



Basler Electric Highland, Illinois

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August 25, 1983

Mr. James L. Keppler
Regional Administrator
USNRC
Region #3
Office of Inspection and Enforcement
Glen Ellen, IL 60137

Dear Mr. Keppler:

On August 19, 1983, Mr. Don Srenawski and Mr. Harvey Wescott of the USNRC Region 3 Office of Inspection and Enforcement, were notified by telephone of a component problem in the Basler Electric Tracking M.O.C. part number 9 1258 00 100. In addition we have notified Mr. B. B. Beckley of Public Service Company of New Hampshire, (Seabrook, P/N 9 1121 00 100), Mr. Jerry Tenenbaum of the Public Service Electric and Gas (Hopewick, P/N 9 1245 00 100) and Mr. George Olson of Fairbanks Morse Engine Division, Inc. Please refer to the enclosed letters. A description of the problem and the proposed repair is detailed in the following paragraphs.

Resistor R14 in the Tracking M.O.C., part number 9 1258 00 100 under certain conditions will be overpowered. R14 is a Dale RS-2 or Omtronics T-3 4000 ohm $\pm 1\%$, 4 watt power resistor. By Basler specification the Tracking M.O.C. has a maximum operating ambient of 60°C. At 60°C R14's wattage rating must be derated to 3.6 watts. With a nominal 125VDC input voltage applied, R14 dissipates 3.2 watts which is within the device's rating. At the high line condition, the input voltage is 140 VDC and R14's dissipation increases to 4.2 watts exceeding the device's rating by 16.7%.

Our research indicates R14 should be changed from 4000 ohms to 10,000 ohms. If R14 is 10,000 ohms, then at 125 VDC the dissipation is 1.3 watts and at 140 VDC the dissipation is 1.7 watts. We now have a safety margin of 57.5% at the worst case condition. We have changed R14 to a 10,000 ohm $\pm 1\%$, 4 watt resistor supplied by Dale (RS-2) or Omtronics (T-3).

We became aware of this problem during a visit one of our engineers made to a non-nuclear site. The change has been implemented in the non-nuclear site.

To make the change, the following steps should be performed:

1. Remove the four screws holding the cover in place and then remove the cover.
2. Remove the five screws holding the printed circuit board in place.
3. Remove the nylon spacer between the printed circuit board and the motor bracket.

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Manufacturers of: Electronic Equipment · Magnetic Components · Power Products and Systems

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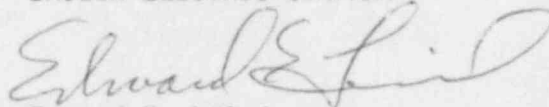
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4. Swing the printed circuit board out and away from the chassis.
5. Locate R14 by using the reference designation silkscreened on the component side of the printed circuit board.
6. Using a 25 watt soldering iron, remove R14. Care must be taken to remove the residue left by the solder and the conformal coating.
7. Install the 10,000 ohm resistor leaving the resistor body approximately 1/4" off the printed circuit board surface.
8. Trim the excess lead and remove all solder flux.
9. Brush an epoxy resin conformal coating on the solder joints, resistor body and resistor leads.
10. Reassemble the unit.
11. Verify operation.

If additional data is required, please contact myself at your earliest convenience. As indicated all parties have been notified and we await your instructions.

Sincerely,

BASLER ELECTRIC COMPANY



Edward E. Leird
Vice President of Engineering

Enclosure: Beckley
Tenenbaum
Olson

wp/rs