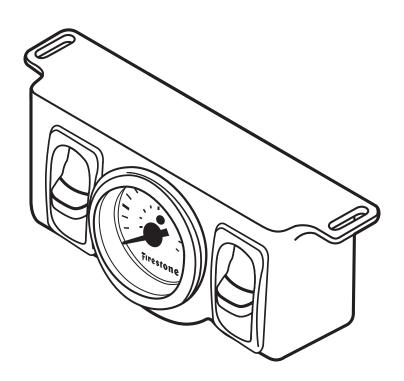


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# **INSTALLATION INSTRUCTIONS**



# ! IMPORTANT

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

### 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.

### 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

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 THE PRESSURE REQUIREMENTS FOR THE AIR SPRINGS:



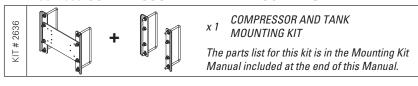
# **PARTS**

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

# **MAIN KIT CONTENTS**

PT # 7555	x 1 DUAL AIR CONTROL PANEL	PT # 9287	x 1 AIR COMPRESSOR 450C x 1 AIR TANK 2 GALLON						
PT # 9416	x 1 AIR LINE TUBE (30 FEET)	PT # 9194	x 1 EXTERNAL HOSE    SE						
PT # 9301	Firestone X 1 STORAGE BAG HEAVY DUTY	A24-760-2636 COMPRESSOR AND TANK MOUNTING KIT  COMPRESSOR AND TANK							

# A24-760-2636 COMPRESSOR AND TANK MOUNTING KIT

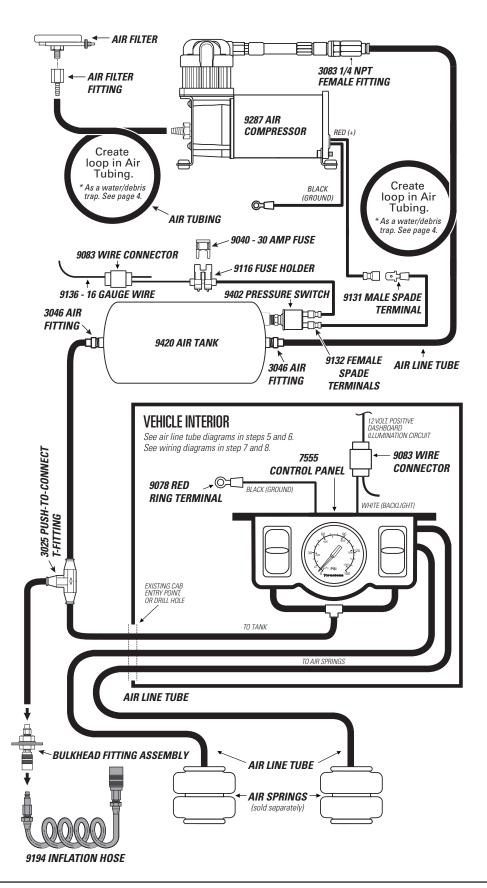


# **A21-760-2912 HARDWARE PACK**

AZ I	AZI-700-Z3IZ HANDWANE PACK												
PT # 3087		x 7 10-32 x 1" MACHINE SCREW	PT # 3083		x 1	1/4 NPT FEMALE 1/4 PTC	PT # 9078		x 1	RED RING TERMINAL			
PT # 3088		x 7 10-32 LOCK NUT	PT # 3046		х3	1/4 STRAIGHT FITTING PTC	PT # 9086		x 2	SPADE TERMINAL FEMALE (22-18 GAUGE)			
PT # 3086	0	x 14 #10 FLAT WASHER	PT # 3025		х3	PUSH-TO- CONNECT T-FITTING	PT # 9132		x 2	SPADE TERMINAL FEMALE (16-14 GAUGE)			
PT # 3421		10-16 x 3/4" x 1 SELF-TAPPING SCREW	PT # 9196		x 1	DRY COUPLER FITTING	PT # 9117	A	x 2	SPADE TERMINAL MALE (22 - 18 GAUGE)			
PT # 0070		3/8-16 x 1.00 x 4 HEX HEAD CAP SCREW GR2	PT # 3146		x 1	1/4 NPT ANCHOR COUPLING	PT # 9131	A	x 2	SPADE TERMINAL MALE BLUE (16-14 GAUGE)			
PT # 0071	0	x 4 3/8 FLAT WASHER	PT # 9040		x 1	FUSE ATO/ATC 30 AMP	PT # 9116		x 1	FUSE HOLDER SPADE TYPE			
PT # 3067		3/8-16 HEX HEAD x 4 FLANGE CENTER LOCK NUT	PT # 9402		x 1	SEALED PRESSURE SWITCH 110/145	PT # 9083		x 2	WIRE CONNECTOR			
PT # 9036		x 15 NYLON TIE	PT # 9136		x 1	15' 16 GAUGE RED WIRE	PT # 9082		x 1	15' 18 GAUGE RED WIRE			

# **CONTENTS AND OVERVIEW**

PLANNING THE PAGE 1 INSTALL PREPARE AIR PAGE 5 COMPRESSOR, TANK & CONTROL PANEL DRILL HOLES FOR PAGE h AIR COMPRESSOR **INSTALLATION INSTALL THE** PAGE AIR COMPRESSOR AIR COMPRESSOR TO PAGE 8 **CONTROL PANEL AIR** LINE TUBE AIR SPRINGS TO PAGE C **CONTROL PANEL** AIR LINE TUBE INSTALL PRESSURE PAGE 1 **SWITCH WIRING** FINISH CONTROL PAGE 1 **PANEL WIRING & INSTALLATION** INSTALL BULKHEAD ASSEMBLY, USING PAGE INFLATOR, CLEAN UP INSTALLATION PAGE 13 TEST THE SYSTEM



# PLANNING THE INSTALL

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

# DETERMINE THE MOUNTING LOCATION FOR THE CONTROL PANEL

- Mount inside the vehicle cab, in a place where you will not hit or kick it.
- Allow room for the air line tube to run without sharp curves or bends.
- Do not obstruct your view or ability to safely operate the vehicle.

# DETERMINE THE MOUNTING LOCATION FOR THE AIR COMPRESSOR

- Use the provided Mounting Kit (Part # 2636) to mount the Compressor, considering the guidelines below, and follow the kit's instructions.
- Provide ample air flow.
- Protect from airborne debris and moisture.
- Optionally you can drill holes to mount the compressor to the frame, see Section 3

# PLAN INSTALLATION ROUTES FOR WIRING AND AIR LINES INTO CAB

- If possible, use existing factory grommet, such as where a wiring harness enters the cab.
- If not possible, drill a hole large enough for two air line tubes and a ground wire. Make sure the wiring and air line tubes are not exposed to sharp metal edges that can damage them.

# SOAK AIR LINE TUBE ENDS IN HOT WATER BEFORE INSTALLING ONTO BARBED FITTINGS

-The hot water makes the air line tube easier to work with and enables it to shrink onto the barbed fitting for a better seal.

# 5

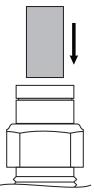
# TAPE ALL ELECTRICAL CONNECTIONS

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

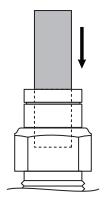
### USING PUSH-TO-CONNECT FITTINGS FOR AIR LINES

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

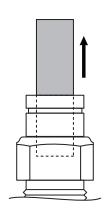
Insert end of air line tube into air fitting.



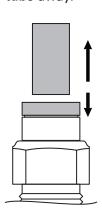
Push air line tube into air fitting as far as possible.



Gently pull on the air line tube to check for a secure fit.



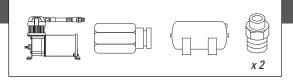
To remove, push down collar and gently pull air line tube away.



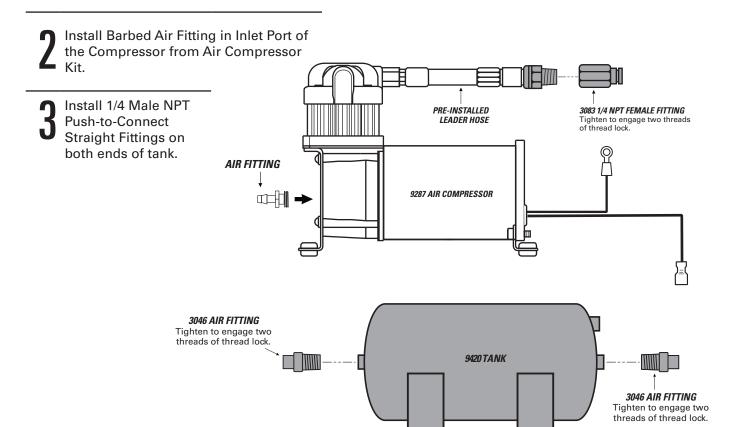
**Removal Tip:** Use a 1/4", 5/16", or 6mm open-ended wrench to push the collar down.



# PREPARE THE AIR COMPRESSOR AND TANK



Install 1/4 Female NPT Push-to-Connect Straight Fitting on the Check Valve.

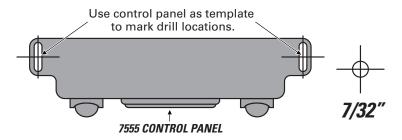


DRILL HOLES FOR CONTROL PANEL INSTALLATION

Use the location you selected during the Planning the Installation step on page 4.



- Using the Control Panel slots as a template, mark two drill locations with a punch or marking tool.
- **2** Drill a 7/32" diameter hole on each center mark.
- Do not mount the control panel until step 8.







IF YOU ARE USING THE SUPPLIED FIRESTONE AIR ACCESSORY MOUNTING KIT, SKIP THIS STEP AND REFER TO THE MOUNTING KIT'S INSTRUCTIONS AT THE END OF THIS MANUAL..

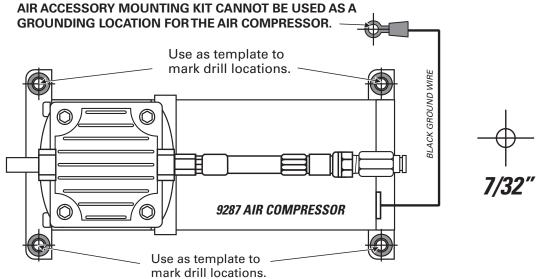
# STOP HERE AND SKIP THIS STEP IF USING THE PROVIDED MOUNTING KIT



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

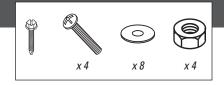
- Using the Air Compressor as a template, mark four drill locations with a punch or marking tool.
- Mark ground wire fastening location within reach of the ground wire ring terminal.
- 3 Drill 7/32" diameter holes. Remove any burrs and debris from drill holes..

Drill within reach of the ground wire ring terminal on body or frame of vehicle or create a wire to link to the negative battery terminal. Minimum gauge of wire should be 12.





# **INSTALL AIR COMPRESSOR AND TANK**

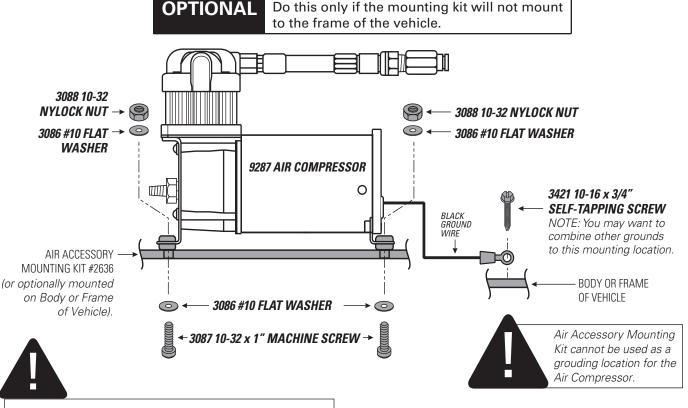




DO NOT OVER TIGHTEN MOUNTING BOLTS AND NUTS. TOO MUCH TORQUE CAN CRUSH THE BRASS INSERTS AND RUBBER ISOLATORS.

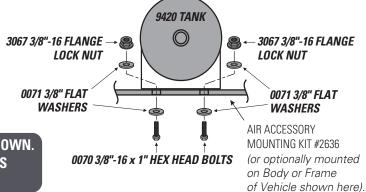
- Mount the Air Compressor to the hole locations on the provided Mounting Kit using the supplied fasteners.

  DO NOT OVERTIGHTEN.
- 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. (Optionally, you can run the negative wire to the negative battery terminal.)



Mount to the drill holes made in the frame.

TO CREATE A PROPER GROUND, ASSURE THE GROUND RING TERMINAL CONTACTS BARE METAL AND IS FASTENED SECURELY. AFTER INSTALLATION, YOU MAY OPTIONALLY COAT THE RING TERMINAL IN SILICONE TO PROTECT IT FROM CORRODING.



OPTIONAL FRAME MOUNTING FOR TANK SHOWN.
REFER TO MOUNTING KIT INSTRUCTIONS
FOR PROVIDED TANK BRACKETS.



Use the route you selected during the Planning the Installation step on page 4.



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

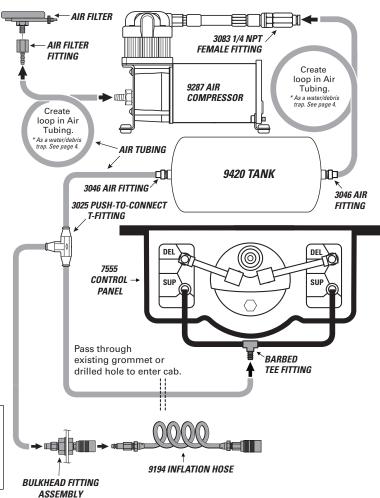


THE AIR LOOPS CREATES A TRAP FOR CONDENSATION TO GATHER. WITHOUT THIS TRAP, THE AIR COMPRESSOR COULD BE DAMAGED BY WATER INTAKE.

- Route the Air Tubing from the Air Tank to the Control Panel, leaving room to secure line safely. Use guidelines below to cut.
- Install the Air Tubing into the Barbed Tee fitting on the back of the Control Panel switch as shown.
- Install the AirTubing from the other end of the AirTank into the 1/8 NPT Push-to-Connect Straight Fitting on the top of the Air Compressor.
- Use supplied NylonTies to install the Air Filter in a dry, secure place, away from dirt and debris. Periodically check the Air Filter during operation, and rpelace it when it becomes dirty.



FOR PROPER INSTALLATION, SOAK AIR LINE TUBE ENDS IN HOT WATER BEFORE INSTALLING ONTO BARBED FITTINGS.

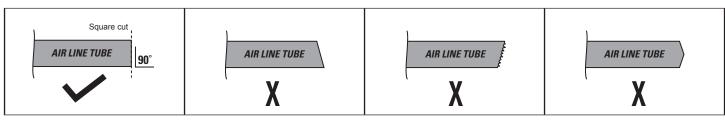


DO

Make sure the cut is as square as possible. Use a tube cutter or sharp utility knife. **DON'T** 

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

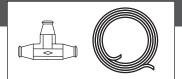
# PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE





# INSTALL T-FITTING AND ROUTE AIR LINE TUBE TO CONTROL PANEL

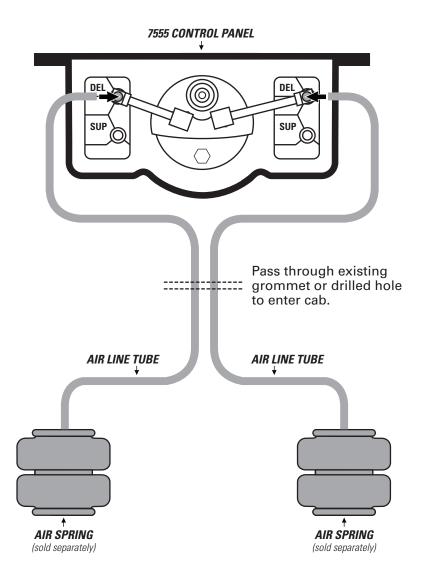
Use the route you selected during the Planning the Installation step on page 4.

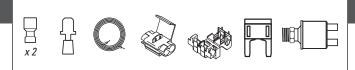




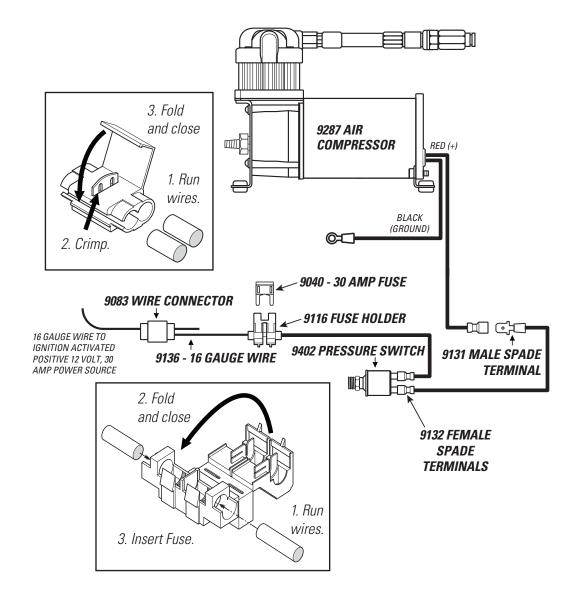


- Route the AirTubing from the Control Panel to the Air Springs.
- 2 Install the AirTubing end onto the Barbed Fittings on the back of the Control Panel pressure gauge as shown.
- Route the Air Tubing from the Control Panel to the Air Springs, making sure to keep in mind which line is for the left and right Air Spring.



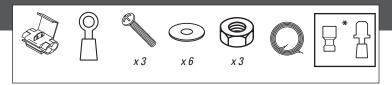


- Insert the Pressure Switch in the 1/8 NPT offset port on the AirTank.
  - Cut a length of 16 Gauge Wire from the 15' included with this kit. Crimp a 16 Gauge Male Space Connector on one end to connect to the Female Spade Connector coming off of the Compressor. Crimp a Blue Female Spade Connector to the other end to connect to the Pressure Switch.
- Using another piece of wire, install another Blue Female Space Connector to one end for the other spade terminal on the Pressure Switch. Connect the other end of the wire to a 12 Volt power wire with a Wire Connector. The 12 Volt power wire should be connected to an ignition powered source.
- Install the In-Line Fuse Holder in the positive Pressure Switch Wire. Cut the Pressure Switch Wire and insert the unstripped ends of the wire into the Fuse Holder. Close the Fuse Holder over the wires with pliers and install the 30 Amp blade fuse.



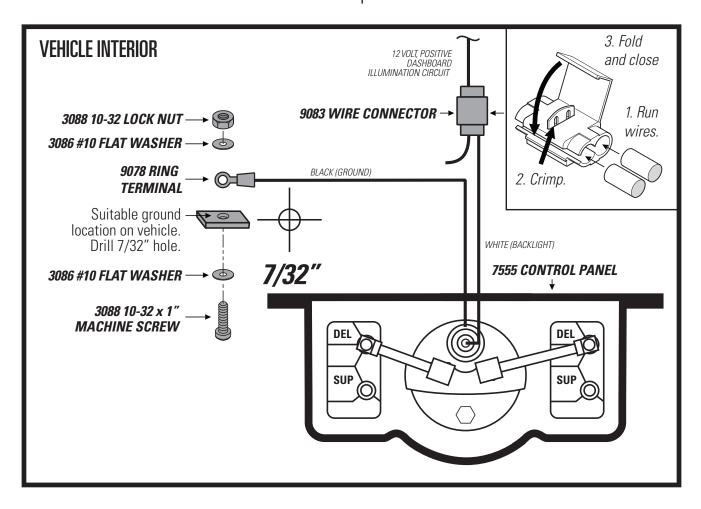


# FINISH WIRING AND INSTALLATION

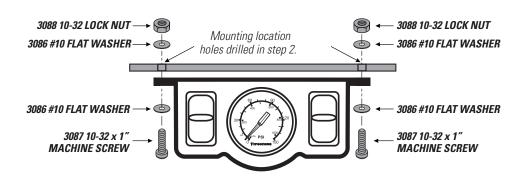


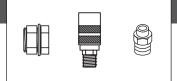
\* Additional Male and Female 18 Gauge Spade Connectors provided if desired to create disconnects for control panel.

- Install Ring Terminal and Wire Connector as shown below on backlight wires. Use additional 18 Gauge Wire as needed.
- Pasten Control Panel backlight ground wire to vehicle as shown.



Install the Control Panel using the supplied fasteners.





- Determine a suitable location to mount the Bulkhead Assembly and Fittings. This area should be convenient to access and safe from debris. Make sure you have room to attach the Inflation Hose.
- Drill a 3/4" hole in the selected mounting location and install the Bulkhead Assembly Components, Air Fitting and Dry Coupler Fitting, as shown.

INSTALLATION LOCATION ON VEHICLE

Install Air Tubing from the Push-to-Connect T-fitting between the Air Tank and the ECU to the Air Fitting installed into the Bulkhead Assembly.

3046 AIR FITTING
Tighten to engage two threads of thread lock.

1/8 NPT PUSH-TO-CONNECT FITTING
From AUX port of ECU

BULKHEAD NUT

Tighten to engage two thread lock.

BULKHEAD NUT

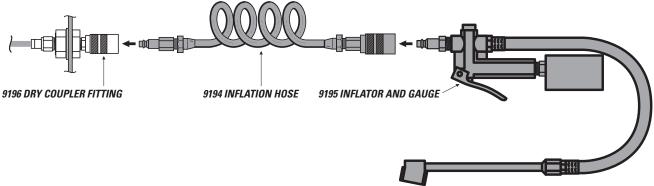
BULKHEAD NUT

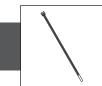
BULKHEAD STUD



**USING INFLATOR** 

Connect the male Air Fittings to the Dry Couplers to use the Inflation Hose and Inflator. When finished, simply disconnect and store in the supplied





CLEAN UP INSTALLATION



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

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

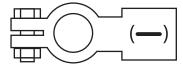




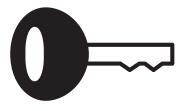
# TEST THE SYSTEM

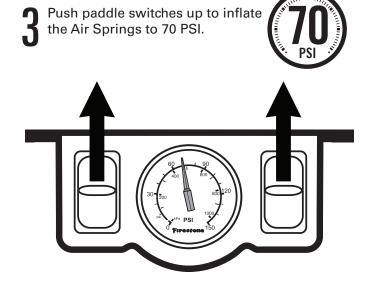
With the Air Command™ kit and your air springs installed, you are ready to test the system.

Reattach the negative battery cable.



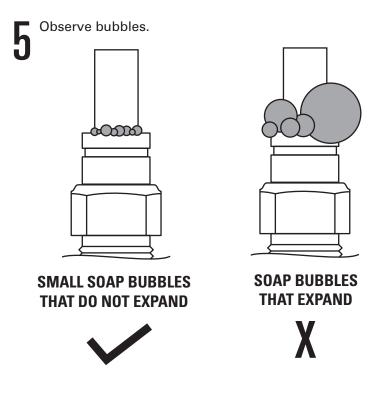
Turn on your vehicle's ignition.





Spray fittings with soap and water mixture.





# NO LEAKS?

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

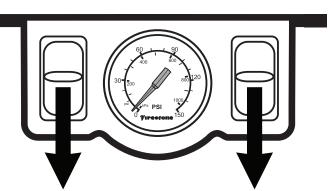
**LEAK?** 

Bummer. Continue to step 12 to fix the leak.

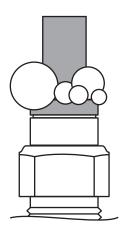


Push paddle switches down to release all air pressure from the Air Springs.

NOTE: While doing this, if you get a quick burst of air prior to the gauge dropping to 0 PSI, your lines are incorrectly swapped.

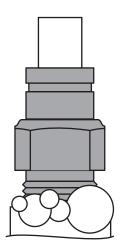


# LEAK AT AIR LINE TUBE AND AIR FITTING



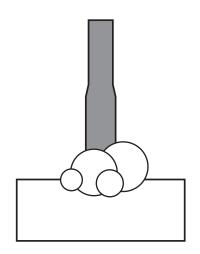
Release air line tube (see page 4).
Review proper cuts and
procedures in step 5. Repeat
installation steps.

# LEAK AT BASE OF AIR FITTING ON AIR SPRING



Tighten air fitting one turn or until leak stops.

# **LEAK AT A BARBED FITTING**



Being careful not to scar the metal barbs, cut away, check for debris. Trim air tube line, soak for 5 minutes in hot water. Reinstall.

# 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, email us at rrtech@fsip.com. If emailing, please include photos to help us better diagnose and understand any problems you may be experiencing.



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# BEFORE YOU DRIVE, CONFIRM THE FOLLOWING:

- ☐ Secure all air line tubes and wiring inside the cab and on the outside of the truck.
- $\square$  Make sure no wiring, air line tubes, or hardware obstruct your vision or ability to safely operate the vehicle.
- ☐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.
- ☐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.
- ☐The air gauge backlight turns off when the ignition is off, or when dashboard lights do not illuminate.
- ☐ Put a minimum of 5 PSI in the air springs, unloaded.

# **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.



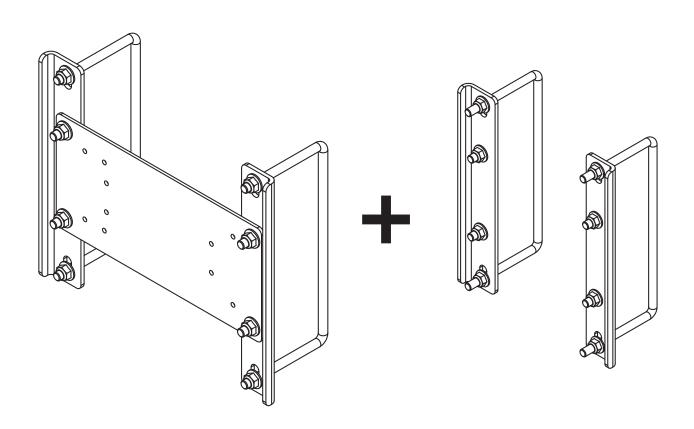
FirestoneAiride





# 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 USES

This kit works with Air Command Kits 2902 and 2912. Refer to the following pages for kit-specific layouts to ensure proper fitment.

### **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.

# 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.

# **PARTS**

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

# MAIN KIT CONTENTS



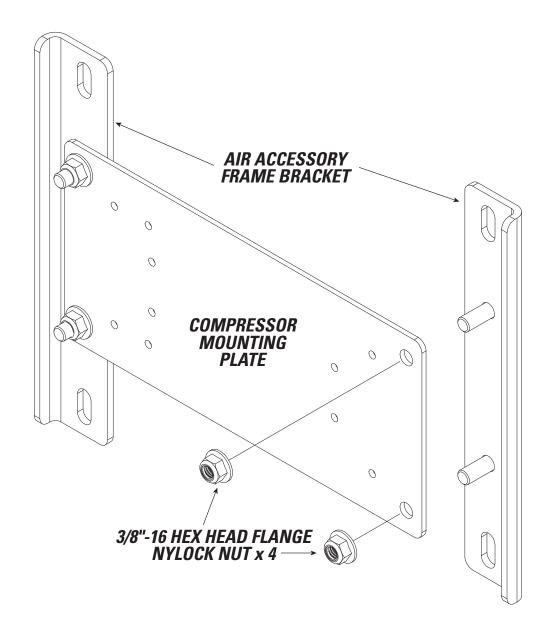
# A21-760-2530 HARDWARE PACK



Secure the Compressor Mounting Plate to the System Frame Brackets shown below.

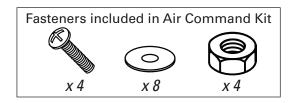
**?** Select a suitable location for installation on the vehicle frame rail.

It is recommended to mount to the passenger side frame rail as the vehicle's battery is normally located in the engine compartment on the passenger side. Double check fitment for obstructions before final installation.





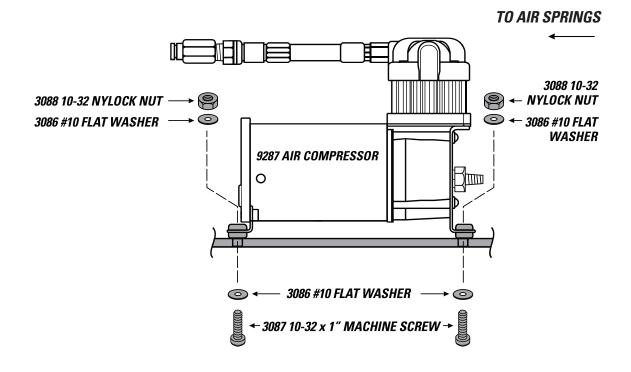
# INSTALL THE AIR COMPRESSOR - USE FOR STANDARD DUTY AIR COMMAND KITS 2902 & 2912

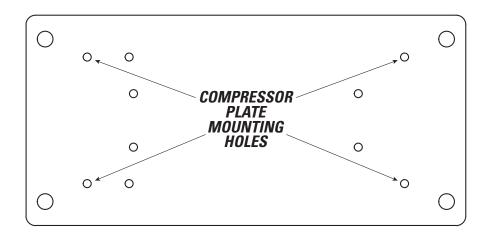




DO NOT OVER TIGHTEN MOUNTING BOLTS AND NUTS ON THE AIR COMPRESSOR. TOO MUCH TORQUE CAN CRUSH THE BRASS INSERTS AND RUBBER ISOLATORS.

- Mount the Air Compressor to the hole locations in the Compressor Plate using the supplied fasteners. DO NOT OVERTIGHTEN.
- lt is recommended to face the outlet of the compressor towards the air springs on the rear axle of vehicle.





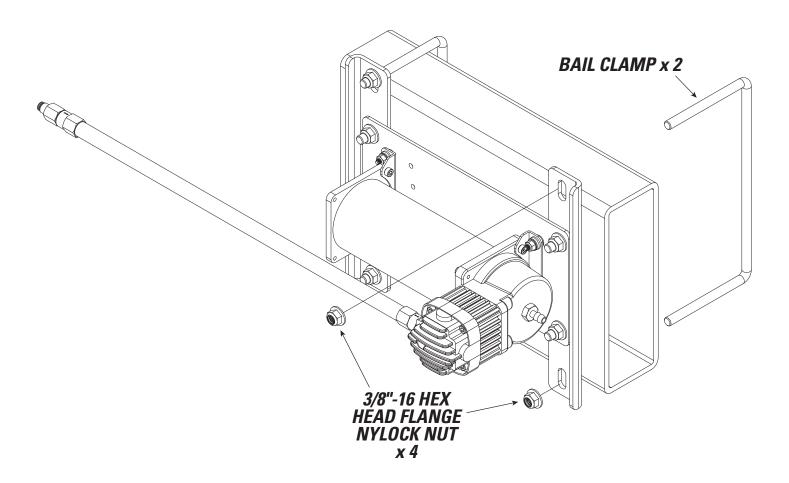


AIR ACCESSORY MOUNTING KIT CANNOT BE USED AS A GROUNDING LOCATION FOR THE AIR COMPRESSOR

Install the compressor mounting assembly to the vehicle's frame rail, using the provided Bail Clamps.

# -RECOMMENDED -

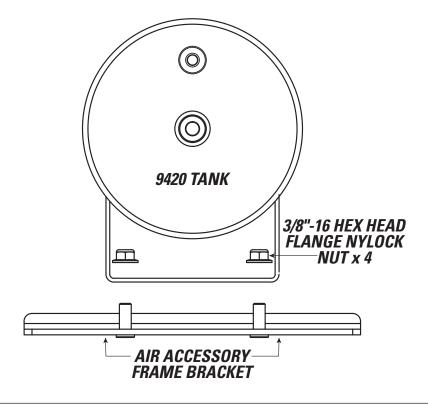
**?** Continue following the Air Command Kit instructions to connect all air tubing and electrical wiring.



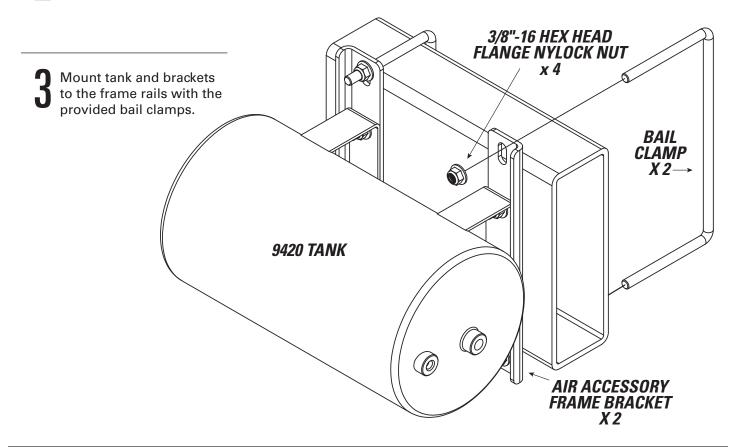


# PREASSEMBLE AND INSTALL AIR TANK

Mount the Air Accessory System Frame Bracket to the feet of the Air Tank.



**1** Determine a location on the frame rail of the vehicle to mount the tank. This should be as close to the Air Compressor as possible.



# **NOTES**



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# BEFORE YOU DRIVE, CONFIRM THE FOLLOWING:

- ☐ Make sure all fasteners are tight and secure.
- ☐ Make sure the installation does not interfere with any other components on the vehicle.
- ☐ Reattach negative battery cable.

# **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.



