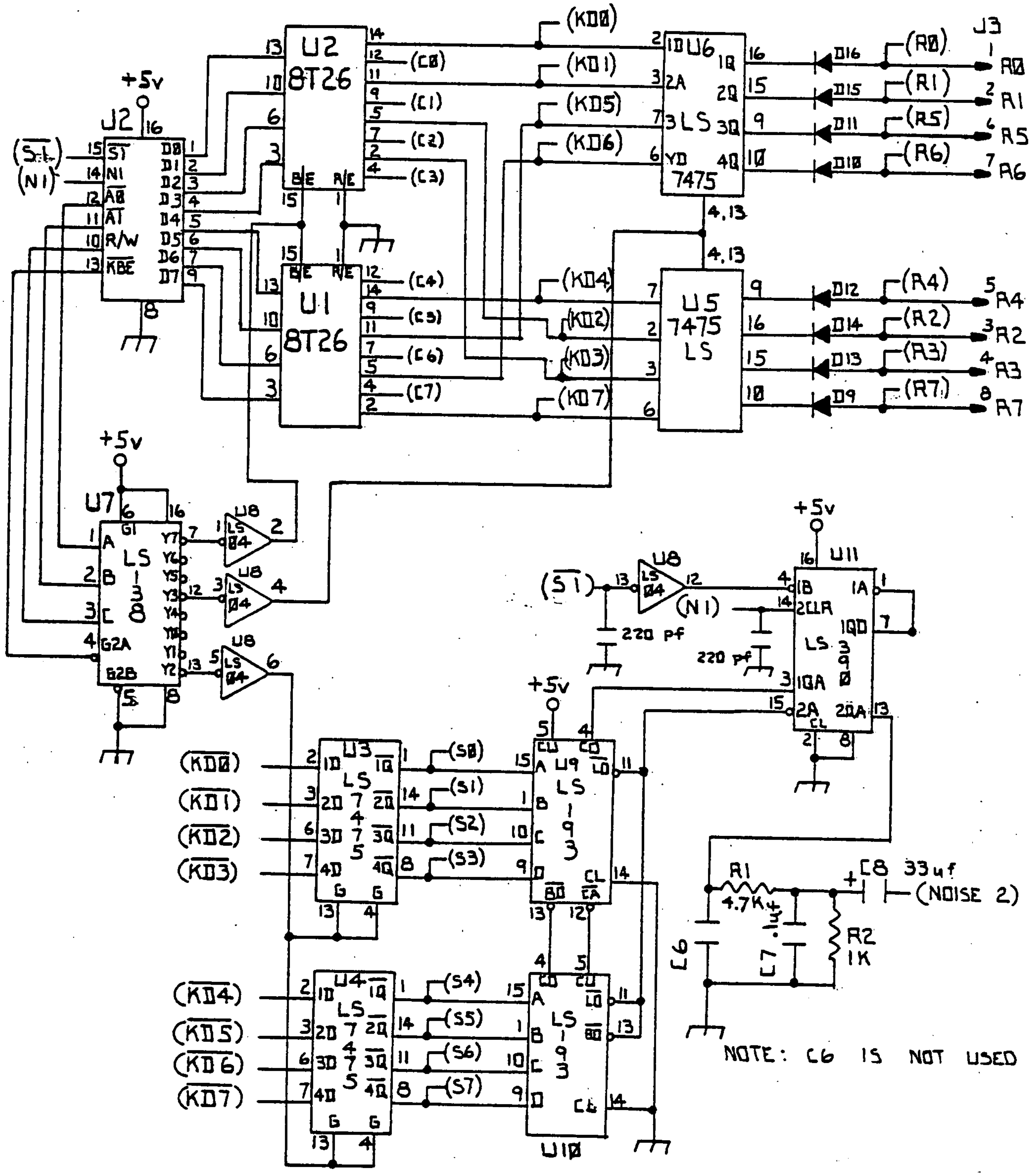
# MODEL 542 REV B SCHEMATICS

| | |
|---|---|
| | |
| | |
| | |
| REV B | 15 AUG 1979 |


+5v
J2
(S.L.)
(N1)
ST
N1
A0
A1
R/W
KBE
D0
D1
D2
D3
D4
D5
D6
D7
U2
8T26
BE
RE
U1
8T26
(C0)
(C1)
(C2)
(C3)
(C4)
(C5)
(C6)
(C7)
(KD0)
(KD1)
(KD5)
(KD6)
(KD4)
(KD2)
(KD3)
(KD7)
U6
3LS
7475
4,13
U5
7475
LS
D16
D15
D11
D10
D12
D14
D13
D9
(R0)
(R1)
(R5)
(R6)
(R4)
(R2)
(R3)
(R7)
J3
R0
R1
R5
R6
R4
R2
R3
R7
U7
LS 138
G1
A
B
C
G2A
G2B
Y7
Y6
Y5
Y3
Y4
Y0
Y1
Y2
U8
LS 04
(S1)
(N1)
220 pf
220 pf
U11
LS 390
1B
2CLR
1QA
2A
1A
1QD
2QA
CL
U3
LS 7475
U4
LS 7475
(S0)
(S1)
(S2)
(S3)
(S4)
(S5)
(S6)
(S7)
U9
LS 193
U10
LS 193
CU
CD
LD
BO
CA
CL
R1
4.7K
C6
C7 .1
C8 33uf
R2
1K
(NOISE 2)

NOTE: C6 IS NOT USED

**OHIO SCIENTIFIC**

**product name/number**
MODEL 542 POLLED KEYBOARD

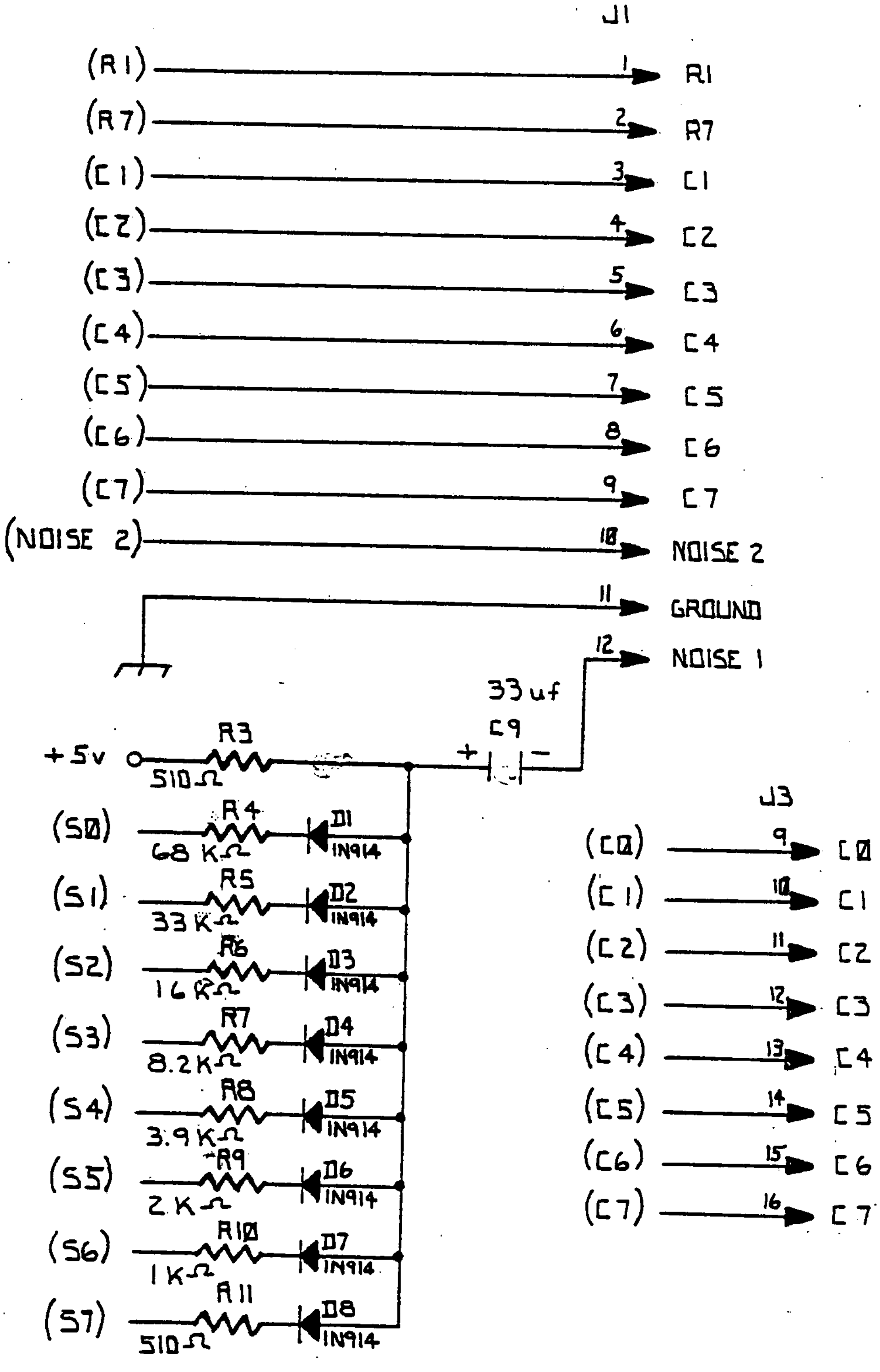
**date** 15 AUG 1979
DRAWN ~ J.L.K.

**revision** B

**page**

**status**

**sheet** 1 **of** 3


J1
(R1)
1
R1
(R7)
2
R7
(C1)
3
C1
(C2)
4
C2
(C3)
5
C3
(C4)
6
C4
(C5)
7
C5
(C6)
8
C6
(C7)
9
C7
(NOISE 2)
10
NOISE 2
11
GROUND
12
NOISE 1
33 uf
C9
+
−
+5v
R3
510Ω
(S0)
R4
68 KΩ
D1
IN914
(S1)
R5
33 KΩ
D2
IN914
(S2)
R6
16 KΩ
D3
IN914
(S3)
R7
8.2 KΩ
D4
IN914
(S4)
R8
3.9 KΩ
D5
IN914
(S5)
R9
2 KΩ
D6
IN914
(S6)
R10
1 KΩ
D7
IN914
(S7)
R11
510Ω
D8
IN914
J3
(C0)
9
C0
(C1)
10
C1
(C2)
11
C2
(C3)
12
C3
(C4)
13
C4
(C5)
14
C5
(C6)
15
C6
(C7)
16
C7

**OHIO SCIENTIFIC**

**product name/number** MODEL 542 REV B

**date** 15 AUG 1979

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**revision** B

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**status**

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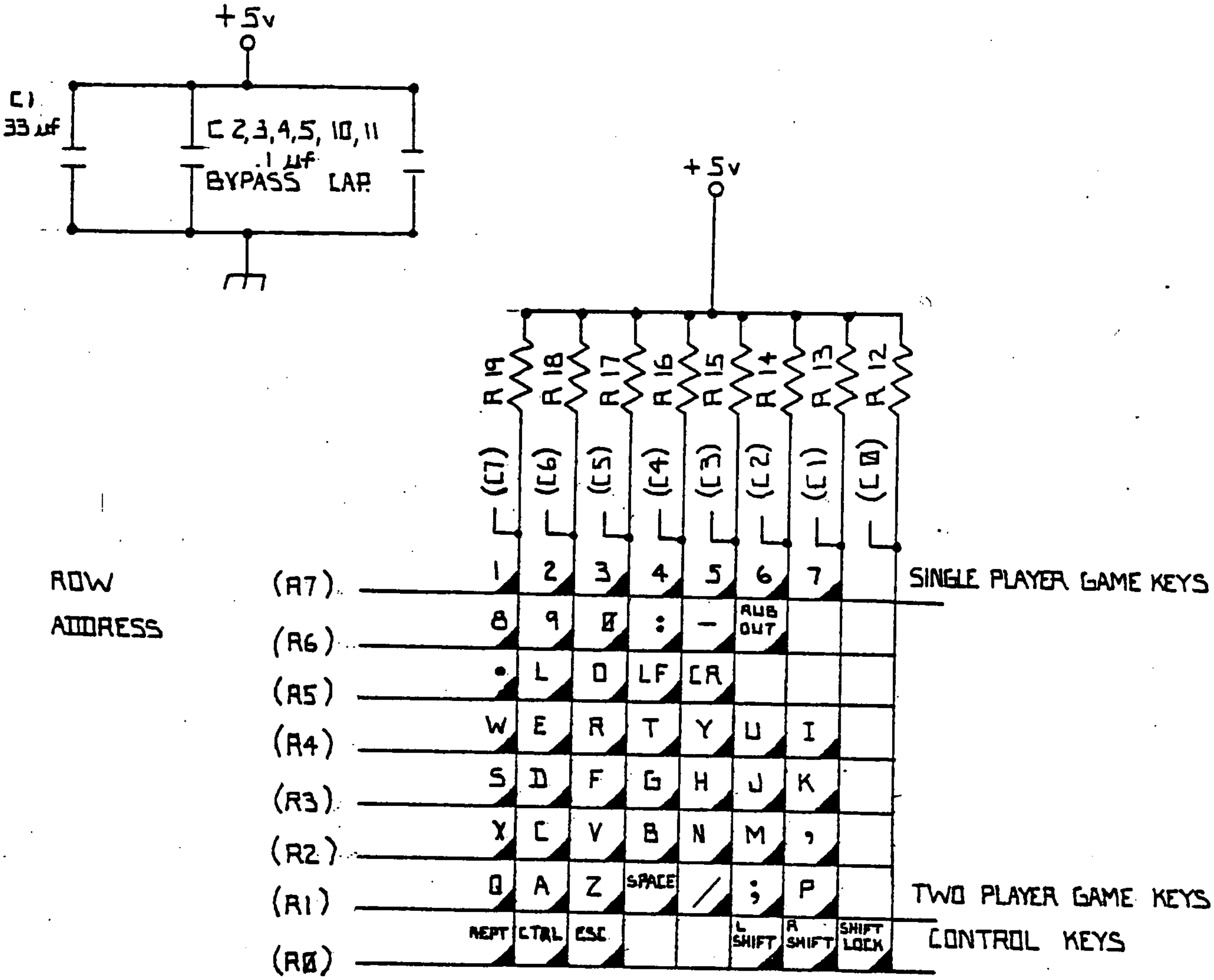
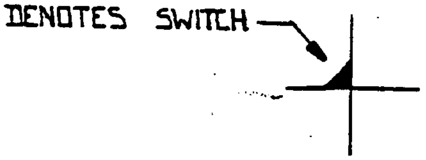
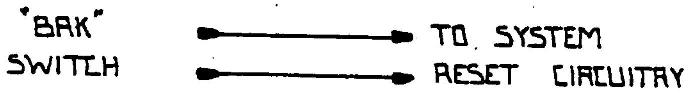

+5v
C1
33 µf
C 2,3,4,5, 10, 11
.1 µf
BYPASS CAP
+5v
R19
R18
R17
R16
R15
R14
R13
R12
ROW
ADDRESS
SINGLE PLAYER GAME KEYS
TWO PLAYER GAME KEYS
CONTROL KEYS

| | (C7) | (C6) | (C5) | (C4) | (C3) | (C2) | (C1) | (C0) |
|---|---|---|---|---|---|---|---|---|
| (R7) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| (R6) | 8 | 9 | 0 | : | — | RUB OUT | | |
| (R5) | • | L | O | LF | CR | | | |
| (R4) | W | E | R | T | Y | U | I | |
| (R3) | S | D | F | G | H | J | K | |
| (R2) | X | C | V | B | N | M | , | |
| (R1) | Q | A | Z | SPACE | / | ; | P | |
| (R0) | REPT | CTRL | ESC | | | L SHIFT | R SHIFT | SHIFT LOCK |

DENOTES SWITCH




"BRK"
SWITCH
TO SYSTEM
RESET CIRCUITRY

NOTES:

1. STANDARD 53 KEY LAYOUT EXCEPT:
"HERE IS" DELETED
"RUB OUT" AT "HERE IS" LOCATION
"SHIFT LOCK" AT "RUB OUT" LOCATION
"SHIFT" SEPERATELY DECODED FOR "LEFT SHIFT" AND "RIGHT SHIFT."

| | |
|---|---|
| **OHIO SCIENTIFIC** | **product name/number** MODEL 542 KEYSWITCH LOCATIONS |

| | | | | |
|---|---|---|---|---|
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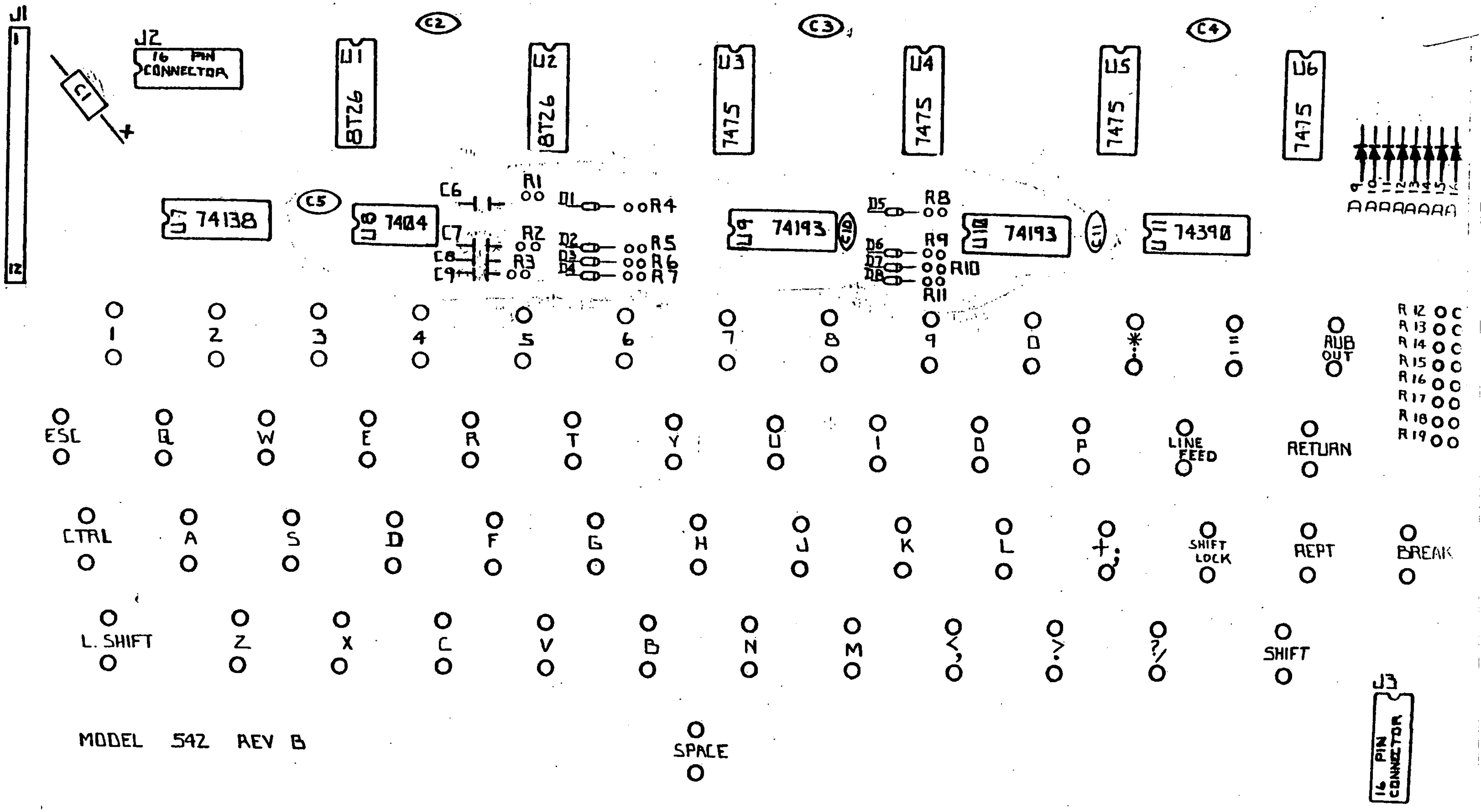
J1
1
12
C1
+
J2
16 PIN CONNECTOR
C2
C3
C4
U1 8T26
U2 8T26
U3 7475
U4 7475
U5 7475
U6 7475
U7 74138
C5
U8 7404
C6
C7
C8
C9
R1
R2
R3
D1
D2
D3
D4
R4
R5
R6
R7
U9 74193
C10
D5
D6
D7
D8
R8
R9
R10
R11
U10 74193
C11
U11 74390
A A A A A A A A
9 10 11 12 13 14 15 16
1 2 3 4 5 6 7 8 9 0 * = RUB OUT
ESC Q W E R T Y U I O P LINE FEED RETURN
CTRL A S D F G H J K L +; SHIFT LOCK REPT BREAK
L. SHIFT Z X C V B N M <, >. ?/ SHIFT
SPACE
R12 R13 R14 R15 R16 R17 R18 R19
J3
16 PIN CONNECTOR
MODEL 542 REV B