


THE FOLLOWING IS AN EXPLANATION OF THE DISC WIRING ON #929-1


1. Note that on this game we are using a new double Contact Plate Wiper. The reason for this is to multiply the number of available rivet positions for wiring i.e. We now have available 19 Rivets for every symbol position and a total of 6 different detecting slot depths. Our schematic shows the wiring laid out as in the game, just remember that a symbol position wired on the left hand side of the schematic may be continued on the right hand side.
2. The circuit used on this game to detect winners makes use of common diodes to minimize the amount of wiring that would be necessary otherwise, in fact, it is the only practical method that could be used on this type of game. The following paragraphs are, therefore, designed to be of help in the understanding of those circuits.

THE FUNCTION OF A DIODE


3. A.C. Voltage consists of alternating positive (+) and negative (-) pulses.

A diode simply has the ability to pass one of these pulses and block the other depending in which direction the diode is arranged in the circuit. For Example:

A. Alternating voltage entering a diode in this direction  will allow only positive pulses to pass through, effectively blocking the negative portion of the cycle.

B. Alternating voltage entering a diode in this direction  will allow only negative pulses to pass through, effectively blocking the positive portion of the cycle.

C. Similarly (+) Positive Direct Current will only flow thru Example "A" and (-) Negative Direct Current will only flow thru Example "B".

Now in conclusion, if we decide as in this particular game to use a negative D.C. Input, we will be able to direct or block that Input by arranging the diode's in the direction necessary, and ultimately make the circuit path we want to the appropriate pay value. However, due to the complexity of the wiring that same negative pulse is feeding other circuits and here we place a diode  typical of the manner shown which will not allow the negative pulse to pass, which if it did, could cause wrong paying combination.

POWER SUPPLY

4. The power supply used for the payout system is obtained through a bridge rectifier circuit made from the arrangement of 4 diodes as shown on the schematic at ^{21-B}~~21-B~~. Alternating current is supplied through wires ³⁰~~30~~ and 70 and comes out negative D.C. and positive D.C. at wire colors ³²⁻¹~~32-1~~ and ⁷⁵⁻¹~~75-1~~ respectively. The conversion to full wave rectification at this point allows 50 volt D.C. to be available to the P.O. Circuits and provides a negative potential to the 90 feed for the disc wiring.

BASIC CIRCUITS

5. To further help in the understanding of this circuit, each pay line has been drawn in its basic form and using Example "A" operates as follows:

E.G. Combination 9-24-16 pays 2.

The negative feed (90) flows thru Reel #3 wiper (Z) at disc position #IV, thru 60 wire picking up #24 symbol thru wiper (S) and finally #9 symbol thru wiper (R). (Note that the negative supply is able to pass thru diode (A)).

Now that 13 wire is conditioned negative and is hot, note that diode (B) because of its direction prevents this negative pulse from passing thru wiper (U) which if were possible would result in a 20 pay for the above combination. As then it would flow across wiper (U) and wiper (T).

Similarly: 24-16-4

The negative feed flows thru wiper (Z), (Y) and diode (B) thru wiper (U) to the 2 pay.

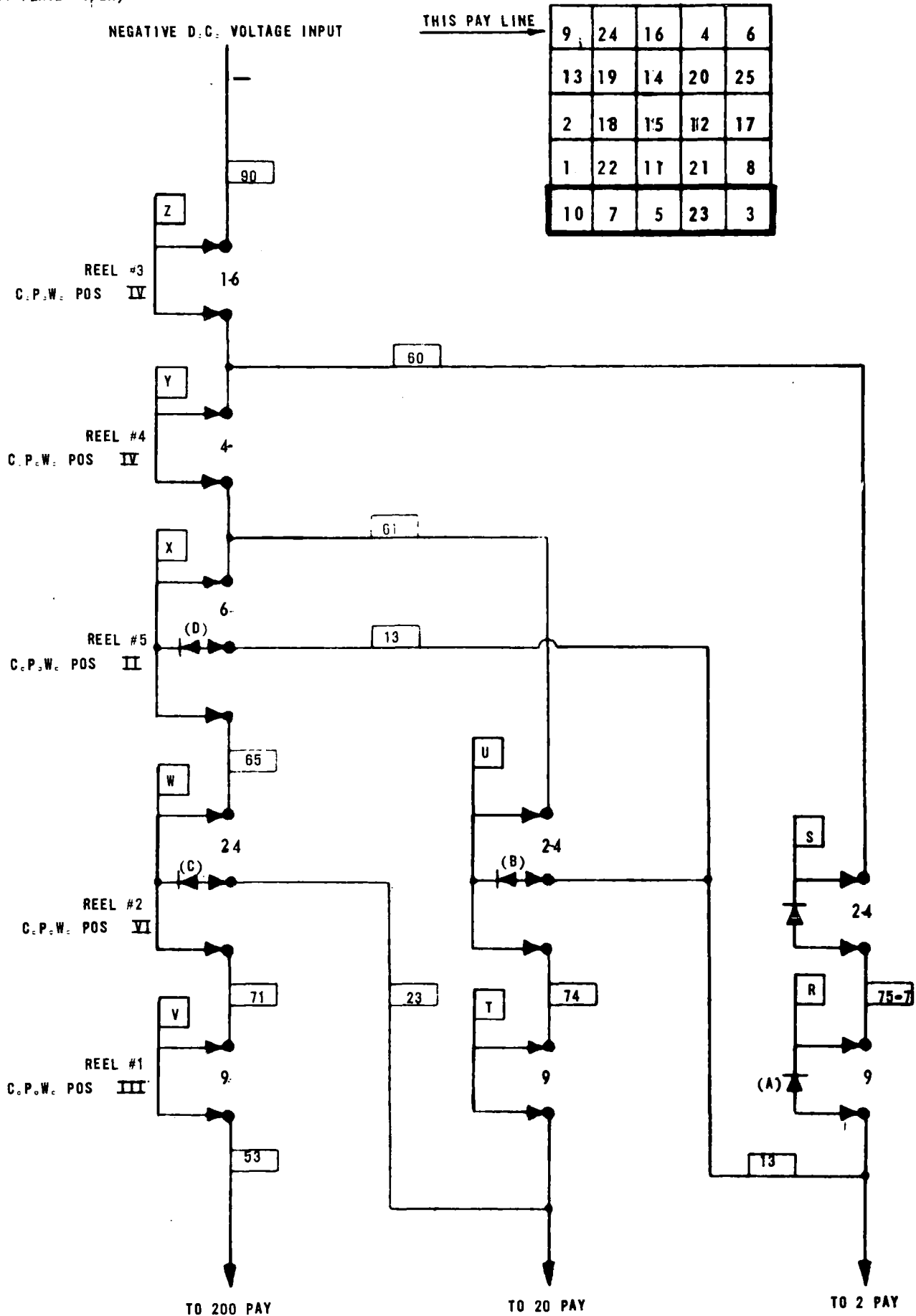
Similarly: 24-16-4-6

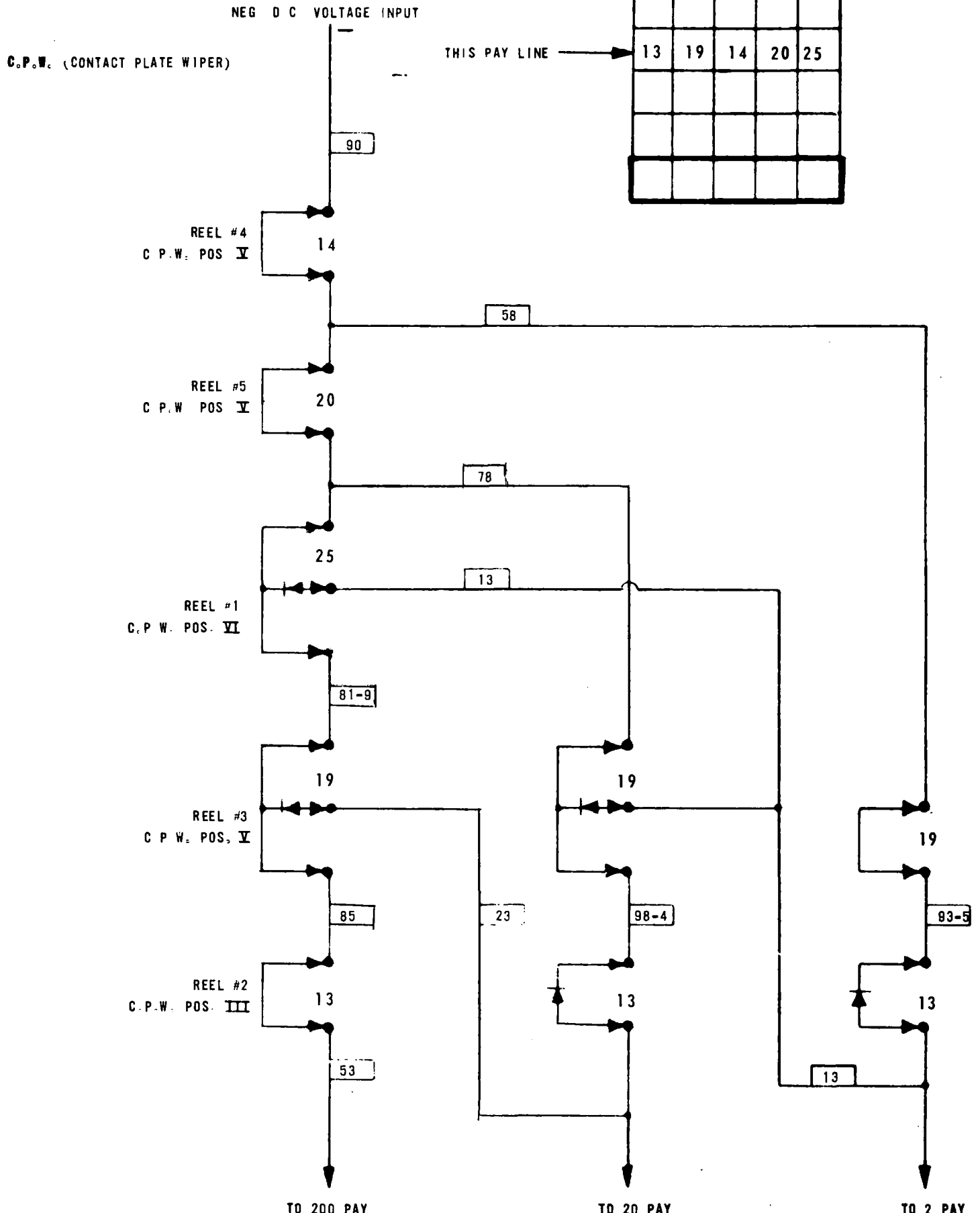
The negative feed flows across wipers (Z), (Y), (X) and thru diode (C) on wiper (W) to the 20 pay.

EXAMPLE 'A'

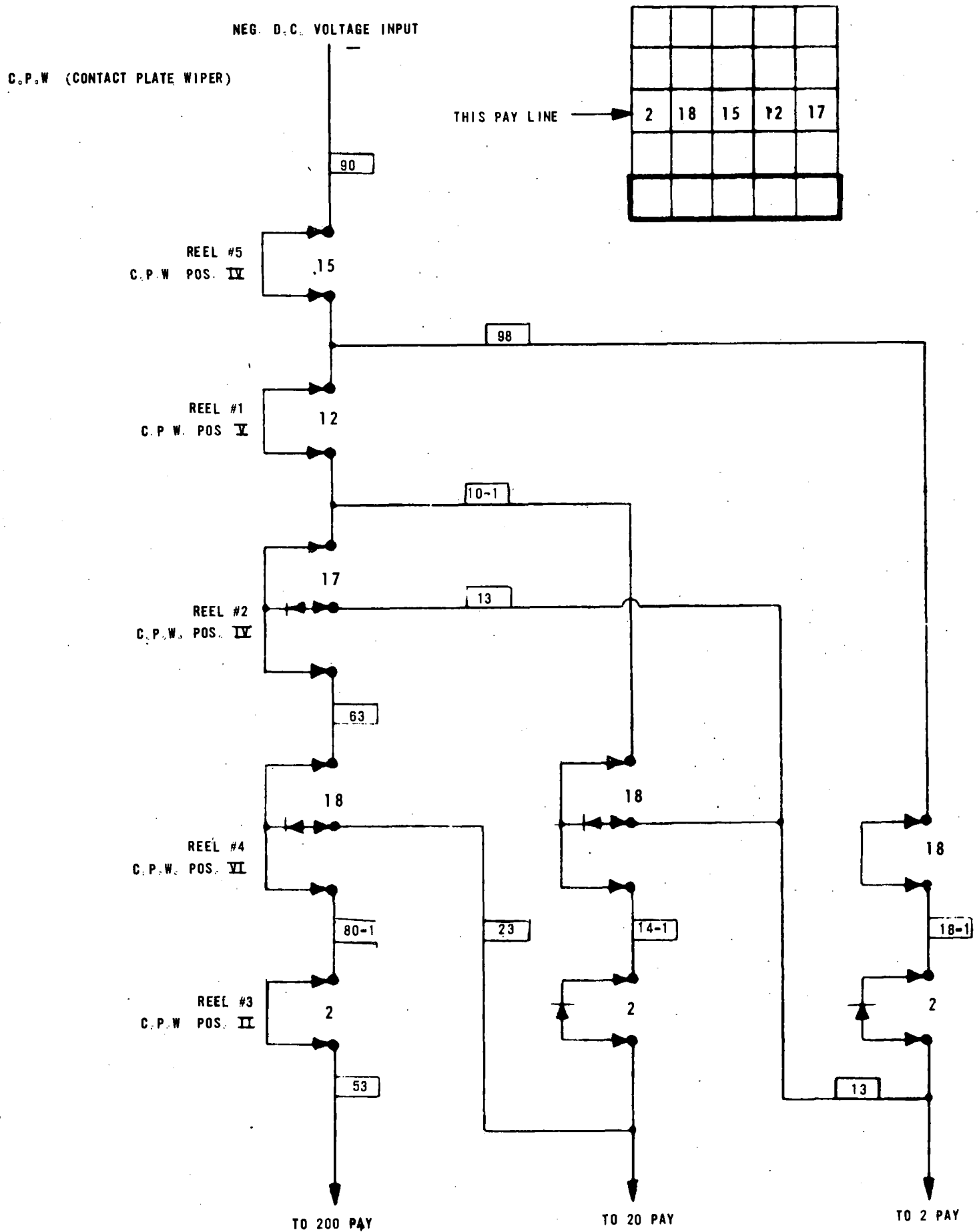
HORIZONTAL (BINGO CONTINENTAL) #929-1

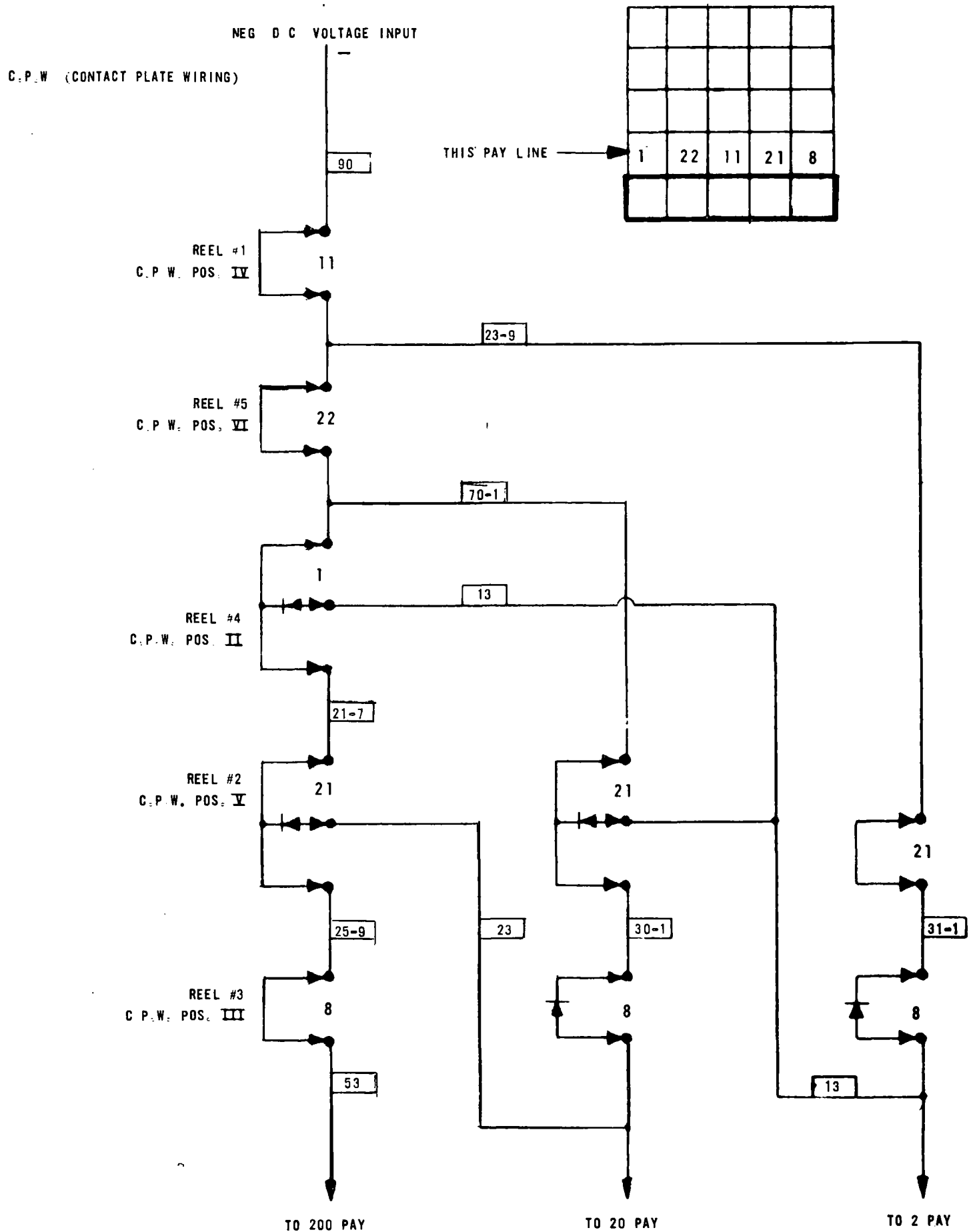
C.P.W. (CONTACT PLATE WIPER)



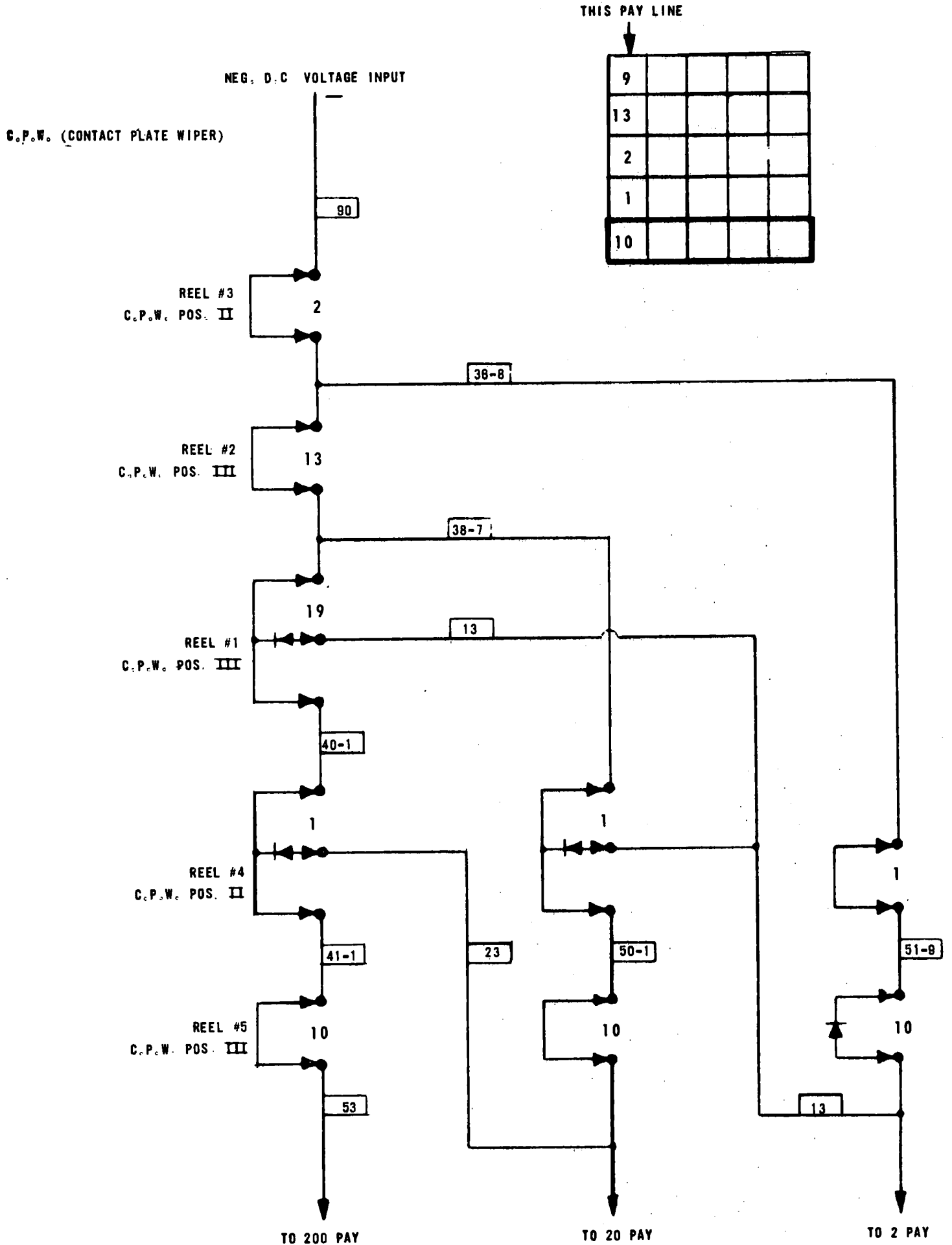


HORIZONTAL (BINGO CONTINENTAL) #929-1

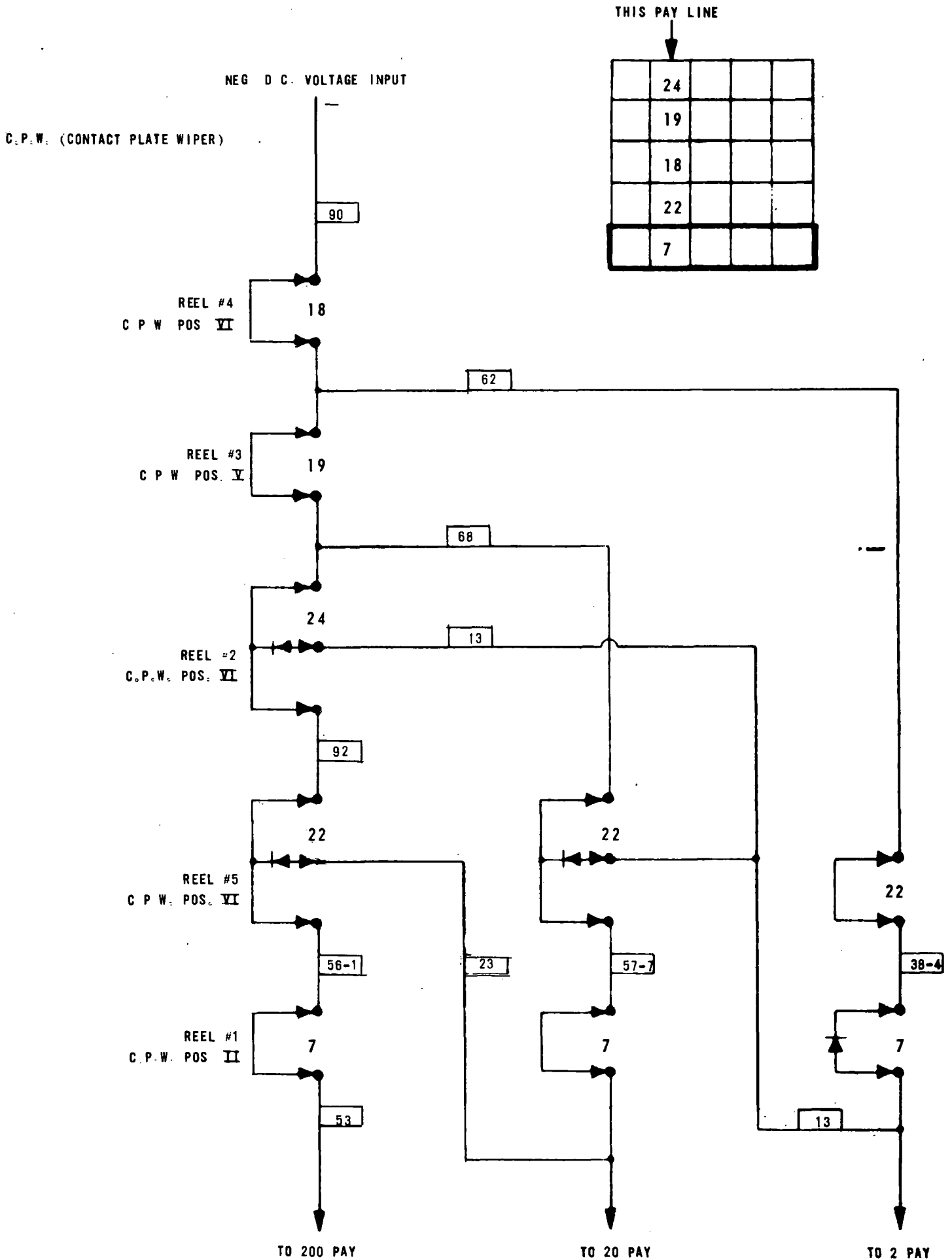




VERTICAL (BINGO CONTINENTAL) #929-1



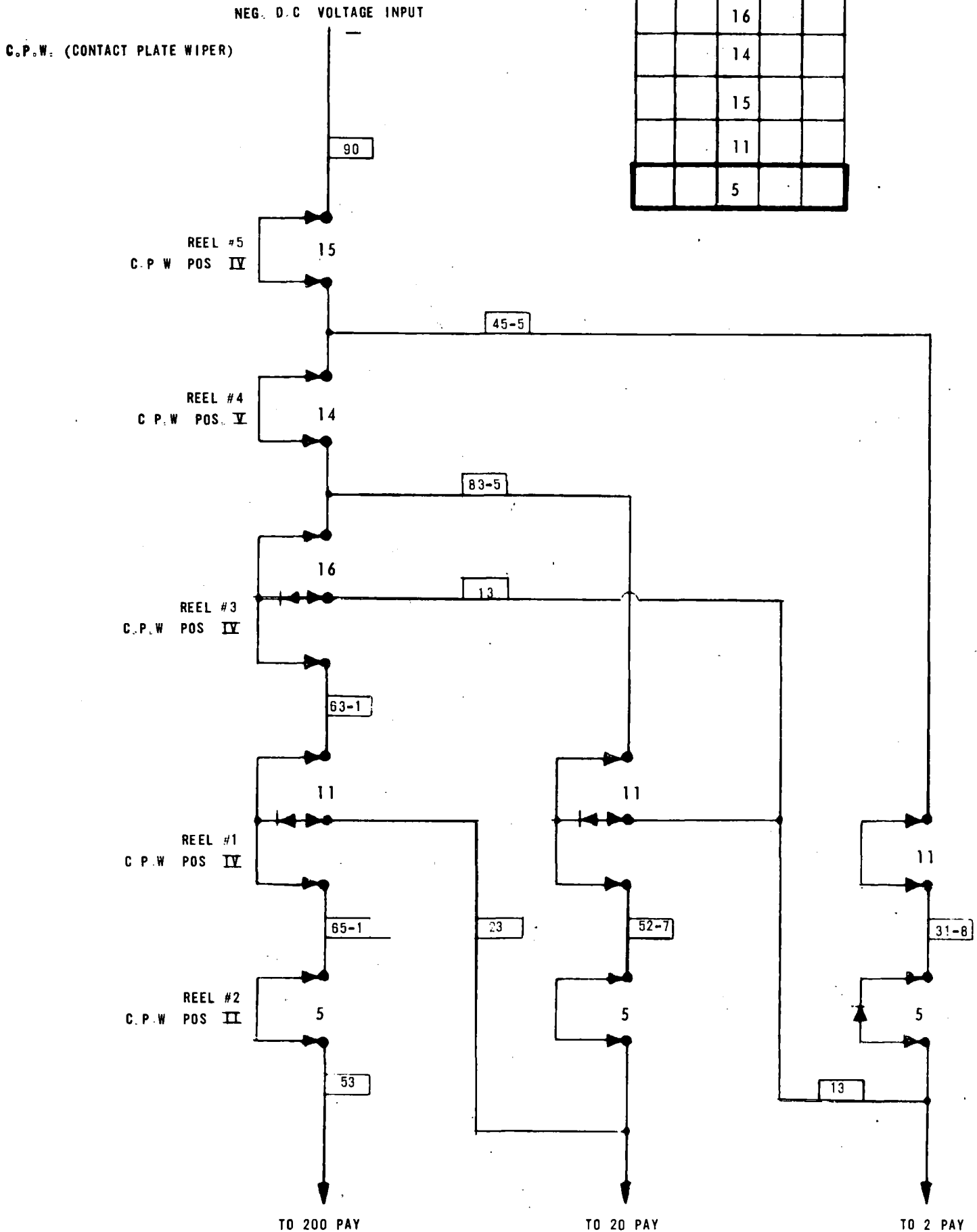
VERTICAL (BINGO CONTINENTAL) #929-1



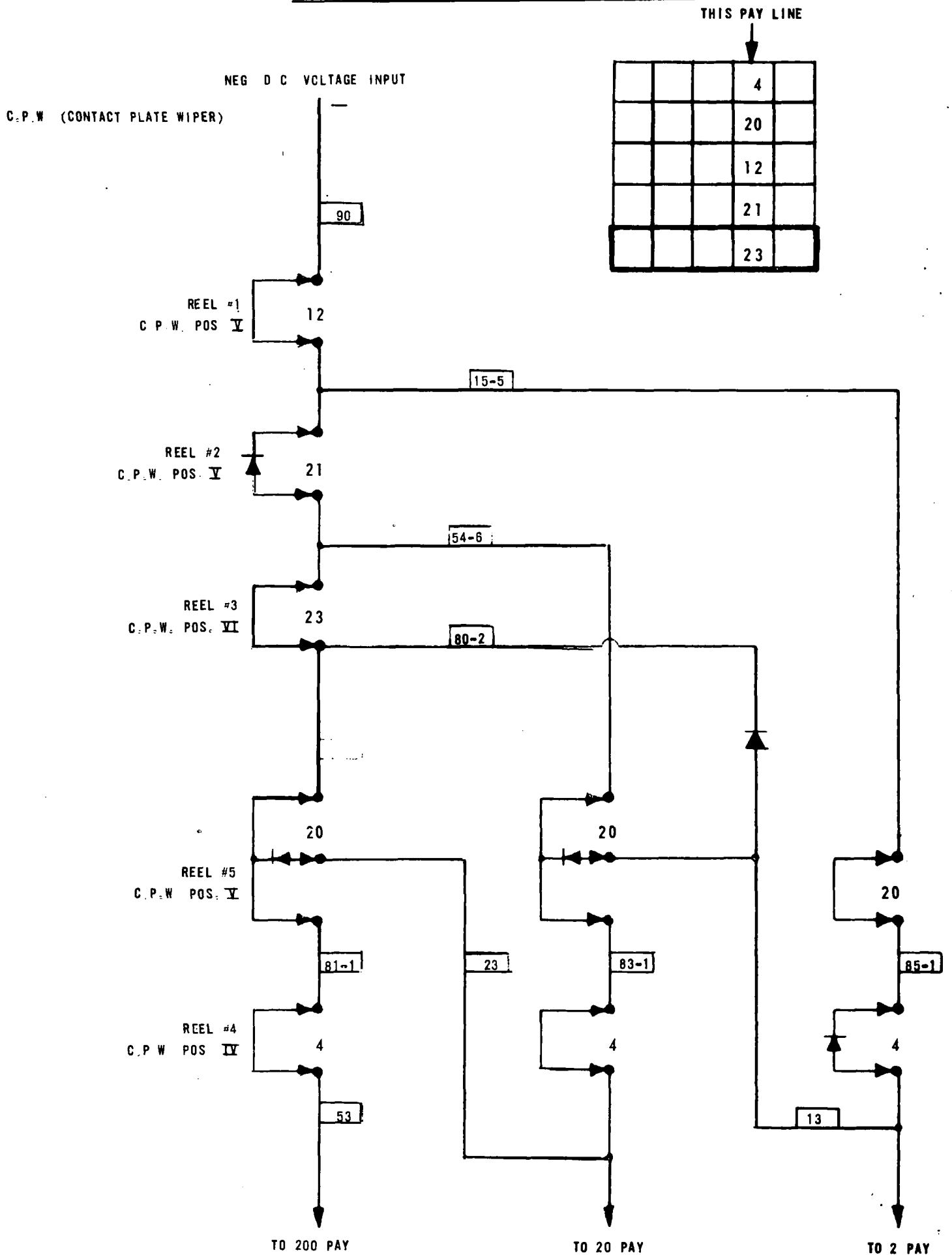
VERTI CAL (BI NGO CONTI NENTAL) #929-1

THIS PAY LINE

		16		
		14		
		15		
		11		
		5		



VERTICAL (BINGO CONTINENTAL) #929-1



C.P.W. (CONTACT PLATE WIPER)

NEG D.C. VOLTAGE INPUT

THIS PAY LINE

				6
				25
				17
				8
				3

REEL #2
C.P.W. POS. IV

REEL #3
C.P.W. POS. III

REEL #4
C.P.W. POS. III

REEL #1
C.P.W. POS. VI

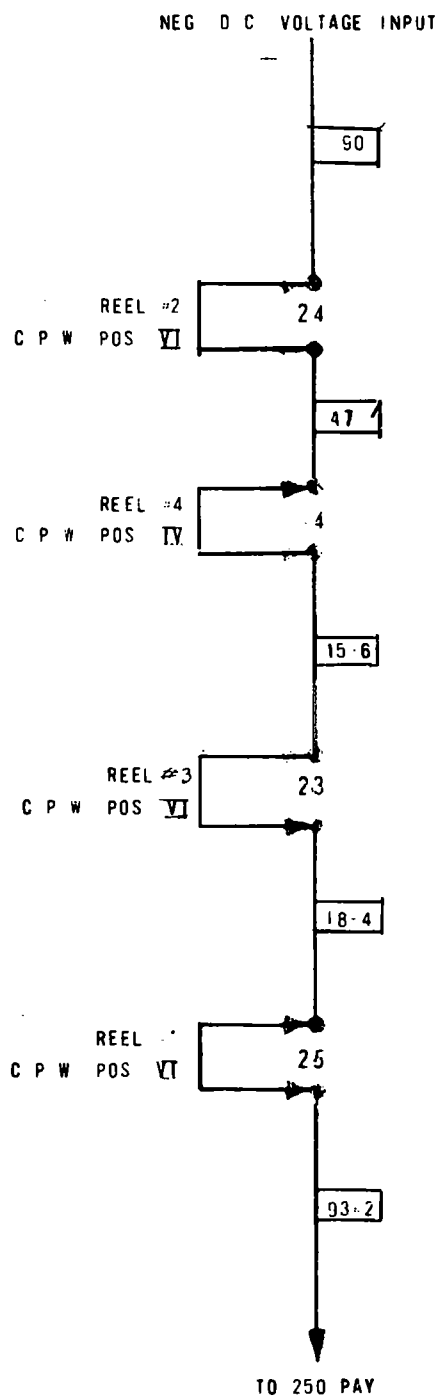
REEL #5
C.P.W. POS. II

TO 200 PAY

TO 20 PAY

TO 2 PAY

4 CORNERS (BINGO CONTINENTAL) #929-1



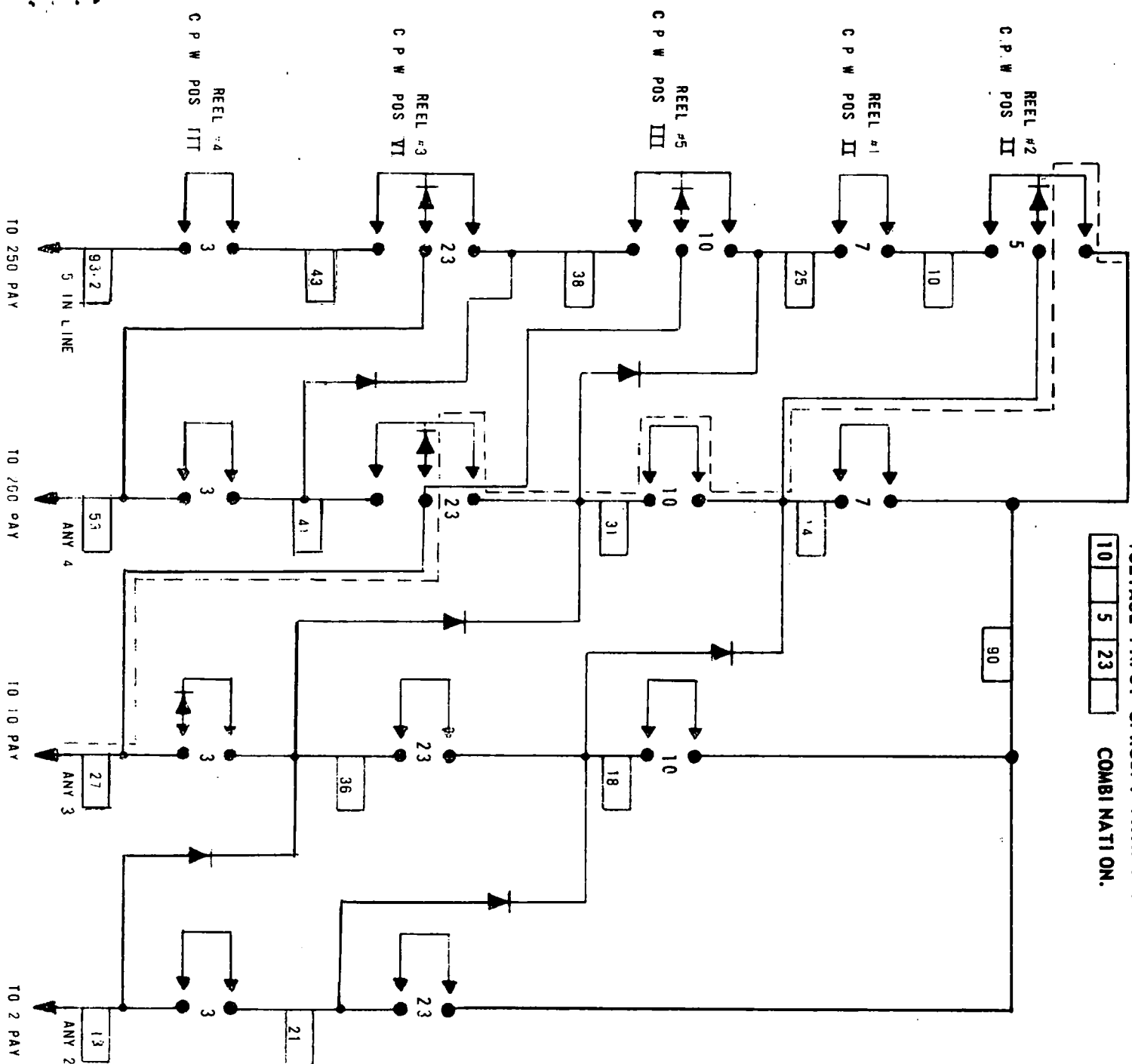
24	9	4
16	15	13
25	1	23

10		5	23	
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COMBINATION.

[illegible]

SUPER LINE



PAY COMBINATIONS

[illegible]

ANY 2

ANY 3

ANY 4

10	7	5		
10		5		3
10	7			3
10	7		23	
10		5	23	
10			23	3
	7	5		3
10	7	5	23	
10		5	23	3
	7	5	23	3
10	/		23	3