



American Made Products for RV, Specialty, Marine and Medical Industries

Service Department

Troubleshooting - PD5100 Series ATS

The Automatic Transfer Switch (ATS) is designed to be quickly tested for proper operation and repair if necessary. All critical circuits are located on the easily replaced circuit board. The following will describe how to test for proper circuit board operation and how to replace it if necessary.

1. Disconnect all AC power from the RV and make sure the generator is "OFF"
2. Remove the cover from the ATS by sliding a screwdriver blade under the edge of the cover and pry off.



Use the blade of a screwdriver to pry off the cover of the ATS

3. Start the generator and wait 30-40 seconds to see if the relay will energize. If the relay does not energize, go to Step # 4. If the relay energizes, but the Generator still does not provide 120 VAC power to the RV, use an AC Voltmeter to check for 120 VAC power from the Generator to the ATS. Then check for 120 VAC at the N.O. (Normally Open) terminals of the relay. If 120 VAC power is present at the N.O. terminals of the relay, you have a wiring problem between the ATS and the RV AC Distribution panel.

4. With the Generator running use an insulated screwdriver to carefully push down on the center arm of the relay, until the center arm of the relay makes contact with the N.O. contacts of the relay. If AC power is now present in the RV the circuit board in the ATS has failed and must be replaced. If holding down the relay contacts does not provide AC power to the RV, suspect a bad Generator or open wiring between the ATS and the RV AC Distribution Panel.

Replacing the ATS Circuit Board



Disconnect all AC power from the RV and turn the Generator "OFF".

1. Pull the circuit board out of the plastic housing and then using a screwdriver blade, pry the Yellow, White,

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Service Address

Progressive Dynamics Service Department

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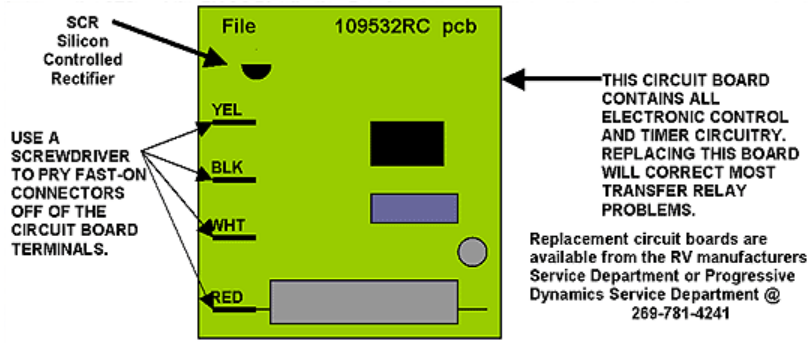
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Black and Red wires off the connectors on the circuit board.



2. Replace the Circuit Board and reconnect the four (4) wires and test the system by starting the Generator. The Relay should energize in approximately 30-seconds. If the relay does not energize, the relay coil is probably open and the ATS must be replaced.

Relay Contacts Burned and Pitted

If the Relay Contacts are burned and pitted (see photo below), the Generator has a problem and it's voltage is dropping below 90 VAC under load. If this problem occurs, you must repair or replace the Generator and the complete ATS.



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