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WR1-760-6110

COMPRESSOR AND SINGLE GAUGE KIT **WITH LOW PRESSURE SENSOR**

INSTALLATION INSTRUCTIONS





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Introduction

The purpose of this publication is to assist with the installation of the compressor and single gauge system.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information here includes a hardware list, tool list, step-by-step installation information, maintenance tips, safety information and a troubleshooting guide.

IMPORTANT SAFETY NOTICE

The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

Gross Vehicle Weight Rating: The maximum allowable weight of the fully loaded vehicle (including passengers and cargo).

Payload: The combined, maximum allowable weight of cargo and passengers that the vehicle is designed to carry.

Installation Diagram

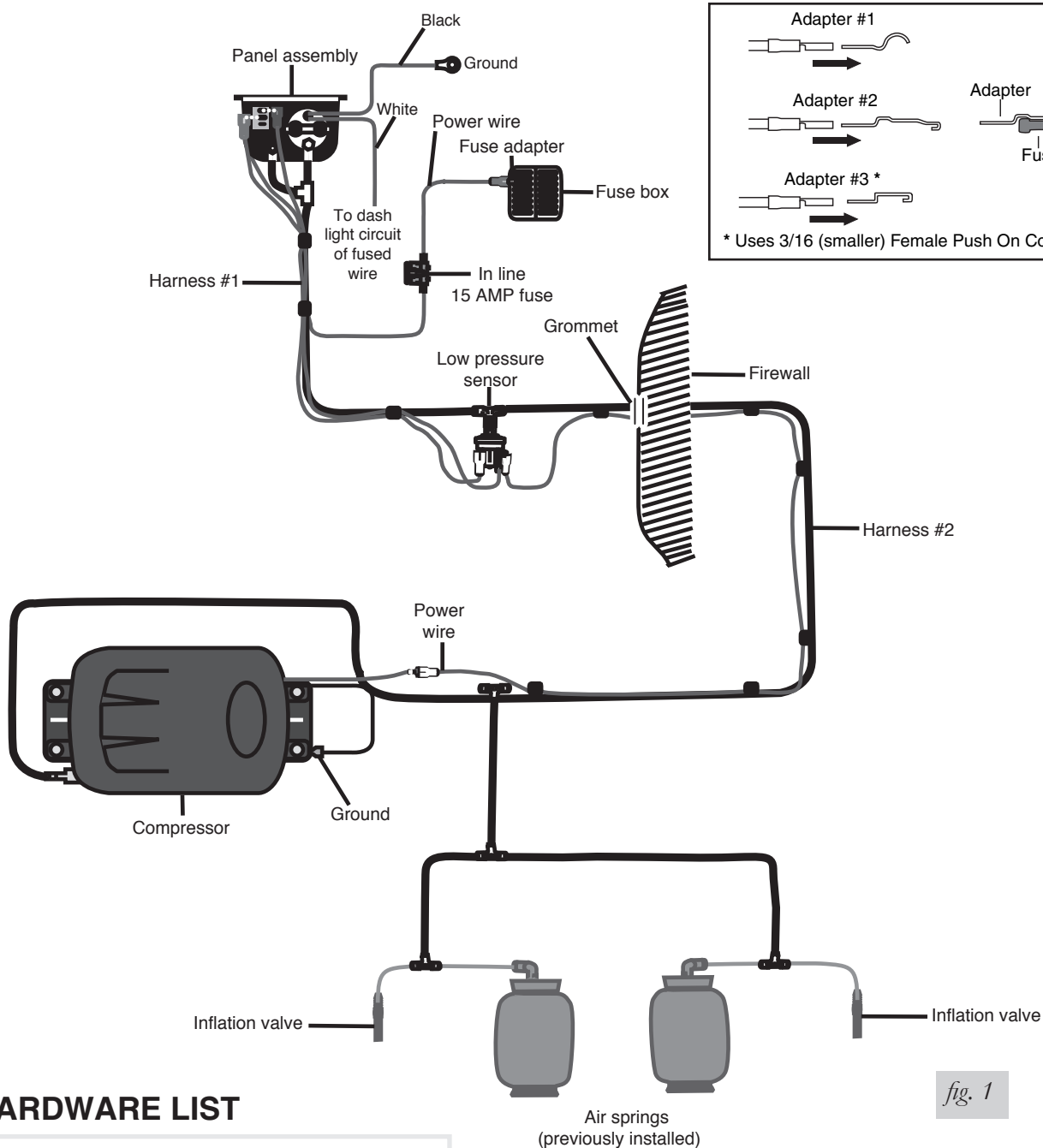


fig. 1

HARDWARE LIST

Item	Description.....	Qty
A	Compressor	1
B	Panel assembly.....	1
C	Harness #1.....	1
D	Harness #2.....	1
E	Hose.....	10'
F	Hardware pack.....	1
G	Hardware pack.....	1

Installing the Compressor and Single Gauge System

RECOMMENDED COMPRESSOR LOCATIONS

Important

LOCATE COMPRESSOR IN DRY, PROTECTED AREA ON VEHICLE.
DIRECT SPLASH OR EXCESSIVE MOISTURE CAN DAMAGE
THE COMPRESSOR AND CAUSE SYSTEM FAILURE.

Disclaimer: If you choose to mount the compressor outside the vehicle please keep in mind the compressor body must be shielded from direct splash and the intake should be snorkeled inside the vehicle. If the compressor does not include a remote mount air filter or if mounting the compressor outside the vehicle, make sure to orient the compressor intake filter so that all moisture can easily drain.

Please also remember...

- To avoid high heat environments
- To avoid mounting the compressor in the engine compartment.
- To check to be sure the compressor harness #2 will reach the compressor and connect to harness #1.

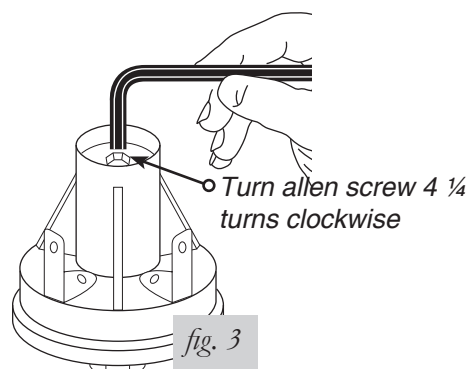
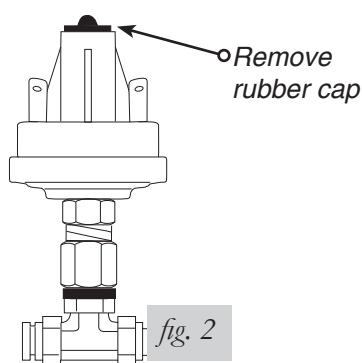
The compressor can be mounted in any position — vertical, upside down, sideways, etc. (please refer to the instruction manual).

GETTING STARTED

This part of the installation should be done after the air spring kit is installed.

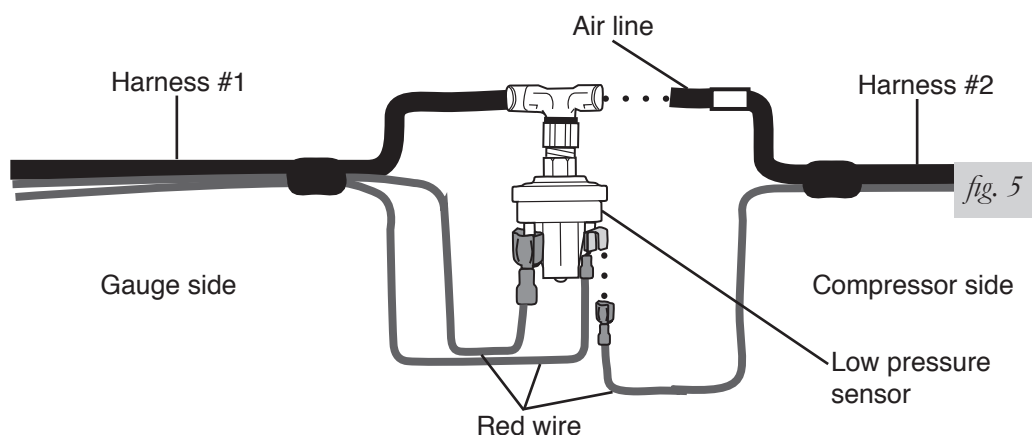
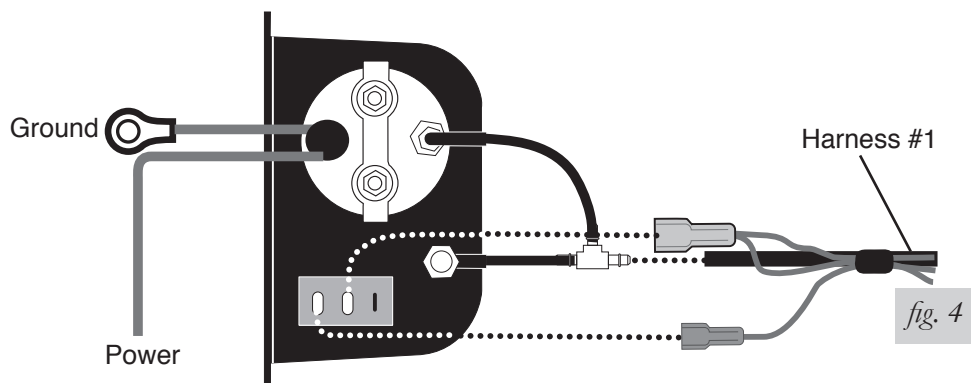
If you are adding this control system to a CoilRite application, then no modifications to the low pressure sensor are necessary. If you are adding this control system to a Semi-Air application, and if your specific application requires a minimum of 10 PSI, then it will be necessary to adjust the low pressure sensor to 10 PSI. To increase the pressure in the low pressure sensor, remove the rubber plug with pliers (fig. 2). Using an allen wrench, turn the screw clockwise 4 1/4 turns (fig. 3). Push the rubber plug back into the top of the low pressure sensor. Proceed with the step by step installation instructions.

Do not cut, trim, modify, or disassemble the harness. If you have excess length, simply coil it up and secure out of the way with the provided tie straps. All preassembled gauge panels have been 100% leak & function tested. DO NOT attempt to tighten, loosen, or adjust any fittings or connections. This will likely cause a leak or malfunction and void the warranty.



STEP BY STEP INSTALLATION

All of the electrical connections are matched by male-to-female push-in terminals. All of the air line connections will be white-to-white, no tape-to-no tape, indicated by the color band. The color band also serves as a reference point for installing the air line into the fitting. Properly installed, the front edge of the color band should be against the collar of the fitting (fig. 4 and 5).



1. Install the gauge panel. Select a convenient mounting location that has a sturdy rigid surface. The bottom edge of the dash on either side of the steering wheel is a good location. Attach the panel to the selected location with the black self-tapping screws.
2. Install the compressor unit.
 - a. Hold the compressor in the recommended location and use the provided silver self tapping screws to attach the mounting brackets to the vehicle.
 - b. In some cases the mounting area does not provide enough room to use a drill to drive the screws in. It may be necessary to use the mounting brackets as a template to drill 13/64" holes through the frame first and then use a 7/16" nut driver to install the self tapping screws.

NOTE

Attach the ground wire to one of the screws (fig. 1).

- c. For box frames: In some cases the frame section will not be wide enough to mount the compressor legs flat to the rail. Refer to fig. 6 in this situation.



CAUTION

DO NOT DRILL ANY HOLES INTO THE FRAME OR THE FLOOR BEFORE CHECKING FOR HYDRAULIC LINES, FUEL LINES, AND/OR ELECTRICAL WIRES THAT MAY NEED TO BE MOVED ASIDE. ALSO, WHEN ATTACHING TO THE FLOOR, IT IS IMPORTANT TO CHECK WHERE THE SCREWS PROTRUDE THROUGH THE FLOOR. IT MAY BE NECESSARY TO TRIM OR COVER THE TOP OF THE SCREWS INSIDE THE VEHICLE. A SEALER SHOULD BE USED AROUND THE SCREW TO PREVENT THE ELEMENTS FROM ENTERING THE CAB AREA.

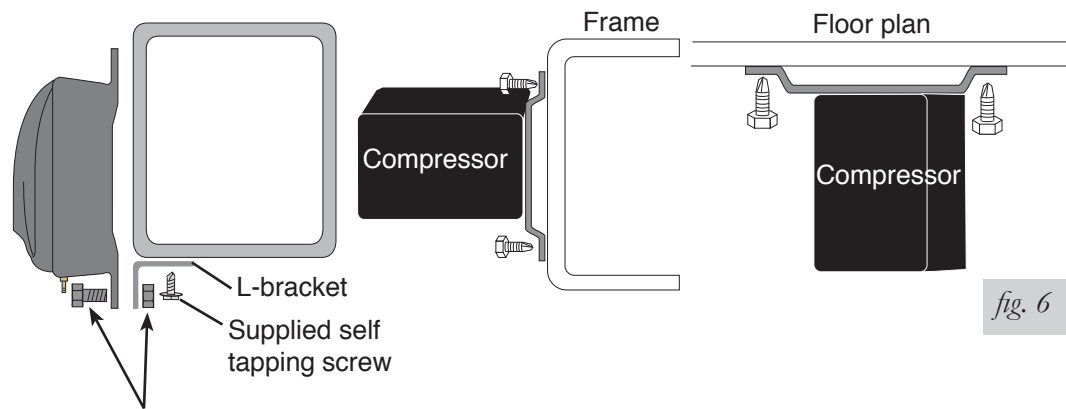


fig. 6

1/4" Bolt and nut will need to be provided if the L-bracket is fabricated.

3. Connect wiring harness #1 to the back of the gauge panel.
 - a. With your thumb against the front side of the switch, connect the wire by pushing the female connectors onto the blade connectors on the switch.
 - b. Match the color band on the air line to the color band on the tees.
 - c. Push the air lines onto the "T" fitting until the air line completely covers the barb (fig. 4). Lubricating the air line will ease pushing the air line over the barb.
 - d. Do not connect the power wire at this time.
 - e. Wiring harness #1 also connects the gauge panel to the low pressure sensor assembly. The low pressure sensor protects the air springs from failure resulting from low pressure in the unloaded condition. The sensor is preset to maintain a MINIMUM pressure of 5 PSI in the air springs. The sensor measures the pressure in each spring and turns on the compressor if the pressure falls below 5 PSI.

NOTE

The low pressure sensor is preassembled onto wiring harness #1. The sensor should be located under the dash inside the vehicle and secured with the provided tie straps.

4. Attach harness #2 to the compressor unit.
 - a. Push the air line completely over the barbed fitting on the compressor and connect the power wire (red) (fig. 7).

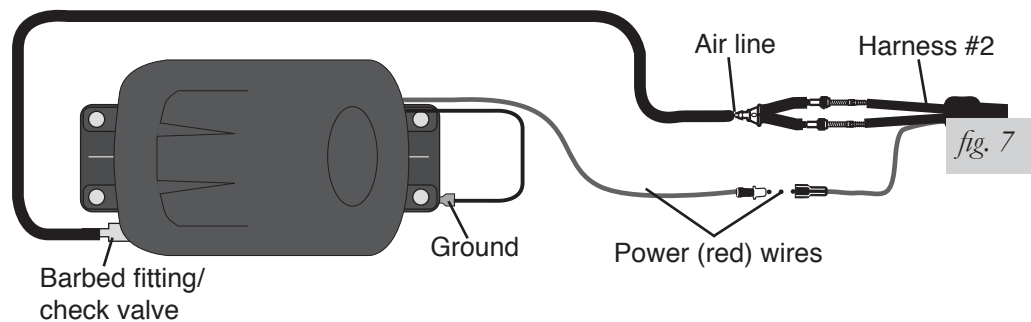


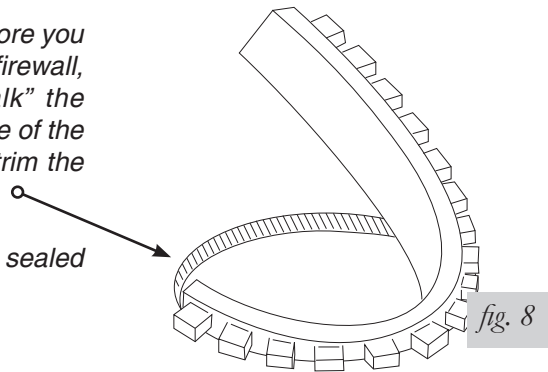
fig. 7

5. Route wiring harness #2 from the compressor.
 - a. Use existing grommets in the floor or firewall to route the harness from the compressor to the low pressure sensor.
 - b. In some cases, a hole may have to be drilled to allow access for the harness. Drill a 5/8" diameter hole and install the provided grommet (fig. 8). It will be necessary to seal any grommets or holes that have been cut, drilled or removed so as not to allow elements to enter the cab area of the vehicle.
 - c. When routing wiring harness #2 from the compressor, it should not be routed so as

to lay on, or near, the exhaust pipe/silencer/catalytic convertor of the vehicle. Routing along the top of a crossmember or over a heat shield is recommended.

After the hole is drilled and before you route the harness through the firewall, insert the grommet and “walk” the material around the inside edge of the drilled hole. You may have to trim the grommet to get an exact fit.

(The flexible grommet is in the sealed parts package.)



6. Connect wiring harness #2 to wiring harness #1 inside the vehicle by connecting the red wire from harness #2 and the banded and no tape air lines to the low pressure sensors. See fig. 5 for air line and electrical connection.
7. The next connection is between each air spring and the air line “T” fitting located just ahead of the check valves in harness #2, near the compressor (fig. 1 and 7).
 - a. With the air springs deflated, use a hose cutter to cut the air line already installed between the air springs and the inflation valves.
 - b. Install the provided “T” fittings (fig. 1) by pushing the air line into each leg of the “T” until you feel a definite “click”. Each line should go in 9/16”.
 - c. Connect a single length of air line to the open leg of each “T”. Bring each of the lines to the “T” fittings in harness #2 just in front of the check valves and connect as shown in fig. 7.
 - d. Route the air line across the chassis from the far side over the exhaust system heat shields and along the frame up to the compressor. Avoid heat sources, sharp edges, and tight bends.
8. Connect the power wire from harness #1.
 - a. Route it to the vehicle fuse box.
 - b. Use a multi meter to determine which open terminal (accessory, etc.) works only when the key is in the “on” or accessory position (or refer to the owners manual for an available accessory fuse). The terminal should have an amperage rating equal to or higher than the 15 amp in-line fuse.
 - c. Connection to the fuse terminal will depend on what type of fuse your vehicle uses. If your vehicle uses the barrel type fuse, use adapter #1. If you have the standard spade type fuses, use adapter #2. Many late model vehicles use a smaller spade type fuse which requires adapter #3 (see inset with fig. 1). If adapter #1 or #2 are used, it will be necessary to cut off the 1/4” female connector attached to the power wire and crimp the smaller 3/16” female connector supplied with this kit.

NOTE

Connect adapter to “LIVE” side of the fuse (use a multi meter to determine). With the ignition on, the compressor will turn on and fill the system to 5 PSI before shutting off.

9. Connect the gauge light.
 - a. Route the white wire for the illuminated gauge to harness #1’s fused wire or to a dash light wire circuit and attach with the quick splice provided.
 - b. Ground the black wire to an adequate ground. Use the additional wire and connectors supplied if longer leads are needed (fig. 1).
10. Press the off/on button to inflate both air springs and use the small deflate button to

adjust the pressure. Inflate to 30 PSI. Check all fittings and inflation valve cores with a soapy water solution to test for leaks.

11. Recheck air pressure after 24 hours. A 2–4 PSI loss after initial installation is normal. If pressure has dropped more than 5 PSI, re-test for leaks with soapy water solution. Please read and follow the maintenance and operating tips in the installation manual that came with your air spring kit.

IMPORTANT: If the compressor runs continually or often, then there is a leak. Disconnect the compressor at the fuse box and test for leaks with a soapy water solution.



CAUTION

NEVER RUN THE COMPRESSOR LONGER THAN FOUR MINUTES CONTINUOUSLY. ALLOW AT LEAST FIVE MINUTES FOR COOL DOWN BEFORE STARTING THE COMPRESSOR AGAIN.

Notes



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