# Wireless**ONE**



User Guide



#### **IDENTIFYING THE DIFFERENCES BETWEEN KITS**

Should you need to contact Air Lift customer service, you will need to know which kit you are inquiring about: the first-generation WirelessOne or the second-generation. The kits are easily identifiable by looking at the wireless controller or the manifold, which is likely mounted under the vehicle.

#### **FIRST GENERATION**



Wireless controller

#### **SECOND GENERATION**



Wireless controller



Manifold

## WirelessOne User Guide

### **Table of Contents**

A. Introduction	4	D. Android App	12
Notation Explanation	4	Dashboard Operation	12
B. Wireless Controller Operation Backlight Pair the Manifold to the Wireless Controller	<b>5</b> 5 5	Pair the Manifold to the Mobile App Navigation/Communicate App Presets Firmware Updates	13 14 15 15
Units Troubleshoot Wireless Controller Presets	6 6 7	E. Troubleshooting Guide Replacing Batteries in the Wireless Controller FCC and Industry Canada Information to User	
C. iOS App User Interface Operation Pair the Manifold to the Mobile App Settings	<b>8</b> 8 9 10	Finding Air Leaks Fixing Leaks on Barbed Fittings Cutting Air Lines Fixing Leaks on PTC Fittings	21 21 22 22
App Presets	11	Limited Warranty and Return Policy	23
Firmware Updates	11	Replacement Part Information	23
		Contact Information	23



### A. Introduction

WirelessOne<sup>TM</sup> is an on-board air compressor system designed to easily level the vehicle digitally. It can be operated both with the included wireless controller and with a free app, available for iOS and Android operating systems.

The kit includes a compressor, manifold, wiring harness, wireless digital controller, air line and integrating hardware. The system can be used inside or outside the vehicle, for adjustments in full view of the vehicle.

The wireless digital controller is a compact, battery-powered unit. Three user-defined memory settings are provided for frequently used settings. As an added safety measure, WirelessOne maintains minimum air pressure (5 PSI [.34BAR]) in the system. The manifold is also weather resistant for maximum life expectancy.

#### 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.



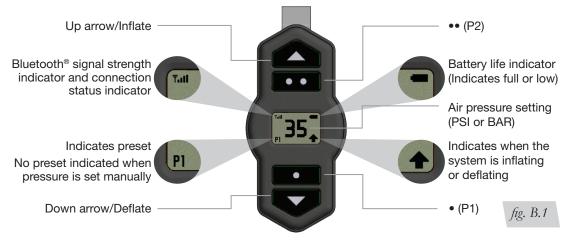
INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



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



### **B.** Wireless Controller



#### **OPERATION**

- Push any button to wake up the controller, which will show the desired pressure.
- Press the up or down arrows to raise or lower the pressure in increments of 1 PSI or 0.1BAR.
- 3. Maximum pressure is 100 PSI (7BAR)\*.



<sup>\*</sup>Maximum pressure varies. See chart on page 8.

#### **BACKLIGHT**

The controller display stays on for 40 seconds. The backlight automatically dims after 2 to 10 seconds depending on battery condition, then goes off after an additional 30 seconds. Press any button to wake up the controller.

**NOTE** To enter the menu, press and hold the center button for 5 seconds (Fig. B.1).



#### PAIR THE MANIFOLD TO THE WIRELESS CONTROLLER

The manifold will enter pairing mode for three minutes after the fuse is installed.

Once a device is paired, it will automatically connect if no other device is already connected. The wireless controller will go into sleep mode after 40 seconds, at which time it will disconnect from the system.

**NOTE** The wireless controller comes with batteries installed. To operate the device, slowly pull the tab out of the battery compartment.

- 1. To initiate pairing mode, remove the fuse, wait five seconds and reinstall.
- 2. Press any button to wake up the controller. It will automatically go to the pairing screen if it is not already paired with a manifold. Use the up and down arrow buttons to navigate the pairing menu. Select the device that matches the manifold serial number (Figs. B.2 & B.3).
- 3. Use the up and down arrows to

- choose the manifold. Press (P1) to begin the pairing process.
- 4. The device will indicate "pairing" when it is connecting to a device. There is no Bluetooth password.
- 5. Once complete, the controller will either indicate "Pairing successful," which means the devices are paired. or "Pairing unsuccessful." which will require the user to pull and reinstall the fuse and try again. Once the wireless controller is connected to the manifold, it will automatically connect each time the manifold is active and the controller is woken up.

NOTE To enter the menu, press the inflate and deflate buttons simultaneously (Fig. B.1).

Menu 1.Devices 2 Units

3.Troubleshoot

fig. B.2



fig. B.3

#### UNITS

Choose Units from the menu to change between PSI and BAR (Fig. B.4). The factory default is PSI.

#### TROUBLESHOOT

Choose Troubleshoot from the menu to see system error messages. For more information about error messages, see E. Troubleshooting.

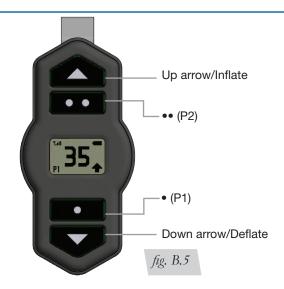


fig. B.4



## WIRELESS CONTROLLER PRESETS

- Set the pressure to the desired level using the inflate and deflate buttons (Fig. B.5).
- 2. To set each preset:
  - Preset 1: Press and hold the (P1) for 3 seconds.
  - Preset 2: Press and hold •• (P2) for 3 seconds.
  - Preset 3: Push and hold the and
    •• buttons simultaneously for 3 seconds.
- For example, after setting the desired pressure, press and hold the
   to set preset 1.
- The controller will indicate which preset is currently selected in the lower left corner.

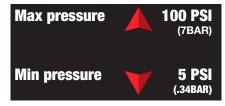




### C. iOS App

## USER INTERFACE OPERATION

- When the app is open to the user interface, it shows the desired pressure (Fig. C.1).
- Press the up or down arrows to inflate or deflate in increments of 1 PSI (0.1BAR).
- 3. Click on the gear for each preset to set and name the presets.
- 4. Click on the air pressure number to manually enter a desired pressure.



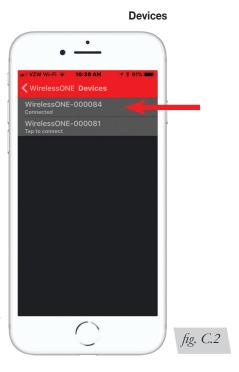
### WirelessONE Settings Menu Connected to WirelessONE-000084 Connection status Inflate psi Pressure setting (PSI or BAR) Deflate Click gear to edit **Presets** Click gear to edit Click gear to edit fig. C.1

User Interface



#### PAIR THE MANIFOLD TO THE MOBILE APP

- Download the free Air Lift WirelessOne app from the Apple App Store for iOS. Search for Air Lift WirelessOne.
- Download on the App Store
- Put the manifold in pairing mode by removing the fuse and reinstalling it after five seconds. The manifold will remain in pairing mode for three minutes after the fuse is reinserted.
- The app will automatically go to the devices screen if no connected manifold is detected. Click on the device you want to pair. The manifold will have WirelessOne in the title. Each device also shows the connection status (Fig. C.2).
- 4. Once the mobile app is paired to the manifold via Bluetooth, it will connect automatically each time the manifold is active and the device is in range. Only one device can be connected at a time. To connect another device, the app on any device currently connected must be closed.
- To pair a second mobile device, repeat the procedure on that device. The manifold can pair with up to 10 mobile devices. There is no limit to the number of manifolds one mobile device can pair with.





#### **SETTINGS**

1. The Settings screen (Fig. C.3) has these options:

#### Devices

Lists manifolds that are within range

#### **Troubleshoot**

 Displays system error messages (See E. Troubleshooting Guide)

#### **Settings**

- Pressure control units (PSI or BAR)
- Prevent Screen Lock stops the mobile device screen from going to sleep while the app is open

#### **Firmware Update**

#### Communicate

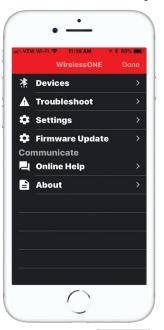
#### **Online Help**

· Links to AirLiftCompany.com

#### About (Fig. C.4)

- Shows the app software revision and manifold firmware revision
- 2. Use the "Done" button to go back to the User interface.

#### **Settings**



#### About









#### **APP PRESETS**

- The app must be connected to the manifold to change presets (Fig. C.5). Presets are stored on the manifold, so changes made in the app will also affect the wireless controller and vice versa.
- 2. Adjust presets by clicking on the gear next to each preset.
- To adjust preset values, click on the name or pressure value and type the desired name and pressure.
- 4. Click "OK" to save the preset or "Cancel" to close the preset screen.

#### FIRMWARE UPDATES

- The app must be connected to the manifold to change firmware on the manifold (Fig. C.6).
- Update the WirelessOne app to also download the latest firmware for transfer to the manifold.



#### Firmware Updates



fig. C.5

**Presets** 

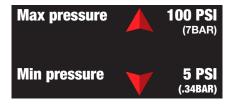




## **D.** Android App

#### **DASHBOARD OPERATION**

- 1. When the app is open to the dashboard, it shows the desired pressure (Fig. D.1).
- Press the up or down arrows to inflate or deflate in increments of 1 PSI (0.1BAR).
- 3. Click on the gear for each preset to set and name the presets.
- 4. Click on the air pressure number to manually enter a desired pressure.



## Dashboard





#### PAIR THE MANIFOLD TO THE MOBILE APP

 Download the free Air Lift WirelessOne app from Google Play for Android. Search for Air Lift WirelessOne.



- Put the manifold in pairing mode by removing the fuse to the battery and reinstalling it after five seconds. The manifold will remain in pairing mode for three minutes after the fuse is reinserted.
- The app will automatically go to the devices screen if no connected manifold is detected. Click on the device you want to pair. The manifold will have WirelessOne in the title. Each device also shows the connection status (Fig. D.2).
- 4. Once the mobile app is paired to the manifold via Bluetooth, it will connect automatically each time the manifold is active and the device is in range. Only one device can be connected at a time. To connect another device, the app on any device currently connected must be closed.
- To pair a second mobile device, repeat the procedure on that device. The manifold can pair with up to 10 mobile devices. There is no limit to the number of manifolds one mobile device can pair with.





#### NAVIGATION/COMMUNICATE

1. The Navigation/Communicate screen (Fig. D.3) has these options:

#### **Navigation**

#### Dashboard

 Closes the menu and returns to the dashboard

#### **Devices**

 Lists devices that are available for pairing

#### **Troubleshoot**

• Displays system error messages (See E. Troubleshooting Guide)

#### **Settings**

- Pressure control units (PSI or BAR)
- Prevent Screen Lock stops the mobile device screen from going to sleep while the app is open

#### **Update Firmware**

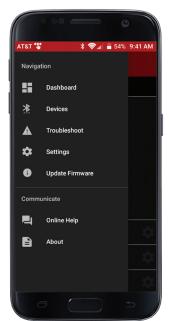
## Communicate Online help

· Links to AirLiftCompany.com

#### About (Fig. D.4)

- Shows the app software revision and manifold firmware revision
- Click off of the menu bar or press the back button to return to the dashboard.

#### **Navigation**



**About** 



fig. D.3

fig. D.4



#### **APP PRESETS**

- The app must be connected to the manifold to change presets (Fig. D.5).
   Presets are stored on the manifold, so changes made in the app will also affect the wireless controller and vice versa.
- 2. Adjust presets by clicking on the gear next to each preset.
- To adjust preset values, click on the name or pressure value and type the desired name and pressure.
- 4. Click "ACCEPT" to save the preset or "CANCEL" to close the preset screen.

#### **FIRMWARE UPDATES**

- The app must be connected to the manifold to change firmware on the manifold (Fig. D.6).
- Update the WirelessOne app to also download the latest firmware for transfer to the manifold.



#### Firmware Updates



fig. D.5

**Presets** 

fig. D.6



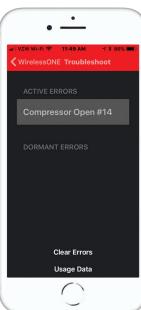
### **E. Troubleshooting Guide**

For any code not listed, contact Air Lift Customer Service at (800) 248-0892 or service@airliftcompany.com.

Error codes are labeled "Active Errors" and "Dormant Errors" on the app (Fig. E.1). Active and dormant error codes are indicated by "A" and "D" on the wireless controller (Fig. E.2).

Use the "CLEAR ERRORS" button to clear current codes and check for presently active codes. Error codes can only be cleared by using the mobile app.





Example of an error code on the smartphone app for Android (left) and iOS.

fig. E.1



Example of an error code on the wireless controller.

fig. E.2



## **Troubleshooting Guide (cont.)**

Problem	Error Code	Cause	Solution		
	If the ignition wire is not connected, the system will only maintain a preset when the vehicle starts moving or is connected to the wireless controller or mobile app.				
Compressor doesn't run when inflation is commanded	1	Vehicle battery voltage is too low (below 9 volts)	Check the vehicle battery		
	2	Vehicle battery voltage is too high (above 18 volts)	Check the vehicle battery and charging system		
	3	Manifold temperature is too cold	Allow manifold to warm up		
	4	Manifold temperature is too hot	Allow manifold to cool down. Move manifold to location that is not near heat sources		
	14	Compressor under-current	Check battery and ground connections. Disconnect the compressor and test on the bench using 12 volts. Remove and reinstall the 15A fuse to reset the fault.		
	15	Compressor over-current	Use the mobile app to clear the error code. Disconnect the compressor and test on the bench using 12 volts		
	18	Compressor duty cycle limit has been reached	Allow the compressor to sit idle until the cool down period (15 minutes) has been reached		
	19	Blockage in the compressor or system which is preventing air flow	Check for system blockages or frozen moisture in the air lines. Remove and reinstall the 15A fuse to reset the fault		
	-	Bad ground, poor wire connections, bad compressor or bad manifold	Disconnect the compressor and test on the bench using 12 volts		



## **Troubleshooting Guide (cont.)**

Problem	Error Code	Cause	Solution
System does not exhaust when deflation is commanded	1	Vehicle battery voltage is too low (below 9 volts)	Check the vehicle battery
	2	Vehicle battery voltage is too high (above 18 volts)	Check the vehicle battery and charging system
	3	Manifold temperature is too cold	Allow manifold to warm up
	4	Manifold temperature is too hot	Allow manifold to cool down. Move manifold to location that is not near heat sources
Nothing happens when the vehicle is turned on	-	If the ignition wire is not connected, the system will only maintain a preset if the vehicle starts moving or is connected to the wireless controller or mobile app	Connect the optional ignition wire if desired. Connect to the manifold using the remote or mobile app to wake the system up for quicker adjustments
Nothing happens when making an adjustment with the remote	-	When first powering on the wireless controller, the Bluetooth connection is established in the background. Changes to the desired pressure can be made while connecting, but the adjustment command won't be sent until the Bluetooth connection is complete and signal strength icon is visible in the upper left corner of the screen	Wait for the Bluetooth connection to complete. The last adjustment will automatically be made once the connection is established



## **Troubleshooting Guide (cont.)**

Problem	Error Code	Cause	Solution
Unable to connect to the manifold with the remote	-	Wireless controller batteries are low	Check wireless controller battery icon. Change batteries if necessary (See page 20)
	-	Blown 15A fuse	Check 15A fuse. Enter the pairing screen on the remote or the devices menu on the mobile app and see if the manifold is visible via Bluetooth
	-	Weak Bluetooth signal	Ensure the manifold is mounted forward of the rear axle.  Move manifold to a location that is not shielded by metal
	-	Wireless controller has become unpaired from the manifold	Re-pair the remote by removing and re-inserting the 15A fuse. The manifold will be in pairing mode for 3 minutes after power is applied
System does not maintain/ reach ride height	21	Large leak in the system	Locate and correct leak (See Finding Air Leaks and Fixing Leaks on Barbed Fittings and Fixing Leaks on PTC Fittings).  Remove and reinstall the 15A fuse to reset the fault
	-	The vehicle could be overloaded	If the air pressure in the system is at its max pressure of 100 PSI (7BAR), the system will stop inflating.
Compressor runs often without commanding an inflate adjustment	22	Small air leak in the system	Locate and correct leak (See Finding Air Leaks and Fixing Leaks on Barbed Fittings and Fixing Leaks on PTC Fittings)



# REPLACING BATTERIES IN THE WIRELESS CONTROLLER

- To install the two CR2032 batteries in the wireless controller, use a small flat screwdriver to separate the two halves of the controller by prying apart the internal clip locations.
- Stack the batteries positive to negative inside the rear cover with the positive end pointed in the direction of the circuit board. Take note of "NEG" on the case and "+" symbol on the circuit board.
- Snap the front cover/circuit board onto the rear cover.



#### FCC AND INDUSTRY CANADA INFORMATION TO USER

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Note: Changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment.

 Remote
 Manifold

 FCC ID: 2ANLC-0MQ228171
 IC: 23130-0MQ228171
 FCC ID: 2ANLC-HJL71117
 IC: 23130-HJL71117



#### FINDING AIR LEAKS

- 1. Inflate the air springs to 30 PSI (2.1BAR).
- Spray all connections with a solution of liquid dish soap and water. Wait 30 seconds and check for bubbles which indicate leaks.
- 3. Check the air pressure again after 24 hours. A 2-4 PSI (.14-.28BAR) loss after initial installation is normal. Retest for leaks if the loss is more than 5 PSI (.34BAR).
- After checking for leaks, deflate the springs to the minimum pressure required to restore the system to normal ride height.

#### **FIXING LEAKS ON BARBED FITTINGS**

- If there is a leak at the Schrader valve, tighten the valve with a valve core tool.
- 2. If there is a leak at any barbed fitting, cut the air line 1 1/2" (38mm) behind the fitting. Use a pair of pliers or locking pliers to twist and pull the air line off of the fitting. Do not cut the air line lengthwise at the fitting because this could nick the barbs, likely causing it to leak.
- Reinstall the air line and the air line clamp if the fitting has one. Make sure the air line covers all barbs.





#### **CUTTING AIR LINES**

When cutting air lines, use a sharp knife or a hose cutter and make clean, square cuts. Do not use scissors or wire cutters because these tools will deform the air line, causing it to leak around fittings. Do not cut the lines at an angle.

The maximum bend radius for 1/4" air line is 1" (25mm). Do not bend the air line more than the maximum bend radius or side load the fitting connections. Air lines are to be installed straight into fittings.

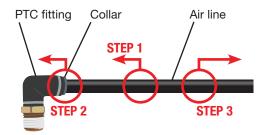


#### FIXING LEAKS ON PTC FITTINGS

After insertion, check the PTC fitting connection by pulling on each line to verify a robust connection.

To release the air line from the connection, first release all air from the system. Push in on the air line (step 1), push the collar in (step 2), and with the collar depressed, pull the air line out of the fitting (step 3).

To reconnect, push the air line into the fitting and pull to verify a robust connection.



#### **TIPS**

- To ensure a proper seal, cut off the end of the air line just beyond the witness mark before reinstalling in the fitting.
- If the fitting is leaking at the threads, it may be necessary to remove and re-apply thread sealant on the threads and re-install 1 1/2 turns beyond finger tight.



#### LIMITED WARRANTY AND RETURN POLICY

Air Lift Company provides a 2-year limited warranty to the original purchaser of WirelessOne<sup>™</sup> 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 in the full Limited Warranty and Return Policy that is available online at www.airliftcompany.com/warranty.

For additional warranty information contact Air Lift Company customer service.

#### REPLACEMENT PART INFORMATION

If replacement parts are needed, 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 INFORMATION**

Mailing address P.O. Box 80167 Lansing, MI 48908-0167

**Shipping address** 2727 Snow Road **for returns** Lansing, MI 48917

## 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.

Phone Toll free: (800) 248-0892 International: (517) 322-2144

Email service@airliftcompany.com

Web address www.airliftcompany.com



#### **Need Help?**

Contact Customer Service at: (800) 248-0892

or email: service@airliftcompany.com

For calls outside the U.S. or Canada: (517) 322-2144



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