

**WATERS CORPORATION**  
**ENGINEERING TEST SPECIFICATION AND PROCEDURE**  
**COMPANY CONFIDENTIAL**

SYSTEM/ASSEMBLY NAME: **2690 / 2790 Fluidic Trays**

PART NUMBER AFFECTED: **270612, 270613, 271087, 279000255, 700001219, 700001220**

TEST EQUIPMENT NAME: **2690 Fluidics tray Tester**

TEST EQUIPMENT NUMBER: **T.E. 82523**

TEST EQUIPMENT LOCATION: **Milford, Systec**

DOCUMENT NUMBER: **047159**

AUTHOR(S): **Mark Jussaume**

REV:           DATE: **9/1/98**

LAST REVISION: **L. Payne**

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| APPROVED BY                            | SIGNATURE          | DATE |
|----------------------------------------|--------------------|------|
| RESPONSIBLE<br>TEST ENGINEER:          | <b>M. Jussaume</b> |      |
| RESPONSIBLE<br>PRODUCT ENGINEER:       | <b>G. Crean</b>    |      |
| RESPONSIBLE<br>MANUFACTURING ENGINEER: | <b>B. Cook</b>     |      |

FOR DATA SERVICES USE ONLY

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DOC  
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EFFECTIVE REVISION ON THE DATE  
ISSUED, AND IS VALID FOR GENERAL  
PRODUCTION AND TESTING USE ONLY  
IF STAMPED IN RED BY DATA  
SERVICES.

## 1. EQUIPMENT REQUIRED:

1.1. DEGASSER TRAY TESTER T.E. 82523

1.2. NITROGEN Supply

1.3. 5/16" open end wrench

## 2. TESTER SETUP:

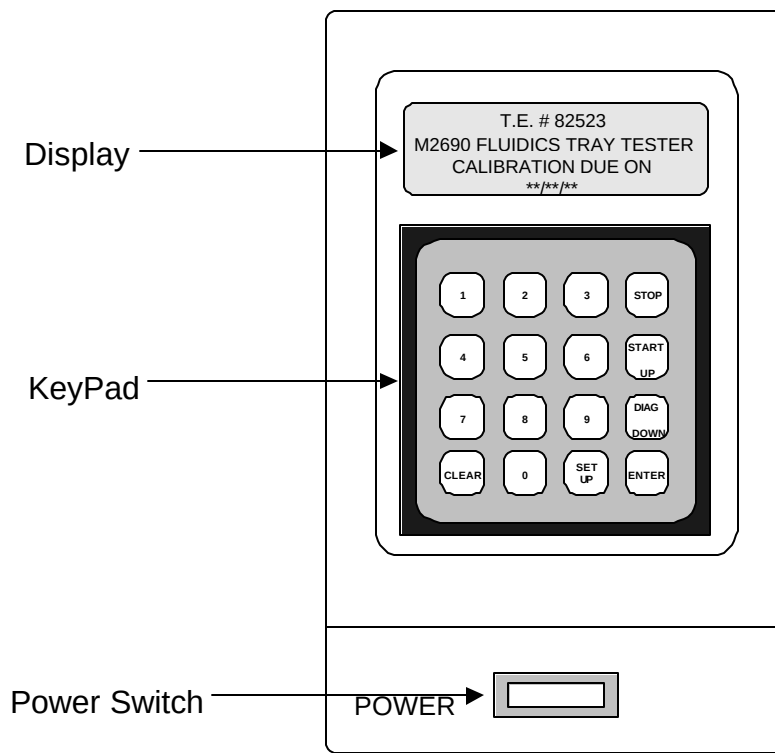
2.1. Plug Tester into 120 Volt AC outlet.

2.3. Connect nitrogen source to "**N2 IN**", located on the rear of Tester.

2.4. Turn tank on and adjust tank regulator for 30 PSI.

2.5. Adjust tester's regulator for 9 PSI on gauge on front of tester.

## 3. TEST SETUP:



3.2. Switch "POWER" on, the display should read:

2690 CPU BOARD  
INITIALIZING  
PLEASE WAIT

,wait until tester

displays

READY TO TEST  
PRESS START TO BEGIN

#### 4. TEST:

4.1. Press



on Keypad, the display should read:

TEST .024 TUBING:  
PRESS 1 [enter]  
TEST AF TUBING:  
PRESS 2 [enter]

. Once the selection

is made, the display should read:

FOR COMPLETE TEST:  
PRESS 1 [enter]  
FOR DEGASSER ONLY:  
PRESS 2 [enter]

. Once this selection is made, the

display should read:

MAKE ELECTRICAL AND  
TUBING CONNECTIONS  
TO UUT. PRESS ENTER  
TO INIATE TEST.

4.2. Connect "**N2 OUT**" to common port of GPV on the UUT

4.3. Connect solvent lines A, B, C, & D to the corresponding vacuum chambers on UUT.

4.4. Connect power, serial, & gpv cables to UUT.

4.8. Press



and the tests will begin. When an error occurs, the test halts and displays an error message. If no errors are encountered during tests, the display reads:

ALL TESTS COMPLETE  
!PASSED!  
!PASSED!  
!PASSED!

NOTES: a) You may abort a test anytime by pressing



, the display will read:

THIS TEST HAS BEEN  
STOPPED! FIX PROBLEM  
& RESET OR CONNECT  
A NEW UNIT FOR TEST.

b) If the nitrogen is low, testing halts and the display reads:

NO OR LOW NITROGEN!  
SET N2 SOURCE FOR 30  
PSI. ADJUST SIDE REG  
FOR 9 PSI ON GAUGE