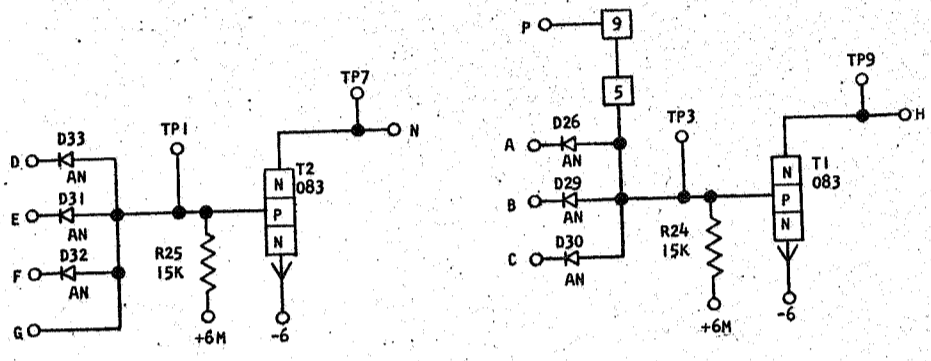
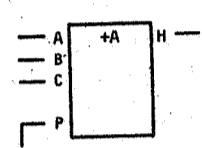
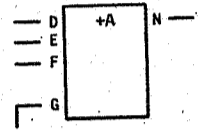


CARD CODE 729833
CK WF

REFERENCE DRAWING
SEE PRODUCTION DRAWING 371270

CTDL-3-WAY "AND" NPN NO LOADS



SEQUENCE OF OPERATION

1. ALL INPUTS UP TRANSISTOR ON OUTPUT DOWN
2. ANY INPUT DOWN TRANSISTOR OFF OUTPUT UP
3. INPUTS ON EXTENDER CARD UP IN COINCIDENCE WITH UP INPUTS ON CARD FOR DOWN OUTPUT.
4. COLLECTORS MUST BE LOADED
5. LOGIC BLOCKS MAY HAVE SYMBOLS OTHER THAN SHOWN.

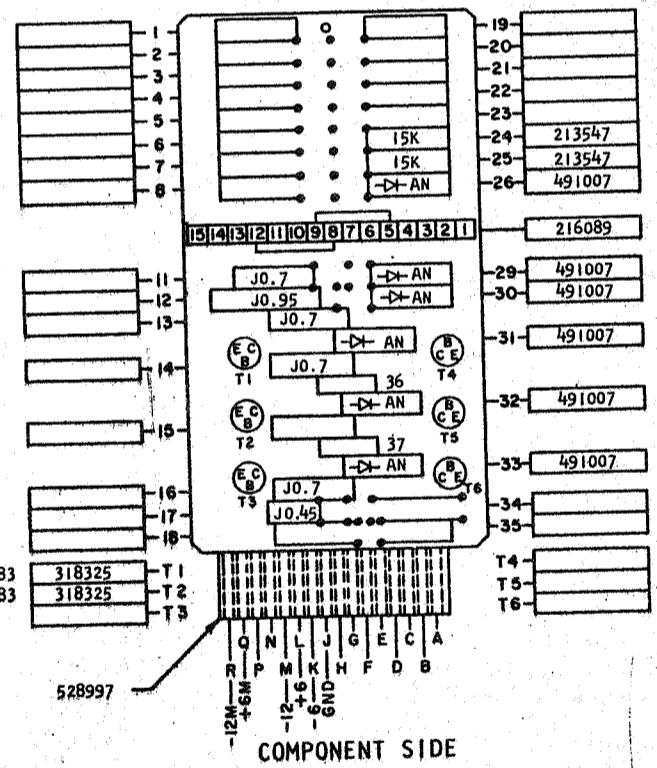
PINS	SIGNAL NAME	WAVE SHAPE	LEVELS	
			MIN	MAX
D, A U	INPUT	[High]	UP -5.26	0.24
E, B U	INPUT	[High]	DOWN -7.44	-12.5
F, C U	INPUT	[High]	UP -5.26	0.24
G, P	EXTENDER INPUT	[High]	DOWN -7.44	-12.5
			UP -5.26	0.24
N, H T	OUTPUT	[High]	UP 1.44	6.24
			DOWN -5.46	-6.24

DELAY - USEC

	MINIMUM	MAXIMUM
TURN ON	0.05	0.70
TURN OFF	0.05	1.50*

*THIS DELAY CAN OCCUR ONLY ON HEAVILY LOADED BLOCKS.

NOTE: THE ABOVE RANGES OF DELAYS ARE REPRESENTATIVE. SPECIFIC CIRCUIT APPLICATION AND/OR WIRING CAPACITANCE MAY RESULT IN DELAYS WHICH ARE OUT OF THE GIVEN RANGES. IN SUCH CASES, CARD REPLACEMENT SHOULD INDICATE IF THE CIRCUIT IS OUT OF SPECIFICATIONS. EXAMPLE: LOGIC BLOCK DRIVING EF "OR".



CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE
ABC	4-2-62

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NAME	CARD ASH TSTR-CTDL - THREE	6-1-62	115599					729833
WAY	"AND" NPN-NO LOADS							
DESIGN	RQ 3-1-62	MODEL	SMS					
DETAIL	WH 3-1-62	SCALE	NONE					
CHECK	WH 3-1-62	DRAW	LIG 3-17-62					
APPRO		CHECK						