

7714 Laser Controller Board Functional Test Results Page 1

Date: 7/14/2006 8:03:34 PM

Technician: Dan Fasano

Board S N: 123-456-78

Test Summary:

- TEST	RESULTS (COUNT)
- Power Status:	Passed (3)
- RS-232 Test:	Passed (3)
- EEPROM Test:	Passed (3)
- LED Test:	Passed (3)
- -15 Volt Test:	Passed (3)
- TFG Test:	Passed (1) Failed (2)
- Opt/Sync Test:	Passed (1) Failed (2)
- Htr/Thermistor Test:	Passed (3)

## 7714 Laser Controller Board Functional Test Results Page 2

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**Technician:** Dan Fasano

**Board S N:** 123-456-78

### Report:

- Failed TFG Test Test: Pass: 2
- Begin TFG Test
- Set Heater Mode to FULL OFF
- Set Heater Mode to FULL OFF
- OSC:OFF 42MHZ at 1000 LCB:0.84 SBCP:0.00
- OSC:OFF 42MHZ at 1500 LCB:0.84 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:OFF 42MHZ at 1500 LCB:0.84 SBCP:0.00
- OSC:OFF 42MHZ at 2000 LCB:0.84 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:OFF 42MHZ at 2000 LCB:0.84 SBCP:0.00
- OSC:OFF 42MHZ at 2500 LCB:0.84 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:OFF 42MHZ at 2500 LCB:0.84 SBCP:0.00
- OSC:OFF 42MHZ at 3000 LCB:0.84 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:OFF 42MHZ at 3000 LCB:0.84 SBCP:0.00
- OSC:OFF 42MHZ at 3500 LCB:0.84 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:OFF 42MHZ at 3500 LCB:0.84 SBCP:0.00
- OSC:OFF 42MHZ at 4000 LCB:0.84 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:OFF 42MHZ at 4000 LCB:0.84 SBCP:0.00
- ERROR: LCB MAX TFG PWR too LOW. OSC:OFF 42MHZ at 4000 LCB:0.84 SBCP:0.00
- OSC:OFF 20MHZ-A at 1000 LCB:0.99 SBCP:5.66

## 7714 Laser Controller Board Functional Test Results Page 3

**Date:** 7/14/2006 8:03:34 PM

**Technician:** Dan Fasano

**Board S N:** 123-456-78

### Report:

- Failed TFG Test Test: Pass: 2 continued...
- OSC:OFF 20MHZ-A at 1500 LCB:1.48 SBCP:19.67
- OSC:OFF 20MHZ-A at 2000 LCB:1.98 SBCP:38.07
- OSC:OFF 20MHZ-A at 2500 LCB:2.47 SBCP:62.79
- OSC:OFF 20MHZ-A at 3000 LCB:2.96 SBCP:94.39
- OSC:OFF 20MHZ-A at 3500 LCB:3.46 SBCP:131.14
- OSC:OFF 20MHZ-A at 4000 LCB:3.95 SBCP:170.32
- OSC:OFF 20MHZ-B at 1000 LCB:0.99 SBCP:6.39
- OSC:OFF 20MHZ-B at 1500 LCB:1.48 SBCP:22.19
- OSC:OFF 20MHZ-B at 2000 LCB:1.97 SBCP:42.60
- OSC:OFF 20MHZ-B at 2500 LCB:2.47 SBCP:71.46
- OSC:OFF 20MHZ-B at 3000 LCB:2.97 SBCP:107.42
- OSC:OFF 20MHZ-B at 3500 LCB:3.46 SBCP:147.16
- OSC:OFF 20MHZ-B at 4000 LCB:3.87 SBCP:181.70
- TFG Test Failed

## 7714 Laser Controller Board Functional Test Results Page 4

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**Technician:** Dan Fasano

**Board S N:** 123-456-78

### Report:

- Failed TFG Test Test: Pass: 3 continued...
- OSC:OFF 20MHZ-A at 2500 LCB:2.47 SBCP:62.97
- OSC:OFF 20MHZ-A at 3000 LCB:2.96 SBCP:94.92
- OSC:OFF 20MHZ-A at 3500 LCB:3.46 SBCP:130.77
- OSC:OFF 20MHZ-A at 4000 LCB:3.95 SBCP:171.28
- OSC:OFF 20MHZ-B at 1000 LCB:0.99 SBCP:6.41
- OSC:OFF 20MHZ-B at 1500 LCB:1.48 SBCP:22.26
- OSC:OFF 20MHZ-B at 2000 LCB:1.97 SBCP:42.48
- OSC:OFF 20MHZ-B at 2500 LCB:2.47 SBCP:71.46
- OSC:OFF 20MHZ-B at 3000 LCB:2.97 SBCP:107.42
- OSC:OFF 20MHZ-B at 3500 LCB:3.46 SBCP:147.16
- OSC:OFF 20MHZ-B at 4000 LCB:3.87 SBCP:182.21
- TFG Test Failed

## 7714 Laser Controller Board Functional Test Results Page 5

**Date:** 7/14/2006 8:03:34 PM

**Technician:** Dan Fasano

**Board S N:** 123-456-78

### Report:

- Failed Opt/Sync Test Test: Pass: 2
- Begin Opt/Sync Test
- Set Heater Mode to FULL OFF
- Optical Sync Freq:29999794
- Set Heater Mode to FULL OFF
- OSC:ON 42MHZ at 1000 LCB:0.84 SBCP:0.00
- OSC:ON 42MHZ at 1500 LCB:0.84 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:ON 42MHZ at 1500 LCB:0.84 SBCP:0.00
- OSC:ON 42MHZ at 2000 LCB:0.85 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:ON 42MHZ at 2000 LCB:0.85 SBCP:0.00
- OSC:ON 42MHZ at 2500 LCB:0.85 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:ON 42MHZ at 2500 LCB:0.85 SBCP:0.00
- OSC:ON 42MHZ at 3000 LCB:0.85 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:ON 42MHZ at 3000 LCB:0.85 SBCP:0.00
- OSC:ON 42MHZ at 3500 LCB:0.85 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:ON 42MHZ at 3500 LCB:0.85 SBCP:0.00
- OSC:ON 42MHZ at 4000 LCB:0.85 SBCP:0.00
- ERROR: LCB TFG too LOW. OSC:ON 42MHZ at 4000 LCB:0.85 SBCP:0.00
- ERROR: LCB MAX TFG PWR too LOW. OSC:ON 42MHZ at 4000 LCB:0.85 SBCP:0.00

## 7714 Laser Controller Board Functional Test Results Page 6

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### Report:

- Failed Opt/Sync Test Test: Pass: 2 continued...
- OSC:ON 20MHZ-A at 1000 LCB:0.99 SBCP:5.86
- OSC:ON 20MHZ-A at 1500 LCB:1.48 SBCP:20.34
- OSC:ON 20MHZ-A at 2000 LCB:1.98 SBCP:39.16
- OSC:ON 20MHZ-A at 2500 LCB:2.47 SBCP:64.95
- OSC:ON 20MHZ-A at 3000 LCB:2.96 SBCP:98.45
- OSC:ON 20MHZ-A at 3500 LCB:3.46 SBCP:135.64
- OSC:ON 20MHZ-A at 4000 LCB:3.95 SBCP:177.16
- OSC:ON 20MHZ-B at 1000 LCB:0.99 SBCP:6.63
- OSC:ON 20MHZ-B at 1500 LCB:1.48 SBCP:23.15
- OSC:ON 20MHZ-B at 2000 LCB:1.98 SBCP:44.44
- OSC:ON 20MHZ-B at 2500 LCB:2.47 SBCP:74.96
- OSC:ON 20MHZ-B at 3000 LCB:2.96 SBCP:112.36
- OSC:ON 20MHZ-B at 3500 LCB:3.46 SBCP:152.64
- OSC:ON 20MHZ-B at 4000 LCB:3.95 SBCP:198.80
- Opt/Sync Test Failed

## 7714 Laser Controller Board Functional Test Results Page 7

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### Report:

- Failed Opt/Sync Test Test: Pass: 3 continued...
- OSC:ON 20MHZ-A at 1500 LCB:1.48 SBCP:20.34
- OSC:ON 20MHZ-A at 2000 LCB:1.98 SBCP:39.27
- OSC:ON 20MHZ-A at 2500 LCB:2.47 SBCP:65.13
- OSC:ON 20MHZ-A at 3000 LCB:2.96 SBCP:98.73
- OSC:ON 20MHZ-A at 3500 LCB:3.46 SBCP:136.02
- OSC:ON 20MHZ-A at 4000 LCB:3.95 SBCP:177.16
- OSC:ON 20MHZ-B at 1000 LCB:0.99 SBCP:6.66
- OSC:ON 20MHZ-B at 1500 LCB:1.48 SBCP:23.15
- OSC:ON 20MHZ-B at 2000 LCB:1.98 SBCP:44.44
- OSC:ON 20MHZ-B at 2500 LCB:2.47 SBCP:74.75
- OSC:ON 20MHZ-B at 3000 LCB:2.96 SBCP:112.36
- OSC:ON 20MHZ-B at 3500 LCB:3.46 SBCP:153.50
- OSC:ON 20MHZ-B at 4000 LCB:3.95 SBCP:199.36
- Opt/Sync Test Failed