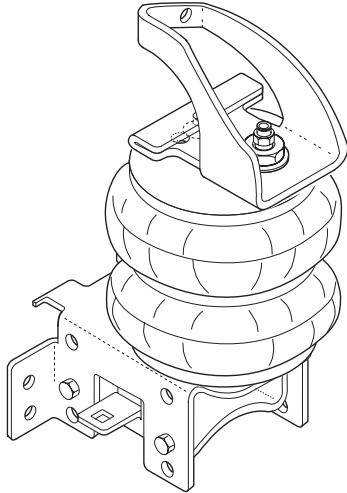


**DO NOT INSTALL if the truck has been lifted and the stock jounce bumper spacers are not on the vehicle.**



### INSTALLATION INSTRUCTIONS

Congratulations—your new Air Helper Springs are quality products capable of improving the handling and comfort of your vehicle. As with all products, proper installation is the key to obtaining all of the benefits your kit is capable of delivering. Please take a few minutes to read through the instructions to identify the components and learn where and how they are used. It is a good idea to start by comparing the parts in your kit with the parts list below.

The heart of the air helper spring kit is, of course, the air springs. Remember that the air helper springs must flex and expand during operation, so be sure that there is enough clearance to do so without rubbing against any other part of the vehicle.

Be sure to take all applicable safety precautions during the installation of the kit. The instructions listed in this brochure and the illustrations all show the left, or driver's side of the vehicle. To install the right side assembly simply follow the same procedures.

Your kit includes separate inflation valves and air lines for each air helper spring. This will allow you to

### WARNING:

Do not inflate this assembly when it is unrestricted. The assembly must be restricted by the suspension or other adequate structure. Do not inflate beyond 100 psi. Improper use or over inflation may cause property damage or severe personal injury.

***The air springs in this kit have a minimum pressure of 5 psi and maximum of 100 psi after the truck is loaded.***

level your vehicle from side to side as well as from front to back. If you would rather have a single valve inflation system, your dealer can supply the optional "T" fitting.

### IMPORTANT!

***For your safety and to prevent possible damage to your vehicle, do not exceed the maximum load recommended by the vehicle manufacturer (GVWR).***

Although your Air Helper Springs are rated at a maximum inflation pressure of 100 psi, this pressure may allow you to carry too great a load on some vehicles. It is best to have your vehicle weighed once it is completely loaded and compare that weight to the maximum allowed. Check your vehicle owner's manual or data plate on driver's side door for maximum loads listed for your vehicle.

When inflating your Air Helper Springs, add air pressure in small quantities, checking pressure frequently during inflation. The air spring requires much less air volume than a tire and, therefore, inflates much quicker.

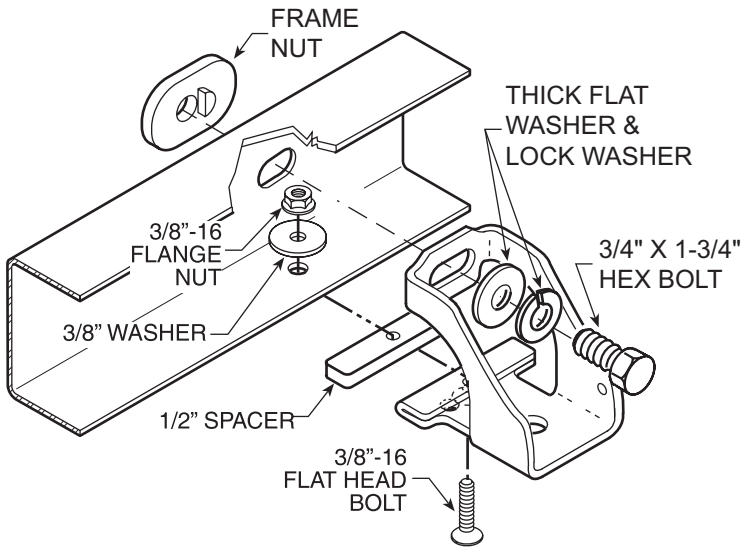
Remove the negative battery cable. It is not necessary to jack up the truck to install this Ride-Rite kit, if you DO, please use chocks in front of the front tires. Also, use jack stands beneath the truck's rear axle that are properly rated to support the truck's weight.

### PARTS LIST

224C AIR SPRING	6401	2
RIGHT UPPER BRACKET	5572	1
LEFT UPPER BRACKET	5717	1
LOWER BRACKET	5726	2
SADDLE BRACKET	5379	2
BRACKET STRAP	1163	2
1/2" SPACER	5477	2
BAIL CLAMP	3077	2
HEAT SHIELD	1004	1
AIR LINE TUBING		1

### HARDWARE PACK (A21-760-2535)

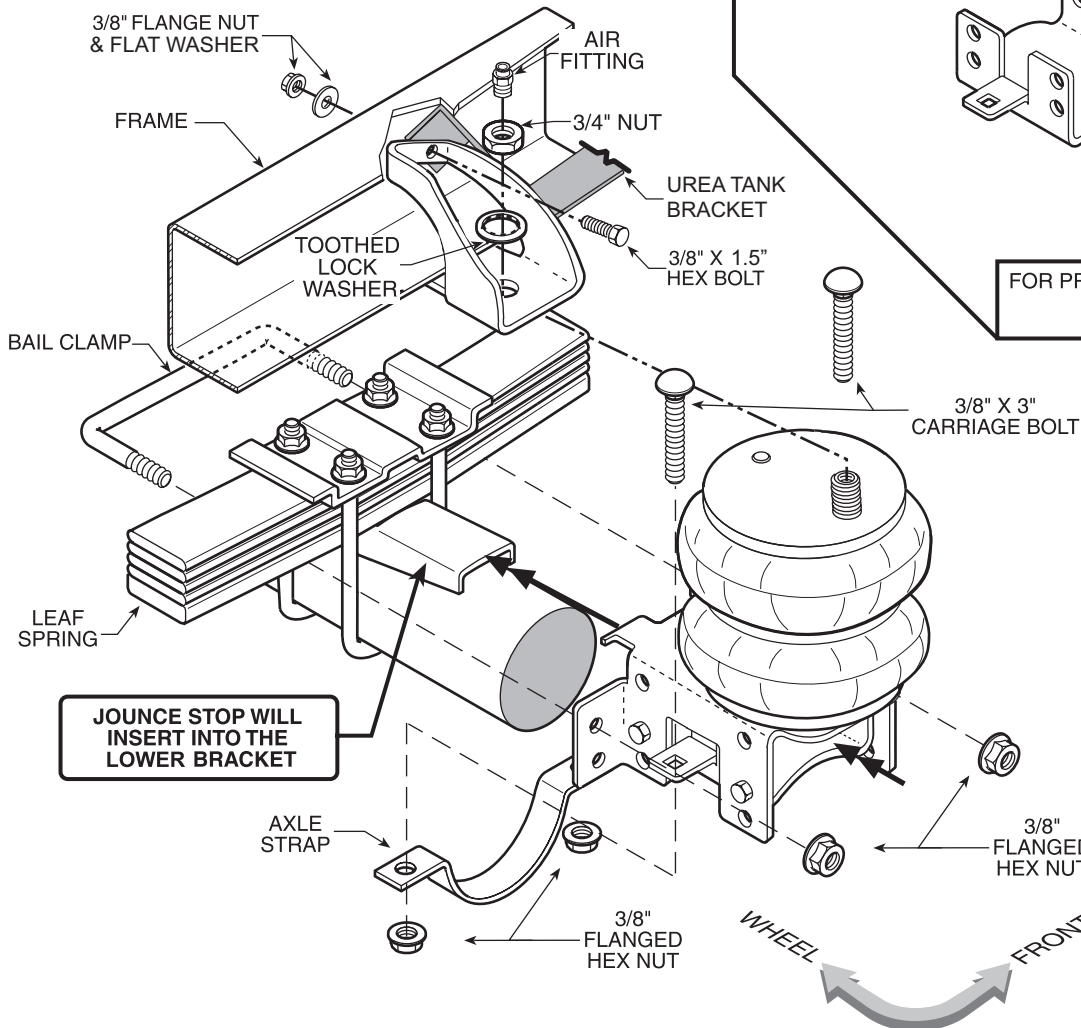
3/8"-16 X 1-1/2" HEX HEAD BOLT		1
3/8" FLAT WASHER		1
5/16" FLAT WASHER		4
3/8"-16 X 3/4" HEX HEAD BOLT		2
3/8"-16 X 1" HEX HEAD BOLT		8
3/8"-16 X 2 1/2" FLAT HEAD BOLT		2
3/8"-16 FLANGE LOCK NUT		19
3/8" LARGE FLAT WASHER		2
3/8"-16 X 3" CARRIAGE BOLT		4
3/4"-16 X 1-3/4" HEX HEAD BOLT		1
3/4"-16 HEX NUT		2
3/4"-16 FRAME NUT	3412	1
3/4" INTERNAL TOOTH LOCK WASHER		2
3/4" THICK FLAT WASHER		1
3/4" FLAT WASHER		1
3/4" LOCK WASHER		2
INFLATION VALVE	3032	2
STRAIGHT FITTING	3046	2
THERMAL SLEEVE		2
NYLON TIE		6
CAUTION TAG		2



### PASSENGER'S SIDE UPPER BRACKET ATTACHMENT

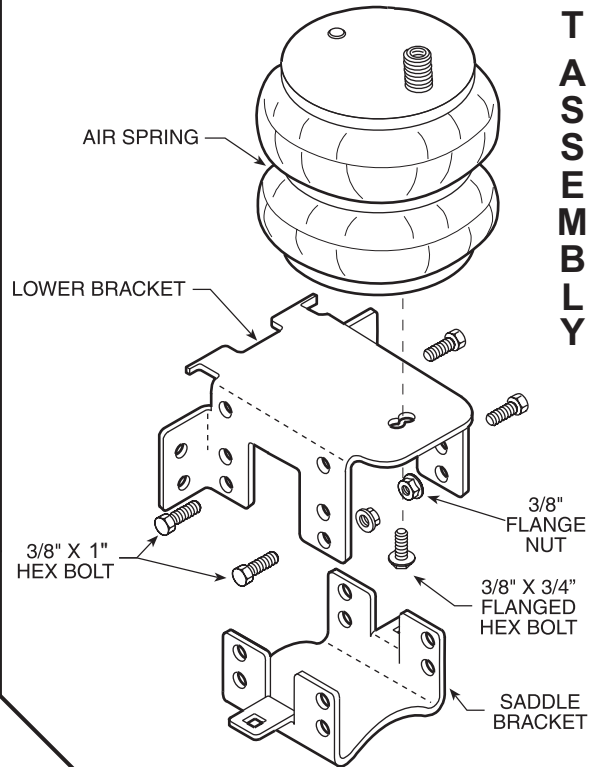
**NOTE:** The driver's side will not use the large oval hole in the frame. Instead, remove the factory installed bolt & p-clip from the urea tank bracket. Use the provided 3/8"-16 x 1-1/2" hex bolt, washer, and flange nut to attach the upper bracket and urea tank bracket to the frame. See below.

### KIT TO FRAME ASSEMBLY



**FIGURE "A"**

**NOTE:** This diagram is of the left side of the truck. Reverse any orientations when assembling and installing the right side of the vehicle.



**KIT ASSEMBLY**

FOR PROPER LOWER BRACKET HEIGHT SETTING, SEE FIGURE "C"

### STEP 1— PREPARE THE VEHICLE

Your vehicle is equipped with rubber jounce bumpers attached to the frame directly above the axle. Remove these bumpers by un-bolting from the inside of the frame flange. These bumpers and nuts will not be re-used with this kit.

### STEP 2— UPPER BRACKET INSTALLATION

On the passenger's side, or right side, insert the 3/8"-16 x 2-1/2" flat head bolt into the right upper bracket and then slide the spacer over the bolt. Install the upper bracket onto the frame. Make sure that no part of the vehicle's wiring will be pinched between the upper bracket and the frame. Tighten the 3/8"-16 flat head bolt with a 3/8"-16 flange nut and the large 3/8" washer.

Install the 3/4"-16 x 1-3/4" hex bolt thru the upper bracket and thru the existing hole in the frame rail. Secure the 3/4" bolt with a thick flat washer, lock washer, and a 3/4" frame nut. Use an additional 3/4" flat washer if needed.

The emergency brake cable will have to be tie-wrapped out of the way using the hole provided in the upper bracket. **See Figure "A"**.

On the driver's side, or left side, remove the bolt securing the urea tank bracket to the frame. Next, remove the p-clip from the urea tank bracket. Insert the 3/8"-16 x 2-1/2" flat head bolt into the right upper bracket and then slide the spacer over the bolt. Install the upper bracket onto the frame. Make sure that no part of the vehicle's wiring will be pinched between the upper bracket and the frame. Tighten the 3/8"-16 flat head bolt with a 3/8"-16 flange nut and the large 3/8" washer.

Install the 3/8"-16 x 1-1/2" hex bolt thru the upper bracket and thru the hole in the urea tank bracket, and into the frame rail. Secure the 3/8" bolt with a flat washer and 3/8" flange nut. **See Figure "A"**.

### STEP 3— AIR SPRING INSTALLATION

Install the air springs and heat shield. The heat shield will be used on the exhaust side of the truck only. It is placed between the upper bracket and the top of the air spring. **See Figure "C"**. The top of the air spring has a button which will be put into the hole in the upper bracket, towards the front of the truck on both sides. When the air spring is in place and properly aligned, place the internal tooth lock washer and then the large 3/4" nut onto the stud of the air spring. On the right (exhaust) side, you can move the heat shield into alignment before tightening the nut on the air spring. Make sure the heat shield will not interfere with the normal operation of the air spring or the vehicle's suspension. Do not position the face of the shield directly over the axle, as it may contact the axle on full suspension compression.

Now install the air fitting into the stud of the air spring. Tighten the air fitting securely to engage the orange thread sealant.

### STEP 4— LOWER BRACKET INSTALLATION

Some trucks will have a cast iron jounce tongue as shown in figure A. If this jounce tongue is present, the height setting of the lower bracket will be just above the jounce tongue (to clear the head of the bolt going into the bottom of the air spring). If there is no jounce tongue, simply assemble the lower and saddle brackets at the shortest setting. **See figure "B"**.

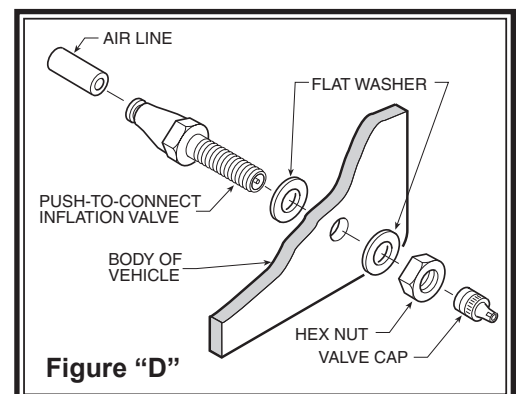
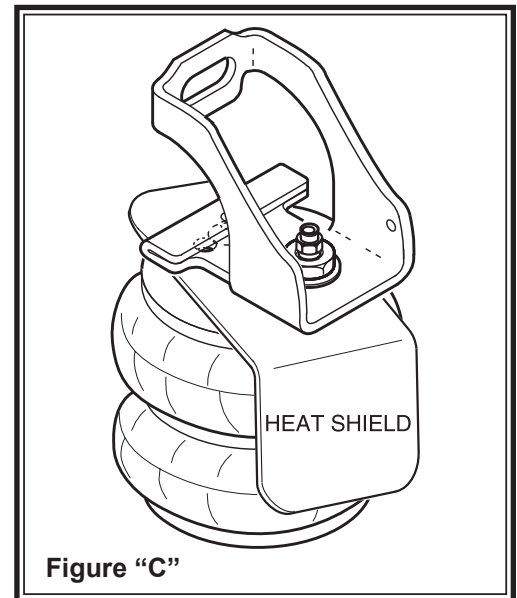
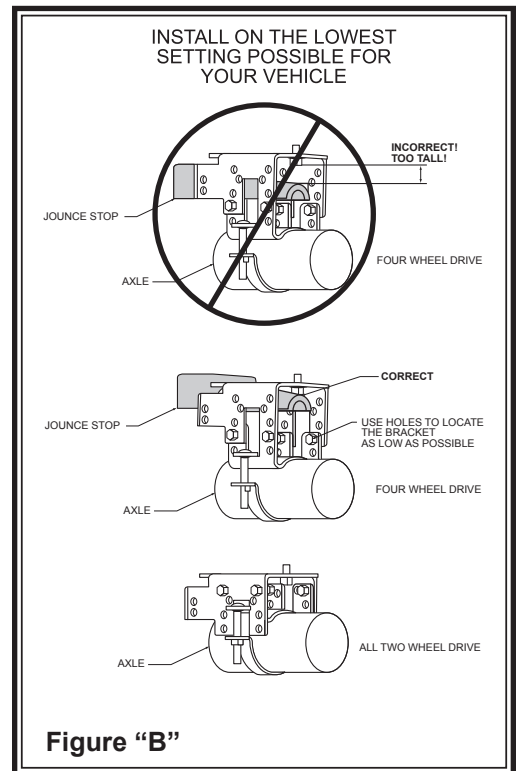
**The lower bracket assembly should be installed on the lowest setting possible for the vehicle. See Figure "B"**.

The saddle and lower brackets are bolted together using the four 3/8" x 1" bolts and flange nuts. When the lower brackets are bolted together at the proper height, install the 3/8" x 3/4" bolt thru the forward hole in the lower bracket and into the bottom of the air spring and tighten.

Place the lower bracket assembly against the leaf spring stack making sure that the top of the bottom bracket is wedged between the axle U-bolts.

Place the bail clamp around the axle block and install the flange nuts onto the bail clamp and tighten the 3/8" flange nuts. **See Figure "A"**.

Insert the carriage bolts thru the saddle bracket being very careful

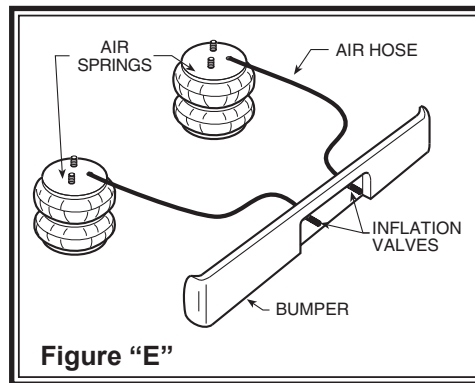


not to chaff or pinch the brake lines on the axle. Next, push the axle strap onto the bottom of the axle and over the carriage bolts. When the flange nuts are tightened, they will draw the axle strap into place.

### STEP 5— AIR LINE INSTALLATION

Uncoil the air tubing and cut it into two equal lengths. **DO NOT FOLD OR KINK THE TUBING.** Try to make the cut as square as possible. Insert one end of the tubing into the elbow fitting installed in the top of the air helper spring. Push the tubing into the fitting as far as possible.

Select a location on the vehicle for the air inflation valves. This can be on the bumper or the body of the vehicle, as long as it is protected so the valves will not be damaged. Drill a 5/16" hole and install the air inflation valve using two 5/16" flat washers per valve as supports. Route the tubing from the air helper spring to the inflation valve, avoiding direct heat from the engine, exhaust pipe, and away from sharp edges. The air line tubing should not be bent or curved sharply as it may buckle with time. Secure the tubing in place with the nylon ties provided. Push the end of the air line tubing into the inflation valve as far as possible. **See Figures "D" & "E".**



### STEP 6— CHECK THE SYSTEM

Final inspection. Visually check for loose attaching bolts. Make sure that no part of the truck is rubbing against the air springs. Again, make sure that the truck's brake lines are not pinched or being rubbed by any part of your Ride-Rite™ kit.

Once the inflation valves are installed, inflate the air helper springs to **50 psi** and check the fittings for air leaks with an applied solution of soap and water. If a leak is detected, deflate the air spring by depressing the valve core. The tubing can easily be removed from the fittings by pushing the collar towards the body of the fitting while pulling out the tube. Next, check the tubing connection to ensure that the air tubing is cut as square as possible and that it is pushed completely into the fitting.

If a leak is detected where the air fitting screws into the air spring, gently tighten the air fitting into the spring until the leak stops. Also, check the core of the inflation valve. This valve core can be tightened using the cap. Re-inflate the air spring and check for leaks again if needed. This now completes the installation. Reconnect the battery cable and remove the wheel chocks.

**NOTE: THE OPERATING PRESSURE OF THIS KIT IS 5 PSI MIN. TO 100 PSI MAX.**

*Too much air pressure in the air helper springs will result in a firmer ride, while too little air pressure will allow the air helper spring to bottom out over rough conditions. Too little air pressure will also not provide the improvement in handling that is possible. TO PREVENT POSSIBLE DAMAGE MAINTAIN A MINIMUM OF 5 psi IN THE AIR HELPER SPRINGS AT ALL TIMES.*

Once the air helper springs are installed, it is recommended that the vehicle not be lifted by the frame, as over-extension may occur, resulting in damage to the air helper springs. However, should it become necessary to raise the vehicle by the frame, deflate both air helper springs completely.

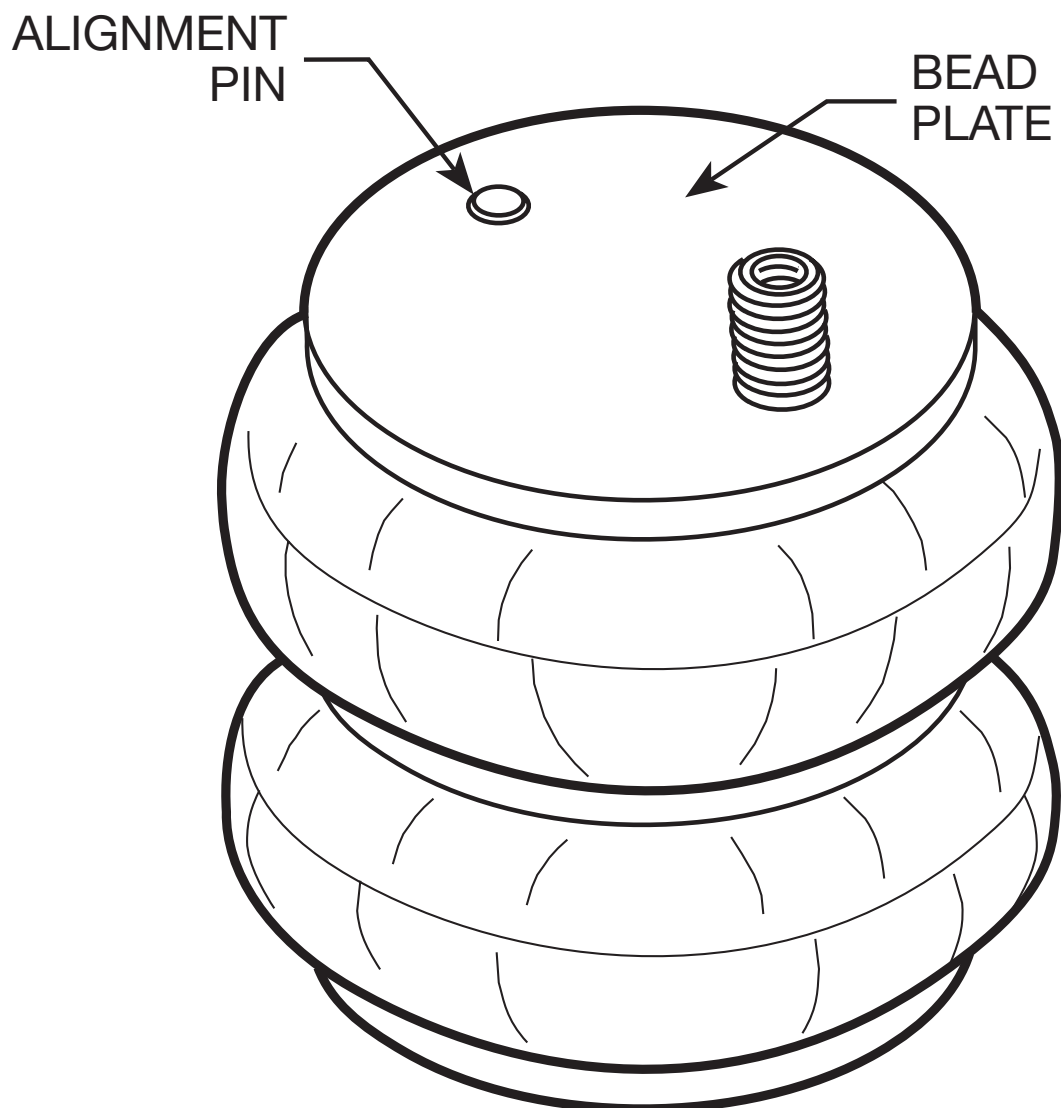
<b>NOTE:</b>	
MIN PRESSURE	5 PSI
MAX PRESSURE (LOADED)	100 PSI



# **COMBO STUD NOTICE:**

THE ALIGNMENT PIN ON THE AIR SPRING **MUST** BE INSTALLED INTO THE HOLE IN THE UPPER BRACKET.

FAILURE TO DO SO WILL CAUSE THE ALIGNMENT PIN TO BE PUSHED INTO THE BEAD PLATE, CREATING AN AIR LEAK, AND RESULTING IN AN AIR SPRING FAILURE THAT IS **NOT WARRANTABLE.**



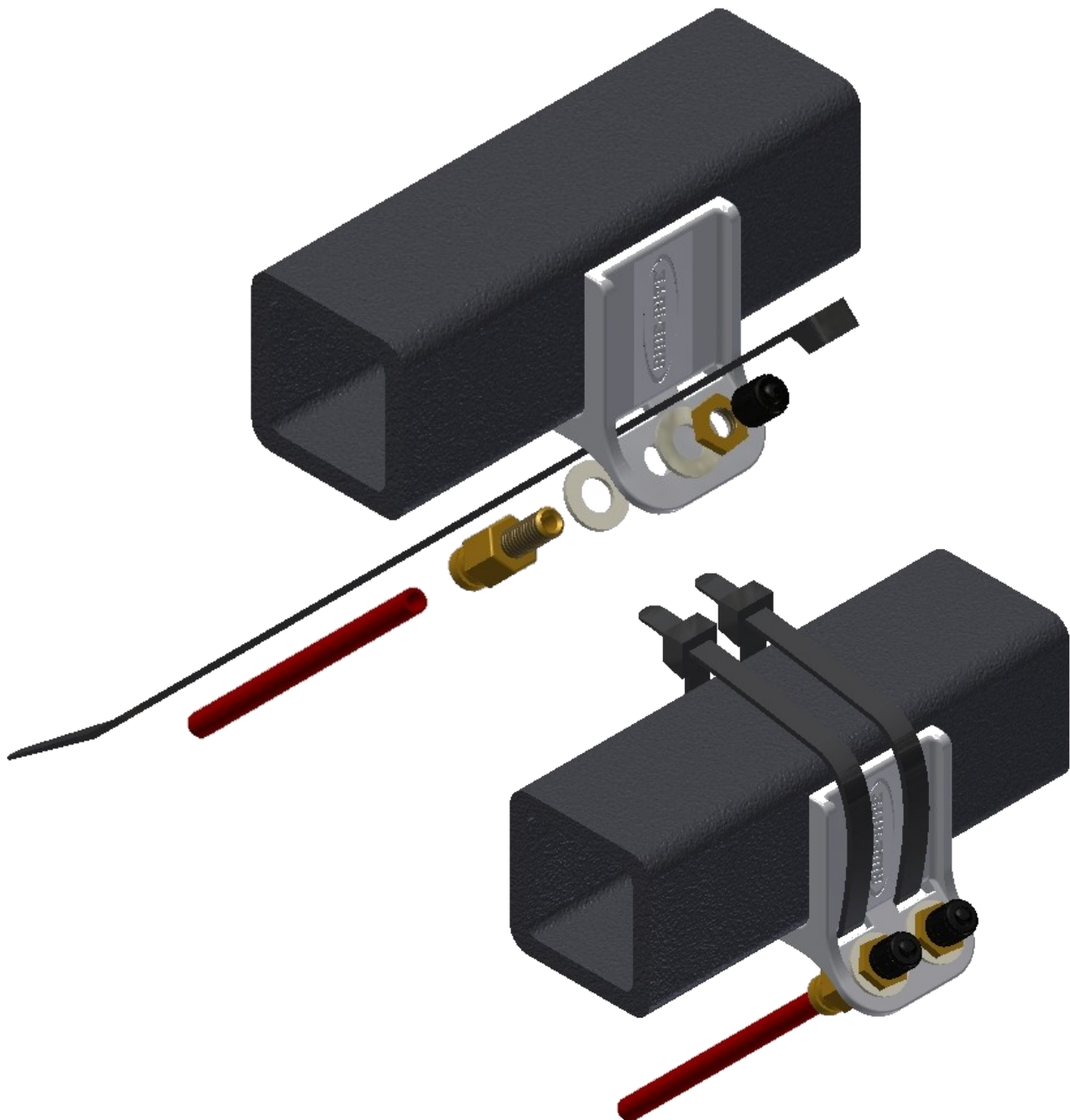


# No Drill Inflation Valve Bracket

## Parts List

Description	Part Number	Quantity
Inflation Valve Bracket	9483	1
Large Nylon Tie	9488	2

This bracket is designed to mount on receiver hitches round or square. Simply use the two provided large Nylon ties to affix the bracket to the receiver hitch tube. Install the air inflation valves on the bracket using two 5/16" flat washers per valve as supports. Then push the end of each air line tubing into the inflation valve as far as possible.



# Firestone

**World's Number 1  
Air Spring.**



FIRESTONE INDUSTRIAL PRODUCTS COMPANY



## Operating Instructions and Trouble Shooting Guide

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Thank you for purchasing Firestone air helper springs. You have purchased a quality product from the world's number one air spring manufacturer.

This guide will provide answers to some of your questions regarding the use and operation of your new air helper springs. Following the guidelines in this manual will help provide you with many years of trouble-free service from your Firestone air helper springs.

For vehicle applications, air pressure requirements, air compressor CFM, maintenance, or air spring technical data, contact us at:

***www.ride-rite.com***  
**1-800-888-0650**

**INSTALLER: Please leave this manual with the vehicle's owner.**

## **SAFETY TIPS**

### **Never exceed the manufacturer's recommended Gross Vehicle Weight Rating (GVWR)**

As with your vehicle's tires, an air helper spring is a pneumatic device that supports a portion of the vehicle's weight. The air helper spring may fail as a result of punctures, impact damage, improper inflation, improper installation, or improper usage. To reduce the risk of failure, we strongly recommend the following:

**Never overload your vehicle.** The manufacturer's gross vehicle weight rating (GVWR) is stated on the specification plate on the chassis. You should weigh your vehicle on a truck scale when it is fully loaded and in a level condition to determine if you are exceeding the manufacturer's recommended GVWR.

Inspect the inflated air springs to verify that they do not contact any component of the vehicle under normal suspension operation. The air helper spring must flex and expand during normal operation. There must be at least 1/2" of clearance between the inflated air spring and any other component of the vehicle under normal suspension operation.

The kit is designed to clear all chassis components. If there is **any** interference, please call Firestone at 1 (800) 888-0650.

Inspect the air line tubing and the air spring to verify that they have not been too close to the exhaust system. If the distance between any portion of the air spring or air line tubing and the exhaust system is less than 6", a heat shield should be used.

Never inflate the air helper springs beyond the maximum pressure indicated in the installation manual.

Never attempt to remove any component of the air spring assembly when the air springs are inflated.

If an air helper spring has failed while you are on the road, operate your vehicle at reduced speeds. High speed over rough roads will result in severe bottoming of the air spring and may damage other vehicle components.

Never attempt to drive the vehicle in an unlevelled condition. Failure to level a heavily loaded vehicle may result in excessive body roll and possible damage or injury.

If unidentifiable problems exist with your air helper spring kit, visit Firestone on the web at [www.riderite.com](http://www.riderite.com) or call 1 (800) 888-0650 for technical assistance.

Never cut, weld, or modify the air helper springs or brackets.

Do not use aerosol tire repair products in the air helper springs or a tire patch of any kind on the air helper spring. If there is a hole in the air spring it must be replaced.

## **GENERAL INFORMATION**

Firestone air helper springs are heavy duty, quality air springs designed to supplement your vehicle's existing suspension system. These durable air springs allow you to maximize your vehicle's load carrying capacity through the use of air pressure. Proper installation, use, and operation will provide the maximum service life and performance your air spring kit is capable of delivering. These instructions will help you obtain the maximum benefits available from your air spring kit.

### **RIDE-RITE™ AIR HELPER SPRINGS**

Ride-Rite™ air helper springs are installed between the frame and the suspension of trucks, vans, and motorhomes. Ride-Rite™ air helper springs are capable of supporting loads up to 5000 lbs per pair.\*

### **SPORT-RITE™ AIR HELPER SPRINGS**

Sport-Rite™ air helper springs are installed between the frame and suspension of light trucks, and utilize a sleeve-style air spring to enhance the ride when the vehicle is loaded or unloaded. Sport-Rite™ air helper springs are capable of supporting loads up to 3000 lbs per pair.\*

### **LEVEL-RITE™ AIR HELPER SPRINGS**

Level-Rite™ air helper springs replace the existing shock absorber with a fully-protected, reversible sleeve air spring paired it with a high-performance Bilstein monotube shock absorber for perfectly matched performance characteristics over the entire operation spectrum. Level-Rite™ air helper springs are capable of supporting loads up to 1000 lbs per pair.\*

## **BASIC OPERATION**

As your vehicle is loaded, the stock suspension is compressed under the weight of the load. Your vehicle's stock suspension system has been designed so that it will provide optimum performance and handling with a specific load on the vehicle. When your vehicle is loaded, its performance, handling characteristics, and ride quality may be compromised. As the stock suspension is compressed, the ride may become "mushy", and you may encounter sway and handling problems. As weight is added to the vehicle, the air helper springs become an active part of

\*Do not exceed the vehicle's recommended gross vehicle weight rating (GVWR)



the suspension system. As more air pressure is added to the air springs, they will support more weight. You will be able to compensate for a heavy load by adding air pressure to the air springs, thereby reducing sway and handling problems associated with a heavily loaded vehicle.

<b>TABLE "A"</b>	
<b>ALL TORQUE SPECIFICATIONS</b>	
Using a torque wrench, torque the threaded fasteners to the following specifications:	
Fasteners used on studs and blind holes in air springs	15 – 20 ft lbs
Hex nuts installed on axle straps	10 – 15 ft lbs
Hex nuts installed on 3/8" hex bolts	28 – 32 ft lbs
Hex nuts and bolts used to secure brackets to frame	28 – 32 ft lbs
Hex nuts installed on U-bolts	15 – 20 ft lbs
Hex bolts securing tapered sleeve style air spring to lower bracket	10 – 12 ft lbs

### **PREVAILING-TORQUE LOCK NUTS**

In order to assure trouble-free operation, your air spring kit includes a variety of self-locking threaded fasteners. Your kit may include prevailing-torque lock nuts. Prevailing-torque lock nuts may be more difficult to install, but will not come loose under normal suspension operation.

### **THREAD LOCKING COMPOUND**

The hex bolts used to secure the air spring to the brackets may have a locking compound applied to the threads. Lock washers are not required when using a fastener with pre-applied thread locking compound. When installing fasteners with thread locking compound, follow the torque recommendations listed in table.

### **HELICAL LOCK WASHERS**

Your air helper spring kit may include helical lock washers. In order to properly use the lock washer, tighten the nut/bolt fastener just enough to flatten the lock washer. Overtightening the fastener may damage the nut or bolt. When using helical lock washers, follow the torque recommendations listed in Table "A".

### **AIR FITTINGS**

Your kit will include one of two types of push-to-connect air fittings: fittings with a thread locking compound pre-applied to the threads or fittings with a Nylon collar in place of the thread locking compound.

The pre-applied thread sealant, thread the air fitting into the air spring and tighten the fitting securely to engage the pre-applied thread sealant.

The Nylon collar, thread the air fitting into the threaded hole on the air spring so that the Nylon collar makes contact with the top of the air spring and then tighten 1/2 turn. No thread sealant is required.

Both types of air fittings allow easy connection between the air fitting and the air line tubing. To install the air line in the fittings, cut the tubing as square as possible using a sharp utility knife or razor blade. Push the air line into the fitting as far as possible. If the tubing must be removed from the fitting, first release the air pressure from the air spring. Push the collar towards the body of the fitting and then pull the tubing out.

### **PRESSURE DIFFERENTIAL BETWEEN AIR SPRINGS**

It is not uncommon to have different pressures between the air springs after the vehicle has been brought to a level condition. If the vehicle is within the manufacturer's recommended gross vehicle weight and you have not achieved a level condition after inflating the air springs to 100 psi, there may be a problem with your stock suspension. The leaf springs may have become fatigued over time or a leaf spring may be fractured. There may be an obstruction in the air system, not allowing the air pressure to reach the air helper springs.

### **AIR SPRING ALIGNMENT AND HEIGHT**

Upon completion of the installation, the air springs should be inspected for proper alignment. Although the air helper springs can function with some misalignment, it is preferred that the air springs be mounted so that they are aligned with as little top to bottom offset as possible.

Check the distance between the upper bracket and lower bracket (design height). The dimensions shown on **Page 5** are a guide to assist in determining the ideal operating height for your air helper springs.

## **INFLATING THE AIR SPRINGS**

With the air helper springs installed on your vehicle and the vehicle sitting on a level surface, visually verify that the vehicle is in a level state. If the vehicle is not level (front-to-back or from side-to-side) it can be brought to a level position by inflating the air springs. Each air spring has a separate inflation valve. To level the vehicle from front-to-back, add air pressure to both air springs in equal amounts. To level the vehicle from side-to-side, add more air pressure to the air spring on the lower side of the vehicle. When inflating the air springs, add air pressure in small quantities, checking the pressure frequently. The air spring requires much less air volume than a tire, and therefore, will inflate and deflate quickly.

**WARNING:** DO NOT EXCEED THE MAXIMUM PRESSURE AS INDICATED IN THE INSTALLATION MANUAL

## **LEVELING THE VEHICLE**

Check the level of your vehicle visually. If it is not level, either from front to back or from side to side, level it by inflating your air springs. (If your vehicle is equipped with a cab control unit or automatic control system refer to the directions for that device.) There is one inflation valve for each air spring. To level from front to back, add air pressure to both air springs equally. For side to side, add air pressure to the air springs on the side of the vehicle that is low. When adding air pressure to the air springs, remember that they have a much smaller volume of air than a tire so they will inflate much quicker. Add air pressure in short bursts until the vehicle is level. (NEVER EXCEED 100psi IN EACH AIR SPRING.)

## **MAINTENANCE**

It is considered normal for air helper springs to lose some air pressure over time. Normal pressure loss should not exceed 3 – 4 psi per week when the air springs are inflated to 50 psi. If the pressure loss is greater than 3 – 4 psi per week, there may be a leak in the system. Each time you check the pressure in the air springs, you will lose 1 – 3 psi. The air pressure should be checked at regular intervals.

It is recommended that the air pressure be checked according to the following guidelines:

At least monthly intervals during the continuous operation of the vehicle (see above)

When the vehicle is removed from long-term storage

If the air springs are used to assist in leveling an RV or camper on uneven ground, ensure that the vehicle is returned to a level ride height before departing.

The brackets used to secure the air helper spring to the vehicle should be inspected periodically for damage and for loose fasteners. Ensure that the air line tubing is clear of any sharp edges and routed away from the exhaust system. The brackets and air line tubing should be inspected every 6 months. Ensure that the threaded fasteners are torqued to the specifications listed on **Page 3**.

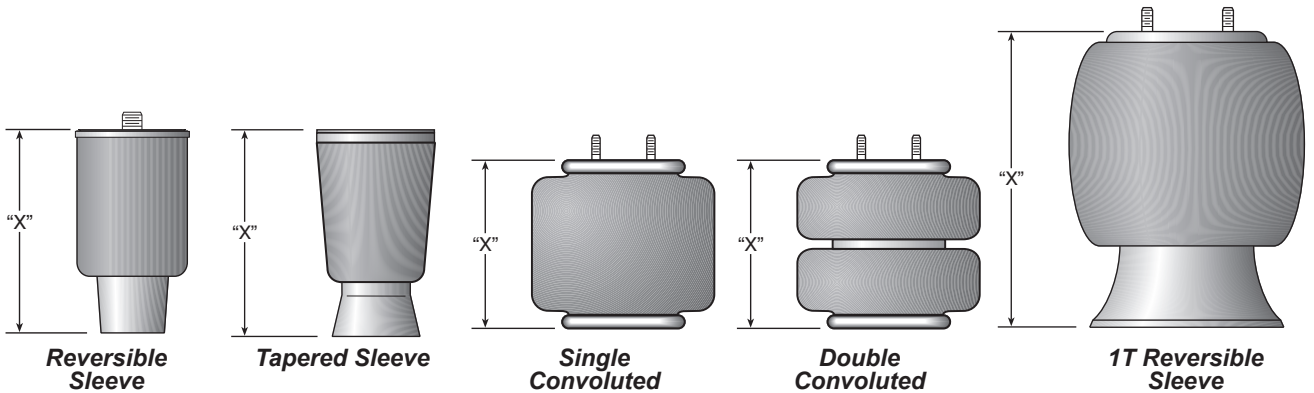
Accumulated sand, gravel, or other road debris on the air springs or brackets should be rinsed away with a garden hose each time the vehicle is washed.

If it is necessary to lift the vehicle by the frame, first release the air pressure from the air springs. This will allow the air springs to extend to their maximum length without being damaged. The uninflated air springs are capable of supporting the weight of the axle when the vehicle is lifted by the frame. After servicing of the vehicle is complete, lower the vehicle to the ground and reinflate the air helper springs to the desired pressure. **NOTE:** On Sport-Rite kits the air helper springs must be aired up to 50 psi and then release the air until the air helper springs are to the desired pressure.

## **ONLINE AUCTION PURCHASES**

Firestone will not replace missing components from any kit purchased through an online auction.

## AIR SPRING TECHNICAL DATA



Part Number	Description	Style	"X" Ride Height	Min/Max Air Pressure	Max Load @100 psi (per pair)
6868	Single Convoluted	160BY	5.0" - 6.0"	5 / 100 psi	3600 lbs
6762 6764 6766	Double Convoluted	268C	4.5" - 5.5"	5 / 100 psi	3200 lbs
6397 6410 6781	Double Convoluted	267C1.5	5.5" - 6.5"	5 / 100 psi	4800 lbs
6401 6873 6859	Double Convoluted	224C	5.5" - 7.0"	5 / 100 psi	5000 lbs
7689 7701	Double Convoluted	26C	7.0" - 8.0"	5 / 100 psi	5640 lbs
7076	Reversible Sleeve	70mm	6.0" x 8.0"	10 / 100 psi	2000 lbs
9000	Tapered Sleeve	110/70 mm	7.75" - 8.75"	10 / 100 psi	3000 lbs
9001	Tapered Sleeve	110/70 mm	5.88" - 6.88"	10 / 100 psi	3000 lbs
9002	Tapered Sleeve	110/70 mm	6.75" - 7.75"	10 / 100 psi	3000 lbs
5405	1T Reversible Sleeve	1T14C-3	8.0" - 12.0"	5 / 100 psi	6400 lbs

This information is provided for reference purposes only. The bracketry and air springs in the Ride-Rite™ and Sport-Rite™ kits are designed to work with the original suspension and within the manufacture's Gross Vehicle Weight Rating (GVWR) for the intended vehicle. Brackets and air springs should not be interchanged or modified.

# ***TROUBLE SHOOTING GUIDE***

## ***Air spring will not inflate***

Ensure that the air line tubing is inserted into the air fittings as far as possible. The tubing should go in the fitting 3/4 of an inch. You will feel some resistance when the tubing goes past the o-ring.

Clear any dirt or debris from inside the inflation valves.

Inspect the entire length of air line tubing to ensure that it is not kinked, damaged from exhaust heat, or cut due to contact with sharp edges

## ***Air spring will not hold air***

Normal pressure loss is no more than 3 - 4 psi per week when the air spring is inflated to 50 psi.

Using the inflation valve cap as a core tool, ensure that the valve stem core is installed securely.

Apply a solution of soap and water to the air fittings, air line, and air springs to check for leaks. Tighten the air fitting or re-install the tubing in the air fitting to stop the leak. Rinse the soap and water solution from the system when complete.

If a leak can not be detected with the soap and water solution, deflate the air springs and remove them from the vehicle. Re-install the tubing and inflation valve on the air spring and inflate the air spring to a maximum of 20 psi. Submerge the air spring in a bucket of water to check for leaks.

## ***Locations of air leaks***

Leaks occur most often at the threaded connection between the air fittings and the air springs. Tighten the fitting to engage the pre-applied orange thread sealant or until the nylon collar makes contact with the air spring, plus 1/2 turn, depending on which type of fitting is included in your kit. (See air fittings on page 3)

The end of the air line tubing must be cut square and clean to avoid burrs in the connection to the air fittings. The push-to-connect fittings require a square cut to properly seal. The tubing can be removed from the fitting by first releasing the air pressure from the air spring. Push the collar on the fitting toward the body of the fitting. While holding the collar in, pull out the tubing. Cut the tubing squarely and push the tubing into the fitting as far as possible.

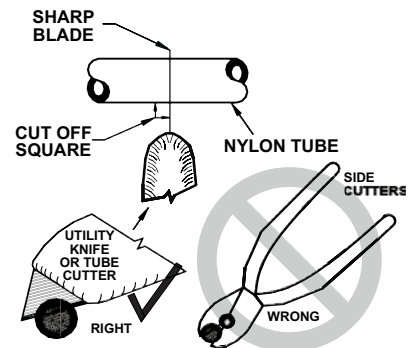
## ***The vehicle is not level***

Check for proper inflation of the air springs on each side of the vehicle.

Check for obstructions in the air system or vehicle components that may be restricting suspension travel.

### **IMPORTANT**

**NYLON TUBE CUTTING:**  
FOLLOW THESE INSTRUCTIONS  
TO AVOID LEAKS



## WARRANTY QUESTIONS

### FIRESTONE LIMITED LIFETIME AIR SPRING WARRANTY

Firestone Industrial Products Company LLC ("Firestone") warrants that its Ride Rite Air Spring Assembly will perform according to the manufacturer's specifications for as long as the vehicle on which the system was originally installed is owned by the original retail purchaser. This limited warranty does not include installation or other service charges for replacement.

#### Warranty Period

The Air Spring is warranted for as long as the original purchaser owns the vehicle on which it was originally installed. The fasteners and upper and lower brackets which accompany the air spring are warranted for a period of twenty-four (24) months or 24,000 miles whichever occurs first. This warranty begins on the original retail delivery date.

#### What is Covered

Any implied warranties are limited in duration to the coverage period of this warranty (some states do not allow limitation on how long an implied warranty lasts so the above limitation may not apply to you). This Warranty runs in favor of the original retail purchaser when the Ride Rite Air Spring Assembly is used under normal operating conditions according to Firestone's specifications and installed on the appropriate application. This warranty does not apply to Ride Rite Air Spring Assemblies that have been improperly applied, improperly installed, used in racing or off road applications or used for commercial purposes. In addition, the warranty will not apply to products which have not been maintained and serviced according to the instructions that accompany the air spring assembly. The consumer will be responsible for any costs incurred in removing the product from the vehicle and the cost to return the air spring assembly to the dealer or installer from which it was purchased. If it is determined that the Ride Rite Air Spring Assembly failed as a result of a manufacturing defect, Firestone will repair or replace, at its option, any product or components subject to this warranty. You should retain a copy of your contract with your installer and your receipt as proof of the date of installation. This warranty is non-transferable and is not assignable in any way.

**Firestone specifically excludes any obligation for consequential damages or incidental expenses including claims for loss of use of the product, loss of time, inconvenience, or commercial loss. This warranty gives you specific legal rights. You may also have other rights that may vary from state-to-state. Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages. The above limitation or exclusion may not apply to you. There are no warranties, express or implied, including implied warranty of merchantability and fitness which extend beyond this warranty.**



### IS A LEAKING AIR SPRING COVERED UNDER WARRANTY?

An air helper spring with a leak does not necessarily indicate that the air spring is defective. Inspect the air spring for obvious punctures or abrasions. A failure caused by a puncture or abrasion to the air spring would not be covered by the material and workmanship warranty. An air helper spring kit that has not been installed according to the published installation manual will not be covered by the warranty. Warranty consideration will only be given if the kit listed in our published application guide is installed on the proper vehicle.

### WHAT DO I DO IF I HAVE A DEFECTIVE PART THAT IS COVERED UNDER WARRANTY?

If you live in the U.S. or Canada, contact Firestone directly at 1-800-888-0650 for warranty assistance. All other customers should contact their purchasing dealer.

Firestone has made every attempt to assure that your air helper spring kit will properly fit your vehicle. Revised vehicle designs, new model year vehicles, and changes made to the vehicle by the manufacturer can affect proper fit. Any aftermarket chassis or suspension modification made to the vehicle may affect suspension dimensions and may not allow the air helper spring kit to fit the vehicle as intended.



# AIR-RITE™ AIR CONTROL SYSTEMS








Firestone has expanded the offering of Air-Rite Air Control Systems, which provides an instant air source for air suspension products. Adjust the ride for various load and road conditions with a flip of a switch or even a click on a remote. Individual air accessory components are also available, including compressors, air tanks, and mounting solutions, providing a wide variety of air control assist solutions.

Choosing among the Air Command products has now become easier. To select an Air Command Kit from the table below, consider the level of air source and the style of gauge that best fits the application.

## STEP #1:

Based upon usage, consider the level of air source.



	LIGHT DUTY	STANDARD DUTY	HEAVY DUTY	XTRA	XTREME	PRESSURE MONITOR ONLY
<b>Usage Examples</b>	Ideal for Coil-Rite, Level-Rite, or consistent loads	Moderate use Most 1/2 tons	Regular use 8-lug or RVs Wide load ranges	Heavy Use Small Fills (Motorcycle Tires)	Heavy Use Large Fills (RV/Truck Tires)	No Compressor No Tank
<b>Compressor Included</b>	 Compressor No. 9377	 Compressor No. 9284	 Compressor No. 9285	 Compressor No. 9285	 Compressor No. 9287	N/A
<b>Air Tank Included</b>	N/A	N/A	N/A	 9124 1/2 gal.	 9420 2 gal.	N/A
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## STEP #2:

Select from the assortment of gauge styles.



## STEP #3:

Use the table to choose the Air Command Kit that matches your air source and gauge selection.

Air Command™	CLASSIC		2538	2158	2097	2266	2543	2196
		Single						
	Dual			2178	2219	2168	2549	
	ELECTRONIC	Single	2490	2544				
	Dual		2491	2545				
	REMOTE	Dual	2554	2540	2541	2546	2547	
								
Warranty Period			1 yr.	1 yr.	2 yr.	2 yr.	2 yr.	2 yr.