

SERVICETEKNOTES

TEKTRONIX—EVER SEARCHING FOR NEW AND BETTER PRODUCTS TO SERVE YOUR NEEDS!

TEKTRONIX UNVEILS FAMILY OF COLOR AND MONOCHROME POSTSCRIPT® COMPATIBLE PRINTERS



New Phaser™ Printers

TO OUR CUSTOMERS

The Tektronix Service Organization firmly supports a policy of assuring continued utility of products sold by Tektronix.

This publication is meant to provide technical information to the customer who has elected to maintain his own Tektronix products. It contains product servicing information and is written for the technician. The notation at the bottom of each article (W² Issue: XX-X) signifies that the article has previously been published in a publication known as *WIZARDS' WORKSHOP*.

Articles are submitted primarily by Corporate Service Support & Planning personnel thoroughly familiar with the products they support.

SERVICETEKNOTES also encourages you, the customer, to submit articles for publication. If you have knowledge of a technique, procedure or idea that enables you to service your Tektronix product more effectively, write it up so others may benefit from your experience.

Articles for publication should be submitted directly to:

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Tektronix Unveils Family of Color, Monochrome PostScript[®] Compatible Printers

Redwood City, California, November 1, 1988 — Tektronix, Inc., today introduced the Phaser[™] family of advanced, color and monochrome personal computer printers. It includes the first color printer compatible with both PostScript, the most popular PC page description language, and HPGL, the leading graphics plotter language.

The Phaser products include a 300 dots-per-inch color thermal wax transfer printer, a B-sized monochrome laser printer and a multi-emulation language controller card compatible with IBM classic bus computers and compatibles or the IBM PS/2 Model 30. It is the first PostScript-compatible add-in card and the first capable of supporting both a color and monochrome printers.

The Phaser CP color printing system (including the Phaser controller card and 8MB of memory) is priced at \$12,995, significantly less than its leading color PostScript competitor. The Phaser Card, which interprets color PostScript, makes possible both the low price and the high-speed communications for rapid downloading from PC to printer. It produces 8 1/2 by 11-inch output on legal-size (8 1/2 by 14-inch) transparencies and paper, featuring a virtually unlimited range of colors and shades. Print speed is less than 50 seconds per copy for three-pass color and 15 seconds for large-format monochrome.

The Phaser LP laser printing system (including Phaser controller card with 8MB of memory), priced at \$9,995, is the first B-size or tabloid (11 by 17 inches) laser printer available for less than \$10,000. It is capable of producing four prints per minute in B-size and eight prints per minute in A-size. It produces plain paper output at 300 dpi resolution.

Tek's Phaser Card, a component of the Phaser CP and LP, provides a flexible, low-cost upgrade path to users who want to add color output to their Phaser LP or monochrome laser output to their Phaser CP. The cost of this upgrade is considerably less because users don't need to purchase a second printer controller.

Both the Phaser CP and Phaser LP can be shared by placing the Phaser Card in a local area network (LAN) server. The Phaser Card can be configured to emulate parallel and serial ports.

Both printers come with 35 standard type faces, including — Times[®], Helvetica[®], Helvetica-Narrow, Palatino[®], ITC Avant Garde[®], ITC Bookman[®], ITC Zapf Chancery[®], ITC Zapf Dingbats[®], New Century Schoolbook, Courier, and Symbols Set. The trademark designs were licensed from Linotype and International Typeface Corporation, and the outline definitions were digitized for Tektronix by URW GmbH.

The printers support standard Type 3 downloadable fonts without intelligent scaling. Tektronix will support the industry standard (Type 3) format and provide access to commercial font libraries.

The Phaser Card can be purchased separately for \$6,995. The Phaser CP engine alone is priced at \$6,000. The Phaser LP engine only is priced at \$3,000.

In addition to the new Phaser LP and Phaser CP printers, the Phaser Card will support Tektronix' existing 300 dpi thermal wax printer, the Color Image Printer (Models 4693D and 4693DX), giving it PostScript and HPGL capabilities.

"We believe that the emerging Publish[™] and Present[™] market represents a significant opportunity for products that provide high-quality printing solutions in both color and monochrome," said Rob Stewart, marketing manager of Tektronix Graphics Printing and Imaging Division.

"As new print technology becomes available, we will integrate it with the Phaser software and controller card," Stewart said. He added that Tek will offer low-cost upgrades to purchasers of its popular Color Image Printer between now and Phaser CP shipment.

This upgrade flexibility is based on the architecture of the Phaser controller card. The card features a high-performance Motorola 68020 microprocessor and three custom integrated circuits.

The color coprocessor handles color halftone rendering as rapidly as monochrome rendering with a throughput capability of 6 million pixels per second in color or monochrome.

(Continued on the following page)

New Phaser Printers *(Continued from previous page)*

A custom bus interface IC emulates standard PC COM and LPT ports but allows them to operate at a much higher speed. The card also includes a logic cell, or reprogrammable, gate array which configures the card to interface with different print engines.

The card, which is completely software configurable, includes 8MB of RAM — 3MB on the card and 5MB on a daughter board. The daughter board can accommodate an additional 3MB of RAM, bringing the total to 11MB. The 3MB memory option is priced at \$1,500. The card and daughter board occupy a single PC slot.

The Phaser CP is ideal for a range of applications in color desktop presentations, graphics arts and technical data analysis, as well as supporting color in desktop publishing. The Phaser LP is optimal for desktop publishing, computer-aided design, newsletters, technical publishing, and graphics applications that can take advantage of its tabloid capability. Users can print two 8 1/2 by 11-inch pages side by side, or one full-bleed, 8 1/2 by 11-inch page. A single 11 by 17-inch page can be reduced to 8 1/2 by 11 inches on a photocopier, producing 54 percent higher pixel resolution.

Popular software packages such as Aldus PageMaker, Harvard Graphics, Micrografx Designer, AutoCAD, AutoShade, Microsoft Excel, GEM Artline, and Zenographics' Pixie can take advantage of the Phaser products' sophisticated color and monochrome capabilities.

The Phaser CP and LP support software written for

PostScript or HPGL. PostScript is the standard language for desktop publishing. HPGL is the standard used by plotters and most PC graphics software for plotter output. Page description languages are software interpreters that "describe" the size and shape of a file's text fonts and graphics images to the printer, producing smoother, sharper reproductions without the "jaggie" image contours associated with output based on pixel replication.

Tektronix is a leader in color print technology, introducing its first ink-jet color printers in 1982. In 1987, Tek introduced its first high-performance, high-quality color printer for the PC. Tektronix is also a leader in color imaging techniques and color media research.

Tek's Phaser CP and LP printers will be available in the first quarter of 1989. For further customer or dealer information, contact a local Tektronix field sales office or write to Tektronix, Inc., P.O. Box 14689, Portland, Oregon 97214, or call 1-800-225-5434.

Tektronix is a leading manufacturer of electronic products and systems in the areas of computer graphics, test and measurement, and communications. Sales in fiscal 1988 totalled \$1.4 billion. The company has approximately 16,000 employees worldwide.

Tek's Graphics Printing and Imaging Division is part of the Information Display Group, which markets a complete line of graphics products including advanced color image printers, color graphics terminals, netstations, workstations, and software.

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PRODUCT SERVICE TRAINING CLASSES

Tektronix Service Training provides electronic technicians the skills and techniques required for effective maintenance of Tektronix products. In addition, it brings experienced technicians up-to-date on maintenance of new products.

<u>CLASS</u>	<u>LOCATION</u>	<u>DATES</u>
465B/475A Portable Oscilloscopes (\$975)	Boston, MA Dallas, TX	Feb 13-17, 1989 May 15-19, 1989
2215/35/36 Portable Oscilloscopes (\$975)	Boston, MA Dallas, TX	Feb 20-24, 1989 May 22-26, 1989
2246/2247 Portable Oscilloscope (\$1,100)	Atlanta, GA	March 6-10, 1989
2230/2232 Digital Storage Oscilloscope (\$1,100)	Boston, MA	May 8-12, 1989
2465/2467 Portable Oscilloscope (\$1,950)	Dallas, TX	Feb 6-17, 1989
7904/7633 Laboratory Storage Oscilloscopes (\$2,100)	Atlanta, GA Dallas, TX	Dec 5-16, 1988 Apr 24-May 5, 1989
TM500 Calibration Package (\$975)	Dallas, TX	Apr 10-14, 1989
TM5000 Distortion Analyzer (SG/AA) (\$1,300)	Beaverton, OR	Feb 20-24, 1989
TM5000 Function Generator (FG) (\$1,300)	Beaverton, OR	Feb 27-Mar 3, 1989
TM5000 Calibration Generator (CG5001) (\$1,300)	Beaverton, OR	Mar 6-10, 1989
113XX Programmable Oscilloscopes (\$1,200)	Beaverton, OR	Apr 24-28, 1989
114XX Programmable Oscilloscope (\$1,300)	Beaverton, OR	May 1-5, 1989
118XX Digitizing Sampling Oscilloscope (\$1,500)	Beaverton, OR	Mar 20-24, 1989
7612D Programmable Waveform Digitizer (\$2,800)	Beaverton, OR	Feb 6-17, 1989
412X Color Graphic Workstation (\$2,400)	Santa Clara, CA	Feb 6-17, 1989

(Continued on next page)

PRODUCT SERVICE TRAINING CLASSES (...Continued)

<u>CLASS</u>	<u>LOCATION</u>	<u>DATES</u>
422X/423X Color Graphic Terminals (\$3,000)	Atlanta, GA	Apr 3-14, 1989
4692/4695/4696 Color Printers (\$1,100)	Santa Clara, CA	Feb 20-24, 1989
4693D/4693RGB Color Printer (\$1,100)	Atlanta, GA	Feb 27-Mar 3, 1989
Introduction to TekniCAD User Training (\$800)	Irvine, CA Washington DC	Feb 20-24, 1989 Apr 24-28, 1989
Advanced TekniCAD User Training (\$600)	Irvine, CA Washington DC	Feb 27-Mar 1, 1989 May 1-3, 1989
Workstation User/UTek User Training (\$950)	Irvine, CA Washington DC	Feb 13-17 1989 Apr 17-21, 1989

In addition to classroom instruction, Tektronix Service Training has a variety of training packages and video tapes available for self-study. Classes are available for maintenance of other Tektronix products. On-Site classes are also offered. Call for further information.

REGISTRATION INFORMATION*

Class sizes are limited. We recommend that you enroll early.

For more information or to register for these classes, call Tektronix Service Training, 1-800-835-9433, EXT. WR1407 (in Oregon, call 629-1407), or contact your local Tektronix Field Office.

*We retain the option to cancel or reschedule a class.

LID Telephone Response Center

Since Service Support was divisionalized, it has been difficult to reach the support people when help is needed. To help solve this problem, Lab Instruments Division (LID) has instituted a telephone response center. This phone is staffed between the hours of 6:00 AM and 6:00 PM Pacific Time. All questions will be answered or the call will be referred to someone capable of providing the answer. Our goal is to provide an answer immediately. However, some problems may require special support. When special support is required, an action plan will be developed.

The same people that provided support to you for LID products are still available to help you. This new service is an addition designed to insure that you get answers to all your questions or concerns in a timely manner.

So don't be afraid to call. Our goal is to provide you with the best service possible.

The number to call is: (503) 627-3086

W2 Issue: 18-19

S3295: TEKTEST V Version VO3.02A Software Release (Pullout A)

Refer to Pullout "A" for TEKTEST Software Release Notes.

To obtain the latest S3295 Software:

Tektronix Technical Support Specialists should contact Nancy Wise at 94-557, phone number; (503) 629-1560.

Please provide system Job Numbers and Serial Numbers for each update requested.

Customers should be directed to contact their local Sales Engineer.

W2 Issue: 18-19

5A48: Vertical Oscillations Eliminated

Ref: Mod #H4691

S/N H700200

A vertical oscillation may develop after replacement of the input FET (Q140/Q340) or when replacing the attenuator board. To correct this a 100 ohm resistor was added between the attenuator board and the FET. Replace the wire going from the gate of the FET to the attenuator board with Tektronix P/N 315-0101-00.

W2 Issue: 18-18

067-0587-XX: Usage

There has been some confusion as to which 067-0587-XX Signal Standardizer is used with which 11000 Series mainframe. An error in the 11400 Service manual also added to this confusion. The manual called out a 067-0587-02. Following is a list of correct usages for the 11000 Series mainframes:

- | | |
|-------------|--|
| 067-0587-02 | 11301
11302
11301A
11302A |
| 067-0587-10 | 11301
11302
11301A
11302A
11401
11402 |

The key reason for the -10 is that it has a trigger output with the GAIN signal that enables it's use with digitizing mainframes. Without this trigger, the digitizers can't define the stair-step GAIN signal. The analog instruments (11300) can use Signal Standardizers with or without this feature.

A 067-0587-02 Signal Standardizer can be upgraded to a -10 with the addition of the field upgrade kit 040-1204-00. This kit adds the trigger signal necessary for digitizers.

For either the -02 or the -10 to be used in the 11000 Series instruments, the rear panel must be changed to fit the 11000 Series mainframes. This can be accomplished by installing the rear panel kit (040-1212-00) for this purpose.

If you have a 067-0587-02 that you want to use for the 11000 Series mainframes, the best bet would be to install both the 040-1204-00 and the 040-1212-00 compatibility kits. This will remove any doubt as to the compatibility of your Signal Standardizer with the 11000 Series mainframes.

W2 Issue: 18-19

1421, 1422 Series: S1820 Part Number

REF: 1420 SERIES INSTRUCTION MANUAL, P/N 070-2899-00

The part number for S1820, the INT/EXT Subcarrier switch, is 260-1608-00.

Add this note to your instruction manuals.

W2 Issue: 18-19

2220/2221/2230: Firmware Change Corrects Power Up Failure and Wrong Readout in Rerence Memory

Mod #67906

S/N: 2220 B021494
2221 B011183
2230 B028529

The firmware has been changed in the 2200 Series Digital Storage Scopes to correct for the following:

1. Power up RAM failure of "NMI 0004".
2. With a waveform saved in Ref Memory, when a new waveform is acquired and saved on screen, the Ref Memory saved waveform Volt/Div setting may now be incorrect.

Following are the kit part numbers:

<u>Instrument</u>	<u>Part Number</u>
2230	050-2157-08
2230 Option	050-2221-06
2221	050-2318-03
2221 Option	050-2327-02
2220	050-2231-06
2220 Option	050-2252-05

W2 Issue: 18-19

2225: Focus Pot Replacement

Ref: Mod #67523
P/N 670-9938-05

It is no longer necessary to order the focus board in order to replace the focus pot in the 2225. The focus pot part number is 311-2357-00.

This part can be used in all Beaverton (S/N BXXXXXX) and Guernsey (S/N 1XXXXX) built instruments.

For instruments built in Hoddesdon with S/N between 202062 and 203059, a MOD kit is necessary. To replace the focus pot only, use 050-2437-00. To replace the A5 board, order P/N 050-2438-00.

W2 Issue: 18-17

2245A/2246A: Increase Variable Hold-Off Range

MOD: #67731

SN 2245A: B012351
2246A: B012975

Some 2245A and 2246A instruments may not meet variable holdoff specifications. To correct this, change A10R638 to a 100K ohm resistor, Tektronix P/N 313-1104-00 and A10W612 to a diode A10CR612, Tektronix P/N 152-0141-02. Install the new diode with the cathode electrically connected to A10R636.

Perform this mod to instruments below the listed serial numbers which come in for service.

W2 Issue: 18-18

2245A/2246A: Manual Correction

Ref: A10C447

The part number called out for A10C447 in the Electrical Parts List of the 2245A and 2246A manual is incorrect. Please correct your manual to show A10C447 as Tektronix P/N 281-0765-00, which is a 100 pF capacitor.

W2 Issue: 18-18

2467/2467B: CRT, Z Axis Drive Adjustment

When performing the 2467/B CRT Adjustment procedure, step 2 directs that the drive be set to 40 volts. It is not usually necessary to change the factory set drive voltage. It has been set to produce optimum writing rate. It should be left as is at the beginning of the procedure and only readjusted later if necessary to produce proper writing speed in older CRTs that have aged.

When a CRT is replaced, use the enclosed "CRT Data Sheet" to preset the Z Axis drive to match the listed Writing Speed Voltage:

<u>Writing Speed Voltage:</u>	<u>Preset Z Axis Drive to:</u>
850 to 950 V	40 volts
950 to 1050 V	50 volts
1050 to 1100 V	60 volts

In summary, it is usually not necessary to change the factory set value for Z Axis Drive when first starting the CRT adjustment procedure.

As the CRTs age, reducing the Z Axis Drive will allow the correct MCP Bias adjustments to be made which will produce the best Writing speed.

Use the Data Sheet to determine the starting voltages to be used on replacement CRTs.

W2 Issue: 18-19

**4224/4225/4324/4325: GRAPHZ Boards
With OPDM Rev "C" Need Boot Disk
Version 42.5**

Ref: Corporate Mod 66786
4220 Field Service Manual, P/N 070-6646-00
4220 Series GRAPHZ1 and GRAPHZ2 Technical Data Manual, P/N 070-6652-99

The GRAPHZ boards used in the 4224/4225 products are currently using QPDMs with a revised level of "C". Several PALs on the GRAPHZ boards have also been changed to suffix level "-01". The part numbers of the GRAPHZ boards that contain these changes are 670-9954-02 (GRAPHZ 1 board used in the 4224), and 670-9982-01 (GRAPHZ 2 board used in the 4225). The part numbers of the PALs that have been changed are 160-4463-01 (used in U325 and U725 on the GRAPHZ 1 and in U325 and U722 on the GRAPHZ 2 boards), 160-4464-01 (used in U331 and U731 on the GRAPHZ 1 and in U326 and U725 on the GRAPHZ 2 boards), and 160-4989-01 (used in U321 and U721 only on the GRAPHZ 2 board).

These changes **REQUIRE** the use of a boot disk with Version 42.5 or higher. Using a boot disk with Version 42.4 or lower will result in the GRAPHZ FRU test not passing the Video RAM "bit-blit" test (in Extended Self-Test). When this test does not pass, the keyboard bell sounds and the WAIT LED turns on. The user may also see screen anomalies when using the graphics mode.

W2 Issue: 18-18

**5111A/R: CRT Part Number
Clarification**

Ref: Mod #56727

S/N: 5111A/R B024058

The manual change information for the referenced MOD lists the CRT part number used in the 5110. The CRT's used in the 5111A are listed here:

154-0634-11	Standard
154-0634-12	P402 (Opt. 3) Internal Scale

Please correct your insert.

W2 Issue: 18-19

**5110/R & 5111A/R: High Voltage
Tolerance**

Ref: MOD #56727

S/N: 5110/R B140959
5111A/R B024058

With the major mod listed above, the high voltage adjustment was removed. At the same time, the voltage out of the HV circuit also changed. The insert only shows the adjustment as being removed.

For instruments with a serial number higher than those mentioned above, the high voltage should be checked for 3300 volts \pm 200 volts. Please note this in your manual.

W2 Issue: 18-18

5110/R & 5111A/R: Incorrect Value Documented for A3R274

Ref: MOD #56727

S/N: 5110/R B140959
5111A/R B024058

The manual change information for the referenced MOD indicates that A3R274 is a 2M ohm resistor in the schematic as well as the parts list. The correct value is 1M ohm resistor, P/N 315-0105-03.

Please correct your manual.

W2 Issue: 18-18

5440/5441: Vertical Oscillations with 5A21N Eliminated

Ref: MOD #64902

Vertical oscillations may occur in these main-frames in the following use mode:

A 5A21N installed in the middle compartment, in the "CURRENT PROBE ONLY" mode, with amperes/div set to .5m or less.

To correct this oscillation, lift the bottom end of A2R728 and solder it to the ground end of A2R738.

W2 Issue: 18-18

7000 Series High Efficiency Power Supplies

A Service Action Request was recently submitted requesting a listing of 7000 Series High Efficiency Power Supplies by part number, instrument usage, and exchange status. This listing should also be useful for others dealing with 7000 Series instruments.

SUBASSEMBLY # 620-0283-02

7854	ALL
7934	ALL
7104	ALL
R7903	ALL
7904A	ALL
7704A	B242132 and above

SUBASSEMBLY # 620-0230-00

7704A B010101 to B242131

SUBASSEMBLY # 620-0250-00

7834 ALL

SUBASSEMBLY # 620-0459-00

7704 ALL

SUBASSEMBLY # 620-0461-00

7904 ALL

SUBASSEMBLY # 620-0462-00

R7903 ALL

SUBASSEMBLY # 620-0464-00

7844	ALL
R7844	ALL

The assemblies that are on exchange are: 620-0283-02 and 620-0230-00.

W2 Issue: 18-19

DIAGNOSTIC PROBLEMS

Corrected A2 error condition when pin is 100 or above.

correction files:
[3,20]BUFADJ.TEK V02.02
[3,20]C140.TSK V02.02

Changed instructions in Part 2 for no extender card.

correction files:
[3,20]CLKCAL.TEK V02.05
[3,20]C080.TSK V02.05

Changed test spec for dacs 5 thru 8.

correction files:
[3,20]DACCAL.TEK V02.01
[3,20]C030.TSK V02.01

[3,10]DACCK.TEK V02.01
[3,10]F040.TSK V02.01

Corrected instructions in Part 2 for adjustment of R627.

correction files:
[3,20]DCSCAL.TEK V02.02
[3,20]C020.TSK V02.02

Modified so that Part 7 works with card on extender.

correction files:
[3,20]DSKADJ.TEK V02.02
[3,20]C160.TSK V02.02

Changed phase start/stop pulse width test specs for reliable DESKEW operation.

correction files:
[3,20]FAZCAL.TEK V02.06
[3,20]C081.TSK V02.06

Added support for 93 ohm VERSION 2 pin cards.

correction files:
[3,20]SLWADJ.TEK V02.03
[3,20]C100.TSK V02.03

Changed test tolerances for -11.9996V check.

correction files:
[3,20]FCRCAL.TEK V02.03
[3,20]C040.TSK V02.03

DIAGNOSTIC PROBLEMS (Cont.)

New Verdict program for R7612D digitizer.

correction files:

[3,10]R7612V.TEK	V02.00
[3,10]F780.TSK	V02.00
[3,10]R7612V.PPA	V02.00
[3,10]R7612V.PPL	V02.00

Modified to check all RTIB address crossover connections.

correction files:

[3,10]ACROSS.TEK	V02.01
[3,10]B070.TSK	V02.01

Corrected test tolerance in Part 3; changed source code for use in TCM.

correction files:

[3,10]CLOCK9.TEK	V02.04
[3,10]F390.TSK	V02.04

Changed test tolerances which were too tight.

correction files:

[3,10]CLOK10.TEK	V02.02
[3,10]F395.TSK	V02.02

Changed program to measure Reference Voltage through active load bridge.

correction files:

[3,10]LODCHK.TEK	V02.01
[3,10]F170.TSK	V02.01

Fixed LOOP-ON-PASS/FAIL and PIN selection.

correction files:

[3,10]MATRIX.TEK	V02.02
[3,10]F110.TSK	V02.02

Changed program to initially set Write Data and Write Mask registers for all bits on all RTIB memory partitions.

correction files:

[3,10]MEMORY.TEK	V02.02
[3,10]B020.TSK	V02.02

DIAGNOSTIC PROBLEMS (Cont.)

Corrected printouts which were reversed for PS12 and PS13.

correction files:

[3,10]POWER.TEK	V02.01
[3,10]F030.TSK	V02.01

Added 5ms wait before measuring compliance voltage (measurement failed run on 1151 power supply).

correction files:

[3,10]TIS1.TEK	V02.02
[3,10]F070.TSK	V02.02

Added measurement system tolerances which were missing; changed measurement correction factors.

correction files:

[3,10]SLWCHK.TEK	V02.04
[3,10]F520.TSK	V02.04

Added micro-code for 7S14 sampling trigger in D100.TSK.

correction files:

[3,50]VERIFY.PPA	V02.01
[3,50]VERIFY.PPL	V02.01

Changed 10V aberration test limit to +/-400mV; removed support for 93 ohm pin cards from program.

correction files:

[3,50]DRIVER.TEK	V02.09
[3,50]D100.TSK	V02.09

Corrected random trigger problems; program cleanup; changed pin lists to include all pins.

correction files:

[3,110]R7612D.TEK	V02.00
[3,110]FF02.TSK	V02.00

[3,110]R7612D.PPA	V02.01
[3,110]R7612D.PPL	V02.01

DIAGNOSTIC PROBLEMS (Cont.)

New DRIVER and MENU programs to support all OEM Verify customers.

correction files:

[3,110]DRIVER.TEK	V03.00
[3,110]DRIVER.TSK	V03.00
[3,110]MENU.TEK	V03.00
[3,110]FF00.TSK	V03.00

Modified program to measure voltages up to 30V and to test AC only if AC Option is installed.

correction files:

[3,110]FLUKE8502.TEK	V02.01
[3,110]FF06.TSK	V02.01

Changed program to specify SY: instead of DU2: for the default drive, and added file output capability.

correction files:

[3,110]HP5335A.TEK	V02.01
[3,110]FF01.TSK	V02.01
[3,110]HP8160A.TEK	V02.01
[3,110]FF04.TSK	V02.01
[3,110]HP8161A.TEK	V02.01
[3,110]FF05.TSK	V02.01
[3,110]HP8165A.TEK	V02.01
[3,110]FF03.TSK	V02.01

Added file output capability, fixed erroneous errors; changed to print out FF07 test title.

correction files:

[3,110]R7912AD.TEK	V02.08
[3,110]FF07.TSK	V02.08

Added configuration entry for the R7612 digitizer.

correction files:

[3,1]CONFIG.BIN	V02.02
[3,1]CONFIG1.TEK	V02.02
[3,1]CONFIG1.BIN	V02.02
[3,1]CONFIG2.TEK	V02.02
[3,1]CONFIG2.BIN	V02.02

SYSTEM PROBLEMS

New program to load DESKEW registers at boot time.

correction files:
[1,54]DESKEW.TSK V02.00
[1,2]STARTUP.CMD V03.03

STARTUP.CMD did not load the MS tape drive at boot time.

correction files:
[1,2]STARTUP.CMD V03.04

The wrong error messages were displayed for TEK errors 12, 21-26.

correction files:
[1,2]TEKERROR.HLP no version #

New program (R7612V.TEK, F780.TSK) added to build instruction list.

correction files:
[1,54]BLDTEK.CMD V02.12

Specifying a 0 in CONFIG.CMD for IS1 or IS2 (not present) caused a B9 error when the Verdict test is run.

correction files:
[1,54]CONFIG.CMD V02.04

New INTFAC program that will boot and execute from RSX-11.

correction files:
[1,54]INTFAC.CMD V02.00
[1,54]INTFAC.SYS V02.00

The dynamic storage for Tektest strings or pinlists declared in TEKTEST subroutines or functions is now released when the function or subroutine completes.

correction files:
[1,1]TEKLIB.OLB (STRING.MAC) V02.02
[1,1]TCMTEKLIB.OLB (STRING.MAC) V02.02
[1,54]TRAN.TSK V02.06

The Tektest accept statement reported an error condition when 0.0 was entered.

correction files:
[1,1]TEKLIB.OLB (CAC1X.C) V02.01
[1,1]TCMTEKLIB.OLB (CAC1X.C) V02.01

SYSTEM PROBLEMS (Cont.)

The binary and octal PRINT formats did not work correctly.

correction files:

[1,1]TEKLIB.OLB	(PRNTF.C)	V02.02
[1,1]TCMTEKLIB.OLB	(PRNTF.C)	V02.02

The UNSET TO MEASURE statements also reset previous DCSS setups.

correction files:

[1,1]TEKLIB.OLB	(CONNECT.MAC)	V02.03
[1,1]TCMTEKLIB.OLB	(CONNECT.MAC)	V02.03

A Tektest A2 error is generated when evaluating un-initialized strings.

correction files:

[1,1]TEKLIB.OLB	(RELOPS.MAC)	V02.03
[1,1]TCMTEKLIB.OLB	(RELOPS.MAC)	V02.03

Tektest string functions sometimes cause a register dump when assigning a value to the function.

correction files:

[1,1]TEKLIB.OLB	(SUBR.MAC)	V02.05
[1,1]TCMTEKLIB.OLB	(SUBR.MAC)	V02.05

Foreground Tektest tasks did not check for test station power. A run-time error now occurs if the test station power is off when the test station is initialized.

correction files:

[1,1]TEKLIB.OLB	(TSINIT.MAC)	V02.02
[1,1]TCMTEKLIB.OLB	(TSINIT.MAC)	V02.02

GPIB programs generated an EA error while inputting data from the GPIB instruments.

correction files:

[1,1]TEKLIB.OLB	(GPDRV.MAC)	V2.14D
	(GPDRV.MAC)	V2.03D
[1,1]TCMTEKLIB.OLB	(GPDRV.MAC)	V2.14D
	(GPDRV.MAC)	V2.03D
[1,1]TEKMAC.MLB	(ERRDEF.MAC)	V02.10
[1,2]TEKERROR.HLP	no version #	

SYSTEM PROBLEMS (Cont.)

Optional device driver for the SYMTEK handler.

correction files:

[1,1]TCM.ODL	V02.08	
[1,1]VDT.ODL	V02.07	
[1,1]HW.ODL	V02.08	
[1,1]RTRTNTBL2.MAC	V02.02	
[1,1]TEKLIB.OLB	(HNDLR2.MAC)	V02.00
	(HNDL2I.MAC)	V02.00
	(HNDLR2D.MAC)	D02.00
	(HNDL2ID.MAC)	D02.00
[1,1]TCMTEKLIB.OLB	(HNDLR2.MAC)	V02.00
	(HNDL2I.MAC)	V02.00
	(HNDLR2D.MAC)	D02.00
	(HNDL2ID.MAC)	D02.00
[1,1]TCMSRCLIB.OLB	(RTAUT1.OBJ)	V02.01
	(RTLBT1.OBJ)	V02.01
	(RTAUT2.OBJ)	V02.01
	(RTLBT2.OBJ)	V02.01

Program does not properly set up a 4207 terminal with VT200 option.

correction files:

[3,1]420X.TEK	V02.01
[3,1]420X.TSK	V02.01

The LOGIN.CMD file for the diagnostics account did not support TEK 4200 series terminals.

correction files:

[3,1]LOGIN.CMD	V02.02
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- 1) PPASM did not properly evaluate constant declarations.
- 2) The SCAN keyword generated incorrect micro-code.
- 3) The pattern processor assembler now generates up to 1024 inhibit/mask vectors.

correction files:

[1,54]PPASM1.TSK	V05.16
[1,54]PPASM2.TSK	V05.22

RELEASE NOTES FOR TEKTEST V, V03.02A

SYSTEM PROBLEMS (Cont.)

When TRAN's declare switch was used, not all undeclared variables were flagged as errors.

correction files:

[1,1]PREDEFINE.ENV	V02.02	
[1,1]S3295.ENV	V02.00	
[1,1]BACKGRND.ENV	V02.00	
[1,54]TRAN.TSK	V02.05	
[1,1]SYNTRAN.OLB	(SYNTAX1.MAC)	V02.01

TekTest function TEKSTAT caused TCM to crash. Illegal immediate mode statements were incorrectly echoed to the user's terminal.

correction files:

[1,1]TEKLIB.OLB	(GBLDAT.MAC)	V02.03
	(IOSTATUS.MAC)	V02.01
[1,1]TCMTEKLIB.OLB	(GBLDAT.MAC)	V02.03
	(IOSTATUS.MAC)	V02.01
[1,1]TCMSRCLIB.OLB	(TCMINIT.C)	V02.06
	(TCMMAIN.C)	V03.02
	(BLDPSD.C)	V02.01
[1,54]TCM.TSK	V03.02	