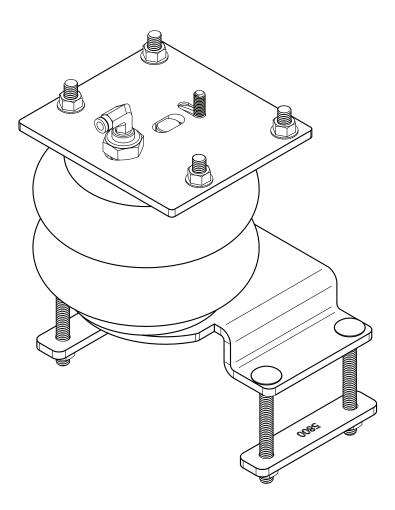


firestoneairide.com

### **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:



# PARTS

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

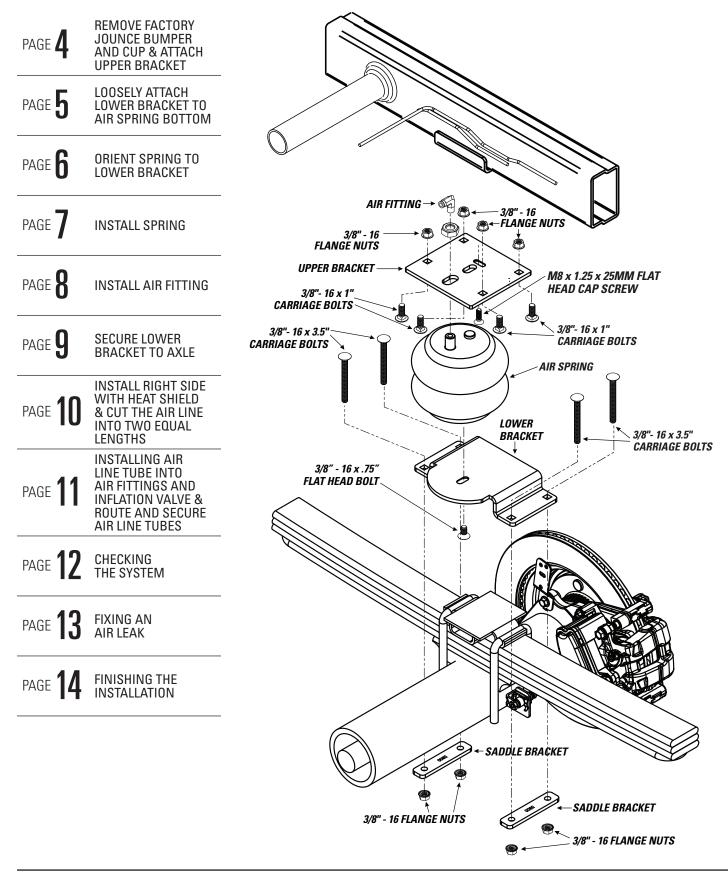
#### MAIN KIT CONTENTS

| DT # 6766 |  | x 2 AIR SPRING     | PT # 5971 | and of the second secon | x 2 | LOWER BRACKET | PT # 5972 | A B B A | x 2 | UPPER BRACKET                  |
|-----------|--|--------------------|-----------|--|-----|---------------|-----------|---------|-----|--------------------------------|
| DT # 5800 |  | x 4 SADDLE BRACKET | PT # 1004 | $\bigcirc$   | х 1 | HEAT SHIELD   | PT # 9414 |         | x 1 | RED AIR LINE TUBE<br>(18 FEET) |

#### A21-760-2646 HARDWARE PACK

| PT # 3128 | OT_        | x2  | ELBOW FITTING                                | PT # 3370 |   | x 2  | 3/8" - 16 x .75" FLAT<br>HEAD SCREW | PT # 3482 | x 8 3/8" - 16 x 3.5" CARRIAGE BC |  |
|-----------|------------|-----|--|-----------|---|------|-------------------------------------|-----------|----------------------------------|--|
| PT # 3033 | $\bigcirc$ | x 4 | 5/16" FLAT WASHER                            | PT # 3022 | 9 | x 16 | 3/8" - 16 FLANGE<br>LOCK NUT        | PT # 9036 | x 6 RED NYLON TIE                |  |
| PT # 3032 |            | x 2 | INFLATION VALVE<br>AND VALVE CAP<br>ASSEMBLY | PT # 3332 |   | x 2  | 5/8" - 11 HEX<br>LOCK NUT           | PT # 0899 | x 2 THERMAL SLEEVE               |  |
| PT # 9483 | 0          | x 1 | INFLATION VALVE<br>BRACKET                   | PT # 9488 |   |      | x 2 LARGE NYLON TIE                 | PT # 3072 | x 8 3/8" - 16 x 1" CARRIAGE BOLT |  |
| PT # 3522 |            | x 2 | M8 x 1.25 x 25MM<br>FLAT HEAD CAP<br>SCREW   |           |   |      |                                     |           |                                  |  |

# **CONTENTS AND OVERVIEW**

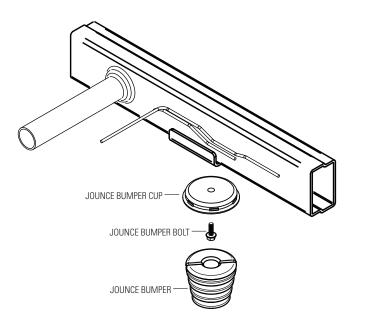


#### **REMOVE FACTORYJOUNCE BUMPER AND CUP**



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

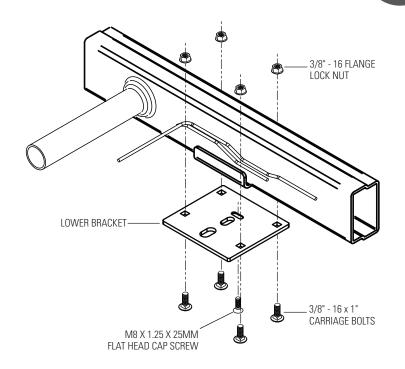
- 1.1 Pry jounce bumper from jounce bumper cup.
- 1.2 Remove M8 bolt in cup previously hidden by jounce bumper.
- 1.3 Remove jounce bumper cup.



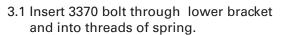
ATTACH UPPER BRACKET



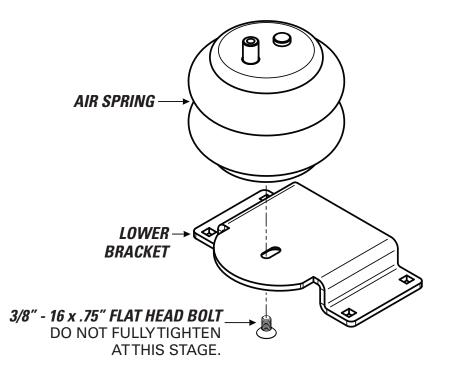
- 2.1 Use 3522 flat head M8 bolt in jounce bumper bolt hole in frame to loosely attach 5972 upper bracket.
- 2.2 Make sure bracket is turned so that the overhang is toward the inside of the frame and the 3522 bolt is in the front of the countersunk slot (bracket slid rearward).
- 2.3 Install at least two of the 3072 carriage bolts facing upwards into the 5972 bracket and secure each with a 3022 lock nut.
- 2.4 Tighten all fasteners to 23lb-ft





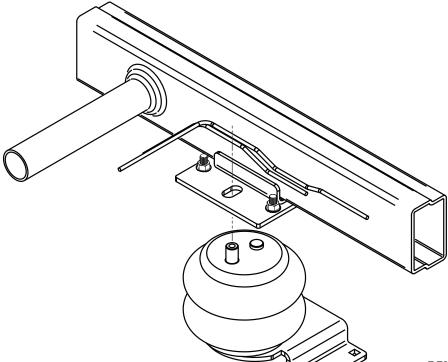


3.2 Do not tighten – you will need to be able to rotate spring for proper orientation.



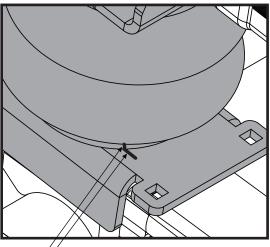
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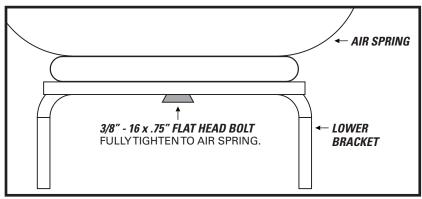
- 4.1 Temporarily insert spring into upper bracket
- 4.2 Do not attach combo stud nut at this time.
- 4.3 Ensure air spring index pin is fully seated into upper bracket hole.
- 4.4 Accurately mark this position on lower spring plate and lower bracket
- 4.5 Remove spring from upper bracket.
- 4.6 With marks aligned, secure spring to lower bracket by tightening 3370 bolt.

#### **DRY FIT ALIGNMENT**



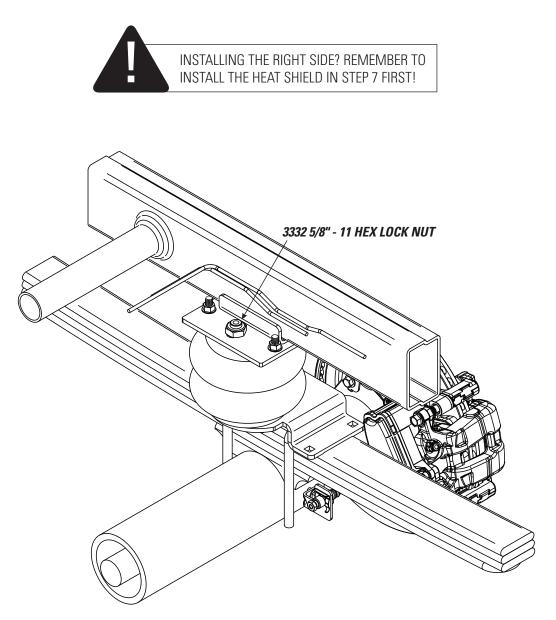
MAKE ALIGNMENT MARKS







- 5.1 Insert spring into upper bracket.
- 5.2 Make sure air spring index pin is properly seated in upper bracket hole.
- 5.3 Secure spring to upper bracket using 3332 jam nut.

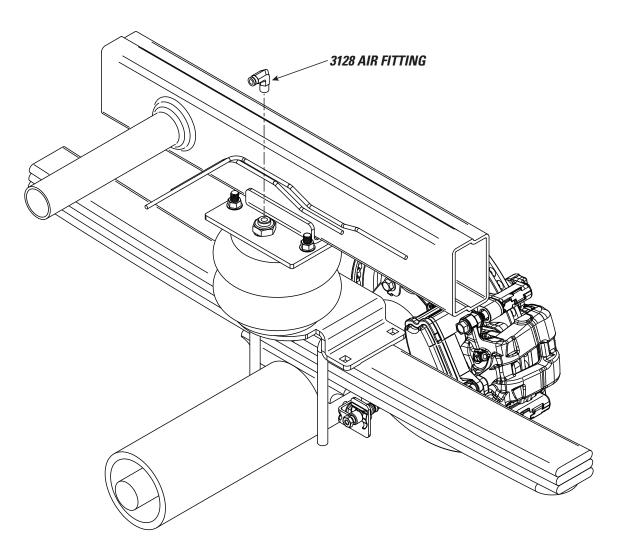


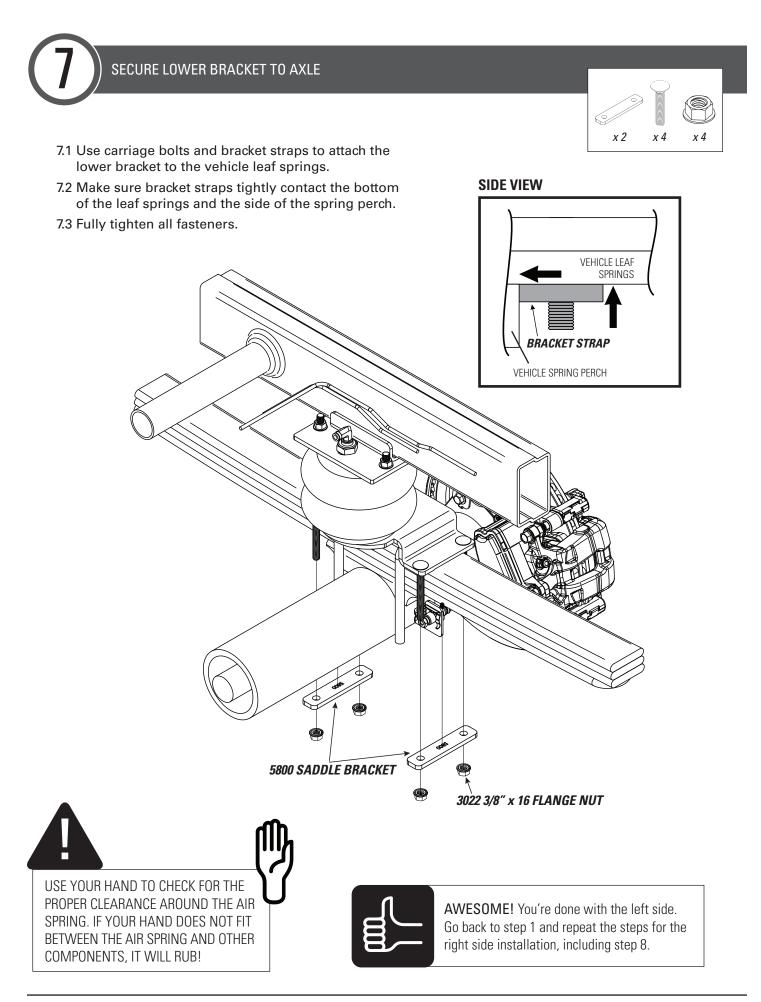
х2

INSTALL AIR FITTING



- 5.1 Thread 3128 air fitting into air spring combo stud
- 5.2 Securely tighten air fitting





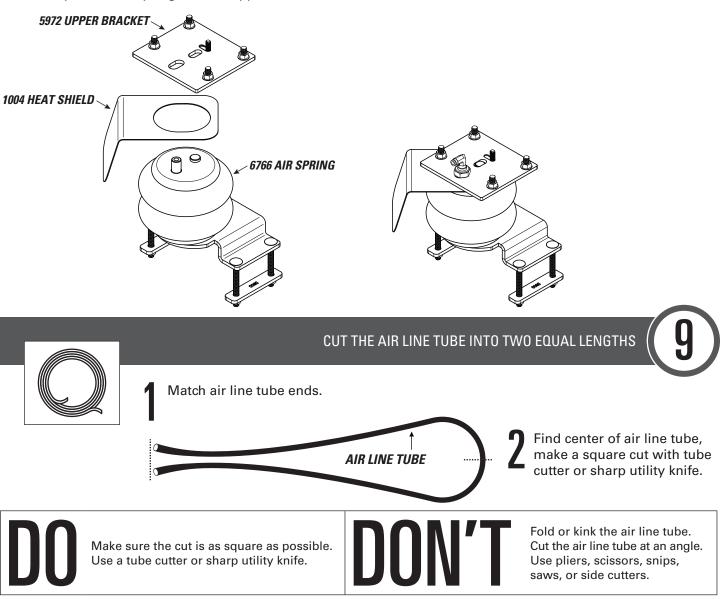




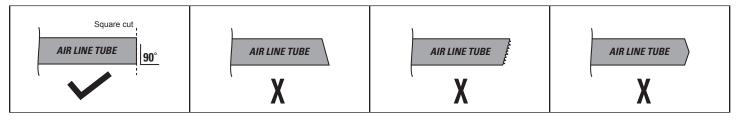
- 8.1 The right side installation is the mirror image of the left with an added heat shield.
- 8.2 Secure the heat shield by clamping it between the top of the air spring and the upper bracket.



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

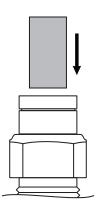


#### **PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE**

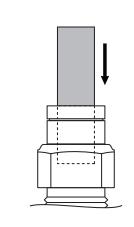




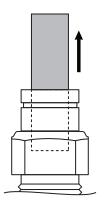
Insert end of air line tube into air fitting.



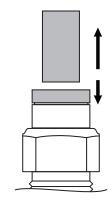
Push air line tube
into air fitting as
far as possible.



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.

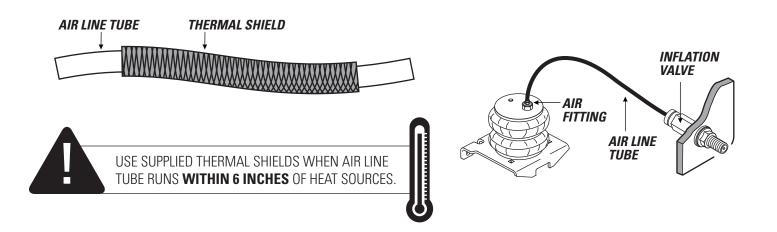
| x 5 |  |
|-----|--|
| x 2 |  |



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.

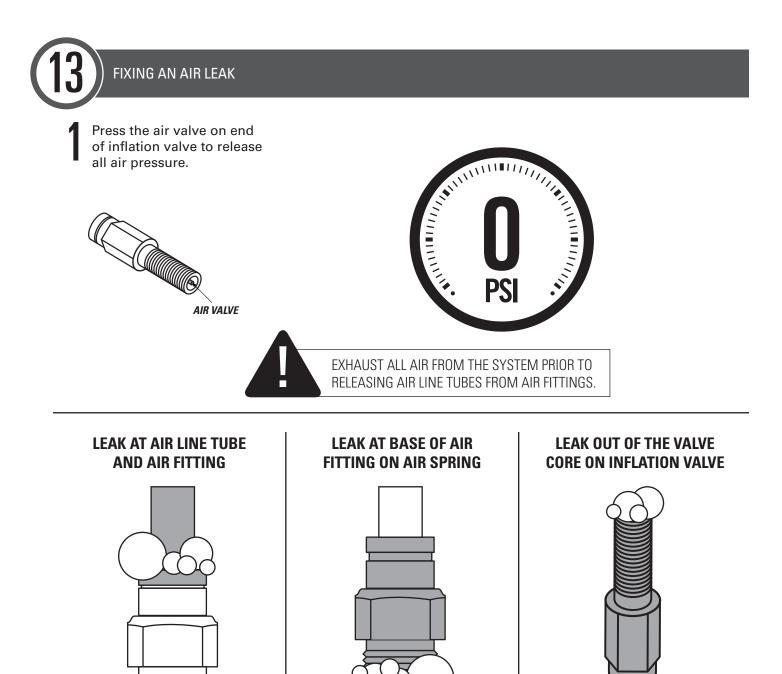


CHECKING THE AIR SYSTEM Place an air chuck onto the Spray fittings with inflation valve and fill the soap and water system to 70 PSI. mixture. THE REAL PROPERTY OF THE PROPE -----WATER SOAP AIR SPRINGS INFLATE QUICKLY. CHECK AIR PRESSURE WHILE INFLATING. Observe bubbles. Source **SOAP BUBBLES SMALL SOAP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

## **NO LEAKS?**

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

**LEAK?** Bummer. Continue to step 13 to fix the leak.



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

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 torgue 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**

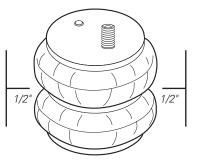
NEVER exceed the maximum load recommended by the vehicle manufacturer (GVWR). The GVWR can be found in your vehicle's owner's manual or on the data plate on the driver's side door. Consult your local dealership for additional GVWR specifications.

#### 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.



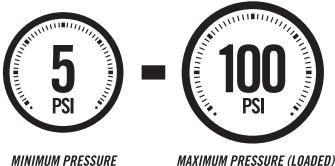
USE YOUR HAND TO CHECK FOR THE PROPER CLEARANCE AROUND THE AIR SPRING. IF YOUR HAND DOES NOT FIT BETWEEN THE AIR SPRING AND OTHER COMPONENTS, IT WILL RUB!



### **! 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.



### 

### 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 paperwork in your glove compartment for future reference.
- □You've been bagged...and now your suspension is Airide<sup>™</sup> 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.



**Firestone Ride-Rite** 

5 1/2" - 6 1/2"

