



Fresenius Medical Care

SERVICE BULLETIN

Equipment: 2008C/D/E/H/K Hemodialysis Machines
Bulletin: 02-FRS-001 Rev A (Revised from FSB 95-FRH-015)
Subject: Checking Heating Element Resistance to Ground

Written By	Reviewed By	Approved By	Effective Date
J. Fox (TSD)	Mark Lowery	ECO# 8031	5/8/02

Distribution: Nat'l Svc Mgr (M. Lowery), TS Mgr (K. Cogswell), QS (M. Owen), QE (R. Fox), Eng (D.Gavin), DTS (M. Crnkovich), Tng (B. Hassard)

1.0 PURPOSE

This procedure explains how to check the resistance to ground on the heater elements used in the 2008 Hemodialysis systems.

2.0 EQUIPMENT REQUIRED:

Use a digital voltmeter that can measure at least 19.9 meg-ohms.

3.0 PROCEDURE:

- 3.1 Power the machine **OFF** and **unplug the power cord** from the wall receptacle.
- 3.2 Remove the rear access panels and distribution board cover so that the wires of the heater are exposed. Disconnect the three wires from the terminal block. **Do not take measurements with the wires connected to terminal block, as resistance readings will be affected.**
- 3.3 Attach one lead of the voltmeter to the ground (yellow / green wire) and the other lead to the brown or blue wire. Measure the resistance. Resistance should be " OL " or greater than 19.9 meg-ohms. If this is not the case, replace the heater element.
- 3.4 After completing this resistance check, attach the heater wires back to the terminal block. When inserting the element wires in the terminal block, verify that the ground, neutral and hot wires of the element correspond to the same wires coming down from the electronics (Blue to Blue, Brown to Brown and Yellow / Green to Yellow / Green). The correct position of the ground wire is marked on the terminal block with a ground symbol. Be sure to tighten the screws of the terminal block very well so that arcing and overheating does not occur.

If there are any questions regarding this bulletin, contact Fresenius Technical Support at 800-227-2572.