

# TROUBLESHOOTING GUIDE

## TROUBLESHOOTING TOPICS

- My 12-Voltair does not run.
- My 12-voltair shakes a lot.
- My 12-voltair runs but is not able to pump up any pressure.
- My 12-Voltair just start-stops-start-stops.
- My 12-Voltair runs fast at the beginning but sounds like it slows down after it has run for 5, 10 or 15 minutes.
- When running the 12-Voltair for extended periods of time, my vehicle just shuts off.

## MY 12-VOLT AIR DOES NOT RUN

1. Check if the switch on the pressure switch is in the auto (down) position
2. Check the air pressure. If you have more than 120 PSI in the compressor, the compressor will not kick in and run until the pressure has dropped below 120 PSI

**Before proceeding with this troubleshooting guide, be sure to disconnect the wire on the right side of the solenoid to avoid the 12-Voltair from switch on without notice. This is the wire that goes to the inside of the motor.**

3. Do you have a toggle switch? If not skip to 4.
  - Check if the toggle switch is in the on position
  - Check your wiring against the wire diagram on previous page
  - Check with a volt meter that you have voltage on at least one side of the switch (10-14 VDC) when the switch is in the off position
  - Check to see if you have voltage on both sides of the switch when the switch is in the on position
4. Do you have a circuit breaker? If not skip to 5.
  - Check to see if there is a reset on the circuit breaker
  - Check to see if you have voltage on both sides of the circuit breaker (10-14 VDC)
5. Check to see if the solenoid is working
  - Make sure the circuit breaker is engaged, the remote switch is on
  - Make sure the switch is in the off position
  - Put you hand on the top side of the solenoid with one hand and turn the switch on the pressure switch on with the other hand. You should feel a click. If not you possibly have a bad solenoid. Double check with the next step **(Be sure the wire on the right side of the solenoid is disconnected)**
  - With a volt meter check the solenoid using the two different scenarios

Scenario		Left Post	Top Post	Right Post
1	Circuit breaker on Remote Switch on Pressure switch off	10-14 VDC	0 VDC	0 VDC
2	Circuit breaker on Remote Switch on Pressure switch on	10-14 VDC	10-14 VDC	10-14 VDC

## PROBLEM

- If you don't get voltage on the top post in scenario #2 you have a bad pressure switch
- If you don't get voltage of the right post in scenario #2 you have a bad solenoid

6. Was the compressor running and just quit?
  - If the motor overheated (surface temp over 190F) then the thermal protector will have shut the system down until the temperature drops below 170F. This may take up to 30 minutes. **WARNING:** This is an automatic reset thermal protector- If all switches are on, and the thermal protector resets it will run without any warning. Never put hand in the box without first disconnecting the power.

## MY 12-VOLT AIR SHAKES A LOT.

1. Check to make sure there is adequate belt tension. You should have anywhere from 1/4" - 3/8" movement when applying pressure to the belt directly between the motor and pump pulleys
2. Check to make sure that the motor and compressor are securely fastened to the frame. Make sure that bolts have not come loose.

## MY 12-VOLT AIR RUNS BUT IS NOT ABLE TO PUMP UP ANY PRESSURE

1. Check to see if you have any external air leaks
  - Disconnect any air storage tanks and plug tank supply line and run compressor to see if pressure builds up
  - If this fixes the problem you have a leak that needs to be fixed

## MY 12-VOLT AIR JUST STARTS - STOPS - STARTS - STOPS

1. You probably don't have an external air storage supply tank. The compressor is shutting down with 150 PSI in the air lines and a small leak is draining the pressure down to 125 PSI and the compressor is kicking back on to build the pressure back up to 150 PSI.

**MY COMPRESSOR RUNS FAST AT BEGINNING BUT SOUNDS LIKE IT SLOWS DOWN AFTER IT HAS RUN FOR 5, 10, 15 MINUTES.**

**PROBLEM: BATTERY**

STEP 1 Recharge battery to make sure you have a good full charge if the problem still exists- STEP 2

STEP 2 Replace battery with a new battery. See battery facts on page 7 - if this does not fix that problem- STEP 3

STEP 3 Check your alternator.

OPTION 1- Take it to a mechanic for him to check

OPTION 2- With an DC amp meter and the vehicle running, check the wire between the battery and the alternator to see if the alternator is charging

**WHEN RUNNING THE 12-VOLT AIR FOR EXTENDED PERIODS OF TIME, MY VEHICLE JUST SHUTS OFF.**

**PROBLEM: BATTERY**

Check the steps above to diagnose a problem

**HOW DO I ADJUST MY PRESSURE SWITCH**

Main Spring

Adjustment Screw A (*metal screw*)

Turn Clockwise to increase both cut-in and cut-out pressure.

Differential Pressure

Adjustment Screw B (*black plastic screw*)

Turn Clockwise to increase cut-in pressure without affecting cut-out pressure

