

Instruction Manual for

TRIPLE STRIKE



Williams[®]

ELECTRONICS INC.

3401 N. California Ave.
(312) 267-2240

AUGUST
1975

Chicago, Ill. 60618, U.S.A.
Cable Address: Wilcoin

"TRIPLE STRIKE"

GAME OPERATES AS FOLLOWS:

TOP EJECT HOLE SCORES 500 POINTS AND ADVANCES EJECT HOLE VALUE FROM 1 TO 5.

WHEN EJECT HOLE VALUE REACHES 3 THEN BOTTOM BLUE STAR LITES.

BLUE STAR, WHEN LIT, HOLDS ACCUMULATED BONUS TO NEXT BALL.

WHEN LAST BALL IS BEING PLAYED, MAKING 3 ON TOP EJECT HOLE LITES BOTH BLUE AND RED STARS AT BOTTOM OF GAME.

RED STAR, WHEN LIT, SCORES EXTRA BALL.

WHEN EJECT HOLE VALUE REACHES 5 BOTTOM LEFT ROLLOVER LANE LITES SPECIAL.

SPECIAL LANE SCORES AS FOLLOWS:

IN 'CREDIT POSITION'	-	ONE REPLAY
IN 'EXTRA BALL POSITION'	-	ONE EXTRA BALL
IN 'NOVELTY POSITION'	-	10,000 POINTS

SUGGESTED SCORE CARDS

CREDIT PLAY

5 BALL PLAY -	459-15	(126,000 - 157,000)
3 BALL PLAY -	459-30	(106,000 - 127,000 - 148,000)

EXTRA BALL PLAY

5 BALL PLAY -	459-50	(80,000)
3 BALL PLAY -	459-46	(60,000)

SEQUENCE OF OPERATION

RESET CYCLE

COIN RELAY IS ENERGIZED AT SCORE MOTOR INDEX CAM SWITCH C, THRU SWITCH ON COIN RELAY, GAME RELAY, ZERO SWITCH ON CREDIT UNIT AND CREDIT BUTTON SWITCH.

SWITCHES ON COIN RELAY WILL ENERGIZE GAME-OVER RELAY, ENERGIZE RESET RELAY, ENERGIZE A&B AND C&D TARGET RESET COILS, ENERGIZE GAME RELAY LATCH COIL THRU WIPER ON BALL COUNT UNIT (AT ZERO POSITION), AND PULSE BALL COUNT RESET AND S.U. COILS THRU SWITCH D ON GAME RELAY.

SWITCHES ON RESET RELAY WILL RUN SCORE MOTOR, PULSE SCORE RESET RELAY, THRU SCORE MOTOR IMPULSE CAM SWITCH, ENERGIZE BONUS RELAY THRU SWITCH ON "1 TO 10 SET-UP RELAY", AND ENERGIZE 1 TO 10 RELAY BANK RESET COIL. (115 VOLTS).

SWITCHES ON SCORE RESET RELAY WILL PULSE 4 SCORE DRUM UNITS UNTIL THEY REACH ZERO.

SWITCHES ON BONUS RELAY WILL RUN SCORE MOTOR, HOLD RESET RELAY IN, PULSE STRIKE BONUS UNIT RESET COIL, PULSE 1 TO 10 BONUS DRUM UNIT, PULSE EJECT ADVANCE DRUM UNIT IF ZERO SWITCH IS CLOSED, ENERGIZE 1 TO 10 HOLD RELAY AND 1 TO 10 SET-UP RELAY.

BONUS RELAY DROPS OUT WHEN STRIKE BONUS UNIT IS RESET TO ZERO AND THE "1 TO 10 SET-UP RELAY" IS ENERGIZED (AT SCORE MOTOR CAM SWITCH 6A). NOW WHEN THE SCORE MOTOR REACHES INDEX POSITION, THE OUTHOLE RELAY WILL ENERGIZE.

SWITCHES ON OUTHOLE RELAY WILL RUN SCORE MOTOR, ENERGIZE 1 TO 10 RELAY BANK RESET COIL (115 VOLTS) THRU SWITCH ON BLUE STAR RELAY, AND ENERGIZE BALL RELEASE COIL TO PROPEL BALL TOWARD PLUNGER.

1. GENERAL

NEVER EXPERIMENT with any of the mechanism. Locate any trouble with the aid of Wiring Diagrams or Operating & Servicing Information supplied with the machine, then check for proper adjustment of the units involved before making any changes. Improper adjustment or make-shift repair will only cause serious damage to other parts of the machine or repeated failure of the part.

NOTE: Always look for a possible loose wire, bad connection at a plug and socket, broken or unhooked springs on step-up units, relays, etc., before adjustments are made or wires reconnected.

2. FUSES

IMPORTANT: Never replace fuses with any rating other than specified on the fuse block; this block is located adjacent to the transformer.

3. LUBRICATION

Over-lubrication causes far more trouble in coin operated equipment than under-lubrication. Practically all cases of poor contact on switches and wiper discs are due to oil or grease, or oil vapor, which forms a film or residue on the contacts and will not allow current to pass through. Excess lubricant may also seep into clutches causing them to slip.

IMPORTANT: NEVER USE VASELINE FOR LUBRICATION OF ANY PART OF THE MACHINE. Vaseline is not a true lubricant. It leaves a dirty and gummy residue and it becomes very thick when cold. A special Coin Machine Lubricant is supplied with each machine.

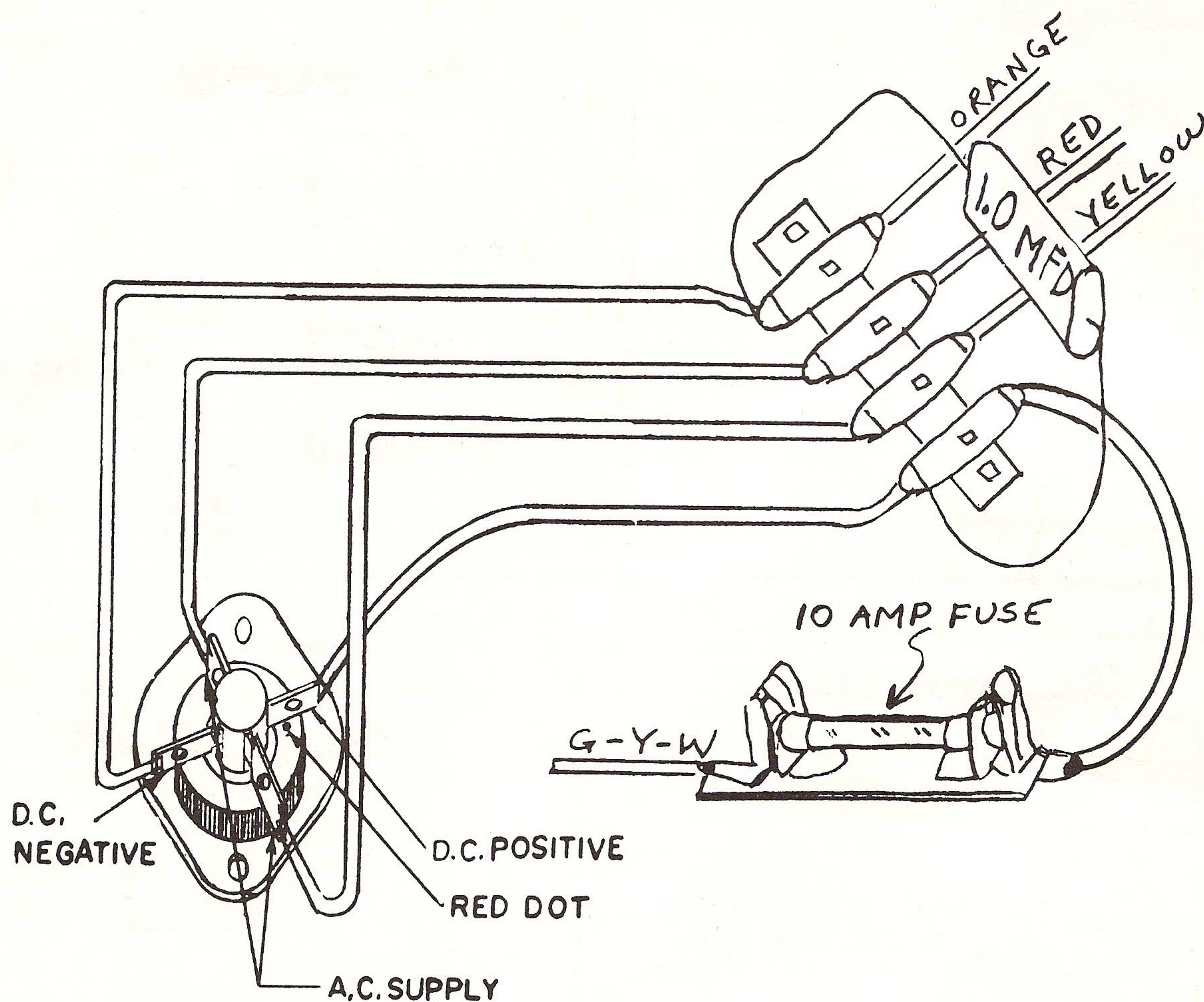
STEP-UP Levers, Ratchets, Cams, Shafts and other sliding or oscillating parts should be very lightly greased with special Coin Machine Lubricant (supplied with machine) not oftener than every six months. The bakelite discs (biscuits) on the Motor Units and Step-up Units will require lubrication with the special Coin Machine Lubricant only after the grease is completely evaporated (3 to 12 months, depending on climate) or when the film of grease becomes dirty. In either event, clean the parts thoroughly with a solvent, then apply an extremely thin coat of the special grease.

Solenoid Plungers should not have a lubricant of any kind. Should there be a sluggish tendency or if plungers are sticking, the parts should be cleaned with a solvent and flaked graphite applied on reassembly.

SWITCH ADJUSTMENT

BEFORE ADJUSTING SWITCHES, MAKE CERTAIN THE SCREWS HOLDING THE SWITCH STACKS ARE DOWN TIGHTLY. BAKELITE SPACERS IN THE SWITCH STACKS, DUE TO EXCESSIVE MOISTURE, HAVE OCCASIONALLY SHRUNK BY DRYING OUT, CAUSING POOR ADJUSTMENT.

SILICON BRIDGE RECTIFIER



THE FUNCTION OF THE RECTIFIER AND CAPACITOR IS TO CONVERT THE ALTERNATING CURRENT (A.C.) TO DIRECT CURRENT (D.C.), SUPPLYING D.C. TO THE BUMPERS, KICKERS ETC.

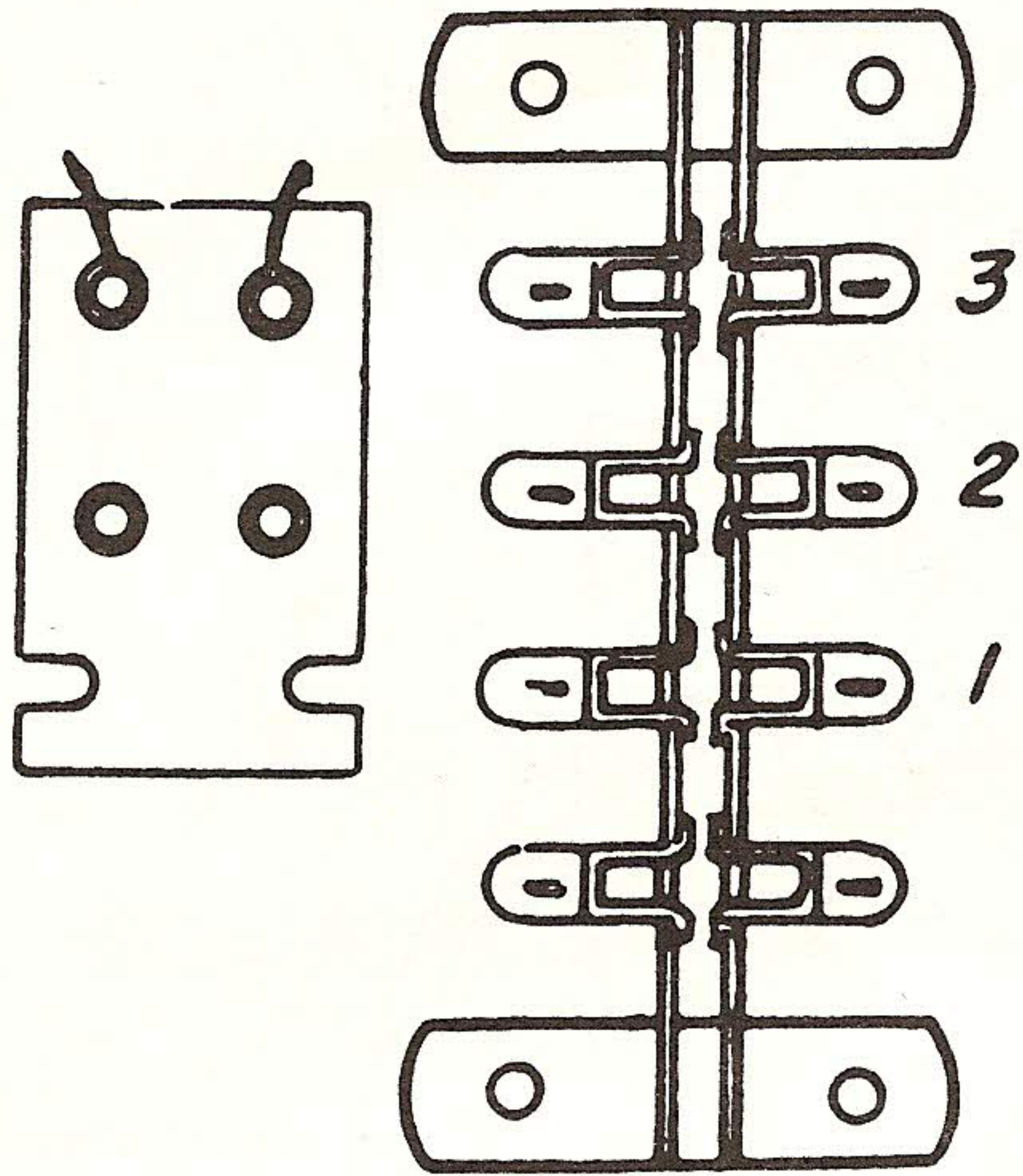
THE BRIDGE RECTIFIER SHOULD PRACTICALLY NEVER NEED REPLACING, AS IT IS RATED WELL OVER THE VOLTAGE AND CURRENT REQUIREMENTS OF THE COMPONENTS IT SUPPLIES.

IF, HOWEVER, THE 15 AMP 24 VOLT FUSE ON THE MECHANISM PANEL OPENS, IT COULD BE DUE TO A FAULTY RECTIFIER. DISCONNECT THE A.C. INPUT TO RECTIFIER, REPLACE FUSE, AND RECHECK.

IF THE 10 AMP FUSE LOCATED NEXT TO THE RECTIFIER OPENS, CHECK ALL D.C. COMPONENTS I.E. BUMPERS, KICKERS ETC. FOR SHORTS.

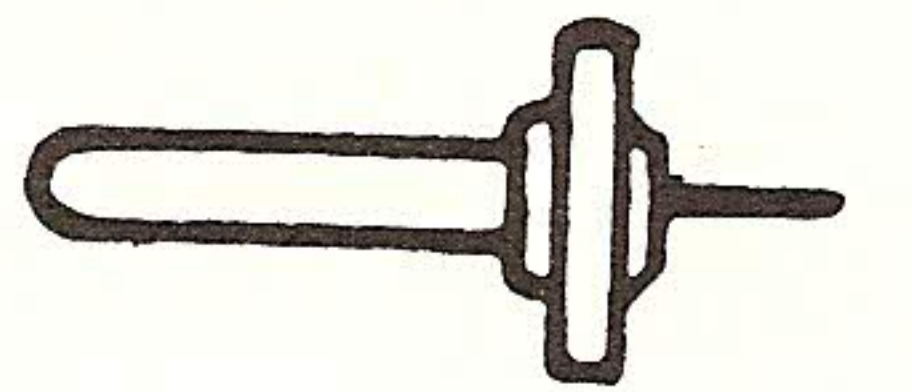
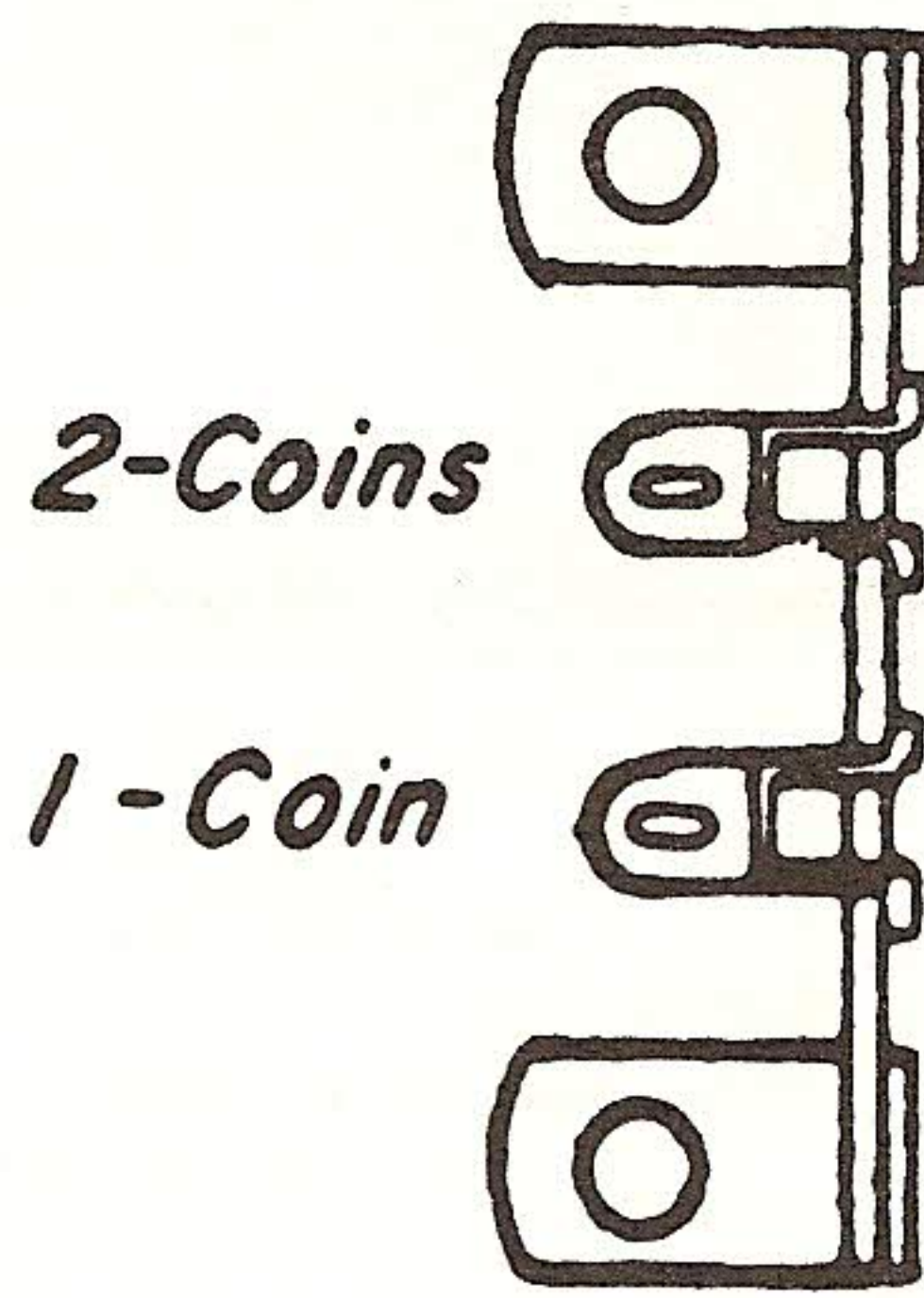
ADJUSTMENTS ON MECHANISM PANEL

10¢ Adjustment



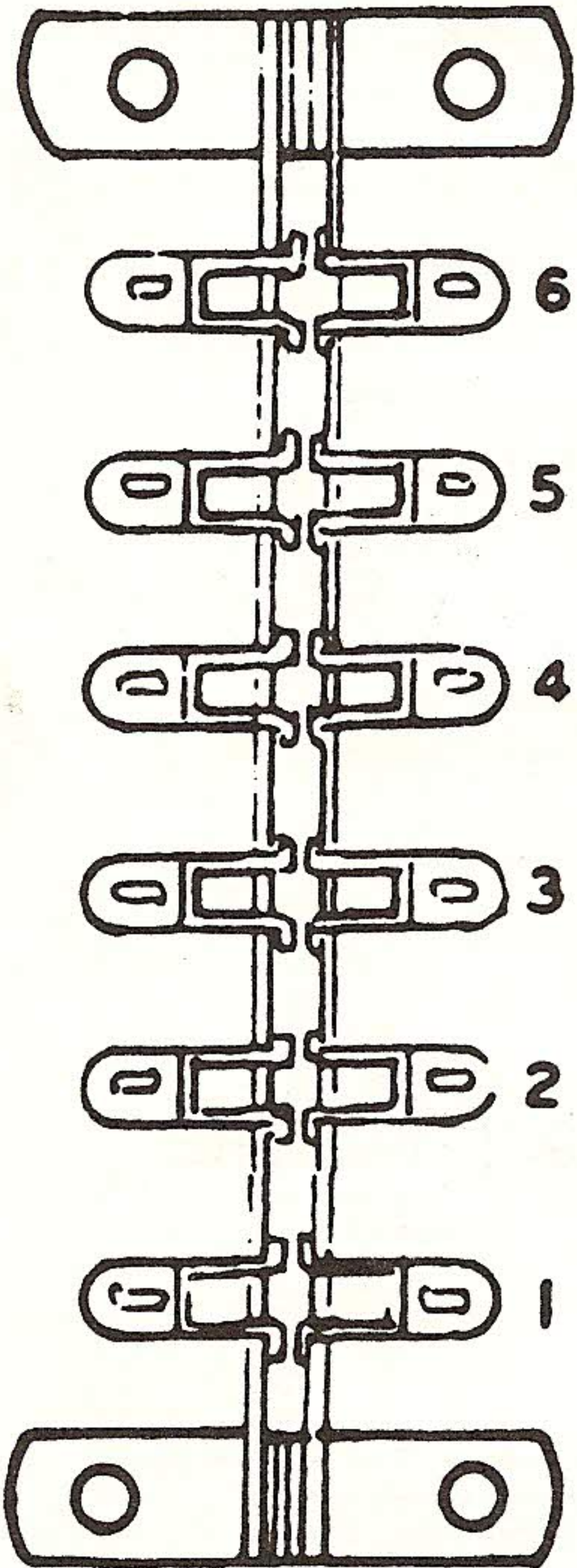
PROVIDES
1, 2 OR
3 PLAYS
FOR ONE
COIN.

5¢ Adjustment

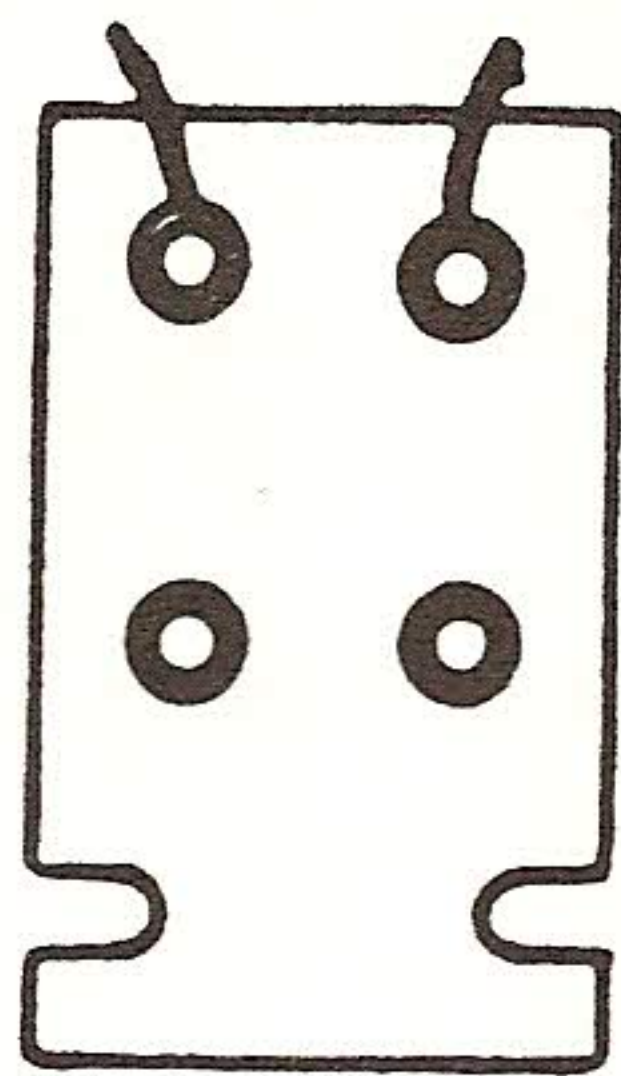


IN "2 COINS FOR
1 PLAY", CIRCUIT
TO COIN RELAY
PASSES THRU SW.
ON ALTERNATOR
UNIT.

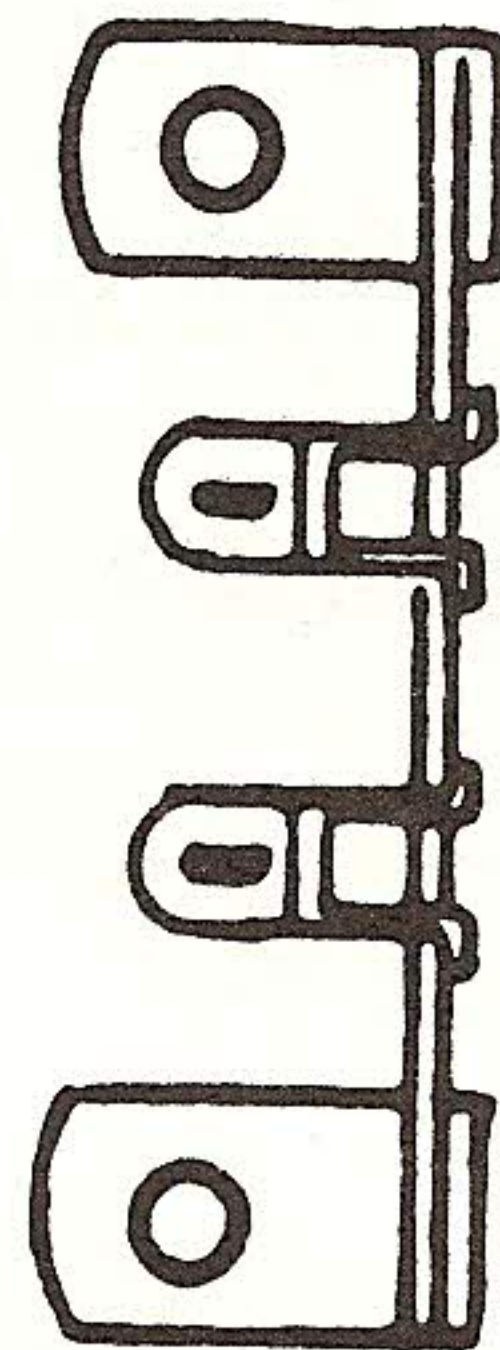
25¢ Adjustment



PROVIDES 1, 2, 3, 4, 5
OR 6 PLAYS FOR 25¢.

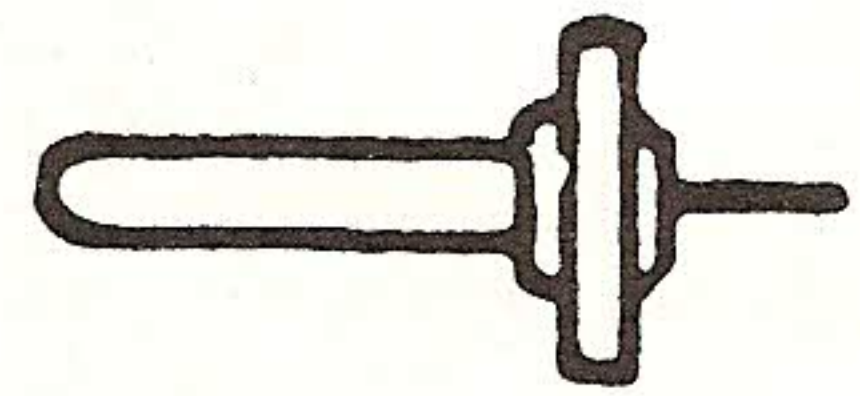


Motor Service Jack



ON

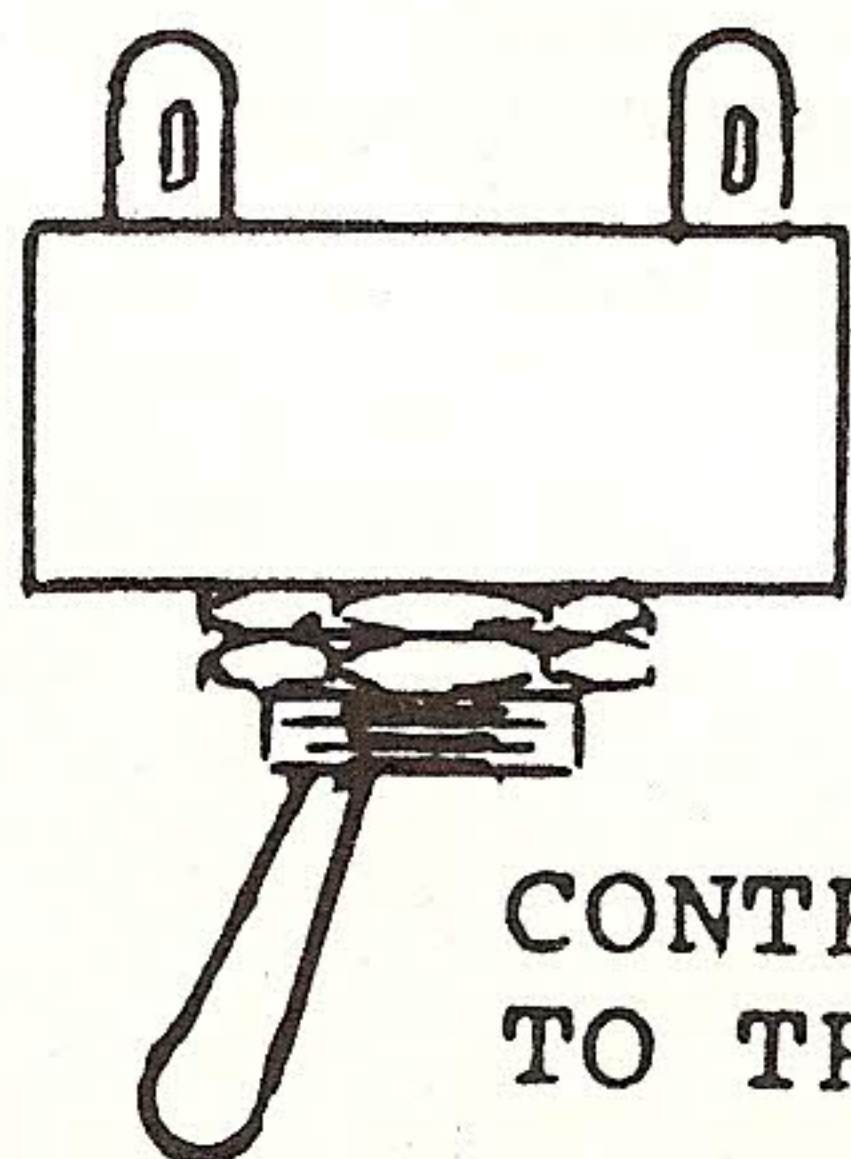
OFF



INSERT PHONE TIP IN
"OFF" POSITION - CAMS
CAN BE TURNED BY HAND
TO CHECK ADJUSTMENT OF
SWITCHES.

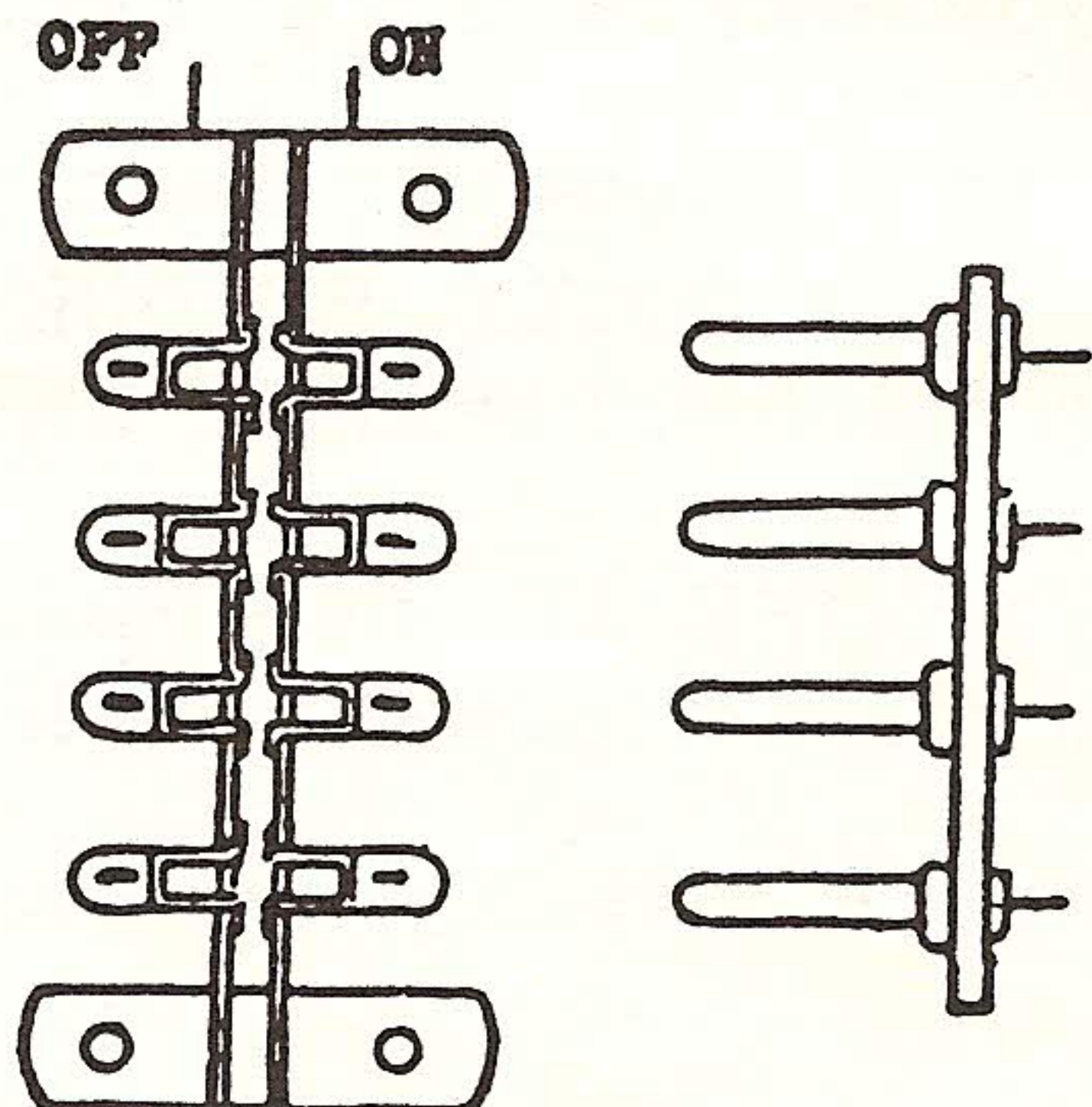
MASTER ON-OFF SW.

(Located under front of
Cabinet)



CONTROLS POWER
TO TRANSFORMER

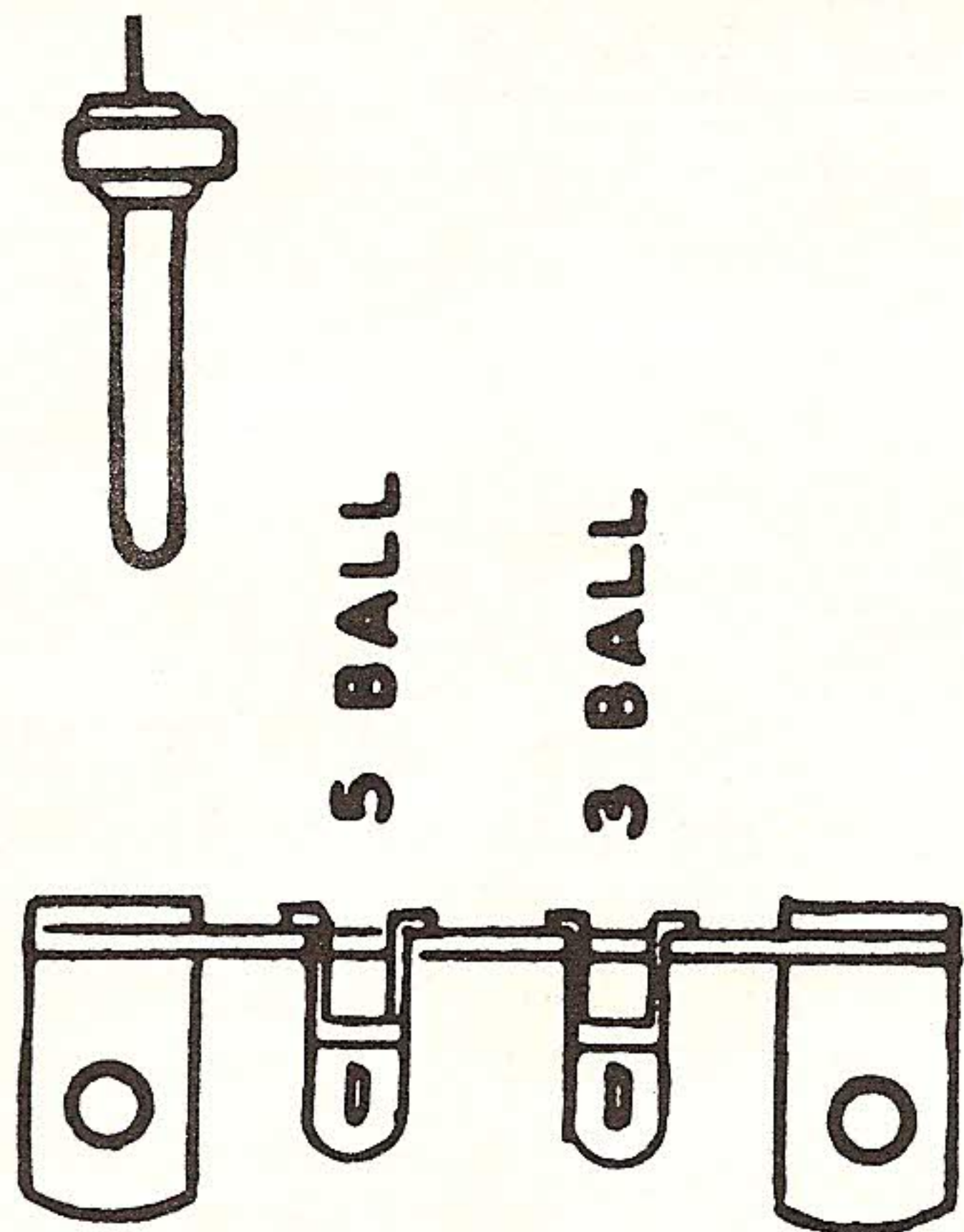
1 COIN - 1 PLAY
2 COINS - 3 PLAYS ADJ.



IN "ON" POSITION, 10¢ ADJUSTMENT
MUST BE IN #2 POSITION & 25¢ ADJUSTMENT
MUST BE IN #6 POSITION. FIRST COIN
ADVANCES CREDIT UNIT 1 STEP. SECOND
COIN WILL ADVANCE CREDIT UNIT 2 STEPS.
IN "OFF" POSITION, 25¢ ADJUSTMENT
AND/OR 10¢ ADJUSTMENT SHOULD BE PUT IN
PROPER POSITION.

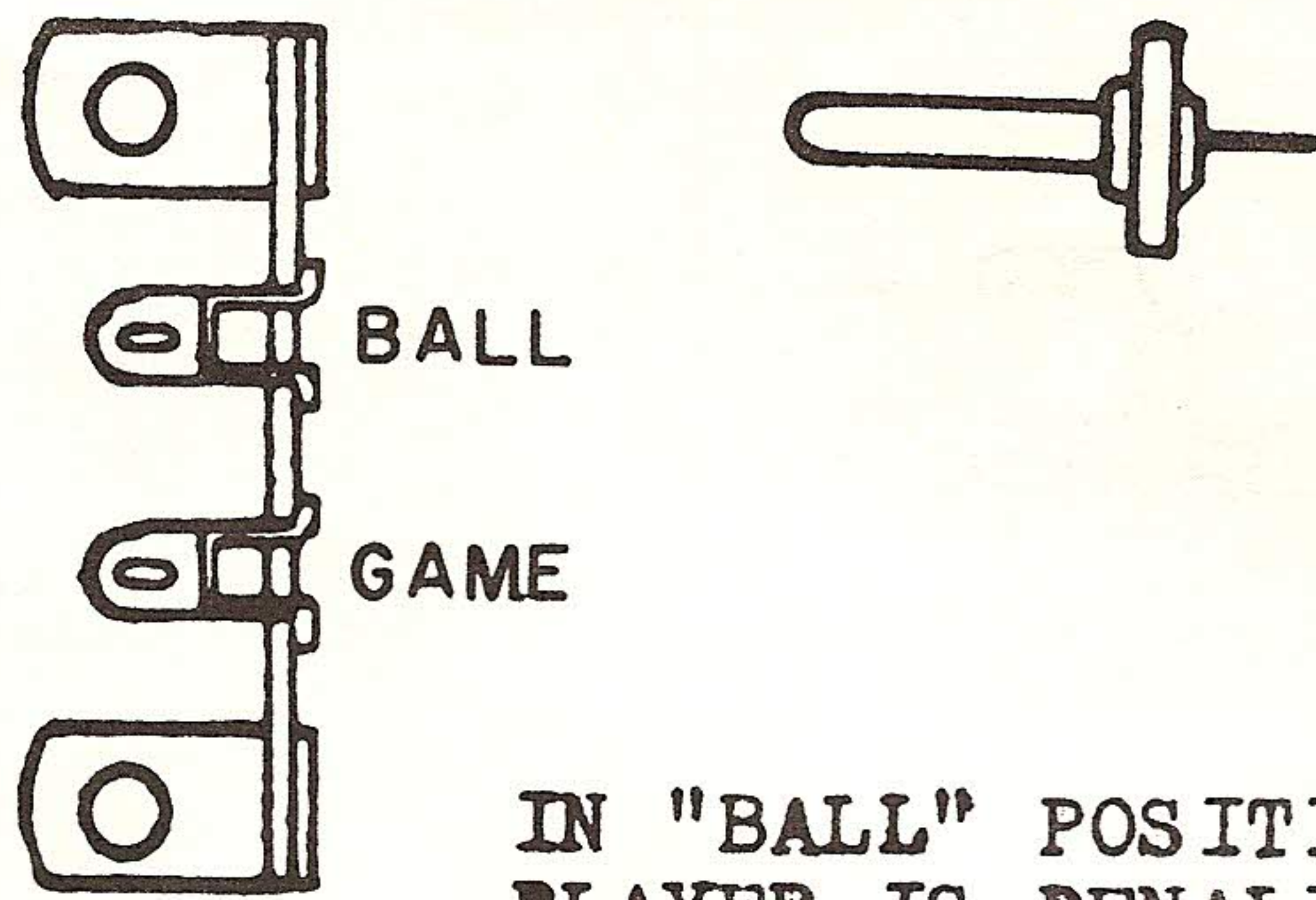
ADJUSTMENTS ON MECHANISM PANEL

No. of Balls Adjustment



Plug changes 3 to 5 ball play, or vice versa.

TILT ADJ.



IN "BALL" POSITION, PLAYER IS PENALIZED ONE BALL WHEN TILTING THE GAME.
 IN "GAME" POSITION, PLAYER IS PENALIZED THE ENTIRE GAME.

ADJUSTMENTS IN BACKBOX

Hi-Score Adjustment

- | | | |
|-------------------------------|--------------------------|------|
| 1000 <input type="checkbox"/> | <input type="checkbox"/> | 6000 |
| 2000 <input type="checkbox"/> | <input type="checkbox"/> | 7000 |
| 3000 <input type="checkbox"/> | <input type="checkbox"/> | 8000 |
| 4000 <input type="checkbox"/> | <input type="checkbox"/> | 9000 |
| 5000 <input type="checkbox"/> | <input type="checkbox"/> | 0000 |

- | | | |
|--|------------|---|
| | - PURPLE - | (1000 to 10,000)
(101,000 to 110,000) |
| | - RED - | (11000 to 20000)
(111,000 to 120,000) |
| | - BLUE - | (21000 to 30000)
(121,000 to 130,000) |
| | - YELLOW - | (31000 to 40000)
(131,000 to 140,000) |
| | - GREEN - | (41000 to 50000)
(141,000 to 150,000) |
| | - WHITE - | (51000 to 60000)
(151,000 to 160,000) |
| | - BROWN - | (61000 to 70000)
(161,000 to 170,000) |
| | - ORANGE - | (71000 to 80000)
(171,000 to 180,000) |
| | - BLACK - | (81000 to 90000)
(181,000 to 190,000) |
| | - GRAY - | (91,000 to 100,000)
(191,000 to 199,000) |

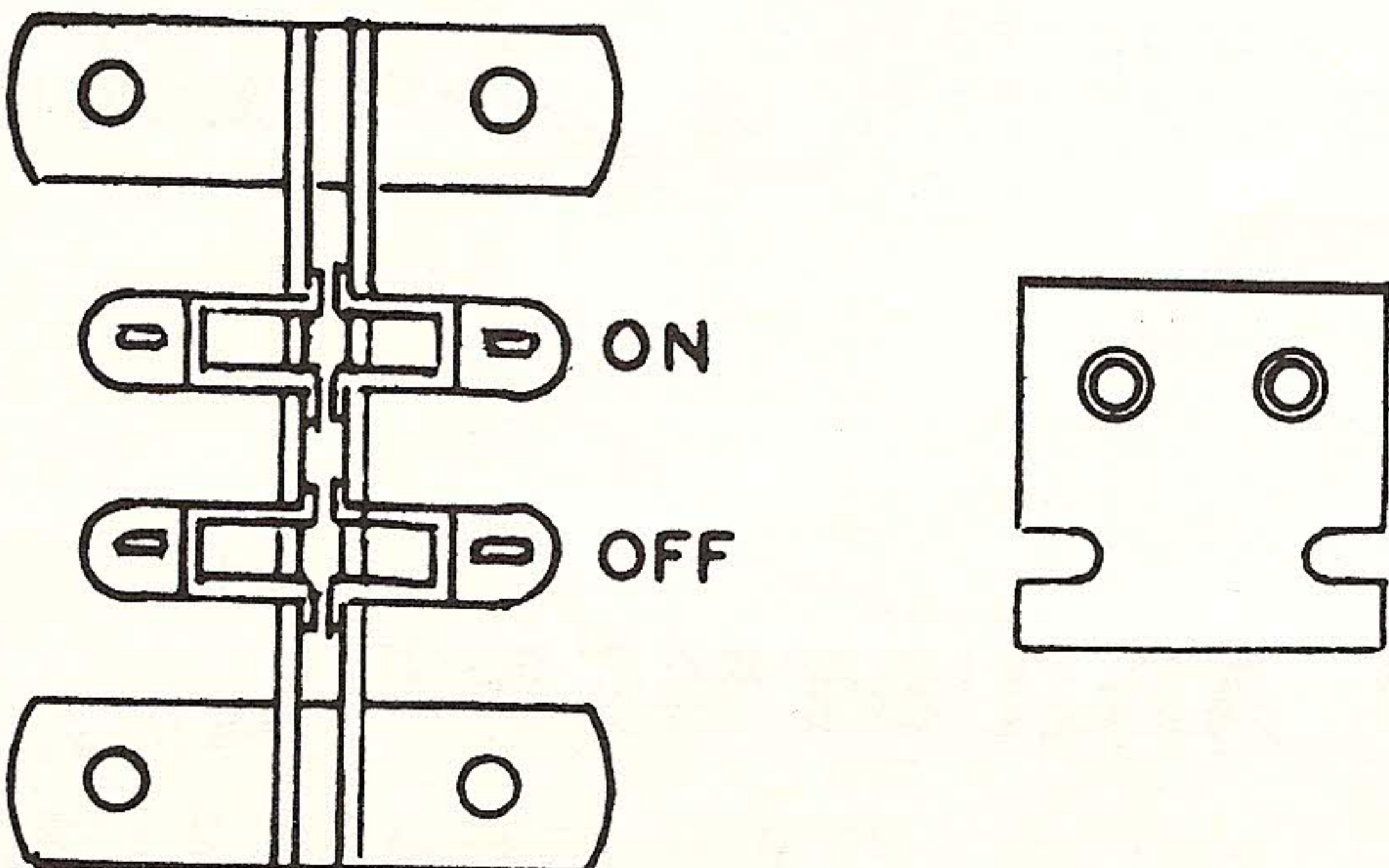
FOR HI-SCORES TO OPERATE BETWEEN 1,000 AND 100,000, BLACK-WHITE AND YELLOW WIRES IN BACK-BOX SHOULD BE TIED TOGETHER. OTHERWISE, HI-SCORE CIRCUITS WILL OPERATE BETWEEN 101,000 & 199,000.

EXAMPLE:

WITH BLACK-WHITE AND YELLOW TIED TOGETHER, PHONE TIP WITH GREEN WIRE INTO 3000 POSITION SCORES AT 43,000.

WITH BLACK-WHITE AND YELLOW NOT TIED TOGETHER, PHONE TIP WITH GREEN WIRE INTO 3000 POSITION SCORES AT 143,000.

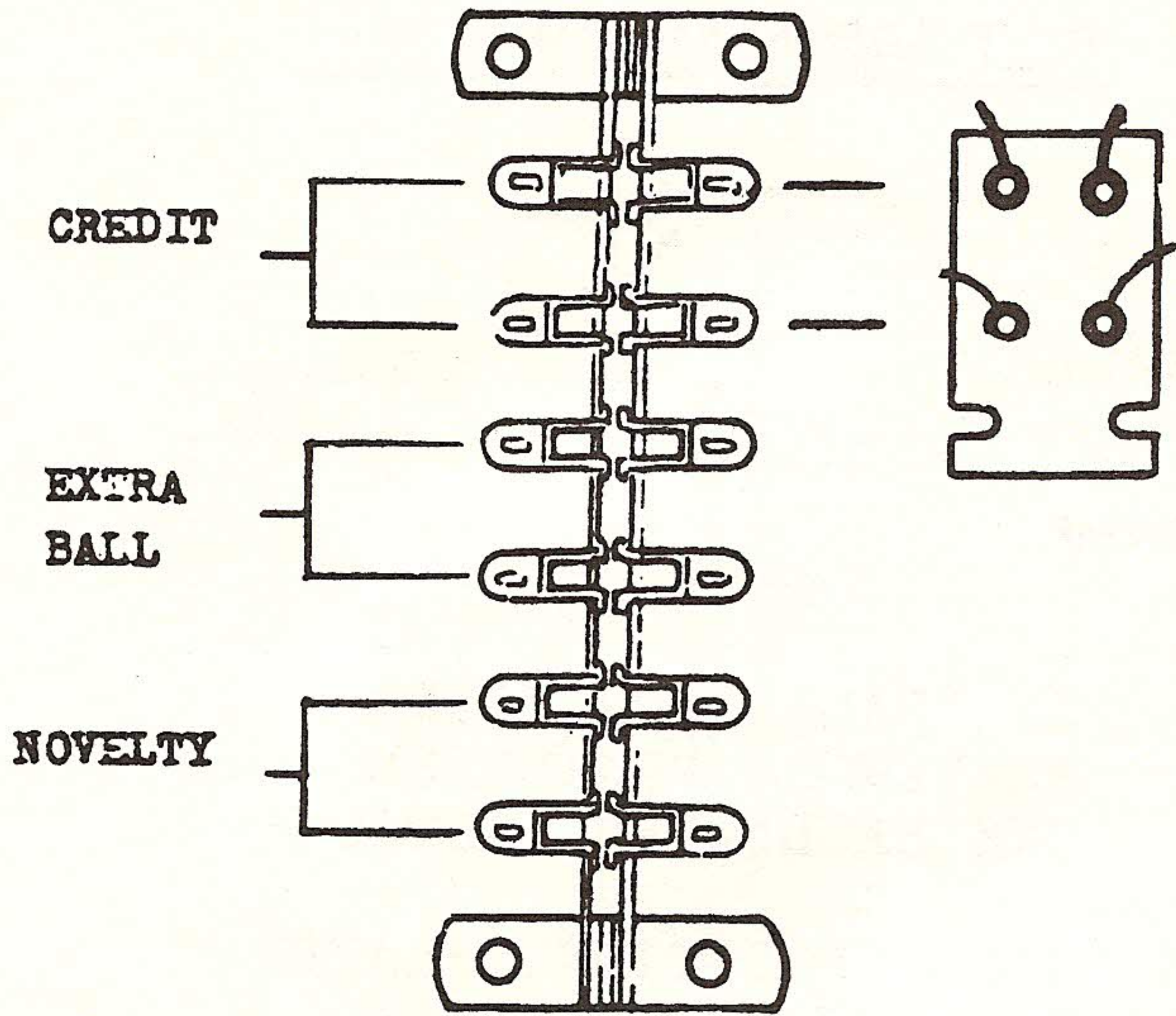
NUMBER MATCH ADJUSTMENT



IN "ON" POSITION, A NUMBER MATCH LITE WILL APPEAR WHEN GAME IS OVER. TO AWARD CREDITS, WHEN NUMBER IS MATCHED, "CREDIT-EXTRA BALL-NOVELTY" ADJUSTMENT MUST BE IN CREDIT POSITION. IF IT IS IN "EXTRA BALL" POSITION, NUMBER MATCH ADJUSTMENT MUST BE TURNED TO "OFF".

ADJUSTMENTS IN BACKBOX

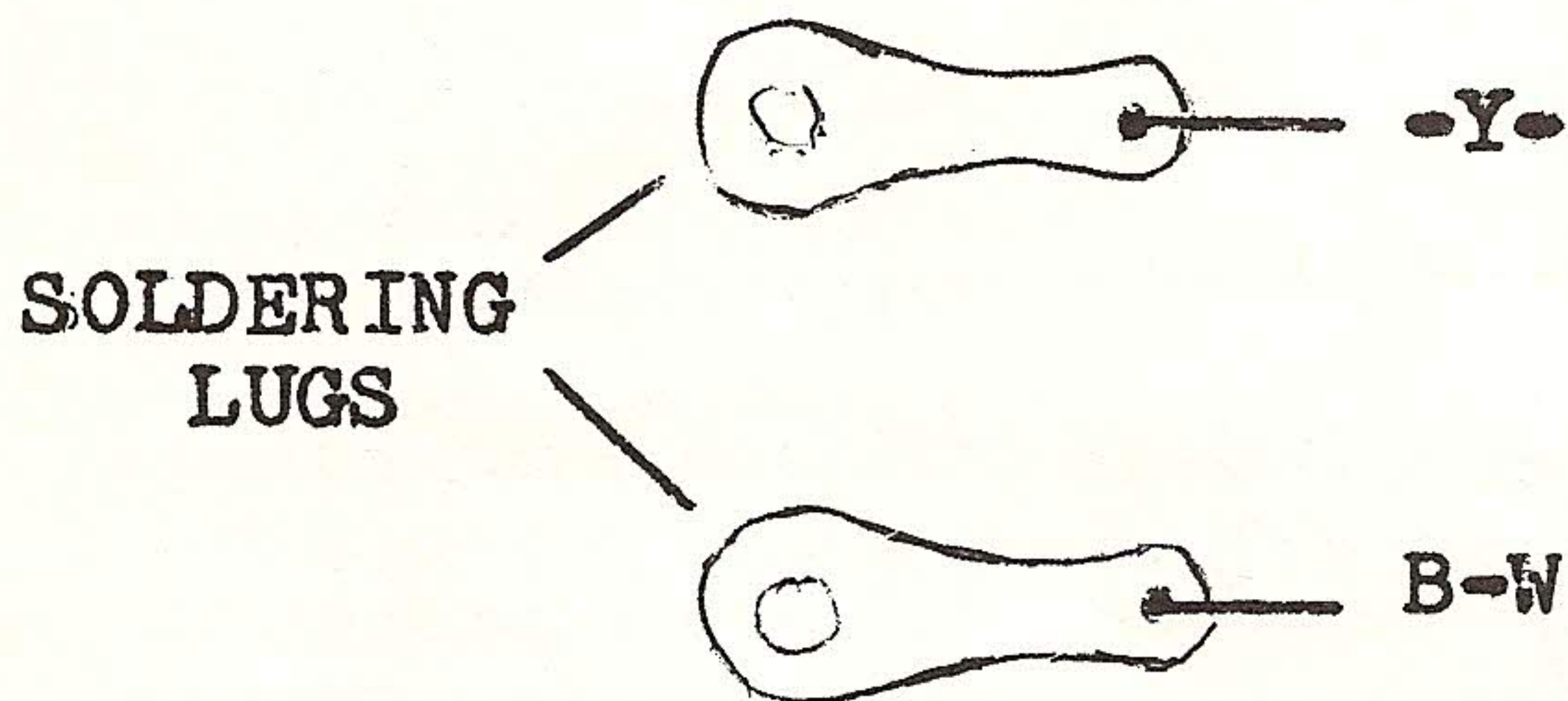
PLAY ADJUSTMENT



IN CREDIT POSITION: HI-SCORES AND NO. MATCH SCORE A CREDIT. MAKING LEFT OUTSIDE ROLLOVER, WHEN SPECIAL RELAY IS ENERGIZED SCORES A CREDIT. MAKING EJECT HOLE WHEN BLUE STAR RELAY IS ENERGIZED (WHILE PLAYING LAST BALL) WILL ENERGIZE EXTRA BALL RELAY. PULLING TARGET RELAY IN WHEN GREEN STAR IS LIT WILL ENERGIZE EXTRA BALL RELAY.

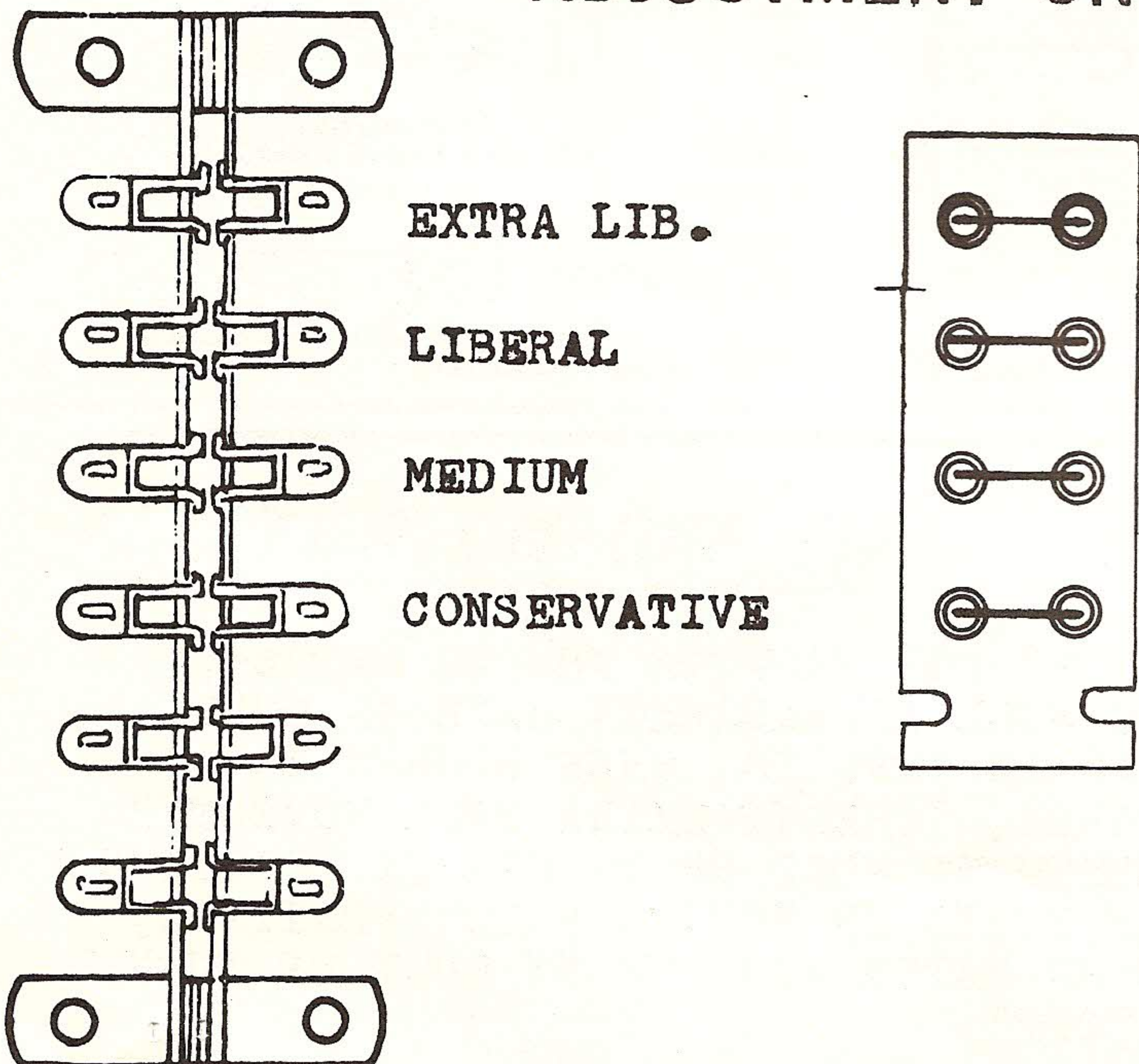
IN EXTRA BALL POSITION: ALL OF THE ABOVE CIRCUITS WILL ENERGIZE EXTRA BALL RELAY. NUMBER MATCH ADJUSTMENT SHOULD BE IN 'OFF' POSITION.
 NOTE: IF EXTRA BALLS ARE TO BE AWARDED FOR SCORES BETWEEN 1,000 AND 100,000 THEN BLACK-WHITE AND YELLOW WIRES IN BACK BOX SHOULD BE TIED TOGETHER.

IN NOVELTY POSITION: MAKING LEFT OUTSIDE ROLLOVER WHEN SPECIAL IS LIT-OR-PULLING TARGET RELAY IN WHEN GREEN STAR IS LIT, WILL PULSE 10,000 POINT DRUM UNIT.



FOR HI-SCORES TO OPERATE BETWEEN 1,000 AND 100,000, BLACK-WHITE AND YELLOW WIRES IN BACK-BOX SHOULD BE TIED TOGETHER. OTHERWISE, HI-SCORE CIRCUITS WILL OPERATE BETWEEN 101,000 AND 199,000.

ADJUSTMENT ON PLAYFIELD



IN EXTRA LIBERAL POSITION: NO. 2 & NO. 3 RELAYS (ON RELAY BANK) WILL TRIP AT SAME TIME---SO WILL NO. 8 & NO. 9---NO. 4 & NO. 6---NO. 7 & NO. 10.

IN LIBERAL POSITION: ONLY THE LAST 3 PAIRS OF RELAYS SHOWN ABOVE APPLIES.

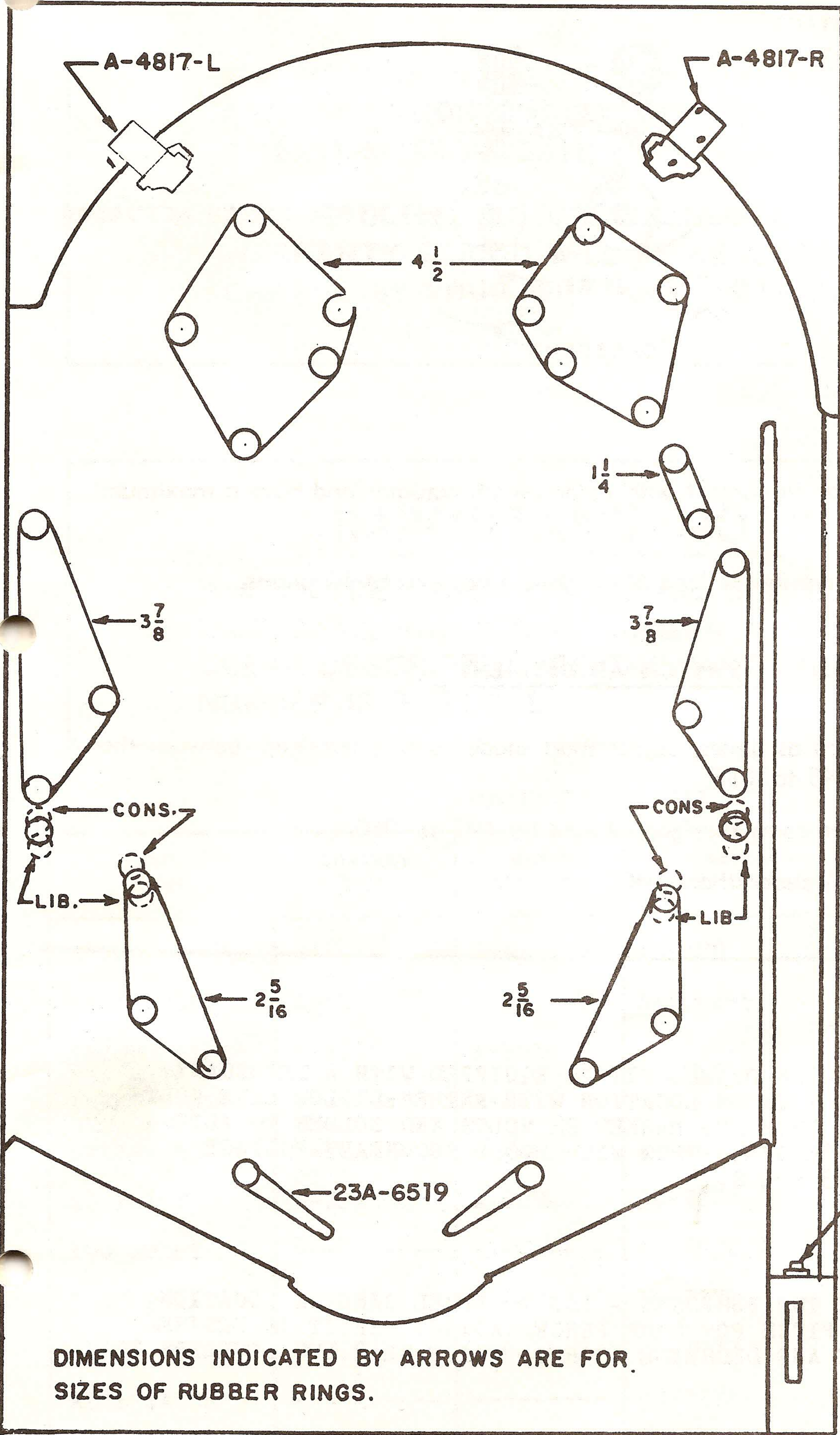
IN MEDIUM POSITION: ONLY THE LAST 2 PAIRS OF RELAYS APPLIES.

IN CONSERVATIVE POSITION: ONLY THE LAST PAIR OF RELAYS APPLIES.

I-10 ADJUSTMENT

TRIPLE STRIKE - POST ADJUSTMENT SHEET

TO MAKE GAME MORE "CONSERVATIVE" OR "LIBERAL" - MOVE POST $3/16$ " AS SHOWN IN SKETCH BELOW. SPOTTING HOLES ARE PROVIDED AND CAN BE SEEN ON REMOVAL OF POSTS.



ABBREVIATIONS:

CONS.-CONSERVATIVE
LIB.-LIBERAL

RUBBER RING NUMBERS:

23A-6300	5/16 I.D.
23A-6303	1 1/4 I.D.
23A-6306	2 5/16 I.D.
23A-6309	3 7/8 I.D.
23A-6530	4 1/2 I.D.
23A-6519	FLIPPER RUBBER

GLASS
SIZE — 21 x 43

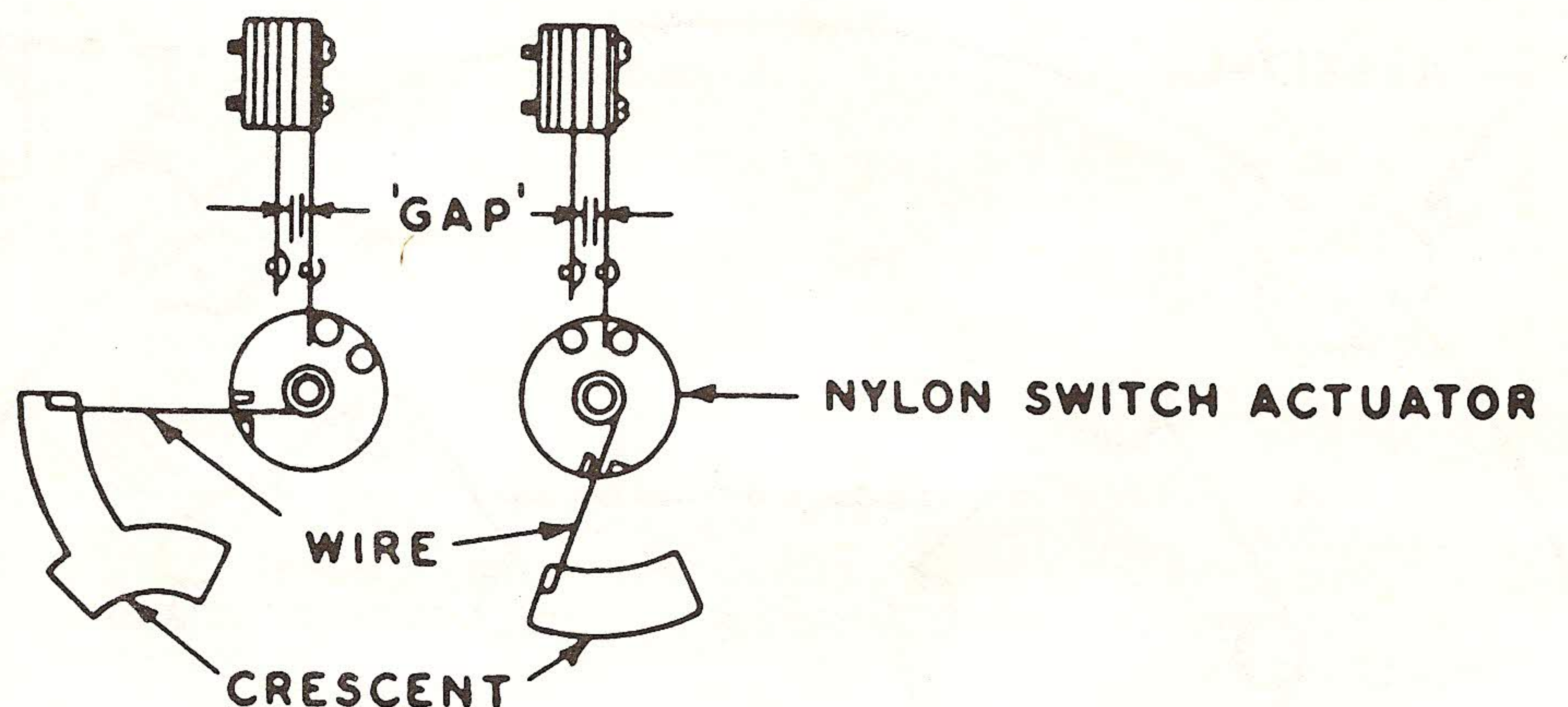
BALL DIA. - $1 \frac{1}{16}$

DIMENSIONS INDICATED BY ARROWS ARE FOR SIZES OF RUBBER RINGS.

23A-6327 BALL SHOOTER RUBBER TIP

INSTRUCTIONS FOR COIN TRIP SWITCH ADJUSTMENT

WIRE SHOULD BE IN CONTACT WITH END OF CRESCENT OPENING WHEN BLADE ADJUSTMENT IS MADE.



Long blade should be in contact with nylon switch actuator and have a maximum overtravel of $1/32$.

or

Using a gram gauge, tension of long blade should not exceed 10 grams.

SWITCH ADJUSTMENT

1. For small coins, such as dimes, adjust short blade so that the 'gap' between the silver contacts is .045 to .055.
2. For larger & heavier coins the 'gap' should be .045 to .060.
3. Do not adjust 'gap' closer than .040.

POWER TRANSFORMER:

LOCATED ON MECHANISM PANEL, IT IS EQUIPPED WITH A SECONDARY TAP. IF YOUR GAME IS ON LOCATION WITH EXTREMELY LOW LINE VOLTAGE, REMOVE LEAD FROM LUG MARKED 24 VOLTS AND SOLDER TO ALTERNATE LUG MARKED "HIGH". THIS WILL BOOST SECONDARY VOLTAGE APPROXIMATELY 2-3 VOLTS.

LEG LEVELERS:

ARE PROVIDED FOR TWO PURPOSES - 1ST TO LEVEL GAME ON LOCATION, 2ND TO INCREASE PITCH FOR GAME PERCENTAGING. IF IT IS DESIRED TO SPEED UP PLAY AND DECREASE SCORES, RAISE REAR LEG LEVELERS TO INCREASE PITCH.

WARRANTY

THE MOTORS IN ALL NEW WILLIAMS PRODUCTS ARE UN-CONDITIONALLY GUARANTEED FOR 6 MONTHS FROM DATE OF PURCHASE.

ANY DEFECTIVE MOTORS RETURNED DURING THE WARRANTY PERIOD WILL BE REPLACED FREE OF CHARGE BY YOUR WILLIAMS DISTRIBUTOR.

IMPORTANT NOTICE

WHEN ORDERING PARTS ALWAYS SPECIFY NAME OF UNIT, GAME AND SERIAL NUMBER, IN ADDITION TO A CLEAR DESCRIPTION OF THE PART AND PART NUMBER IF POSSIBLE.

UNIT PARTS LIST

UNIT NAME	CONTACT DISC	WIPER ASSEMBLY	RATCHET GEAR ASSEMBLY	MOTORS
REPLAY	-----	-----	A-6400	
BALL COUNT	C-6414	B-7456-44	A-6402-5	
(RIGHT SIDE)	B-7568	A-7614	A-7548-1	SCORE MOTOR
NO. MATCH (LEFT SIDE)	B-7569	A-7615		14A-7883 (60 CYCLE)
STRIKE BONUS	C-6417	B-7456-54	A-6402-6	14A-7884 (50 CYCLE)
10 POINT	B-7253	A-6294	3C-7272	
100 POINT	-----	-----	3C-7272	
1000 POINT	B-7253	A-6294	3C-7272	
10000 POINT	B-7253	A-6294	3C-7272	
ALTERNATOR	-----	-----	3C-7272	

CAUTION!

The playboard on this machine has an improved finish with excellent wearing properties. Do not under any circumstances clean the board with water, water soap solutions or harsh abrasives. Avoid such things as steel wool, kitchen cleansers or abrasive hand soap. Water will weaken the adhering of the paint to the board and abrasives shorten the board life by many thousand plays. A wax base cleaner with negligible abrasive qualities used lightly, but frequently, will extend the board life to its full capabilities.

SERVICEMAN

TO REMOVE BACKGLASS:

- **WITH BACK DOOR REMOVED, PULL BACK ON BRACKETS AT INSIDE TOP OF LITE BOX.**
- **FROM THE FRONT OF GAME, LIFT GLASS UP AND OUT.**

IMPORTANT NOTICE

KINDLY INFORM LOCATIONS THAT THEY CAN TURN DISPLAY LIGHTS ON BY PRESSING LEFT FLIPPER BUTTON. MACHINE CAN STILL BE SHUT OFF BY TAPPING BOTTOM OF CABINET.

MASTER SWITCH (ON-OFF) IS LOCATED UNDERNEATH FRONT PART OF CABINET.

"TRIPLE STRIKE" COIL CHART

NOTICE:

THIS GAME OPERATES ON 24 VOLTS. WHEN ORDERING REPLACEMENT TRANSFORMERS, MOTORS, COILS OR METERS ... MAKE SURE TO SPECIFY CORRECT PART NUMBER.

NUMBER	DESCRIPTION	LOCATION
<u>MOTORS & TRANSFORMERS</u>		
14 A-7883	SCORE MOTOR - 60 CYCLE	MECH. PANEL
14 A-7884	SCORE MOTOR - 50 CYCLE	MECH. PANEL
15 A-6771	TRANSFORMER - 60 CYCLE	MECH. PANEL
15 A-6782-1	TRANSFORMER - 50 CYCLE	MECH. PANEL
B 6396	METER - 24 VOLT	MECH. PANEL
<u>SOLENOID COILS</u>		
A 22-550	STRIKE BONUS UNIT STEP UP BALL RELEASE COIL BALL COUNT UNIT STEP UP	PLAYFIELD PLAYFIELD INSERT
A 23-600	CREDIT UNIT STEP UP	INSERT
A2-23-750	KNOCKER	CABINET
A2-26-1300	TRIPLE CHIME COILS ... (3 req'd.)	CABINET
B1-26-800	SCORE DRUM UNITS ... (4 req'd.) BALL COUNT UNIT RESET CREDIT UNIT RESET STRIKE BONUS UNIT RESET EJECT ADVANCE UNIT 1 TO 10 BONUS UNIT	INSERT INSERT INSERT PLAYFIELD PLAYFIELD PLAYFIELD
D1-24-1400	RELAY BANK RESET COIL	PLAYFIELD
FL 20-300/ 28-400	FLIPPERS ... (2 req'd.)	PLAYFIELD
G 22-550	"A"- "B"- "C"- "D" TARGET RESET ... (4 req'd.)	PLAYFIELD
G 23-750	EJECT COIL	PLAYFIELD
G 23-750 D.C.	D.C. JET BUMPER COIL D.C. KICKER COILS ... (2 req'd.)	PLAYFIELD PLAYFIELD
M 29-1000	GAME RELAY TRIP	MECH. PANEL
M 29-1100	10¢ RELAY 25¢ RELAY 10 POINT RELAY 100 POINT RELAY 1,000 POINT RELAY SCORE RESET RELAY 1 TO 10 RESET RELAY NO. 1 STRIKE RELAY TARGET RELAY NO. 2 STRIKE RELAY NO. 3 STRIKE RELAY 1 TO 10 HOLD RELAY	MECH. PANEL MECH. PANEL INSERT INSERT INSERT INSERT PLAYFIELD PLAYFIELD PLAYFIELD PLAYFIELD PLAYFIELD PLAYFIELD
M 30-1300	COIN SET UP RELAY 100,000 RELAY	MECH. PANEL INSERT
M 30-1400	SPECIAL RELAY	PLAYFIELD
M1-31-1500	COIN LOCKOUT COIL	DOOR
S 27-500	1 TO 10 RELAY BANK COILS ... (10 req'd.)	PLAYFIELD
XS 28-1000	NUMBER MATCH ALTERNATOR UNIT	INSERT MECH. PANEL
XM 27-675	TOTAL PLAY METER COIL	CABINET
Z 27-1000	OUTHOLE RELAY RESET RELAY COIN RELAY GAME RELAY (LATCH) BONUS RELAY EJECT RELAY 1 TO 10 SET UP RELAY	MECH. PANEL MECH. PANEL MECH. PANEL MECH. PANEL PLAYFIELD PLAYFIELD PLAYFIELD
Z 28-1150	GAME OVER RELAY TILT RELAY BALL INDEX RELAY EXTRA BALL RELAY GREEN STAR RELAY BLUE STAR RELAY	MECH. PANEL MECH. PANEL MECH. PANEL MECH. PANEL PLAYFIELD PLAYFIELD

JACK LAYOUT

GAME TRIPLE STRIKE

POSITION PAN-INSERT SIZE 20

JACK LAYOUT

GAME TRIPLE STRIKE

POSITION PAN-INSERT SIZE 18

1	FEEED	B(A)
2	"	R(A)
3	COIN LOCKOUT	W/GRY
"	"	W/O
"	"	B/R-3
5	RESET RE.	BLU/BR-1
6	KNOCKER	B/W
7	SCORE RESET RE.	W/BR-3
8	CREDIT U. STEP UP	GRY
9	EXT. BALL RE.	Y/B
10	PAN = PANEL	
	(A) = 16 GAUGE	

1	BR/G-2	PLAY ADJ. JACK
2	GRY/O-1	"
3	W/G	"
4	R/B-5	"
5	R/BR-4	"
6	R/BLU	TOTAL PLAY METER
7	B/Y	"
8	GRY/B	BALL COUNT U. STEP UP
9	O/R-1	" RESET
10	O-	BALL IND. RE.
		PLAY F. = PLAYFIELD
		(PL) = PLASTIC

1	100.000 RE.	O/BLU-3
2	GAME OVER RE.	BR/R
3	LITE FEED	BR(A)
4	NO. MATCH U.	B/R-2
5	TILT LITE	Y/BR-3
6	NO. MATCH LITE	W/O-3
7	CREDIT LITE	R/B-1
8		
9		

	BR/Y	1.000 PT. RE.
	W/R	100 "
	G/B	10 "
	B/G-2	L. CHIME
	O-3	M. "
	O/R-5	S. "
	Y(A)	FEED
	GRY/BR-3	PLAY ADJ. JACK
	R/BLU-4	"

JACK LAYOUT

GAME TRIPLE STRIKE

POSITION PAN-PLAYF. SIZE 24

1 TO 10	GRY/O-2	EJECT RE.
BANK RESET B(PL)	GRY/G-1	EJECT ADV. UNIT
" " O(PL)	GRY/BR	1 TO 10 BONUS UNIT
" " BR(PL)	G/O-4	" "
" " W(PL)	O/W	STRIKE BONUS UNIT RESET
RESET RE. BLU/BR-1	R/W-2	" "
MOTOR RUN %G	G-2	BONUS RE.
PLAY ADJ. JACK BR/G-2	Y/O	" "
A-B-C-D TARGET RESET BLU/R	G/W-2	" "
" " GRY/W	GRY/BLU	" "
" " BLU/O-1	BLU/Y/W	FEED
EJECK COIL B/Y-2	Y(A)	" "
EJECK RE. BLU/Y-1		

1	FEED B(A)	R/Y/W FEED
2	" R(A)	BR/R-1 GREEN STAR RE
3	1 TO 10 SET UP RE. BR-1	BLU-1 " "
4	" " O/R	R/Y-1 EXT. BALL RE.
5	" " W/BR-2	W/GRY-2 " "
6	BONUS RE. GRY/G-3	R/B-5 " "
7	OUTHOLE RE. BLU/Y-4	BLU/B 1 TO 10 RESET RE.
8	BALL RELEASE BLU/W-5	B/G-3 STRIKE BONUS UNIT STEP UP
9	TILT RE. Y/R-3	BR/G " "
10	STRIKE BONUS BR/O UNIT STEP UP	B/O " "
11	---	R/BLU-4 PLAY ADJ. JACK.

JACK LAYOUT

GAME TRIPLE STRIKE

POSITION PAN-PLAYF. SIZE 22

1		R/Y/W FEED
2		BR/R-1 GREEN STAR RE
3		BLU-1 " "
4		R/Y-1 EXT. BALL RE.
5		W/GRY-2 " "
6		R/B-5 " "
7		BLU/B 1 TO 10 RESET RE.
8		B/G-3 STRIKE BONUS UNIT STEP UP
9		BR/G " "
10		B/O " "
11		R/BLU-4 PLAY ADJ. JACK.

JACK LAYOUT

GAME TRIPLE STRIKE

POSITION PAN-PLAYF. SIZE 16

NO. 2 STRIKE RE. Y/R-1	1	GRY/W-3 1.000PT.RE.
" 1 " G/R-1	2	R/W " "
" 3 " BLU/O	3	BR/Y " "
BLU STAR RE. BLU/W	4	W/R 100 "
L. FLIPPER B/W-5(A)	5	G/B 10 "
R. " BR/W-5(A)	6	GRY/R-2 EXTRA BALL LITE
—	7	R/B-1 CREDIT LITE
—	8	BLU(A) LITE FEED

BALL COUNT UNIT DISC

DURING RESET CYCLE, THIS UNIT RESETS TO ZERO AND THEN ADVANCES 3 OR 5 STEPS. DURING PLAY, IT RESETS ONE STEP EACH TIME THE BALL MAKES OUTHOLE SWITCH, EXCEPT WHEN EXTRA BALL RELAY IS ENERGIZED.

VIEW LOOKING AT WIPER FINGERS, WITH WIPER IN RESET POSITION.

HOLD CIRCUIT TO GAME-OVER RELAY.

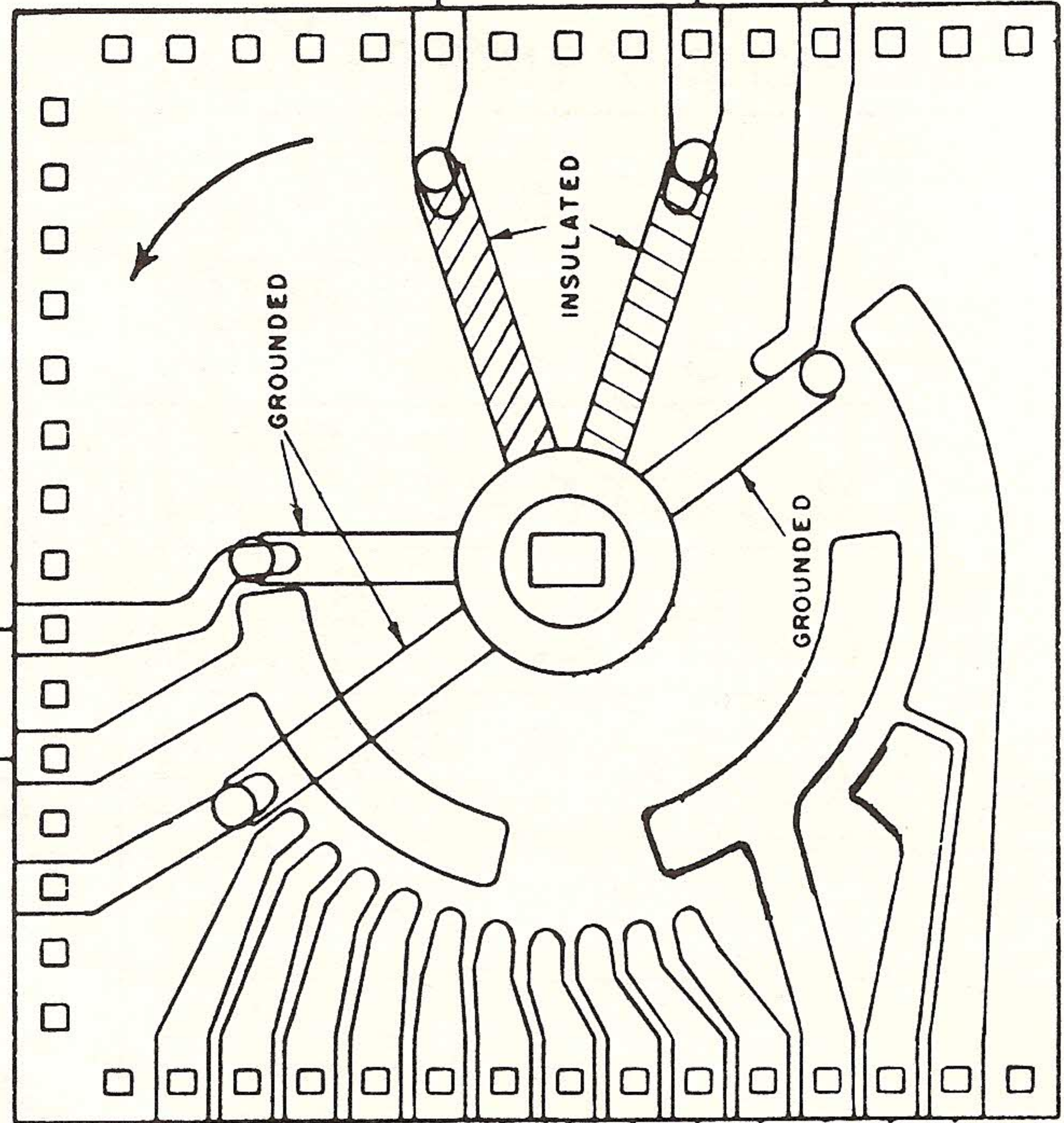
BR - R
D-9

DIAGRAM LOCATION

- NO. 1
- NO. 2
- NO. 3
- NO. 4
- NO. 5

BALLS TO PLAY LITES

- G-O
- G-W
- G-Y
- G-R
- Y-B



TO GAME RELAY LATCH COIL.

FEED TO R-BLU FROM SW. ON COIN RELAY.

IN NO. MATCH CIRCUIT.

STRIKE BONUS UNIT

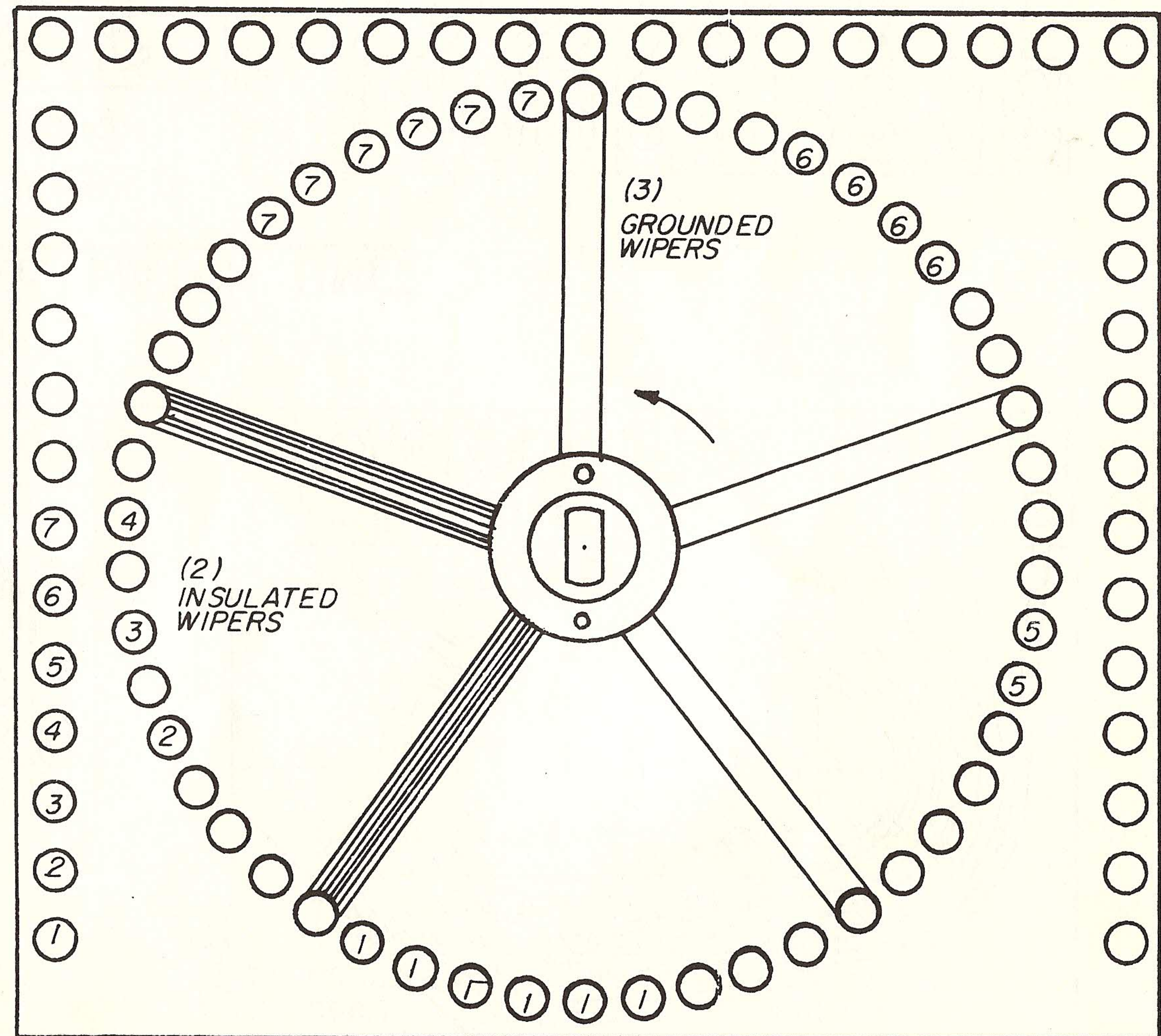
THIS UNIT ADVANCES TWO STEPS EACH TIME THE "1 TO 10 RESET RELAY" IS ENERGIZED.

IT RESETS ONE STEP AT A TIME THRU SWITCHES ON BONUS RELAY AND "1 TO 10 SET-UP RELAY".

IF BLUE STAR RELAY HAD BEEN ENERGIZED (FOR STRIKE HOLDOVER), THEN THIS UNIT WILL ADVANCE BY SCORE MOTOR IMPULSE CAM SWITCH 'A', THRU SWITCHES ON NO. 1, NO. 2 AND NO. 3 STRIKE RELAYS.

VIEW LOOKING AT WIPER FINGERS, WITH WIPER IN RESET POSITION.

NO. 1 STRIKE LITE	(B-6)	R-B
NO. 2 STRIKE LITE	(B-6)	BLU-B
NO. 3 STRIKE LITE	(B-6)	Y-G
TO NO. 1 STRIKE RE.	(D-16)	GRAY-BR
TO NO. 2 STRIKE RE.	(E-16)	O-W
TO NO. 3 STRIKE RE.	(E-16)	W-BLU
FEED FROM SW. ON BLU-STAR RELAY.	(D-16)	O-G



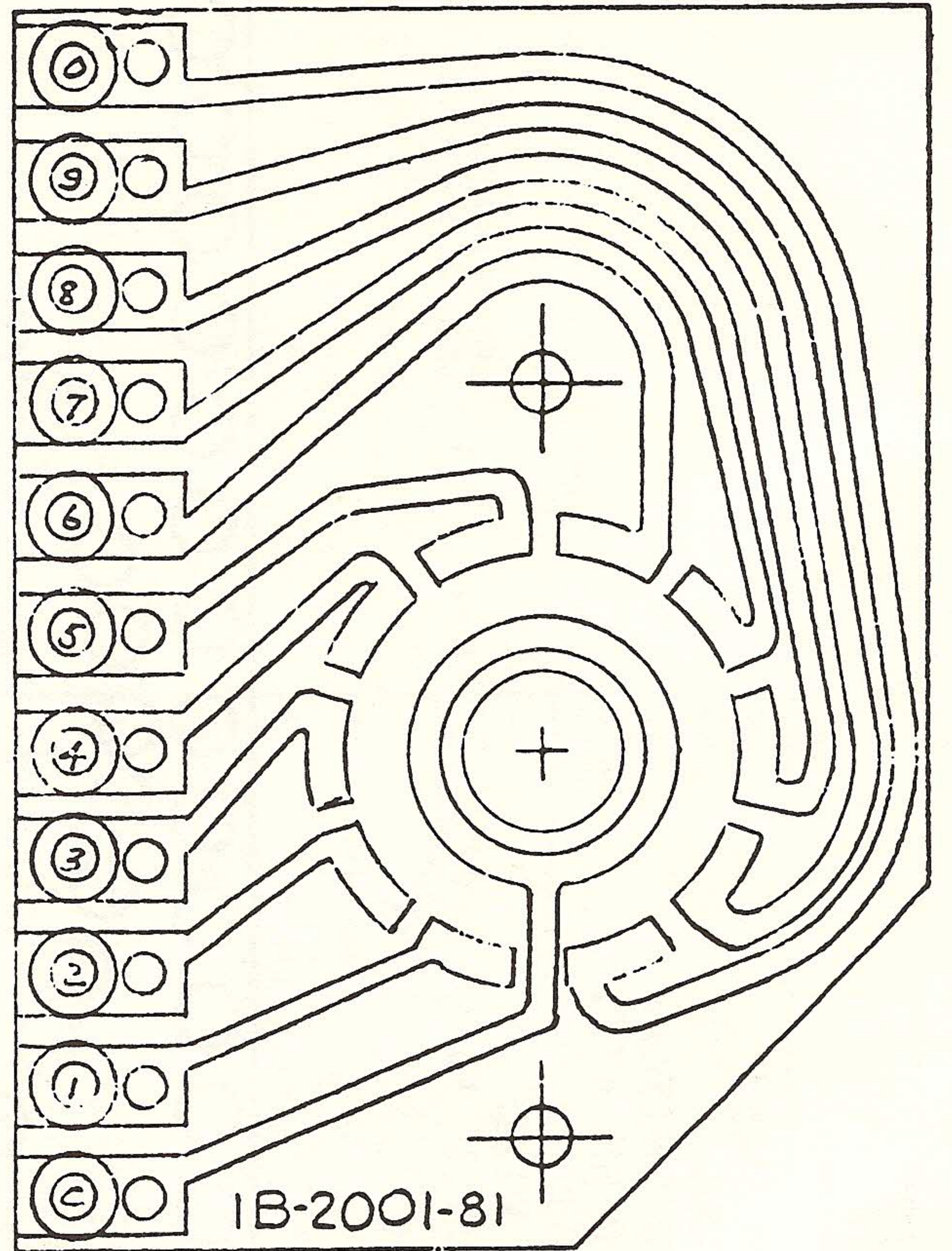
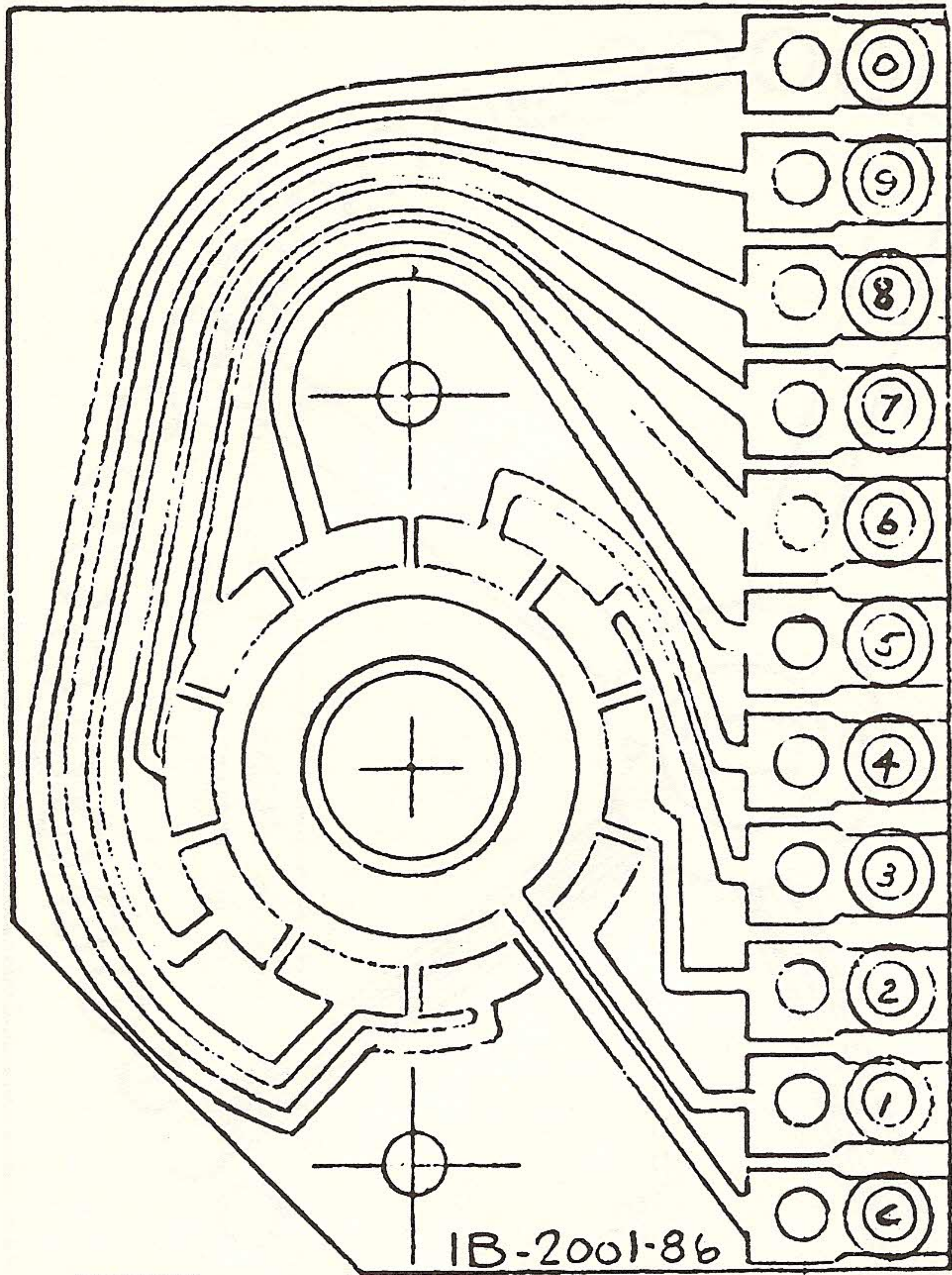


DIAGRAM
LOCATION

B-4

00 LITE	W/G-1	⑩
60 "	BR/W-1	⑨
10 "	BR/G-1	⑧
70 "	BR/Y-1	⑦
30 "	BR/BLU-1	⑥
80 "	BR/R-2	⑤
20 "	W/GRY-1	④
50 "	W/B-2	③
90 "	W/O-2	②
40 "	W/BR	①
FEED	BR/O-1	Ⓒ

PRINTED CIRCUIT - 1B-2001-86

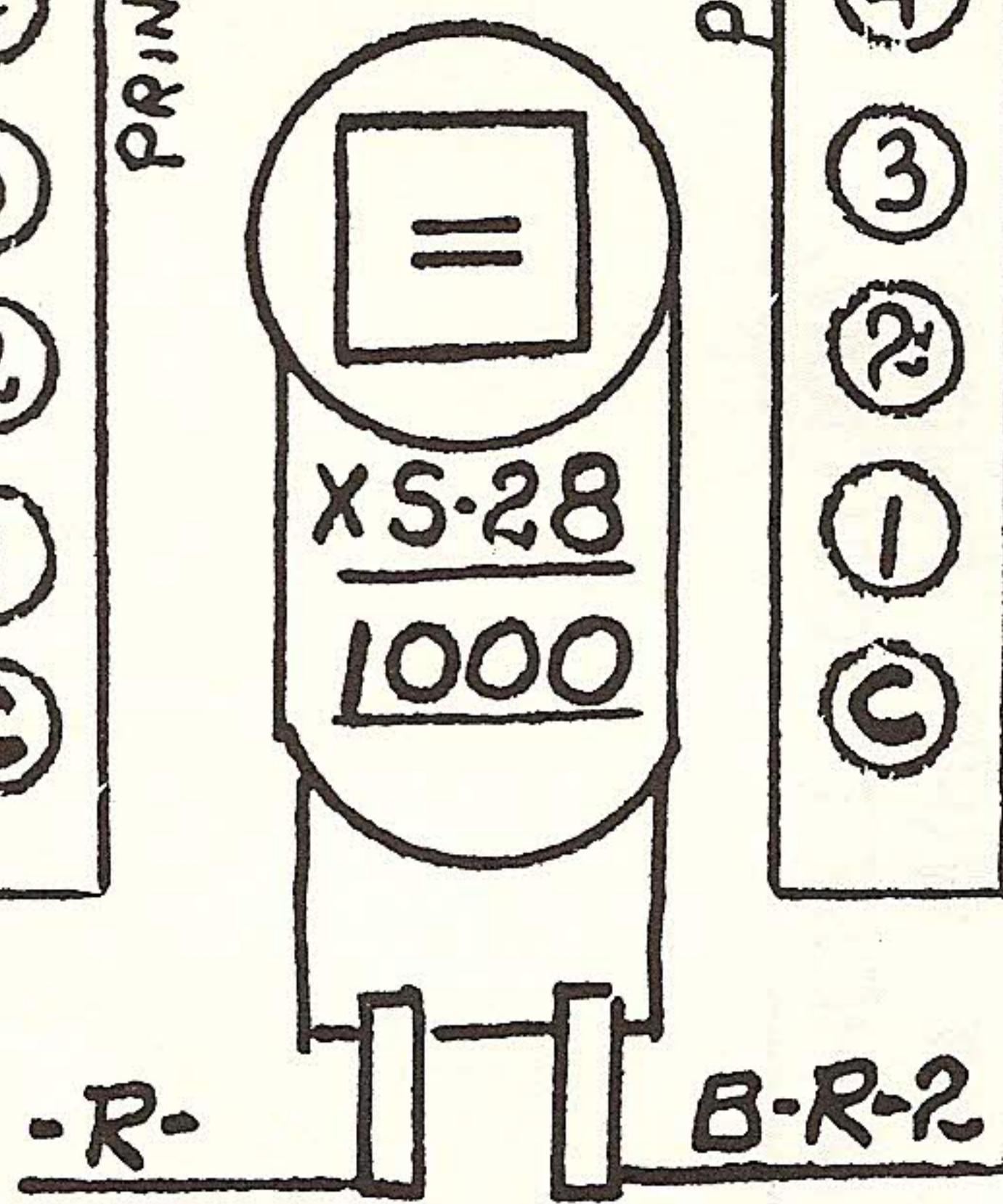
No. MATCH UNIT

⑩
⑨
⑧
⑦
⑥
⑤
④
③
②
①
Ⓒ

PRINTED CIRCUIT - 1B-2001-81

Y/BLU-1	00-MATCH
G/Y-3	60 "
Y/G-2	10 "
G/W-3	70 "
Y/O-1	30 "
G/O-1	80 "
Y/BR	20 "
G/R	50 "
W/BLU-2	90 "
Y/B-5	40 "
BLU/O-2	FEED

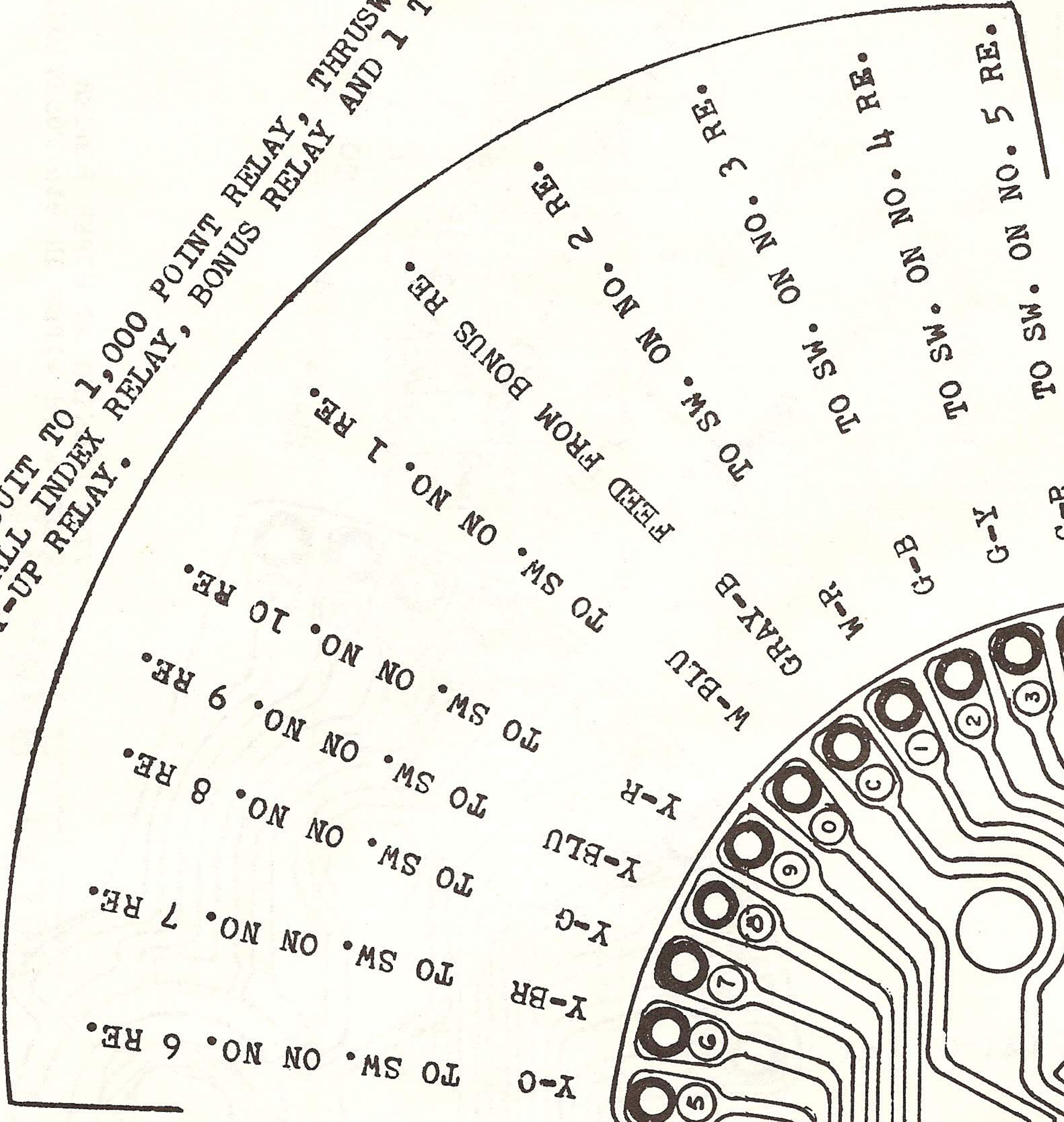
D-8



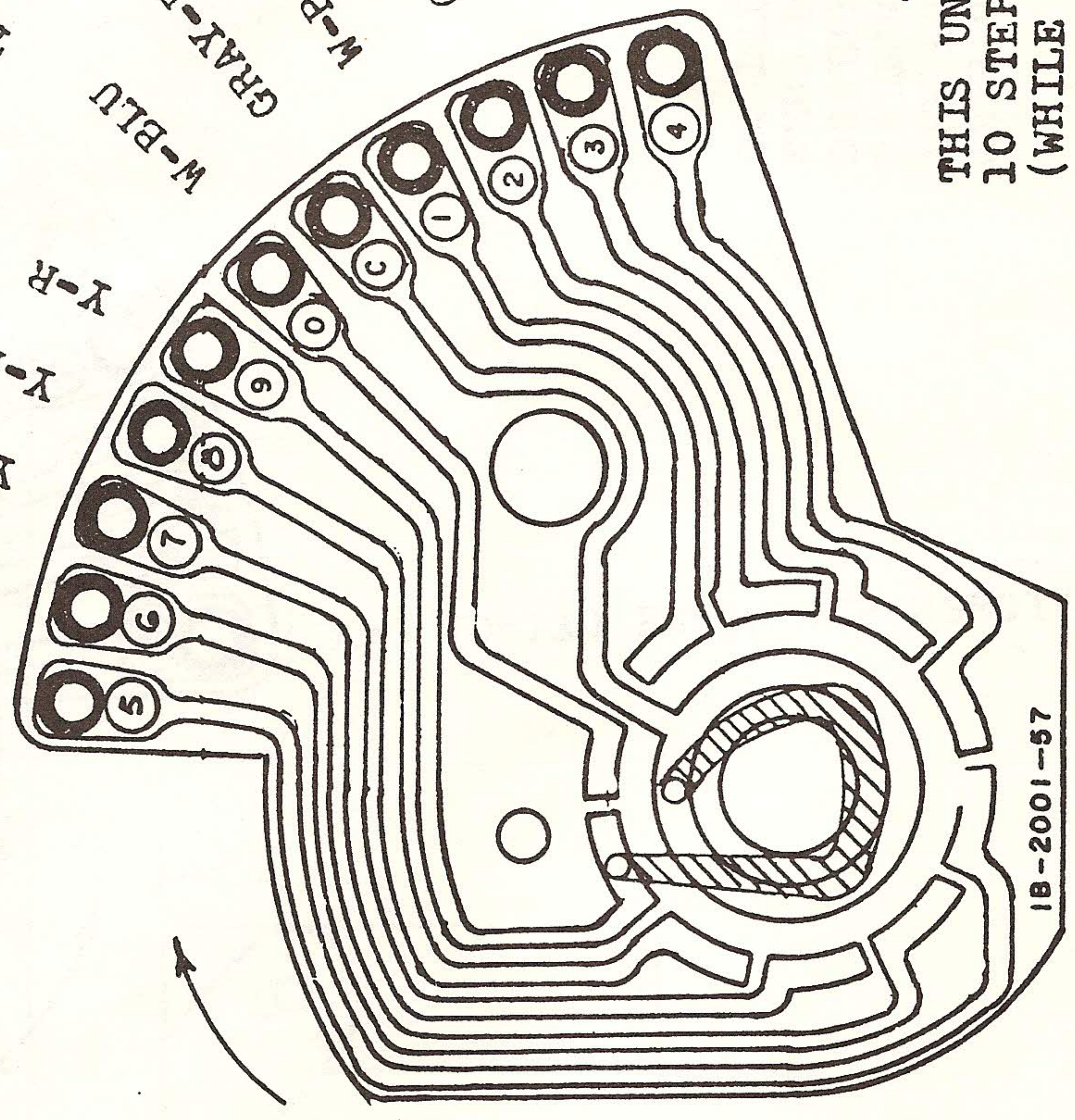
DRIVE SPRING 10A-324-1

D-18

IN CIRCUIT TO 1,000 POINT RELAY, THRU SWITCHES ON BALL INDEX RELAY, BONUS RELAY AND 1 TO 10 SET-UP RELAY.



VIEW LOOKING AT WIPER FINGER SIDE, WITH WIPER IN 9th POSITION.



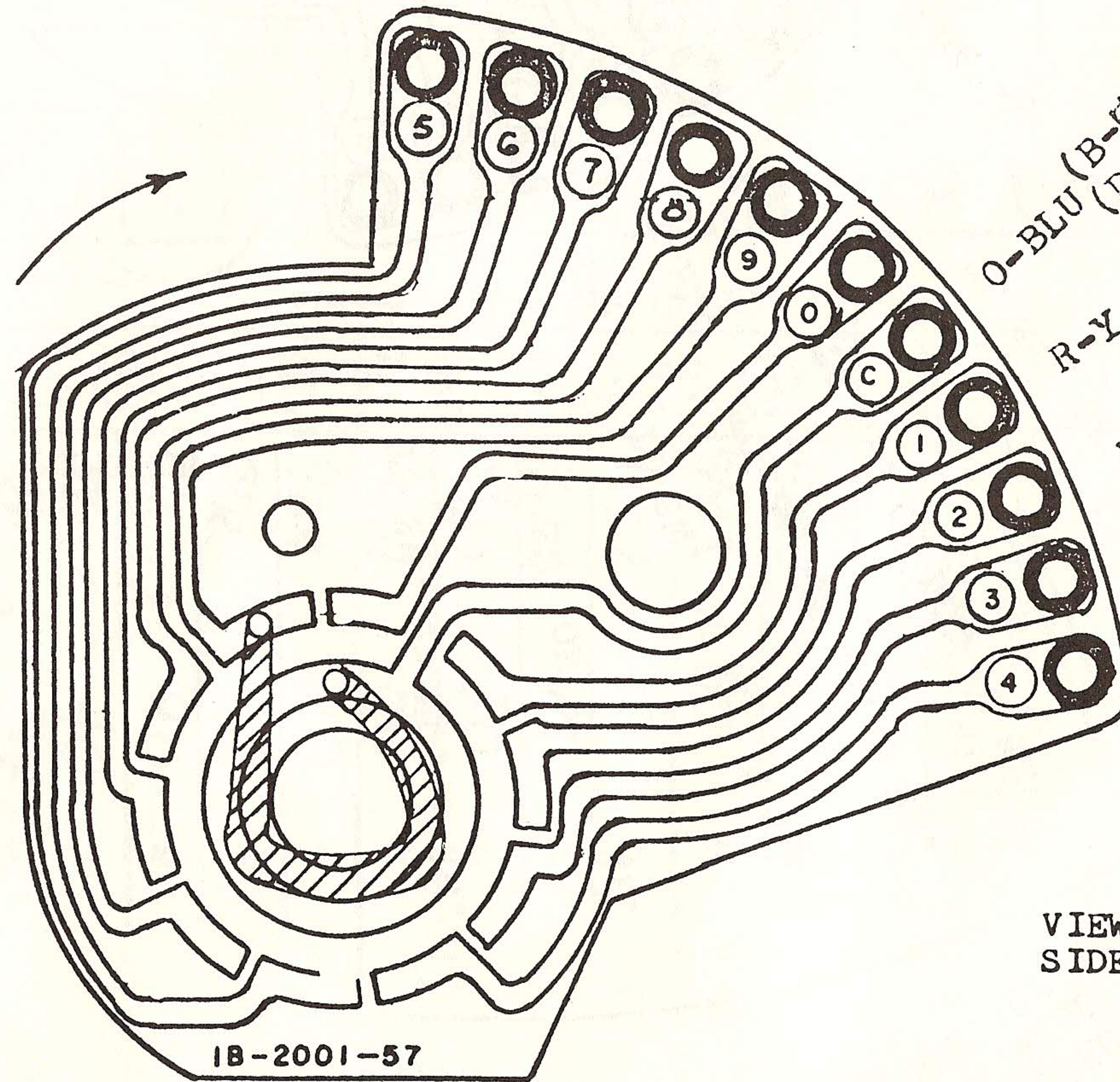
1 TO 10 BONUS UNIT

THIS UNIT, LOCATED ON PLAYFIELD, ADVANCES 10 STEPS AFTER BONUS RELAY IS ENERGIZED (WHILE COLLECTING BONUS). ITS FUNCTION IS TO SCORE 1,000 POINTS FOR EACH RELAY TRIPPED ON THE RELAY BANK.

EJECT ADVANCE UNIT

THIS UNIT ADVANCES ONE STEP EACH TIME THE EJECT RELAY IS ENERGIZED, THRU SWITCH ON SPECIAL RELAY. DURING RESET CYCLE, IT IS PULSED TO ZERO BY BONUS RELAY, THRU ZERO SWITCH ON THIS UNIT.

Y-0 (D-17) ENERGIZES SPECIAL RE.



O-BLU (B-6) FEED FROM BONUS RE.
R-Y (B-5) TO NO. 1 EJECT LITE.

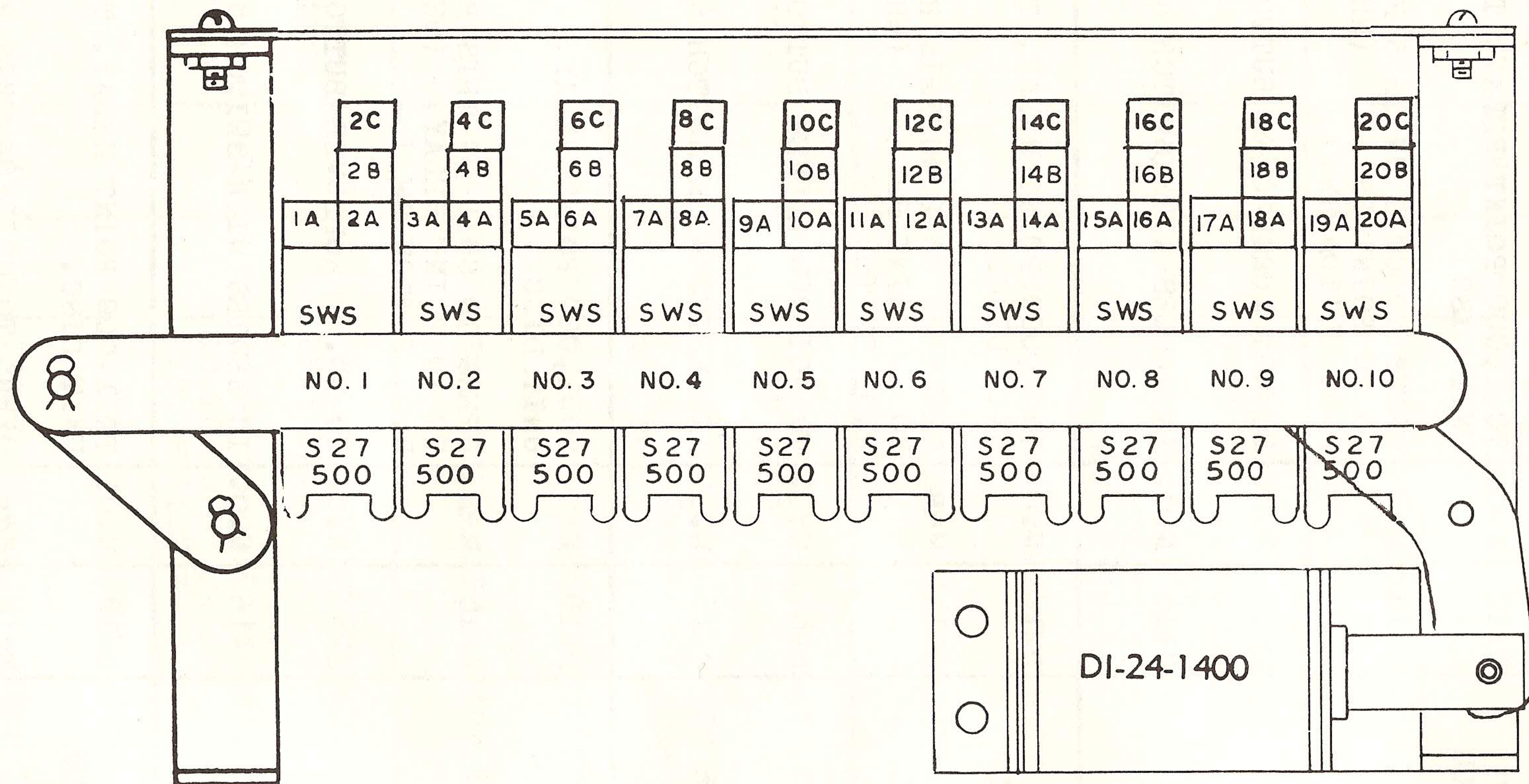
W-G (B-5) TO NO. 2 EJECT LITE.
GRAY-Y (D-17) ENERGIZES BLU STAR RE.

-GRAY- (B-5) TO NO. 4 EJECT LITE

VIEW LOOKING AT WIPER FINGER SIDE, WITH WIPER IN 9th POSITION.

IB-2001-57

RELAY BANK SWS.



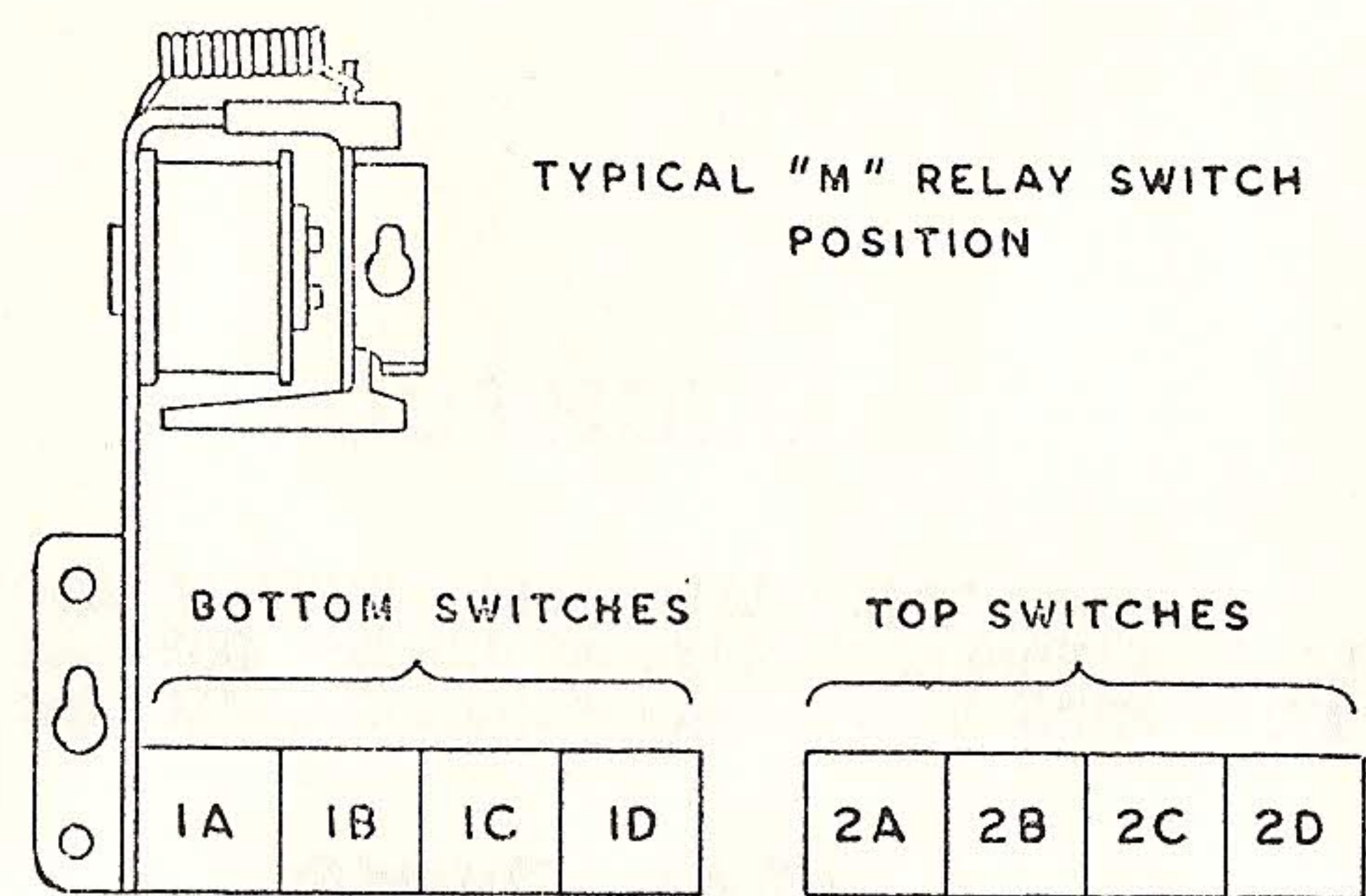
RELAY	SW.	WIRE COLORS	DIAG. LOC.	TYPE	SWITCH OPERATION
NO. 1 RELAY	1A	W-BLU BR-BLU	D-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	2C	-J- -BR- G-B	E-14	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 1 R.O. BUTTON SW.).
	2B	W-G Y	B-8	N.C.	TO NO. 1 ROLLOVER BUTTON LITE.
	2A	-J- G-W	C-16	N.O.	IN SERIES WITH SWITCH 4A ON NO. 2 RELAY.
NO. 2 RELAY	3A	W-R BR-BLU	D-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	4C	-J- BR-BLU G-B	E-14	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 2 R.O. BUTTON SW.).
	4B	W-BR -Y-	B-8	N.C.	TO NO. 2 ROLLOVER BUTTON LITE.
	4A	-J- -J-	C-16	N.O.	IN SERIES WITH SWITCH 6A ON NO. 3 RELAY.
NO. 3 RELAY	5A	G-B BR-BLU	D-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	6C	-J- BR-Y G-B	E-14	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 3 R.O. BUTTON SW.).
	6B	W-B -Y-	B-8	N.C.	TO NO. 3 ROLLOVER BUTTON LITE.
	6A	-J- -J-	C-16	N.O.	IN SERIES WITH SWITCH 8A ON NO. 4 RELAY.
NO. 4 RELAY	7A	G-Y BR-BLU	D-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	8C	-J- BR-W G-B	E-14	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 4 R.O. BUTTON SW.).

RELAY	SW.	WIRE COLORS	DIAG. LOC.	TYPE	SWITCH OPERATION
NO. 4 RELAY	8B	R-G -Y-	B-8	N.C.	TO NO. 4 ROLLOVER BUTTON LITE.
	8A	-J- -J-	C-16	N.O.	IN SERIES WITH SWITCH 10A ON NO. 5 RELAY.
NO. 5 RELAY	9A	G-R BR-BLU	D-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	10C	-J- BR-O G-B	E-14	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 5 R.O. BUTTON SW.).
	10B	R-W -Y-	B-8	N.C.	TO NO. 5 ROLLOVER BUTTON LITE.
	10A	-J- -J-	D-16	N.O.	IN SERIES WITH SWITCH 12A ON NO. 6 RELAY.
NO. 6 RELAY	11A	Y-O BR-BLU	D-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	12C	-J- -O- G-B	E-14	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 6 R.O. BUTTON SW.).
	12B	R-BR -Y-	B-8	N.C.	TO NO. 6 ROLLOVER BUTTON LITE.
	12A	-J- -J-	D-16	N.O.	IN SERIES WITH SWITCH 14A ON NO. 7 RELAY.
NO. 7 RELAY	13A	Y-BR BR-BLU	D-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	14C	-J- O-R G-B	E-15	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 7 R.O. BUTTON SW.).
	14B	R-O -Y-	B-8	N.C.	TO NO. 7 ROLLOVER BUTTON LITE.
	14A	-J- -J-	D-16	N.O.	IN SERIES WITH SWITCH 16A ON NO. 8 RELAY.

RELAY	SW.	WIRE COLORS	DIAG. LOC.	TYPE	SWITCH OPERATION
NO. 8 RELAY	15A	Y-G BR-BLU	D-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	16C	-J- O-G G-B	E-15	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 8 R.O. BUTTON SW.).
	16B	R.B. -Y-	B-9	N.C.	TO NO. 8 ROLLOVER BUTTON LITE.
	16A	-J- -J-	D-16	N.O.	IN SERIES WITH SWITCH 18A ON NO. 9 RELAY.
NO. 9 RELAY	17A	Y-BLU BR-BLU	E-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	18C	-J- O-W G-B	E-15	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 9 R.O. BUTTON SW.).
	18B	-BLU- -Y-	B-9	N.C.	TO NO. 9 ROLLOVER BUTTON LITE.
	18A	-J- -J-	E-16	N.O.	IN SERIES WITH SWITCH 20A ON NO. 10 RELAY.
NO. 10 RELAY	19A	Y-R BR-BLU	E-18	N.O.	TO 1,000 POINT RELAY, THRU 1 TO 10 BONUS UNIT DISC.
	20C	-J- GRAY-BLU G-B	E-15	M&B	OPENS TO COIL ON THIS RELAY AND CLOSES TO 10 POINT RELAY. (WHEN MAKING NO. 10 R.O. BUTTON SW.).
	20B	BLU-R -Y-	B-9	N.C.	TO NO. 10 ROLLOVER BUTTON LITE.
	20A	-J- GRAY-R	E-16	N.O.	IN CIRCUIT TO ENERGIZE "1 TO 10 RESET RELAY". (SEE SW. 2A ON NO. 1 RELAY).

RELAYS & SWITCHES

(ON MECHANISM PANEL)



TILT

IS ENERGIZED BY PLUMB BOB TILT, BALL ROLL-DOWN TILT OR PLAYFIELD VIBRATION TILT SWITCH.

EXTRA BALL

IS ENERGIZED, THRU "PLAY ADJUSTMENT JACK", BY:

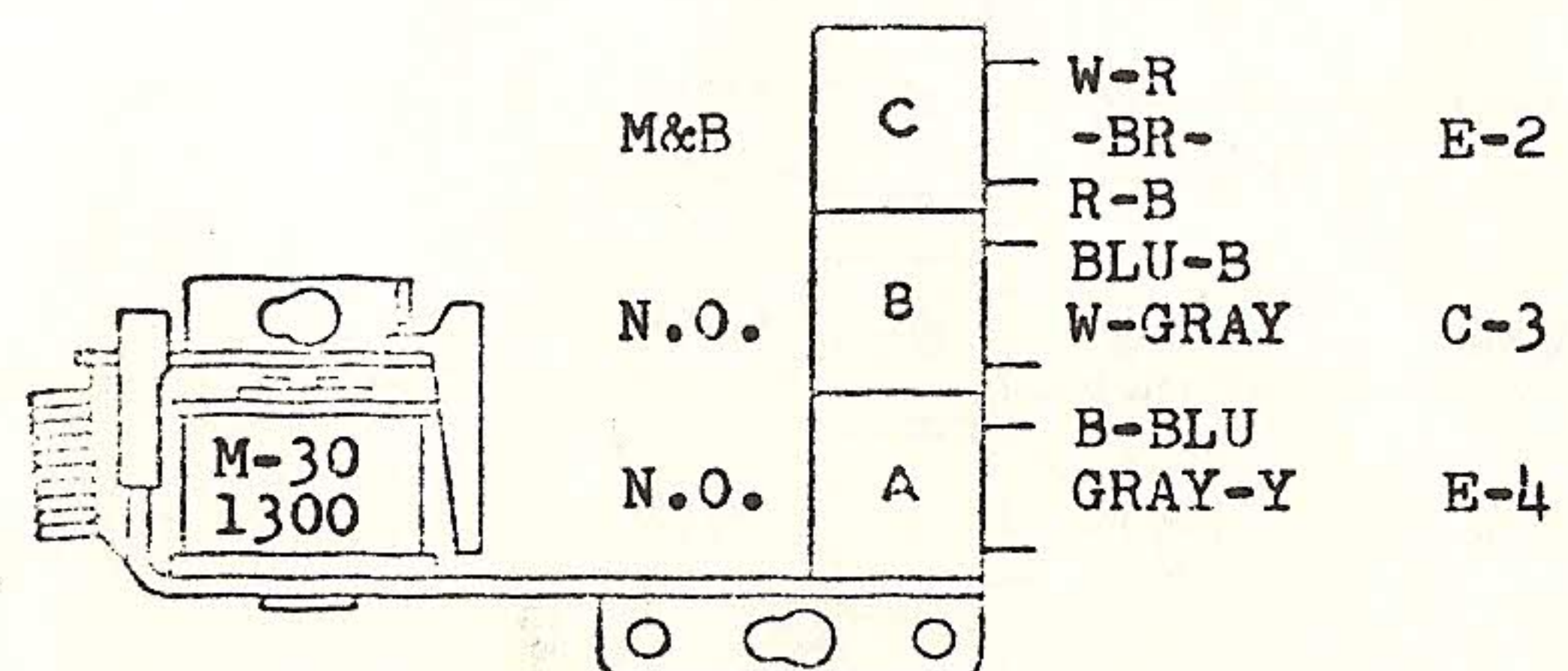
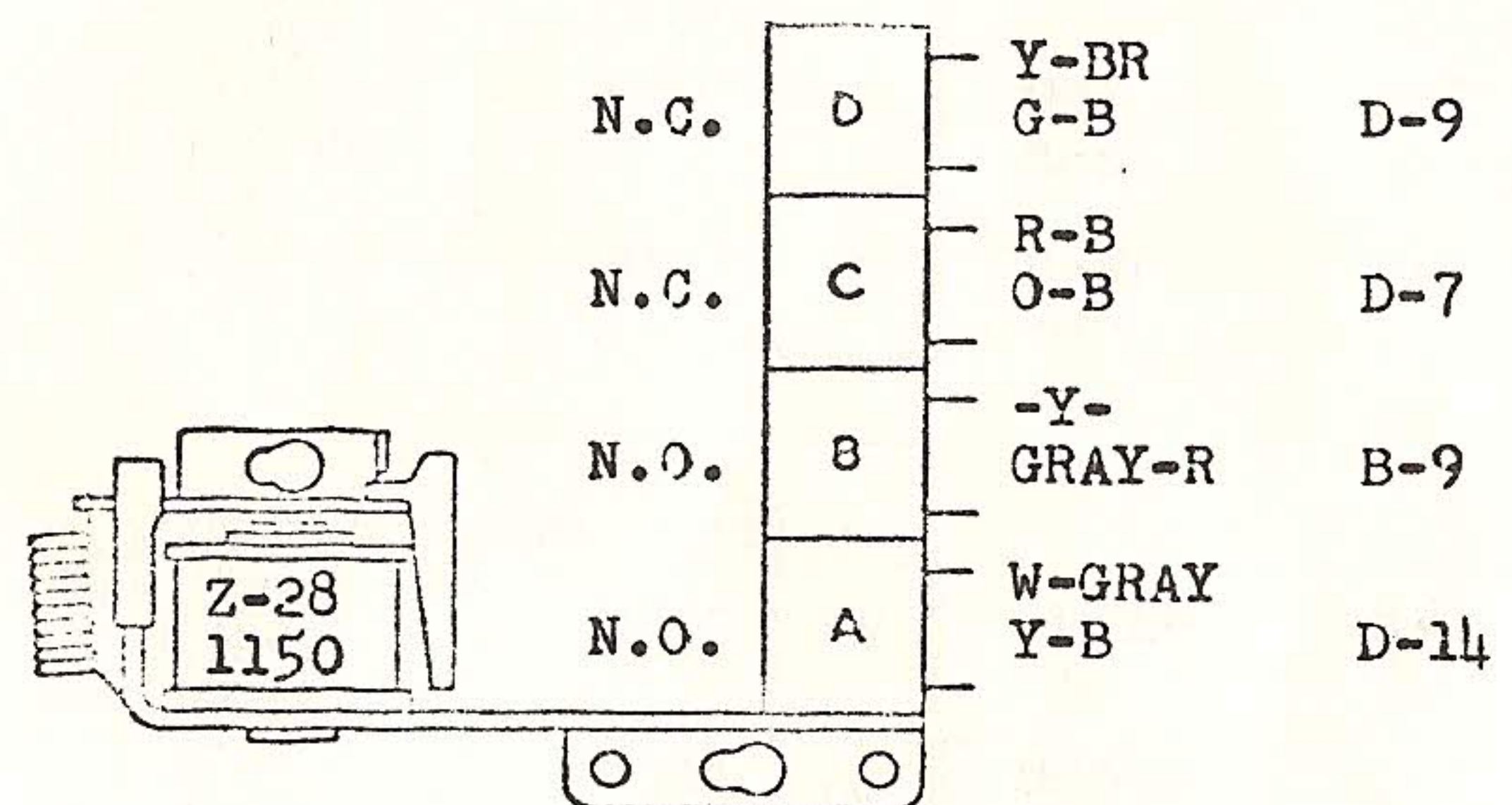
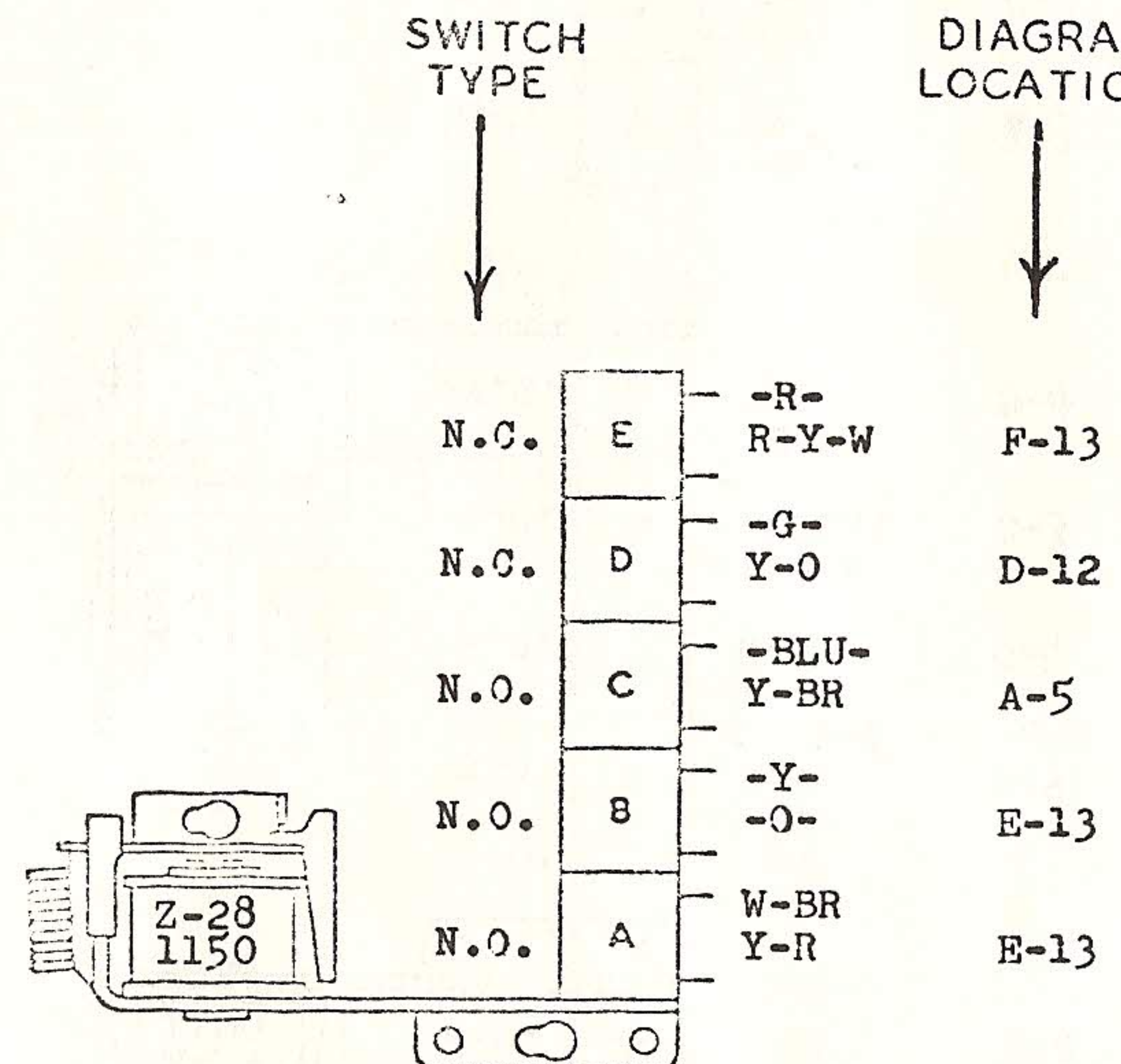
1. MAKING LEFT OUTSIDE ROLLOVER SWITCH WHEN SPECIAL RELAY IS ENERGIZED.
2. HI-SCORE CIRCUIT.
3. EJECT RELAY, THRU BLUE STAR RELAY AND BALL COUNT UNIT DISC (WHEN LAST BALL IS IN PLAY).
4. TARGET RELAY, THRU GREEN STAR RELAY.

COIN SET-UP

IS ENERGIZED BY 25¢ RELAY, IF "1 COIN=1 PLAY/2 COINS=3 PLAYS ADJUSTMENT JACK" IS IN "ON" POSITION.

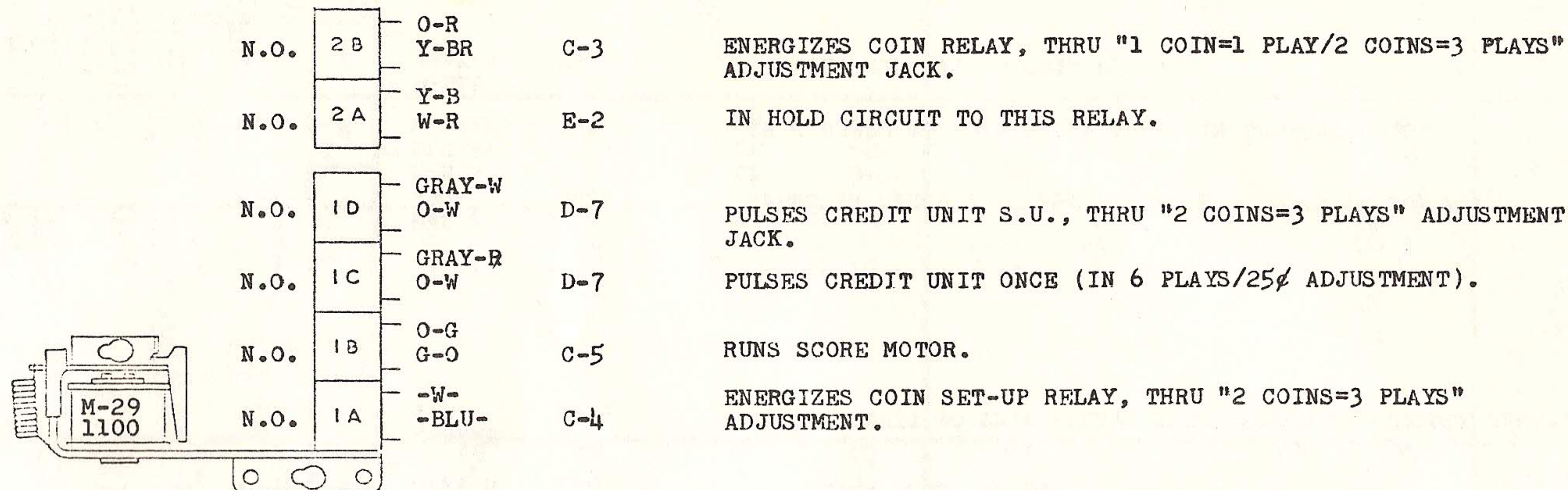
DIAGRAM LOCATION

SWITCH TYPE



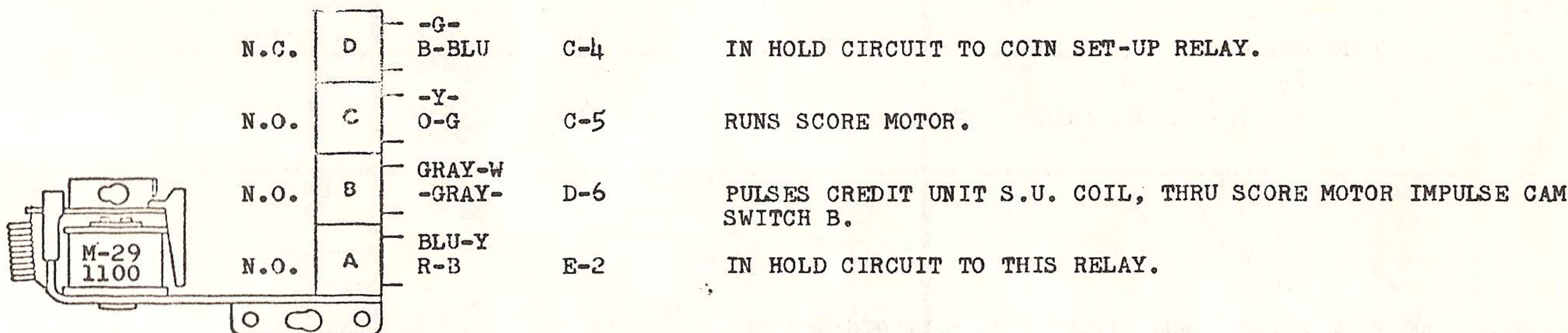
25¢

IS ENERGIZED BY 25¢ COIN SWITCH.



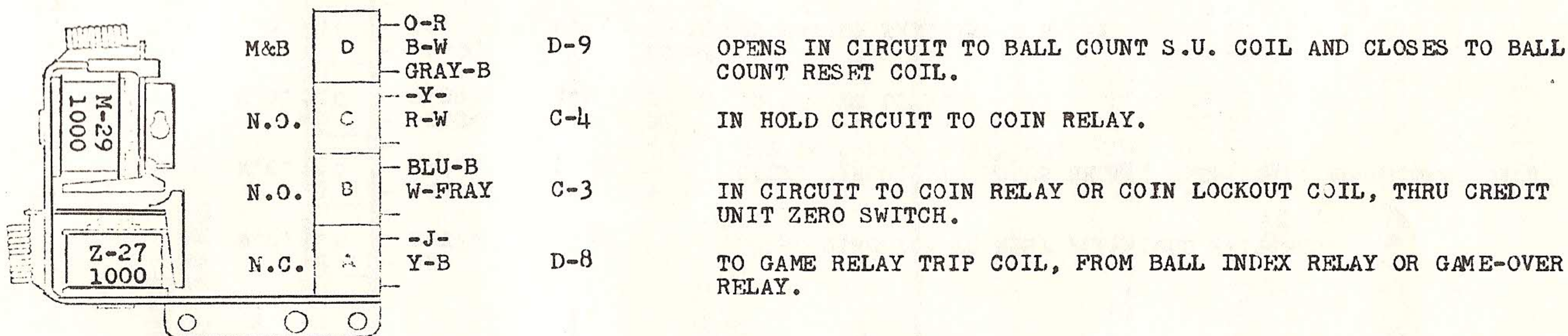
10¢

IS ENERGIZED BY 10¢ COIN SWITCH, IF 10¢ ADJUSTMENT JACK IS IN "2 PLAYS" OR "3 PLAYS" POSITION---ALSO BY 25¢ COIN SWITCH, THRU SWITCH ON COIN SET-UP RELAY IF "2 COINS FOR 3 PLAYS" ADJUSTMENT IS IN "ON" POSITION.



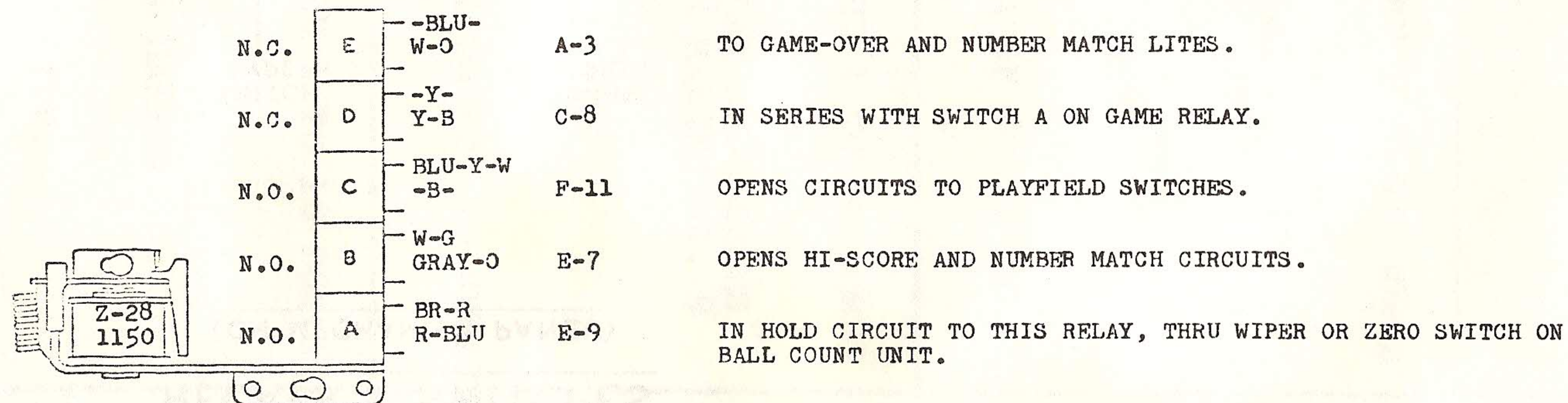
GAME

LATCH COIL IS ENERGIZED BY COIN RELAY, THRU WIPER FINGERS ON BALL COUNT UNIT (AT ZERO POSITION).
TRIP COIL IS ENERGIZED BY BALL INDEX RELAY OR GAME-OVER RELAY.



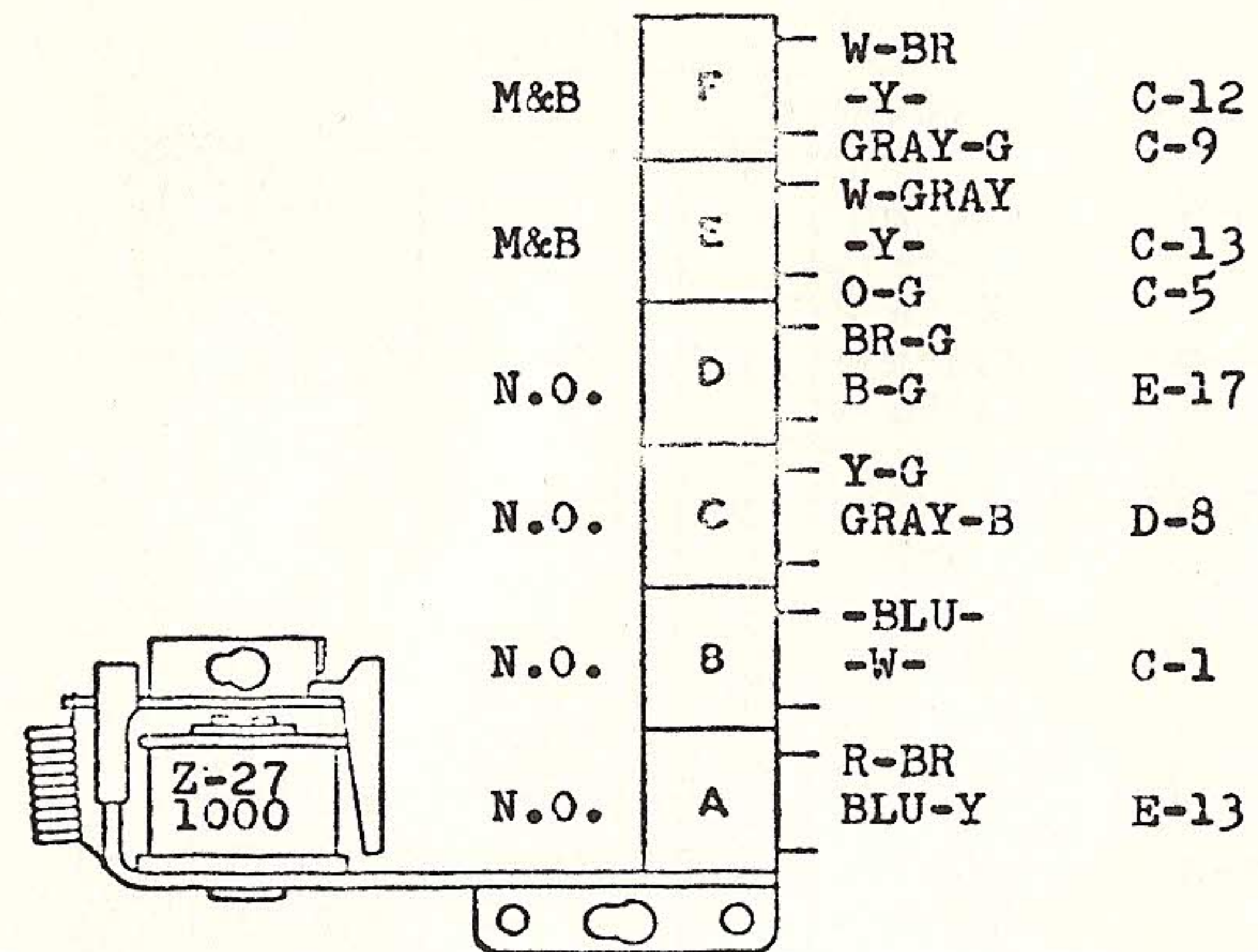
GAME-OVER

IS ENERGIZED BY COIN RELAY. IT THEN HOLDS IN BY ZERO SWITCH ON BALL COUNT UNIT OR WIPER FINGER ON BALL COUNT UNIT DISC.



OUTHOLE

IS ENERGIZED BY "CLOSE AT ZERO POSITION SWITCH" ON STRIKE BONUS UNIT, THRU SWITCH ON "1 TO 10 SET-UP RELAY".



OPENS IN HOLD CIRCUIT TO "1-10 SET UP RE." AND "1-10 HOLD RE.", AND CLOSES IN SERIES WITH SW. C ON BALL INDEX RE.

OPENS IN HOLD CIRCUIT TO BALL INDEX, EXTRA BALL AND GREEN STAR RELAYS, AND CLOSES TO RUN SCORE MOTOR.

IN CIRCUIT TO STRIKE BONUS UNIT S.U. COIL.

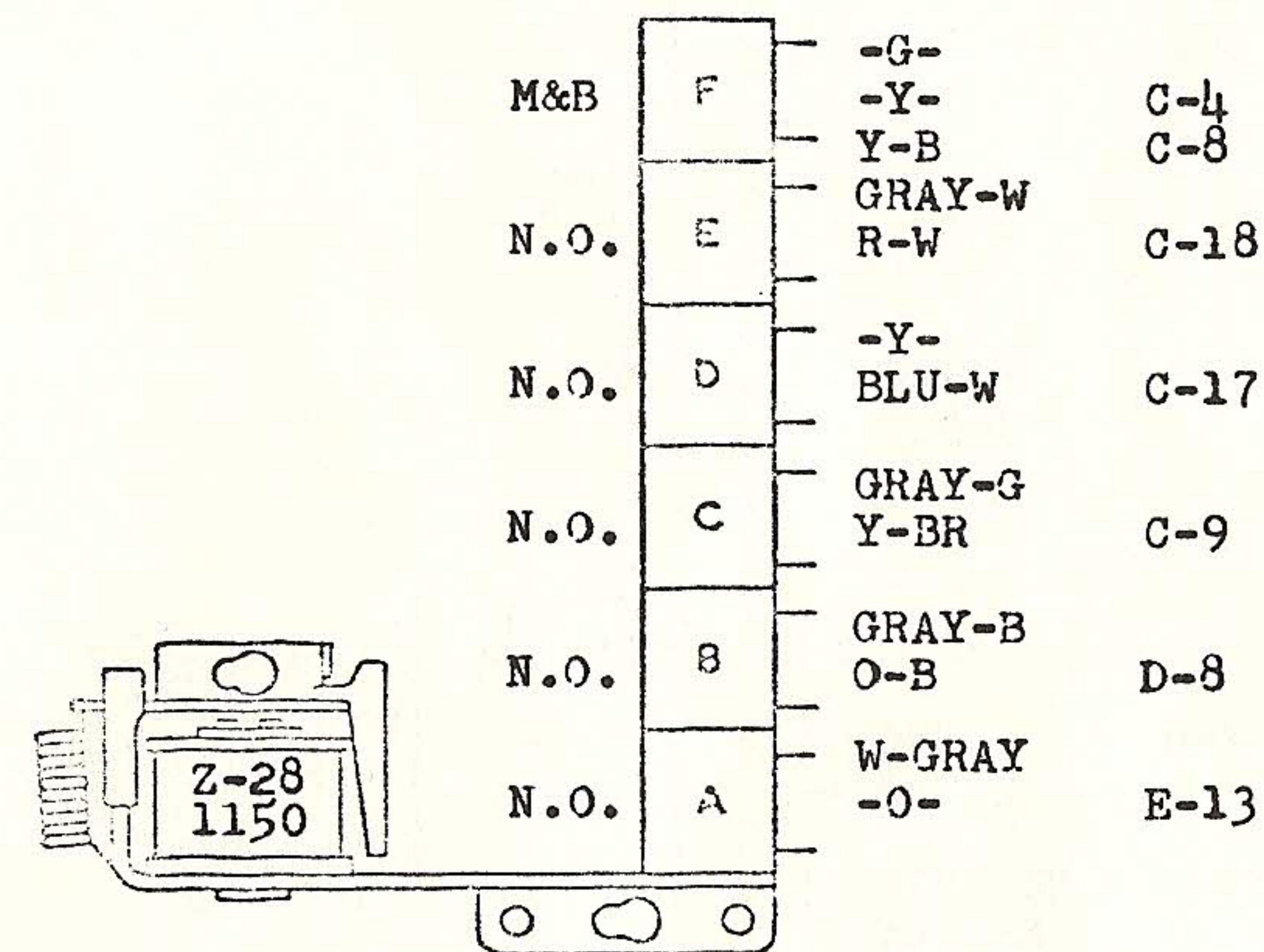
IN NUMBER MATCH CIRCUIT TO "PLAY ADJUSTMENT JACK".

IN SERIES WITH SWITCH 'E' ON BLUE STAR RELAY. (115 VOLTS).

IN HOLD CIRCUIT TO THIS RELAY.

BALL INDEX

IS ENERGIZED BY 10 POINT, 100 POINT, 1,000 POINT OR TILT RELAYS.



OPENS IN HOLD CIRCUIT TO COIN SET-UP RELAY AND CLOSES IN SERIES WITH SWITCH 'A' ON GAME RELAY.

IN SERIES WITH SWITCH B ON BONUS RELAY.

IN HOLD CIRCUIT TO BLUE STAR RELAY.

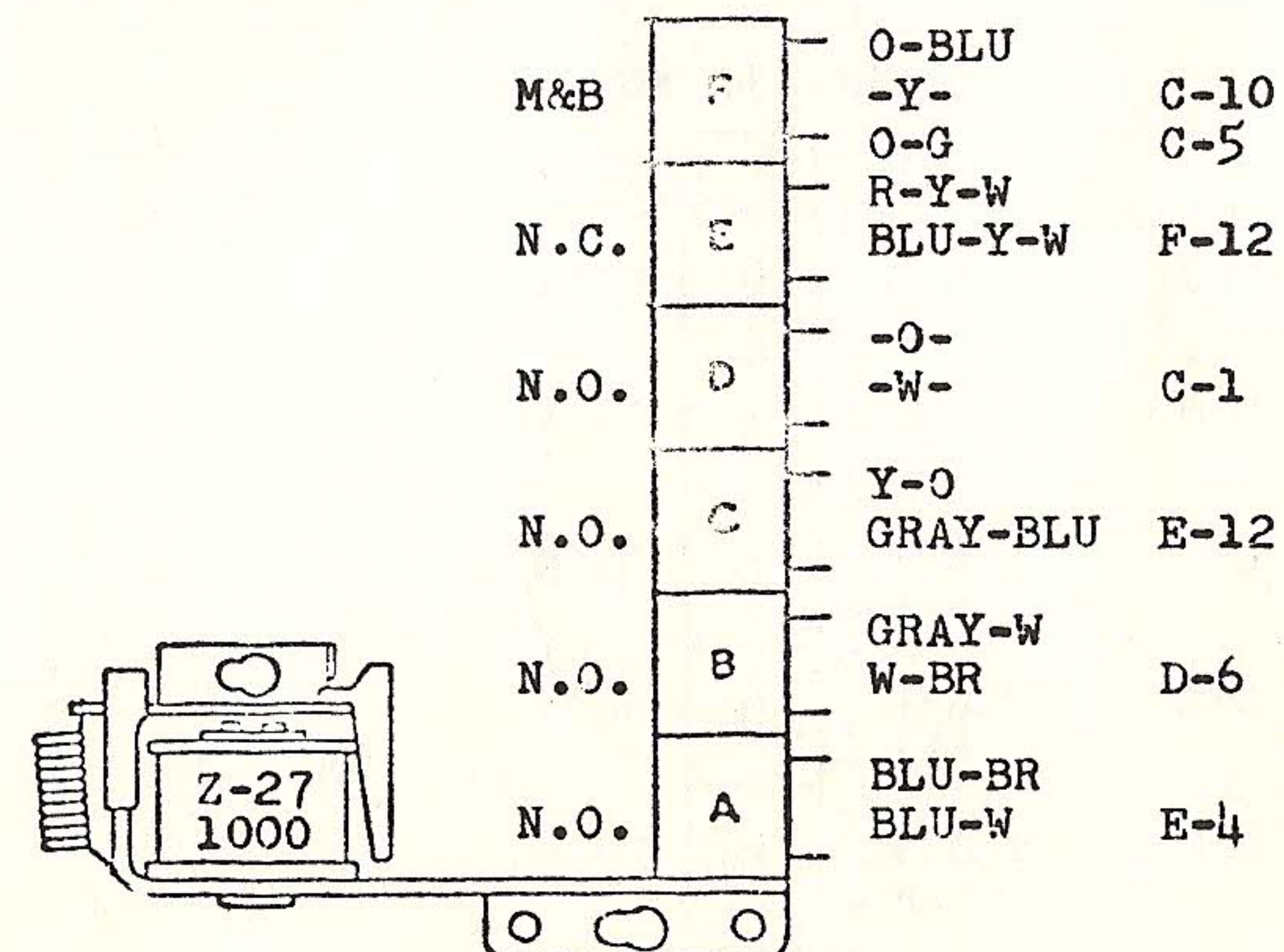
IN SERIES WITH SWITCH D ON EXTRA BALL RELAY.

IN SERIES WITH SWITCH C ON OUTHOLE RELAY.

IN HOLD CIRCUIT TO THIS RELAY, THRU SWITCH ON OUTHOLE RELAY.

RESET

IS ENERGIZED BY COIN RELAY.



OPENS IN HOLD CIRCUIT TO 100,000 RELAY AND CLOSES TO RUN SCORE MOTOR.

OPENS CIRCUITS TO PLAYFIELD SWITCHES.

ENERGIZES "1 TO 10 RELAY BANK RESET COIL," THRU SCORE MOTOR CAM SWITCH 1A. (115 VOLTS).

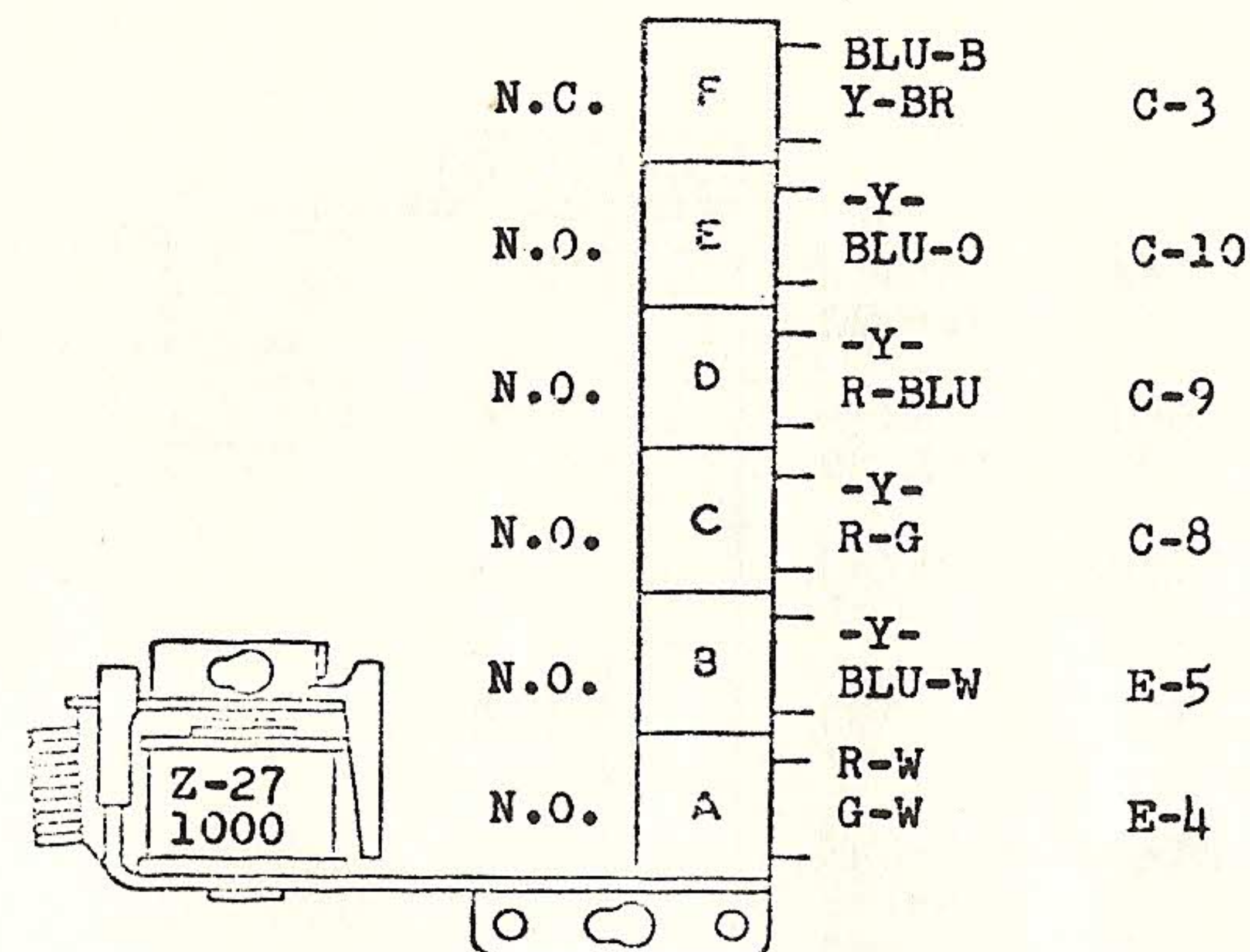
ENERGIZES BONUS RELAY, THRU SWITCH ON "1 TO 10 SET-UP RELAY.

PULSES SCORE RESET RELAY, THRU IMPULSE CAM SWITCH B.

IN HOLD CIRCUIT TO THIS RELAY.

COIN

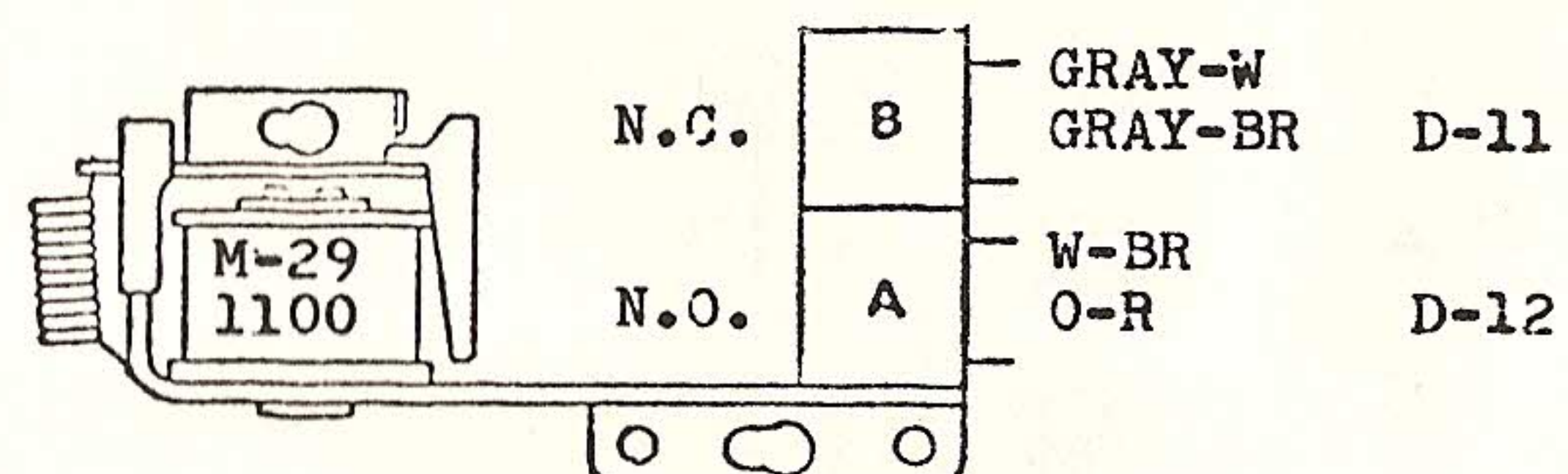
IS ENERGIZED BY 10¢ COIN SWITCH, IF 10¢ ADJUSTMENT IS IN "1 PLAY" POSITION--- ALSO BY CREDIT BUTTON, THRU ZERO SWITCH ON CREDIT UNIT.



LOCATED ON PLAYFIELD

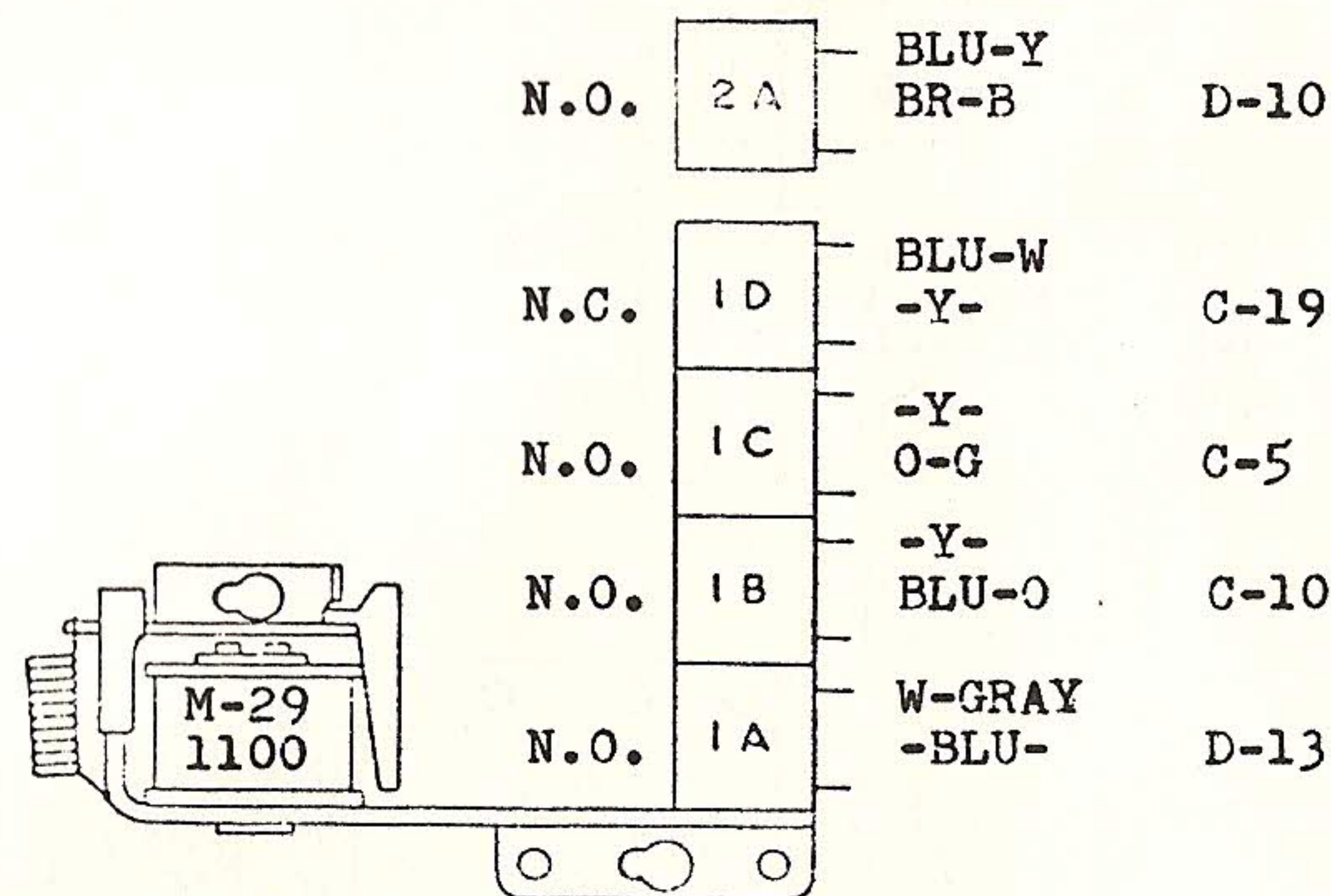
1 TO 10 HOLD

IS ENERGIZED BY BONUS RELAY, AT SCORE MOTOR CAM SWITCH 5A.



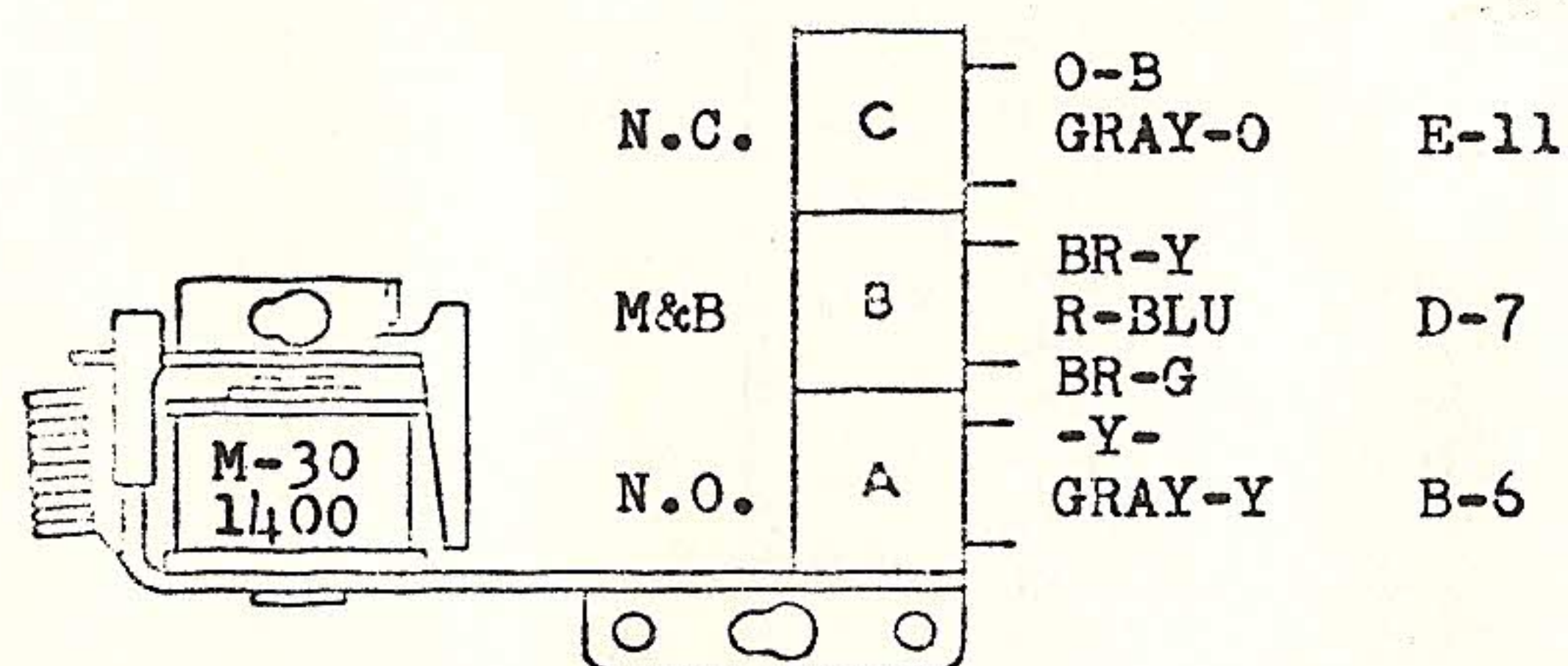
TARGET

IS ENERGIZED BY SERIES CIRCUIT THRU A-B-C AND D TARGET SWITCHES.



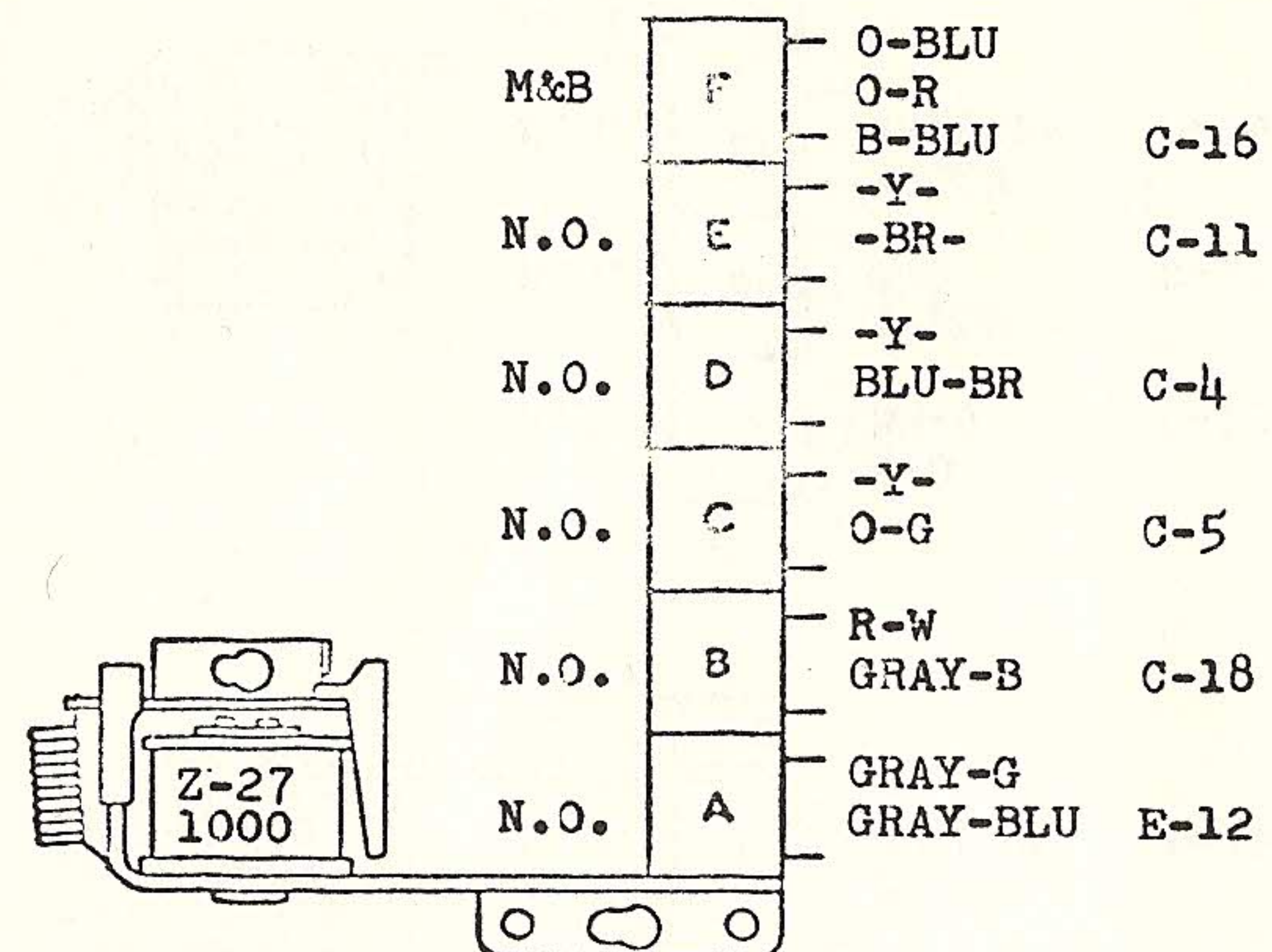
SPECIAL

IS ENERGIZED BY WIPER ON EJECT ADVANCE DRUM UNIT (5TH POSITION), THRU SWITCH ON BONUS RELAY AND 1 TO 10 SET-UP RELAY.



BONUS

IS ENERGIZED BY OUTHOLE SWITCH, THRU SWITCH ON TILT RELAY AND 1 TO 10 SET-UP RELAY.



OPENS IN CIRCUIT TO 'BLUE STAR' AND 'SPECIAL' RELAYS, AND CLOSES IN CIRCUITS TO NOS. 1-2 AND 3 STRIKE RELAYS.

IN CIRCUIT TO PULSE '1 TO 10 SET-UP' AND '1 TO 10 HOLD' RELAYS. ALSO IN SERIES WITH SWITCH C ON '1 TO 10 SET UP' RE.

IN HOLD CIRCUIT TO RESET RELAY.

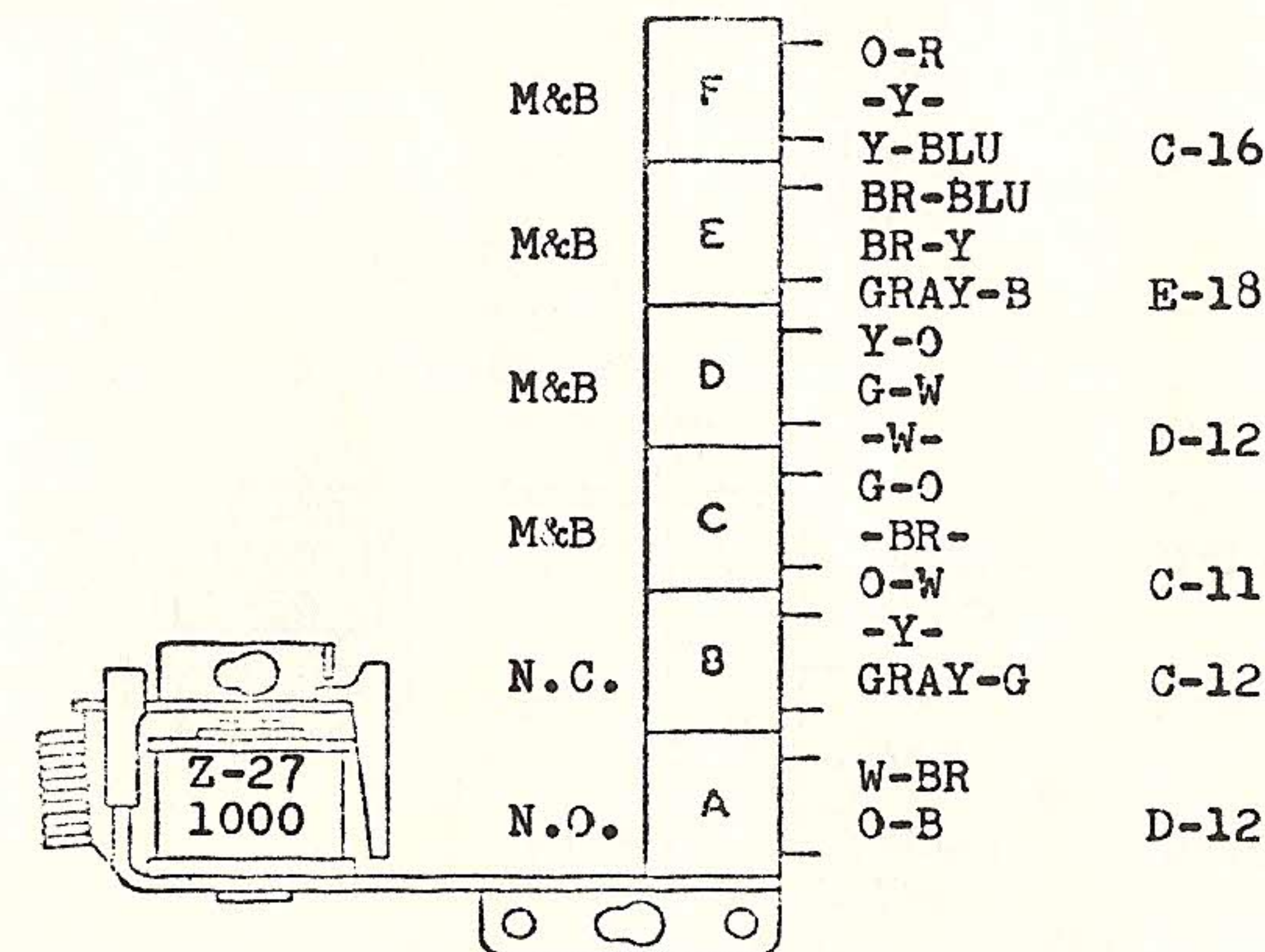
RUNS SCORE MOTOR.

IN CIRCUIT TO 1,000 POINT RELAY (WHEN COLLECTING BONUS).

IN HOLD CIRCUIT TO THIS RELAY.

1 TO 10 SET-UP

IS ENERGIZED, AT CAM SWITCH 5A, BY BONUS RELAY THRU ZERO SWITCH ON 1 TO 10 BONUS DRUM UNIT.



OPENS IN SERIES WITH SWITCH 'F' ON BONUS RELAY, AND CLOSES IN HOLD CIRCUIT TO NOS. 1, 2 AND 3 STRIKE RELAYS.

IN CIRCUIT TO 1,000 POINT RELAY (WHEN COLLECTING BONUS).

OPENS IN CIRCUIT TO ENERGIZE BONUS RELAY AND CLOSES TO ENERGIZE OUTHOLE RELAY.

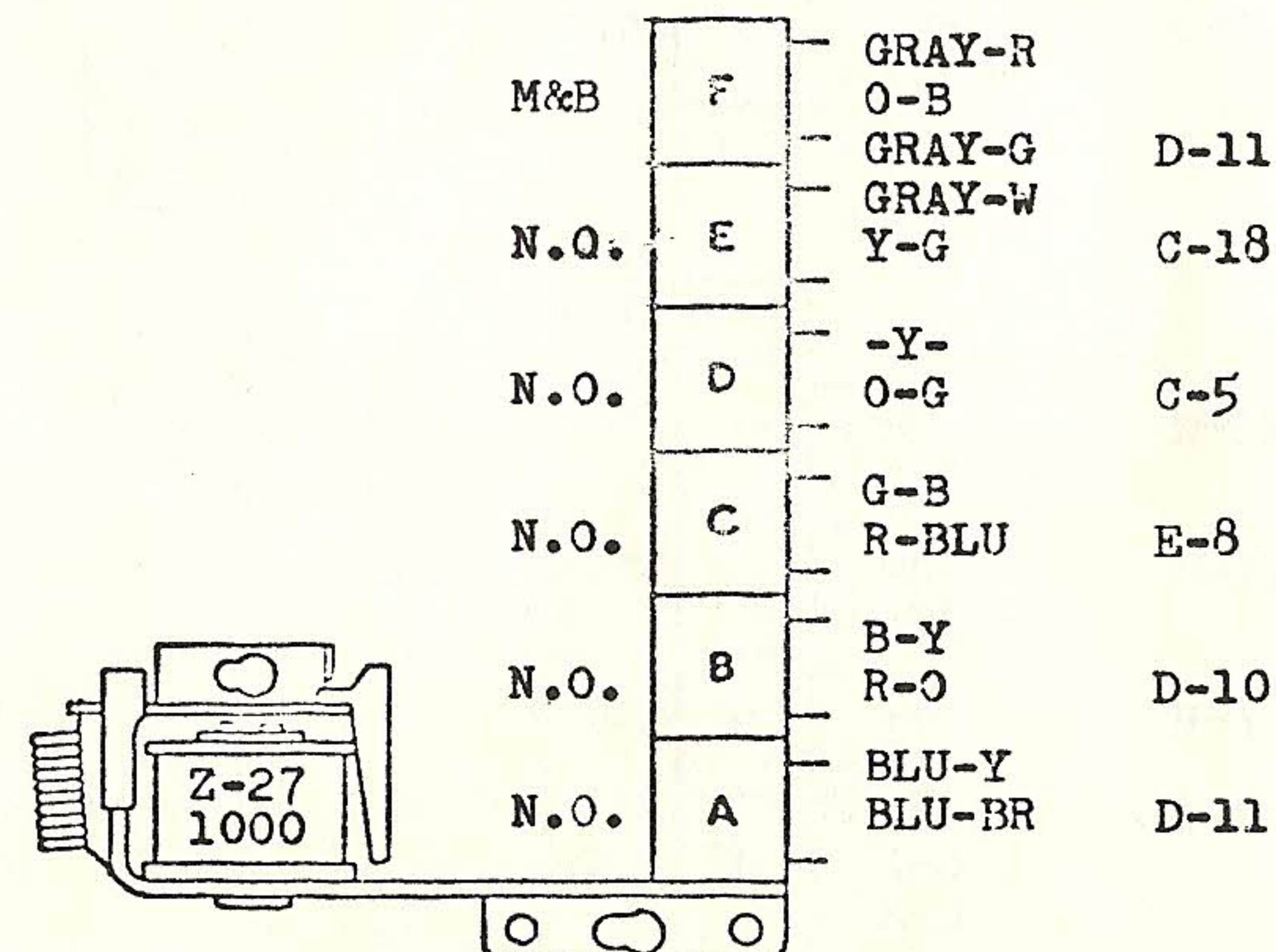
OPENS IN CIRCUIT TO PULSE EJECT ADVANCE UNIT AND 1 TO 10 BONUS UNIT AND CLOSES TO PULSE STRIKE BONUS UNIT RESET COIL.

IN HOLD CIRCUIT TO BONUS RELAY.

IN HOLD CIRCUIT TO THIS RELAY.

EJECT

IS ENERGIZED BY EJECT POCKET SWITCH, AT INDEX CAM SWITCH B.



IN CIRCUIT TO ENERGIZE EJECT ADVANCE UNIT COIL.

IN SERIES WITH SWITCH 'D' ON GREEN STAR RELAY.

RUNS SCORE MOTOR.

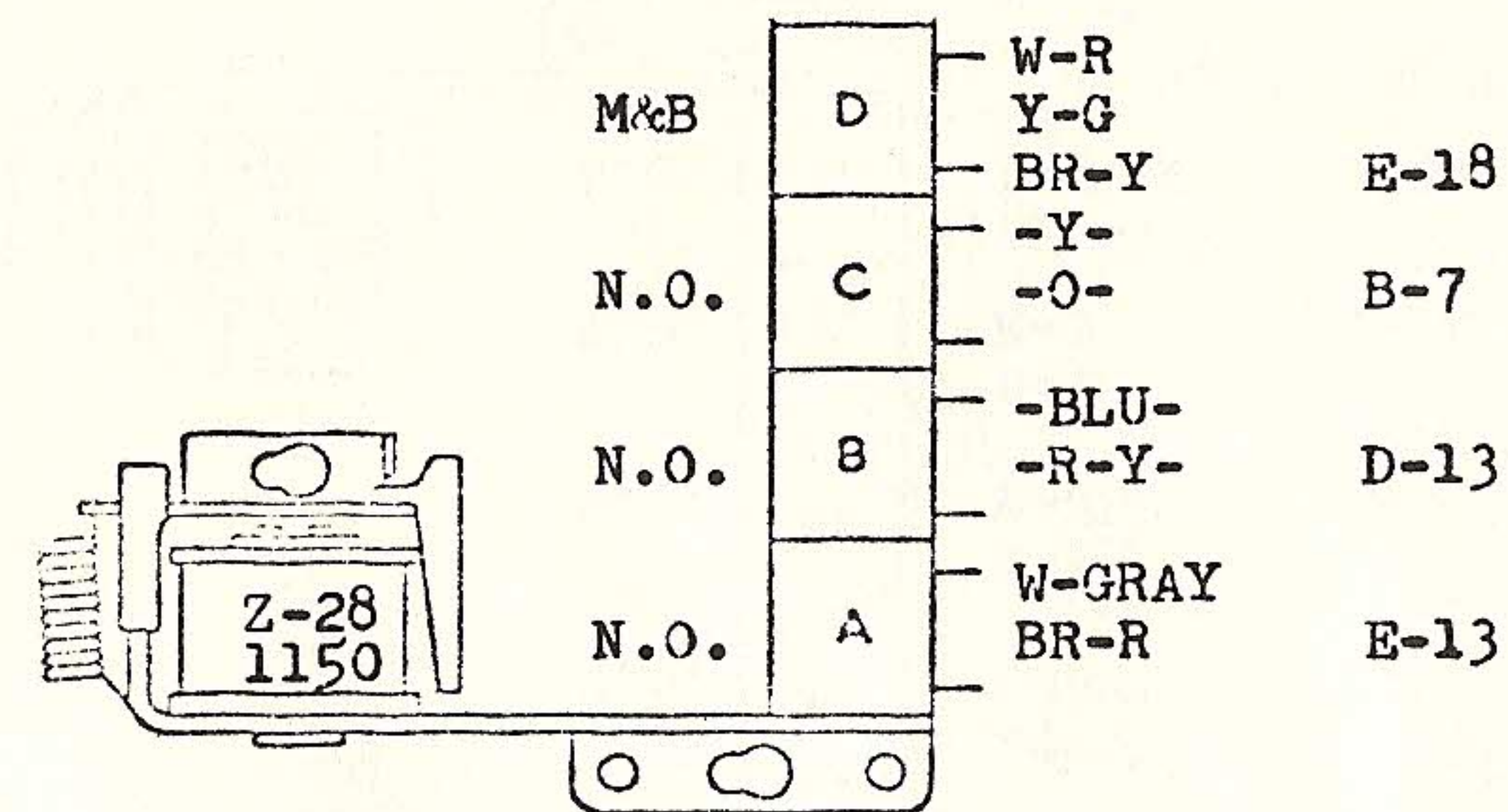
IN CIRCUIT TO "PLAY ADJUSTMENT JACK", THRU BALL COUNT UNIT DISC.

PULSES EJECT COIL, THRU SCORE MOTOR CAM SWITCH 4C.

IN HOLD CIRCUIT TO THIS RELAY.

GREEN STAR

IS ENERGIZED BY TARGET RELAY AT SCORE MOTOR CAM SWITCH 4B.



OPENS IN CIRCUIT TO 100 POINT RELAY AND CLOSSES TO 1,000 POINT RELAY.

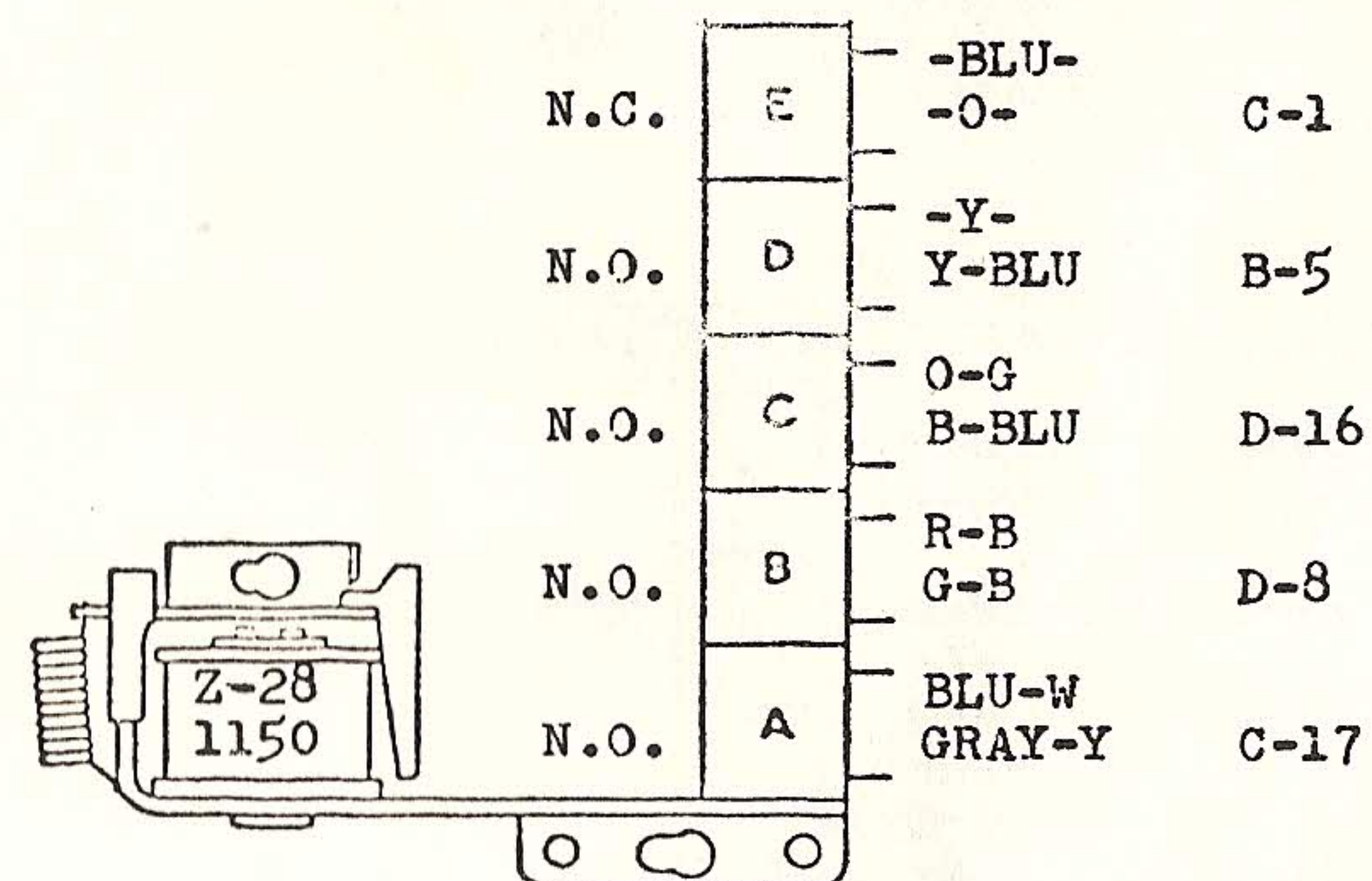
TO (3) ROLLOVER BUTTON LITES AND LEFT & RIGHT BOTTOM INSIDE ROLLOVER LITES.

IN CIRCUIT TO "PLAY ADJUSTMENT JACK", THRU SWITCH ON TARGET RELAY.

IN HOLD CIRCUIT TO THIS RELAY.

BLUE STAR

IS ENERGIZED BY WIPER ON EJECT ADVANCE DRUM UNIT (3RD POSITION), THRU SWITCH ON BONUS RELAY AND 1 TO 10 SET-UP RELAY.



IN CIRCUIT TO "1 TO 10 RELAY BANK RESET COIL". (115 VOLTS).

TO BLUE STAR LITE AND NO. 3 EJECT ADVANCE LITE.

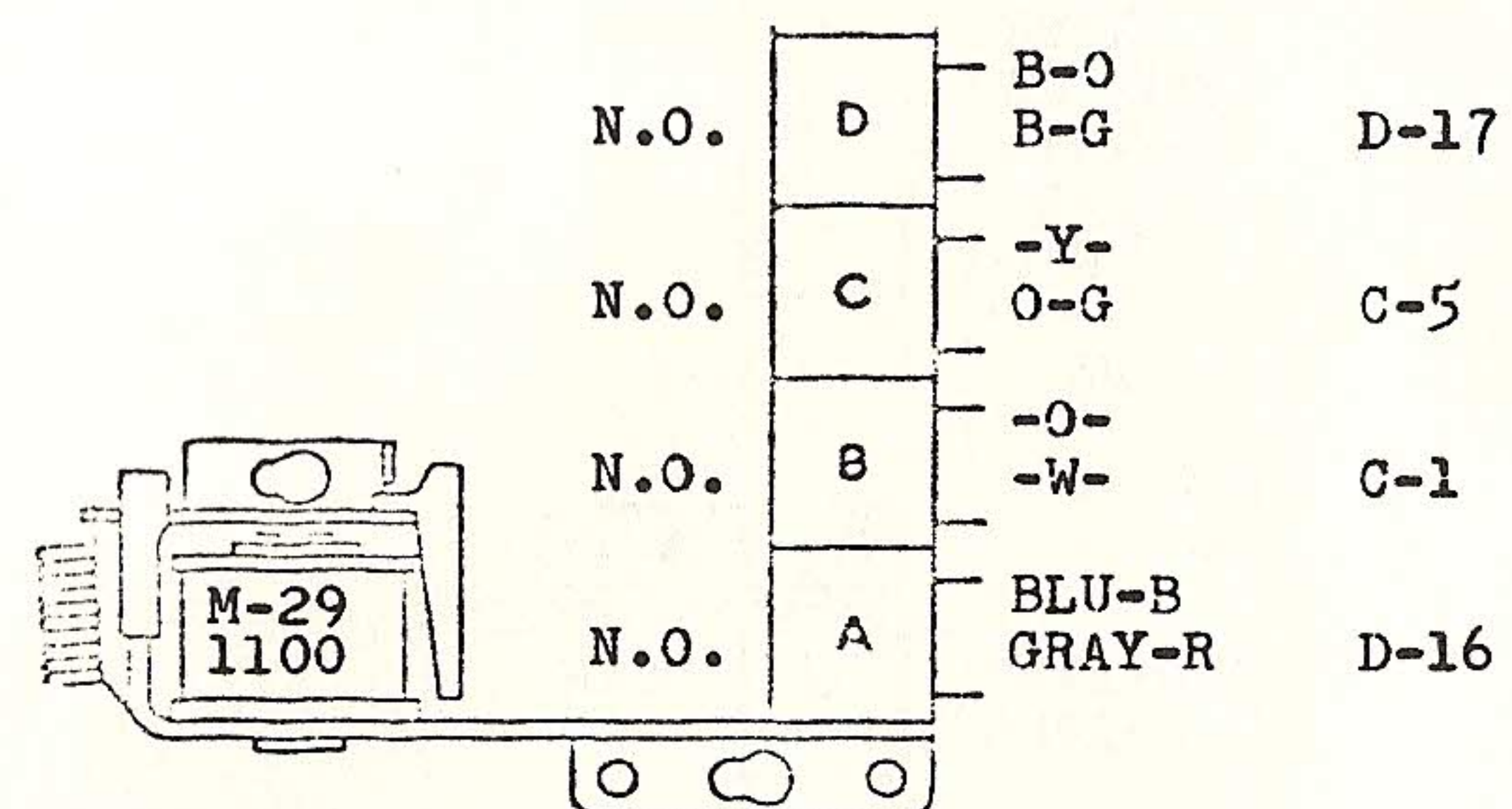
IN CIRCUIT TO ENERGIZE NO. 1, 2 OR 3 STRIKE RELAY, THRU STRIKE BONUS UNIT DISC.

IN SERIES WITH SWITCH C ON EJECT RELAY.

HOLD CIRCUIT TO THIS RELAY, THRU SWITCH ON BALL INDEX RELAY.

1 TO 10 RESET

IS ENERGIZED BY SERIES CIRCUIT FROM NO. 1 RELAY THRU NO. 10 RELAY (ALL TEN RELAYS LOCATED ON RELAY BANK).



PULSES STRIKE BONUS UNIT S.U. COIL, THRU IMPULSE CAM SWITCH A.

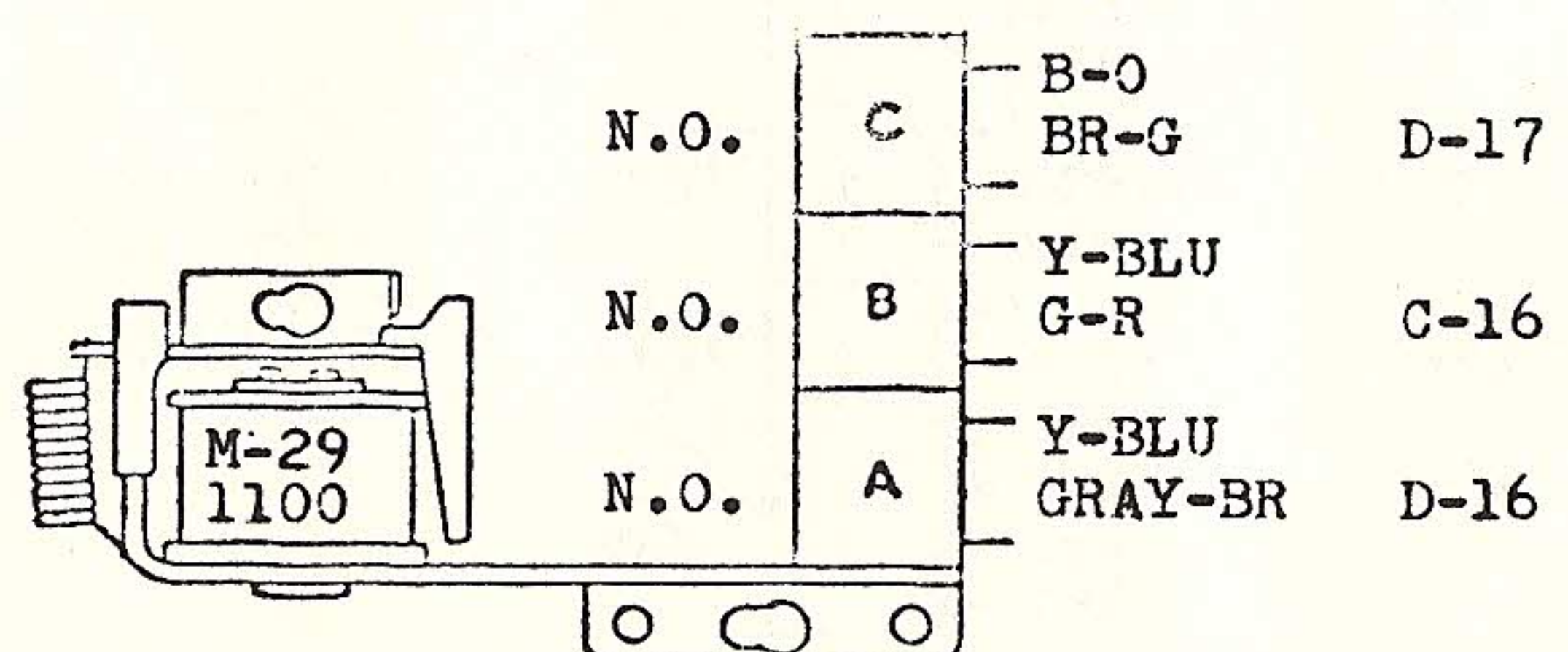
RUNS SCORE MOTOR.

ENERGIZES RELAY BANK RESET COIL, THRU CAM SWITCH 1A. (115 VOLTS).

IN HOLD CIRCUIT TO THIS RELAY.

NO. 1 STRIKE

IS ENERGIZED BY WIPER ON STRIKE BONUS UNIT (2ND POSITION) THRU SWITCH ON BLUE STAR RELAY, BONUS RELAY AND 1 TO 10 SET-UP RELAY.



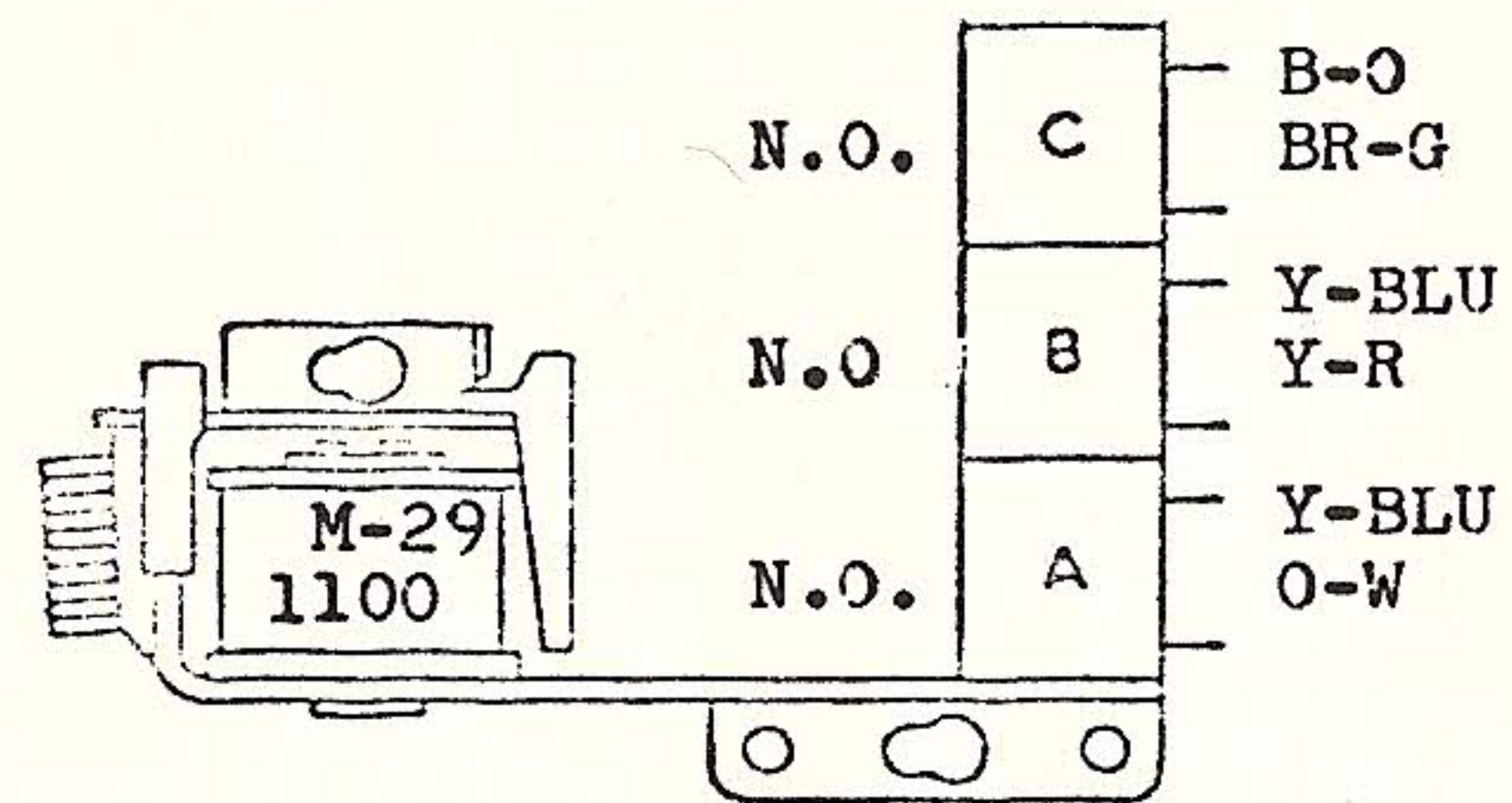
PULSES STRIKE BONUS UNIT S.U. COIL, THRU SWITCH ON OUTHOLE RELAY.

IN SERIES WITH SWITCH A ON THIS RELAY.

IN HOLD CIRCUIT TO THIS RELAY.

NO. 2 STRIKE

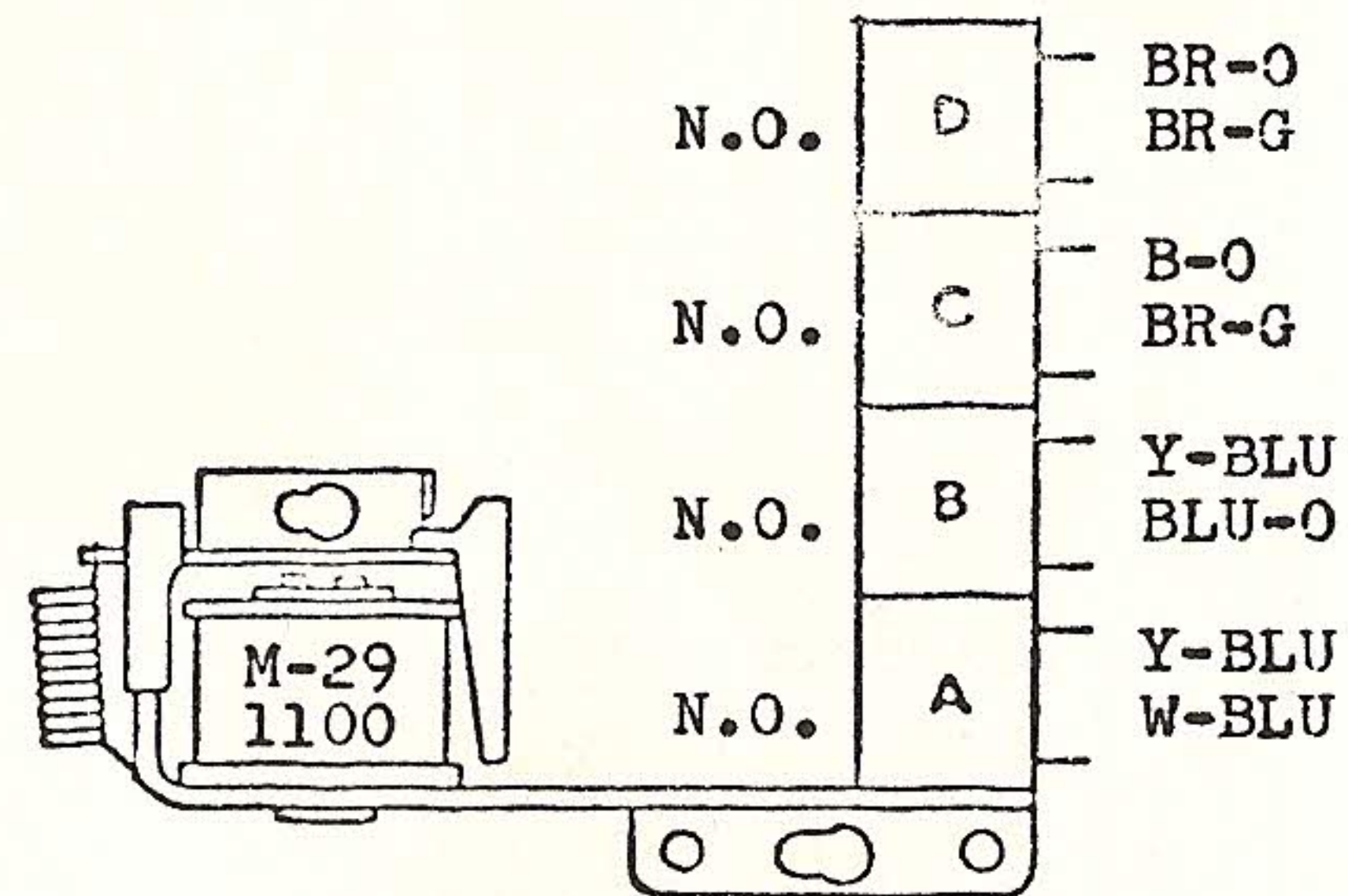
IS ENERGIZED BY WIPER ON STRIKE BONUS UNIT (4TH POSITION), THRU SAME SWITCHES THAT ENERGIZE NO. 1 STRIKE RELAY.



- | | | |
|------|--------------|---|
| D-17 | B-O
BR-G | PULSES STRIKE BONUS UNIT S.U. COIL, THRU SWITCH ON OUTHOLE RELAY. |
| C-16 | Y-BLU
Y-R | IN SERIES WITH SWITCH A ON THIS RELAY. |
| D-16 | Y-BLU
O-W | IN HOLD CIRCUIT TO THIS RELAY. |

NO. 3 STRIKE

IS ENERGIZED BY WIPER ON STRIKE BONUS UNIT (6TH POSITION), THRU SAME SWITCHES THAT ENERGIZE NO. 1 STRIKE RELAY.

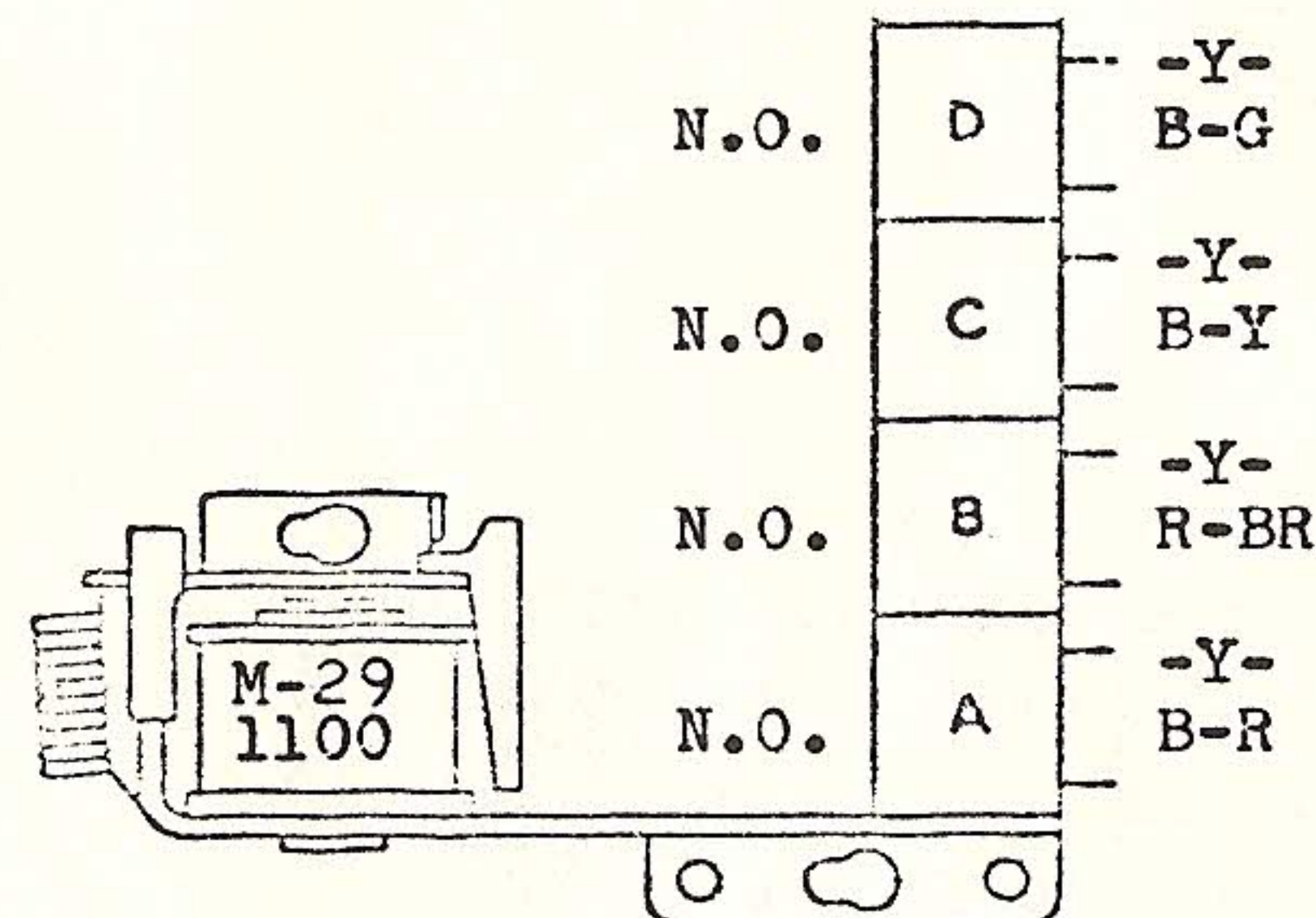


LOCATED IN BACK-BOX

- | | | |
|------|----------------|---|
| D-17 | BR-O
BR-G | PULSES STRIKE BONUS UNIT S.U. COIL, THRU CAM SWITCH 5C. |
| D-17 | B-O
BR-G | PULSES STRIKE BONUS UNIT S.U. COIL, THRU SWITCH ON OUTHOLE RELAY. |
| C-16 | Y-BLU
BLU-O | IN SERIES WITH SWITCH A ON THIS RELAY. |
| D-16 | Y-BLU
W-BLU | IN HOLD CIRCUIT TO THE RELAY. |

SCORE RESET

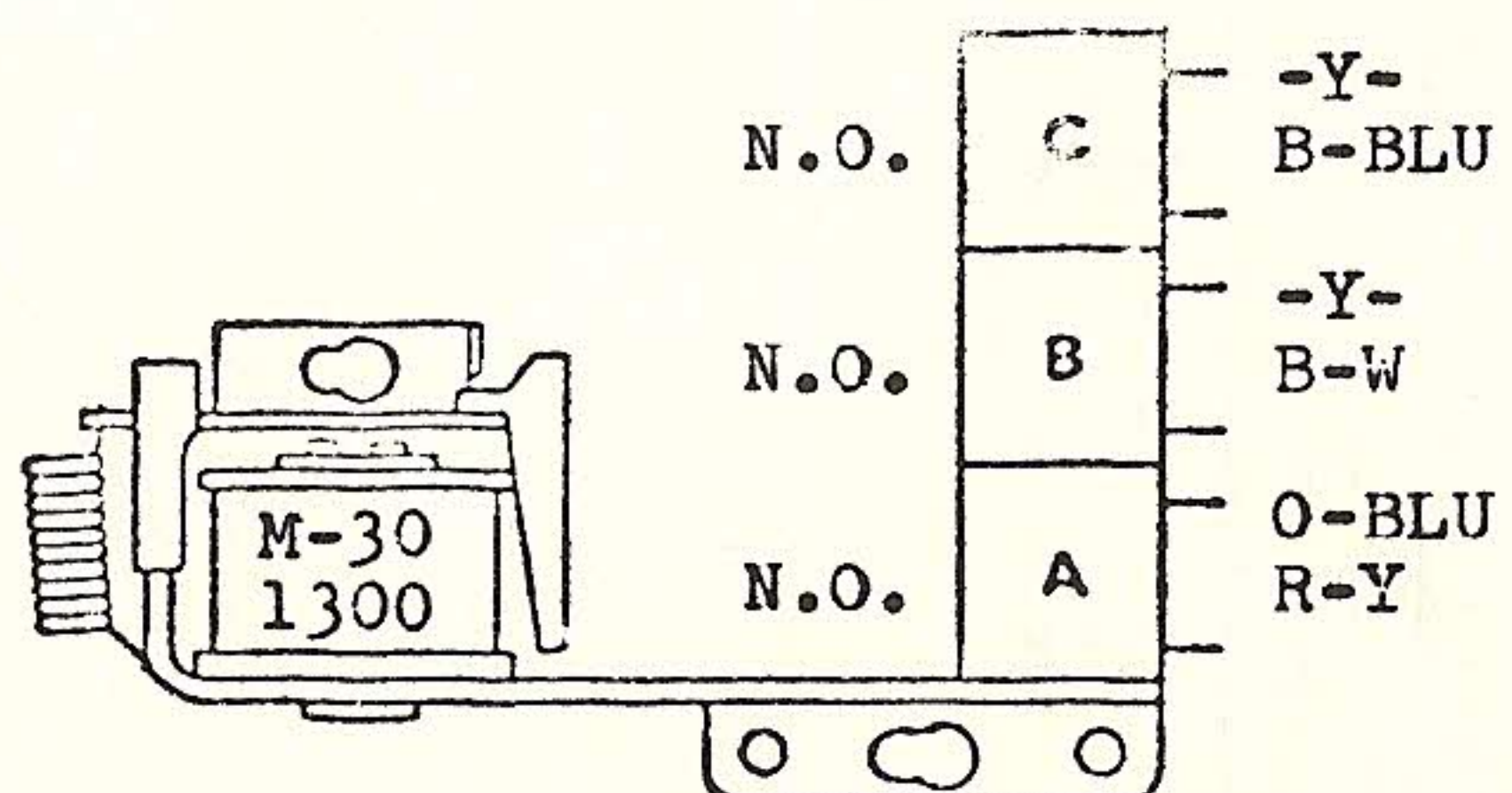
IS PULSED BY IMPULSE CAM SWITCH B, THRU SWITCH ON RESET RELAY.



- | | | |
|-----|-------------|---|
| D-6 | -Y-
B-G | PULSES 10,000 POINT DRUM UNIT, THRU ZERO SWITCH ON THAT UNIT. |
| D-6 | -Y-
B-Y | PULSES 1,000 POINT DRUM UNIT, THRU ZERO SWITCH ON THAT UNIT. |
| D-6 | -Y-
R-BR | PULSES 100 POINT DRUM UNIT, THRU ZERO SWITCH ON THAT UNIT. |
| D-6 | -Y-
B-R | PULSES 10 POINT DRUM UNIT, THRU ZERO SWITCH ON THAT UNIT. |

100,000

IS ENERGIZED BY 9TH POSITION SWITCH ON 10,000 POINT DRUM UNIT, THRU END-OF-STROKE SWITCH ON THAT SAME UNIT, AND SWITCH F ON RESET RELAY.

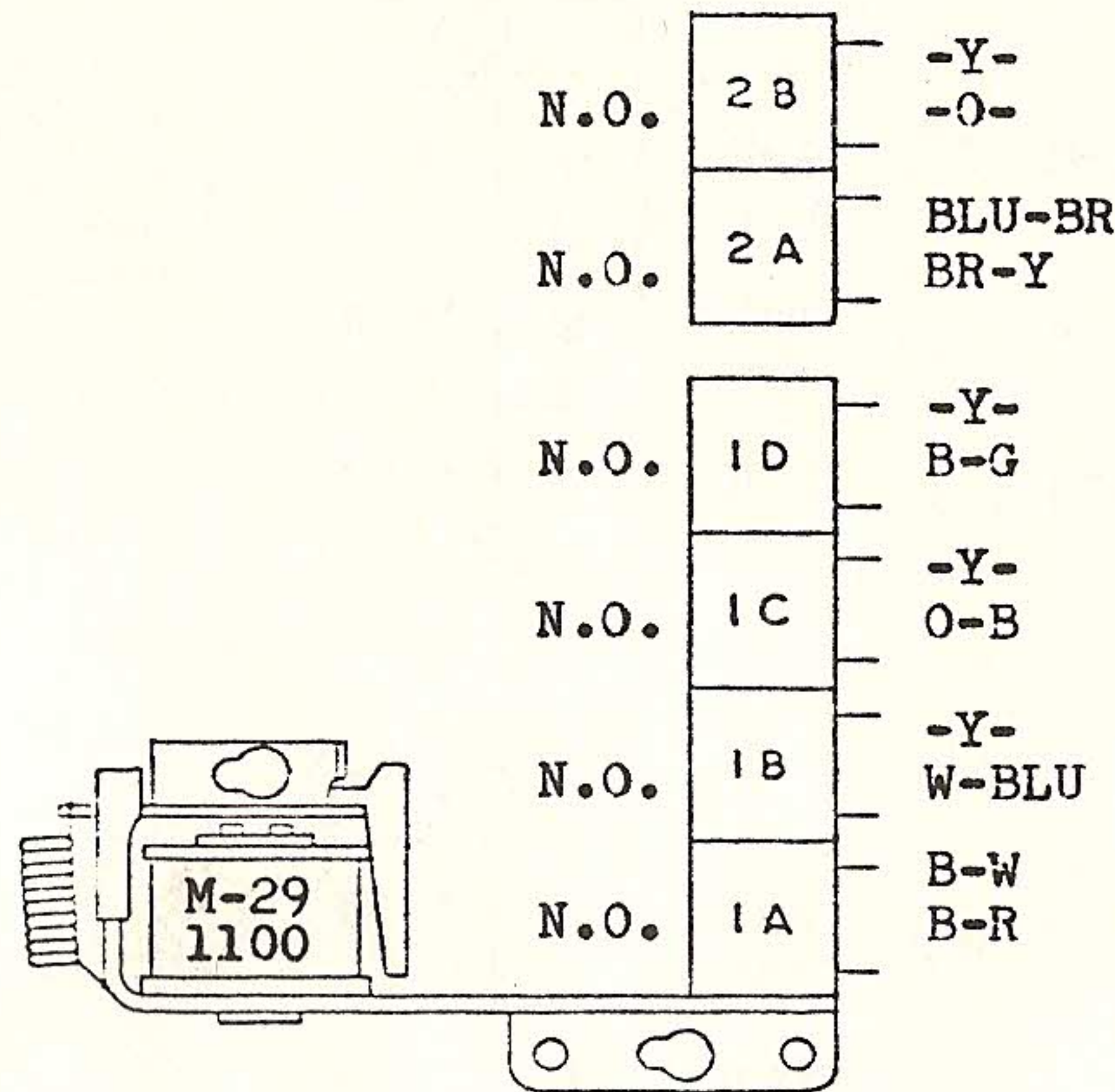


- | | | |
|------|--------------|--|
| B-2 | -Y-
B-BLU | TO 100,000 LITE. |
| C-8 | -Y-
B-W | IN HI-SCORE CIRCUIT TO "PLAY ADJUSTMENT JACK". |
| D-10 | O-BLU
R-Y | IN HOLD CIRCUIT TO THIS RELAY, THRU SWITCH ON RESET RELAY. |

1000 POINT

IS PULSED BY:

1. LEFT OUTSIDE ROLLOVER SWITCH, THRU SW. ON SPECIAL RELAY.
2. RIGHT OUTSIDE ROLLOVER SWITCH.
3. A-B-C OR D TARGET SWITCH.
4. EJECT RELAY, THRU SWITCH ON GREEN STAR RELAY.
5. BONUS RELAY, THRU SWITCH ON 1 TO 10 SET-UP RELAY (WHEN COLLECTING BONUS).

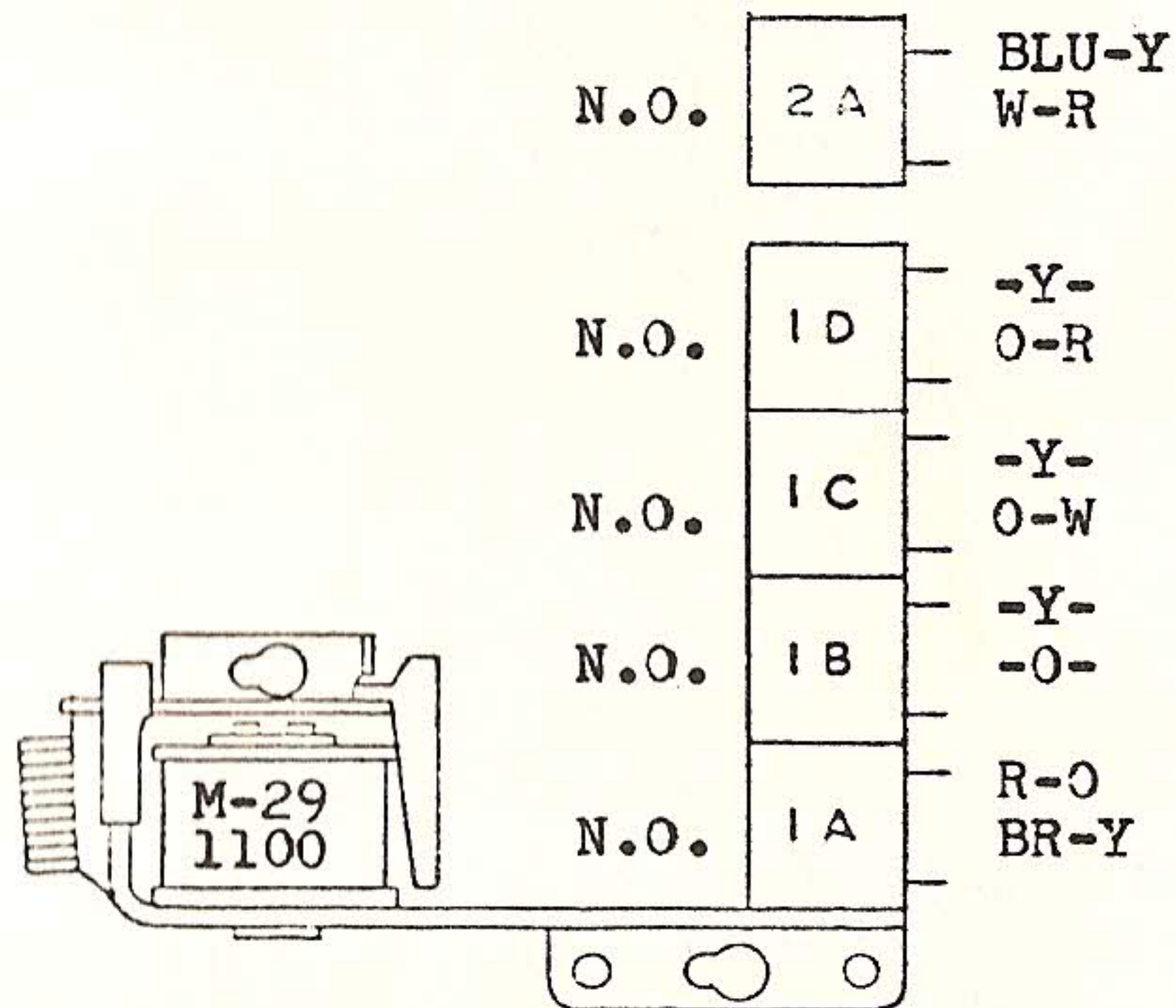


- ENERGIZES BALL INDEX RELAY.
- IN HOLD CIRCUIT TO THIS RELAY.
- PULSES LARGE CHIME COIL.
- PULSES 1,000 POINT DRUM UNIT.
- PULSES 10,000 POINT DRUM UNIT, THRU 9TH POSITION SWITCH ON 1,000 POINT DRUM UNIT.
- IN HI-SCORE CIRCUIT TO "PLAY ADJUSTMENT JACK".

100 POINT

IS PULSED BY:

1. JET BUMPER SWITCH.
2. (3) LEFT TOP ROLLOVER BUTTON SWITCHES.
3. (2) INSIDE ROLLOVER SWITCHES.
4. EJECT RELAY, THRU SWITCH ON GREEN STAR RELAY.

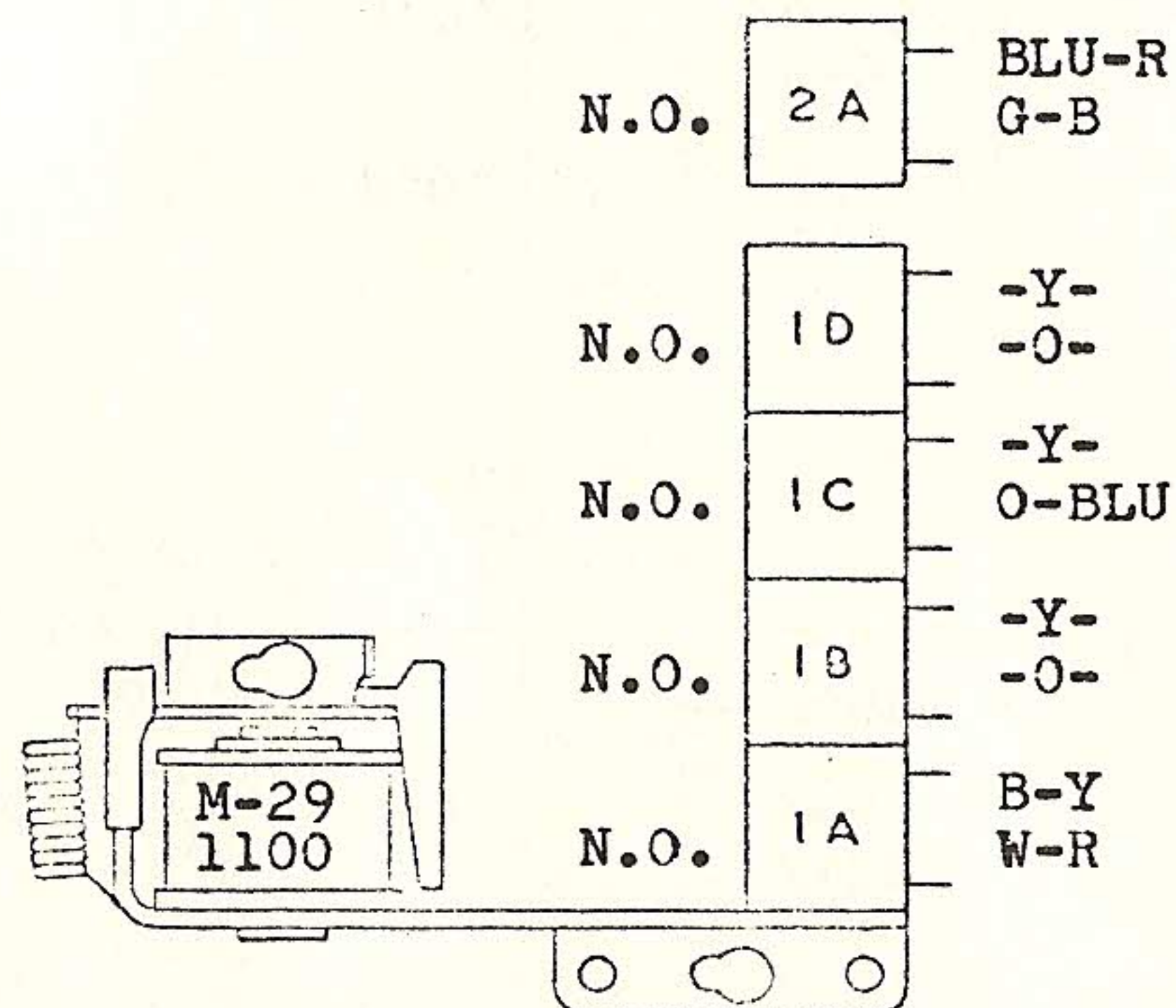


- IN HOLD CIRCUIT TO THIS RELAY.
- PULSES SMALL CHIME COIL.
- PULSES 100 POINT DRUM UNIT.
- ENERGIZES BALL INDEX RELAY.
- PULSES 1,000 POINT RELAY, THRU 9TH POSITION SWITCH ON 100 POINT DRUM UNIT.

10 POINT

IS PULSED BY:

1. LEFT AND RIGHT KICKER SWITCHES.
2. (4) STAND-UP SWITCHES.
3. ALL (10) ROLLOVER BUTTON SWITCHES.



- HOLD CIRCUIT TO THIS RELAY, THRU END-OF-STROKE SWITCH ON 10 POINT DRUM UNIT.
- PULSES MEDIUM CHIME COIL.
- PULSES 10 POINT DRUM UNIT.
- ENERGIZES BALL INDEX RELAY.
- PULSES 100 POINT RELAY, THRU 9TH POSITION SWITCH ON 10 POINT DRUM UNIT.