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SUBJECT: PP100 Programmer rework

MODELS AFFECTED	2500	3000	7000	7500
	PP100 X	9500	970	T/R ALL

**1.0 PURPOSE:** To inform Data I/O Service personel how to change Op-Amp U4 to increase programming yields.

2.0 TOOLS REQUIRED: Solder Iron, desolder tool, Flux, and flux cleaner.

3.0 PARTS REQUIRED: 3300008001 U4 MC33072D and 3241941012 U21 TOP4 Flash test adapter S277 DIO part # 7152799001.

#### 4.0 **INSTRUCTIONS:**

- 4.1 Remove the programmer from the PP100.
- 4.2 Disassemble the programmer and locate the TOP4 Flash board (7013125XXX)
- 4.3 Remove the 8 pin SOIC on U4 (see figure 2)
- 4.4 Replace the 8 pin SOIC with 3300008001.
- 4.5 Clean flux from board. Replace the socketed 8 pin DIP U21 with part number 324-1941-012. (see figure 3)
- 4.6 Reassemble the programmer.
- 4.7 Reinstall the programmer into the PP100.
- 5.0 Test Procedure
  - 5.1 After replacing the Op-Amp U4 go to the programmer PC104 and run Optitest –h from the DOS prompt. The adapter should not be installed at this time. Use Optitest Verision AJ/2000 or higher.
  - 5.2 At the main optitest menu select (2) "Calibration and manual test".
  - **5.3** Run the test 1 "test all inputs for shorts and functionality" The status box (lower right corner) should say PASS after the test is completes.

- 5.4 Run the test (7) "test all relay functions" Install the Top4flash test adapter S277 (see figure 4) when prompted to do so. You should see the message "all test passed" after the testing is finished. When you press enter and return to the main test menu, the status box (lower right) should say "Pass"
- 5.5 Quit Optitest

Note: If you are not prompted to install the test adapter, you did not enter -h option in the command line or you have an older version of optitest. If test #7 shows "FAIL" in the status box without any messages you have an older version of Optitest.



Figure 1



Figure 2



Figure 3



Figure 4