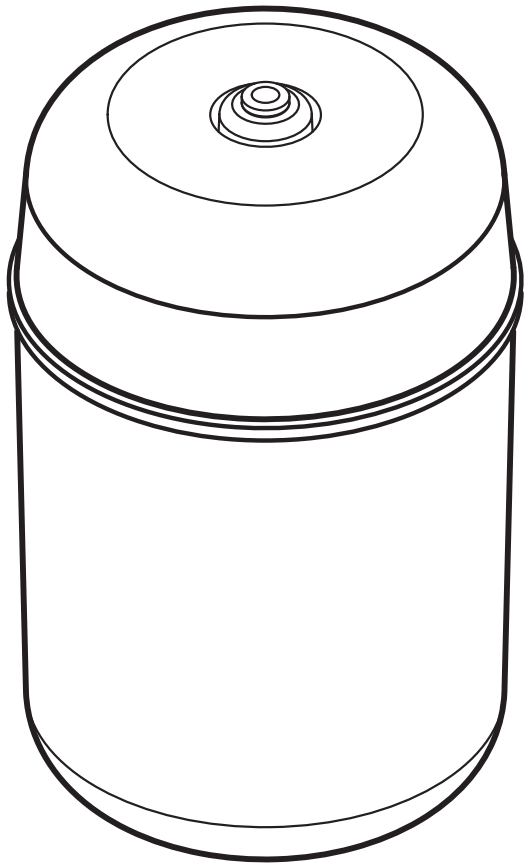
4135

AIRIDE

firestoneairide.com

INSTALLATION INSTRUCTIONS



01-23

! IMPORTANT

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

WARNING
Do not inflate this assembly when it is unrestricted. The assembly must be restricted by a coil spring. Do not ever inflate beyond recommended operating pressures for your specific vehicle. Improper use or over inflation may cause property damage or severe personal injury.

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.

SHOCK ABSORBERS
If necessary, additional clearance between the coil turns may be obtained by removing the shock absorbers from the lower shock mounts and lowering the suspension an additional one to two inches. (CAUTION: Do not put strain or tension on the flexible brake line.)

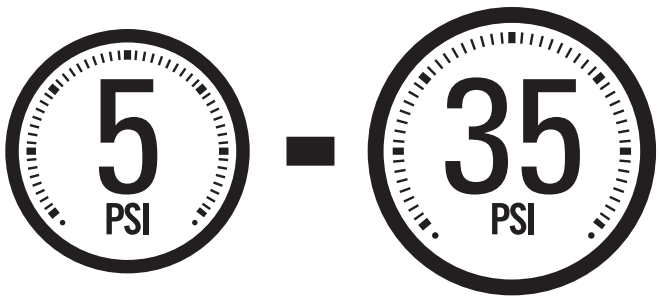
VEHICLE GVWR
NEVER exceed the maximum load recommended by the vehicle manufacturer (GVWR). The GVWR can be found in your vehicle's owner's manual or on the data plate on the driver's side door. Consult your local dealership for additional GVWR specifications.

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.

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)*

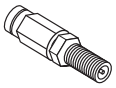
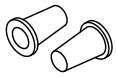
PARTS

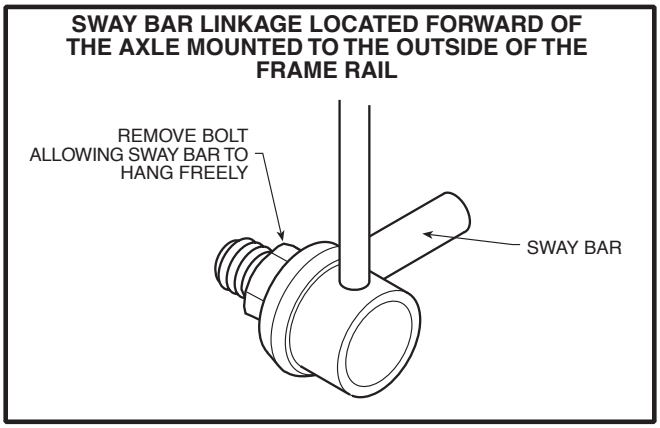
Compare the parts below to your kit. Assure you have all pieces and organize them for an easier installation.

MAIN KIT CONTENTS

PT # 6024		x 2 COIL-RITE AIR SPRING	PT # 9417		x 1 BLUE AIR LINE TUBE (18 FEET)

4135 HARDWARE PACK

PT # 3033		x 4 5/16" FLAT WASHERS	PT # 3098		x 2 INFLATION VALVE
PT # 9168		x 6 BLACK NYLON TIE			
PT # 3099		x 2 VALVE CAP	PT # 0019		x 2 COIL-RITE PTC PLUG
PT # 0899		x 2 THERMAL SLEEVE			



WARNING: Do not inflate this assembly when it is unrestricted. The assembly must be restricted by a coil spring. Do not inflate beyond recommended operating pressures for your specific vehicle. Improper use or over inflation may cause property damage or severe personal injury.

1 VEHICLE PREPARATION

1 With the vehicle on a solid level surface, chock the rear wheels. With the vehicle on a solid level surface, chock the rear wheels.

2 Raise the rear wheels of the vehicle using a lift or platform jack rated for your vehicle's weight at the center of the rear axle. Continue to raise the vehicle until the rear wheels are 8" off the ground.

3 Lower the vehicle frame forward of the suspension onto jack stands rated for your vehicle's weight allowing the suspension to hang freely. (DO NOT use wood or concrete blocks to support the weight of the vehicle.)

In order to complete the installation of the air helper springs, it is necessary to remove the coil springs from the vehicle.

4 With the vehicle resting on jack stands, jack the vehicle suspension from the differential up approximately 2" from its fully extended position.

5 Remove the lower shock bolt and free the shock from both sides of the vehicle, **see Figure "A".** Then, detach the sway bar on both sides of the vehicle located forward of the axle mounted to the frame rail, **see Figure "A".**

6 Now, remove the emergency brake cable clip located on the rear center of the axle allowing the emergency brake line to hang freely, **see Figure "A".**

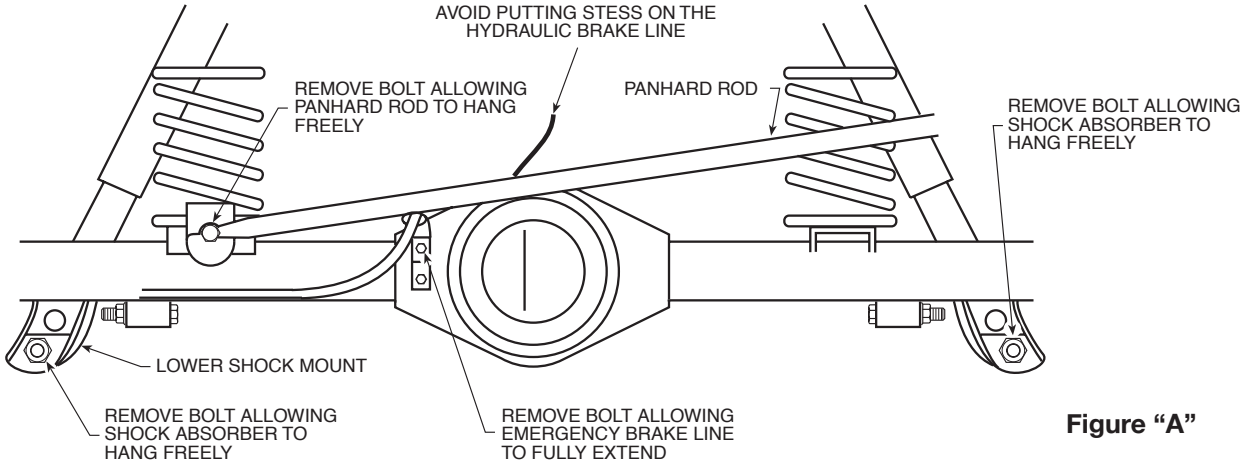


Figure "A"

7 The panhard rod must be unbolted on the drivers side rear of the axle in order to lower the suspension to free the coil springs, **see Figure "A".**

8 To remove the coil springs place a jack stand under the passenger side axle (leave the current jack stands under the frame in place) as close to the wheel as possible. Then lower the jack under the differential allowing the drivers side suspension to hang freely. Take special precautions not to overextend the the flexible hydraulic barke line, **see Figure "A".**

9 Remove the driver's side coil spring and rubber overload bumper.

OVERLOAD BUMPER PREPARATION 2

To provide enough operating distance for the air helper spring the existing overload bumper must be modified.

1 After removal of the overload bumper the four (4) convoluted sections of the bumper should be cut off. This is accomplished by holding the largest portion of the bumper in a vice and using a hack saw to remove the upper portion of the overload bumper **see Figure "B".**

2 The lower convoluted portion of the overload bumper will not be used. The upper portion will be needed to complete this installation, see Figure "B".

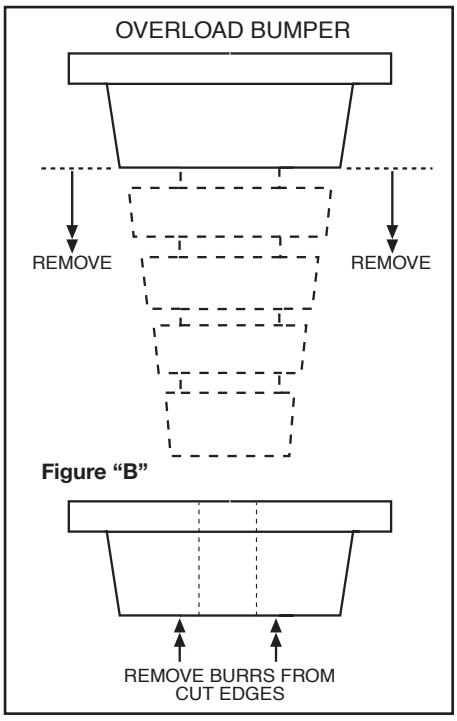


Figure "B"

INSTALL THE AIR SPRING 3

Insert the air helper spring into the driver's side coil spring with the air inlet towards the top of the coil spring, **see Figure "C".** Cut the air line tubing into two equal lengths, making sure the tubing is cut as squarely as possible (a "saw" cut with a sharp knife is preferred). Insert the air line tubing into the push-to-connect fitting on the air spring as far as possible.

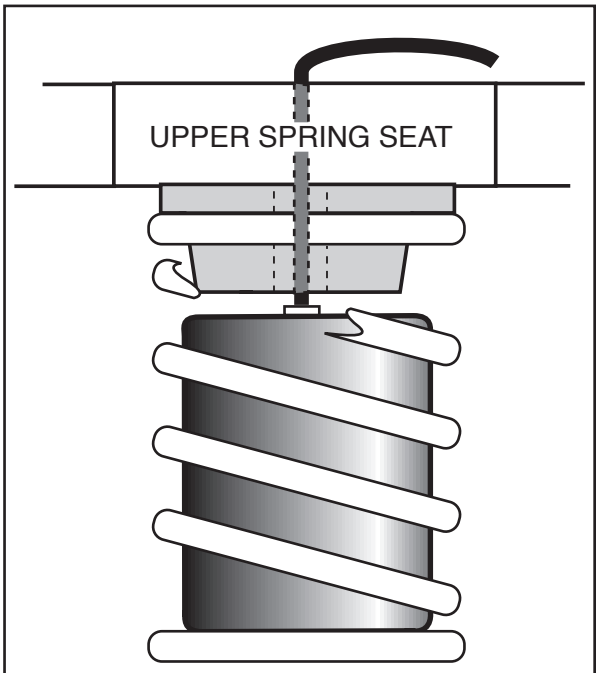


Figure "C"

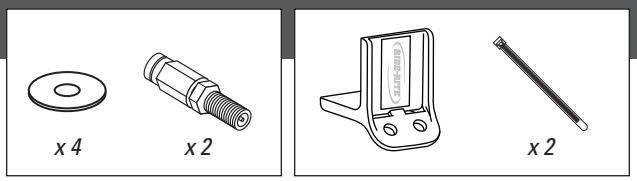
4 RE-INSTALL THE OVERLOAD BUMPER

1 After the air spring has been installed into the coil spring place the converted overload bumper back in its original position on top of the coil spring with the air line routed through the hole in the center, **see Figure "C".**

2 The top of the air spring will be next to the bottom of the overload bumper. The coil spring will be re-installed after the air line has been inserted through the upper spring seat and installed in the air spring refer to the following step.

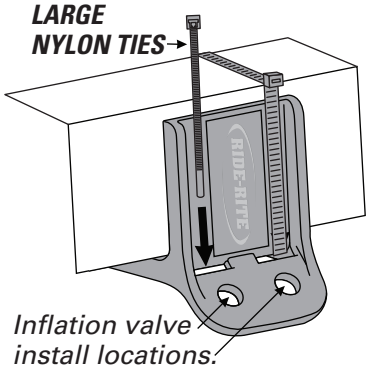
3 Make sure that the bottom of the spring is seated in the spring retainer properly. Route the air line tubing through the top of the upper spring seat and through the hole in the overload bumper, **see Figure "C".**

5 INSTALL INFLATION VALVES



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.**

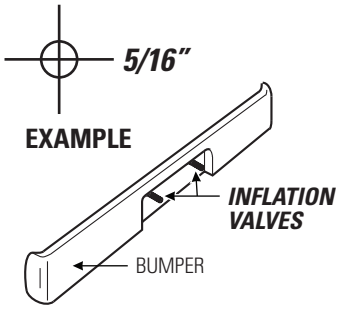
1 Secure the air inflation valve bracket to a protected, secure location. PROCEED TO STEP 3.



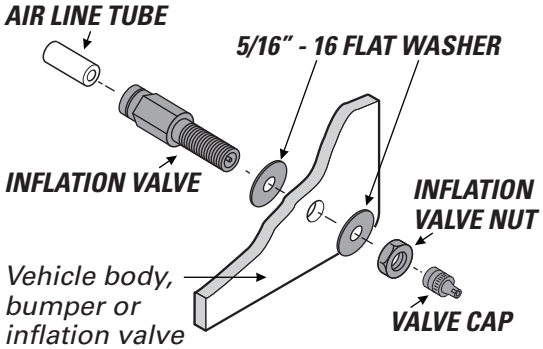
Inflation valve install locations.

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

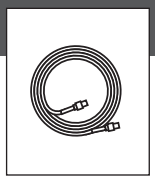
Drill two 5/16" holes for inflation valve install locations.



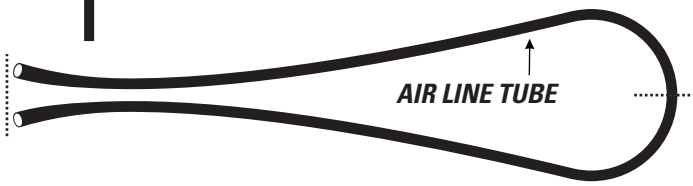
3 Install inflation valve assembly as shown.



CUT THE AIR LINE TUBE INTO TWO EQUAL LENGTHS 6



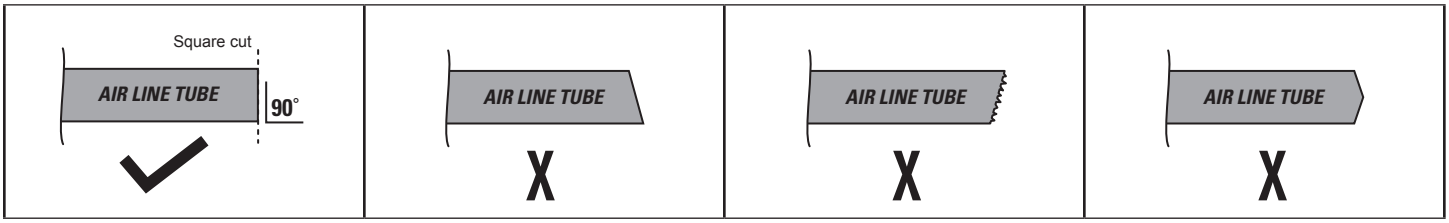
1 Match air line tube ends.



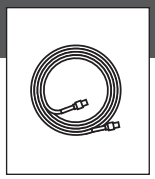
2 Find center of air line tube, make a square cut with tube cutter or sharp utility knife.

DO	DON'T
Make sure the cut is as square as possible. Use a tube cutter or sharp utility knife.	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

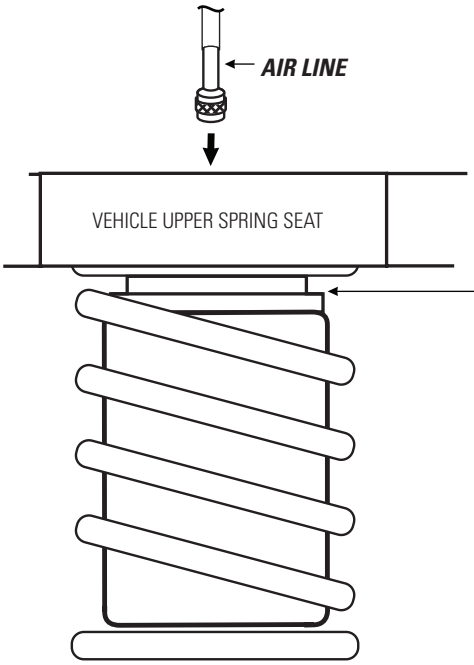


INSTALL AIR LINE TO AIR SPRINGS 7

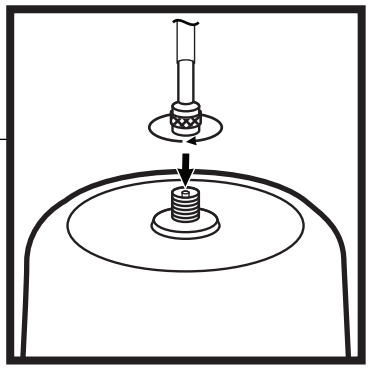


1 Screw the fitting that is on the air line tubing onto the air spring inflation valve stem coming out of the air spring.

2 Route the tubing from the air spring to the inflation valve install location, making sure to avoid direct heat from the engine or exhaust pipe, and away from sharp edges.



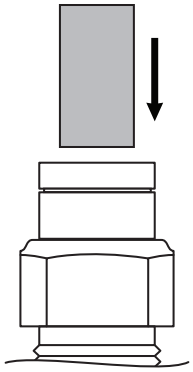
VIEW FROM ABOVE



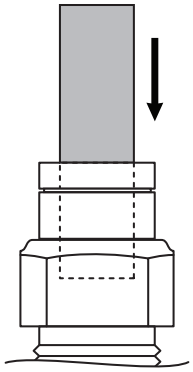
AWESOME! You're done with the left side. Follow the same steps for the right side, then proceed to step 8 to finish installation.

8 INSTALLING AIR LINE TUBE INTO AIR FITTINGS AND INFLATION VALVE

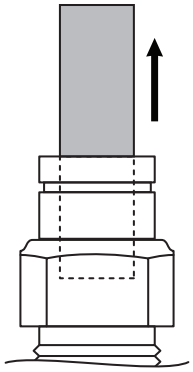
1 Insert end of air line tube into air fitting.



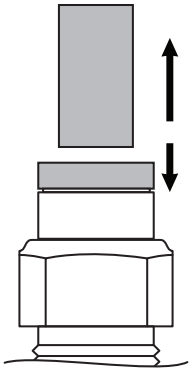
2 Push air line tube into air fitting as far as possible.



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



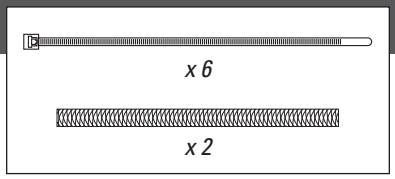
4 To remove, push down collar and gently pull air line tube away.



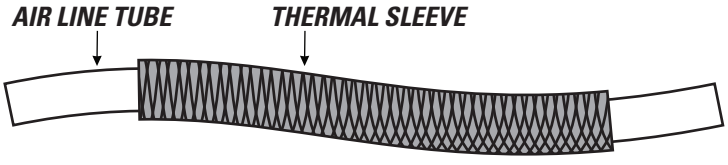
Removal Tip: Use a 1/4", 5/16", or 6mm open-ended wrench to push the collar down.

9 ROUTE AND SECURE AIR LINE TUBES

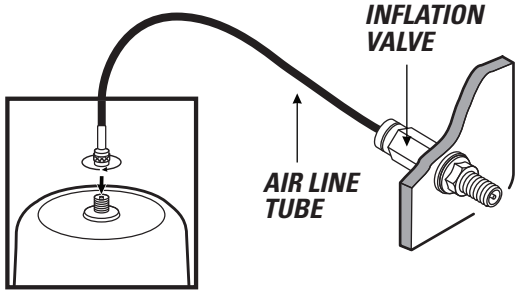
Air line tube routes will vary, depending on your truck, and requires you to choose the best path from the air springs to the inflation valves. Use the instructions below to help you choose.



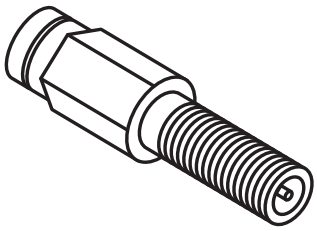
DO	DON'T
Select routes protected from heat, debris, and sharp edges. Use thermal sleeves near heat sources. Use Nylon ties to secure the air line tube.	Bend or sharply curve air line tubes. Leave air line tube exposed to sharp edges. Use unnecessary lengths of air line tube. Route air line tube near moving parts. Let air line tube hang unsecured from vehicle. Scar air line tube while routing.







1 Place an air chuck onto the inflation valve and fill the system to **35 PSI**.



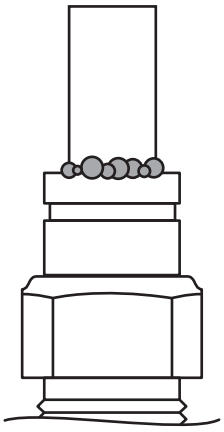


AIR SPRINGS INFLATE QUICKLY. CHECK AIR PRESSURE WHILE INFLATING.

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

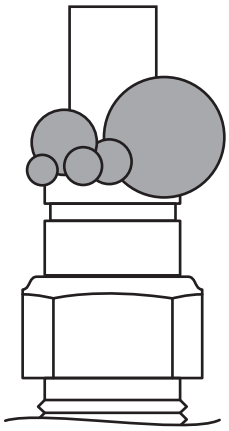


3 Observe bubbles.



SMALL SOAP BUBBLES THAT DO NOT EXPAND

✓



SOAP BUBBLES THAT EXPAND

X

NO LEAKS?

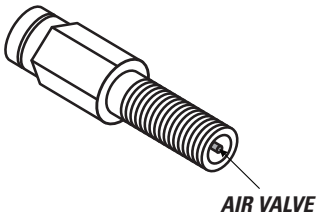
Congratulations! Continue to step 12 to finish installation. Review the Operating Instructions.

LEAK?

Bummer. Continue to step 11 to fix the leak.

11 FIXING AN AIR LEAK

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

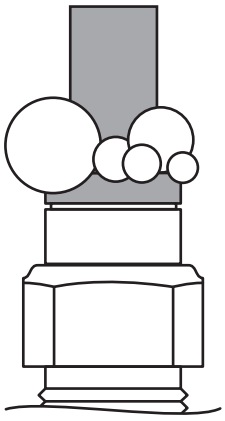






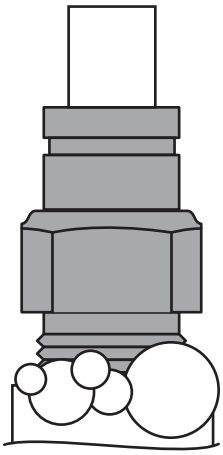
EXHAUST ALL AIR FROM THE SYSTEM PRIOR TO RELEASING AIR LINE TUBES FROM AIR FITTINGS.

LEAK AT AIR LINE TUBE AND AIR FITTING



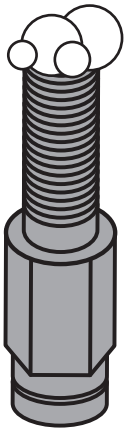
Release air line tube (see page 7). Review proper cuts and procedures in step 6. Repeat steps 8 and 10.

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.

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.

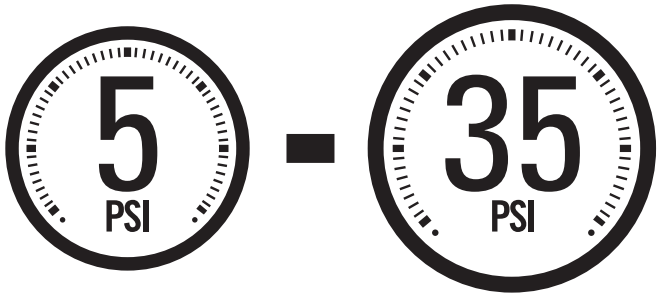
READ AND UNDERSTAND THE OPERATING INSTRUCTIONS

The Coil-Rite system can improve handling and comfort. Take a moment to review the operating instructions before hitting the road.

! 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)*

AIRIDE

firestoneairide.com

BEFORE YOU DRIVE, CONFIRM THE FOLLOWING:

☐ Do you have a minimum of 5 PSI in your air springs?

☐ Put your paperwork in your glove compartment for future reference.

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.