

digital

RK05J

Engineering Drawings

Digital Equipment Corporation

The material herein is for information purposes only and is subject to change without notice. Digital Equipment Corporation assumes no responsibility for any errors which may appear herein.

These drawings and specifications herein are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

Copyright © 1975, Digital Equipment Corporation

DRAWING DIRECTORY

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION"

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

DRAWING DIRECTORY
MODULE UTILIZATION LIST
READ/WRITE
INDEX & SECTOR
CYLINDER ADDRESS & DIFFERENCE
CONTROL & INTERLOCK
POSITION SERVO PREAMP
SERVO POWER AMP CIRCUIT
SERVO POWER AMP
CONTROL PANEL CIRCUIT
CONTROL PANEL
RELAY BOARD CIRCUIT
DECPACK MOTOR RELAYS
CHASSIS WIRING
ACCESSORY LIST
POWER SUPPLY (H743)
WIRE LIST

SEQUENCE
B-DD-RK05J-0
SHEET #1 ONLY
C-MU-RK05-0-2
D-CS-G180-0-1
D-CS-M7680-0-1
D-CS-M7681-0-1
D-CS-M7701-0-1
D-CS-G938-0-1
D-CS-H604-0-1
E-UA-H604-0-0
D-CS-5409698-0-1
E-IA-5409698-0-0
D-CS-5409574-0-1
E-IA-5409574-0-0
D-DD-RK05-0-1
A-AL-RK05-0-17
B-DD-H743-0
K-WL-RK05-0-3

SEQUENCE
MFG. PRINT SET
MODULE UTILIZATION (PL)
RK05J TESTER
DECPACK ASSY
DECPACK ASSY (PL)
WIRED ASSY
LINEAR POSITIONER ASSY
LINEAR POSITIONER ASSY (PL)
H743 POWER SUPPLY
REVISION STATUS
SPACER

SEQUENCE
A-PL-RK05-0-2
B-DD-RK05J-T
D-UA-RK05J-0-0
A-PL-RK05J-0-0
D-AD-7008696-0-0
D-AD-7008702-0-0
A-PL-7008702-0-0
B-DD-H743-0
A-WT-7008696-0
B-MD-7419064-0-0

| UNIT VARIATIONS | | PRINT SET | |
|-----------------|-------------------------------|-----------|--|
| VAR | TITLE | RK05J-0 | |
| RK05J-AA | DECPACK 115V 60HZ | X | |
| RK05J-AB | DECPACK 230V 60HZ | X | |
| RK05J-BA | DECPACK 115V 50HZ | X | |
| RK05J-BB | DECPACK 230V 50HZ | X | |
| RK05J-CA | RK05J-AA W.BEZEL FOR H9500 | | |
| | CAB 115V 60HZ | X | |
| RK05J-CB | RK05J-AB W.BEZEL FOR H9500 | | |
| | CAB 230V 60HZ | X | |
| RK05J-CC | RK05J-BA W.BEZEL FOR H9500 | | |
| | CAB 115V 50HZ | X | |
| RK05J-CD | RK05J-BB W.BEZEL FOR H9500 | | |
| | CAB 230V 50HZ | X | |
| RK05J-DE | RK05J-AA H960 861 PWR CONTROL | | |
| RK05J-DF | RK05J-AB H960 861 | | |
| RK05J-DH | RK05J-BA H960 861 | | |
| RK05J-DJ | RK05J-BB H960 861 | | |

| DATE | CHG. NO. | REV |
|----------------|----------|-----|
| A.V. | RK05-69 | AL |
| DWG WAS RK05-0 | | |
| A.V. | RK05J-3 | AM |
| A.V. | RK05J-4 | AN |
| A.V. | RK05J-5 | AP |
| A.V. | RK05J-6 | AR |
| A.V. | RK05J-7 | AS |
| A.V. | RK05J-8 | AT |
| 7-77 | RK05J-9 | AU |
| 8-77 | RK05J-10 | AV |
| 12-77 | RK05J-11 | AW |
| 3-78 | RK05J-12 | AX |

| USED ON OPTION/MODEL | DRM. | DATE | TITLE | | | |
|----------------------|--------------|------|--------------|------|---------|-----|
| RK05J | J. FLEMING | 1/72 | DECPACK ASSY | | | |
| | CHK'D. | DATE | | | | |
| | J. FLEMING | 5/72 | | | | |
| | PROJ ENG. | DATE | SIZE | CODE | NUMBER | REV |
| | A. KARLSBERG | 5/72 | B | DD | RK05J 0 | A X |
| | PROD. | DATE | | | | |
| | A. KARLSBERG | 5/72 | | | | |
| | FIELD SERV. | DATE | | | | |
| | J. WALSH | 5/72 | | | | |
| SHEET 1 OF 5 | | DIST | | | | |

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTE:
TERMINATOR OR DISKBUS CABLE CONNECTOR MAY BE INTERCHANGED BETWEEN SLOTS 7 AND 8.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-------|------------|----------------|-------------------------------|---------------------|-----------------------|-------------------|------------|-------------------------|
| USAGE | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | READ/WRITE | INDEX & SECTOR | CYLINDER ADDRESS & DIFFERENCE | CONTROL & INTERLOCK | POSITION SERVO PREAMP | CHASSIS CONNECTOR | TERMINATOR | DISKBUS CABLE CONNECTOR |
| | G180 | M7680 | M7681 | M7701 | G938 | M983 | M930 * | M929 |

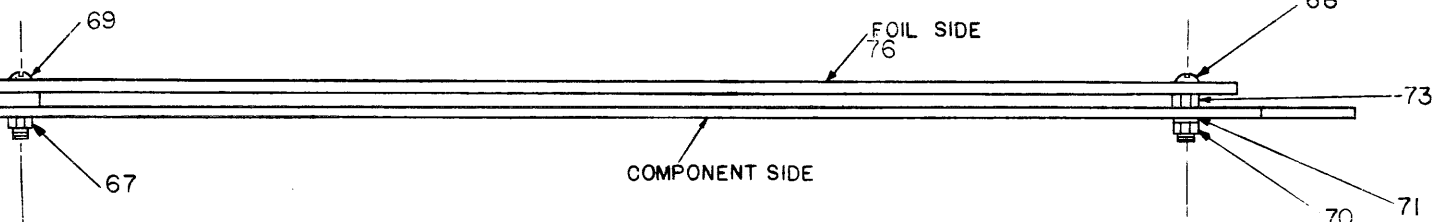
* IF MORE THAN ONE DRIVE IS USED, M930 IS REPLACED BY M929 (BC11A), M930 IS USED IN THE LAST DRIVE ON THE BUS.

| REV. | CHANGE NO. | CHK | DATE |
|------|------------|-----|-----------|
| A | 00002 | | 1-14-72 |
| B | 00006 | | 30 Jan 72 |
| C | 00023 | | 9-25-72 |
| D | 00040 | | 10/11/72 |
| E | 00007 | | 12 Jan 77 |

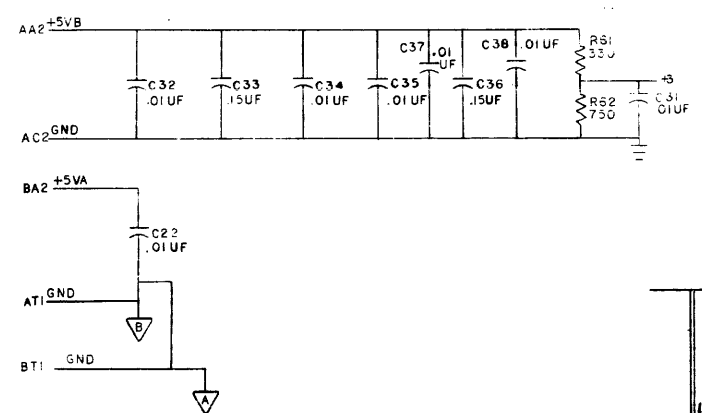
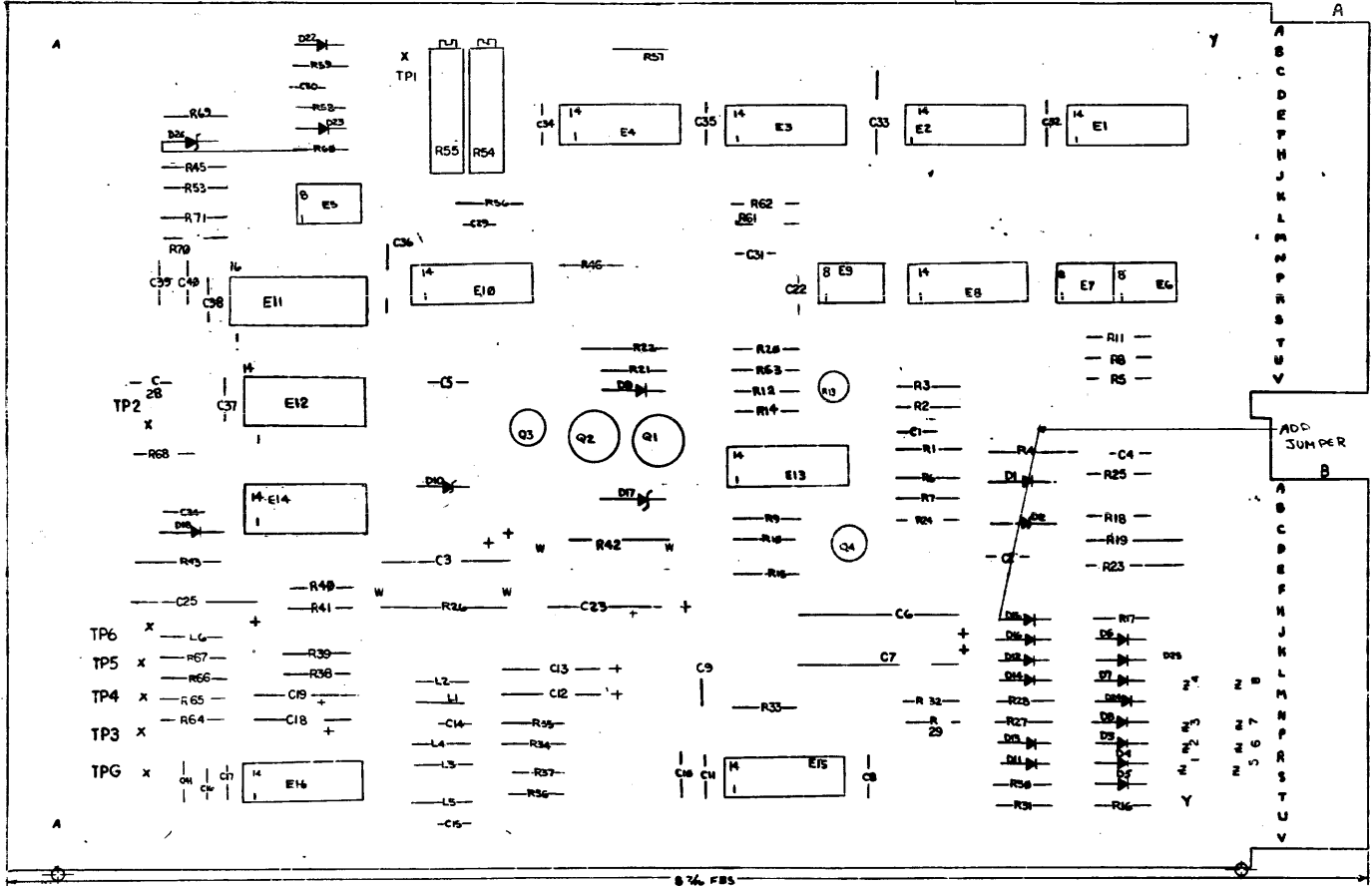
| FIRST USED ON OPTION/MODEL | QTY. | DESCRIPTION | PART NO. | ITEM NO. |
|---|------------------------------|----------------|--|----------|
| RK05 | | | | |
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES | DRM <i>D. Skinnit</i> | DATE 11-2-71 | digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS | |
| DECIMALS .XXX = .005 .XX = .02 .X = .1 | CHK'D <i>J. F. Corbin</i> | DATE 11-9-71 | | |
| ANGLES ±0° 30' | ENG. <i>John Jensen</i> | DATE 24 Nov 71 | TITLE MODULE UTILIZATION | |
| REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓ | PROJ. ENG. <i>C. Johnson</i> | DATE 11-24-71 | | |
| MATERIAL | PROD. <i>D. A. Silberg</i> | DATE 11/7/71 | SIZE CODE NUMBER REV. C MU RK05-0-2 E | |
| FINISH | NEXT HIGHER ASSY. | | | |
| | B-DD-RK05-0 | SCALE NONE | SHEET OF DIST. | |

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION OF DIGITAL EQUIPMENT CORPORATION.
COPYRIGHT © 1974

NOTES:



NOTE:
DO NOT INSERT HANDLE HOLE EYELETS ON OUTSIDE HANDLE HOLES: (2 PLCS)



| | | |
|--|-----|-----|
| DI 8640 | 1 | 6 |
| DI 75-52 | 4 | 8 |
| IC TYPE | GND | +5V |
| PIN 1 AND 2 ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPT IONS ARE STATED ABOVE | | |
| IC PIN LOCATIONS | | |

| A/R | DESCRIPTION | QTY | REF. DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|-----|-------------------------------|-----|------------------|-------------|----------|----------|
| 1 | D26 WIRE, 30AWG GREEN | 80 | 9105740-55 | | | |
| 1 | D26 DIODE IN748A (3.9V ZENER) | 79 | 1100122 | | | |
| 1 | R69 RES. 180 1/4W 5% | 78 | 1301322 | | | |
| 2 | R7,R10 RES. 100 1/4W 5% | 77 | 1300229 | | | |
| 1 | NOISE SHIELD | 76 | 5009893 | | | |
| 2 | HANDLE, FLIP CHIP-GREEN | 75 | 9008337-01 | | | |
| 7 | TPG, TP1 THRU TP6 SWAGE LUG | 74 | 9007791 | | | |
| 2 | HEX NUT, NYLON, #2-56 | 73 | 9007263 | | | |
| 2 | EYELET #6S4-7 | 72 | 9006732 | | | |
| 2 | INTERNAL LOCK WASHER #2-56 | 71 | 9006631 | | | |
| 2 | HEX NUT #2-56 | 70 | 9006555 | | | |
| 2 | SCREW 4-40 X 3/8 | 69 | 9006011-4 | | | |
| 2 | SCREW PAN HD #2-56 X 5/16 | 68 | 9006002-1 | | | |
| 2 | KEP NUT 4/70 | 67 | 9006557 | | | |

| CHK | CHANGE NO. | REV. |
|-------------|------------|------|
| J. SOTO | | |
| S. RADOFF | | |
| J. RINALDIS | | |
| K. FREY | | |
| D. JENSEN | | |

| | | | |
|----|--|----------------------------|------------|
| 3 | E6, E29 | I.C. DEC 75452 | 1910645 |
| 2 | E15, I6 | I.C. DEC 733 | 1910644 |
| 1 | E14 | I.C. DEC 1414 | 1910337 |
| 1 | E5 | I.C. DEC 741 | 1910298 |
| 1 | E1 | I.C. DEC 8881 | 1909705 |
| 2 | E2, E8 | I.C. DEC 8640 | 1911409 |
| 1 | E10 | I.C. DEC 9601 | 1909373 |
| 1 | E13 | I.C. DEC 7472 | 1905398 |
| 2 | E4, E12 | I.C. DEC 7400 | 1905375 |
| 1 | E3 | I.C. DEC 7474 | 1905347 |
| 1 | L6 | INDUCTOR 120UH | 1610663 |
| 2 | L1, L2 | INDUCTOR 56UH | 1610661 |
| 3 | L3, L4, L5 | INDUCTOR 100UH | 1610662 |
| 1 | Q3 | TRANSISTOR DEC 6534C | 1503409-0 |
| 1 | Q4 | TRANSISTOR DEC 3009B | 1503130 |
| 2 | Q1, Q2 | TRANSISTOR 2N2904 | 1501742 |
| 1 | R13 | POT 1K 1/2W 20% TANT | 1303150-3 |
| 2 | R54, 55 | POT 10K 3/4W 10% 78PR | 1303151-10 |
| 2 | R16, R17 | RES. 27K 1/4W 5% | 1305344 |
| 2 | R27, R28 | RES. 8.2K 1/4W 5% | 1303179 |
| 1 | R60 | RES. 220K 1/4W 5% | 1302022 |
| 1 | R4 | RES. 270 1/2W 5% | 1300265 |
| 2 | R40, R41 | RES. 560 1/4W 5% | 1301190 |
| 6 | R6, 9, 45, 53, 70, 71 | RES. 5.6K 1/4W 5% | 1301974 |
| 1 | R11 | RES. 1.1K 1/4W 5% | 1301475 |
| 1 | R59 | RES. 3.3K 1/4W 5% | 1300439 |
| 1 | R62 | RES. 750 1/4W 5% | 1301401 |
| 2 | R15, R21 | RES. 1.2K 1/4W 5% | 1301320 |
| 2 | R30, R31 | RES. 15K 1/4W 5% | 1300496 |
| 6 | R5, 8, 18, 38, 39, 57 | RES. 10K 1/4W 5% | 1300479 |
| 1 | R59 | RES. 4.7K 1/4W 5% | 1300447 |
| 1 | E11 | I.C. DEC 74123 | 1910436 |
| 16 | R1, R2, R3, R2C, R34-37 | RES. 1K 1/4W 5% | 1300365 |
| 2 | R4, R12 | RES. 470 1/4W 5% | 1300316 |
| 1 | R43 | RES. 470 1/2W 5% | 1300315 |
| 3 | R22, R25, R61 | RES. 330 1/4W 5% | 1300295 |
| 2 | R29, R32 | RES. 220 1/4W 5% | 1300271 |
| 2 | R26, R42 | RES. 180 1W 5% | 1300262 |
| 1 | R19 | RES. 180 1/2W 5% | 1300260 |
| 1 | R14 | RES. 150 1/4W 5% | 1300250 |
| 1 | R23 | RES. 150 1/2W 5% | 1300249 |
| 1 | R33 | RES. 100 1/4W 5% | 1300229 |
| 8 | I-9 | SOLDER WIRE WPA2 PINS | 9009217 |
| 18 | D1, D3-9, D11-16, D22-25 | DIODE D672 | 1105275 |
| 1 | D2 | DIODE IN 753A (5.1V ZENER) | 1105994 |
| 3 | D10, D17, D18 | DIODE IN 753A (5.1V ZENER) | 1102421 |
| 13 | C9, C33, C36 | CAP. 150PF 50V 10% TANT | 1000031 |
| 1 | C15 | CAP. 100PF 100V 5% D.M. | 1002408 |
| 4 | C12, C13, C18, C19 | CAP. 01UF 50V AXIAL | 1001610-00 |
| 14 | C40, C11, C16, C22, C24, C27, C28, C30, C31, C32, C34, C35, C37, C38 | CAP. 01UF 100V 20% DISC | 1001610-01 |
| 2 | C6, C7 | CAP. 10UF 35V 20% TANT | 1000069 |
| 3 | C3, C23, C25 | CAP. 33UF 35V 20% TANT | 1000067 |
| 1 | C2 | CAP. 680PF 100V 5% D.M. | 1000026 |
| 2 | C5, C30 | CAP. 470PF 100V 5% D.M. | 1000024 |
| 1 | C29 | CAP. 150PF 100V 5% D.M. | 1000019 |
| 1 | C41 | CAP. 27PF 100V 5% D.M. | 1001739 |
| 1 | C14 | CAP. 56PF 100V 5% D.M. | 1000012 |
| 3 | C1, C39, C40 | CAP. 47PF 100V 5% D.M. | 1000011 |
| 2 | C8, C6 | CAP. 16PF 100V 5% D.M. | 1002609 |
| 1 | ETCHED CIRCUIT BOARD | 5009743 | |
| 1 | MODULE ECO HISTORY | B-VH-G180-0-6 | |
| 1 | ASSY. DRILLING HOLE LAYOUT | E-A-G180-0-5 | |
| 1 | X-Y COORDINATE HOLE LOCATION | K-70-G180-0-4 | |

| QTY | REF. DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|-----|------------------|-------------|----------|----------|
| | | PARTS LIST | | |
| | | | | |
| | | | | |
| | | | | |

| | |
|------------------------|---------------|
| DRN. R. DOUKETTE | DATE 11-22-71 |
| CHVD. MURPHY MADRE | DATE 11-20-71 |
| ENG. DALE JENSEN | DATE 1-22-72 |
| PROJ. ENG. D. KUNIBERG | DATE 1-22-72 |
| PROD. | DATE |

digital

TITLE DEC PACK READ WRITE

SCALE D

SHEET 1 OF 2

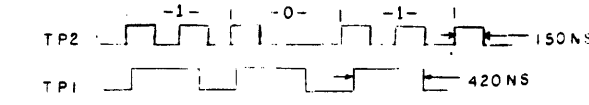
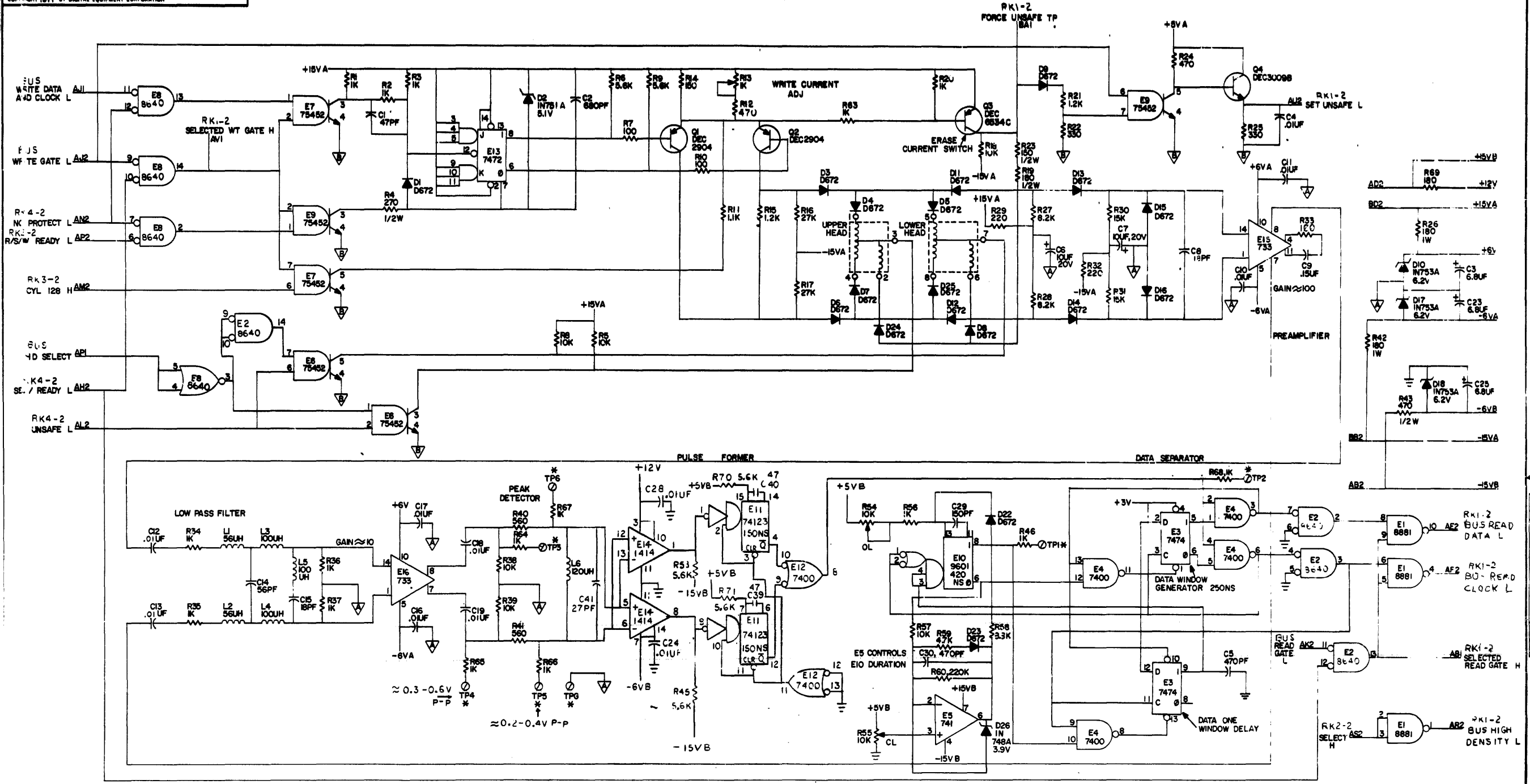
SIZE CODE D

NUMBER 6182-0-1

REV.

| | |
|--------------------------------|---------|
| SEMICONDUCTOR CONVERSION CHART | |
| DEC NO. | EIA NO. |
| DEC 2N2904 | 2N2118A |
| DEC 6534C | MPS6534 |
| DEC 75452 | D672 |
| DEC 733 | IN753A |
| DEC 1414 | IN751A |
| DEC 8640 | IN751A |
| DEC 9601 | IN3653 |

THIS SCHEMATIC IS FURNISHED ONLY FOR TEST AND MAINTENANCE PURPOSES. THE CIRCUITS ARE PROPRIETARY IN NATURE AND SHOULD BE TREATED ACCORDINGLY. COPYRIGHT © 1971 BY DIGITAL EQUIPMENT CORPORATION.



UNLESS OTHERWISE INDICATED:
 * INDICATES SWAGE LUG
 ▽ = ANALOG GND "A" BTI
 ▽ = ANALOG GND "B" AT1
 ⊥ = DIGITAL GND AC2
 --- = COMPONENTS NOT MOUNTED ON BOARD
 ALL TIMES INDICATED ARE NOMINAL

| REV. | DATE | BY | CHKD | APP'D | TRANSISTOR & DIODE CONVERSION CHART | TITLE |
|------|----------|-----------|------|-------|-------------------------------------|---------------------|
| 1 | 11/11/71 | W. J. ... | | | DEC 6834C MPS 6534 D672 IN 753A | DEC PACK READ/WRITE |
| 2 | 12/29/71 | ... | | | DEC 3009B 2N3009 IN 753A | DEC PACK READ/WRITE |
| 3 | ... | ... | | | 2N2904 2N218A IN 753A | DEC PACK READ/WRITE |

8

7

6

5

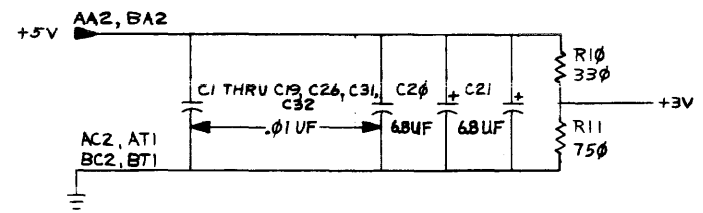
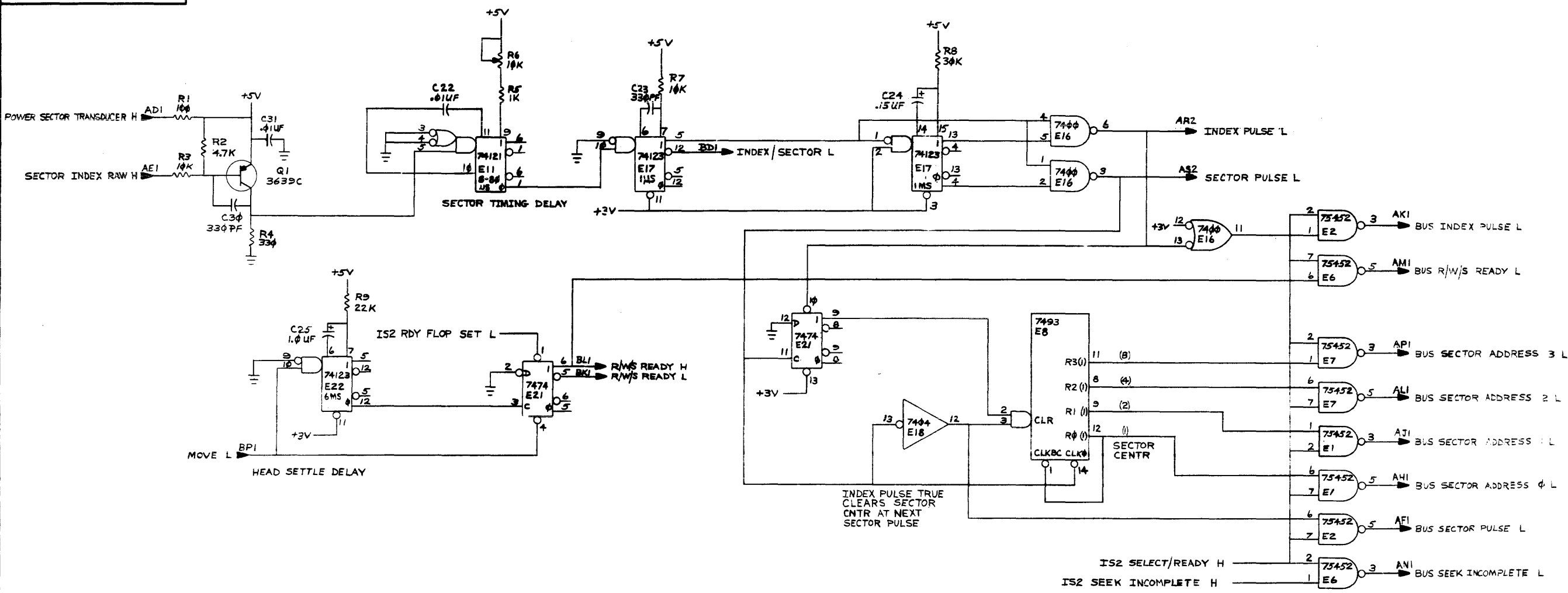
4

3

1-0-069/W 50 2

i

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1976, DIGITAL EQUIPMENT CORPORATION

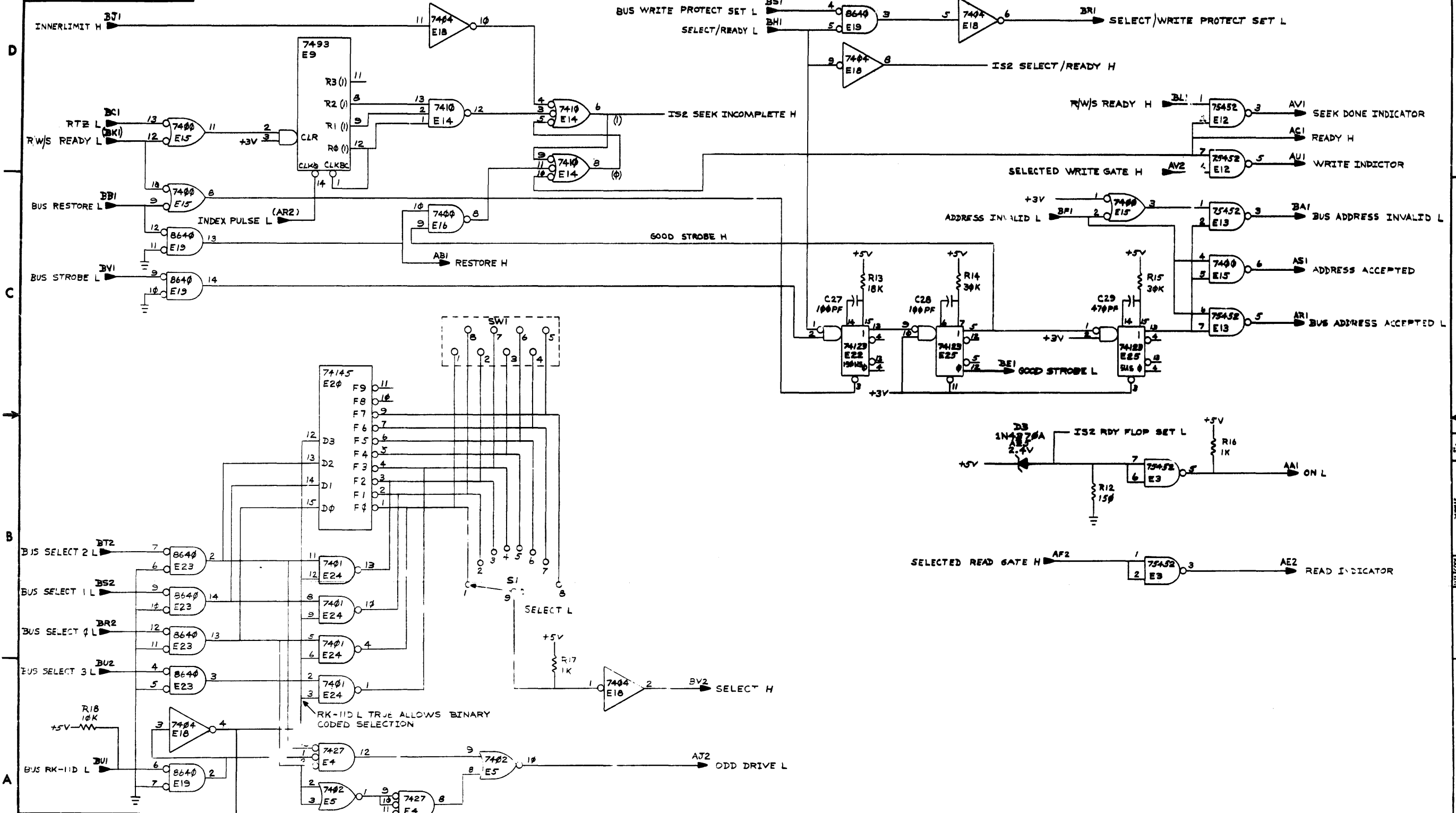


| | |
|---------|--------------|
| REV. 1 | DATE 5-31-77 |
| REV. 2 | DATE |
| REV. 3 | DATE |
| REV. 4 | DATE |
| REV. 5 | DATE |
| REV. 6 | DATE |
| REV. 7 | DATE |
| REV. 8 | DATE |
| REV. 9 | DATE |
| REV. 10 | DATE |

| | | | |
|--------------------------------|-----------|---------------|---------------------------------|
| DRN. <i>[Signature]</i> | 22 JAN 76 | FIRST USED ON | <i>[Signature]</i> |
| CHK'D <i>[Signature]</i> | 3 FEB 76 | TITLE | DEC PACK INDEX AND SECTOR (IS1) |
| ENG. <i>[Signature]</i> | | SIZE | D CS |
| PROJ. ENGR. <i>[Signature]</i> | 55-2-2 | NUMBER | M7680-0-1 |
| PROD. <i>[Signature]</i> | 2/28/76 | REV. | B |
| NEXT HIGHER ASSY. | | SHEET | 1 OF 2 |
| D-1A-M7680-0-0 | | DIST. | |

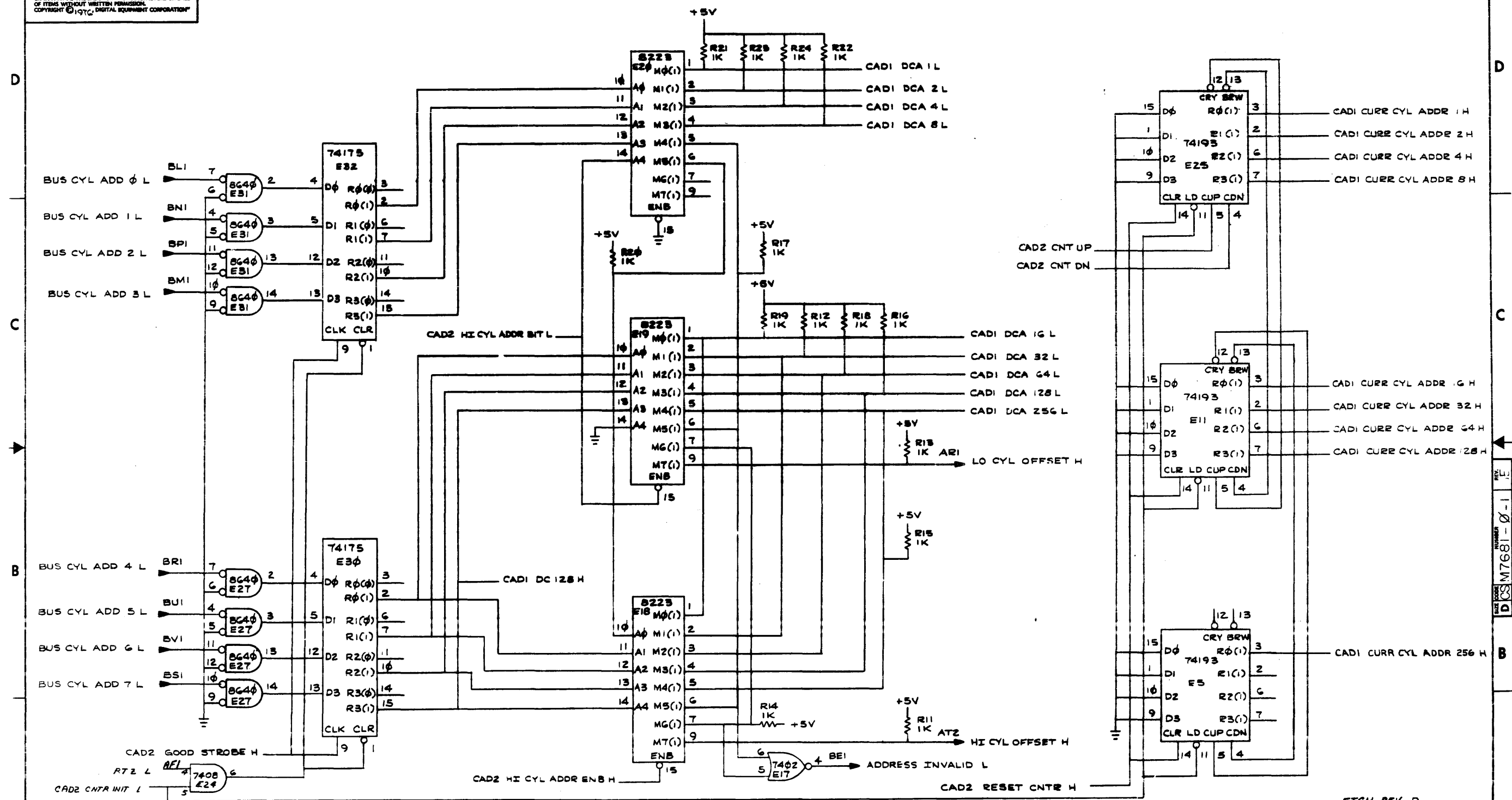
REV. B
M7680-0-1
D CS

"THE DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1976 DIGITAL EQUIPMENT CORPORATION"



| REV. | NUMBER | SIZE | TITLE |
|--------------|-----------|-------|---------------------------------|
| B | M7680-0-1 | D CS | DEC PACK INDEX (IS2) AND SECTOR |
| SHEET 2 OF 2 | | SCALE | |

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1970, DIGITAL EQUIPMENT CORPORATION"



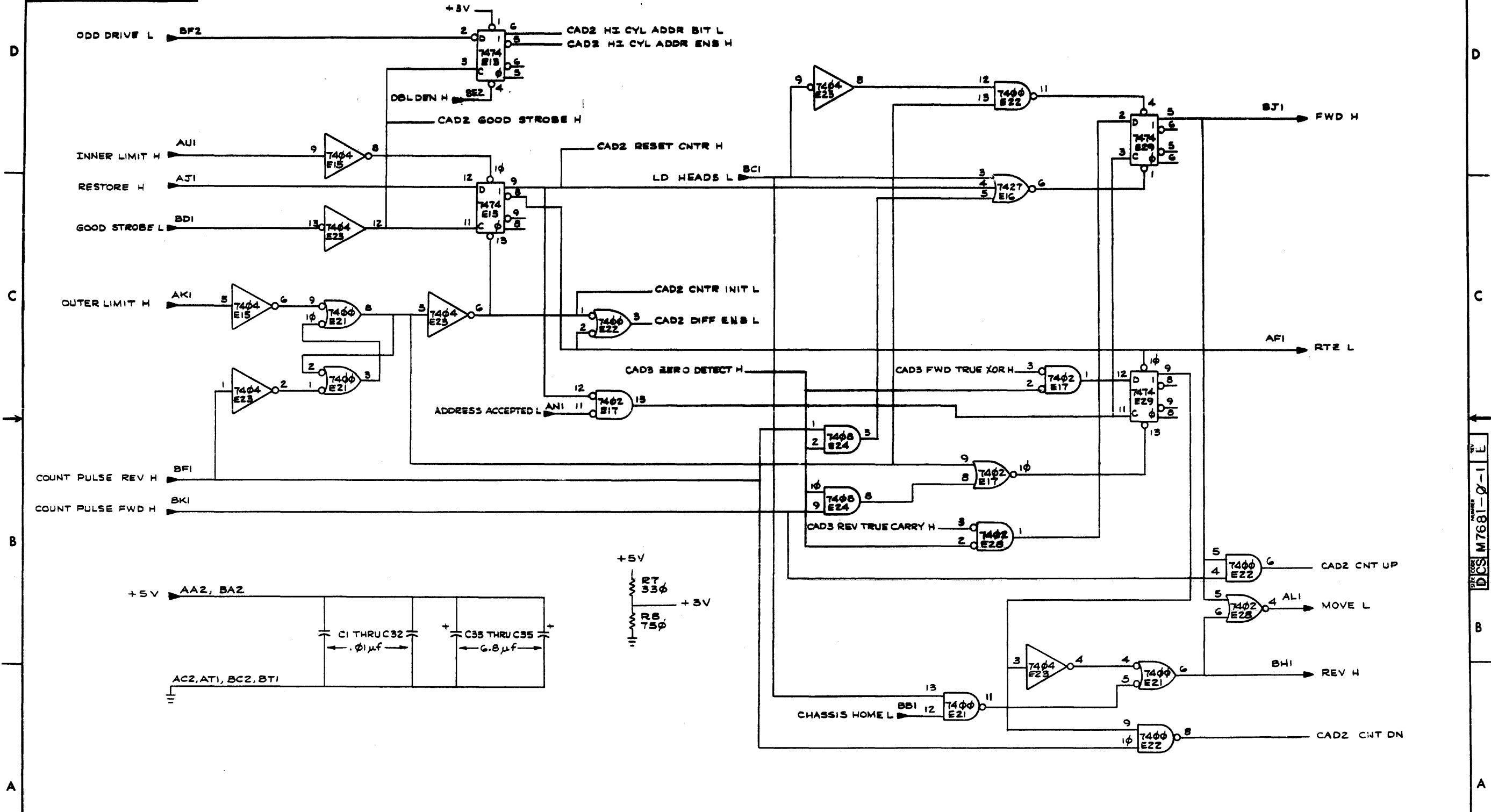
| | |
|------------|-------------|
| REV. | B |
| CHANGE NO. | 0002 |
| DATE | 1-19-76 |
| BY | J. RINALDIS |
| CHKD BY | J. RINALDIS |
| DATE | 2-15-76 |
| BY | J. RINALDIS |
| CHKD BY | J. RINALDIS |
| DATE | 2/17/76 |
| BY | S. RADOFF |
| CHKD BY | S. RADOFF |
| DATE | 4/14/77 |
| BY | A. RICARDO |
| CHKD BY | A. RICARDO |
| DATE | 8/27/77 |

ETCH REV D

| | | | |
|-------------------|----------|---------------|--|
| DRN. No. | 12176 | FIRST USED ON | RK05F |
| CHK'D BY | 2 FEB 76 | TITLE | CYLINDER ADDRESS AND DIFFERENCE (CADI) |
| ENG. BY | 2 FEB 76 | SIZE | D-BA-M7681-0-0 |
| PROD. BY | 2 FEB 76 | SCALE | 1 OF 3 |
| NEXT HIGHER ASSY. | RK05F | NUMBER | D CS M7681-0-1 |
| REV. | E | SHEET | 1 OF 3 |

REV. E
NUMBER
D CS M7681-0-1

THE DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1975 DIGITAL EQUIPMENT CORPORATION

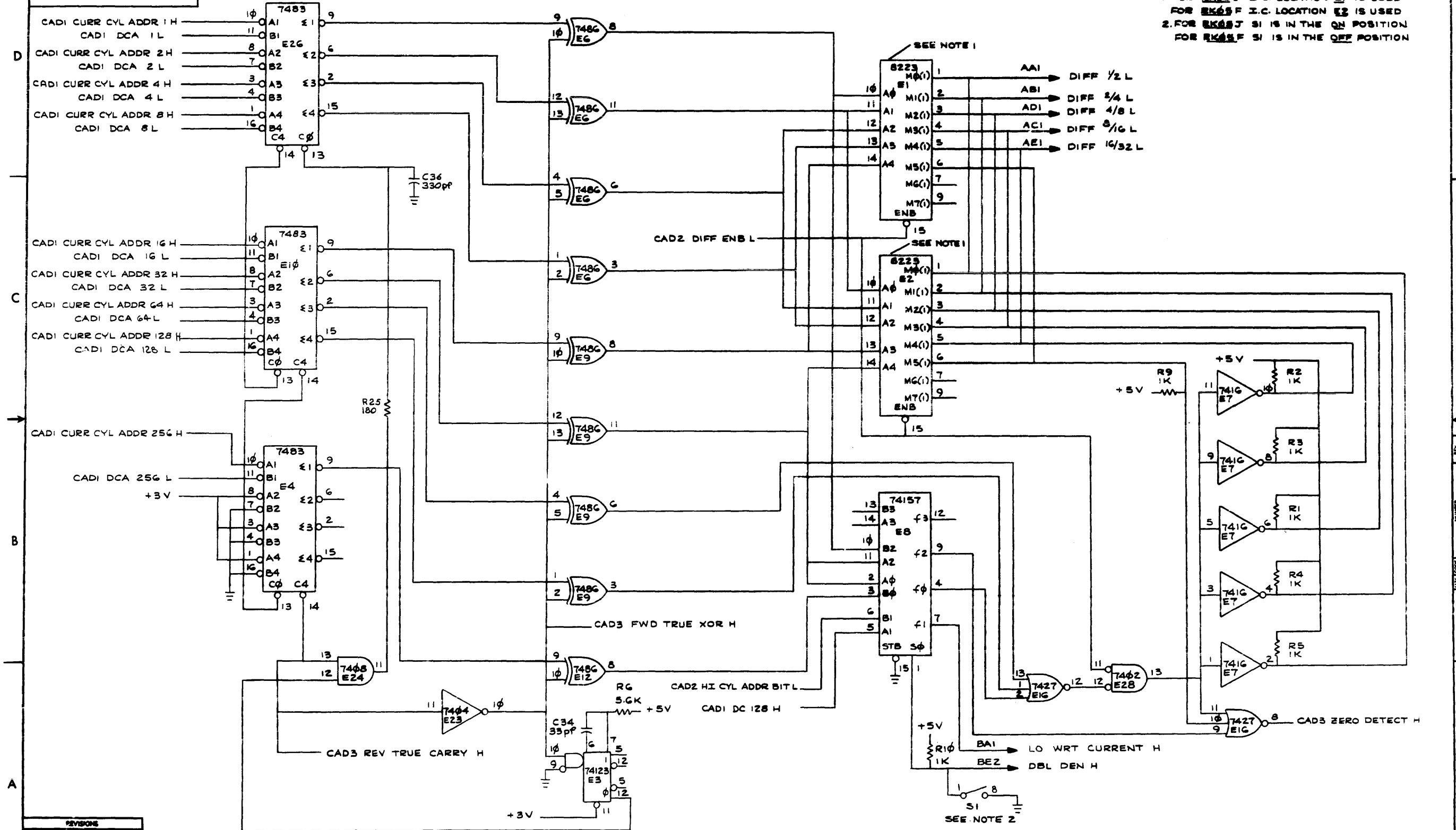


| REVISIONS | | |
|-----------|------------|------|
| CHK | CHANGE NO. | REV. |
| | | |

PART NUMBER DCS M7681-0-1 E

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1970 DIGITAL EQUIPMENT CORPORATION"

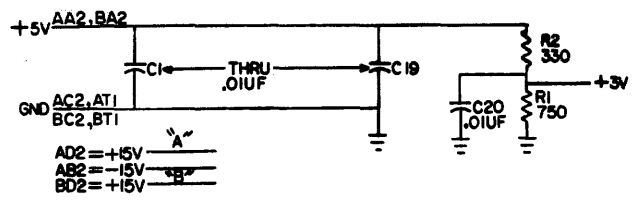
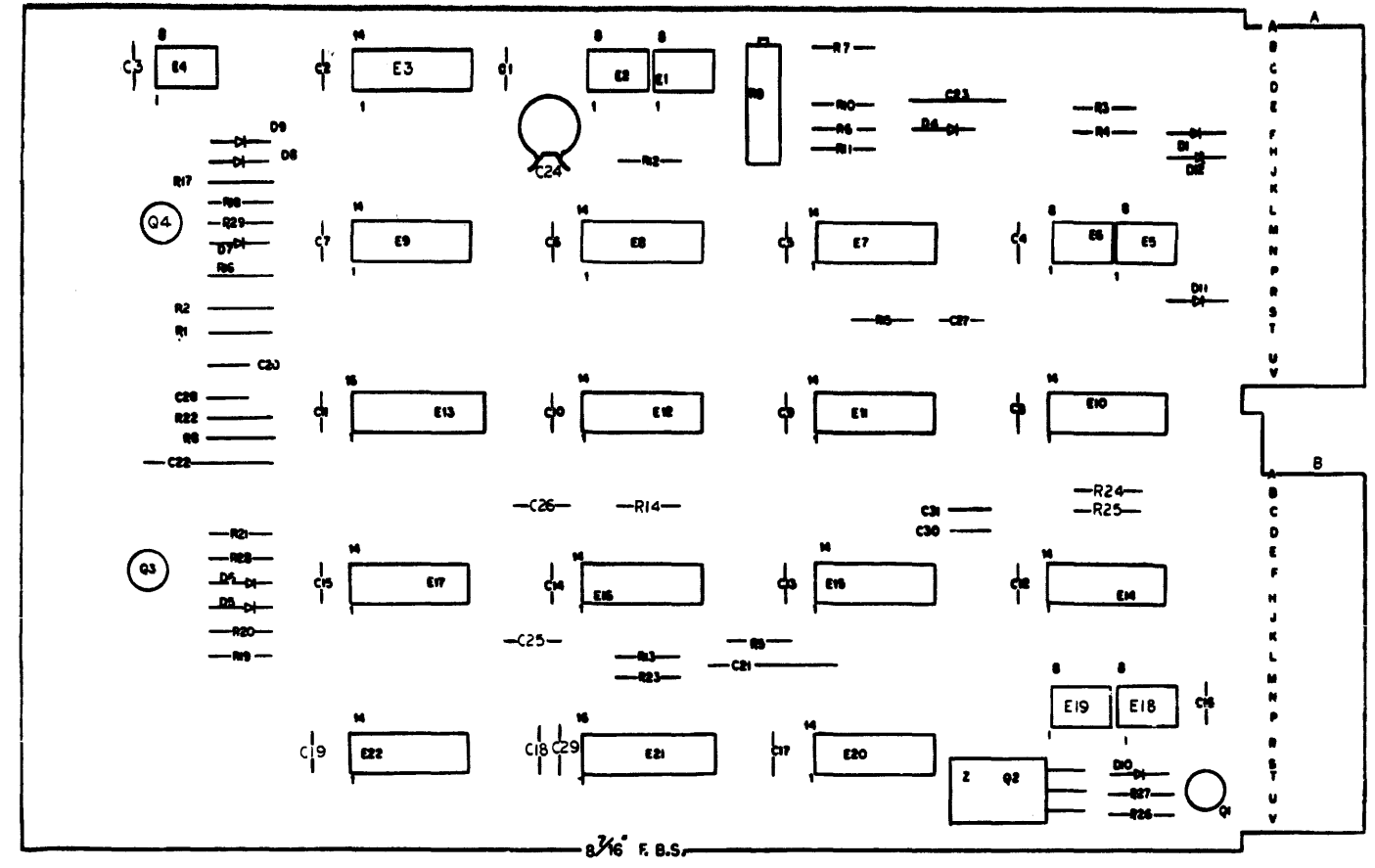
NOTE:
 1. FOR 8K05J I.C. LOCATION E1 IS USED
 FOR 8K05F I.C. LOCATION E2 IS USED
 2. FOR 8K05J S1 IS IN THE ON POSITION
 FOR 8K05F S1 IS IN THE OFF POSITION



| REVISIONS | | |
|-----------|------------|------|
| CHK | CHANGE NO. | REV. |
| | | |

DCS M7681-0-1

The drawing and manufacturer's name, on the part and on the component description and shall not be changed or altered in any way or in any manner for the production of any of these parts.



| | |
|------------|------------------|
| 6-27-72 | S. RADOFF |
| 17 June 77 | CS M7701-00011 P |
| 4-3-73 | D. JENSEN |
| 4-1-73 | D. JENSEN |
| 11-23-72 | D. JENSEN |
| 10-5-72 | D. JENSEN |
| 2-25-72 | D. JENSEN |
| 2-15-72 | D. JENSEN |
| 1-20-72 | D. JENSEN |
| 1-15-72 | D. JENSEN |
| 1-10-72 | D. JENSEN |
| 1-5-72 | D. JENSEN |
| 1-1-72 | D. JENSEN |
| 1-20-72 | D. JENSEN |
| 1-15-72 | D. JENSEN |
| 1-10-72 | D. JENSEN |
| 1-5-72 | D. JENSEN |
| 1-1-72 | D. JENSEN |
| 1-20-72 | D. JENSEN |
| 1-15-72 | D. JENSEN |
| 1-10-72 | D. JENSEN |
| 1-5-72 | D. JENSEN |
| 1-1-72 | D. JENSEN |

| QTY | REF DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|--------------------------------|-----------------|-------------------------------------|------------------|----------|
| PARTS LIST | | | | |
| ETCH BOARD REV K | | | | |
| | IN748 3.9V | SAME | DEC6534D MPS6534 | |
| | IN746A 3.3V | SAME | DEC44C3 | |
| | IN4001 | SAME | IN759 S | |
| | D670 | IN3653 | | |
| | D664 | IN3606 | | |
| | DEC6531 | MPS6531 | | |
| | DEC2219 | 2N2219 | | |
| DEC NO. | EIA NO. | DEC NO. | EIA NO. | |
| SEMICONDUCTOR CONVERSION CHART | | | | |
| SCALE | | NEXT HIGHER ASSY | | |
| SHEET 1 OF 3 | | TITLE DISK ENG. CONTROL + INTERLOCK | | |
| DCS | | NUMBER M7701-0-1 | | REV. P |

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1978 DIGITAL EQUIPMENT CORPORATION"

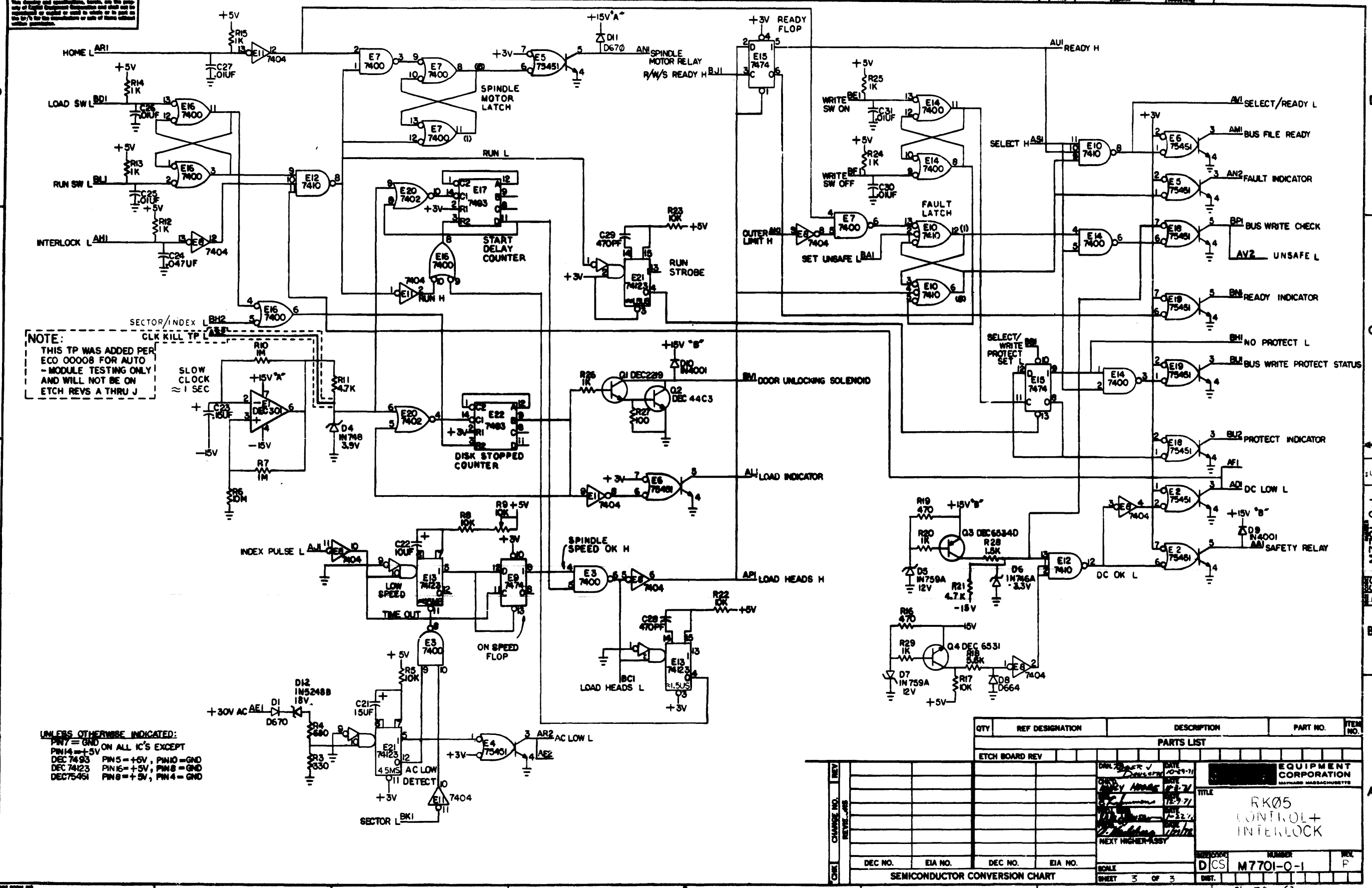
SIZE CODE NUMBER
D CS M7701-0-1

| QTY | REF | DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|-----|---|-------------|------------------------------|----------------|----------|
| | | | X-Y COORDINATE HOLE LOCATION | K-CO-M7701-0-4 | 1 |
| | | | ASSY/DRILLING HOLE LAYOUT | E-AH-M7701-0-5 | 2 |
| | | | MODULE ECO HISTORY | B-MH-M7701-0-6 | 3 |
| 1 | | | ETCHED CIRCUIT BOARD | 5009714 | 4 |
| 25 | C1-C20, C25-C27, C30, C31 | | CAP. .01 UF, 180V, 20%, DISC | 1001610 | 5 |
| 1 | C21 | | CAP. .15 UF, 20V, 20%, TANT | 1004812 | 6 |
| 1 | C22 | | CAP. .10 UF, 20V, 20%, TANT | 1004513 | 7 |
| 1 | C23 | | CAP. .15 UF, 35V, 20%, TANT | 1002180 | 8 |
| 2 | C28, C29 | | CAP. 470 PF, 100V, 5%, DM | 1000024 | 9 |
| 1 | D8 | | DIODE, D664 | 1100114 | 10 |
| 2 | D1, D11 | | DIODE, D670 | 1102162 | 11 |
| 2 | D9, D10 | | DIODE, 1N4001 | 1102942 | 12 |
| 1 | D6 | | DIODE, 1N746A, 3.3V | 1104860 | 13 |
| 1 | D4 | | DIODE, 1N748, 3.9V | 1100121 | 14 |
| 2 | D5, D7 | | DIODE, 1N759S, 12V | 1110643 | 15 |
| A/R | | | GRIPLETS | 1210244-0 | 16 |
| 1 | R27 | | RES. 100 OHMS, 1/4W, 5% | 1300229 | 17 |
| 2 | R2, R3 | | RES. 330 OHMS, 1/4W, 5% | 1300295 | 18 |
| 2 | R16, R19 | | RES. 470 OHMS, 1/4W, 5% | 1300316 | 19 |
| 1 | R1 | | RES. 750 OHMS, 1/4W, 5% | 1301401 | 20 |
| 9 | R12, R13, R15, R20, R24, R25, R26, R29, R14 | | RES. 1K, 1/4W, 5% | 1300365 | 21 |
| 1 | R28 | | RES. 1.5K, 1/4W, 5% | 1300391 | 22 |
| 1 | R4 | | RES. 680 OHMS, 1/4W, 5% | 1301424 | 23 |
| 2 | R11, R21 | | RES. 47K, 1/4W, 5% | 1300447 | 24 |
| 1 | R18 | | RES. 5.6K, 1/4W, 5% | 1301874 | 25 |
| 5 | R5, R8, R17, R22, R23 | | RES. 10K, 1/4W, 5% | 1300479 | 26 |
| | | | | | 27 |
| | | | | | 28 |
| 2 | R7, R10 | | RES. 1M, 1/4W, 5% | 1309595 | 29 |
| 1 | R8 | | RES. 10 M, 1/4W, 5% | 1302666 | 30 |
| 1 | R9 | | RES. 10 K, 1/4W, 10%, 76 PR | 1309143-10 | 31 |
| 1 | Q4 | | TRANSISTOR, DEC 6531 | 1509338 | 32 |
| 1 | Q1 | | TRANSISTOR, DEC 2219 | 1501881 | 33 |
| 1 | Q3 | | TRANSISTOR, DEC 6534D | 1503409-00 | 34 |
| 1 | Q2 | | TRANSISTOR, DEC 44C3 | 151671 | 35 |
| 4 | E3, E7, E16, E14 | | I.C., DEC 7400 | 1905575 | 36 |
| 1 | E20 | | I.C., DEC 7402 | 1909004 | 37 |
| 2 | E11, E8 | | I.C., DEC 7404 | 1909686 | 38 |
| 2 | E12, E10 | | I.C., DEC 7410 | 1905576 | 39 |
| 2 | E9, E15 | | I.C., DEC 7474 | 1905547 | 40 |
| 2 | E22, E17 | | I.C., DEC 7493 | 1909054 | 41 |
| 2 | E21, E13 | | I.C., DEC 74123 | 1910436 | 42 |
| 6 | E2, E4, E6, E5, E18, E19 | | I.C., DEC 75451 | 1910206 | 43 |
| 1 | E1 | | I.C., DEC 301 | 1910262 | 44 |
| 4 | | | EYELET #GSL-7 | 9006732 | 45 |
| 2 | | | HANDLE FLIP CHIP - MAGENTA | 9008337-08 | 46 |
| 1 | | | SCREW #4-40 X 5/16 | 9006010-1 | 47 |
| 1 | | | NUT, KEP #4-40 | 9006557 | 48 |
| 1 | D12 | | DIODE, 1N5248B, 18V, 5% | 1110766 | 49 |
| 1 | C24 | | CAP. .047 UF, 16V, DISC | 1009678 | 50 |

| REVISIONS | | |
|-----------|------------|------|
| CHK | CHANGE NO. | REV. |
| | | |

TITLE DISK ENG. CONTROL + INTERLOCK
 SCALE / / SHEET 2 OF 3
 SIZE CODE NUMBER D CS M7701-0-1
 DIST. / /

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied in whole or in part without the written consent of Digital Equipment Corporation.



NOTE:
THIS TP WAS ADDED PER ECO 00008 FOR AUTO-MODULE TESTING ONLY AND WILL NOT BE ON ETCH REVS A THRU J

UNLESS OTHERWISE INDICATED:
PIN 7 = GND ON ALL IC'S EXCEPT
DEC 7493 PIN 5 = +5V, PIN 10 = GND
DEC 7423 PIN 6 = +5V, PIN 8 = GND
DEC 7545 PIN 8 = +5V, PIN 4 = GND

| QTY | REF DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. | | | | | | | | | | | | | | | | | | | | |
|--|-----------------|-------------|----------|--|-----|------------|------|----|---|--|----------|--|---|--|----------|--|---|--|---------|--|---|--|----------|--|
| PARTS LIST | | | | | | | | | | | | | | | | | | | | | | | | |
| ETCH BOARD REV | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>REV</td> <td>CHANGE NO.</td> <td>DATE</td> <td>BY</td> </tr> <tr> <td>1</td> <td></td> <td>10-21-71</td> <td></td> </tr> <tr> <td>2</td> <td></td> <td>12-27-71</td> <td></td> </tr> <tr> <td>3</td> <td></td> <td>1-22-72</td> <td></td> </tr> <tr> <td>4</td> <td></td> <td>11-17-72</td> <td></td> </tr> </table> | | | | | REV | CHANGE NO. | DATE | BY | 1 | | 10-21-71 | | 2 | | 12-27-71 | | 3 | | 1-22-72 | | 4 | | 11-17-72 | |
| REV | CHANGE NO. | DATE | BY | | | | | | | | | | | | | | | | | | | | | |
| 1 | | 10-21-71 | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | 12-27-71 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | 1-22-72 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | 11-17-72 | | | | | | | | | | | | | | | | | | | | | | |
| EQUIPMENT CORPORATION MAYFORD MASSACHUSETTS | | | | TITLE RK05 CONTROL + INTERLOCK | | | | | | | | | | | | | | | | | | | | |
| PROJECT DCS | | | | NUMBER M7701-0-1 | | | | | | | | | | | | | | | | | | | | |
| SCALE 3 OF 3 | | | | REV P | | | | | | | | | | | | | | | | | | | | |
| SEMICONDUCTOR CONVERSION CHART | | | | | | | | | | | | | | | | | | | | | | | | |
| DEC NO. | EIA NO. | DEC NO. | EIA NO. | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

DCS M7701-0-1

8

7

6

5

4

3

S

1-08969

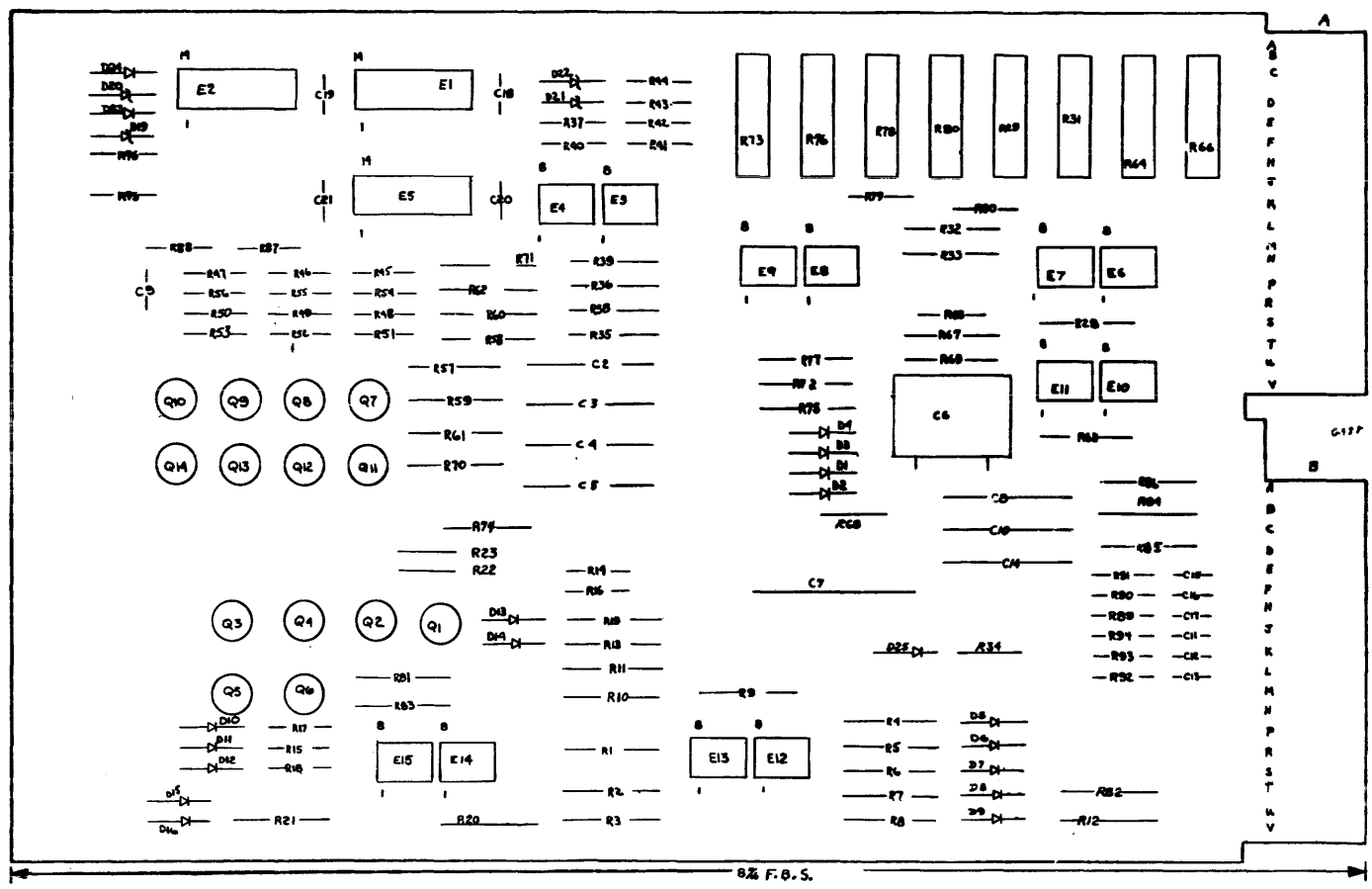
2

1

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE CONSTRUCTION OR SALE OF ANY EQUIPMENT WITHOUT WRITTEN PERMISSION. DIGITAL EQUIPMENT CORPORATION © 1976

NOTES:

| QTY | REF. | DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|-----|------|--|-------------------------|------------|----------|
| 8 | 8 | Q1 THRU Q4, Q11 THRU Q14 | TRANSISTOR 2N5245 | 1509681 | 49 |
| 6 | 6 | Q5 THRU Q10 | TRANSISTOR DEC 6534D | 1503409-00 | 50 |
| 1 | 1 | E1 | I.C. DEC 7241 | 1909686 | 51 |
| 1 | 1 | E2 | I.C. DEC 7413 | 1909989 | 52 |
| 2 | 2 | E3, E4 | I.C. DEC 301 | 1910282 | 53 |
| 1 | 1 | E5 | I.C. DEC 7400 | 1905575 | 54 |
| 7 | 7 | E7, E8, E11 THRU E15 | I.C. DEC 72741 | 1910298-00 | 55 |
| 4 | 4 | | EYELET *GS4-7 | 9006732 | 56 |
| 2 | 2 | | HANDLE, FLIP CHIP GREEN | 9008337-01 | 57 |
| A/R | A/R | | GRIPLET | 1210244-0 | 58 |
| 1 | - | R22 | RES 200K, 1/4W, 1% | 1305386 | 59 |
| 1 | - | R23 | RES 137K, 1/4W, 1% | 1305442 | 60 |
| 2 | - | R13, R19 | RES 9.09K, 1/4W, 1% | 1304855 | 61 |
| 1 | - | R74 | RES 2.94K, 1/4W, 1% | 1301981 | 62 |
| 3 | 3 | EG, E9, E10 | IC DEC 72741 | 1910298-01 | 63 |
| 1 | 1 | R2 | RES. 13.3K 1/4W 1% MF | 1312565 | 15 |
| 1 | 1 | R3 | RES. 9.09K 1/8W 1% MF | 1304855 | 16 |
| 1 | - | R4 | RES. 39.8K 1/8W 1% MF | 1303156 | 17 |
| - | 1 | R4 | RES. 68.1K 1/8W 1% MF | 1305252 | 18 |
| - | 1 | R5 | RES. 39.8K 1/8W 1% MF | 1303156 | 19 |
| 1 | - | R5 | RES. 21.5K 1/8W 1% MF | 1303155 | 20 |
| 1 | - | R6 | RES. 11.5K 1/8W 1% MF | 1309415 | 21 |
| - | 1 | R6 | RES. 21.5K 1/8W 1% MF | 1303155 | 22 |
| 1 | - | R7 | RES. 5.62K 1/8W 1% MF | 1305128 | 23 |
| - | 1 | R7 | RES. 11.5K 1/8W 1% MF | 1309415 | 24 |
| 1 | - | R8 | RES. 2.74K 1/8W 1% MF | 1304868 | 25 |
| - | 1 | R8 | RES. 5.62K 1/8W 1% MF | 1305128 | 26 |
| 5 | 5 | R9, R57, R59, R61, R70 | RES. 10K 1/8W 1% MF | 1303312 | 27 |
| 12 | 12 | R18, R19, R22, R33, R35, R36, R38, R39, R67, R69, R84, R83 | RES. 19.6K 1/8W 1% MF | 1309419 | 28 |
| 2 | 2 | R12, R72 | RES. 6.81K 1/8W 1% MF | 1304870 | 29 |
| - | 2 | R13, R19 | RES. 4.64K 1/8W 1% MF | 1304856 | 30 |
| 9 | 9 | R14, R16, R43, R44, R45, R48, R52, R54, R68 | RES. 2.5K 1/4W 5% | 1300391 | 31 |
| 5 | 5 | R18, R47, R50, R53, R56 | RES. 3.9K 1/4W 5% | 1300444 | 32 |
| 1 | 1 | R20 | RES. 200K 1/8W 1% MF | 1305336 | 33 |
| 1 | 1 | R21 | RES. 3.83K 1/8W 1% MF | 1309413 | 34 |
| - | 1 | R22 | RES. 100K 1/4W 5% | 1302466 | 35 |
| 5 | 6 | R23, R30, R41, R42, R65, R79 | RES. 75K 1/4W 5% | 1304841 | 36 |
| 5 | 5 | R29, R69, R73, R76, R78 | POT. 10K 3/4W 20% 76 PR | 130943-10 | 37 |
| 3 | 3 | R31, R66, R80 | POT. 2K 3/4W 10% 76 PR | 130943-08 | 38 |
| 3 | 3 | R37, R40, R87 | RES. 330 1/4W 5% | 1300295 | 39 |
| 5 | 5 | R58, R60, R62, R71, R82 | RES. 511 1/8W 1% MF | 1302411 | 40 |
| 1 | 1 | R75 | RES. 29.3K 1/8W 1% MF | 1309418 | 41 |
| 2 | 2 | R84, R85 | RES. 10 1/2W 5% | 1300168 | 42 |
| 1 | 1 | R86 | RES. 2.7 1/2W 10% | 1309444 | 43 |
| 6 | 6 | R89 THRU R94 | RES. 22 3/4W 5% | 1301969 | 44 |
| 1 | 1 | R88 | RES. 750 4W 5% | 1301401 | 45 |
| 3 | 3 | R28, R63, R77 | RES. 1.96K 3/8W 1% MF | 1304833 | 46 |
| - | 1 | R74 | RES. 1.47K 1/8W 1% MF | 1305108 | 47 |
| 3 | 3 | R34, R95, R96 | RES. 10K 1/4W 5% | 1300479 | 48 |



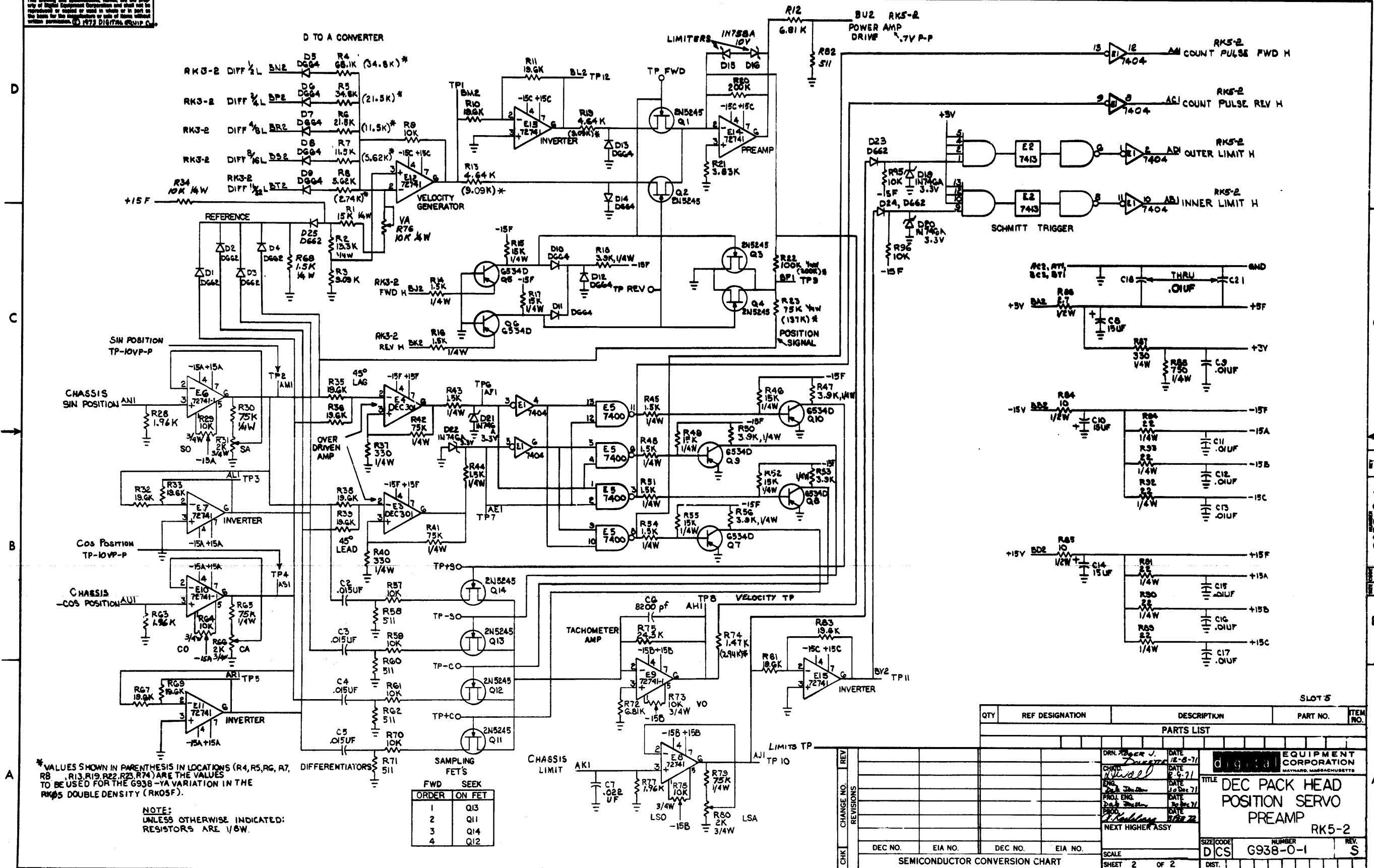
| | |
|--|-----------|
| 72741 | SEE SHT 2 |
| LM301 | SEE SHT 2 |
| IC TYPE | GND +5V |
| GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE | |
| IC PIN LOCATIONS | |

REVISIONS

| REV. | DESCRIPTION | DATE |
|------|-------------------|----------|
| 1 | REVISED & REDRAWN | 12-30-71 |
| 2 | REVISED & REDRAWN | 12-30-71 |
| 3 | REVISED & REDRAWN | 12-30-71 |
| 4 | REVISED & REDRAWN | 12-30-71 |
| 5 | REVISED & REDRAWN | 12-30-71 |

| QTY | QTY | REF. DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. | | | | | | | | | | | | | | | | | | | | |
|--|---------|----------------------|---------------|----------|----------|------------------|--------------|--------|--|-------------|--------------|------|-------|----------------|---------------|------|--------|----------------------|---------------|-------|------|--------------------|--------------|--|--|
| FIRST USED ON OPTION MODEL | | | | | | | | | | | | | | | | | | | | | | | | | |
| PARTS LIST | | | | | | | | | | | | | | | | | | | | | | | | | |
| ETCH BOARD REV. K | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>6534D</td> <td>NONE</td> <td>DRN. A. DOUCETTE</td> <td>DATE 12-9-71</td> </tr> <tr> <td>2N5245</td> <td></td> <td>CHWD. DEVAL</td> <td>DATE 12-9-71</td> </tr> <tr> <td>D662</td> <td>IN645</td> <td>ENG. D. JENSEN</td> <td>DATE 12-30-71</td> </tr> <tr> <td>D664</td> <td>IN3606</td> <td>PROJ. ENG. D. JENSEN</td> <td>DATE 12-30-71</td> </tr> <tr> <td>1746A</td> <td>SAME</td> <td>PROD. A. KARLSBERG</td> <td>DATE 12-3-72</td> </tr> </table> | | | | 6534D | NONE | DRN. A. DOUCETTE | DATE 12-9-71 | 2N5245 | | CHWD. DEVAL | DATE 12-9-71 | D662 | IN645 | ENG. D. JENSEN | DATE 12-30-71 | D664 | IN3606 | PROJ. ENG. D. JENSEN | DATE 12-30-71 | 1746A | SAME | PROD. A. KARLSBERG | DATE 12-3-72 | <p>digital</p> <p>TITLE DEC PACK HEAD POSITION SERVO PREAMP RK5-1</p> <p>SIZE CODE NUMBER REV. DCS G938-0-1 S</p> | |
| 6534D | NONE | DRN. A. DOUCETTE | DATE 12-9-71 | | | | | | | | | | | | | | | | | | | | | | |
| 2N5245 | | CHWD. DEVAL | DATE 12-9-71 | | | | | | | | | | | | | | | | | | | | | | |
| D662 | IN645 | ENG. D. JENSEN | DATE 12-30-71 | | | | | | | | | | | | | | | | | | | | | | |
| D664 | IN3606 | PROJ. ENG. D. JENSEN | DATE 12-30-71 | | | | | | | | | | | | | | | | | | | | | | |
| 1746A | SAME | PROD. A. KARLSBERG | DATE 12-3-72 | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <th>DEC NO.</th> <th>EIA NO.</th> <th>DEC NO.</th> <th>EIA NO.</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> | | | | DEC NO. | EIA NO. | DEC NO. | EIA NO. | | | | | | | | | | | | | | | | | | |
| DEC NO. | EIA NO. | DEC NO. | EIA NO. | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or used in whole or in part as the basis for the manufacture or sale of items without written permission. © 1972 DIGITAL EQUIP. CO.



* VALUES SHOWN IN PARENTHESIS IN LOCATIONS (R4, R5, R6, R7, R8, R13, R19, R22, R23, R74) ARE THE VALUES TO BE USED FOR THE G938-YA VARIATION IN THE RK05 DOUBLE DENSITY (RK05F).

NOTE: UNLESS OTHERWISE INDICATED: RESISTORS ARE 1/4W.

| FWD | | SEEK | |
|-------|-----|-------|-----|
| ORDER | FET | ORDER | FET |
| 1 | Q13 | 1 | Q11 |
| 2 | Q11 | 2 | Q14 |
| 3 | Q14 | 3 | Q12 |
| 4 | Q12 | 4 | |

| QTY | REF DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|------------|-----------------|-------------|----------|----------|
| PARTS LIST | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

DRN: Roger J. [Signature]
 CHND: [Signature]
 PROJ. ENG: [Signature]
 DATE: 12-5-71
 DATE: 8-9-71
 DATE: 1-9-71
 DATE: 1-9-71
 DATE: 1-9-71
 DATE: 1-9-71
 DATE: 1-9-71
 DATE: 1-9-71

DIGITAL EQUIPMENT CORPORATION
 MAYFARLD, MASSACHUSETTS

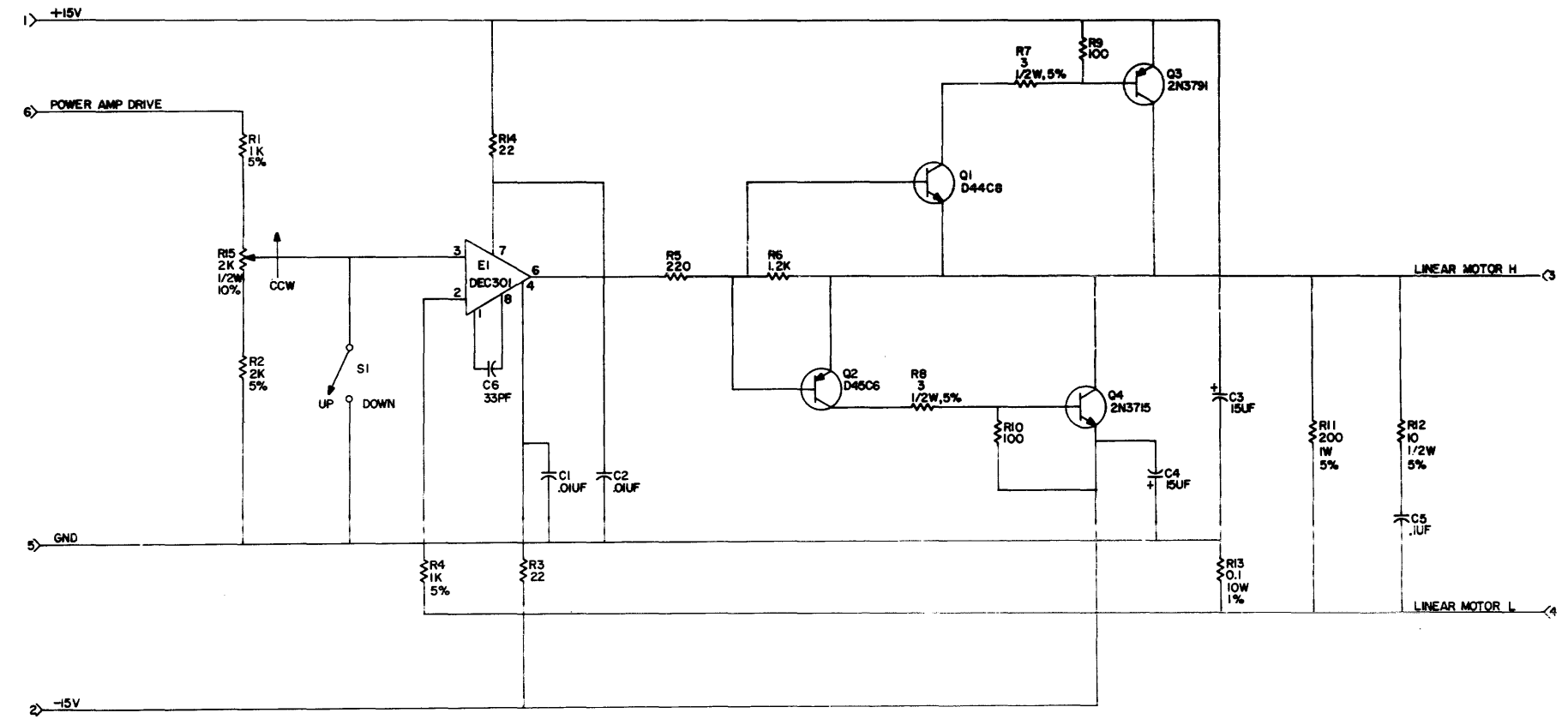
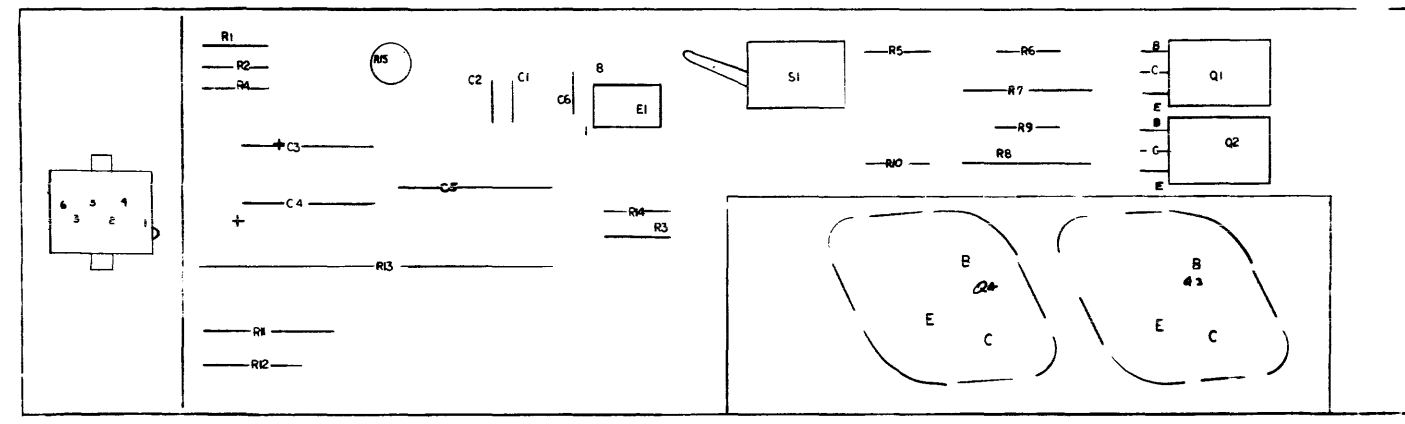
TITLE: DEC PACK HEAD POSITION SERVO PREAMP
 RK5-2

CHK CHANGE NO. REVISIONS

DEC NO. EIA NO. DEC NO. EIA NO.
 SEMICONDUCTOR CONVERSION CHART

SCALE: DIST. SHEET 2 OF 2
 SIZE CODE: DCS NUMBER: G938-0-1 REV. S

THIS SCHEMATIC IS FURNISHED ONLY FOR TEST AND MAINTENANCE PURPOSES. THE CIRCUITS ARE PROPRIETARY IN NATURE AND SHOULD BE TREATED ACCORDINGLY. COPYRIGHT 1971 BY DECPAK EQUIPMENT CORPORATION



UNLESS OTHERWISE INDICATED:
 RES. ARE 1/4W, 10%
 R13 IS A CURRENT SAMPLING RES.

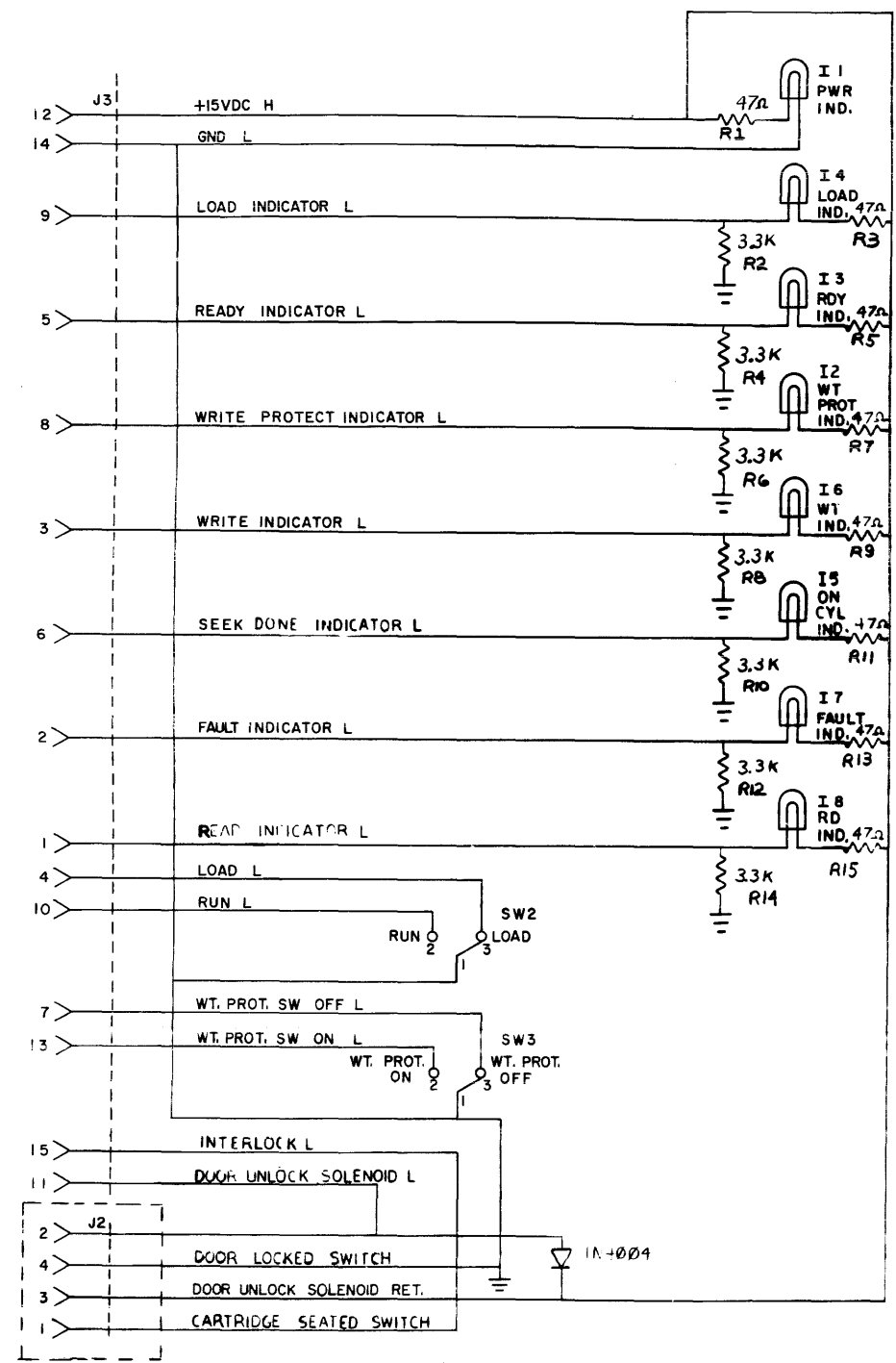
| REVISION | DATE | BY | CHKD |
|----------|----------|--------------|-----------|
| 1 | 11/15/71 | E. JENSEN | D. JENSEN |
| 2 | 11/15/71 | D. JENSEN | D. JENSEN |
| 3 | 11/15/71 | S. B. JENSEN | D. JENSEN |
| 4 | 11/15/71 | D. JENSEN | D. JENSEN |
| 5 | 11/15/71 | D. JENSEN | D. JENSEN |
| 6 | 11/15/71 | D. JENSEN | D. JENSEN |
| 7 | 11/15/71 | D. JENSEN | D. JENSEN |
| 8 | 11/15/71 | D. JENSEN | D. JENSEN |
| 9 | 11/15/71 | D. JENSEN | D. JENSEN |
| 10 | 11/15/71 | D. JENSEN | D. JENSEN |

| TRANSISTOR & DIODE CONVERSION CHART | | | |
|-------------------------------------|--------|------|----|
| DATE | BY | DATE | BY |
| 11-7-71 | 2N3715 | | |
| 10-14-71 | D45C6 | | |
| 10-14-71 | D44CB | | |

| | | | |
|---------------------|------|----------------------------------|-----|
| TITLE | | DECPAK HEAD POS. SERVO PWR. AMP. | |
| SIZE | CODE | NUMBER | REV |
| D | CS | H604-0-1 | - |
| PRINTED CIRCUIT REV | | K | |

NUMBER H604-0-1
 REV K
 SIZE CODE D CS

THIS SCHEMATIC IS FURNISHED ONLY FOR TEST AND MAINTENANCE PURPOSES. THE CIRCUITS ARE PROPRIETARY IN NATURE AND SHOULD BE TREATED ACCORDINGLY. COPYRIGHT 1978 BY DIGITAL EQUIPMENT CORPORATION



| REV | CHK | CHG NO. | REV |
|-----|-----------|---------|-----|
| 1 | LOGO | 1 | B |
| 2 | D. JENSEN | | |
| 3 | D. JENSEN | | |
| 4 | D. JENSEN | | |
| 5 | D. JENSEN | | |
| 6 | D. JENSEN | | |
| 7 | D. JENSEN | | |
| 8 | D. JENSEN | | |
| 9 | D. JENSEN | | |
| 10 | D. JENSEN | | |
| 11 | D. JENSEN | | |
| 12 | D. JENSEN | | |
| 13 | D. JENSEN | | |
| 14 | D. JENSEN | | |
| 15 | D. JENSEN | | |

| DRN | DATE |
|-----------|----------|
| S. COOPER | 11-20-71 |
| CHK'D | |
| ENG | DATE |
| PROD | DATE |

| TRANSISTOR & DIODE CONVERSION CHART | | | |
|-------------------------------------|-----|-----|-----|
| DEC | EIA | DEC | EIA |
| | | | |
| | | | |
| | | | |
| | | | |

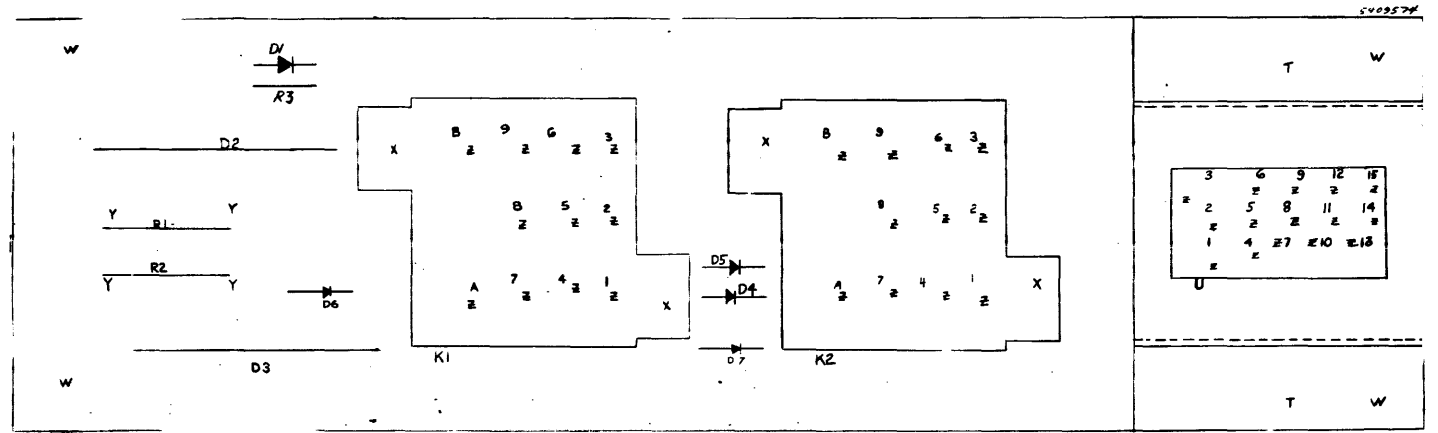
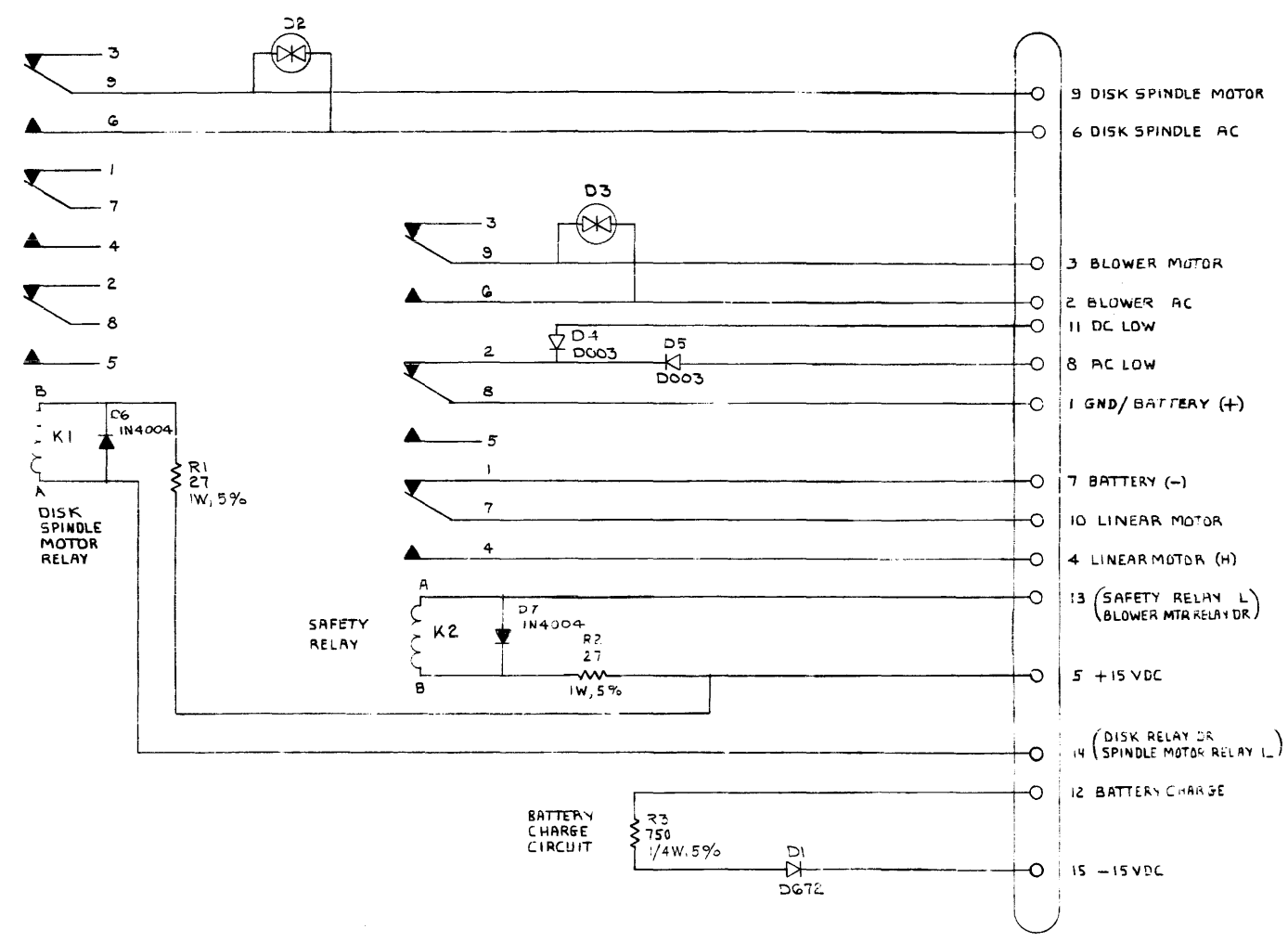
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE: RK05 CONTROL PANEL
NUMBER: 5409E98-0-1
PRINTED CIRCUIT REV. E-12

SIZE CODE: P 1 CS
NUMBER: 5409E98-0-1
REV: F

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or used in whole or in part as a basis for the manufacture or sale of items without written permission.

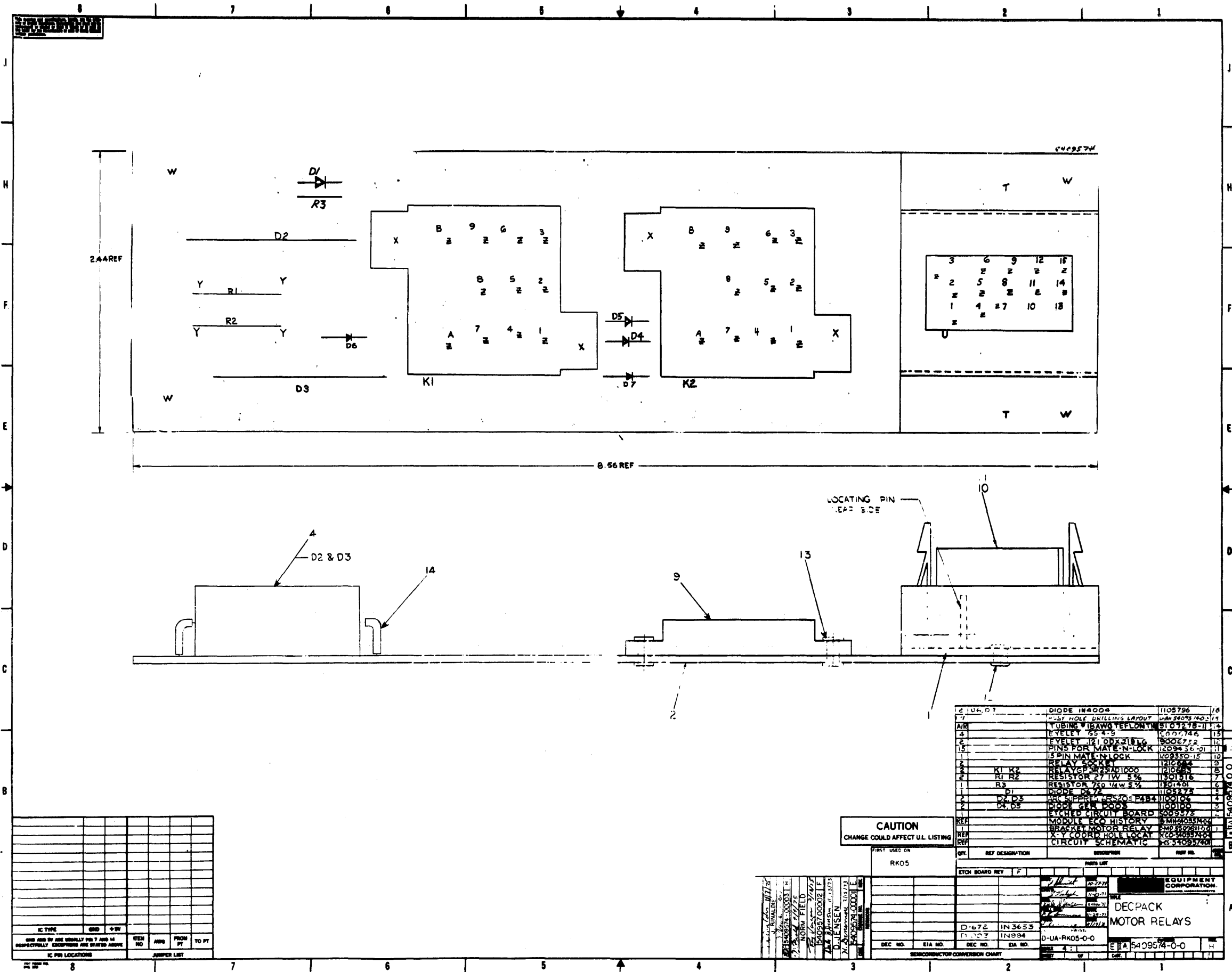
- NOTE:**
1. RELAY CONTACTS ARE SHOWN IN THE DE-ENERGIZED POSITIONS.
 2. SAFETY RELAY L AND BLOWER MTR RELAY DR ARE THE SAME SIGNAL.
 3. SPINDLE MOTOR RELAY L AND DISK RELAY DR ARE THE SAME SIGNAL.
 4. THIS MODULE MUST BE UL APPROVED



REVISIONS
 CHG. NO. CHANGE NO. REV. DATE
 1 1/1/71 J. RINALDIS
 2 1/15/71 N. FIEL
 3 1/15/71 D. JENSEN
 4 1/15/71
 5 1/15/71
 6 1/15/71
 7 1/15/71
 8 1/15/71
 9 1/15/71
 10 1/15/71
 11 1/15/71
 12 1/15/71
 13 1/15/71
 14 1/15/71
 15 1/15/71

| QTY | REF DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|--------------------------------|-----------------|----------------|--|-------------|
| PARTS LIST | | | | |
| | | ETCH BOARD REV | F | |
| | D003 | IN994 | | |
| | D672 | IN3653 | | |
| DEC NO. | | EIA NO. | DEC NO. | EIA NO. |
| SEMICONDUCTOR CONVERSION CHART | | | | |
| DRN. ROYER | | DATE 12-9-71 | digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS TITLE DEC PACK MOTOR RELAYS | |
| CHK'D. ROYER | | DATE 12-15-71 | | |
| ENG. J. JENSEN | | DATE 12-15-71 | | |
| PROD. J. JENSEN | | DATE 12-15-71 | | |
| NEXT HIGHER ASSY | | | SIZE CODE | NUMBER |
| | | | DICS | 5409574-0-1 |
| SCALE | | | SHEET | OF |
| | | | DIST. | |

5409574-0-1 H



Check for correct specifications, consult the data sheets for the components and equipment and check for correct wiring of cables or wires to be used in the system. Verify the manufacturer's code of items before using them.

INTERFACE CABLE

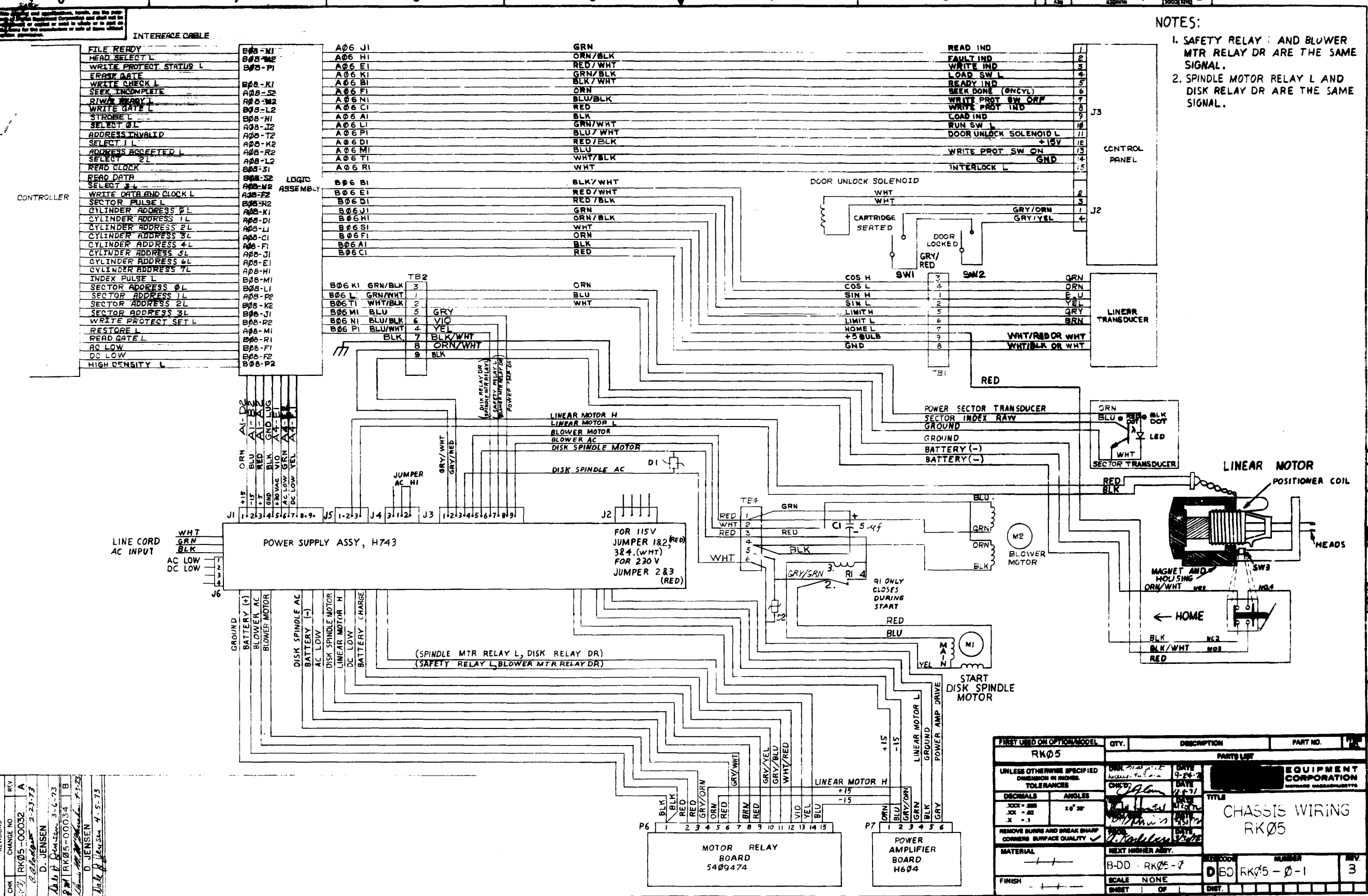
| | |
|------------------------|--------|
| FILE READY | B03-N1 |
| HEAD SELECT L | B03-M2 |
| WRITE PROTECT STATUS L | B03-P1 |
| ERASE GATE | B03-K1 |
| WRITE CHECK L | B03-S2 |
| SEEK INCOMPLETE | B03-M2 |
| R/W/R READY L | B03-L2 |
| WRITE GATE L | B03-H1 |
| STROBE L | B03-J2 |
| SELECT 0 L | B03-T2 |
| ADDRESS INVALID | B03-K2 |
| SELECT 1 L | B03-R2 |
| ADDRESS ACCEPTED L | B03-L2 |
| SELECT 2 L | B03-S1 |
| READ CLOCK | B03-S1 |
| READ DATA | B03-S2 |
| SELECT 3 L | B03-M2 |
| WRITE DATA AND CLOCK L | B03-E2 |
| SECTOR PULSE L | B03-N2 |
| CYLINDER ADDRESS 0 L | B03-K1 |
| CYLINDER ADDRESS 1 L | B03-D1 |
| CYLINDER ADDRESS 2 L | B03-L1 |
| CYLINDER ADDRESS 3 L | B03-C1 |
| CYLINDER ADDRESS 4 L | B03-F1 |
| CYLINDER ADDRESS 5 L | B03-J1 |
| CYLINDER ADDRESS 6 L | B03-E1 |
| CYLINDER ADDRESS 7 L | B03-H1 |
| INDEX PULSE L | B03-M1 |
| SECTOR ADDRESS 0 L | B03-L1 |
| SECTOR ADDRESS 1 L | B03-R2 |
| SECTOR ADDRESS 2 L | B03-N1 |
| SECTOR ADDRESS 3 L | B03-F1 |
| WRITE PROTECT SET L | B03-R2 |
| RESTORE L | B03-M1 |
| READ GATE L | B03-R1 |
| AC LOW | B03-F1 |
| DC LOW | B03-F2 |
| HIGH DENSITY L | B03-P2 |

LOGIC ASSEMBLY

| | |
|--------|---------|
| A06 J1 | GRN |
| A06 H1 | ORN/BLK |
| A06 E1 | RED/WHT |
| A06 K1 | GRN/BLK |
| A06 B1 | BLK/WHT |
| A06 F1 | ORN |
| A06 N1 | BLU/BLK |
| A06 C1 | RED |
| A06 A1 | BLK |
| A06 L1 | GRN/WHT |
| A06 P1 | BLU/WHT |
| A06 D1 | RED/BLK |
| A06 M1 | WHT/BLK |
| A06 T1 | WHT |
| A06 R1 | WHT |
| B06 B1 | BLK/WHT |
| B06 E1 | RED/WHT |
| B06 D1 | RED/BLK |
| B06 J1 | GRN |
| B06 H1 | ORN/BLK |
| B06 S1 | WHT |
| B06 F1 | ORN |
| B06 A1 | BLK |
| B06 C1 | RED |

| | | | |
|--------|---|---------|---------|
| TB2 | 3 | GRN/BLK | ORN |
| B06 L | 1 | GRN/WHT | BLU |
| B06 T1 | 2 | WHT/BLK | WHT |
| B06 M1 | 5 | BLU | GRY |
| B06 N1 | 6 | BLU/BLK | VIO |
| B06 P1 | 4 | BLU/WHT | YEL |
| | 7 | BLK | BLK/WHT |
| | 8 | ORN/WHT | ORN/WHT |
| | 9 | BLK | BLK |

- NOTES:
1. SAFETY RELAY L AND BLOWER MTR RELAY DR ARE THE SAME SIGNAL.
 2. SPINDLE MOTOR RELAY L AND DISK RELAY DR ARE THE SAME SIGNAL.



REVISIONS

| CHK | CHANGE NO | REV |
|-----|-----------|-----|
| | 1 | A |
| | 2 | B |
| | 3 | C |
| | 4 | D |
| | 5 | E |

DATE: 1-23-73
D. JENSEN
DATE: 3-6-73
D. JENSEN
DATE: 4-5-73

| FIRST USED ON OPTION MODEL | QTY. | DESCRIPTION | PART NO. |
|---|--------|-------------|----------|
| RK05 | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES | | | |
| DECIMALS | ANGLES | | |
| .XXX - .999 | ±0.005 | | |
| .XX - .99 | ±0.01 | | |
| .X - .9 | ±0.02 | | |
| REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY | | | |
| MATERIAL | | | |
| NEXT HIGHER ASSY. | | | |
| FINISH | | | |

| | | | |
|----------------|---------|------|---|
| DATE | 9-24-73 | BY | |
| CHK'D | | DATE | |
| TITLE | | | |
| CHASSIS WIRING | | | |
| RK05 | | | |
| SCALE | NONE | REV | 3 |
| SHEET | OF | DRY | |

| DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS | | | ACCESSORY LIST | | LEGEND | | QUANTITY / VARIATION | | | | | | | | | | | | |
|--|---------------------------|--|----------------|--------------|--------|---------------------------|----------------------|--|--|---------------------|--|-----------|--|-----------|--|--------------------------|--|---------|--|
| MADE BY | | CHECKED <i>G. Schneider</i> | | SECTION | | D DOCUMENT | | RK05's for all RK05's for all RK05's | | | | KIT CHECK | | BY DATE | | INSTALLATION CHECK | | BY DATE | |
| DATE G. Schneider | | DATE 8/17/72 | | | | DN DOCUMENT CHANGE NOTICE | | | | | | | | | | | | | |
| ENG <i>G. Schneider</i> | | PROD <i>Alan Backberg</i> | | ISSUED SECT. | | PA PAPER TAPE ASCII | | | | | | | | | | | | | |
| DATE 8/17/72 | | DATE 8/17/72 | | | | PB PAPER TAPE BINARY | | | | | | | | | | | | | |
| PM PAPER TAPE READ-IN-MODE | | | | | | | | | | | | | | | | | | | |
| ITEM NO. | DWG NO. / PART NO. | DESCRIPTION | | | | | | | | | | | | | | | | | |
| 1 | RK05-0 | Customer Print Set (B-DD-RK05-0 Sheet one only) | | | | | | | | | | | | | | | | | |
| 2 | DEC-RK05-TPB-1 | ILLUSTRATED PARTS BREAK DOWN FOR RK05 | | | | | | | | | | | | | | | | | |
| 3 | DEC-00-RK05JF-DA | Maintenance Manual | | | | | | | | | | | | | | | | | |
| *** 4 | BC 11A-08 | Unibus Cable 8 feet | | | | | | | | | | | | | | | | | |
| 5 | 2200007 | Head Cleaning Kit | | | | | | | | | | | | | | | | | |
| 6 | 3010350-00 | Disk Cartridge 12 Sector | | | | | | | | | | | | | | | | | |
| 7 | 3010350-02 | Disk Cartridge 16 Sector | | | | | | | | | | | | | | | | | |
| 8* | A-AD-7009276-Q-0 | Mounting Hardware KIT | | | | | | | | | | | | | | | | | |
| 9* | 1209152-0-2 REF | Slide Chassis (Use set that was issued to Assy Line) | | | | | | | | | | | | | | | | | |
| NOTE: The following items are additionally required when unit is shipped in a rack. | | | | | | | | | | | | | | | | | | | |
| 10 | 749691-1 | Shipping Bracket (Left Hand) | | | | | | | | | | | | | | | | | |
| 11 | 749691-2 | Shipping Bracket (Right Hand) | | | | | | | | | | | | | | | | | |
| 12** | 3611382 | Drive Identification Numbers | | | | | | | | | | | | | | | | | |
| *NOTE: If unit is shipped in a rack, Items 8 and 9 are mounted to the rack. | | | | | | | | | | | | | | | | | | | |
| **NOTE: Attach the drive identification number set to the instruction sheet #DEC-16-(379)-1094-N573 using transparent adhesive tape. Insert sheet behind front cover of maintenance manual | | | | | | | | | | | | | | | | | | | |
| *** NOTE: MAXIMUM TOTAL UNIBUS CABLE LENGTH = 50 FEET | | | | | | | | | | | | | | | | | | | |
| TITLE DECpack Assembly | | | | ASSY. NO. | | | | SIZE CODE A AL | | NUMBER RK05-0-17 | | | | REV. F | | ECO NO RK05J 00006 | | | |
| SHEET 1 OF 1 | | | | DIST. | | | | | | | | | | | | | | | |

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

| | | | | |
|--|--|--|--|--|
| | | | | |
|--|--|--|--|--|

DRAWING DIRECTORY
CIRCUIT SCHEMATIC
±5V REGULATOR
CIRCUIT SCHEMATIC
±15V REGULATOR
CIRCUIT SCHEMATIC

SEQUENCE

B-DD-H743-~~0~~ SHEET #1 ONLY
D-CS-H743-~~1~~-1
E-1A-5409503-0-0
D-CS-5409503-0-1
E-1A-5409484-0-0
D-CS-5409484-0-1

SEQUENCE

MFG PRINTS

POWER SUPPLY
POWER SUPPLY (PL)
DRAWING DIRECTORY
PACKAGING INSTRUCTION
E-UA-H743-0-0
A-PL-H743-0-0
B-DD-H743-~~0~~
A-PI-3700130-0-0

| UNIT VARIATIONS | | PRINT SET TYPE | | | | |
|-----------------|-------------------|----------------|--|--|--|--|
| VARIATION | TITLE | | | | | |
| H743-AA | POWER SUPPLY 115V | X | | | | |
| H743-AB | POWER SUPPLY 230V | X | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

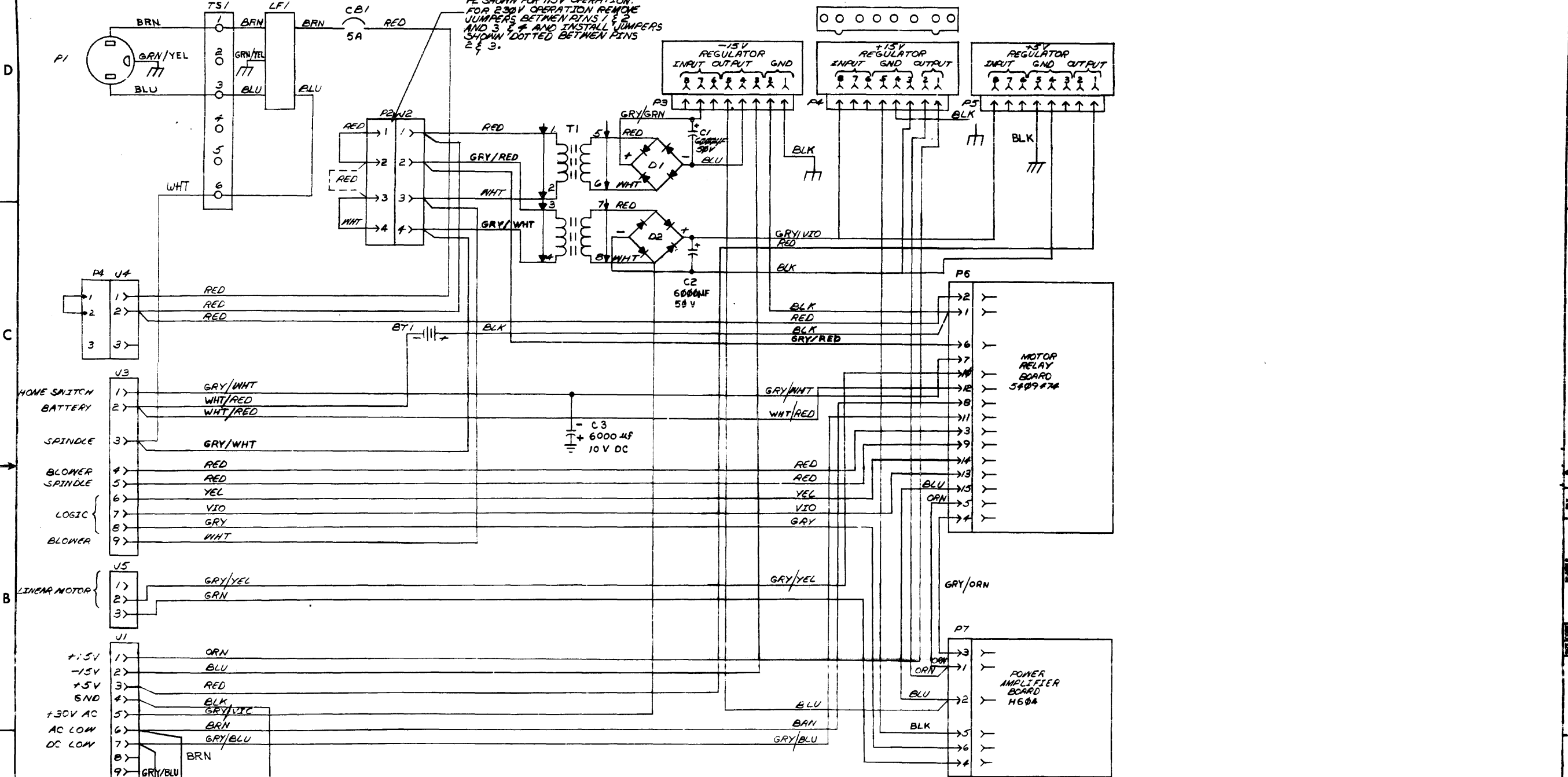
REVISIONS

| DATE | CHG. NO. | REV |
|--------|----------|-----|
| 8/72 | RK05-19 | A |
| 8/72 | H743-1 | B |
| 2-1-73 | H743-2 | C |
| 3-1-73 | H743-3 | D |
| 4-1-73 | H743-4 | E |
| 4-1-73 | H743-5 | F |
| 2-74 | H743-6 | H |
| 6-74 | H743-7 | J |
| 3-75 | H743-10 | V |
| 5-75 | H743-11 | L |
| 6-75 | H743-12 | M |
| 8-75 | H743-13 | N |
| 9-75 | H743-14 | P |
| 1-76 | H743-15 | R |
| 4-76 | H743-16 | S |
| 12-76 | H743-17 | T |
| 2-76 | H743-18 | U |
| 1-78 | H743-19 | V |

| USED ON OPTION/MODEL | DRN. | DATE | TITLE |
|----------------------|--------------|-------|---------------------|
| RK05 | J. FLEMING | 12/67 | POWER SUPPLY (H743) |
| | CHK'D. | DATE | |
| | PROJ ENG. | DATE | |
| | PROD. | DATE | |
| | FIELD SERV. | DATE | |
| | SHEET 1 OF 3 | | |

| SIZE CODE | | NUMBER | REV |
|-----------|----|--------------------|-----|
| B | DD | H743- 0 | V |
| DIST | | | |

This drawing and specifications herein are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.
1973



R2 SHOWN FOR 115V OPERATION. FOR 230V OPERATION REMOVE JUMPERS BETWEEN PINS 1 & 2 AND 3 & 4 AND INSTALL JUMPERS SHOWN DOTTED BETWEEN PINS 2 & 3.

| QTY | REF DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|---------------------|-----------------|-------------|----------|--------------|
| ..PARTS LIST | | | | |
| ETCH BOARD REV | | | | |
| REV | CHANGE NO. | DESCRIPTION | DATE | BY |
| 1 | 1 | ASSEMBLED | 11/15/73 | J. R. JENSEN |
| 2 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 3 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 4 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 5 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 6 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 7 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 8 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 9 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 10 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 11 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 12 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 13 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 14 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 15 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 16 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 17 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 18 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 19 | 1 | REVISED | 11/15/73 | J. R. JENSEN |
| 20 | 1 | REVISED | 11/15/73 | J. R. JENSEN |

EQUIPMENT CORPORATION
MAYFIELD ROAD - CINCINNATI, OHIO 45215

TITLE
CIRCUIT SCHEMATIC
H743

NUMBER
DCS H743-0-1

REV.
H

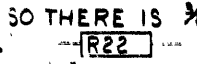
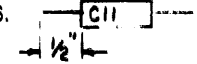
SCALE
100%

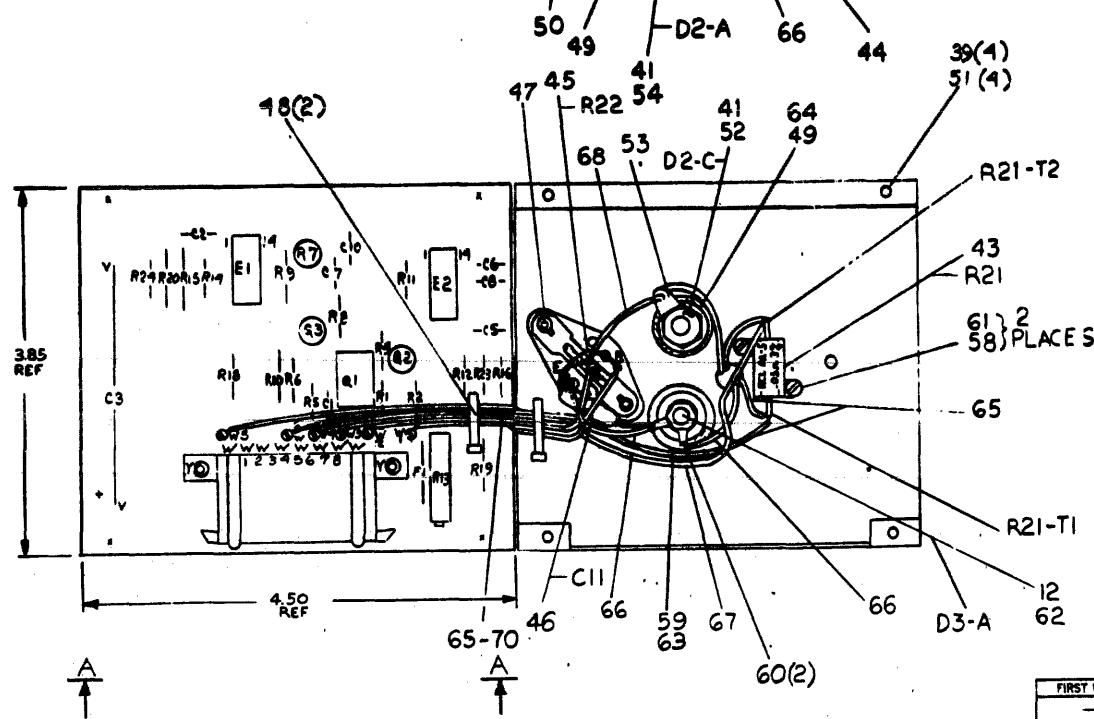
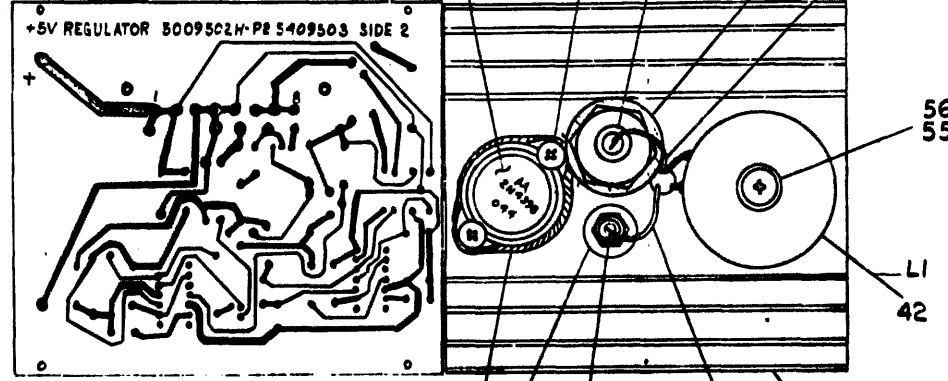
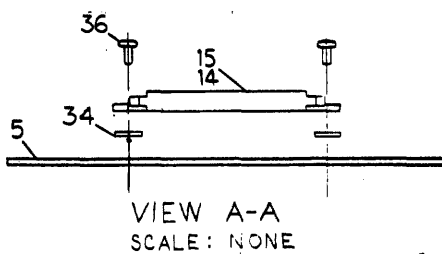
SHEET
OF 1

15409503-C-0

The drawing and specifications herein are the property of the Government and shall not be reproduced or transmitted in whole or in part in any form or by any means without written permission.

| WIRE TABLE | | | | | | EXTERNAL COMPONENTS | | | | | | | | |
|------------|-----|-------|-------------|----------|----------|---------------------|----------|----------|---------|-----------------|------|------------------|----------|------|
| ITEM NO. | AWG | COLOR | IN. ± 1/32" | LENGTH-X | LENGTH-Y | CONNECTIONS FROM | TO | ITEM NO. | LENGTH | DESCRIPTION | POL. | CONNECTIONS FROM | TO | POL. |
| 42 | | BLK | 2 1/8 | | 1/2" | L1 | ANODE | 45 | NOTE #2 | RES. 100 MW 5% | | Q5-E | Q5-B | |
| 48 | | BLK | 2 1/8 | | 1/2" | L1 | R21-T2 | 46 | NOTE #3 | CAR. 100 50/100 | + | Q5-E | D3-ANODE | - |
| 68 | 18 | VIO | 2 1/4 | 1/2" | 1/2" | Q5-C | D3-ANODE | | | | | | | |
| 66 | | GRN | 4 1/4 | 1/2" | 1/2" | D2 ANODE | D3-ANODE | | | | | | | |
| 65 | | YEL | 4 1/8 | 1/2" | 1/2" | D3 CATHODE | R21-T1 | | | | | | | |
| 70 | | WHT | 4 3/8 | 1/2" | 1/2" | SPLIT LUG #1 | Q5-E | | | | | | | |
| 69 | | GRY | 5 1/4 | 1/2" | 1/2" | SPLIT LUG #2 | Q5-B | | | | | | | |
| 68 | | VIO | 5 1/4 | 1/2" | 1/2" | SPLIT LUG #3 | Q5-C | | | | | | | |
| 67 | | BLU | 8 | 1/2" | 1/2" | SPLIT LUG #4 | R21-T2 | | | | | | | |
| 66 | | GRN | 5 3/4 | 1/2" | 1/2" | SPLIT LUG #6 | D3-ANODE | | | | | | | |
| 65 | 18 | YEL | 8 1/4 | 1/2" | 1/2" | SPLIT LUG #9 | R21-T1 | | | | | | | |

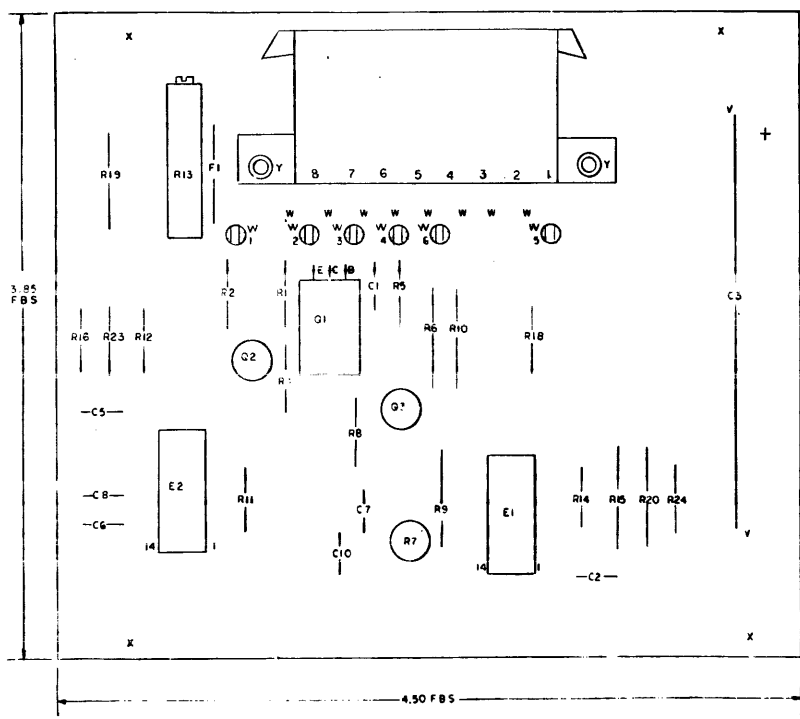
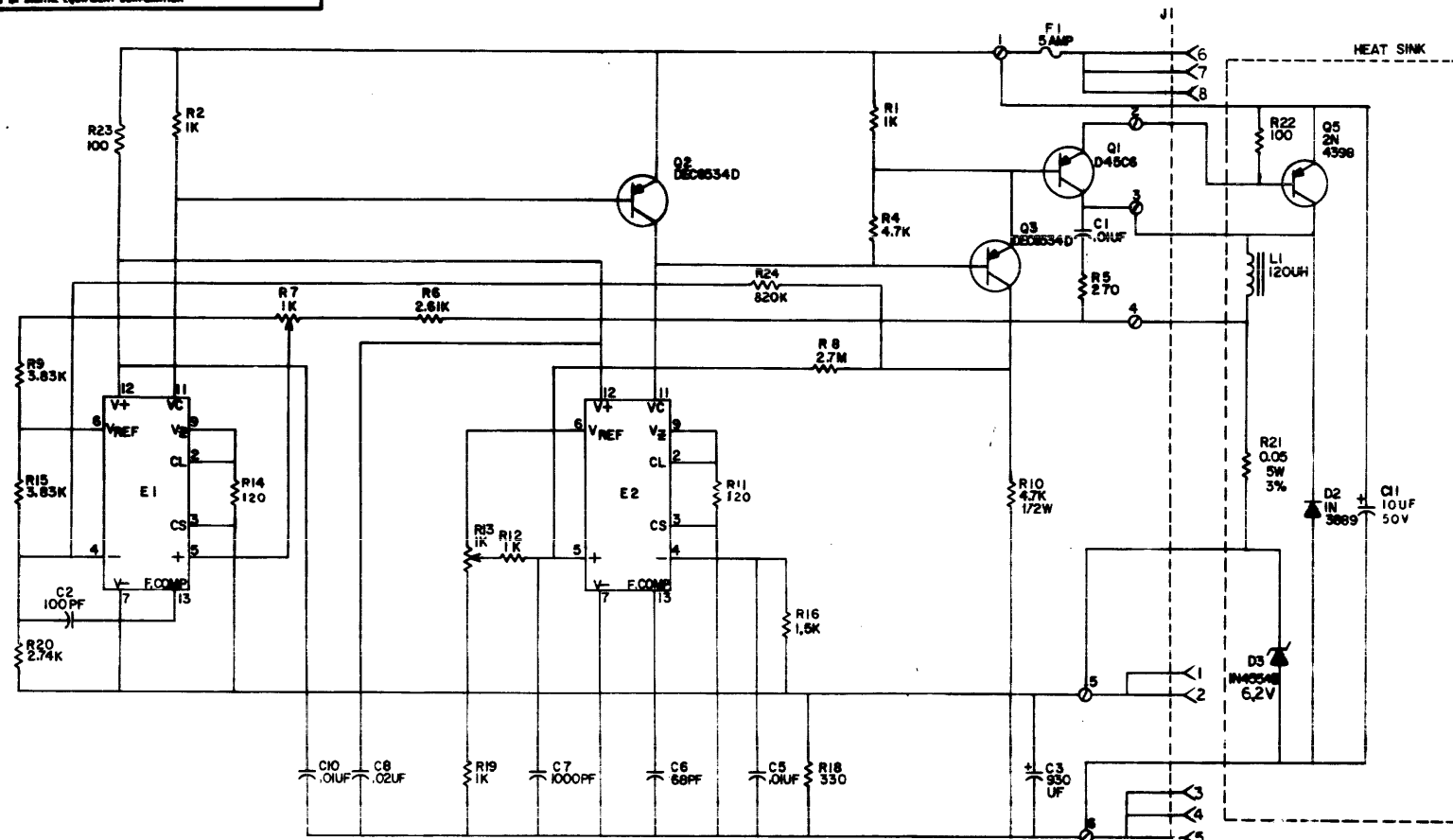
- NOTES:**
- R13 IS USED FOR OUTPUT VOLTAGE ADJUSTMENT. R7 IS USED FOR OUTPUT CURRENT ADJUSTMENT.
 - CUT LEADS OF RES. (R22) SO THERE IS 3/8" OF A LEAD LEFT ON BOTH ENDS. 
 - CUT LEADS OF CAR (C11) SO THERE IS 1/2" OF A LEAD LEFT ON BOTH ENDS. 
 - THERMAL COMPOUND (ITEM 31) IS TO BE APPLIED TO BOTH SIDES OF ALL THERMAL INSULATORS (ITEM 49, 50 & 63). BOTH SIDES OF EACH INSULATOR SHOULD BE COVERED, LEAVING NO VOIDS WHEN INSTALLED. CARE MUST BE EXERCISED SO THAT NO EXTRA COMPOUND INTERFERES WITH ANY ELECTRICAL CONNECTION MADE TO ANY DEVICE.
 - WHEN ASSEMBLING THE WIRES FROM THE CIRCUIT BOARD TO THE HEAT SINK, PLACE THE MODULE AGAINST THE HEAT SINK, WIRE AS SHOWN BY THE WIRE LIST AND MAKE A SERVICE LOOP AT THE CONNECTIONS ON THE HEAT SINK TO TAKE UP ANY EXCESS WIRE THAT MIGHT BE AVAILABLE.



| | | |
|---|-----|-----|
| IC TYPE | GND | +5V |
| GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTS ARE STATED ABOVE | | |
| IC PIN LOCATIONS | | |

| FIRST USED ON OPTION MODEL | | QTY | REF DESIGNATION | DESCRIPTION | PART NO. | ITEM NO. |
|--------------------------------|--------------|------|-----------------|--------------------------|----------|----------|
| | | | | | | |
| PARTS LIST | | | | | | |
| ETCH BOARD REV | | H | | | | |
| DRN | G. MARINI | DATE | 8-21-71 | EQUIPMENT CORPORATION | | |
| CHKD. | J. FLEMING | DATE | 8-27-71 | MAYNARD, MASSACHUSETTS | | |
| ENGR. | P. VENDONSON | DATE | 9-8-71 | TITLE | | |
| PROJ. ENR. | P. VENDONSON | DATE | 9-8-71 | + 5 VOLT POWER REGULATOR | | |
| PROJ. ENR. | P. FAZIO | DATE | 9-9-71 | NEXT HIGHER ASSY | | |
| SEMICONDUCTOR CONVERSION CHART | | | SCALE | NONE | SHEET | 1 OF 1 |

THIS SCHEMATIC IS FURNISHED ONLY FOR TEST AND MAINTENANCE PURPOSES. THE CIRCUITS ARE PROPRIETARY IN NATURE AND SHOULD BE TREATED ACCORDINGLY. COPYRIGHT 1951 BY BENTON EQUIPMENT CORPORATION



| QTY | REF DESIGNATION | DESCRIPTION | PART NO. | ITEM NO |
|-----|---------------------------------|------------------|----------|---------|
| 70 | WIRE #18AWG STRD (WHT.) | 9107360-99 | 70 | |
| 69 | WIRE #18AWG STRD (GRY.) | 9107360-88 | 69 | |
| 68 | WIRE #18AWG STRD (VIO.) | 9107360-77 | 68 | |
| 67 | WIRE #18AWG STRD (BLU.) | 9107360-66 | 67 | |
| 66 | WIRE #18AWG STRD (GRN.) | 9107360-55 | 66 | |
| 65 | WIRE #18AWG STRD (YEL.) | 9107360-44 | 65 | |
| 64 | 3/16 FLAT WASHER | 9006666 | 64 | |
| 63 | THERMAL INSULATOR | 9009678 | 63 | |
| 62 | NUT, HEX 1/4 X 28 | 9008063 | 62 | |
| 61 | WASHER, INT TOOTH LOCK #2 | 9006631 | 61 | |
| 60 | SOLDER LUG | 9006764 | 60 | |
| 59 | 1/4 FLAT WASHER | 9006676 | 59 | |
| 58 | SCR BINDING HD 2-56 X 3/16 S5T | 9006000-4 | 58 | |
| 57 | SCR PHIL PAN HD 6-32 X 5/8 S5T | 9006025-1 | 57 | |
| 56 | SCR PHIL TRUSS HD 10-32 X 1 S5T | 9006077-3 | 56 | |
| 55 | WASHER INT TOOTH LOCK #10 | 9006635 | 55 | |
| 54 | BUSHING | 9008441 | 54 | |
| 53 | SOLDER LUG | 9008150 | 53 | |
| 52 | NUT, HEX #10-32 | 9006564 | 52 | |
| 51 | SCR PHIL PAN HD #6-20 X 3/8 ST | 9008407 | 51 | |
| 50 | THERMAL INSULATOR | 9008419 | 50 | |
| 49 | THERMAL INSULATOR | 9008424 | 49 | |
| 48 | TIE WRAPS | 9007031 | 48 | |
| 47 | TRANSISTOR SOCKET | 1210130 | 47 | |
| 46 | CAP 10UF 50V | 1000070 | 46 | |
| 45 | RES 100 1/4W 5% | 1300229 | 45 | |
| 44 | HEAT SINK | D-1A-5409503-0-0 | 44 | |
| 43 | RES 0.05 5W 3% | 1310507 | 43 | |
| 42 | CHOK 120UH | 1610525 | 42 | |
| 41 | DIODE IN3889 | 1110481 | 41 | |
| 40 | TRANSISTOR 2N4398 | 1508870 | 40 | |
| 39 | WASHER INT TOOTH #6 | 9006633 | 39 | |
| 38 | RES 120 1/4W 5% | 1300247 | 38 | |
| 37 | RES 1.5K 1/4W 5% | 1300891 | 37 | |
| 36 | EYELETS | 9006732 | 36 | |
| 35 | SPLIT LUGS | 9006735 | 35 | |
| 34 | WASHER NYLON | 9006707 | 34 | |
| 33 | IC 723C DLP REGULATOR | 1910415 | 33 | |
| 32 | TRANSISTOR D45C6 G.E. | 1810414 | 32 | |
| 31 | THERMAL COMPOUND | 9008268 | 31 | |
| 30 | TRANSISTOR DEC 6934D | 1503409-00 | 30 | |
| 29 | RES 2.7M 1/4W 5% | 1309690 | 29 | |
| 28 | RES 3.83K 1/8W 1% | 1309413 | 28 | |
| 27 | RES 1K 1/2W 20% | 1309150-3 | 27 | |
| 26 | RES 1K 10W 76 PR | 1309143-07 | 26 | |
| 25 | RES 2.74K 1/8W 1% MF | 1309869 | 25 | |
| 24 | RES 2.61K 1/8W 1% MF | 1303303 | 24 | |
| 23 | RES 1K 1/8W 1% MF | 1303114 | 23 | |
| 22 | RES 4.7K 1/2W 5% | 1300443 | 22 | |
| 21 | RES 270 1/4W 5% | 1301272 | 21 | |
| 20 | RES 4.7K 1/4W 5% | 1300447 | 20 | |
| 19 | RES 1K 1/4W 5% | 1300365 | 19 | |
| 18 | RES 330 1/4W 5% | 1300235 | 18 | |
| 17 | RES 820K 1/4W 10% | 1303187 | 17 | |
| 16 | CONNECTOR PIN | 1209456 | 16 | |
| 15 | CONN 5 PIN AMP | 1209340-00 | 15 | |
| 14 | FUSE 5 AMPS | 1209070 | 14 | |
| 13 | DIODE IN4554B 6.2V | 1112122 | 13 | |
| 12 | CAP .02UF 100V -0 +20% DISC | 1000004 | 12 | |
| 11 | CAP 93UF 30V -10 +75% ELEC. | 1010509 | 11 | |
| 10 | CAP .01UF 100V 20% DISC | 1001610 | 10 | |
| 9 | CAP 1000PF 100V 5% MICA | 1000042 | 9 | |
| 8 | CAP 100 PF 100V 5% DM | 1000016 | 8 | |
| 7 | CAP 68PF 100V 5% DM | 1000014 | 7 | |
| 6 | ETCH CIRCUIT BOARD | 5009502 | 6 | |
| 5 | MODULE ECO HISTORY | B-MH-5409503-0-4 | 5 | |
| 4 | ASSY/DRILLING HOLE LAYOUT | D-AH-5409503-0-5 | 4 | |
| 3 | X-Y COORDINATE HOLE LOCATION | K-CO-5409503-0-2 | 3 | |
| 2 | +5V REGULATOR | D-1A-5409503-0-0 | 2 | |

TRANSISTOR & DIODE CONVERSION CHART

DATE: 6-2-77

BY: S. Cooper

REVISION: 1

5V REGULATOR

EQUIPMENT CORPORATION

5409503-0-1

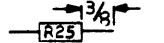
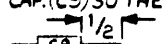
This drawing and specifications herein are the property of Digital Equipment Corporation and shall not be reproduced or copied in whole or in part or the basis for the manufacture or sale of items without written permission. 1975

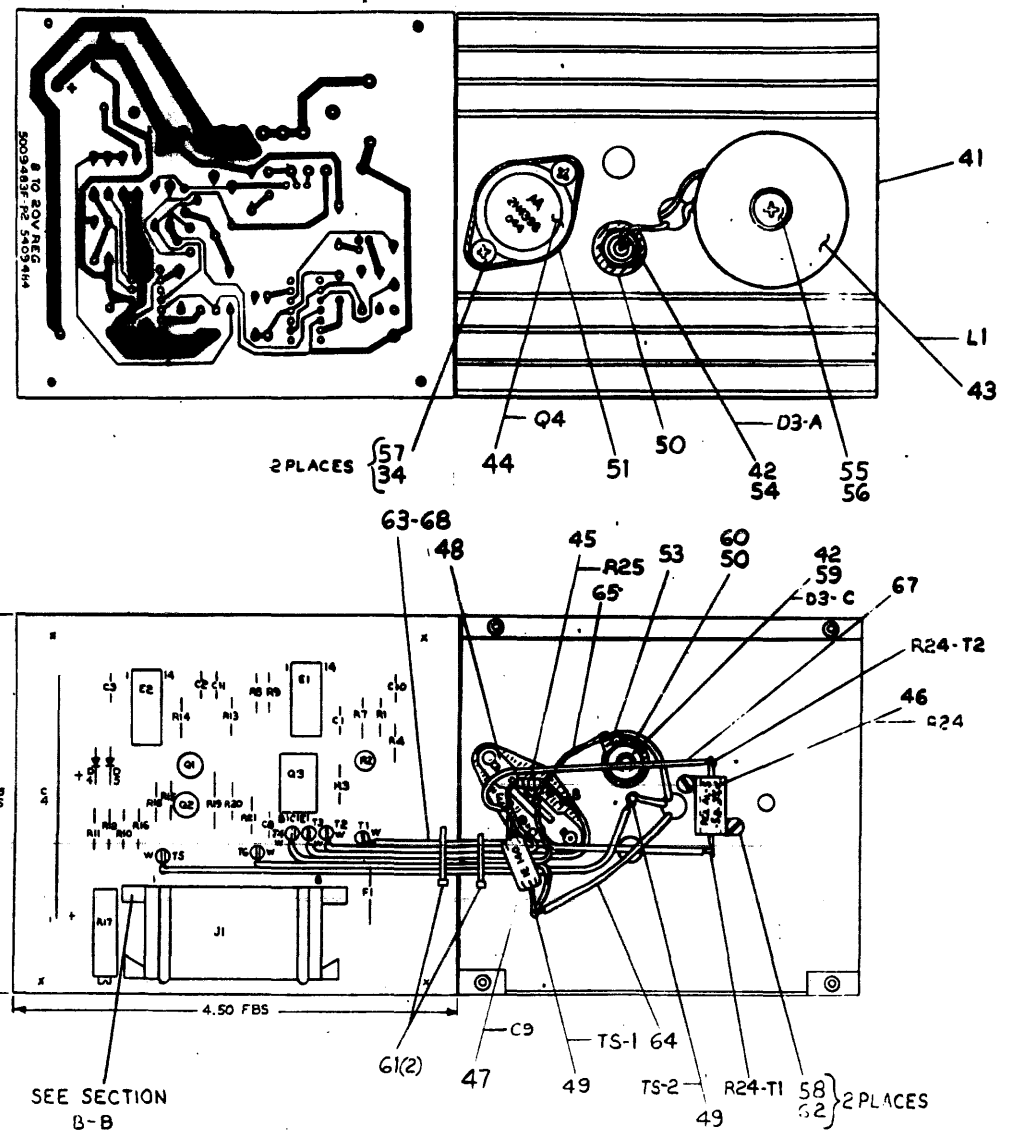
| WIRE TABLE | | | | | |
|------------|-------------|---------------------|----------|----------|-------------|
| ITEM NO. | DESCRIPTION | LENGTH INCHES ± 1/8 | STRIP | | CONNECTIONS |
| | | | LENGTH X | LENGTH Y | |
| 43 | BLK | 2 1/8 | | 1/2 | L1 |
| 43 | BLK | 2 1/8 | | 1/2 | L1 |
| 65 | BLU | 2 1/4 | 1/2 | 1/2 | Q4-C |
| 67 | GRY | 3 5/8 | 1/2 | 1/2 | Q4-E |
| 64 | GRN | 4 1/2 | 1/2 | 1/2 | D3-ANODE |
| 68 | WHT | 5 7/8 | 1/2 | 1/2 | SPLIT LUG |
| 67 | GRY | 4 7/8 | 1/2 | 1/2 | Q4-E |
| 66 | VIO | 5 1/8 | 1/2 | 1/2 | Q4-B |
| 65 | BLU | 5 1/8 | 1/2 | 1/2 | Q4-C |
| 64 | GRN | 5 1/2 | 1/2 | 1/2 | TS-1 |
| 63 | YEL | 6 7/8 | 1/2 | 1/2 | SPLIT LUG |

| EXTERNAL COMPONENTS | | | | | |
|---------------------|------------|-------------------|------|-------------|------|
| ITEM NO. | LENGTH | DESCRIPTION | POL. | CONNECTIONS | POL. |
| 45 | SEE NOTE 2 | RES 100Ω 1/4W 5% | | Q4-E | Q4-B |
| 47 | SEE NOTE 3 | CAP 100UF 50V 10% | + | Q4-E | TS-1 |

SEE NOTE 5

NOTES:

- R17 IS USED FOR OUTPUT VOLTAGE ADJUSTMENT. R2 IS USED FOR OUTPUT POWER ADJUSTMENT.
- CUT LEADS OF RES. (R25) SO THERE IS 3/8" OF A LEAD LEFT AT BOTH ENDS. 
- CUT LEADS OF CAP. (C9) SO THERE IS 1/2" OF A LEAD LEFT AT BOTH ENDS. 
- THERMAL COMPOUND (ITEM #39) IS TO BE APPLIED TO BOTH SIDES OF ALL THERMAL INSULATORS (ITEM #50-51) BOTH SIDES OF EACH INSULATOR SHOULD BE COMPLETELY COVERED, LEAVING NO VOIDS WHEN INSTALLED. CARE MUST BE EXERCISED SO THAT NO EXTRA COMPOUND INTERFERES WITH ANY ELECTRICAL CONNECTION MADE TO ANY DEVICE.
- WHEN ASSEMBLING THE WIRES FROM THE CIRCUIT BOARD TO THE HEAT SINK, PLACE THE MODULE AGAINST THE HEAT SINK AS SHOWN BY THE WIRE LIST AND MAKE A SERVICE LOOP AT THE CONNECTIONS ON THE HEAT SINK TO TAKE UP ANY EXCESS WIRE THAT MIGHT BE AVAILABLE.



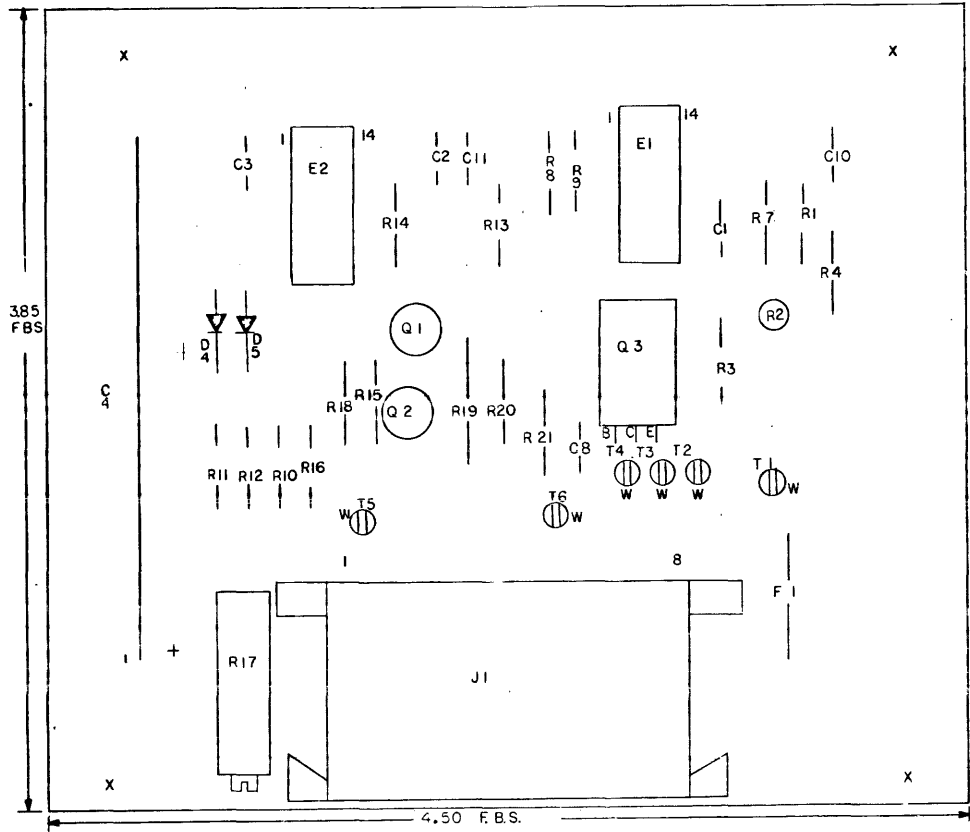
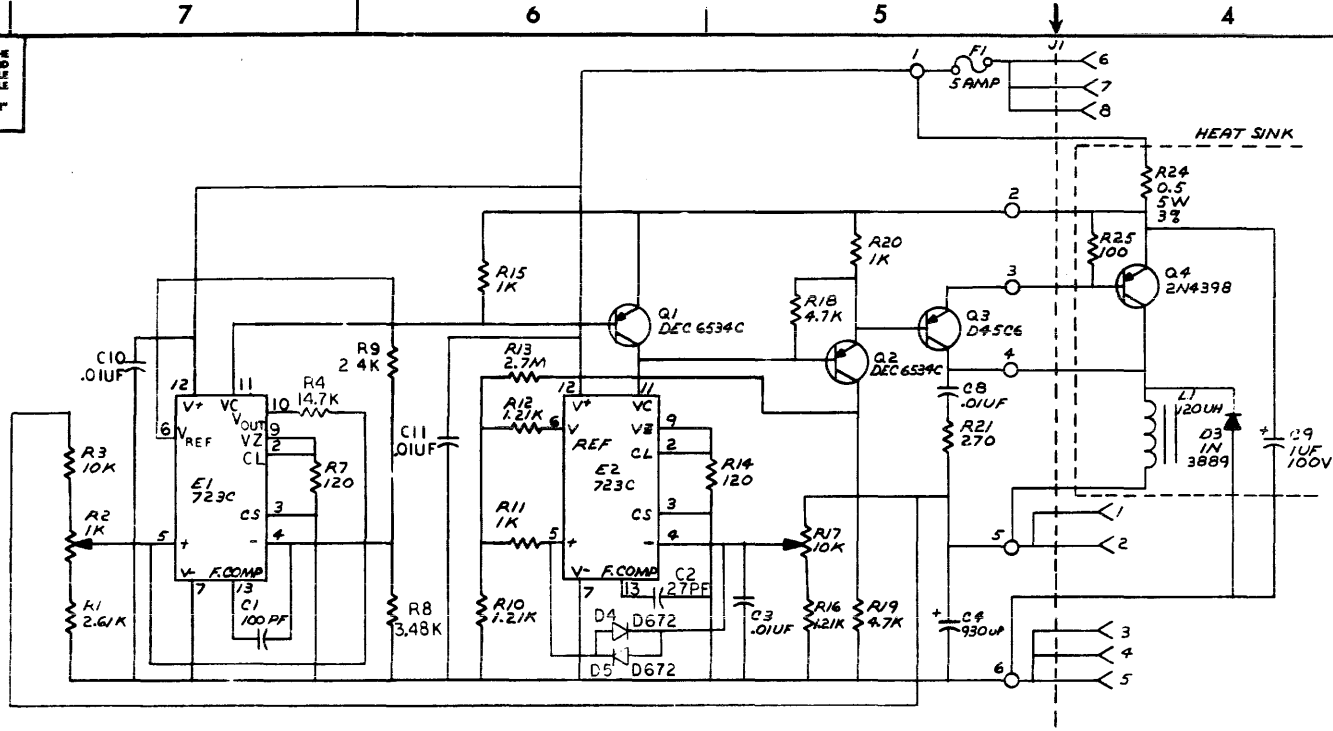
| QTY | REF DESIGNATION | DESCRIPTION | PART NO | ITEM NO. | | | | | | | | | | |
|--|-----------------|------------------|---------|----------|-----------------|--------------|-------------------|-------------|------------------|-------------|------------------------|-------------|---------------|--------------|
| PARTS LIST | | | | | | | | | | | | | | |
| ETCH BOARD REV | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>DRN. T. QUILLIN</td> <td>DATE 7-28-71</td> </tr> <tr> <td>CHK'D. J. FLEMING</td> <td>DATE 8-2-71</td> </tr> <tr> <td>ENG. P. SVENDSEN</td> <td>DATE 8-2-71</td> </tr> <tr> <td>PROJ. ENR. P. SVENDSEN</td> <td>DATE 8-2-71</td> </tr> <tr> <td>PROD. P. FAZI</td> <td>DATE 9-11-71</td> </tr> </table> | | | | | DRN. T. QUILLIN | DATE 7-28-71 | CHK'D. J. FLEMING | DATE 8-2-71 | ENG. P. SVENDSEN | DATE 8-2-71 | PROJ. ENR. P. SVENDSEN | DATE 8-2-71 | PROD. P. FAZI | DATE 9-11-71 |
| DRN. T. QUILLIN | DATE 7-28-71 | | | | | | | | | | | | | |
| CHK'D. J. FLEMING | DATE 8-2-71 | | | | | | | | | | | | | |
| ENG. P. SVENDSEN | DATE 8-2-71 | | | | | | | | | | | | | |
| PROJ. ENR. P. SVENDSEN | DATE 8-2-71 | | | | | | | | | | | | | |
| PROD. P. FAZI | DATE 9-11-71 | | | | | | | | | | | | | |
| NEXT HIGHER ASSY | | D-UA-H737-0-0 | | | | | | | | | | | | |
| SCALE NONE | | SIZE CODE NUMBER | | | | | | | | | | | | |
| SHEET OF | | DIA 54094-4-0-0 | | | | | | | | | | | | |

| REV | DESCRIPTION |
|-----|-----------------|
| 1 | REVISED DRAWN |
| 2 | 54C 9484-0007 K |
| 3 | CHANGE NO. |
| 4 | REVISIONS |

SEMICONDUCTOR CONVERSION CHART

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © DIGITAL EQUIPMENT CORPORATION

2 | DCS | 5409484-0-1 | K



| QTY | REF DESIGNATION | DESCRIPTION | PART NUMBER | REV. |
|-----|-----------------|--------------------------------|------------------|------|
| 4 | | WASHER, LOCK SPRING | 9007801 | 69 |
| A/R | | WIRE #18 AWG STRD (WHT) | 9107360-99 | 3 |
| A/R | | WIRE #18 AWG STRD (GRY) | 9107360-88 | 3 |
| A/R | | WIRE #18 AWG STRD (VIO) | 9107360-77 | 63 |
| A/R | | WIRE #18 AWG STRD (BLU) | 9107360-66 | 35 |
| A/R | | WIRE #18 AWG STRD (GRN) | 9107360-55 | 4 |
| A/R | | WIRE #18 AWG STRD (YEL) | 9107360-44 | 63 |
| 2 | | #2 INTERNAL LOCK WASHER | 9006631 | 62 |
| 2 | | TIE WRAPS | 9007031 | 61 |
| 1 | | WASHER FLAT 3/16 | 9006626 | 60 |
| 1 | | #10-32 HEX NUT | 9006564 | 60 |
| 2 | | 2/56 X 3/16" SCREW | 9006900 | 58 |
| 2 | | 6/32 X 5/8" PAN HD SCREW | 9006025 | 57 |
| 1 | | 10-32 X 1" TRUSS HD SCREW | 9006077-3 | 56 |
| 1 | | #10 INTERNAL LOCK WASHER | 9006635 | 55 |
| 1 | | BUSHING (DIODE) | 9003441 | 54 |
| 1 | | SOLDER LUG | 4008150 | 53 |
| 4 | | #6-20 X 3/8 SELF TAPPING SCREW | 9008407-01 | 52 |
| 1 | | THERMAL INSULATOR | 9005447 | 51 |
| 2 | | THERMAL INSULATOR | 9008424 | 50 |
| 2 | | STAND OFF (STUD TYPE) | 9009060 | 49 |
| 1 | | TRANSISTOR SOCKET | 1210130 | 48 |
| 1 | C9 | CAP 1UF 100V | 1005507 | 47 |
| 1 | R24 | RES. 0.5 3% 5W | 1310508 | 46 |
| 1 | R25 | RES. 100 5% 1/4W | 1300229 | 45 |
| 1 | Q4 | TRANSISTOR 2N4398 | 1505870 | 44 |
| 1 | L1 | 120UH CHOKE | 160573 | 43 |
| 1 | D3 | DIODE 1N3889 | 110491 | 42 |
| 1 | | HEAT SINK | D-2A-3309543-0-0 | 41 |
| 6 | | SPLIT LUGS | 9006735 | 40 |
| A/R | | THERMAL COMPOUND | 9008268 | 39 |
| 1 | F1 | FUSE 5 AMPS | 1209070 | 38 |
| 2 | | WASHER NYLON | 9006707 | 37 |
| 2 | | CONNECTOR PINS | 1209456 | 36 |
| 2 | | EYELET | 9006732 | 35 |
| 2 | | WASHER INT TOOTH #6 | 9006633 | 34 |
| 2 | E1,2 | DIP REGULATOR 723C | 1910415 | 33 |
| 1 | Q3 | TRANSISTOR D4506 | 1510414 | 32 |
| 2 | Q1,2 | TRANSISTOR LE 6534C | 1503409-02 | 31 |
| | | | | 30 |
| 1 | R21 | RES. 270 1/4W 5% | 1301972 | 29 |
| 1 | R19 | RES. 4.7K 1/2W 5% | 1300445 | 28 |
| 1 | R18 | RES. 4.7K 1/4W 5% | 1300447 | 27 |
| 1 | R17 | RES. VARIABLE 10K 3/4W 10% | 1309143-10 | 26 |
| 1 | R13 | RES. 2.7M 1/4W 5% | 1309680 | 25 |
| 3 | R11,15,20 | RES 1K 1/4 W 5% | 1300365 | 24 |
| 3 | R10,12,16 | RES 1.2K 1/8W 1% MF | 1302871 | 23 |
| 1 | R8 | RES 3.48K 1/8W 1% MF | 1302874 | 22 |
| 2 | R7,14 | RES 120 1/4 W 5% | 1300247 | 21 |
| | | | | 20 |
| 1 | R9 | RES 2.4K 1/4W 5% | 1305177 | 19 |
| 1 | R4 | RES 14.7K 1/8W 1% MF | 1302941 | 18 |
| 1 | R3 | RES 10K 1/8W 1% MF | 1303312 | 17 |
| 1 | R2 | RES VARIABLE 1K 1/2W | 1309150-03 | 16 |
| 1 | R1 | RES 2.4K 1/8W 1% MF | 1303303 | 15 |
| 1 | J1 | AMP 8 PIN CONNECTOR (MATELO) | 1209340-00 | 14 |
| 2 | D4, D5 | DIODE D672 | 1105275 | 13 |
| | | | | 12 |
| | | | | 11 |
| | | | | 10 |
| 1 | C4 | CAP. 990UF 30V-10+75 | 1000509 | 9 |
| 4 | C3, 8,10,11 | CAP. .01UF 100V20% AXIAL | 1001610 | 8 |
| 1 | C2 | CAP. 27 PF 100V 5% MICA | 1001754 | 7 |
| 1 | C1 | CAP. 100 PF 100V 5% DM. | 1000016 | 6 |
| 1 | | ETCHED CIRCUIT BOARD | 5709483 | 5 |
| | | MODULE ECO HISTORY | B-MH-5409484-0-0 | 4 |
| | | AS-Y DRILLING HOLE LAYOUT | D-AH-5409484-0-0 | 3 |
| | | X-Y COORDINATE HOLE LOCATION | K-CO-5409484-0-0 | 2 |
| | | B TO 20V REGULATOR | E-2A-5409484-0-0 | 1 |

| CHK | CHANGE NO. | REV. |
|-------------|------------|---------|
| J. RINALDIS | 1 | 11/1/75 |

| REV. | DESCRIPTION | DATE |
|------|------------------------|---------|
| 1 | ISSUED FOR MANUFACTURE | 11/1/75 |

| TITLE | SIZE CODE | NUMBER | REV. |
|---------------------|-----------|-------------|------|
| 5V TO 20V REGULATOR | DCS | 5409484-0-1 | K |

| | |
|---------------|--------|
| DRWG NO | REVLTR |
| K-WL-RKØ5-Ø-3 | C |

| REVISIONS | | | |
|-----------|-------------|------|-----|
| REV LTR | ECO NO | DATE | ENG |
| A | RKØ5-0001 | 7/72 | ED |
| B | RKØ5-00031 | 2/73 | ED |
| C | RKØ5J-00005 | 4/76 | MM |

| | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------|----------------------|-----------|---------|---------|------|--|---------|-----|------|-------------|-----------|----------|------|-----------|----------|------|------|--------------|----------|--|---|
| <table border="1"> <tr> <td>DRAWN</td> <td>DATE</td> </tr> <tr> <td>REthellen</td> <td>11/8/71</td> </tr> <tr> <td>CHECKED</td> <td>DATE</td> </tr> <tr> <td></td> <td>11-1-71</td> </tr> <tr> <td>ENG</td> <td>DATE</td> </tr> <tr> <td>Daly Jensen</td> <td>24 Nov 71</td> </tr> <tr> <td>PROJ ENG</td> <td>DATE</td> </tr> <tr> <td>Ek Jensen</td> <td>11-24-71</td> </tr> <tr> <td>PROD</td> <td>DATE</td> </tr> <tr> <td>David Jensen</td> <td>11/29/71</td> </tr> </table> | DRAWN | DATE | REthellen | 11/8/71 | CHECKED | DATE | | 11-1-71 | ENG | DATE | Daly Jensen | 24 Nov 71 | PROJ ENG | DATE | Ek Jensen | 11-24-71 | PROD | DATE | David Jensen | 11/29/71 | <p>digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS</p> | <p>TITLE WIRE LIST (RKØ5)</p> <p>FOR TAPE# FILE*</p> |
| DRAWN | DATE | | | | | | | | | | | | | | | | | | | | | |
| REthellen | 11/8/71 | | | | | | | | | | | | | | | | | | | | | |
| CHECKED | DATE | | | | | | | | | | | | | | | | | | | | | |
| | 11-1-71 | | | | | | | | | | | | | | | | | | | | | |
| ENG | DATE | | | | | | | | | | | | | | | | | | | | | |
| Daly Jensen | 24 Nov 71 | | | | | | | | | | | | | | | | | | | | | |
| PROJ ENG | DATE | | | | | | | | | | | | | | | | | | | | | |
| Ek Jensen | 11-24-71 | | | | | | | | | | | | | | | | | | | | | |
| PROD | DATE | | | | | | | | | | | | | | | | | | | | | |
| David Jensen | 11/29/71 | | | | | | | | | | | | | | | | | | | | | |
| ASSY NO D-AD-7008696-0-0 | SIZE CODE K WL | DWG. NO. RKØ5-Ø-3 | | | | | | | | | | | | | | | | | | | | |
| SCALE NONE SHEET 1 OF 1 | DIST. | REV LTR C | | | | | | | | | | | | | | | | | | | | |

| RK05.C RUN NAME | A/P | WRP200.V34(62)-1 PIN NAME | 31-Jul-75 ORDER PIN | RAY - ORDER | Q | DRAW OPT | PV RG Y | X Z | REMARKS | 2-JUN-76 | 8156 NC FLAG | PAGE 1 LENGTH EXCEPTIONS | RUN NUMBER |
|---------------------|-----|------------------------------|------------------------|----------------|---|-------------|---------|-----|---------|----------|-----------------|-----------------------------|---------------|
| +15VDC | H | A05D2 | | 1-01 * | | | D05-9 | 1 | | | | 0-4/8 | 1 |
| +15VDC | H | A06D1 | | 1-02 * | | | D05-9 | | | | | | 1 |
| +15VDC | H | | | 1 | | | | | | | | 0-4/8 | 1 |
| +5VDC BULB | H | R06A1 | | 1-01 * | | | D05-9 | 1 | | | | 0-4/8 | 2 |
| +5VDC BULB | H | R06A2 | | 1-02 * | | | D05-9 | | | | | | 2 |
| +5VDC BULB | H | | | 1 | | | | | | | | 0-4/8 | 2 |
| 12R | H | A01M2 | | 1-01 * | | | D05-1 | 1 | | | | 2-5/8 | 3 |
| 12R | H | R03A1 | | 1-02 * | | | D05-1 | | | | | | 3 |
| 12R | H | | | 1 | | | | | | | | 2-5/8 | 3 |
| AC LOW | H | A04R2 | | 1-01 * | | | D05-8 | 1 | | | | 2-7/8 | 4 |
| AC LOW | H | R08F1 | | 1-02 * | | | D05-8 | 2 | | | | 1 | 4 |
| AC LOW | H | R07F1 | | 1-03 * | | | D05-8 | | | | | | 4 |
| AC LOW | H | | | 1 | | | | | | | | 3-7/8 | 4 |
| ADDR ACCEPTED | L | A02S1 | | 1-01 * | | | D05-5 | 1 | | | | 1-2/8 | 5 |
| ADDR ACCEPTED | L | A03N1 | | 1-02 * | | | D05-5 | | | | | | 5 |
| ADDR ACCEPTED | L | | | 1 | | | | | | | | 1-2/8 | 5 |
| ADDRESS INVALID | L | R02F1 | | 1-01 * | | | D05-2 | 1 | | | | 0-5/8 | 6 |
| ADDRESS INVALID | L | R03F1 | | 1-02 * | | | D05-2 | | | | | | 6 |
| ADDRESS INVALID | L | | | 1 | | | | | | | | 0-5/8 | 6 |
| BLOWER MTR RELAY DR | H | A04A1 | | 1-01 * | | | D05-9 | 1 | | | | 5-5/8 | 7 |
| BLOWER MTR RELAY DR | H | R06N1 | | 1-02 * | | | D05-9 | | | | | | 7 |
| BLOWER MTR RELAY DR | H | | | 1 | | | | | | | | 5-5/8 | 7 |
| BUS ADDR ACCEPTED | L | A02P1 | | 1-01 * | | | D05-4 | 1 | | | | 3-2/8 | 8 |
| BUS ADDR ACCEPTED | L | A07R2 | | 1-02 * | | | D05-4 | 2 | | | | 1 | 8 |
| BUS ADDR ACCEPTED | L | A08R2 | | 1-03 * | | | D05-4 | | | | | | 8 |
| BUS ADDR ACCEPTED | L | | | 1 | | | | | | | | 4-2/8 | 8 |
| BUS ADDR INVALID | L | A08T2 | | 1-01 * | | | D05-4 | 2 | | | | 1 | 9 |
| BUS ADDR INVALID | L | A07T2 | | 1-02 * | | | D05-4 | 1 | | | | 4-1/8 | 9 |
| BUS ADDR INVALID | L | R02A1 | | 1-03 * | | | D05-4 | | | | | | 9 |
| BUS ADDR INVALID | L | | | 1 | | | | | | | | 5-1/8 | 9 |
| BUS FILE READY | L | A04M1 | | 1-01 * | | | D05-7 | 1 | | | | 4-6/8 | 10 |
| BUS FILE READY | L | R08N1 | | 1-02 * | | | D05-7 | 2 | | | | 1 | 10 |
| BUS FILE READY | L | R07N1 | | 1-03 * | | | D05-7 | | | | | | 10 |
| BUS FILE READY | L | | | 1 | | | | | | | | 5-6/8 | 10 |
| BUS INDEX PUL | L | A02M1 | | 1-01 * | | | D05-3 | 1 | | | | 4-6/8 | 11 |
| BUS INDEX PUL | L | R08M1 | | 1-02 * | | | D05-3 | 2 | | | | 1 | 11 |
| BUS INDEX PUL | L | R07M1 | | 1-03 * | | | D05-3 | | | | | | 11 |
| BUS INDEX PUL | L | | | 1 | | | | | | | | 5-6/8 | 11 |
| BUS P/N/S READY | L | A02N1 | | 1-01 * | | | D05-4 | 1 | | | | 3-5/8 | 12 |
| BUS P/N/S READY | L | A07H2 | | 1-02 * | | | D05-4 | 2 | | | | 1 | 12 |
| BUS P/N/S READY | L | A08H2 | | 1-03 * | | | D05-4 | | | | | | 12 |
| BUS P/N/S READY | L | | | 1 | | | | | | | | 4-5/8 | 12 |

| RK05.C RUN NAME | A/P | WRP200.V34(62)-1 PIN NAME | 31-Jul-75 ORDER PIN | RAY - ORDER | Q | DRAW OPT | PV RG Y | X Z | REMARKS | 2-JUN-76 | 8156 NC FLAG | PAGE 2 LENGTH EXCEPTIONS | RUN NUMBER |
|-----------------------|-----|------------------------------|------------------------|----------------|---|-------------|---------|-----|---------|----------|-----------------|-----------------------------|---------------|
| BUS SECTOR ADDR | L | A02M1 | | 1-01 * | | | D05-3 | 1 | | | | 4-7/8 | 13 |
| BUS SECTOR ADDR | L | R08L1 | | 1-02 * | | | D05-3 | 2 | | | | 1 | 13 |
| BUS SECTOR ADDR | L | R07L1 | | 1-03 * | | | D05-3 | | | | | | 13 |
| BUS SECTOR ADDR | L | | | 1 | | | | | | | | 5-7/8 | 13 |
| BUS SECTOR ADDR 1 | L | A02J1 | | 1-01 * | | | D05-4 | 1 | | | | 3-5/8 | 14 |
| BUS SECTOR ADDR 1 | L | A07P2 | | 1-02 * | | | D05-4 | 2 | | | | 1 | 14 |
| BUS SECTOR ADDR 1 | L | A08P2 | | 1-03 * | | | D05-4 | | | | | | 14 |
| BUS SECTOR ADDR 1 | L | | | 1 | | | | | | | | 4-5/8 | 14 |
| BUS SECTOR ADDR 2 | L | A02L1 | | 1-01 * | | | D05-4 | 1 | | | | 4-1/8 | 15 |
| BUS SECTOR ADDR 2 | L | R07K2 | | 1-02 * | | | D05-4 | 2 | | | | 1 | 15 |
| BUS SECTOR ADDR 2 | L | R08K2 | | 1-03 * | | | D05-4 | | | | | | 15 |
| BUS SECTOR ADDR 2 | L | | | 1 | | | | | | | | 5-1/8 | 15 |
| BUS SECTOR ADDR 3 | L | A02P1 | | 1-01 * | | | D05-4 | 1 | | | | 4-1/8 | 16 |
| BUS SECTOR ADDR 3 | L | R07J1 | | 1-02 * | | | D05-4 | 2 | | | | 1 | 16 |
| BUS SECTOR ADDR 3 | L | R08J1 | | 1-03 * | | | D05-4 | | | | | | 16 |
| BUS SECTOR ADDR 3 | L | | | 1 | | | | | | | | 5-1/8 | 16 |
| BUS SECTOR PULSE | L | A02F1 | | 1-01 * | | | D05-3 | 1 | | | | 5-2/8 | 17 |
| BUS SECTOR PULSE | L | R08N2 | | 1-02 * | | | D05-3 | 2 | | | | 1 | 17 |
| BUS SECTOR PULSE | L | R07N2 | | 1-03 * | | | D05-3 | | | | | | 17 |
| BUS SECTOR PULSE | L | | | 1 | | | | | | | | 6-2/8 | 17 |
| BUS SEEK INCOMPLETE | L | A02N1 | | 1-01 * | | | D05-4 | 1 | | | | 3-3/8 | 18 |
| BUS SEEK INCOMPLETE | L | A07S2 | | 1-02 * | | | D05-4 | 2 | | | | 1 | 18 |
| BUS SEEK INCOMPLETE | L | A08S2 | | 1-03 * | | | D05-4 | | | | | | 18 |
| BUS SEEK INCOMPLETE | L | | | 1 | | | | | | | | 4-3/8 | 18 |
| BUS WR PROTECT STATUS | H | R04U1 | | 1-01 * | | | D05-8 | 1 | | | | 2-3/8 | 19 |
| BUS WR PROTECT STATUS | H | R07P1 | | 1-02 * | | | D05-8 | 2 | | | | 1 | 19 |
| BUS WR PROTECT STATUS | H | R08P1 | | 1-03 * | | | D05-8 | | | | | | 19 |
| BUS WR PROTECT STATUS | H | | | 1 | | | | | | | | 3-3/8 | 19 |
| BUS WRITE CK | H | R04P1 | | 1-01 * | | | D05-8 | 1 | | | | 2-3/8 | 20 |
| BUS WRITE CK | H | R07K1 | | 1-02 * | | | D05-8 | 2 | | | | 1 | 20 |
| BUS WRITE CK | H | R08K1 | | 1-03 * | | | D05-8 | | | | | | 20 |
| BUS WRITE CK | H | | | 1 | | | | | | | | 3-3/8 | 20 |
| COS POSITION | H | A05U1 | | 1-01 * | | | D05-9 | 1 | | | | 1-5/8 | 21 |
| COS POSITION | H | R06P1 | | 1-02 * | | | D05-9 | | | | | | 21 |
| COS POSITION | H | | | 1 | | | | | | | | 1-5/8 | 21 |
| COUNT PULSE FWD | H | A05A1 | | 1-01 * | | | D05-5 | 1 | | | | 5-1/8 | 22 |
| COUNT PULSE FWD | H | R03K1 | | 1-02 * | | | D05-5 | | | | | | 22 |
| COUNT PULSE FWD | H | | | 1 | | | | | | | | 5-1/8 | 22 |
| COUNT PULSE REV | H | A05C1 | | 1-01 * | | | D05-5 | 1 | | | | 4-3/8 | 23 |
| COUNT PULSE REV | H | R03F1 | | 1-02 * | | | D05-5 | | | | | | 23 |
| COUNT PULSE REV | H | | | 1 | | | | | | | | 4-3/8 | 23 |
| CYC ADDR 0 | L | A07K1 | | 1-01 * | | | D05-5 | 2 | | | | 1 | 24 |
| CYC ADDR 0 | L | R08K1 | | 1-02 * | | | D05-5 | 1 | | | | 4-4/8 | 24 |
| CYC ADDR 0 | L | R03L1 | | 1-03 * | | | D05-5 | | | | | | 24 |
| CYC ADDR 0 | L | | | 1 | | | | | | | | 5-4/8 | 24 |

| RK05.C RUN NAME | A/P | WPP260.V34(62)-1 PIN NAME | 31-JUL-75 ORDER PIN | RAY - ORDER | Q | DRAW | HV RG Y OPT | X | Z | REMARKS | 2-JUN-76 | 8:56 NC LENGTH EXCEPTIONS FLAG | PAGE 3 | RUN NUMBER |
|--------------------|-----|---------------------------------|---------------------------|----------------|---|------|----------------|---|---|---------|----------|--------------------------------------|--------|---------------|
| CYC ADDR 1 | L | A07D1 | 1-21 * | | | | D05-6 | | 2 | | | 1 | | 25 |
| CYC ADDR 1 | L | A08D1 | 1-22 * | | | | D05-6 | | 1 | | | 6-4/8 | | 25 |
| CYC ADDR 1 | L | R03N1 | 1-23 * | | | | D05-6 | | | | | 7-4/8 | | 25 |
| CYC ADDR 1 | L | | 1 | | | | | | | | | | | 25 |
| CYC ADDR 2 | L | A08L1 | 1-21 * | | | | D05-6 | | 2 | | | 1 | | 26 |
| CYC ADDR 2 | L | A07L1 | 1-22 * | | | | D05-6 | | 1 | | | 5-3/8 | | 26 |
| CYC ADDR 2 | L | R03P1 | 1-23 * | | | | D05-6 | | | | | 6-3/8 | | 26 |
| CYC ADDR 2 | L | | 1 | | | | | | | | | | | 26 |
| CYC ADDR 3 | L | A07C1 | 1-01 * | | | | D05-6 | | 2 | | | 1 | | 27 |
| CYC ADDR 3 | L | A08C1 | 1-02 * | | | | D05-6 | | 1 | | | 5-2/8 | | 27 |
| CYC ADDR 3 | L | R03M1 | 1-03 * | | | | D05-6 | | | | | 6-2/8 | | 27 |
| CYC ADDR 3 | L | | 1 | | | | | | | | | | | 27 |
| CYC ADDR 4 | L | A07F1 | 1-01 * | | | | D05-6 | | 2 | | | 1 | | 28 |
| CYC ADDR 4 | L | A08F1 | 1-02 * | | | | D05-6 | | 1 | | | 6-4/8 | | 28 |
| CYC ADDR 4 | L | R03R1 | 1-03 * | | | | D05-6 | | | | | 7-4/8 | | 28 |
| CYC ADDR 4 | L | | 1 | | | | | | | | | | | 28 |
| CYC ADDR 5 | L | A07J1 | 1-01 * | | | | D05-6 | | 2 | | | 1 | | 29 |
| CYC ADDR 5 | L | A08J1 | 1-02 * | | | | D05-6 | | 1 | | | 5-3/8 | | 29 |
| CYC ADDR 5 | L | R03U1 | 1-03 * | | | | D05-6 | | | | | 6-3/8 | | 29 |
| CYC ADDR 5 | L | | 1 | | | | | | | | | | | 29 |
| CYC ADDR 6 | L | A08F1 | 1-01 * | | | | D05-6 | | 2 | | | 1 | | 30 |
| CYC ADDR 6 | L | A07F1 | 1-02 * | | | | D05-6 | | 1 | | | 6-5/8 | | 30 |
| CYC ADDR 6 | L | R03V1 | 1-03 * | | | | D05-6 | | | | | 7-5/8 | | 30 |
| CYC ADDR 6 | L | | 1 | | | | | | | | | | | 30 |
| CYC ADDR 7 | L | A07H1 | 1-01 * | | | | D05-6 | | 2 | | | 1 | | 31 |
| CYC ADDR 7 | L | A08H1 | 1-02 * | | | | D05-6 | | 1 | | | 5-2/8 | | 31 |
| CYC ADDR 7 | L | R03S1 | 1-03 * | | | | D05-6 | | | | | 6-2/8 | | 31 |
| CYC ADDR 7 | L | | 1 | | | | | | | | | | | 31 |
| DC LOW | H | A04D1 | 1-21 * | | | | D05-8 | | 1 | | | 5 | | 32 |
| DC LOW | H | R08F2 | 1-22 * | | | | D05-8 | | 2 | | | 1 | | 32 |
| DC LOW | H | R07F2 | 1-03 * | | | | D05-8 | | | | | 6-0/8 | | 32 |
| DC LOW | H | | 1 | | | | | | | | | | | 32 |
| DIFF 1 | L | A03A1 | 1-01 * | | | | D05-7 | | 1 | | | 5-7/8 | | 33 |
| DIFF 1 | L | R05N2 | 1-02 * | | | | D05-7 | | | | | | | 33 |
| DIFF 1 | L | | 1 | | | | | | | | | 5-7/8 | | 33 |
| DIFF 16 | L | A03E1 | 1-01 * | | | | D05-7 | | 1 | | | 5-7/8 | | 34 |
| DIFF 16 | L | R05T2 | 1-02 * | | | | D05-7 | | | | | | | 34 |
| DIFF 16 | L | | 1 | | | | | | | | | 5-7/8 | | 34 |
| DIFF 2 | L | A03B1 | 1-01 * | | | | D05-7 | | 1 | | | 5-5/8 | | 35 |
| DIFF 2 | L | R05P2 | 1-02 * | | | | D05-7 | | | | | | | 35 |
| DIFF 2 | L | | 1 | | | | | | | | | 5-5/8 | | 35 |
| DIFF 4 | L | A03D1 | 1-01 * | | | | D05-7 | | 1 | | | 5-5/8 | | 36 |
| DIFF 4 | L | R05R2 | 1-02 * | | | | D05-7 | | | | | | | 36 |
| DIFF 4 | L | | 1 | | | | | | | | | 5-5/8 | | 36 |

| RK05.C RUN NAME | A/P | WPP260.V34(62)-1 PIN NAME | 31-JUL-75 ORDER PIN | RAY - ORDER | Q | DRAW | HV RG Y OPT | X | Z | REMARKS | 2-JUN-76 | 8:56 NC LENGTH EXCEPTIONS FLAG | PAGE 4 | RUN NUMBER |
|-----------------------|-----|---------------------------------|---------------------------|----------------|---|------|----------------|---|---|---------|----------|--------------------------------------|--------|---------------|
| DIFF 8 | L | A03C1 | 1-01 * | | | | D05-7 | | 1 | | | 5-7/8 | | 37 |
| DIFF 8 | L | R05S2 | 1-02 * | | | | D05-7 | | | | | | | 37 |
| DIFF 8 | L | | 1 | | | | | | | | | 5-7/8 | | 37 |
| DISK RELAY DR | H | A04N1 | 1-01 * | | | | D05-8 | | 1 | | | 4-1/8 | | 38 |
| DISK RELAY DP | H | R06P1 | 1-02 * | | | | D05-8 | | | | | | | 38 |
| DISK RELAY DP | H | | 1 | | | | | | | | | 4-1/8 | | 38 |
| DR UNLOCKING SOLENOID | L | R06P1 | 1-01 * | | | | D05-8 | | 1 | | | 4-5/8 | | 39 |
| DR UNLOCKING SOLENOID | L | R04V1 | 1-02 * | | | | D05-8 | | | | | | | 39 |
| DR UNLOCKING SOLENOID | L | | 1 | | | | | | | | | 4-5/8 | | 39 |
| FAULT IND | H | A04N2 | 1-01 * | | | | D05-8 | | 1 | | | 1-3/8 | | 40 |
| FAULT IND | H | A06H1 | 1-02 * | | | | D05-8 | | | | | | | 40 |
| FAULT IND | H | | 1 | | | | | | | | | 1-3/8 | | 40 |
| FWD | H | R03J1 | 1-01 * | | | | D05-5 | | 1 | | | 1-6/8 | | 41 |
| FWD | H | R05J2 | 1-02 * | | | | D05-5 | | | | | | | 41 |
| FWD | H | | 1 | | | | | | | | | 1-6/8 | | 41 |
| GND 01 | | A01C2 | 1-01 * | | | | | | 1 | | | 2-1/8 | | 42 |
| GND 01 | | A01T1 | 1-02 * | | | | | | 2 | | | 1-5/8 | | 42 |
| GND 01 | | R01C2 | 1-03 * | | | | | | 1 | | | 2-1/8 | | 42 |
| GND 01 | | R01T1 | 1-04 * | | | | | | | | | | | 42 |
| GND 01 | | | 1 | | | | | | | | | 5-7/8 | | 42 |
| GND 02 | | A02C2 | 1-01 * | | | | | | 1 | | | 2-1/8 | | 43 |
| GND 02 | | A02T1 | 1-02 * | | | | | | 2 | | | 1-5/8 | | 43 |
| GND 02 | | R02C2 | 1-03 * | | | | | | 1 | | | 2-1/8 | | 43 |
| GND 02 | | R02T1 | 1-04 * | | | | | | | | | | | 43 |
| GND 02 | | | 1 | | | | | | | | | 5-7/8 | | 43 |
| GND 03 | | A03C2 | 1-01 * | | | | | | 1 | | | 2-1/8 | | 44 |
| GND 03 | | A03T1 | 1-02 * | | | | | | 2 | | | 1-5/8 | | 44 |
| GND 03 | | R03C2 | 1-03 * | | | | | | 1 | | | 2-1/8 | | 44 |
| GND 03 | | R03T1 | 1-04 * | | | | | | | | | | | 44 |
| GND 03 | | | 1 | | | | | | | | | 5-7/8 | | 44 |
| GND 04 | | A04C2 | 1-01 * | | | | | | 1 | | | 2-1/8 | | 45 |
| GND 04 | | A04T1 | 1-02 * | | | | | | 2 | | | 1-5/8 | | 45 |
| GND 04 | | R04C2 | 1-03 * | | | | | | 1 | | | 2-1/8 | | 45 |
| GND 04 | | R04T1 | 1-04 * | | | | | | | | | | | 45 |
| GND 04 | | | 1 | | | | | | | | | 5-7/8 | | 45 |
| GND 05 | | A05C2 | 1-01 * | | | | | | 1 | | | 2-1/8 | | 46 |
| GND 05 | | A05T1 | 1-02 * | | | | | | 2 | | | 1-5/8 | | 46 |
| GND 05 | | R05C2 | 1-03 * | | | | | | 1 | | | 2-1/8 | | 46 |
| GND 05 | | R05T1 | 1-04 * | | | | | | | | | | | 46 |
| GND 05 | | | 1 | | | | | | | | | 5-7/8 | | 46 |

| PKMS.C RUN NAME | A/P | WPP2RR.V34(62)-1 PIN NAME | 31-JUL-75 ORDER PIN | RAY - ORDER | Q | DPAN | PV RG Y OPT | X | Z | REMARKS | 2-JUN-76 | 8156 PAGE 5 NC LENGTH EXCEPTIONS FLAG | RUN NUMBER |
|--------------------|-----|---------------------------------|---------------------------|----------------|---|------|----------------|---|---|---------|----------|--|---------------|
| GND 26 | | A06C2 | | 1-21 * | | | | | 1 | | | 2-1/8 | 47 |
| GND 26 | | A06T1 | | 1-22 * | | | | | 2 | | | 1-5/8 | 47 |
| GND 26 | | A06C2 | | 1-23 * | | | 025-9 | | 1 | | | 0-4/8 | 47 |
| GND 26 | | A06C1 | | 1-24 * | | | 025-9 | | 2 | | | 0-4/8 | 47 |
| GND 26 | | A06E1 | | 1-25 * | | | 025-9 | | 1 | | | 0-5/8 | 47 |
| GND 26 | | A06T1 | | 1-26 * | | | 025-9 | | 2 | | | 1-4/8 | 47 |
| GND 26 | | A06T1 | | 1-27 * | | | 025-9 | | 1 | | | 0-1/8 | 47 |
| GND 26 | | A06S1 | | 1-28 * | | | 025-9 | | | | | | 47 |
| GND 26 | | | | 1 | | | | | | | | 7-0/8 | 47 |
| GND 27 | | A07R2 | | 1-21 * | | | | | 1 | | | 0-1/8 | 48 |
| GND 27 | | A07C2 | | 1-22 * | | | | | 2 | | | 1-5/8 | 48 |
| GND 27 | | A07N1 | | 1-23 * | | | | | 1 | | | 0-1/8 | 48 |
| GND 27 | | A07P1 | | 1-24 * | | | | | 2 | | | 0-1/8 | 48 |
| GND 27 | | A07R1 | | 1-25 * | | | | | 1 | | | 0-1/8 | 48 |
| GND 27 | | A07S1 | | 1-26 * | | | | | 2 | | | 0-1/8 | 48 |
| GND 27 | | A07T1 | | 1-27 * | | | | | 1 | | | 0-4/8 | 48 |
| GND 27 | | A07V1 | | 1-28 * | | | | | 2 | | | 1-3/8 | 48 |
| GND 27 | | A07B2 | | 1-29 * | | | | | 1 | | | 0-1/8 | 48 |
| GND 27 | | A07C2 | | 1-30 * | | | | | 2 | | | 0-1/8 | 48 |
| GND 27 | | A07D1 | | 1-31 * | | | | | 1 | | | 0-1/8 | 48 |
| GND 27 | | A07E1 | | 1-32 * | | | | | 2 | | | 1-7/8 | 48 |
| GND 27 | | A07T1 | | 1-33 * | | | | | 1 | | | 0-4/8 | 48 |
| GND 27 | | A07V2 | | 1-34 * | | | | | | | | | 48 |
| GND 27 | | | | 1 | | | | | | | | 6-7/8 | 48 |
| GND 28 | | A08R2 | | 1-21 * | | | | | 1 | | | 0-1/8 | 49 |
| GND 28 | | A08C2 | | 1-22 * | | | | | 2 | | | 1-5/8 | 49 |
| GND 28 | | A08N1 | | 1-23 * | | | | | 1 | | | 0-1/8 | 49 |
| GND 28 | | A08P1 | | 1-24 * | | | | | 2 | | | 0-1/8 | 49 |
| GND 28 | | A08R1 | | 1-25 * | | | | | 1 | | | 0-1/8 | 49 |
| GND 28 | | A08S1 | | 1-26 * | | | | | 2 | | | 0-1/8 | 49 |
| GND 28 | | A08T1 | | 1-27 * | | | | | 1 | | | 0-4/8 | 49 |
| GND 28 | | A08V1 | | 1-28 * | | | | | 2 | | | 1-3/8 | 49 |
| GND 28 | | A08B2 | | 1-29 * | | | | | 1 | | | 0-1/8 | 49 |
| GND 28 | | A08C2 | | 1-30 * | | | | | 2 | | | 0-1/8 | 49 |
| GND 28 | | A08D1 | | 1-31 * | | | | | 1 | | | 0-1/8 | 49 |
| GND 28 | | A08E1 | | 1-32 * | | | | | 2 | | | 1-7/8 | 49 |
| GND 28 | | A08T1 | | 1-33 * | | | | | 1 | | | 0-4/8 | 49 |
| GND 28 | | A08V2 | | 1-34 * | | | | | | | | | 49 |
| GND 28 | | | | 1 | | | | | | | | 6-7/8 | 49 |
| GOOD STROBE | L | A02F1 | | 1-21 * | | | 025-5 | | 1 | | | 1-1/8 | 50 |
| GOOD STROBE | L | A03D1 | | 1-22 * | | | 025-5 | | | | | | 50 |
| GOOD STROBE | L | | | 1 | | | | | | | | 1-1/8 | 50 |
| HEAD SELECT | L | A01P1 | | 1-21 * | | | 025-1 | | 1 | | | 5-2/8 | 51 |
| HEAD SELECT | L | A07M2 | | 1-22 * | | | 025-1 | | 2 | | | 1 | 51 |
| HEAD SELECT | L | A08M2 | | 1-23 * | | | 025-1 | | | | | | 51 |
| HEAD SELECT | L | | | 1 | | | | | | | | 6-2/8 | 51 |
| HIGH DENSITY | L | A01P2 | | 1-21 * | | | 025-4 | | 1 | | | 4-3/8 | 52 |
| HIGH DENSITY | L | A07P2 | | 1-22 * | | | 025-4 | | 2 | | | 1 | 52 |
| HIGH DENSITY | L | A08P2 | | 1-23 * | | | 025-4 | | | | | | 52 |
| HIGH DENSITY | L | | | 1 | | | | | | | | 5-3/8 | 52 |

| PKMS.C RUN NAME | A/P | WPP2RR.V34(62)-1 PIN NAME | 31-JUL-75 ORDER PIN | RAY - ORDER | Q | DPAN | PV RG Y OPT | X | Z | REMARKS | 2-JUN-76 | 8156 PAGE 6 NC LENGTH EXCEPTIONS FLAG | RUN NUMBER |
|--------------------|-----|---------------------------------|---------------------------|----------------|---|------|----------------|---|---|---------|----------|--|---------------|
| HOME | L | A04R1 | | 1-21 * | | | 025-7 | | 2 | | | 2-1/8 | 53 |
| HOME | L | A03R1 | | 1-22 * | | | 025-7 | | 1 | | | 2-3/8 | 53 |
| HOME | L | A06F1 | | 1-23 * | | | 025-7 | | | | | | 53 |
| HOME | L | | | 1 | | | | | | | | 4-4/8 | 53 |
| INDEX PULSE | L | A07R2 | | 1-21 * | | | 025-3 | | 1 | | | 1-4/8 | 54 |
| INDEX PULSE | L | A04J1 | | 1-22 * | | | 025-3 | | | | | | 54 |
| INDEX PULSE | L | | | 1 | | | | | | | | 1-4/8 | 54 |
| INDEX/SECTOR | L | A02D1 | | 1-21 * | | | 025-5 | | 1 | | | 1-7/8 | 55 |
| INDEX/SECTOR | L | A04H2 | | 1-22 * | | | 025-5 | | | | | | 55 |
| INDEX/SECTOR | L | | | 1 | | | | | | | | 1-7/8 | 55 |
| INNER LIMIT | H | A05R1 | | 1-21 * | | | 025-2 | | 1 | | | 3-3/8 | 56 |
| INNER LIMIT | H | A03U1 | | 1-22 * | | | 025-2 | | 2 | | | 2-3/8 | 56 |
| INNER LIMIT | H | A02J1 | | 1-23 * | | | 025-2 | | | | | | 56 |
| INNER LIMIT | H | | | 1 | | | | | | | | 5-6/8 | 56 |
| INTERLOCK | L | A04H1 | | 1-21 * | | | 025-7 | | 1 | | | 1-7/8 | 57 |
| INTERLOCK | L | A06R1 | | 1-22 * | | | 025-7 | | | | | | 57 |
| INTERLOCK | L | | | 1 | | | | | | | | 1-7/8 | 57 |
| LIMIT | H | A05K1 | | 1-21 * | | | 025-9 | | 1 | | | 3-3/8 | 58 |
| LIMIT | H | A06H1 | | 1-22 * | | | 025-9 | | | | | | 58 |
| LIMIT | H | | | 1 | | | | | | | | 3-3/8 | 58 |
| LOAD HEADS | L | A03C1 | | 1-21 * | | | 025-6 | | 1 | | | 1 | 59 |
| LOAD HEADS | L | A04C1 | | 1-22 * | | | 025-6 | | | | | | 59 |
| LOAD HEADS | L | | | 1 | | | | | | | | 1-0/8 | 59 |
| LOAD IND | H | A04T1 | | 1-21 * | | | 025-8 | | 1 | | | 1-7/8 | 60 |
| LOAD IND | H | A06A1 | | 1-22 * | | | 025-8 | | | | | | 60 |
| LOAD IND | H | | | 1 | | | | | | | | 1-7/8 | 60 |
| LOAD SW | L | A06K1 | | 1-21 * | | | 025-7 | | 1 | | | 3-3/8 | 61 |
| LOAD SW | L | A04D1 | | 1-22 * | | | 025-7 | | | | | | 61 |
| LOAD SW | L | | | 1 | | | | | | | | 3-3/8 | 61 |
| MOVE | L | A03L1 | | 1-21 * | | | 025-2 | | 1 | | | 4-1/8 | 62 |
| MOVE | L | A02P1 | | 1-22 * | | | 025-2 | | | | | | 62 |
| MOVE | L | | | 1 | | | | | | | | 4-1/8 | 62 |
| NO PROTECT | L | A01N2 | | 1-21 * | | | 025-1 | | 1 | | | 3-5/8 | 63 |
| NO PROTECT | L | A04H1 | | 1-22 * | | | 025-1 | | | | | | 63 |
| NO PROTECT | L | | | 1 | | | | | | | | 3-5/8 | 63 |
| ODD DRIVE | L | A02J2 | | 1-21 * | | | | | 1 | | | 3-3/8 | 64 |
| ODD DRIVE | L | A03F2 | | 1-22 * | | | | | | | | | 64 |
| ODD DRIVE | L | | | 1 | | | | | | | | 3-3/8 | 64 |
| ON | L | A02A1 | | 1-21 * | | | 025-5 | | 1 | | | 2-1/8 | 65 |
| ON | L | A03M1 | | 1-22 * | | | 025-5 | | | | | | 65 |
| ON | L | | | 1 | | | | | | | | 2-1/8 | 65 |

