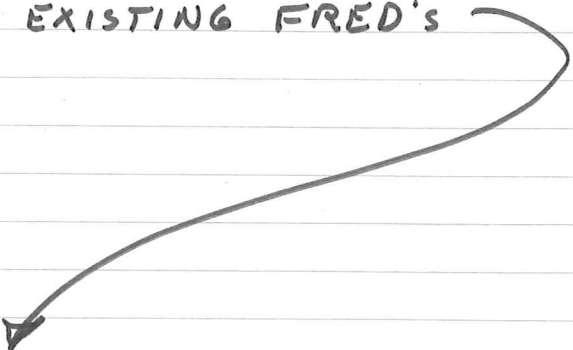


1. MICROTUTORS
2. ADD OPTION BOARDS TO 2 EXISTING FRED'S
3. 1 NEW FRED



MAIN BOARD: JUMPER OPTION PAD \equiv 18 TO EC-R (DMA-IN).
JUMPER PAD H TO PAD F

OPTION BOARD: PADS C1-C10 \rightarrow AC PINS 1-10
PADS C11-C20 \rightarrow AC PINS A-L
TWISTED PAIR \rightarrow WRITE JACK.
CLOCK \rightarrow TV BFR. BOARD PIN 5

OPTIONAL CARD TEST

1. RUN EXISTING PROGRAMS

2. CHECK +5, GND, + CLOCK PINS

3.

400	21FF	FF → VI
2	E1BF	VI → EXT
4	F4Φ2	REPEAT

CHECK 8 BUS OUT LINES + OUT PULSE

for mach
cycle
time
≤ 10μs

400	21FF	FF → VI
2	E191	VI → EXTR.
4	21ΦΦ	ΦΦ → VI
6	E191	VI → EXTR.
8	F4ΦΦ	REPEAT

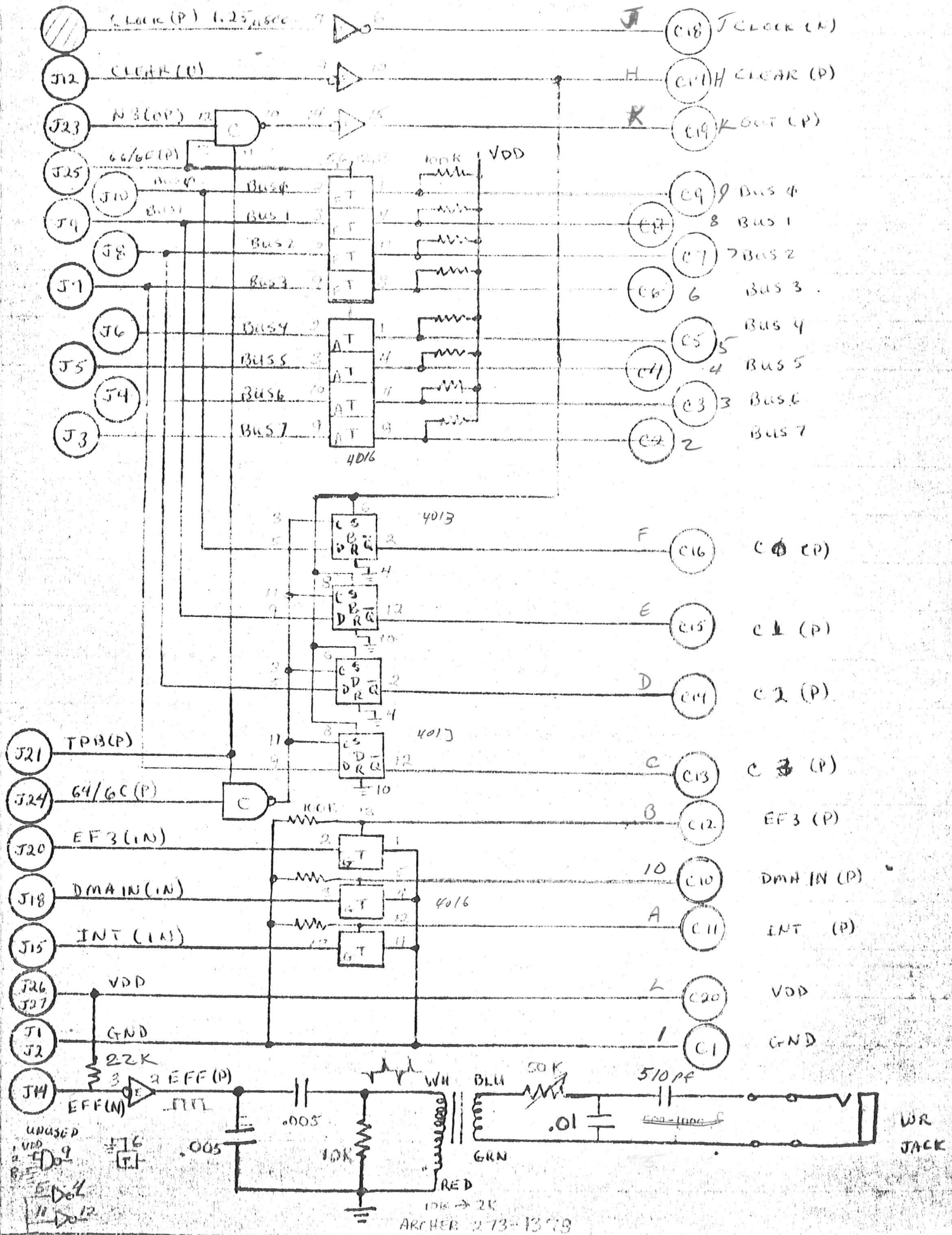
CHECK 4 OUT FF LINES.

FRED DEMO - LANG.

2B4 = 3Φ (~~FF~~ WAS 3B)
1B8 = 3Φ (WAS 3A)

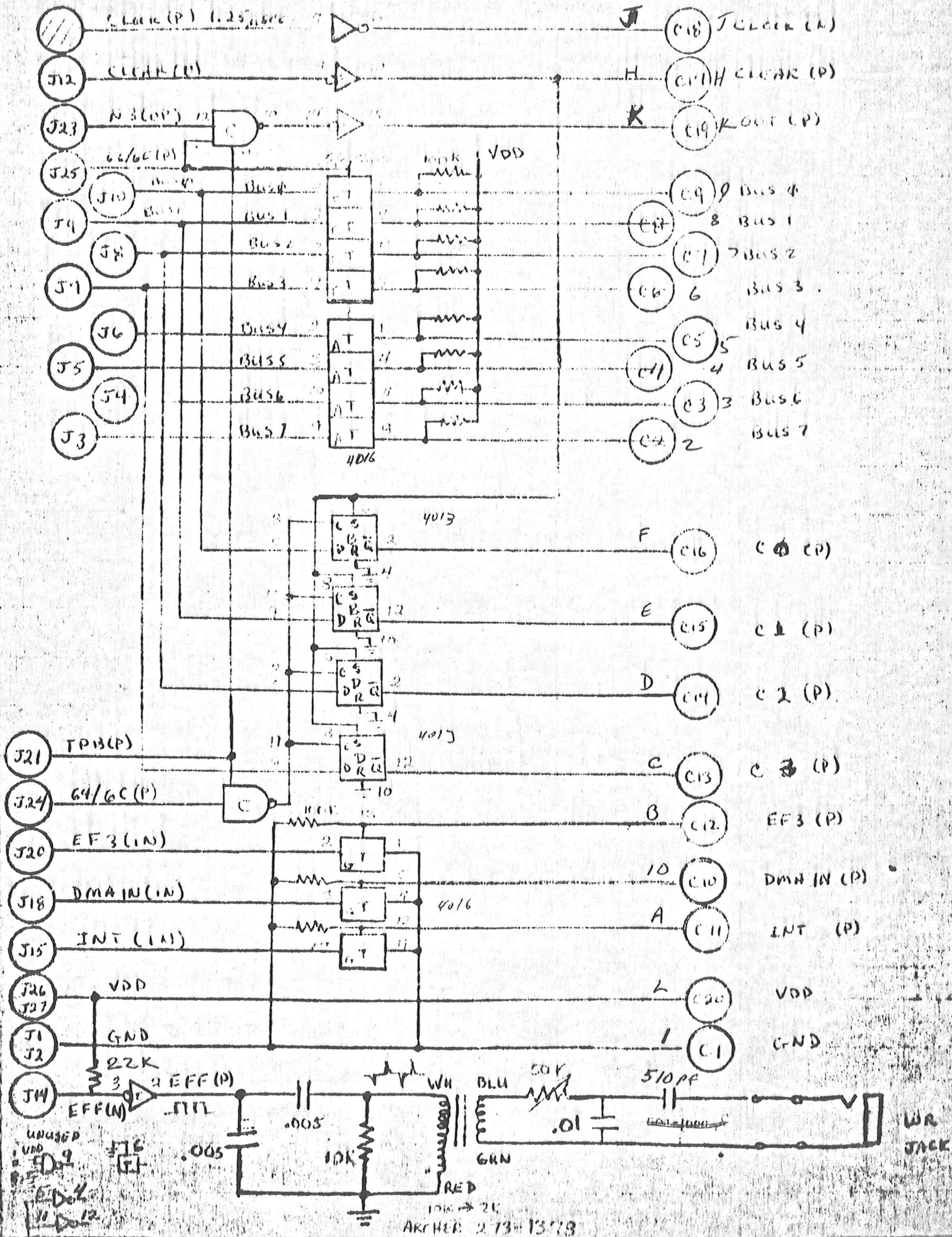
FRED II - OPTION CARD

PLUG



FREED - OPTION CARD

PLUG



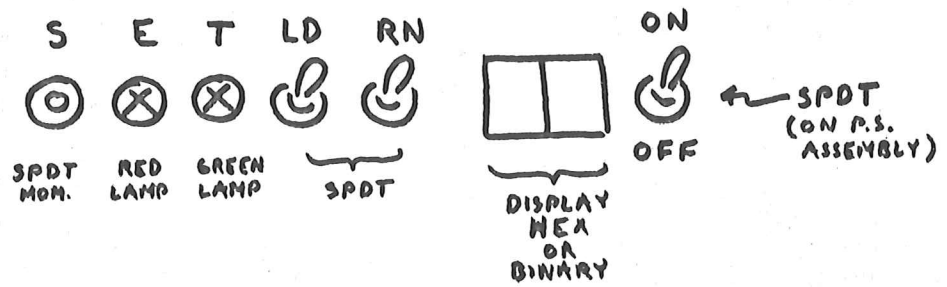


FIGURE 5

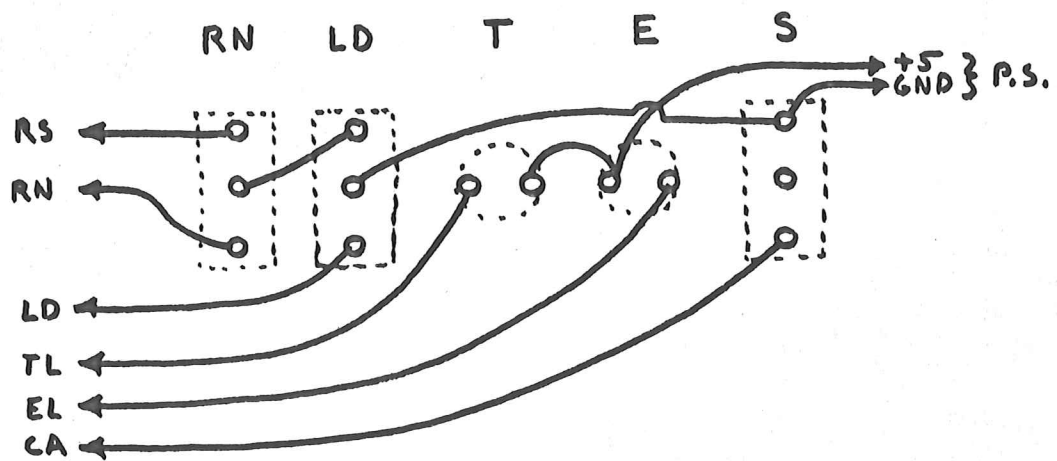


FIGURE 6



FRED-II INITIAL CHECK OUT.

- A. POWER ON: +5 CURRENT SHOULD BE 600-800 mA.
TPA/B SHOULD APPEAR WITH "LD" UP.
- B. ADJUST CLOCK BY SETTING V SYNC = 60V
- C. CHECK HEX & BYTE KEYBOARD LOAD MODES.
- D. WITH "T" UP SET TV CHANNEL FREQUENTLY (CHANNEL 4)
AND CHECK TV PICTURE.
- E. WITH CASSETTE PLAYER & STD. 4.17KCTONE TAPE
ADJUST TONE DETECTOR CARD.
- F. LOAD & RUN PROGRAMS INCLUDING M TEST.