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. 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:

![Pressure Chart]

<table>
<thead>
<tr>
<th>Minimum Pressure</th>
<th>Maximum Pressure (Loaded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 PSI</td>
<td>100 PSI</td>
</tr>
</tbody>
</table>
# Parts

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

## Main Kit Contents

<table>
<thead>
<tr>
<th>Part</th>
<th>Part Number</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Spring</td>
<td>PT # 6397</td>
<td>2</td>
</tr>
<tr>
<td>Lower Air Spring Bracket</td>
<td>PT # 5878</td>
<td>2</td>
</tr>
<tr>
<td>Bail Clamp</td>
<td>PT # 5077</td>
<td>2</td>
</tr>
<tr>
<td>Upper Left Bracket</td>
<td>PT # 5872</td>
<td>1</td>
</tr>
<tr>
<td>Axle Strap Bracket (4.5&quot; Axle)</td>
<td>PT # 5870</td>
<td>2</td>
</tr>
<tr>
<td>Heat Shield</td>
<td>PT # 1004</td>
<td>1</td>
</tr>
<tr>
<td>Upper Right Bracket</td>
<td>PT # 5873</td>
<td>1</td>
</tr>
<tr>
<td>Axle Strap Bracket (3.5&quot; Axle)</td>
<td>PT # 0530</td>
<td>2</td>
</tr>
<tr>
<td>Air Line Tube (22 Feet)</td>
<td>PT # 9415</td>
<td>1</td>
</tr>
<tr>
<td>Axle Saddle Bracket</td>
<td>PT # 5874</td>
<td>2</td>
</tr>
</tbody>
</table>

## A24-760-7560 Inflation Valve Bracket Kit

<table>
<thead>
<tr>
<th>Part</th>
<th>Part Number</th>
<th>Quantity</th>
</tr>
</thead>
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<tr>
<td>No-Drill Inflation Valve Bracket</td>
<td>PT # 9483</td>
<td>1</td>
</tr>
<tr>
<td>Large Nylon Tie</td>
<td>PT # 9488</td>
<td>2</td>
</tr>
</tbody>
</table>

## A21-760-2605 Hardware Pack

<table>
<thead>
<tr>
<th>Part</th>
<th>Part Number</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot; - 16 x 3/4&quot; Flat Head Screw</td>
<td>PT # 3370</td>
<td>4</td>
</tr>
<tr>
<td>Flange Lock Nut</td>
<td>PT # 3067</td>
<td>12</td>
</tr>
<tr>
<td>Inflation Valve and Valve Cap Assembly</td>
<td>PT # 3032</td>
<td>2</td>
</tr>
<tr>
<td>5/16&quot; Flat Washer</td>
<td>PT # 3033</td>
<td>4</td>
</tr>
<tr>
<td>3/8&quot; Flat Washer</td>
<td>PT # 3483</td>
<td>12</td>
</tr>
<tr>
<td>Air Fitting</td>
<td>PT # 3085</td>
<td>2</td>
</tr>
<tr>
<td>3/8&quot; - 16 x 3/4&quot; Flange Bolt</td>
<td>PT # 3095</td>
<td>2</td>
</tr>
<tr>
<td>5/8&quot; - 18 Nylon Jam Nut</td>
<td>PT # 3332</td>
<td>2</td>
</tr>
<tr>
<td>3/8&quot; - 16 Carriage Bolt</td>
<td>PT # 9038</td>
<td>4</td>
</tr>
<tr>
<td>3/8&quot; - 16 x 2&quot; Threaded Rod</td>
<td>PT # 3504</td>
<td>2</td>
</tr>
<tr>
<td>Frame Nut</td>
<td>PT # 3488</td>
<td>4</td>
</tr>
<tr>
<td>Hex Head Bolt</td>
<td>PT # 3308</td>
<td>8</td>
</tr>
<tr>
<td>Nylock Nuts</td>
<td>PT # 3489</td>
<td>4</td>
</tr>
<tr>
<td>Thermal Sleeve</td>
<td>PT # 3487</td>
<td>2</td>
</tr>
<tr>
<td>3/8&quot; - 16 x 3&quot; Carriage Bolt</td>
<td>PT # 0899</td>
<td>4</td>
</tr>
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### CONTENTS AND OVERVIEW

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<td>Heat Shield &amp; Passenger Side</td>
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<td>10</td>
<td>Air Line Tube &amp; Inflation Valve Installation</td>
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<td>Finishing the Installation</td>
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</table>
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.
**FASTEN AIR SPRING TO UPPER BRACKET**

3

**WARNING:**

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

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**AIR FITTING**

Thread into inside of air combo stud. 
Tighten until threadlock coating is fully engaged.

**5/8" - 16 NYLON JAM NUT**

Thread onto outside of air combo stud. 
Tighten to 30-40 ft lbs.

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**VIEW FROM BELOW**

**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!**

**ROTATE ASSEMBLY TO USE FRONT ALIGNMENT HOLE**

**UPPER BRACKET**

**AIR SPRING**

**UPPER BRACKET**

**ALIGNMENT PIN**

Must fully seat into FRONT alignment hole.

**AIR COMBO STUD**
**INSTALL LOWER BRACKET ASSEMBLY**

**DO NOT USE THE 3.5” CARRIAGE BOLTS ON 3.5” AXLE INSTALLATIONS. THEY COULD PUNCTURE THE AIR SPRING, RESULTING IN A FAILURE THAT IS NOT WARRANTABLE.**

1. Follow steps in diagram 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.

**3.5” AXLE INSTALLATION**

*Pre-install the 3” Carriage Bolts to the inner holes on the Axle Saddle Bracket. 4.5” Axle application installs 3.5” carriage bolts in Step 5.*

- **3/8” - 16 x 3/4” Flanged Hex Bolt**
  - Tighten to 15-20 ft lbs.

- **3/8” FLANGE NUT**
  - Tighten to 15-20 ft lbs.

- **3/8” WASHERS**

5 1/2” - 6 1/2” AIR SPRING DESIGN HEIGHT
USE YOUR HAND TO CHECK FOR THE PROPER CLEARANCE AROUND THE AIR SPING. 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.
Position heat shield to closest point of exhaust. DO NOT PLACE DIRECTLY ABOVE AXLE.
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.

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

- Square cut 90°:
  - ✓
- Fold or kink:
  - ☒
- Cut at an angle:
  - ☒
- Use pliers, scissors, snips, saws, or side cutters:
  - ☒
**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.

**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.

**REMOVAL TIP:** Use a 1/4”, 5/16”, or 6mm open-ended wrench to push the collar down.

**AIR LINE TUBE**

**THERMAL SHIELD**

**INFLATION VALVE**

**AIR LINE TUBE**

**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**.

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

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

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.
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.

! 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 5 PSI 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 Industrial Products