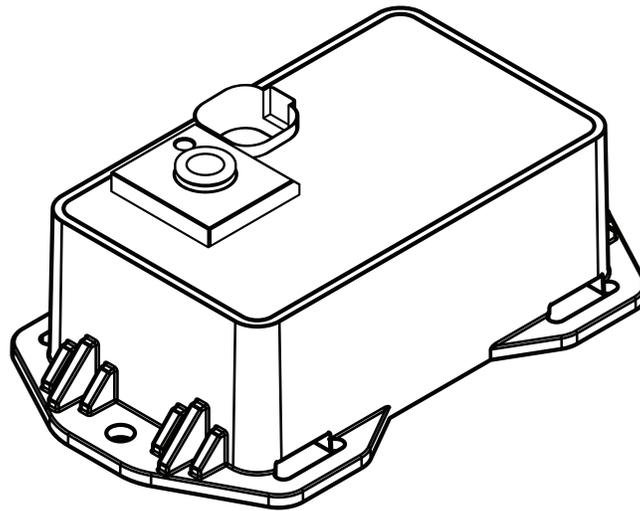




riderite.com

INSTALLATION INSTRUCTIONS



Firestone

Firestone Industrial Products

IMPORTANT

PLEASE DON'T HURT YOURSELF, THE 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.

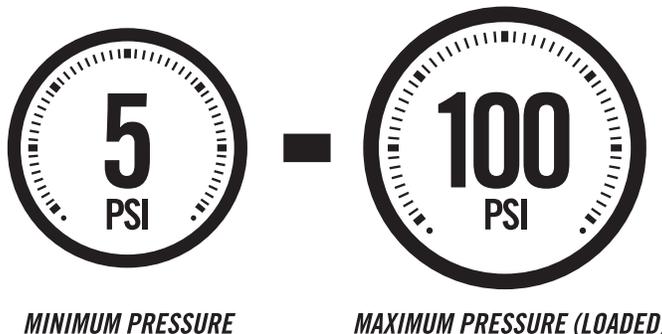
PRESSURE TO LOAD

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.

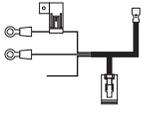
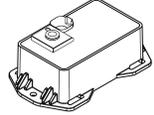
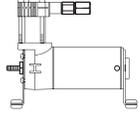
ONCE INSTALLED SUCCESSFULLY, FOLLOW THESE PRESSURE REQUIREMENTS FOR THE AIR SPRINGS:



PARTS

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

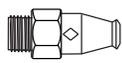
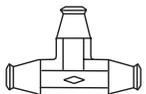
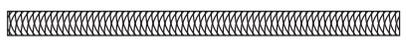
MAIN KIT CONTENTS

PT # 9534	 x1 WIRE HARNESS	PT # 9535	 x1 ECU	PT # 9523	 x1 AIR COMPRESSOR KIT
				PT # 9414	 x1 AIR LINE TUBE (18 FEET)

A24-760-7560 INFLATION VALVE BRACKET KIT

PT # 9483	 x1 NO-DRILL INFLATION VALVE BRACKET	PT # 9488	 x2 LARGE NYLON TIE
-----------	---	-----------	---

A21-760-2610 HARDWARE PACK

PT # 3087	 x4 10-32 x 1" MACHINE SCREW	PT # 3093	 x2 10-32 x 3/4" MACHINE SCREW	PT # 3086	 x10 3/16" FLAT WASHER
PT # 3088	 x6 10-32 NYLOCK NUT	PT # 3055	 x1 1/8 NPT PUSH-TO-CONNECT STRAIGHT FITTING	PT # 3032	 x1 INFLATION VALVE AND VALVE CAP ASSEMBLY
PT # 3025	 x3 1/4" PUSH-TO-CONNECT TEE	PT # 3421	 x1 10-16 x 3/4" SELF-TAPPING SCREW	PT # 9036	 x8 RED NYLON TIE
PT # 9488	 x2 LARGE NYLON TIE	PT # 0899	 x2 THERMAL SLEEVE		

CONTENTS AND OVERVIEW

- PAGE **4** **PLANNING THE INSTALL**

- PAGE **5** **PREPARE THE AIR COMPRESSOR**

- PAGE **6** **DRILL HOLES FOR AIR COMPRESSOR AND ECU**

- PAGE **7** **INSTALL THE AIR COMPRESSOR AND ECU**

- PAGE **8** **INSTALL THE WIRE HARNESS**

- PAGE **9** **INSTALL THE AIR LINE TUBES**

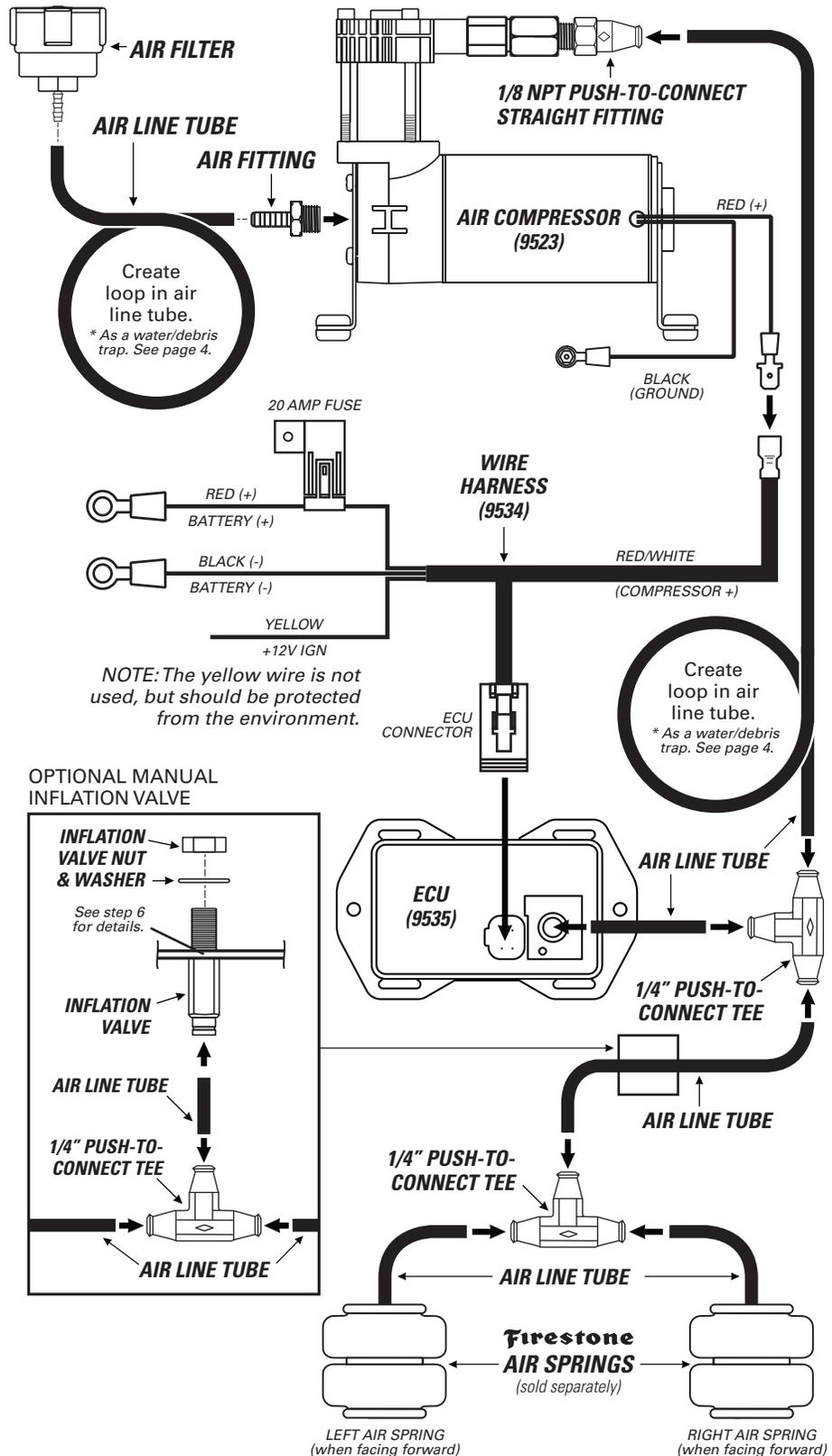
- PAGE **10** **OPTIONAL INFLATION VALVE INSTALLATION**

- PAGE **11** **INSTALL THE AIR FILTER AND CLEAN UP**

- PAGE **12** **CONNECTING TO THE APP**

- PAGE **13** **TEST THE SYSTEM**

- PAGE **14** **FIX AN AIR LEAK**

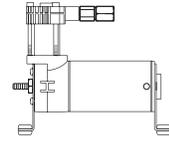


PLANNING THE INSTALL

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

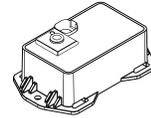
DETERMINE THE MOUNTING LOCATION FOR THE AIR COMPRESSOR

- Provides ample air flow and is protected from airborne debris and moisture.
- Mount close enough to the ECU to allow wire harness connections to reach.
- If using the optional Firestone air accessory mounting kit, consider the guidelines above, and follow the kit's instructions.



DETERMINE THE MOUNTING LOCATION FOR THE ECU

- Mount close enough to the air compressor to allow wire harness connections to reach.
- Allow room for air line tube to connect to the air fittings on the ECU.
- Allow room for the 4-pin ECU connector to connect to the ECU.
- Allow room for the air line tube to run without sharp curves or bends.
- Using supplied fasteners shown in step 3 is recommended. If no other mounting option is available, see the sidebar on step 2 for using the large Nylon ties.
- Select a location that is solid and secure on the body or frame of the vehicle, away from any moving parts, electrical or any other lines.



PLAN INSTALLATION ROUTES FOR WIRING AND AIR LINES

- Make sure the wire harness and air line tubes are not exposed to sharp metal edges that can damage them.
- Use supplied thermal sleeves on air line tubes when routing near heat sources.
- Use supplied Nylon ties to secure air line tubes and wire harness to the vehicle.
- Make a loop in the air line tube where shown. This creates a water/debris trap that protects the air compressor.
- Measure twice, cut once!

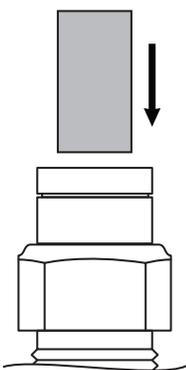
TAPE ALL ELECTRICAL CONNECTIONS

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

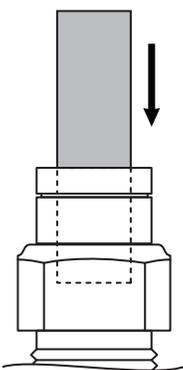
USING PUSH-TO-CONNECT FITTINGS FOR AIR LINES

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

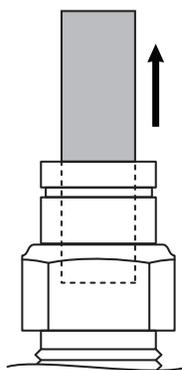
- 1** Insert end of air line tube into air fitting.



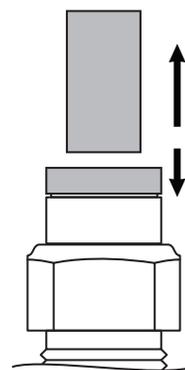
- 2** Push air line tube into air fitting as far as possible.



- 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.

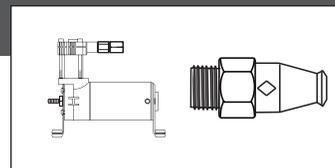


Removal Tip: Use a 1/4", 5/16", or 6mm open-ended wrench to push the collar down.

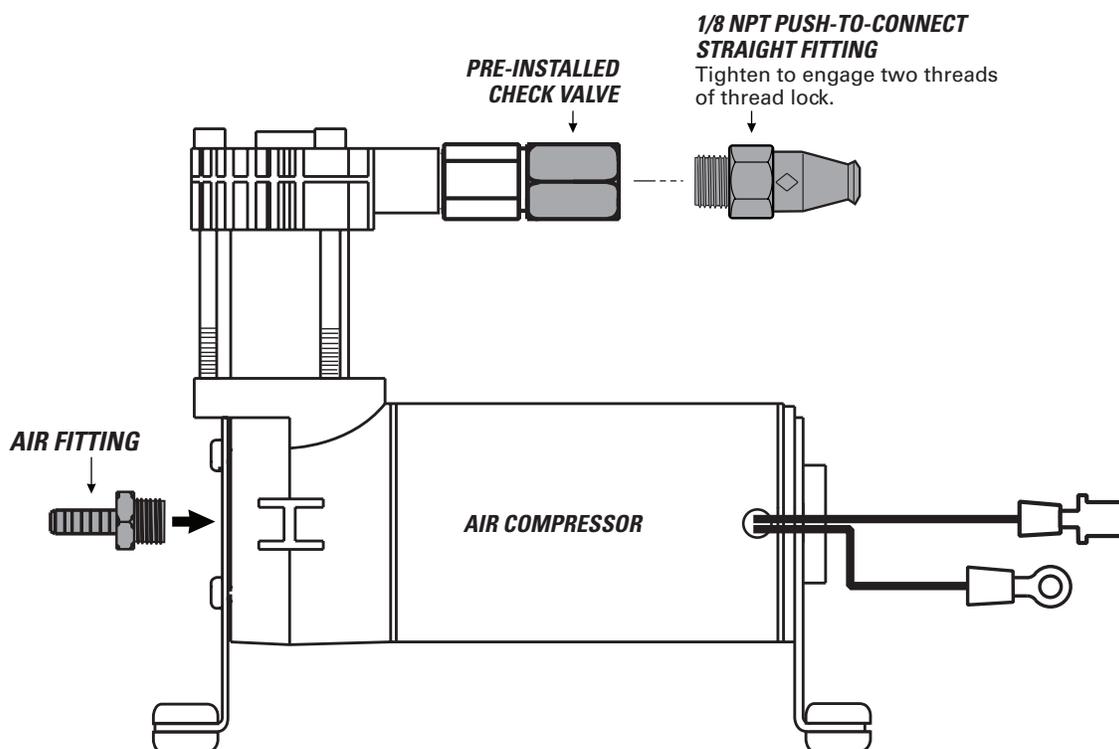
1

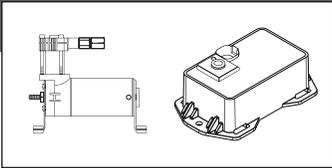
PREPARE THE AIR COMPRESSOR

NOTE: Air compressor can be mounted facing any direction.



- 1 Install 1/8 NPT push-to-connect straight fitting on the check valve.





CHECK SURROUNDING AREA AND BACK SIDE OF MOUNTING LOCATION TO AVOID DRILLING INTO EXISTING LINES OR WIRING.



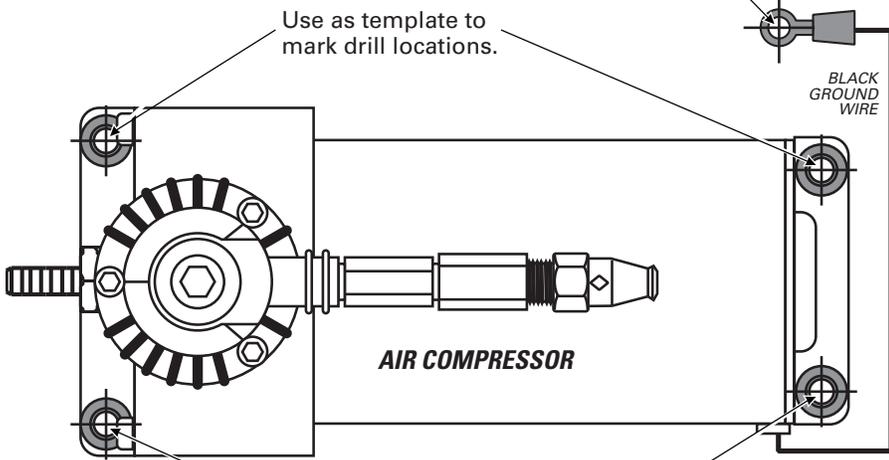
IF YOU ARE USING THE OPTIONAL FIRESTONE AIR ACCESSORY MOUNTING KIT, SKIP THIS STEP AND REFER TO THE MOUNTING KIT'S INSTRUCTIONS.

Drill within reach of the ground wire ring terminal on body or frame of vehicle. **AIR ACCESSORY MOUNTING KIT CANNOT BE USED AS A GROUNDING LOCATION FOR THE AIR COMPRESSOR.**

1 Using the air compressor and ECU as templates, mark drill locations as shown with a punch or marking tool.

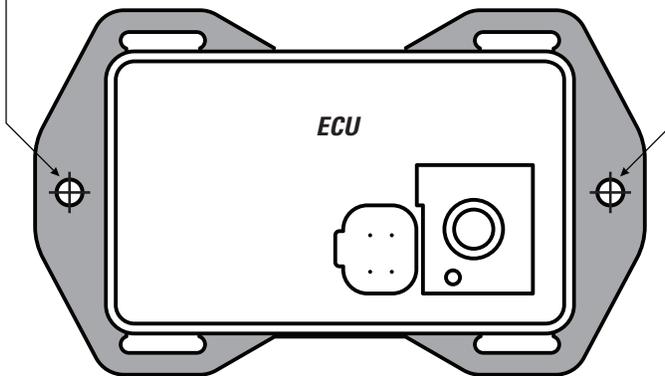
2 Mark air compressor ground wire fastening location within reach of the ground wire ring terminal.

3 Drill 3/16" diameter holes. Remove any burrs and debris from drill holes.

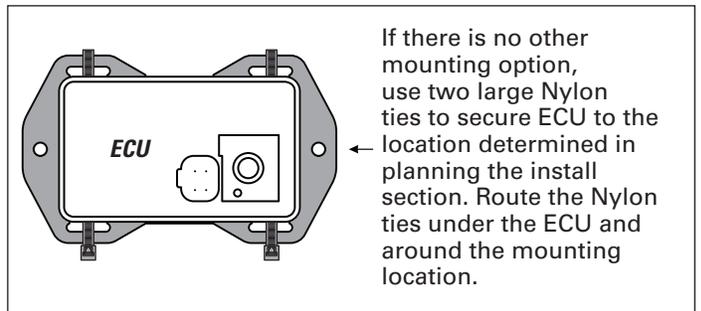


ASSURE THAT YOU INSTALL THE AIR COMPRESSOR AND ECU CLOSE ENOUGH SO THE CONNECTORS ON THE WIRE HARNESS WILL REACH THEM BOTH.

Use as template to mark drill locations.



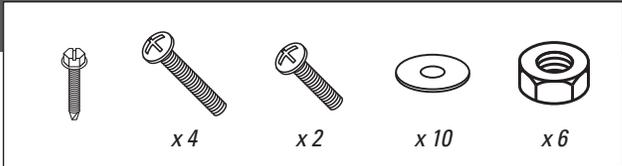
OPTIONAL ECU MOUNTING



If there is no other mounting option, use two large Nylon ties to secure ECU to the location determined in planning the install section. Route the Nylon ties under the ECU and around the mounting location.

3

INSTALL THE AIR COMPRESSOR AND ECU

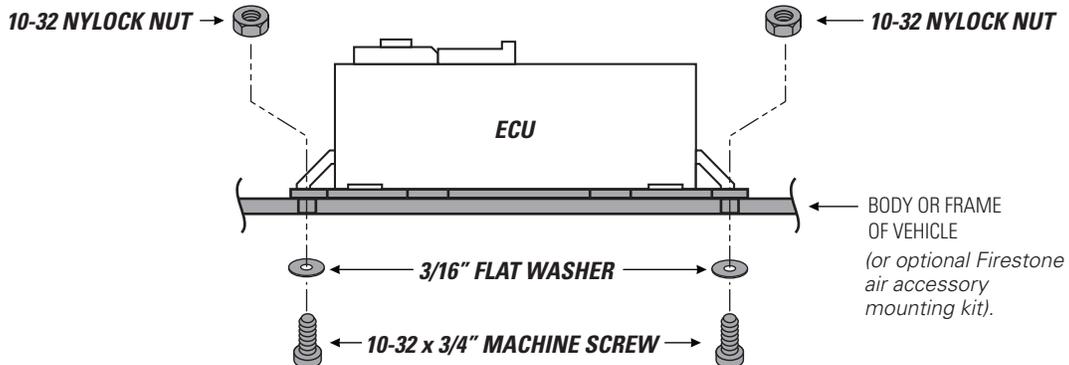
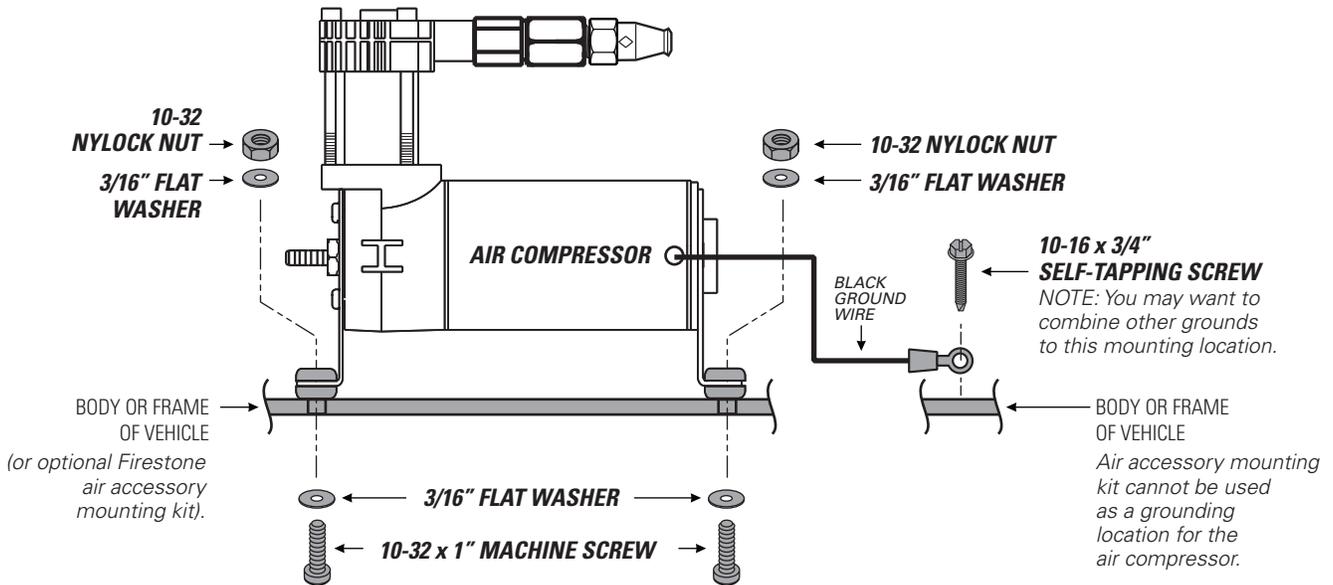


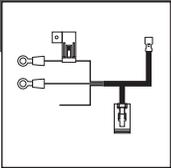
DO NOT OVER TIGHTEN MOUNTING BOLTS AND NUTS ON THE AIR COMPRESSOR. TOO MUCH TORQUE CAN CRUSH THE BRASS INSERTS AND RUBBER ISOLATORS.

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

2 Mount the ECU to the drill hole location using the supplied fasteners.

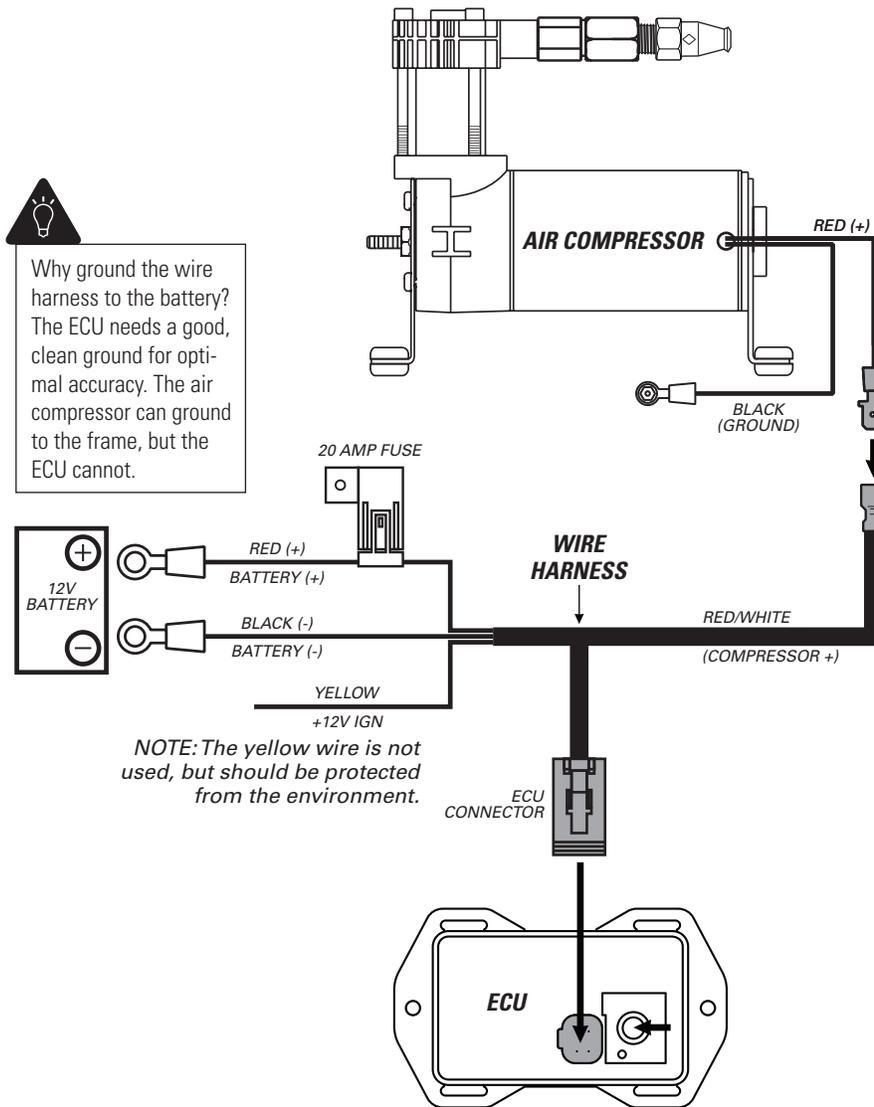
3 Mount the black ground wire ring terminal using the supplied fasteners. Assure that the ring terminal makes a solid contact with bare metal for a proper ground.





1 Route the wire harness in the most protected manner possible, and securely make all connections as shown.

2 The yellow wire is not used. Wrap or wire nut it to protect it from the environment.

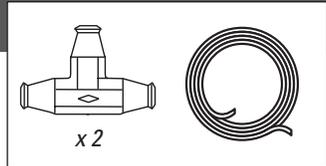


5

INSTALL AIR LINE TUBES



EXHAUST ALL AIR FROM THE SYSTEM PRIOR TO RELEASING AIR TUBES FROM AIR FITTINGS.

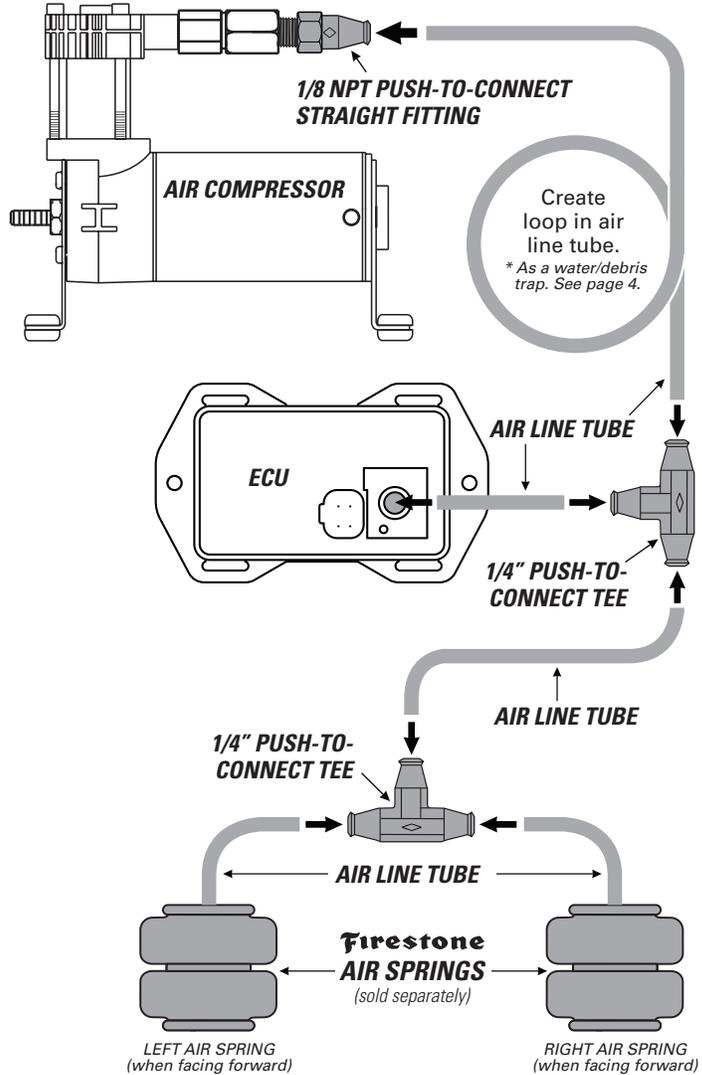


1 Route the air line tube from 1/8 NPT push-to-connect straight fitting on the top of the air compressor to the first 1/4" push-to-connect tee.

2 From the 1/4" push-to-connect tee, route air line tube to the ECU, as shown.

3 Route air line tube from each air spring and connect to a 1/4" push-to-connect tee, as shown.

4 Route air line tube to connect the two 1/4" push-to-connect tees, as shown.



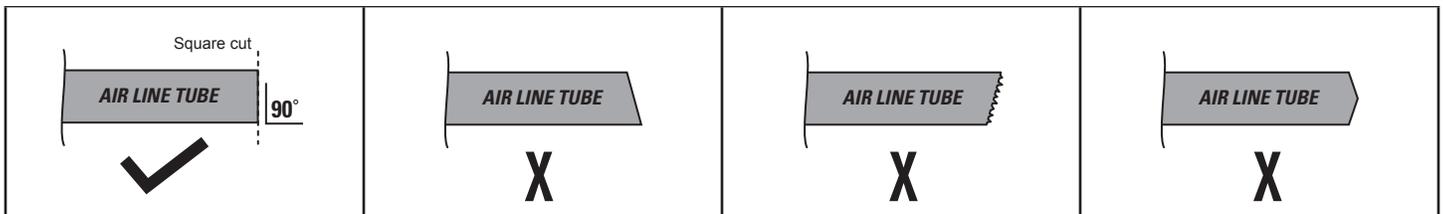
DO

Make sure the cut is as square as possible. Use a tube cutter or very sharp utility knife.

DON'T

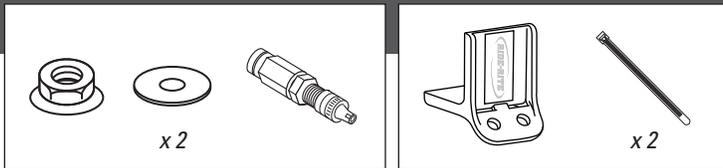
Fold or kink the air line tube. Cut the air line tube at an angle. Use pliers, scissors, snips, saws, or side cutters.

PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE



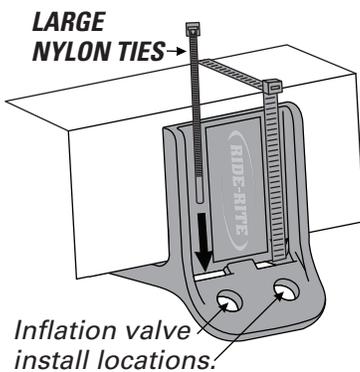
OPTIONAL INFLATION VALVE INSTALL

6



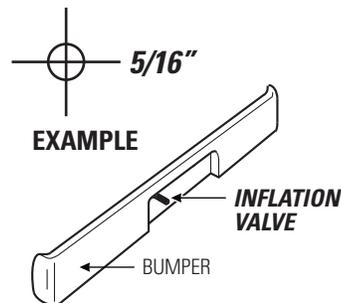
IF USING THE OPTIONAL NO-DRILL INFLATION VALVE BRACKET, CHOOSE OPTION 1. IF DRILLING, CHOOSE OPTION 2. **INFLATION VALVE MUST BE ACCESSIBLE BY AN AIR CHUCK.**

- 1** Secure the air inflation valve bracket to a protected, secure location. **PROCEED TO STEP 3.**

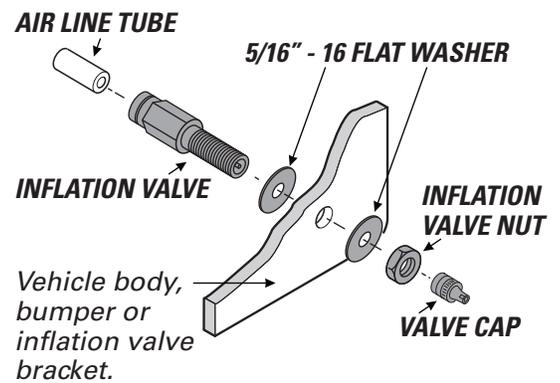


- 2** Select a protected location to install the inflation valve, such as the bumper or the body of the vehicle.

Drill a 5/16" hole for inflation valve install location.

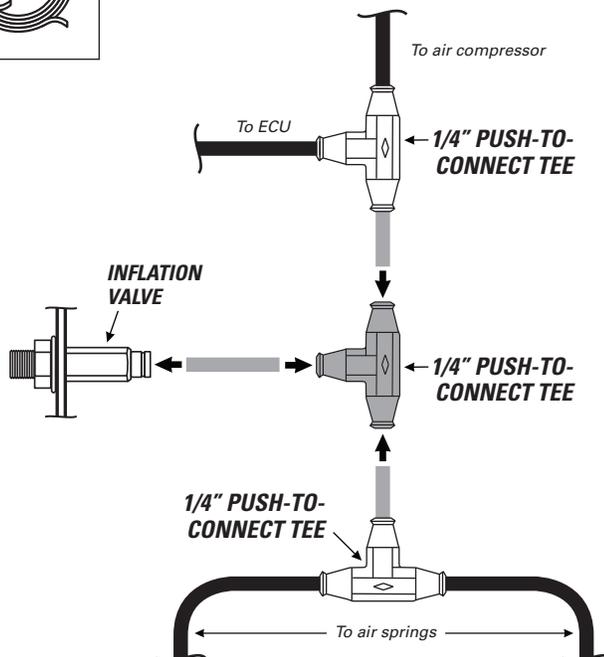
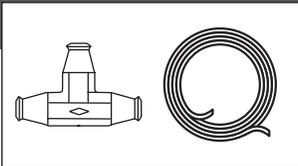


- 3** Install inflation valve assembly as shown.



RUN AIR LINE TO OPTIONAL INFLATION VALVE

7



- 1** Run air line tube from the location of the installed inflation valve in step 7 to the air line tube that connects the two installed 1/4" push-to-connect tees.

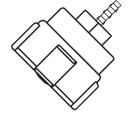
- 2** Cut the piece of air line tube that connects the two installed 1/4" push-to-connect tees.

- 3** Install the air lines into the 1/4" push-to-connect tee, as shown.

- 4** Install the air line tube into the inflation valve, as shown.

8

INSTALLING THE AIR FILTER



FILTER LIFE WILL VARY BASED ON ENVIRONMENTAL CONDITIONS. PROTECT THE AIR COMPRESSOR BY CHANGING THE AIR FILTER MORE FREQUENTLY IN DUSTY CONDITIONS.

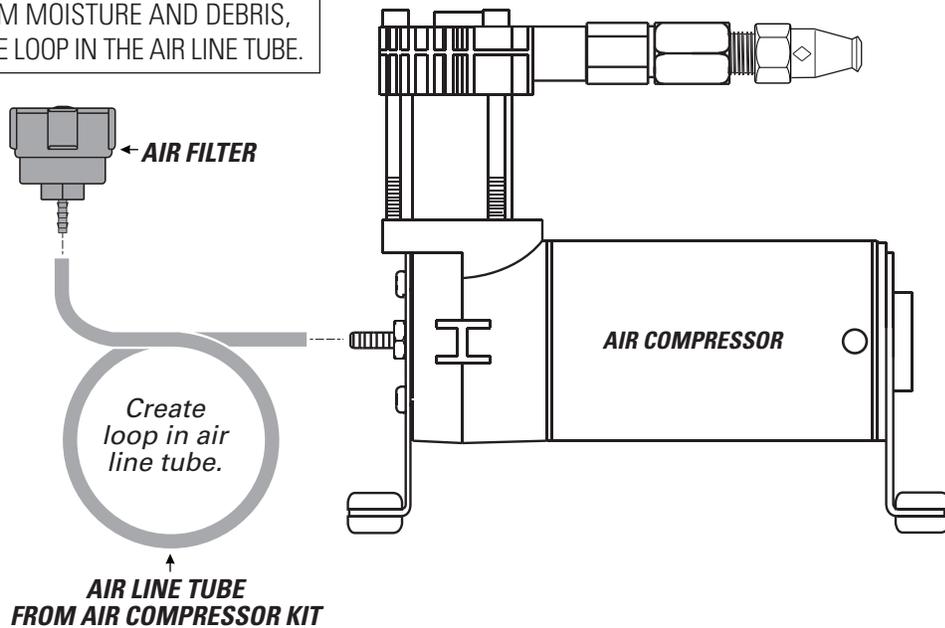
1 Fully secure the air filter barb into the air line tube from the air compressor kit.

2 Press air line tube onto the barb on the air compressor air fitting until fully seated. Assure you create a loop in the air line tube, as shown, when securing it to the vehicle.

3 Periodically check the air filter during operation. When the air filter is dirty and needs to be replaced, contact an Authorized Firestone dealer to purchase a new one.



SECURE THE AIR FILTER IN A LOCATION THAT PROTECTS IT FROM MOISTURE AND DEBRIS, AND IS ABOVE THE LOOP IN THE AIR LINE TUBE.



9

CLEAN UP INSTALLATION



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

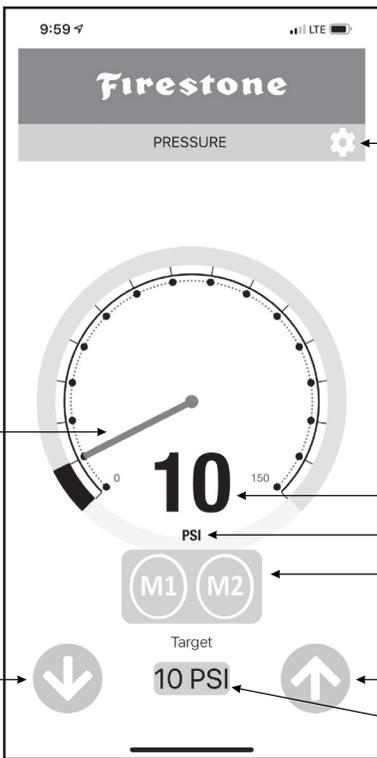


USING SUPPLIED NYLON TIES, SECURE ALL WIRING AND AIR LINE TUBE IN A MANNER THAT DOES NOT OBSTRUCT MOVING PARTS OR IN ANY WAY THAT AFFECTS YOUR ABILITY TO SAFELY OPERATE THE VEHICLE.

1 Download and install the Firestone Air Command app on a compatible iPhone or Android device.

2 Open the app. Once the app has established a Bluetooth connection on startup, it will automatically link to the ECU.

MAIN APP SCREEN



NEEDLE AND BAR Shows actual pressure. Can be used to change pressure.

DECREASE PRESSURE

SETTINGS

ACTUAL PRESSURE

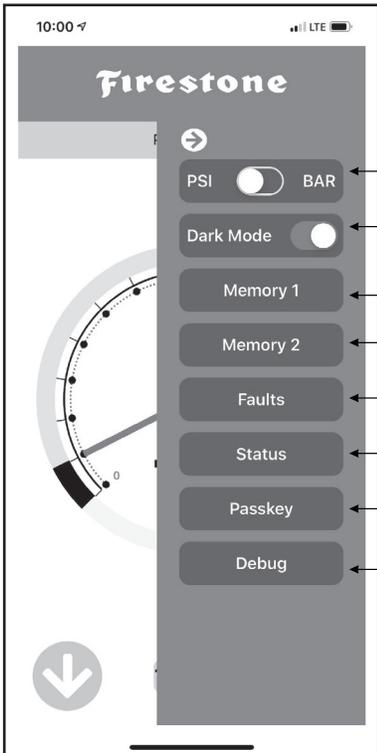
UNITS

MEMORY BUTTONS To set memory, hold down target pressure, then press M1 or M2.

INCREASE PRESSURE

TARGET PRESSURE Set by user.

SETTINGS



CHANGE UNITS

CHANGE DARK MODE Auto adjust to ambient light for contrast.

SET AND NAME MEMORY 1

SET AND NAME MEMORY 2

SHOW FAULTS SCREEN

SHOW SYSTEM STATUS SCREEN

CHANGE PASSKEY User set or default (123456).

SHOW LOG SCREEN FOR TROUBLESHOOTING

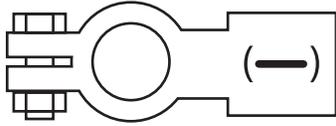
* Any faults will include troubleshooting instructions

11

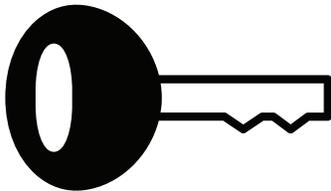
TEST THE SYSTEM

With the Air Command™ F3 kit and your air springs installed, you are ready to test the system.

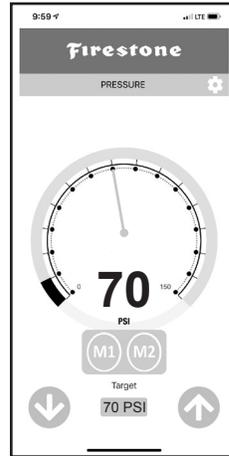
- 1** Reattach the negative battery cable.



- 2** Turn on your vehicle's ignition.



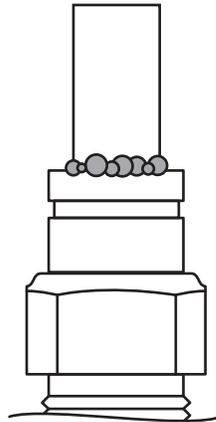
- 3** Use the app to inflate the air springs to 70 PSI. See step 10 for details.



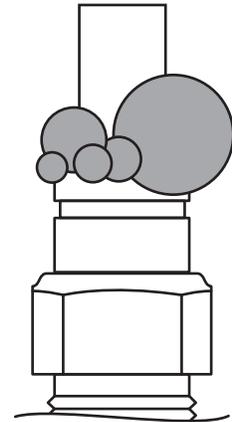
- 4** Spray fittings with soap and water mixture or glass cleaner.



- 5** Observe bubbles.



**SMALL SOAP BUBBLES
THAT DO NOT EXPAND**



**SOAP BUBBLES
THAT EXPAND**



NO LEAKS?

Congratulations! You're riding right with the push of a button! Remember to review the Operating Instructions.

LEAK?

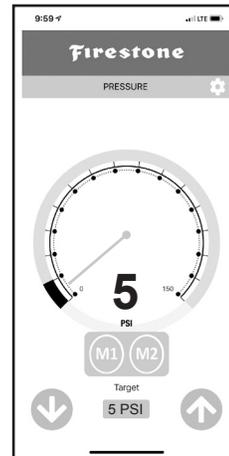
Bummer. Continue to step 12 to fix the leak.



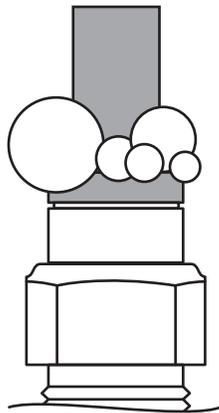
EXHAUST ALL AIR FROM THE SYSTEM PRIOR TO RELEASING AIR TUBES FROM AIR FITTINGS.



- 1 Use the app to deflate the air springs to 5 PSI. See step 10 for details.

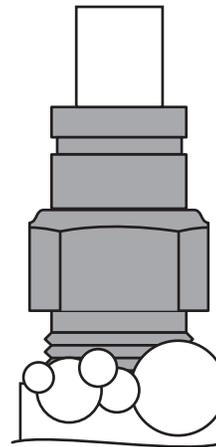


LEAK AT AIR LINE TUBE AND AIR FITTING



Release air line tube (see page 4). Review proper cuts and procedures in step 5. Repeat step 5.

LEAK AT BASE OF AIR FITTING



Tighten Air Fitting one turn or until leak stops.

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.
- 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.
- The wire harness is grounded to the negative (-) battery terminal. The ECU needs a good, clean, interference-free ground.
- 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.

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

Firestone Industrial Products

CONNECT WITH US



FirestoneIP



Firestone Ride-Rite