– ADDENDUM –

Wire #23 and #194 Quick Diagnostic

Generator runs but does not transfer to Standby.

Note: This applies to Evolution 1.0 (w/firmware v1.17 and higher) and Evolution 2.0 (all firmware).

1. Ensure that the Generator MLCB is ON (closed).
2. Place the controller in MANUAL and allow the unit to start and run.
3. Check for rated AC voltage output at the Generator MLCB. If the voltage is below rated output, stop testing and refer to the appropriate test in the Diagnostic Manual.
4. Place the Utility Source Breaker (MLCB) in the OFF (open) position.
5. After the Utility Loss Delay timer expires, Wire 23 will close to ground in the controller and the transfer switch should transfer to Standby.
    a. If the 3-light annunciator is flashing green, go to the next step.
    b. If the 3-light annunciator is not flashing green, validate that Steps 3 & 4 in this procedure have been performed.
    c. If Steps 3 & 4 have been double-checked and the 3-light annunciator is not flashing green, check to see if Channel 8 on the Output Screen in the Test Menu is displaying a "1". If so, refer to the appropriate test in the diagnostic manual.
6. Locate Wire 23 and Wire 194 at the WAGO block (or connection point) in the generator.
7. Set the DMM to measure DC Volts. Measure voltage on Wire 194 to ground.
    a. If voltage is present, go to next step.
    b. If voltage is not present, a problem exists on Wire 194. See appropriate test in the Diagnostic Manual.

Note: Wire 194 is a protected circuit. If a short (to ground) exists on this wire, the voltage on this wire falls to zero.

8. Measure voltage across Wires 23 and 194 at the test points on the WAGO block.
    a. If voltage is present, go to next step.
    b. If voltage is not present, a problem in either Wire 23 or 194 exists between the WAGO block and the Evolution controller. See appropriate test in the Diagnostic Manual.
9. Locate Wire 23 and Wire 194 at the WAGO block (or the iSACM connection point) in the Transfer Switch.
10. Set the DMM to measure DC Volts. Measure voltage on Wire 194 to ground.
    a. If voltage is present, go to next step.
    b. If voltage is not present, a problem exists on Wire 194. See appropriate test in the Diagnostic Manual.
11. Set the DMM to measure DC Volts. Measure voltage across Wires 23 and 194 at the test points in the Transfer Switch.
    a. If no voltage is present, an open in either Wire 23 or 194 exists between the WAGO block in the Transfer Switch connection point (or WAGO block) and the WAGO block (connection deck) on the generator.
    b. If voltage is present, a problem exists internal to the Transfer Switch, for example, the relay or the iSACM or the Contactor Assembly itself.