

## Kit 25592

*5 PSI Low Pressure Sensor (Single Gauge)* 





## **INSTALLATION GUIDE**

For maximum effectiveness and safety, please read these instructions completely before proceeding with installation.

Failure to read these instructions can result in an incorrect installation.

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### Introduction

The purpose of this publication is to assist with the installation of the Load Controller™ II compressor 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.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. Contact Air Lift Company at (800) 248-0892 for the latest version of this manual.

#### 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). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

**Payload:** The combined, maximum allowable weight of cargo and passengers that the truck is designed to carry. Payload is GVWR minus the Base Curb Weight.

#### NOTATION EXPLANATION

Hazard notations appear in various locations in this publication. Information which is highlighted by one of these notations must be observed to help minimize risk of personal injury or possible improper installation which may render the vehicle unsafe. Notes are used to help emphasize areas of procedural importance and provide helpful suggestions. The following definitions explain the use of these notations as they appear throughout this guide.



INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



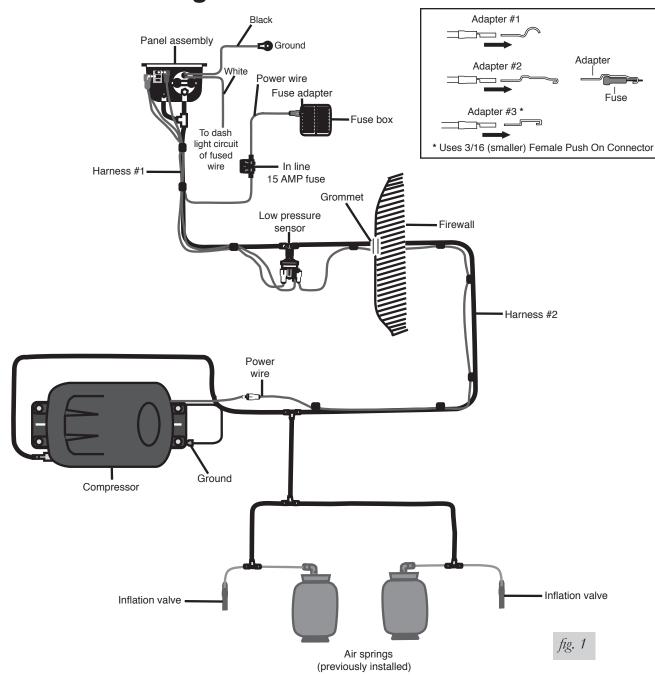
INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE MACHINE OR MINOR PERSONAL INJURY.

NOTE

Indicates a procedure, practice or hint which is important to highlight.



## **Installation Diagram**



#### **HARDWARE LIST**

item	Part #	DescriptionQty	Item	Part #	DescriptionQty
Α	16060	Compressor 1	Ε	20210	Hose10
В	26156	Panel assembly1	F	33485	Hardware pack1
С	26078	Harness #1 1	G	33872	Hardware pack1
D	26109	Harness #2 1			·
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service at (800) 248-0892 for a replacement part.



## **Installing the Load Controller II System**

#### RECOMMENDED COMPRESSOR LOCATIONS

#### <u>Important</u>

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 under the hood.
- To check to be sure the compressor harness #2 will reach the compressor and connect to harness #1.

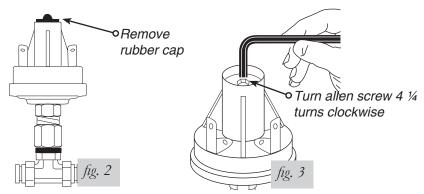
The compressor can be mounted in any position — vertical, upside down, sideways, etc. (please refer to the instruction manual).

#### **GETTING STARTED**

This part of the installation should be done after the air spring kit is installed. If you have any questions, please call Air Lift customer service at (800) 248-0892.

If you are adding this control system to an Air Lift LoadLifter 5000<sup>™</sup> application, then no modifications to the low pressure sensor are necessary. If you are adding this control system to an Air Lift 1000<sup>™</sup> or RideControl<sup>™</sup> 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.

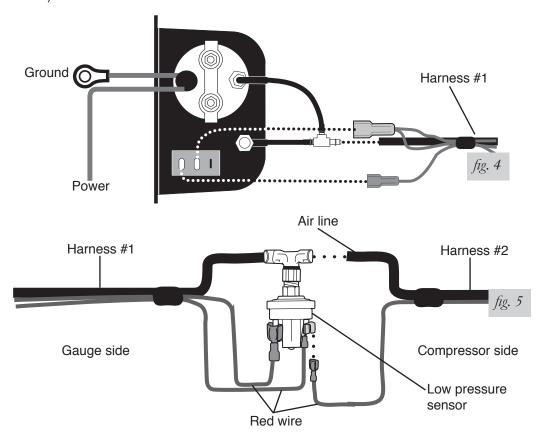
Do not cut, trim, modify, or disassemble the harness. If you have excess length, simply coil it up and secure out of the way with the provided tie straps. All preassembled gauge panels have been 100% leak and function tested. DO NOT attempt to tighten, loosen, or adjust any fittings or connections. This 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. (Figs. 4 and 5).



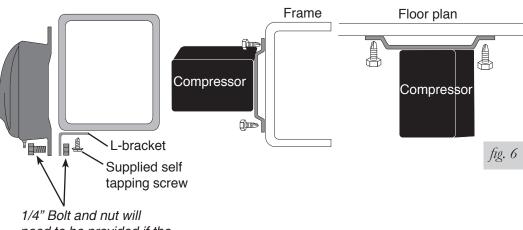
- 1. Install the gauge panel. Select a convenient mounting location that has a sturdy rigid surface. The bottom edge of the dash on either side of the steering wheel is a good location. Attach the panel to the selected location with the black self-tapping screws.
- 2. Install the compressor unit.
  - 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.
  - 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.

**A** CAUTION

DO NOT DRILL ANY HOLES INTO THE FRAME OR THE FLOOR BOARD BEFORE CHECKING FOR HYDRAULIC LINES, GAS LINES, AND/OR ELECTRICAL WIRES THAT MAY NEED TO BE MOVED ASIDE. ALSO, WHEN ATTACHING TO THE FLOOR BOARD, IT IS IMPORTANT TO CHECK WHERE THE SCREWS PROTRUDE THROUGH THE FLOOR BOARD. 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.

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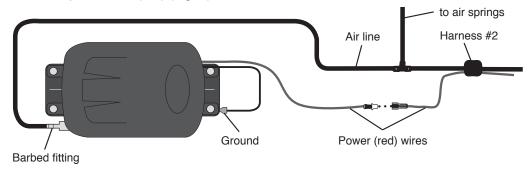
1/4" Bolt and nut will need to be provided if the L-bracket is fabricated.

- 3. Connect wiring harness #1 to the back of the gauge panel (Fig. 4).
  - 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. Push the air line onto the "T" fitting until the air line completely covers the barb (Fig. 4). Lubricating the air line with soapy water will ease pushing the air line over the barb.
  - c. Do not connect the power wire at this time.
  - d. 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 10 PSI in the air springs. The sensor measures the pressure in each spring and turns on the compressor if the pressure falls below 10 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).



- 5. Route wiring harness #2 from the compressor.
  - a. Use existing grommets in the floorboard 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/muffler/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 to 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. a (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 hose, to the low pressure sensor. See Figure 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 (Figs. 1 and 7).
  - a. With the air springs deflated, use a hose cutter or razor blade 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 Figure 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 test light 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 "HOT" side of the fuse (use a test light to determine). With the ignition on, the compressor will turn on and fill the system to 10 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 guick 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 (20 PSI for Air Lift 1000 kits). Check all fittings and inflation valve cores with a solution of 1/5 dish soap to 4/5 water in a spray bottle 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.



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



## **Limited Warranty and Return Policy**

#### WHAT THIS WARRANTY COVERS

Air Lift Company provides a warranty to the original purchaser of its Load Support Products, for the periods of time listed below, by product line, from the date of original purchase, that the products will be free from defects in workmanship and materials when used on cars and trucks as specified by Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth below.

#### WHAT THIS WARRANTY DOES NOT COVER

The warranty does not apply to products that have been improperly applied, improperly installed, or which have not been maintained in accordance with installation instructions furnished with all products. This warranty does not apply and is void if damage or failure is caused by: accident, abuse, misuse (including but not limited to racing or off-road activities or commercial use), abnormal use, faulty installation, liquid contact, fire, earthquake or other external cause; operating the product outside Air Lift Company's instructions, specifications or guidelines; or service, alteration, maintenance or repairs performed by anyone other than Air Lift Company to the product from its purchased condition. This warranty also does not apply to: consumable parts, such as batteries; cosmetic damage, including but not limited to scratches or dents; defects caused by normal wear and tear or otherwise due to the normal aging of the product, or if any serial or identification number has been removed or defaced from the product. Air Lift Company reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

#### LIMITATION OF LIABILITY

To the extent permitted by law, this warranty and the remedies set forth herein are exclusive and in lieu of all other warranties, remedies and conditions, whether oral, written, statutory, express or implied. AIR LIFT COMPANY DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS TO THE EXTENT PERMITTED BY LAW. To the extent such warranties cannot be disclaimed, such implied warranties shall apply only for the warranty period specified above. Please note that some states do not allow limitation on how long an implied warranty (or condition) lasts. So the above limitation may not apply to you.

Except as provided in this warranty and to the extent permitted by law, Air Lift Company shall not be liable for any direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or arising in connection with the sale, use or repair of air lift products, or under any other legal theory, including but not limited to loss of use, loss of revenue, loss of actual or anticipated profits, loss of the use of money, loss of business, loss of opportunity, loss of goodwill, and loss of reputation. Air Lift Company's maximum liability shall not in any case exceed the purchase price paid by you for the Air Lift product. Please note that some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

#### **HOW TO GET SERVICE**

If a defect in workmanship or materials causes your Air Lift product to become inoperable within the warranty period, before returning any defective product, call Air Lift Company at (800) 248-0892 in the U.S. and Canada (elsewhere, (517) 322-2144) to obtain a Returned Materials Authorization (RMA) number. The consumer shall be responsible for removing (labor charges) the defective product from the vehicle and returning it, shipping costs prepaid, to Air Lift Company for verification. Returns to Air Lift Company must be postage prepaid and sent to: Air Lift Company • 2727 Snow Road • Lansing, MI • 48917. You must prove to the satisfaction of Air Lift Company the date of original purchase of your Air Lift product. You must also enclose the RMA number and a return address. A minimum \$10 shipping and handling charge will apply to all warranty claims. You must also pack the product to minimize the risk of it being damaged in transit. If we receive a product in damaged condition as the result of shipping, we will notify you and you must seek a claim with the shipper.

#### WHAT AIR LIFT COMPANY WILL DO

If you submit a valid claim to Air Lift Company during the warranty period, Air Lift Company will, at its option, repair your Air Lift product or furnish you with a new or rebuilt product. Air Lift Company will not reimburse you for repairs or replacement parts provided by other parties. Your repaired or replacement Air Lift product will be returned to you (subject to payment of the required warranty claim shipping and handling charge) and it will be covered under the warranty for the balance of the warranty period, if any. When a product or part is replaced, any replacement item becomes your property and the replaced item becomes property of Air Lift Company. You are responsible for installation/reinstallation (labor charges) of the product.

#### HOW THE LAW RELATES TO THIS WARRANTY

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. By this warranty, Air Lift Company does not limit or exclude your rights except as allowed by law. To fully understand your rights, you should consult the laws of your state.

#### SPECIFIC LOAD SUPPORT WARRANTY PERIODS BY PRODUCT LINE

LoadLifter 5000™ UltimateLifetime Lim	ited WirelessAIR™	2 Year Limited
LoadLifter 5000™Lifetime Lim	ited WirelessONE™	2 Year Limited
RideControl™Lifetime Lim	ited LoadController™ Single and Dual	2 Year Limited
Air Lift 1000™Lifetime Lim	ited LoadController™ I and II	2 Year Limited
AirCell™Lifetime Lim	ited SmartAir™ II	2 Year Limited
SlamAir™Lifetime Lim	ited Other Accessories	2 Year Limited

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## **Replacement Information**

If you need replacement parts, contact the local dealer or call Air Lift customer service at (800) 248-0892. Most parts are immediately available and can be shipped the same day.

#### Contact Air Lift Company customer service at (800) 248-0892, first if:

- Parts are missing from the kit.
- · Need technical assistance on installation or operation.
- Broken or defective parts in the kit.
- · Wrong parts in the kit.
- · Have a warranty claim or question.

#### Contact the retailer where the kit was purchased:

- If it is necessary to return or exchange the kit for any reason.
- · If there is a problem with shipping if shipped from the retailer.
- If there is a problem with the price.

## **Contact Information**

If you have any questions, comments or need technical assistance contact our customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, our local number is (517) 322-2144.

For inquiries by mail, our address is PO Box 80167, Lansing, MI 48908-0167. Our shipping address for returns is 2727 Snow Road, Lansing, MI 48917.

You may also contact us anytime by e-mail at sales@airliftcompany.com or on the web at www.airliftcompany.com.



## **Notes**



## **Notes**

## **Need Help?**

Contact our customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, our local number is (517) 322-2144.

Register your warranty online at www.airliftcompany.com/warranty



Thank you for purchasing Air Lift products — the professional installer's choice!