OPERATING INSTRUCTIONS

CONFIDENTIAL: DO NOT LEAVE INSTRUCTIONS IN GAME

Bally®

CONEY ISLAND

CONEY ISLAND

INSTALLATION AND OPERATING INSTRUCTIONS

Fasten 4 legs to cabinet with bolts and washers furnished. Place back-box in position, fasten to cabinet with bolts furnished, plug in connector cables. Plug power line into A.C. ONLY, 60 cycles, 110-115 volts. Turn on power by turning toggle switch on in bottom of cabinet (front right).

ACCESS TO MECHANISM

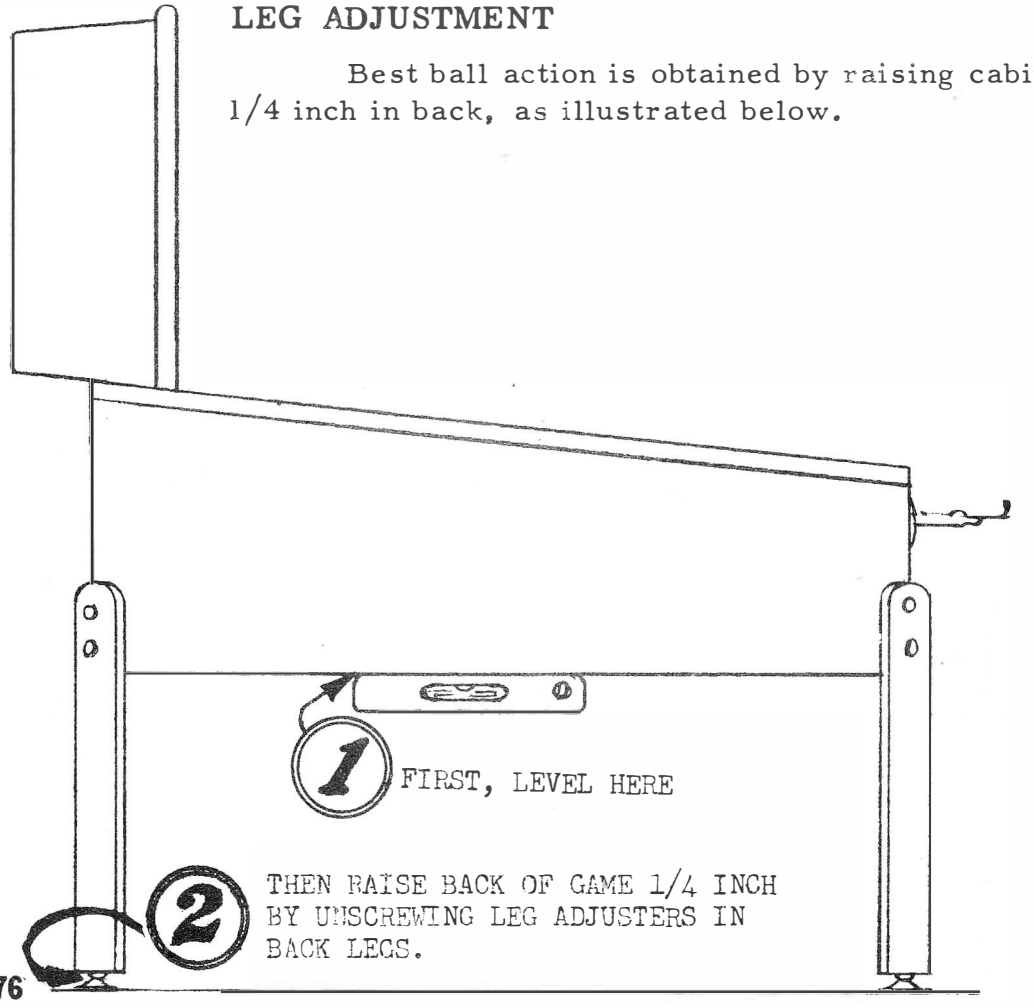
Mechanism is almost entirely in back box. Unlock and lower back door to horizontal position. Door may be lowered to vertical position if screw that holds support-link for back door is removed.

TO SERVICE LIGHT BULBS

Unlock back door and unscrew slotted bolt with red tag attached. Bolt is located in top center of back box. Remove 2 screws at top of top moulding and slide out back-glass. (NOTE: 2 screws in moulding may be omitted on location.)

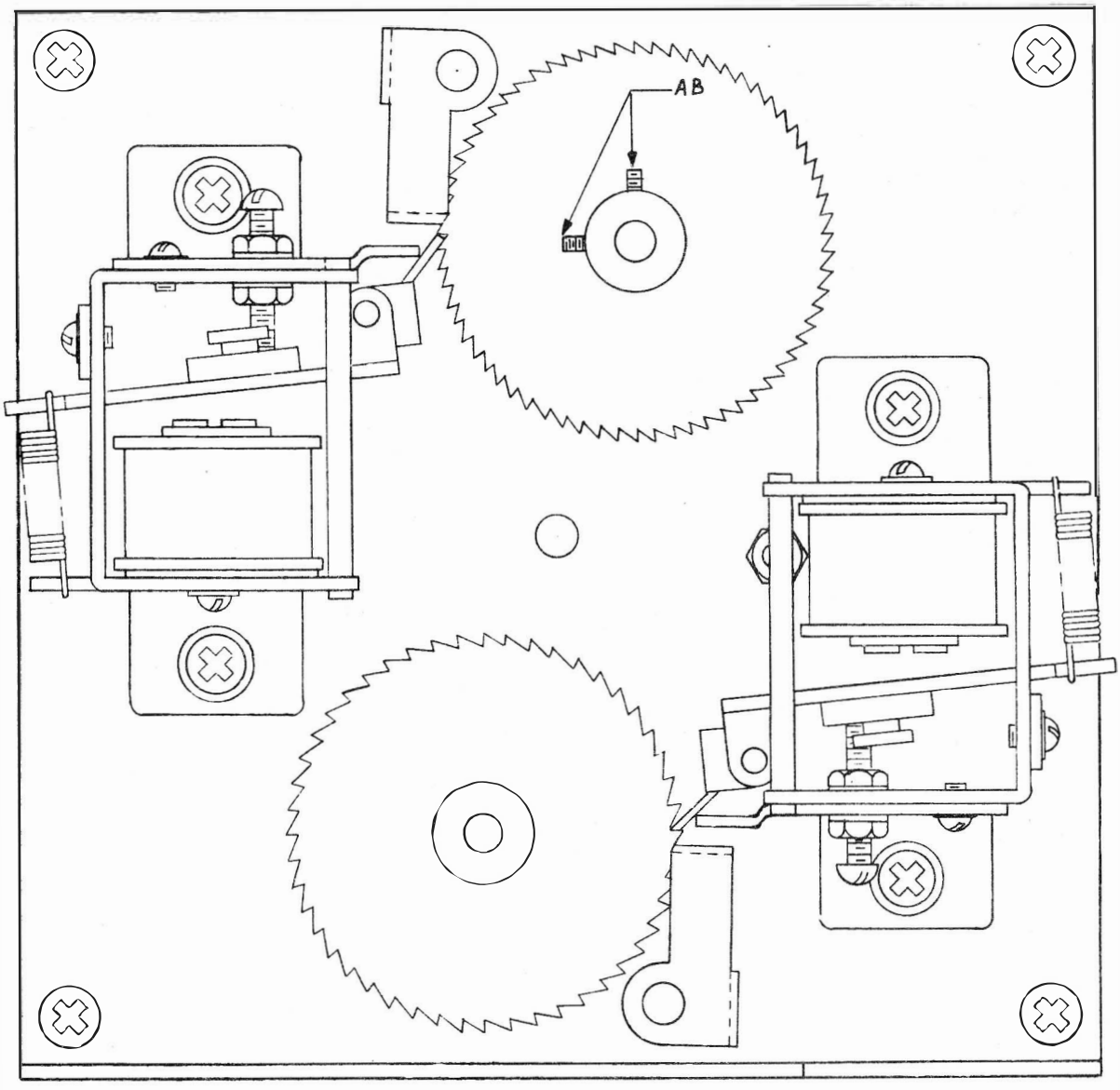
LEG ADJUSTMENT

Best ball action is obtained by raising cabinet 1/4 inch in back, as illustrated below.



GAME PROPORTIONING

PROPORTIONING of game to maintain a maximum amount of play is the function of the REFLEX UNIT which is located on the back door. Two additional ratchets are supplied if the type of play in some locations require a change. See diagram below for location of set screws (A and B) for fastening ratchets. No. 3 ratchet will liberalize EXTRA BALL LIGHTS.

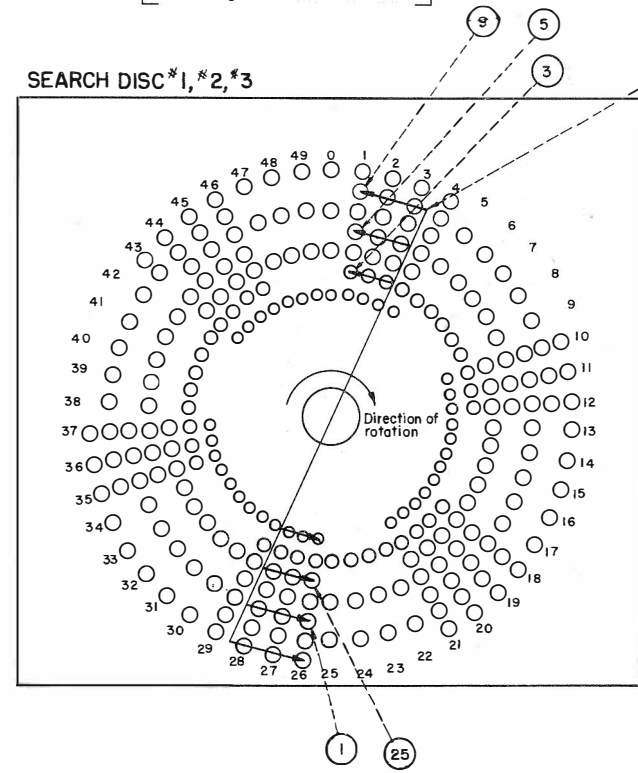


SEARCH DISC #1, #2, #3

12 Winning Combinations for Each Section

Position of wiper on disc	Row 3	Row 2	Row 1	Row 4	Row 5	
1	5	1	9	25	3	SECTION #1
2	8	22	10	19	7	
3	6	18	16	11	17	
4	24	21	14	20	13	
5	12	23	2	4	15	
6	5	8	6	24	12	
7	1	22	18	21	23	
8	9	10	16	14	2	
9	25	19	11	20	4	
10	3	7	17	13	15	
11	5	22	16	20	15	
12	3	19	16	21	12	
13	—	—	—	—	—	5 Blank Positions
14	—	—	—	—	—	
15	—	—	—	—	—	
16	—	—	—	—	—	
17	—	—	—	—	—	
18	9	24	16	4	6	SECTION #2
19	13	19	14	20	25	
20	2	18	15	12	17	
21	1	22	11	21	8	
22	10	7	5	23	3	
23	9	13	2	1	10	
24	24	19	18	22	7	
25	16	14	15	11	5	
26	4	20	12	21	23	
27	6	25	17	8	3	
28	9	19	15	21	3	
29	6	20	15	22	10	
30	—	—	—	—	—	5 Blank Positions
31	—	—	—	—	—	
32	—	—	—	—	—	
33	—	—	—	—	—	
34	—	—	—	—	—	
35	3	7	10	4	9	SECTION #3
36	24	21	18	22	8	
37	15	14	17	11	2	
38	13	20	12	19	23	
39	6	25	16	1	5	
40	3	24	15	13	6	
41	7	21	14	20	25	
42	10	18	17	12	16	
43	4	22	11	19	1	
44	9	8	2	23	5	
45	3	21	17	19	5	
46	9	22	17	20	6	
47	—	—	—	—	—	4 Blank Positions
48	—	—	—	—	—	
49	—	—	—	—	—	
50	—	—	—	—	—	

Wiper arm shown in #1 position contacting Nos 5-1-9-25-3



NOTES

CONEY ISLAND

RELAY CHART

SWITCHES ARE NUMBERED LEFT TO RIGHT LOOKING AT LUGS.

CODE

N.C. ..... NORMALLY CLOSED
N.O. ..... NORMALLY OPEN
M.B.B. ..... MAKE BEFORE BREAK
S.P.D.T. ...SINGLE POLE DOUBLE THROW

COIL NO.	SWITCH NO.		SWITCH CODE	WIRE NO.	WIRE COLORS	FUNCTION
C1		Search Relay #1		30 20	Yellow Blue	Energizes when search disc wipers contact any number that appears 1st in a given horizontal, vertical or diagonal line of any card.
	Sw. 1	Search Relay #1	N.O.	98-2 85-2	Gray-Black Black-White	In "five in line" replay circuit.
	Sw. 2	Search Relay #1	N.O.	53-2 85-2	White-Yellow Black-White	In "four in line" replay circuit.
	Sw. 3	Search Relay #1	N.O.	75-2 52-2	Orange-White White-Blue	In "three in line" replay circuit.
C2		Search Relay #2		31 20	Yellow-Red Blue	Energizes when search disc wipers contact any number that appears 2nd in a given horizontal, vertical or diagonal line of any card.
	Sw. 4	Search Relay #2	N.O.	74-2 75-2	Orange-Green Orange-White	In "three in line" replay circuit.
	Sw. 5	Search Relay #2	N.O.	74-2 83-2	Orange-Green Black-Yellow	In "four in line" replay circuit.
C3		Search Relay #3		36 20	Yellow-Brown Blue	Energizes when search disc wipers contact any number that appears 3rd in a given horizontal, vertical or diagonal line of any card.
	Sw. 6	Search Relay #3	N.O.	56 74-2	White-Brown Orange-Green	In series with all other search relay switches. Feeds 3, 4 and 5 in line winners.
C4		Search Relay #4		38 20	Yellow-Black Blue	Energizes when search disc wipers contact any number that appears 4th in a given horizontal, vertical or diagonal line of any card.
	Sw. 7	Search Relay #4	N.O.	83-2 85-2	Black-Yellow Black-White	In "four in line" and "five in line" replay circuit.
	Sw. 8	Search Relay #4	N.O.	75-2 52-2	Orange-White White-Blue	In "three in line" replay circuit.
	Sw. 9	Search Relay #4	N.O.	74-2 81-2	Orange-Green Black-Red	In "three in line" replay circuit.
C5		Search Relay #5		40 20	Green Blue	Energizes when search disc wipers contact any number that appears 5th in a given horizontal, vertical or diagonal line of any card.
	Sw. 10	Search Relay #5	N.O.	85-2 53-2	Black-White White-Yellow	In "four in line" replay circuit.
	Sw. 11	Search Relay #5	N.O.	81-2 52-2	Black-Red White-Blue	In "three in line" replay circuit.
	Sw. 12	Search Relay #5	N.O.	98-2 57-2	Gray-Black White-Orange	In "five in line" replay circuit.
C6		Replay Reset Relay		45 70	Green-White Orange	Energizes when replay button under cabinet is operated or when anti-cheat relay drops out.
	Sw. 13	Replay Reset Relay	N.C.	57 41-2	White-Orange Green-Red	In start relay circuit.
	Sw. 14	Replay Reset Relay	S.P.D.T.	63 91 83	Brown-Yellow Gray-Red Black-Yellow	Transfers circuit from replay unit to replay meter during replay cancel.
	Sw. 15	Replay Reset Relay	N.O.	45 74	Green-White Orange-Green	Lock-in switch for replay reset relay.
	Sw. 16	Replay Reset Relay	N.O.	10 20	Red (Plastic) Blue (Plastic)	Operates 115 volt control unit motor.
C7		Anti-Cheat Relay		51 70	White-Red Orange	Protects 6 volt and 17 volt circuit from "plug" pulling.
	Sw. 17	Anti-Cheat Relay	N.C.	45 74	Green-White Orange-Green	Pulls replay reset relay in if anti-cheat relay drops out.
	Sw. 18	Anti-Cheat Relay	N.O.	50 51	White White-Red	Lock-in switch for anti-cheat relay.
	Sw. 19	Anti-Cheat Relay	N.O.	14 15	Red-Green Red-White	Breaks 17 volt circuit.
	Sw. 20	Anti-Cheat Relay	N.O.	81 90-5	Black-Red Gray	Breaks 6 volt circuit.
C8		Start Relay		45-5 70	Green-White Orange	Energizes when coin switch or replay button is actuated.
	Sw. 21	Start Relay	N.C.	93-5 91-5	Gray-Yellow Gray-Red	Breaks coin lockout coil when start relay is energized.
	Sw. 22	Start Relay	N.C.	15-5 18-5	Red-White Red-Black	Opens circuit to extra ball relay when start relay is energized.
	Sw. 23	Start Relay	N.O.	45-5 71	Green-White Orange-Red	Lock-in switch for start relay.
	Sw. 24	Start Relay	N.O.	78 98	Orange-Black Gray-Black	Operates shutter motor.
C9		Extra Ball Play Relay		18-5 70	Red-Black Orange	Energizes when yellow button on front door is actuated for extra ball play.
	Sw. 25	Extra Ball Play Relay	S.P.D.T.	45-5 41-2 43-2	Green-White Green-Red Green-Yellow	Directs circuit from start relay to extra ball start relay.
	Sw. 26	Extra Ball Play Relay	S.P.D.T.	78 65 60	Orange-Black Brown-White Brown	Directs circuit from shutter motor to selection cam index.
	Sw. 27	Extra Ball Play Relay	N.O.	57 74	White-Orange Orange-Green	In parallel with replay button.
	Sw. 28	Extra Ball Play Relay	N.O.	98 83	Gray-Black Black-Yellow	Lights extra ball lights.
C10		Extra Ball Start Relay		43-2 70	Green-Yellow Orange	Energizes only during extra ball play.
	Sw. 29	Extra Ball Start Relay	N.O.	43-2 71	Green-Yellow Orange-Red	Lock-in switch.
	Sw. 30	Extra Ball Start Relay	N.O.	21-5 60	Blue-Red Brown	Energizes extra ball sequence cam index.
C11		Extra Ball Run Relay		54 70	White-Green Orange	Energizes when player received more than one extra ball per play.
	Sw. 31	Extra Ball Run Relay	N.O.	54 85-1	White-Green Black-White	Lock-in switch for extra ball run relay.
C12		Ball Lifter Relay		36-5 70	Yellow-Brown Orange	Controls action of ball lifter motor.
	Sw. 32	Ball Lifter Relay	N.C.	52-3 23-5	White-Blue Blue-Yellow	Breaks circuit to ball lifter motor.
	Sw. 33	Ball Lifter Relay	N.O.	31-5 36-5	Yellow-Red Yellow-Brown	Lock-in switch for ball lifter relay.

NOTES

CONEY ISLAND

CONTROL UNIT CAM CHART

NOTE: ON ANY CAM SWITCH WHERE THERE ARE MORE THAN ONE SET OF POINTS, THE SWS. ARE LETTERED FROM THE BOTTOM PAIR UP TO THE TOP.

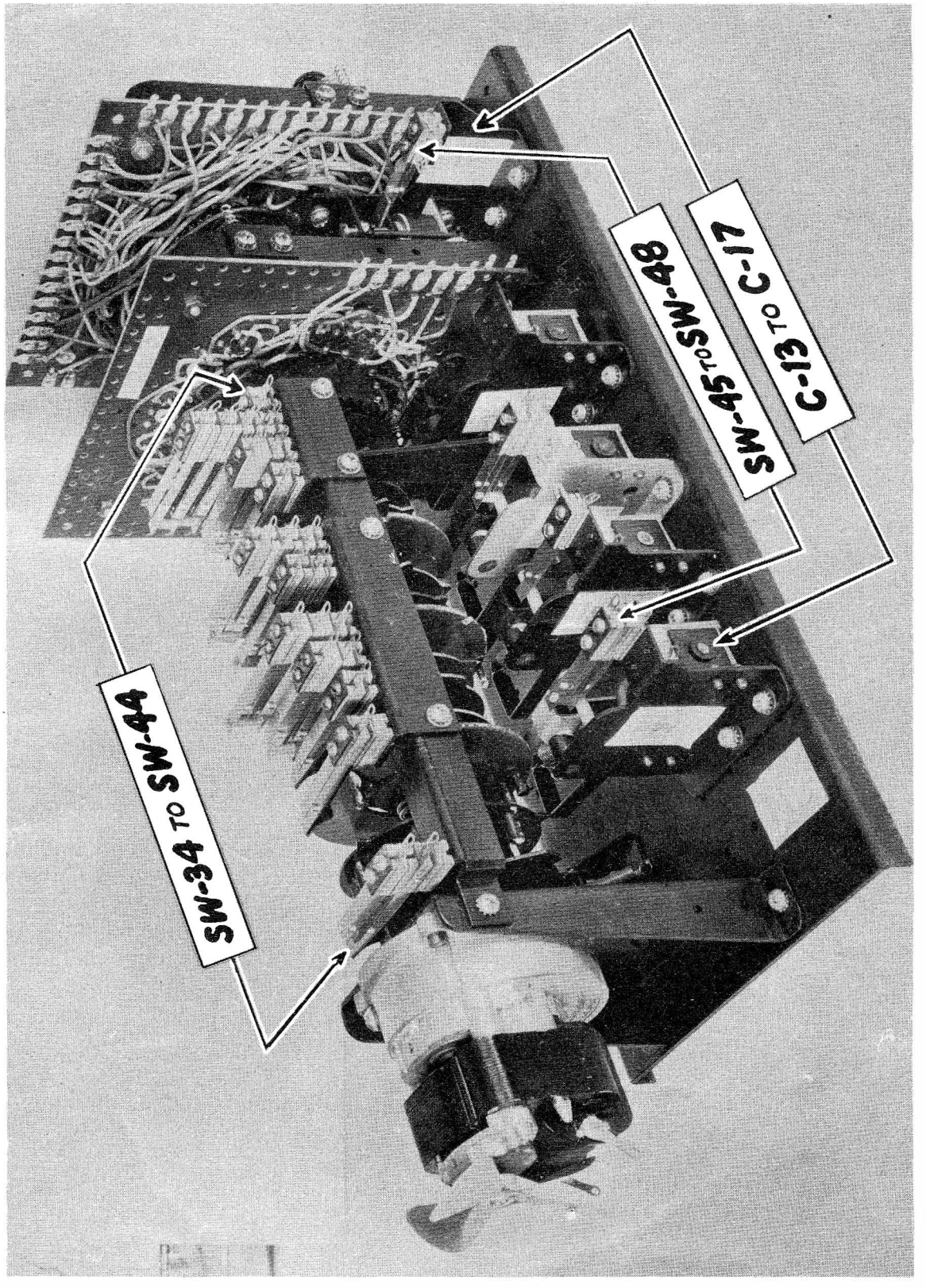
CODE

N.C. ..... NORMALLY CLOSED
N.O. ..... NORMALLY OPEN
M.B.B. ..... MAKE BEFORE BREAK
S.P.D.T. ...SINGLE POLE DOUBLE THROW

COIL NO.	SWITCH NO.		SWITCH CODE	WIRE NO.	WIRE COLORS	FUNCTION
	Sw. 34A	Control Unit Cam #1A	N.O.	10 20	Red (Plastic) Blue (Plastic)	Operates motor so that timer stepper coil can not remain energized.
	Sw. 34B	Control Unit Cam #1B	N.O.	50 38-5	White Yellow-Black	Operates timer stepper coil.
	Sw. 35	Control Unit Cam #2	N.C.	21 23	Blue-Red Blue- Yellow	Pulses extra ball stepper.
	Sw. 36	Control Unit Cam #3	N.C.	15-4 71	Red-White Orange-Red	Opens start and extra ball start relay circuit after operating yellow button.
	Sw. 37A	Control Unit Cam #4A	N.C.	98-5 13-5	Gray-Black Red-Yellow	Flashes 1st, 2nd, 3rd extra ball lites.
	Sw. 37B	Control Unit Cam #4B	N.C.	60 78-2	Brown Orange-Black	Energizes extra ball selection index.
	Sw. 38A	Control Unit Cam #5A	N.C.	65 50	Brown-White White	Drops out extra ball play relay.
	Sw. 38B	Control Unit Cam #5B	N.O.	63 50	Brown-Yellow White	Replay subtract switch when playing for extra balls.
	Sw. 38C	Control Unit Cam #5C	N.O.	81 50	Black-Red White	Resets timer stepper when playing for extra balls.
	Sw. 39A	Control Unit Cam #6A	N.C.	50 15-4	White Red-White	Drop out circuit for start relays.
	Sw. 39B	Control Unit Cam #6B	N.O.	50 81-5	White Black-Red	Resets timer stepper when starting a new game.
	Sw. 40A	Control Unit Cam #7A	N.O.	54-2 63	White-Green Brown-Yellow	Replay subtract switch.
	Sw. 40B	Control Unit Cam #7B	N.O.	50 51	White White-Red	Anti-cheat relay pull-in switch.
	Sw. 40C	Control Unit Cam #7C	N.O.	50 71-2	White Orange-Red	Pulses selector unit stepper.
	Sw. 41	Control Unit Cam #8	N.O.	25-2 23-2	Blue-White Blue-Yellow	Pulses replay register, reflex magnet and also sounder.
	Sw. 42A	Control Unit Cam #9A	N.O.	91-3 41-5	Gray-Red Green-Red	In series with replay counters #1, #2 and #3 stepper coils.
	Sw. 42B	Control Unit Cam #9B	N.O.	50 81-5	White Black-Red	Resets timer stepper when replays are registered.
	Sw. 43A	Control Unit Cam #10A	N.O.	83 45	Black-Yellow Green-White	Pulses replay meter and replay register reset during automatic replay reset.
	Sw. 43B	Control Unit Cam #10B	N.O.	27-2 40-5	Blue-Orange Green	Pulses replay delay stepper.
	Sw. 43C	Control Unit Cam #10C	N.O.	78-2 90	Orange-Black Gray	Pulses mixer stepper.
	Sw. 43D	Control Unit Cam #10D	N.O.	93-2 54	Gray-Yellow White-Green	Pulses extra ball stepper when more than one extra ball is registered on one play.
	Sw. 44	Control Unit Cam #11	N.O.	50 36-3	White Yellow-Brown	Completes circuit for more than one extra ball.
		Control Unit Index Coils				
C13		Extra Ball Sequence Index		21-5 70	Blue-Red Orange	Energizes when playing for extra balls.
	Sw. 45A	Extra Ball Sequence Index	N.O.	10 20	Red (Plastic) Blue (Plastic)	Operates control unit motor.
	Sw. 45B	Extra Ball Sequence Index	N.C.	40-5 30-2	Green Yellow	Breaks circuit to replay delay stepper.
C14		Selection Cam Index		52 70	White-Blue Orange	Operates for every coin or replay played except when playing for extra balls.
	Sw. 46		N.O.	10 20	Red (Plastic) Blue (Plastic)	Operates control unit motor.
C15		Replay Cams Index		25-2 70	Blue-White Orange	Energizes when replays are registered.
	Sw. 47	Replay Cams Index	N.O.	10 20	Red Blue	Operates control unit motor.
C16		Extra Ball Selection Index		78-2 70	Orange-Black Orange	Energized by control unit cam switch #4
C17		Search Index Magnet		13-2 70	Red-Yellow Orange	Energizes when search wipers on control unit find a winning combination.
	Sw. 48	Search Index Magnet	S.P.D.T.	36-2 50 27-2	Yellow-Brown White Blue-Orange	Directs circuit from replay delay unit reset coil to the step-up coil.

CONEY ISLAND

CONTROL UNIT



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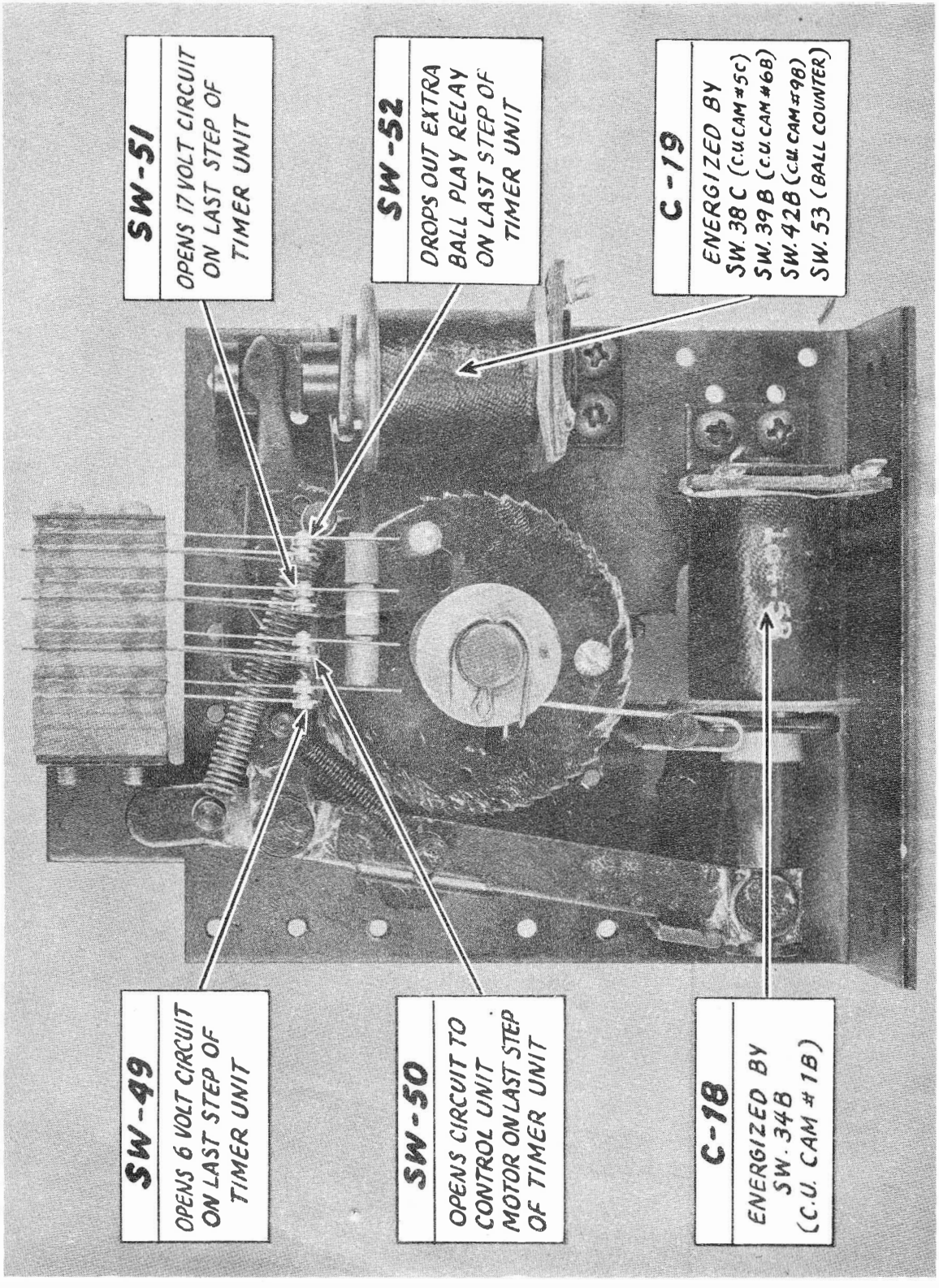
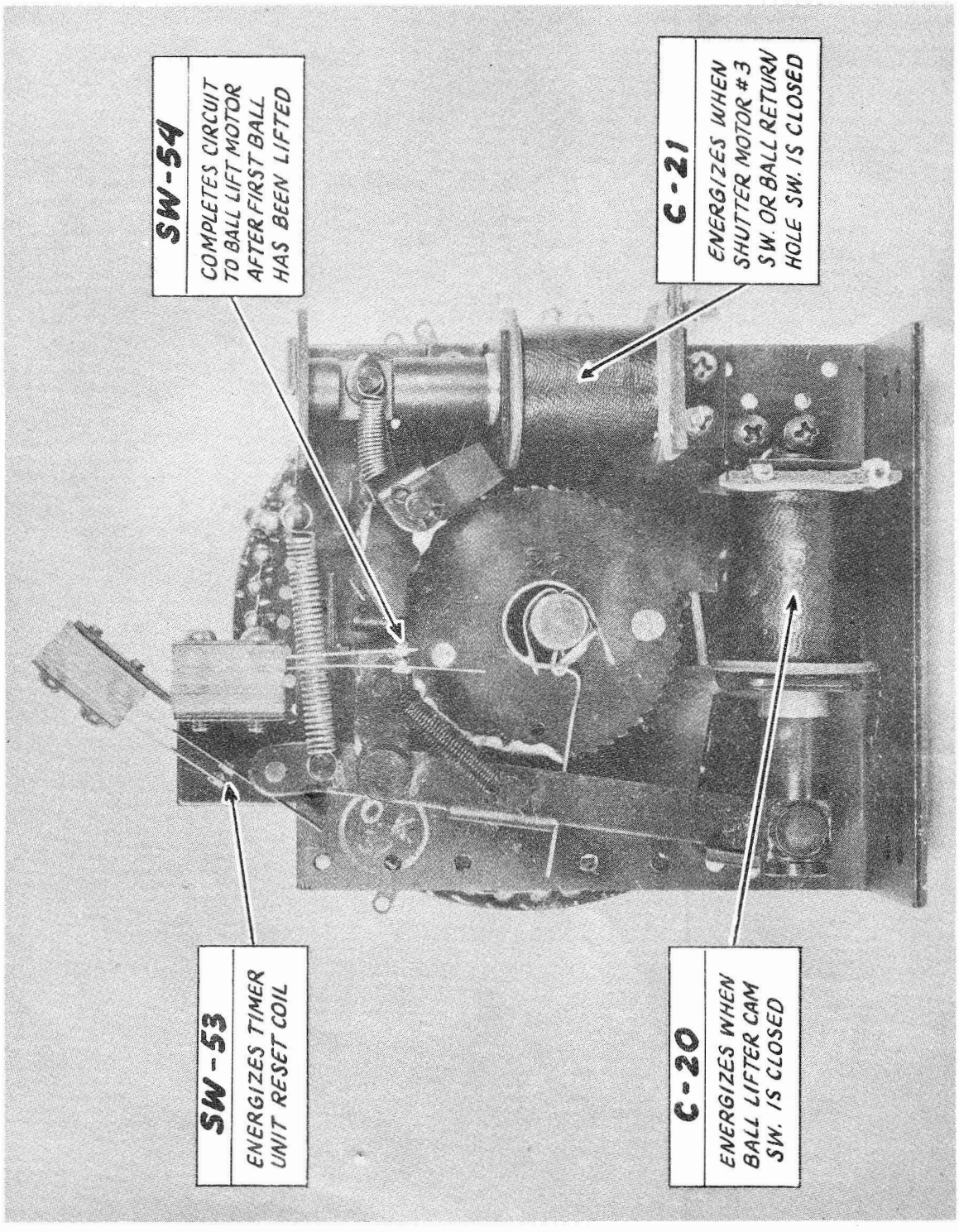
TIMER STEPPER



NOTES

CONEY ISLAND

BALL COUNTER — SWITCH SIDE



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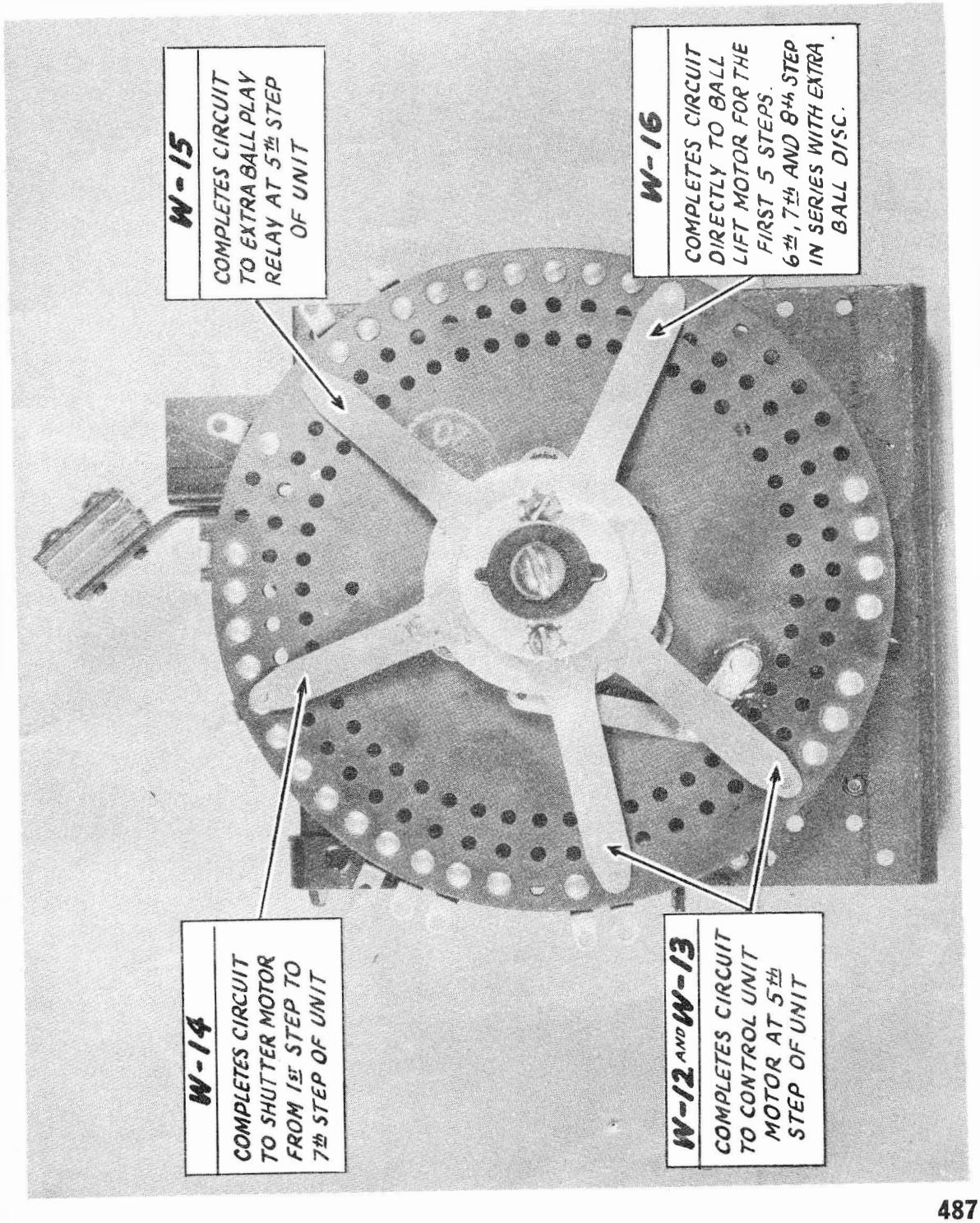
BALL COUNTER — WIPER SIDE



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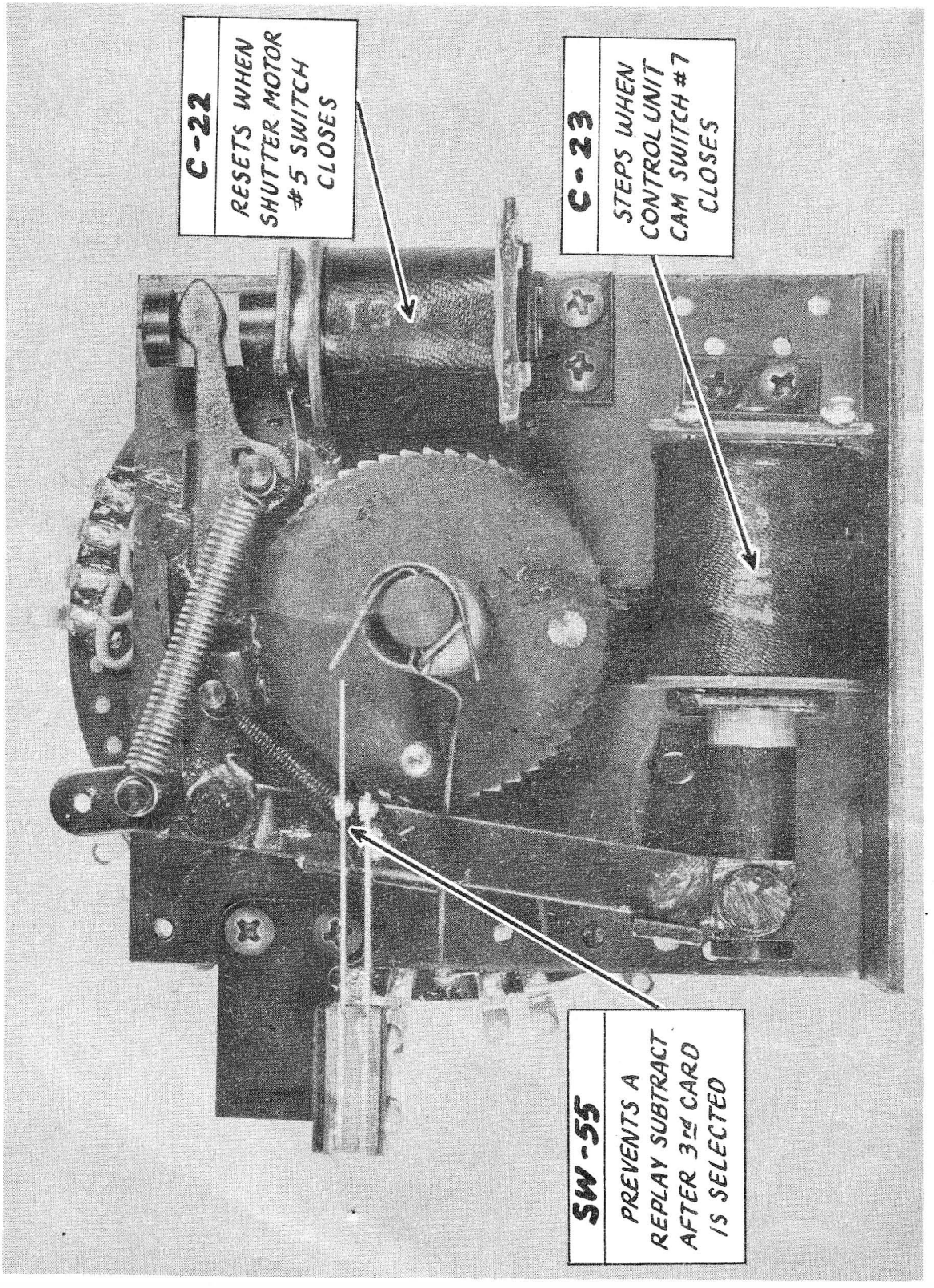
SELECTOR STEPPER — SWITCH SIDE



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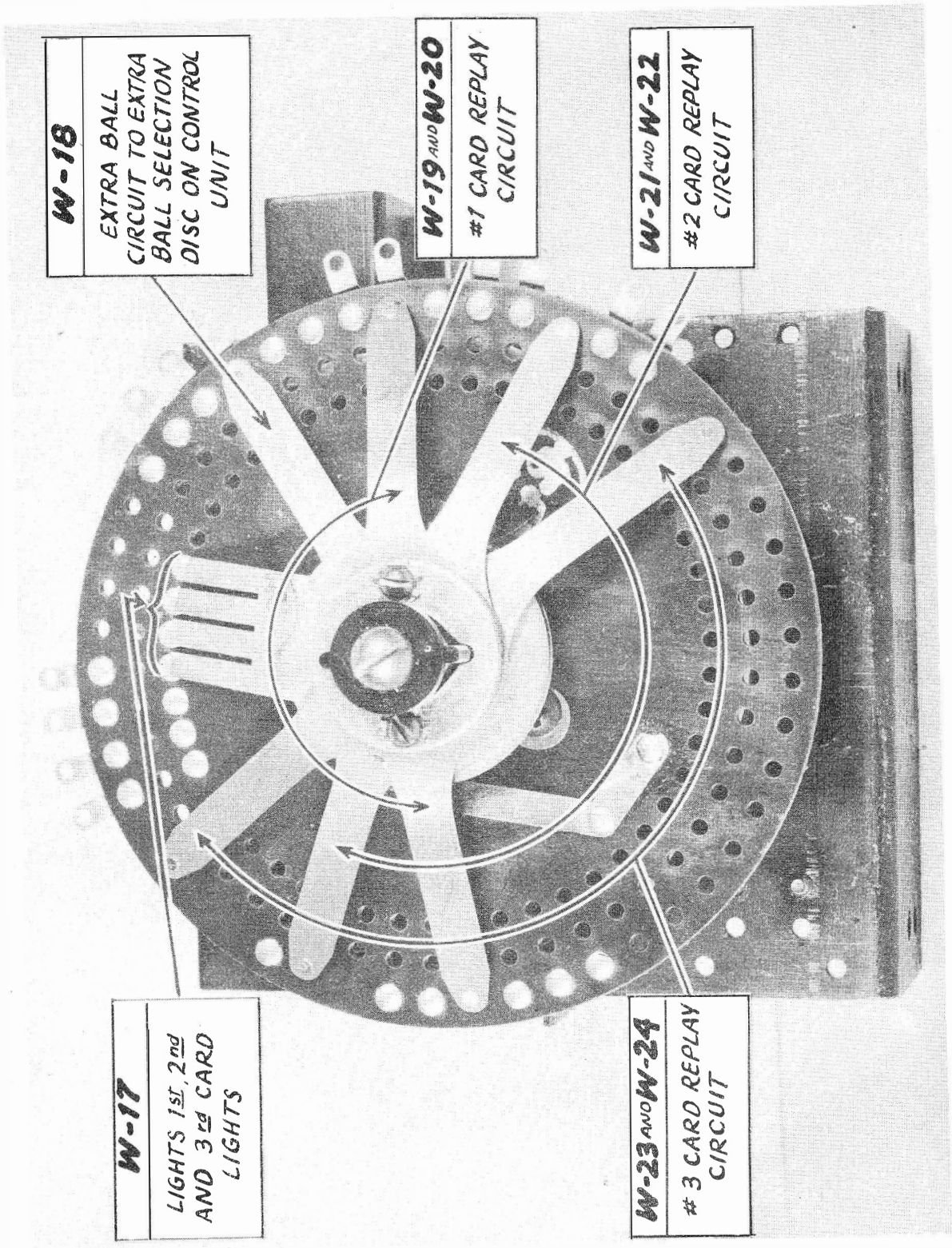
SELECTOR STEPPER — WIPER SIDE



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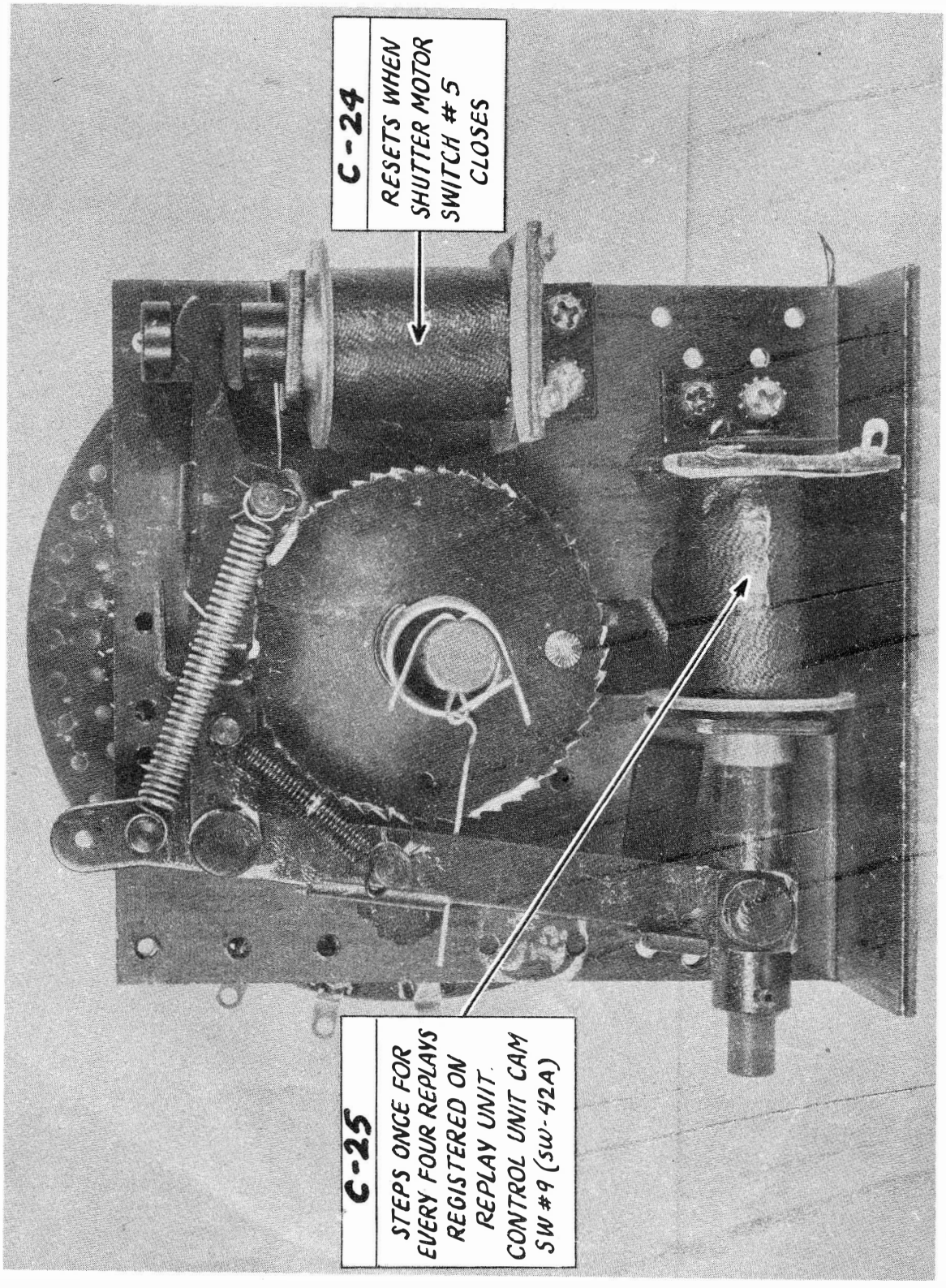
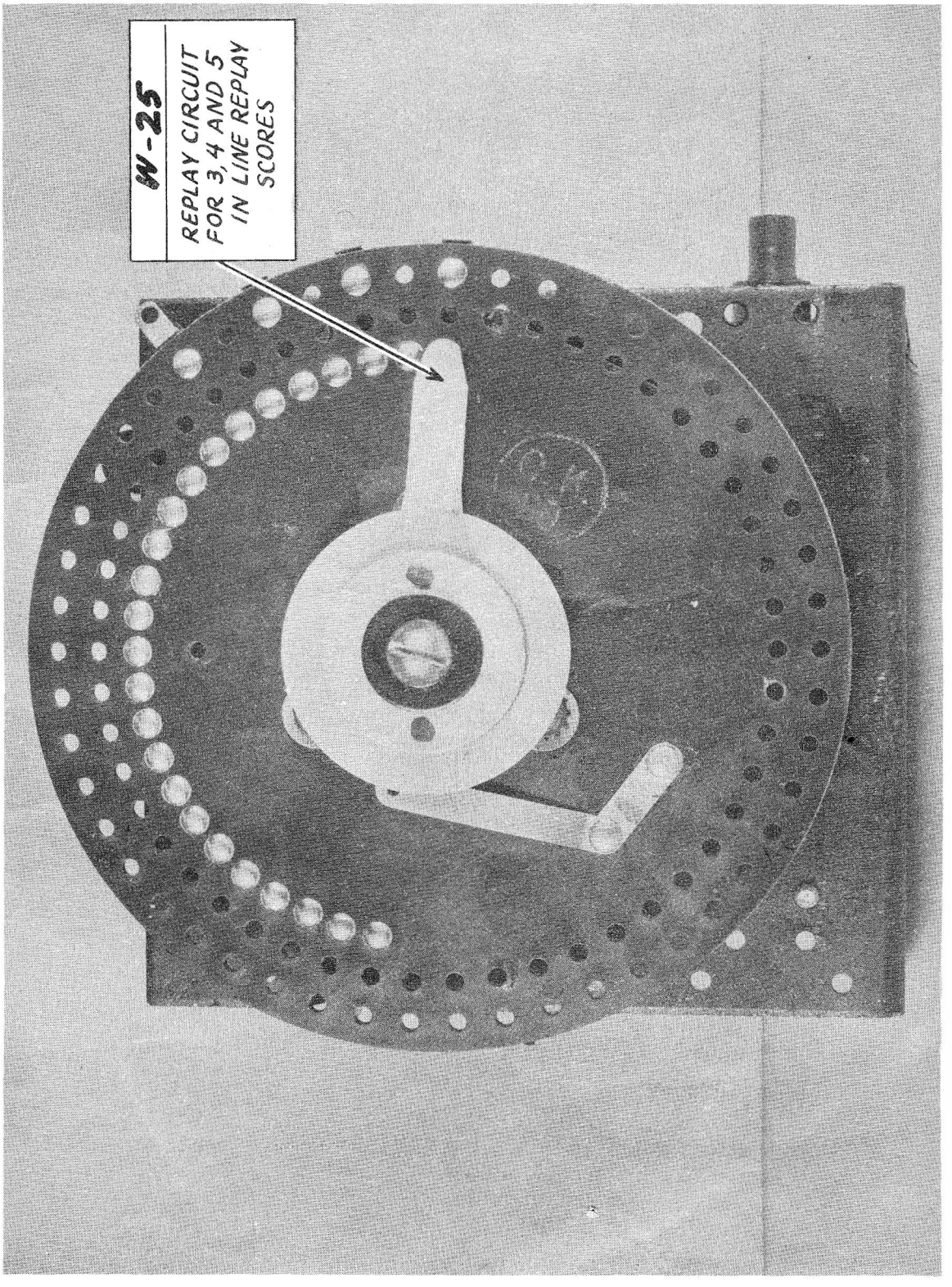
REPLAY COUNTERS NOS. 1, 2 OR 3 — SWITCH SIDE



CONEY ISLAND

REPLAY COUNTERS NOS. 1, 2 OR 3 — WIPER SIDE



CONEY ISLAND

REPLAY DELAY UNIT

SW-56

BREAKS CIRCUIT TO EXTRA BALL PLAY RELAY WHEN REPLAYS ARE BEING REGISTERED

SW-57

BREAKS CIRCUIT TO RESET COIL WHEN OPEN. COMPLETES CIRCUIT TO RESET COIL WHEN CLOSED

SW-58

BREAKS CIRCUIT TO STEP-UP COIL AT 5th STEP OF UNIT

C-26

ENERGIZED BY SW. 43B (C.U. CAM # 108) IN SERIES WITH SEARCH INDEX SW. EXTRA BALL SEQUENCE CAM INDEX SW. AND REPLAY DELAY UNIT SW. OPEN AT 5th STEP (SW. 5B)

SW-59

COMPLETES CIRCUIT TO REPLAY CAM INDEX COIL. ALSO TO REPLAY REGISTER STEP-UP COIL THRU SW. 41 (C.U. CAM #8)

SW-60

COMPLETES CIRCUIT TO #1, #2 AND #3 REPLAY COUNTER STEP-UP COILS WHEN THIS UNIT REACHES 5th STEP

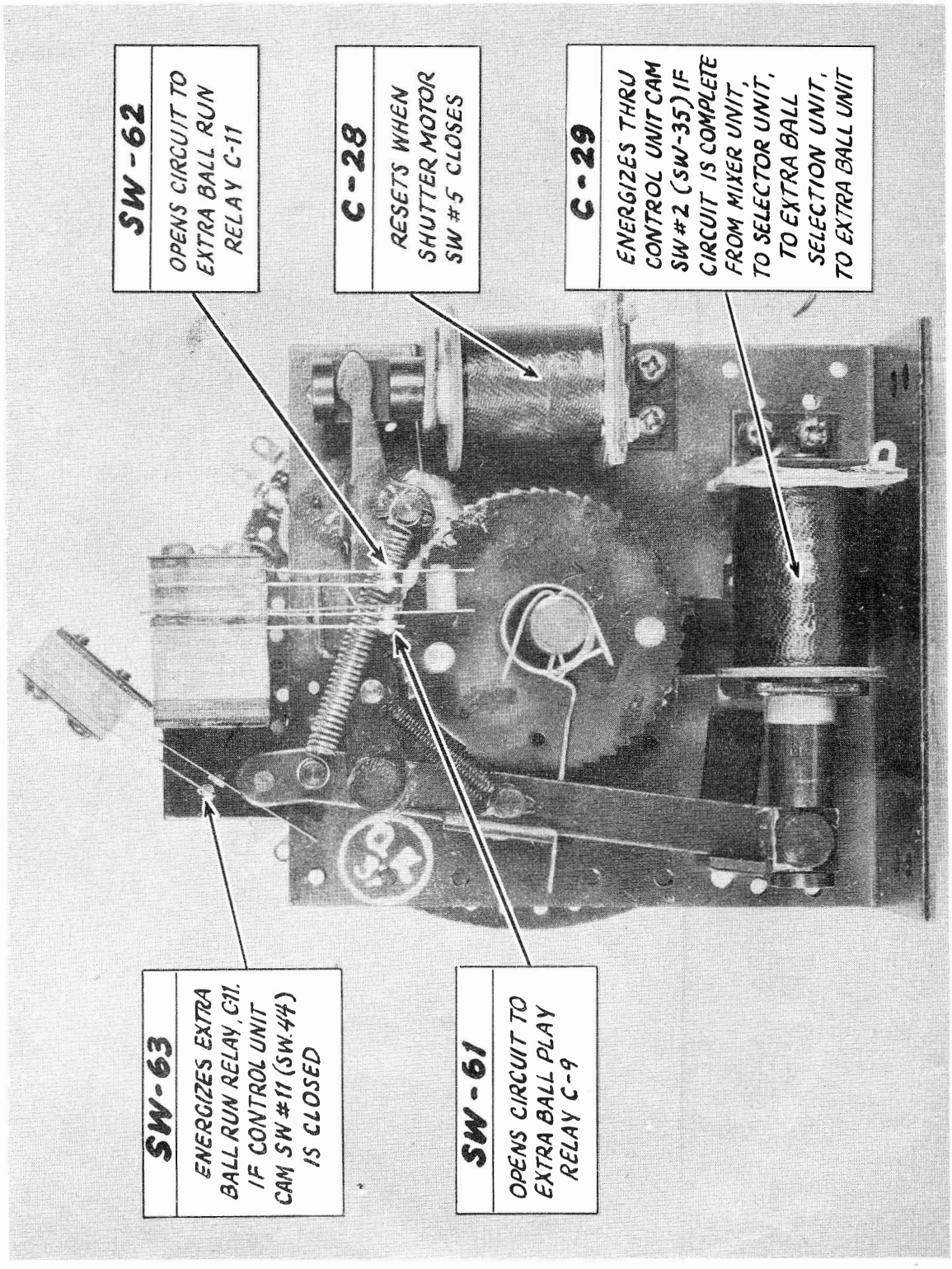
C-27

ENERGIZED BY SEARCH INDEX SW. WHEN SW. 57 ON THIS UNIT IS CLOSED

NOTES

CONEY ISLAND

EXTRA BALL UNIT — SWITCH SIDE



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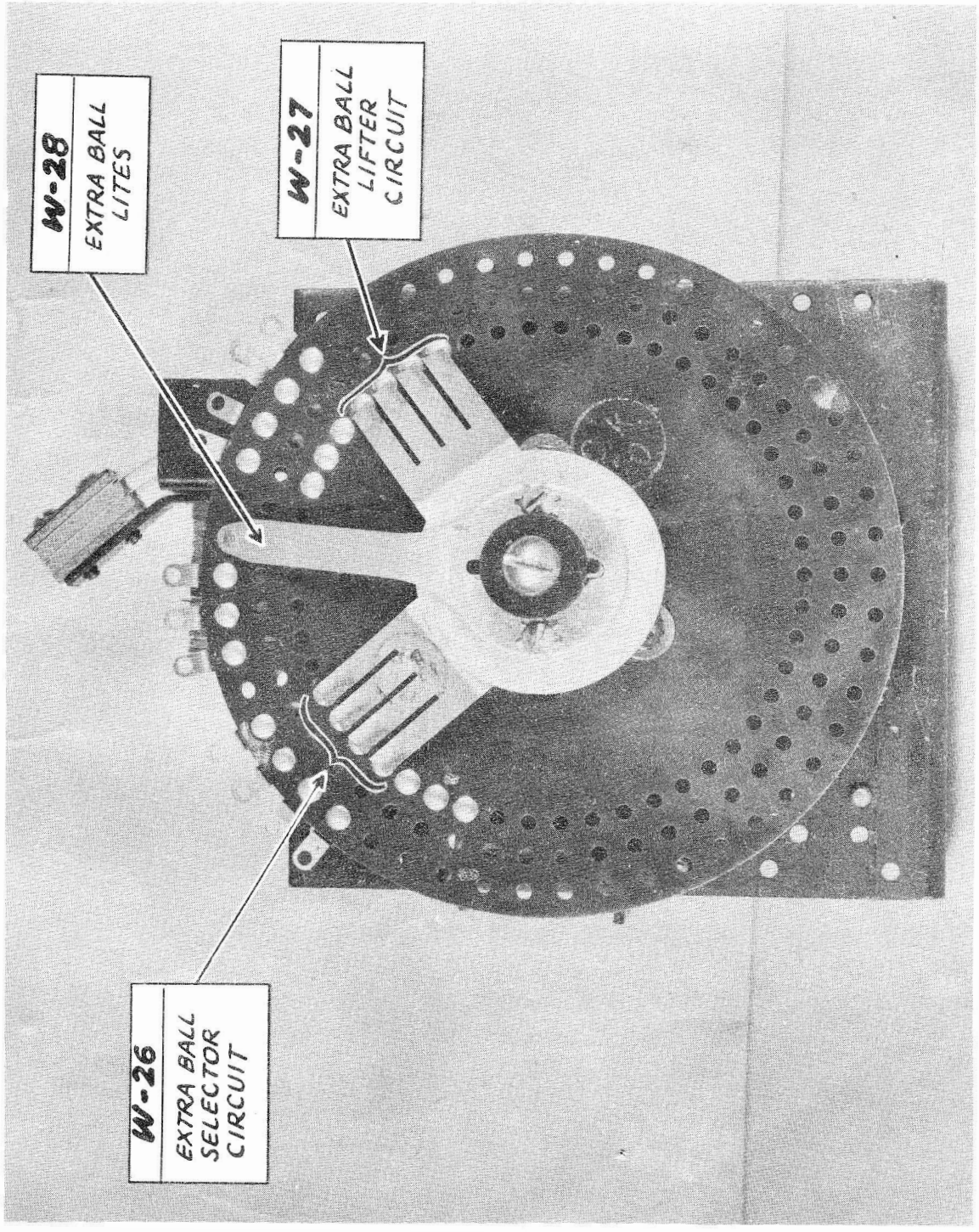
EXTRA BALL UNIT — WIPER SIDE



CONEY ISLAND

SEARCH DISC

(CONTROL UNIT)

W-1

ENERGIZES #3 SEARCH RELAY WHEN WIPER CONTACTS ANY NUMBER THAT APPEARS 3rd IN A HORIZONTAL, VERTICAL OR DIAGONAL LINE OF ANY CARD

W-2

ENERGIZES #1 SEARCH RELAY WHEN WIPER CONTACTS ANY NUMBER THAT APPEARS 1st IN A HORIZONTAL, VERTICAL OR DIAGONAL LINE OF ANY CARD

W-6 AND W-7

COMPLETES CIRCUIT BETWEEN SELECTOR STEPPER AND REPLAY COUNTERS #1, 2 AND 3

W-3

ENERGIZES #5 SEARCH RELAY WHEN WIPER CONTACTS ANY NUMBER THAT APPEARS 5th IN A HORIZONTAL, VERTICAL OR DIAGONAL LINE OF ANY CARD.

W-4

ENERGIZES #4 SEARCH RELAY WHEN WIPER CONTACTS ANY NUMBER THAT APPEARS 4th IN A HORIZONTAL, VERTICAL OR DIAGONAL LINE OF ANY CARD

W-5

ENERGIZES #2 SEARCH RELAY WHEN WIPER CONTACTS ANY NUMBER THAT APPEARS 2nd IN A HORIZONTAL, VERTICAL OR DIAGONAL LINE OF ANY CARD

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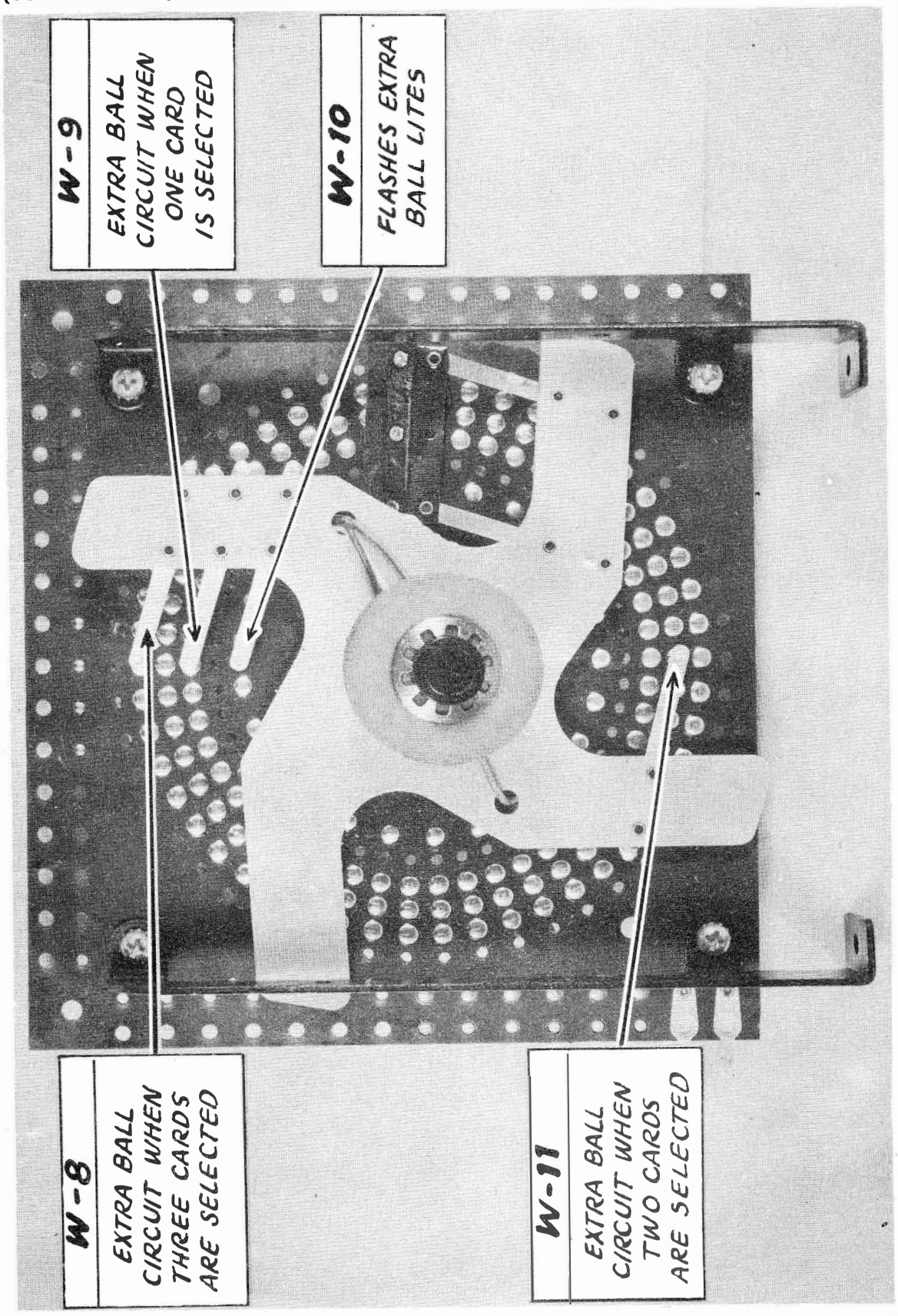
EXTRA BALL SELECTION DISC

(CONTROL UNIT)