

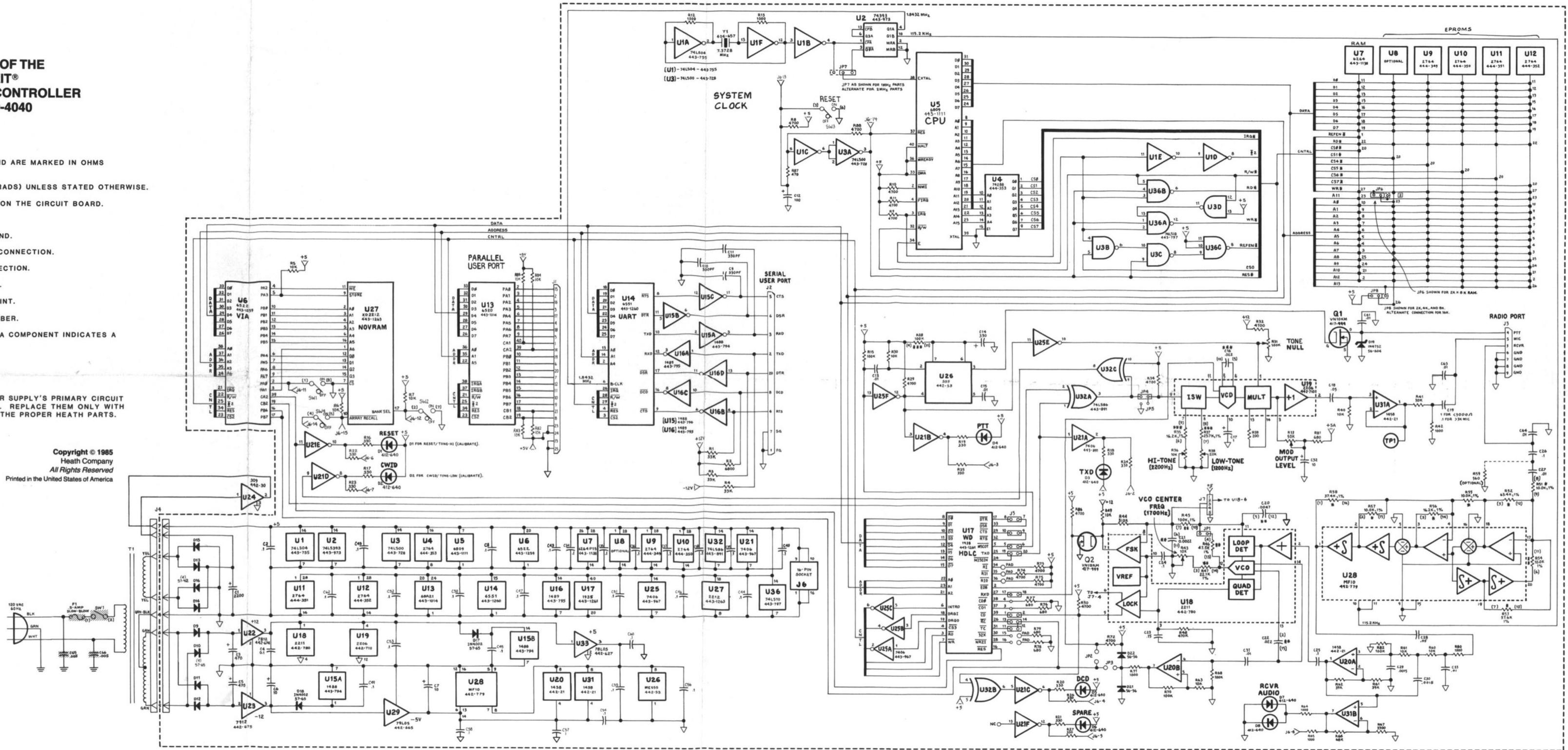
SCHEMATIC OF THE HEATHKIT® TERMINAL NODE CONTROLLER MODEL HD-4040

NOTES:

- ALL RESISTORS ARE 1/4-WATT, 5% AND ARE MARKED IN OHMS (k-1,000; M-1,000,000).
- ALL CAPACITORS ARE IN µF (MICROFARADS) UNLESS STATED OTHERWISE.
- INDICATES A WIRE CONNECTION ON THE CIRCUIT BOARD.
- ≡ INDICATES CHASSIS GROUND.
- ▽ INDICATES CIRCUIT BOARD GROUND.
- ♀ INDICATES A FEMALE (SOCKET) CONNECTION.
- ♂ INDICATES A MALE (PLUG) CONNECTION.
- ⊕ INDICATES A CONNECTION POINT.
- ⊖ INDICATES A NO CONNECTION POINT.
- J6-1 INDICATES SOCKET AND PIN NUMBER.
- NUMBERS SUCH AS (1) OR 8 NEXT TO A COMPONENT INDICATES A PIN NUMBER.
- ✳ - U30 16 PIN PLUG.
- ✳✳ - U34 16 PIN PLUG.
- ✳✳✳ - U35 14 PIN PLUG.
- PARTS IN SHADED AREAS IN THE POWER SUPPLY'S PRIMARY CIRCUIT ARE CRITICAL FOR CONTINUED SAFETY. REPLACE THEM ONLY WITH PARTS OF THE SAME RATING OR WITH THE PROPER HEATH PARTS.

Part of 595-3334-01

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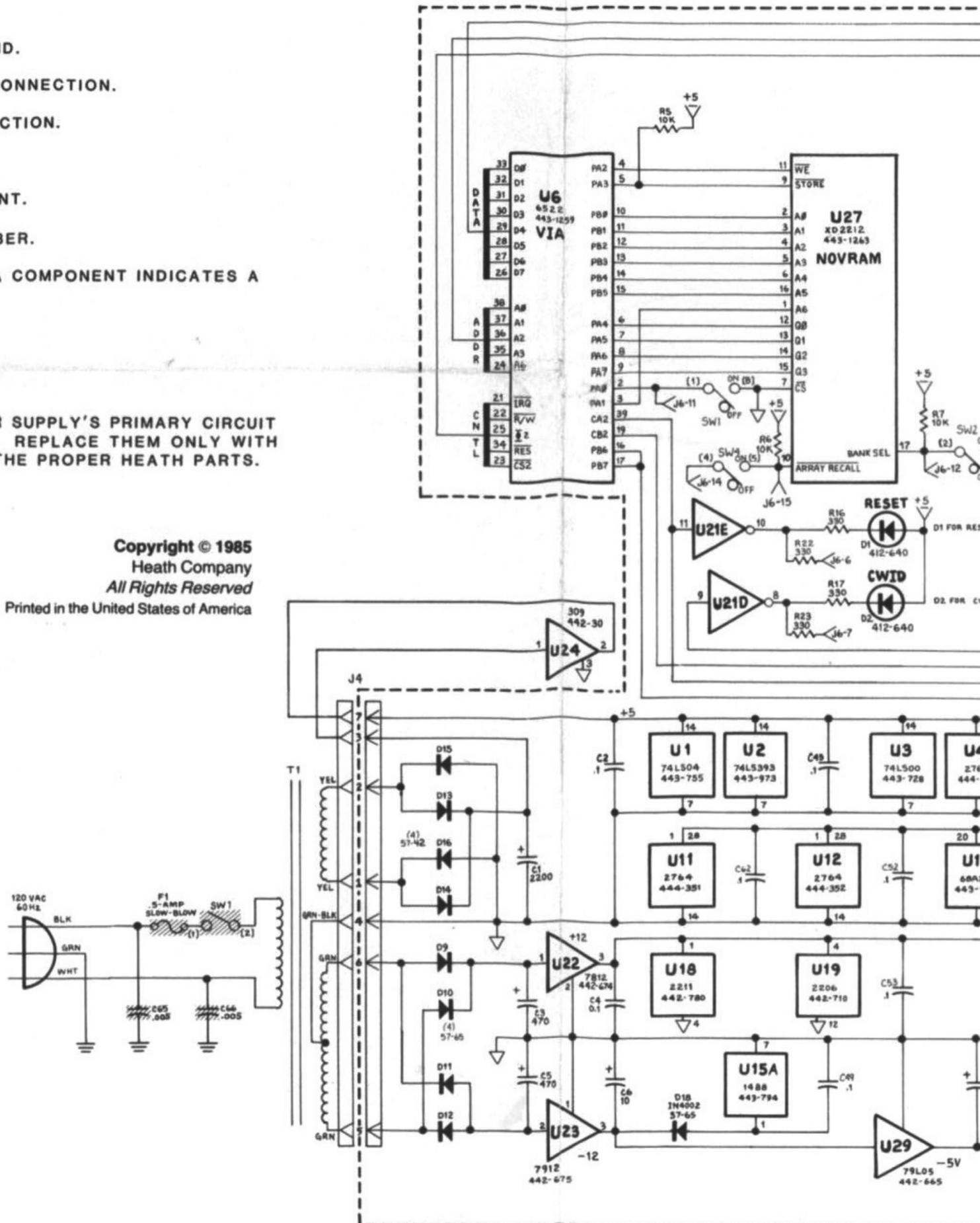
SCHEMATIC OF THE HEATHKIT® TERMINAL NODE CONTROLLER MODEL HD-4040

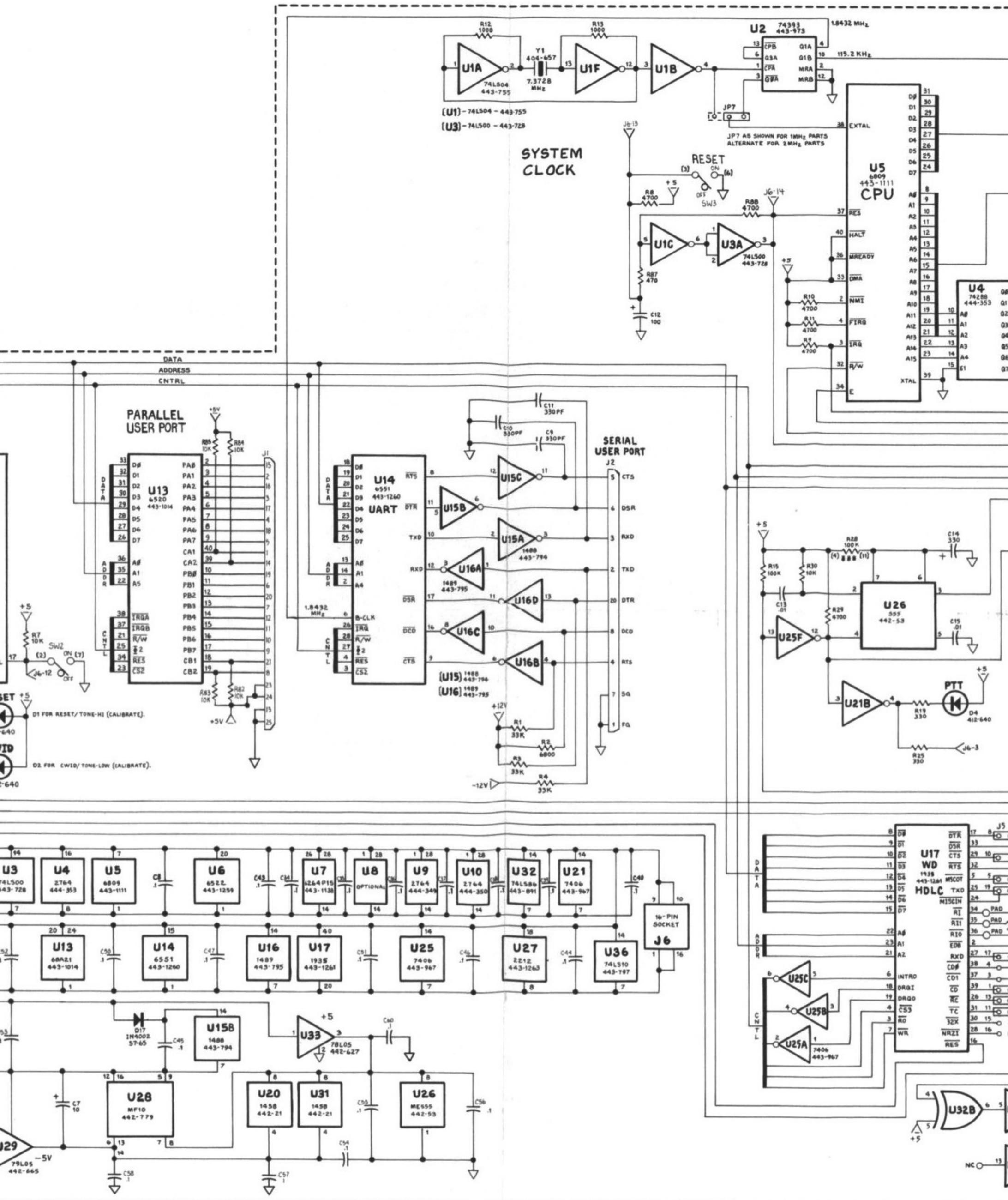
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(U1) - 74LS04 - 443-755
 (U3) - 74LS00 - 443-728

**SYSTEM
 CLOCK**

**U5
 6809
 443-1111
 CPU**

**PARALLEL
 USER PORT**

**SERIAL
 USER PORT**

**U13
 6821
 443-1014**

**U14
 6551
 443-1260
 UART**

**U26
 555
 442-53**

**U3
 74LS00
 443-728**

**U4
 2764
 444-353**

**U5
 6809
 443-1111**

**U6
 6522
 443-1259**

**U7
 4244 P15
 443-1138**

**U8
 OPTIONAL**

**U9
 2764
 444-349**

**U10
 2764
 444-350**

**U12
 74LS86
 443-891**

**U13
 6821
 443-1014**

**U14
 6551
 443-1260**

**U15
 1489
 443-795**

**U16
 1935
 443-1261**

**U17
 1938
 443-1261
 WD
 HOLC**

**U19
 7406
 443-967**

**U20
 1458
 442-21**

**U21
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**U23
 2212
 443-1263**

**U25
 7406
 443-967**

**U27
 74LS10
 443-797**

**U29
 79L05
 442-665**

**U30
 1N4002
 57-65**

**U31
 1458
 442-21**

**U32
 74LS10
 443-797**

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