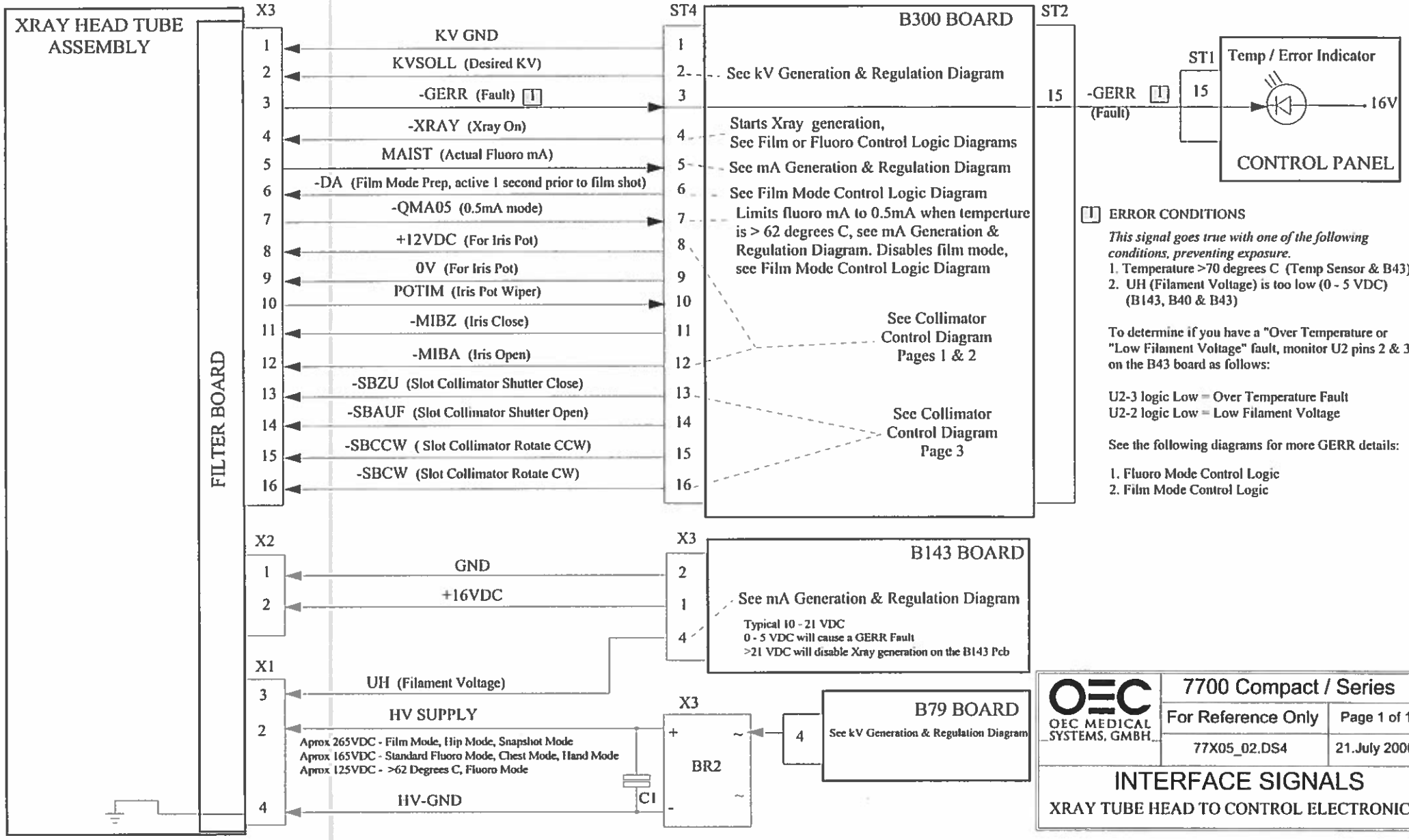
XRAY HEAD TUBE ASSEMBLY
FILTER BOARD
X3
1 KV GND
2 KVSOLL (Desired KV)
3 -GERR (Fault) [1]
4 -XRAY (Xray On)
5 MAIST (Actual Fluoro mA)
6 -DA (Film Mode Prep, active 1 second prior to film shot)
7 -QMA05 (0.5mA mode)
8 +12VDC (For Iris Pot)
9 0V (For Iris Pot)
10 POTIM (Iris Pot Wiper)
11 -MIBZ (Iris Close)
12 -MIBA (Iris Open)
13 -SBZU (Slot Collimator Shutter Close)
14 -SBAUF (Slot Collimator Shutter Open)
15 -SBCCW (Slot Collimator Rotate CCW)
16 -SBCW (Slot Collimator Rotate CW)
ST4
B300 BOARD
1
2 See kV Generation & Regulation Diagram
3
4 Starts Xray generation, See Film or Fluoro Control Logic Diagrams
5 See mA Generation & Regulation Diagram
6 See Film Mode Control Logic Diagram
7 Limits fluoro mA to 0.5mA when temperture is > 62 degrees C, see mA Generation & Regulation Diagram. Disables film mode, see Film Mode Control Logic Diagram
8
9
10
11
12 See Collimator Control Diagram Pages 1 & 2
13
14
15 See Collimator Control Diagram Page 3
16
ST2
15
-GERR [1] (Fault)
ST1
15
Temp / Error Indicator
16V
CONTROL PANEL
[1] ERROR CONDITIONS
This signal goes true with one of the following conditions, preventing exposure.
1. Temperature >70 degrees C (Temp Sensor & B43)
2. UH (Filament Voltage) is too low (0 - 5 VDC) (B143, B40 & B43)
To determine if you have a "Over Temperature or "Low Filament Voltage" fault, monitor U2 pins 2 & 3 on the B43 board as follows:
U2-3 logic Low = Over Temperature Fault
U2-2 logic Low = Low Filament Voltage
See the following diagrams for more GERR details:
1. Fluoro Mode Control Logic
2. Film Mode Control Logic
X2
1 GND
2 +16VDC
X3
B143 BOARD
2
1 See mA Generation & Regulation Diagram
4
Typical 10 - 21 VDC
0 - 5 VDC will cause a GERR Fault
>21 VDC will disable Xray generation on the B143 Pcb
X1
3 UH (Filament Voltage)
2 HV SUPPLY
Aprox 265VDC - Film Mode, Hip Mode, Snapshot Mode
Aprox 165VDC - Standard Fluoro Mode, Chest Mode, Hand Mode
Aprox 125VDC - >62 Degrees C, Fluoro Mode
4 HV-GND
C1
X3
+
-
BR2
~
~
4
B79 BOARD
See kV Generation & Regulation Diagram
OEC MEDICAL SYSTEMS, GMBH
7700 Compact / Series
For Reference Only
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77X05_02.DS4
21.July 2000
INTERFACE SIGNALS
XRAY TUBE HEAD TO CONTROL ELECTRONICS