

OHIO SCIENTIFIC
SALES/TECHNICAL
NEWSLETTER #15
August 3, 1979

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MEMO TO: ALL DEALERS

DATE: JULY 27, 1979

FROM: JOHN YELLENIC, OHIO SCIENTIFIC
RETURN REPAIR TECHNICIAN

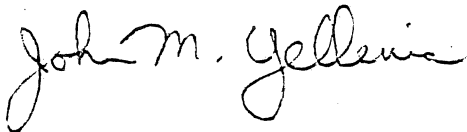
SUBJECT: ADDITION OF NON-OSI MANUFACTURED BOARDS

We have recently received computers for repair containing non-OSI manufactured boards.

The introduction of non-OSI manufactured circuit boards to an Ohio Scientific computer will void all warranties previously granted for that computer including all other circuit boards, backplane, and power supplies.

Also, any computer returned for repair containing non-OSI manufactured circuit boards will have those boards removed before repair begins. They will be returned, but not within the computer. Because these boards were not manufactured at O.S.I., we do not know what effects they may have on the system and cannot be tested.

John Yellenic



SALES NOTES:

THE SALES DEPARTMENT HAS RECENTLY UNDERGONE A FEW CHANGES WE WOULD LIKE TO MAKE YOU AWARE OF. MISS LETTY WEBER HAS BEEN PROMOTED FROM SALES COORDINATOR TO PERSONNEL COORDINATOR. AS OF AUGUST 10th, LETTY WILL NO LONGER BE WITH THE SALES DEPARTMENT.

SALES HAS HIRED TWO NEW SALES COORDINATORS. MR. CHRIS BELEC IS REPLACING LETTY AND WILL BE HANDLING HER ACCOUNTS. MR. AL GASPER WILL BE A SALES COORDINATOR AS WELL.

MISS SUE KOBETZ IS NO LONGER WITH US. AL GASPER WILL BE HANDLING SOME OF HER ACCOUNTS. THE NEW COORDINATORS WILL CONTACT YOU PERSONALLY IF ASSIGNED TO YOUR ACCOUNT.

ANOTHER ADDITION TO THE SALES OFFICE IS MRS. NANCY ABELT. AMONG SOME OF HER OTHER DUTIES WILL BE FILLING IN FOR THE RECEPTIONISTS. THOSE OF YOU WHO HAVE BEEN WITH US FOR A WHILE WILL PROBABLY RECOGNIZE HER FRIENDLY VOICE ON THE PHONE.

PLEASE BEAR WITH US DURING THIS PERIOD OF GROWTH.

OS-65U POLLED KEYBOARD SYSTEMS ONLY

THIS FIX PERMITS THE "PRINTER 5 STALLED" ERROR MESSAGE TO BE OUTPUT ON A VIDEO SYSTEM. IF THE "PRINTER 5 STALLED" ERROR MESSAGE OCCURS, HITTING ANY KEY WILL PERMIT THE COMPUTER TO CONTINUE PRINTING.

OK
RUN "CHANGE", "PASS

DISK CHANGE UTILITY

MODE: HEX(H),DEC(D) ? H
UNIT ? A
ADDRESS OFFSET ? C00
ADDRESS ? 3E37
00003E37 E2 ? C7
00003E38 : 3A ? 3B
00003E39 E8 ?
ADDRESS ? 3E3D
00003E3D D 64 ? 5E
00003E3E : 3A ? 3C
00003E3F AE ? X

OK
CLOSE

OK

OS-65U 6/79 RELEASE CREATE FIX

THIS FIX CORRECTS THE PROBLEM OF CREATE "HANGING IN A LOOP" WHEN DEFILE IS NOT FOUND ON THE CURRENTLY SELECTED DEVICE.

CHANGE LINE 2470 IN CREATE FROM:

2470 ON EV GOTO 2590, 2440

TO:

2470 ON EV GOTO 2590, 2480

CORRECTION TO TECH LETTER #11, PAGE 1

THE "TO USE" COLUMN FOR THE 65-H CD-74 HARD DISC BOOTSTRAP IS INCORRECTLY LABELED AS PIN 3 TO PIN 9. THE COLUMN SHOULD READ PIN 1 TO PIN 9.

OS-65U LEVEL I

THE BASIC LINES BELOW MAY BE ADDED TO BEXEC* TO PERMIT ANY PROGRAM TO OBTAIN THE DATE. THIS THEN REQUIRES THE OPERATOR TO ENTER THE DATE ONCE AT BOOT UP.

```
220 REM
221 REM GET DATE
222 PRINT: INPUT "M, D, Y ";DM$,DD$,DY$: PRINT
223 DM=VAL(DM$): DD=VAL(DD$): DY=VAL(DY$)
224 IF DM < 1 OR DM > 12 OR DM <> INT(DM) GOTO 222
225 IF DD < 1 OR DD > 31 OR DD <> INT(DD) GOTO 222
226 IF DY < 1 OR DY <> INT(DY) GOTO 222
227 POKE 24569,DD: POKE 24570,DM: POKE 24571,DY
228 REM
```

THE FOLLOWING BASIC PROGRAM LINES MAY BE USED TO PEEK THE DATE AFTER IT HAS BEEN POKED INTO PLACE USING OS-65U LEVEL I.

```
A=24569:DT$=RIGHT$(STR$(PEEK(A+1)+100),2)+"/"
REM
DT$=DT$+RIGHT$(STR$(PEEK(A)+100),2)+"/"
REM
DT$=DT$+RIGHT$(STR$(PEEK(A+2)+100),2)
```

TESTING PARTITIONED MEMORY USING THE SERIAL MEMORY TEST PROGRAM

THE SERIAL MEMORY TEST PROGRAM NOW AVAILABLE FOR \$10.00 MAY BE USED TO TEST MEMORY IN A LEVEL III SYSTEM. TO TEST A PARTITION'S MEMORY FOLLOW THE STEPS BELOW. NOTE THAT THE USER 0 CONSOLE IS ALWAYS THE COMMAND CONSOLE.

- 1) INSERT MEMORY TEST DISKETTE INTO DRIVE A.
- 2) PRESS THE RESET BUTTON.
- 3) TYPE A "M" AT THE KEYBOARD.
- 4) NOW ENTER THE SEQUENCE BELOW. IF YOU MAKE A MISTAKE, ENTER "R" AND START FROM THE LAST "L" COMMAND.

R	
L F701 04R	SELECT DATA REGISTER "A"
L F700 FFR	SET DATA TO ALL HIGH
L F701 00R	SELECT DATA DIRECTION REG. "A"
L F700 FFR	MAKE ALL BITS OUTPUTS
L F701 04R	SELECT DATA REGISTER "A"
L F700 FXR	SELECT PARTITION

WHERE X EQUALS THE PARTITION NUMBER OF THE PARTITION TO BE TESTED E.G. USER 0 IS REFERRED TO AS PARTITION "F", USER 1, AS PARTITION "E", ETC.

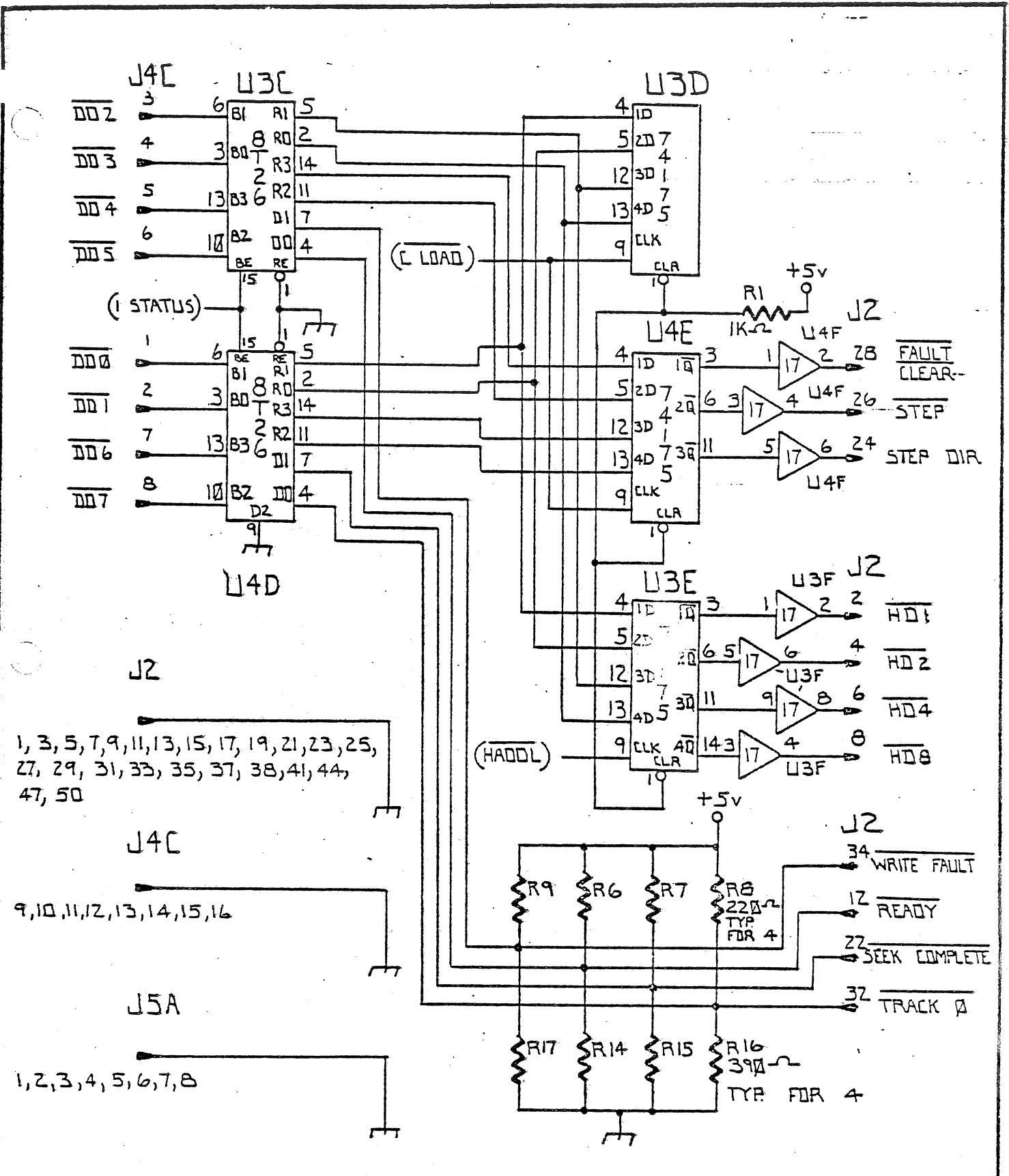
- 5) MANUALLY LOAD TRACK ZERO OF THE MEMORY TEST PROGRAM BY ENTERING:

```
L 012E FFF3R
G
```

- 6) NOW START THE MEMORY TEST PROGRAM BY ENTERING:

```
L 012E 2200R
G
```

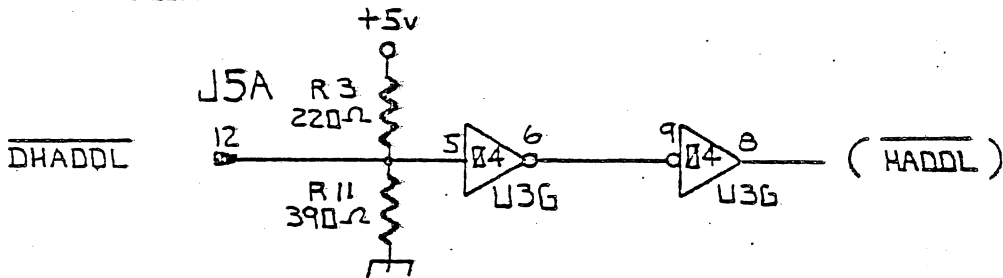
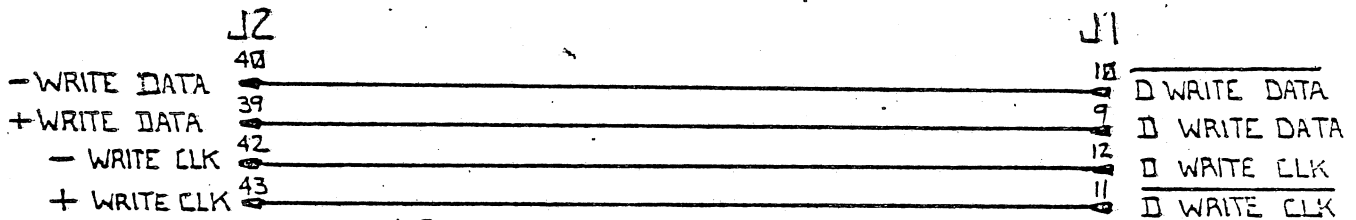
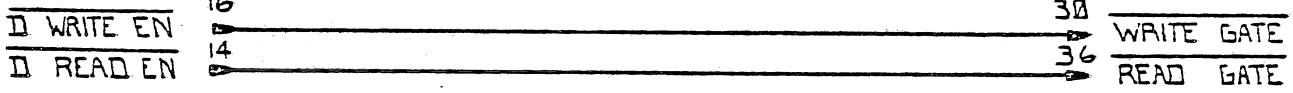
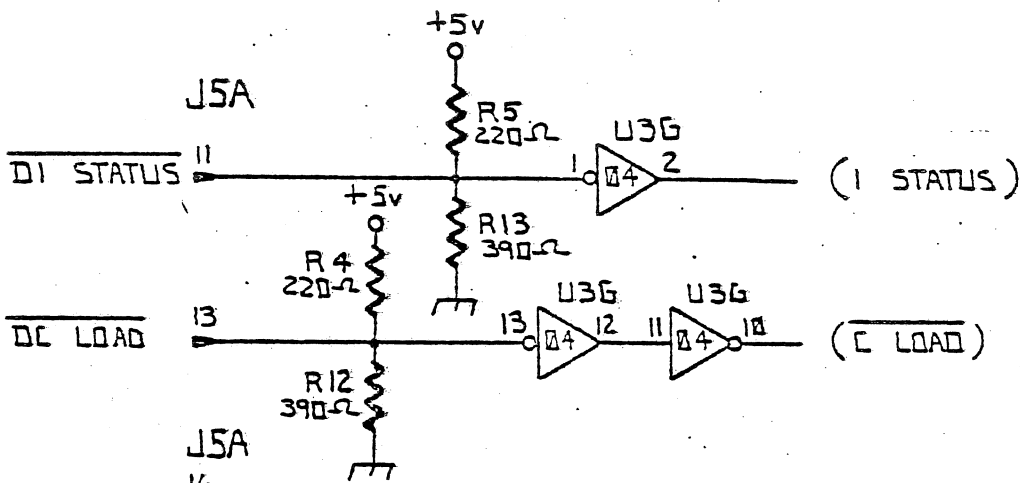
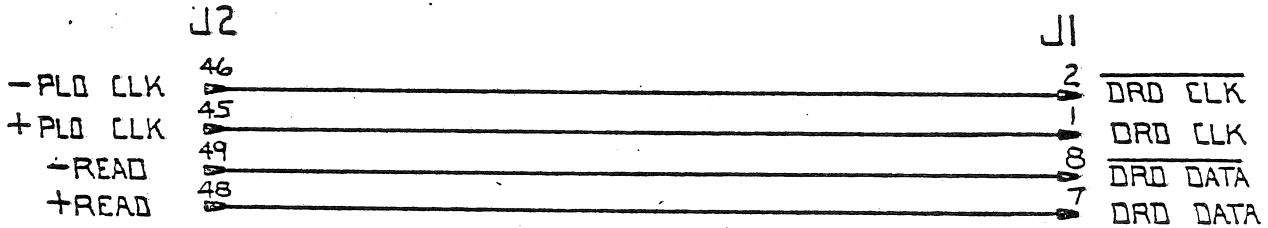
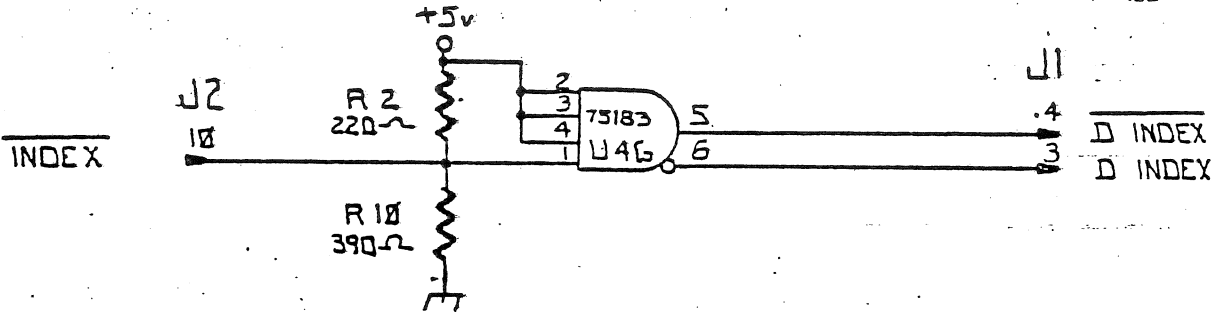
- 7) THE MEMORY TEST PROGRAM WILL NOW PROCEED TO TEST THE MEMORY IN THE SPECIFIED PARTITION AS IF IT WERE TESTING MEMORY IN A STANDARD SYSTEM.



OHIO SCIENTIFIC

product name/number
 MODEL S94 SHUGART HARD
 DISK INTERFACE

date 31 JAN 1979	revision	page	status	sheet 1 of 2
DRAWN ~ J.L.K.				



OHIO SCIENTIFIC

product name/number

MODEL 594 SHUGART HARD DISK INTERFACE

date 31 JAN 1979

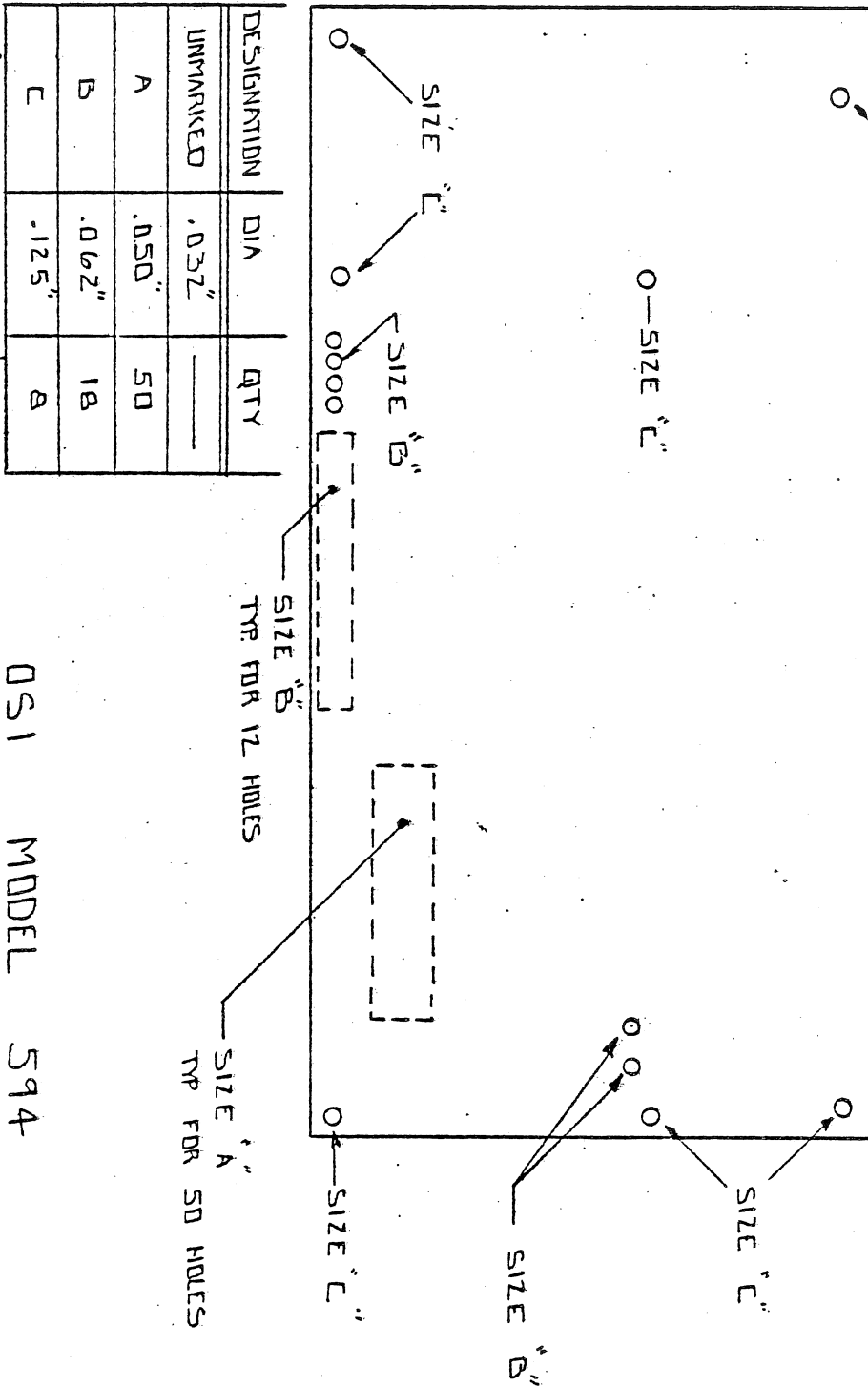
revision

page

status

sheet 2 of 2

DRAWN ~ J.L.K.

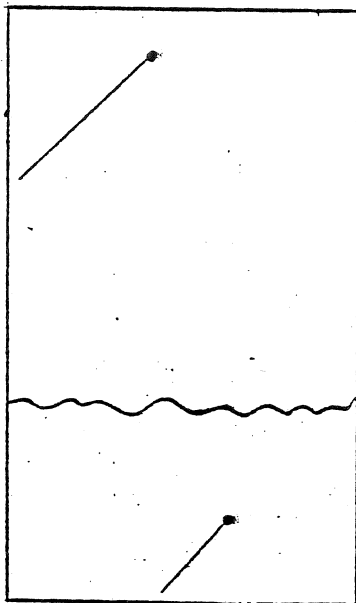


OS1 MODEL 594
 7 MAR 1979

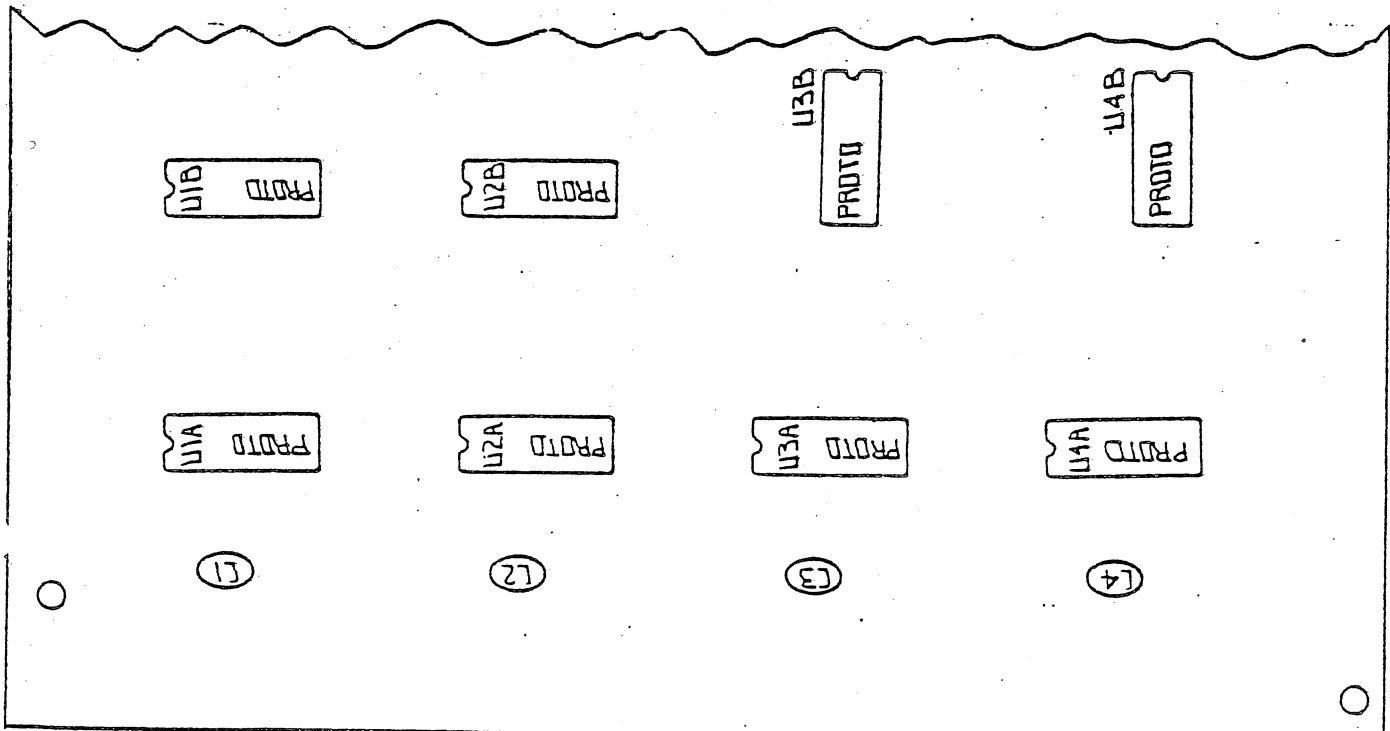
SECTION ~A

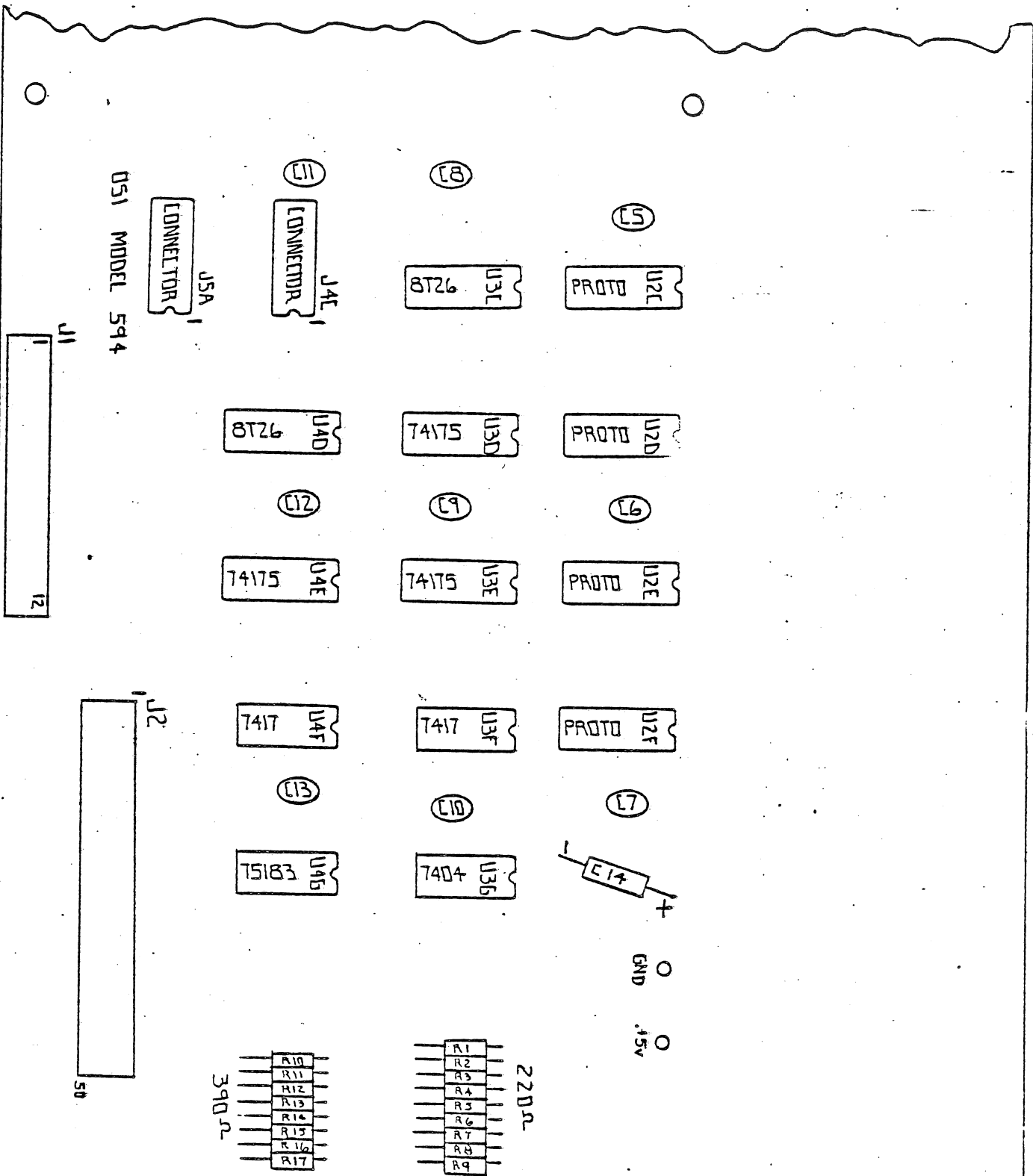
SEE SECTION ~B

SEE SECTION ~A



DSI MODEL 594





OS1 MODEL 594

CONNECTOR

CONNECTOR

U3C 8T26

U2C PROTO

U4D 8T26

U3D 74175

U2D PROTO

U4E 74175

U3E 74175

U2E PROTO

U4F 7417

U3F 7417

U2F PROTO

U4G 75183

U3G 7404

U2G E17

GND

.15V

220Ω

390Ω

50

12

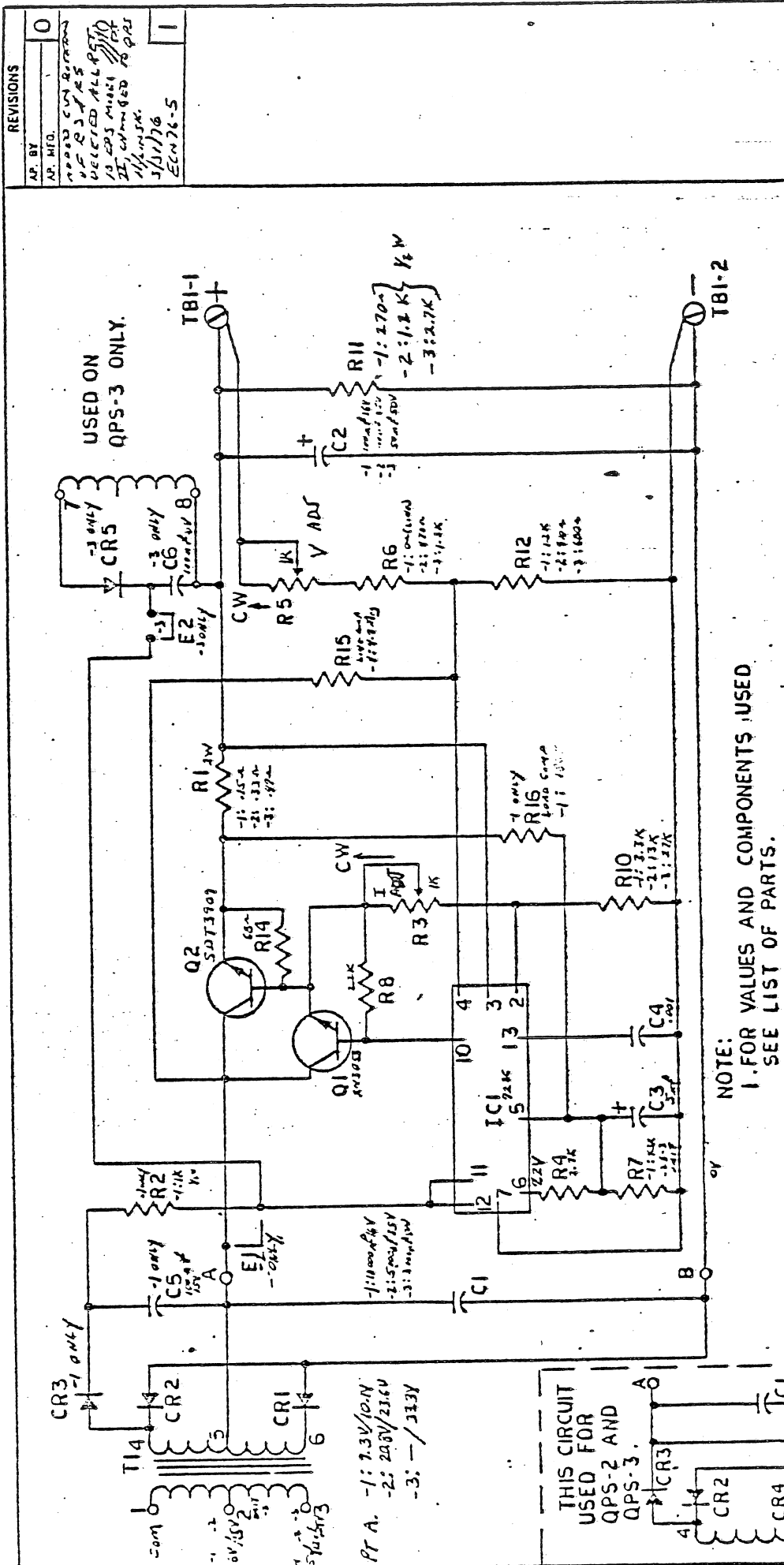
QPS SERIES

TROUBLESHOOTING GUIDE

#15, 11

Refer to voltage test points shown on schematic for ease of failure determination

SYMPTOM	POSSIBLE PROBLEMS
1 HIGH INPUT CURRENT, BLOWS FUSES	a.) CR1, CR2, CR3, CR4 or CR5 SHORTED b.) C1, C5 or C6 SHORTED c.) HIGH INPUT AC VOLTAGE
2 LOW OUTPUT VOLTAGE, WITH EXCESSIVE RIPPLE	a.) OUTPUT OVERLOADED b.) IC1 FAULTY c.) CR1, CR2, CR3, CR4 or CR5 OPEN d.) C1, C5 or C6 OPEN e.) Q1 or Q2 OPEN f.) R3 or R5 IMPROPERLY ADJUSTED g.) IMPROPER PRIMARY TRANSFORMER CONNECTION
3 HIGH OUTPUT VOLTAGE & RIPPLE, POOR REGULATION	a.) R5 IMPROPERLY ADJUSTED b.) IC1 FAULTY c.) Q1 or Q2 SHORTED
4 UNIT OVERHEATING	a.) OUTPUT OVERLOAD b.) INADEQUATE VENTILATION c.) HIGH INPUT AC VOLTAGE d.) IMPROPER TRANSFORMER PRIMARY CONNECTION e.) OUTPUT VOLTAGE ADJUSTED LOW
5 UNIT WILL NOT COME ON.	a.) CONSTANT CURRENT LOAD (TOO HIGH FOR FOLDBACK CIRCUIT)
6. UNABLE TO ADJUST OUTPUT VOLTAGE	a.) R5 FAULTY



REVISIONS

AP. BY	0
AP. HFD.	
REVISIONS 1- REDESIGN QPS-3 2- DELIVERED ALL PARTS 3- QPS-3 MUST BE 4- CHANGED TO QPS-3 5/1/76 ECN 76-5	

NOTE:
1. FOR VALUES AND COMPONENTS USED
SEE LIST OF PARTS.

SCHEMATIC:
QPS-1, QPS-2, QPS-3

FIRST MADE FOR
USED ON

SECUN BY
CHECKED BY

TRACED BY
CHECKED BY

DELPHI Inc.

B14799

VARIATIONS ON FINISHED DIMENSIONS UNLESS OTHERWISE MARKED	
BASIC DIMENSIONS	DECIMAL DIMENSIONS
UP TO 8	± .005
8 TO 24	± .010
24 TO 48	± .015
48 TO 96	± .020
96 TO 192	± .030
192 TO 384	± .040
384 TO 768	± .050
768 TO 1536	± .060
1536 TO 3072	± .070
3072 TO 6144	± .080
6144 TO 12288	± .090
12288 TO 24576	± .100
24576 TO 49152	± .110
49152 TO 98304	± .120
98304 TO 196608	± .130
196608 TO 393216	± .140
393216 TO 786432	± .150
786432 TO 1572864	± .160
1572864 TO 3145728	± .170
3145728 TO 6291456	± .180
6291456 TO 12582912	± .190
12582912 TO 25165824	± .200
25165824 TO 50331648	± .210
50331648 TO 100663296	± .220
100663296 TO 201326592	± .230
201326592 TO 402653184	± .240
402653184 TO 805306368	± .250
805306368 TO 1610612736	± .260
1610612736 TO 3221225472	± .270
3221225472 TO 6442450944	± .280
6442450944 TO 12884901888	± .290
12884901888 TO 25769803776	± .300
25769803776 TO 51539607552	± .310
51539607552 TO 103079215104	± .320
103079215104 TO 206158430208	± .330
206158430208 TO 412316860416	± .340
412316860416 TO 824633720832	± .350
824633720832 TO 1649267441664	± .360
1649267441664 TO 3298534883328	± .370
3298534883328 TO 6597069766656	± .380
6597069766656 TO 13194139533312	± .390
13194139533312 TO 26388279066624	± .400
26388279066624 TO 52776558133248	± .410
52776558133248 TO 105553116266496	± .420
105553116266496 TO 211106232532992	± .430
211106232532992 TO 422212465065984	± .440
422212465065984 TO 844424930131968	± .450
844424930131968 TO 1688849860263936	± .460
1688849860263936 TO 3377699720527872	± .470
3377699720527872 TO 6755399441055744	± .480
6755399441055744 TO 13510798882111488	± .490
13510798882111488 TO 27021597764222976	± .500
27021597764222976 TO 54043195528445952	± .510
54043195528445952 TO 10808639105689184	± .520
10808639105689184 TO 21617278211378368	± .530
21617278211378368 TO 43234556422756736	± .540
43234556422756736 TO 86469112845513472	± .550
86469112845513472 TO 172938225691026944	± .560
172938225691026944 TO 345876451382053888	± .570
345876451382053888 TO 691752902764107776	± .580
691752902764107776 TO 1383505805528215552	± .590
1383505805528215552 TO 2767011611056431104	± .600
2767011611056431104 TO 5534023222112862208	± .610
5534023222112862208 TO 11068046442225724416	± .620
11068046442225724416 TO 22136092884451448832	± .630
22136092884451448832 TO 44272185768902897664	± .640
44272185768902897664 TO 88544371537805795328	± .650
88544371537805795328 TO 177088743075611590656	± .660
177088743075611590656 TO 354177486151223181312	± .670
354177486151223181312 TO 708354972302446362624	± .680
708354972302446362624 TO 1416709944604892735248	± .690
1416709944604892735248 TO 2833419889209785470496	± .700
2833419889209785470496 TO 5666839778419570940992	± .710
5666839778419570940992 TO 11333679556839141881984	± .720
11333679556839141881984 TO 22667359113678283763968	± .730
22667359113678283763968 TO 45334718227356567527936	± .740
45334718227356567527936 TO 90669436454713135055872	± .750
90669436454713135055872 TO 181338872909426270111744	± .760
181338872909426270111744 TO 362677745818852540223488	± .770
362677745818852540223488 TO 725355491637705080446976	± .780
725355491637705080446976 TO 1450710923275410160893952	± .790
1450710923275410160893952 TO 2901421846550820321787904	± .800
2901421846550820321787904 TO 5802843693101640643575808	± .810
5802843693101640643575808 TO 11605687382203281287151616	± .820
11605687382203281287151616 TO 2321137476440656257430304	± .830
2321137476440656257430304 TO 4642274952881312514860608	± .840
4642274952881312514860608 TO 9284549905762625029721216	± .850
9284549905762625029721216 TO 1856909981152525005844432	± .860
1856909981152525005844432 TO 3713819962305050011688864	± .870
3713819962305050011688864 TO 7427639924610100023377728	± .880
7427639924610100023377728 TO 14855279849220200047555456	± .890
14855279849220200047555456 TO 29710559698440400095110912	± .900
29710559698440400095110912 TO 59421119396880800190221824	± .910
59421119396880800190221824 TO 11884223879376160038043744	± .920
11884223879376160038043744 TO 23768447758752320076087488	± .930
23768447758752320076087488 TO 47536895517504640152174976	± .940
47536895517504640152174976 TO 95073791035009280304349504	± .950
95073791035009280304349504 TO 190147582070018560608699008	± .960
190147582070018560608699008 TO 3802951641400371212173398016	± .970
3802951641400371212173398016 TO 7605903282800742424346796032	± .980
7605903282800742424346796032 TO 15211806565601484848693920064	± .990
15211806565601484848693920064 TO 30423613131202969697387840128	± 1.000

SCALE:

B14799

THIS CIRCUIT USED FOR QPS-2 AND QPS-3.

ALL DIMENSIONS ARE IN THICKNESS AND INCLUDE THICKNESS OF PLATING. DO NOT SCALE DRAWING.

ALL EXTERNAL THREADS TO BE CLASS 3B (LARGER SIZE) UNLESS OTHERWISE SPECIFIED.

ALL INTERNAL THREADS TO BE CLASS 2B UNLESS OTHERWISE SPECIFIED.

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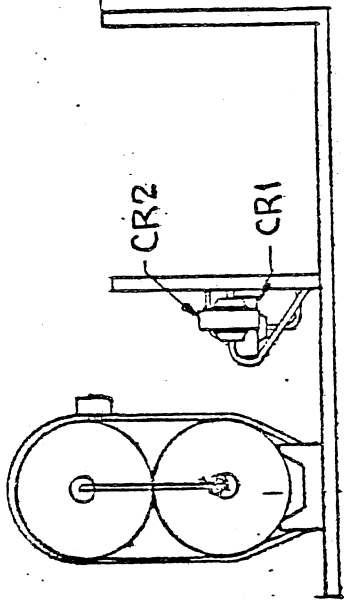
REVISIC

AP. BY	0
AP. MFG.	1
ECN 78-91	
BECK	
17 OCT 78	

MODEL 9246X FOR
OHIO SCIENTIFIC INSTRU.
P.O. BOX 36
HIRAM, OHIO 44234

MODEL 9246X IS A QPS-1 MODIFIED TO DELIVER 4.5 A @ 5V. BUILD PER P51081-501 EXCEPT

1. CI CHANGE QTY FROM 1 TO 2. DELETE ITEM 5-40 & ADD CAP STRAP CABLE TIE.
2. # SST3S-M PANDUIT CORP. (QTY 2) & MOUNT AROUND BOTH CAPS & MTG BASE AS SHOWN.
3. CR1 & CR2 DELETE & USE CR1 & CR2 MOTOROLA MRT50 QTY 2.
4. RI DELETE & USE RI 0.1 Ω 5W IRC-PW5 QTY 1
5. RIG DELETE & USE RIG 100K 5% 1/4W QTY 1
6. TEST AS A QPS EXCEPT SPECS AT NOM OUTPUT ONLY & LOAD REG .25%
7. USE GENEROUS AMOUNT OF THERMAL COMPOUND BETWEEN Q101 (T03) & H.S. BRKT. ALSO BETWEEN H.S. BRKT. & CHASSIS.



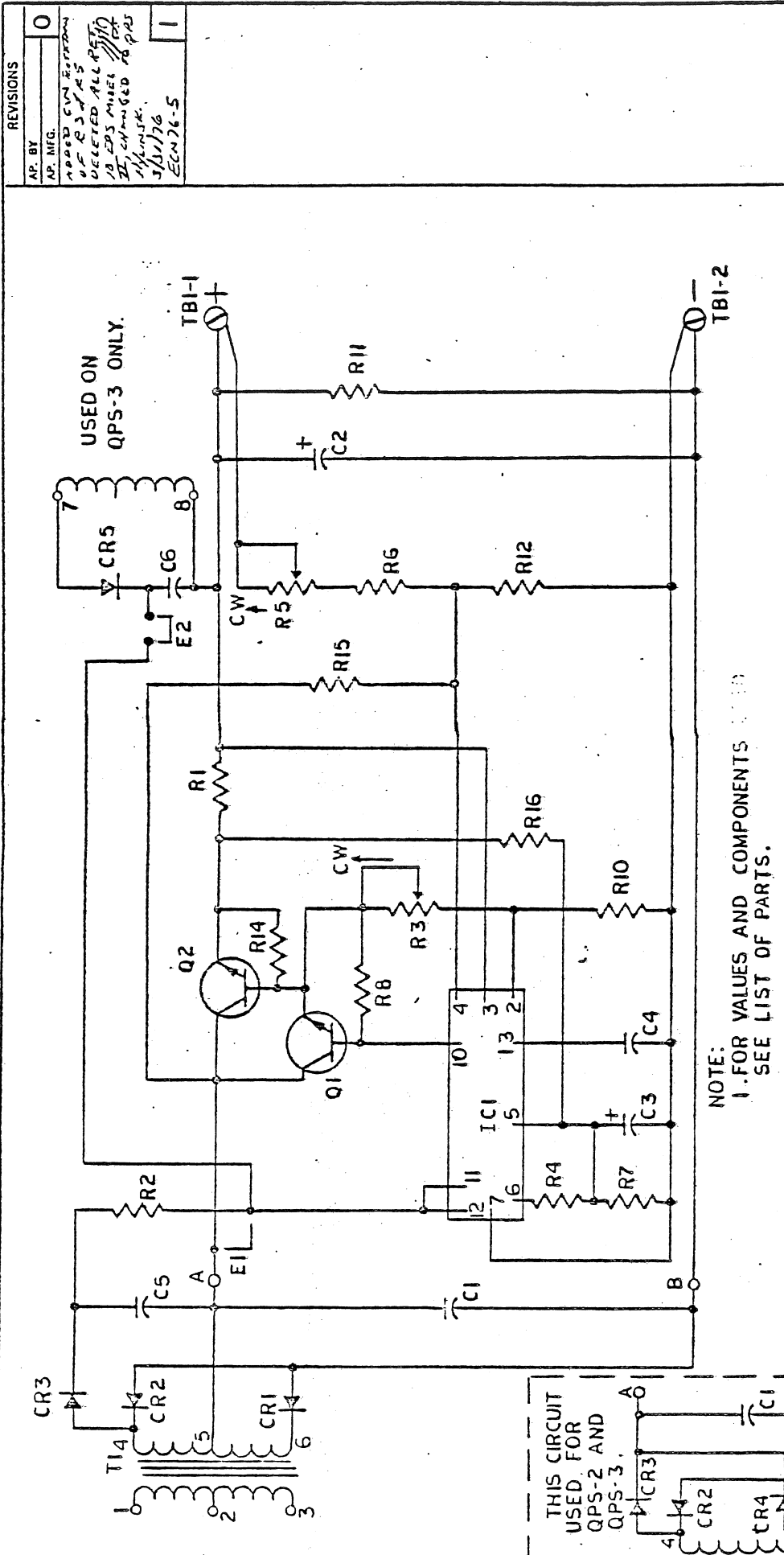
DIMENSIONS ARE IN INCHES AND INCLUDE THICKNESS OF PLATING, DO NOT SCALE DRAWING.
ALL EXTERNAL THREADS TO BE CLASS 2A (AMER STD); ALL INTERNAL THREADS TO BE CLASS 2B (AMER STD). UNLESS OTHERWISE SPECIFIED.

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	BASIC DIMENSIONS	FRACTIONAL DIMENSIONS					DECIMAL DIMENSIONS
	UP TO 6	$\pm 1/64$					$\pm .005$
	ABOVE 6 TO 24	$\pm 1/32$					$\pm .010$
	ABOVE 24	$\pm 1/16$	$\pm .015$				
	ANGULAR DIMENSIONS						
	SEE PURCH. SPEC. FOR STOCK TOLERANCES						

MODEL 9246X



SCALE:



REVISIONS

AP. BY	0
AP. MFG.	
ADDED CVM EXTENSION OF R2 & R5 DELETED ALL PARTS TO QPS WIRE FOR QPS II, CHANGED TO QPS MOUNTS. 3/31/76 ECN76-5	

USED ON QPS-3 ONLY.

SCHEMATIC QPS-1, QPS-2, QPS-3

FIRST MADE FOR QPS-3

USED ON QPS-1, QPS-2, QPS-3

BEGUN BY *[Signature]* 3/16/76

TRACED BY *[Signature]* 3-9-76

CHECKED BY *[Signature]*

DELTAION Inc.

B14799

VARIATIONS ON FINISHED DIMENSIONS UNLESS OTHERWISE MARKED	
BASIC DIMENSIONS	DECIMAL DIMENSIONS
UP TO 6	± .005
ABOVE 6 TO 24	± .010
ABOVE 24	± .015
ANGULAR DIMENSIONS ± 1/2°	
SEE PUNCH SPEC. FOR STOCK TOLERANCES	

NOTE: 1. FOR VALUES AND COMPONENTS SEE LIST OF PARTS.

SCALE: *[Signature]*

B14799

THIS CIRCUIT USED FOR QPS-2 AND QPS-3. DIMENSIONS ARE IN INCHES AND INCLUDE THICKNESS OF PLATING. DO NOT SCALE DRAWING. ALL INTERNAL THREADS TO BE CLASS 2B (AMER STD), UNLESS OTHERWISE SPECIFIED. ALL EXTERNAL THREADS TO BE CLASS 2A (AMER STD). SCALE: 1/8"

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DELTAION INC., PHILA.

P 51081

SHEET 0 CONT. ON 1

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COMP BY	APP BY	FIRST MADE FOR	501	502	503	504	505	506	507	508	509	510	511	512
TEP	MJH 3-1-76	QPS-1												
REP	MJH 3-1-76	QPS-2												
TEP	MJH 3-1-76	QPS-3												

PARTS LIST FOR

QPS SERIES MODEL II

REVISIONS

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ECN 76-5
HYLINSKI
3/16/76

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