PC04/PC05
paper tape
reader/punch
engineering drawings

digital equipment corporation · maynard, massachusetts

PC04/PC05 Engineering Drawings

PC04 Engineering Drawings

Number	Title
D-DI-PC04-0-1	Drawing Index
D-UA-PC04-0-0	Unit Assembly
C-PL-PC04-0-0	Unit Assembly, Parts List
D-BS-PC04-0-2	Power and Control Schematic Diagram
D-BS-PC04-CL-RD	Reader and Power Supply
D-BS-PC04-CL-PNCH	Punch
D-MU-PC04-0-3	Module Utilization List
A-PL-PC04-0-3	Parts List, Modules
E-AD-7006268-0-0	Bus Bar
A-PL-7006268-0-0	Bus Bar, Parts List
A-SP-PC04-0-4	PC04 Engineering Specification

PC05 Engineering Drawings

Number	Title
D-DI-PC05-0-1	Drawing Index
D-UA-PC05-0-0	Unit Assembly
A-PL-PC05-0-0	Unit Assembly, Parts List
D-BS-PC05-0-4	Power and Control Schematic
C-MU-PC05-0-3	Module Utilization List
A-PL-PC05-0-3	Parts List, Modules
C-AD-7006253-0-0	Bus Bar
A-PL-7006253-0-0	Bus Bar, Parts List

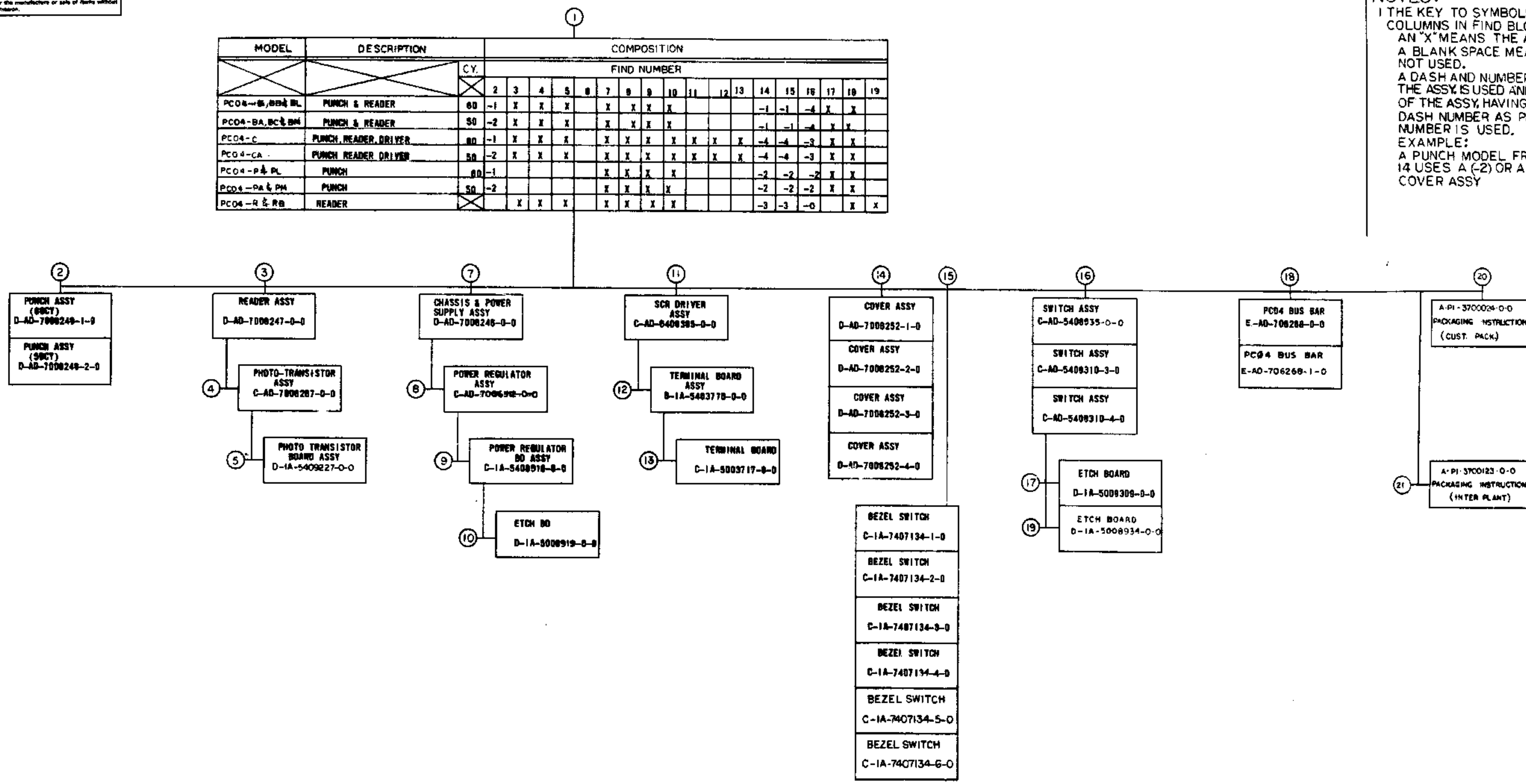
PC04/PC05 Circuit Schematics

Number	Title
C-CS-G918-0-1	Photo Transistor Amplifier
B-CS-M040-0-1	Solenoid Driver (Reader Motor)
B-CS-M044-0-1	Solenoid Driver (Punch Solenoid)
D-CS-M710-0-1	Punch Control
C-CS-M715-0-1	Reader Clock
E-CS-M340-0-1	Reader/Punch Control
D-CS-M7050-0-1	Reader Control
B-CS-5408918-0-1	Power Regulator Card
B-CS-5408308-0-1	Power Regulator Card
B-CS-5408384-0-1	Triac Driver Assembly

MODEL	DESCRIPTION	CY.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
			COMPOSITION – FIND NUMBER																	
PC04-B, BB & BL	PUNCH & READER	60	-1	X	X	X		X	X	X	X				-1	-1	-4	X	X	
PC04-BA, BC & BM	PUNCH & READER	50	-2	X	X	X		X	X	X	X				-1	-1	-4	X	X	
PC04-C	PUNCH, READER, DRIVER	60	-1	X	X	X		X	X	X	X	X	X	X	-4	-4	-3	X	X	
PC04-CA	PUNCH READER DRIVER	50	-2	X	X	X		X	X	X	X	X	X	X	-4	-4	-3	X	X	
PC04-P & PL	PUNCH	60	-1					X	X	X	X				-2	-2	-2	X	X	
PC04-PA & PM	PUNCH	50	-2					X	X	X	X				-2	-2	-2	X	X	
PC04-R & RB	READER			X	X	X		X	X	X	X				-3	-3	-0		X	X

NOTES:

1 THE KEY TO SYMBOLS IN THE FIND NO. COLUMNS IN FIND BLOCK 1 IS:
AN "X" MEANS THE ASSY IS USED.
A BLANK SPACE MEANS THE ASSY. IS NOT USED.
A DASH AND NUMBER (-1,-2 ETC) MEANS THE ASSY. IS USED AND THAT VARIATION OF THE ASSY. HAVING THAT PARTICULAR DASH NUMBER AS PART OF ITS DWG. NUMBER IS USED.
EXAMPLE:
A PUNCH MODEL FROM FIND COLUMN 14 USES A (-2) OR A D-AD-7006252-2-0 COVER ASSY



1
2 PUNCH ASSY (60CY) D-AD-7006249-1-0
PUNCH ASSY (50CY) D-AD-7006249-2-0
3 READER ASSY D-AD-7006247-0-0
4 PHOTO-TRANSISTOR ASSY C-AD-7006287-0-0
5 PHOTO TRANSISTOR BOARD ASSY D-1A-5409227-0-0
7 CHASSIS & POWER SUPPLY ASSY D-AD-7006246-0-0
6 POWER REGULATOR ASSY C-AD-7006918-0-0
9 POWER REGULATOR BD ASSY C-1A-5408918-0-0
10 ETCH BD D-1A-5008919-0-0
11 SCR DRIVER ASSY C-AD-5409385-0-0
12 TERMINAL BOARD ASSY B-1A-5403778-0-0
13 TERMINAL BOARD C-1A-5003717-0-0
14 COVER ASSY D-AD-7006252-1-0
COVER ASSY D-AD-7006252-2-0
COVER ASSY D-AD-7006252-3-0
COVER ASSY D-AD-7006252-4-0
15 BEZEL SWITCH C-1A-7407134-1-0
BEZEL SWITCH C-1A-7407134-2-0
BEZEL SWITCH C-1A-7407134-3-0
BEZEL SWITCH C-1A-7407134-4-0
BEZEL SWITCH C-1A-7407134-5-0
BEZEL SWITCH C-1A-7407134-6-0
16 SWITCH ASSY C-AD-5408935-0-0
SWITCH ASSY C-AD-5408310-3-0
SWITCH ASSY C-AD-5408310-4-0
17 ETCH BOARD D-1A-5008309-0-0
19 ETCH BOARD D-1A-5008934-0-0
18 PC04 BUS BAR E-AD-706268-0-0
PCØ4 BUS BAR E-AD-706268-1-0
20 A-PI-3700024-0-0 PACKAGING INSTRUCTION (CUST. PACK)
21 A-PI-3700123-0-0 PACKAGING INSTRUCTION (INTER PLANT)

UNIT ASSY. DWG. NO. D-UA-PCØ4-Ø-Ø

FIRST USED ON OPTION/MODEL: PCØ4

NEXT HIGHER ASSY: A-ML-PCØ4

TITLE: DRAWING INDEX LIST, PCØ4

digital EQUIPMENT CORPORATION

SIZE: D CODE: DI NUMBER: PCØ4-Ø-1 REV: Z

SHEET 1 OF 2

FIND NO	DESCRIPTION (MECHANICAL)	PART NO	PROD	CUST	F/C
1	PCO4- READER & PUNCH	D-UA-PCO4-0-0			
	PCØ4- READER & PUNCH (PL)	A-PL-PCØ4-Ø-Ø			
	CHAD BOX	B-MD-7405300-0-0			
	TAPE CONTAINER	D-MD-7407131-0-0			
	I/O CABLE ASSY	C-IA-7006281-0-0			
	PCØ4-PA PUNCH	D-UA-PCØ4-PA-Ø			
	BRKT RESISTOR	C-MD-7408091-0-0			
	SCR MODULE RETAINER	C-IA-7405642-00			
	HOLD DOWN BAR	C-IA-74083397-0			
	PACKAGING INSTRUCTIONS PCO READER & PUNCH	A-PI 3700024-00			
2	PUNCH ASSY (60CY)	D-AD-7006248-1-0			
	PUNCH ASSY (50CY)	D-AD-7006248-2-0			
	PUNCH ASSY (PL)	A-PL-7006248-0-0			
	CHAD TUBE	B-MD-7407386-0-0			
	PUNCH MTG CHASSIS	D-IA-7407071-0-0			
	HINGE	B-MD-7407083-0-0			
	BRKT FEED	D-MD-7408088-0-0			
	TAPE CHUTE	D-IA-7408171-0-0			
	TAPE DEPRESSOR	D-SC-1209915-0-0			
	PIN	B-MD-7408172-0-0			
	PULLY (60CY)	B-MD-7406089-1-0			
	PULLY (50CY)	B-MD-7406089-2-0			
	TORSION SPRING	C-SC-1209924-0-0			
3	READER ASSY	D-AD-7006247-0-0			
	READER ASSY (PL)	A-PL-7006247-0-0			
	TAPE PATH GUIDE	D-MD-7407078-0-0			
	READER PLATE	D-MD-7407085-0-0			
	BLOCK READER	B-MD-7407119-0-0			
	SHAFT READER PLATE	B-MD-7407120-0-0			
	ARM, SPRING	B-MD-7407118-0-0			
	SPRING, BULB	A-MD-7407116-0-0			
	DEPRESSOR TAPE	C-MD-7407121-0-0			
	BRKT TAPE HOLD DOWN	C-MD-7407144-0-0			
	SLO SYN MOTOR REWORK	B-IA-7407684-0-0			
	SHIM	B-MD-7407800-0-0			
	LENS	B-MD-7404989-0-0			

FIND NO	DESCRIPTION (MECHANICAL)	PART NO	PROD	CUST	F/C
4	PHOTO TRANSISTOR ASSY	C-IA-7006267-0-0			
	TEST SCHEMATIC	D-CS-7406267-T-1			
	TEST PROCEDURE	A-SP-7406267-T-2			
5	PHOTO TRANSISTOR BD ASSY	D-IA-5409227-0-0			
6					
7	CHASSIS & POWER SUPPLY ASSY	D-AD-7006246-0-0			
	CHASSIS & POWER SUPPLY (PL)	A-PL-7006246-0-0			
	PANEL FRONT	D-IA-7407075-0-0			
	BRKT MTG BAR RIGHT HAND	C-IA-7407065-1-0			
	BRKT. MTG BAR LEFT HAND	C-IA-7407065-2-0			
	CHASSIS	E-IA-7407074-0-0			
	COVER, JONES STRIP	C-MD-5309641-0-0			
	HARNESS, CONTROL	D-IA-7006311-0-0			
	HARNESS I/O 110 VAC	D-IA-7006310-0-0			
	HARNESS POWER SUPPLY	D-IA-7006309-0-0			
	DECAL (PCØ4)	A-DC-7407478-0-0			
8	PWR REGULATOR ASSY	C-AD-7006512-0-0			
	PWR REGULATOR (PL)	A-PL-7006512-0-0			
	HEATSINK, PWR REGULATOR	C-MD-7407068-0-0			
9	PWR REGULATOR BOARD ASSY	C-IA-5408910-0-0			
10	ETCH BOARD	D-IA-5008919-0-0			
11	SCR DRIVER ASSY	C-AD-5408385-0-0			
	SCR DRIVER CHASSIS	C-IA-7407070-0-0			
12	TERMINAL BD ASSY	B-IA-5403770-0-0			
13	TERMINAL BOARD	C-IA-5003717-0-0			
14	COVER ASSEMBLY	D-AD-7006252-1-0			
	COVER ASSEMBLY	D-AD-7006252-2-0			
	COVER ASSEMBLY	D-AD-7006252-3-0			
	COVER ASSEMBLY	D-AD-7006252-4-0			
	COVER ASSEMBLY (PL)	A-PL-7006252-0-0			
	COVER, PCO (BASIC & COMB.)	E-SC-1209396-1-0			
	COVER, PCO (PUNCH)	E-SC-1209396-3-0			
	COVER, PCO (READER)	E-SC-1209396-5-0			
	~~SHIM, BEZEL~~	~~C-MD-7407849-0-0~~			
	BEZEL	E-SC-1209225-0-0			
15	BEZEL SWITCH	C-IA-7407134-1-0			
	SILK SCREEN	A-SS-7407134-1-1			
	BEZEL SWITCH	C-IA-7407134-2-0			
	SILK SCREEN	A-SS-7407134-2-1			
	BEZEL SWITCH	C-IA-7407134-3-0			
	SILK SCREEN	A-SS-7407134-3-1			
	BEZEL SWITCH	C-IA-7407134-4-0			
	SILK SCREEN	A-SS-7407134-4-1			

FIND NO	DESCRIPTION (MECHANICAL)	PART NO	PROD	CUST	F/C
16	SWITCH ASSY	C-AD-5409935-0-0			
	SWITCH ASSY	C-AD-5408310-3-0			
	SWITCH ASSY	C-AD-5408310-4-0			
	SWITCH ASSY (PL)	A-PL-5408310-0-0			
	BAR SPACER SW. BD.	B-MD-7407175-0-0			
17	PCO SWITCH BOARD	D-IA-5008309-0-0			
	FLIP CHIP MODULE	D-MD-1402230-0-0			
19	PR SWITCH BOARD	D-IA-5008934-0-0			
18	PCØ4 BUS BAR	E-AD-7006268-0-0			
	MTG. BAR (8 IN.)	B-IA-7407077-0-0			
20	PACKAGING INSTRUCTION	A-PI-3700024-0-0			
	OUTER SHIPPING CARTON	A-PS-9905046-0-0			
	INNER SHIPPING CARTON	A-PS-9905047-0-0			
	BOTTOM PAD	A-PS-9905053-0-0			
	FRONT SPACER	A-PS-9905054-0-0			
	SIDE SPACER	A-PS-9905055-0-0			
	REAR SUPPORT	A-PS-9905052-0-0			
	TOP SPACER	A-PS-9905056-0-0			
	TORO PAD	A-PS-9905044-1-0			
	POLY BAG	A-PS-9905129-7-0			
21	PACKAGING INSTRUCTION	A-PI-3700123-0-0			
	TAPELESS CARTON	A-PS-9905348-00-0			
	SPECIAL DIE CUT	A-PS-9905348-01-0			
	ONE PIECE FOLDER	A-PS-9905348-02-0			
	QUAD MODUAL BOOK PACK	A-PS-9905072-0-0			
	POLY BAG	A-PS-9905129-7-0			

FIND NO	DESCRIPTION (ELECTRICAL)	PART NO	PROD	CUST	F/C
1	PAPER TAPE READER	A-ML-PCØ4-Ø			
	~~PCØ4-BA READER & PUNCH~~	~~A-ML-PCØ4-BA~~			
	~~PCØ4-C READER & PUNCH & DRIVER~~	~~A-ML-PCØ4-C~~			
	~~PCØ4-CA READER & PUNCH & DRIVER~~	~~A-ML-PCØ4-CA~~			
	~~PCØ4-P PUNCH~~	~~A-ML-PCØ4-P~~			
	~~PCØ4-PA PUNCH~~	~~A-ML-PCØ4-PA~~			
	POWER AND CONTROL SCHEMATIC DIAGRAM	D-BS-PCØ4-0-2			
	MODULE UTILIZATION	C-MU-PCO4-0-3			
	MODULE UTILIZATION (PL)	A-PL-PCO4-0-3			
	ENGINEERING SPECS	A-SP-PCO4-0-4			
	WIRELIST	K-WL-PCO4-0-5			
	WIRELIST	K-WL-PCO4-0-6			
	WIRELIST	K-WL-PCO4-0-7			
7.	CHASSIS & POWER SUPPLY ASSY	D-AD-7006246-0-0			
9.	POWER REG BD C.S.	B-CS-5408308-0-0			
11.	SCR DRIVER ASSY	C-AD-5408385-0-0			
12.	PRINTED CIRCUIT 823	PC-5403770-0-1			
18	BUS BAR (PCØ4)	E-AD-7006268-0-0			
	BUS BAR (PCØ4)	E-AD-7006268-1-0			
1	ACCESSORY LIST	A-AL-PCO4-0-08			

REVISIONS		
REV.	CHANGE NO.	CHK
Y	PCO4-0005B	WILLIAMS
Z	PCO4-00059	A. WILLIAMS

FIRST USED ON OPTION/MODEL: PCØ4

QTY.	DESCRIPTION	PART NO	ITEM NO

PARTS LIST

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN / DATE 6/6/69
CHKD / DATE 6/6/69
DATE 6/6/69
PROJ. ENG. / DATE 6/6/69
DATE 6/6/69

NEXT HIGHER ASSY: A ML PCØ4

SCALE

SHEET 2 OF 2

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE: DRAWING INDEX LIST PCØ4

SIZE: D CODE: DI NUMBER: PCØ4-Ø-1 REV: Z

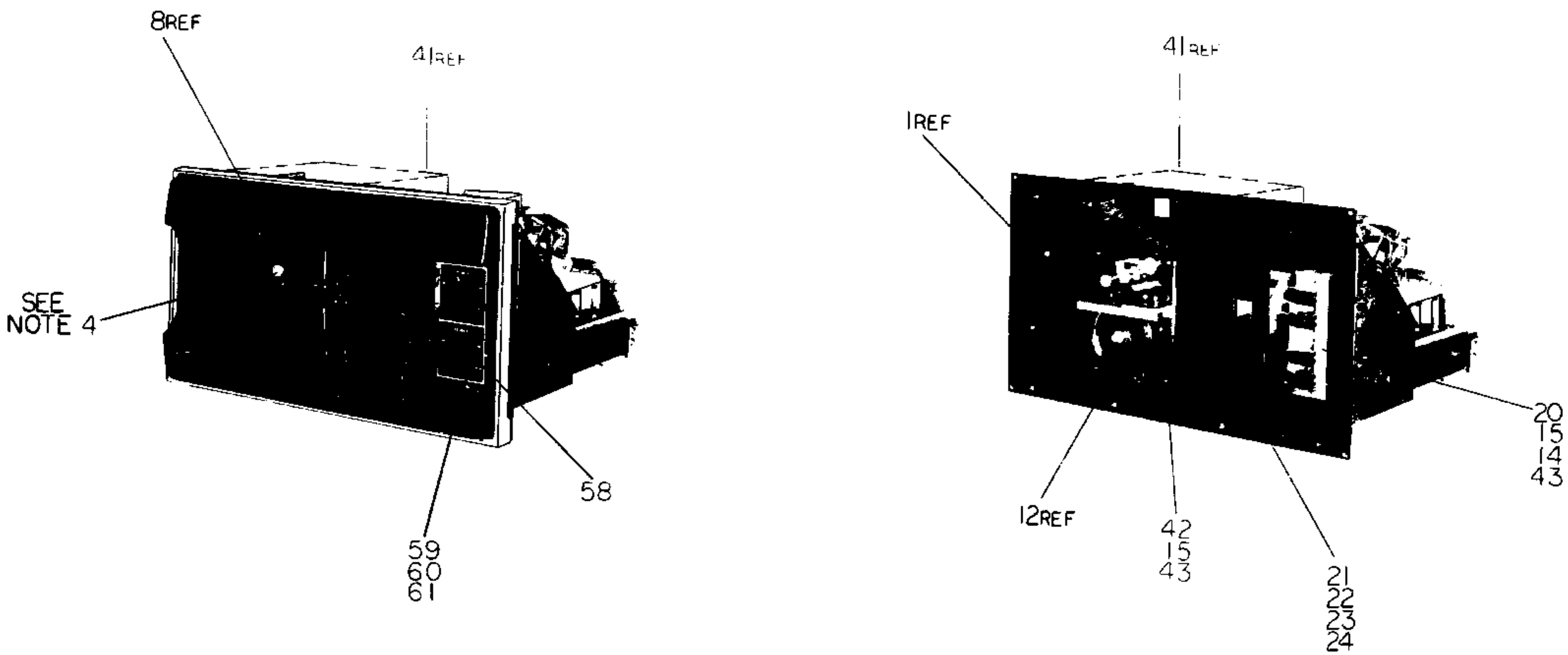
DIST. G

LEGEND

MODEL	VARIATION	
	CY	COMPOSITION
PCØ4 - B, BB, & BL	60	READER & PUNCH
PCØ4 - BA, BC BM	50	READER & PUNCH
PCØ4 - C	60	READER, PUNCH & SCR
PCØ4 - CA	50	READER, PUNCH & SCR
PCØ4 - P, & PL	60	PUNCH
PCØ4 - PA & PV	50	PUNCH
PCØ4 - R & RB	50/60	READER

NOTES:

1. WIRING OF SWITCHES VARIES DEPENDING ON UNIT MODEL BEING BUILT, FOR SWITCH CONFIGURATION, FOR WIRING PURPOSES SEE: DETAIL "A" FOR MODEL B [illegible] DETAIL "F" [illegible] DETAIL "D" FOR MODEL "C" AND "CA". 50/60 CY HAS NO EFFECT.
2. IF THE SCR DRIVER UNIT IS USED, THIS WIRE WILL CONNECT TO SCR DRIVER T1, NOT TS-6. FOR CORRECT WIRING WHEN UNIT IS USED, SEE SCR DRIVER WIRE LIST. (SHEET 3)
3. REMOVE CLAMP FROM CHASSIS, PLACE CABLE IN POSITION, THEN REINSTALL CLAMP IN POSITION OVER CABLE.
4. COVER ASSY TO BE ATTACHED TO CHASSIS ASSY AFTER ALL OTHER INSTALLATIONS ARE COMPLETE. TO DO SO, READER KNOB MUST BE REMOVED, COVER INSTALLED, THEN KNOB REPLACED ON READER SHAFT.
5. ON MODELS P AND PA THIS WIRE WILL BE TIED BACK AND WHITE SHRINKABLE TUBING (ITEM 45) REQD.
6. ON ALL MODELS ALL UNUSED WIRES SHOULD BE CONNECTED TO THEIR APPROPRIATE TABS
7. [illegible]



FIRST USED ON OPTION / MODEL	PCØ4
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	TOLERANCES: DECIMALS ± .005, FRACTIONS ± 1/64, ANGLES ± 0°30'
FINAL SURFACE QUALITY	✓
	REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL	—
FINISH	—
NEXT HIGHER ASSY	A-ML-PCØ4-Ø

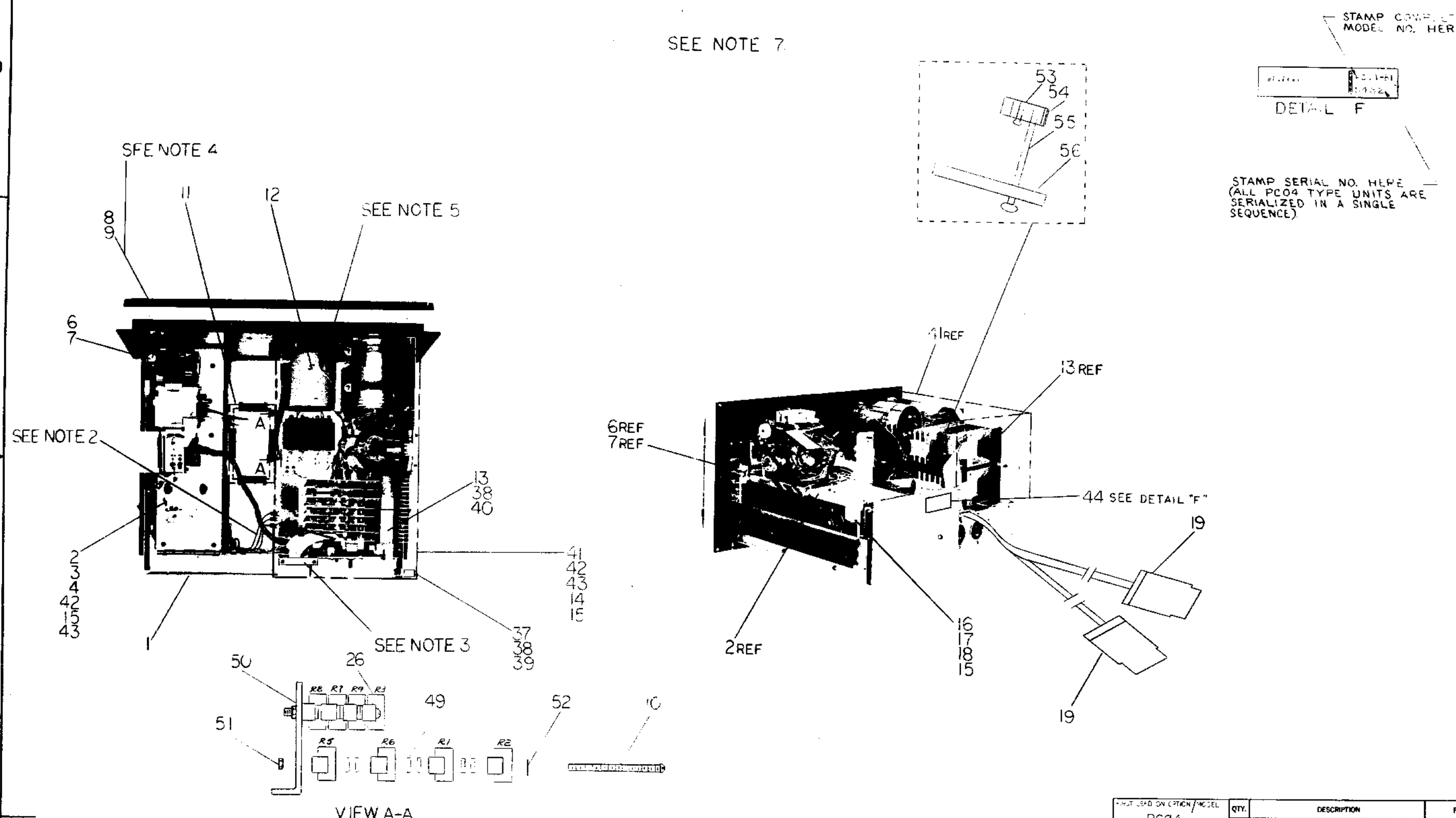
QTY.	DESCRIPTION	PART NO	ITEM NO.
	PARTS LIST		

digital EQUIPMENT CORPORATION

TITLE: PCØ4 READER AND PUNCH

SIZE	CODE	NUMBER	REV.
D	UA	PCØ4-Ø-Ø	

SCALE [illegible] SHEET 1 OF [illegible]



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PCØ4		PARTS LIST		

UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —
FINISH —

DRN. Robert Hatnake DATE 4/6/67
CHK'D. DATE 6/5/67
ENG. DATE 6/6/67
PROJ. ENG. DATE
PROD. DATE

NEXT HIGHER ASSY A-ML-PCØ4-Ø

SCALE NONE
SHEET 2 OF 4

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
PCØ4
READER AND PUNCH

SIZE D CODE UA NUMBER PCØ4-Ø-Ø REV. F

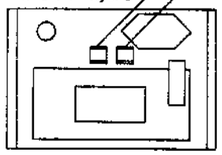
DIST.

REVISIONS: REV. | CHANGE NO. | CHK

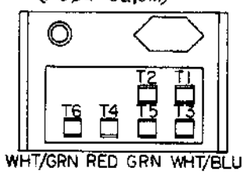
DEC FORM NO. DRD

TS
(TOP VIEW)

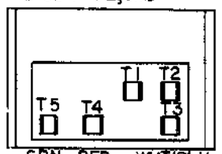
SCR DRIVER
5408385 (PCØ4-C,CA)



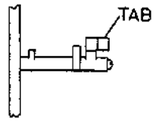
SCR DRIVER
7006720 (W/5408384 REV A)
(PCØ4-CL,CM)



SCR DRIVER
7006720 (W/5408384 REV B)
(PCØ4-CL,CM)

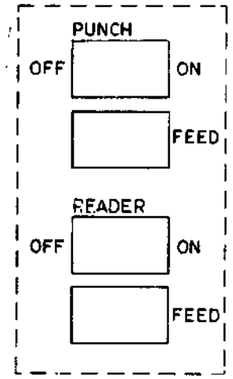


R9

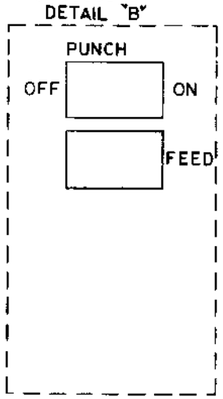


FRONT VIEW

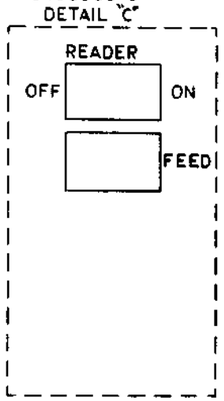
PCØ4-B,BA,BB,BC,BL,BM
5408310-4
DETAIL "A"



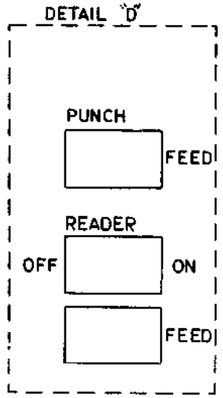
PCØ4-P,PA,PL,PM
5408935-0
DETAIL "B"



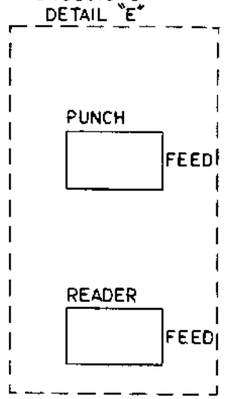
PCØ4-R,RB,RL
5408935-0
DETAIL "C"



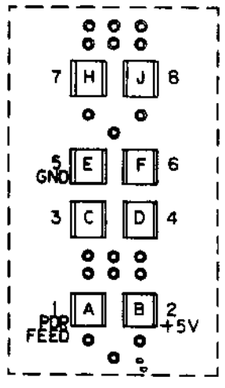
PCØ4-C,CA
5408310-3
DETAIL "D"

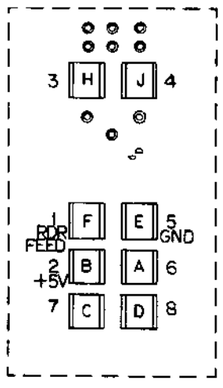


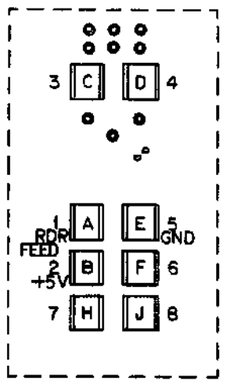
PCØ4-CL,CM
5408310-5
DETAIL "E"

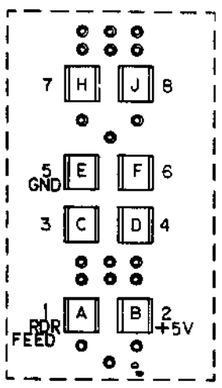


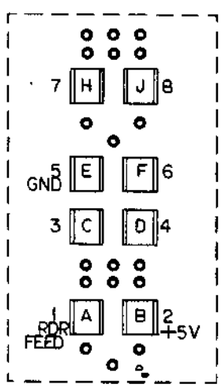
REAR VIEW











FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO
PCØ4		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX = .005 .XX = .02 .X = .1 ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. B. HUTNAK	DATE 4-IC-69	digital EQUIPMENT CORPORATION
CHK'D. R. CARVELLI	DATE 6-5-69	
ENG. G. BECKNER	DATE 6-6-69	TITLE PCØ4 READER PUNCH (SW E TERM LOCATIONS)
PROJ. ENG. G. BECKNER	DATE 6-6-69	
PROD. B. ANTONUCCIO	DATE 6-6-69	
NEXT HIGHER ASSY. A-ML-PCØ4-Ø		SIZE D CODE UA NUMBER PCØ4-Ø-Ø REV -
SCALE		
SHEET 3 OF 4		DIST.

REV F
NUMBER D UA PCØ4-Ø-Ø

CONNECTIONS IF NO SCR DRIVER ASSY

COLOR/AWG	WIRE	CONNECTION	REMARKS
RED #18	#9	TS — 6	
BLK & YEL OR BLK & WHT	PUNCH MOTOR	TS — 6	IF PUNCH PRESENT
RED #18	#7	SW BOARD-"H"	SEE DETAIL "A" OR "B" OR "C"

CONNECTIONS FOR 54Ø8385 SCR DRIVER ASSY

COLOR/AWG	WIRE	CONNECTION	REMARKS
RED #18	#9	SCR — T1	
BLK & YEL OR BLK & WHT	PUNCH MOTOR	SCR — T2	
RED #18	#7	SW BOARD-"J"	SEE DETAIL "D"
WHT/BLU #22	SCR LEAD	AØ7B	
WHT/GRN #22	SCR LEAD	BØ1B	

CONNECTIONS FOR 7ØØ652Ø SCR DRIVER ASSY

COLOR/AWG	WIRE	CONNECTION	REMARKS
RED #18	#9	SCR T1	
BLK & YEL OR BLK & WHT	PUNCH MOTOR	SCR T2	
RED #18	#7	SW BOARD-"J"	SEE DETAIL "E"
WHT/BLU #22	SCR LEAD	AØ7B	
WHT/GRN #22	SCR LEAD	AØ7C	NOT USED ON 54Ø8384 REV B
RED #22	SCR LEAD	AØ7A	
GRN #22	SCR LEAD	BØ1F	

PUNCH CONNECTIONS

COLOR	WIRE	CONNECTION	REMARKS
WHT #22	PUNCH CAP	TS — 7	

PLUG PUNCH DATA CABLE (WØ23) INTO SLOT BØ2

NOTE: SEE SHEET 3 FOR TERMINAL IDENTIFICATION DIAGRAMS.

CONNECTIONS IF NO READER

COLOR/AWG	WIRE	CONNECTION	REMARKS
GRY/RED #18	#7	—	SLEEVE WITH ITEM #45 & TIE BACK

READER CONNECTIONS

COLOR/AWG	WIRE	CONNECTION	REMARKS
GRY/RED #18	#7	R9 TAB	LAMP RESISTOR
WHT/RED	READER MOTOR	TS - 1	
RED	READER MOTOR	TS - 2	
WHT/GRN	READER MOTOR	TS - 3	
GRN	READER MOTOR	TS - 4	
WHT & BLK	READER MOTOR	TS - 5	

PLUG READER PHOTOCELL CABLE (WØ77) INTO SLOT BØ8

READER WIRING

ITEM NO	COLOR/AWG	FROM	USING ITEM NO.	TO	USING ITEM NO.
29	WHT/VIO #22	R1 & R2	—	TS - 1	28
3Ø	WHT/YEL #22	R3 & R4	—	TS - 2	28
31	WHT/ORN #22	R5 & R6	—	TS - 3	28
32	WHT/BRN #22	R7 & R8	—	TS - 4	28
33	VIO #22	R1	—	BØ6R	—
33	VIO #22	R2	—	BØ6S	—
34	YEL #22	R3	—	BØ5R	—
34	YEL #22	R4	—	BØ5S	—
35	ORN #22	R5	—	BØ4R	—
35	ORN #22	R6	—	BØ4S	—
36	BRN #22	R7	—	BØ3R	—
36	BRN #22	R8	—	BØ3S	—

SEE VIEW "A"-"A" ON SHEET 2 FOR IDENTIFICATION OF R1 THRU R8

WIRING ON PCØ4-BB, -BC, AND -RB ONLY

ITEM NO	COLOR/AWG	FROM		TO	
57	GRN #24	AØ8H		AØ8F	

COMMON CONNECTIONS

COLOR/AWG	WIRE	CONNECTION	REMARK
BLK #18	#27	GND LUG	LOGIC GND
GRY/YEL #18	#29	AØ8B	-15V
BLU #18	#31	BØ2D	-3ØV
BLK #18	#28	GND LUG	LOGIC GND
GRY/RED #18	#30	AØ8A	+5V
GRN #18	#32	BØ6V	-18V
YEL #22	#1	SW BOARD-"A"	SEE DETAILS "A" THRU "E" FOR LOCATION.
WHT/BLK #22	#2	SW BOARD-"B"	
WHT/YEL #22	#3	SW BOARD-"C"	
BRN #22	#4	SW BOARD-"D"	
BLK #22	#5	SW BOARD-"E"	
WHT #22	#6	SW BOARD-"F"	
RED #18	#8	SW BOARD-"J"	
YEL #22	#11	AØ1V	
WHT/BLK #22	#12	BØ7A	+5V
WHT/YEL #22	#13	AØ8F	
BLK #22	#15	BØ8C	
WHT #22	#16	BØ2U	

CONNECTION ON 7ØØ6268-Ø LOGIC BLOCK (PCØ4-B, -BA, -BB, BC, -C, -CA, -P, -PA, -R -RB)

COLOR/AWG	WIRE	CONNECTION
BRN #22	#14	AØ2B

CONNECTION ON 7ØØ6268-1 AND -2 LOGIC BLOCK (PCØ4-BL, -BM, -CL, -CM, -PL, -PM, -RL)

COLOR/AWG	WIRE	CONNECTION
BRN #22	#14	AØ1B

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
PCØ4-Ø		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS .XXX ± .005 .XX ± .02 .X ± .1 — ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. B. HUTNAK	DATE 4-10-69	
CHK'D. R. CARVELLI	DATE 6-5-69	
ENG. GEO. BECKNER	DATE 6-6-69	
PROJ. ENG. GEO. BECKNER	DATE 6-6-69	
PROD. B. ANTONUCCIO	DATE 6-6-69	

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE PCØ4 READER & PUNCH (WIRING)

NEXT HIGHER ASSY A-ML-PCØ4

SIZE D CODE UA NUMBER PCØ4-Ø-Ø REV. F

SCALE — SHEET 4 OF 4

ITEM NO.	DWG. NO. /PART NO.	DESCRIPTION	QUANTITY/VARIATION PCØ4-B,BB	PCØ4-BA,BC	PCØ4-BL	PCØ4-BM	PCØ4-C	PCØ4-CA	PCØ4-CL	PCØ4-CM	PCØ4-P	PCØ4-PA	PCØ4-PL	PCØ4-PM	PCØ4-R,RB	PCØ4-RL
1	D-AD-7006246-0-0	CHASSIS AND POWER SUPPLY ASSY	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	D-AD-7006248-1-0	PUNCH ASSY (60 HZ)	1	-	1	-	1	-	1	-	1	-	1	-	-	-
2	D-AD-7006248-2-0	PUNCH ASSY (50 HZ)	-	1	-	1	-	1	-	1	-	1	-	1	-	-
3	9006021-1	SRC. PHL PAN HD 6-32 X 5/16 LG SST	6	6	6	6	6	6	6	6	6	6	6	6	6	6
4	9006560	NUT. KEPS 6-32 X 5/16 X 5/32	2	2	2	2	2	2	2	2	2	2	2	2	-	-
~~5~~	~~[illegible]~~	~~SCR, PHL PAN HD 10-32 X 5/16 [illegible] SST~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~		~~-~~	~~2~~	~~2~~	~~2~~	~~2~~		
6	1100106	THYRECTOR GR620SP4B4	1	1	1	1	-	-	-	-	1	1	1	1	-	-
7	9107278-3	18 AWG TEF TUBING RED	A/R	A/R	A/R	A/R	-	-	-	-	A/R	A/R	A/R	A/R	-	-
8	D-AD-7006252-1-0	COVER ASSY (PUNCH & READER)	1	1	1	1	-	-	-	-	-	-	-	-	-	-
8	D-AD-7006252-2-0	COVER ASSY (PUNCH)	-	-	-	-	-	-	-	-	1	1	1	1	-	-
8	D-AD-7006252-3-0	COVER ASSY (READER)	-	-	-	-	-	-	-	-	-	-	-	-	1	1
8	D-AD-7006252-4-0	COVER ASSY (PUNCH, READER & SCR)	-	-	-	-	1	1	-	-	-	-	-	-	-	-
8	D-AD-7006252-6-0	COVER ASSY (READER, PUNCH & SCR)	-	-	-	-	-	-	1	1	-	-	-	-	-	-
9	9006042-2	SCR, PHL FLAT HD 8-32 X 1 LG SST	4	4	4	4	4	4	4	4	4	4	4	4	4	4
10	9006083-1	SCR, PHL PAN HD 10-32 X 2½ LG SST	4	4	4	4	4	4	4	4	-	-	-	-	4	4
11	C-MD-745300-0-0	CHAD BOX	1	1	1	1	1	1	1	1	1	1	1	1	-	-
12	D-AD-7006247-0-0	READER ASSY	1	1	1	1	1	1	1	1	-	-	-	-	1	1
13	E-AD-7006268-0-0	WIRED ASSY, PCØ4	1	1	-	-	1	1	-	-	1	1	-	-	1	-
13	E-AD-7006268-1-0	WIRED ASSY, PCØ4	-	-	1	1	-	-	-	-	-	-	1	1	-	1
13	E-AD-7006268-2-0	WIRED ASSY, PCØ4	-	-	-	-	-	-	1	1	-	-	-	-	-	-
14	9006022-1	SCR, PHL PAN HD 6-32 X 3/8 LG SST	3	3	3	3	3	3	3	3	3	3	3	3	3	3
15	9006033	WASHER, INT TOOTH #6	15	15	15	15	17	17	17	17	11	11	11	11	13	13
16	C-AD-5408385-0-0	SCR DRIVER ASSY	-	-	-	-	1	1	-	-	-	-	-	-	-	-
16	C-AD-700652Ø-0-0	SCR DRIVER ASSY	-	-	-	-	-	-	1	1	-	-	-	-	-	-
17	9006026-1	SCR, PHL PAN HD 6-32 X 3/4 LG SST	-	-	-	-	2	2	2	2	-	-	-	-	-	-
18	9006801	HEX SPACER, ¼AF X 3/8 LG #6 HOLE	-	-	-	-	2	2	2	2	-	-	-	-	-	-
19	C-IA-7006281-0-0	I/O CABLE, PCØ4 (WØ33 TO WØ77)	2	2	-	-	2	2	~~2~~	~~2~~	1	1	-	-	1	1
19	D-IA-7407067-1-0	CABLE CONNECTOR M926 TO WØ33 S	-	-	1	1	-	-	-	-	-	-	-	-	-	-
19	D-IA-7006145-1-0	CABLE CONN (PUNCH) M926 TO WØ33	-	-	-	-	-	-	-	-	-	-	1	1	-	-
19	D-IA-7407067-3-0	CABLE CONNECTOR M926 TO WØ33 S	-	-	-	-	-	-	1	1	-	-	-	-	-	-
20	C-AD-5408310-4-0	SWITCH ASSY	1	1	1	1	-	-	-	-	-	-	-	-	-	-
20	C-AD-5408935-0-0	SWITCH ASSY	-	-	-	-	-	-	-	-	1	1	1	1	1	1
20	C-AD-5408310-3-0	SWITCH ASSY	-	-	-	-	1	1	-	-	-	-	-	-	-	-
20	C-AD-5408310-5-0	SWITCH ASSY	-	-	-	-	-	-	1	1	-	-	-	-	-	-
21	D-MD-7407131-0-0	TAPE CONTAINER	1	1	1	1	1	1	1	1	1	1	1	1	-	-
22	9006011-2	SCR, PHL FLAT HD 4-40 X 3/8 LG SST	2	2	2	2	2	2	2	2	2	2	2	2	-	-
23	9006556	NUT, HEX 4-40 X ¼ X 1/16 SST	2	2	2	2	2	2	2	2	2	2	2	2	-	-
24	9006632	WASHER, INT TOOTH #4	2	2	2	2	2	2	2	2	2	2	2	2	-	-
~~25~~	~~[illegible]~~	~~[illegible] #10~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~			~~2~~	~~2~~	~~2~~	~~2~~		
26	1309896	RES, 25 OHM ±5% 40 W	8	8	8	8	8	8	8	8	-	-	-	-	8	8
~~27~~	~~[illegible]~~	~~[illegible]~~	~~A/R~~	~~A/R~~	~~A/R~~	~~A/R~~	~~A/R~~	~~A/R~~			~~A/R~~	~~A/R~~	~~A/R~~	~~A/R~~	~~A/R~~	
28	9007917	SOLDERLESS CONN 18-22 AWG .250 TAB	4	4	4	4	4	4	4	4	-	-	-	-	4	4
29	9107400-97	WIRE, 22 AWG STRD TEFLON WHT/VIO TRACER	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	-	-	-	-	A/R	A/R

REVISIONS

CHK	CHANGE NO.	REV.
[illegible]	PC04-00053 REVISEDE REDRAWN M. Poirier 12-13-71 A-KENT Allan Kent 4 Jan 72	M
PM	PC04-00057 [illegible] 3-19-73 A. WILLIAMS A. Williams 3/27/73	N
LB	PC04-00059 Q. Yowke 5-28-74 A. WILLIAMS J.R. Catt 6/14/74	P

FIRST USED ON OPTION/MODEL PCØ4 (ALL)

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —
FINISH —

DRN.	R. HUTNAK	DATE 4-10-69
CHK'D.	R. CARVELLI	DATE 6-5-69
ENG.	GEO. BECKNER	DATE 6-6-69
PROJ. ENG.	GEO. BECKNER	DATE 6-6-69
PROD.	R. ANTONUCCIO	DATE 6-6-69

NEXT HIGHER ASSY. D-UA-PCØ4-Ø-Ø
SCALE —
SHEET 1 OF 2

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE PCØ4 READER AND PUNCH

SIZE C CODE PL NUMBER PCØ4-Ø-Ø REV. P
DIST.

DEC FORM NO. DEC 110

C PL PCØ4 Ø Ø REV. P

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	PCØ4-B,BB	PCØ4-BA,BC	PCØ4-BL	PCØ4-BM	PCØ4-C	PCØ4-CA	PCØ4-CL	PCØ4-CM	PCØ4-P	PCØ4-PA	PCØ4-PL	PCØ4-PM	PCØ4-R,RB	PCØ4-RL
30	9107400-94	WIRE, 22 AWG STRD TEFLON WHT/YEL TRACER	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	-	-	-	-	A/R	A/R
31	9107400-93	WIRE, 22 AWG STRD TEFLON WHT/ORN TRACER	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	-	-	-	-	A/R	A/R
32	9107400-91	WIRE, 22 AWG STRD TEFLON WHT/BRN TRACER	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	-	-	-	-	A/R	A/R
33	9107350-77	WIRE, 22 AWG STRD TEFLON VIO	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	-	-	-	-	A/R	A/R
34	9107350-44	WIRE, 22 AWG STRD TEFLON YEL	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	-	-	-	-	A/R	A/R
35	9107350-33	WIRE, 22 AWG STRD TEFLON ORN	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	-	-	-	-	A/R	A/R
36	9107350-11	WIRE, 22 AWG STRD TEFLON BRN	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	-	-	-	-	A/R	A/R
37	9006043-1	SCR, PHL PAN HD 8-32 X 1 LG SST	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38	9006634	WASHER, INT TOOTH #8	2	2	2	2	2	2	2	2	2	2	2	2	2	2
39	9006823	HEX SPACER 3/8 X 3/4 LG #8	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	9006037-1	SCR, PHL PAN HD 8-32 X 3/8 LG SST	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41	E-IA-7407438-0-0	POWER SUPPLY COVER	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42	9006024-1	SCR, PHL PAN HD 6-32 X 1/4 LG SST	4	4	4	4	4	4	4	4	4	4	4	4	4	4
43	9006653	WASHER, FLAT #6 SST	14	14	14	14	14	14	14	14	10	10	10	10	12	12
44	9008141	DEC NAME PLATE	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45	9107275	SHRINKABLE TUBING WHITE	-	-	-	-	-	-	-	-	A/R	A/R	A/R	A/R	-	-
~~46~~	~~E-AD-7006268-1-0~~	~~BUS BAR PCØ4(BL)~~											1	1		
~~47~~	~~D-IA-7407067-1-0~~	~~I/O CABLE ASSY, (BL)~~			1	1										
~~48~~	~~7006145-1~~	~~I/O CABLE ASSY, (BL)~~											1	1		
49	9006664	WASHER, FLAT #10	24	24	24	24	24	24	24	24	-	-	-	-	24	24
50	C-MD-7408091-0-0	BRK'T RESISTOR	1	1	1	1	1	1	1	1	-	-	-	-	1	1
51	9006565	NUT, KEPS 10-32 X 3/8 X 3/16	4	4	4	4	4	4	4	4	-	-	-	-	4	4
52	9006635	WASHER, INT TOOTH #10	4	4	4	4	4	4	4	4	-	-	-	-	4	4
53	9007799-6	SCR, PHL FILLISTER HD 8-32 X 1.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1
54	1209850	UNIVERSAL MODULE RETAINER	1	1	1	1	1	1	1	1	1	1	1	1	1	1
55	C-IA-7405642-0-0	SCR, MODULE RETAINER	1	1	1	1	1	1	1	1	-	-	1	1	1	1
56	C-IA-7408339-7-0	HOLD DOWN BAR (6")	1	1	1	1	1	1	1	1	-	-	1	1	1	1
57	9107470-55	WIRE, 24 AWG SOLID TEFLON GREEN	A/R	A/R	-	-	-	-	-	-	-	-	-	-	A/R	-
58	C-IA-7407134-1-0	BEZEL SWITCH	1	1	1	1	-	-	-	-	-	-	-	-	-	-
58	C-IA-7407134-2-0	BEZEL SWITCH	-	-	-	-	-	-	-	-	1	1	1	1	-	-
58	C-IA-7407134-3-0	BEZEL SWITCH	-	-	-	-	-	-	-	-	-	-	-	-	1	1
58	C-IA-7407134-4-0	BEZEL SWITCH	-	-	-	-	1	1	-	-	-	-	-	-	-	-
58	C-IA-7407134-5-0	BEZEL SWITCH	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58	C-IA-7407134-6-0	BEZEL SWITCH	-	-	-	-	-	-	1	1	-	-	-	-	-	-
59	9006558	NUT HEX #6-32 SST	2	2	2	2	2	2	2	2	2	2	2	2	2	2
60	9006633	WASHER INT TOOTH LOCK #6	2	2	2	2	2	2	2	2	2	2	2	2	2	2
61	9006656	WASHER FLAT	2	2	2	2	2	2	2	2	2	2	2	2	2	2
62	A-PI-3700024-0-0	PACKAGING INSTRUCTIONS	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63	A-PI-3700123-0-0	PACKAGING INSTRUCTIONS	1	1	1	1	1	1	1	1	1	1	1	1	1	1

REVISIONS | REV. | CHANGE NO. | CHK

FIRST USED ON OPTION/MODEL: PCØ4 (ALL)

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 | FRACTIONS ± 1/64 | ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN. R. HUTNAK	DATE 4-10-69	
CHK'D. R. CARVELLI	DATE 6-5-69	
ENG. GEO. BECKNER	DATE 6-6-69	
PROJ. ENG. GEO. BECKNER	DATE 6-6-69	
PROD. R. ANTONUCCIO	DATE 6-6-69	

NEXT HIGHER ASSY. D-UA-PCØ4-Ø-Ø

SCALE

SHEET 2 OF 2

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: PCØ4 READER AND PUNCH

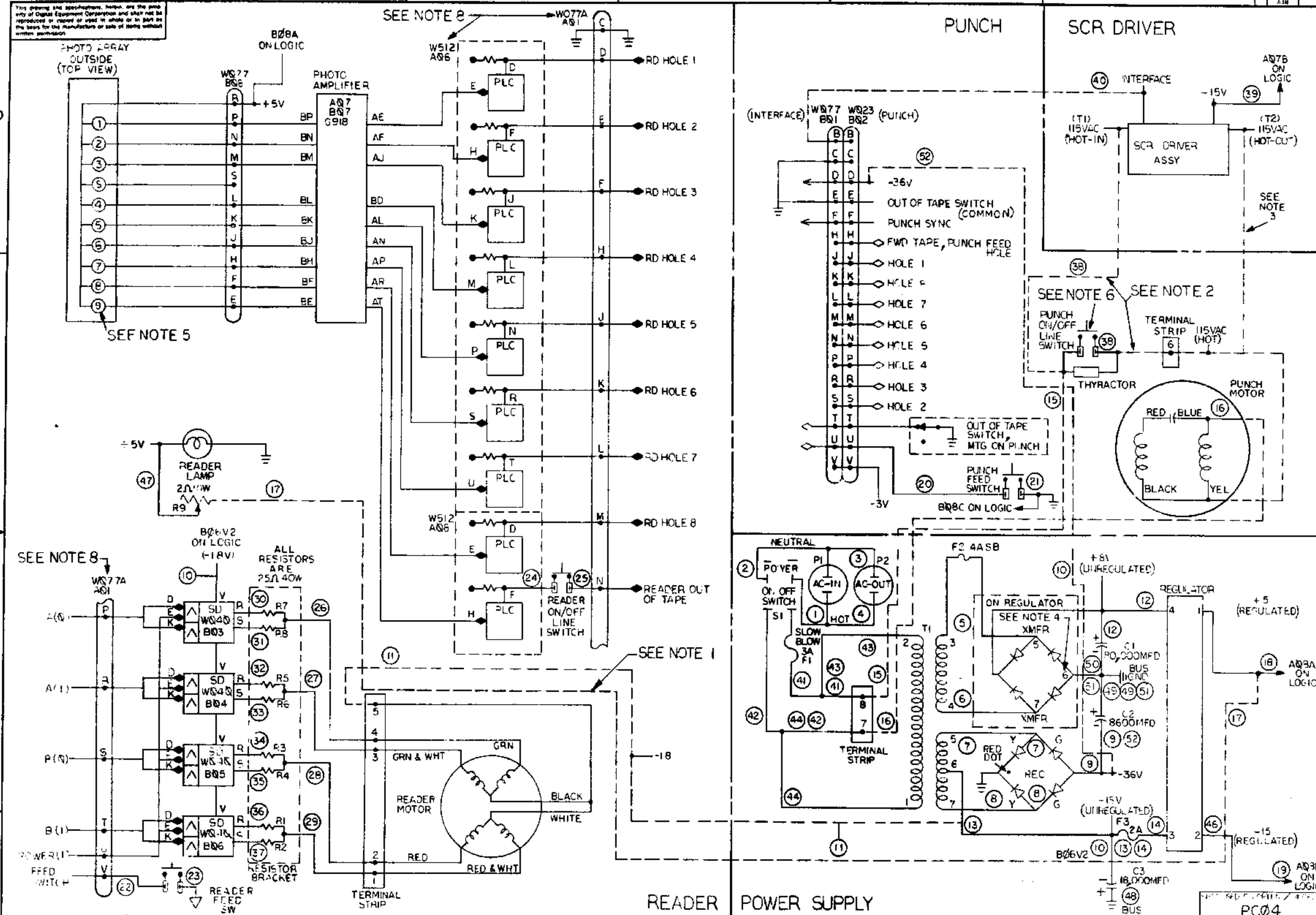
SIZE	CODE	NUMBER	REV.
C	PL	PCØ4-Ø-Ø	P

DIST.

REV. P

SIZE C CODE PL NUMBER PCØ4-Ø-Ø

DEC FORM NO. DRC 110



NOTE 9: SEE NOTE 4 ON AD-7006268-0-0

REFERENCE: 7006268-Ø-Ø LOGIC BLOCK

NOTES:

1. DOTTED LINES INDICATE POSSIBLE CONNECTIONS BETWEEN POWER SUPPLY, READER, PUNCH AND SCR DRIVER. SEE LEGEND.
2. WIRE NO. 38 HAS TWO POSSIBLE ROUTES DEPENDING ON THE SCR DRIVER OPTION WITH THE OPTION IT GOES TO THE SCR BOARD. WITHOUT THE OPTION IT GOES TO THE TERMINAL STRIP
3. WITH SCR DRIVER THE BLACK-YEL COMBINATION FROM THE PUNCH MOTOR GOES TO THE SCR BD. WITHOUT DRIVER IT GOES TO THE TERMINAL STRIP.
4. THE UNCIRCLED NUMBERS 1 THRU 7 REFER TO CONNECTIONS ON REGULATOR BOARD
5. THIS PHOTO TRANSISTOR USED TO DETECT OUT OF TAPE
6. WITH SCR OPTION SWITCHED AC WILL BE WIRED TO COMMON TERMINAL, THYRACTOR NOT REQD.
7. CIRCLED NUMBERS 1 THRU 46 ARE WIRE NUMBERS. SEE TABLE.
8. SEE PAGE 2 FOR MODELS EB, BC & RB
   SEE PAGE 3 FOR MODELS BL, EM, PL & PM

WIRE NO	COLOR	WIRE NO	COLOR
1	RED	24	WHITE-YELLOW
2	WHITE	25	BROWN
3	WHITE	26	WHITE-BROWN
4	RED	27	WHITE-ORANGE
5	ORANGE	28	WHITE-YELLOW
6	GRAY-BLUE	29	WHITE-VIOLET
7	GRAY-WHITE	30	BROWN
8	YELLOW	31	BROWN
9	BLUE	32	ORANGE
10	GRN	33	ORANGE
11	GRN	34	YELLOW
12	GRAY-VIOLET	35	YELLOW
13	GREEN	36	VIOLET
14	GREEN	37	VIOLET
15	RED	38	RED
16	WHITE	39	WHITE-BLUE
17	GRAY-RED	40	WHITE-GREEN
18	GRAY-RED	41	RED
19	GRAY-YELLOW	42	WHITE
20	WHITE	43	RED
21	BLACK	44	WHITE
22	YELLOW	45	
23	WHITE-BLACK	46	GRAY-YELLOW
43 THRU 51	BLACK	47	GRAY-[illegible]
52	BLUE		

LEGEND

CONNECTIONS	MODEL			
	PC04 B PC04 BA	PC04 C PC04 CA	PC04 [illegible] PC04 [illegible]A	PC04 R
PWR SUP TO READER	+5V TO READER LAMP [illegible] -18 TO T.S.S.	SAME AS PC04-B PC04-BA	X	SAME AS PC04 B PC04 BA
PWR SUP TO PUNCH	30 TO PUNCH CABLE B[illegible] 115V (HOT) TO PUNCH [illegible] 115 (NEUTRAL) TO PUNCH MOTOR	[illegible]	[illegible]	X
PWR SUP TO SCR DRVR	X	A07 [illegible] -15 INPUT	X	X
SCR DRVR TO PUNCH	X	INTERFACE LINE TO [illegible] 115V (HOT) TO PUNCH MOTOR	X	X

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

PC04

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —
FINISH —

DRN Bob Haley DATE 2/14/69
CHK'D Connelly DATE 6/5/69
ENG. DATE 6/6/69
PROJ. ENG. DATE 6/6/69
PROD. DATE

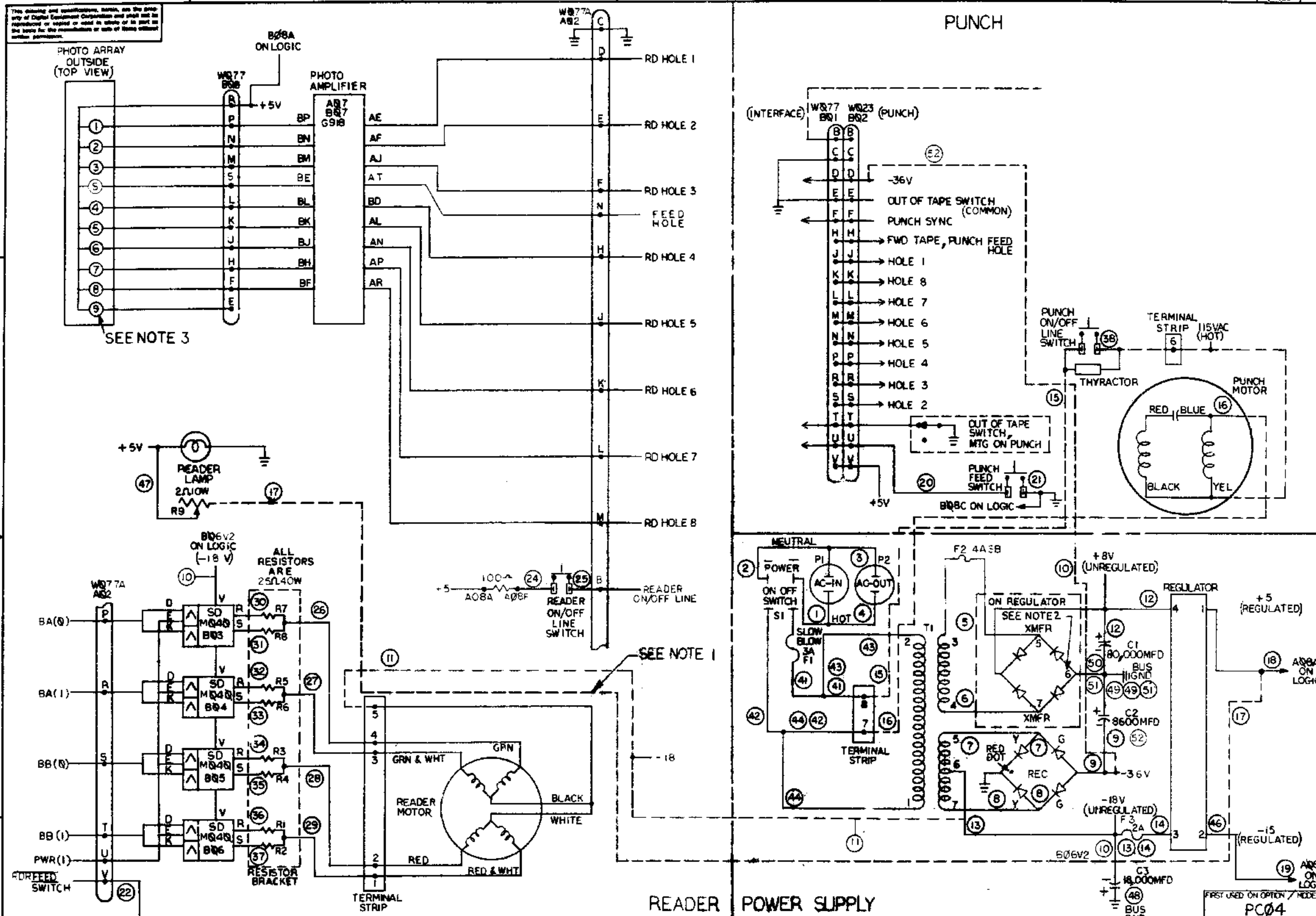
NEXT HIGHER ASSY A-ML-PCØ4

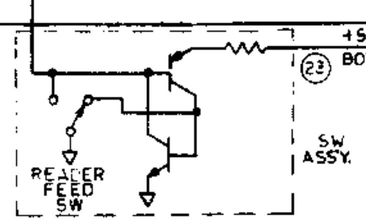
digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE POWER AND CONTROL SCHEMATIC DIAGRAM

SIZE D CODE BS NUMBER PC04-0-2 REV J
SCALE NONE
SHEET 1 OF 3
DIST.

REVISIONS: PC04-00026 (BECKNER), PC05-00003, PC04-00022 (C. YOUSE), PC04-00025 (ADLEMAN), PC04-00046 (G. ADLEMAN), PC04-00055 (M. LEIS), PC04-00058 (C. YOUSE), WILLIAMS





REFERENCE: 7006268-0
LOGIC BLOCK

NOTES:

1. DOTTED LINES INDICATE POSSIBLE CONNECTIONS BETWEEN POWER SUPPLY, READER AND PUNCH.
2. THE UNCIRCLED NUMBERS 1 THRU 7 REFER TO CONNECTIONS ON REGULATOR BOARD.
3. THIS PHOTO TRANSISTOR IS NOT USED.
4. CIRCLED NUMBERS 1 THRU 46 ARE WIRE NUMBERS. SEE TABLE.

WIRE TABLE

WIRE NO	COLOR	WIRE NO	COLOR
1	RED	24	WHITE-YELLOW
2	WHITE	25	BROWN
3	WHITE	26	WHITE-BROWN
4	RED	27	WHITE-ORANGE
5	ORANGE	28	WHITE-YELLOW
6	GRAY-BLUE	29	WHITE-VIOLET
7	GRAY-WHITE	30	BROWN
8	YELLOW	31	BROWN
9	BLUE	32	ORANGE
10	GRN	33	ORANGE
11	GRN	34	YELLOW
12	GRAY-VIOLET	35	YELLOW
13	GREEN	36	VIOLET
14	GREEN	37	VIOLET
15	RED	38	RED
16	WHITE		
17	GRAY-RED		
18	GRAY-RED	41	RED
19	GRAY-YELLOW	42	WHITE
20	WHITE	43	RED
21	BLACK	44	WHITE
22	YELLOW		
23	WHITE-BLACK	46	GRAY-YELLOW
48 THRU 51	BLACK	47	GRAY-RED
52	BLUE		

LEGEND

CONNECTIONS	MODEL: PC04 BB, PC04 BC		PC04 P, PC04 PA	PC04 RB
PWR SUP TO READER	+5V TO READER LAMP POT; -15 TO T.S.5		X	SAME AS PC04-B, PC04-BC
PWR SUP TO PUNCH	30 TO PUNCH CABLE B01D; 115V (HOT) TO PUNCH SW; 115 (NEUTRAL) TO PUNCH MOTOR		SAME AS PC04 BB, PC04 BC	X

FIRST USED ON OPTION / MODEL: PC04

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES
TOLERANCES: DECIMALS ±.005, FRACTIONS ±1/64, ANGLES
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL: —

FINISH: —

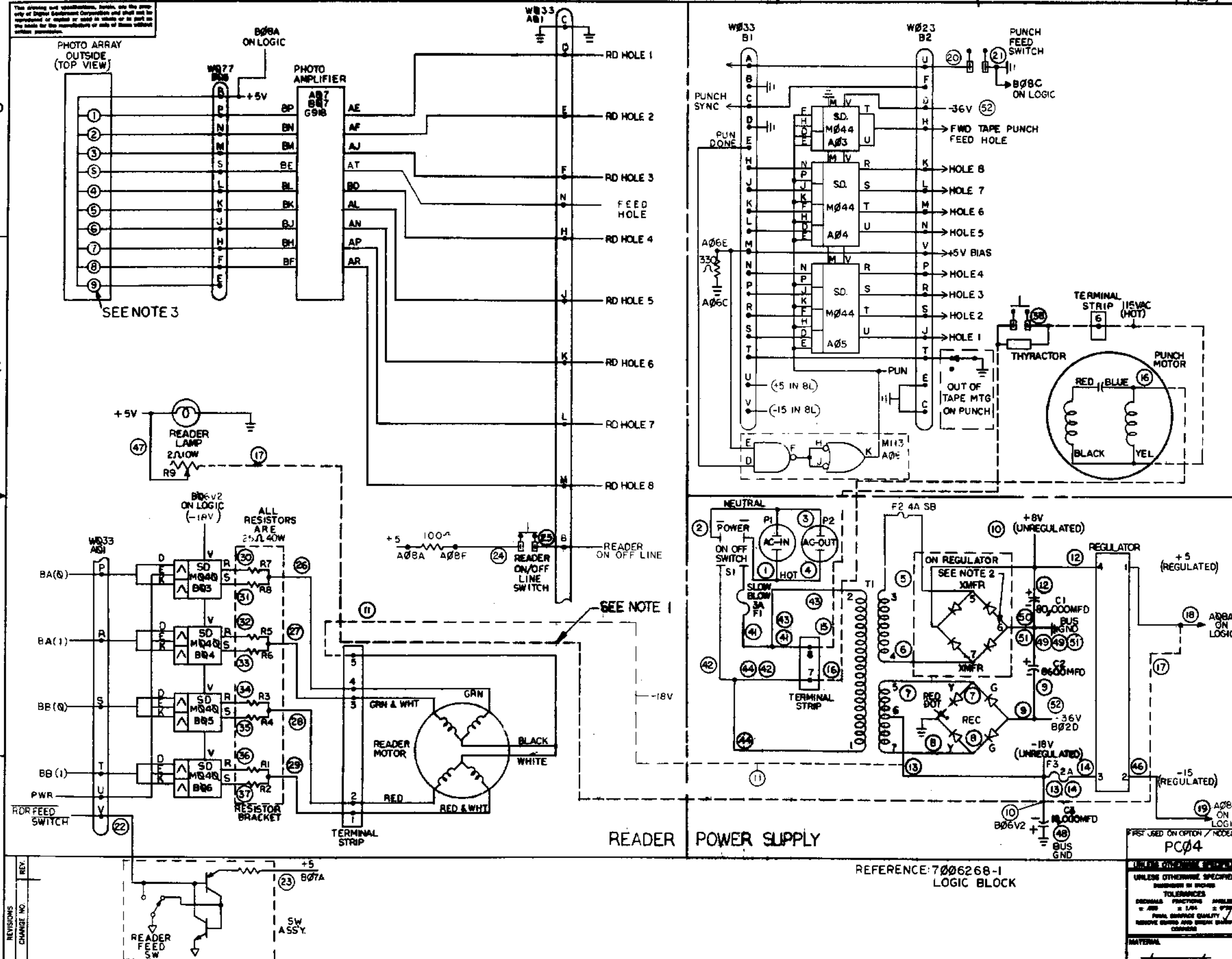
NEXT HIGHER ASSY.: A-ML-PC04-

SCALE: NONE
SHEET 2 OF 3

TITLE: POWER AND CONTROL SCHEMATIC DIAGRAM (81)

SIZE: D CODE: BS NUMBER: PC04-0-2 REV.: J

D BS PC04-0-2 J



REFERENCE: 7006268-1 LOGIC BLOCK

NOTES:

1. DOTTED LINES INDICATE POSSIBLE CONNECTIONS BETWEEN POWER SUPPLY, READER AND PUNCH.
2. THE UNCIRCLED NUMBERS 1 THRU 7 REFER TO CONNECTIONS ON REGULATOR BOARD.
3. THIS PHOTO TRANSISTOR IS NOT USED.
4. CIRCLED NUMBERS 1 THRU 46 ARE WIRE NUMBERS. SEE TABLE.

WIRE TABLE

WIRE NO	COLOR	WIRE NO	COLOR
1	RED	24	WHITE-YELLOW
2	WHITE	25	BROWN
3	WHITE	26	WHITE-BROWN
4	RED	27	WHITE-ORANGE
5	ORANGE	28	WHITE-YELLOW
6	GRAY-BLUE	29	WHITE-VIOLET
7	GRAY-WHITE	30	BROWN
8	YELLOW	31	BROWN
9	BLUE	32	ORANGE
10	GRN	33	ORANGE
11	GRN	34	YELLOW
12	GRAY-VIOLET	35	YELLOW
13	GREEN	36	VIOLET
14	GREEN	37	VIOLET
15	RED	38	RED
16	WHITE	39	
17	GRAY-RED	40	
18	GRAY-RED	41	RED
19	GRAY-YELLOW	42	WHITE
20	WHITE	43	RED
21	BLACK	44	WHITE
22	YELLOW		
23	WHITE-BLACK	46	GRAY-YELLOW
48 THRU 51	BLACK	47	GRAY-RED
52	BLUE		

LEGEND

CONNECTIONS	MODEL: PC04 BL, PC04 BM		PC04 PL, PC04 PM	PC04 R8
PWR SUP TO READER	+5V TO READER LAMP POT -18 TO T.S.5		X	SAME AS PC04-BL PC04-BM
PWR SUP TO PUNCH	30 TO PUNCH CABLE B02D 115V (HOT) TO PUNCH SW 115 (NEUTRAL) TO PUNCH MOTOR		SAME AS PC04 BL PC04 BM	X
	X		X	X
	X		X	X

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION / MODEL: PC04

UNLESS OTHERWISE SPECIFIED

MATERIAL

FINISH

NEXT HIGHER ASSY: A-ML-PC04

SCALE: NONE

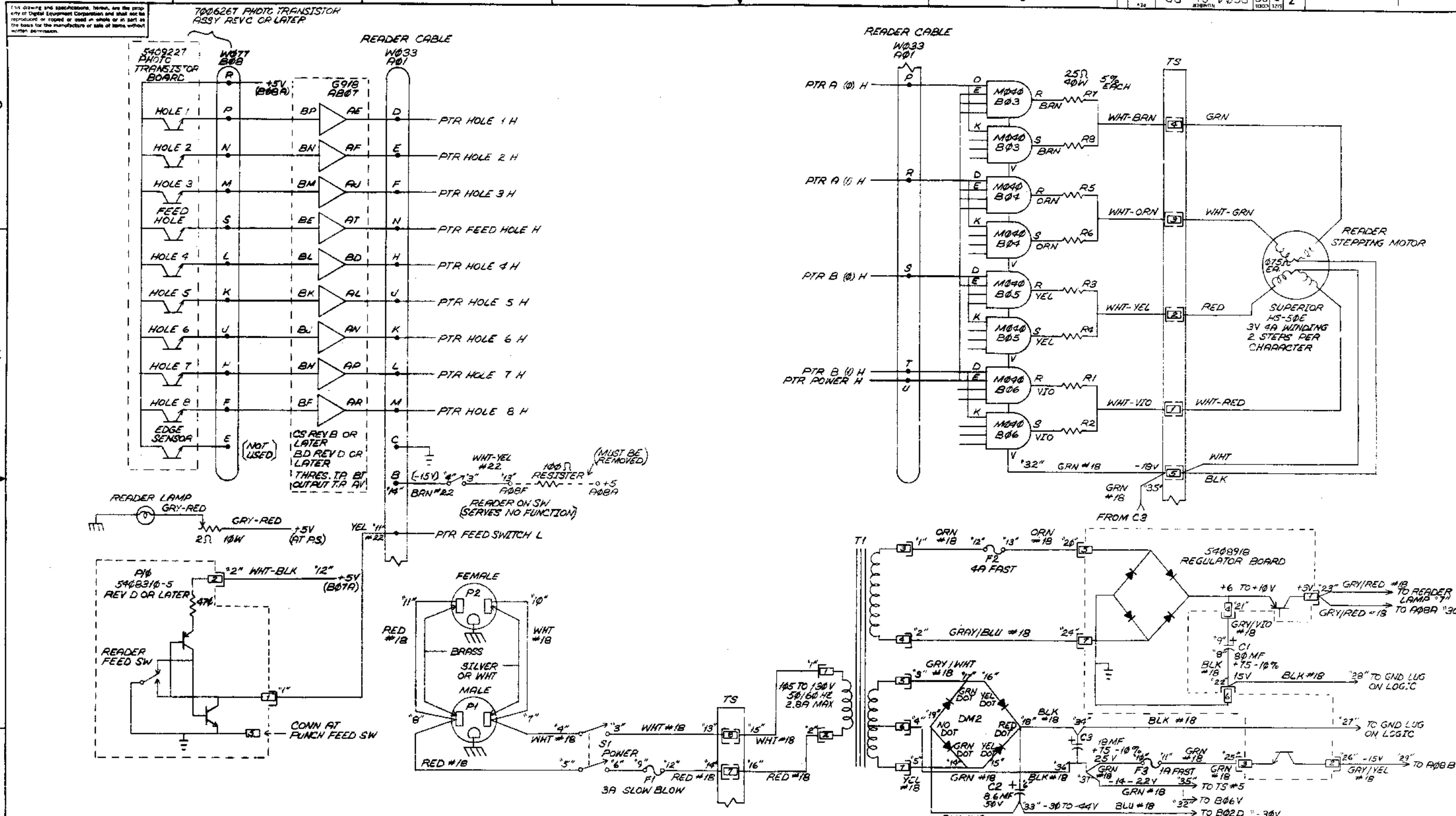
SHEET 3 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: POWER AND CONTROL SCHEMATIC DIAGRAM (8L, 8E, 8M, 8F)

SIZE	CODE	NUMBER	REV.
D	BS	PC04-0-2	J

DIST.



This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.
7006267 PHOTO TRANSISTOR ASSY REV C OR LATER
5409227 PHOTO TRANSISTOR BOARD
W077 B08
G918 AB07
READER CABLE W033 A01
+5V (B08A)
HOLE 1
HOLE 2
HOLE 3
FEED HOLE
HOLE 4
HOLE 5
HOLE 6
HOLE 7
HOLE 8
EDGE SENSOR
(NOT USED)
PTR HOLE 1 H
PTR HOLE 2 H
PTR HOLE 3 H
PTR FEED HOLE H
PTR HOLE 4 H
PTR HOLE 5 H
PTR HOLE 6 H
PTR HOLE 7 H
PTR HOLE 8 H
CS REV B OR LATER BD REV D OR LATER THRES. I.P. BT OUTPUT T.P. AV
WHT-YEL #22
100Ω RESISTER
(MUST BE REMOVED)
+5 A08A
A08F
BRN #22
READER ON SW (SERVES NO FUNCTION)
READER LAMP
GRY-RED
2Ω 10W
+5V (AT P.S.)
PTR FEED SWITCH L
P10 5408310-5 REV D OR LATER
"2" WHT-BLK "12" +5V (B07A)
READER FEED SW
CONN AT PUNCH FEED SW
FEMALE
P2
MALE
P1
BRASS
SILVER OR WHT
RED #18
WHT #18
S1 POWER
F1 3A SLOW BLOW
TS
105 TO 130V 50/60 HZ 2.8A MAX
READER CABLE W033 A01
PTR A (0) H
PTR A (1) H
PTR B (0) H
PTR B (1) H
PTR POWER H
M040 B03
M040 B04
M040 B05
M040 B06
25Ω 40W 5% EACH
WHT-BRN
WHT-ORN
WHT-YEL
WHT-VIO
GRN
WHT-GRN
RED
WHT-RED
WHT
BLK
READER STEPPING MOTOR
SUPERIOR HS-50E 3V 4A WINDING 2 STEPS PER CHARACTER
FROM C3
T1
F2 4A FAST
5408918 REGULATOR BOARD
+6 TO +10 V
GRY/RED #18 TO READER LAMP "7"
GRY/RED #18 TO A08A "30"
GRAY/BLU #18
C1 80 MF +75 -10% 15V
BLK #18 "28" TO GND LUG ON LOGIC
GRY/WHT #18
DM2
C3 18 MF +75 -10% 25 V
BLK #18 "27" TO GND LUG ON LOGIC
F3 1A FAST
-14 - 22V
TO TS #5
-15V "29" TO A08B
GRY/YEL #18
C2 8.6 MF 50V
"33" -30 TO -44V
TO B06V
TO B02D -30V
BLU #18

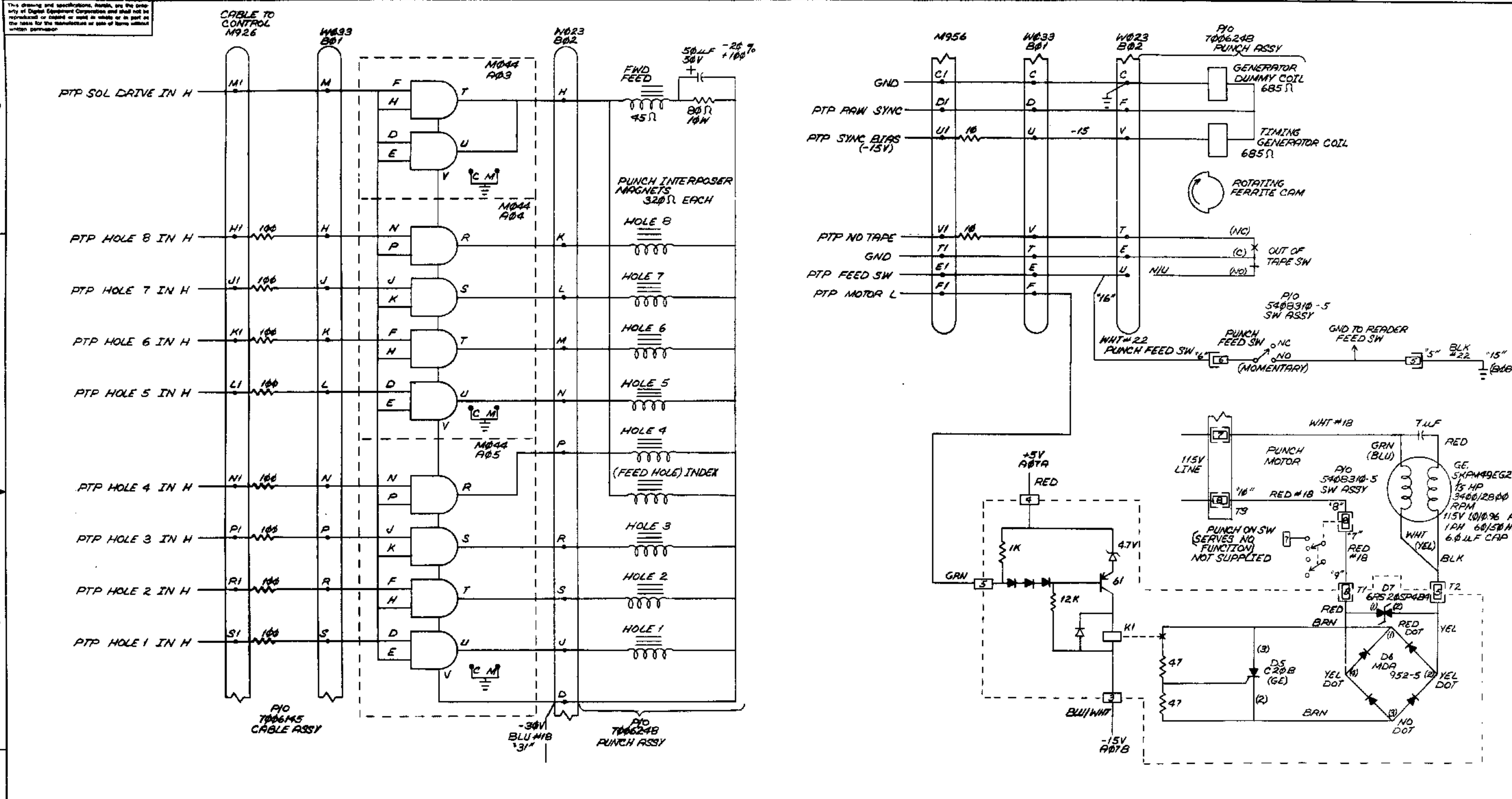
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	
DECIMALS	ANGLES
.XXX ± .005 .XX ± .02 .X ± .1	± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	
MATERIAL	
FINISH	

DRN. A. Wallace	DATE 7-21-71	
CHK'D. Allan Kent	DATE 2 Dec 71	
ENG. Allan Kent	DATE 2 Dec 71	
PROJ. ENG. Allan Kent	DATE 2 Dec 71	
PROD.	DATE	
NEXT HIGHER ASSY. A-ML-PC04-2		
SCALE		
SHEET 1 OF 1		

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE READER AND POWER SUPPLY (PC04-CL & -CM)

SIZE D CODE BS NUMBER PC04-CL-RD REV.



CABLE TO CONTROL M926
W033 B01
W023 B02
M044 A03
M044 A04
M044 A05
PTP SOL DRIVE IN H
FWD FEED
45Ω
50µF 50V -20% +100%
80Ω 10W
PUNCH INTERPOSER MAGNETS 320Ω EACH
PTP HOLE 8 IN H
PTP HOLE 7 IN H
PTP HOLE 6 IN H
PTP HOLE 5 IN H
PTP HOLE 4 IN H
PTP HOLE 3 IN H
PTP HOLE 2 IN H
PTP HOLE 1 IN H
HOLE 8
HOLE 7
HOLE 6
HOLE 5
HOLE 4
(FEED HOLE) INDEX
HOLE 3
HOLE 2
HOLE 1
P/O 7006145 CABLE ASSY
-30V BLU #18 "31"
P/O 7006248 PUNCH ASSY
M956
GND
PTP RAW SYNC
PTP SYNC BIAS (-15V)
P/O 7006248 PUNCH ASSY
GENERATOR DUMMY COIL 685Ω
TIMING GENERATOR COIL 685Ω
ROTATING FERRITE CAM
PTP NO TAPE
GND
PTP FEED SW
PTP MOTOR L
OUT OF TAPE SW
N/U
P/O 5408310-5 SW ASSY
GND TO READER FEED SW
WHT #22 PUNCH FEED SW
PUNCH FEED SW
(MOMENTARY)
BLK #22
"15" (808C)
+5V A07A
RED
GRN
1K
12K
4.7V
61
K1
BLU/WHT
-15V A07B
WHT #18
7µF
RED
115V LINE
PUNCH MOTOR
GRN (BLU)
GE. 5KPM49EG2276 1/5 HP 3400/2800 RPM 115V 1.0/0.96 A 1PH 60/50 HZ 6.0µF CAP
P/O 5408310-5 SW ASSY
RED #18
PUNCH ON SW (SERVES NO FUNCTION) NOT SUPPLIED
WHT (YEL)
BLK
D7 6RS 20SP4B4
D5 C20B (GE)
D6 MDA 952-5
RED DOT
YEL DOT
NO DOT
BRN
YEL
47

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KI10		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX ± .005 .XX ± .02 .X ± .1 — ANGLES ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. A. Wallace — DATE 7-2-71
CHK'D. Allen Kent — DATE 2 Dec 71
ENG. Allen Kent — DATE 2 Dec 71
PROJ. ENG. Allen Kent — DATE 2 Dec 71
PROD. — DATE

NEXT HIGHER ASSY. A-ML-PC04-0
SCALE —
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

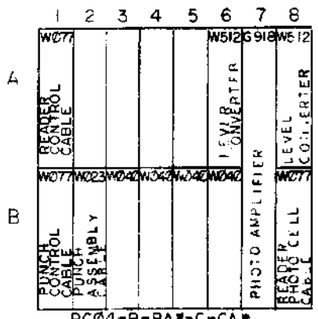
TITLE
PUNCH
(PC04 - CL - PNCH)

SIZE D — CODE BS — NUMBER PC04-CL-PNCH — REV.

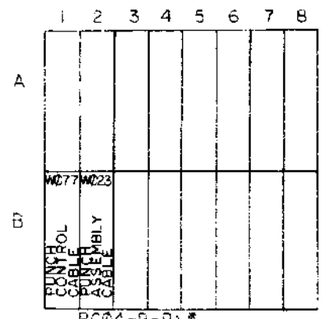
REVISIONS — CHANGE NO. — REV — CHK

DEC FORM NO DRF 102-B

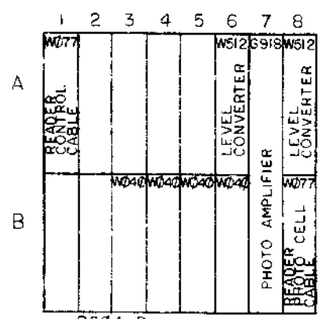
NOTES:
1. G918 REVISION MUST BE "B" CIRCUIT SCHEMATIC, "D" ETCHED BOART OR HIGHER.
2. * 50 HZ VARIATION



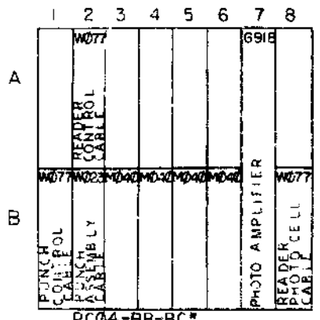
PCØ4-B-BA*-C-CA*
(SEE E-AD-7ØØ6268-Ø-Ø WITH NOTE 4; PDP-8/S,-8/S,-8, KAIØ)



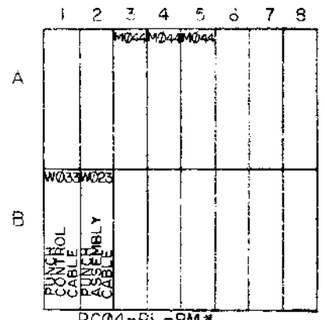
PCØ4-B-BA*
(SEE E-AD-7ØØ6268-Ø-Ø WITH NOTE 4; PDP-8-8/S)



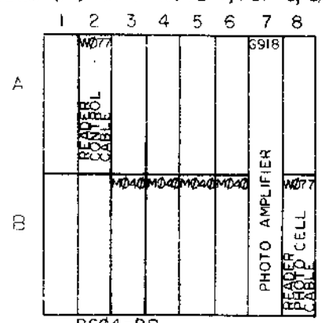
PCØ4-R
(SEE E-AD-7ØØ6268-Ø-Ø WITH NOTE 4; PDP-8,-8/S)



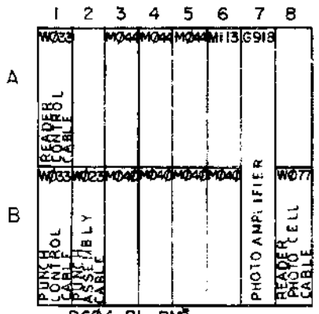
PCØ4-BB-BC*
(7ØØ6268-Ø; PDP-8/I)



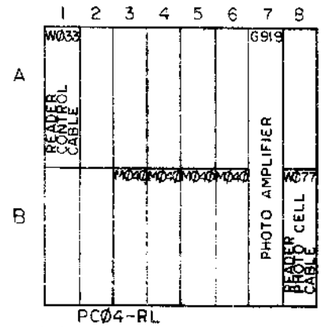
PCØ4-PL-PM*
(7ØØ6268-1; PDP-8/L,-8/E -8/M -8/F)



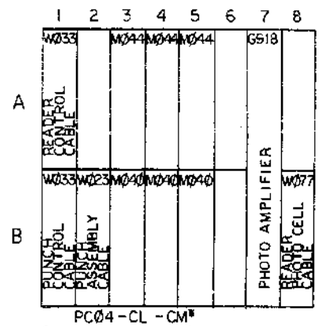
PCØ4-RB
(7ØØ6268-Ø; PDP-8/I)



PCØ4-BL,-BM*
(7ØØ6268-1; PDP-8/L,-8/E,-8/M,-8/F)



PCØ4-RL
(7ØØ6268-1; PDP-8/L,-8/E,-8/M,-8/F)



PCØ4-CL-CM*
(7006268-2; KIIØ)

REVISIONS			
CHK	CHANGE NO	REV	
	PCØ4-00053	C	
	REVISED PER DRAWN		
	KENT 4-19-72		
	PCØ4-00055	D	
	C. YOUSE 4-19-72		

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PCØ4-Ø		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX - .005, XX - .02, X - .1; ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. P. MARCOTTI	DATE 6-5-69	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. R. CARVELLI	DATE 6-5-69	
ENG. G. BECKNER	DATE 6-6-69	TITLE MODULE UTILIZATION LIST PCØ4
PROJ. ENG. G. BECKNER	DATE 6-6-69	
PROD. R. ANTONUCCIO	DATE 6-6-69	
NEXT HIGHER ASSY. A-ML-PCØ4		SIZE D CODE MU NUMBER PCØ4-Ø-3 REV D
SCALE —		
SHEET 1 OF 1		DIST.

SIZE D CODE MU NUMBER PCØ4-Ø-3 REV D

DEC FORM NO 1781 2000-A

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY P. MARCOTTE	CHECKED R Carvell	SECTION 1
DATE	DATE 6/5/69	
ENG Jo Kent 6/6/69	PROD —	ISSUED SECT. 1
DATE	DATE 6/6/69	

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY/VARIATION PCØ4-B-Ø	PCØ4-BA-Ø	PCØ4-C-Ø	PCØ4-CA-Ø	PCØ4-P-Ø	PCØ4-PA-Ø	PCØ4-R-Ø	PCØ4-BB-Ø	PCØ4-BC-Ø	PCØ4-RB-Ø		
1	G918 *	PHOTO AMPLIFIER	1	1	1	1	–	–	1	1	1	1		
~~2~~	~~M5Ø2~~	~~NEGATIVE INPUT CONVERTER~~	~~1~~	~~1~~	~~1~~	~~1~~	~~–~~	~~–~~	~~1~~					
3	WØ4Ø	SOLENOID DRIVER	4	4	4	4	–	–	4	–	–	–		
4	W512	POSITIVE LEVEL CONVERTER	2	2	2	2	–	–	2	–	–	–		
5	MØ4Ø	SOLENOID DRIVER (+ 8I)	–	–	–	–	–	–	–	4	4	4		
6	MØ44	SOLENOID DRIVER(+8L)												
7	M113	1Ø-2 INPUT NAND GATE	–	–	–	–	–	–	–	–	–	–		
	* NOTE: G918 MUST BE D BOARD REV OR HIGHER													

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV	ECO NO.
MODULE UTILIZATION	D-MU-PCØ4-Ø-3	A	PL	PCØ4-Ø-3	D	PCO4-0055
	SHEET 1 OF 2	DIST.				

DEC FORM NO.
DRA 110

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY P. MARCOTTE	CHECKED R. CARVELLI	SECTION 1
DATE	DATE 6/5/69	
ENG G. BECKNER	PROD ANTONNUCIO	ISSUED SECT. 1
DATE 6/6/69	DATE 6/6/69	

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY/VARIATION PCØ4-BL-Ø	PCØ4-BM-Ø	PCØ4-PL-Ø	PCØ4-PM-Ø	PCØ4-CL, -CM	PCØ4-RL						
1	G918 *	PHOTO AMPLIFIER	1	1	–	–	1	1						
2														
3	WØ4Ø	SOLENOID DRIVER (-)	–	–	–	–	–	–						
4	W512	POSITIVE LEVEL CONVERTER	–	–	–	–	–	–						
5	MØ4Ø	SOLENOID DRIVER (+)	4	4	–	–	4	4						
6	M044	SOLENOID DRIVER (+ 8L)	3	3	3	3	3	–						
7	M113	1Ø-2 INPUT NAND GATE	1	1	1	1	–	–						
	* NOTE: G918 MUST BE D REV BOARD OR HIGHER													

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
MODULE UTILIZATION	D-MU-PCØ4-Ø-3	A	PL	PCØ4-Ø-3	D	
	SHEET 2 OF 2	DIST.				

DEC FORM NO.
DRA 110

LEGEND

PART #	MODEL USED ON	WIRELIST
7006268-0	PC04-B, BA, BB, BC, C, CA, P, PA, R, RB	K-WL-PC04-0-5
7006268-1	PC04-BL, BM, PL, PM, RL	K-WL-PC04-0-6
7006268-2	PC04-CL, CM	K-WL-PC04-0-7

NOTES:

1. CONNECTIONS ON ITEM 3 & [illegible] TO BE SOLDERED AND LOCATED AT MINIMUM PRACTICAL HEIGHT ABOVE BLOCKS.
2. CONNECTOR BLOCKS TO BE GROUNDED TO GND LUG AS SHOWN.
3. USE BLUE WIRE (ITEM [illegible]) FOR HAND WRAPPED WIRING.
4. PDP8/8S/9/KA:0
   TO CONVERT 7006268-0 BLOCK PACK TO NEG. LOGIC MACHINES, DO FOLLOWING:
   A. REMOVE TRANSISTORS IN READER FEED SWITCH ASSY
   B. WIRE CHANGES
      DELETE — BØ8S-EØ7E
      ADD — AØ2N-AØ3H
      BØ5E BØ7E
      AØ2B AØ1N
   C. DELETE 100Ω RESISTOR FROM AØ8A-AØ8F

EXTERNAL COMPONENT TABLE — 7006268-2

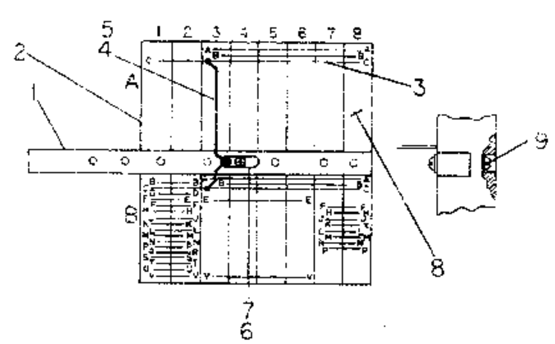
ITEM	COMP	POL	FROM	TO	POL	REMARKS
10	CAP	+	AØ3A	AØ3C	−	6.8µF
10	CAP	−	BØ3B	BØ3C	+	6.8µF

EXTERNAL COMPONENT TABLE — 7006268-1

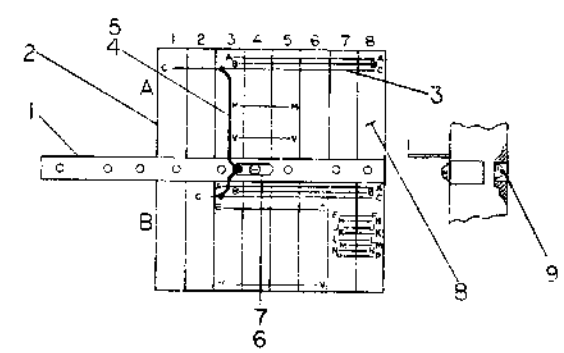
ITEM	COMP	POL	FROM	TO	POL	REMARKS
10	CAP	+	AØ3A	AØ3C	−	
10	CAP	−	BØ3B	BØ3C	+	
12	RES		AØ8A	AØ8F		[illegible]
13	RES		AØ6E	AØ6C		[illegible]Ω

EXTERNAL COMPONENT TABLE — 7006268-0

ITEM	COMP	POL	FROM	TO	POL	REMARKS
10	CAP	+	AØ3A	AØ3C	−	
10	CAP	−	BØ3B	BØ3C	+	
12	RES		AØ8A	AØ8F		100Ω



7006268-0
(8, 8S, 8[illegible])



7006268-1
(8L, 8E, 8M, 8F)
7006268-2
(KI1Ø)

FIRST USE ON OPTION/MOD. PCØ4

DRN R. HUTNAK
CHKD [illegible]CARVELLI
ENG G. BECKNER
PROJ ENG G. BECKNER
R. ANTONELLIO

NEXT HIGHER ASSY D-UA-PCØ4-Ø-Ø

digital EQUIPMENT CORPORATION

TITLE (PC04) WIRED ASSY

SIZE E CODE AD NUMBER 7006268-0-0

SHEET 1 OF 1

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY ROBERT TURNAK	CHECKED	SECTION
DATE 2/20/69	DATE 5.5.69	1
ENG	PROD	ISSUED SECT.
DATE 6/4/69	DATE	1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION 7006268-0	7006268-1	7006268-2
1	B-IA-7407077-0-0	MTG BAR 6 IN.	1	1	1
2	1202244	144 PIN CONN BLOCK WRAPTYPE	2	2	2
3	1202188	BUS BAR BERG NO.3584-032	A/R	A/R	A/R
4	9107560-1	#22 AWG BUS WIRE	A/R	A/R	A/R
5	9107265	#22 TUBING, TEFLON, WHITE	A/R	A/R	A/R
6	9007597	TERMINAL SHAKEPROOF #2116-08-00	1	1	1
7	9006034	SCR PHL FAN HD #8-32 x .19 LG SST	1	1	1
8	9107470-10	#24 AWG SOLID KYNAR BLUE	A/R	A/R	A/R
9	9007641	SCR PHL FIL HD #8-32 x 1/2 LG SST	4	4	4
10	1005306	CAP 6.8 MFD 35V 10%	2	2	2
~~11~~	~~1000086~~	~~CAP, 180 MFD 6V 10%~~			
12	13-00231	RES 100ohm ¼W 5%	1	1	-
13	1300295	RES 330 OHM ¼W 5%	-	1	-
REF	K-WL-PC04-0-5	WIRE LIST	1	-	-
REF	K-WL-PC04-0-6	WIRE LIST	-	1	-
REF	K-WL-PC04-0-7	WIRE LIST	-	-	1

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
PCØ4 WIRED ASSY	E-AD-7006268-0-0	A	PL	7006268-0-0	H	PC04-00055
	SHEET 1 OF 1	DIST.				

DEC FORM NO.
DRA 110

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 11/11/69

TITLE PCØ4 Engineering Specification

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A		PC04-00046	M. LEIS			3-17-71

General Information:

The PCØ4 comes in eight (8) configurations. They are the PCØ4P, PL (basic punch), PCØ4R, RB (basic reader), PCØ4B, BB, BL, (punch and reader), and PCØ4C (punch, SCR, and reader). The 50 cycle variations are PCØ4PA, PM; PCØ4BA, EC, BM, and PCØ4CA with no variation in PCØ4R and RB. Table 1-1 gives the block schematic references, UMI, interface cables, and the applicable computers.

Logic Levels: Negative Logic Systems
Logic 1 is -3.2v to -3.9 volts
Logic 0 is 0v to -0.3 volts

Logic Levels: Positive Logic Systems

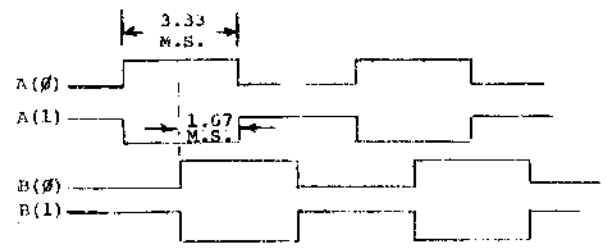
	Outputs	Inputs
Logic 1 is	≥+2.4v	≥+2.0v
Logic 0	≤+0.4v	≤+0.8v

Reader Signals:

Reference drawing BS-D-PCØ4-0-2

(1) A(0), A(1), B(0), and B(1) are the signals used to drive the stepping motors via the four solenoid drivers.

The timing chart and graph for these signals would be:



ENG	APPD	SIZE	CODE	NUMBER	REV
		A	SP	PCØ4-0-4	A

DEC FORM NO. DRA 107

SHEET 1 OF 7

[redacted] CONTINUATION SHEET

TITLE PCØ4 Engineering Specification

(2) Power (1) serves the function of supplying only half current to the stepping motor when the motor is stopped. This signal is 0 volts when the motor is stopped and -3 volts when the motor is active for negative logic systems and ≥+2.0 volts when motor is active and ≤+0.8 v when the motor is stopped for positive logic systems.

(3) The reader feed switch is simply an off line means of moving tape through the reader. A ground level performs this function.

(4) The reader on/off line switch allows the operator to disable the unit from reading by putting the switch in the off-line position.

(5) The reader on/off line switch is open whenever the reader is off line, and is ≥2.4V when the reader is on line.

(6) Data Output Lines:

	Hole	No Hole
Negative Systems	-3 volts	Ø volts
Positive Systems	+2.4 volts	0 volts

Punch Signals:

Refer to drawing BS-D-PCØ4-0-2

(1) The interface signal used to turn on the punch motor with an SCR driver option is Gnd when active and open or -3v when inactive.

(2) The -36 volt is supplied to the solenoid coils on the punch motor and also to the solenoid drivers at the external control.

(3) Punch sync is the signal generated from the sync timing wheel on the punch. Equally spaced (in time) positive and negative pulses (one each) for each shaft revolution is generated on this line.

(4) Forward tape and punch feed hole: A ground level for 10 msec. ±10% will punch feed hole and then advance the tape forward in preparation for another cycle for all configurations except PCØ4PL and BL when the solenoid drivers are activated by a +2.0v signal.

	SIZE	CODE	NUMBER	REV
	A	SP	PCØ4-0-4	A

DEC FORM NO DRA 108A

SHEET 2 OF 7

[redacted] CONTINUATION SHEET

TITLE PCØ4 Engineering Specification

(5) The eight data holes also require a 10 msec. level to activate the punches.

(6) Out-of-tape signal is generated from a micro-switch on the punch. It is at ground when the punch is out-of-tape.

(7) Punch feed switch is used to manually feed tape through the punch.

(8) The -3 volt or +5v supply is a bias on the punch sync coil.

(9) The punch on/off power switch is used in the options not using the SCR driver. It simply supplies 115 volts to the punch motor.

Power Supply

(1) Regulated +5 volts ±.25 volts

(2) Regulated -15 volts ±1.0 volt

(3) -36 volts ± 4 volts

Power Requirements

Unit will run at 50 or 60 cycles, 115 volts ±10%. 2.5 AMPS run
4 AMPS surge

Reader

(a) Temperature

(1) 55° - 110°F operating, 10° - 150°F non-operating

(b) Humidity

(1) 20% - 95% w/o condensation operating; 5% - 95% w/o condensation non-operating.

(c) Speed

(1) 300 - 310 characters/second full speed.

(2) 20 - 26 character/second single character rate.

(d) Type of tape

(1) non-oil (less than 12% transmissivity)

(e) Tape Life: Acceleration de-accelerate type operation = 30,000 cycles.

	SIZE	CODE	NUMBER	REV
	A	SP	PCØ4-0-4	A

DEC FORM NO DRA 108A

SHEET 3 OF 7

[redacted] CONTINUATION SHEET

TITLE PCØ4 Engineering Specification

Punch

(a) Temperature

(1) 55° - 110°F operating; 10° - 150°F non-operating

(b) Humidity

(1) 20% - 95% w/o condensation - operating

(2) 5% - 95% w/o condensation - non-operating

(c) Tension of tape supply

(1) Not to exceed 6 ounches

(d) Speed

(1) 50 characters/second ±5%

Margins

+5v is +5v ±.5v

-15v is -15v ±20%

-30v is -36v ±15%

	SIZE	CODE	NUMBER	REV
	A	SP	PCØ4-0-4	A

DEC FORM NO DRA 108A

SHEET 4 OF 7

TABLE 1-1
PCØ4 Configuration

CONFIGURATION	REFERENCE BLOCK SCHEMATICS	PUNCH MODULES	INTERFACE CABLES	READER MODULES	APPLICABLE COMPUTERS
PCØ4P	D/BS/PCØ4-0-2 Page 1 of 3	None	1-W077A	N/A	PDP8; PDP8/S; PDP8/I
PCØ4PL	D/BS/PCØ4-0-2 Page 1 of 3	3-M044	1-W033A	N/A	PDP8/L; PDP8E
PCØ4R	D/BS/PCØ4-0-2 Page 1 of 3	N/A	1-W077A	1-G918 4-M040 2-W512	PDP8; PDP8/S
PCØ4RB	D/BS/PCØ4-0-2 Pages 2 and 3 of 3	N/A	1-W077A	1-G918 4-M040 2-W512	PDP8/I; PDP8/L PDP8/E
PCØ4B	D/BS/PCØ4-0-2 Page 1 of 3	None	2-W077A	1-G918 4-M040 2-W512	PDP8; PDP8/S
PCØ4BB	D/BS/PCØ4-0-2 Page 2 of 3	None	2-W077A	1-G918 4-M040	PDP8/I
PCØ4BL	D/BS/PCØ4-0-2 Page 3 of 3	3-M044	2-W033C	1-G918 4-M040	PDP8/L PDP8/E
PCØ4C	D/BS/PCØ4-0-2 Page 1 of 3	None	2-W077A	1-G918 4-M040 2-W512	PDP9; PDP10

1. Do not apply power until the following checks are made.
   a. Logic block empty.
   b. AØ1A, AØ2A, AØ1B, AØ2B, BØ1A, and BØ2A are bare (no wiring or bussing).
   c. BØ1B and BØ2B should be bussed together without any wires on them except for the PCØ4C configuration when a white/green wire will be on BØ1B.
   d. Remove reader lamp.
   e. Check caps for proper polarity in wiring.
   f. Put ohmmeter on X100 scale and check regulator board tabs 1 thru 5 and 7 for lack of short to ground. Tabs 6 and 8 should indicate a short to ground.
   g. Check fuses for proper rating. Also, should be slo/blo.
   h. Check for continuity between reader lamp ground slot and chassis ground.
   i. Check the following wires for proper connection.

Color	Location	Color	Location
+black (str)	BØ8C	*wh/blue	AØ7B
#wh/black (str)	BØ7C	*wh/green	BØ1B
#brown (str)	AØ2B AØ1B	#brown (solid)	BØ3R, S
#yellow (str)	AØ1V	#orange (solid)	BØ4R, S
#wh/yellow (str)	AØ8F	#yellow (solid)	BØ5R, S
+white (str)	BØ1U	#violet (solid)	BØ6R, S
grey/red (str)	AØ8A	+punch configurations	
grey/yellow (str)	AØ8B	*only on PCØ4C configuration	
blue (str)	BØ6V	#reader configurations	

   j. Put reader lamp back in position making sure that the tension on the lamp is sufficient for good contact.
2. Apply AC power to the unit and check.
   a. +5 volts on AØ8A and BØ8A (+5 volts ±.25 volts.

   B. -15 volts on AØ8B and BØ8B (±1 volts).
   C. -30 volts on BØ6V and BØ2D (-32 to -40 volts).
3. Shut power off and insert modules for PCØ4.
4. Apply power and make same check as in 2
5. Put cap. (6.8uf, 10-5306) between pins AØ3A (+) and AØ3C (-) and between pins BØ3C (+) and BØ3B (-).

MODEL	DESCRIPTION	CY	FIND NUMBER 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
PC05-C	PUNCH, READER, DRIVER	60	-1	X	X	X			X	X	X	X	X	X			-4	-4	-3	X	X	
PC05-CA	PUNCH, READER, DRIVER	50	-2	X	X	X			X	X	X	X	X	X			-4	-4	-3	X	X	
PC05-P	PUNCH, DRIVER	60	-1						X	X	X	X	X	X			-5	-5	-1	X	X	
PC05-PA	PUNCH, DRIVER	50	-2						X	X	X	X	X	X			-5	-5	-1	X	X	
PC05-R	READER			X	X	X			X	X	X	X					-3	-3	-3		X	X

NOTES:
1. THE KEY TO SYMBOLS IN THE FIND NO. COLUMNS IN FIND BLOCK 1 IS:
   AN "X" MEANS THE ASSY IS USED.
   A BLANK SPACE MEANS THE ASSY. IS NOT USED.
   A DASH AND NUMBER (-1-2 ETC) MEANS THE ASSY. IS USED AND THAT VARIATION OF THE ASSY. HAVING THAT PARTICULAR DASH NUMBER AS PART OF ITS DWG. NUMBER IS USED
   EXAMPLE:
   A READER MODEL FROM FIND COLUMN 14 USES A (-3) OR A D-AD-7006252-3-0 COVER ASSY.

(2) PUNCH ASSY (60CY) D-AD-7006248-1-0
PUNCH ASSY (50CY) D-AD-7006248-2-0

(3) READER ASSY D-AD-7006247-0-0
(4) PHOTO-TRANSISTOR ASSY C-AD-7006267-0-0
(5) PHOTO-TRANSISTOR BOARD ASSY B-IA-5409227-0-0

(7) CHASSIS & POWER SUPPLY ASSY D-AD-7006248-0-0
(8) POWER REGULATOR ASSY C-AD-7006652-0-0
(9) POWER REGULATOR 60 ASSY C-IA-5408918-0-0
(10) ETCH 60 D-IA-5008919-0-0

(11) TRIAC DRIVER ASSY C-AD-7006520-0-0
(12) TERMINAL BOARD ASSY B-IA-5408384-0-0

(14) COVER ASSY D-AD-7006252-5-0
COVER ASSY D-AD-7006252-3-0
COVER ASSY D-AD-7006252-4-0

(15) BEZEL SWITCH C-IA-7407134-5-0
BEZEL SWITCH C-IA-7407134-3-0
BEZEL SWITCH C-IA-7407134-4-0

(16) SWITCH ASSY C-AD-5406[illegible]-1-0
(17) ETCH BOARD D-IA-5008309-0-0
(16) SWITCH ASSY C-AD-5408935-0-0
(13) ETCH BOARD C-IA-5008934-0-0
(16) SWITCH ASSY C-AD-5408310-3-0
(17) ETCH BOARD D-IA-5008309-0-0

(18) PC05 BUS BAR C-AD-7006253-0-0
(20) PACKAGING INST. (CUSTOMER PACK) A-PI-3700024-0-0
(21) PACKAGING INST. (INTER PLANT) A-PI-3700123-0-0

UNIT ASSY. DWG. NO. D-UA-PC05-0-0

CHN	CHANGE NO	REV
	PC05-00001	A
	PC05-00002	B
	TU55-00014	C
	PC05-00006	D
	PC05-00007	E
	PC05-00002	E
	PC05-00014	F
	PC05-00015	H
	PC04-00021	J
	PC05-00017	K
	PC04-00032	M
	PC05-00018	N
	PC05-00019	P
	PC05-00029	R
	PC05-00021	S
	PC05-00059	T
	MISC-60086	U
	PC05-00024	V
	[illegible]	[illegible]

SEE SHEET 2 OF 2

FIRST USED ON OPTION/MODEL: PC05

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY 125
REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL
FINISH

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

	NAME	DATE
DRAWN	[illegible]	6/13/69
CHK'D	C.F. Connelly	6/24/69
ENGR	[illegible]	7/11/69
MFG ENG	[illegible]	7/11/69
	[illegible]	7/24/69

NEXT HIGHER ASSY: A-ML-PC05-0
SCALE
SHEET 1 OF 2

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DRAWING INDEX LIST PC05

SIZE	CODE	NUMBER	REV
D	DI	PC05-0-1	Z

DIST.

MECHANICAL			DEPT USAGE		
FIND NO.	DESCRIPTION	PART NO.	PROD	CUST	F/C
1	PCØ5- READER, PUNCH.	D-UA-PCØ5-0-0			
	PCØ5 READER & PUNCH (PL)	A-PL-PCØ5-Ø-Ø			
	CHAD BOX	B-MD-7405300-0-0			
	TAPE CONTAINER	D-MD-7407191-0-0			
	BRKT; RESISTOR	C-MD-[illegible]			
	POWER SUPPLY COVER	E-IA-7407430-0-0			
	SCR MODULE RETAINER	C-IA-7405642-0-0			
	HOLD DOWN BAR	C-IA-7408334-7-0			
	PACKAGING INSTUCTION PCO READER & PUNCH	A-PI-3700024-0-0			
2	PUNCH ASSY (60 CY)	D-AD-7008248-1-0			
	PUNCH ASSY (50 CY)	D-AD-7008248-2-0			
	PUNCH ASSY (PL)	A-PL-7008248-0-0			
	CHAD TUBE	B-MD-7407306-0-0			
	PUNCH MTG CHASSIS	D-IA-7407071-0-0			
	HINGE	B-MD-7407083-0-0			
	SHIELD PUNCH CONTACTS	B-MD-7407132-0-0			
	TAPE DEPRESSOR	D-SC-1209915-0-0			
	PIN	B-MD-7408172-0-0			
	PULLY (60CY)	B-MD-7408089-1-0			
	PULLY (50CY)	B-MD-7408089-2-0			
	PAPER TAPE PUNCH FEED BRKT	D-MD-7408088-0-0			
	TAPE CHUTE	D-IA-7408171-0-0			
	TORSION SPRING	C-SC-1209324-0-0			
3	READER ASSY	D-AD-7008247-0-0			
	READER ASSY (PL)	A-PL-7008247-0-0			
	TAPE PATH GUIDE	D-MD-7407078-0-0			
	READER PLATE	D-MD-7407085-0-0			
	BLOCK READER	B-MD-7407119-0-0			
	SHAFT READER PLATE	B-MD-7407120-0-0			
	ARM, SPRING	B-MD-7407116-0-0			
	SPRING, BULB	A-MD-7407118-0-0			
	DEPRESSOR TAPE	C-MD-7407121-0-0			
	BRKT TAPE HOLD DOWN	C-MD-7407144-0-0			
	SLO SYN MOTOR REWORK	B-IA-7407684-0-0			
	SHIM	B-MD-7407800-0-0			
	LENS	B-MD-7404969-0-0			

MECHANICAL			DEPT USAGE		
FIND NO.	DESCRIPTION	PART NO.	PROD	CUST	F/C
4	PHOTO TRANSISTOR ASSY	C-IA-7008287-0-0			
5	PHOTO TRANSISTOR BD ASSY	B-IA-5409227-0-0			
7	CHASSIS & POWER SUPPLY ASSY	D-AD-7008246-0-0			
	CHASSIS & POWER SUPPLY (PL)	A-PL-7006246-0-0			
	PANEL FRONT	D-IA-7407075-0-0			
	BRKT MTG BAR RIGHT HAND	C-MD-7407065-1-0			
	BRKT MTG BAR LEFT HAND	C-MD-7407065-2-0			
	CHASSIS	E-IA-7407074-0-0			
	COVER, JONES STRIP	C-MD-5309641-0-0			
	HARNESS, CONTROL	D-IA-7008311-0-0			
	HARNESS I/O 110 VAC	D-IA-7008310-0-0			
	HARNESS POWER SUPPLY	D-IA-7008309-0-0			
	DECAL (PCØ4)	A-DC-7407476-0-0			
8	PWR REGULATOR ASSY	C-AD-7006512-0-0			
	PWR REGULATOR (PL)	A-PL-7006512-0-0			
	HEATSINK, PWR REGULATOR	C-MD-7407069-0-0			
	CIRCUIT SCHEMATIC	B-CS-5408306-0-1			
9	PWR REGULATOR BOARD ASSY	C-IA-5408918-0-0			
10	ETCH BOARD	D-IA-5008919-0-0			
11	TRIACDRIVER ASSY	C-AD-7006520-0-0			
	~~SCR DRIVER ASSY (PL)~~	~~A-PL-7006520-0-0~~			
	SCR DRIVER CHASSIS	C-IA-7407020-0-0			
12	TERMINAL BD ASSY	E-IA-5408384-0-0			
~~13~~	~~TERMINAL BOARD~~	~~C-IA-[illegible]~~			
14	COVER ASSEMBLY	D-AD-7008252-3-0			
	COVER ASSEMBLY	D-AD-7008252-4-0			
	COVER ASSEMBLY	D-AD-7008252-5-0			
	COVER ASSEMBLY (PL)	A-PL-7008252-0-0			
	COVER, PCO (BASIC & COMB)	E-SC-1208398-1-0			
	COVER, PCO (PUNCH)	E-SC-1208398-3-0			
	COVER PCO (READER)	E-SC-1208398-5-0			
	BEZEL	E-SC-1209225-0-0			
15	BEZEL SWITCH	C-IA-7407134-5-0			
	SILK SCREEN	A-SS-7407134-5-1			
	BEZEL SWITCH	C-IA-7407134-3-0			
	SILK SCREEN	A-SS-7407134-2-0			
	BEZEL SWITCH	C-IA-7407134-4-0			
	SILK SCREEN	A-SS-7407134-4-1			

MECHANICAL			DEPT USAGE		
FIND NO.	DESCRIPTION	PART NO.	PROD	CUST	F/C
16	SWITCH ASSY	C-AD-5408310-1-0			
	SWITCH ASSY	C-AD-5408935-0-0			
	SWITCH ASSY	C-AD-5408310-3-0			
	SWITCH ASSY (PL)	A-PL-5408310-0-0			
	BAR SPACER SW.BD.	B-MD-7407175-0-0			
17	PCO SWITCH BOARD	D-IA-5008308-0-0			
	FLIP CHIP MODULE	D-MD-1402230-0-0			
18	PCØ5 BUS BAR	C-AD-7008253-0-0			
	MTG. BAR (8 IN.)	B-IA-7407077-0-0			
19	PR SWITCH BOARD	D-IA-5008934-0-0			
20	PACKAGING INSTRUCTIONS	A-PI-3700024-0-0			
	OUTER SHIPPING CARTON	A-PS-9905046-0-0			
	INNER SHIPPING CARTON	A-PS-9905047-0-0			
	BOTTOM PAD	A-PS-9905053-0-0			
	FRONT SPACER	A-PS-9905054-0-0			
	SIDE SPACER	A-PS-9905055-0-0			
	REAR SUPPORT	A-PS-9905052-0-0			
	TOP SPACER	A-PS-9905056-0-0			
	TORO PAD	A-PS-9905044-1-0			
	POLY BAG	A-PS-9905129-7-0			
21	PACKAGING INSTRUCTIONS	A PI 3700123-0-0			
	TAPELESS CARTON	A PS 9905348-00-0			
	SPECIAL DIE CUT	A PS 9905348-01-0			
	ONE PIECE FOLDER	A PS 9905348-02-0			
	QUAD MODULE BOOK PACK	A PS 9905072-0-0			
	POLY BAG	A-PS-9905129-7-0			

ELECTRICAL			DEPT USAGE		
FIND NO.	DESCRIPTION	PART NO.	PROD	CUST	F/C
1	PAPER TAPE PUNCH, READER SCR	A-ML-PCØ5-Ø			
	~~PC05-CR READER & PUNCH & DRIVER~~	~~A-ML-PC05-CR~~			
	~~PC05-P PUNCH~~	~~A-ML-PC05-P~~			
	~~PC05-PA PUNCH~~	~~A-ML-PC05-PA~~			
	~~PC05-R~~	~~A-ML-PC05-R~~			
	POWER & CONTROL SCHEMATIC DIAGRAM	D-BS-PCØ5-Ø-4			
	MODULE UTILIZATION	C-MU-PCØ5-3			
	MODULE UTILIZATION (PL)	A-PL-PCØ5-3			
	SET UP PROCEDURE	A-SP-PCØ5-0-0			
	ACCESSORY LIST	A-AL-PC05-0-05			
7	CHASSIS & POWER SUPPLY ASSY	D-AD-7006246-0-0			
11	TRIAC DRIVER ASSY	C-AD-7006520-0-0			
	~~CIRCUIT SCHEMATIC~~	~~B-CS-7006520-0-1~~			
18	BUS BAR (PCØ5)	C-AD-7008253-0-0			
8	PWR REGULATOR ASSY	C-AD-7006512-0-0			
	CIRCUIT SCHEMATIC	B-CS-5408918-0-1			

QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST			

REV.	CHANGE NO			CHK
W	PCO5-00025	T. [signature] 1-9-73	A WILLIAMS [signature] 2/3/73	[initials]
Y	PCO5-00026	G. Allen 9-25-73	A. WILLIAMS [signature] 9/17/73	[initials]
Z	PCØ5-00027	[signature] 5-24-74	A WILLIAMS [signature] 6/4/74	[initials]

FIRST USED ON OPTION/MODEL: PCØ5

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL —
FINISH —

DRN [signature] DATE 6/29/67
CHK'D [signature] DATE 6/29/67
ENG. [signature] DATE 7/11/67
[signature] DATE 7/11/67
[signature] DATE 7/12/67
NEXT HIGHER ASSY A-ML-PCØ5-Ø
SCALE —
SHEET 2 OF 2

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DRAWING INDEX LIST PCØ5

SIZE D | CODE DI | NUMBER PCØ5-Ø-1 | REV Z

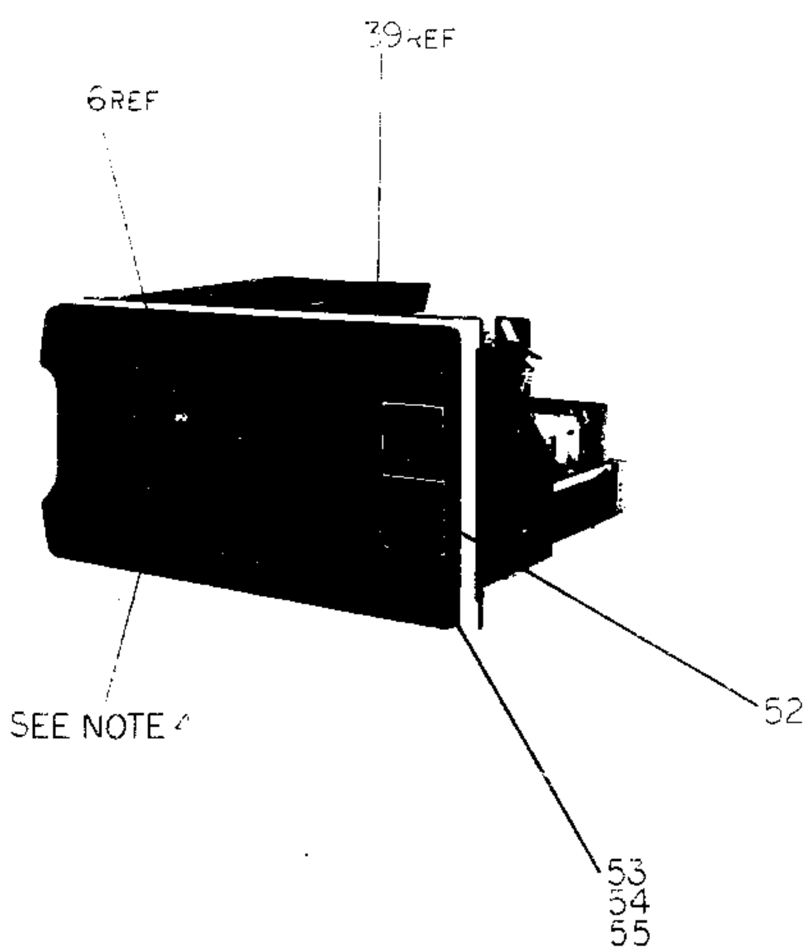
DIST. [illegible]

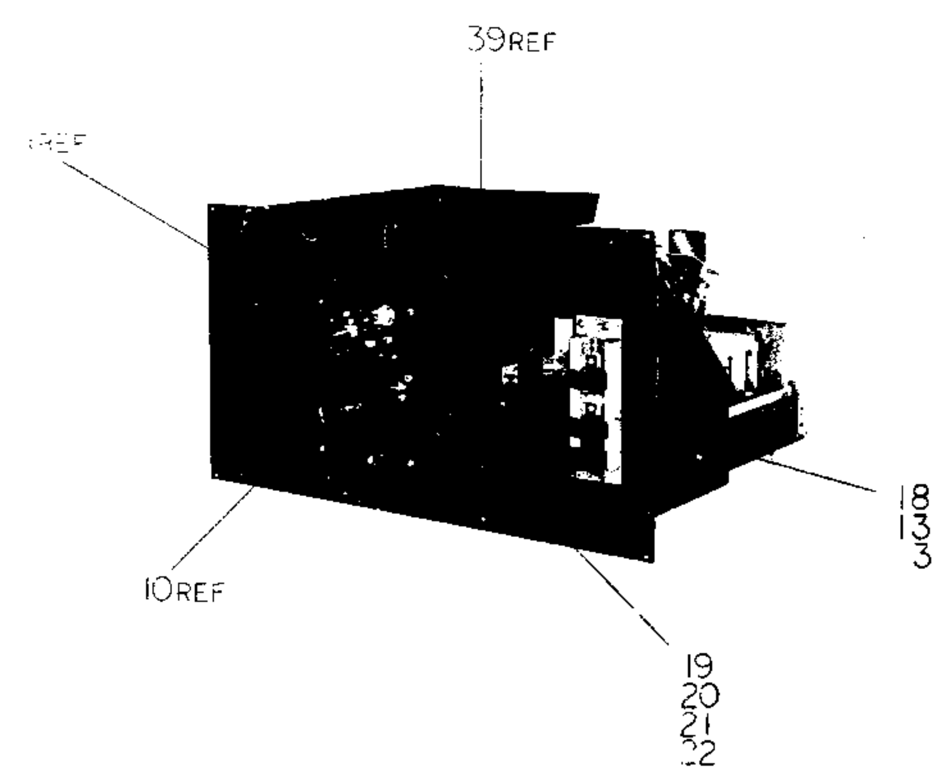
LEGEND

MODEL	CY	VARIATION COMPOSITION
PC05-C	60	READER PUNCH & DRIVER
PC05-CA	50	READER PUNCH & DRIVER
PC05-P		PUNCH
PC05-PA	50	PUNCH
PC05-R	X	READER

NOTES:

1. WIRING OF SWITCHES VARIES DEPENDING ON UNIT MODEL BEING BUILT. FOR SWITCH CONFIGURATION, FOR WIRING PURPOSES SEE DETAIL "A" FOR MODEL "C" AND "CA", DETAIL B FOR MODEL "P" AND "PA", AND DETAIL "C" FOR MODEL "R". 50 OR 60 CY HAS NO EFFECT.
2. IF THE TRIAC DRIVER UNIT IS USED, THIS WIRE WILL CONNECT TO TRIAC DRIVER TERMINAL T1. IF THE UNIT IS NOT USED, THIS WIRE WILL CONNECT TO TS-6 AND END. FOR CORRECT WIRING WHEN THE UNIT IS USED, SEE TRIAC DRIVER WIRE LIST. (SHEET 3).
3. ~~REMOVE CLAMP FROM CHASSIS, PLACE CABLE IN POSITION, THEN REINSTALL CLAMP IN POSITION OVER CABLE~~.
4. COVER ASSY TO BE ATTACHED TO CHASSIS ASSY AFTER ALL OTHER INSTALLATIONS ARE COMPLETE. TO DO SO, READER KNOB MUST BE REMOVED, COVER INSTALLED, THEN KNOB REPLACED ON READER SHAFT.
5. ON MODELS "P" AND "PA" THIS WIRE WILL BE TIED BACK AND WHITE SHRINKABLE TUBING (ITEM 43) ADDED AS REQD.
6. FOR REFERENCE SEE DRAWING INDEX D-DI-PC05-0-1
7. ON MODELS PC05 C, CA, P, & PA THESE WIRES WILL BE BUSSED TOGETHER AT COMMON TERMINAL ON SWITCH PANEL. ON "R" MODEL THESE WIRES WILL BE CONNECTED AS USUAL TO THEIR APPROPRIATE TERMINALS.
8. MODULE HOLD DOWN BAR TO BE INSTALLED BEFORE SHIPPING MACHINE.

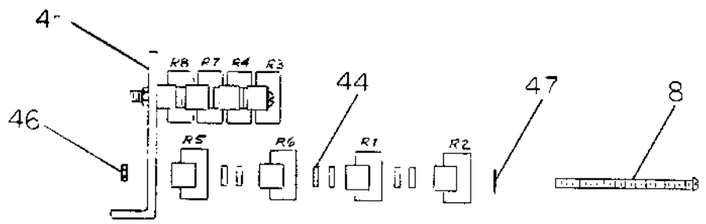




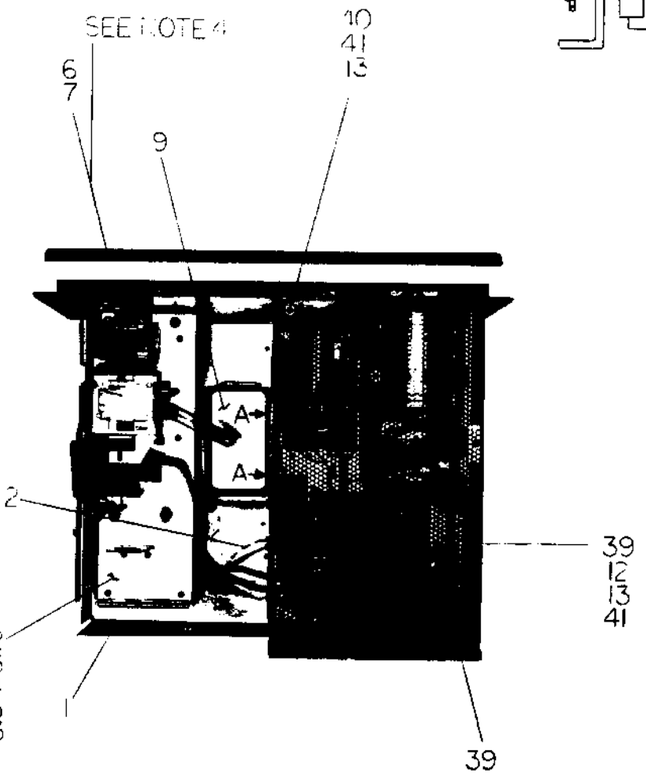
REVISIONS: PC05-00002 A; PC05-00004 B; PC05-00007 C; PC05-00014 D; PC04-00021 E; PC05-00019 F; PC04-00075 H; PC04-0003 J; PC05-00014 K; PC05-00015 L; PC05-00021 M; PC05-00024 N; PC05-00025 P; PC05-00027 R

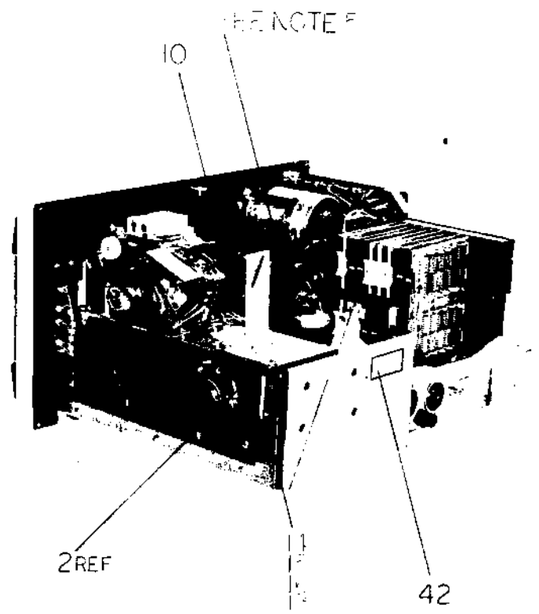
FIRST USED ON OPTION/MODEL	PC05
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	TOLERANCES: DECIMALS ± .005, FRACTIONS ± 1/64, ANGLES ± 0°30'
TITLE	PC05 READER AND PUNCH
NEXT HIGHER ASSY	A-ML-PC05-0
SIZE / CODE / NUMBER	D UA PC05-0-0
SCALE	NONE
SHEET	1 OF 3

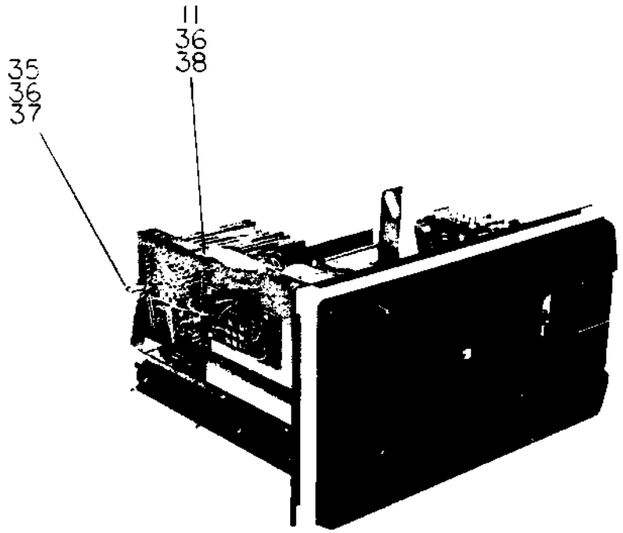
digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

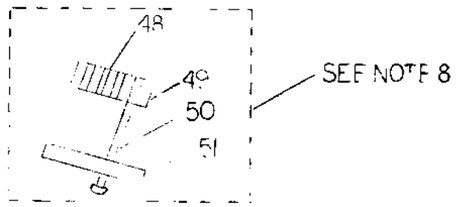


VIEW A-A









REV.	CHANGE NO.	CHK

FIRST USED ON ASSY/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO.
PC25		PARTS LIST		

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS .XX ±.005 .XXX ±.004 FRACTIONS ±1/64 ANGLES ±0°30'
FINAL SURFACE QUALITY √
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN.		DATE 6/1/67
CHK'D.		DATE
ENG.		DATE 7/1/67
PROJ. ENG.		DATE 7/1/67
PROD.		DATE 7/24/67

NEXT HIGHER ASSY A-MI-PC25-0

SCALE 1/2 SHEET 2 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
PC05
READER AND PUNCH

SIZE	CODE	NUMBER	REV.
D	UA	PC05E-0-0	

DIST.

SIZE	CODE	NUMBER	REV.
D	UA	PC05-0-0	A

TRIAC DRIVER WIRE LIST

JUMPER CONNECTIONS

WIRE	COLOR	CONNECTION	REMARKS
HARN WIRE #9	RED	T1	SEE NOTE 2
PUNCH MOT LEAD	BLK/YEL	T2	
T3	WHT/BLU	A11B2	
~~T6~~	~~WHT/GRN~~	~~A12C2~~	
T4	RED	A11A2	
T5	GRN	A12N2	

PUNCH WIRE LIST

HARNESS CONNECTIONS

COLOR	WIRE NO.	LOCATION	REMARKS
BLK	5	PNCH SW1 TAB 5	SEE NOTE 1 SHEET 1
WHT	6	PNCH SW1 TAB 6	
RED	7	SWITCH PANEL TAB 7	SEE NOTE 7 SHEET 1
RED	8	SWITCH PANEL TAB 8	
RED	9	TS6	SEE NOTE 2 SHEET 1
GY/RED	8	DO NOT CONNECT	SEE NOTE 5
BLK	15	B12C2 (GND)	
WHT	16	AØ5T2	

JUMPER CONNECTIONS

WIRE		CONNECTIONS			
ITEM NO.	COLOR	TYPE ITEM	FROM	TO	TYPE ITEM
25	WHT	26	SEE BELOW*	TS-7	26

*THIS END CONNECTS TO CAPACITOR ON PUNCH CHASSIS, ON TERMINAL WITH BLUE WIRE ATTACHED

READER WIRE LIST

HARNESS CONNECTIONS

COLOR	WIRE NO.	LOCATION	REMARKS
YEL	1	RDR SW2 TAB 1	SEE NOTE 1 SHEET 1
WHT/BLK	2	RDR SW2 TAB 2	
WHT/YEL	3	RDR SW1 TAB 3	
BRN	4	RDR SW1 TAB 4	
YEL	11	BØ4M1	
WHT/BLK	12	B11A2 (+5)	
WHT/YEL	13	A11T1	
BRN	14	BØ4U1	
GY/RED	8	R9	

HARNESS CONNECTIONS

COLOR	WIRE NO.	LOCATION	REMARKS
BLK	27	GND LUG	LOGIC GND
GY/YEL	29	A12B2	
GRN	31	AØ8V2	
BLK	28	GND LUG	LOGIC GND
GY/RED	30	A12A2	
GRN	32	A1Ø V2	

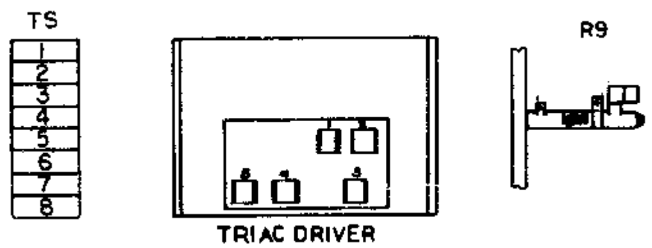
JUMPER CONNECTIONS

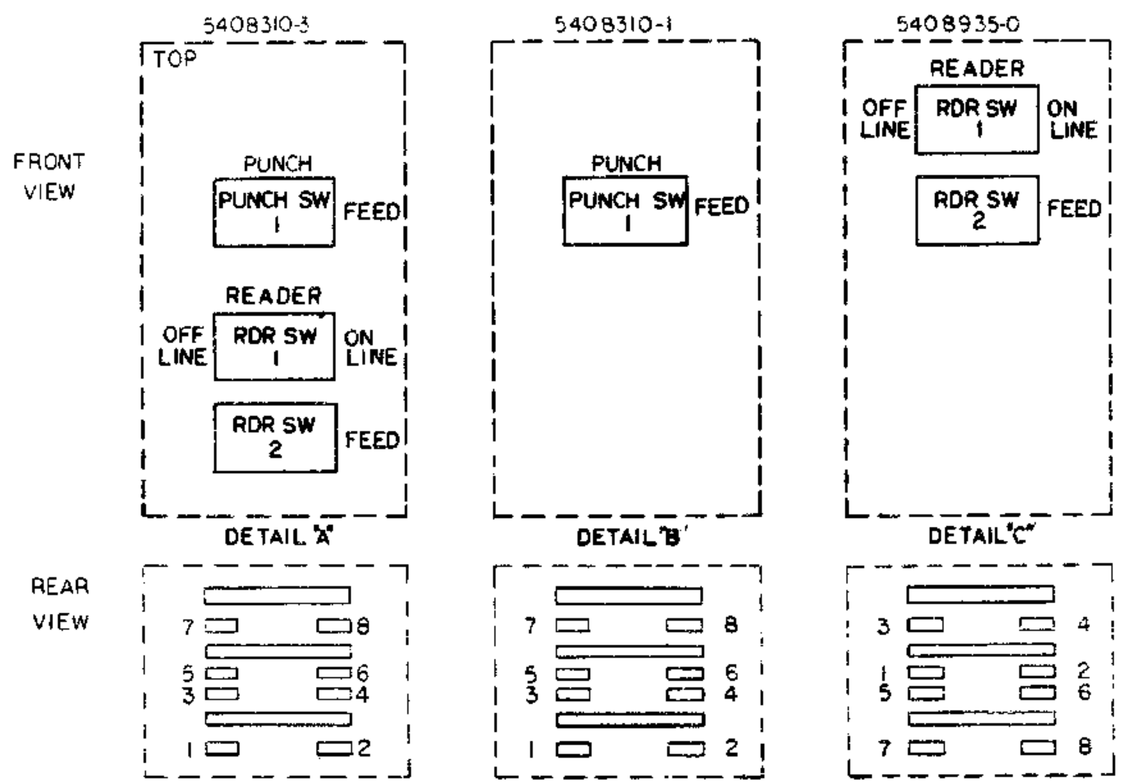
WIRE		CONNECTIONS			
ITEM NO.	COLOR	TYPE ITEM	FROM *	TO	TYPE ITEM
27	WHT/VIO	NONE	R1 & R2	TS-1	26
28	WHT/YEL	↑	R3 & R4	TS-2	26
29	WHT/ORN		R5 & R6	TS-3	26
30	WHT/BRN		R7 & R8	TS-4	26
31	VIO		R1	BØ8R2	NONE
31	VIO		R2	BØ8S2	↑
32	YEL		R3	BØ7R2	
32	YEL		R4	BØ7S2	
33	ORN		R5	A1ØR2	
33	ORN		R6	A1ØS2	
34	BRN	↓	R7	AØ9R2	↓
34	BRN	NONE	R8	AØ9S2	NONE

* FOR RESISTOR CONFIGURATION SEE VIEW A-A SHEET 2

READER MOTOR CONNECTIONS

COLOR	FROM	TO	REMARKS
WHT/RED	RDR MOTOR	TS-1	
RED	↑	TS-2	
WHT/GRN		TS-3	
GRN	↓	TS-4	
WHT & BLK	RDR MOTOR	TS-5	





FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PCØ5		PARTS LIST		

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: PCØ5 READER AND PUNCH

NEXT HIGHER ASSY: A-ML-PCØ5-Ø

SIZE: D CODE: UA NUMBER: PCØ5-Ø-Ø

SCALE: NONE SHEET 3 OF 3

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY P. MARCOTTE | CHECKED R Cornell | SECTION
DATE 6/19/69 | DATE 6/24/69 | 1
ENG Jos. Barker 7/1/69 | PROD | ISSUED SECT.
DATE | DATE 7/2/69 | 1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	PCØ5-C	PCØ5-CA	PCØ5-P	PCØ5-PA	PCØ5-R
1	D-AD-7006246-0-0	CHASSIS AND POWER SUPPLY ASSY	1	1	1	1	1
2	D-AD-7006248-1-0	PUNCH ASSY (60 CY)	1		1		
2	D-AD-7006248-2-0	PUNCH ASSY (50 CY)		1		1	
3	9006021-1	SCR, PHL PAN HD 6-32 x 5/16 LG SST	6	6	6	6	4
4	9006560	NUT, KEPS 6-32	2	2	2	2	
5	9006070-1	SCR PHL, PAN HD 10-32 x 5/16 LG SST	2	2	2	2	
6	D-AD-7006252-5-0	COVER ASSY (PUNCH)			1	1	
6	D-AD-7006252-3-0	COVER ASSY (READER)					1
6	D-AD-7006252-4-0	COVER ASSY (COMB)	1	1			
7	9006042-2	SCR, PHL FH 8-32 x 1 LG SST	4	4	4	4	4
8	9006083-1	SCR, PHL PAN HD 10-32 x 2-1/2 LG SST	4	4			4
9	C-MD-7405300-0-0	CHAD BOX	1	1	1	1	
10	D-UA-7006247-0-0	READER ASSY	1	1			1
11	C-AD-7006253-0-0	BUS BAR PCØ5	1	1	1	1	1
12	9006022-1	SCR, PHL PAN HD 6-32 x 3/8 LG SST	3	3	3	3	3
13	9006633	WASHER, INT TOOTH #6	15	15	9	9	13
14	C-AD-7006520-0-0	TRIAC DRIVER ASSY	1	1	1	1	
15	9006026-1	SCR, PHL PAN HD 6/32 x 3/4 LG SST	2	2			
16	9006801	SPACER ¼ AF x 3/8 LG #6 HOLE	2	2			
~~17~~	~~D-UA-PCØ5[illegible]~~	~~PCØ5A CABLE~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~
18	C-AD-5408310-1-0	SWITCH ASSY			1	1	
18	C-AD-5408935-0-0	SWITCH ASSY					1

TITLE: PCØ5 READER, PUNCH, DRIVER | ASSY NO. D-UA-PCØ5-Ø-Ø | SHEET 1 OF 3 | SIZE A | CODE PL | NUMBER PCØ5-Ø-Ø | REV. R | ECO NO. PCO* 00027 | DIST. G

DEC FORM NO. DRA 110

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY P. MARCOTTE | CHECKED R Cornell | SECTION
DATE 6/19/69 | DATE 6/24/69 | 1
ENG Jos. Barker 7/1/69 | PROD | ISSUED SECT.
DATE | DATE 7/2/69 | 1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	PCØ5-C	PCØ5-CA	PCØ5-P	PCØ5-PA	PCØ5-R
18	C-AD-5408310-3-0	SWITCH ASSY	1	1			
19	D-MD-7407131-0-0	TAPE CONTAINER	1	1	1	1	
20	9006011-2	SCR, PHL FH 4-40 x 3/8 LG SST	2	2	2	2	
21	9006556	NUT, HEX 4-40	2	2	2	2	8
22	9006632	WASHER, INT TOOTH #4	2	2	2	2	8
23	9006635	WASHER, INT TOOTH #10	2	2	2	2	
24	1309896	RES, 25 OHM 40 W ± 5%	8	8			8
25	9107360-98	18 AWG STRD TEFLON WHT	A/R	A/R	A/R	A/R	
26	9007917	SOLDERLESS CONN	6	6	6	6	4
27	9107400-87	22 AWG STRD TEFLON TRACER WHT/VIO	A/R	A/R			A/R
28	9107400-94	22 AWG STRD TEFLON TRACER WHT/YEL	A/R	A/R			A/R
29	9107400-93	22 AWG STRD TEFLON TRACER WHT/ORN	A/R	A/R			A/R
30	9107400-91	22 AWG STRD TEFLON TRACER WHT/BRN	A/R	A/R			A/R
31	9107470-77	24 AWG SOLID KYNAR VIO	A/R	A/R			A/R
32	9107470-44	24 AWG SOLID KYNAR YEL	A/R	A/R			A/R
33	9107470-33	24 AWG SOLID KYNAR ORN	A/R	A/R			A/R
34	9107470-11	24 AWG SOLID KYNAR BRN	A/R	A/R			A/R
35	9006043-1	SCR, PHL PAN HD 8-32 x 1" LG SST	1	1	1	1	1
36	9006634	WASHER INT TOOTH #8	2	2	2	2	2
37	9006823	SPACER 3/8 AF x 3/4 LG	1	1	1	1	1
38	9006040-1	SCR, PHL PAN HD 8-32 x 5/8 LG SST	1	1	1	1	1
39	E-IA-7407438-0-0	POWER SUPPLY COVER	1	1	1	1	1

TITLE: PCØ5 READER, PUNCH, DRIVER | ASSY NO. D-UA-PCØ5-Ø-Ø | SHEET 2 OF 3 | SIZE A | CODE PL | NUMBER PCØ5-Ø-Ø | REV. R | ECO NO. | DIST. G

DEC FORM NO. DRA 110

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

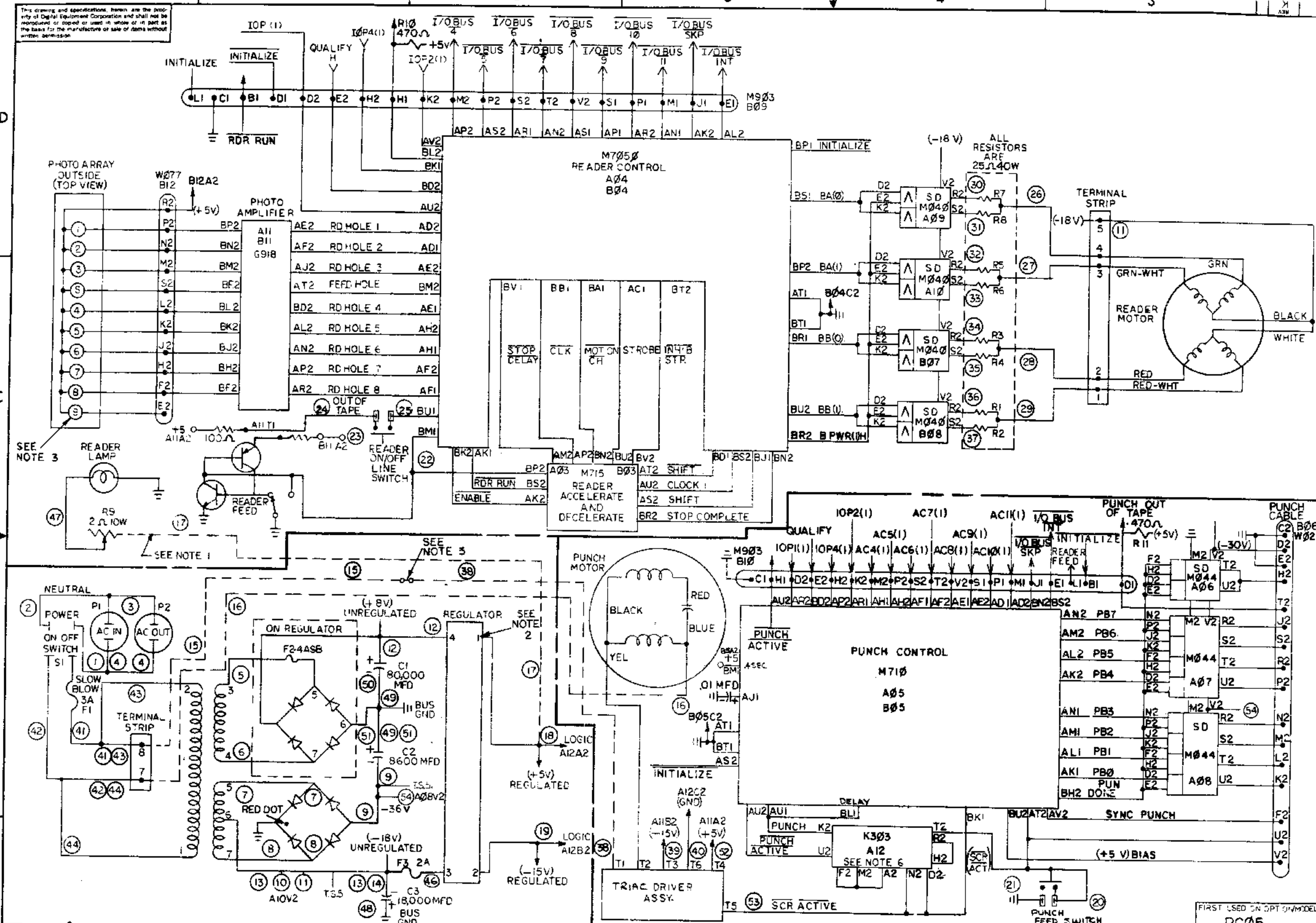
PARTS LIST

MADE BY P. MARCOTTE | CHECKED R Cornell | SECTION
DATE 6/19/69 | DATE 6/24/69 | 1
ENG Jos. Barker 7/1/69 | PROD | ISSUED SECT.
DATE | DATE 7/2/69 | 1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	PCØ5-C	PCØ5-CA	PCØ5-P	PCØ5-PA	PCØ5-R
40	9006024-1	SCR, PHL PAN HD 6-32 x ½ LG SST	6	6	2	2	6
41	9006653	WASHER, FLAT #6 SST	5	5	5	5	5
42	9008141	DEC NAME TAG	1	1	1	1	1
43	9107252-09	WHITE S[illegible] INKABLE TUBING			A/R	A/R	
44	9006664	WASHER #10 SST	24	24			24
45	C-MD-7408091-0-0	BRKT, RESISTOR	1	1			1
46	9006565	NUT, KEP 10-32 SST	4	4			4
47	9006635	WASHER INT. TOOTH #10	4	4			4
48	9007799-6	SCR, PHL, FILLISTER HD 8-32X 1½	1	1	1	1	1
49	1209850	UNIVERSAL RETAINER	1	1	1	1	1
50	C-IA-7405642-0-0	SCR MODULE RETAINER	1	1	1	1	1
51	C-IA-7408339-7-0	HOLD DOWN BAR 6"	1	1	1	1	1
52	C-IA-7407134-3-0	BEZEL SWITCH					1
52	C-IA-7407134-4-0	BEZEL SWITCH	1	1			
52	C-IA-7407134-5-0	BEZEL SWITCH			1	1	
53	9006558	NUT-HEX #6-32 SST	2	2	2	2	2
54	9006633	WASHER INT TOOTH LOCK #6	2	2	2	2	2
55	9006656	WASHER FLAT	2	2	2	2	2
56	A-PI-3700024-0-0	PACKAGING INSTRUCTIONS	1	1	1	1	1
57	A-PI-3700123-0-0	PACKAGING INSTRUCTIONS	1	1	1	1	1

E
TITLE: PCØ5 READER, PUNCH, DRIVER | ASSY NO. D-UA-PCØ5-Ø-Ø | SHEET 3 OF 3 | SIZE A | CODE PL | NUMBER PCØ5-Ø-Ø | REV. R | ECO NO. | DIST. G

FORM NO



NOTES:

1. DOTTED LINES INDICATE POSSIBLE CONNECTIONS BETWEEN POWER SUPPLY, READER, PUNCH AND TRIAC DRIVER. SEE LEGEND.
2. THE UNCIRCLED NUMBERS 1 THRU 7 REFER TO CONNECTIONS ON REGULATOR BOARD.
3. THIS PHOTO-TRANSISTOR USED TO DETECT OUT OF TAPE.
4. CIRCLED NUMBERS 1 THRU 53 ARE WIRE NUMBERS. SEE TABLE.
5. WIRE #15 AND #38 ARE BUSSED TOGETHER ON SWITCH PANEL ON "C" "CA", "P" & "PA" MODELS ONLY. ON "R" MODEL THESE WIRES WILL BE CONNECTED AS USUAL TO THEIR APPROPRIATE TABS.
6. WHEN M710 CKT REV H & HIGHER IS USED, DELETE K303 MODULE.

WIRE TABLE

WIRE NO.	COLOR	WIRE NO.	COLOR
1	RED	24	WHITE-YELLOW
2	WHITE	25	BROWN
3	WHITE	26	WHITE-BROWN
4	RED	27	WHITE-ORANGE
5	ORANGE	28	WHITE-YELLOW
6	GRAY-BLUE	29	WHITE-VIOLET
7	GRAY-WHITE	30	BROWN
8	YELLOW	31	BROWN
9	BLUE	32	ORANGE
10	GREEN	33	ORANGE
11	GREEN	34	YELLOW
12	GRAY-VIOLET	35	YELLOW
13	GREEN	36	VIOLET
14	GREEN	37	VIOLET
15	RED	38	RED
16	WHITE	39	WHITE-BLUE
17	GRAY-RED	40	WHITE-GREEN
18	GRAY-RED	41	RED
19	GRAY-YELLOW	42	WHITE
20	WHITE	43	RED
21	BLACK	44	WHITE
22	YELLOW		
23	WHITE-BLACK	46	GREEN
48 THRU 51	BLACK	47	GRAY-RED
52	GREEN	53	RED
54	BLUE		

LEGEND

CONNECTIONS	MODEL PC05-C, PC05-CA	MODEL PC05-P, PC05-PA	MODEL PC05 R
PWR SUP TO READER	+5 TO READER LAMP POT; -18V T.S.5.		SAME AS PC05-C PC05-CA
PWR SUP TO PUNCH	-30 V TO A10V2 ON LOGIC; 115V (HOT) TO TRIAC DRIVER; 115V (NEUTRAL) TO PUNCH MOTOR	SAME AS PC05-C PC05-CA	
TRIAC DRVR TO PUNCH	115V HOT (OUT) TO PUNCH MOTOR	SAME AS PC05-C PC05-CA	
PWR SUP TO TRIAC DRIVER	A11B2 TO -15V INPUT; A12C2 TO GND INPUT; A11A2 TO +5V INPUT	SAME AS PC05-C PC05-CA	

QTY.	DESCRIPTION	PART NO	ITEM NO

PARTS LIST

REV.	CHANGE NO.
A	PC05-00003
B	PC05-00005
C	PC05-00016
D	PC04-00023
E	PC04-00025
F	PC05-00021
H	PC05-00022
J	PC05-00024
K	PC05-00026

FIRST USED ON OPT OR MODEL: PC05

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES: DECIMALS ± .005, FRACTIONS ± 1/64, ANGLES ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL: —
FINISH: —

DRN. DATE 6/12/69
CHK'D. DATE 6/24/69
ENG. DATE
PROJ. ENG. DATE
PROD. DATE

NEXT HIGHER ASSY: A-ML-PC05

SCALE: NONE
SHEET 1 OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: POWER AND CONTROL SCHEMATIC

SIZE: D | CODE: BS | NUMBER: PC05-0-4 | REV: K

+5V BIAS

BU2

+5

-30V

I/O BUS IN SKIP

BN2

I/O BUS IN INT

BS2

IOT 021

+3

PUN FLAG

PUN ACTIVE

TP AU2

PUN ACT Ø

PUN DONE

M044 AØ8

M044 AØ7

M044 AØ6

U2 T2 S2 R2 V2

SD

E2 D2 H2 F2 K2 J2 P2 N2

PB Ø PB 1 PB 2 PB 3 PB 4 PB 5 PB 6 PB 7

AK1 AL1 AM1 AN1 AK2 AL2 AM2 AN2

AM1 AC4(1)

AH2 AC5(1)

AF1 AC6(1)

AF2 AC7(1)

AE1 AC8(1)

AE2 AC9(1)

AD1 AC10(1)

AD2 AC11(1)

QUALIFY BD2

IOP4(1) AP2

AJ2

API

ARI

IOP2(1)

INITIALIZE AS2

AJI CLEAR

IOP1(1) AR2

ASI IOT 021

PUNCH FEED SWITCH

PUN ACTIVE(Ø)

5 SEC ONE SHOT

0.4 SEC ONE SHOT

PUN PERMIT

PUNCH

10MS ONE SHOT

PUN DONE

BH2 PUN DONE

PUN SYNC AV2

BV1 TP SYNC PULSE

BK1 SCR ACTIVE (TO TRIAC)

NOTE:

(1) SIGNAL NAMES INDICATE ASSERTED STATES FOR HIGH(H) LEVELS PER DEC STD 054

M71Ø A,B5

REVISIONS

REV | CHANGE NO | CHK

FIRST USED ON OPTION/MODEL: PCØ5

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30' FINISH SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

QTY. | DESCRIPTION | PART NO. | ITEM NO.

PARTS LIST

DRN. R. Thelen	DATE 6/18/69	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. E. Connelly	DATE 6/23/69	
ENG.	DATE 7/1/69	
PROJ. ENG.	DATE 7/1/69	
APPD.	DATE 7/1/69	

NEXT HIGHER ASSY. A-ML-PCØ5

SCALE NONE

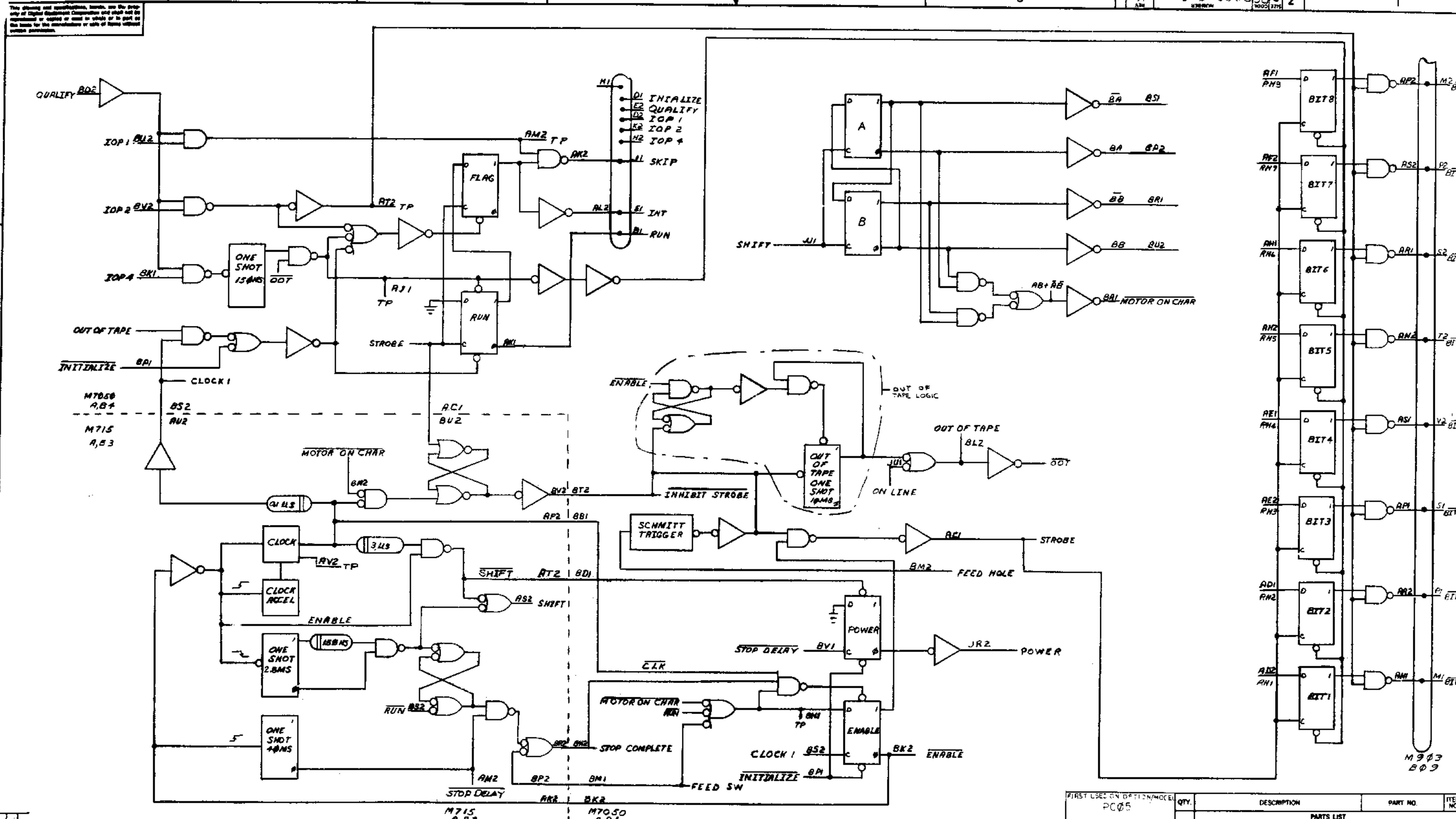
SHEET 2 OF 3

TITLE: POWER AND CONTROL SCHEMATIC (PUNCH)

SIZE D | CODE BS | NUMBER PCØ5-Ø-4 | REV. K

DIST.

PCØ5-Ø-Ø4 K



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PC05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES. TOLERANCES: DECIMALS ± .005, FRACTIONS ± 1/64, ANGLES ± 0°30'. FINAL SURFACE QUALITY. REMOVE BURRS AND BREAK SHARP CORNERS.

MATERIAL —
FINISH —

		DATE
DRN.	R THELLEN	2-19-71
CHK'D.	P CARVELLY	
ENG.	G BECKNER	
PROJ. ENG.	G BECKNER	
PROD.	ANTONUCCIO	

NEXT HIGHER ASSY: A-ML-PC05-0

digital EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS

TITLE: CONT... POWER SCHEMATIC (READER)

SIZE D, CODE BS, NUMBER PC05-0-4, REV. K

SCALE NONE — SHEET 3 OF 3

MODEL	MODULE LIST
PCØ5-C, PCØ5-CA	A3-A12, B6-B12
PCØ5-P, PCØ5-PA	A5, A6, A7, A8, A12, B6, B10
PCØ5-R	A3, A4, A9, A10, A11, B7, B8, B9, B12

NOTES:

1. REF C-AD-5408231-0-0
2. DELETE THIS MODULE WHEN CKT REV H (ETCH F) AND UP OF M710 IS USED.
3. M715 MUST BE OF REVISION (K CIRCUIT / E ETCH) OR HIGHER.
4. G918 MUST BE OF REVISION (B CIRCUIT / D ETCH) OR HIGHER.

	1	2	3	4	5	6	7	8	9	10	11	12
A			M715 READER CLOCK	M705Ø READER CONTROL	M71Ø PUNCH CONTROL	MØ44	MØ44	MØ44	MØ4Ø	MØ4Ø	G918 PHOTO AMPLIFIER	K3Ø3 * (SEE NOTE 1,2)
B						WØ23 TO PUNCH CONN	MØ4Ø	MØ4Ø	M9Ø3	M9Ø3		WØ77 TO PHOTO HEAD

SEE NOTE 3 (slot 3) — SEE NOTE 4 (slot 11)

REVISIONS			
CHK	CHANGE NO.	REV.	
[signature]	PC05-00001	A	Jack Mome 8-27-69
G. BECKNER			G. Beckner 9-3-69
	PC05-00021	B	McLendon 4/17/71
LEIS			M. Leis 3/24/71

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PCØ5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —
FINISH —

DRN: C. Morcotte DATE 6/18/69
CHK'D: R. Carnell DATE 6/20/69
ENG: Geo. Beckner DATE 9/1/69
PROJ. ENG: Geo. Beckner DATE 9/1/69
PROD: [signature] DATE 7/2/69
NEXT HIGHER ASSY. A-ML-PCØ5-Ø
SCALE —
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: MODULE UTILIZATION LIST PCØ5

SIZE C CODE MU NUMBER PCØ5-Ø-3 REV. B

DIST.

DEC FORM NO. DRC 100

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY P. MARCOTTE DATE 6/18/69	CHECKED R. Carvell DATE 6/20/69	SECTION 1	
ENG [illegible] 7/1/69 DATE	PROD [illegible] DATE 7/2 [illegible]	ISSUED SECT. 1	

ITEM NO.	DWG NO./PART NO.	DESCRIPTION	PCØ5-C	PCØ5-CA	PCØ5-F	PCØ5-FA	PCØ5-R
1	G918	PHOTO AMPLIFIER	1	1			1
[illegible]	C-AD-5408231-0-0	TIMER, (R303 WITH R374, R376 & R378)	1	1	1	1	
[illegible]	MØ4Ø	SOLENOID DRIVER	4	4			4
	MØ44	SOLENOID DRIVER	3	3	3	3	
~~—~~	~~M7Ø5~~	~~READER CONTROL~~	~~1~~	~~1~~			~~1~~
[illegible]	M71Ø	PUNCH CONTROL	1	1	1	1	
[illegible]	M715	READER CLOCK	1	1			1
8	M7050	READER CONTROL	1	1			1

NOTE 1: DELETE 5408231 MODULE WHEN CKT REV H AND HIGHER OF M710 MODULE IS USED

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
MODULE UTILIZATION	C-MU-PCØ5-Ø-3	A	PL	PCØ5-Ø-3	B	PCØ5-00002
	SHEET 1 OF 1	DIS				

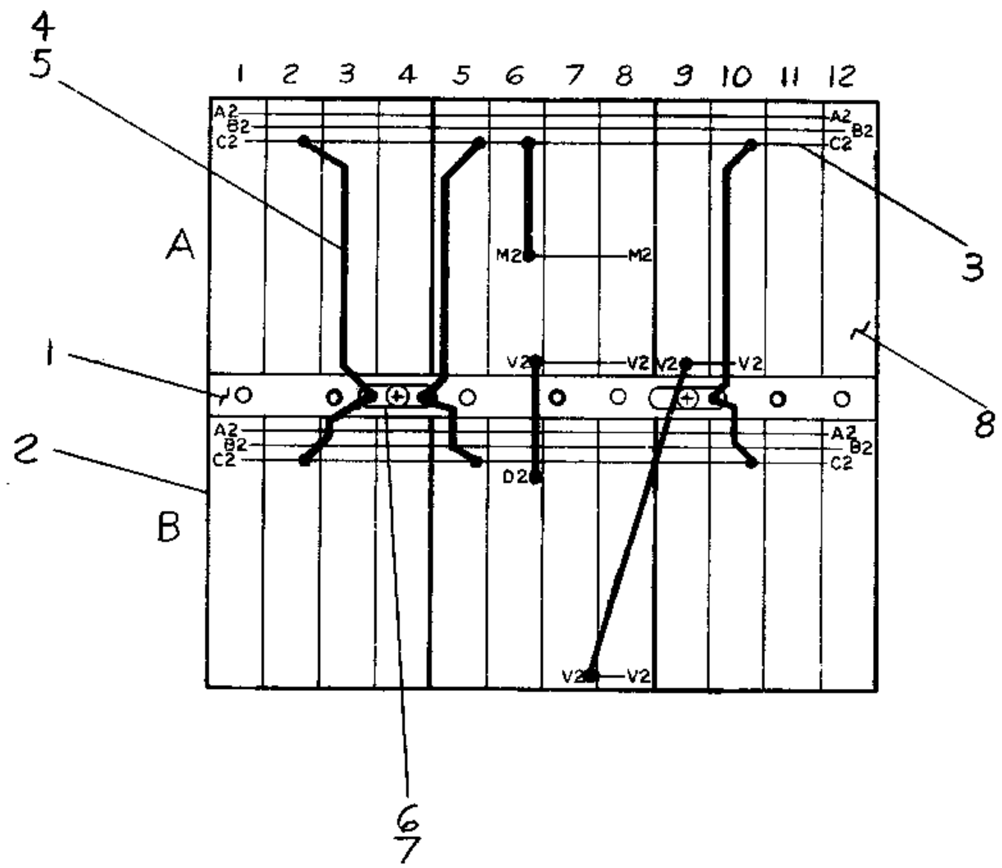
DEC FORM NO.
DRA 110

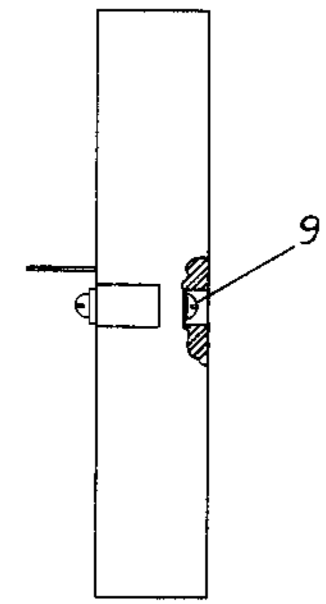
EXTERNAL COMPONENT TABLE

ITEM	COMP.	POL	FROM	TO	POL	REMARKS
10	CAP	+	AØ3A2	AØ1C2	−	
10	CAP	+	BØ1C2	BØ3B2	−	
11	CAP	+	AØ5J1	AØ5C2	−	
13	RES		BØ9H1	BØ9A2		
13	RES		B1ØD1	B1ØA2		
14	RES		A11T1	A11A2		

NOTES:

1. CONNECTIONS ON ITEM 3 & 4 TO B SOLDERED AND LOCATED AT MINIMUM PRACTICAL HEIGHT ABOVE BLOCKS.
2. CONNECTOR BLOCKS TO BE GROUNDED TO GND. LUG AS SHOWN.





REVISIONS

CHK	CHANGE NO.	REV.
	PCØ5-00003 E. LUTTIG	A
	PCØ5-00016 T. QUILL 5-8-70 YOUSE	B
	PCØ5-00021 LEIS	C

FIRST USED ON OPTION/MODEL: PCØ5

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

DRN. DATE 6/9/69
CHK'D. DATE 6/19/69
ENG. DATE 7/1/69
DATE 7/1/69
PROD. DATE 7/2/69

NEXT HIGHER ASSY D-UA-PCØ5-Ø-Ø

SCALE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE

BUS BAR (PCØ5)

SIZE	CODE	NUMBER	REV.
C	AD	7006253-0-0	C

DIST.

DEC FORM NO. DRC 100

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

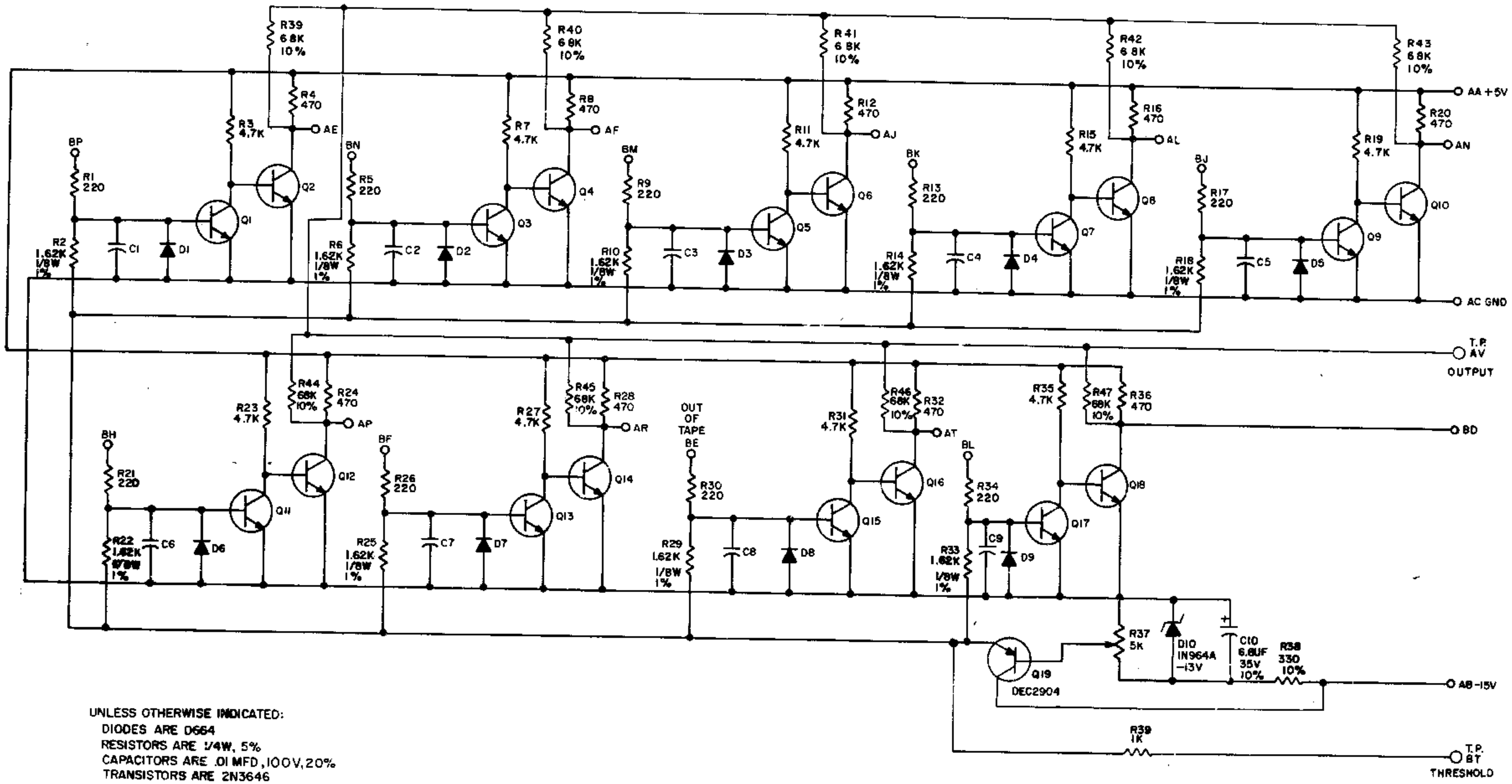
PARTS LIST

MADE BY F. MARCOTTE	CHECKED	SECTION
DATE 6/10/69	DATE 6/18/69	1
ENG	PROD	ISSUED SECT.
DATE 7/1/69	DATE	1

ITEM NO.	DWG NO./PART NO.	DESCRIPTION	QUANTITY/VARIATION
1	B-IA-7407071-0-0	MTG. BAR 6IN.	1
2	1205348	288 PIN CONN. BLOCK WRAPTYPE	3
3	1205541	BUS STRIP - 44 HOLE	A/R
4	9107560-03	#18 AWG BUS WIRE	A/R
5	9107278-09	#18 TUBING TEFLON, WHITE	A/R
6	9007597	TERMINAL, SHAKEPROOF #2116-08-00	2
7	9006034	SCR PHL PAN HD #8-32 x.19 LG SST	2
8	9105740-41	30 AWG SOLID TEF INS. WIRE, YELLOW	A/R
9	9006120	SCR PHL FIL HD #8-32 x .62 LG SST	6
10	1005306	CAP 6.8 MFD 35V 10%	2
11	1001610	CAP .01 MFD 100V 20%	1
~~12~~	~~1002627~~	~~CAP 2.2 MFD 20V 10%~~	~~1~~
REF	K-WL-PCØ5-Ø-2	WIRE LIST	1
13	1300317	RES 470 OHM 1/4 W 10%	2
14	1300231	RES 100 ohm ¼W 5%	1

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
BUS BAR (PCØ5)	C-AD-7006253-0-0	A	PL	7006253-0-0	C	PC05-00021
	SHEET 1 OF 1	DIST. G				

DEC FORM NO.
DRA 110



UNLESS OTHERWISE INDICATED:
DIODES ARE D664
RESISTORS ARE 1/4W, 5%
CAPACITORS ARE .01 MFD, 100V, 20%
TRANSISTORS ARE 2N3646

○ INDICATES TEST POINT

REVISIONS		
REV.	CHG NO.	CHK
A	00001	
B	00003	

DRN. R. BUTLER DATE 4/1/69
CHK'D G. Yanga DATE
ENG. R. Abel DATE 6/16/69
PROD. DATE

TRANSISTOR & DIODE CONVERSION CHART			
DEC	EIA	DEC	EIA
2N3646	2N3009	IN964A -13V	SAME
D664	IN3606	DEC2904	2N1132

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE PHOTO TRANSISTOR AMPLIFIER G918

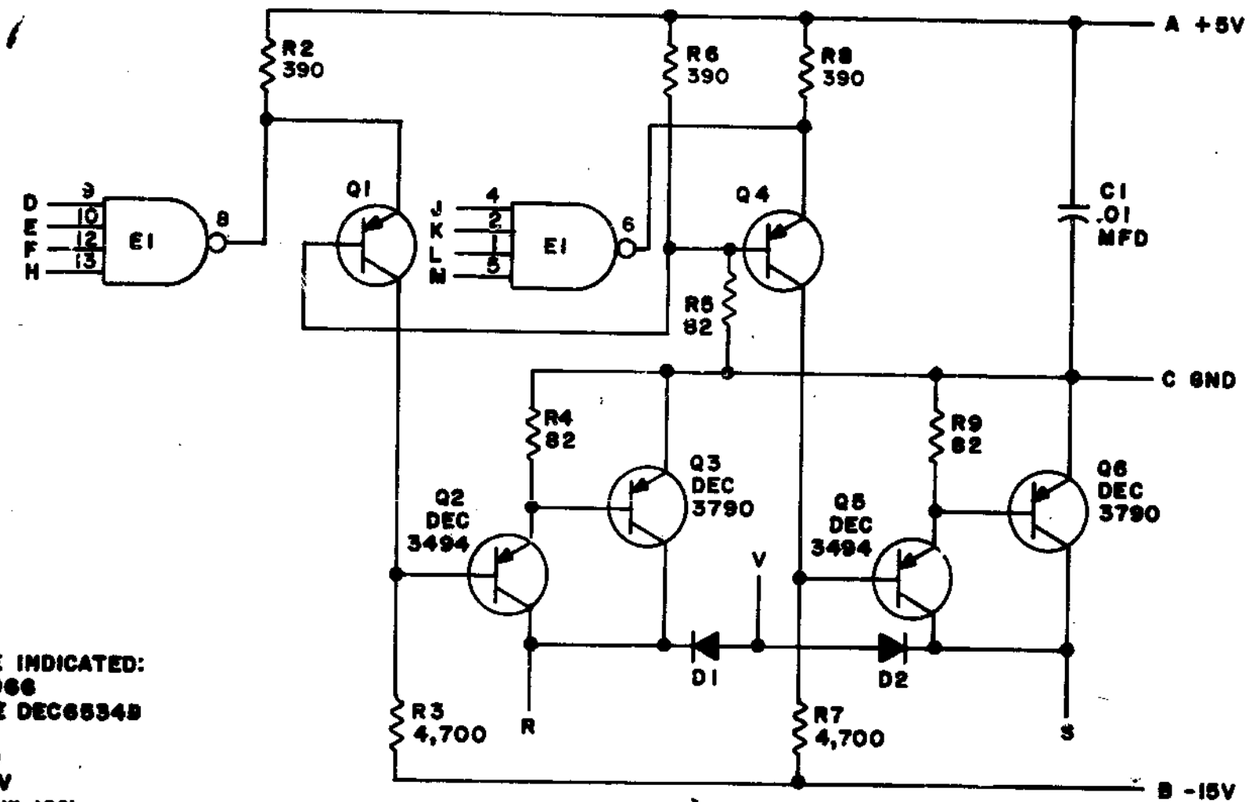
SIZE	CODE	NUMBER	REV
C	CS	G918-0-1	B

PRINTED CIRCUIT REV. D

DEC FORM NO. DRC 102

5

DIST. 324, 434



UNLESS OTHERWISE INDICATED:
DIODES ARE MR2066
TRANSISTORS ARE DEC6534B
E1 IS DEC7490N
PIN 7 ON IC = GND
PIN 14 ON IC = +5V
RESISTORS ARE 1/4W, 10%

PARTS LIST A-PL-M040-0-0

REVISIONS	CHK	CHG NO.	REV.
		00001	E
		00002	

DRN.		DATE 9-14-67
CHK'D		DATE 9/22/67
ENG		DATE 9/19/67
PROD.		DATE

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
DEC3494	2N3638		
DEC3790	2N3790		
DEC6534B	MPS6534		
D662	1N646		
MR2066	1N4003		

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

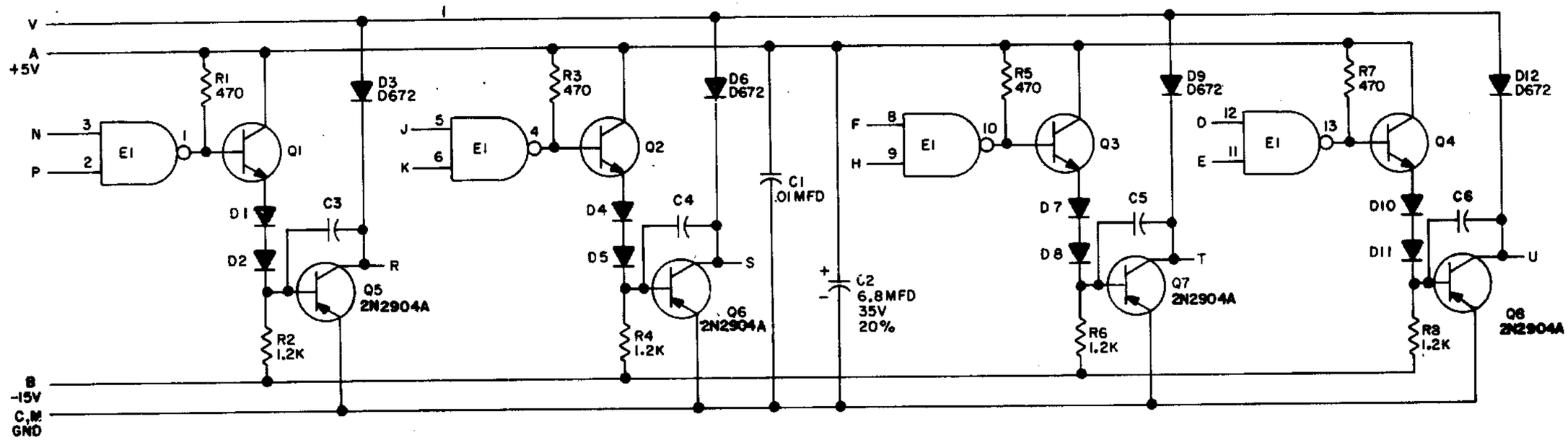
TITLE
SOLENOID DRIVER M040

SIZE	CODE	NUMBER	REV.
B	CS	M040-0-1	E

PRINTED CIRCUIT REV. E

DEC FORM NO.
DRB 102

5 DIST. 324, 434, 435[3] DINK



UNLESS OTHERWISE INDICATED:
RESISTORS ARE 1/4W, 10%
DIODES ARE D664
E1 IS DEC7401N
TRANSISTORS ARE DEC300[illegible]
PIN 7 ON EACH IC = GND
PIN 14 ON EACH IC = +5V
CAPACITORS ARE 100pf, 100V, 5%

REVISIONS	CHK	CHG NO.	REV.
	[illegible]	[illegible]	B
	[illegible]	[illegible]	C

DRN.	Butler	DATE 6/23/69
CHKD	[illegible]	DATE [illegible]
ENG.	[illegible]	DATE [illegible]
PROD.		DATE

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
D664	1N3606		
[illegible]	[illegible]		
DEC3005	2N3009		

[redacted] EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE 4-100MA SOLENOID DRIVER M044

SIZE	CODE	NUMBER	REV.
B	CS	M044-0-1	C

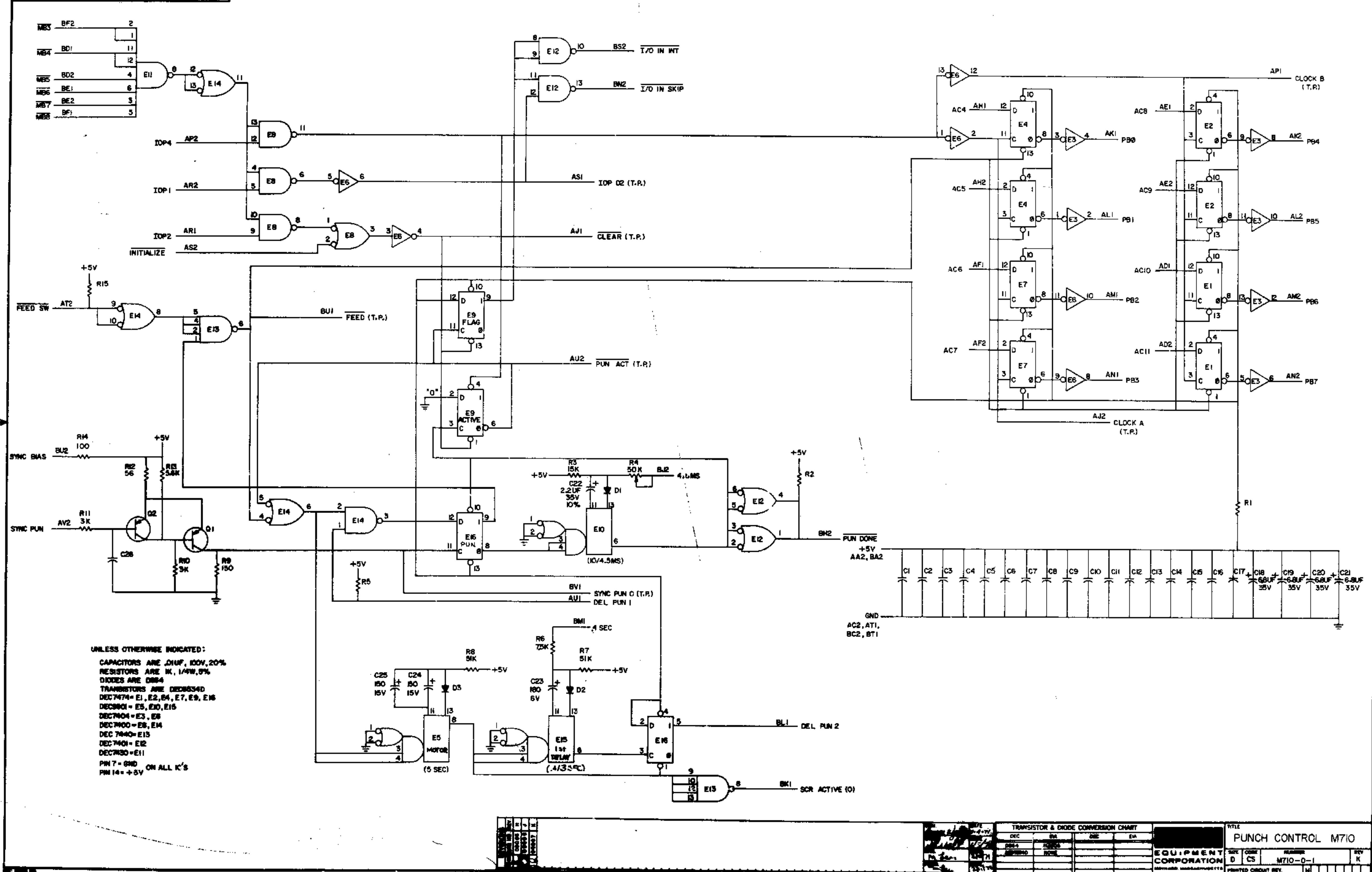
PRINTED CIRCUIT REV. B

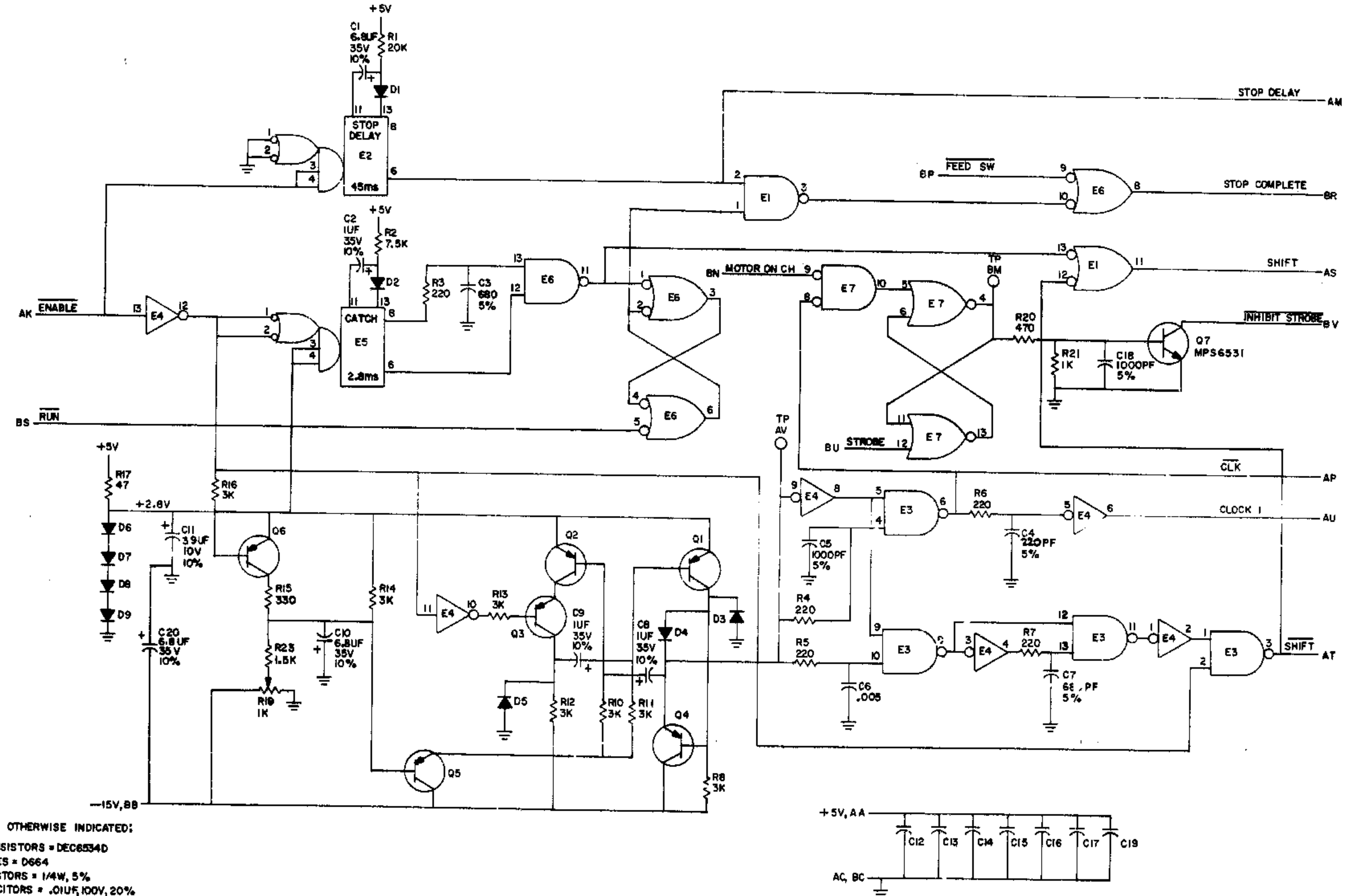
DEC FORM NO.

5

DIST. 324, 434, 435

PINK





UNLESS OTHERWISE INDICATED:

- TRANSISTORS = DEC6534D
- DIODES = D664
- RESISTORS = 1/4W, 5%
- CAPACITORS = .01UF, 100V, 20%
- E1, E3, E6 = DEC7400
- E4 = DEC7404
- E2, E5 = DEC9601
- PIN 7 = GND, PIN 14 = +5V ON ALL IC'S
- E7 = DEC7402

REVISIONS		
CHK	CHG NO	REV
AY	00002	E
REV & REDR	00006	K
& CANCELS ECO 00005	00007	
	00008	L

DRN.	M. HALLER	DATE 10/16/67
CHK'D	R. SILVERMAN	DATE 11/2/67
ENG.	R. G. BOGGE	DATE 11/2/67
PROD.		DATE

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
DEC6534D	MPS6534	IN756	SAME
D664	IN3606		
DEC6531	MPS6531		

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

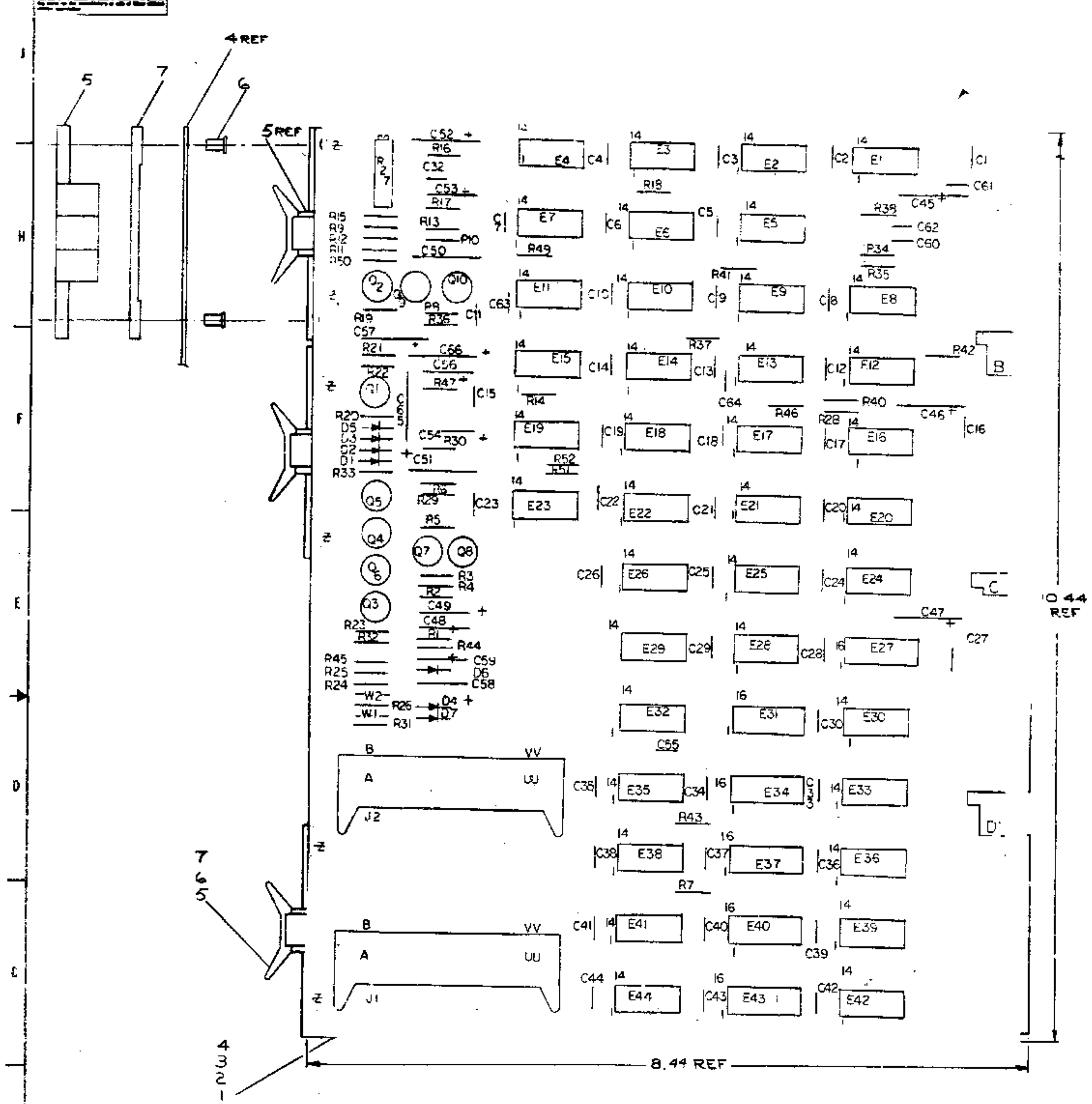
TITLE: READER CLOCK M715

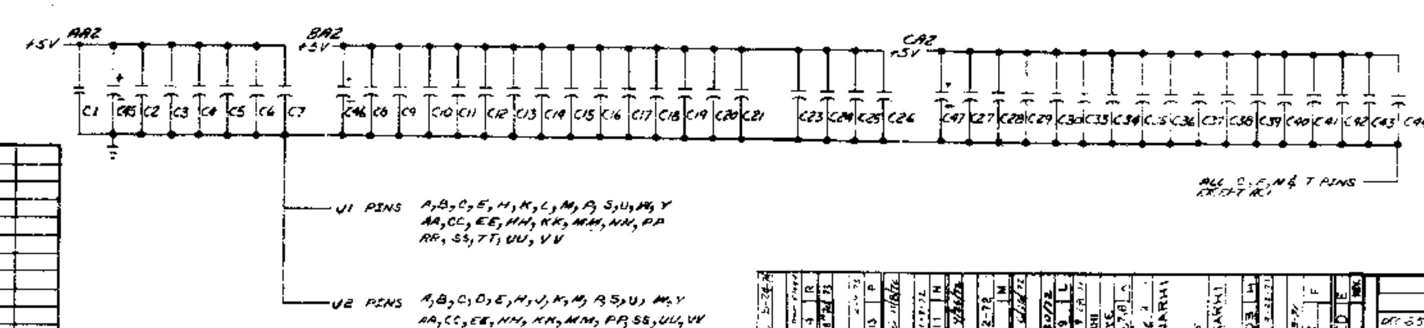
SIZE	CODE	NUMBER	REV.
C	CS	M715-0-1	L

PRINTED CIRCUIT REV. F

DIST. 824, 830, 835
4 PINK

DEC FORM NO. PC 102





QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	[illegible]	CAP [illegible]	[illegible]	[illegible]
1	C55	CAP 220PF [illegible] DEC	[illegible]	[illegible]
1	R44	RES 75 1/4W [illegible]	[illegible]	[illegible]
A/R	W1, W2	WIRE 22 AWG SOLID BUS	[illegible]	60
1	E35	IC DEC 1920	1905577	59
1	R49	RES 270 1/4W 5%	1301972	58
1	R9	RES 5.6K 1/4W 5%	1301874	57
1	R13	RES 150 1/4W 5%	1300250	56
1	R8	RES 56 1/4W 5%	1302602	55
1	R21	RES 680 1/4W 5%	1301424	54
1	R47	RES 18K 1/4W 5%	1300498	53
2	J1, J2	CONN 40 PIN RT ANGLE - SPACER	1209941	52
4	E34, E37, E40, E43	IC DEC [illegible]	[illegible]	51
1 (struck)	E33	IC DEC [illegible]	[illegible]	50
2	E27, E31	IC DEC 8251	[illegible]	49
4	E17, E18, E33, E39	IC DEC [illegible]	[illegible]	48
2	E21, E25	IC DEC 6314	1907972	47
5	E20, E24, E30, E36, E42	IC DEC 380	[illegible]	46
7	E3, E8, E26, E29, E38, E41, E44	IC DEC 7404	[illegible]	45
4	E4, E7, E15, E19	IC DEC 9601	[illegible]	44
1	E16	IC DEC 384	[illegible]	43
2	E1, E11	IC DEC 7410	1905576	42
7	E5, E6, E13, E22, E23, E28, E32	IC DEC 7400	1905575	41
5	E2, E9, E10, E12, E14	IC DEC 7474	[illegible]	40
2	Q7, Q8	TRANSISTOR DEC 6531	[illegible]	39
8	Q1-Q6, Q9, Q10	TRANSISTOR DEC 6534D	1503409-00	38
7	R1, R4, R6, R18, R34, R38, R51	RES 220 1/4W 5%	1300271	37
22	R7, R?, R11, R12, R14, R15, R19, R20, R23, R24-R26, R31, R32, R37, R40-R43, R45, R22, R52	RES 3K 1/4W 5%	1300432	36
1	R27	RES 1K 3/4W 10% TRPE	[illegible]	35
(struck)	[illegible]	RES [illegible] 1/4W 5%	[illegible]	34
(struck)	[illegible]	RES [illegible] 1/4W 5%	[illegible]	33
1	R17	RES 7.5K 1/4W 5%	1301422	32
(struck)	[illegible]	RES [illegible]	[illegible]	31
1	R16	RES 15K 1/4W 5%	1300496	30
(struck)	[illegible]	RES [illegible] 1/4W 5%	[illegible]	29
3	R30, R36, R46	RES 10K 1/4W 5%	1300472	28
2	R2, R3	RES 4.7K 1/4W 5%	1300447	27
1	R50	RES 1.5K 1/4W 5%	[illegible]	26
1	R35	RES 330 1/4W 5%	[illegible]	25
3	R5, R10, R29	RES 100 1/4W 5%	[illegible]	24
1	R33	RES 47 1/4W 5%	1300202	23
(struck)	[illegible]	DIODE [illegible]	[illegible]	22
3	D4, D6, D7	DIODE D664	[illegible]	21
4	D1, D2, D3, D5	DIODE D662	[illegible]	20
41	C1-C21, C23-C44, C28-C30	CAP .01UF 100V 20% DISC	[illegible]	19
5	C45, C46, C47, C57, C66	CAP 6.8UF 35V 10% TANT	[illegible]	18
2	C50, C51	CAP .01UF 100V 10% [illegible]	[illegible]	17
2	C48, C49	CAP .33UF 20V 10% [illegible]	[illegible]	16
1	C52	CAP 15UF [illegible] TANT	[illegible]	15
1	C56	CAP 2.2UF 20V 10% TANT	[illegible]	14
3	C53, C58, C59	CAP 1UF 35V 10% TANT	1001776	13
1	C65	CAP 39UF 10V 10% TANT	[illegible]	12
1	C54	CAP 3.3UF 10V 10% [illegible]	[illegible]	11
1	C60	CAP 1000PF 100V 5% MICA	[illegible]	10
3	C22, C32, C62	CAP 680PF 100V 5% [illegible]	[illegible]	9
2	C63, C64	CAP 330PF 100V 5% [illegible]	[illegible]	8
2		SPACER (CABLE CLAMP)	[illegible]	7
6		EYELET GS4-11 STIMPSON	9006750	6
3		HANDLE FLIP CHIP-MAGENTA	[illegible]	5
1		ETCHED CIRCUIT BOARD	5008428	4
REF		MODULE HISTORY LIST	B-MH-M840-[illegible]	3
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-M840-[illegible]	2
REF		X-Y COORDINATE HOLE LOC.	K-CO-M840-[illegible]	1

PARTS LIST

ETCH BOARD REV K

IC TYPE	GND	+5V
[illegible] 384	1	8
[illegible] 6314	1	8
[illegible] 8271	8	16
[illegible] 380	1	8

[illegible] 5V ARE USUALLY PIN 7 AND 14 EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

ITEM NO.	AWG	FROM PT	TO PT
59	22	W2-A	W2-B
57	22	W1-A	W1-B

JUMPER LIST

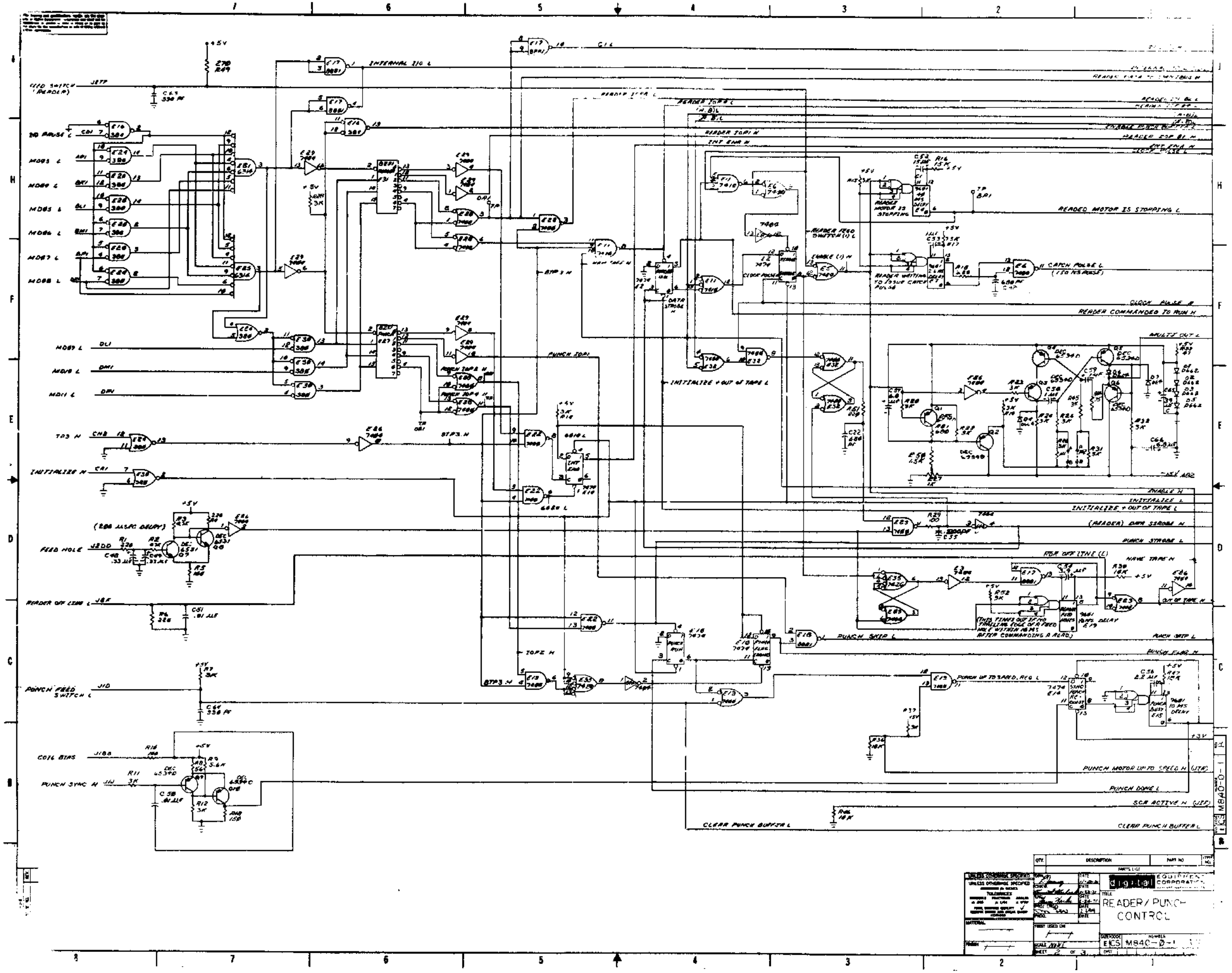
DEC NO.	EIA NO.	DEC NO.	EIA NO.
DEC 6531	MPS6531		
DEC 6534D	MPS6534		
D664	1N3606		
D662	1N645		

SEMICONDUCTOR CONVERSION CHART

REV.	CHANGE NO.
R	M840-000014
P	M840-00013
N	M840-00011
M	M840-00010
L	M840-00009
K	M840-00006,7,8
H	M840-00003
F	M840-00002
E	M840-00001
	ORIGINATED

L. NARHI
LAWRENCE NARHI
BOB GRAY

FIRST USED ON: [illegible]

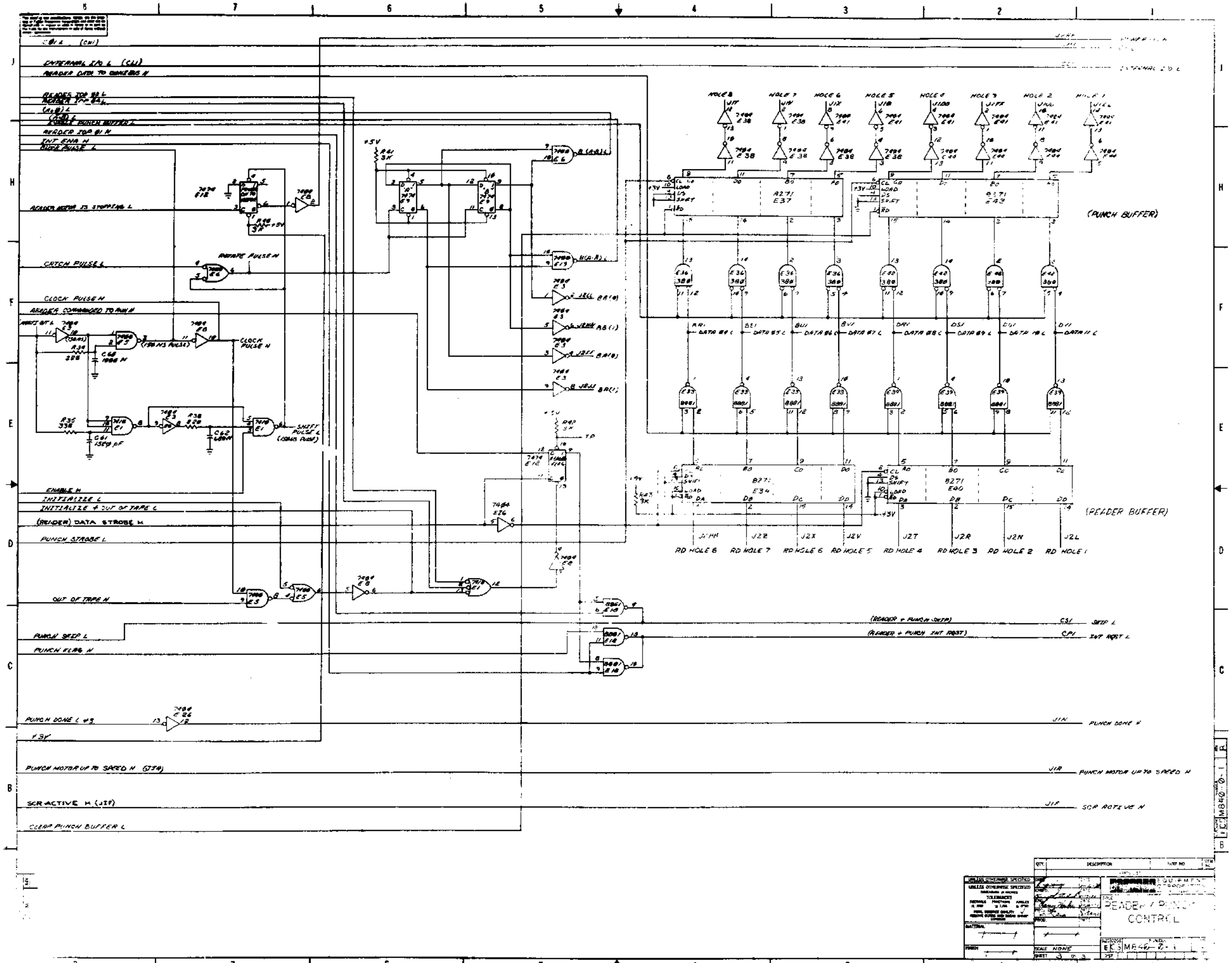


digital EQUIPMENT CORPORATION

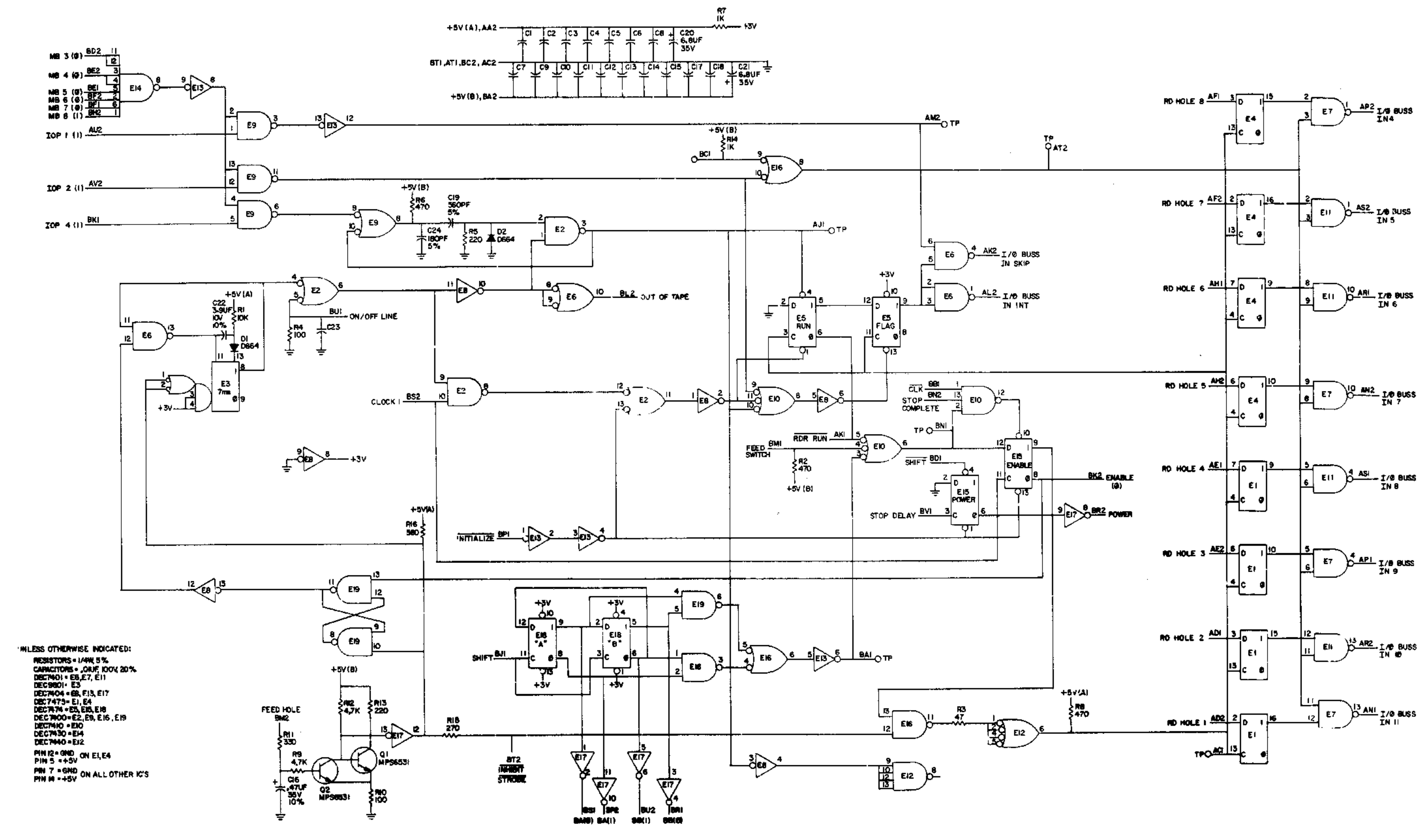
TITLE: READER / PUNCH CONTROL

SIZE E CS NUMBER M840-0-1

SCALE NONE SHEET 2 OF 3



ENTERNAL I/O L (CLI)
READER DATA TO OMNIBUS H
READER IOP 00 L
READER IOP 04 L
ENABLE PUNCH BUFFER L
READER IOP 01 H
INT ENA H
READER MOTOR IS STOPPING L
CATCH PULSE L
ROTATE PULSE H
CLOCK PULSE H
READER COMMANDED TO RUN H
CLOCK PULSE H
SHIFT PULSE L
ENABLE H
INITIALIZE L
INITIALIZE + OUT OF TAPE L
(READER) DATA STROBE H
PUNCH STROBE L
OUT OF TAPE H
PUNCH SKIP L
PUNCH FLAG H
PUNCH DONE L #3
+3V
PUNCH MOTOR UP TO SPEED H (J1R)
SCR ACTIVE H (J1F)
CLEAR PUNCH BUFFER L
HOLE 8
HOLE 7
HOLE 6
HOLE 5
HOLE 4
HOLE 3
HOLE 2
HOLE 1
(PUNCH BUFFER)
(READER BUFFER)
RD HOLE 8
RD HOLE 7
RD HOLE 6
RD HOLE 5
RD HOLE 4
RD HOLE 3
RD HOLE 2
RD HOLE 1
(READER + PUNCH SKIP)
SKIP L
(READER + PUNCH INT RQST)
INT RQST L
PUNCH DONE H
PUNCH MOTOR UP TO SPEED H
SCR ACTIVE H
QTY.
DESCRIPTION
PART NO
UNLESS OTHERWISE SPECIFIED
TOLERANCES
MATERIAL
FINISH
READER / PUNCH CONTROL
SCALE NONE
SHEET 3 OF 3
MR840-2


+5V (A), AA2
R7 1K
+3V
C20 6.8UF 35V
BT1, AT1, BC2, AC2
C21 6.8UF 35V
+5V (B), BA2
MB 3 (0)
MB 4 (0)
MB 5 (0)
MB 6 (0)
MB 7 (0)
MB 8 (1)
IOP 1 (1)
IOP 2 (1)
IOP 4 (1)
AM2 TP
+5V (B)
R14 1K
TP AT2
R6 470
C19 360PF 5%
C24 180PF 5%
R5 220
D2 D664
AJ1 TP
I/O BUSS IN SKIP
I/O BUSS IN INT
OUT OF TAPE
ON/OFF LINE
C22 3.9UF 10V 10%
R1 10K
D1 D664
E3 7ms
R4 100
C23
E5 RUN
E5 FLAG
CLOCK 1
CLK
STOP COMPLETE
FEED SWITCH
RDR RUN
R2 470
+5V (B)
SHIFT
E15 POWER
E15 ENABLE
STOP DELAY
ENABLE (0)
POWER
INITIALIZE
R16 560
UNLESS OTHERWISE INDICATED:
RESISTORS = 1/4W, 5%
CAPACITORS = .01UF, 100V, 20%
DEC7401 = E6, E7, E11
DEC9601 = E3
DEC7404 = E8, E13, E17
DEC7475 = E1, E4
DEC7474 = E5, E15, E18
DEC7400 = E2, E9, E16, E19
DEC7410 = E10
DEC7430 = E14
DEC7440 = E12
PIN 12 = GND ON E1, E4
PIN 5 = +5V
PIN 7 = GND ON ALL OTHER IC'S
PIN 14 = +5V
FEED HOLE BM2
R11 330
R9 4.7K
C16 47UF 35V 10%
Q2 MPS6531
R12 4.7K
R13 220
Q1 MPS6531
R10 100
R18 270
BT2 INHIBIT STROBE
E18 "A"
E18 "B"
BA1 TP
R3 47
R8 470
+5V (A)
RD HOLE 8
RD HOLE 7
RD HOLE 6
RD HOLE 5
RD HOLE 4
RD HOLE 3
RD HOLE 2
RD HOLE 1
I/O BUSS IN 4
I/O BUSS IN 5
I/O BUSS IN 6
I/O BUSS IN 7
I/O BUSS IN 8
I/O BUSS IN 9
I/O BUSS IN 10
I/O BUSS IN 11

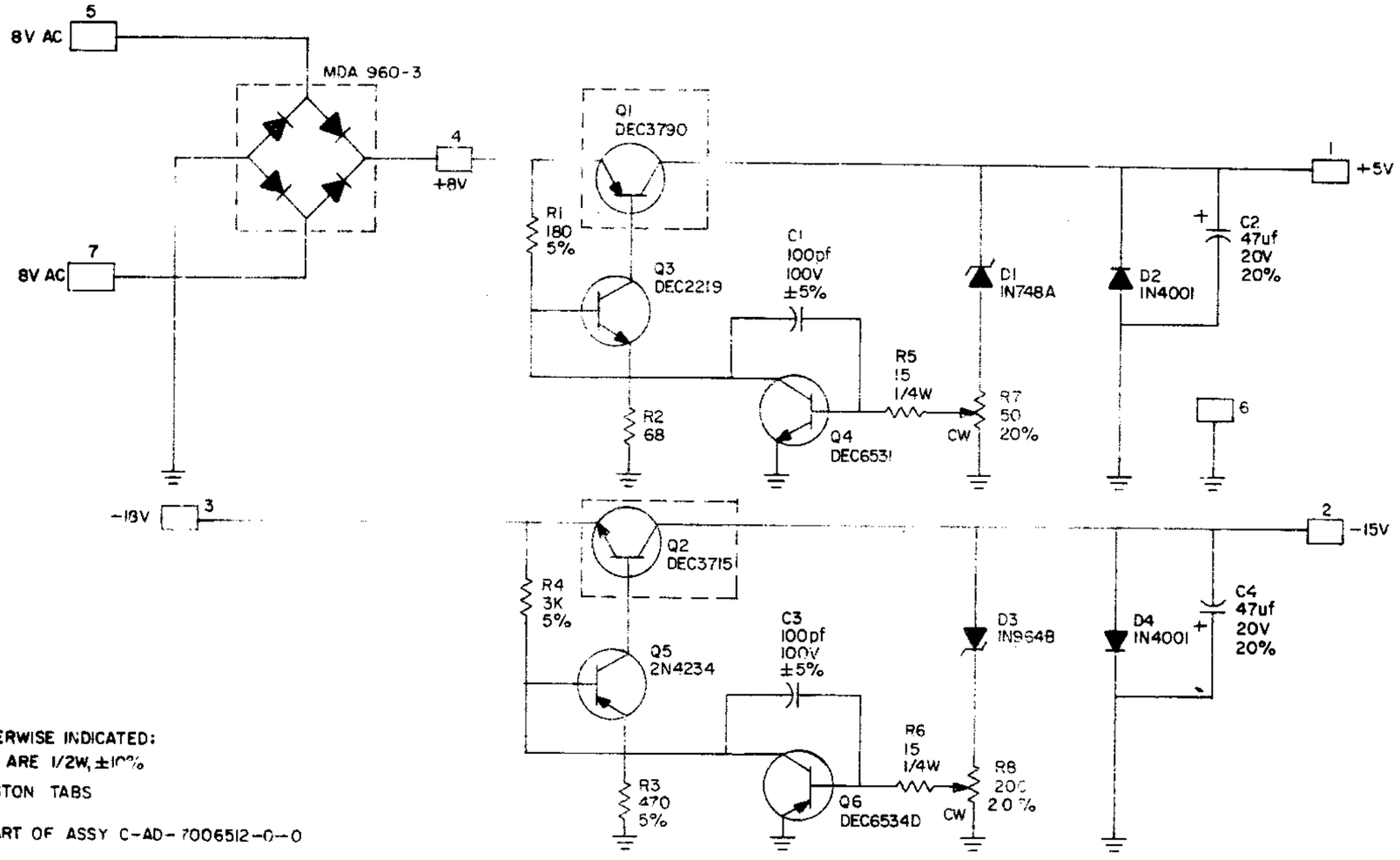
TRANSISTOR & DIODE CONVERSION CHART

EQUIPMENT CORPORATION

READER CONTROL

0 | CS | M7050—0—1 | C

SIZE B | CODE CS | NUMBER 5408918-0-1 | REV A



UNLESS OTHERWISE INDICATED:
RESISTORS ARE 1/2W, ±10%
□ = FASTON TABS
[ ] PART OF ASSY C-AD-7006512-0-0

REVISIONS	REV	CHG NO	CHK

DRN	NANCY MOORE	DATE 7/8/70
CHK'D		DATE 8/8/70
ENG		DATE 10/12/70
PROD		DATE

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
DEC3790-2	2N3790	DEC6531	MPS6531
DEC2219	2N2219	IN748A	SAME
DEC3715	2N3715	IN9648	SAME
2N4234	2N4234	IN4001	SAME
DEC6534D	MPS6534		

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

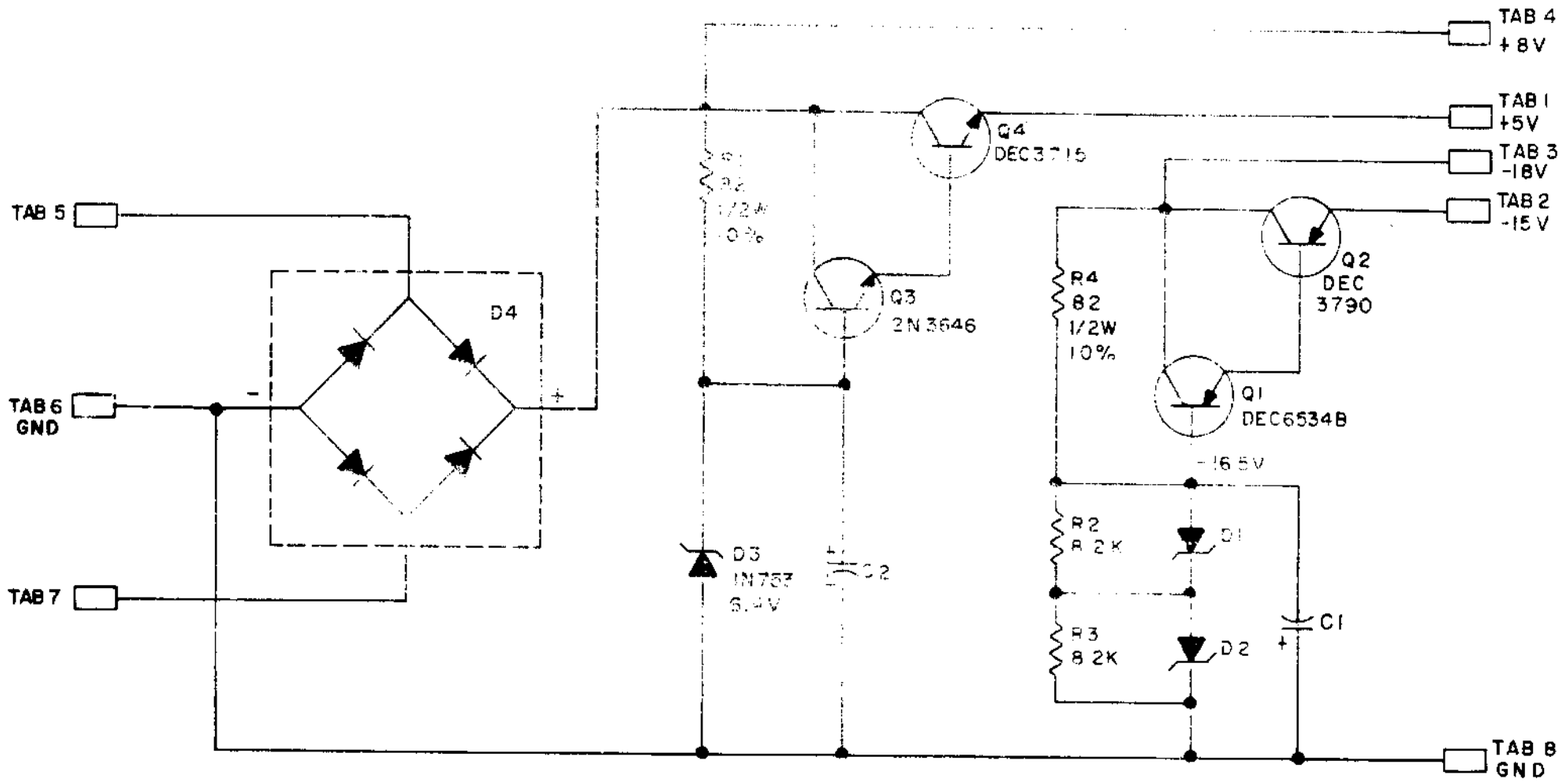
TITLE PCO REGULATOR 5408918

SIZE	CODE	NUMBER	REV
B	CS	5408918-0-1	A

PRINTED CIRCUIT REV B

DEC FORM NO
DRB 102

DIST. 524.434.1357 Page 5



UNLESS OTHERWISE INDICATED.
CAPACITORS ARE 6.8 MFD 35V 20%
DIODES ARE IN756A, 8.2V
D4 IS MDA960-3
RESISTORS ARE 1/4W 5%
TABS ARE AMP 41290

REVISIONS		
REV	CHG NO	CHK
A	00001	
B	00002	
C	00003	

DRN		DATE 3-31-69
CHK'D M. Marchand		DATE 4/1/69
ENG Dick Able		DATE 3-14-69
PROD.		DATE

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
IN753	SAME	2N3646	2N3009
IN756A	SAME		
DEC3790	2N3790		
DEC6534B	MPS6534		
DEC3715	NONE		

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

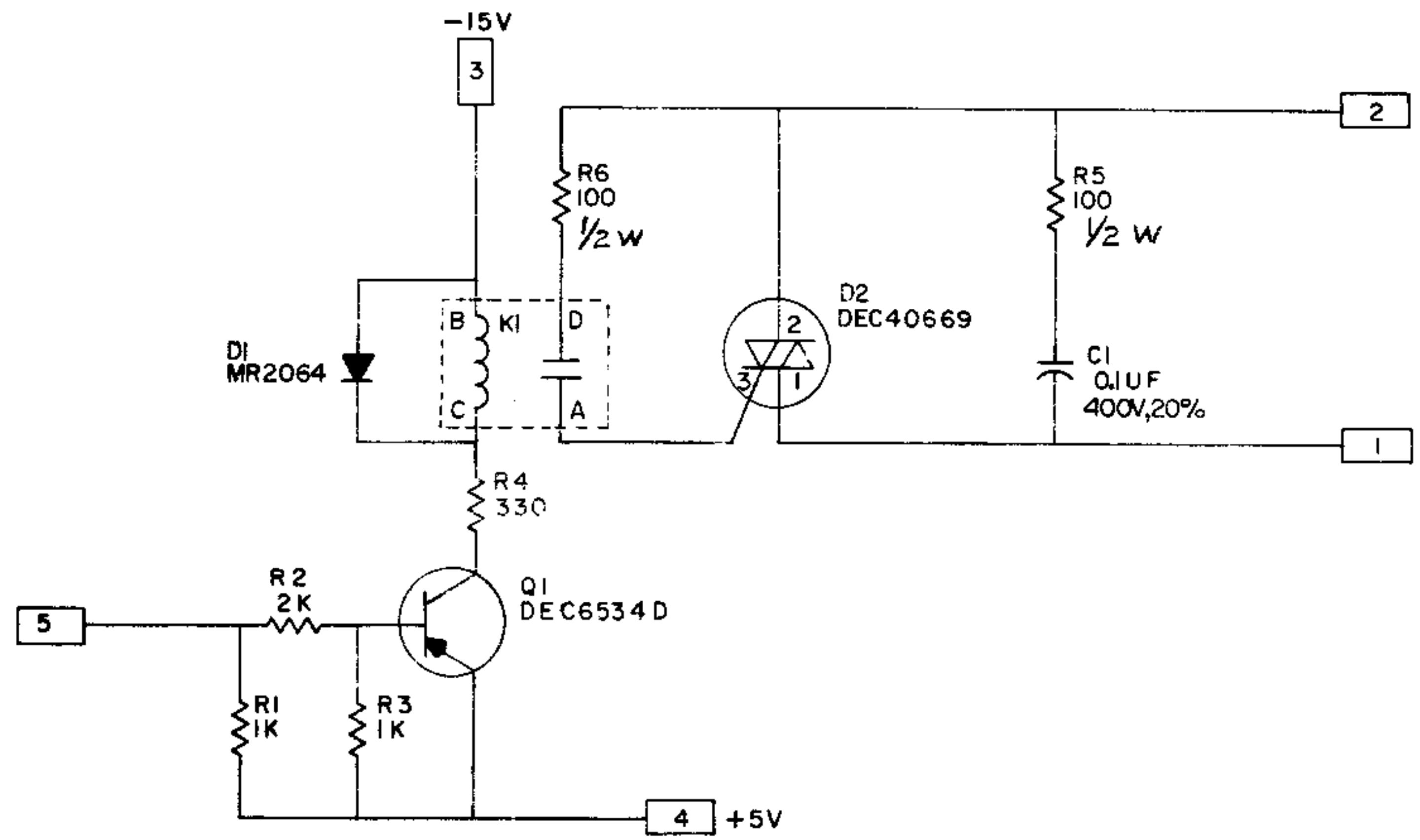
TITLE PCO POWER SUPPLY REGULATOR 5408308

SIZE	CODE	NUMBER	REV
B	CS	5408308-0-1	C

PRINTED CIRCUIT REV D

DEC FORM NO.

B | CS | 5408384-0-1 | REV. B



UNLESS OTHERWISE INDICATED:
RELAY IS DEC40034
TABS ARE AMP. # 41290
RESISTORS ARE 1/4W, 5%

REVISIONS		
REV	CHG NO.	CHK
B	REV & REDR 400001	

DRN.	M. HALLER	DATE 6-20-69
CHK'D	T.A. NALETTE	DATE 6-24-69
ENG.	G. BECKNER	DATE 11-19-69
PROD		DATE

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
		DEC6534D	MPS6534

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE TRIAC SW ASSY (PC05)

SIZE	CODE	NUMBER	REV
B	CS	5408384-0-1	B

PRINTED CIRCUIT REV B

DEC FORM NO.