

# Troubleshooting Guide



## SINGLE CHANNEL WIRELESS AIR CONTROLS

L6558 • ECN 1-2557



**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"> <li>• Ensure battery voltage is not less than 10 VDC (12 VDC system) and replace / charge battery if necessary</li> <li>• Ensure harness battery wires are secure and have clean connection to the battery terminals. Clean battery terminals if necessary.</li> <li>• 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.</li> </ul>
Air leak in system	<ul style="list-style-type: none"> <li>• Inspect all air lines and fittings for damage or wear</li> <li>• Spray soapy water on all air line and air fitting connections and observe for bubbles to detect air leaks</li> <li>• Replace air lines or fittings as necessary</li> </ul>
Air solenoid is not maintaining seal	<ul style="list-style-type: none"> <li>• Spray soapy water on exhaust port in solenoid block and observe for bubbles to detect air leak</li> <li>• Replace solenoid assembly if necessary</li> </ul>
Check valve is worn or stuck closed	<ul style="list-style-type: none"> <li>• Remove solenoid assembly and apply power to compressor. If air is felt at compressor outlet, check valve internals are worn or stuck. Replace check valve if necessary</li> <li>• Check compressor power fuse and replace if necessary. Tripping this fuse is a common side effect due to increased current draw with a stuck or closed check valve.</li> </ul>
Restricted intake airline or filter	<ul style="list-style-type: none"> <li>• Inspect intake filter and intake air line for dirt or debris and replace if necessary</li> </ul>
Worn reed valve or piston seal	<ul style="list-style-type: none"> <li>• 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</li> <li>• Replace compressor assembly if necessary</li> </ul>

## Air compressor is not activating

Cause	Solution
Insufficient power applied to compressor	<ul style="list-style-type: none"> <li>• Ensure battery voltage is not less than 10 VDC (12 VDC system) and replace / charge battery if necessary</li> <li>• Ensure voltage at ignition power source is not less than 9 VDC and use alternate power source if necessary</li> <li>• Ensure vehicle ignition is in ON position for application with controller wired to switched ignition power</li> <li>• Ensure harness battery wires are secure and have clean connection to the battery terminals. Clean battery terminals if necessary.</li> <li>• Check 10 Amp power fuse at switched ignition connection and replace if necessary</li> <li>• Check compressor power fuse at battery and replace if necessary</li> <li>• If vehicle auxiliary or upfitter switch was used, ensure switch is in ON position and check switch fuse.</li> <li>• 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.</li> </ul>
Compressor is over-heated or exceeded duty cycle  <b>If applicable:</b> Thermal limit switch in compressor is tripped	<ul style="list-style-type: none"> <li>• Ensure compressor assembly is not mounted in location exposed to high heat</li> <li>• Allow time (generally 1 hour) for compressor to cool down and re-attempt use</li> </ul>
Air pressure is exceeding restart pressure of compressor	<ul style="list-style-type: none"> <li>• Release excess air pressure in air springs</li> </ul>
Compressor motor short/open circuit	<ul style="list-style-type: none"> <li>• Use a multimeter to measure resistance and continuity across the two wires coming from the compressor body <ul style="list-style-type: none"> <li>○ If NO continuity is measured, open circuit present in motor</li> <li>○ If resistance is 0 or infinite, short circuit present in motor</li> </ul> </li> <li>• Replace compressor assembly if necessary</li> </ul>
Relay failure	<ul style="list-style-type: none"> <li>• Inspect harness mounted relay for damage</li> <li>• Disconnect harness from controller and apply 12 VDC across pins 7 and 12. <ul style="list-style-type: none"> <li>○ Relay should make an audible click when power is applied. If no sound is heard, contact circuit has failed</li> <li>○ If sound is heard and compressor does not engage, measure voltage across 2-pin harness connector. If battery voltage is not measured, energized circuit in relay has failed</li> </ul> </li> <li>• Replace relay if necessary</li> </ul>

### Air compressor is running unexpectedly

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

### Air solenoid is not activating (springs not deflating)

Cause	Solution
Insufficient power supplied to solenoid	<ul style="list-style-type: none"> <li>Ensure battery voltage is not less than 10 VDC (12 VDC system) and replace / charge battery if necessary</li> </ul>
Damaged or worn solenoid	<ul style="list-style-type: none"> <li>Apply 12 VDC to pins 4 and 5 of 6-pin connector attached to solenoid and pressure sensor assembly. An audible click should be heard when power is applied</li> <li>Replace solenoid assembly if necessary</li> </ul>

### App is showing incorrect pressure readings

Cause	Solution
Pressure sensor is out of calibration	<ul style="list-style-type: none"> <li>Recalibrate pressure sensor by holding the decrease pressure (-) switch in the app for 60 seconds</li> </ul>
Pressure sensor is broken	<ul style="list-style-type: none"> <li>If pressure reading is "0" or "---" after performing recalibration procedure, sensor is likely faulty. Replace pressure sensor.</li> </ul>

## Cannot connect to controller from the Wireless Air Controls application

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

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