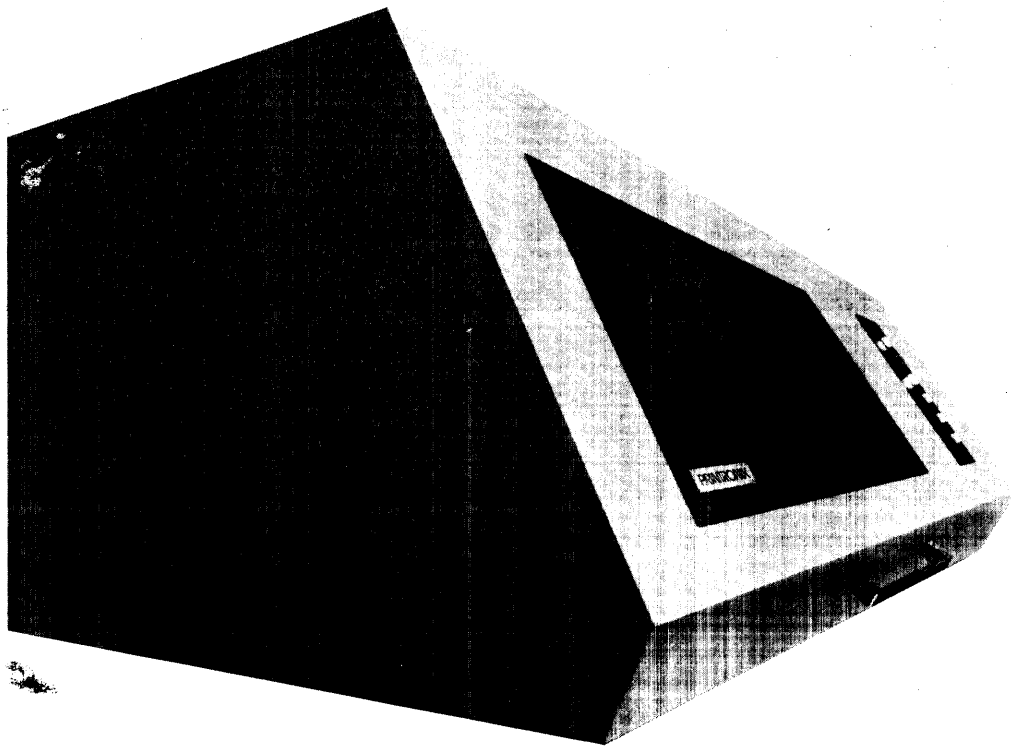


PRINTRONIX

Model 300 Printer Drawing Manual



PRINTRONIX

Model 300 Printer Drawing Manual

PART NO. 102496-001 REVISION B

MAY 1977

PROPRIETARY NOTICE

All information contained in this Maintenance Manual is disclosed for normal use and may not be duplicated in part or full without prior written approval of Printronix, Inc. The purpose of this manual is to provide the user with sufficient information to efficiently maintain the equipment supplied. Use of this document for any other purpose is prohibited.

PRINTRONIX

17421 DERIAN AVE., IRVINE, CALIFORNIA 92714
(714) 549-8272 TWX 910-595-2535

INTRODUCTION

This Drawing Manual contains logic diagrams, schematics, and assembly drawings to permit the maintenance of the printer circuitry and mechanics. It includes drawings for: options, non-standard configurations, and the current standard printer.

For detailed theory of operation and maintenance, the Maintenance Manual (Part No. 101690 Rev B) should be used. For information on installation instructions, electrical and logic interface requirements, consult the Application Manual (Part No. 102487). Operating instructions can be found in the Printer Operator's Manual (Part No. 102486).

TABLE OF CONTENTS

TITLE	SCHEMATIC #	ASSEMBLY #
MNEMONIC DICTIONARY		
BLOCK DIAGRAM – PRINTRONIX 300		
LOGIC A1 (STANDARD) PCBA	101688 H	101685
LOGIC A1 (SPECIAL) PCBA	102473 B1	102470
LOGIC B4 (STANDARD) PCBA	102363 A4	102360
LOGIC B4 (SPECIAL) PCBA	102461 A1	102462
LOGIC B3 PCBA	101738 H	101735
HAMMER DRIVER PCBA	101203 F	101200
RIBBON CONTROL PCBA (DC)	102143 B1	102140
RIBBON CONTROL PCBA (AC)	101223 J	101220
POWER SUPPLY PCBA	102163 B1	102160
POWER SUPPLY PCBA	101876 E	101875
POWER SUPPLY ASSEMBLY	101877 C	102237
CONTROL PANEL 2	101766 B	101578
PRINTER WIRING DIAGRAM	101646 D	NONE
PRINTER MECHANICS	102099 L	NONE
RS 232 PCBA	102113 B2	102110
LONG LINES PCBA	102246 B	102248
MECHANICAL VFU PCBA	102323 A1	102320
FORMS LENGTH PCBA	102343 A2	102340
NOVA CONTROLLER PCBA	102223 A1	102220
PDP-11 CONTROLLER PCBA	102213 A1	102210
PRINTER PEDESTAL MOUNTING	101889 F	NONE

MNEMONIC DICTIONARY

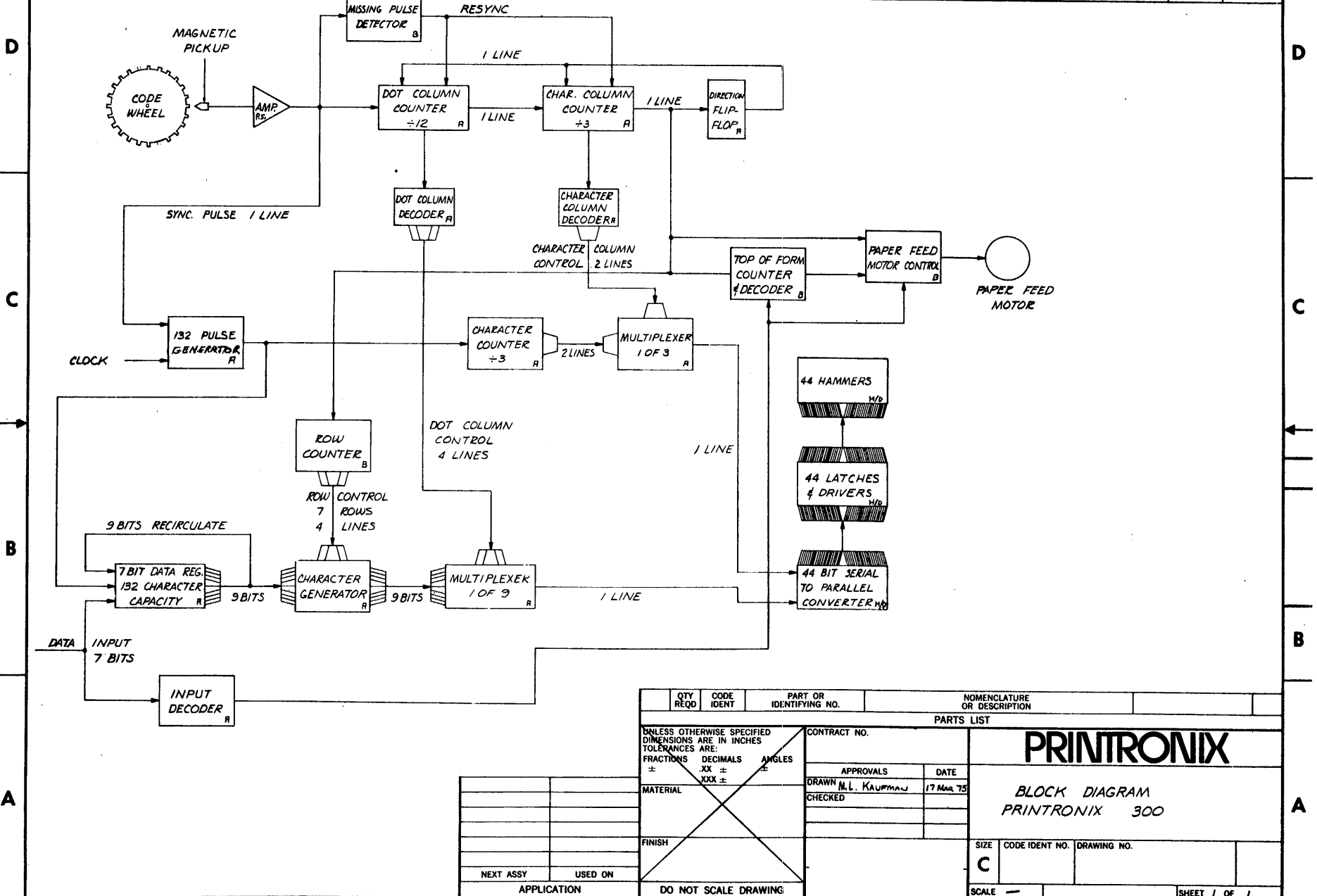
The following list presents and defines, in alphabetical order, the mnemonics used in logic diagrams contained in the *Drawings* manual. (Initial N denotes negative-true.)

BC	Binary Count (EVFU . . . DB5 True)
CC1, CC2	Character Column Binary Count
CLK, CLK A, CLK B	Clock (2-MHz system clock)
COM	Serial Data to Hammer Bank Shift Register
DB1-DB8	Latched Data Bits
DC1-DC4	Dot Column Binary Count
EDT	Enable Data Transfer
EOP	End of Print
EPFP	End Paper Feed Pulse
EPP	Even Paper Pulse
ESR	End Shift Register (shift register justified)
EVR	Enable EVFU Ready
FLL	Form Feed Last Line (line 65)
FMFD	Form Feed
GND	Ground
HB21	Hammer Bank Hammer 21
HC1-HC44	Hammer Coil Drive
HMC	Hammer Master Clear (+5V dc up)
IACK	Acknowledge (interface)
IBOF	Bottom of Form (interface)
ICBY	Busy (interface)
ICPE	Ready (interface)
ICSTB, IDSTB	Strobe (interface . . . from controller)
IDB1-IDB8	Data Bits (interface)
IDR	Data Request (interface . . . "demand")
IONL	On Line (interface)
IPI	EVFU Control (interface)
IRDY	Ready (interface)
LCHK	Check Lamp
LD	Load EVFU
L8LPI	8 LPI Lamp (control panel)
LONL	On Line Lamp (control panel)
LVRDY	Top of Form Lamp (control panel EVFU loaded)
MAG PICKUP	MPU Timing Disk Sense (ac wave)
MC	Master Clear (Power-up Start)
MC3	Master Clear to MVFU
MPU	Magnetic Pickup (amplified)
NBOF	Bottom of Form (EVFU)
NDBEL	(not used)
NDCRR	Decoded Carriage Return
ND8LPI	Enable 8 LPI (decoded command)
NDEL	Elongated Character (decoded command)
NDFMFD	Form Feed (decoded command)
NDLC	Delayed Last Count (EVFU . . . RC=0)

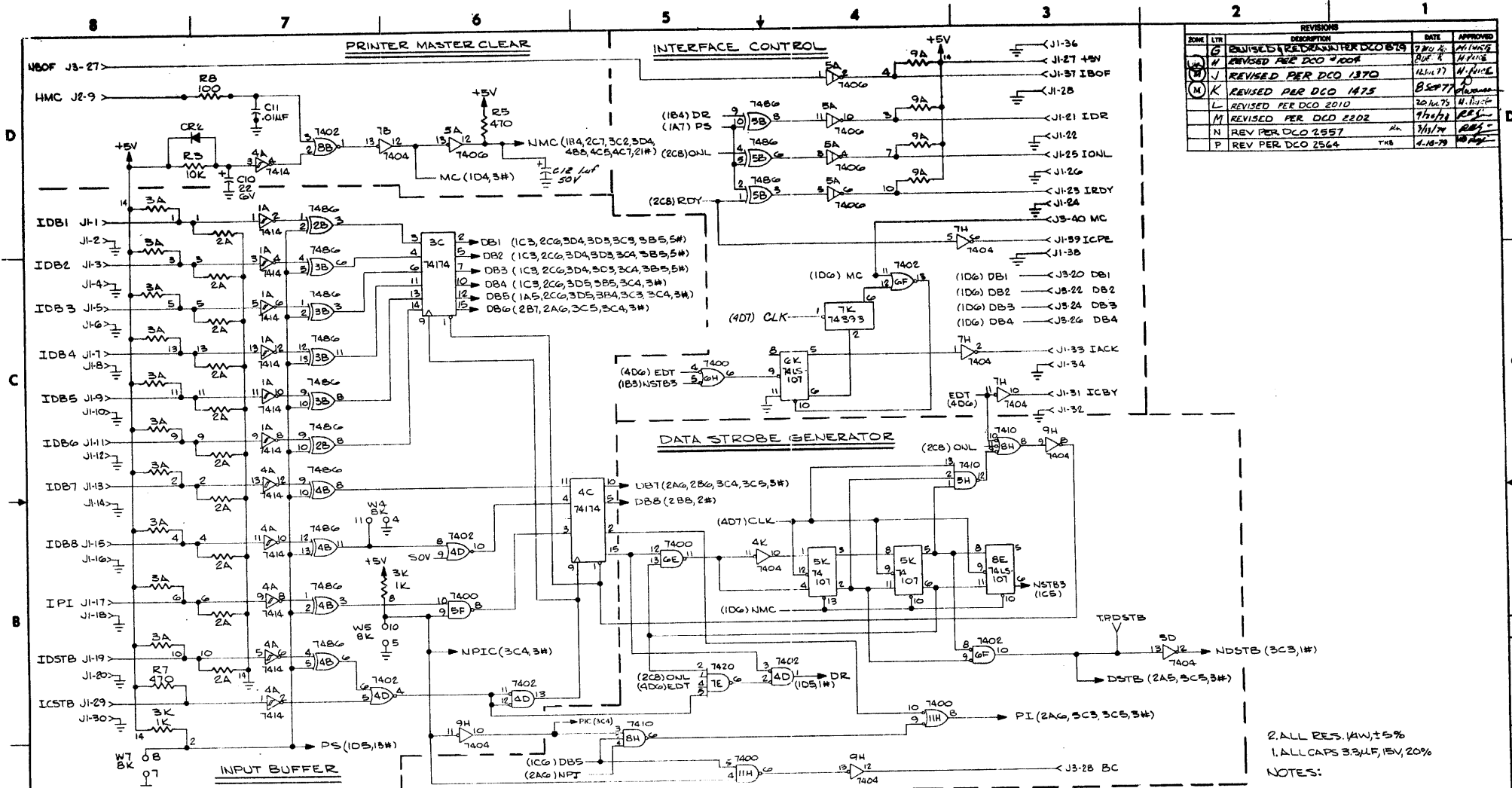
NDLNFD	Line Feed (decoded command)
NDSTB	Delayed Strobe
NDUL	Underline (decoded command)
NDVT	Vertical Tab (VFU . . . decoded command)
NECR	End Carriage Return
NECS	Extended Character Set (SOV+IDB8)
NEFF	End Form Feed (line 66)
NELB	End Load Buffer (RESYNC · EOL)
NELD	End Load (VFU)
NEMV	MVFU Move
NEOL	End of Load (buffer loaded)
NEVC	MVFU Runaway
NFIR	0-64 Character Enable
NFL	Paper Motion Fault
NFMRS	Form Feed Reset
NFLT	Fault (power supply or interlock)
NHCK	Hammer Latch Clock
NHRS	Hammer Reset
NHSC	Hammer Shift Clock (330 KHz)
NLC	Lower Case Strobe
NMVE	MVFU Enable
NOCD	Output Clock Disable (for test)
NONL	On Line
NOPP	Odd Paper Pulse
NPADV	Paper Advance
NPAL	Print Additional Lines
NPC	Latched Printable Character
NPDE	Print Disable
NPT	Printable Character (no strobe)
NPTCH	Printable Character (strobed)
NPSYNC	Print More Resync
NRCR	Reset Row Counter
NREC	Recirculate (buffer memory)
NSD	Shuttle Drive
NSLW	Slew
NSP	Space Code
NSPFP	Start Paper Feed Pulse
NSPI	Strobed Paper Instruction (PI · DSTB)
NSPT	Start Print
NSTB3	Strobe 3
NSRCLK	Shift Register Clock
NSTL	Start Load (VFU)
NTFLC	Final Line Count (TOF counter clock)
NULR	Underline Recirculate (buffer memory)
NVFS	VFU Slew
NVSC	VFU Shift Register Clock
PAPER OUT SW	Paper Out Detector on Platen
PF1	Paper Feed 1
PF2	Paper Feed 2
PFM01-PFM04	Paper Feed Motor Phases 1-4
PIC	Centronics Paper Instruction

5HL	+5V dc Supply to Hammer Latches
+8V DC	Filtered +8V dc Supply
+28VH	+28V dc Supply
-30V DC	Filtered -30V dc, Paper Feed
PM	Plot Mode
PMD	Paper Motion Detect
PPF	Paper Feed Mode
PRT	Print Mode
PS	Polarity Select (interface polarity)
RC1-RC4	Row Clock Binary Count
RCLK	Row Clock
RESYNC	Resync Pulse from MPU (50 msec)
RLB	Load Buffer
S5	16- μ sec Clk Count
S8LPI	8 LPI Switch (control panel)
S45	(Test)
SCHK	Check Switch
SDB1-SDB7	Shift Register Data Bits
SDUL	Shift Register Underline
SONL	On Line Switch (control panel)
SOV	Shift Out (special character set)
STOF	Top of Form Switch (control panel)
SUS	Shuttle Up to Speed
SYNC	Sync Pulse from MPU (0.5 msec)
TC3	Top of Form Counter
VB1-VB4	VFU Data Bits 1-4
VB5	VFU Bit 5 (enable binary count)
VRDY	VFU Memory Loaded (Ready for Commands)
VREF	4.7V dc Reference Voltage

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED



QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO.	
FRACTIONS ±	DECIMALS .XX ±	APPROVALS	DATE
ANGLES ±	XXX ±	DRAWN N.L. KAUFMAN	17 MAR 75
MATERIAL	FINISH	CHECKED	
NEXT ASSY	USED ON	<h1>PRINTRONIX</h1> <p>BLOCK DIAGRAM PRINTRONIX 300</p>	
APPLICATION	DO NOT SCALE DRAWING		
SCALE	C	SIZE	CODE IDENT NO. DRAWING NO.
SHEET 1 OF 1			



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
G		REVISED PER DCO 1875	7/20/77	W. H. HARRIS
H		REVISED PER DCO 1900	8/24/77	W. H. HARRIS
J		REVISED PER DCO 1875	12/14/77	W. H. HARRIS
K		REVISED PER DCO 1875	8/24/77	W. H. HARRIS
L		REVISED PER DCO 2010	20/10/78	W. H. HARRIS
M		REVISED PER DCD 2202	1/10/79	W. H. HARRIS
N		REV PER DCO 2557	3/1/79	W. H. HARRIS
P		REV PER DCO 2564	4/10/79	W. H. HARRIS

2. ALL RES. 1/4W, ±5%
 1. ALL CAPS 33µF, 15V, 20%
 NOTES:

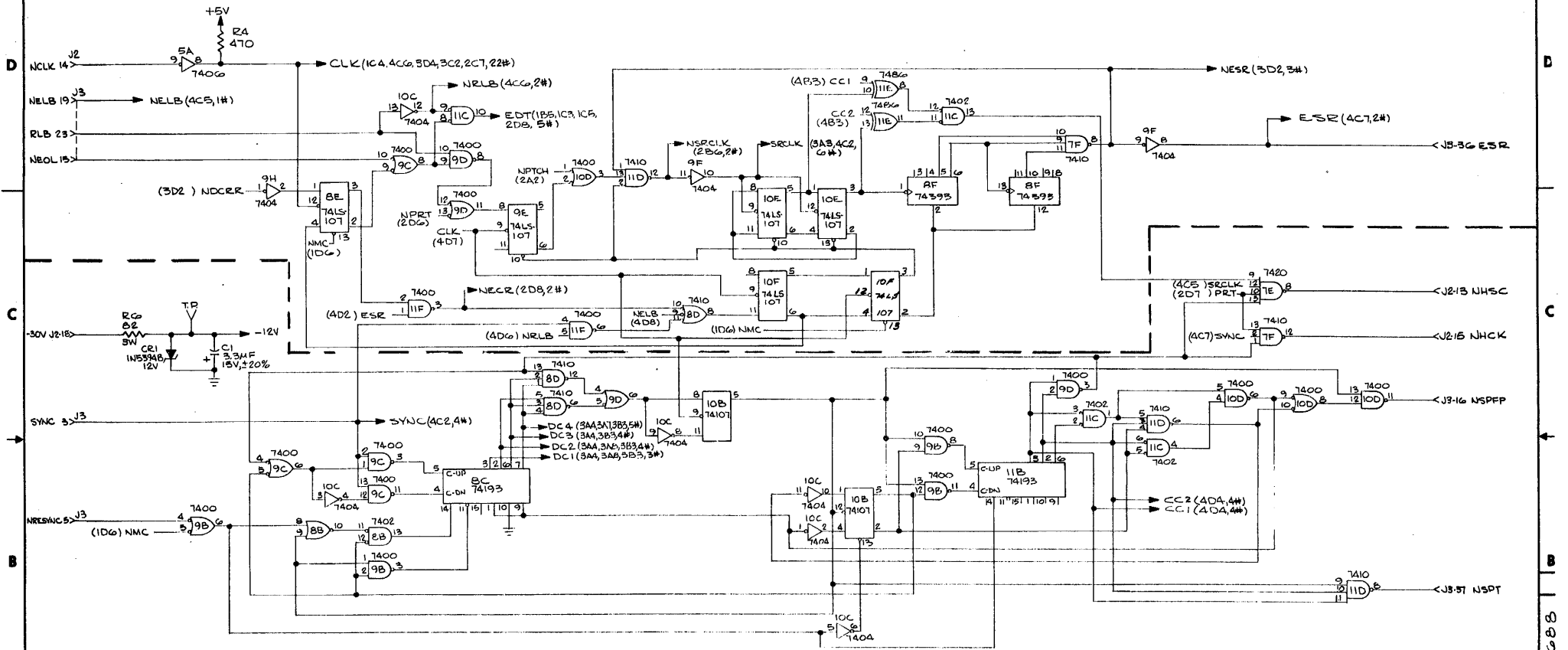
QTY		CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:				
FRACTIONS	DECIMALS	ANGLES		
XX ± .01		XX ± 1/2		
XXX ± .010				
MATERIAL			FINISH	
P300			USED ON	
NEXT ASSY			APPLICATION	
DO NOT SCALE DRAWING				

JUMPER TABLE		CONNECTORS		LAST REDESIGN USED		SPARE GATES	
W1	AUTOMATIC LINE FEED	J1	INPUT	C11		7412	RES PACK
W2	CR = LF	J2	POWER	R7			
W3	UNDERLINE DISABLE	J3	B BOARD TRANSFER	CR2			
W4	DATA BITS ENABLE						
W5	PI DISABLE						
W6	PRINT LOWER CASE A-Z UPPER CASE						
W7	I/O POLARITY						

CONTRACT NO.		DATE		APPROVALS	
PRINTRONIX		5-9-76		E. LOWRY	
SCHEMATIC, PCB		1-27-76		J. S. HARRIS	
LOGIC A1					
SIZE	CODE IDENT NO.	DRAWING NO.	REV		
D		101688	R		
SCALE	CODE 10	SHEET 1 OF 4			

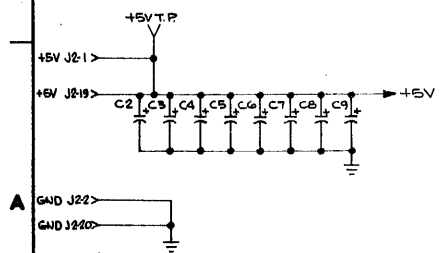
SHIFT REGISTER COUNTER

REVISES		DATE	APPROVED
FORM LTR	DESCRIPTION		
(7)	SEE SHEET 1		



DGT COLUMN COUNTER

CHARACTER COLUMN COUNTER

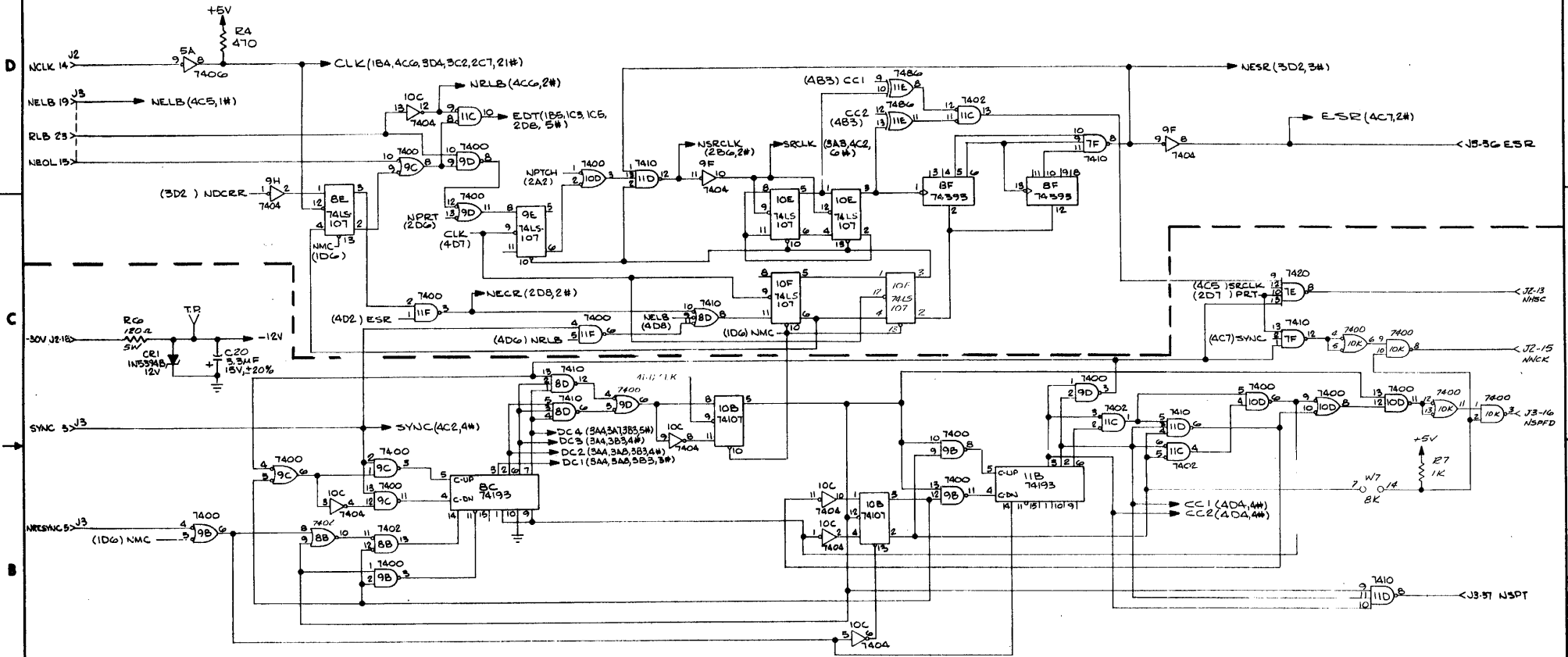


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		CONTRACT NO.	PRINTRONIX
		PARTS LIST	
		APPROVALS	SCHEMATIC, PCB LOGIC A1
		CHECKED	
		DATE	SIZE CODE IDENT NO. DRAWING NO.
			D 101688 P
			SCALE SHEET 4 OF

101688

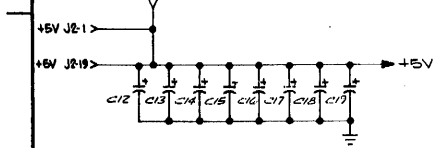
SHIFT REGISTER COUNTER

REV	DATE	DESCRIPTION	APPROVED
(M)		SEE SHEET 1	



DOT COLUMN COUNTER

CHARACTER COLUMN COUNTER



QTY	CODE	PART OR	NOMENCLATURE
REQD	IDENT	IDENTIFYING NO.	OR DESCRIPTION
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		CONTRACT NO.	
TOLERANCES ARE:		DRAWN	
FRACTIONS DECIMALS ANGLES		CHECKED	
± .003 ± .010 ± 1/2°		APPROVALS	
DATE		DATE	
MATERIAL		DATE	
FINISH		DATE	
NEXT ASSY		DATE	
USED ON		DATE	
APPLICATION		DATE	
DO NOT SCALE DRAWING		DATE	

PRINTRONIX

PCB, LOGIC AI
SCHEMATIC (LONG LINES)
SPECIAL

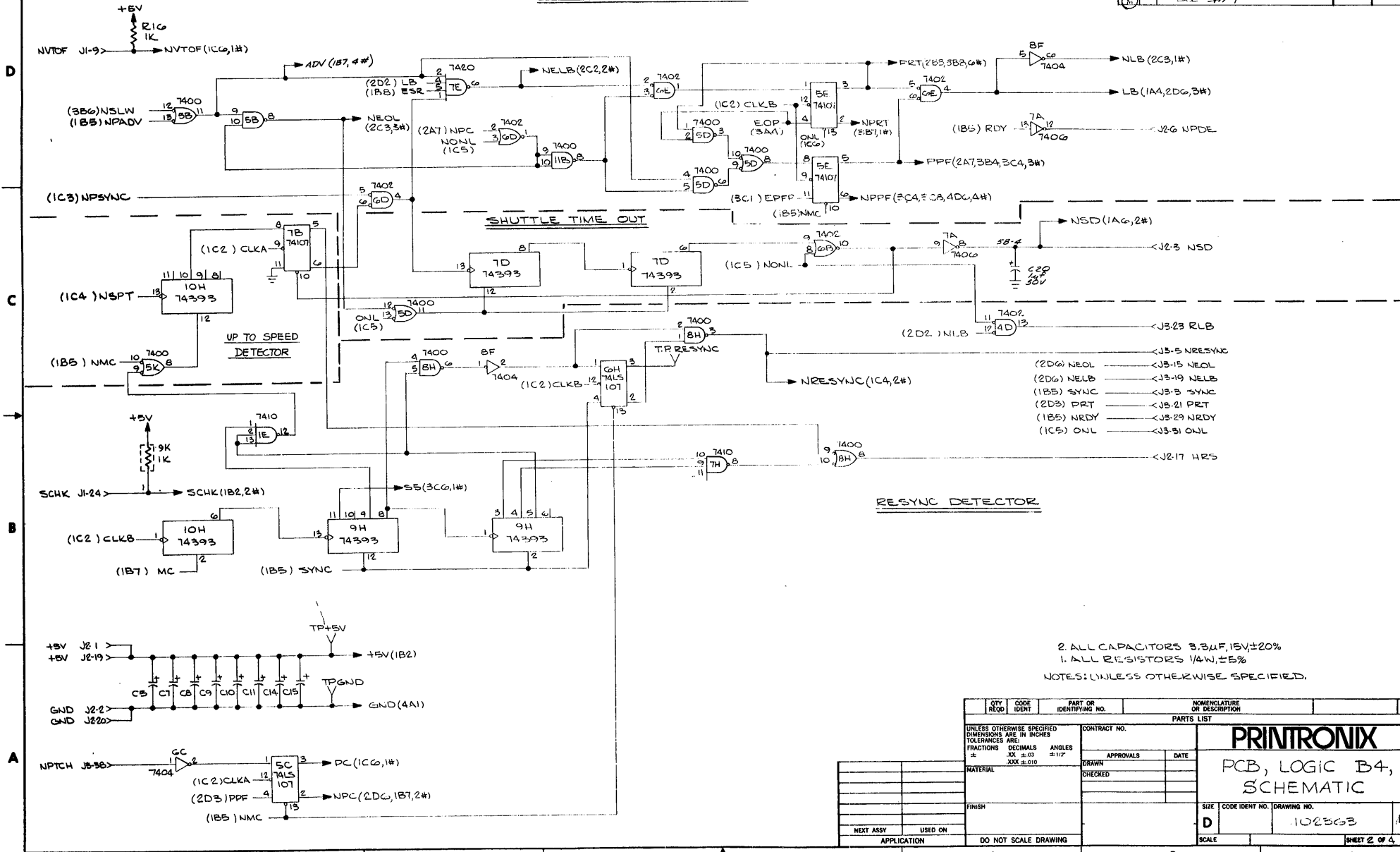
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102473 1/3

SHEET 4 OF 4

PRINTER STATE CONTROL

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
(N)		SEE SH7		



2. ALL CAPACITORS 3.3uF, 15V ± 20%
 1. ALL RESISTORS 1/4W, ± 5%
 NOTES: UNLESS OTHERWISE SPECIFIED.

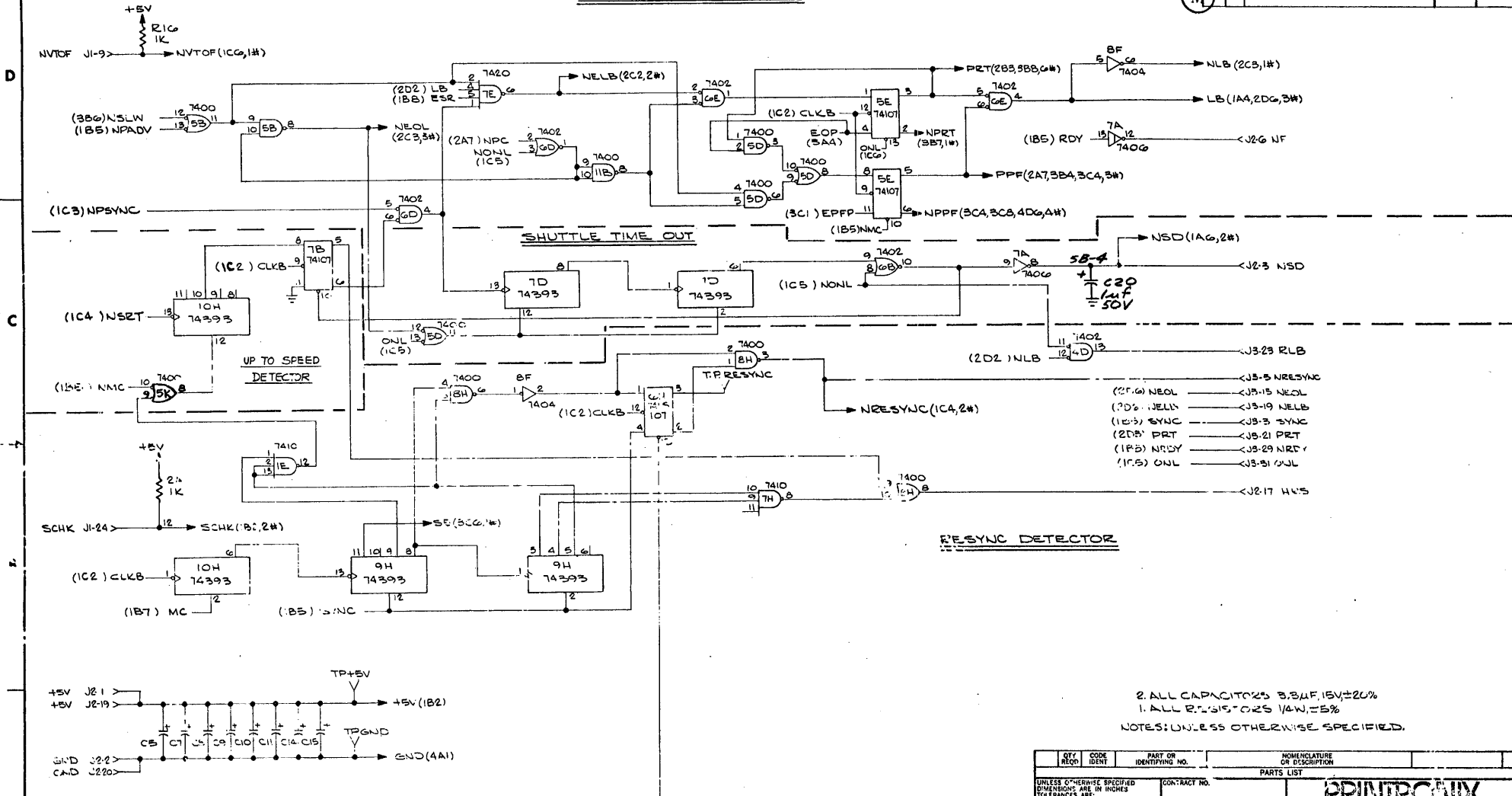
QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES .XX ± .03 .XXX ± .010			
MATERIAL		CONTRACT NO.	
FINISH		APPROVALS DATE	
NEXT ASSY USED ON APPLICATION		DRAWN CHECKED	
DO NOT SCALE DRAWING		SCALE	

PRINTRONIX
 PCB, LOGIC B4,
 SCHEMATIC

SIZE CODE IDENT NO. DRAWING NO.
D 102363
 SHEET 2 OF 4

PRINTER STATE CONTROL

REVISE		REVISIONS	DATE	APPROVED
ZONE	LTR	DESCRIPTION		
M				



- (2F) NEOL → J3-5 NRESYNC
- (2D) NELB → J3-19 NELB
- (1E) SYNC → J3-3 SYNC
- (2D) PRT → J3-21 PRT
- (1F) RDY → J3-29 NRDY
- (1C) ONL → J3-31 ONL

2. ALL CAPACITORS 5.0% ±20%
 1. ALL RESISTORS 1/4W, 5%
 NOTES: UNLESS OTHERWISE SPECIFIED.

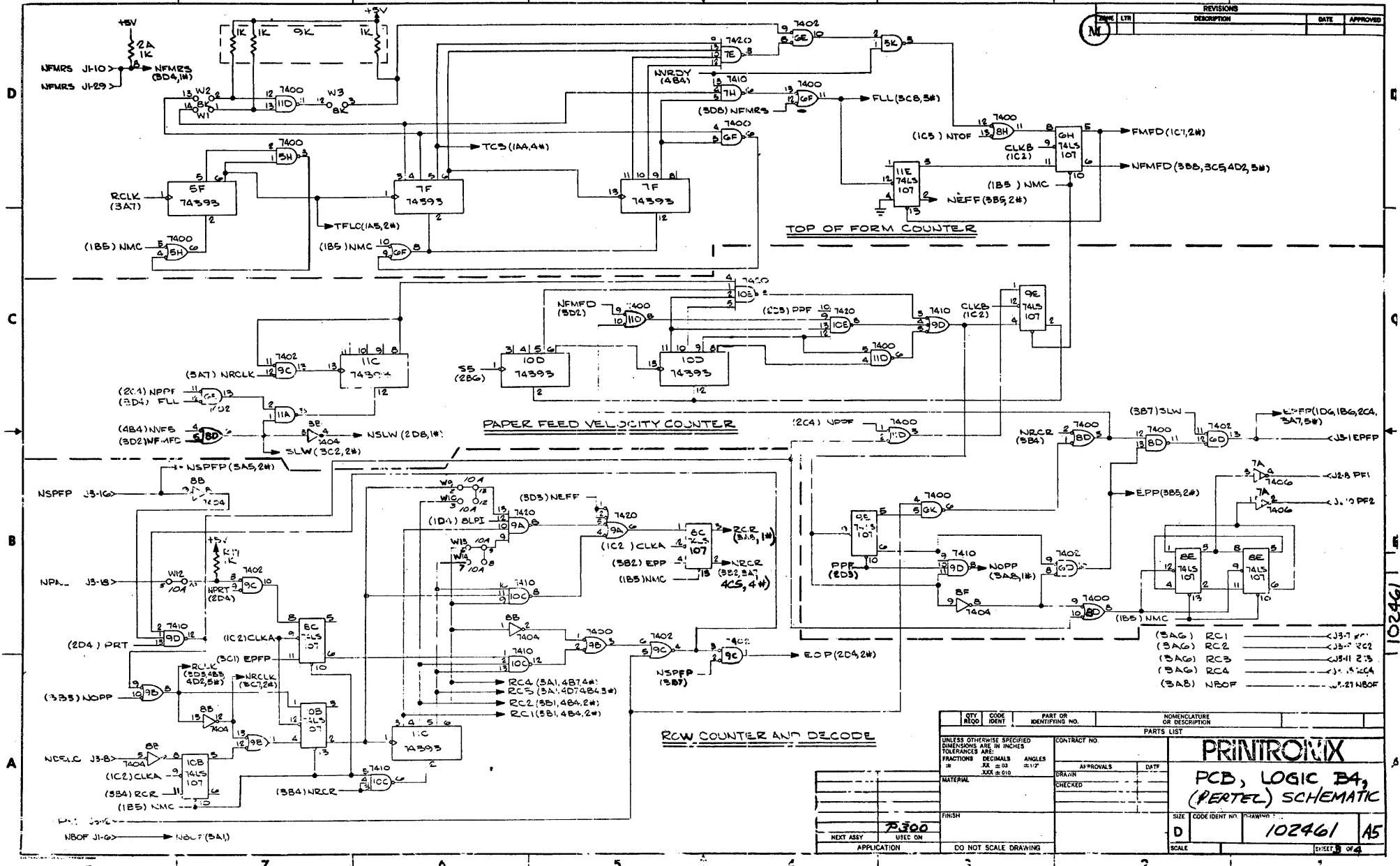
QTY	CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		CONTRACT NO.	
FRACTIONS	DECIMALS	ANGLES	APPROVAL DATE
3/16	0.031	30°	
1/32	0.0156	45°	
1/64	0.0078	60°	
MATERIAL		CHECKED	
FINISH		DATE	
NEXT ASSY		SCALE	
APPROVAL		DO NOT SCALE DRAWINGS	

PRINTRONIX
 PCB, LOGIC B4,
 (HEYTEL) SCHEMATIC

SIZE: 102461
 DRAWING NO. 102461
 SHEET 1 OF 4

102461

REVISIONS			
REV	DATE	DESCRIPTION	APPROVED
M			



- (3A8) RC1 <J3-7 4P
- (3A9) RC2 <J3-7 2C2
- (3A9) RC3 <J3-11 2B
- (3A9) RC4 <J3-11 2C4
- (3A8) NRDF <J3-21 1B0F

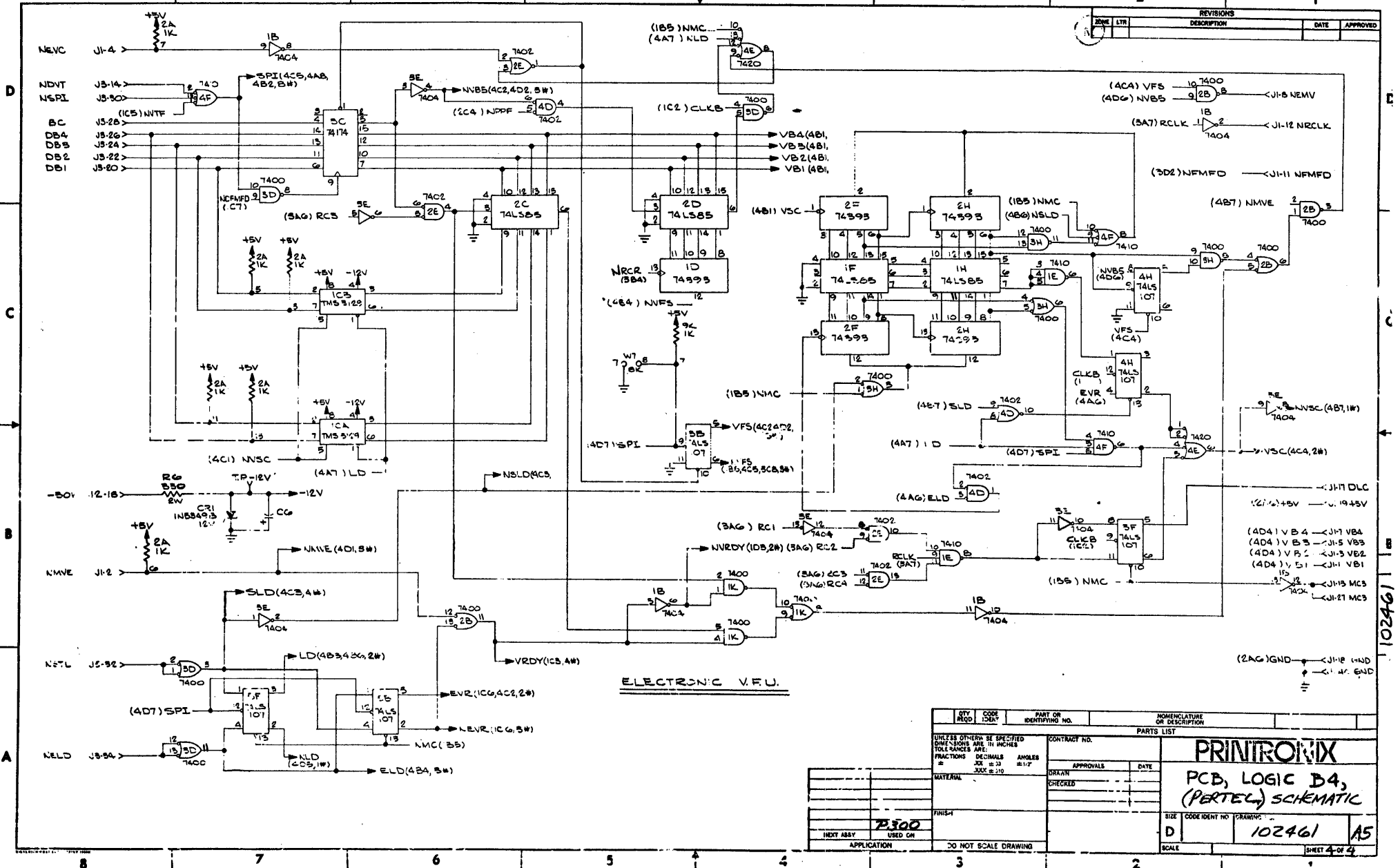
QTY	CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
			PARTS LIST
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES			
MATERIAL			
FINISH			
NEXT ASSY USE ON			
APPLICATION			
DO NOT SCALE DRAWING			

PRINTROLIX
PCB, LOGIC BA,
(PERTEL) SCHEMATIC

SIZE CODE IDENT NO. DRAWING NO.
D 102461 AS

SCALE SHEET 3 OF 4

102461



ELECTRONIC V.F.U.

REV	DATE	DESCRIPTION	DATE	APPROVED
1				

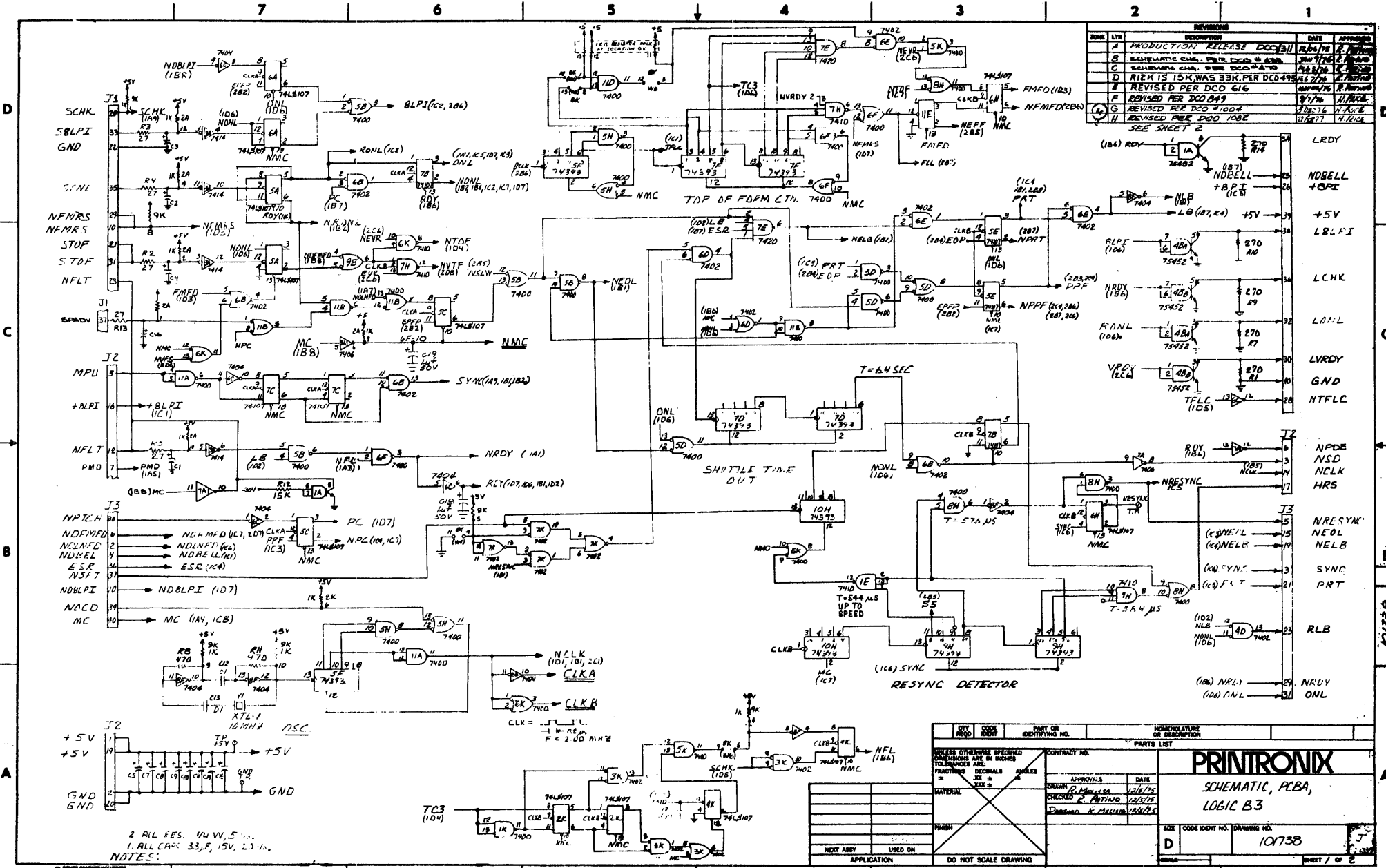
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PARTS LIST		CONTRACT NO.	

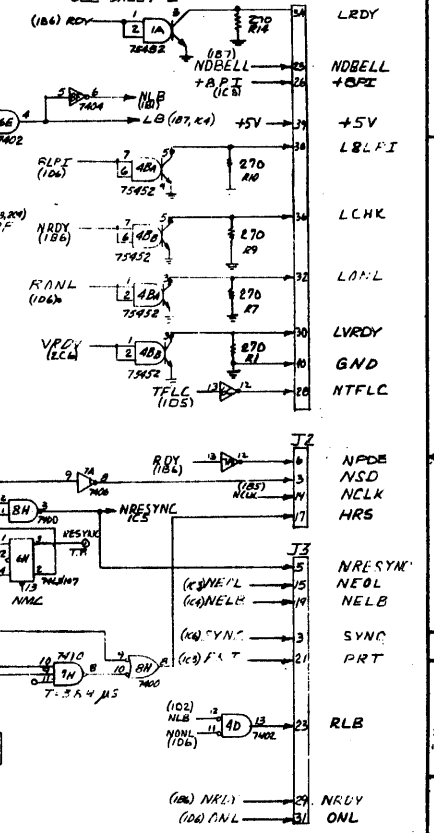
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FRACTIONS	DECIMALS						
±.005	±.001						

SIZE	CODE IDENT NO.	DRAWING NO.	SCALE
D		102461	A5

102461



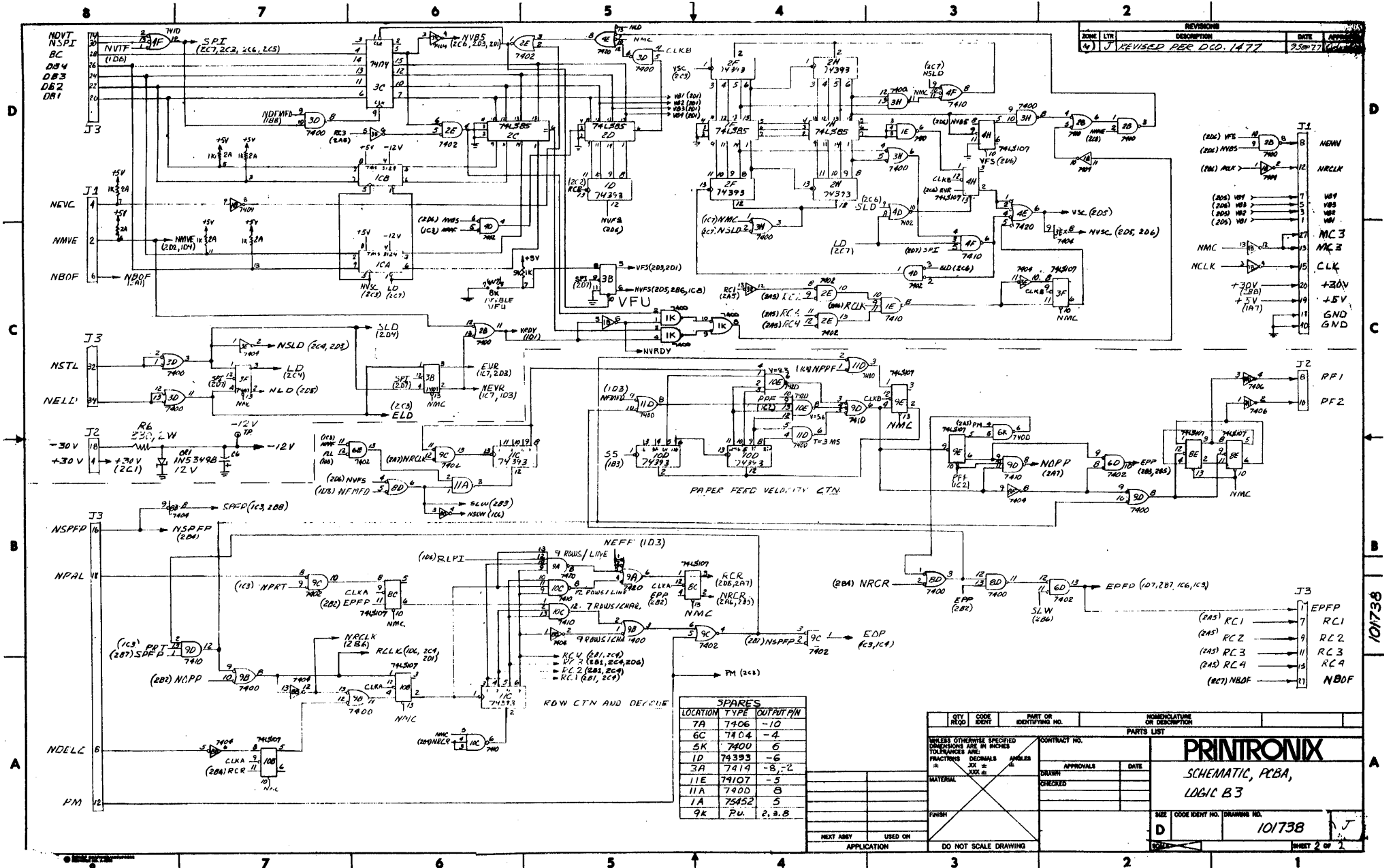
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A	12/20/78	PRODUCTION RELEASE DCO 911	J. J. J.
B	12/20/78	SCHEMATIC CHG. PER DCO 911	J. J. J.
C	12/20/78	SCHEMATIC CHG. PER DCO 911	J. J. J.
D	12/20/78	RISK IS 15K, WAS 33K. PER DCO 495	J. J. J.
E	12/20/78	REVISED PER DCO 616	J. J. J.
F	12/20/78	REVISED PER DCO 649	J. J. J.
G	12/20/78	REVISED PER DCO 1004	J. J. J.
H	12/20/78	REVISED PER DCO 1082	J. J. J.



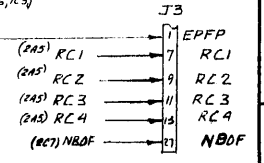
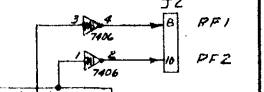
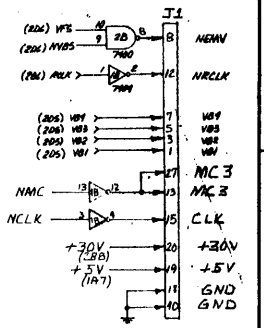
REV	DATE	DESCRIPTION	APPROVED
A	12/20/78	PRODUCTION RELEASE DCO 911	J. J. J.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:	CONTRACT NO.	PARTS LIST
FRACTIONS DECIMALS ANGLES	APPROVALS	
TRAYERAL	DATE	<h1>PRINTRONIX</h1>
FINISH	DATE	
NEXT ASSY	USED ON	<h2>SCHMATIC, PCBA, LOGIC B3</h2>
APPLICATION	DO NOT SCALE DRAWING	SIZE CODE IDENT NO. (DRAWING NO.) D 101738

2 ALL RES. 1/4 W, 5%.
1. ALL CAPS 33F, 15V, 2.3-1.
NOTES:



REV	DATE	DESCRIPTION
4	9/30/77	REVISED PER DCO. 1477



LOCATION	TYPE	OUTPUT PIN
7A	7406	-10
6C	7404	-4
5K	7400	6
1D	74393	-6
3A	7414	-8, -2
11E	74107	-5
11A	7400	8
1A	75452	5
9K	P.W.	2, 2, 2, 2

QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
			EPFP
			RC1
			RC2
			RC3
			RC4
			NBOF

PRINTRONIX
SCHEMATIC, PCBA,
LOGIC B3

101738

101738

A

D

C

B

A

D

C

B

A

8

7

6

5

4

3

2

8

7

6

5

4

3

2

1

© 1977 PRINTRONIX

DO NOT SCALE DRAWING

REVISIONS

DATE

APPROVALS

CHECKED

DATE

CONTRACT NO.

SIZE

CODE IDENT NO.

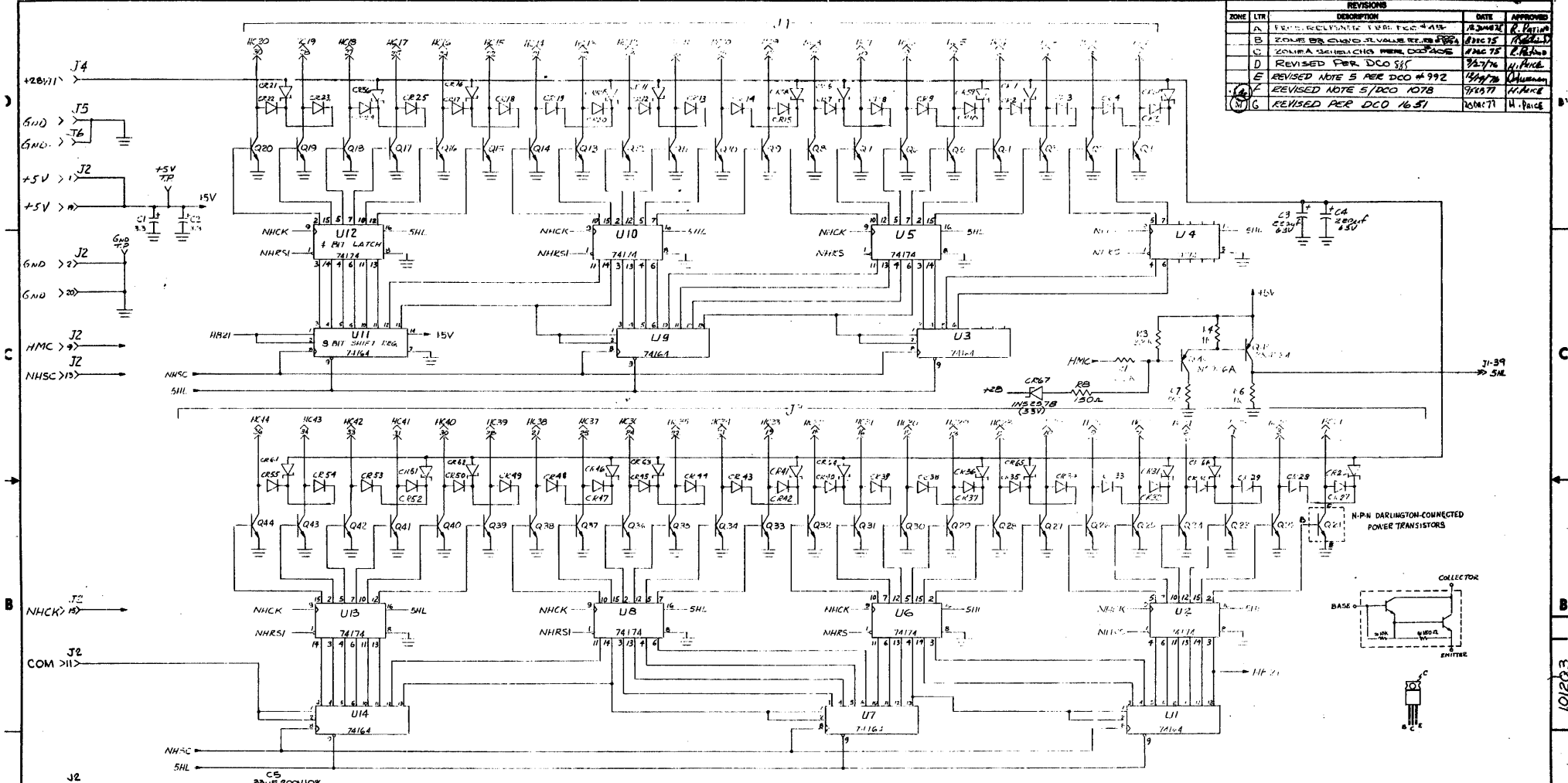
DRAWER NO.

101738

J

SHEET 2 OF 2

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
A		FORMERLY REVISED 1 PER DCO #415	8/24/74	R. PATINO
B		ZONE B8 CHANGED VALUE OF R8	8/28/75	R. PATINO
C		ZONE A8 CHANGED VALUE OF R8	8/28/75	R. PATINO
D		REVISED PER DCO 585	12/2/76	H. PAIGE
E		REVISED NOTE 5 PER DCO #992	12/2/76	H. PAIGE
F		REVISED NOTE 5 PER DCO 1078	9/15/77	H. PAIGE
G		REVISED PER DCO 1651	10/11/77	H. PAIGE



5. ALL 30MMER DIODES 102427-001
 4. ALL CAPACITORS 3.3uF/15V/±20%
 3. ALL RESISTORS 1/4W/±5%
 2. ALL DIODES 1N4003
 1. ALL TRANSISTORS TIP 18.
- NOTES: UNLESS OTHERWISE SPECIFIED

CONNECTORS	
J1	HAMMER BANK
J2	POWER SUPPLY
J3	HAMMER BANK
J4	+28V
J5	GND
J6	GND

LAST REF DESIG USED	
CR67	
CR68	
CR69	
R8	
U16	

SPARE GATES	
U15	7422, 4
U16	7422, 10

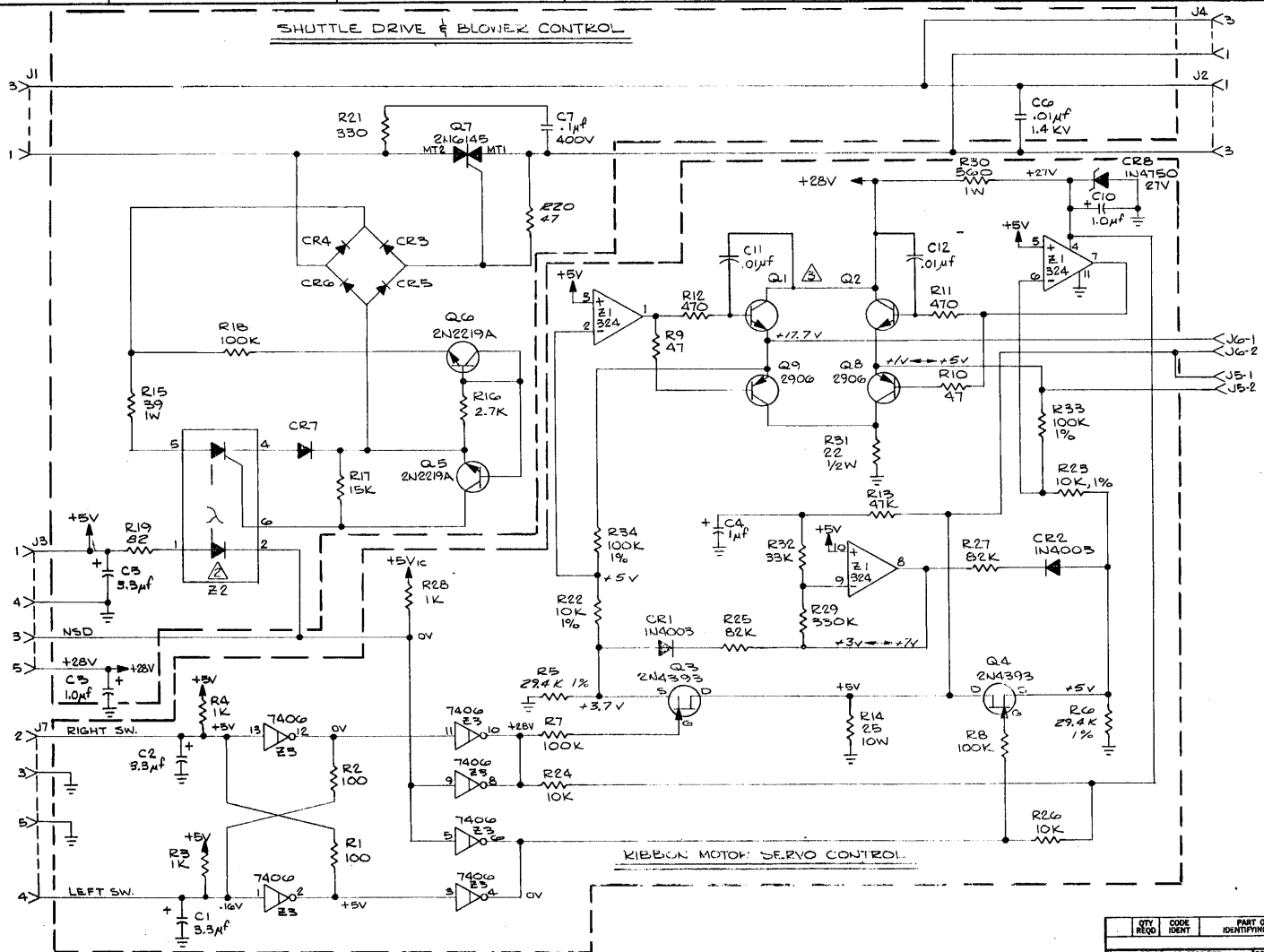
FINISH	USED ON
P150/310	
APPLICATION	DO NOT SCALE DRAWING

QTY	CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
TOLERANCES ARE: FRACTIONS DECIMALS ANGLES			
MATERIAL			
CONTRACT NO.			
DRAWN BY			
CHECKED BY R. PATINO			
APPROVALS			
DATE			
PARTS LIST			
PRINTRONIX			
SCHEMATIC, PCB, HAMMER DRVR			
SIZE CODE IDENT NO. DRAWING NO.			
D 101203			
SCALE			
SHEET 2 OF 1			

101203

SHUTTLE DRIVE & BLOWER CONTROL

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A1	RELEASE PER DCO 823	29 Jun 76	H. P. I. C.
	A2	REVISED PER DCO 969	19 Oct 76	H. P. I. C.
	B1	REVISED PER DCO 1005	24 Feb 77	H. P. I. C.
	M1	REVISED PER DCO 1912	19 Jun 78	H. P. I. C.



4. ALL REF. VOLTAGES GIVEN ARE FOR RUNNING CONDITION AND ARE ONLY APPROX.
 Δ Q1, Q2 ARE T.I. TIP121 OR EQUIV.
 Δ Z2 IS GE H11C2 OR EQUIV.
 1. ALL RESISTORS 1/4W, 5%
 NOTES:

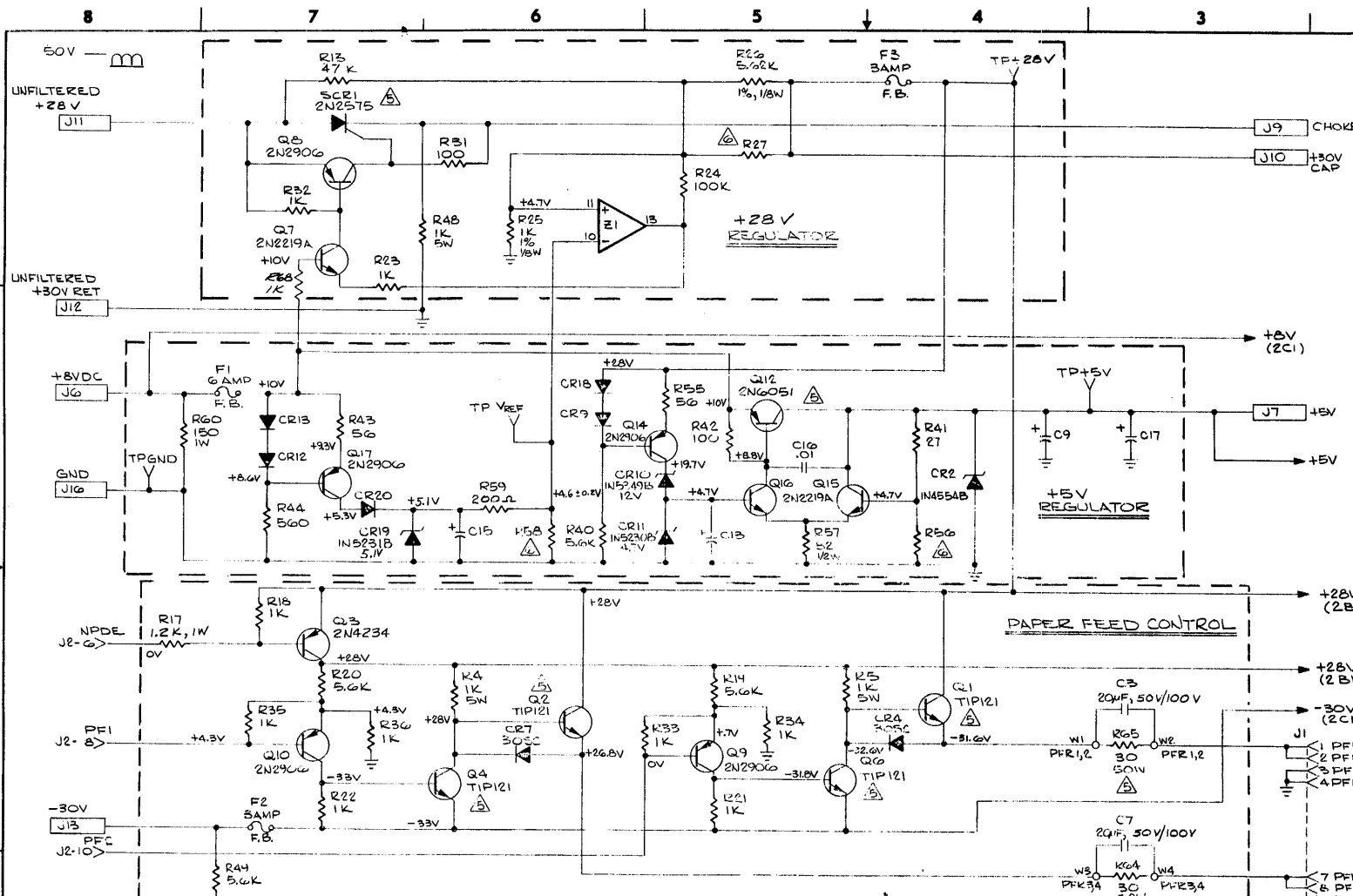
CONNECTORS	
J1	AC POWER IN
J2	TO SHUTTLE MOTOR
J3	TO POWER SUPPLY
J4	TO BLOWER MOTOR
J5	LEFT MOTOR
J6	RIGHT MOTOR
J7	LIMIT SWITCHES

QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO.	
FRACTIONS	DECIMALS	ANGLES	APPROVALS
±	±.01	±1/2	DATE
	±.005		DRAWN BY LOWRY
			CHECKED BY [Signature]
MATERIAL		FINISH	
NEXT ASSY		USED ON	
APPLICATION		DO NOT SCALE DRAWING	

PRINTRONIX
 PCB, RIBBON CONTROL
 SCHEMATIC

SIZE CODE IDENT NO. (DRAWING NO.)
D 102143 C1
 SCALE — INCHES — OF

102143



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
A1		PRODUCTION RELEASE DCO 861	9/7/76	H. H. H.
A1		REVISED PER DCO 898	1/22/76	H. H. H.
A1		REVISED PER DCO 1081	1/20/77	H. H. H.
		REVISED PER DCO 1170		
		REVISED PER DCO 1275		
A1		REVISED PER DCO 1319	3/AUG/77	H. H. H.
A1		REVISED PER DCO 1680	20/JAN/78	H. H. H.
A1		REVISED PER DCO 1804	22/MAR/78	H. H. H.
A1		REVISED PER DCO 1931	18/MAY/78	H. H. H.
C		REVISED PER DCO 2419	5-26-79	H. H. H.

- 7 □ = FASTON CONNECTORS
 Δ SELECTED VALUES
 ▴ HEATSINK MOUNTED
 4. COMPARATOR IS LM339
 3. ALL DIODES ARE IN4003
 2. ALL CAPS. ARE 3.3MFD, 15V, 20%
 1. ALL RESISTORS 1/4W, ±5%

CONNECTORS	
J1	PAPER FEED MOTOR
J2	CARD CAGE
J3	RIBBON ASST
J4	MAGNETIC PICK-UP
J5	INTERLOCKS
J6	+8VDC
J7	+5VDC
J8	PN11D
J9	CHOKE

CONNECTORS	
J10	+30V CAP
J11	+30V FROM BK2+
J12	GND (+50V)
J13	-30VDC
J14	GND (+5V)

STAKE GATE LEGACY
 (L185) P1 PINS 8, 9, 14

LAST REF DESIGNED	
C1	
C2	
C3	
C4	
C5	
C6	
C7	

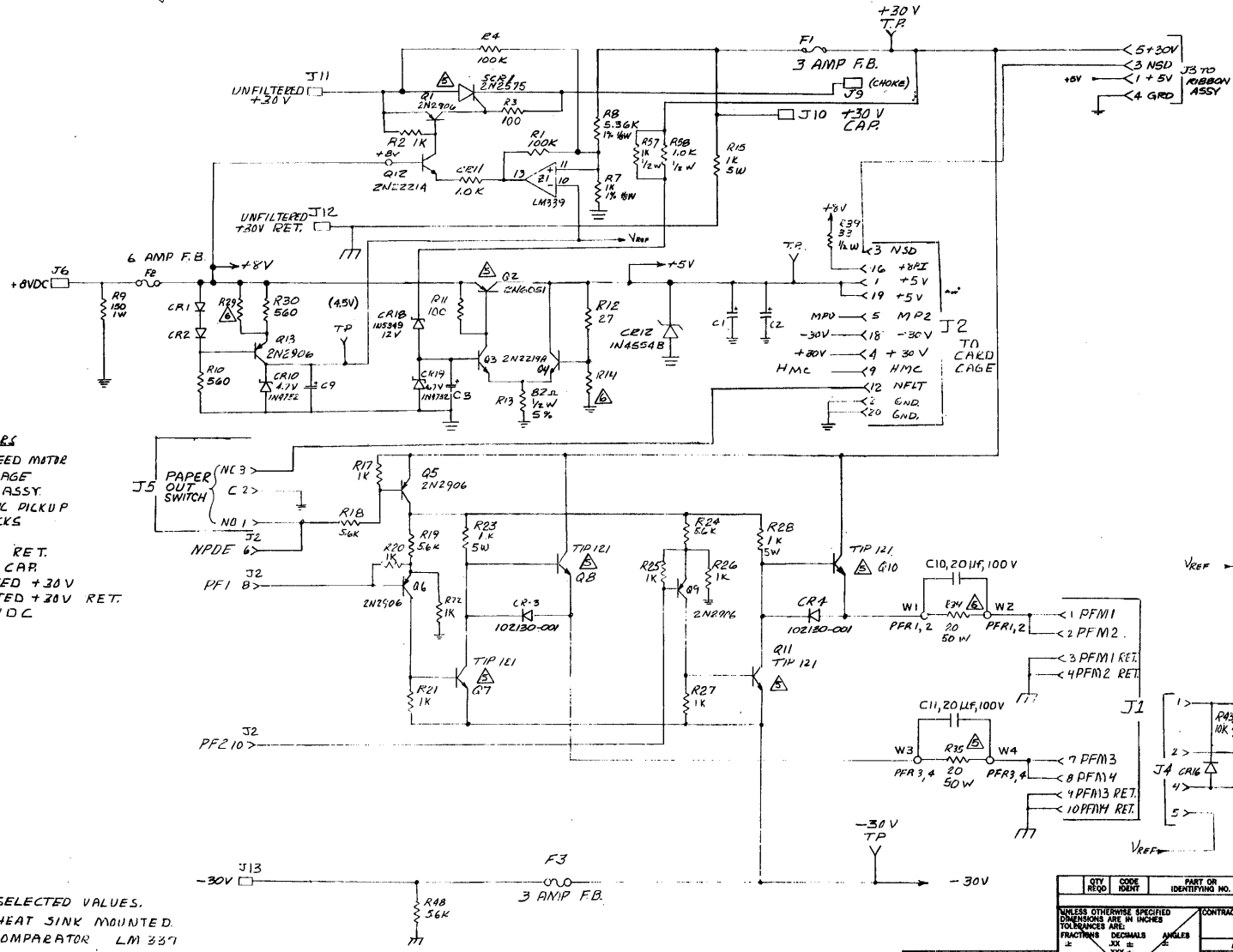
REV	CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
1			

PARTS LIST	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES	CONTRACT NO.
1/16" ±0.015 1/32" ±0.010 3/16" ±0.010 1/2" ±0.010 3/4" ±0.010 1" ±0.010	APPROVALS
MATERIAL	DATE
FINISH	CHECKED
NEXT ASSY	USED ON
APPLICATION	DO NOT SCALE DRAWING

PRINTRONIX	
SCHEMATIC, PCB	
POWER SUPPLY	
SIZE	CODE IDENT NO. DRAWING NO.
D	102163
SCALE	REV. C
	SHEET 1 OF 2

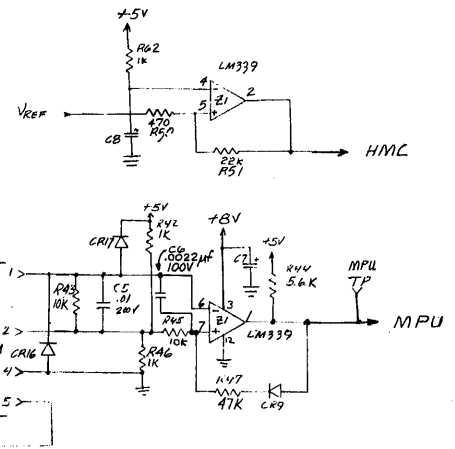
102163

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
A		PROD. REL. PER D.C.O. # 522	17 MAR 76	R. PATIÑO
B		REVISED PER DCO # 541	17 MAR 76	R. PATIÑO
C		REVISED PER DCO # 568	26 MAR 76	R. PATIÑO
D		REVISED PER DCO # 698	25 JUN 76	H. PACE
E		REVISED PER DCO # 729	28 JUN 76	



- CONNECTORS**
- J1 PAPER FEED MOTOR
 - J2 CARD CAGE
 - J3 RIBBON ASSY.
 - J4 MAGNETIC PICKUP
 - J5 INTERLOCKS
 - J6 +BVDC
 - J7 +BVDC RET.
 - J10 +30V CAP.
 - J11 UNFILTERED +30V
 - J12 UNFILTERED +20V RET.
 - J13 -30VDC

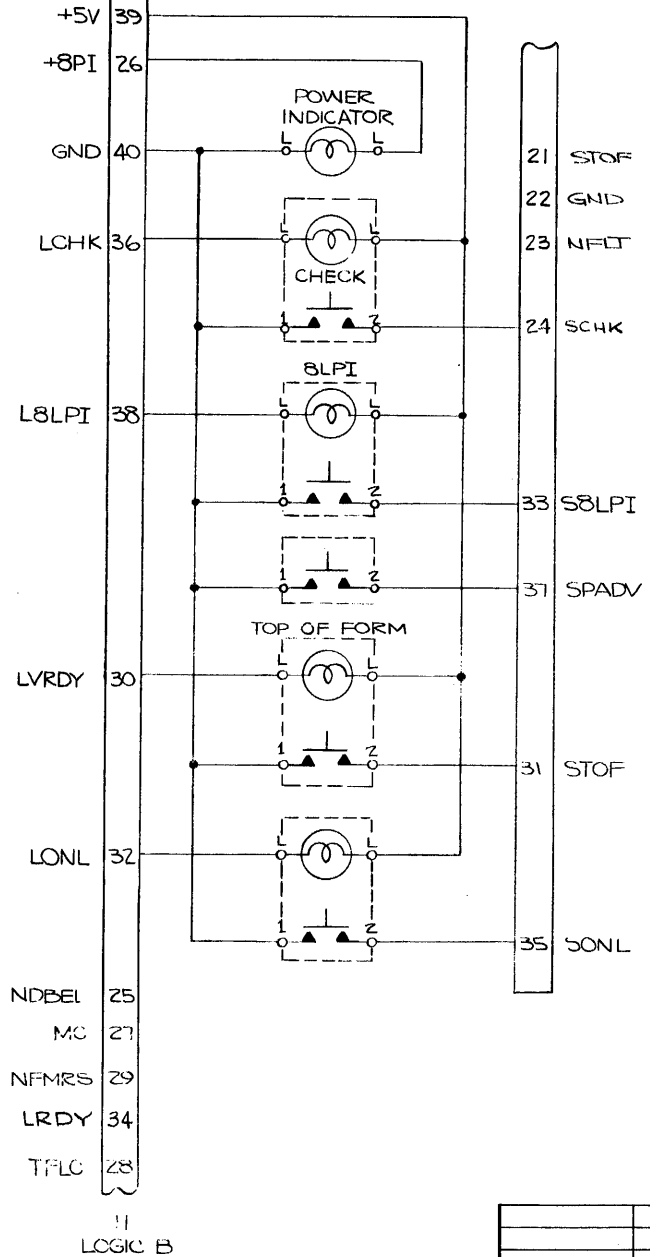
- NOTES**
- △ SELECTED VALUES.
 - △ HEAT SINK MOUNTED.
 - 4 COMPARATOR LM 339
 - 3 ALL DIODES IN4003
 - 2 ALL CAPS. 3.3. MFD, 15V, 20%
 - 1 ALL RESISTORS 1/4 W, 5%
- NOTES : UNLESS OTHERWISE SPECIFIED.



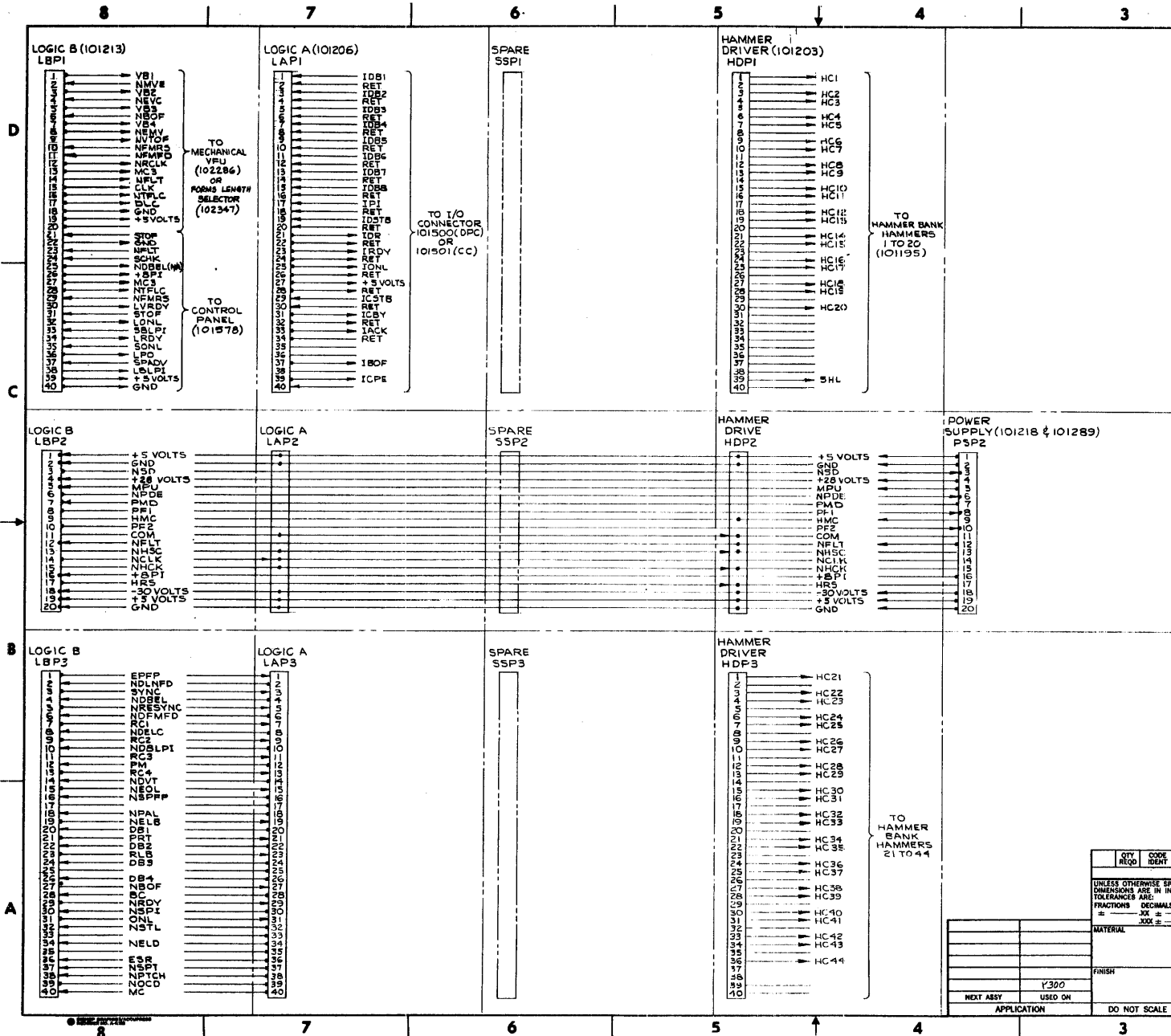
QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ARE DECIMALS ANGLES ±			
MATERIAL		CONTRACT NO.	
FINISH		APPROVALS	
NEXT ASSY		DATE	
APPLICATION		DRAWN R. MELISSA 9/13/76	
		CHECKED R. PATIÑO 11/10/76	
		THIS DRAWING WAS MADE FROM 101876 ORIGINAL. W.K.R.W. 7/76	
		SIZE CODE IDENT NO. DRAWING NO.	
		D 101876 E	
		SCALE: N/A	
		SHEET 1 OF 1	

101876

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	PRODUCTION RELEASE DCO#309	12 Nov 75	H. P. [Signature]
	B	ADD SCHK TO J1-24 DCO#393	17 Dec 75	H. P. [Signature]
	C	REV PER DCO 2672	3-8-79	Ray [Signature]



QTY REQD		CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS .XX ± .XXX ± DECIMALS .XX ± .XXX ± ANGLES ±			CONTRACT NO.		<h1>PRINTRONIX</h1> <p>SCHMATIC, CONTROL PANEL 2</p>
MATERIAL			APPROVALS	DATE	
FINISH			DRAWN	11/75	
NEXT ASSY USED ON			CHECKED		
APPLICATION			SIZE	CODE IDENT NO.	DRAWING NO.
DO NOT SCALE DRAWING			C	101766	C
			SCALE	CODE 10	SHEET 1 OF 1



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
A		RELEASE FOR PRODUCTION DCO #243	8-13-75	<i>[Signature]</i>
B		CHANGE FROM DCO #243	12-04-75	R. Parino
C		REVISED PER DCO #405	11 DEC 75	
D		REVISED PER DCO #85	9/27/76	H. POICE
E		REVISED PER DCO 1180	6/10/77	H. POICE
F		REVISED PER DCO 1442	2/24/77	H. POICE
G		REVISED PER DCO 2627	5/1/77	<i>[Signature]</i>

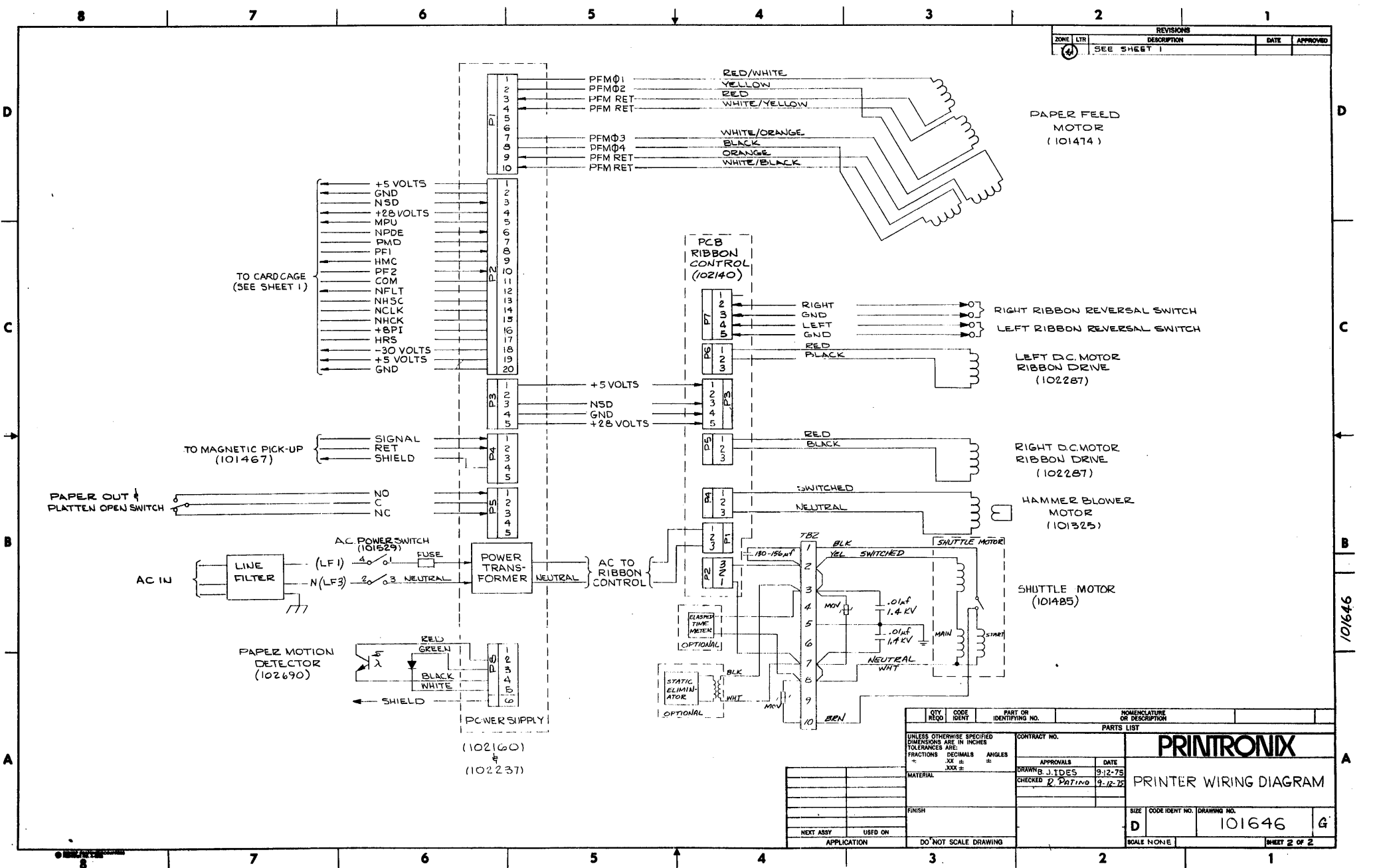
QTY REQD	CODE IDENT	PARTY OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES				
MATERIAL		CONTRACT NO.		
FINISH		APPROVALS DATE		
NEXT ASSY USED ON		DRAWN B. J. IDES 8-13-75		
APPLICATION		CHECKED R. Parino 9-12-75		
DO NOT SCALE DRAWING		SCALE NONE		

PRINTRONIX
 PRINTER
 WIRING DIAGRAM
 SIZE CODE IDENT NO. DRAWING NO.
 D 101646 G

101646

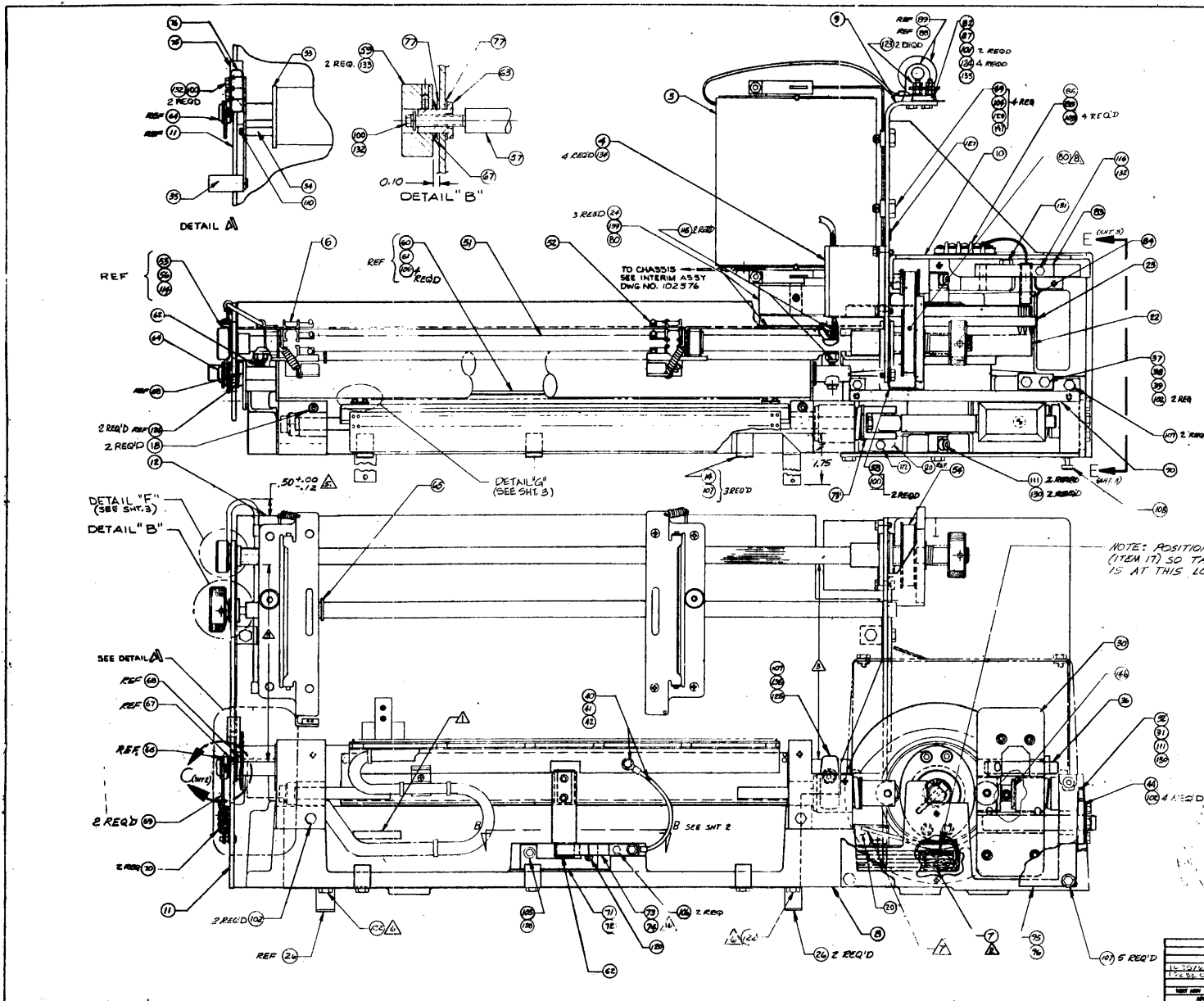
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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
4		SEE SHEET 1		



QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES		CONTRACT NO.	
XXX ±		APPROVALS DATE	
MATERIAL		DRAWN J.T.D.S. 9-12-75	
FINISH		CHECKED R. PATINO 9-12-75	
NEXT ASSY USED ON		SIZE CODE IDENT NO. DRAWING NO.	
APPLICATION		D 101646 G	
DO NOT SCALE DRAWING		SCALE NONE SHEET 2 OF 2	

101646

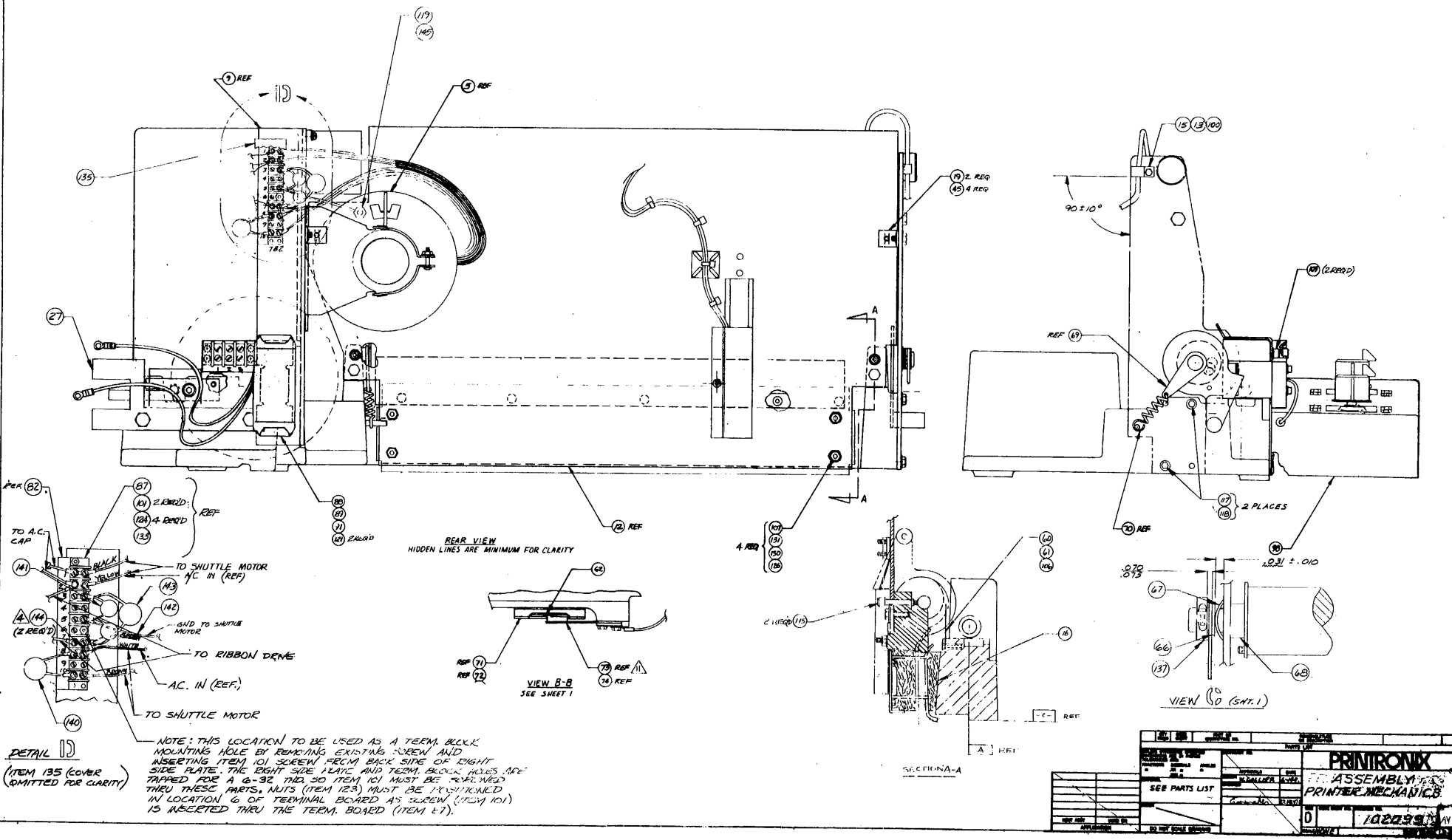


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
A		PRODUCTION PER DCO 477	22 May 76	H. PRICE
		CHG'D ITEM #2 WAS 10157-006		
		IS 10152-001 DCO 75		
C		REVISED PER DCO 706	22 29 76	H. PRICE
D		REVISED PER DCO 780	12 DEC 76	H. PRICE
E		REVISED PER DCO 1050	3/9/77	H. PRICE
F		REVISED PER DCO 1089	7/27/77	H. PRICE
G		REVISED ITEM 146 (DCO 1117)	10/27/77	H. PRICE
H		REVISED PER DCO 1126	2/16/77	H. PRICE
J		REVISED PER DCO 1115	2/16/77	H. PRICE
K		REVISED PER DCO 1150	6/28/77	H. PRICE
L		REVISED PER DCO 1174	7/24/77	H. PRICE
M		REVISED PER DCO 1245	8/21/77	H. PRICE
N		REVISED PER DCO 1313	9/21/77	H. PRICE
P		REVISED PER DCO 1281	9/16/77	H. PRICE
R		REVISED PER DCO 1311	7/26/77	H. PRICE
S		REVISED PER DCO 1345	7/26/77	H. PRICE
T		REVISED PER DCO 1298	2/16/77	H. PRICE
U		REVISED PER DCO 1390	6/29/77	H. PRICE
V		REVISED PER DCO 1424	6/29/77	H. PRICE
W		REVISED PER DCO 1479	9/29/77	H. PRICE
X		REVISED PER DCO 1471	3/23/77	H. PRICE
Z		REVISED PER DCO 1510	2/23/77	H. PRICE
AA		REVISED PER DCO 1503	1/21/77	H. PRICE
AB		REVISED PER DCO 1590	12/14/77	H. PRICE
AC		REVISED PER DCO 1677	12/14/77	H. PRICE
AD		REVISED PER DCO 1718	9/27/77	H. PRICE
AE		REVISED PER DCO 1704	9/27/77	H. PRICE
AF		REVISED PER DCO 1733	9/27/77	H. PRICE
AG		REVISED PER DCO 1737	2/24/78	H. PRICE
AH		REVISED PER DCO 1766	3/1/78	H. PRICE
AI		REVISED PER DCO 1835	3/28/78	H. PRICE
AJ		REVISED PER DCO 1897	12/26/78	H. PRICE
AK		REVISED PER DCO 1849	7/11/78	H. PRICE
AL		REVISED PER DCO 1914	4/10/78	H. PRICE

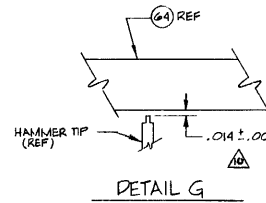
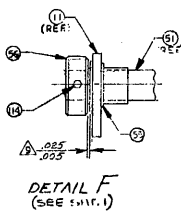
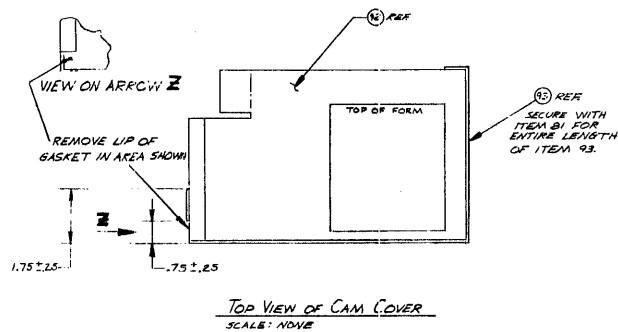
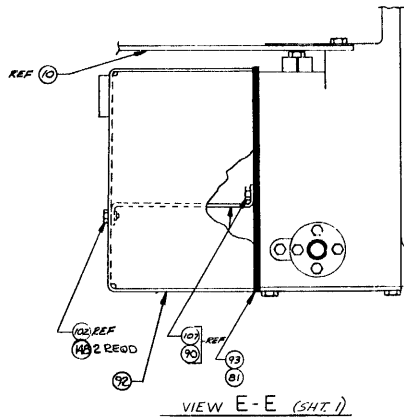
- (CONT ON SHT 3)
- ⓐ ALIGN PAPER FEED PULLEY SO BELT IS CENTERED ON SPINE SHAFT PULLEY THEN USE LOCTITE (ITEM 80) ON SET SCREWS.
 - ⓑ POSITION FREE END OF OIL WICK FLAPPER (PIN 1514-001) UNDER TOP LIP OF CAM WICK CLAMP (ITEM 20).
 - ⓒ TIGHTEN ITEM 122 (#10B15-001) TO 30 IN/LBS.
 - ⓓ SET DIMENSION FOR CABLE LOOP WHEN LEFT TRACTOR ASSY IS IN EXTREME LEFT POSITION.
 - ⓔ JUMPERS (ITEM 144) TO BE INSTALLED ON TER2 (ITEM 67) BETWEEN TERMINALS 2 & 3 AND TERMINALS 7 & 8.
 - ⓕ MAXIMUM DIFFERENCE WHEN MEASURING BETWEEN SPINE SHAFT AND PLATEN PINS IS .030.
 - ⓖ ASSY INSTRUCTIONS: ADD NO ADDITIONAL OIL. INSTALL CAPS TO ALL OIL IS CONTAINED IN WICK CAVITY. CASTING MARK PART NO. AND REV LETTER APPROX WHERE SHOWN.
- NOTES: 0/S DCO 2 935

DATE	22 MAY 76	BY	H. PRICE
APPROVED		DATE	
REVISIONS		DATE	
SEE PARTS LIST			
DO NOT SCALE DRAWING			

PRINTRONIX
ASSEMBLY & PRINTER MECHANICS
102093 AY



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
AD		REVISED PER DCO 1936	3/24/78	W. HICK
AP		REVISED PER DCO 1970	3/24/78	W. HICK
AR		REVISED PER DCO 2122	1/29/79	REF
AS		REVISED PER DCO 2182	1/29/79	REF
AT		REVISED PER DCO 2197	1/26/79	REF
AU		REV PER DCO 2482	DN	REF
AV		REV PER DCO 2510	DN	REF
AW		VAR PER DCO 2835	MS 7-21-79	REF
AY		REV PER DCO 2971	MS 7-21-79	REF



- ⚠ FORCE REQUIRED TO JUST SEPARATE ITEM 73 FROM ITEM 62
5.0 ± 1.0 LBS
- ⚠ ADJUST PLATEN GAP (PLATEN LEVER TO BE SET AT
1" ON FORM THKNG SCALE).
- ⚠ THIS DIM. MUST EXIST WHEN RIGHT HAND BALL BEARING
ON SPRING SHAFT ASSY (ITEM 51) IS POSITIONED AS FAR
AS POSSIBLE TOWARD RIGHT SIDE PLATE (ITEM 8),
NYLINER BUSHING (ITEM 56) IS POSITIONED TOWARD
LEFT AS SHOWN AND BOTH PLATES ARE IN A FREE
UNSTRESSED CONDITION.

NOTES: (CONT FROM SHT. 1)

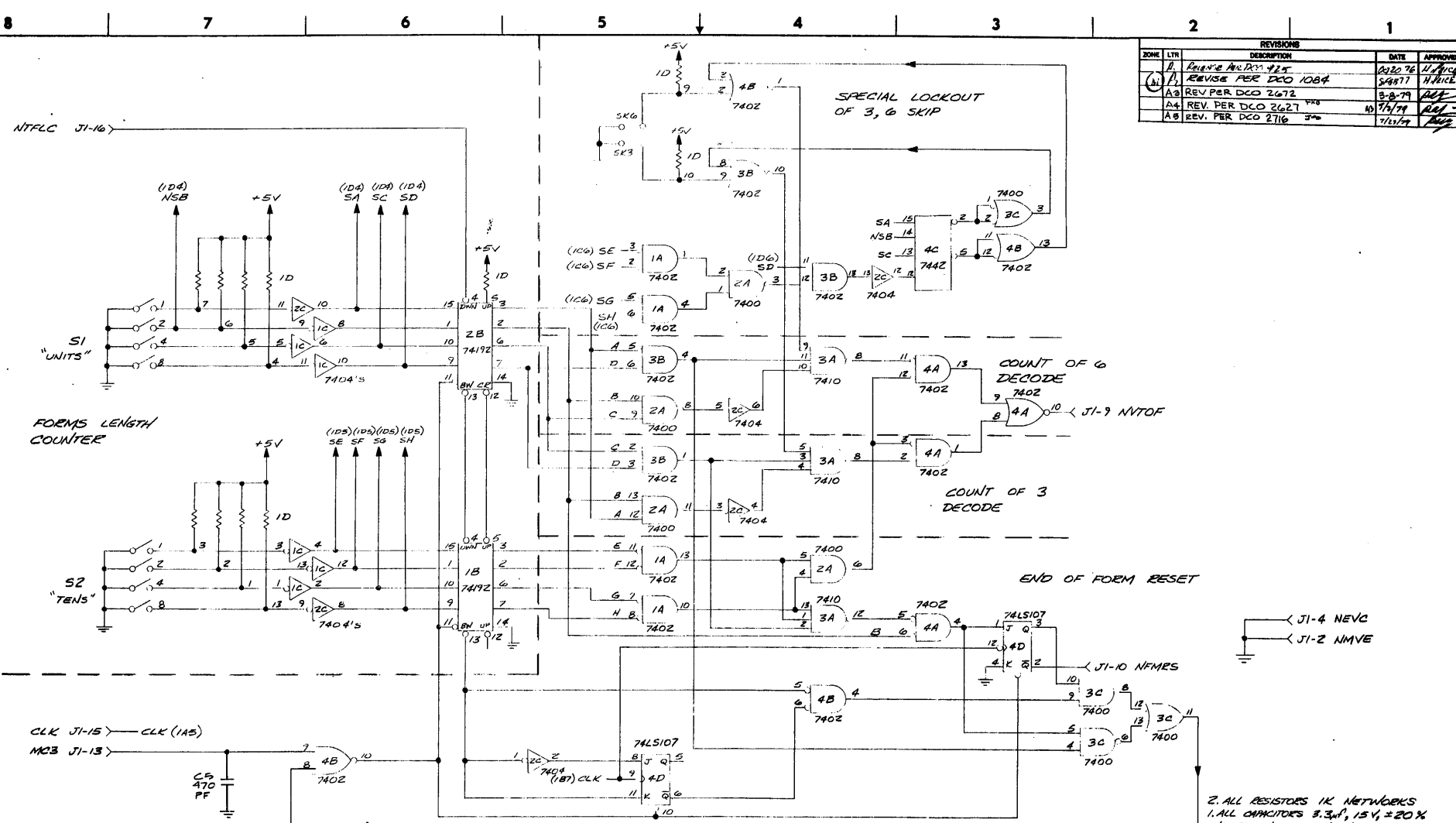
ITEM NO	QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:			CONTRACT NO.	
FRACTIONS DECIMALS ANGLES			APPROVALS DATE	
± .005 ± .010 ± 1/2°			DRAWN CHECKED	
MATERIAL SEE PARTS LIST				
FINISH				
NEXT ASSY USED ON				
APPLICATION DO NOT SCALE DRAWING				
SCALE			OR CODE	

PRINTRONIX
ASSEMBLY
PRINTER MECHANICS

SIZE CODE IDENT NO. DRAWING NO.
D 102099 AV

SHEET 5 OF 13

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	REVISE PER DCO #25	03/20/76	J. PRICE
	B	REVISE PER DCO 1084	04/07/77	H. PRICE
	A3	REV. PER DCO 2672	03-2-79	W. PRICE
	A4	REV. PER DCO 2627	11/1/79	W. PRICE
	A5	REV. PER DCO 2716	7/16/79	W. PRICE



2. ALL RESISTORS 1K NETWORKS
 1. ALL CAPACITORS 3.3 μ F, 15V \pm 20%
 NOTES: UNLESS OTHERWISE SPECIFIED

JUMPER TABLE	
SK3	SKIP 3 LINES (1/2")
SK6	SKIP 6 LINES (1")

CONNECTOR
J1 LOC: B BOARD

LAST REF. DESIG. USED
03

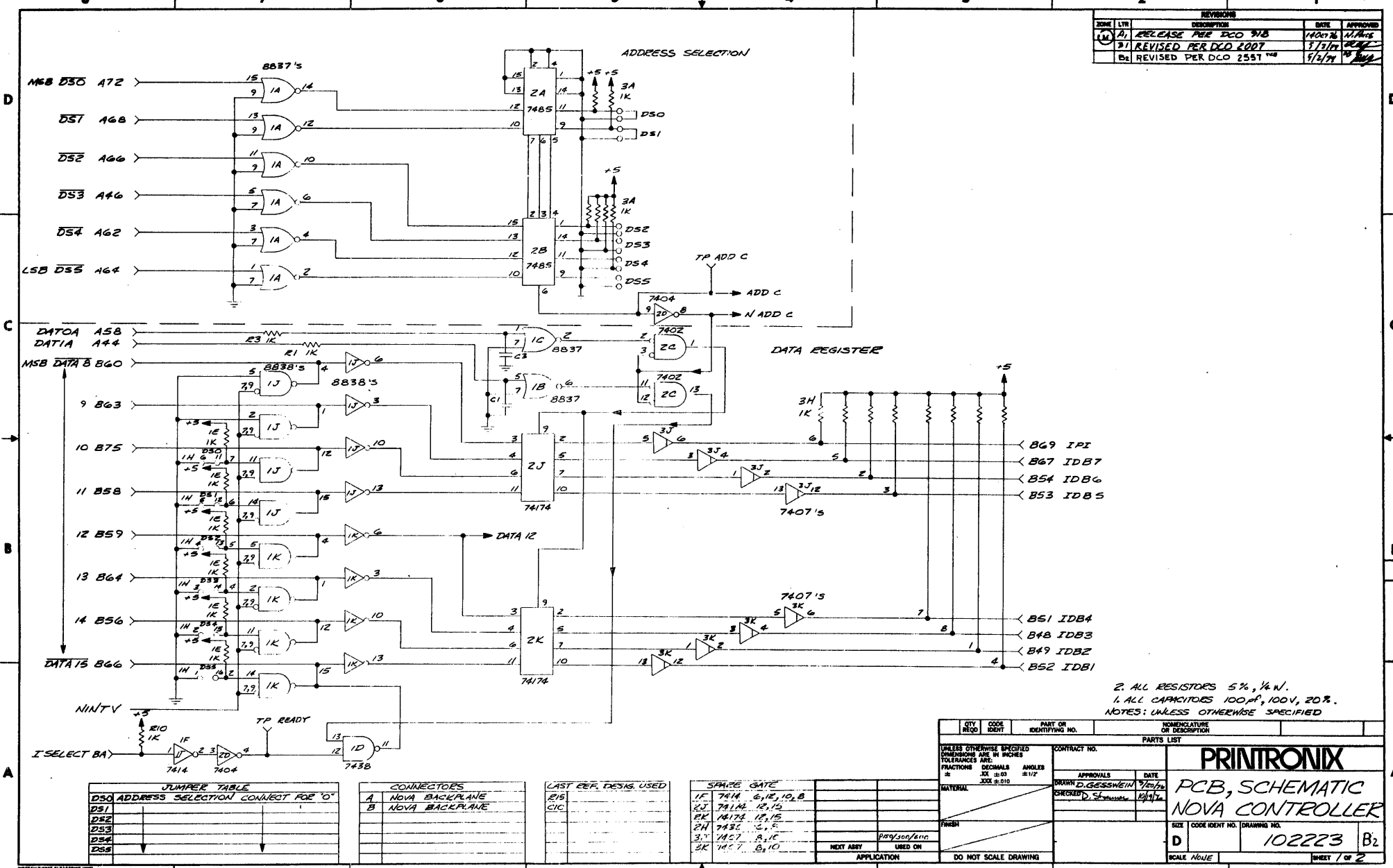
SPARE GATES

FINISH
P600
P100

QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION

PARTS LIST	
CONTRACT NO.	
APPROVALS	DATE
DRAWN D. GESSWEIN	7/15/76
CHECKED J. PRICE	8/15/76
PRINTRONIX PCB, FORMS LENGTH SELECTOR SCHEMATIC	
SIZE	CODE IDENT NO. DRAWING NO.
D	102343 A5
SCALE	NONE CODE 10
SHEET 1 OF 1	

REVISIONS				
ZONE	LYN	DESCRIPTION	DATE	APPROVED
1	A1	RELEASE PER DCO 918	1/20/76	W. H. H. S.
2	B1	REVISED PER DCO 2007	7/7/77	W. H. H. S.
3	B2	REVISED PER DCO 2557	9/2/77	W. H. H. S.



2. ALL RESISTORS 5%, 1/4 W.
 1. ALL CAPACITORS 100PF, 100V, 20%.
 NOTES: UNLESS OTHERWISE SPECIFIED

DS0 ADDRESS SELECTION	CONNECT FOR	0*
DS1		
DS2		
DS3		
DS4		
DS5		

A	NOVA BACKPLANE
B	NOVA BACKPLANE

B5B	
C1C	

1F	7414	6, 1E, 10, B
2J	7414	12, 15
3K	7438	12, 15
3, 7	7457	A, 1E
3K	7457	B, 10

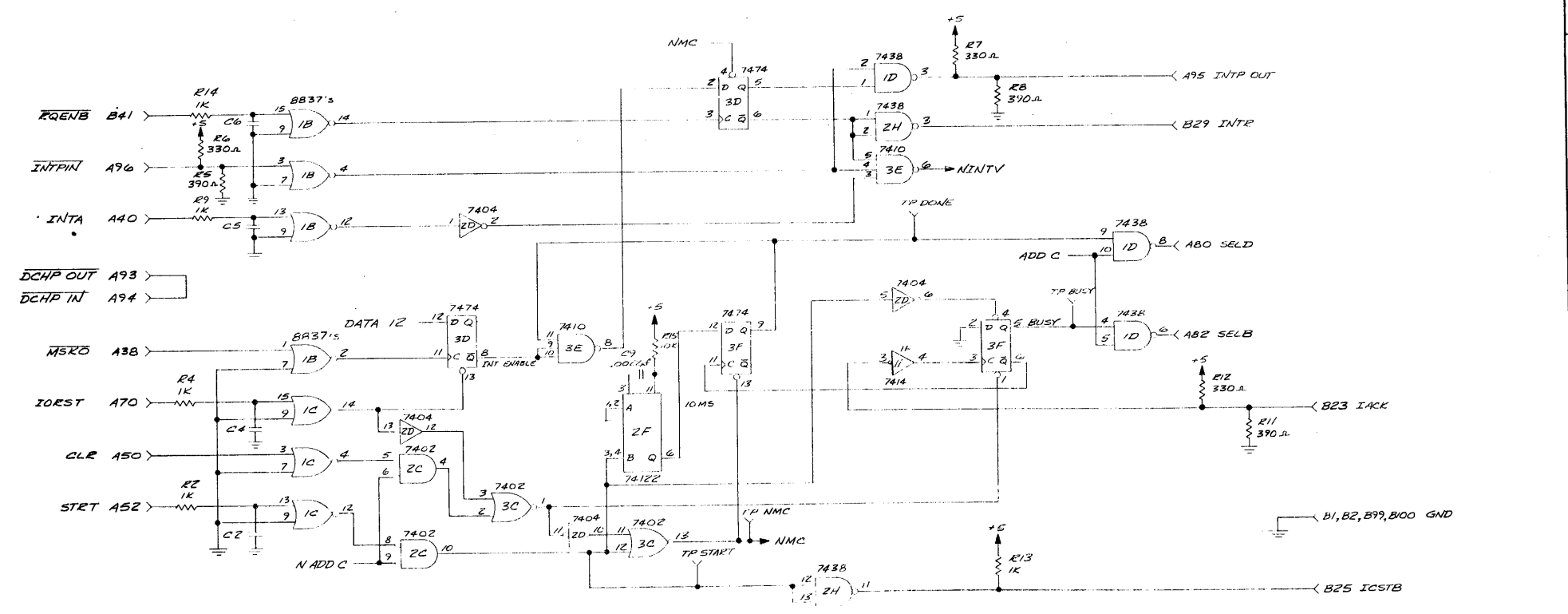
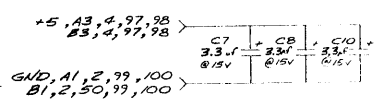
USED ON	PP9/200/610
NEXT ASST	

QTY REQD	CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST			
UNLESS OTHERWISE SPECIFIED		CONTRACT NO.	
DIMENSIONS ARE IN INCHES		APPROVALS	
TOLERANCES ARE:		DATE	
FRACTIONS	DECIMALS	DRAWN D. GESSWEIN 7/2/77	
±	±	CHECKED D. S. 9/2/77	
NATURAL		SCALE	
FINISH		CODE IDENT. NO. DRAWING NO.	
DO NOT SCALE DRAWING		D 102223 B2	
		SHEET 1 OF 2	

PRINTRONIX

PCB, SCHEMATIC
NOVA CONTROLLER

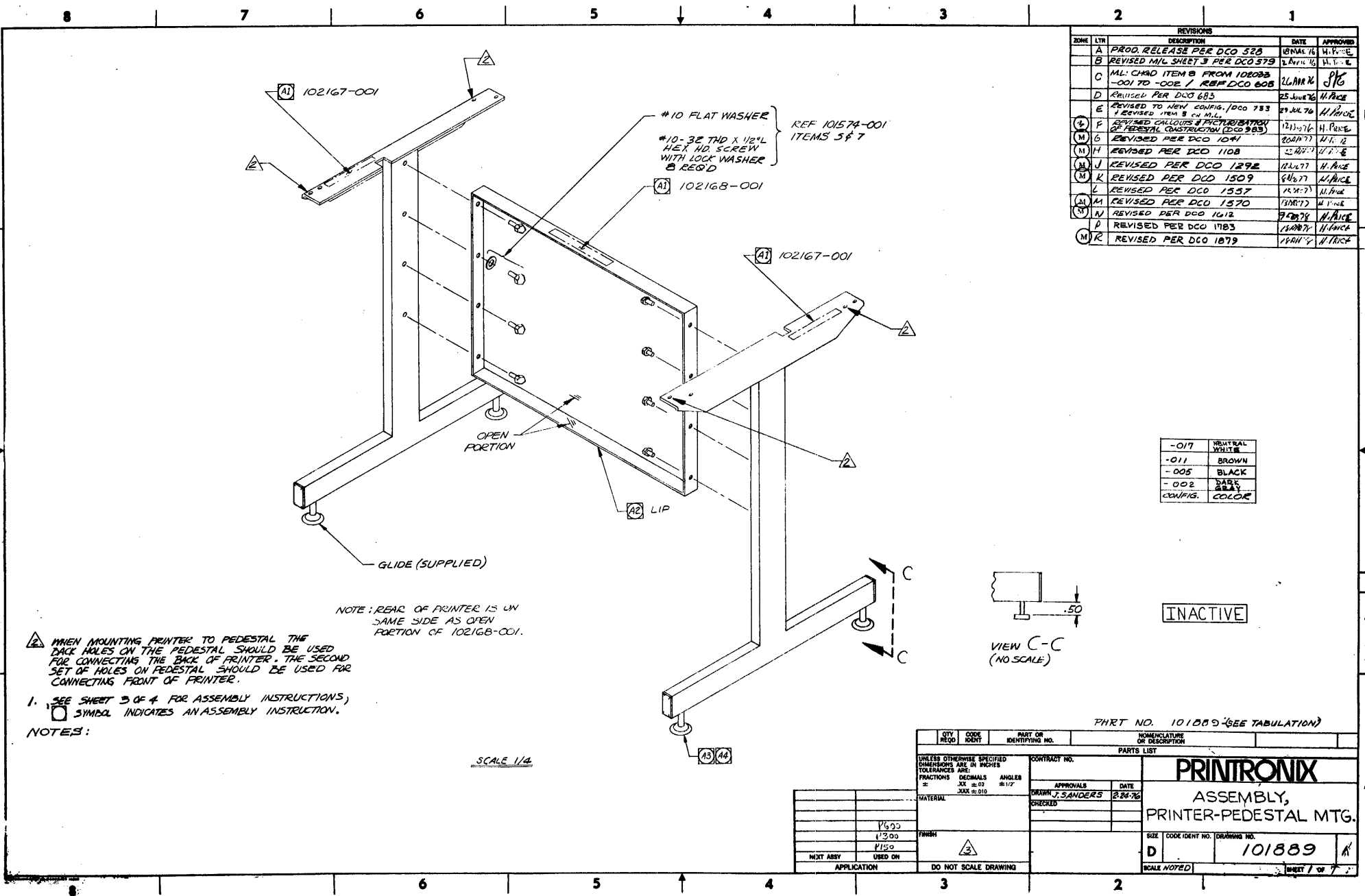
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
1		SEE SHEET 1		



INTERRUPT CONTROL

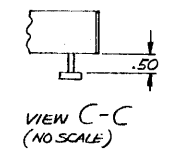
QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES		CONTRACT NO.	
± .XX ±.05 ±1/2		APPROVALS DATE	
XXX ±.010		DRAWN <i>PROSSER</i> 3/29/76	
MATERIAL		CHECKED	
FINISH		SIZE CODE IDENT NO. DRAWING NO.	
NEXT ASSY USED ON		D 102223 B2	
APPLICATION		SCALE: 1/4"=1" SHEET 2 OF 2	

PRINTRONIX
PCB, SCHEMATIC
NOVA CONTROLLER



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	PROD. RELEASE PER DCO 520	18 MAR 76	H. POSE
	B	REVISED MIL SHEET 3 PER DCO 579	2 APR 76	H. POSE
	C	MIL CHSD ITEM B FROM 102098 -001 TO -002 / REF DCO 608	26 MAR 76	JTG
	D	REVISED PER DCO 685	25 JUN 76	H. POSE
	E	REVISED TO NEW CONFIG. DCO 783 1 REVISED ITEM B ON M.L.L.	29 JUL 76	H. POSE
	F	REVISED CALLOUTS & PICTORIALS OF GENERAL CONSTRUCTION (DCO 903)	12 JUL 76	H. POSE
	G	REVISED PER DCO 1041	20 APR 77	H. POSE
	H	REVISED PER DCO 1108	12 APR 77	H. POSE
	J	REVISED PER DCO 1292	12 JUL 77	H. POSE
	K	REVISED PER DCO 1509	24 JUL 77	H. POSE
	L	REVISED PER DCO 1557	15 SEP 77	H. POSE
	M	REVISED PER DCO 1570	13 SEP 77	H. POSE
	N	REVISED PER DCO 1612	7 OCT 77	H. POSE
	P	REVISED PER DCO 1783	15 APR 78	H. POSE
	R	REVISED PER DCO 1879	17 APR 78	H. POSE

-017	NEUTRAL WHITE
-011	BROWN
-005	BLACK
-002	GRAY
CONFIG.	COLOR



INACTIVE

2 WHEN MOUNTING PRINTER TO PEDESTAL THE BACK HOLES ON THE PEDESTAL SHOULD BE USED FOR CONNECTING THE BACK OF PRINTER. THE SECOND SET OF HOLES ON PEDESTAL SHOULD BE USED FOR CONNECTING FRONT OF PRINTER.

1. SEE SHEET 3 OF 4 FOR ASSEMBLY INSTRUCTIONS.
 □ SYMBOL INDICATES AN ASSEMBLY INSTRUCTION.

NOTE: REAR OF PRINTER IS ON SAME SIDE AS OPEN PORTION OF 102168-001.

SCALE 1/4

QTY REQD		CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OF DESCRIPTION
PARTS LIST				CONTRACT NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				APPROVALS DATE DRAWN J. SANDERS 8-24-76
TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .01 ± .003 ± 1/2°				
MATERIAL				CHECKED
FINISH				SCALE 1/4
NEXT ASSY USED ON				D 101889
APPLICATION				SHEET 7 OF 7

101889

A

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
(4)		SEE SHEET 1 OF 4		

ASSEMBLY INSTRUCTIONS

☐ READ THROUGH COMPLETELY BEFORE STARTING. TOOLS REQUIRED:
(1) ONE $\frac{1}{4}$, $\frac{3}{16}$, AND (1) ONE $\frac{9}{16}$ OPEN END WRENCH AND $\frac{3}{16}$ ALLEN WRENCH.

A. PEDESTAL - (REF) PRINTER - PEDESTAL ASSY. DRWG. NO. 101889 SHEET 1 OF 4.

- ASSEMBLE THE PEDESTAL LEGS, 10-2167-001, AS SHOWN ON TOP OF LEG; WITH MODESTY PANEL, 10-2168-001, AS SHOWN ON TOP OF PANEL. (NOTE: ASSEMBLE PEDESTAL ON CARDBOARD SHIPPED WITH IT.)
- USE SUPPLIED HARDWARE TO ASSEMBLE THE ABOVE 3 ITEMS.
CAUTION:
INSTALL MODESTY PANEL WITH LIP AT BOTTOM.
-
- ADJUST GLIDES OUT AS SHOWN IN VIEW "C-C", SHT. 1.

B. PRINTER TO PEDESTAL ASSY. - (REF) PRINTER - PEDESTAL ASSY. DRWG. 101889 SHEET 2 OF 4

- TO PROTECT THE PRINTER, PLACE THE CARDBOARD INSERT (SHIPPED WITH PRINTER) UPON THE FLOOR.
- LAY PRINTER ON ITS BACK SIDE, WINDOW FACE UP, ON CARDBOARD
- CAUTION: DO NOT REMOVE THESE SCREWS.
- USING A $\frac{3}{16}$ ALLEN WRENCH REMOVE THE 4 (FOUR) RUBBER FEET.
- LOCATE THE (4) FOUR TAPPED HOLES IN THE BASE, THAT PREVIOUSLY HAD THE RUBBER FEET.
- STAND PEDESTAL ASSY UPRIGHT. PLACE PRINTER ON PEDESTAL.
- REFER TO LABEL ON THE PRINTER FRONT COVER, IDENTIFY SHIFTING SCREWS AND OPEN FRONT COVER.
- ATTACH PRINTER TO PEDESTAL WITH (4) FOUR 10-32 SCREW AND #10 FLAT WASHERS (ITEMS 3 & 12) AS SHOWN IN VIEW A-A.

C. LEVELING

- SO THAT THE FRONT COVER MAY BE OPENED AND CLOSED EASILY, ADJUST GLIDES.
- USING A $\frac{9}{16}$ WRENCH, ADJUST GLIDES UNTIL COVER FUNCTIONS CORRECTLY.

D. GROUNDING - (REF) PRINTER - PEDESTAL ASSY DRWG. NO. 101889 SHEET 2 OF 4

- FIND DETAILS "A" AND "B", REVIEW THEM BEFORE CONTINUING
-
- ATTACH GROUND CABLE ASSY, (ITEM 7) TO FASTON CONNECTOR SHOWN AT DETAIL "A"
- INSERT THE PAPER BASKET (ITEM 4) BETWEEN PEDESTAL FEET.
- ASSEMBLE THE SCREW, CLAMP, RING TERMINAL END OF GROUND CABLE, AND NUT, THEN SECURELY TIGHTEN SHOWN IN DETAIL "B".

INACTIVE

PART NO: 101889 - (SEE TAB)

QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES			
MATERIAL			
FINISH			
NEXT ASSY USED ON APPLICATION			
DO NOT SCALE DRAWING			
CONTRACT NO.		PARTS LIST	
APPROVALS		DATE	
DRAWN		CHECKED	
SIZE		CODE IDENT NO.	DRAWING NO.
SCALE		D	101889
		SHEET 7 OF 7	

PRINTRONIX
ASSEMBLY PRINTER-
PEDESTAL MTG

101889

A

PRINTRONIX

17421 DERIAN AVE., IRVINE, CALIFORNIA 92714
(714) 549-8272 TWX 910-595-2535