR FITTINGS AND INFLATION VALVE

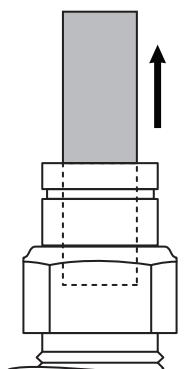
1 Insert end of air line tube into air fitting.



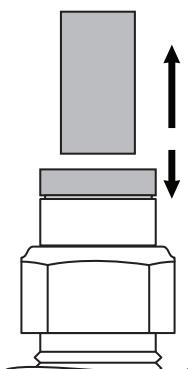
2 Push air line tube into air fitting as far as possible.



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.

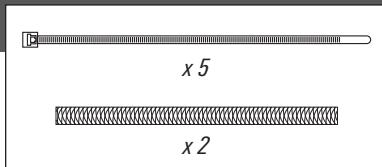


Removal Tip: Use a 1/4", 5/16", or 6mm open-ended wrench to push the collar down.

11

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.

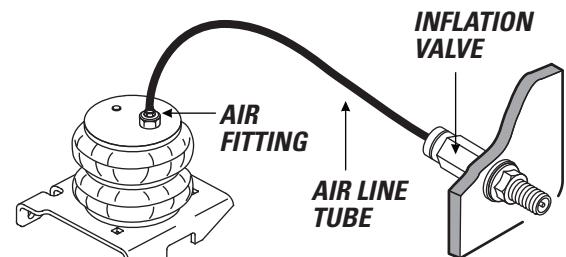
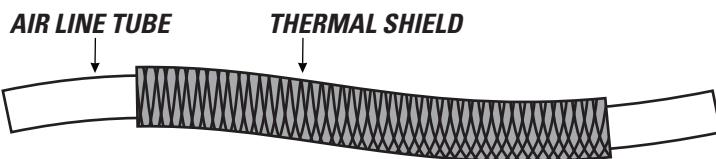


DO

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

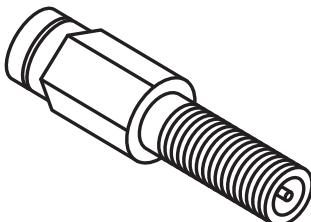
Bend or sharply curve air line tubes.
Leave air line tube exposed to sharp edges.
Use unnecessary lengths of air line tube.
Route air line tube near moving parts.
Let air line tube hang unsecured from vehicle.
Scar air line tube while routing.



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**.

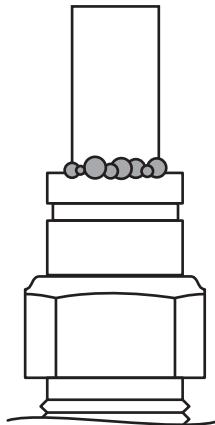


AIR SPRINGS INFLATE QUICKLY. CHECK AIR PRESSURE WHILE INFLATING.

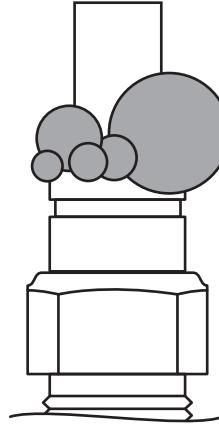
2 Spray fittings with soap and water mixture.



3 Observe bubbles.



SMALL SOAP BUBBLES
THAT DO NOT EXPAND



SOAP BUBBLES
THAT EXPAND



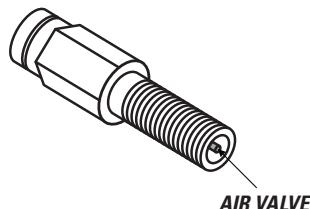
NO LEAKS?

Congratulations! Continue to step 14 to finish installation. Review the Operating Instructions.

LEAK?

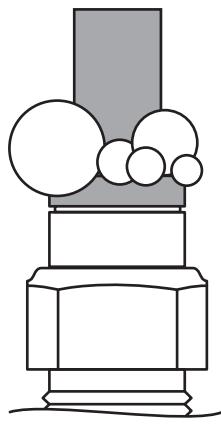
Bummer. Continue to step 13 to fix the leak.

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



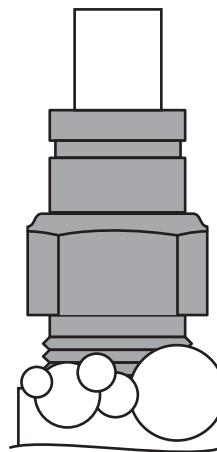
EXHAUST ALL AIR FROM THE SYSTEM PRIOR TO
RELEASING AIR LINE TUBES FROM AIR FITTINGS.

LEAK AT AIR LINE TUBE AND AIR FITTING



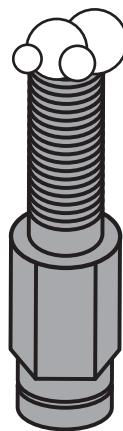
Release air line tube (see page 11).
Review proper cuts and procedures
in step 9. Repeat steps 10 and 12.

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

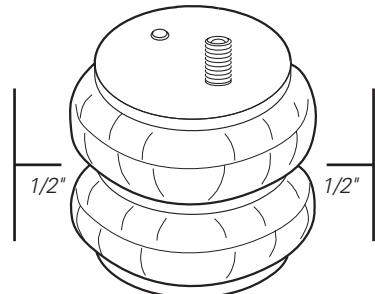
NEVER exceed the maximum load recommended by the vehicle manufacturer (GVWR). The GVWR can be found in your vehicle's owner's manual or on the data plate on the driver's side door. Consult your local dealership for additional GVWR specifications.

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



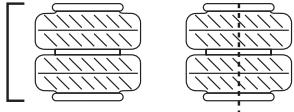
MAXIMUM PRESSURE (LOADED)



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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? **5 1/2" - 6 1/2"** 
- Are your air springs properly aligned, left-to-right and front-to-back?
- Are your nuts and bolts tight?
- Put your paperwork 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, kit number, and the year, make, and model of the vehicle to help us better diagnose and understand any problems you may be experiencing.

CONNECT WITH US



FirestoneLP



Firestone Ride-Rite