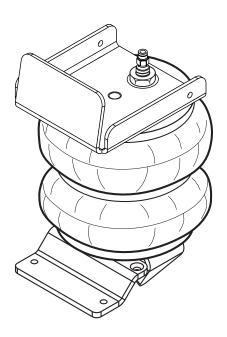
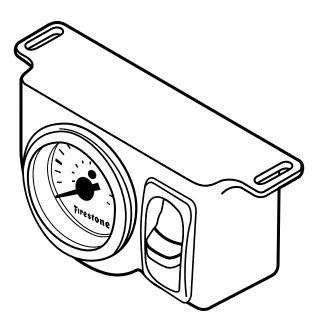


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### **INSTALLATION INSTRUCTIONS**



**SECTION 1 - AIR SPRING** 



**SECTION 2 - AIR ACCESSORY** 



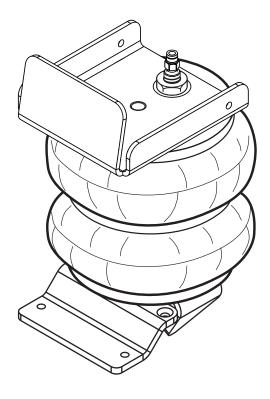
riderite.com

### **INSTALLATION INSTRUCTIONS**



REQUIRES RIDE-RITE 2366 LIFT SPACER KIT (SOLD SEPARATELY) FOR INSTALL ON **Z-71**, **HIGH COUNTRY, TRAIL BOSS, & AT4** MODELS.

THIS KIT IS NOT FOR SILVERADO LD OR SIERRA LIMITED MODELS. USE 2430 KIT.





**Firestone Industrial Products** 

2609

## **! 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:

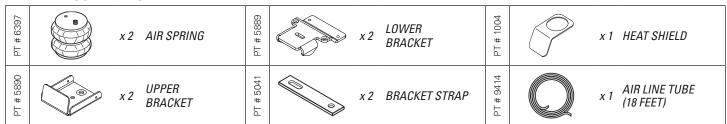


Firestone

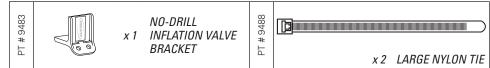
## PARTS

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

### **MAIN KIT CONTENTS**



### A24-760-7560 INFLATION VALVE BRACKET KIT



### A21-760-2609 HARDWARE PACK

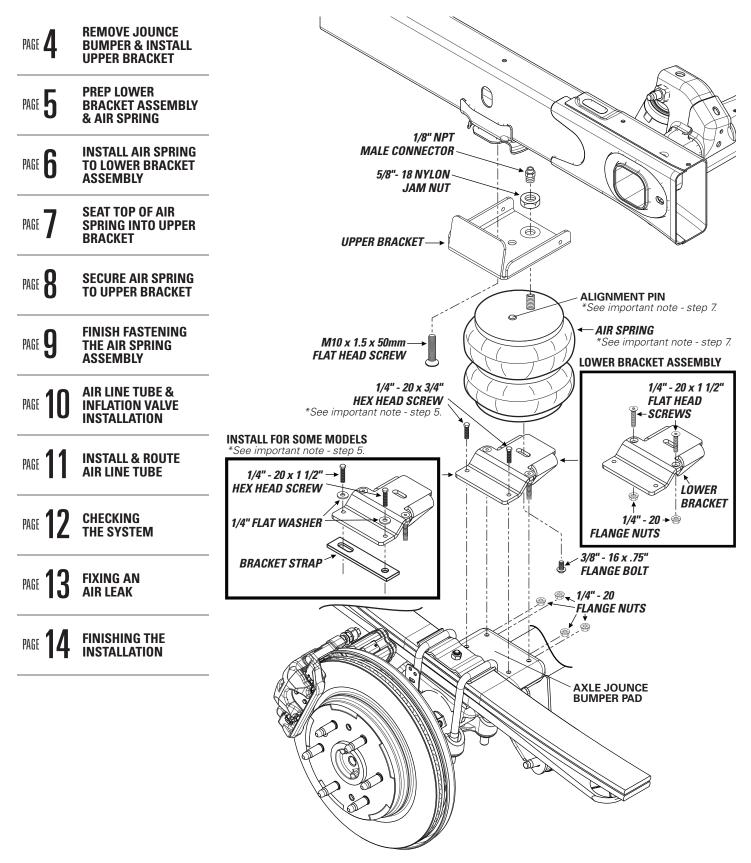
PT # 3033	$\bigcirc$	x 4 5/16" FLAT WASHER	PT # 3358	0	x 2	M10 x 1.5 x 50mm FLAT HEAD SCREW	PT # 3510	8	x 12	1/4" - 20 FLANGE NUT
PT # 3069		x 2 3/8" - 16 x .75" FLANGE BOLT	PT # 3508		x 4	1/4" - 20 x 1 1/2" FLAT HEAD SCREW	PT # 3032		x 2	INFLATION VALVE AND VALVE CAP ASSEMBLY
PT # 3332	9	x 2 5/8" - 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 # 0664	$\odot$	x 4 1/4" FLAT WASHER	PT # 3442		x 4	1/4" - 20 x 1 1/2" HEX HEAD SCREW	PT # 9036			x 6 RED NYLON TIE

### **OPTIONAL ITEMS**

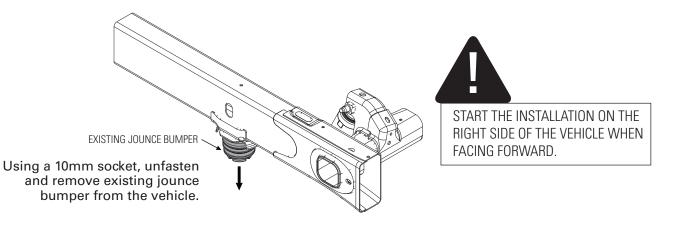
45000 x 1 T-FITTING

Visit riderite.com to find the perfect air accessories.

# **CONTENTS AND OVERVIEW**

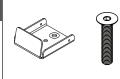


### **REMOVE EXISTING JOUNCE BUMPER**



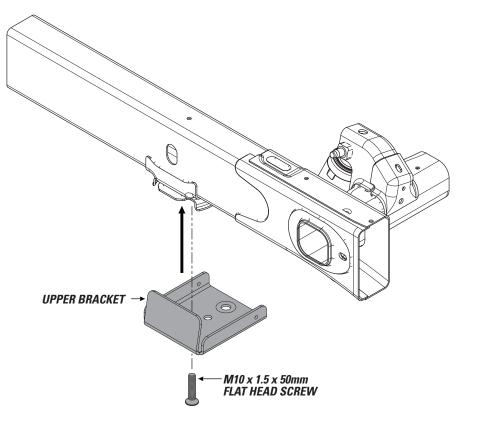
INSTALL UPPER BRACKET



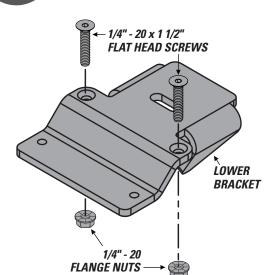


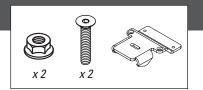
Place upper bracket against frame where jounce bumper was installed, assuring that the tab is on the outside of the frame.

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.



PREP LOWER BRACKET ASSEMBLY





~ 3 inches

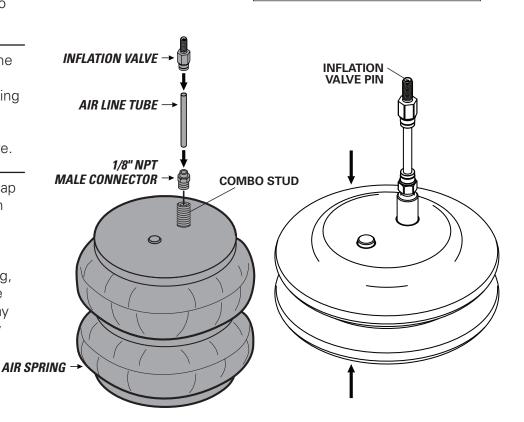
Prep the lower bracket by installing the flat head screws and flange nuts, as shown.

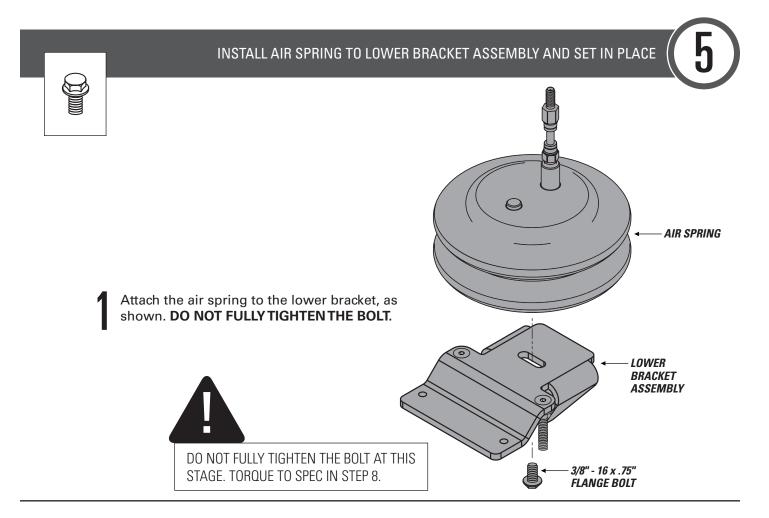
PREP AIR SPRING

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.

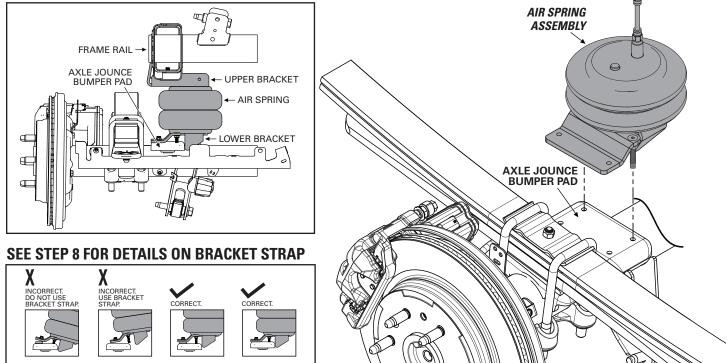
3 Using the inflation valve cap tool, depress the inflation valve pin and compress the air spring as much as possible. While holding the compressed air spring, release the inflation valve pin. The air spring will stay compressed and is ready for installation.





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. See if the lower bracket rests evenly on the axle jounce bumper pad. If not, the bracket strap and associated hardware will be required in step 8.

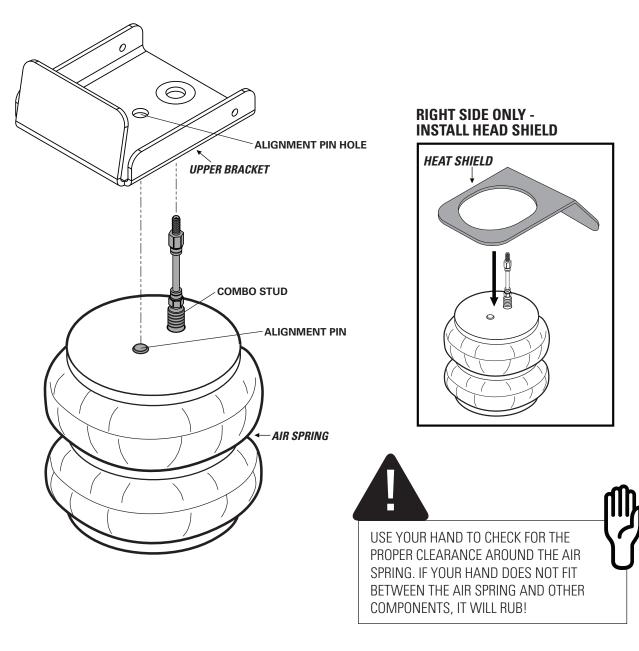
### **RIGHT SIDE VIEW FROM FRONT**



SEAT TOP OF AIR SPRING INTO UPPER BRACKET

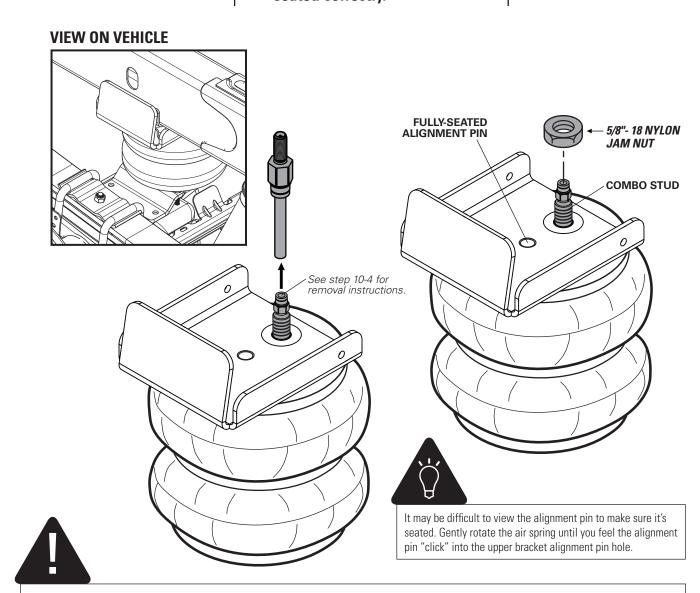
Right side only

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. 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.



### 2,500 LBS! IT IS USED FOR ALIGNMENT ONLY!

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** 



from the air fitting on top of the air spring (see step 10-4 for removal instructions).

Remove the air line tube

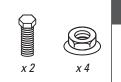
9

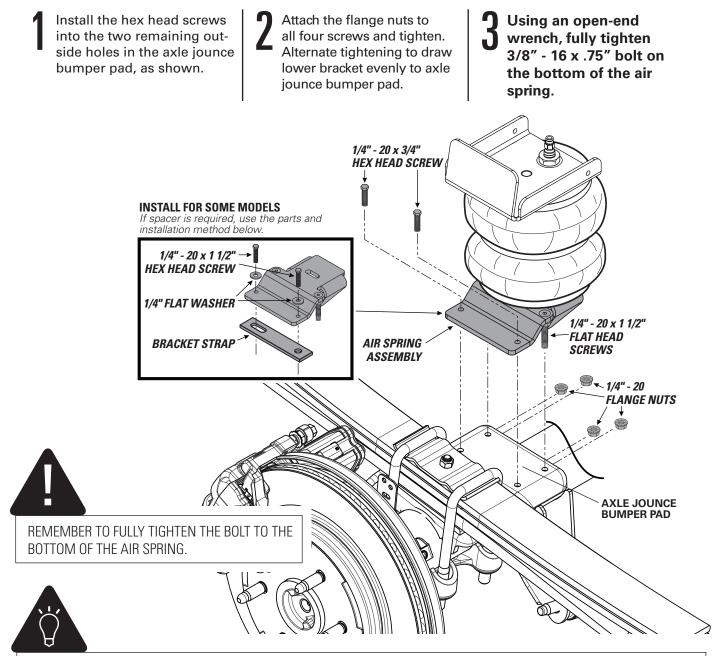
2 Make sure that the alignment pin on top of the air spring has fully seated into the alignment pin hole in the upper bracket. It will "click" into place once seated correctly.

Fully tighten the nut to the combo stud.

SECURE AIR SPRING TO UPPER BRACKET

Most applications do not require the bracket strap and associated hardware. Use only if it assists in aligning the lower bracket to the axle jounce bumper pad. Review step 5 for correct alignment.

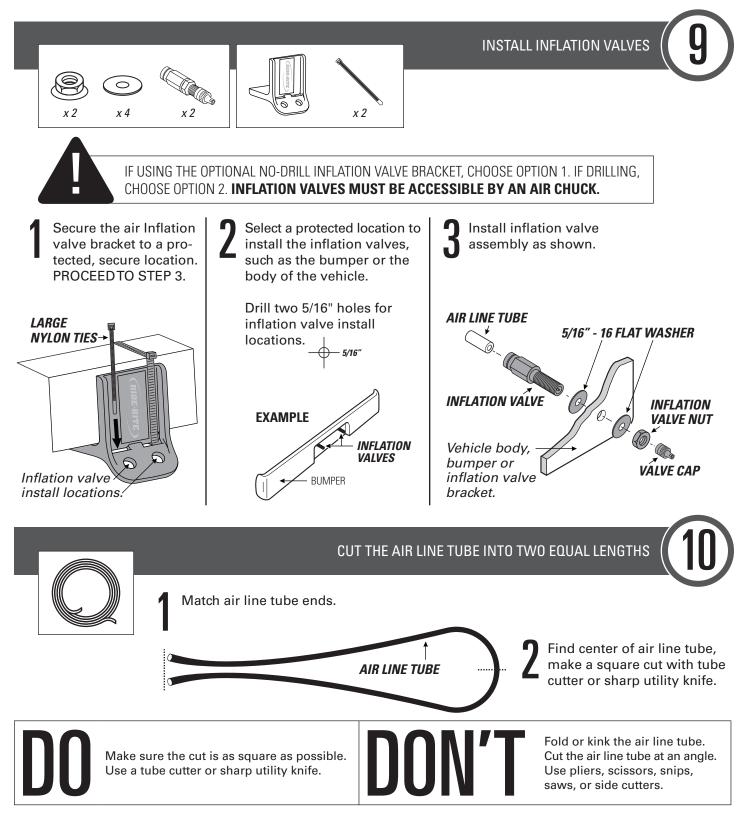




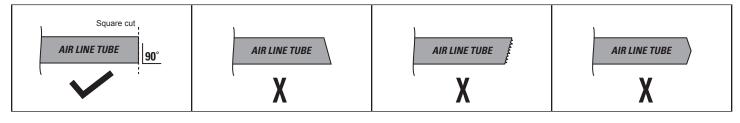
The factory rear brake line guard may be repositioned to gain better access to lower bracket fasteners. To perform this step, remove the three button-head fasteners using a T40 Torx bit. Gently release the plastic retainers on the guard from the brake line and carefully reposition it as needed for access 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.

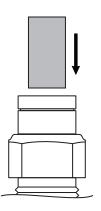


### **PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE**

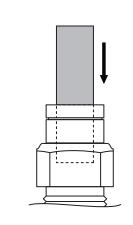


### INSTALLING AIR LINE TUBE INTO AIR FITTINGS AND INFLATION VALVE

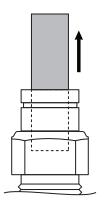
Insert end of air line tube into air fitting.



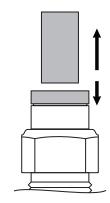
Push air line tube into air fitting as far as possible.



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



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.



### 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.

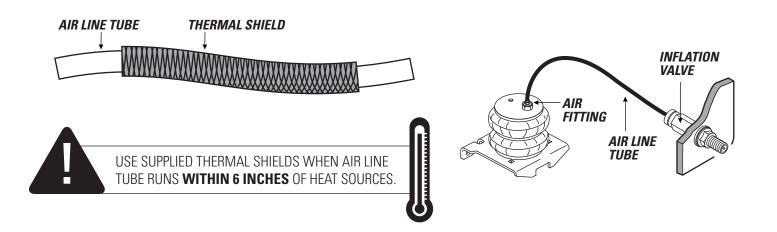
x7	
x 2	

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.



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.



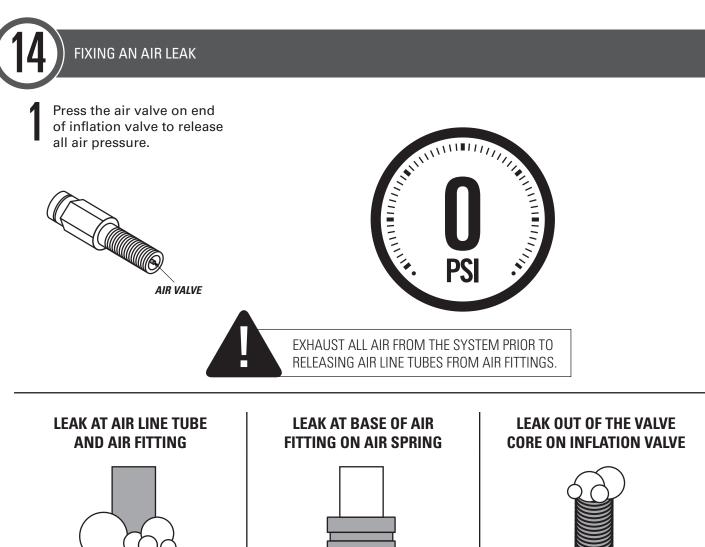
CHECKING THE AIR SYSTEM Place an air chuck onto the Spray fittings with inflation valve and fill the soap and water system to 70 PSI. mixture. THE REAL PROPERTY OF THE PROPE -----WATER SOAP AIR SPRINGS INFLATE QUICKLY. CHECK AIR PRESSURE WHILE INFLATING. Observe bubbles. Source **SOAP BUBBLES SMALL SOAP BUBBLES THAT EXPAND** THAT DO NOT EXPAND X

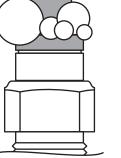


Congratulations! Continue to step 15 to finish installation. Review the Operating Instructions.

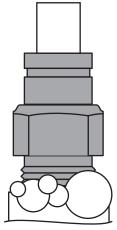
LEAK?

Bummer. Continue to step 14 to fix the leak.





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



Tighten air fitting one turn or until leak stops.



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**

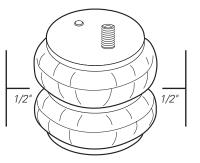
NEVER exceed the maximum load recommended by the vehicle manufacturer (GVWR). The GVWR can be found in your vehicle's owner's manual or on the data plate on the driver's side door. Consult your local dealership for additional GVWR specifications.

### 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)



### 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!

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 **rrtech@fsip.com**. Please include photos to help us better diagnose and understand any problems you may be experiencing.



**Firestone Industrial Products** 

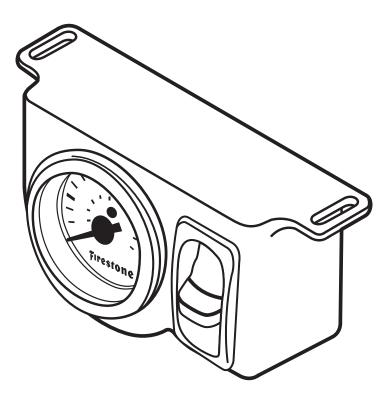


2609



riderite.com

### **INSTALLATION INSTRUCTIONS**





**Firestone Industrial Products** 

2158

## **! IMPORTANT**

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

### 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.

### **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

Be sure to review the load limits noted in the air spring kit installation instructions (sold separately).

### **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.

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



MINIMUM PRESSURE

## PARTS

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

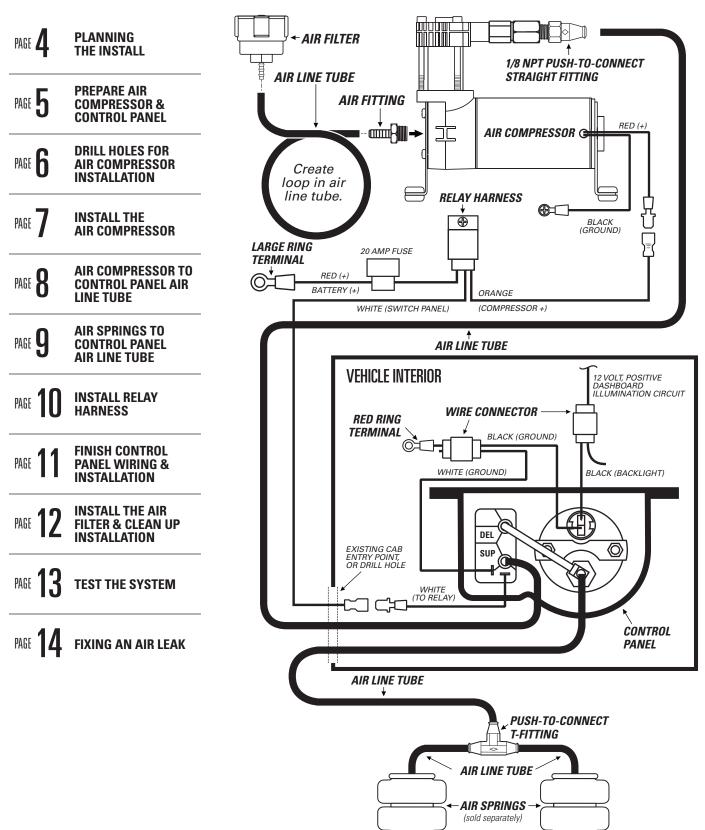
### **MAIN KIT CONTENTS**

PT # 2572	x 1 SINGLE AIR X 1 CONTROL PANEL	PT # 9523	AIR COMPRESSOR	PT # 9307	x 1 RELAY HARNESS
PT # 9416	x 1 AIR LINE TUBE (30 FEET)				

### A21-760-2158 HARDWARE PACK

PT # 3087	() Internet in the second	x 8 10-32 x 1" MACHINE SCREW	PT # 9078	□-0	x 1	RED RING TERMINAL	PT # 3055	1/8 NPT PUSH- x 1 TO-CONNECT STRAIGHT FITTING
PT # 3088		x 8 10-32 LOCK NUT	PT # 9083		x 2	WIRE CONNECTOR	PT # 9041	x 1 LARGE RING TERMINAL
PT # 3086	$\odot$	x 16 #10 FLAT WASHER	PT # 3025		x 1	PUSH-TO- CONNECT T-FITTING	PT # 9036	x 15 NYLON TIE
PT # 3025		x 1 1/4" PUSH-TO- CONNECT TEE	PT # 9041	D-9	x 1	BLUE RING TERMINAL		

# **CONTENTS AND OVERVIEW**



## **PLANNING THE INSTALL**

THESE PLANNING STEPS WILL HELP YOU SAVE TIME AND WILL MAKE THE INSTALLATION EASIER.

### DETERMINE THE MOUNTING LOCATION FOR THE CONTROL PANEL

- Mount inside the vehicle cab, in a place where you will not hit or kick it.
- Allow room for the air line tube to run without sharp curves or bends.
- Do not obstruct your view or ability to safely operate the vehicle.

### DETERMINE THE MOUNTING LOCATION FOR THE AIR COMPRESSOR

- Provide ample air flow.
- Protect from airborne debris and moisture.
- If using the optional Frame Installation Kit (Part # 2497), consider the guidelines above, and follow kit's instructions.

### PLAN INSTALLATION ROUTES FOR WIRING AND AIR LINES INTO CAB

- If possible, use existing factory grommet, such as where a wiring harness enters the cab.
- If not possible, drill a hole large enough for two air line tubes and a ground wire. Make sure the wiring and air line tubes are not exposed to sharp metal edges that can damage them.

### SOAK AIR LINE TUBE ENDS IN HOT WATER BEFORE INSTALLING ONTO BARBED FITTINGS

-The hot water makes the air line tube easier to work with and enables it to shrink onto the barbed fitting for a better seal.

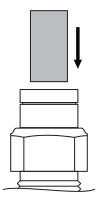
### TAPE ALL ELECTRICAL CONNECTIONS

- Use electrical tape to appropriately secure and protect all electrical connections.

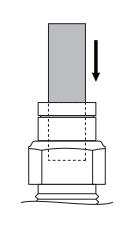
### USING PUSH-TO-CONNECT FITTINGS FOR AIR LINES

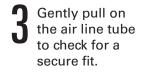
Your kit includes push-to-connect fittings to connect the air line tubes to hardware. Use the instructions below when using the air line.

Insert end of air line tube into air fitting.

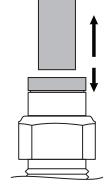


Push air line tube into air fitting as far as possible.

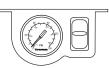




To remove, push down collar and gently pull air line tube away.

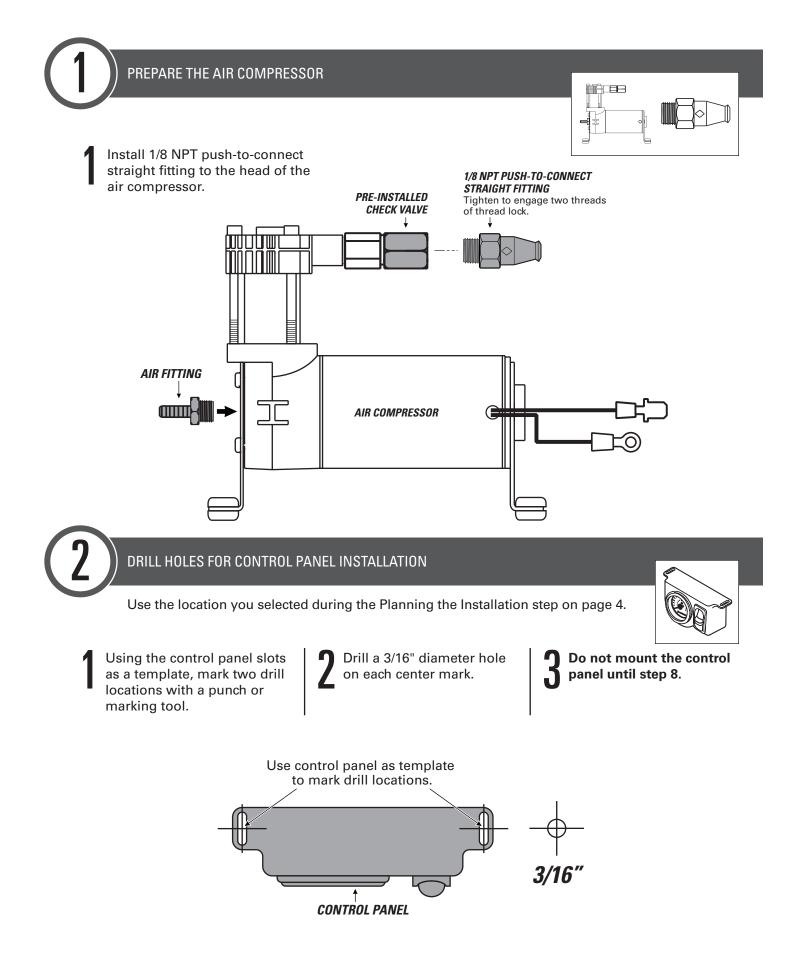


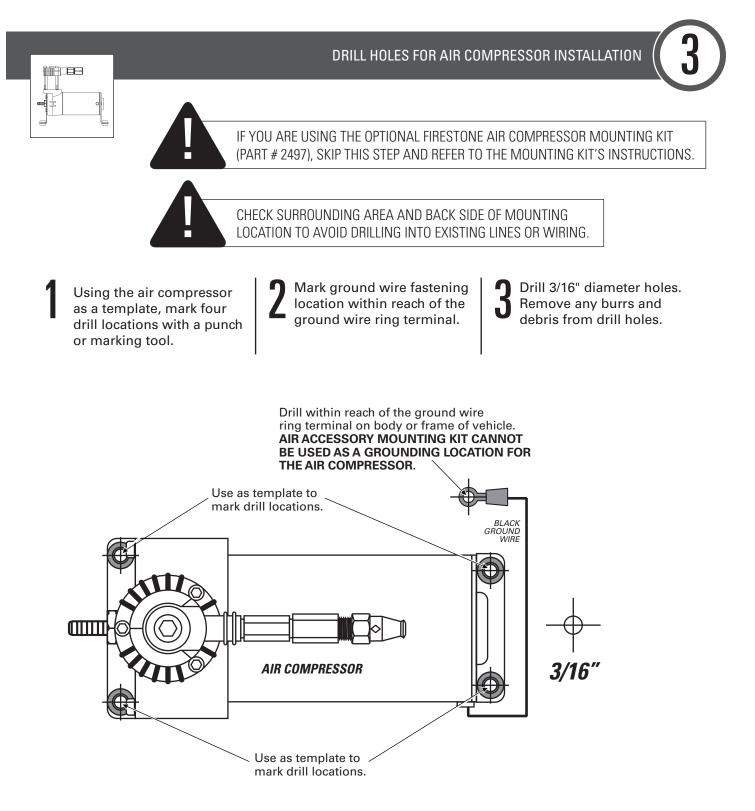
**Removal Tip**: Use a 1/4", 5/16", or 6mm open-ended wrench to push the collar down.

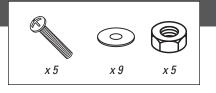










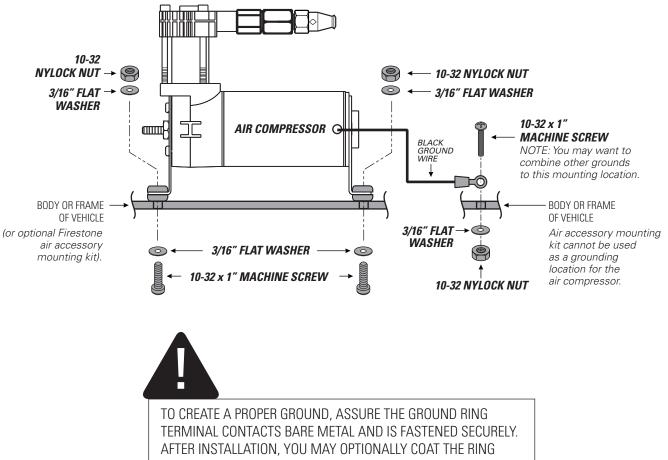


### DO NOT OVER TIGHTEN MOUNTING BOLTS AND NUTS. TOO MUCH TORQUE CAN CRUSH THE BRASS INSERTS AND RUBBER ISOLATORS.

Mount the air compressor to the drill hole location using the supplied fasteners. DO NOT OVERTIGHTEN.

2

Mount the black ground wire ring terminal using the supplied fasteners. Assure that the ring terminal makes a solid contact with bare metal for a proper ground. (Optionally, you can run the negative to the negative battery terminal.)

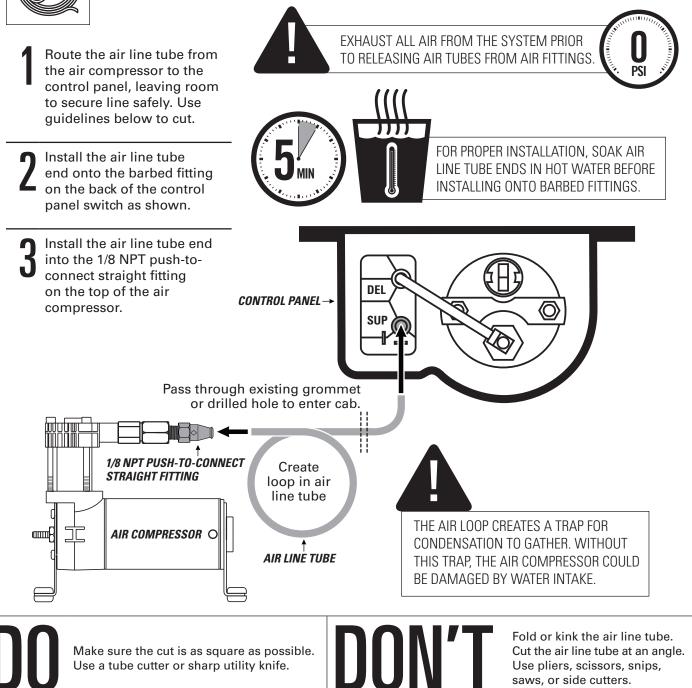


TERMINAL IN SILICONE TO PROTECT IT FROM CORRODING.

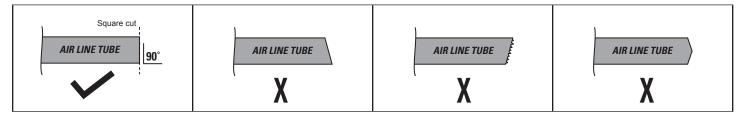
### ROUTE AIR LINE TUBE FROM AIR COMPRESSOR TO CONTROL PANEL



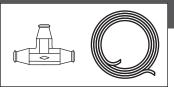
Use the route you selected during the Planning the Installation step on page 4.



### **PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE**



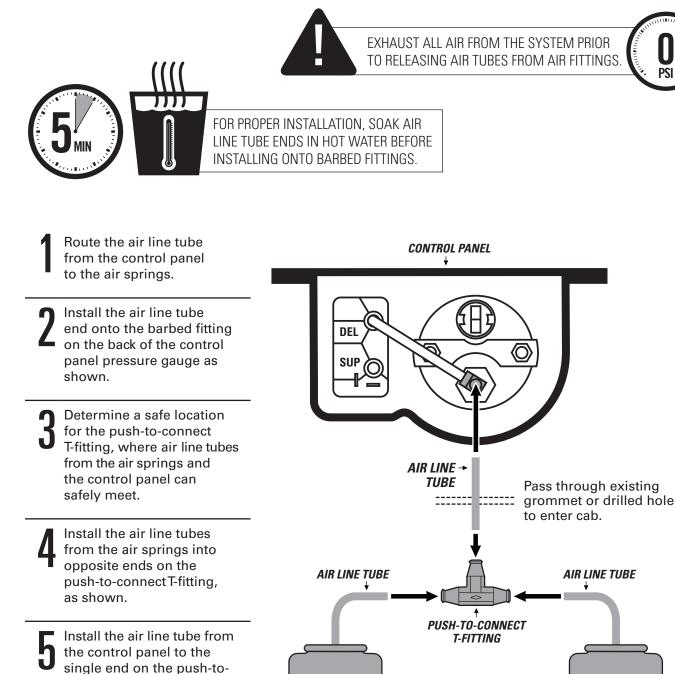
Use the route you selected during the Planning the Installation step on page 4.



AIR LINE TUBE

AIR SPRING

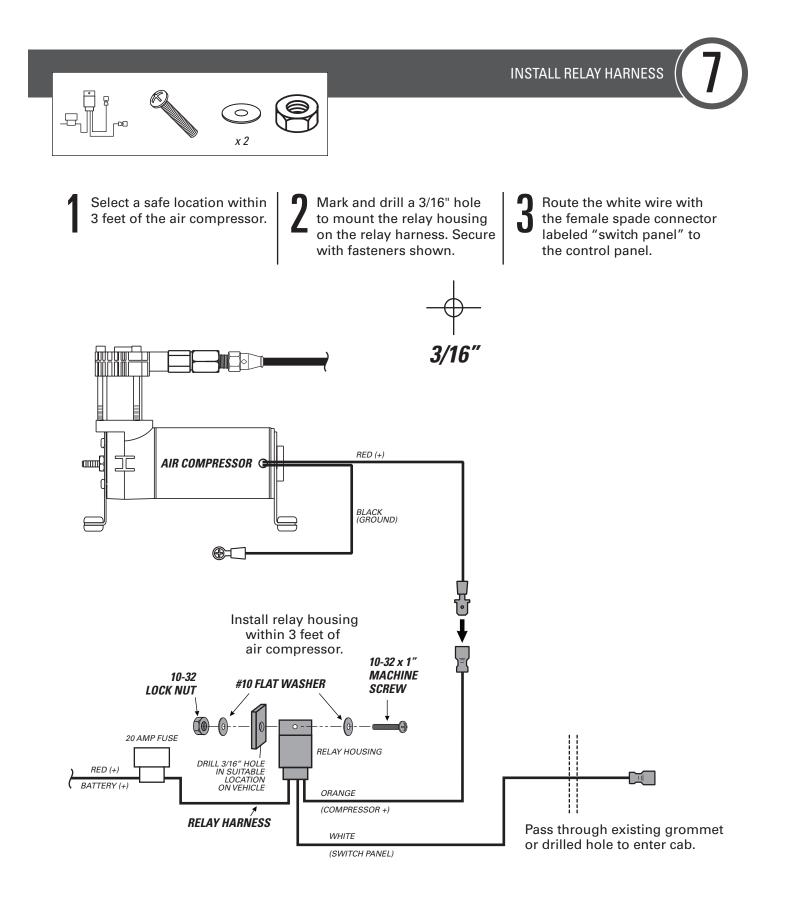
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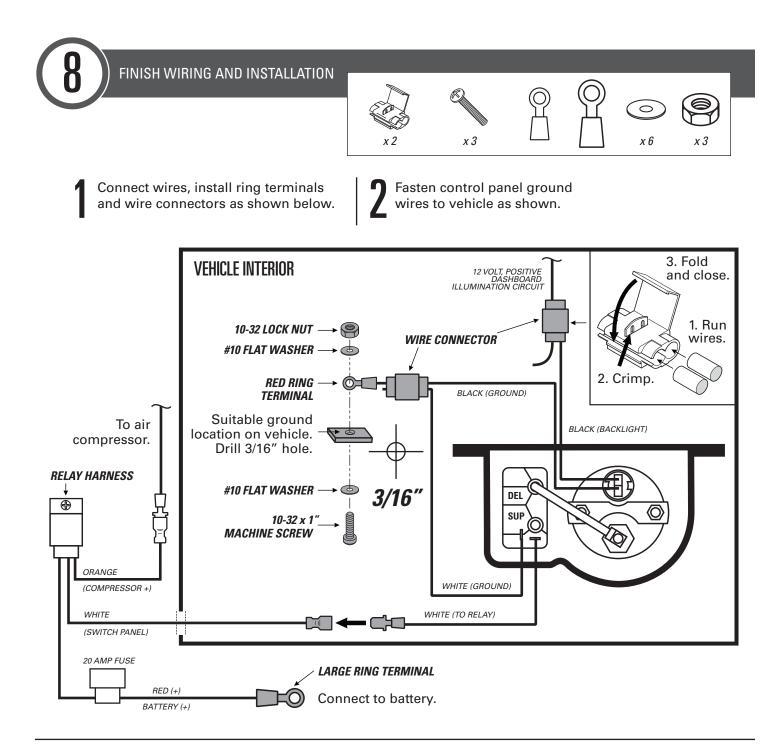


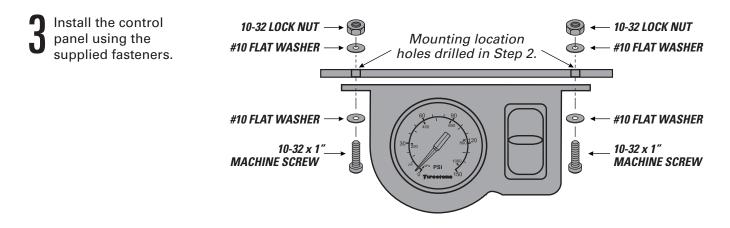
AIR SPRING

(sold separately)

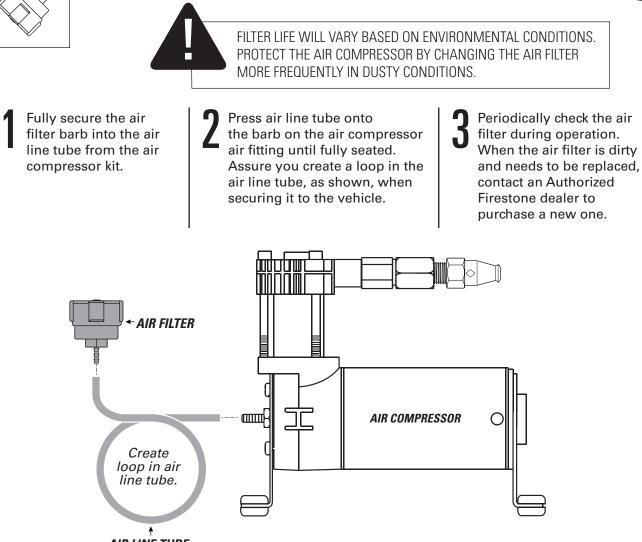
connect T-fitting.







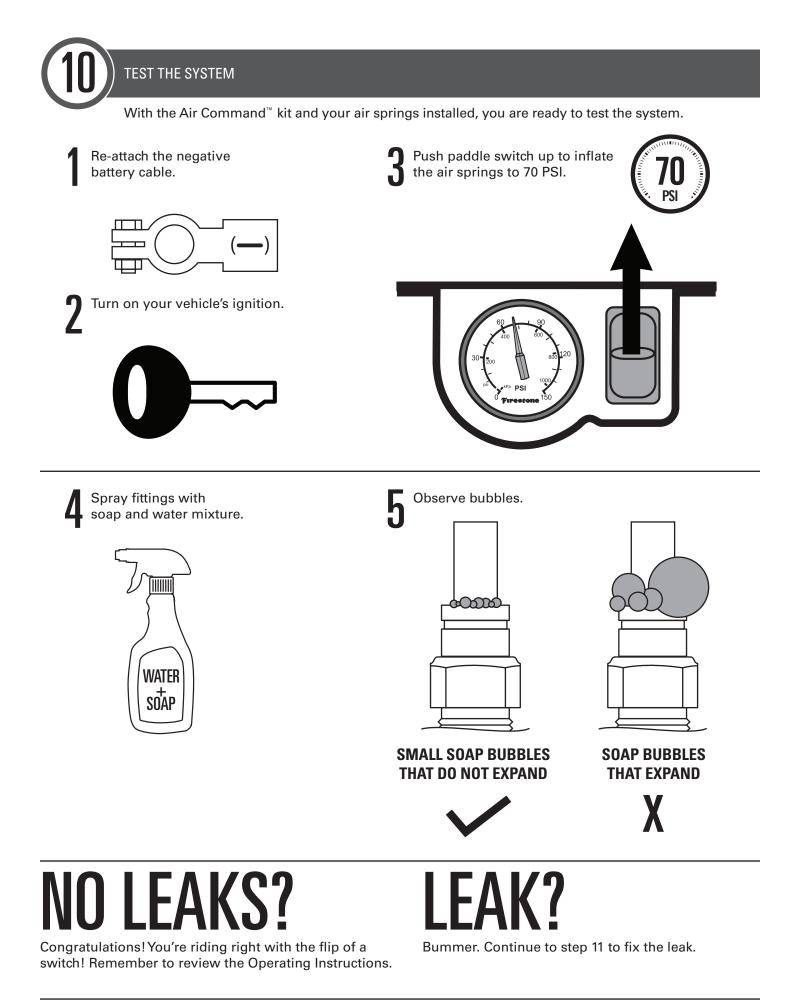




AIR LINE TUBE FROM AIR COMPRESSOR KIT

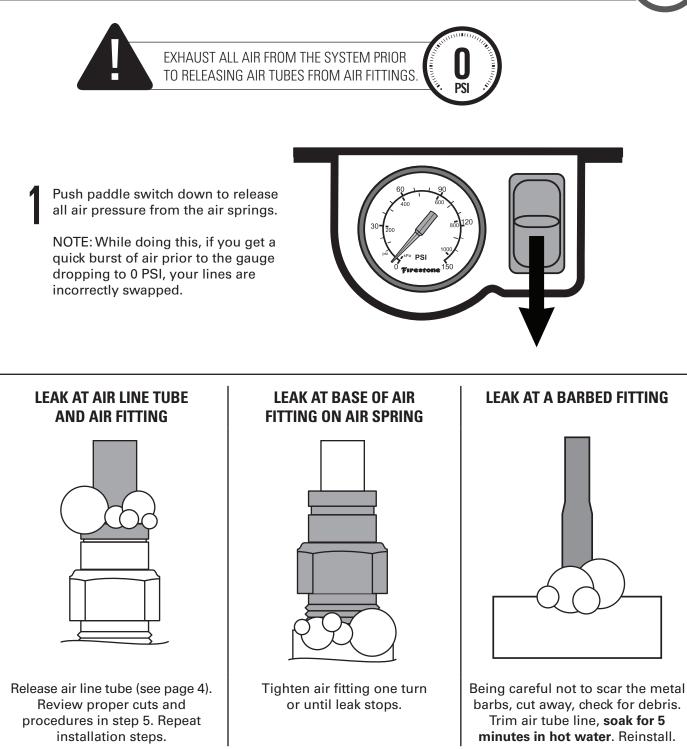
 1
 Clean up the installation using supplied Nylon ties, and return all factory parts and materials to operative state.

 VISING SUPPLIED NYLON TIES, SECURE ALL WIRING AND AIR LINE TUBE IN A MANNER THAT DOES NOT OBSTRUCT YOUR VIEW OR ABILITY TO SAFELY OPERATE THE VEHICLE.



Firestone





### **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.



### riderite.com

### BEFORE YOU DRIVE, CONFIRM THE FOLLOWING:

Secure all air line tubes and wiring inside the cab and on the outside of the truck.

A Make sure no wiring, air line tubes, or hardware obstruct your vision or ability to safely operate the vehicle.

The system passes the leak test and holds air.

The air compressor ground ring terminal is contacting bare metal, and coated with silicone if possible.

 $\Box$  There is a loop in the air line tubes as shown to prevent water or debris from getting into the air

compressor head and damaging it.

The air gauge backlight turns off when the ignition is off, or when dashboard lights do not illuminate.

□ Put a minimum of 5 PSI in the air springs, unloaded.

### NEED INSTALLATION HELP? 1-800-888-0650

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

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



**Firestone Industrial Products** 



### Do Not Return This Product to the Dealer or Distributor

#### If you are

- missing parts,
- · experiencing installation problems, or
- have technical concerns regarding this product,

you may contact a Firestone Technical Service Representative at **rrtech@fsip.com** or at 800-888-0650 (option 1, and then option 2). Representatives are available from 7:30 a.m. – 4:30 p.m. Eastern on Monday – Friday, excluding holidays. If you are located outside of the United States, you should first contact your distributor or dealer directly with any issues.

When contacting Technical Service, please have the kit or part # ready, along with the make, model, and year of the vehicle. You may also need to provide details, such as 2WD/4WD or if the vehicle has been lifted or lowered from stock height.

If you have a warranty concern, please include in your email a detailed description of the situation, a photo(s) of the issue, and your contact information, including ship-to address.

**WARRANTY COVERAGE\***— The Ride-Rite<sup>™</sup> kits, components, and accessories are warranted against defects in workmanship and materials. This warranty does not cover service or labor charges, neglect...to the product.

### PERIOD OF COVERAGE:

- Ride-Rite air springs Lifetime Limited
- Sport-Rite air springs Lifetime Limited
- Coil-Rite air springs Lifetime Limited
- Level-Rite air springs Lifetime Limited
- Work-Rite load assists 2 Years Limited
- Air-Rite accessories 2 Years Limited
- Brackets, hardware, fittings, air line, and other components 2 Years Limited

**HOW TO MAKE A WARRANTY CLAIM** — If you purchased your air springs in the U.S. or Canada and believe you have a part with a warrantable defect, call Firestone directly at 1-800-888-0650.

International customers should contact their distributors or dealers directly with any problems.

(\*) Please refer to the "Firestone Limited Lifetime Air Spring Warranty" for details, terns, and conditions.

#### WARRANTY QUESTIONS

### Go to www.riderite.com/installation-support

Select "Warranty Info" tab