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INSTALLATION INSTRUCTIONS



! IMPORTANT

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

WARNING

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

SAFE INSTALLATION

Please take all safety precautions during installation. A hydraulic jack can fail, and if that happens, you can be seriously hurt, or worse, if you are relying on it to hold up the vehicle. If you use a hydraulic jack, secure jack stands in the appropriate locations and chock any tires still touching the ground.

Wear safety glasses or goggles. Your eyes may be lower than some parts and pieces, and you don't want to lose an eye.

Remove the possibility of any electrical issues by disconnecting the negative battery cable.

SHOCK ABSORBERS

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

VEHICLE GVWR

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

INFLATING THE AIR SPRINGS

When inflating air springs, add air pressure in small quantities, checking air pressure frequently. The air springs have much less air volume than a tire, so they inflate much more quickly.

APPROPRIATE AIR PRESSURE

For best ride, use only enough air pressure in the air springs to level the vehicle when viewed from the side (front to rear). This will vary, depending on the load, location of the load, condition of the existing suspension, and personal preference.

OPTIONAL T-FITTING

This kit includes inflation valves and air line tube for each air spring, allowing you to compensate for unbalanced loads. If you prefer a single inflation valve system to provide equal pressure to both air springs, your dealer can supply the optional "T" fitting (Part # 3025 or WRI-760-3461 retail pack).

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



MINIMUM PRESSURE

MAXIMUM PRESSURE (LOADED)

PARTS

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

MAIN KIT CONTENTS



4176 HARDWARE PACK







TRAILBLAZER and ENCORE GX:

Drill a 1/2" diameter hole through the center of the dimpled area in the bottom of the lower control arm.

2 Make sure there are no sharp edges around the hole. De-burr with a file, grinder, sandpaper, or similar tool.

KIA & HYUNDAI SUVs:

Create a 1/2" diameter hole through the center of the lower pad under the coil spring with a sharp knife.

2 An extra long drill bit may reach to make the hole from the bottom. But most likely it will need to be created from the top with a knife.



Insert the top of the flattened air spring into the coil spring through the lowest opening with the air inlet at the top, as shown. Push the air spring up into the coil spring by hand or with a blunt tool. **DO NOT use anything with sharp edges or corners, as this may damage the air spring**. **3** When the air spring is completely within the coil spring, remove the valve core to let the air back into the air spring. See step 1 for reference. Allow the air spring to return to its normal shape.





INSTALL INFLATION VALVES



PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE







AWESOME! You're done with the left side. Follow the same steps for the right side, then proceed to step 7 to finish installation.

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.

DO

Select routes protected from heat, debris, and sharp edges. Use thermal sleeves near heat sources. Use Nylon ties to secure the air line tube.



Bend or sharply curve air line tubes. Leave air line tube exposed to sharp edges. Use unnecessary lengths of air line tube. Route air line tube near moving parts. Let air line tube hang unsecured from vehicle. Scar air line tube while routing.





EXHAUST CLEARANCE MODIFICATION

The exhaust clearance from the air spring should be no less than 2 inches. If necessary, loosen the exhaust clamps and rotate the the exhaust pipe to obtain additional clearance. Tighten the exhaust clamps after rotation.

HEAT SHIELD INSTALLATION



Bend the heat shield middle tab out at a 90 degree angle and bend the heat shield again half the distance up the tab at a 90 degree angle to form a "L" shape refer to *Figure "A"*.

Mount the heat shield between the air spring and the exhaust pipe. Mount the heat shield using the clamps provided see *Figure "B"*. **Maintain clearance between heat shield, moving axle, lines, etc...**

Bend the heat shield around the exhaust pipe, while allowing for open air space of 1/2" to 1" as shown in *Figure "C"*.





CHECKING THE AIR SYSTEM Place an air chuck onto the Spray fittings with inflation valve and fill the soap and water system to 35 PSI. mixture or glass cleaner. TITION, WATER SOAP AIR SPRINGS INFLATE QUICKLY. CHECK AIR PRESSURE WHILE INFLATING. Observe bubbles. ഹോസ് **SOAP BUBBLES SMALL SOAP BUBBLES THAT EXPAND** THAT DO NOT EXPAND X



Congratulations! Continue to step 11 to finish installation. Review the Operating Instructions.

LEAK?

Bummer. Continue to step 10 to fix the leak.

Press the air valve on end of inflation valve to release all air pressure. PS AIR VALVE EXHAUST ALL AIR FROM THE SYSTEM PRIOR TO RELEASING AIR LINE TUBES FROM AIR FITTINGS. LEAK AT AIR LINE TUBE LEAK AT BASE OF AIR LEAK OUT OF THE VALVE **AND AIR FITTING**



Release air line tube (see page 7). Review proper cuts and procedures in step 5. Repeat steps 7 and 9.

FITTING ON AIR SPRING



Tighten air fitting one turn or until leak stops.

CORE ON INFLATION VALVE

FIXING AN AIR LEAK



Tighten valve core with valve core wrench on inflation valve cap.

STILL HAVE A LEAK?

Refer to the Troubleshooting section of the Instruction Manual.



FINISHING THE INSTALLATION

SAFELY RETURN VEHICLE TO OPERATIVE STATE

If you removed any wheels during installation, install the wheels and torque the lug nuts to the manufacturer's specifications.

Safely remove any jack stands and wheel chocks used during installation.

Re-attach the negative battery cable.

VEHICLE GVWR

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

READ AND UNDERSTAND THE OPERATING INSTRUCTIONS

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

! IMPORTANT

A MINIMUM OF 5 PSI MUST BE MAINTAINED IN THE AIR SPRINGS AT ALL TIMES

Too much air pressure in the air springs will result in a firmer ride, while too little air pressure will allow the air springs to bottom out over rough conditions, and will not provide the improvement in handling that is possible.



MINIMUM PRESSURE

MAXIMUM PRESSURE (LOADED)



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BEFORE YOU DRIVE, CONFIRM THE FOLLOWING:

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

 \Box Put your paperwork in your glove compartment for future reference.

NEED INSTALLATION HELP?

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

