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

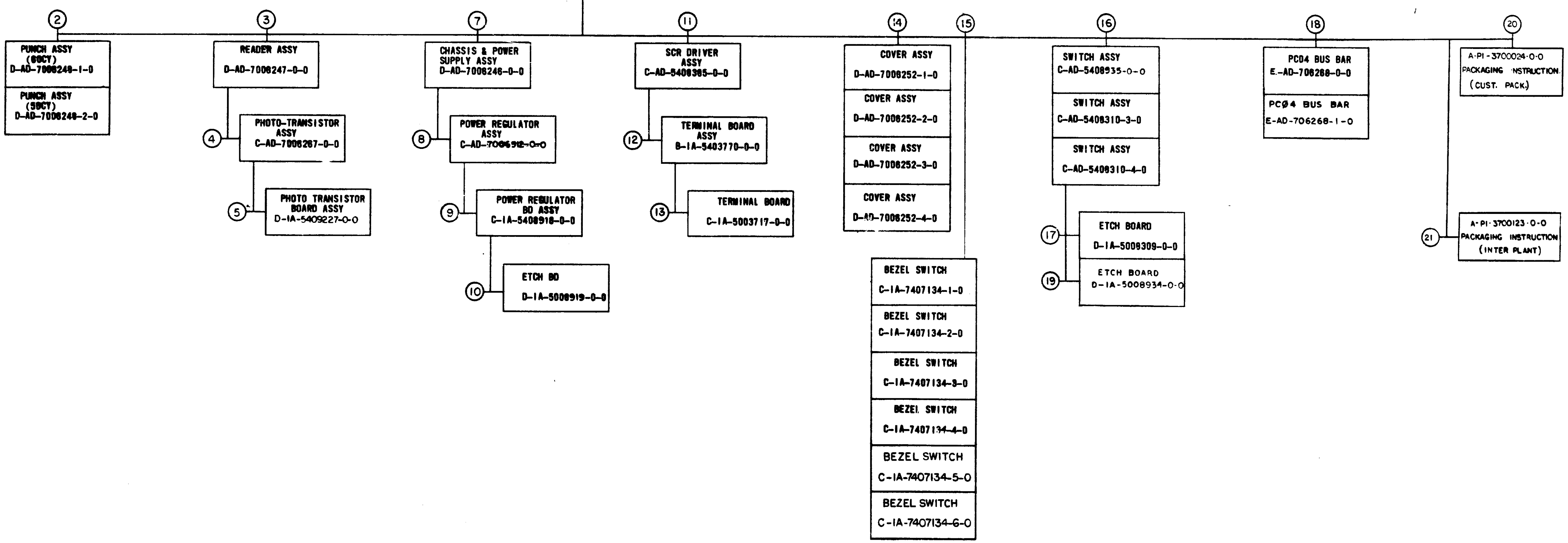
PC04/PC05 Circuit Schematics

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-M840-0-1	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

(1)

MODEL	DESCRIPTION	CY.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
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	80	-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	80	-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



UNIT ASSY. DWG. NO. D-UA-PCØ4-Ø-Ø

REVISIONS

REV.	CHANGE NO.		CHK
A	PC04-00006	T. Quillin 7-7-69; BECKNER 9-19-69	[illegible]
B	PC04-00009	T. Quillin 10-9-69; BECKNER 10-10-69	[illegible]
C	PC04-00011	[illegible]; G. BECKNER 11-6-67	[illegible]
D	PC04-00013	1-12-70; G. BECKNER 1-15-70	[illegible]
E	TU55-00014	1-22-70; I. MORRIS 1-27-70	[illegible]
F	PCO-00002	T. Quillin 3-10-70; CORELL 5-12-70	[illegible]
H	PC04-00019	T. Quillin 3-20-70; CORELL	[illegible]
J	PC04-00021	T. Quillin 4-21-70; ADLEMAN	[illegible]
K	PC04-00022	5-7-70; C. YOUSE	[illegible]
L	PC04-00024	ADLEMAN 7-6-70	[illegible]
M	PC04-00032	8-28-70; CORELL 8-31-70	[illegible]
N	PC04-00036	M. LEIS 12/8/70	[illegible]
P	PC04-00041	1-26-71; M LEIS 1-26-71	[illegible]
R	PC04-00044	3/19/71; LAWRENCE 3-24-71	[illegible]
S	PC04-00046	3-10-71; M LEIS	[illegible]
T	PC04-00051	6-11-71; E LUTTIG 6/21/71	[illegible]
U	MISC-00086	8-13-71; VARTANIAN	[illegible]
V	PC04-00054	8-3-72; M. LEIS	[illegible]
W	PC04-00057	3-20-73; A. WILLIAMS 3-27-73	[illegible]

DEC FORM NO. DRD 100

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION/MODEL: PCØ4

DO NOT SCALE DRAWING
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. [illegible] DATE 6/6/69
CHK'D. [illegible] DATE 6/6/69
ENG. [illegible] DATE 6/6/69
PROJ. ENG. [illegible] DATE 6/6/69
PROD. [illegible] DATE 6/6/69
NEXT HIGHER ASSY A-ML-PCØ4
SCALE —//—
SHEET 1 OF 2

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DRAWING INDEX LIST, PCØ4

SIZE D CODE DI NUMBER PCØ4-Ø-1 REV Z
DIST.

MECHANICAL

FIND NO	DESCRIPTION	PART NO	DEPT USAGE PROD	CUST	F/C
1	PC04- READER & PUNCH	D-UA-PC04-0-0			
	PC84- READER & PUNCH (PL)	A-PL-PC84-B-B			
	CHAD BOX	B-MD-7405300-0-0			
	TAPE CONTAINER	D-MD-7407131-0-0			
	I/O CABLE ASSY	C-IA-7006281-0-0			
	PC84-PA PUNCH	D-UA-PC84-PA-B			
	BRKT RESISTOR	C-MD-7408091-0-0			
	SCR MODULE RETAINER	C-IA-7405642-00			
	HOLD DOWN BAR	C-IA-7408339-7-0			
	PACKAGING INSTRUCTIONS	A-PI-3700024-0-0			
	PCO READER & PUNCH				
2	PUNCH ASSY (60CY)	D-AD-7006248-1-0			
	PUNCH ASSY (50CY)	D-AD-7006248-2-0			
	PUNCH ASSY (PL)	A-PL-7006248-B-0			
	CHAD TUBE	B-MD-7407398-0-0			
	PUNCH MTG CHASSIS	D-IA-7407071-0-0			
	HINGE	B-MD-7407063-0-0			
	BRKT FEED	D-MD-7408098-0-0			
	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-7407076-0-0			
	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			

MECHANICAL

FIND NO	DESCRIPTION	PART NO	DEPT USAGE 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-7006248-0-0			
	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 (PC04)	A-DC-7407476-0-0			
8	PWR REGULATOR ASSY	C-AD-7006242-0-0			
	PWR REGULATOR (PL)	A-PL-7006512-0-0			
	HEATSINK,PWR REGULATOR	C-MD-7407089-0-0			
9	PWR REGULATOR BOARD ASSY	C-IA-5408918-0-0			
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-7407869-0-0~~			
	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			

MECHANICAL

FIND NO	DESCRIPTION	PART NO	DEPT USAGE PROD	CUST	F/C
16	SWITCH ASSY	C-AD-5409375-0-0			
	SWITCH ASSY	C-AD-5408310-3-0			
	SWITCH ASSY	C-AD-5409310-4-0			
	SWITCH ASSY (PL)	A-PL-5409310-0-0			
	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	PC84 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			

ELECTRICAL

FIND NO	DESCRIPTION	PART NO	DEPT USAGE PROD	CUST	F/C
1	PAPER TAPE READER	A-ML-PC04-0			
	~~PC84-BA READER & PUNCH~~	~~A-ML-PC84-BA~~			
	~~PC84-C READER & PUNCH & DRIVER~~	~~A-ML-PC84-C~~			
	~~PC84-CA READER & PUNCH & DRIVER~~	~~A-ML-PC84-CA~~			
	~~PC84-P PUNCH~~	~~A-ML-PC84-P~~			
	~~PC84-PA PUNCH~~	~~A-ML-PC84-PA~~			
	POWER AND CONTROL SCHEMATIC DIAGRAM	D-BS-PC84-0-2			
	MODULE UTILIZATION	C-MU-PC04-0-3			
	MODULE UTILIZATION (PL)	A-PL-PC04-0-3			
	ENGINEERING SPECS	A-SP-PC04-0-4			
	WIRELIST	K-WL-PC04-0-5			
	WIRELIST	K-WL-PC04-0-6			
	WIRELIST	K-WL-PC04-0-7			
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 (PC84)	E-AD-7006268-0-0			
	BUS BAR (PC84)	E-AC-7006268-1-0			
1	ACCESSORY LIST	A-AL-PC04-0-08			

REVISIONS	CHG	CHANGE NO.	REV
	XB	PC04-00058	Y
	XB	PC04-00059	Z

A. Williams 9-26-71
WILLIAMS
Aurelio 10/5/72
A. Williams 3-27-74
A. WILLIAMS
J.R. Batt 6/4/74

FIRST USED ON OPTION/MODEL: PC04

PARTS LIST

QTY.	DESCRIPTION	PART NO.	ITEM NO

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

		DATE
DRN.	G. Morrette	6/6/69
CHK'D	R Carvelli	6/6/69
ENG.		6/6/69
PROJ. ENG.		6/6/69
APPD.		6/6/69

NEXT HIGHER ASSY: AML PC04
SCALE
SHEET 2 OF 2

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DRAWING INDEX LIST PC04

SIZE	CODE	NUMBER	REV
D	DI	PC04-0-1	Z

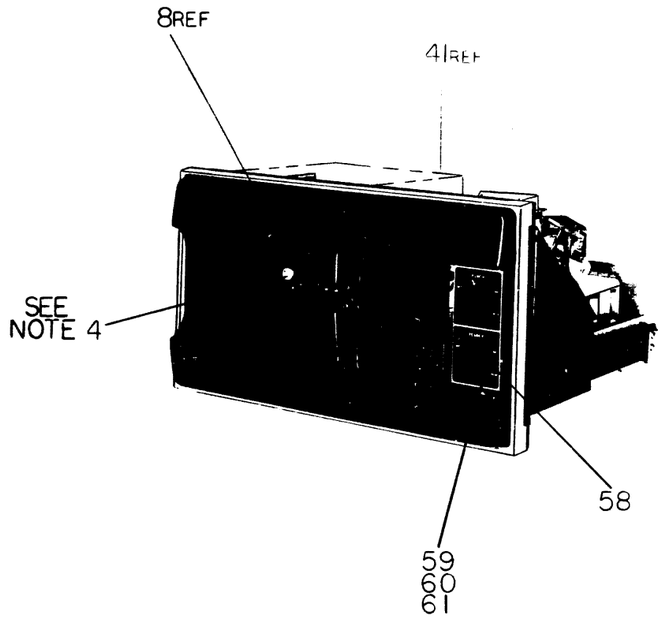
DIST. G

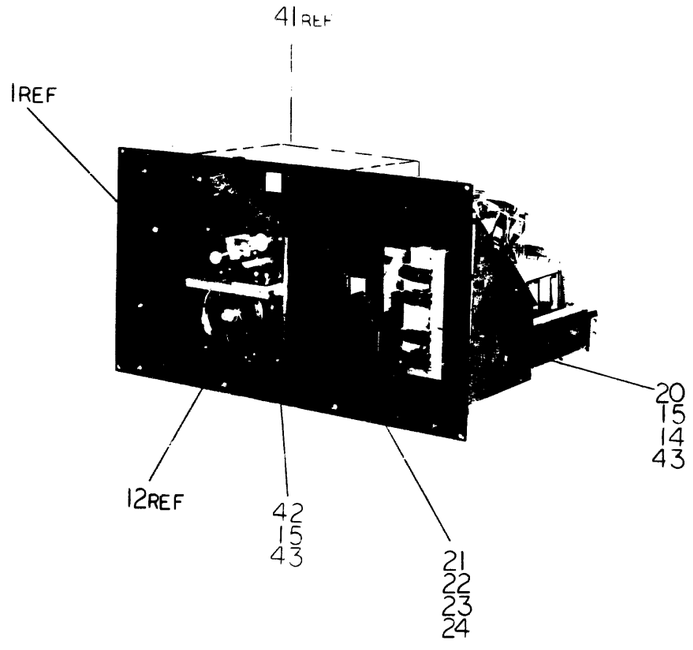
DEC FORM NO. DIID 300

LEGEND		
MODEL	VARIATION	
	CY	COMPOSITION
PC24 - B, BB, & BL	60	READER & PUNCH
PC24 - BA, BC BM	50	READER & PUNCH
PC04 - C	60	READER, PUNCH & SCR
PC24 - CA	50	READER, PUNCH & SCR
PC24 - P, & PL	60	PUNCH
PC24 - PA & PV	50	PUNCH
PC24 - R & RB	60/50	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" PARPER TAPE PUNCH DETAIL "E" FOR MODEL "C" PAPER TAPE READER, DETAIL "F" FOR MODEL "P" PAPER TAPE PUNCH AND DETAIL "D" FOR MODEL "C" AND "CA". SO/60 CY HAS NO EFFECT.~~
2. ~~IF THE SCR DRIVER UNIT IS USED, THIS WIRE WILL CONNECT TO SCR DRIVER H, NOT J5-6. 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) REQ'D.~~
6. ON ALL ~~MODELS ALL UNUSED WIRES SHOULD BE CONNECTED TO THE APPROPRIATE TABS.~~
7. ~~COUPLE HOLE DOWEL PIN TO BE IN PLACE BEFORE PERFORMING CHECK.~~





REVISIONS			
CHK	CHANGE NO.		REV.
	PC04-00006		A
	PCC1-00011		B
	PC05-00037		C
	PC04-00021		D
	PC04-00046		E
	PC04-00062		F
	PC04-00065		H
	PC04-00067		J
	PC04-00053		L
	PC04-00057		M
	PC04-00059		N
			P

BECKNER		11-6-67
G. HISLER		11-6-67
BECKNER		12-18-67
G. ADLEMAN		1-10-68
ADLEMAN		1-22-68
M. LEIS		3-7-68
M. LEIS		3-27-68
A. KENT		5-Jan-72
A. WILLIAMS		3-29-73
A. WILLIAMS		3-27-73
A. WILLIAMS		6/4/74

REDRAWN SHEETS 3&4

FIRST USED ON OPTION / MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO.
PC04		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.	M. J. Hatcher	DATE 11/6/67
CHK'D.		DATE 6/5/68
ENG.	[signature]	DATE 6/6/67
PROJ. ENG.	[signature]	DATE 6/6/67
PROD.		DATE 6/6/67

NEXT HIGHER ASSY. A-VL-PC24-A

SCALE 1/2

SHEET 1 OF 4

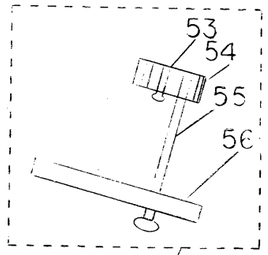
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
PC04
READER AND PUNCH

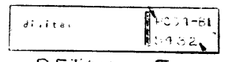
SIZE	CODE	NUMBER	REV.
D	UA	PC04-0-0	

DIST.

SEE NOTE 7



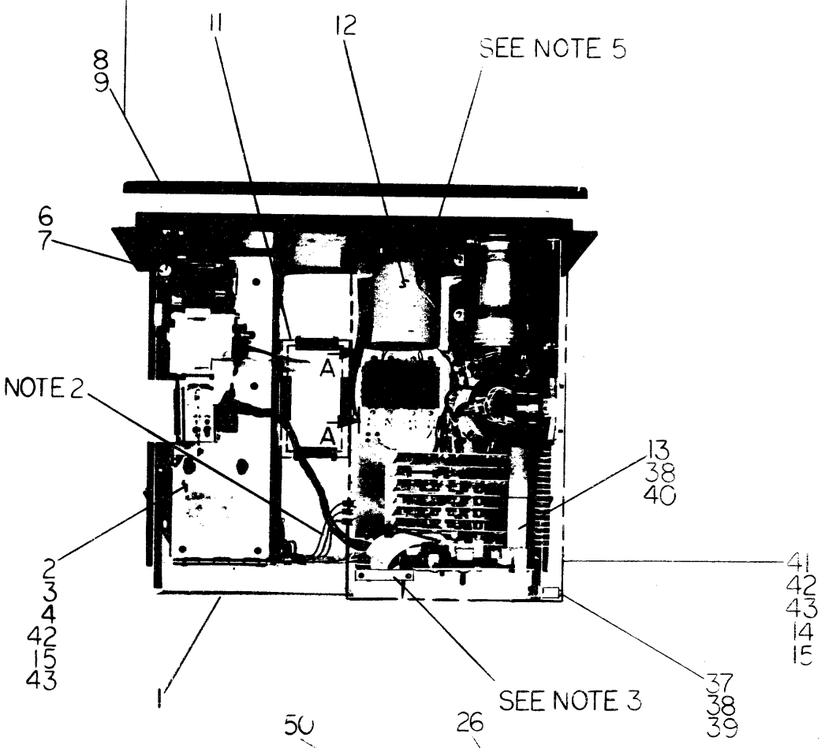
STAMP COMPLETE MODEL NO. HERE

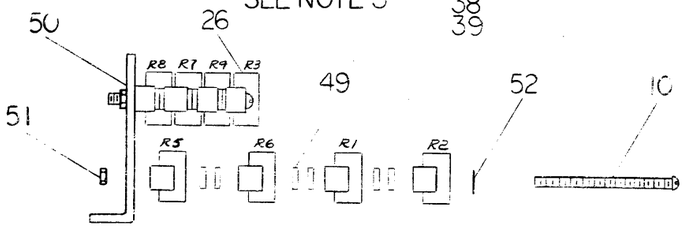


DETAIL F

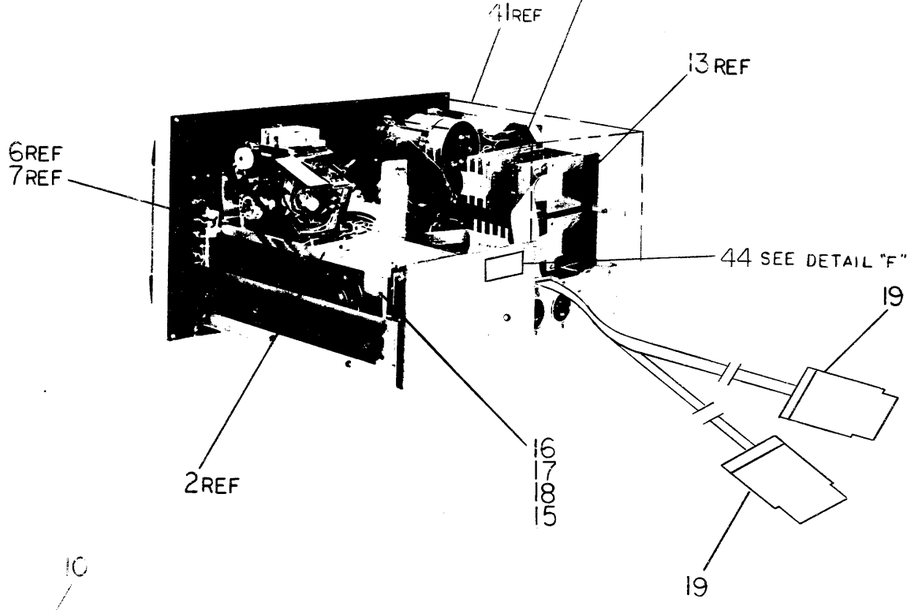
STAMP SERIAL NO. HERE (ALL PC04 TYPE UNITS ARE SERIALIZED IN A SINGLE SEQUENCE).

SEE NOTE 4





VIEW A-A



REVISIONS	REV.
CHANGE NO.	
CHK	

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 Huntoon	DATE 10/26/67
CHK'D.		DATE 6/15/67
ENG.		DATE 6/16/67
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

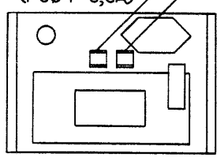
SIZE	CODE	NUMBER	REV.
D	UA	PCØ4-Ø-Ø	F

DIST.

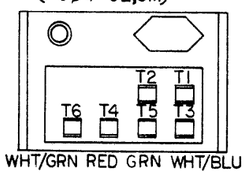
DEC FORM NO. ORC

TS
(TOP VIEW)

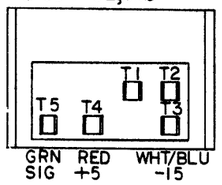
SCR DRIVER
5408385 (PCØ4-C,CA)



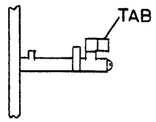
SCR DRIVER
7006720 (W/ 5408384 REV A)
(PCØ4-CL,CM)



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

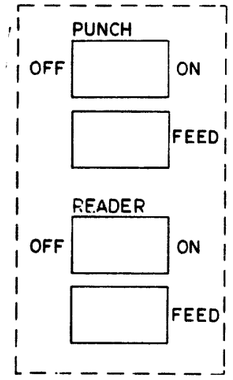


R9

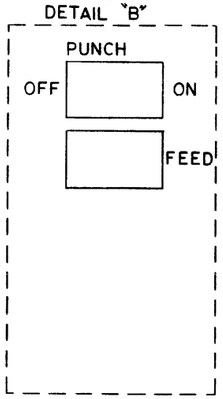


FRONT VIEW

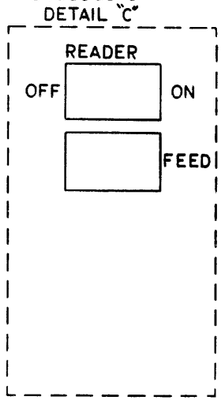
PCØ4-B,BA,BB,BC,BL,BM
5408310-4
DETAIL "A"



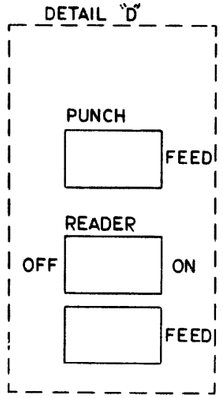
PCØ4-P,PA,PL,PM
5408935-0
DETAIL "B"



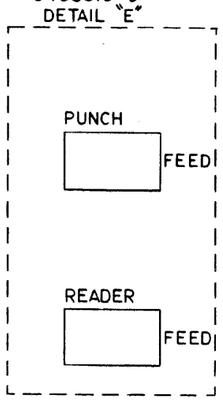
PCØ4-R,RB,RL
5408935-C
DETAIL "C"



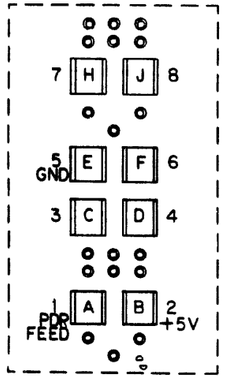
PCØ4-C,CA
5408310-3
DETAIL "D"

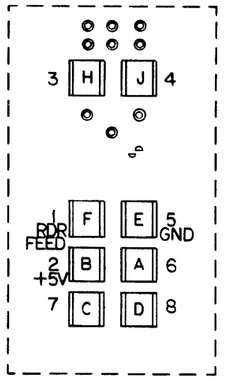


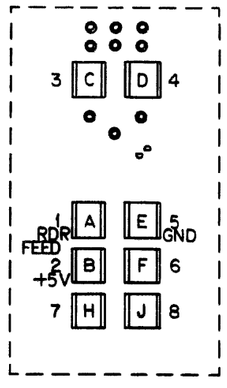
PCØ4-CL,CM
5408310-5
DETAIL "E"

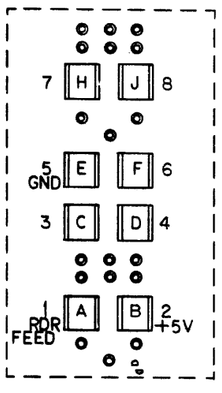


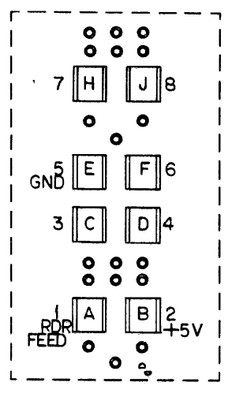
REAR VIEW











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 4-10-69	digital EQUIPMENT CORPORATION maynard massachusetts
CHK'D. R. CARVELLI	DATE 6-5-69	
ENG. G. BECKNER	DATE 6-6-69	
PROJ. ENG. G. BECKNER	DATE 6-6-69	
PROD. B. ANTONUCCIO	DATE 6-6-69	

TITLE: PCØ4 READER PUNCH (SW & TERM LOCATIONS)

NEXT HIGHER ASSY.: A-ML-PCØ4-Ø
SCALE:
SHEET 3 OF 4

SIZE	CODE	NUMBER	REV
D	UA	PCØ4-Ø-Ø	F

DIST.

NO	REVISIONS	CHANGE NO	CHK	REV

SIZE D | CODE UA | NUMBER PCØ4-Ø-Ø | REV F

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 5408385 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	A Ø 7B	
WHT/GRN #22	SCR LEAD	B Ø 1B	

CONNECTIONS FOR 7006520 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	A Ø 7B	
WHT/GRN #22	SCR LEAD	A Ø 7C	NOT USED ON 5408384 REV B
RED #22	SCR LEAD	A Ø 7A	
GRN #22	SCR LEAD	B Ø 1F	

PUNCH CONNECTIONS

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

PLUG PUNCH DATA CABLE (W Ø 23) INTO SLOT B Ø 2

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 (W Ø 77) INTO SLOT B Ø 8

READER WIRING

ITEM NO	COLOR/AWG	FROM	USING ITEM NO.	TO	USING ITEM NO.
29	WHT/VIO #22	R1 & R2	—	TS – 1	28
30	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	—	B Ø 6R	—
33	VIO #22	R2	—	B Ø 6S	—
34	YEL #22	R3	—	B Ø 5R	—
34	YEL #22	R4	—	B Ø 5S	—
35	ORN #22	R5	—	B Ø 4R	—
35	ORN #22	R6	—	B Ø 4S	—
36	BRN #22	R7	—	B Ø 3R	—
36	BRN #22	R8	—	B Ø 3S	—

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	A Ø 8 H		A Ø 8F	

COMMON CONNECTIONS

COLOR/AWG	WIRE	CONNECTION	REMARK
BLK #18	#27	GND LUG	LOGIC GND
GRY/YEL #18	#29	A Ø 8B	-15V
BLU #18	#31	B Ø 2D	-30V
BLK #18	#28	GND LUG	LOGIC GND
GRY/RED #18	#30	A Ø 8A	+5V
GRN #18	#32	B Ø 6V	-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	A Ø 1V	
WHT/BLK #22	#12	B Ø 7A	+5V
WHT/YEL #22	#13	A Ø 8F	
BLK #22	#15	B Ø 8C	
WHT #22	#16	B Ø 2U	

CONNECTION ON 7006268-Ø LOGIC BLOCK (PCØ4-B, -BA, -BB, BC, -C, -CA, -P, -PA, -R -RB)

COLOR/AWG	WIRE	CONNECTION	
BRN #22	#14	A Ø 2B	

CONNECTION ON 7006268-1 AND -2 LOGIC BLOCK (PCØ4 - BL, - BM, - CL, - CM, - PL, - PM, - RL)

COLOR/AWG	WIRE	CONNECTION	
BRN #22	#14	A Ø 1B	

NOTE: SEE SHEET 3 FOR TERMINAL IDENTIFICATION DIAGRAMS.

REVISIONS	REV	CHANGE NO.	CHK

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	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. R. CARVELLI	DATE 6-5-69	
ENG. GEO. BECKNER	DATE 6-6-69	TITLE PCØ4 READER & PUNCH (WIRING)
PROJ. ENG. GEO. BECKNER	DATE 6-6-69	
PROD. B. ANTONUCCIO	DATE 6-6-69	
NEXT HIGHER ASSY. A-ML-PCØ4		SIZE D CODE UA NUMBER PCØ4-Ø-Ø REV. P
SCALE		
SHEET 4 OF 4		DIST.

DEC FORM NO DRD 100-A

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~~	~~9006039-1~~	~~SCR, PHL PAN HD 10-32 X 5/16 LG SST~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~2~~	~~-~~	~~-~~	~~2~~	~~2~~	~~2~~	~~2~~	~~-~~	~~-~~
6	1100106	THYRECTOR CR62ØSP4B4	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	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-7006520-0-0	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-7407~~057-1-0~~	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-7407~~057-3-0~~	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 ½ 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~~	~~9006635~~	~~WASHER, INT TOOTH #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~~	~~9107360-10~~	~~10 AWG STRD TEFLON WHT~~	~~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.	
	PCØ4-00053	M	REVISED, REDRAWN M. Devine 12-13-71 A-KENT Allen Kent 4 Jan 72
	PCØ4-00057	N	Revised per ECO 3-19-73 A. WILLIAMS Williams 3/27/73
	PCØ4-00059	P	R. Hutnak 5-28-74 A. WILLIAMS J.R Cutt 6/4/74

FIRST USED ON OPTION/MODEL: PCØ4 (ALL)

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	CODE	NUMBER	REV.
C	PL	PCØ4-Ø-Ø	P

DIST.

DEC FORM NO. DRC 110

REV. P
NUMBER PCØ4ØØ
SIZE C CODE PL

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 ½ 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(9L)~~	-	-	1	1	-	-	-	-	-	-	1	1	-	-
~~47~~	~~D-IA-7407067-1-0~~	~~I/O CABLE ASSY. (9L)~~	-	-	1	1	-	-	-	-	-	-	-	-	-	-
~~48~~	~~7006145-1~~	~~I/O CABLE ASSY. (9L)~~	-	-	-	-	-	-	-	-	-	-	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 TOOTF #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

4 3 2 1

PHOTO ARRAY OUTSIDE (TOP VIEW)

SEE NOTE 5

W077 B06

B08A ON LOGIC

+5V

PHOTO AMPLIFIER A07 B07 G918

SEE NOTE 8

W077A A01

W512 A06

RD HOLE 1

RD HOLE 2

RD HOLE 3

RD HOLE 4

RD HOLE 5

RD HOLE 6

RD HOLE 7

RD HOLE 8

READER OUT OF TAPE

READER ON/OFF LINE SWITCH

+5V

READER LAMP 2Ω 10W R9

B06V2 ON LOGIC (-18V)

ALL RESISTORS ARE 25Ω 40W

SD W040 B03 R7 R8

SD W040 B04 R5 R6

SD W040 B05 R3 R4

SD W040 B06 R1 R2

RESISTOR BRACKET

READER FEED SW

SEE NOTE 1

TERMINAL STRIP

GRN & WHT

GRN

READER MOTOR

BLACK

WHITE

RED

RED & WHT

-18

READER

PUNCH

SCR DRIVER

(INTERFACE) W077 B01 W023 B02 (PUNCH)

-36V

OUT OF TAPE SWITCH (COMMON)

PUNCH SYNC

FWD TAPE, PUNCH FEED HOLE

HOLE 1

HOLE 8

HOLE 7

HOLE 6

HOLE 5

HOLE 4

HOLE 3

HOLE 2

OUT OF TAPE SWITCH, MTG ON PUNCH

PUNCH FEED SWITCH

-3V

B08C ON LOGIC

INTERFACE

A07B ON LOGIC

-15V

(T1) 115VAC (HOT-IN)

SCR DRIVER ASSY

(T2) 115VAC (HOT-OUT)

SEE NOTE 3

SEE NOTE 6

SEE NOTE 2

PUNCH ON/OFF LINE SWITCH

TERMINAL STRIP 115VAC (HOT)

THYRACTOR

PUNCH MOTOR

RED BLUE

BLACK YEL

NEUTRAL

POWER

ON OFF SWITCH S1

AC-IN P1

AC-OUT P2

HOT

SLOW BLOW 3A F1

TERMINAL STRIP

T1

F2 4ASB

+8V (UNREGULATED)

ON REGULATOR

SEE NOTE 4

XMFR

C1 10,000MFD BUS GND

C2 8600MFD

RED DOT

REC

-15V (UNREGULATED)

F3 2A

C3 18,000MFD BUS GND

REGULATOR

+5 (REGULATED)

A08A ON LOGIC

-15 (REGULATED)

A08B ON LOGIC

B06V2

POWER

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 BB, 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 P PC04 PA	PC04 R
PWR SUP TO READER	+5V TO RELAY LAMP FOR -18 TO T.S.S.	SAME AS PC04-B PC04-BA		SAME AS PC04 B PC04 BA
PWR SUP TO PUNCH	30 TO PUNCH CABLE B10 115V(HOT) TO PUNCH 115 (NEUTRAL) TO PUNCH MOTOR	[illegible]	[illegible]	
PWR SUP TO SCR DRVR		A07 TO -15 INPUT		
SCR DRVR TO PUNCH		INTERFACE -15 TO PIN 5V (HOT IN) TO PUNCH MOTOR		

PARTS LIST

QTY.	DESCRIPTION	PART NO.	ITEM NO.

REVISIONS					REV
CHK	CHANGE NO.				
[illegible]	PC04-00006	E. LUTTIG	12-17-71		A
	PC04-00007	C. YOUSE	1-19-72		C
	PC05-00003	G. ADLEMAN	3-29-72		B
	PC04-00008	G. ADLEMAN	4-19-72		D
	PC04-C-025	H. LEIS	12-7-71		E
	PC04-00046	C. YOUSE	3-29-72		F
	PC04-00055	C. YOUSE	4-19-72		H
	PC04-00058	WILLIAMS	10/5/72		J

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

REFERENCE: 7006268-0-0 LOGIC BLOCK

PC04

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 Hitman	DATE 2/16/67
CHK'D.	C. Connelly	DATE 3/7/67
ENG.	[illegible]	DATE 6/16/67
PROJ. ENG.	[illegible]	DATE 6/16/67
PROD.		DATE

NEXT HIGHER ASSY A-ML-PC04-

SCALE NONE

SHEET 1 OF 3

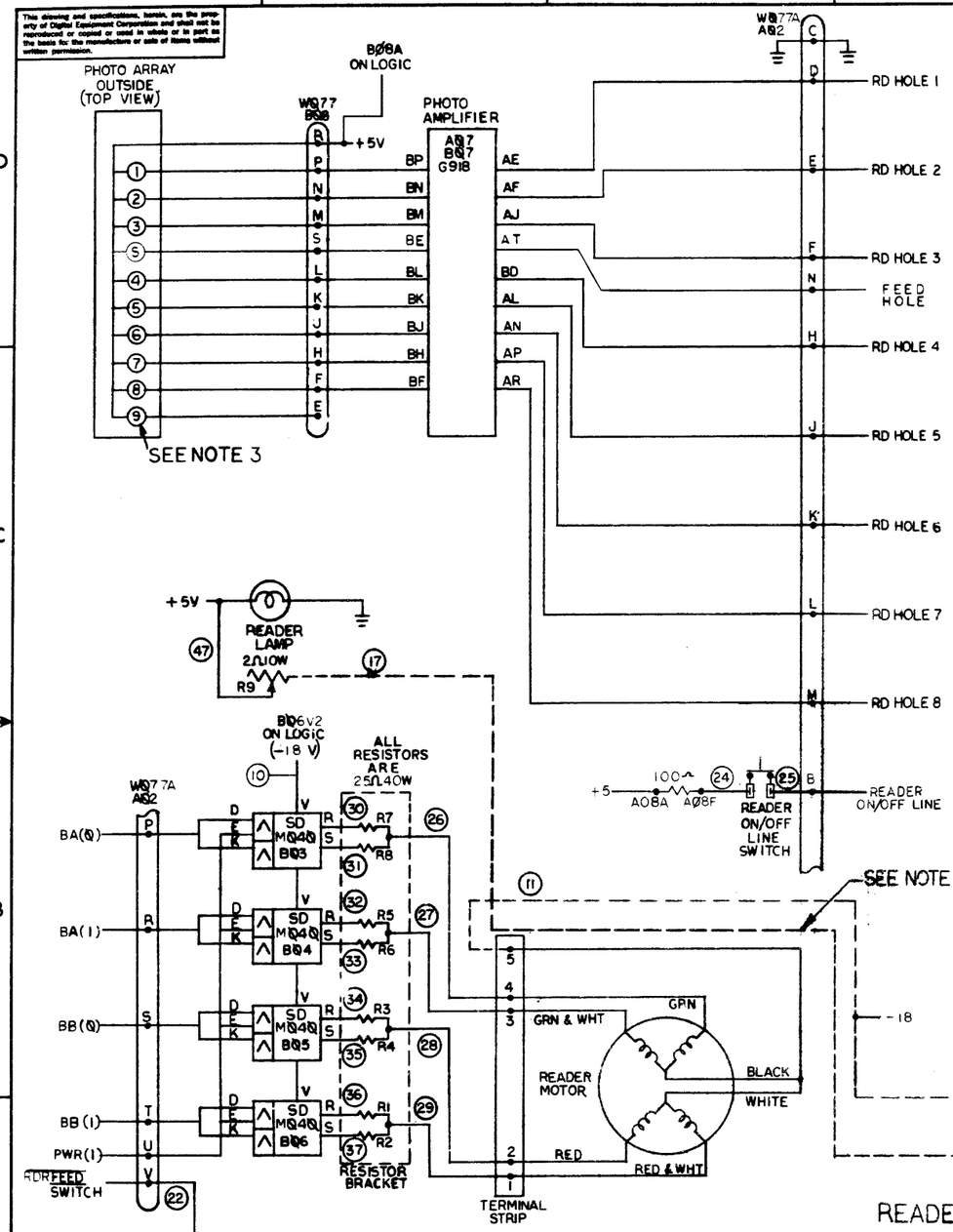
digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

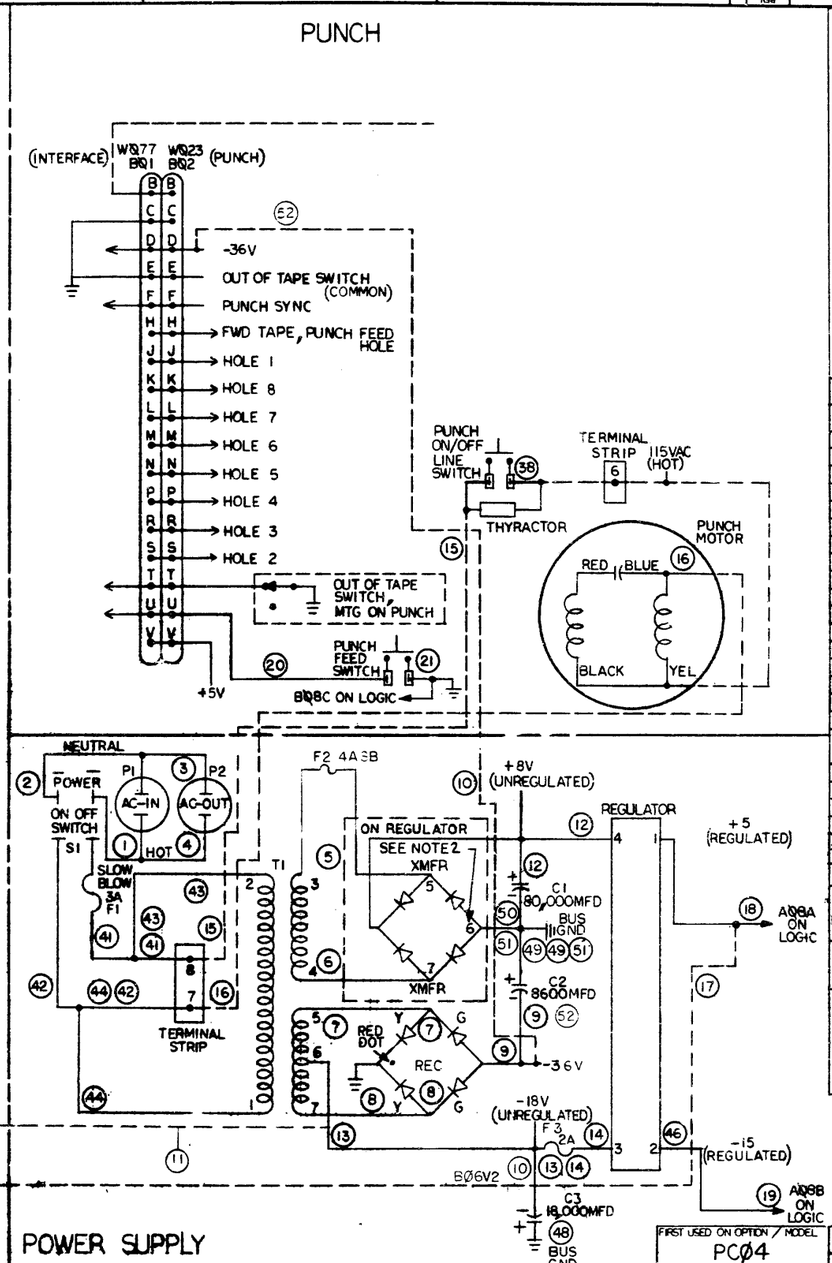
TITLE POWER AND CONTROL SCHEMATIC DIAGRAM

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

DIST.

DEC FORM NO. DRD 102A





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		MODEL PC04 P, PC04 PA	MODEL PC04 RB
PWR SUP TO READER	+5V TO READER LAMP POT -18 TO T.S.5			SAME AS PC04-B PC04-BC
PWR SUP TO PUNCH	30 TO PUNCH CABLE BOID 115V (HOT) TO PUNCH SW 115 (NEUTRAL) TO PUNCH MOTOR		SAME AS PC04 BB PC04 BC	

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

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-

SCALE: NONE

SHEET 2 OF 3

DRAWN Robert Watson DATE 2/9/67
CHECK Eric Carvalho DATE 6/5/69
ENG Ole Buckon DATE 6/11/69
MFG ENG Ole Buckon DATE 6/11/69
QUAL Paul Lane DATE 6/18/69

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

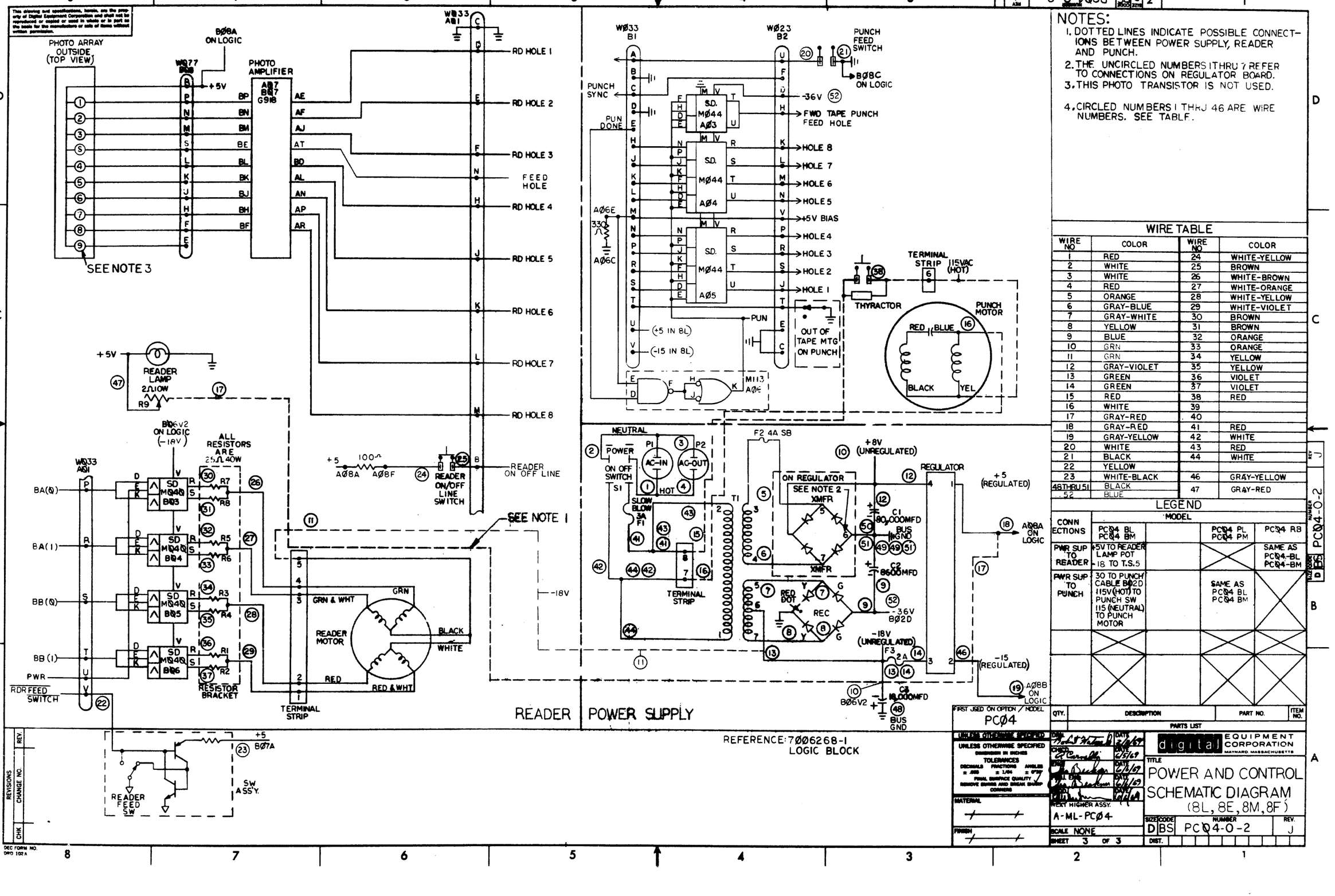
TITLE: POWER AND CONTROL SCHEMATIC DIAGRAM (8I)

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

DIST.

REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM NO. DRO 188



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
48TH RU 51	BLACK	47	GRAY-RED
52	BLUE		

LEGEND

CONNECTIONS	MODEL PCØ4 BL, PCØ4 BM		MODEL PCØ4 PL, PCØ4 PM	MODEL PCØ4 R8
PWR SUP TO READER	+5V TO READER LAMP POT - 18 TO T.S.5			SAME AS PCØ4-BL PCØ4-BM
PWR SUP TO PUNCH	30 TO PUNCH CABLE BØ2D 115V (HOT) TO PUNCH SW 115 (NEUTRAL) TO PUNCH MOTOR		SAME AS PCØ4 BL PCØ4 BM	

PARTS LIST

QTY.	DESCRIPTION	PART NO.	ITEM NO.

FIRST USED ON OPTION / MODEL: PCØ4

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .XX ± .XXX
FRACTIONS ± 1/64
ANGLES ± 0°30'
FINAL SURFACE QUALITY 63
REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL
FINISH

REVISIONS	REV.	CHANGE NO.	CHK

DSN		DATE 2/4/69
CHKD		DATE 2/5/69
ENGR		DATE 2/12/69
PROJ ENGR		DATE 2/14/69
PROJECT		DATE 2/19/69
NEXT HIGHER ASSY.	A-ML-PCØ4-	
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	PCØ4-0-2	J

DIST.

DEC FORM NO. DRD 102A

REV J
NUMBER PCØ4-0-2
SIZE/CODE D BS

7ØØ6267 PHOTO TRANSISTOR ASSY REV C OR LATER

5409227 PHOTO TRANSISTOR BOARD

W077 BØ8

G918 AØ7

READER CABLE W033 PØ1

HOLE 1 — P — BP — AE — D — PTR HOLE 1 H
HOLE 2 — N — BN — AF — E — PTR HOLE 2 H
HOLE 3 — M — BM — AJ — F — PTR HOLE 3 H
FEED HOLE — S — BE — AT — N — PTR FEED HOLE H
HOLE 4 — L — BL — BD — H — PTR HOLE 4 H
HOLE 5 — K — BK — AL — J — PTR HOLE 5 H
HOLE 6 — J — BJ — AN — K — PTR HOLE 6 H
HOLE 7 — H — BH — AP — L — PTR HOLE 7 H
HOLE 8 — F — BF — AR — M — PTR HOLE 8 H
EDGE SENSOR — E — (NOT USED) — C

+5V (BØ8A)

CS REV B OR LATER
BD REV D OR LATER
THRES. TP BT
OUTPUT T.P AV

(-15V) "4" — "3" — "13" — 1ØØΩ RESISTOR (MUST BE REMOVED) — +5 AØ8A
"14" — BRN #22 — AØ8F
WHT-YEL #22

READER ON SW (SERVES NO FUNCTION)

READER LAMP GRY-RED
GRY-RED — 2Ω 1ØW — +5V (AT P.S.)

YEL "11" #22 — PTR FEED SWITCH L

P1Ø 54Ø831Ø-5 REV D OR LATER
"2" WHT-BLK — "12" — +5V (BØ7A)
47Ω
READER FEED SW
"1"
CONN AT PUNCH FEED SW

FEMALE P2
"11" — RED #18
"1Ø" — WHT #18
BRASS
SILVER OR WHT
MALE P1
"8" — "7" — "4" — WHT #18 — "3"
"5" — "6" — "9" — "12" — "14" — RED #18 — F1 3A SLOW BLOW — S1 POWER

TS
"13" — "15" — WHT #18
"16" — RED #18
"2"

105 TO 13Ø V 5Ø/6Ø HZ 2.8A MAX
"1"

READER CABLE W033 AØ1

PTR A (Ø) H — P — D — M04Ø BØ3 — R — BRN — RT — WHT-BRN — TS 4 — GRN
K — M04Ø BØ3 — S — BRN — R8
PTR A (1) H — R — D — M04Ø BØ7 — R — ORN — R5 — WHT-ORN — TS 3 — WHT-GRN
K — M04Ø BØ4 — S — ORN — R6
PTR B (Ø) H — S — D — M04Ø BØ5 — R — YEL — R3 — WHT-YEL — TS 2 — RED
K — M04Ø BØ5 — S — YEL — R4
PTR B (1) H — T — D — M04Ø BØ6 — R — VIO — R1 — WHT-VIO — TS 1 — WHT-RED
PTR POWER H — U — K — M04Ø BØ6 — S — VIO — R2

25Ω 4ØW 5% EACH

"32" GRN #18 — -18V — TS 5 — WHT — BLK
GRN #18 — "35" — FROM C3

READER STEPPING MOTOR
175Ω ER
SUPERIOR HS-5ØE 3V 3A WINDING 2 STEPS PER CHARACTER

T1
"1" ORN #18 — "12" — F2 4A FAST — "13" ORN #18 — "26"
"2" GRAY/BLU #18 — "24"
GRY/WHT "3" #18 — "17" — "16"
"4" — "19" — DM2 — "18" BLK #18 — "34"
"5" — "14" — "15"
YEL #18 — GRN #18 — "36" BLK #18
BLU #18

5408918 REGULATOR BOARD
+6 TO +1Ø V — +5V "23" GRY/RED #18 — TO READER LAMP "7" — GRY/RED #18 — TO AØ8A "3Ø"
"21" — GRY/VIO #18
"9" + C1 8ØMF +75-1Ø% 15V — "8" — BLK #18 — "22"
BLK #18 — "28" TO GND LUG ON LOGIC
BLK #18 — "27" TO GND LUG ON LOGIC
C3 1ØMF +75-1Ø% 25V — "1Ø"
"11" GRN #18 — "25" — "26" -15V — "29" GRY/YEL #18 — TO AØ8B
GRN #18 — "37" — -14 - 22V — F3 1A FAST — GRN #18 — "35" — TO TS #5
GRN #18 — "32" — TO BØ6V
C2 + 8.6MF 5ØV — "33" -3Ø TO -44V — BLU #18 — TO BØ2D "-3ØV"

REVISIONS			
REV	CHANGE NO	CHK	

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN.	DATE
DECIMALS	ANGLES	CA Wallace	7-24-71
.XXX = .005 .XX = .02 .X = .1	±0° 30'	CHK'D. Allan Kent	DATE 2 Dec 71
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓		ENG. Allan Kent	DATE 2 Dec 71
MATERIAL		PROJ. ENGR. Allan Kent	DATE 2 Dec 71
FINISH		PGM.	DATE 12/2/71

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: READER AND POWER SUPPLY (PCØ4-CL & -CM)

NEXT HIGHER ASSY. A-ML-PCØ4-Ø

SCALE —

SHEET 1 OF 1

SIZE	CODE	NUMBER	REV.
D	BS	PCØ4-CL-RD	

DIST.

DEC FORM NO DR 102-B

CABLE TO CONTROL M926

W033 BØ1

W023 BØ2

MØ44 AØ3

MØ44 AØ4

MØ44 AØ5

50 µF 50V -2Ø% +1ØØ%

FWD FEED

45Ω

8ØΩ 1ØW

PUNCH INTERPOSER MAGNETS 32ØΩ EACH

PTP SOL DRIVE IN H — M1 — M — F H T D E U V — C M

PTP HOLE 8 IN H — H1 — 1ØØ — H — N P R — K — HOLE 8

PTP HOLE 7 IN H — J1 — 1ØØ — J — J K S — L — HOLE 7

PTP HOLE 6 IN H — K1 — 1ØØ — K — F H T — M — HOLE 6

PTP HOLE 5 IN H — L1 — 1ØØ — L — D E U — N — HOLE 5

HOLE 4

PTP HOLE 4 IN H — N1 — 1ØØ — N — N P R — P — (FEED HOLE) INDEX

PTP HOLE 3 IN H — P1 — 1ØØ — P — J K S — R — HOLE 3

PTP HOLE 2 IN H — R1 — 1ØØ — R — F N T — S — HOLE 2

PTP HOLE 1 IN H — S1 — 1ØØ — S — D E U — J — HOLE 1

P/O T006145 CABLE ASSY

-3ØV BLU #18 "31"

P/O T006248 PUNCH ASSY

M956

P/O T006248 PUNCH ASSY

GENERATOR DUMMY COIL 685Ω

TIMING GENERATOR COIL 685Ω

ROTATING FERRITE CAM

GND — C1 — C — C
PTP RAW SYNC — D1 — D — F
PTP SYNC BIAS (-15V) — U1 — 1Ø — U — -15 — V

PTP NO TAPE — V1 — 1Ø — V — T — (NC)
GND — T1 — T — E — (C) — OUT OF TAPE SW
PTP FEED SW — E1 — E — U — N/U — (NO)
PTP MOTOR L — F1 — F

"16"

P/O 54Ø831Ø-5 SW ASSY

WHT #22 PUNCH FEED SW "6"

PUNCH FEED SW — NC — NO — (MOMENTARY)

GND TO READER FEED SW

"5" BLK #22 "15" (BOBC)

+5V AØ7A

RED

1K

4.7V1

GRN — 5

12K

Q1

K1

BLU/WHT — 3

-15V AØ7B

115V LINE

PUNCH MOTOR

WHT #18

7 µF

RED

GRN (BLU)

P/O 54Ø831Ø-5 SW ASSY

"1Ø" — RED #18 — T3

"8"

PUNCH ON SW (SERVES NO FUNCTION) NOT SUPPLIED

"7"

"9"

GE 5KPM49EGR76 1/3 HP 3400/2800 RPM 115V 1.0/0.96 A 1PH 60/50 HZ 6.0 µF CAP

WHT (YEL)

BLK

RED #18

T1 — DT 6RS20SP4B4 — T2

RED

BRN

RED DOT

YEL

D5 C20B (GE)

D6 MDA 952-5

YEL DOT

NO DOT

4.7

4.7

(1) (2) (3) (4)

REVISIONS	REV	CHANGE NO.	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
KI1Ø		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	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CH'D. Allen Kent	DATE 2 Dec 71	
ENG. Allen Kent	DATE 2 Dec 71	
PROJ. ENG. Allen Kent	DATE 2 Dec 71	
PROD.	DATE 12/2/71	

TITLE: PUNCH

(PCØ4 -CL $ - PNCH)

NEXT HIGHER ASSY. A-ML-PCØ4-Ø

SCALE

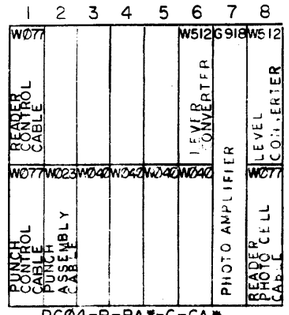
SHEET 1 OF 1

SIZE	CODE	NUMBER	REV.
D	BS	PCØ4-CL-PNCH	

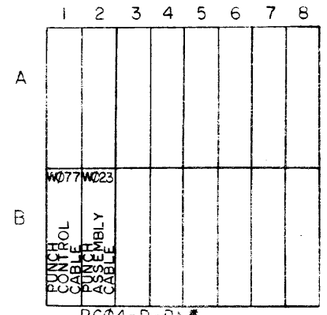
DIST.

DEC FORM NO DRD 102-B

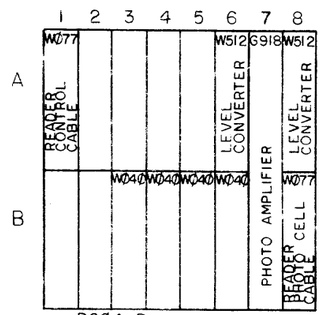
NOTES:
1. G918 REVISION MUST BE "B" CIRCUIT SCHEMATIC, "D" ETCHED BOARD OR HIGHER.
2. * 50 HZ VARIATION



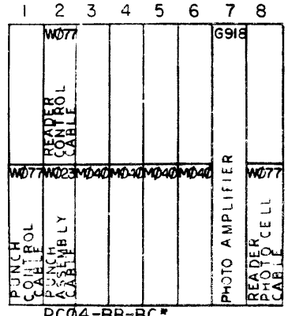
PCØ4-B-BA*-C-CA*
(SEE E-AD-7ØØ6268-Ø-Ø WITH NOTE 4; PDP8,-8/S,-9, KAIØ)



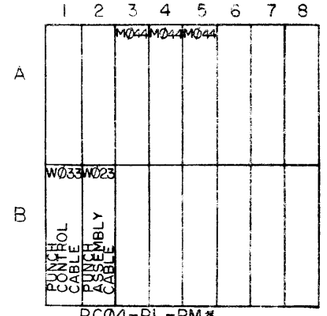
PCØ4-P-BA*
(SEE E-AD-7ØØ6268-Ø-Ø WITH NOTE 4; PDP8,-8/S)



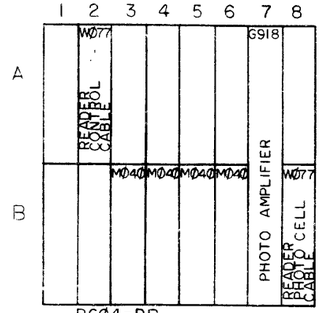
PCØ4-R
(SEE E-AD-7ØØ6268-Ø-Ø WITH NOTE 4; PDP-8,-8/S)



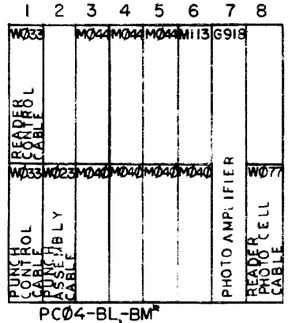
PCØ4-BB-BC*
(7ØØ6268-Ø; PDP-8/I)



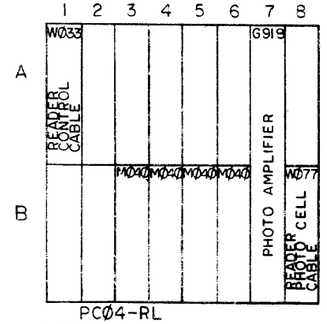
PCØ4-PL-PM*
(7ØØ6268-1; PDP-8/L,-8/E -8/M -8/F)



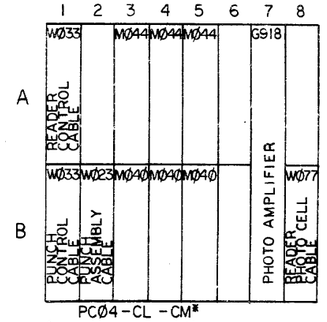
PCØ4-RB
(7ØØ6268-Ø; PDP-8/I)



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.	
	PC04-00053	C	REVISED PE DRAWN
	PC04-00055	D	Per Kent 4 Jan 72
			KENT
			4-19-72
			C. VOUSE

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 DRD 100-A

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY P. MARCOTTE	CHECKED R Carvelli	SECTION 1
DATE	DATE 6/5/69	
ENG Jo Rectum 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-OC055
	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 & 4 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 9) FOR HAND WRAPPED WIRING.
4. PDP8/8S/9/KA10
   TO CONVERT 7006268-0 BLOCK BACK TO NEG. LOGIC MACHINES, DO FOLLOW NG:
   A. REMOVE TRANSISTORS IN READER FEED SWITCH ASS'Y
   B. WIRE CHANGES
      DELETE: — B08S-B07E
      ADD: — A02N-A08H, B03E B07E, A02E A01N
   C. DELETE 100Ω RESISTOR FROM A08A-A08F

EXTERNAL COMPONENT TABLE						
ITEM	COMP	POL	FROM	TO	POL	REMARKS
10	CAP	+	A03A	A03C	-	6.8μF
10	CAP	-	B03B	B03C	+	6.8μF

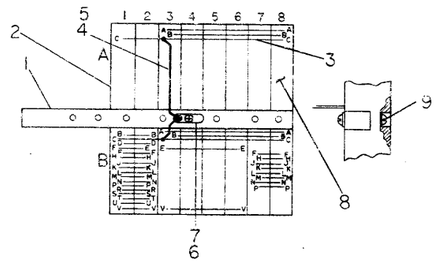
7006268-2

EXTERNAL COMPONENT TABLE						
ITEM	COMP	POL	FROM	TO	POL	REMARKS
10	CAP	+	A03A	A03C	-	
10	CAP	-	B03B	B03C	+	
12	RES		A08A	A08F		100Ω
13	RES		A06E	A06C		330Ω

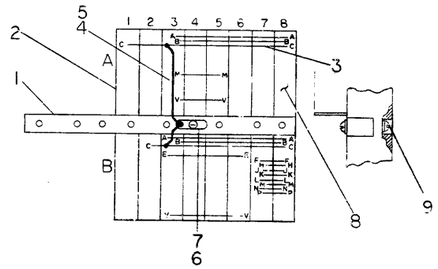
7006268-1

EXTERNAL COMPONENT TABLE						
ITEM	COMP	POL	FROM	TO	POL	REMARKS
10	CAP	+	A03A	A03C	-	
10	CAP	-	B03B	B03C	+	
12	RES		A08A	A08F		100Ω

7006268-0



7006268-0
(8,8S,8I)



7006268-1
(8L, 8E, 8M.8F)
7006268-2
(KI10)

REVISIONS			
CHANGE NO	REV		
PC04-00006	A	REVISED & REDRAWN	BECKNER
PC04-00011	B		BECKNER
PC04-00022	C		CLOUSE
PC04-00041	D		LEIS
PC04-00053	E		A.KENT
PC04-00055	F		C. YOUSE
PC04-00054	G		C. YOUSE

FIRST USE ON OPTION/MOD.	PCØ4	QTY.	DESCRIPTION / PART NO. / ITEM NO.
UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES; TOLERANCES: DECIMALS ± .005, FRACTIONS ± 1/64, ANGLES ± 0°30'; FINISH, SURFACES SMOOTH TO 125 MICRO INCHES OR BETTER			PARTS LIST
MATERIAL		DRN	R. HUTNAK
FINISH		CHK'D	D. CARVELLI
		ENG	G. BECKNER
		PROJ. ENG	G. BECKNER
		MOD	CANTONWILLIO
		NEXT HIGHER ASSY	D-UA-PCØ4-ØØ
		SCALE	
		SHEET	OF

digital EQUIPMENT CORPORATION

TITLE: (PCO4) WIRED ASSY

SIZE CODE: E | NUMBER: AD 7006268-0-0 | REV:

DIST:

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY ROBERT RUTNAK	CHECKED [illegible]	SECTION 1
DATE 2/20/69	DATE 5/5/69	
ENG [illegible]	PROD [illegible]	ISSUED SECT. 1
DATE 6/4/69	DATE [illegible]	

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 COIN 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 PAN 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%~~	~~1~~		
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		MK	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, BC, 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

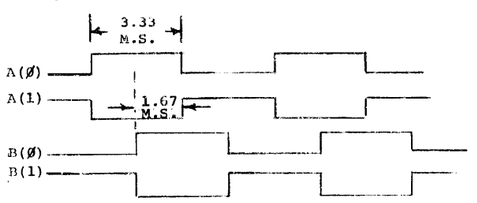
	Outputs	Inputs
Logic 1 is	⩾+2.4v	⩾+2.0v
Logic 0	⩽+0.4v	⩽+0.8v

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
Charles A Young	Joe D Leibson	A	SP	PCØ4-0-4	A

DEC FORM NO. DRA 107

[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

[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	PCO4-0-4	A

DEC FORM NO DRA 108A

[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	PCO4-0-4	A

DEC FORM NO DRA 108A

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	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/S
PCØ4C	D/BS/PCØ4-0-2 Page 1 of 3	None	2-W077A	1-G918 4-M040 2-W512	PDP9; PDP1Ø

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 2	3	4	5	7	8	9	10	11	12	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-7006246-0-0
(8) POWER REGULATOR ASSY C-AD-7006652-0-0
(9) POWER REGULATOR BD ASSY C-IA-5408918-0-0
(10) ETCH BD D-IA-5008919-0-0

(11) TRIAC DRIVER ASSY D-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

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-5408310-1-0
(17) ETCH BOARD D-IA-5008309-0-0
(16) SWITCH ASSY C-AD-5408935-0-0
(19) 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

REVISIONS CHK	CHANGE NO	REV
	PC05-00001	A
	PC05-00002	B
	TU55-00014	C
	PC05-00006	D
	PC05-00008	E
	PC05-00014	F
	PC05-00015	H
	PC04-00021	J
	PC05-00016	K
	PC04-00028	L
	PC04-00032	M
	PC05-00018	N
	PC05-00019	P
	PC05-00029	R
	PC05-00021	S
	PC05-00051	T
	MISC-60086	U
	PC05-00024	V
	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 ✓
REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL
FINISH

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

DRN		DATE 6/19/69
CHK'D	G. Cornelius	DATE 6/24/69
ENG		DATE 7/11/69
PROJ. ENG.		DATE 7/11/69
MFG		DATE 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.

FORM NO. 100

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-7407131-0-0			
	~~BRKT; RESISTOR~~	~~C-MD-7408038-0-0~~			
	POWER SUPPLY COVER	E-IA-7407436-0-0			
	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-7006248-1-0			
	PUNCH ASSY (50 CY)	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			
	SHIELD PUNCH CONTACTS	B-MD-7407132-0-0			
	TAPE DEPRESSOR	D-SC-1209915-0-0			
	PIN	B-MD-7408172-0-0			
	PULLY (80CY)	B-MD-7406088-1-0			
	PULLY (50CY)	B-MD-7406088-2-0			
	PAPER TAPE PUNCH FEED BRKT	D-MD-7408088-0-0			
	TAPE CHUTE	D-IA-7408171-0-0			
	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-7407076-0-0			
	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-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-7407584-0-0			
	SHIM	B-MD-7407800-0-0			
	LENS	B-MD-7404989-0-0			

MECHANICAL			DEPT USAGE		
FIND NO.	DESCRIPTION	PART NO.	PROD	CUST	F/C
4	PHOTO TRANSISTOR ASSY	C-IA-7006267-0-0			
5	PHOTO TRANSISTOR BD ASSY	B-IA-5409227-0-0			
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-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-5309640-0			
	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 -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-7407068-0-0			
	CIRCUIT SCHEMATIC	B-CS-5408308-0-1			
9	PWR REGULATOR BOARD ASSY	C-IA-5408918-0-0			
10	ETCH BOARD	D-IA-5006919-0-0			
11	TRIACDRIVER ASSY	C-AD-7006520-0-0			
	~~SCR DRIVER ASSY (PL)~~	~~A-PL-7006520-0-0~~			
	SCR DRIVER CHASSIS	C-IA-7407070-0-0			
12	TERMINAL BD ASSY	E-IA-5408384-0-0			
~~13~~	~~TERMINAL BOARD~~	~~C-IA-5006363-0-0~~			
14	COVER ASSEMBLY	D-AD-7006252-3-0			
	COVER ASSEMBLY	D-AD-7006252-4-0			
	COVER ASSEMBLY	D-AD-7006252-5-0			
	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			
	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-5008309-0-0			
	FLIP CHIP MODULE	D-MD-1402230-0-0			
18	PCØ5 BUS BAR	C-AD-7006253-0-0			
	MTG. BAR (6 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			
	~~PCØ5 8A READER & PUNCH & DRIVER~~	~~A-ML-PCØ5-CA~~			
	~~PCØ5-P PUNCH~~	~~A-ML-PCØ5-A~~			
	~~PCØ5-PA PUNCH~~	~~A-ML-PCØ5-BA~~			
	~~PCØ5-R~~	~~A-ML-PCØ5-B~~			
	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-PCØ5-0-05			
7	CHASSIS & POWER SUPPLY ASSY	D-AD-7006246-0-0			
11	TRIAC DRIVER ASSY	C-AD-7006520-0-0			
	~~CIRCUIT SCHEMATIC~~	~~B-CS-7006520-04~~			
18	BUS BAR (PCØ5)	C-AD-7006253-0-0			
8	PWR REGULATOR ASSY	C-AD-7006512-0-0			
	CIRCUIT SCHEMATIC	B-CS-5408918-0-1			

REV.	CHANGE NO.	CHK	DRAWN	DATE	ISSUED
N	PCØ5-00025	PM	T. Wilson 1-8-73		
			A. WILLIAMS		
Y	PCØ5-00026	PM	Graham 2/3/73		
			G. Allain 3-28-73		
			A. WILLIAMS		
2	PCØ5-00027	PM	Jas Allen 4/27/73		
			A. WILLIAMS		

FIRST USED ON OPTION/MODEL: PCØ5

DO NOT SCALE DRAWING

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

		DATE
DRN	Paul Marcotte	12/29/67
CHK'D	L. Connelly	12/29/67
ENG		2/11/69
MFG ENG		2/11/69
QA		2/11/69
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*

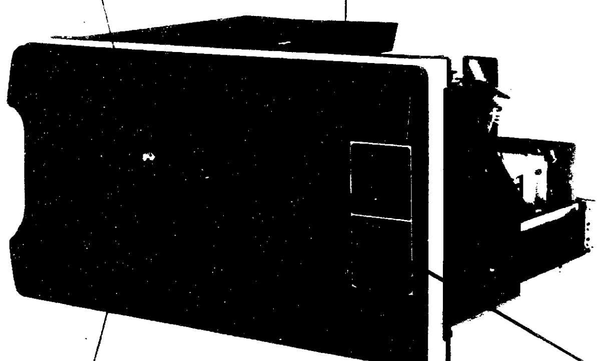
DIST.

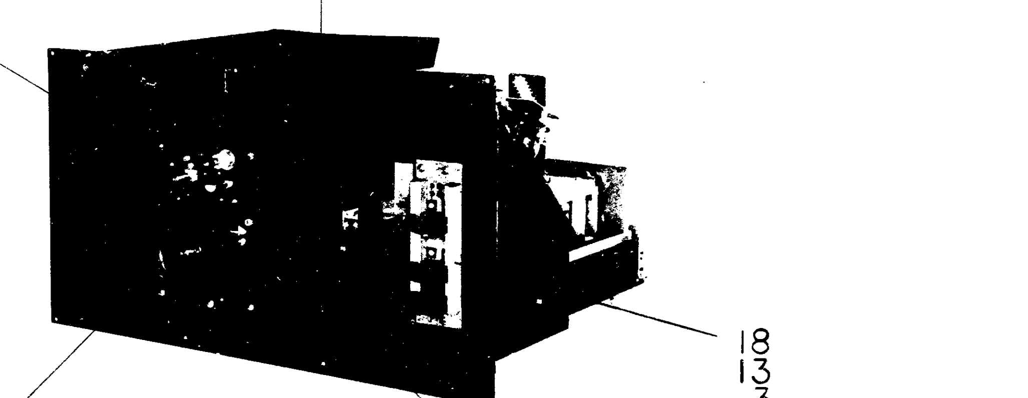
LEGEND

MODEL	CY	VARIATION COMPOSITION
PCØ5-C	60	READER PUNCH & DRIVER
PCØ5-CA	50	READER PUNCH & DRIVER
PCØ5-P	60	PUNCH
PCØ5-PA	50	PUNCH
PCØ5-R		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 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, THE 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-PCØ5-Ø-1
7. ON MODELS PCØ5 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

REV.	CHANGE NO.	CHK
A	PC05-00C02	G. BECKNER
B	PC05-00004	G. BECKNER
C	PC05-00007	BECKNER
D	PC05-00014	CORELL
E	PC04-00021	ADLEMAN
F	PC05-00016	ROUSE
H	PC04-00025	G. ADLEMAN
J	PC04-00022	ADLEMAN
K	PC05-00018	M. LEIS
L	PC05-00019	LEIS
M	PC05-00021	LEIS
N	PC05-00024	M. LEIS
P	PC05-00025	A. WILLIAMS
R	PC05-00027	A. WILLIAMS

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 · CHK'D. / DATE · ENG. / DATE 7/1/69 · PROD. ENG. / DATE 7/1/69 · PROD. / DATE

NEXT HIGHER ASSY: A-ML-PCØ5-Ø

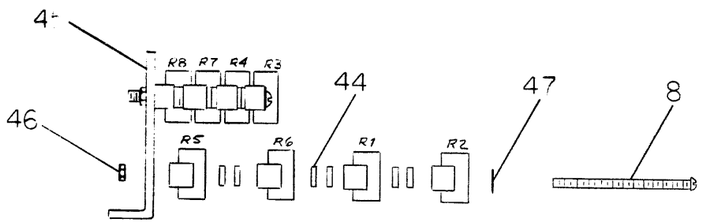
SCALE: NONE
SHEET 1 OF 3

digital EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS

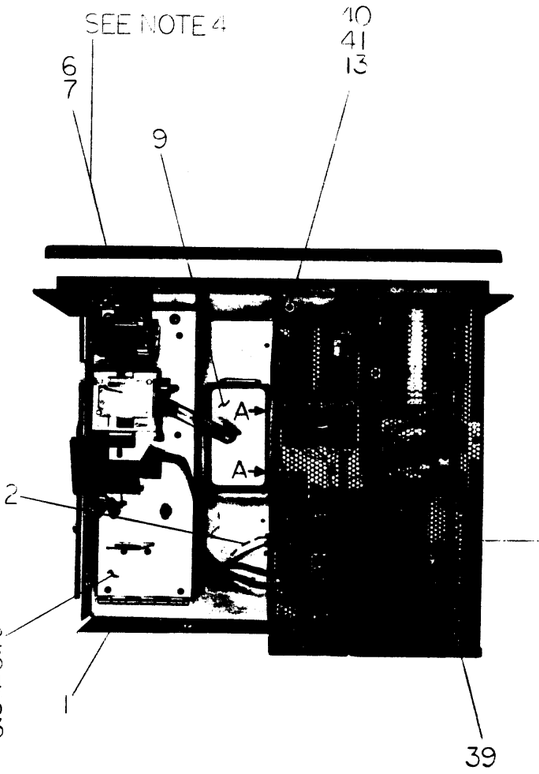
TITLE: PCØ5 READER AND PUNCH

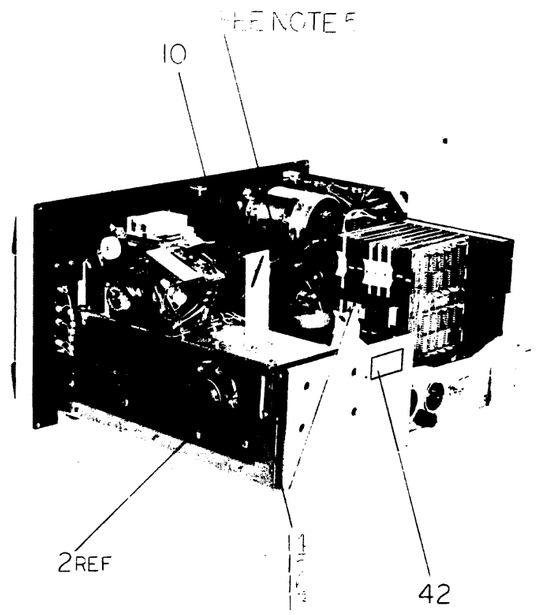
SIZE D · CODE UA · NUMBER PCØ5-Ø-Ø · REV. R

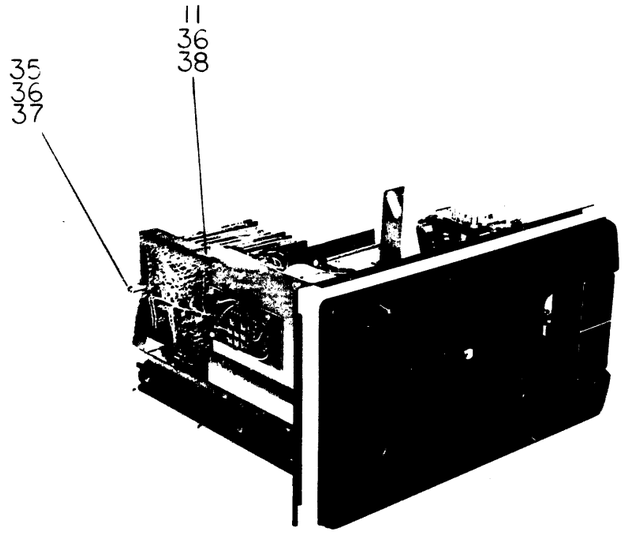
DEC FORM NO. DRC

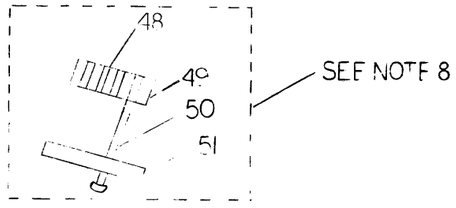


VIEW A-A









REV.	CHANGE NO.	CHK

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

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY 63
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN.		DATE 6/15/67
CHK'D.		DATE
ENG.		DATE 5/1/67
PROJ. ENG.		DATE 5/1/67
PROD.		DATE 7/21/67

NEXT HIGHER ASSY: A-MI-PC05-0

SCALE NONE

SHEET 2 OF 3

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

TITLE
PC05
READER AND PUNCH

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

DIST.

FORM NO

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	A05T2	

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	B04M1	
WHT/BLK	12	B11A2 (+5)	
WHT/YEL	13	A11T1	
BRN	14	B04U1	
GY/RED	8	R9	

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	B08R2	NONE
31	VIO		R2	B08S2	
32	YEL		R3	B07R2	
32	YEL		R4	B07S2	
33	ORN		R5	A10R2	
33	ORN		R6	A10S2	
34	BRN		R7	A09R2	
34	BRN	NONE	R8	A09S2	NONE

* FOR RESISTOR CONFIGURATION SEE VIEW A-A SHEET 2

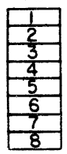
READER MOTOR CONNECTIONS

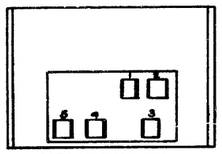
COLOR	FROM	TO	REMARKS
WHT/RED	RDR MOTOR	TS-1	
RED		TS-2	
WHT/GRN		TS-3	
GRN		TS-4	
WHT & BLK	RDR MOTOR	TS-5	

HARNESS CONNECTIONS

COLOR	WIRE NO.	LOCATION	REMARKS
BLK	27	GND LUG	LOGIC GND
GY/YEL	29	A12B2	
GRN	31	A08V2	
BLK	28	GND LUG	LOGIC GND
GY/RED	30	A12A2	
GRN	32	A10 V2	

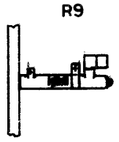
TS



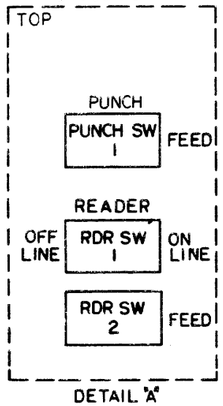


TRIAC DRIVER

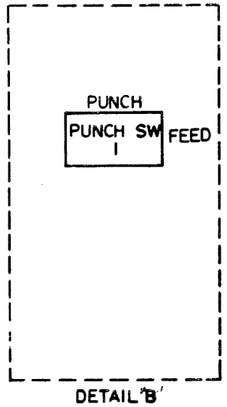
R9



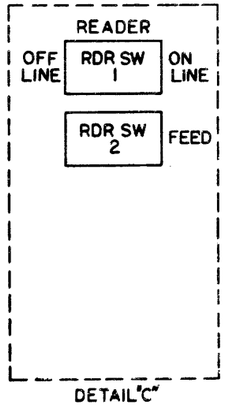
5408310-3



5408310-1



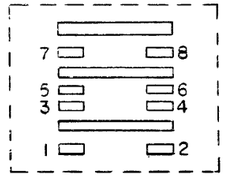
5408935-0



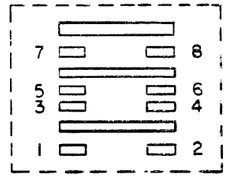
FRONT VIEW

REAR VIEW

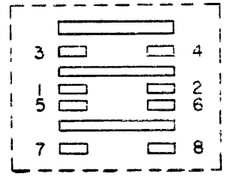
DETAIL "A"



DETAIL "B"



DETAIL "C"



REVISIONS	REV.	CHANGE NO.	CHK.

DEC FORM NO. DRD 100

FIRST USED ON OPTION / MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PCØ5		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
DRWN	S. Marcotte	4/24/69
CHKD	E. Connelli	5/23/69
		6/1/69
		6/1/69
		6/9/69

NEXT HIGHER ASSY: A-ML-PCØ5-Ø

SCALE: NONE

SHEET 3 OF 3

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: PCØ5 READER AND PUNCH

SIZE CODE: D | NUMBER: UA PCØ5-Ø-Ø | REV: R

DIST.

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY P. MARCOTTE | CHECKED R Carvelle | SECTION
DATE 6/19/69 | DATE 6/24/69 | 1
ENG DATE Jos. Beckus 7/1/69 | PROD DATE 7/2/69 | ISSUED SECT. 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 1/4 AF x 3/8 LG #6 HOLE	2	2			
~~17~~	~~D-UA-PCØ5A-Ø~~	~~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. PCØ5 00027
DIST. G

DEC FORM NO. DRA 110

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY P. MARCOTTE | CHECKED R Carvelle | SECTION
DATE 6/19/69 | DATE 6/24/69 | 1
ENG DATE Jos. Beckus 7/1/69 | PROD DATE 7/2/69 | ISSUED SECT. 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	9107360-99	18 AWG STRD TEFLON WHT	A/R	A/R	A/R	A/R	
26	9007917	SOLDERLESS CONN	6	6	6	6	4
27	9107400-97	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 Carvelle | SECTION
DATE 6/19/69 | DATE 6/24/69 | 1
ENG DATE Jos. Beckus 7/1/69 | PROD DATE 7/2/69 | ISSUED SECT. 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 1/2 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 SI[illegible] INKABLE TUBING			A/R	A/R	
44	9006664	WASHER # 10 SST	24	24			24
45	G-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

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 M7ØIØ 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 PCØ5-C PCØ5-CA	PCØ5-P PCØ5-PA	PCØ5 R
PWR SUP TO READER	+5 TO READER LAMP POT −18V T.S.S.		SAME AS PCØ5-C PCØ5-CA
PWR SUP TO PUNCH	−30V TO AIØV2 ON LOGIC 115V(HOT) TO TRIAC DRIVER 115V(NEUTRAL) TO PUNCH MOTOR	SAME AS PCØ5-C PCØ5-CA	
TRIAC DRVR TO PUNCH	115V HOT (OUT) TO PUNCH MOTOR	SAME AS PCØ5-C PCØ5-CA	
PWR SUP TO TRIAC DRIVER	AIIB2 TO −15V INPUT AI2C2 TO GND INPUT AIIA2 TO +5V INPUT	SAME AS PCØ5-C PCØ5-CA	

QTY.	DESCRIPTION	PART NO.	ITEM NO.
	PARTS LIST		

FIRST USED ON OPTION/MODEL: PCØ5

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

	DATE
DRN. Paul Mercuri	6/14/69
CHK'D. R. Carvelli	DATE 6/24/69
ENG.	DATE 7/1/69
PROJ. ENG.	DATE 7/1/69
PROD.	DATE

NEXT HIGHER ASSY. A-ML-PCØ5
SCALE NONE
SHEET 1 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: POWER AND CONTROL SCHEMATIC

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

REVISIONS				
CHK	CHANGE NO.	REV.		
end	PCØ5-00003	A	E. LUTTIG	2-11-70
end	PCØ5-00005	B	E. LUTTIG	5-8-70
end	PCØ5-00016	C	E. LUTTIG	5-8-70
end	PCØ4-00023	D	YOUSE	5-13-70
end	PCØ4-00025	E	G. ADLEMAN	6-22-70
end	PCØ5-0002	F	LEITS	3/24/71
end	PCØ8-00022	H	E. LUTTIG	9-6-71
end	PCØ5-00024	J	E. LUTTIG	9/16/71
end	PCØ5-00026	K	M. LEIS	1/18/72
end	PCØ5-00027	L	E. ALLEIN	9-25-72
end			A. WILLIAMS	9/27/73

DEC FORM NO. DRD 102A

+ 5V BIAS

BU2

+5

−30V

I/O BUS IN SKIP

BN2

I/O BUS IN INT

BS2

IOT 021

+3

TP AU2

PUN FLAG

PUN ACTIVE

PUN ACT Ø

PUN DONE

PB Ø

PB 1

PB 2

PB 3

PB 4

PB 5

PB 6

PB 7

AK1

AL1

AM1

AN1

AK2

AL2

AM2

AN2

AH1 AC4(1)

AH2 AC5(1)

AF1 AC6(1)

AF2 AC7(1)

AE1 AC8(1)

AE2 AC9(1)

AD1 AC10(1)

AD2 AC11(1)

MØ44 AØ8

MØ44 AØ7

MØ44 AØ6

PUNCH FEED

SD

U2

T2

S2

R2

V2

D2 F2

E2 D2

H2 F2

K2 J2

P2 N2

NOTE:

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

M71Ø A,B5

QUALIFY BD2

IOP4(1)

AP2

AJ2

API

AR1

INITIALIZE AS2

AJ1 CLEAR

IOP2(1)

PUNCH FEED SWITCH

IOP1(1)

AR2

AS1

IOT 021

PUN ACTIVE(Ø)

PUNCH

10MS ONE SHOT

PUN DONE

BH2 PUN DONE

5 SEC ONE SHOT

0.4 SEC ONE SHOT

PUN PERMIT

PUN SYNC AV2

BV1

TP SYNC PULSE

BK1 SCR ACTIVE (TO TRIAC)

REVISIONS

REV | CHANGE NO. | CHK

FIRST USED ON OPTION/MODEL: PCØ5	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		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. R.T.Sullen	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	
MOD.	DATE 7/2/69	

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.

DEC FORM NO. CPD 102A

QUALIFY BQ2
IOP 1 BU2
IOP 2 BV2
IOP 4 BK1
ONE SHOT 15 MS OOT
AT2 TP
AJ1 TP
FLAG
RUN
STROBE
AK1
AM2 TP
AK2
AL2
H1
D1 INITIALIZE
E2 QUALIFY
D2 IOP 1
K2 IOP 2
H2 IOP 4
J1 SKIP
EI INT
BL RUN
OUT OF TAPE
INITIALIZE BP1
CLOCK 1
M7050 A,B4
M715 A,B3
BS2 BU2
AC1 BU2
MOTOR ON CHAR
BM2
AJ 4 µS
BV2 BT2
INHIBIT STROBE
AP2 BB1
CLOCK
3 µS
AV2 TP
CLOCK ACCEL
ENABLE
ONE SHOT 2.8 MS
150 NS
ONE SHOT 40 MS
SHIFT RT2 BD1
AS2 SHIFT
RUN BS2
STOP DELAY AM2
BP2 BM2 STOP COMPLETE
AK2 BK2
M715 A,B3
M7050 A,B4
A
B
SHIFT AJ1
BA BS1
BA BP2
BB BR1
BB BU2
AB+AB BR1 MOTOR ON CHAR
ENABLE
OUT OF TAPE LOGIC
OUT OF TAPE ONE SHOT 10 MS
JU1
ON LINE
OUT OF TAPE BL2
OOT
SCHMITT TRIGGER
BC1 STROBE
BM2 FEED HOLE
STOP DELAY BV1
POWER
JR2 POWER
CLK
MOTOR ON CHAR AM
BM1 TP
FEED SW
CLOCK 1 BS2
INITIALIZE BP1
ENABLE
BK2 ENABLE
AFI PH8
BIT8
AF2 RH7
BIT7
AH1 RH6
BIT6
AH2 RH5
BIT5
AE1 RH4
BIT4
AE2 RH3
BIT3
AD1 RH2
BIT2
AD2 RH1
BIT1
AP2 M2 BIT8
AS2 P2 BIT7
AR1 S2 BIT6
AN2 I2 BIT5
AS1 V2 BIT4
AP1 S1 BIT3
AR2 P1 BIT2
AN1 M1 BIT1
M903 B03

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PC05		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. R THELLEN	DATE 2-15-71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. P CARVELLY	DATE	
ENG. G BECKNER	DATE	
PROJ. ENG. G BECKNER	DATE	
PROG. ANTONUCCIO	DATE	
NEXT HIGHER ASSY A-ML-PC05-0		
SCALE NONE	SHEET 3 OF 3	

TITLE CONTROL POWER SCHEMATIC (READER)

SIZE B | CODE BS | NUMBER PC05-0-4 | REV K | DIST.

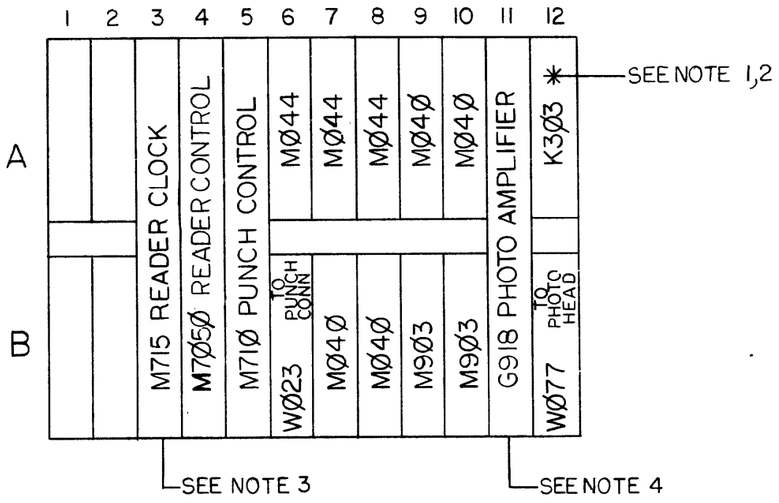
REVISIONS | REV | CHANGE NO. | CHK

REV K | SIZE CODE B BS | NUMBER PC05-0-4

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



REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	PC05-00001	A	
Leslie Moses 2-27-69	G. BECKNER		
Geo. Beckner 4-3-69	PC05-00021	B	
Mike Lane 4/11/71	LEIS		
Jim Lees 3/24/71			

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PCØ5		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. B. Morcette	DATE 6/18/69	
CHK'D. L. Carnelli	DATE 6/20/69	
ENG. Geo. Beckner	DATE 7/1/69	
PROJ. ENG. Geo. Beckner	DATE 7/1/69	
PROD. [illegible]	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	CODE	NUMBER	REV.
C	MU	PCØ5-Ø-3	B

DIST.

DEC FORM NO. DRC 100

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY P. MARCOTTE	CHECKED P Carrelli	SECTION
DATE 6/18/69	DATE 6/20/69	1
ENG DATE [illegible] 7/1/67	PROD DATE 7/2 [illegible]	ISSUED SECT. 1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION PCØ5-C	PCØ5-CA	PCØ5-P	PCØ5-PA	PCØ5-R
1	G918	PHOTO AMPLIFIER	1	1			1
2	C-AD-5408231-0-0	TIMER, (M303 WITH M374, M376 & M378)	1	1	1	1	
3	MØ4Ø	SOLENOID DRIVER	4	4			4
4	MØ44	SOLENOID DRIVER	3	3	3	3	
~~5~~	~~M7Ø6~~	~~READER CONTROL~~	~~1~~	~~1~~			
6	M71Ø	PUNCH CONTROL	1	1	1	1	
7	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	PCØ5-000021
	SHEET 1 OF 1	DIS				

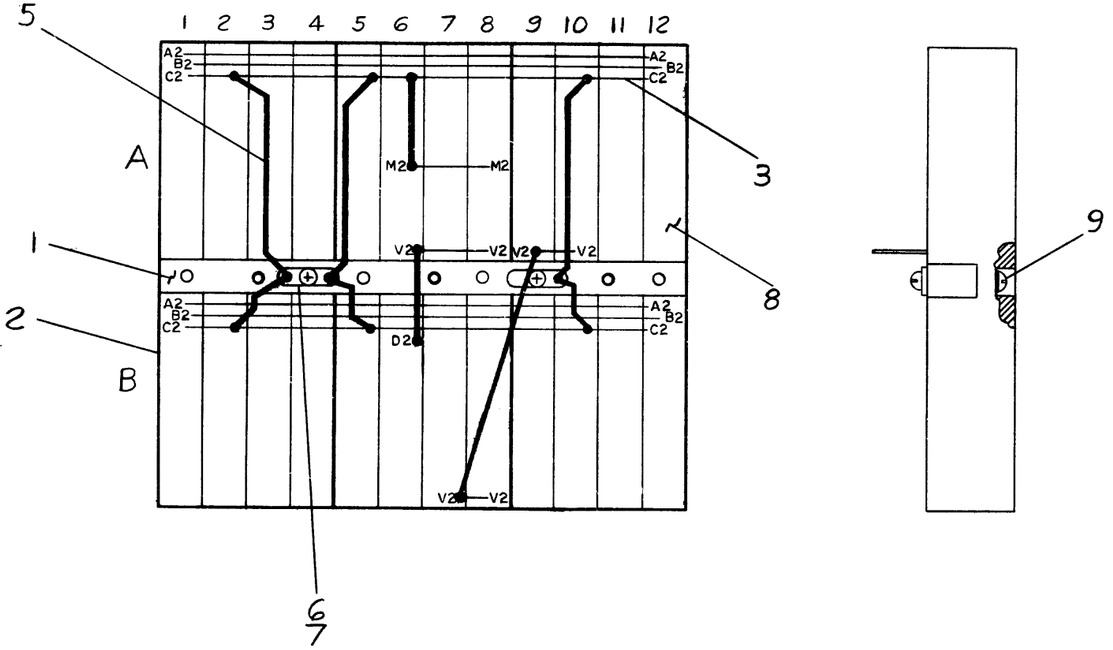
DEC FORM NO.
DRA 110

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.
[illegible]	PCØ5-00003	A
E. LUTTIG		
E. LUTTIG	PCØ5-00016	B
T. QUILLIN	5-8-70	
YOUSE		
	PCØ5-00021	C
LEIS	3/11/71	
	3/24/71	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PCØ5		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.	R Moretti	DATE 6/19/69
CHK'D.	R Carnelli	DATE 6/19/69
ENG.	Leo Beckon	DATE 7/1/69
PROJ. ENG.	Leo Beckon	DATE 7/1/69
PROD.	[illegible]	DATE 7/1/69

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

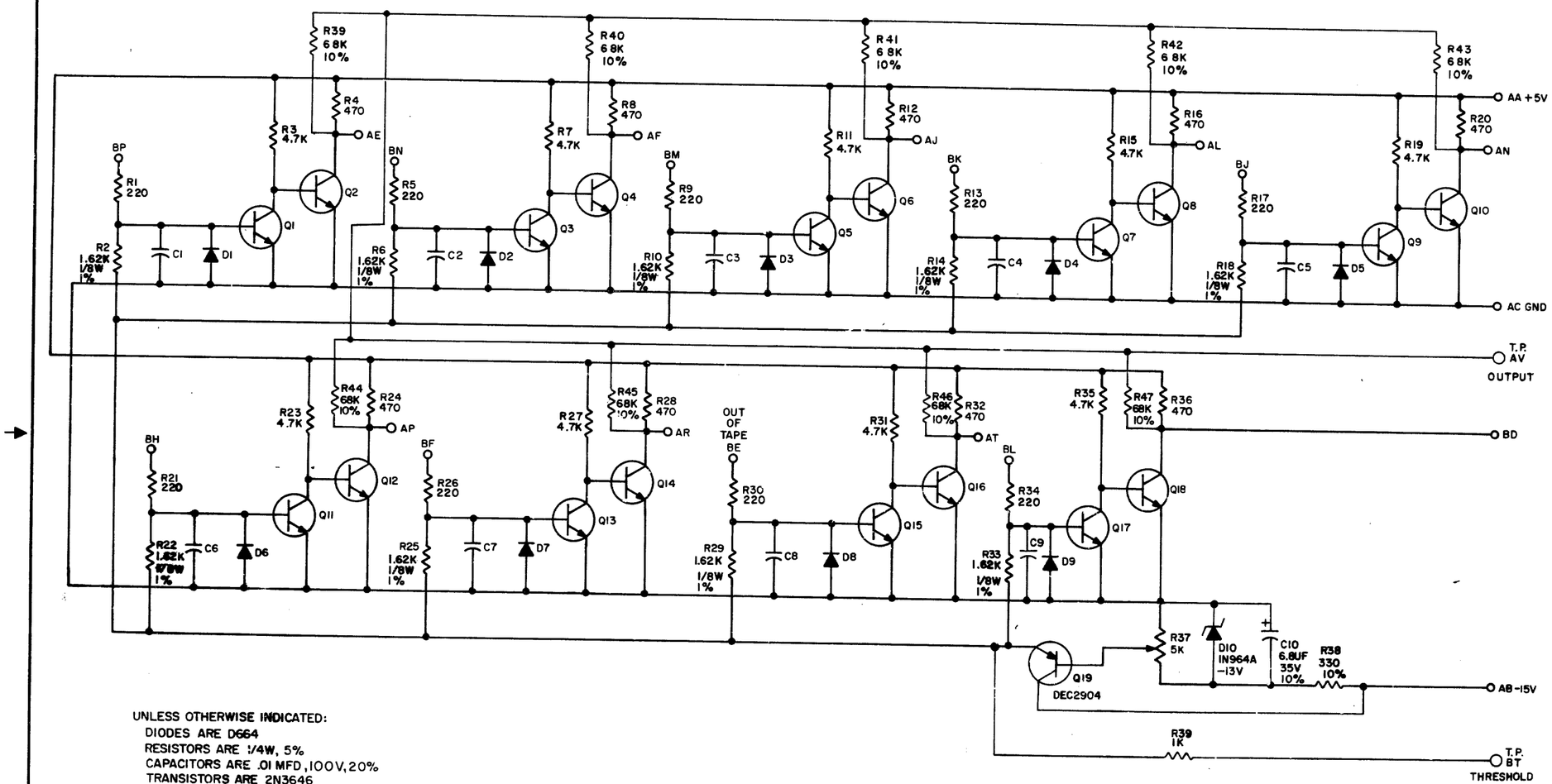
PARTS LIST

MADE BY P. MARCOTTE	CHECKED R Cornell	SECTION 1
DATE 6/10/69	DATE 6/18/69	
ENG DATE Jos. Kerfoot 7/1/69	PROD DATE 7-2-69	ISSUED SECT. 1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION
1	6-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	9105740-44	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: BUS BAR (PCØ5)	ASSY NO. C-AD-7006253-0-0	SIZE A	CODE PL	NUMBER 7006253-0-0	REV. C	ECO NO. 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	CHK	CHG NO.	REV.
		00001	A
		00002	
		00003	B

DRN.	RBUTLER	DATE 4/11/69
CHK'D	G. Yunga	DATE 4/11/69
ENG.	R. Abel	DATE 6/11/69
PROD.		DATE

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

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE PHOTO TRANSISTOR AMPLIFIER G918

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

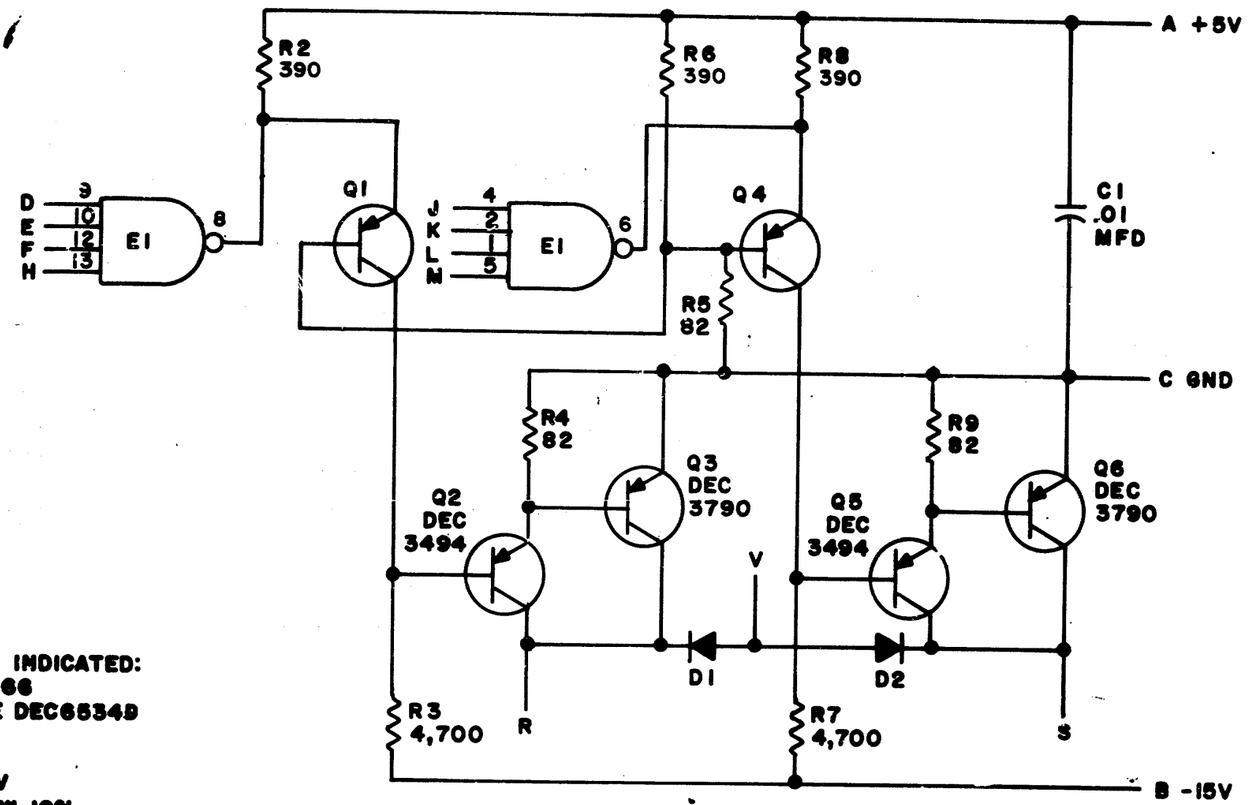
PRINTED CIRCUIT REV. D

DEC FORM NO. DRC 102

5-

DIST. 324,434 +3

PINK



UNLESS OTHERWISE INDICATED:
DIODES ARE MR2066
TRANSISTORS ARE DEC65340
E1 IS DEC7400N
PIN 7 ON IC = GND
PIN 14 ON IC = +5V
RESISTORS ARE 1/4W, 10%

PARTS LIST A-PL-M040-0-0

REVISIONS	REV.	CHG NO.	CHK
	E	00001	
		00002	

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

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
DEC3494	SAME		
DEC3790	2N3790		
DEC65340	MPS6534		
D662	IN645		
MR2066	IN4003		

[redacted]
EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

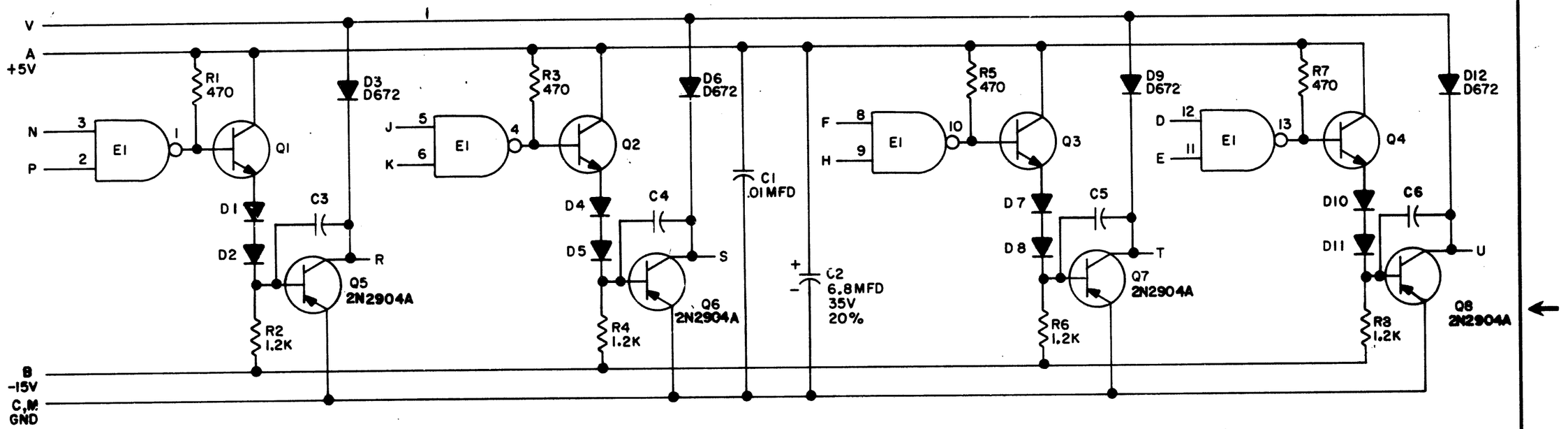
TITLE: SOLENOID DRIVER M040

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] PINK



UNLESS OTHERWISE INDICATED:
RESISTORS ARE 1/4W, 10%
DIODES ARE D664
E1 IS DEC7401N
TRANSISTORS ARE DEC3005
PIN 7 ON EACH IC = GND
PIN 14 ON EACH IC = +5V
CAPACITORS ARE 100pf, 100V, 5%

REVISIONS			
REV.	B	C	
CHG NO.	20001		
CHK	[redacted]		

DRN.	BOTLER	DATE 6/23/69
CHK'D	[redacted]	DATE
ENG.	[redacted]	DATE
PROD.		DATE

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
D664	1N3606		
[redacted]	[redacted]		
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

MB3 BF2 MB4 BD1 MB5 BD2 MB6 BE1 MB7 BE2 MB8 BF1 — E11, E14

IOP4 AP2 — E8 — BS2 I/O IN INT (E12)

IOP1 AR2 — E8, E6 — AS1 IOP 02 (T.P.)

IOP2 AR1, INITIALIZE AS2 — E8, E8, E6 — AJ1 CLEAR (T.P.)

BN2 I/O IN SKIP (E12)

+5V, R15, FEED SW AT2 — E14, E13 — BU1 FEED (T.P.)

E9 FLAG — AU2 PUN ACT (T.P.)

"0" — E9 ACTIVE

+5V, R14 100, SYNC BIAS BU2, R12 56, R13 5.6K, R11 3K, SYNC PUN AV2, Q2, Q1, C28, R10 5K, R9 150

E14, E14 — E16 PUN

R3 15K, R4 50K BJ2 4.6MS, +5V, C22 2.2UF 35V 10%, D1 — E10 (10/4.5MS)

E12, E12 — BH2 PUN DONE

+5V, R5 — BV1 SYNC PUN 0 (T.P.), AU1 DEL PUN 1

BM1 4 SEC, R6 75K, R7 51K, R8 5K, +5V, C25 150 15V, C24 150 15V, C23 180 6V, D3, D2 — E5 MOTOR (5 SEC), E15 1st DELAY (.4/3.5SEC)

E16 — BL1 DEL PUN 2

E13 — BK1 SCR ACTIVE (0)

AC4 AH1, AC5 AH2, AC6 AF1, AC7 AF2 — E4, E4, E7, E7 — PB0 AK1, PB1 AL1, PB2 AM1, PB3 AN1

AC8 AE1, AC9 AE2, AC10 AD1, AC11 AD2 — E2, E2, E1, E1 — PB4 AK2, PB5 AL2, PB6 AM2, PB7 AN2

API CLOCK B (T.P.)

AJ2 CLOCK A (T.P.)

R1

C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18 6.8UF 35V C19 6.8UF 35V C20 6.8UF 35V C21 6.8UF 35V

GND AC2, AT1, BC2, BT1

UNLESS OTHERWISE INDICATED:

CAPACITORS ARE .01UF, 100V, 20%
RESISTORS ARE 1K, 1/4W, 5%
DIODES ARE DI84
TRANSISTORS ARE DEC8534D
DEC7474 = E1, E2, E4, E7, E9, E16
DEC9601 = E5, E10, E15
DEC7404 = E3, E6
DEC7400 = E8, E14
DEC 7440 = E13
DEC7401 = E12
DEC7430 = E11
PIN 7 = GND
PIN 14 = +5V ON ALL IC'S

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
DI84	FAIRCHILD		
8534D	NONE		

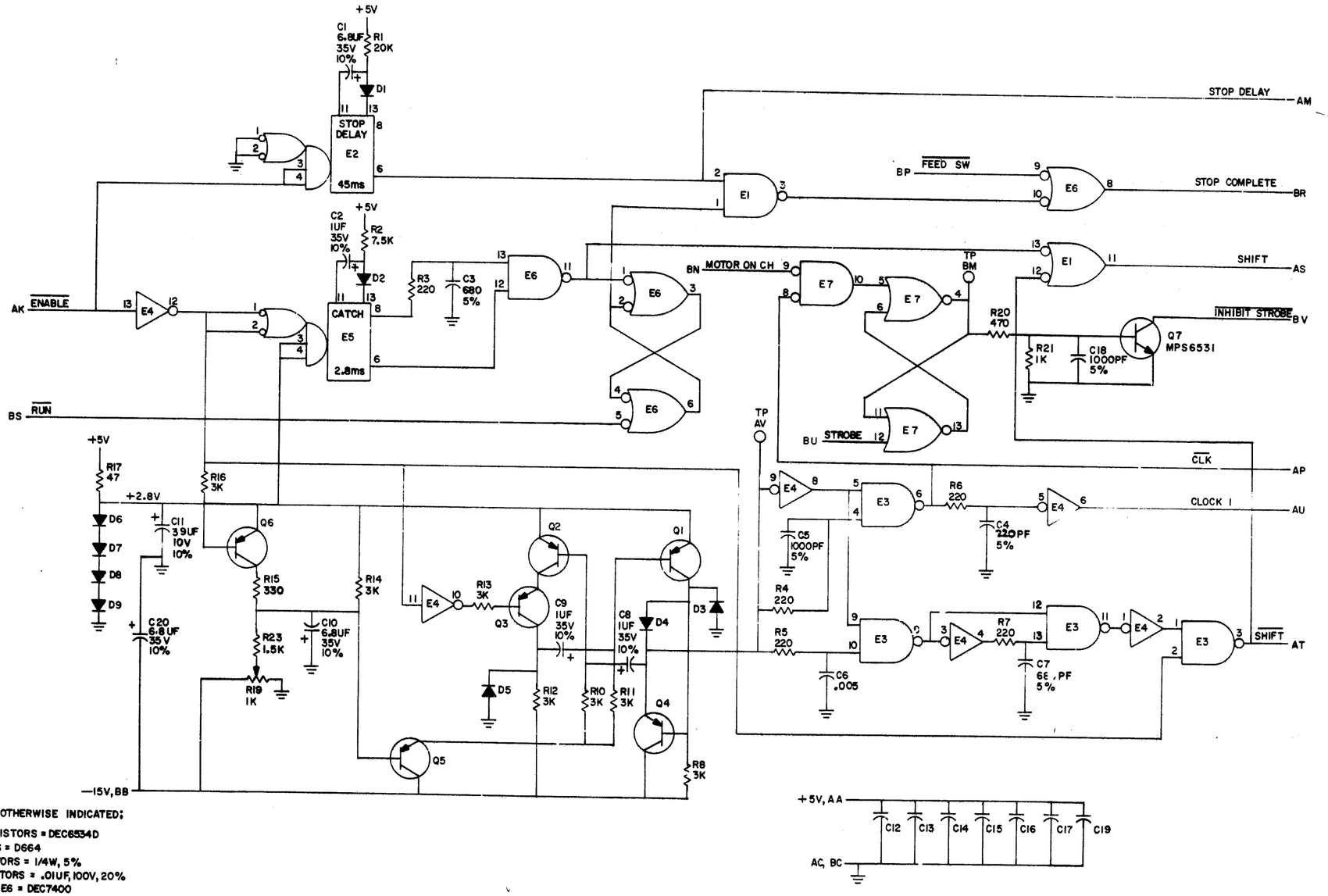
EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS

TITLE: PUNCH CONTROL M710

SIZE D | CODE CS | NUMBER M710-0-1 | REV K | PRINTED CIRCUIT REV. H

DST: 324, 434, 435

5 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 ON ALL IC'S
PIN 14 = +5V
E7 = DEC7402

REVISIONS			
CHK	CHG NO	REV.	
AT	00002	E	
	00006	K	REV A REMA
	00005		& CANCELS
	00007	L	ECO 00005
	00008		

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

TRANSISTOR & DIODE CONVERSION CHART			
DEC	EIA	DEC	EIA
DEC6534D	MPS6534	IN758	SAME
D664	IN3606		
DEC6531	MPS6531		

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: READER CLOCK M715

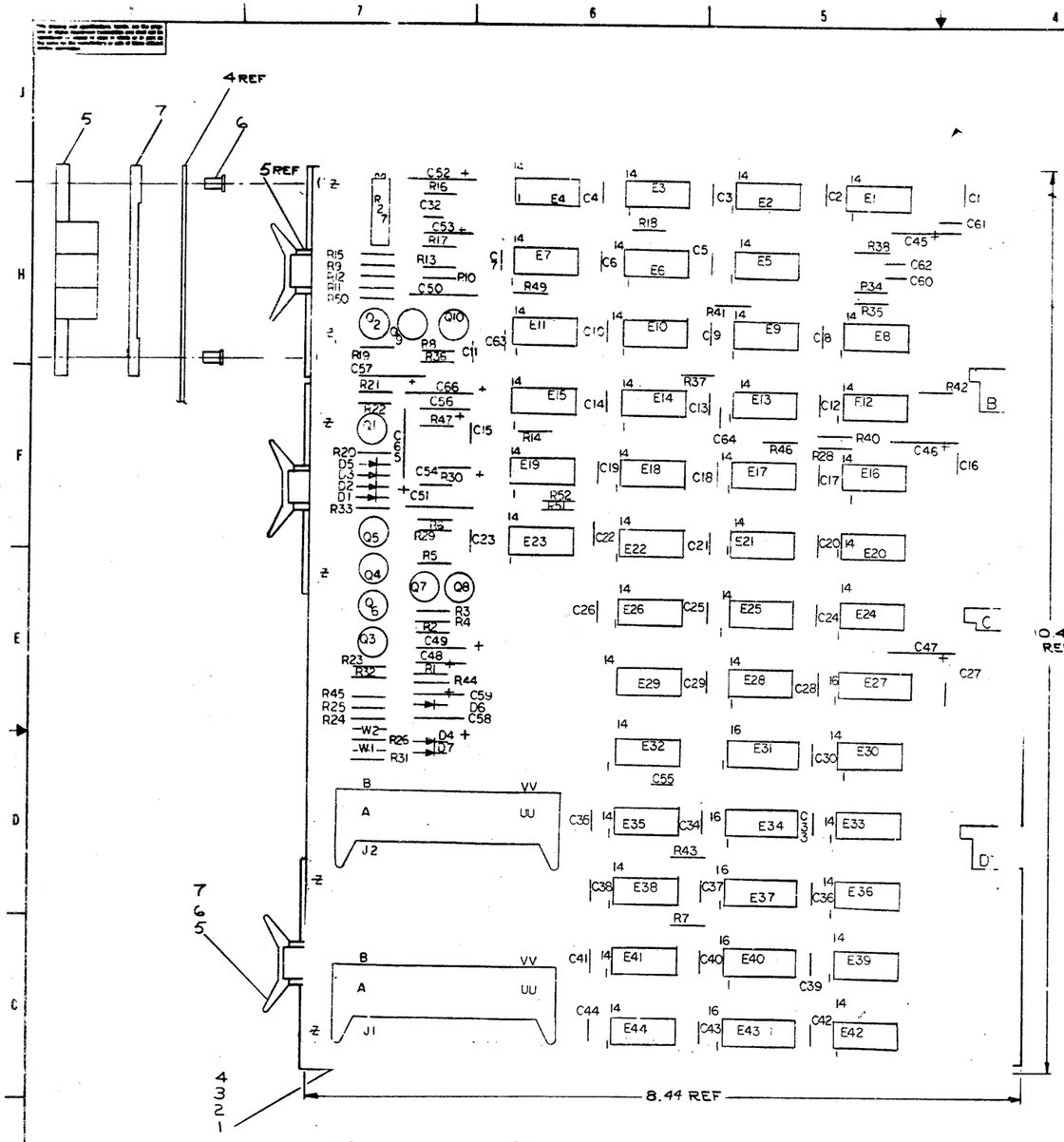
SIZE	CODE	NUMBER	REV.
C	CS	M715-0-1	L

PRINTED CIRCUIT REV. F

CUST. 724, 731, 735 2

4 PINK

FORM NO. DC 102



QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM
		PARTS LIST		
		ETCH BOARD REV K		
1	C21	CAP .1UF 100V 20% MYLAR	1000	
1	C22	CAP .2200PF 50V 10% DISC	1000128	12
1	R44	RES 75 1/4W 1%	1307571	
AR	W1, W2	WIRE 22 AWG SOLID BUS	9301540-01	EC
1	E35	IC DEC 7925	1905577	59
1	R49	RES 270 1/4W 5%	1309732	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%	1301429	54
1	R47	RES 18K 1/4W 10%	1300498	53
2	J1,J2	CONN 40 PIN ET EDGE CONN	1209941	52
4	E34,E37,E40,E43	IC DEC 8251	1905578	51
1	E35	IC DEC 7425	1905577	50
2	E27, E31	IC DEC 8251	1905578	49
4	E13,E20,E33,E39	IC DEC 8211	1907705	48
2	E21, E25	IC DEC 8214	1907914	47
5	E22,E24,E30,E36,E42	IC DEC 880	1907944	46
7	E3,E8,E26,E29, E38,E41,E44	IC DEC 7404	1907496	45
4	E4,E7,E15,E19	IC DEC 9601	1907373	44
1	E16	IC DEC 384	1907486	43
2	E1, E11	IC DEC 7410	1905576	42
7	E5,E6,E13,E22, E23,E28,E32	IC DEC 7400	1905575	41
5	E8,E9,E10,E12,E14	IC DEC 7474	1905577	40
2	Q7,Q8	TRANSISTOR 2EC 6531	1509338	39
6	Q1-Q6,Q9,Q10	TRANSISTOR P.C. 65340	1503409-00	38
7	R1,R4,R6, R18, E34,E38,R51	RES 220 1/4W 5%	1300271	37
22	R7,R8,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 1F 3/4W 10% 76PE	1309183-07	35
2	R48, R33	RES 910 1/4W 5%	1305576	34
1	R2	RES 82 1/4W 5%	1301622	33
1	R17	RES 7.5K 1/4W 5%	1301422	32
1	R50	RES 200 1/4W 5%	1301401	31
1	R16	RES 15K 1/4W 5%	1300496	30
1	R39	RES 12K 1/4W 5%	1300488	29
3	R30,R36,R46	RES 10K 1/4W 5%	1300479	28
2	R2, R3	RES 4.7K 1/4W 5%	1300447	27
1	R40	RES 1.5K 1/4W 5%	1300397	26
1	R35	RES 330 1/4W 5%	1300295	25
3	R5, R10, R29	RES 100 1/4W 5%	1300274	24
1	R33	RES 47 1/4W 5%	1300202	23
5	D3	DIODE IN4148 SMALL	1100126	22
3	D4,D5,D7	DIODE D664	1100114	21
4	D1,D2,D6,D8	DIODE D662	1100113	20
A1	C1-C21,C33-44, C58-C90	CAP .01UF 100V 20% DISC	1001610	19
5	C45,C46,C47,C57,C66	CAP 6.8UF 35V 10% TANT	1005306	18
2	C50,C51	CAP .01UF 100V 10% M-LAR	1005784	17
2	C48,C49	CAP .12UF 20V 10% TANT	1123226	16
1	C52	CAP 15UF 20V 10% TANT	1004812	15
1	C56	CAP 2.2UF 20V 10% TANT	1002627	14
3	C53,C58,C59	CAP 1UF 35V 10% TANT	1001776	13
1	C65	CAP 39UF 10V 10% TANT	1000176	12
1	C54	CAP 3.9UF 10V 10% TANT	1123164	11
1	C60	CAP 1000PF 100V 5% MICA	1000242	10
3	C22,C32,C66	CAP 680PF 100V 5% MICA	1000026	9
2	C63,C64	CAP 330PF 100V 5% MICA	1000023	8
2		SPACER (CABLE CLAMP)	1202704	7
6		EYELET GS4-11 STIMPSON	9006750	6
3		HANDLE FLIP CHIP-MAGENTA	1003737-1	5
1		ETCHED CIRCUIT BOARD	5003848	4
REF		MODULE HISTORY LIST	B-MH-M8402-1	3
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-M8402-0	2
REF		X-Y COORDINATE HOLE LOC.	K-CO-M8402-1	1

DEC NO.	EIA NO.	DEC NO.	EIA NO.
DEC 6531	MPS6531		
DEC 6540	MPS6539		
D664	1N3606		
D662	1N645		

SEMICONDUCTOR CONVERSION CHART

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

JUMPER LIST

IC 384	1	8
IC 6514	1	8
IC 8271	8	16
IC 283	1	8

GND +5V

PIN LOCATIONS

ORIGINATED	DWN	CHANGE NO.	REVISIONS
	E		
	F		
	G		
	H		
	J		
	K		
	L		
	M		
	N		
	P		

Larry Hastie 5-28-74
Larry Hastie 11-8-74
Larry Hastie 9-12-72
LAWRENCE NARH
Scott Doherty
Larry Hastie 8-23-73
Larry Hastie 9-12-72
Larry Hastie 11-8-74
Larry Hastie 5-28-74
Larry Hastie 9-12-72
Larry Hastie 11-8-74
LAWRENCE NARH
Larry Hastie 5-28-74
Larry Hastie 9-12-72
Larry Hastie 11-8-74
LAWRENCE NARH
Larry Hastie 5-28-74
Larry Hastie 9-12-72
Larry Hastie 11-8-74
LAWRENCE NARH

M8402-00001-1 R
M8402-00003 P
M8402-00011 N
M8402-00010 M
M8402-00009 L
M8402-00008 K
M8402-00007 J
M8402-00006 H
M8402-00005 G
M8402-00004 F
M8402-00002 E

L. NARH
L. NARH
L. NARH
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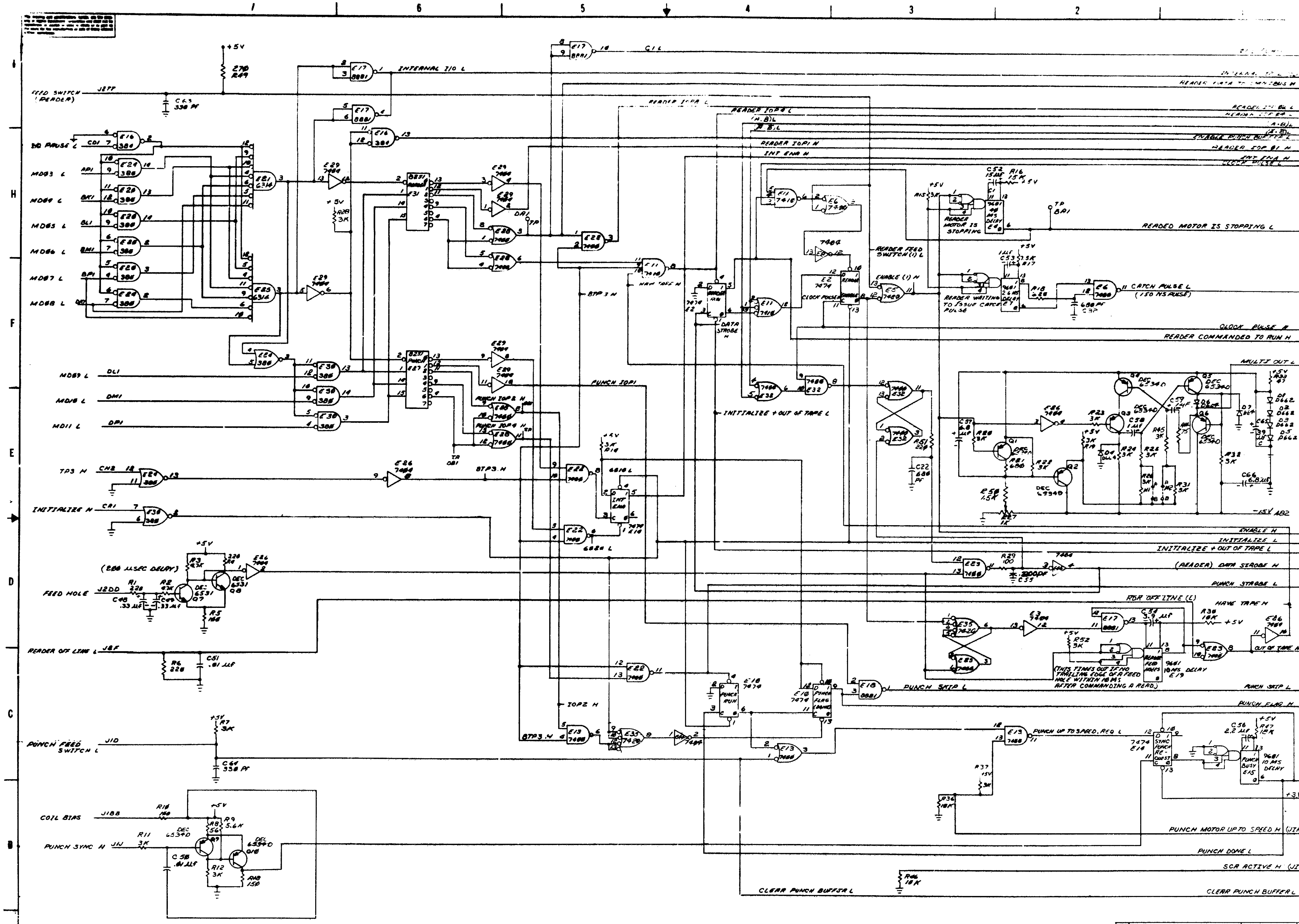
TITLE	MODULE ASSY
SIZE	C
DWG. NO.	M8402-00
FIRST USED ON	
SCALE	2:1
SHEET	1 OF 2



UNLESS OTHERWISE SPECIFIED
DIMENSIONS IN INCHES
TOLERANCES

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE READER/ PUNCH CONTROL

SIZE	CODE	NUMBER
E	CS	M840-0-1

SCALE NONE
SHEET 2 OF 3

DRN. DATE 11-20-71
CHK'D DATE 1-23-71
ENG. DATE 2-24-71
PROJ. ENG. DATE 2-24-71

E CS M840-0-1 REV. A

CBI L (CH I)

INTERNAL I/O L (CLI)

READER DATA TO CHANNELS H

READER TOP 8 L

READER TOP 8 H

(A+B) L

(A+B) H

PUNCH BUFFER L

READER TOP 8 H

INT ENA H

BLOCK PULSE L

READER MOTOR IS STOPPING L

7474 E12

7400 E8

R42 3K

+5V

ROTATE PULSE H

CATCH PULSE L

7400 E6

CLOCK PULSE H

READER COMMANDED TO RUN H

UNIT SET L

7400 E3

7400 E5

7400 E8

(150 NS)

(150 NS PULSE)

CLOCK PULSE H

R34 220

C60 1000 pf

R35 330

C61 1500 pf

7400 E1

7400 E3

R38 500

C62 .068 M

(450 NS PULSE)

SHIFT PULSE L

ENABLE H

INITIALIZE L

INITIALIZE + OUT OF TAPE L

(READER) DATA STROBE H

PUNCH STROBE L

OUT OF TAPE H

7400 E5

7400 E5

7400 E6

7474 E1

PUNCH SKIP L

PUNCH FLAG H

PUNCH DONE L #3

7404 E 24

+3V

PUNCH MOTOR UP TO SPEED H (JIP)

SCR ACTIVE H (JIF)

CLEAR PUNCH BUFFER L

+5V

R41 3K

7400 E6

B (A+B) L

7400 E13

B (A+B) L

7400 E3

JELL BA (0)

JERK BA (1)

JEFF BA (0)

JRH BA (1)

+5V

R43 3K

TP

7474 E12

7400 E6

7400 E26

7400 E18

7400 E18

(READER + PUNCH SKIP)

(READER + PUNCH INT REQ)

CSI SKIP L

CPI INT REQ L

JIN PUNCH DONE H

JIR PUNCH MOTOR UP TO SPEED H

JIF SCR ACTIVE H

HOLE 8 HOLE 7 HOLE 6 HOLE 5 HOLE 4 HOLE 3 HOLE 2 HOLE 1

7400 E38 7400 E40 7400 E41

8271 E37

8271 E43

(PUNCH BUFFER)

8271 E34

8271 E40

(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

J2AA J2Z J2X J2V J2T J2R J2N J2L

DATA 8 L DATA 7 L DATA 6 L DATA 5 L DATA 4 L DATA 3 L DATA 2 L DATA 1 L

QTY	DESCRIPTION	PART NO	ITEM NO

UNLESS OTHERWISE SPECIFIED

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

DRAWN

CHK'D

ENG

PROD.

DATE

SCALE NONE

SHEET 3 OF 3

DIGITAL EQUIPMENT CORPORATION

TITLE READER / PUNCH CONTROL

SIZE CODE IDENT NO. DWG NO. REV

E C S M840-0-1 R

DIST B

+5V(A), AA2 — R7 1K — +3V
C1 C2 C3 C4 C5 C6 C8 C20 6.8UF 35V
BT1, AT1, BC2, AC2
C7 C9 C10 C11 C12 C13 C14 C15 C17 C18 C21 6.8UF 35V
+5V(B), BA2

MB 3 (0) BD2 11
MB 4 (0) BE2 3
MB 5 (0) BE1 5
MB 6 (0) BF2 2
MB 7 (0) BF1 6
MB 8 (1) BH2 1
E14 8 — E13 9 8
IOP 1 (1) AU2
IOP 2 (1) AV2
IOP 4 (1) BK1
E9 2 3 — E13 13 12 — AM2 TP
E9 13 12 11
E9 4 5 6
E9 9 10 8
+5V(B) R6 470 — C19 560PF 5% — C24 180PF 5% — R5 220 — D2 D664
E2 2 1 3 — AJ1 TP
E2 4 5 6
E8 11 10
E6 8 9 10 — BL2 OUT OF TAPE
BU1 ON/OFF LINE
R4 100 — C23
+5V(A) — C22 3.3UF 10V 10% — R1 10K — D1 D664
E6 11 12 13
E3 7ms 1 2 3 4 9
+3V
E8 9 8 +3V
CLOCK 1 BS2
E2 9 10 8
E2 12 13 11
E8 1 2
E10 9 10 8
E8 5 6
+5V(B) R14 1K
BC1
E16 9 10 8
TP AT2
E5 RUN D 1 C Ø — E5 FLAG D 1 C Ø
+3V
E6 6 5 4 — AK2 I/Ø BUSS IN SKIP
E6 2 3 1 — AL2 I/Ø BUSS IN INT
CLK BB1 — STOP COMPLETE BN2 — E10 13 2 12
TP BN1
RDR RUN AK1 — FEED SWITCH BM1 — R2 470 — +5V(B)
E10 5 4 6
SHIFT BD1
E15 ENABLE D 1 C Ø — E15 POWER D 1 C Ø
STOP DELAY BV1 3 6
BK2 ENABLE (Ø)
E17 9 8 BR2 POWER
INITIALIZE BP1 — E13 1 2 — E13 3 4
+5V(A) R16 560
E8 12 13
E19 11 13 12 — E19 8 9 10
+3V — E18 "A" D 1 C Ø — +3V
+3V — E18 "B" D 1 C Ø — +3V
SHIFT BJ1
E19 4 5 6 — E19 1 2 3
E16 5 4 6 — E13 6 5 6 — BA1 TP
+5V(B)
FEED HOLE BM2
R12 4.7K — R13 220
R11 330 — R9 4.7K — C16 .47UF 35V 10% — Q2 MPS6531 — R10 100
Q1 MPS6531
E17 13 12
R15 270
BT2 INHIBIT STROBE
E17 1 2 — BS1 DA(0) BA(1)
E17 11 10 — BP2
E17 5 6 — BU2 BS(1)
E17 3 4 — BR1 BS(0)
E16 13 12 11 — R3 47 — E12 1 2 4 5 6
+5V(A) R8 470
E8 3 4
E12 9 10 12 13 8
TP AC1

RD HOLE 8 AF1 — E4 D 1 C Ø — E7 1 2 3 — AP2 I/Ø BUSS IN4
RD HOLE 7 AF2 — E4 D 1 C Ø — E11 1 2 3 — AS2 I/Ø BUSS IN 5
RD HOLE 6 AH1 — E4 D 1 C Ø — E11 8 9 10 — AR1 I/Ø BUSS IN 6
RD HOLE 5 AM2 — E4 D 1 C Ø — E7 9 8 10 — AN2 I/Ø BUSS IN 7
RD HOLE 4 AE1 — E1 D 1 C Ø — E11 5 6 4 — AS1 I/Ø BUSS IN 8
RD HOLE 3 AE2 — E1 D 1 C Ø — E7 5 6 4 — AP1 I/Ø BUSS IN 9
RD HOLE 2 AD1 — E1 D 1 C Ø — E11 12 11 13 — AR2 I/Ø BUSS IN Ø
RD HOLE 1 AD2 — E1 D 1 C Ø — E7 11 12 13 — AN1 I/Ø BUSS IN 11

UNLESS OTHERWISE INDICATED:
RESISTORS = 1/4W, 5%
CAPACITORS = .01UF, 100V, 20%
DEC7401 = E6, E7, E11
DEC9601 = E3
DEC7404 = E8, F13, 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

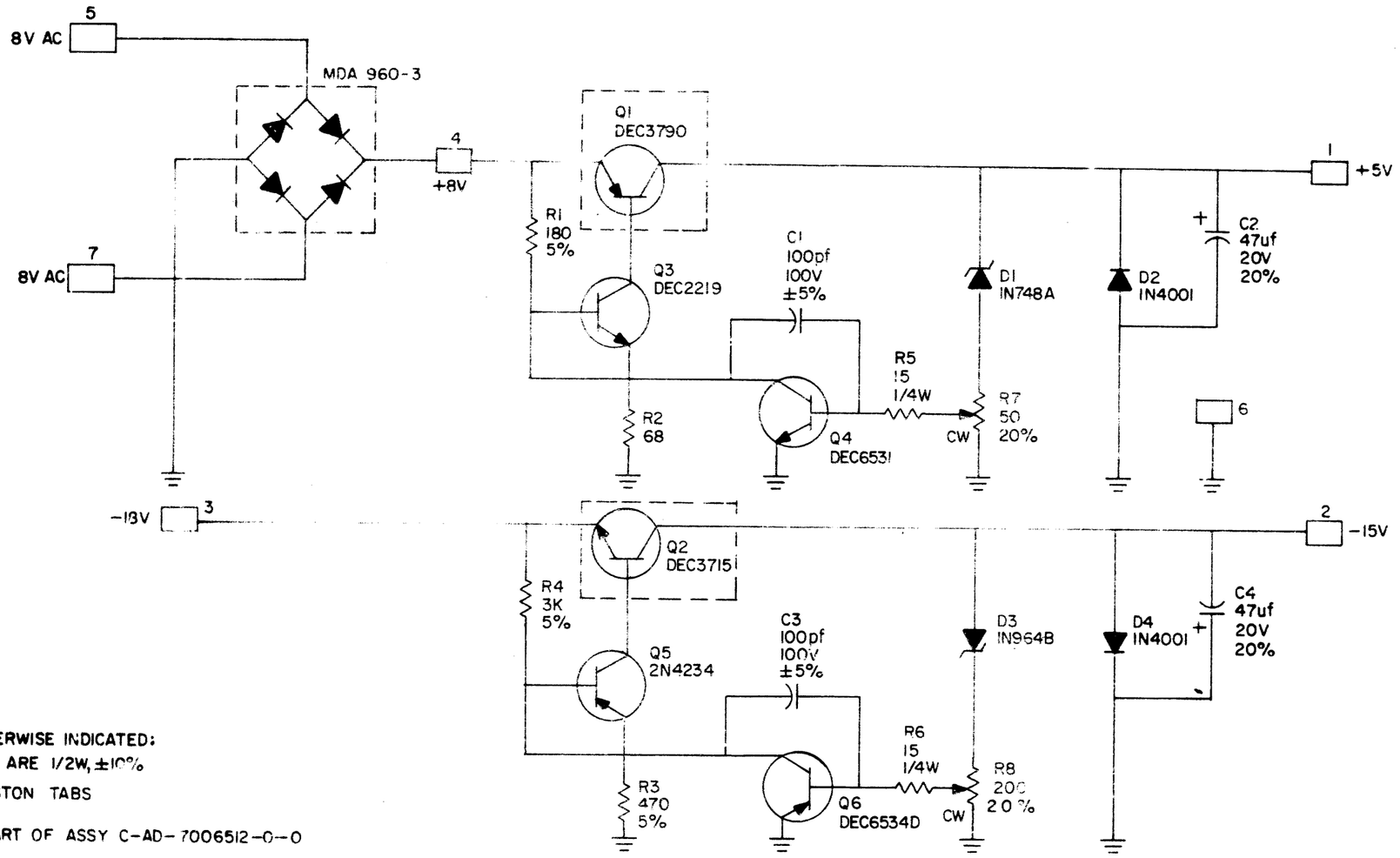
DRAWN		DATE 3/25/71	TRANSISTOR & DIODE CONVERSION CHART		
CHECKED		DATE 6-1-71	DEC	DIA	DEC	DIA
ISSUED		DATE				

EQUIPMENT CORPORATION

TITLE: READER CONTROL
SIZE D | CODE CS | NUMBER M7050-0-1 | REV C
PRINTED CIRCUIT REV 0

REV C | M7050-0-1 | SIZE CODE D CS

SIZE	CODE	NUMBER	REV
B	CS	5408918-0-1	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	IN964B	SAME
2N4234	2N4234	IN4001	SAME
DEC6534D	MPS6534		

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

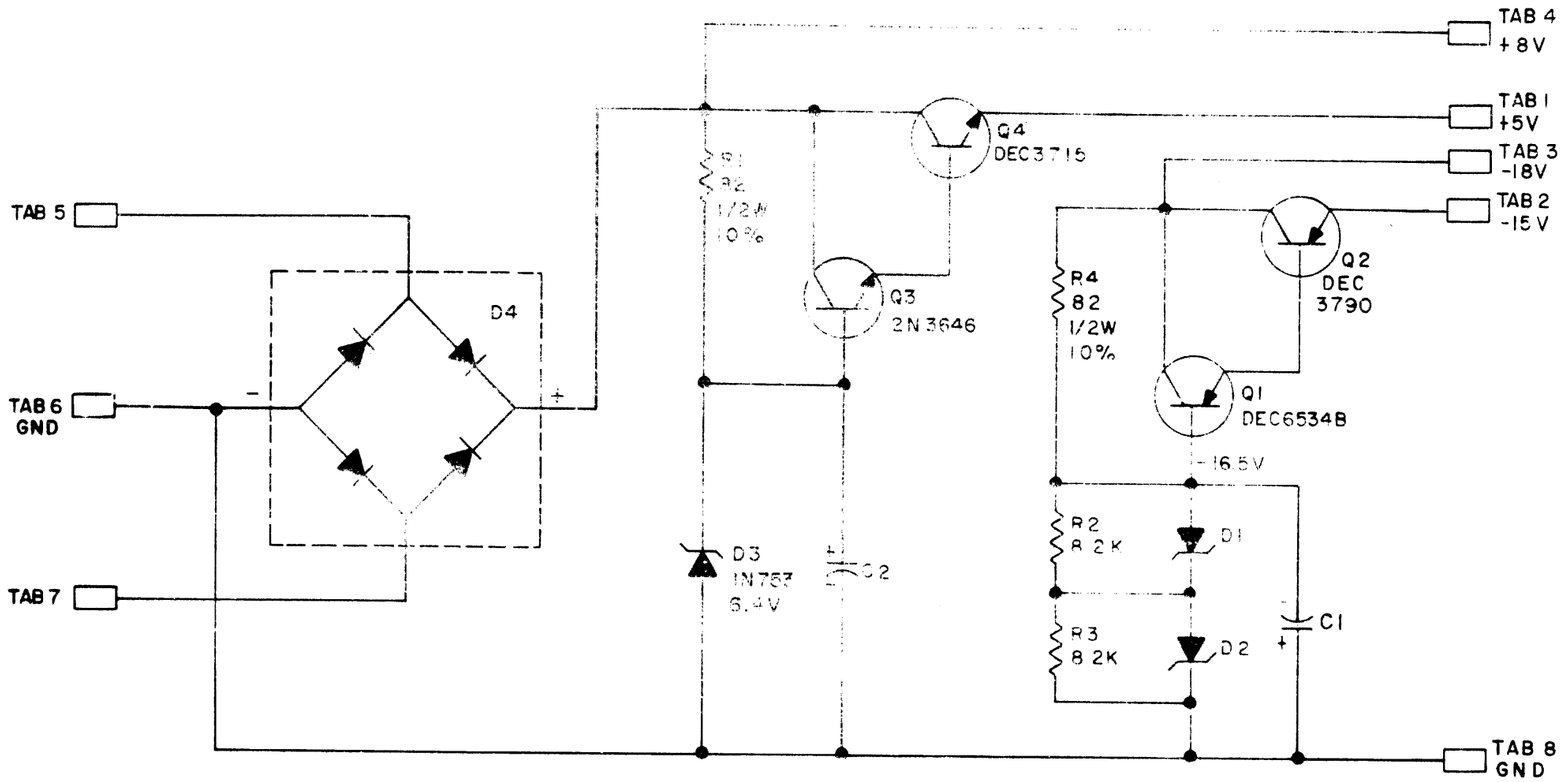
TITLE PCO REGULATOR 5408918

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

PRINTED CIRCUIT REV. B

DEC FORM NO
DRB 102

DIST. 524.434.435 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	CHK	CHG NO.	REV.
		00001	A
		00002	B
		00003	C

DRN.		DATE 3-3-69
CHK'D M. Marshall		DATE 4/1/69
ENG Dick Able	Ted P.	DATE 3-14-69
PROD.		DATE

DEC FORM NO.

TRANSISTOR & DIODE CONVERSION CHART

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

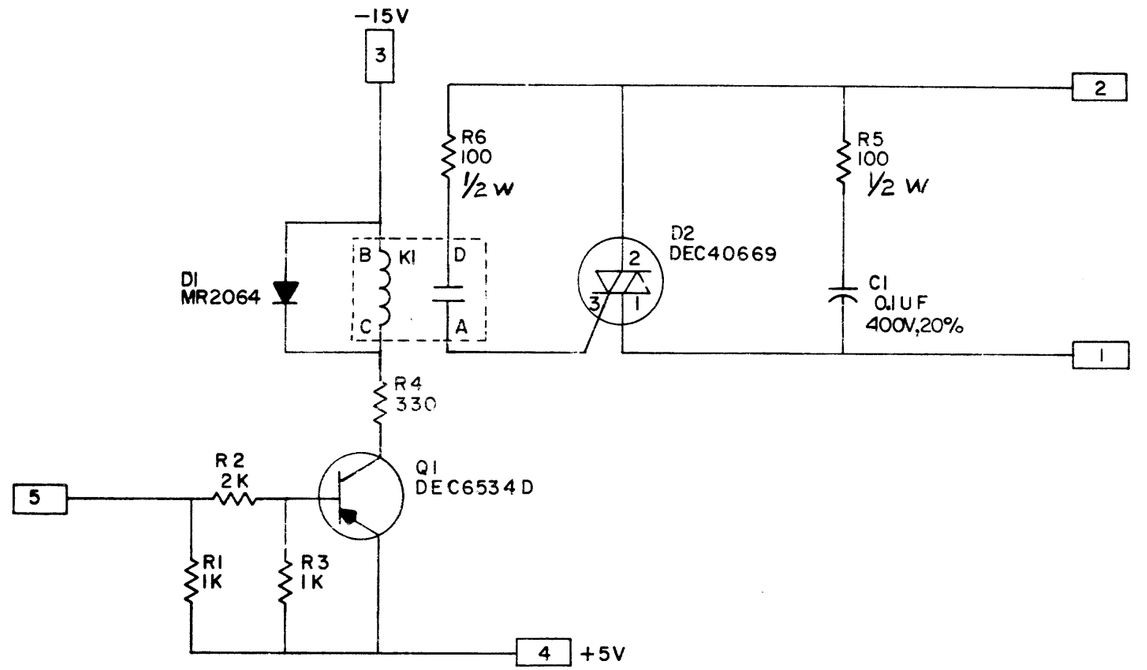
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE PCO POWER SUPPLY REGULATOR 5408308

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

PRINTED CIRCUIT REV D

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



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

REVISIONS			
REV.	CHG NO.	CHK	
B	REV A REDR per #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-i	B

PRINTED CIRCUIT REV. B

DEC FORM NO.