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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 operation of the WirelessAIR system consisting of two main components: The wireless digital controller (72001), hereafter referred to as the WDC; and the wireless manifold (72003).

It is important to read and understand the entire user guide before beginning to operate your WirelessAIR system.

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 user guide or find it online at http://www.airliftcompany.com/wirelessair.htm.

Operating the WirelessAIR Control System

GENERAL DESCRIPTION

The WDC has nine push buttons that are used to activate the remote and control all system features. The manifold is a board-on-coil design incorporating onboard pressure sensors. The system communicates using 2.4GHz radio modules, with measures taken to ensure that the WDC and manifold only accept information from the unit to which they have been joined.

Due to the three valve design of the manifold, the system is not capable of simultaneous fill and dump operations on the two air bag circuits. A new setting sent to the manifold requiring both a fill and dump will be accomplished by doing the dump first followed by the fill.

If the battery icon on the WDC display is on, the batteries are nearing exhaustion and should be replaced promptly (fig. 1).



USER INTERFACE SWITCHES

The WDC has nine switches. The five switches that make up the navigation switch are referred as TOP, RIGHT, LEFT, BOTTOM, and MIDDLE. The four switches on the lower edge of the WDC are referred to as P1, P2, DOWN, UP (going from left to right) (fig. 2).



When the WDC has been inactive for a period of time, it automatically enters Sleep Mode in order to conserve battery power (fig. 3).



Pressing and releasing any switch other than MIDDLE will cause the WDC to wake up and resume operation. The button pressed to wake up the WDC is not acted on until it is pressed again.

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. 4).



Once the WDC has been joined to at least one manifold, it will enter Operating Mode on wakeup.

WDC OPERATING MODES

In *Sleep Mode*, the WDC enters a very low-power state. The radio and backlights are shut off, and the display shows the Air Lift logo, the compressor bar outline, and "- -" in the left and right digits. Before entering *Sleep Mode*, the WDC checks the battery condition and displays the battery icon if the battery voltage is low. The display is not updated while in *Sleep Mode*.

In Option Mode, four options are shown,

- Jn -r : Join rear axle manifold. See installation manual, page 11.
- Jn -F : Join front axle manifold. See installation manual, page 11.
- En d?: Exit option mode.
- dl SP: Alternate between units, PSI and BAR. See installation manual, page 11.

Use TOP and BOTTOM to scroll through the options. The displayed option is selected by pressing and releasing MIDDLE. Use LEFT and RIGHT when changing units in "dISP."

In *Operating Mode*, the WDC indicates the currently selected manifold by illuminating the TIRE ARROWS corresponding to the front or rear axle (fig. 5). If two manifolds are joined, press MIDDLE to toggle between the front and rear manifold.



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The TIRE ARROWS indicate which pressure settings (left, right or both) will be adjusted. The numeric displays initially indicate the last setting sent to the currently selected manifold. If there is no activity for 10 seconds, the WDC will return to *Sleep Mode*.

The WDC responds to the switches as follows:

ТОР	Press and release to increase the selected pressure settings by 1 PSI. Press and hold to rapidly increase the selected settings. The maximum setting is 100 PSI or 69 BAR.
RIGHT	Press and release to sequence the TIRE ARROW indicators through both right and left. Only the pressure settings (left, right) having a TIRE ARROW visible will be changed by thte TOP/BOTTOM switches
LEFT	Press and release to sequence the TIRE ARROW indicators through both left and right. Only the pressure settings (left, right) having a TIRE ARROW visible will be changed by the TOP/BOTTOM switches.
BOTTOM	Press and release to decrease the selected pressure settings by 1 PSI. Press and hold to rapidly decrease the selected settings. The minimum setting is 5 PSI.
MIDDLE	Quickly press and release to send the pressure setting to the selected manifold (front or rear axle). See "Sending New Settings".
	Press and hold to switch between the front and rear axles (will only work if a second manifold is linked).
P1/P2	Quickly press and release to send the preset #1 pressure setting to the selected manifold (front or rear axle). Individual presets are stored for each axle. The default value for preset #1 is 25 PSI. The default value for preset #2 is 75 PSI.
	The WDC is designed to be able to retain 2 presets for the front manifold and 2 presets for the rear manifold. To store the current pressure settings as the new preset #1, press and hold P1 until the display shows "Str" (fig. 6).
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	Release P1 and the display will show "Str1" to indicate the settings have been stored to preset #1 (fig. 7).
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	To store the current pressure settings as the new preset #2, press and hold P2 until the display shows "Str" (fig. 6). Release P2 and the display will show "Str2" to indicate the settings have been stored to preset #2 (fig. 8). Both preset settings are retained even when the WDC batteries are removed.

P1/P2 continued	To store the current pressure settings as the new preset #2, press and hold P2 until the display shows "Str" (fig. 6). Release P2 and the display will show "Str2" to indicate the settings have been stored to preset #2 (fig. 8). Both preset settings are retained even when the WDC batteries are removed.
DOWN	Pressing DOWN will decrease the left and right pressure settings to 5 PSI, and then send the new setting to the currently selected manifold. This command is sent instantly, you do not need to push the middle button to send the setting.
UP	Pressing UP will increase the left and right pressure settings by 10 PSI, and then send the new setting to the currently selected manifold. See "Sending New Settings". This command is sent instantly, you do not need to push the middle button to send the setting.

SENDING NEW SETTINGS

When new setting are sent from the WDC to a manifold, the WDC will display "FAIL" if it does not receive any response from the manifold (fig. 9).



If the manifold acknowledges the new settings, the WDC will then wait for the manifold to get to the new setpoint pressures. While it is waiting, the WDC will update the display at one second intervals with the actual air bag pressures, and show the compressor icon (fig. 10) or dump arrow (fig. 11) to indicate the operation in progress.



The WDC will continue to update the settings until:

1. The manifold achieves the new settings, at which point the WDC returns to displaying the current settings.

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- 2. The WDC is unable to get any status information from the manifold for 10 seconds, in which case the WDC will return to *Sleep Mode*.
- 3. Three minutes have passed since the settings were sent, in which case the WDC will return to *Sleep Mode*.

MANIFOLD OPERATION:

The current air bag pressure settings will be automatically maintained by the system subject to the following constraints:

- 1. The maximum pressure is 100 PSI (see your air bag's installation manual for individual maximum inflation pressure).
- 2. The minimum pressure is 5 PSI.
- In general, the system will not dump air from an air bag circuit unless commanded by the user. The only exception is if the average air bag pressure exceeds 110 PSI, in which case it will be bled down to below 110 PSI.
- 4. The system will limit continuous compressor operation to 3 minutes. After 3 minutes, the system will lock out all compressor operations until power is cycled, or a 7 minute cooling period takes place (fig. 12).



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, 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.

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



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

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