

10/30/78

B.O.M. ACTIVE CABLE FIX

8020244	I.C. 74LS244 LINE DRIVER	3 ea
8207122	RES, CRB, FILM $\frac{1}{2}$ W 5% 220 OHM	6 ea
8304101	CAP DISC 12V .1 MFD	3 ea
8709020	P.C. BOARD, ACTIVE CABLE ( $2\frac{1}{2}$ x 4)	1 ea
8709021	CABLE ASSY (AMP) 3"	2 ea
8709022	WIRE JUMPER $2\frac{1}{2}$ ", 24 gauge, STRANDED	1 ea
8709023*	WIRE TWISTED PAIR (RED-BLACK) $7\frac{1}{2}$ "	1 ea
8709024*	WIRE TWISTED PAIR (WHITE-BLACK) 7"	1 ea
8709025*	WIRE TWISTED PAIR (BLUE-BLACK) $5\frac{1}{2}$ "	1 ea
	SOLID BARE WIRE 3/16" (NOT INCLUDED)	1 ea

## ACTIVE CABLE-TWISTED PAIR MODIFICATION

### PROCEDURES FOR COMPONENT SIDE OF BOARD:

- 1.) CUT THE MUX ETCH AT POINTS (1) AND (2), ABOVE PIN 23 OF THE EDGE CONNECTOR AND BELOW PIN 1 OF Z17 RESPECTIVELY.
- 2.) CUT THE ETCH AT POINT (7) BETWEEN PIN 37 AND 39.
- 3.) CUT THE ETCH AT POINT (8) BETWEEN PIN 37 AND POINT (G).
- 4.) CONNECT PIN 39 TO POINT (G) WITH A 3/16" BARE WIRE.
- 5.) CONNECT PIN 37 TO POINT (H) WITH A 2½" JUMPER WIRE.

### PROCEDURES FOR COPPER SIDE OF BOARD:

- 1.) CUT THE CAS ETCH AT POINTS (3) AND (4), NEAR PIN 2 OF THE EDGE CONNECTOR AND BELOW PIN 4 OF Z24.
- 2.) CUT THE RAS ETCH AT POINTS (5) AND (6), ABOVE PIN 2 OF THE EDGE CONNECTOR AND BELOW PIN 1 OF Z43.
- 3.) PREPARE 3 PAIRS OF 220 OHM RESISTORS. CUT ONE END LEAD OF EACH OF THE 6 RESISTORS TO ½ INCH AND BEND 1/8" AT A RIGHT ANGLE; THEN SOLDER TOGETHER INTO PAIRS.

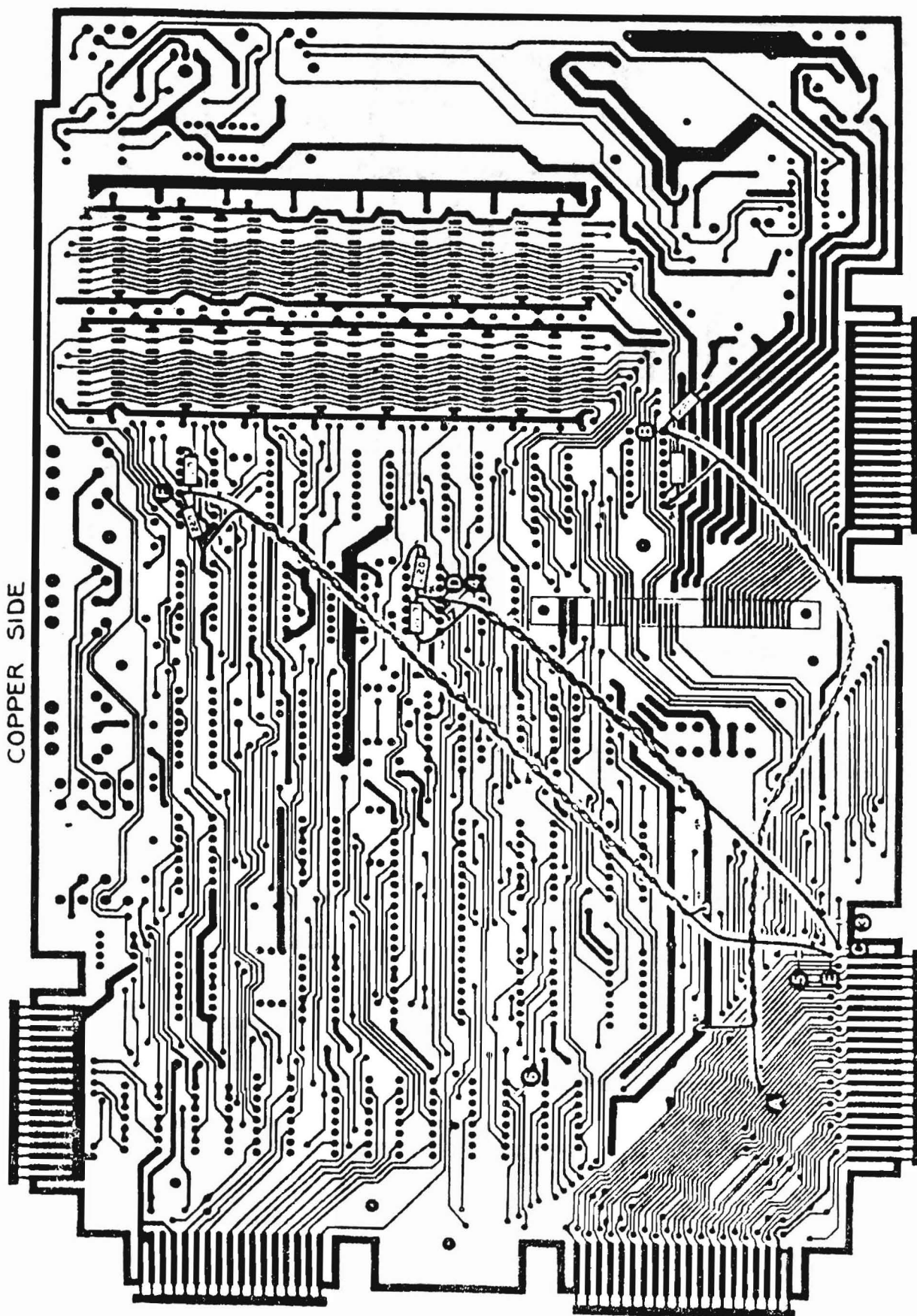


- 4.) SOLDER THE COMMON LEAD OF THE RESISTOR PAIRS TO:  
POINT (B), PIN 1 OF Z17 (MUX)  
POINT (D), PIN 4 OF Z24 (CAS)  
POINT (F), PIN 12 OF Z22 (RAS)
- 5.) OF THE REMAINING LEADS OF EACH RESISTOR PAIR SOLDER ONE LEAD EACH TO THE NEAREST +5V AND THE OTHER TO GROUND.
- 6.) CONNECT WHITE AND BLACK, 7" TWISTED WIRE PAIR:  
WHITE FROM POINT (A) TO (B), MUX TO COMMON OF RESISTOR PAIR AT Z17.  
BLACK FROM GROUND OF Z17 RESISTOR PAIR TO GROUND NEAREST POINT (A).
- 7.) CONNECT BLUE AND BLACK, 5½" TWISTED WIRE PAIR:  
BLUE FROM POINT (C) TO (D), CAS TO COMMON OF RESISTOR PAIR AT Z24.  
BLACK FROM GROUND OF Z24 RESISTOR PAIR TO GROUND NEAREST POINT (C).
- 8.) CONNECT RED AND BLACK, 7½" TWISTED WIRE PAIR:  
RED FROM POINT (E) TO (F), RAS TO COMMON OF RESISTOR PAIR AT Z22.  
BLACK FROM GROUND OF Z22 RESISTOR PAIR TO GROUND NEAREST POINT (E).

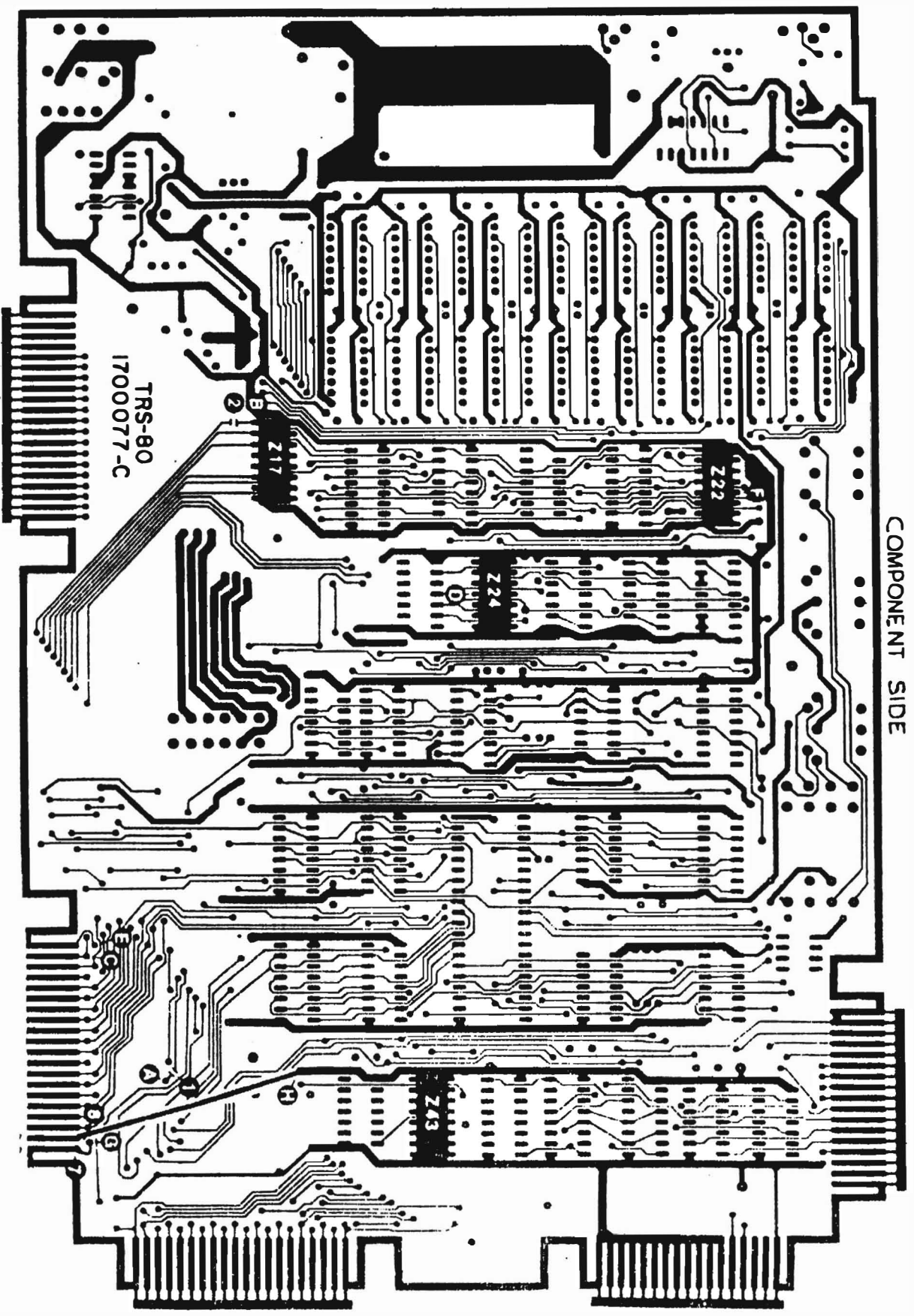
**SAFETY NOTE:** AFTER THE EXPANSION INTERFACE HAS BEEN MODIFIED, THE NEW LINE BUFFER CABLE ASSEMBLY MUST BE USED. IF THE ORIGINAL CABLE IS USED, THE POWER SUPPLY IN THE EXPANSION INTERFACE WILL BE SHORTED.

- 9.) AFTER RE-ASSEMBLY AND CHECK OUT, ATTACH THE WARNING LABEL TO THE EXPANSION INTERFACE JUST ABOVE THE TRS-80 I/F PORT.
- 10.) ATTACH THE -1 LABEL AS A SUFFIX TO THE EXISTING CATALOG NUMBER OF THE SERIAL NUMBER LABEL, I.E. 260-1141-1.

COPPER SIDE



COMPONENT SIDE



TRS-80  
1700077-C