

Kit 72000

Automatic Leveling Digital On-Board Compressor System





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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How to Avoid a Freezing Condition in 72000 Wireless Air Kits

Important

To avoid COLD WEATHER FREEZE UP: Add 4 oz. (1/2 cup) of "GUNK" Brand AIR BRAKE ANTI FREEZE

Directly into each flex member. Remove the air line and/or fitting from the air bag and fill directly. Gunk Brand Air Brake Anti-Freeze may be purchased at an automotive parts store or truck supply store.

WARNING: DO NOT FILL THROUGH COMPRESSOR OR MANIFOLD — DAMAGE WILL OCCUR.

CAUTION: DO NOT USE ENGINE ANTI-FREEZE

Check fluid levels in flex member every year (add if needed).





Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of the WirelessAIR 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, step-by-step installation information, 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 or find it online at http://www.airliftcompany.com/wirelessair.htm.

SYSTEM INFORMATION

The WirelessAIR (Advanced Integrated Remote) is designed for automatic digital leveling of the on-board compressor system. The kit includes a compressor, manifold, wiring harness, and wireless digital controller. With the capability to control two air springs independently, the system can be used in or outside the vehicle, for adjustments in full view of the vehicle.

The wireless digital controller is a compact, battery powered unit that features advanced integrated diagnostic capabilities for increased safety and peace of mind. It also includes a clip that can be attached to the vehicle's visor. Two user-defined memory buttons are provided for frequently used settings. As an added safety measure, minimum air pressures are automatically maintained. The manifold is also weather resistant and waterproof up to 2 ft for maximum life expectancy.

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.

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

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

CAUTION 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 Schematic



HARDWARE LIST

ltem	Part #	Description	Qty
А	72001	Wireless digital controller*	1
В	72003	Wireless manifold	1
С	16092	12V Compressor	1
D	20220	20 ft. hose	1
Е	72003-00	4 Wireless manifold harness	1
Harness Hardware Pack (34638)			
F	21838	Tee 1/4 PTC	2
G	24537	Quick splice 18-22 ga	1
Н	24561	Adapter mini fuse	1
J	24542	1/4 ATC/ATO tap in fuse	1
K	24594	1/4 Female spade 22-18 ga	1
L	24661	Heat shrink butt 22-18 ga	1
М	24748	Ring terminal 12 ga	1
Ν	24752	Heat shrink butt 16 ga	2

ltem	Part #	DescriptionQt	y
0	24767	Barrel and spade fuse pack1	
Р	24542	3/16 Female spade 22-18 ga1	
Q	21834	1/8" FNPT - 1/4" PTC1	
R	21839	1/8" MNPT - 1/4" PTC1	
Mounti	ng Hardwa	re Pack (34639)	
S	17385	10-32" x 1/2" Screw2	
Т	10466	8" Zip tie10	6
U	17263	1/4" x 1 Self-tapping screw1	
V	18411	5/16" Lock Washer1	
W	17132	#8-18 x 1/2" Philips S-t screw (black)2	
Х	17386	#10 x 2.5 Self-tapping screw1	
Y	10977	Magnet1	
Z	72001-004	Visor Clip1	

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* Batteries not included.



Missing or damaged parts? Call Air Lift customer service at (800) 248-0892 for a replacement part.

TOOLS LIST

DescriptionQty	DescriptionQty
Hoist or floor jacks 1	7/32 & 1/8 Drill bits1
Safety stands2	5/16 Driver 1
Safety glasses 1	Hose cutter, razor blade, or sharp knife1
Torque wrench1	Spray bottle with dish soap/water solution1
Heavy duty drill 1	Digital volt meter1
#2 Phillips bit driver 1	

Installing the WirlessAIR System

INSTALLING THE COMPRESSOR

1. Select a rigid mounting location on your vehicle's frame or cross member that shields the compressor from the elements and heat sources (fig. 2).



- 2. Centerpunch and drill four 7/32" to 1/4" holes on the mounting location using the supplied template on page 19.
- 3. Attach the compressor to the frame using the four supplied screws and washers from the compressor box (fig. 2).
- 4. Fasten the screws with the supplied nuts and lock washers from the compressor box.
- 5. Ground the ring terminal using the 1/4" x 1" self-tapping screw (U) and the 5/16" lock washer (V) (fig. 2).
- 6. Insert the male fitting (R) into the compressor intake (fig. 3).
- 7. Insert the hose into the male fitting (R) (fig.3).
- 8. Route the hose into the vehicle or into another clean, dry location.
- 9. Insert the compressor filter into the female fitting (Q). Trim the hose and insert it into the female fitting (fig.3).
- 10. Secure the hose and filter using the zip ties (T) provided.



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INSTALLING THE MANIFOLD

NOTE

When mounting the manifold, it will be necessary to leave the screws loose until after you have joined the manifold to the display controller using a magnet (see Joining the Digital Controller...).

There must be no pressure in the air bags when the manifold is powered on for the first time.



 The manifold can be mounted by using either the two 10-32" mounting holes on the bottom or the thru hole with the locating protusion. If mounting by the bottom of the manifold, use the supplied template on page 19 to drill two 7/32" holes into the mounting surface. Secure using the 10-32" x 1/2" screws (S) (fig. 5).

A CAUTION

- THE MANIFOLD MUST ALWAYS BE MOUNTED IN THE ORIENTATIONS SHOWN IN FIG. 4.
- 2. If mounting by the thru hole and protrusion, try to find an existing hole into which the protrusion will fit. After you have joined the controller to the manifold in later steps, secure using the #10 x 2.5 self-tapping screw (X) torqued to 77 in-lbs. If needed, drill a 7/32" hole for the protrusion and a 1/8" pilot hole for the self-tapping screw using the template supplied on page 19 (fig. 6).

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NOTE
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If torque exceeds 77 in-lbs, the screw (X) has a high probability of breaking.





INSTALLING THE ELECTRICAL COMPONENTS

 Once the manifold has been mounted, ground the white (-12V GND) wire with the serrated ring terminal to the frame or other part of the vehicle that is grounded to the battery. Use a #8-18 x 1/2" Philips S-t screw (black) (W) to attach (fig. 7).

- 2. Mount the relay to a safe location on the frame or body within 10 inches of the manifold using the #8-18 x 1/2" Philips S-t screw (black) (W).
- 3. Locate a keyed +12 volt accessory source on the vehicle using a digital volt meter and connect one side of the barrel fuse to it (fig. 8) . It may be possible to tap into the fuse box with the provided fuse taps, please note that the supplied fuse taps will fit the majority of vehicles, but may not fit all.

Air Lift Company is not responsible for any damage to the vehicle due to splicing into the wrong wire on the vehicle's electrical system. If you have any questions regarding the proper +12V keyed wire to tap into, please contact your local dealer.

4. Crimp one half of the heat shrink butt connector (L) to the other end of the barrel fuse. Trim any access red/ white (+12V KEYED) wire and crimp to the other half of the heat shrink butt connector (fig. 8). Shrink the coating on the connector with a heat gun to seal. To prevent failure, secure the wire away from all heat sources using zip ties.



NOTETry to route the wire through an existing hole with a protective grommet. If none are available,
drilling a hole may be necessary. Once the hole is drilled use the grommet material provided
to protect the wire from sharp edges.NOTEIf the vehicle has an external fuse box, routing through the firewall may not be necessary.

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- 5. Route the yellow wire (+12V BATT FUSED) from the relay to the positive side of the battery. To prevent failure, secure the wire away from all heat sources using zip ties. Trim the extra wire and crimp one end of the heat shrink butt connector (N) to the wire. Crimp the 15 amp spade fuse wire to the other side of the butt connector and shrink the coating on the connector with a heat gun to seal (fig. 9).
- 6. Crimp the ring terminal (M) to the other end of the spade fuse holder wire and fasten to the positivie (+12V) battery post (fig. 9).



- 7. Plug the male Delphi connector on the harness into the female manifold Delphi connector on the manifold (fig. 10). The connectors will only fit one way and the color of the wires will match on each side.
- 8. Route the yellow/red (+12V COMP) wire to the compressor using the same method as in step 5 above. Trim any extra wire and also cut the female spade terminal from the compressor's red wire. Crimp one end of the heat shrink butt connector to the yellow/ red wire from the harness and the other end to the red wire from the compressor. Shrink the coating on the butt splice connector with a heat gun to seal (fig. 11).

DO NOT DISCONNECT THE MANIFOLD CONNECTOR WHILE KEYED IGNITION/POWER IS TURNED ON — IT COULD RESULT IN DAMAGE TO THE MANIFOLD.



A CAUTION

ATTACHING THE AIR LINES

- 1. Using a standard tube cutter, a razor blade, or a very sharp knife, squarely cut a piece of air line to go between each of the air springs and the supplied tees.
- 2. Cut another length of air line to go between the other side of the tee and one of the two ports on the front of the manifold (fig. 12).
- 3. Insert a length of air line with the existing inflation valves to the other port of the tee.



6. Cut a length of air line to go between the compressor and the manifold. Remove the nut from the fitting on the end of the compressor leader hose and slide it over the air line. Attach the air line to the compression fitting and tighten nut, locking the air line to the compressor. Insert the other end of the air line to the push-to-connect fitting on the end of the manifold (fig. 11).

NOTE

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A definite click will be heard/felt when the air line is properly inserted. The air line should go in approximately 9/16". Tug the air line once inserted to make sure it securely seated.



JOINING THE DIGITAL CONTROLLER TO THE MANIFOLD

The wireless digital controller (72001), hereafter referred to as the WDC; and the wireless manifold (72003) must be joined to function properly. To prevent operation from other units, all WDC and manifold parts have a unique serial number. The process of joining units is a way to create a link between the WDC and a specific manifold so that they will communicate only with each other. The WDC is capable of storing two different manifold identities, so that it can operate manifolds on both the front and rear axle of a vehicle.

The joining process requires several specific steps to be successful, so please read all instructions carefully before proceeding to join your units. If you encounter any difficulties, please see "Joining Troubleshooting Flow Chart" on pages 14 and 15 for specific troubleshooting scenarios. If you have any further questions about joining your manifold and WDC, please contact customer service at (800) 248-0892.

There must be no pressure in the air bags when the manifold is powered on for the first time.

- 1. Turn the ignition to the "ON" or accessory position. You should hear the compressor come on and fill the bags to the default minimum setting of 5 PSI.
- The WDC has nine buttons. The five buttons that make up the navigation pad are TOP, RIGHT, LEFT, BOTTOM, and MIDDLE. The four buttons on the lower edge of the WDC are referred to as P1, P2, DOWN, UP (going from left to right) (fig. 13).



- 3. Install 3 AAA batteries in the WDC.
- 4. Press and release any button on the keypad of the WDC. The display will read either "Jn-r" or "Jn-F" (fig. 14 and 15).



- Use the top and bottom buttons (fig. 13) to scroll through "Jn-r" and Jn-F". Press the middle button to select the axle desired, front or rear. The display will then show "Join" (fig. 16).
- 6. Place a magnet near the join sensor on the manifold (at the center on the back of the manifold cap, opposite the Airlift logo), and hold in position (fig. 17).

If the middle button is not pressed and the display reads "Jn-r" and not "Join", the manifold and WDC will not join. The screen must read "Join" prior to placing the magnet to the join sensor on the back of the manifold for the manifold and WDC to join.





8. If the join is successful, after a few seconds the WDC will display "donE" signaling that it and the manifold have been linked (fig. 18). The display will then automatically change to "End?" (fig. 19).



- 9. Press the middle button on the navigation pad to complete the joining. Remove the magnet from the manifold. Now the display will read "----" (fig. 20).
- 10. If the display does not find a manifold signal within a certain amount of time, the display unit will time out and show "FAIL" (fig. 21). It will then return to the options menu.



- 11. Press the up or down button to adjust the air pressure in your springs and enjoy your ride.
- 12. If the manifold joined to was previously joined to the other axle, that link is automatically removed when it is joined to a new axle. If no buttons are pressed when in the options menu, the display will return to the operation screen.
- 13. Refer to the User Guide for further operation of the WirelessAIR system.

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REJOINING AND OPTIONS MENU

If the WDC needs to be rejoined or the options menu accessed, please use the steps below.

- 1. Pressing and releasing any button other than MIDDLE will cause the WDC to wake up. If the WDC has not already been joined to one or more manifolds, it will automatically enter Option Mode on wake up, where it can be joined to an manifold (fig. 22).
- 2. To view the Options menu press and hold P1 until the screen shows OPTN. Use the top and bottom buttons on the navigation pad to select either "Jn-r", "Jn-F", or "dISP".
- 3. To change units from the Options menu, scroll until the display reads "dISP" and use the left and right buttons on the navigation pad to alternate between PSI and BAR (fig. 23).

PSI will show 0-100 PSI. BAR measures decibars and will show 4-69 decibar.



THINGS YOU NEED TO KNOW

- 1. The WirelessAIR system will maintain your pressure setting within a range of plus or minus 3 PSI. This is necessary so that the system will not continue to make adjustments while the vehicle is being driven.
- 2. The WirelessAIR system will automatically maintain the pressures that have been set until the user changes them.
- It is possible to add a second manifold to control a second set of air bags. Please contact us by email at sales@airliftcompany.com or on the web at www.airliftcompany.com for more information.

CHECKING THE SYSTEM

- 1. Inspect all air line connections with a solution of 1/5 dish soap to 4/5 water. If a leak is detected in a push-lock-fitting, reinstall the air line to the fitting. Make sure the air line is cut off squarely and that the air line is completely pushed into the fitting.
- 2. If the compressor or the solenoid fails to function, check the 15 AMP fuse and ground connection. Repair and replace as necessary.



Joining Troubleshooting Flow Chart

The joining process requires several specific steps to be successful, so please read "Joining the Digital Controller to the Manifold" on page 11 before proceeding to join your units. If you encounter any joining issues, use the chart below to help troubleshoot the problem. If you have any further questions or concerns, please contact customer service at (800) 248-0892.







Troubleshooting Guide

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Problem	Cause	Solution
System doesn't work/ shows FAIL on display.	Blown fuse or poor electrical connection/out of communication range.	Replace fuse/repair connection. Move closer to manifold/link display to manifold (see User Guide).
Compressor doesn't run.	Display is not linked to manifold, blown fuse, bad ground or poor electrical connection.	Replace the fuse, check ground or check compressor connection.
Compressor runs all the time.	Leak in the system.	Locate the leak.
Compressor runs but bags will not inflate or deflate. Command is given and display shows system deflating but bag pressure does not change.	Happens in cold climates when moisture in manifold freezes, blocking the air ports and causing limited or no air flow. Debris may have entered the system blocking the internal orfices.	Call and inquire about optional heater kit or add about 4 oz. (1/2 cup) of "Gunk Brand" air brake system anti- freeze directly into each flex member. Remove the air line and/or fitting from the air bag and fill directly. DO NOT FILL THROUGH COMPRESSOR OR MANIFOLD — DAMAGE WILL OCCUR.
Display shows 4-69 BAR instead of 5-100 PSI.	Display is set to decibar instead of PSI.	Refer to "Joining the Digital Controller to the Manifold" on page 11 for instruction on how to change units from the Options menu.



Warranty and Returns Policy

Air Lift Company warrants its products, for the time periods listed below, to the original retail purchaser against manufacturing defects when used on catalog-listed applications on cars, vans, light trucks and motorhomes under normal operating conditions for as long as Air Lift manufactures the product. The warranty does not apply to products that have been improperly applied, improperly installed, used in racing or off-road applications, used for commercial purposes, or which have not been maintained in accordance with installation instructions furnished with all products. The consumer will be responsible for removing (labor charges) the defective product from the vehicle and returning it, transportation costs prepaid, to the dealer from which it was purchased or to Air Lift Company for verification.

Air Lift will repair or replace, at its option, defective products or components. A minimum \$10.00 shipping and handling charge will apply to all warranty claims. Before returning any defective product, you must call Air Lift at (800) 248-0892 in the U.S. and Canada (elsewhere, (517) 322-2144) for a Returned Materials Authorization (RMA) number. Returns to Air Lift can be sent to: Air Lift Company • 2727 Snow Road • Lansing, MI • 48917.

Product failures resulting from abnormal use or misuse are excluded from this warranty. The loss of use of the product, loss of time, inconvenience, commercial loss or consequential damages is not covered. The consumer is responsible for installation/reinstallation (labor charges) of 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.

This warranty gives you specific legal rights and you may also have other rights that vary from state-to-state. Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages. The above limitation or exclusion may not apply to you. There are no warranties, expressed or implied including any implied warranties of merchantability and fitness, which extend beyond this warranty period. There are no warranties that extend beyond the description on the face hereof. Seller disclaims the implied warranty of merchantability. (Dated proof of purchase required.)

Air Lift 1000Lifetime Limited RideControlLifetime Limited SlamAirLifetime Limited LoadLifter 5000*Lifetime Limited	Load Controller (I)
EasyStreet Systems 1 Year Limited	Other Accessories2 Year Limited

*formerly SuperDuty

Replacement Information

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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, Monday through Friday, 8 a.m. to 5 p.m. Eastern Time. 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.



Need Help?

Contact our customer service department by calling (800) 248-0892, Monday through Friday, 8 a.m. to 5 p.m. Eastern Time. For calls from outside the USA or Canada, our local number is (517) 322-2144.

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



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

Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or PO Box 80167 • Lansing, MI 48908-0167 Toll Free (800) 248-0892 • Local (517) 322-2144 • Fax (517) 322-0240 • www.airliftcompany.com

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