

**T & F Documents
for
.150" - Tape Cassette
Unit**



PRODUCT SPECIFICATION

Cassette Tapes

The use of tape cassettes as a reliable data storage medium requires strict adherence to proper operator handling procedures, the control of operation environment, the control of cassette tapes in a storage library, and the control of transportation and storage environment for cassette tapes. Each procedure and control is equally important and interdependent on each other.

Operator Handling Procedures

The tape cassette should be carefully removed from the storage container and placed opening edge down, "A" side toward operator, in the cassette drive.

Before removing a cassette from the drive, always let the unit rewind the tape to clear leader. Make sure the clear leader is in full view before replacing the cassette tape in the storage container. The tape should not be touched or handled in any way.

Do not open the cassette drive front door when tape is in motion or tape damage may occur.

Operation Environment

It is recommended that the cassette drives be operated under the following environmental conditions.

Temperature	50 to 90° F
RH	20 to 80% (no condensation)

For additional information refer to Engineering Specifications 2046 2875, 2046 3725, and Environmental Standard B2-05. The immediate operation environment must be free of liquid or particulate contaminants such as coffee, soft drinks, cigarette or cigar ashes, paper, dust, etc.

The cassette tapes must not be stored or handled near strong magnetic fields.

Tape Library and Storage Environment.

It is recommended that cassette tapes be stored under the following environmental conditions.

Temperature	40 - 122° F
RH	20 to 80% (noncondensing)

During storage the reels shall be secured to prevent any tendency to unwind. For storage a rigid container free from dust and moisture should be used. Containers must be stored in an area free from strong magnetic fields.

Each cassette tape should be clearly identified when put into use. Identification should consist of a date code and identification number. Master file tapes should be clearly marked for ease of identification.

A performance history should be maintained for each cassette tape noting date entering use, error history, certification and tape cleaning history, and maintenance intervals required.

Periodic visual inspection should be performed on each cassette noting nonuniform wound reels, contamination buildup on any of the open end surfaces and contamination on the external cassette surfaces that would prevent proper cassette load/unload.

Tape damage of any type that causes permanent deformation or distortion of the tape will result in unpredictable operation and the cassette tape should be discarded.

The useful life of the cassette tape should be determined for each application. In general cassette tape life is reduced more by operator handling than by cassette drive use. End of tape life can be determined by the performance history of the cassette tape. Analysis of time in service, the number of temporary errors, and visual inspection should provide guidelines in determining end of cassette tape life.

Transportation and Storage Environment

Refer to Engineering Specifications 2046 2875, 2046 3725 and B2-05.

OPERATIONAL

Recommended Use

The cassette drive subsystem is designed for horizontal or vertical mounting. Cassette tape load/unload access is gained by pressing the load/unload button at the top of the cassette drive face. The cassette tape should be gently inserted open edge down, "A" side facing the operator and the carriage closed. Tape drive motion and amount of tape on the supply reel is indicated through the front view window. Optional indicators are available, one for file protect indication and the other is externally controlled through the interface. Cassette unload should only be attempted with the drive stopped and the cassette tape in clear leader position. After use the cassette carriage should be closed to prevent accumulation of dirt and dust in the cassette drive mechanism.

Do not actuate rewind by opening and closing the carriage assembly door. Rewind mode must be actuated by the controller only. To avoid possible tape damage do not open the carriage assembly door unless tape is positioned at clear leader.

ELECTRICAL

I/O Signals and Levels

Signal levels are measured at the receiving end of the line under termination conditions specified in Section 6.1.5.

Logical True

A signal level is logical true (logical 1) if it is in the range + 2.5 to + 5.5 volts. No signal shall be more positive than 5.5 volts.

Logical False

A signal level is logical false (logical 0) if it is in the range 0 to 0.5 volts. No "false" signal level shall be more positive than 0.5 volts.

Switching Time

Switching time is the rise or fall time of a signal, whichever is greater, as seen at the receiving end of the line under the termination conditions of Section 6.1.5.

Switching time shall not exceed .250 microsecond between the 10% and 90% points.

Output Signal Characteristics

The output consists of DTL 944 open collector driver that has sink current capability of 40 ma.

Input Signal Termination

The input line termination consists of $237 \pm 5\%$ ohms to + 5 V and $348 \pm 5\%$ ohms to ground.

Clear Leader - BOT/EOT

A clear leader signal will be generated any time the clear leader is positioned in front of each of the photo sensors located in each tape guide.

The BOT/EOT holes are sensed by the photo sensor located between the tape supply reel and the tape head (i.e. the left sensor).

Interface Pin Assignment

<u>Pin</u>	<u>Signal</u>	<u>Description</u>
K	$\overline{\text{TW}}$	Tape Write Level
V	$\overline{\text{TWRL}}$	Tape Write Ready Level - File Protect
M	$\overline{\text{FDL}}$	Forward Drive Level
W	$\overline{\text{TREL}}$	Tape Ready Level
H	$\overline{\text{TWCP}}$	Tape Write Clock Pulse
U	$\overline{\text{TPRL}}$	Tape Position Ready Level
T	$\overline{\text{CLPL}}$	Clear Leader Position Level
F	$\overline{\text{TWIL}}$	Tape Write Information Level
S	$\overline{\text{TRIP}}$	Tape Read Information Pulse
N	$\overline{\text{BDL}}$	Backward Drive Level
R	$\overline{\text{TRCL}}$	Tape Read Clock Level
C	-12V DC	
E	$\overline{\text{TRWP}}$	Tape Rewind Pulse
P	$\overline{\text{CSL}}$	Cassette Select Level
B	+ 12V DC	
L	$\overline{\text{HSL}}$	High Speed Level
J	$\overline{\text{RCL}}$	Read Clipping Level
A	+ 5V DC	
X	$\overline{\text{RL}}$	Indicator Control (option)

NOTE: All pin numbers 1 thru 19 are ground pins. Pins H, F, S, and R are information transfer lines and are twisted pair. Twisted pair grounds should be grounded at the numbered pin opposite the lettered pin on this connector. The maximum cable length is 10 feet. The cable length may be extended to 15 feet if twisted pair wires are used on all signal lines. See Product Index listed in Par. 2.0.

Interface Connector

The cassette uses Part No. S2041 2516 connector (ANP 583617-1 ref only).

Input Lines to Recorder

FDL - Forward Drive Level

This line, when held "false", will cause the tape to be driven in the forward direction.

BDL - Backward Drive Level

When this line is "false" tape will be driven in the backward direction.

TWL - Tape Write Level

This line, when "False", holds the drive in write status and will permit data to be written on the tape. If this line is held "False" without having "Tape Write Clock" pulses, an erase function is performed. TWL must be "False" when the "Forward Drive Level" is turned on and must be maintained "False" for 30 ms (until tape motion stops). Where possible the tape write level should be held in the "False" state between write operations.

Continued.

TRWP

The negative-going (leading) edge of this pulse (0.5-5 μ s) will initiate a rewind cycle in the tape drive. The rewind cycle will terminate automatically when tape is positioned at the beginning of tape - clear leader.

RCL - Read Clipping Level

When "false," this line selects the high clipping level and should be used when write verification is performed. This line should be held in a "true" state for normal reading. The clipping level should also be changed on alternate read retries after an initial read failure. This will provide the best probability for recover of recorded data.

TWIL - Tape Write Information Level

When "false" during a TWCP pulse, this line will cause a 1-bit (flux change) to be written in the data track. A "true" level (or line open) will result in a 0-bit (no flux change) at TWCP time. The TWIL line must set

Continued.

$\overline{\text{TWIL}}$ (Continued)

to the proper level one microsecond before the leading (negative going edge) of the clock pulse and must remain at that level for one microsecond after the trailing edge of the clock pulse.

$\overline{\text{TWCP}}$ - Tape Write Clock Pulse

The false level of the tape write clock pulse (0.5-5 μs) indicates when the write information line $\overline{\text{TWIL}}$ is being sensed and strobes the resulting data bit into the write amplifier. The clock and, if present, the data signal changes are recorded on the tape at the positive-going (trailing edge) of the clock pulse. In dual gap machines the writing of the flux changes are delayed by approximately 50 μsec . A clock pulse must be transmitted with each information bit.

$\overline{\text{HSL}}$

When "false," this line causes the tape to be driven at approximately 25 ips (635 cmps) in the direction determined by $\overline{\text{FDL}}$ or $\overline{\text{BDL}}$. The $\overline{\text{HSL}}$ command may be given any time before or after a $\overline{\text{FOL}}$ or $\overline{\text{BOL}}$ is given.

Continued.

CSL - Cassette Select Level

When "false" enable all input and output lines, except for CLPL and TREL which are enabled at all times. In multi-unit configurations a separate CSL line is provided to each unit and a separate line is provided from each unit for the CLPL and TREL signals. The CSL line is grounded for single unit configurations.

RL

Optional indicator control line.

Output Lines from Recorder/Reader

TREL - Tape Ready Level

When "false," this line indicates that a cassette is properly inserted in the recorder. The recorder is ready to accept a tape command via the interface.

TWRL - Tape Write Ready Level

When "false," this line indicates that a cassette is properly inserted in the recorder and has a write enable tab installed to allow writing on tape.

TPRL - Tape Position Ready Level

When "false," this line indicates that the tape is positioned properly and that the recorder can be operated in the write or read mode. This level

Continued.

TPRL (Continued)

will be set "false" when the tape has moved forward so that the BOT hole passes the BOT/EOT photo detector. It remains "false" until the EOT hole passes the BOT/EOT photo detector. The record being recorded at the time this level goes "true" at EOT and any additional required "end of file" record(s) must be completed within the remaining usable tape. The tape is usable to within 2.0 inches of the clear leader (trailer). In dual gap units this line is not controlled by the cassette select level and cannot be wire-ored with other units.

CLPL - Clear Leader
Position Level

When "false," this line indicates that the tape is positioned at clear leader at the physical beginning or end of tape. Tape can be driven only in the forward direction when in a clear leader position. Should the tape be at clear leader at the end of the tape, operator intervention will be required to rewind the tape passed the clear

Continued.

TLPL (Continued)

leader. The cassette can then be re-inserted into the carriage and the tape will then automatically rewind to BOT clear leader. In dual gap units this line is not controlled by the cassette select level and cannot be wire-ored with other units.

TRIP - Tape Read Information Pulse

When "false," this line indicates that a "one" is being read for the cell period defined by TRCL. More than one pulse during any one cell period should also be interpreted as a single "one" for that particular cell. No pulse during cell time should be interpreted as a "zero." The minimum pulse width = 600 ns. The TRIP is not logically gated by the TRCL cell period in dual gap units and false levels which may occur outside the cell period are to be ignored.

TRCL - Tape Read Cell Level

This level when "false" indicates cell duration time. The negative going edge defines the beginning of cell period and the positive going trailing edge defines the end of the cell period.

Continued.

TRCL. (Continued)

One or more TRIP's during TRCL time indicates that a "one" is being read and no TRIP's indicates a "zero" read. The minimum time between cell periods = 1.5 μ s.

Input Power

The voltage and current required from the host equipment to power the cassette drive subsystem is as follows:

+ 5 volts \pm 10%	1.0 amp maximum
+ 12 volts \pm 10%	0.9 amp maximum
- 12 volts \pm 10%	0.125 amp maximum

Indicator Option

An optional indicator when provided (see Figure 1) will cause the right side of the lens above the Write Status (WS) legend to be illuminated when a cassette tape, with the write enable plug in place, is properly inserted into the carriage and the carriage is closed. With the tab removed or the carriage open, the indicator will be dark.

The left side of the lens above the "R" legend is externally controlled through pin X of the interface connector. With pin X held at or near ground, the indicator will light. The indicator

Continued.

will be dark when the pin is allowed to float or is held to the +5V power supply level. The open circuit voltage of pin X is equal to the +5V power supply level. The control on pin X must be capable of sinking a maximum of 40 ma (nominally 32 ma) when grounded.

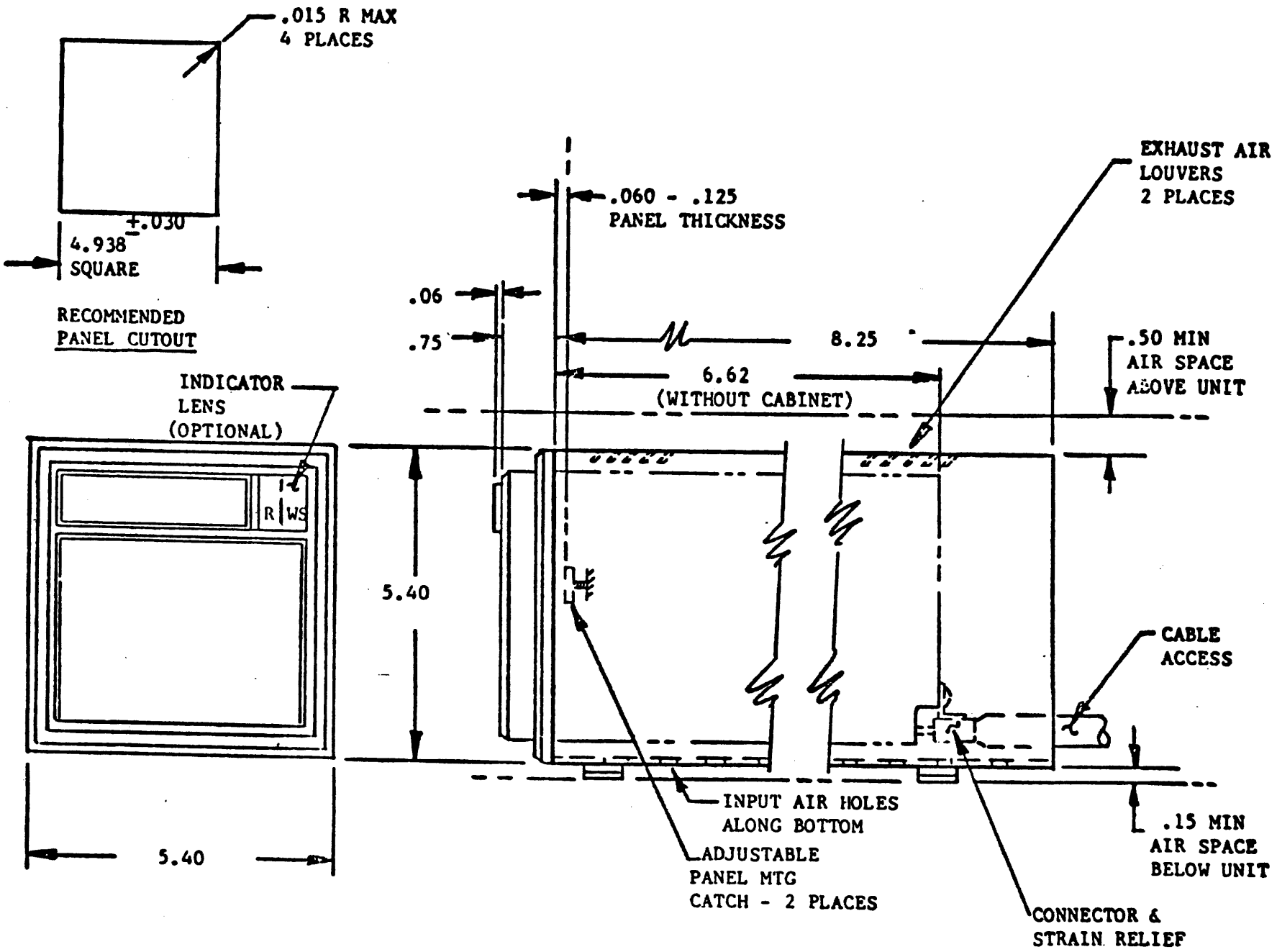
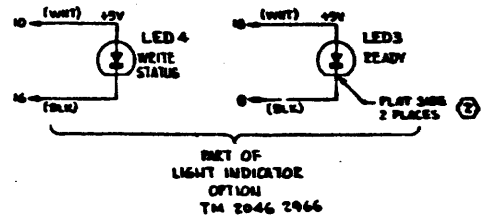
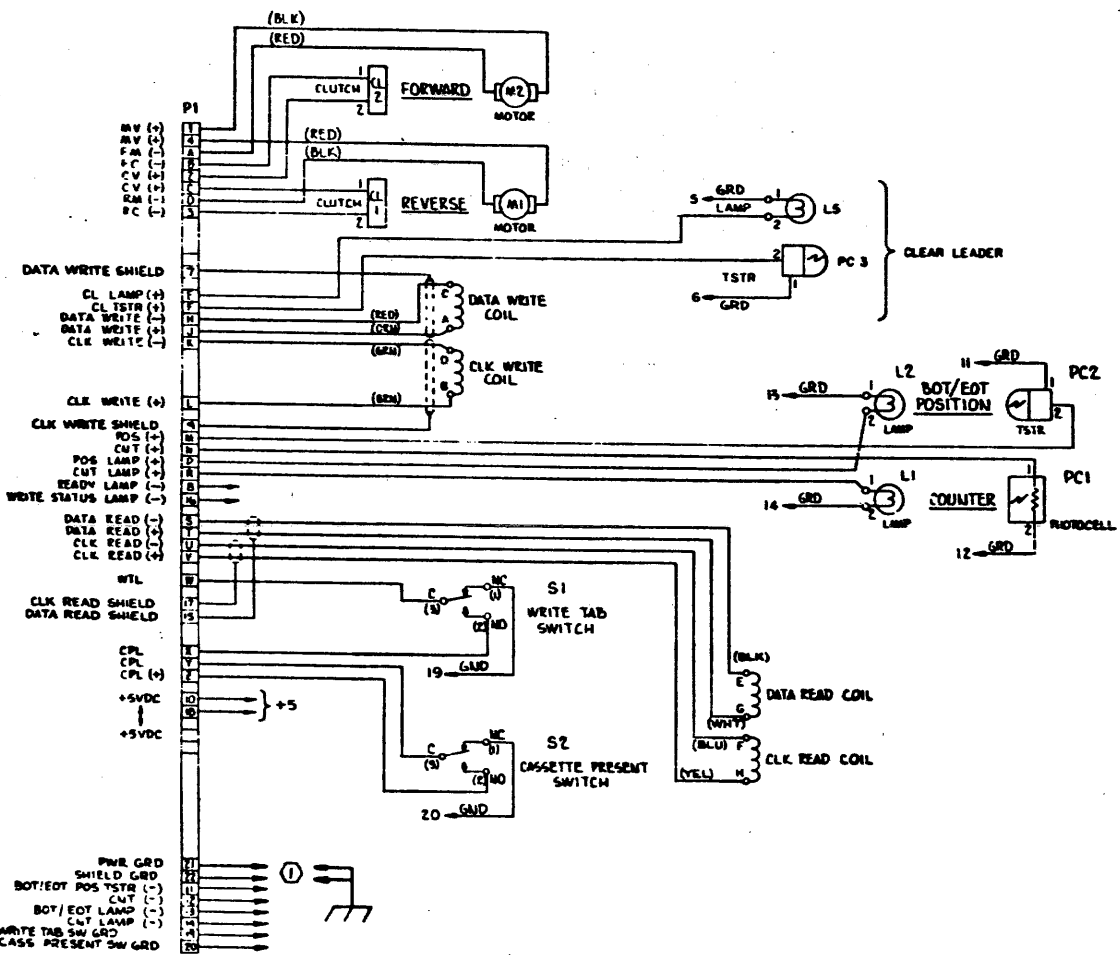


FIGURE 1

REV	DATE	BY	DESCRIPTION
A	10/18/68	WJ	RELEASED
B	11/15/68	WJ	ADDED NOTE 1
C	12/15/68	WJ	1. ADDED PINS ISIT (B-7) 2. CHANGED COLOR CODES: BLK WAS GRN, WHT WAS BRN, BLU WAS YEL, YEL WAS BLU (B-3)
D	1/15/69	WJ	1. ADDED L3 & L4 (B-2) 2. ADDED PINS 8, 10, 16, 18 (B-7, C-7)
E	2/15/69	WJ	1. DELETED LED (B-2) 2. LED3 WAS L3, LED4 WAS L4 (B-2) 3. ADDED NOTE 2 4. TITLE IS SCHEMATIC TAPE DECK, WAS SCHEMATIC TAPE DECK CASSETTE.
F	3/15/69	WJ	1. REVISED TO SHOW DUAL GAP CONFIG. ONLY
G	4/15/69	WJ	1. ADDED PCS & LS (C, D-4) 2. ADDED 'DG' TO TITLE 3. ADDED POSITIONS 11, 12, 13, 14, 19, 20, 9, & 7 4. DELETED POSITIONS 5 & 6.



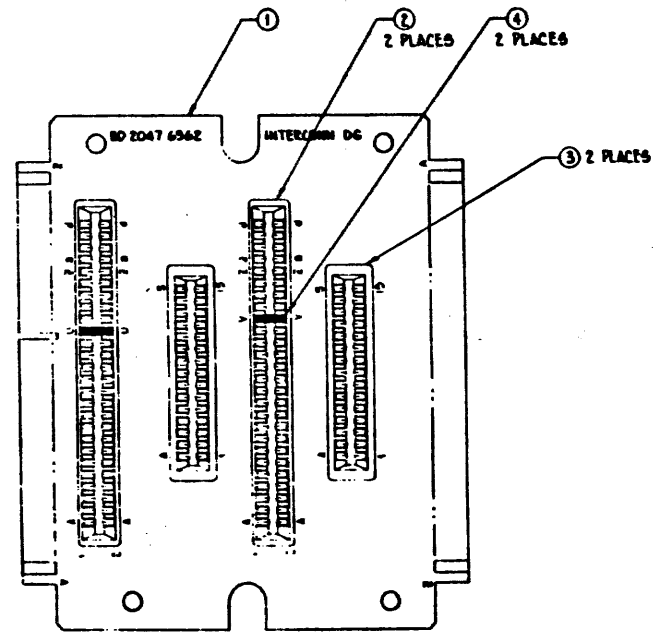
- ② CATHODE IS TOWARD FLAT SIDE OF CASE.
- ① IN PANEL MOUNTING APPLICATIONS, REMOVE THE CONNECTION FROM P1-21 TO CHASSIS GROUND (P1). A SEPARATE GROUNDING JUMPER FROM CHASSIS CONNECTION E1 TO A SUITABLE PANEL GROUND MUST BE ADDED BY USER.

NOTE:

REV	DATE	BY	DESCRIPTION
1	10/18/68	WJ	RELEASED
2	11/15/68	WJ	ADDED NOTE 1
3	12/15/68	WJ	ADDED PINS ISIT (B-7)
4	1/15/69	WJ	ADDED L3 & L4 (B-2)
5	2/15/69	WJ	DELETED LED (B-2)
6	3/15/69	WJ	REVISED TO SHOW DUAL GAP CONFIG. ONLY
7	4/15/69	WJ	ADDED PCS & LS (C, D-4)
8	5/15/69	WJ	ADDED 'DG' TO TITLE
9	6/15/69	WJ	ADDED POSITIONS 11, 12, 13, 14, 19, 20, 9, & 7
10	7/15/69	WJ	DELETED POSITIONS 5 & 6

REVISIONS
BY DATE BY DATE
A 10/10/73

RELEASED



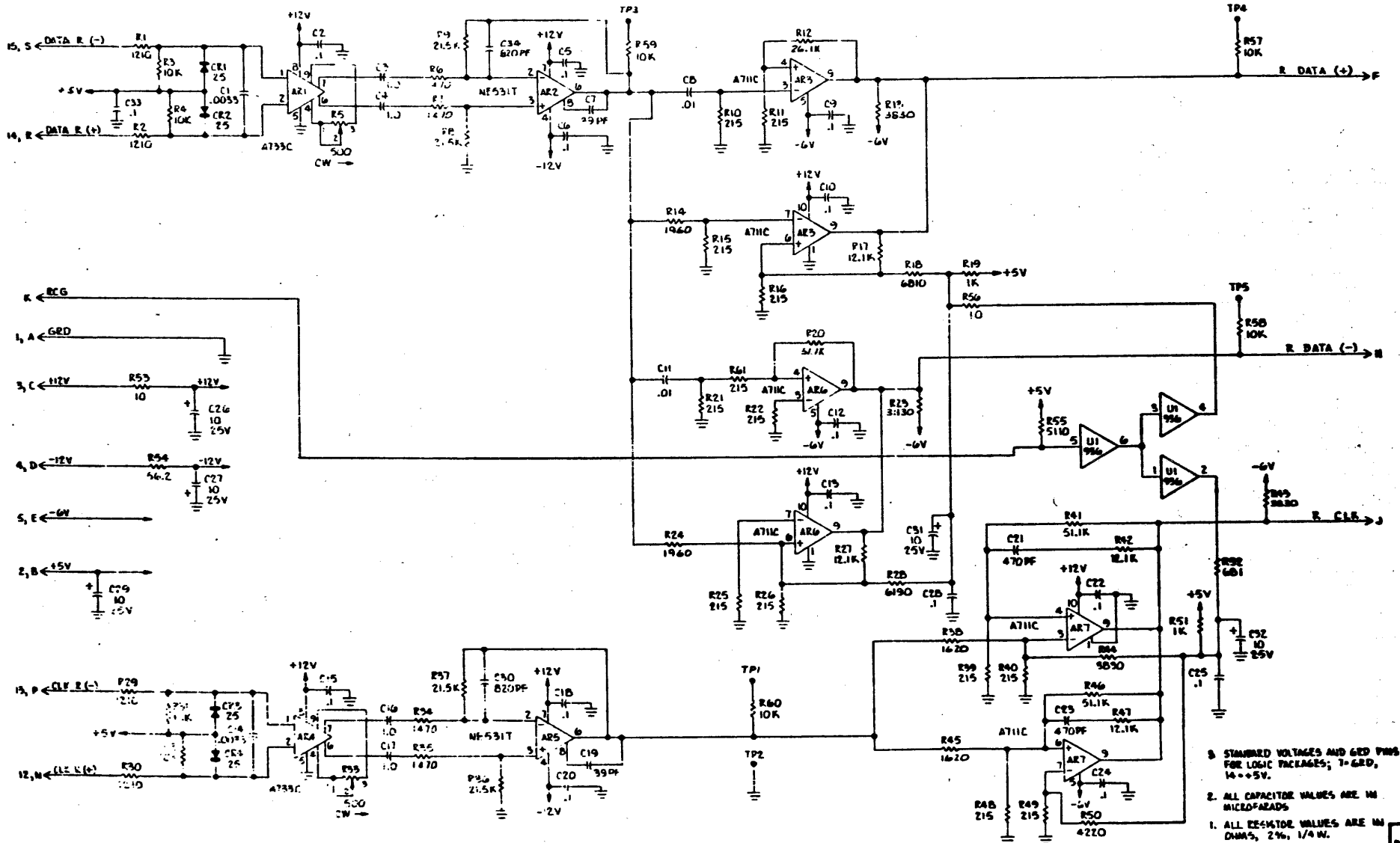
SEE P/L

HOLE DIMENSIONS		REVISION	DATE	BY	CHKD
Ø .125	± .005				
Ø .1875	± .005				
Ø .250	± .005				
Ø .3125	± .005				
Ø .375	± .005				
Ø .4375	± .005				
Ø .500	± .005				
Ø .5625	± .005				
Ø .625	± .005				
Ø .6875	± .005				
Ø .750	± .005				
Ø .8125	± .005				
Ø .875	± .005				
Ø .9375	± .005				
Ø 1.000	± .005				

D.A. [Signature] 8-28-73	DRW. [Signature] 8-28-73	CHKD. [Signature] 8-28-73	DATE	BY	CHKD.
W.F. [Signature] 8-28-73					

Starrett Corporation BUSINESS MACHINES GROUP WESTLAKES VILLAGE CALIFORNIA 91361		WESTLAKES PLANT U.S.A.
CD-INTERCONNECT DG		D-2047 6354 A

D-2046 2B1B E



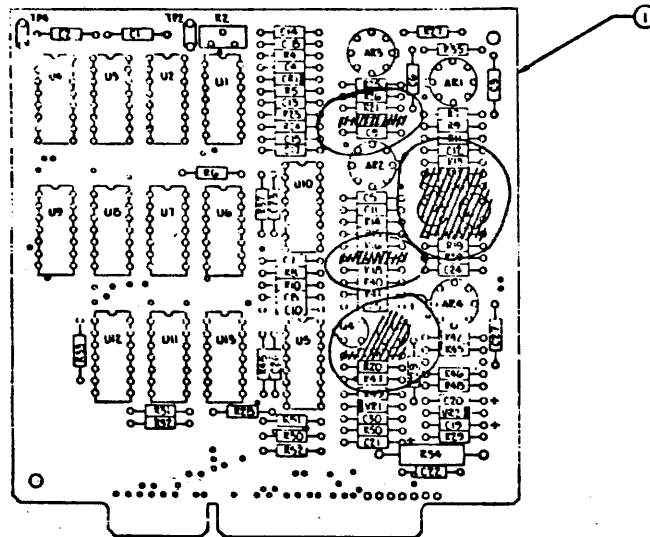
- 1. ALL RESISTOR VALUES ARE IN OHMS, 2%, 1/4 W.
- 2. ALL CAPACITOR VALUES ARE IN MICROFARADS
- 3. STANDARD VOLTAGES AND GND PINS FOR LOGIC PACKAGES; T-GND, 14 = +5V.

NOTES: UNLESS OTHERWISE SPECIFIED

D-2047 6271 A

REVISIONS
 DATE BY
 A 1/10/73 M.S.

RELEASED



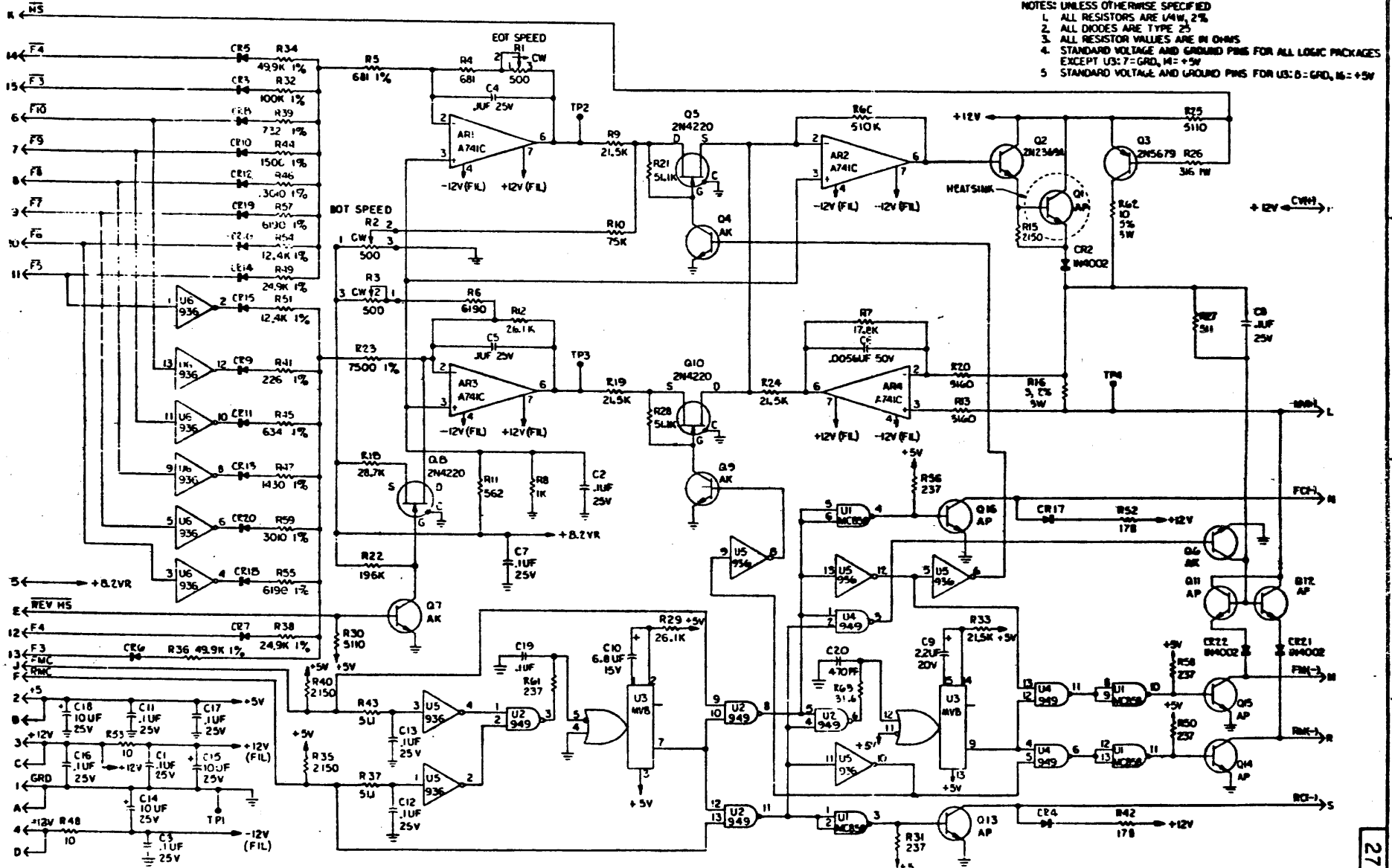
REV. NO.	REFERENCE	DESIGNATION
2	U1, U2	
3	R2, R3, R4, R5	
4	U1, U2	
5	U1, U2	
6	U1, U2	
7	U1, U2	
8	U1, U2, U4	
9	U1, U2	
10	C19, C20, C21, C26	
11	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20	
12	C4	
13	C8, C11, C12, C13, C15	
14	C7, C19	
15	R22	
16	R21	
17	T572 PAD FOR R4, R5, R6, R7, R8	
18	T572 PAD FOR R4, R5, R6, R7, R8	
19	R3, R7, R45	
20	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R46, R47, R48, R49, R50, R51, R52, R53	
21	R6, R16	
22	R28	
23	R5, R6, R25	
24	R2	
25	V19, R10, R39	
26	R4	
27	R30, R51	
28	R54	
29	V2	
30	P2, P4	
31	R20, R41, R52, R56	
32	R20, R41, R52, R56	
33	R15, R18, R21	
34	R35	
35	R11, R16, R27	
36	R42	
37	R42	
38	R41	
39	R42	
40	R42	
41	R47, R48	
42	R43	
43	Q4	
44	R24	
45	R21	
46	C25, C26	
47	C25, C26	
48	C25, C26	
49	C25, C26	
50	R9, R26	
51	R7, R25	
52	R7, R25	
53	R52	

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 Pg. - 4

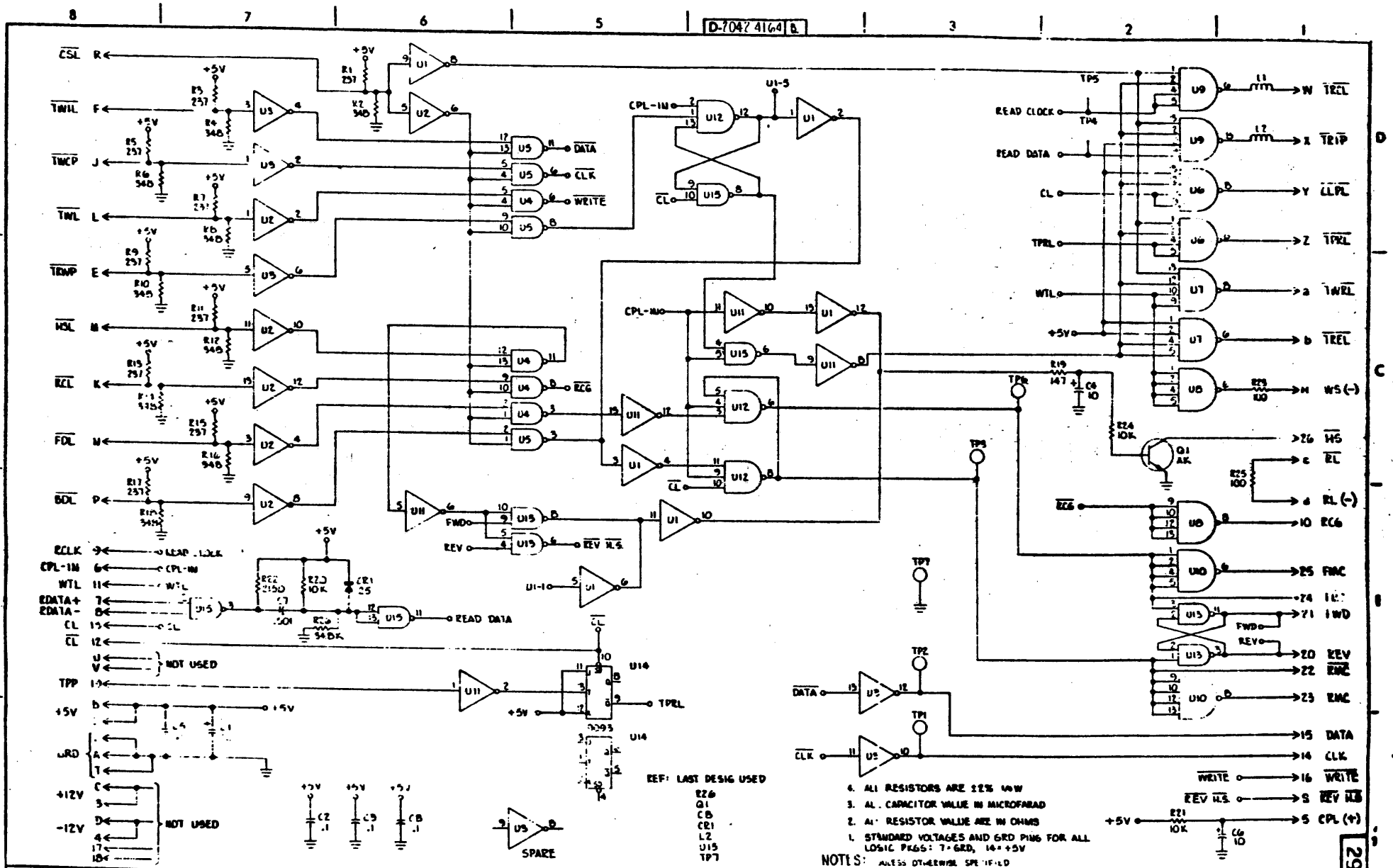
3/10/73

HOLE DIAMETER TOLERANCES .010 - .015 +.0000 - .0005 .015 - .020 +.0000 - .0005 .020 - .025 +.0000 - .0005 .025 - .030 +.0000 - .0005 .030 - .035 +.0000 - .0005 .035 - .040 +.0000 - .0005 .040 - .045 +.0000 - .0005 .045 - .050 +.0000 - .0005 .050 - .055 +.0000 - .0005 .055 - .060 +.0000 - .0005 .060 - .065 +.0000 - .0005 .065 - .070 +.0000 - .0005 .070 - .075 +.0000 - .0005 .075 - .080 +.0000 - .0005 .080 - .085 +.0000 - .0005 .085 - .090 +.0000 - .0005 .090 - .095 +.0000 - .0005 .095 - .100 +.0000 - .0005 .100 - .105 +.0000 - .0005 .105 - .110 +.0000 - .0005 .110 - .115 +.0000 - .0005 .115 - .120 +.0000 - .0005 .120 - .125 +.0000 - .0005 .125 - .130 +.0000 - .0005 .130 - .135 +.0000 - .0005 .135 - .140 +.0000 - .0005 .140 - .145 +.0000 - .0005 .145 - .150 +.0000 - .0005 .150 - .155 +.0000 - .0005 .155 - .160 +.0000 - .0005 .160 - .165 +.0000 - .0005 .165 - .170 +.0000 - .0005 .170 - .175 +.0000 - .0005 .175 - .180 +.0000 - .0005 .180 - .185 +.0000 - .0005 .185 - .190 +.0000 - .0005 .190 - .195 +.0000 - .0005 .195 - .200 +.0000 - .0005 .200 - .205 +.0000 - .0005 .205 - .210 +.0000 - .0005 .210 - .215 +.0000 - .0005 .215 - .220 +.0000 - .0005 .220 - .225 +.0000 - .0005 .225 - .230 +.0000 - .0005 .230 - .235 +.0000 - .0005 .235 - .240 +.0000 - .0005 .240 - .245 +.0000 - .0005 .245 - .250 +.0000 - .0005 .250 - .255 +.0000 - .0005 .255 - .260 +.0000 - .0005 .260 - .265 +.0000 - .0005 .265 - .270 +.0000 - .0005 .270 - .275 +.0000 - .0005 .275 - .280 +.0000 - .0005 .280 - .285 +.0000 - .0005 .285 - .290 +.0000 - .0005 .290 - .295 +.0000 - .0005 .295 - .300 +.0000 - .0005 .300 - .305 +.0000 - .0005 .305 - .310 +.0000 - .0005 .310 - .315 +.0000 - .0005 .315 - .320 +.0000 - .0005 .320 - .325 +.0000 - .0005 .325 - .330 +.0000 - .0005 .330 - .335 +.0000 - .0005 .335 - .340 +.0000 - .0005 .340 - .345 +.0000 - .0005 .345 - .350 +.0000 - .0005 .350 - .355 +.0000 - .0005 .355 - .360 +.0000 - .0005 .360 - .365 +.0000 - .0005 .365 - .370 +.0000 - .0005 .370 - .375 +.0000 - .0005 .375 - .380 +.0000 - .0005 .380 - .385 +.0000 - .0005 .385 - .390 +.0000 - .0005 .390 - .395 +.0000 - .0005 .395 - .400 +.0000 - .0005 .400 - .405 +.0000 - .0005 .405 - .410 +.0000 - .0005 .410 - .415 +.0000 - .0005 .415 - .420 +.0000 - .0005 .420 - .425 +.0000 - .0005 .425 - .430 +.0000 - .0005 .430 - .435 +.0000 - .0005 .435 - .440 +.0000 - .0005 .440 - .445 +.0000 - .0005 .445 - .450 +.0000 - .0005 .450 - .455 +.0000 - .0005 .455 - .460 +.0000 - .0005 .460 - .465 +.0000 - .0005 .465 - .470 +.0000 - .0005 .470 - .475 +.0000 - .0005 .475 - .480 +.0000 - .0005 .480 - .485 +.0000 - .0005 .485 - .490 +.0000 - .0005 .490 - .495 +.0000 - .0005 .495 - .500 +.0000 - .0005 .500 - .505 +.0000 - .0005 .505 - .510 +.0000 - .0005 .510 - .515 +.0000 - .0005 .515 - .520 +.0000 - .0005 .520 - .525 +.0000 - .0005 .525 - .530 +.0000 - .0005 .530 - .535 +.0000 - .0005 .535 - .540 +.0000 - .0005 .540 - .545 +.0000 - .0005 .545 - .550 +.0000 - .0005 .550 - .555 +.0000 - .0005 .555 - .560 +.0000 - .0005 .560 - .565 +.0000 - .0005 .565 - .570 +.0000 - .0005 .570 - .575 +.0000 - .0005 .575 - .580 +.0000 - .0005 .580 - .585 +.0000 - .0005 .585 - .590 +.0000 - .0005 .590 - .595 +.0000 - .0005 .595 - .600 +.0000 - .0005 .600 - .605 +.0000 - .0005 .605 - .610 +.0000 - .0005 .610 - .615 +.0000 - .0005 .615 - .620 +.0000 - .0005 .620 - .625 +.0000 - .0005 .625 - .630 +.0000 - .0005 .630 - .635 +.0000 - .0005 .635 - .640 +.0000 - .0005 .640 - .645 +.0000 - .0005 .645 - .650 +.0000 - .0005 .650 - .655 +.0000 - .0005 .655 - .660 +.0000 - .0005 .660 - .665 +.0000 - .0005 .665 - .670 +.0000 - .0005 .670 - .675 +.0000 - .0005 .675 - .680 +.0000 - .0005 .680 - .685 +.0000 - .0005 .685 - .690 +.0000 - .0005 .690 - .695 +.0000 - .0005 .695 - .700 +.0000 - .0005 .700 - .705 +.0000 - .0005 .705 - .710 +.0000 - .0005 .710 - .715 +.0000 - .0005 .715 - .720 +.0000 - .0005 .720 - .725 +.0000 - .0005 .725 - .730 +.0000 - .0005 .730 - .735 +.0000 - .0005 .735 - .740 +.0000 - .0005 .740 - .745 +.0000 - .0005 .745 - .750 +.0000 - .0005 .750 - .755 +.0000 - .0005 .755 - .760 +.0000 - .0005 .760 - .765 +.0000 - .0005 .765 - .770 +.0000 - .0005 .770 - .775 +.0000 - .0005 .775 - .780 +.0000 - .0005 .780 - .785 +.0000 - .0005 .785 - .790 +.0000 - .0005 .790 - .795 +.0000 - .0005 .795 - .800 +.0000 - .0005 .800 - .805 +.0000 - .0005 .805 - .810 +.0000 - .0005 .810 - .815 +.0000 - .0005 .815 - .820 +.0000 - .0005 .820 - .825 +.0000 - .0005 .825 - .830 +.0000 - .0005 .830 - .835 +.0000 - .0005 .835 - .840 +.0000 - .0005 .840 - .845 +.0000 - .0005 .845 - .850 +.0000 - .0005 .850 - .855 +.0000 - .0005 .855 - .860 +.0000 - .0005 .860 - .865 +.0000 - .0005 .865 - .870 +.0000 - .0005 .870 - .875 +.0000 - .0005 .875 - .880 +.0000 - .0005 .880 - .885 +.0000 - .0005 .885 - .890 +.0000 - .0005 .890 - .895 +.0000 - .0005 .895 - .900 +.0000 - .0005 .900 - .905 +.0000 - .0005 .905 - .910 +.0000 - .0005 .910 - .915 +.0000 - .0005 .915 - .920 +.0000 - .0005 .920 - .925 +.0000 - .0005 .925 - .930 +.0000 - .0005 .930 - .935 +.0000 - .0005 .935 - .940 +.0000 - .0005 .940 - .945 +.0000 - .0005 .945 - .950 +.0000 - .0005 .950 - .955 +.0000 - .0005 .955 - .960 +.0000 - .0005 .960 - .965 +.0000 - .0005 .965 - .970 +.0000 - .0005 .970 - .975 +.0000 - .0005 .975 - .980 +.0000 - .0005 .980 - .985 +.0000 - .0005 .985 - .990 +.0000 - .0005 .990 - .995 +.0000 - .0005 .995 - 1.000 +.0000 - .0005		MATERIALS DRAWN BY: M. J. JAMES 6/20/73 CHECKED BY: R. SHAY 6/26/73 DATE: 6/26/73	TELECOMM WESTLAK VILLAGE CALIFORNIA 91380 U.S. AMERICA
---	--	--	--

- NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL RESISTORS ARE 1/4W, 2%
 2. ALL DIODES ARE TYPE Z5
 3. ALL RESISTOR VALUES ARE IN OHMS
 4. STANDARD VOLTAGE AND GROUND PINS FOR ALL LOGIC PACKAGES EXCEPT U3: 7=GRD, 14=+5V
 5. STANDARD VOLTAGE AND GROUND PINS FOR U5: 8=GRD, 16=+5V



1. R1, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100	2. C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100	3. Q1, Q2, Q3, Q4, Q5, Q6	4. U1, U2, U3, U4, U5, U6, U7, U8, U9, U10, U11, U12, U13, U14, U15, U16, U17, U18, U19, U20, U21, U22, U23, U24, U25, U26, U27, U28, U29, U30, U31, U32, U33, U34, U35, U36, U37, U38, U39, U40, U41, U42, U43, U44, U45, U46, U47, U48, U49, U50, U51, U52, U53, U54, U55, U56, U57, U58, U59, U60, U61, U62, U63, U64, U65, U66, U67, U68, U69, U70, U71, U72, U73, U74, U75, U76, U77, U78, U79, U80, U81, U82, U83, U84, U85, U86, U87, U88, U89, U90, U91, U92, U93, U94, U95, U96, U97, U98, U99, U100	5. TP1, TP2, TP3, TP4
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REF: LAST DESIGN USED

- 1. STANDARD VOLTAGES AND GND PING FOR ALL LOGIC PAGES: 7-GRD, 14+ +5V
- 2. ALL RESISTOR VALUE ARE IN OHMS
- 3. ALL CAPACITOR VALUE IN MICROFARAD
- 4. ALL RESISTORS ARE 1/2% 1/4W

NOTES: ALL 55 OTHERSIVE SPEC IF LD

REVISED

RELEASED

ADDED NOTE 2.

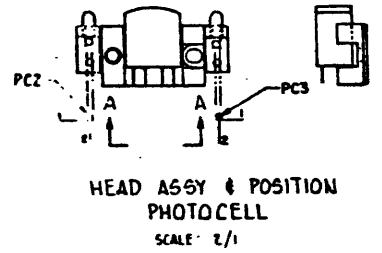
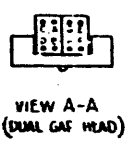
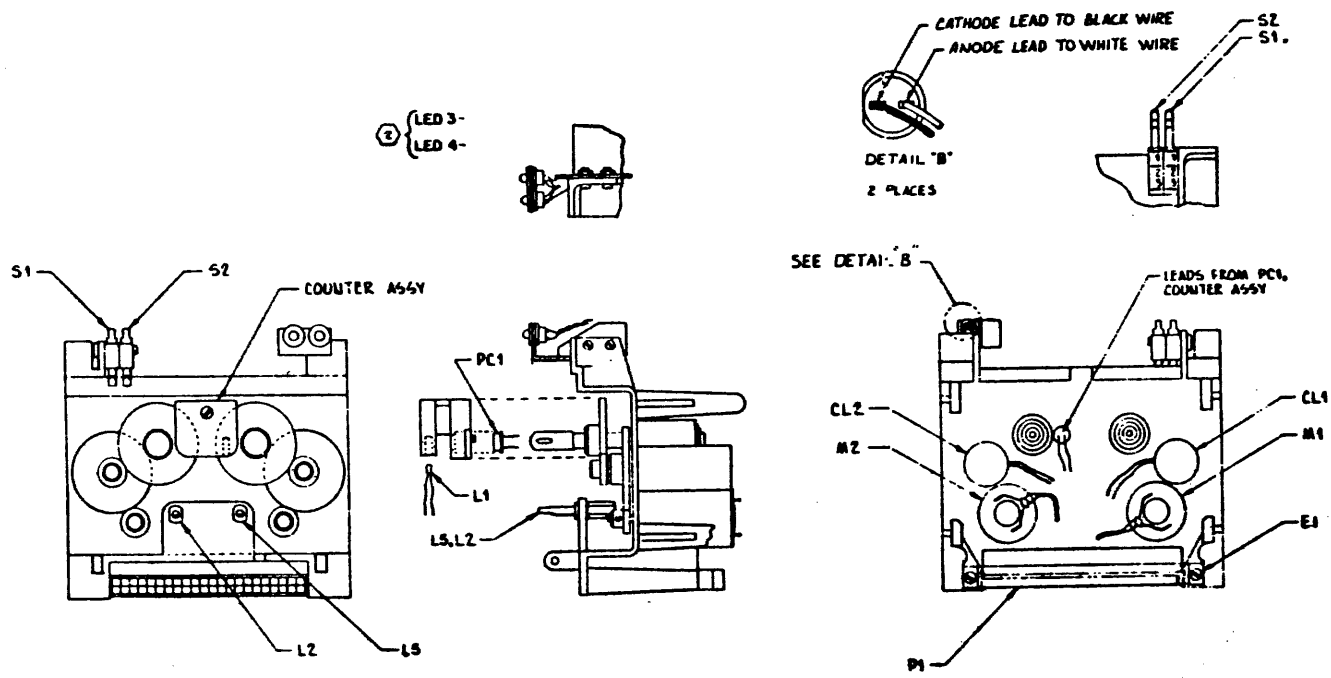
ADDED DETAIL "B" (B-3) - CHANGED MECHANICAL COUPLER HEAD ASSY. POINT ON PHOTOCELL (B-6,7,8)

NOTE 1 IS WRONG. IN DRAWING - LENS DG. HAS A RING DIA. - 1 CASSETTE

ADDED PCS #1 AND L5 #1-3 TO DIAGRAM AND WIRE LIST.

ADDED L3 AND L4 #1 AND L3 AND L4 (D-3).

NOTE 1 WAS FOR SYSTEM INSTALLATION (ONE OF BOTH WIRES FROM PI-E1 AND PI-ZE TO E1 MAY BE REQUIRED DEPENDS ON SYSTEM REQUIREMENTS).



FROM	TO	FROM	TO
S1-1	PI-19	LS-1	PI-3
S1-2	PI-2	LS-2	PI-E
S1-3	PI-W	PC3-1	PI-8
S2-1	PI-ZD	PC3-2	PI-F
S2-2	PI-E		
S2-3	PI-V		
L1-1	PI-R		
L1-2	PI-16		
L2-1	PI-15		
L2-2	PI-P		
PC1-1	PI-N		
PC1-2	PI-12		
PC2-1	PI-U		
PC2-2	PI-M		
CL1-1	PI-C		
CL1-2	PI-5		
CL2-1	PI-B		
CL2-2	PI-2		
M1-RED	PI-4		
M1-BLK	PI-D		
M2-RED	PI-A		
M2-BLK	PI-1		
E1	PI-21		
S1	PI-22		
CAT LED3-BLK	PI-5		
CAT LED3-WHT	PI-18		
CAT LED4-BLK	PI-16		
CAT LED4-WHT	PI-10		

2 CH. DUAL GAP HEAD	PART NO.
FROM	TO
E-BLK	PI-5
G-WHT	PI-7
SHIELD	PI-15
F-RED	PI-11
M1-RED	PI-V
SHIELD	PI-11
C-RED	PI-7
A-ORN	PI-3
SHIELD	PI-7
D-GRN	PI-6
B-BRN	PI-1
SHIELD	PI-9

ITEMS INDICATED ARE OPTIONAL WITH TM D-2042 3893.

IN PANEL MOUNTING APPLICATIONS, STRONG THE CONNECTION FROM PI-1 TO CH-10 (OR CH-11) MUST BE A SEPARATE GROUNDING RUN. THE CONNECTION E1 TO A SEPARATE GROUND TERMINAL MUST BE ADDED BY USER.

EACH WIRE TO BE LOGGED SEPARATELY

WIRE NUMBER	WIRE COLOR	WIRE GAUGE	WIRE TYPE
100	RED	22	22
101	RED	22	22
102	RED	22	22
103	RED	22	22
104	RED	22	22
105	RED	22	22
106	RED	22	22
107	RED	22	22
108	RED	22	22
109	RED	22	22
110	RED	22	22
111	RED	22	22
112	RED	22	22
113	RED	22	22
114	RED	22	22
115	RED	22	22
116	RED	22	22
117	RED	22	22
118	RED	22	22
119	RED	22	22
120	RED	22	22

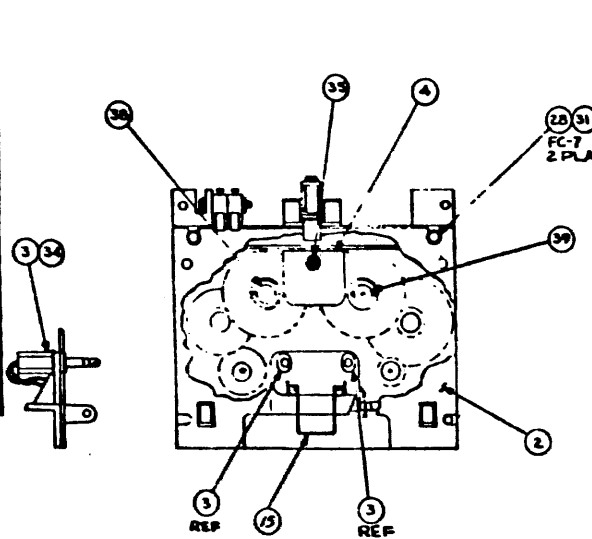
FOR USE WITH DUAL GAP HEAD

Shipping Corporation

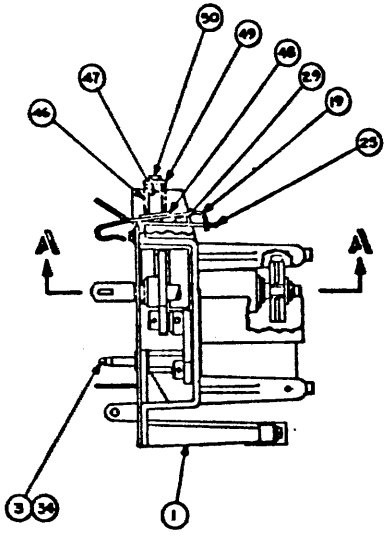
SUPPRESS MACHINERY OILS

WIRING DIAGRAM - CASE DG. | D-2042 3893 E

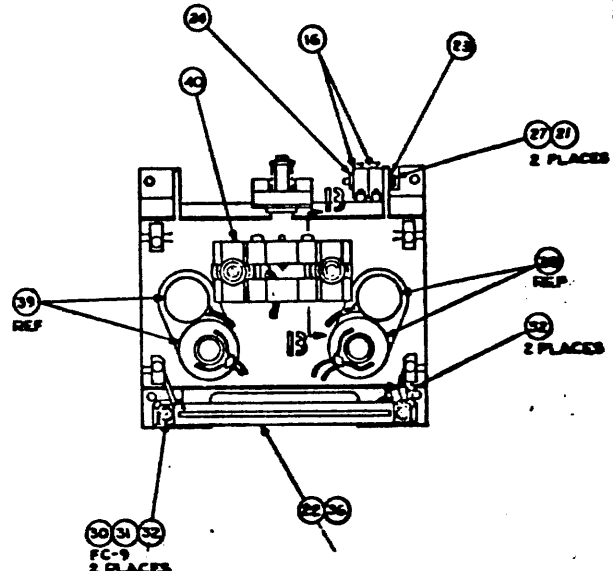
RELEASED
 1. 10-7 2 PLACES WAB
 10-8 2 PLACES B-51
 2. DELETED ITEM
 CALLOUT ID-51
 3. 10-11 N. 8
 4. 10-11 N. 8
 5. 10-11 N. 8
 6. 10-11 N. 8
 7. 10-11 N. 8
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 92. 10-11 N. 8
 93. 10-11 N. 8
 94. 10-11 N. 8
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 96. 10-11 N. 8
 97. 10-11 N. 8
 98. 10-11 N. 8
 99. 10-11 N. 8
 100. 10-11 N. 8



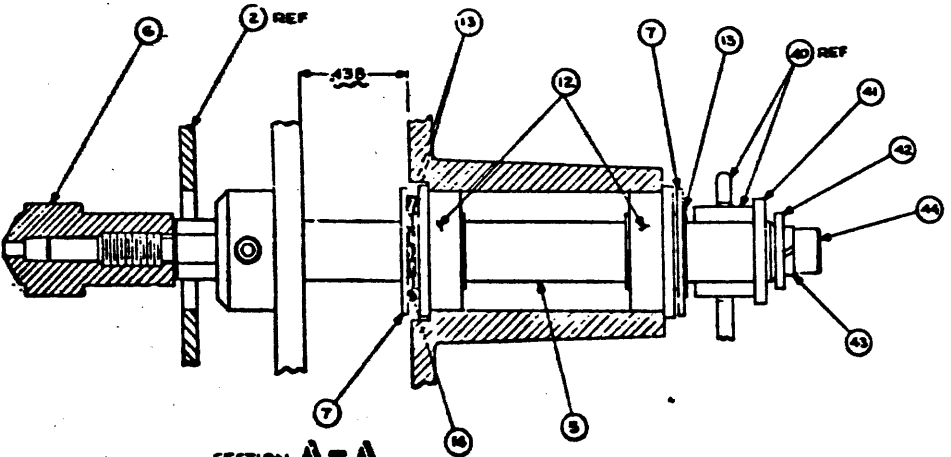
FRONT VIEW



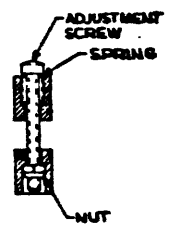
SWITCHES, ITEM 16, NOT SHOWN THIS VIEW



REAR VIEW



SECTION A-A
 SCALE: 4
 2 PLACES



SECTION B-B
 SCALE: 2


NOTE: 1. ASSEMBLE PER BURROUGHS SPEC A-1199 2096.

SEE P/L

REV.	DATE	BY	CHKD.	DESCRIPTION
1				ISSUED FOR PRODUCTION
2				REVISION
3				REVISION
4				REVISION
5				REVISION
6				REVISION
7				REVISION
8				REVISION
9				REVISION
10				REVISION
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14				REVISION
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39				REVISION
40				REVISION
41				REVISION
42				REVISION
43				REVISION
44				REVISION
45				REVISION

GA-BLC-100-100-100
 MFG. CONTROL

Burroughs Corporation
 3-1859
 WESTLAKES VILLAGE, CALIFORNIA 91361
 U.S. PATENT OFFICE
 CHASSIS ASSY, CAB M D-2046 2933

Burroughs Corporation  COMPUTER SYSTEMS GROUP DOWNINGTOWN PLANT DOWNINGTOWN, PENNSYLVANIA 19335		<small>PROPRIETARY TO BURROUGHS CORP. NOT TO BE REPRODUCED NOR USED FOR MANUFACTURING PURPOSES EXCEPT ON BURROUGHS ORDER OR PRIOR WRITTEN CONSENT.</small>	NUMBER 2608 1869	REV A
PREPARED BY J. LOVRENCEVIC <i>J. Lovrenovic</i>		APPROVED BY L. SHAPIRO <i>LS</i> H. B. MARX <i>HBM</i>		TITLE ACU/HDB WIRE STRAP MODULE MODIFICATION SPECIFICATION
		ORIGINAL RELEASE DATE 5-25-76	PAGE 1 OF 4	

REVISIONS			
LEVEL	DESCRIPTION	DATE	APPROVED
A	Initial Release <i>ER91REV54</i>		

2608 1869

B 700

Serial No. B50320-038

Burroughs

SS-DP

**FIELD TEST
AND
REFERENCE DOCUMENT**

1449 1807

REVISION *FD*

B-711

TAPE CASSETTE CONTROL



PROPERTY OF AND TO BE RETURNED TO

Burroughs

PAGE NUMBER	DOCUMENT NUMBER	DOCUMENT NAME	REVISION LEVEL
1-2	1449 0288	WIRE LIST, ADAPTER CABLE	D
3-5	1448 9124	LOGIC SCHEMATIC, TC1	G 97
6-7	1448 9157	LOGIC SCHEMATIC, TC2	D
8-10	1448 9090	LOGIC SCHEMATIC, TC3	D
11-12	1449 0338	LOGIC SCHEMATIC, TC4	E
13-16	1449 0700	CIRCUIT LIST, CONTROL, TC	AA
17-18	1449 7804	FIELD INSTALLATION INSTRUCTIONS (B711/B705)	A
19-20	2601 7392	FLD INST INSTR (B771 PROCESSOR)	A
		BURROUGHS	
		SS-DP	
		FIELD TEST	
		AND	
		REFERENCE DOCUMENT	
		1449 1807	
		XXXXXXXXXX	
		TAPE CASSETTE CONTROL	

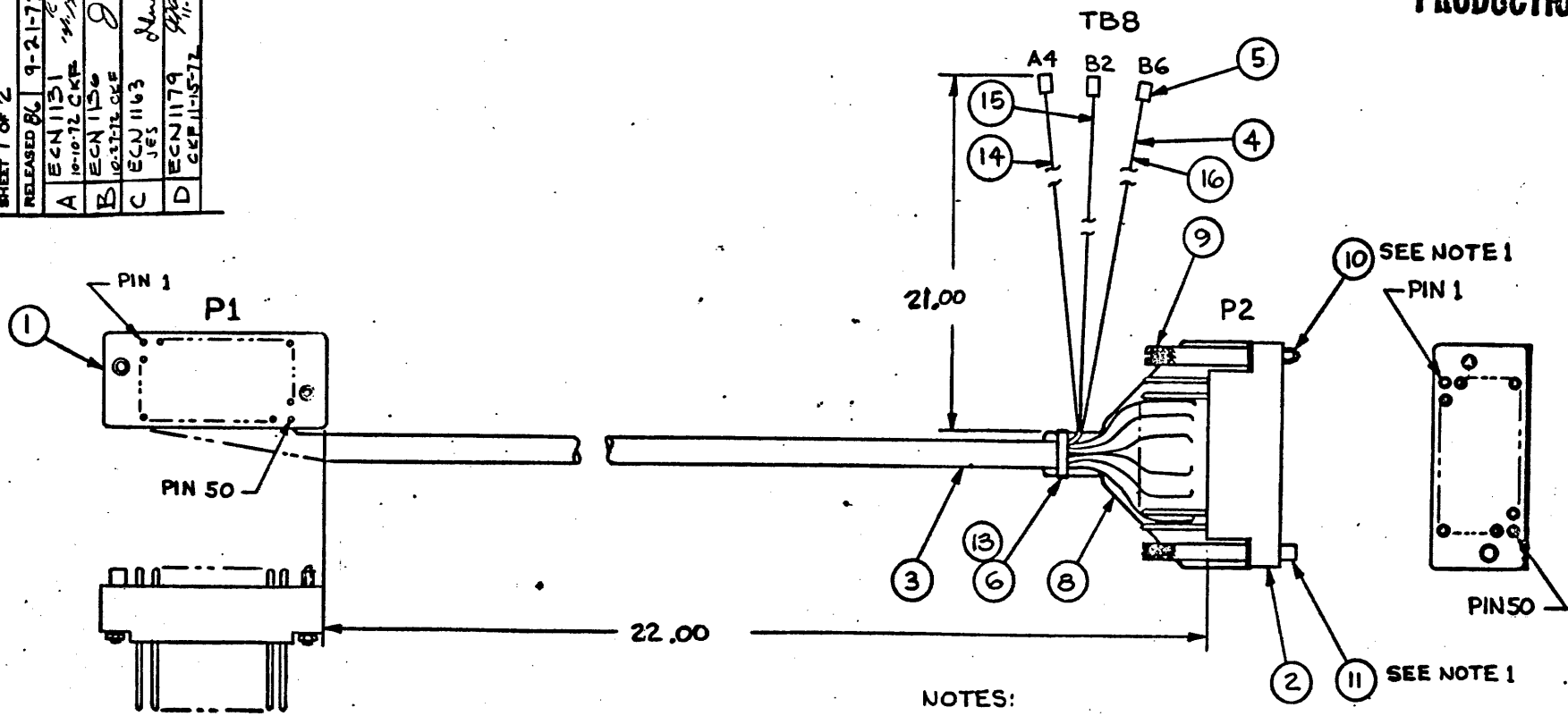
ECN 2089
~~ECN 2089~~

TAPE CASSETTE CONTROL

DWG NO
1449 0288

SHEET 1 OF 2	RELEASED 86	9-21-72
A	ECN 1131	10-10-72 CKR
B	ECN 1150	10-27-72 CKR
C	ECN 1163	JES
D	ECN 1179	11-16-72

PRODUCTION



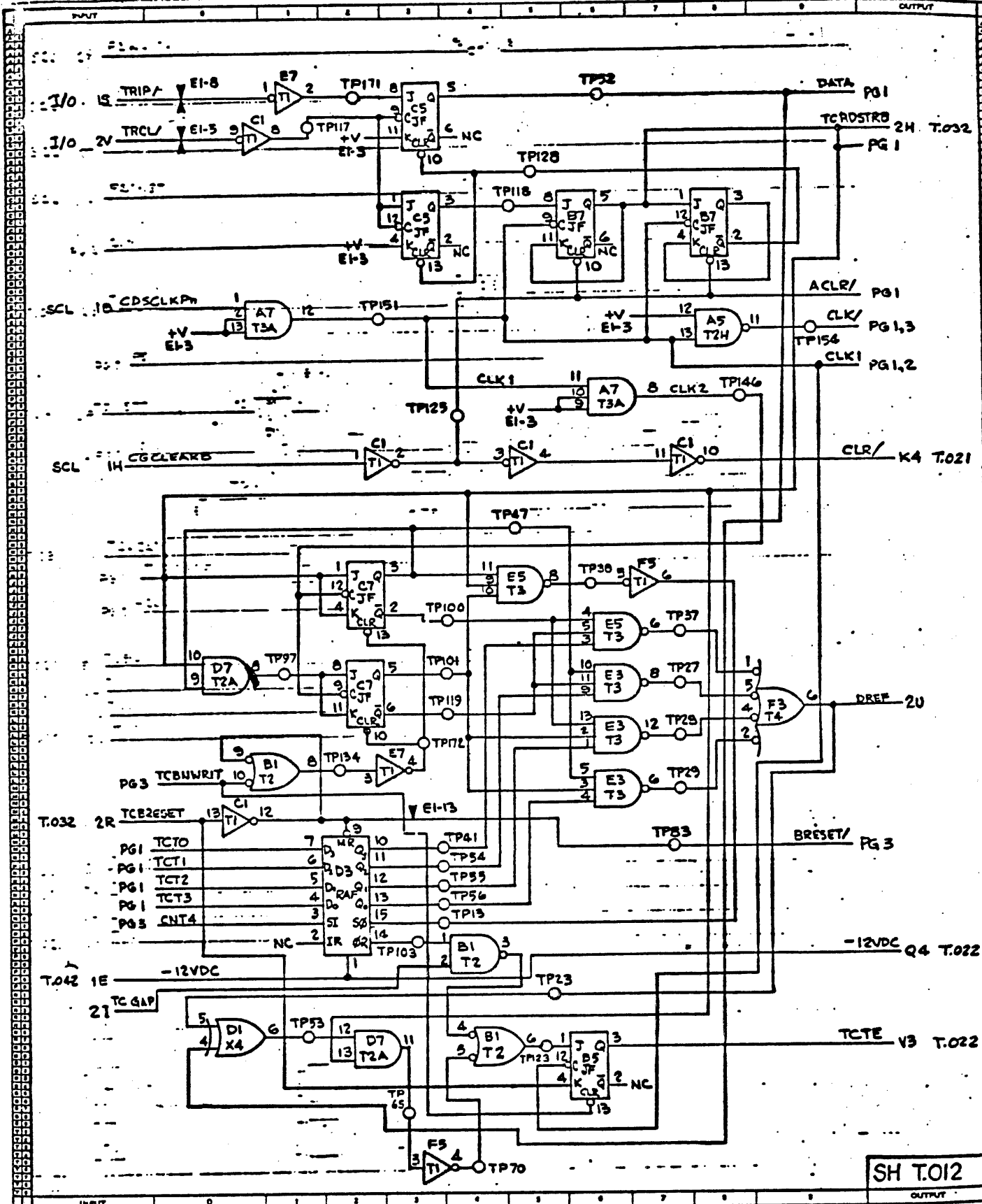
- NOTES:
1. APPLY LOCTITE TO STRAIGHT KNURLED SECTION OF ITEMS 10 & 11. - NO LOCTITE PERMISSIBLE ON ITEMS 2 & 8.
 2. WIRE P1 & P2 BEFORE ASSEMBLING ITEMS 8, 9, 10, & 11.

CC-2-1522

GEN QUAL SPECS 1183 5543 APPLY

TOLERANCES UNLESS OTHERWISE NOTED XXX ± — .XX ± .75 ANGLES ± — ° —'		DRAWN C.L. BISCHOFF	DATE 9-1-72	Burroughs Corporation MAGNETIC SYSTEMS PLANT DOWNINGTOWN, PA. 19335, U. S. AMERICA
MATERIAL		CHECKED RWEA	DATE 9-12-72	
HEAT TREATMENT		DSGN OR ENGR E. Brown	DATE 9/19/72	TITLE ADAPTER CABLE, TAPE CASSETTE
SURFACE TREATMENT		APPROVED M. H. H. H.	DATE 9/21/72	
PROPRIETARY TO BURROUGHS CORP. - NOT TO BE REPRODUCED, NOR USED FOR MANUFACTURING PURPOSES EXCEPT ON BURROUGHS ORDER OR PRIOR WRITTEN CONSENT				SCALE SHEET DWG NO — 1 of 2 1449 0288

SCHEMATIC



SH T.012

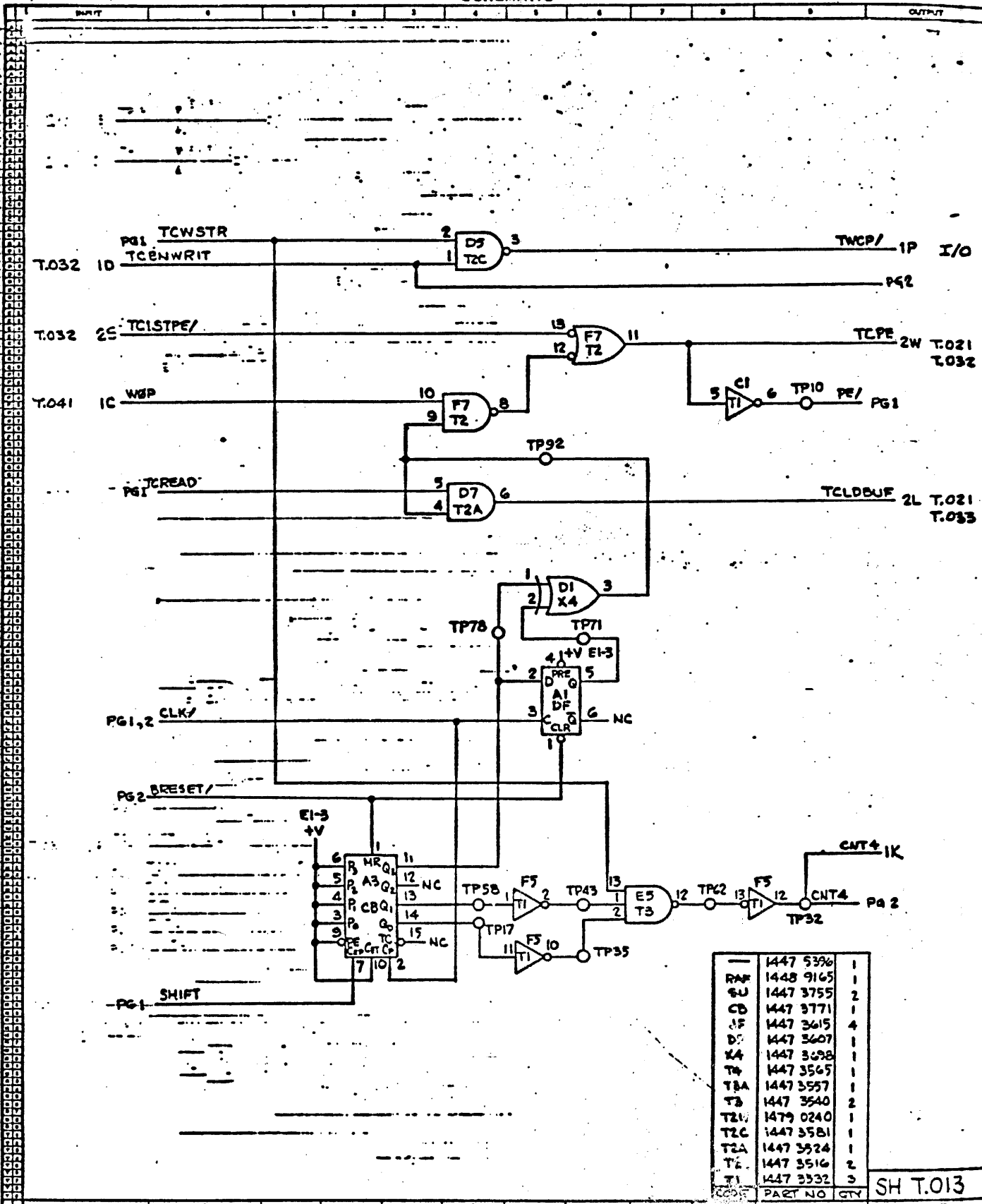
Burroughs Corporation
 MAGNETIC SYSTEMS PLANT DOWNTOWN PL 1938

PRODUCTION

TITLE TCI TAPE CASSETTE 1
 SYSTEM B700
 DRAWN 1 INCH
 APPROVED

DWG. NO. 1448 9124
 PAGE 2
 REV. LETTER E FILE SCAL 1968

SCHMATIC



Burroughs Corporation
 MAGNETIC SYSTEMS PLANT DOWNTOWN PH 10228
PROPERTY OF BURROUGHS CORPORATION. THIS IS AN INTELLECTUAL PROPERTY DOCUMENT FOR BURROUGHS CORPORATION. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

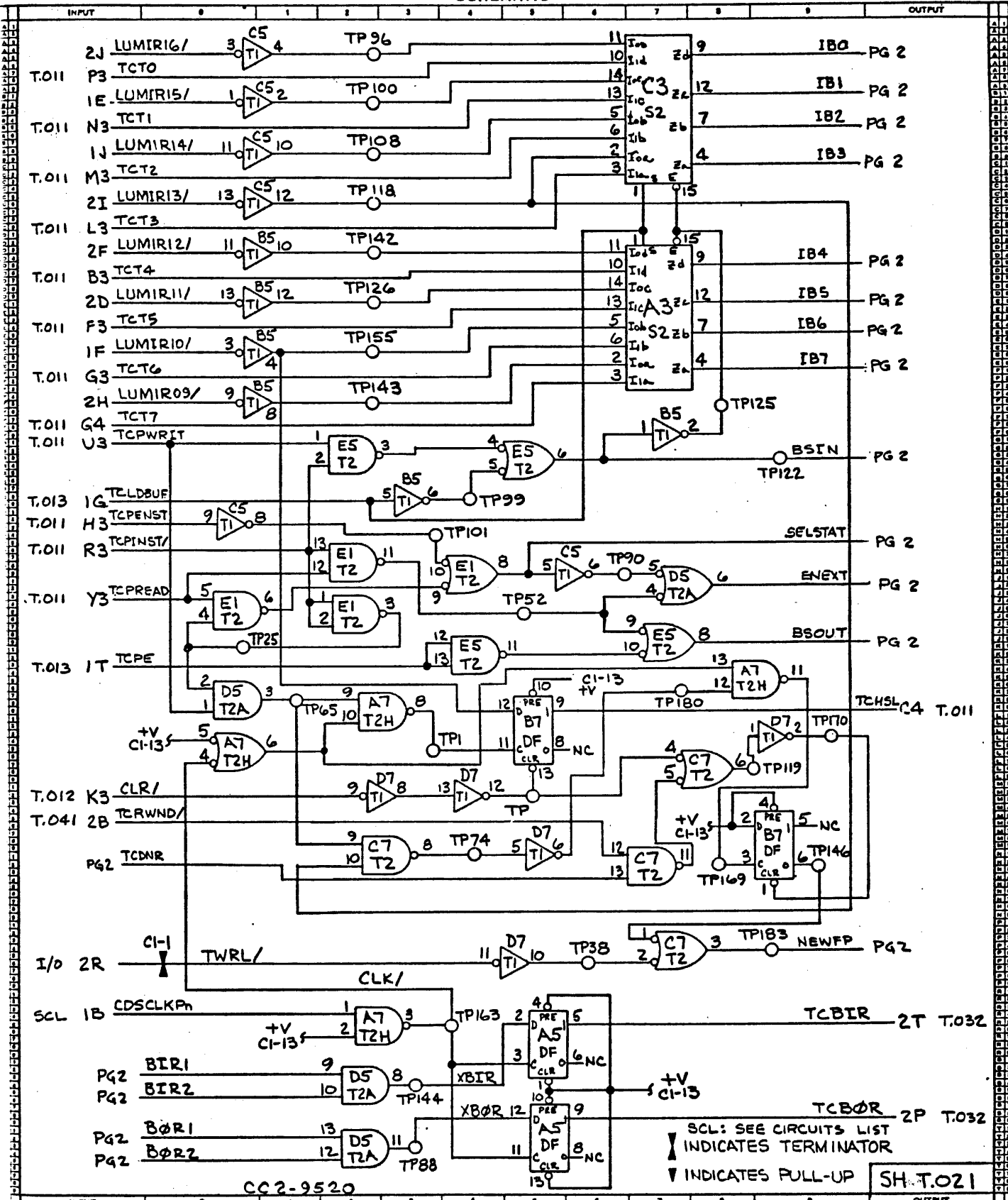
PRODUCTION

TITLE TC1 TAPE CONTROL
 SYSTEM B700
 DRAWN J. INCH
 APPROVED

DWG. NO. 1448 9124
 PAGE 3
 REV. LETTER F PER ECU 1553

SH T.013

SCHMATIC



CC 2-9520

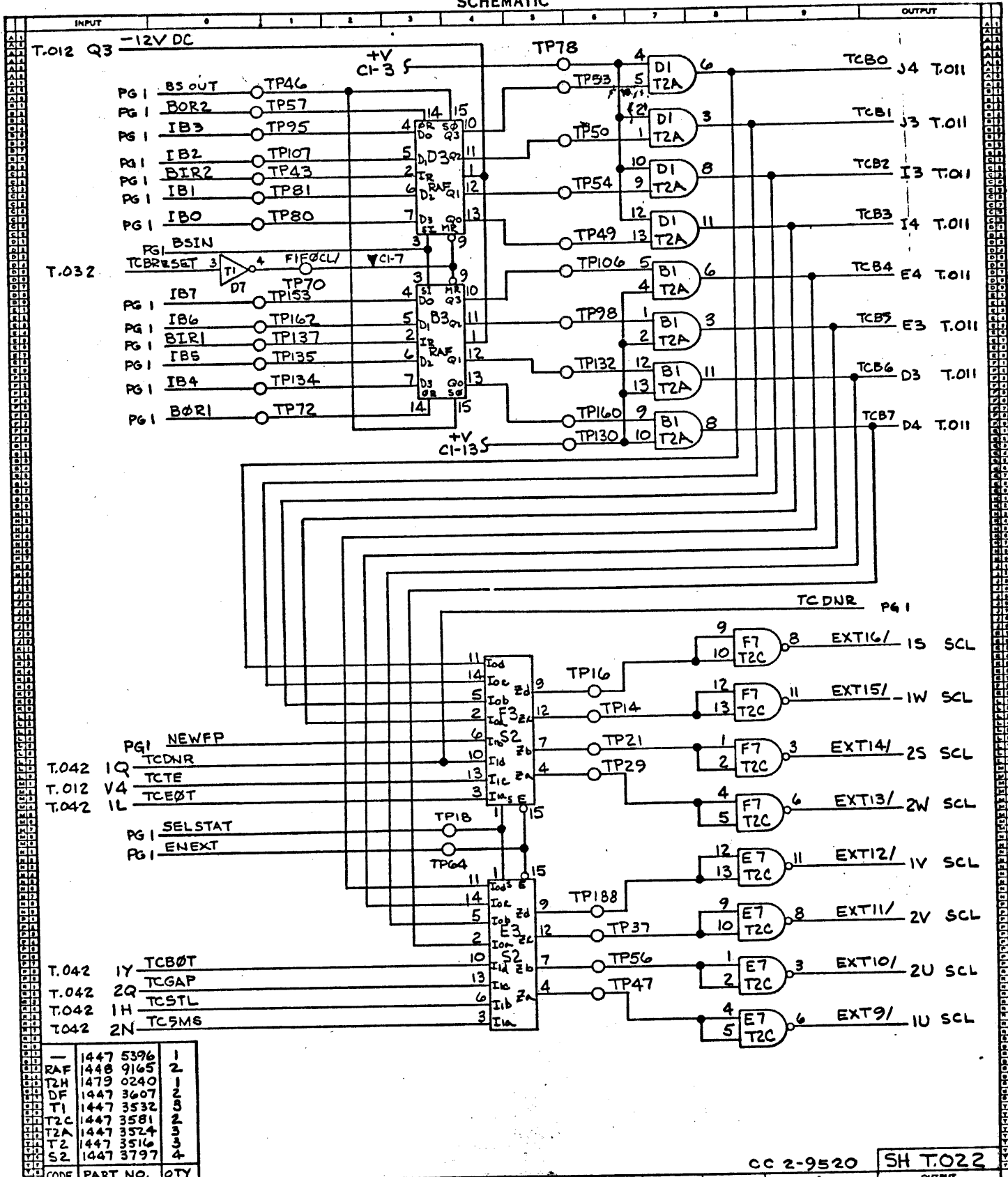
SH.T.021

Burroughs Corporation
 MAGNETIC SYSTEMS PLANT
 DOWNINGTOWN PA 19380

TITLE TC 2 TAPE CASSETTE 2
 SYSTEM B700
 DRAWN R.W. 8-28-72 CHECKED J.L. 8-31-72
 APPROVED B. DIJERMAN RELEASED 10-6-72

DWG. NO. 1448 9157
 PAGE 1 OF 2
 REV. LETTER D PER ECU/311
 1-25-73

SCHMATIC



—	1447	5396	1
RAF	1448	9165	2
T2H	1479	0240	1
DF	1447	3607	2
T1	1447	3532	3
T2C	1447	3581	2
T2A	1447	3524	3
T2	1447	3516	3
S2	1447	3797	4

CODE	PART NO.	QTY
—	—	—

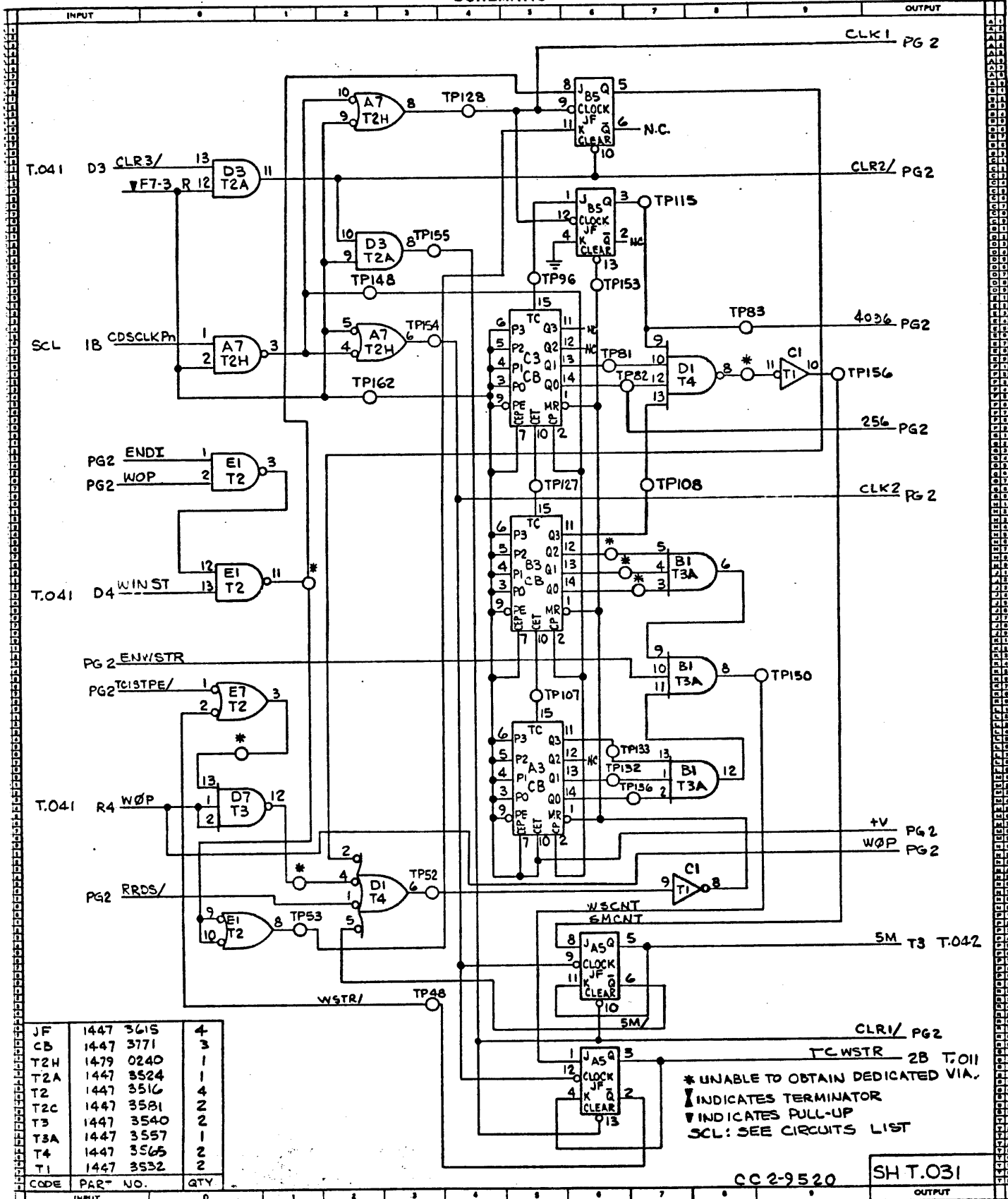
CC 2-9520 SH T.022

Burroughs Corporation
 MAGNETIC SYSTEMS PLANT DOWNINGTOWN, PA 19330

PRODUCTION

TITLE TC2 TAPE CASSETTE 2
 SYSTEM B 700
 DRAWN R.W. 8-28-72 CHECKED J.C. 8-31-72 PAGE 2
 APPROVED B. DINGERMAN RELEASED 10-6-72
 DWG. NO. 1448 9157
 REV. LETTER D PER ECU/311
 1-15-73

SCHMATIC



JF	1447	3615	4
CB	1447	3771	3
T2H	1479	0240	1
T2A	1447	3524	1
T2	1447	3516	4
T2C	1447	3581	2
T3	1447	3540	2
T3A	1447	3557	1
T4	1447	3565	2
T1	1447	3532	2

CODE	PAR. NO.	QTY
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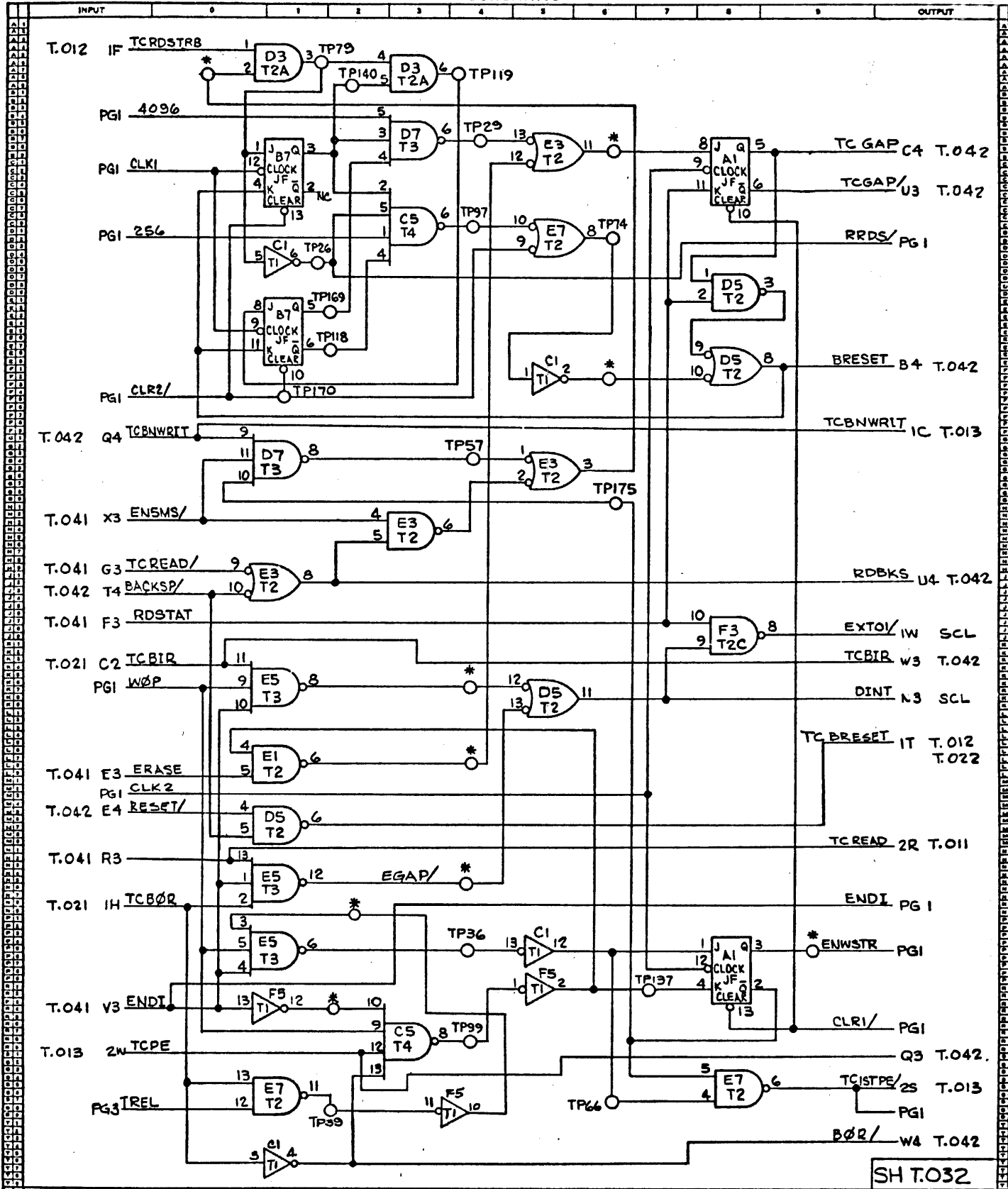
* UNABLE TO OBTAIN DEDICATED VIA.
 X INDICATES TERMINATOR
 V INDICATES PULL-UP
 SCL: SEE CIRCUITS LIST

CC 2-9520 SH T.031

Burroughs Corporation
 MAGNETIC SYSTEMS PLANT
 DOWNINGTOWN, PA 19330

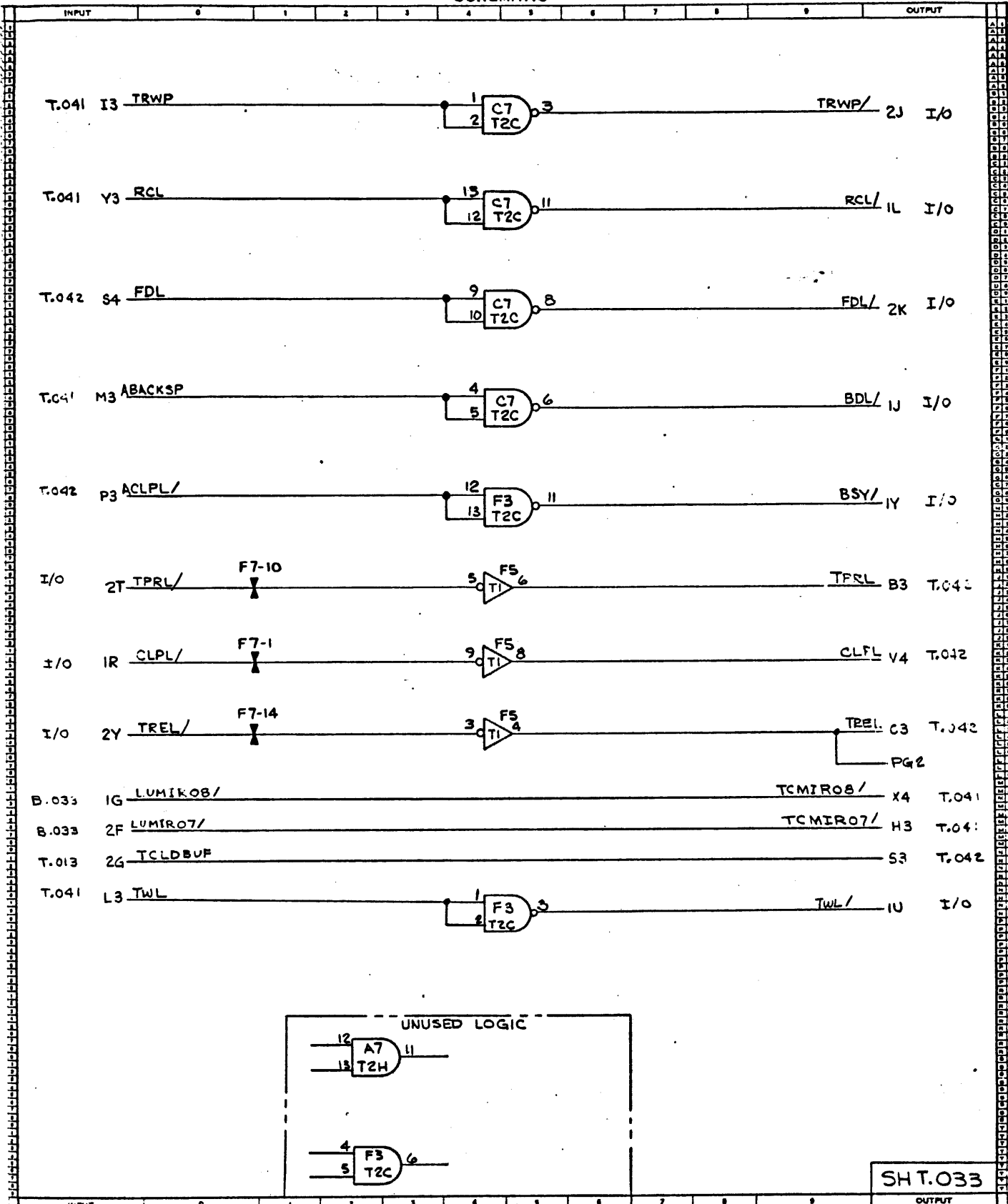
TITLE TC3 TAPE CASSETTE 3
 SYSTEM
 DRAWN *2/10/72*
 APPROVED *[Signature]*
 CHECKED *[Signature]* 1-11-72
 RELEASED 10-6-72
 DWG. NO. 1448 9090
 PAGE 1 OF 3
 REV. LETTER D PER ECN1311
 JT 1-3-73

SCHEMATIC



INPUT	0	1	2	3	4	5	6	7	8	9	OUTPUT
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 30%;"> <p style="text-align: center; margin: 0;">Burroughs Corporation</p> <p style="font-size: small; margin: 0;">MAGNETIC SYSTEMS PLANT DOWNTOWN, PA 19338</p> <p style="font-size: x-small; margin: 0;">PROPERTY OF BURROUGHS CORPORATION TO BE REPRODUCED NON-REPRODUCIBLE FACTORY IS UNDESIRABLE ACCEPT ON BURROUGHS ORDER OR PRINT WITH PERMISSION</p> </div> <div style="text-align: center; width: 30%;"> <p style="font-size: large; font-weight: bold; margin: 0;">PRODUCTION</p> </div> <div style="width: 30%;"> <p style="font-size: small; margin: 0;">TITLE TC3 TAPE CASSETTE 3</p> <p style="font-size: x-small; margin: 0;">SYSTEM</p> <p style="font-size: x-small; margin: 0;">DRAWN BY <i>11/17/72</i> CHECKED <i>11/17/72</i></p> <p style="font-size: x-small; margin: 0;">APPROVED: <i>[Signature]</i> RELEASED 10-6-72</p> </div> <div style="width: 10%; text-align: right;"> <p style="font-size: small; margin: 0;">DWG. NO. 1448 9090</p> <p style="font-size: x-small; margin: 0;">PAGE 2</p> <p style="font-size: x-small; margin: 0;">REV. LETTER D PER ECH 1311</p> </div> </div>											

SCHMATIC



SHT.033

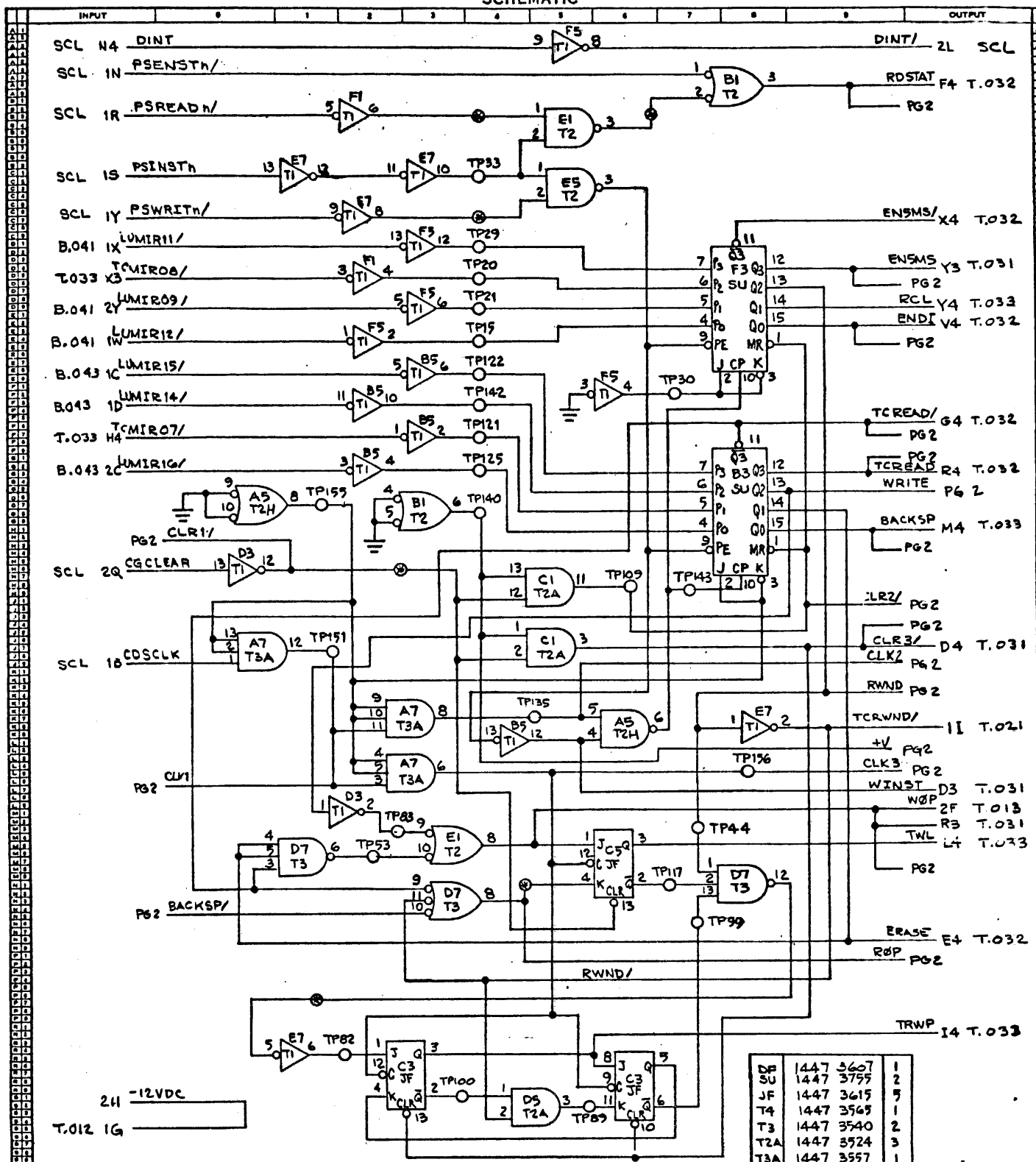
Burroughs Corporation
 MAGNETIC SYSTEMS PLANT
 DOWNTOWN PA 19336

PRODUCTION

TITLE TC3 TAPE CASSETTE 3
 SYSTEM
 DRAWN *J. Long* 9/8/72
 APPROVED *[Signature]* 10-6-72
 CHECKED *[Signature]* 10-6-72
 RELEASED 10-6-72

DWG. NO. 1448 9090
 PAGE 3
 REV. LETTER D PER ECA, B11

SCHMATIC



2H -12VDC
T.012 1G

⊙ DESIGNATES ABSENCE OF DEDICATED VIA.
SCL: SEE CIRCUIT LIST

DF	1447	3607	1
SU	1447	3755	2
JF	1447	3615	5
T4	1447	3565	1
T3	1447	3540	2
T2A	1447	3524	3
T3A	1447	3557	1
T2H	1479	0240	1
T2	1447	3516	3
T1	1447	3532	5
CODE	PART NO.	QTY	

SH T.041

UNUSED LOGIC

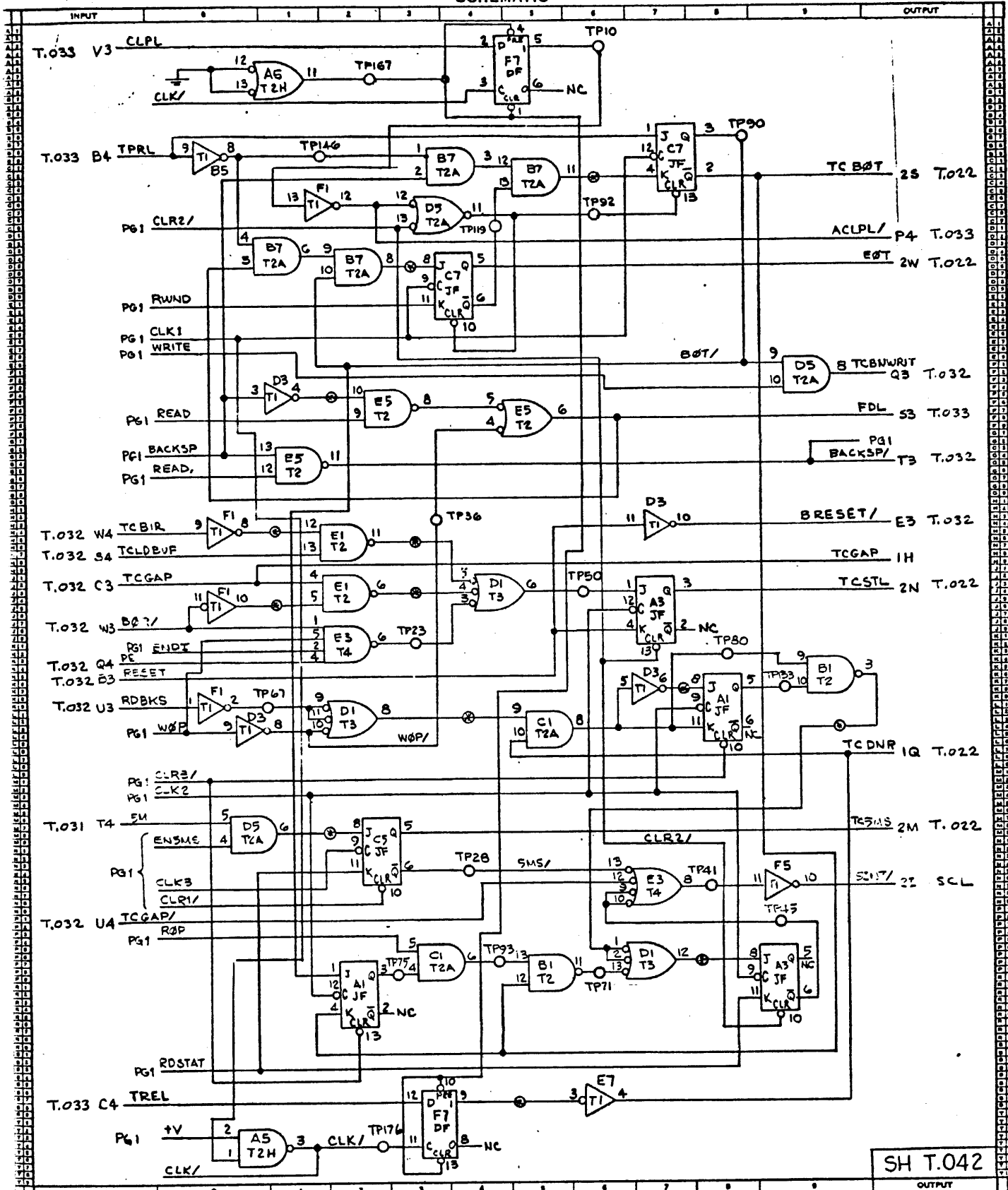
CC 2-9520

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FACTURING PURPOSES & EXCEPT BY BURROUGHS OR BY PRIOR WRITTEN CONSENT

PRODUCTION

TITLE TCA TAPE CASSETTE 4
SYSTEMS 700
DRAWN J. INCH 20-72 CHECKED BY [Signature] DWG. NO. 1449 0335
APPROVED [Signature] RELEASED 10-6-72 PAGE 1 OF 2
REV. LETTER E PER [Signature]

SCHMATIC



SH T.042

Burroughs Corporation
 MAGNETIC SYSTEMS PLANT
 DOWNTOWN PA 19338

PROPRIETARY

TITLE TC4 TAPE CASSETTE 4
 SYSTEM B700
 DRAWN J. INCH
 APPROVED

CHKD BY Schlemmer
 DWG. NO. 1443 0433
 PAGE 2
 REV. LETTER E PER GCN 311
 RELEASED 10-6-72

Burroughs Corporation

SMALL SYSTEMS PLANT
DOWNTOWN, PENNSYLVANIA 19335



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PURPOSES EXCEPT ON BURROUGHS
ORDER OR PRIOR WRITTEN
CONSENT.

NUMBER

1449 0700

TITLE

OVERLAY CIRCUIT LIST
TAPE CASSETTE CONTROL - TC

PREPARED BY

J. Wigle

APPROVED BY

B. Dinkman 3-14-73

ORIGINAL RELEASE DATE

2/16/73

PAGE 1 OF 2

REVISIONS

LEVEL	DESCRIPTION	DATE	APPROVE
	NOTE: SHEET 2 IS E.D.P. PRINT-OUT OF 3 SHEETS.	4-5-73	ERZ#

-SIGNAL-
-MNEMONIC

--PIN LOCATION-- LEVEL
-FROM- --TO-- -Z-Z-

-CARD
--NO-

GLOSSARY NAME

SCHEM
PG

RDL/	OLBE-3C	OLKE-2J	00010
BSY/	OLBE-2E	OLKE-2Y	00020
CDSCLKP	OLKE-0B	OLKE-2B	00030
CDSCLKP	OLKE-2B	OLKE-4B	00040
CDSCLKP	OLKE-4B	OLKE-6B	00050
CDSCLKP	OLKE-6B	PADQ-0B	00060
CGCLEAR	OLKE-1Q	OLKE-6H	00070
CLPL/	OLBE-5C	OLKE-2R	00080
CNT4	OLBE-3F	OLKE-6K	00090
DINT/	OLKE-1L	OLKE-7N	00100
DREF	OLBE-5B	OLKE-7U	00110
EXT01/	OLKE-2W	PAFS-2Q	00120
EXT09/	OLKE-4U	PAFS-8L	00130
EXT10/	OLKE-5U	PAFS-8G	00140
EXT11/	OLKE-5V	PAFS-8P	00150
EXT12/	OLKE-4V	PAFS-8Q	00160
EXT13/	OLKE-5W	PAFT-1L	00170
EXT14/	OLKE-5S	PAFT-1G	00180
EXT15/	OLKE-4W	PAFT-1P	00190
EXT16/	OLKE-4S	PAFT-1Q	00200
FDL/	OLBE-2C	OLKE-3K	00210
HSL/	OLBE-3B	OLKE-7Q	00220
LUMIR07/	OLKE-3F	PAFS-5S	00230
LUMIR08/	OLKE-2G	PAFS-4S	00240
LUMIR09/	OLKE-1Y	OLKE-5H	00250
LUMIR10/	OLKE-4F	PAFS-8S	00260
LUMIR11/	OLKE-0X	OLKE-5D	00270

-SIGNAL- MNEMONIC	--PIN LOCATION-- -FROM- --TO--	LEVEL -Z-Z-	-CARD --NO-	GLOSSARY NAME	SCH P
LUMIR12/	OLKE-0W	OLKE-5F	00280		
LUMIR13/	OLKE-5I	PAFT-0S	00290		
LUMIR14/	OLKE-0D	OLKE-4J	00300		
LUMIR15/	OLKE-0C	OLKE-4E	00310		
LUMIR16/	OLKE-1C	OLKE-5J	00320		
PSENST/	OLKE-0N	OLKE-6V	00330		
PSINST	OLKE-0S	OLKE-6U	00340		
PSREAD/	OLKE-0R	OLKE-7T	00350		
PSWRIT/	OLKE-0Y	OLKE-7X	00360		
RCL/	OLBE-6A	OLKE-2L	00370		
SHIFT	OLBE-4D	OLKE-7E	00380		
SINT/	OLKE-1I	PADP-8P	00390		
TCBIR	OLBE-3A	OLKE-3C	00400		
TCBIR	OLKE-3C	OLKE-5T	00410		
TCBNWRIT	OLKE-2C	OLKE-6D	00420		
TCBOR	OLKE-2H	OLKE-5P	00430		
TCBOT	OLKE-1S	OLKE-4Y	00440		
TCBRESET	OLKE-2T	OLKE-5G	00450		
TCBRESET	OLKE-5G	OLKE-7R	00460		
TCDNR	OLKE-0Q	OLKE-4Q	00470		
TCEOT	OLKE-1W	OLKE-4L	00480		
TCGAP	OLKE-0H	OLKE-5Q	00490		
TCLDBUF	OLKE-3G	OLKE-4G	00500		
TCLDBUF	OLKE-4G	OLKE-7L	00510		
TCPE	OLKE-3W	OLKE-4T	00520		
TCPE	OLKE-4T	OLKE-7W	00530		
TCRDSTRB	OLKE-2F	OLKE-7H	00540		

-SIGNAL- MNEMONIC	--PIN LOCATION-- -FROM- --TO--	LEVEL -Z-Z-	-CARD --NO-	GLOSSARY NAME	SCH PG
TCREAD	OLKE-3R	OLKE-6N	00550		
TCRWND/	OLKE-0I	OLKE-5B	00560		
TCSTL	OLKE-1N	OLKE-4H	00570		
TCWSTR	OLKE-3B	OLKE-7B	00580		
TC3STPE/	OLKE-3S	OLKE-7S	00590		
TC5MS	OLKE-1H	OLKE-5N	00600		
TPRL/	OLBE-4C	OLKE-3T	00610		
TRCL/	OLBE-3D	OLKE-7V	00620		
TREL/	OLBE-4E	OLKE-3Y	00630		
TRIP/	OLBE-4B	OLKE-6S	00640		
TRWP/	OLBE-5A	OLKE-3J	00650		
TWCP/	OLBE-4F	OLKE-6P	00660		
TWIL/	OLBE-4H	OLKE-6L	00670		
TWL/	OLBE-5I	OLKE-2U	00680		
TWRL/	OLBE-3G	OLKE-5R	00690		
HOP	OLBE-2G	OLKE-1F	00700		
HOP	OLKE-1F	OLKE-6C	00710		



TITLE

FIELD INSTALLATION INSTRUCTIONS
FOR PERIPHERAL CONTROL (B 392)
USED IN B711 OR B705 PROCESSOR

PREPARED BY

A. Harvey

3-30-73

APPROVED BY

[Signature]
4-9-73

ORIGINAL RELEASE DATE

4-13-73

PAGE 1 OF

A RELEASED
PER ERX

1. Insert circuit card assemblies into open DDP location in the logic backplane as described below:

CARD TYPE	DDP number and card location						
	1	2	3	4	5	6	7
TC1	FW6	DW6	FV4	DV4	FU2	DU2	DT0
TC2	FW3	DW3	FV1	DV1	FT9	DT9	DS7
TC3	FW0	DW0	FU8	DU8	FT6	DT6	DS4
TC4	FV7	DV7	FU5	DU5	FT3	DT3	DS1

2. Assemble the jumper connectors (Part No. 1534 3940) to the front plane connector end of the card pairs indicated below:

TC1 and TC2
TC3 and TC4

3. On the wiring side of the backplane, slide the LARGE template (TC) over the backplane pins for the DDP location which was used for this control. This will re-identify those pins to conform to the overlay circuit list contained in the Documentation Package.
4. On the wiring side of the backplane, slide the SMALL template (TC) over the backplane pins for the I/O connector location corresponding to the selected DDP, as follows:

DDP	1	2	3	4	5	6	7
I/O Connector	J97	J96	J95	J94	J93	J92	J91

5. Attach the 50-pin connector of the adapter cable (Part No. 1449 0288) which has the strain relief bracket, to the appropriate I/O connector on the insertion side of the backplane.
6. Attach the individual Brown wires labelled "TB8E2", "TB8B6" and "TB8A4" to the appropriate terminals on TB8, which is located on the top of the Capacitor-Rectifier assembly. These connections will supply power to the Tape Cassette Drive (+5VDC, +12VDC and -12VDC). (Ref: Wiring, B700 AC Control and Power Supply - Domestic: Part No. 1449 1674, International: Part No. 1449 1682; contained in Vol. I of the Field Test and Reference Document, Part No. 1448 7185, Pages 132 and 133 (Domestic), Pages 136 and 137 (International))
7. Secure the 50-pin connector on the other end of the adapter cable to the adapter panel which is part of the power control unit, using the #4-40X1/2" long pan head screws and #4 split lockwashers which are provided.
8. Mark, on the connector location decal of the power control, the slots in the adapter panel was used for this control cable.

1449 7804

9. Affix the decal, which identifies the control and its serial number, to the configurator plate (which is on the horizontal rail of the processor) in the space which indicates the DDP location which was used for this control.
10. Control is now ready for use.

Burroughs Corporation

SMALL SYSTEMS PLANT
DOWNTOWN, PENNSYLVANIA 19335



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CONSENT.

NUMBER
2601 7392

REV
A

PREPARED BY

A. Harvey

12-18-73

APPROVED BY

[Signature]
1/13/74

TITLE

FIELD INSTALLATION INSTRUCTIONS
FOR PERIPHERAL CONTROL (B 392)
USED IN B771 PROCESSOR

ORIGINAL RELEASE DATE

PAGE 1 OF 2

A RELEASED
PER ERN 94

1. Insert circuit card assemblies into open DDP location in the logic backplane as described below:

CARD TYPE	DDP number and card location					
	2	3	4	5	6	
TC1	DW6	FV4	DV4	FU2	DU2	
TC2	DW3	FV1	DV1	FT9	DT9	
TC3	DW0	FU8	DU8	FT6	DT6	
TC4	DV7	FU5	DU5	FT3	DT3	

2. Assemble the jumper connectors (Part No. 1534 3940) to the front plane connector end of the card pairs indicated below:

TC1 and TC2
TC3 and TC4

3. On the wiring side of the backplane, slide the LARGE template (TC) over the backplane pins for the DDP location which was used for this control. This will re-identify those pins to conform to the overlay circuit list contained in the Documentation Package for the control.
4. On the wiring side of the backplane, slide the SMALL template (TC) over the backplane pins for the I/O connector location corresponding to the selected DDP, as follows:

DDP	2	3	4	5	6	
I/O Connector	J96	J95	J94	J93	J92	

5. Attach the 50-pin connector of the adapter cable (Part No. 1449 0288) which has the strain relief bracket, to the appropriate I/O connector on the insertion side of the backplane.
6. Attach the individual Brown wires labelled "TB8B2", "TB8B6" and "TB8A4" to the appropriate terminals on TB8, which is located on the top of the Capacitor-Rectifier assembly. These connections will supply power to the Tape Cassette Drive (+5VDC, +12VDC and -12VDC). (Ref: Wiring, B771 AC Control and Power Supply - Domestic: Part No. 1449 6756, International: Part No. 1449 6764, contained in Vol. I of the Field Test and Reference Document, Part No. 1449 4819).
7. Secure the 50-pin connector on the other end of the adapter cable to the adapter panel which is part of the power control unit, using the #4-40X3/4" long pan head screws and #4 split lockwashers which are provided.
8. Mark, on the connector location decal of the power control, which of the slots in the adapter panel was used for this control cable.

2601 7392

NUMBER

2601 7392

PAGE

2

REV.

A

9. Affix the decal, which identifies the control and its serial number, to the configurator plate (which is on the horizontal rail of the processor) in the space which indicates the DDP location which was used for this control.
10. Control is now ready for use.