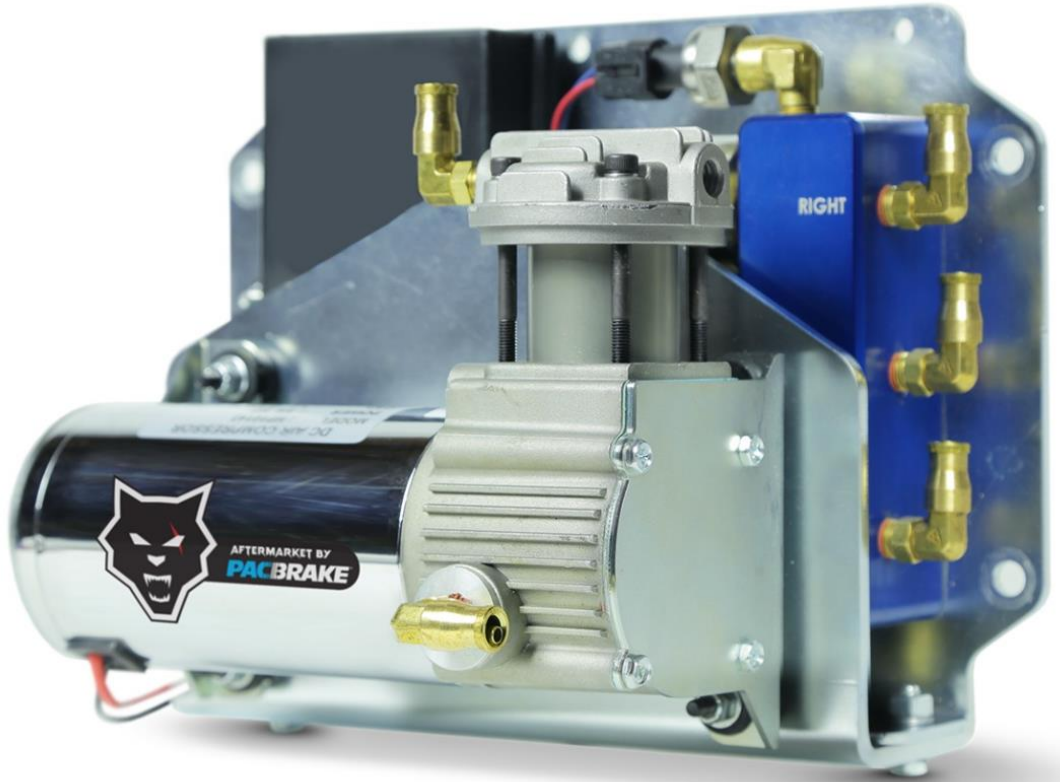


Troubleshooting Guide



DUAL CHANNEL WIRELESS AIR CONTROLS

L6601 • ECN 1-2834



PLEASE NOTE:

Store this document in your vehicle glove box or with your important engine documents for future reference.

800.663.0096





IMPORTANT

Prior to proceeding:

- Ensure all wiring harness connections are securely connected and latched to their mates.
- Inspect all wiring for signs of damage or wear that could cause electrical shorts or discontinuities.
- Ensure any extended lengths of harness do not exceed a span of 10 meters [30 feet] from controller.

WARNING

- **Do NOT cycle power by removing connectors from controller. Cycle power by disconnecting at battery or removing main power fuse.**
- **Unnecessary connection and disconnection of harness connectors wears out plating on electrical contacts and will affect continuity.**

Air compressor is slow/not building pressure

Cause	Solution
Insufficient power applied to compressor	<ul style="list-style-type: none"> • Ensure battery voltage is not less than 9 VDC (12 VDC system) and replace / charge battery if necessary • Ensure harness battery wires are secure and have clean connection to the battery terminals. Clean battery terminals if necessary. • Measure voltage across 2-pin connector of harness for matching battery voltage when attempting to inflate springs. Inspect harness for damage or shorts and replace if necessary.
Air leak in system	<ul style="list-style-type: none"> • Inspect all air lines and fittings for damage or wear • Spray soapy water on all air line and air fitting connections and observe for bubbles to detect air leaks • Replace air lines or fittings as necessary
Center air solenoid is not maintaining seal	<ul style="list-style-type: none"> • Spray soapy water on exhaust port of the center solenoid and observe for bubbles to detect air leak • Replace solenoid if necessary
Restricted intake airline or filter	<ul style="list-style-type: none"> • Inspect intake filter and intake air line for dirt or debris and replace if necessary
Worn reed valve or piston seal	<ul style="list-style-type: none"> • Use finger to block compressor air outlet. If compressor does not force finger off outlet when powered, internal piston seal or reed valve is worn • Replace compressor assembly if necessary

Air compressor is running unexpectedly

Cause	Solution
Damaged or faulty harness relay	<ul style="list-style-type: none"> • Relay is sticking when activated or has an internal short. Replace harness relay

All information contained in this document is for reference only, subject to change without notice.



Air compressor is not activating

Cause	Solution
Insufficient power applied to compressor	<ul style="list-style-type: none"> • Ensure battery voltage is not less than 9 VDC (12 VDC system) and replace / charge battery if necessary • Ensure voltage at ignition power source is not less than 9 VDC and use alternate power source if necessary • Ensure vehicle ignition is in ON position for application with controller wired to switched ignition power • Ensure harness battery wires are secure and have clean connection to the battery terminals. Clean battery terminals if necessary. • Check 10 Amp power fuse at switched ignition connection and replace if necessary • Check compressor power fuse at battery and replace if necessary • If vehicle auxiliary or upfitter switch was used, ensure switch is in ON position and check switch fuse. • Measure voltage across 2-pin connector of harness for matching battery voltage when attempting to inflate springs. Inspect harness for damage or shorts and replace if necessary.
Compressor is over-heated or exceeded duty cycle If applicable: Thermal limit switch in compressor is tripped	<ul style="list-style-type: none"> • Ensure compressor assembly is not mounted in location exposed to high heat • Allow time (generally 1 hour) for compressor to cool down and re-attempt use
Air pressure is exceeding restart pressure of compressor	<ul style="list-style-type: none"> • Release excess air pressure in air springs
Compressor motor short/open circuit	<ul style="list-style-type: none"> • Use a multimeter to measure resistance and continuity across the two wires coming from the compressor body <ul style="list-style-type: none"> ○ If NO continuity is measured, open circuit present in motor ○ If resistance is 0 or infinite, short circuit present in motor • Replace compressor assembly if necessary
Relay failure	<ul style="list-style-type: none"> • Inspect compressor switching relay for damage • Apply 12 VDC across pins 85 and 86 of the relay (black and white wires). <ul style="list-style-type: none"> ○ Relay should make an audible click when power is applied. If no sound is heard, contact circuit has failed ○ If sound is heard and compressor does not engage, measure voltage across 2-pin compressor connector. If battery voltage is not measured, energized circuit in relay has failed • Replace relay if necessary

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Air solenoids are not activating

Cause	Solution
Insufficient power supplied to solenoid	<ul style="list-style-type: none"> • Ensure battery voltage is not less than 9 VDC (12 VDC system) and replace / charge battery if necessary
Damaged or worn solenoid	<ul style="list-style-type: none"> • Apply 12 VDC to the solenoid wire pins in the black 12 position connector. An audible click should be heard when power is applied. <ul style="list-style-type: none"> ○ Center solenoid – Pins 5 & 6 ○ Left solenoid – Pins 7 & 9 ○ Right solenoid – Pins 8 & 10 • Replace solenoid assembly if necessary

Air springs fill or drain in opposite orientation

Cause	Solution
Air lines plugged into incorrect ports	<ul style="list-style-type: none"> • Swap LEFT and RIGHT airlines by pressing down the collar of the fittings to remove the lines
Incorrect harness pinout	<ul style="list-style-type: none"> • Ensure solenoids are connected to black harness connector as follows: <ul style="list-style-type: none"> ○ Center solenoid – Pins 5 & 6 ○ Left solenoid – Pins 7 & 9 ○ Right solenoid – Pins 8 & 10 • Rework solenoid assembly pinout if necessary

Air springs fill or drain unevenly

Cause	Solution
Air lines between the control board and air bags are significantly different lengths	<ul style="list-style-type: none"> • Adjust the length of the lines to be equal
Restriction in airline	<ul style="list-style-type: none"> • Inspect air lines for dirt or debris and replace if necessary

App is showing incorrect pressure readings

Cause	Solution
Pressure sensor is out of calibration	<ul style="list-style-type: none"> • Recalibrate pressure sensor by pressing the calibrate button under the settings tab in the app • Classic App ONLY: Recalibrate the sensor by holding the decrease pressure (-) switch in the app for 60 seconds
Pressure sensor is broken	<ul style="list-style-type: none"> • If pressure reading is “0” or “---” after performing recalibration procedure, sensor is likely faulty. Replace pressure sensor.



Cannot connect to controller from the Wireless Air Controls application

Cause	Solution
Incorrect/ unsupported device or operating system	<ul style="list-style-type: none"> • Ensure the device operates on Android™ 4.3 (Jellybean) or newer • Ensure the device operates on Apple™ iOS™ 10.3 or newer
Insufficient power applied to controller	<ul style="list-style-type: none"> • Ensure battery voltage is not less than 9 VDC (12 VDC system) and replace / charge battery if necessary • Ensure voltage at ignition power source is not less than 9 VDC and use alternate power source if necessary • Ensure vehicle ignition is in ON position for application with controller wired to switched ignition power • If vehicle auxiliary or upfitter switch was used, ensure switch is in ON position and check switch fuse • Ensure system is properly grounded and connected at negative battery terminal. Clean battery terminal if necessary • Check 10 Amp power fuse at switched ignition connection and replace if necessary • Measure voltage at pins 3 or 4 of black connector at controller to check for matching battery voltage
Communication issue between controller and phone	<ul style="list-style-type: none"> • Ensure controller is within Bluetooth range of 10 meters [30 feet] • Ensure controller is not mounted in an enclosed metal area • Ensure Bluetooth on mobile device is turned ON • Ensure Location Services on mobile device is turned ON <ul style="list-style-type: none"> ○ Bluetooth requires this permission in order to scan for controller • Cycle ignition power to reset the controller and refresh the communication • Turn off other wireless communication modes on mobile device (Wi-Fi, NFC, etc.) <ul style="list-style-type: none"> ○ Some devices may have difficulty connecting due to signal interference • Clear Bluetooth data cache and restart mobile device • Android™ Devices ONLY w/ Classic App: Ensure the controller is paired with the mobile device in the Bluetooth devices list. Android devices require pairing to be manually initiated by the user. • Note: It is normal for the controller to NOT appear in the list of paired or available devices on Apple™ mobile devices.

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