Bally®

BARREL O' FUN

(FUN-SPOT)

NON-REPLAY MODEL

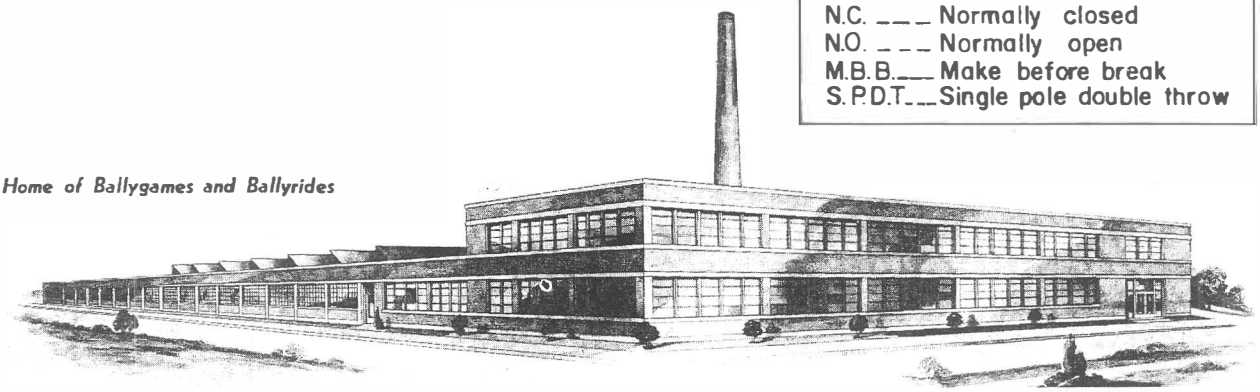
OPERATING INSTRUCTIONS AND PARTS CATALOG

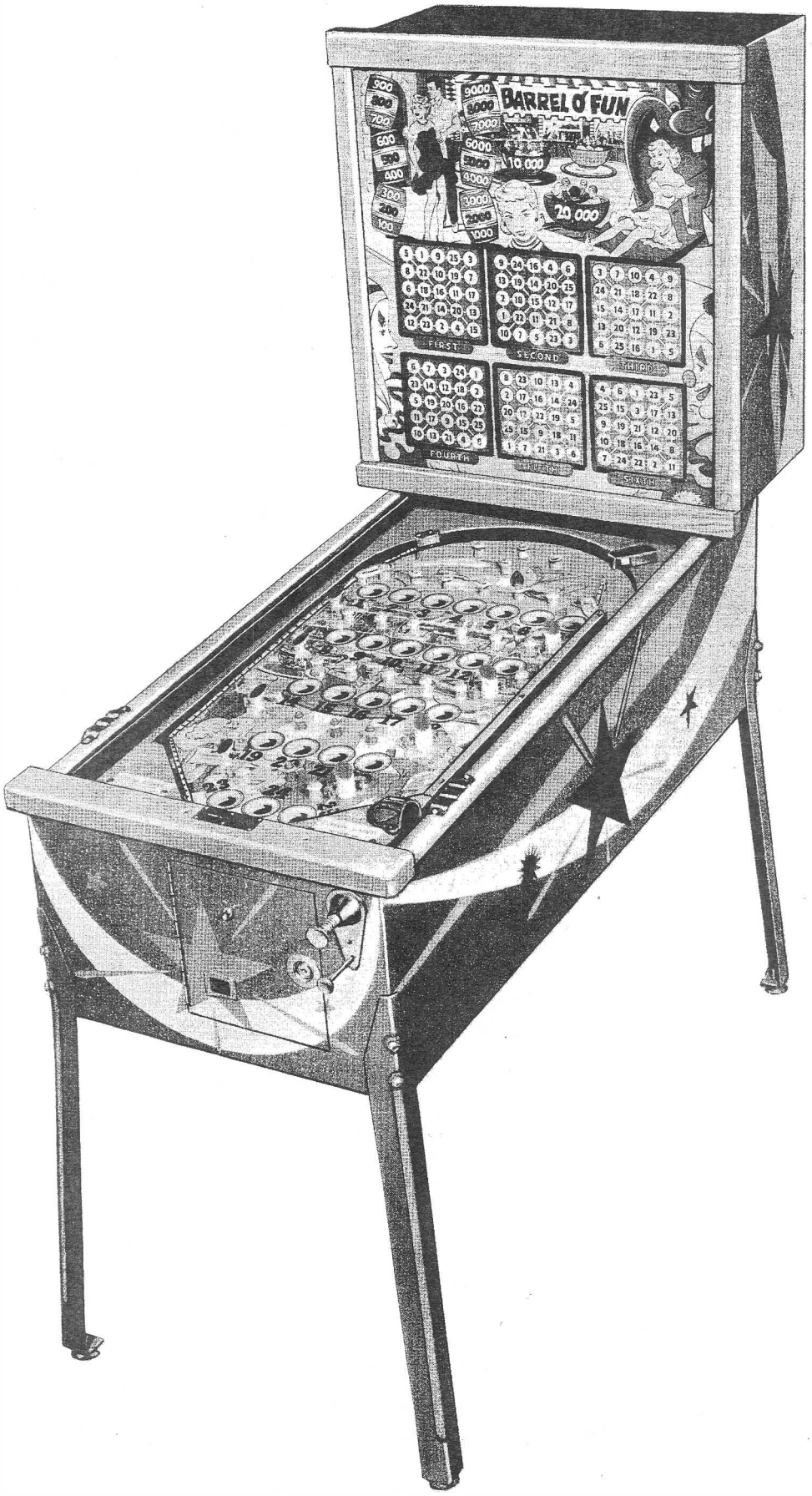
Part Numbers are marked on illustrations and a list of miscellaneous parts appears on back cover.

FOR QUICKEST SERVICE
STATE CORRECT PART NUMBER
WHEN ORDERING PARTS

Code	
N.C.	Normally closed
N.O.	Normally open
M.B.B.	Make before break
S.P.D.T.	Single pole double throw

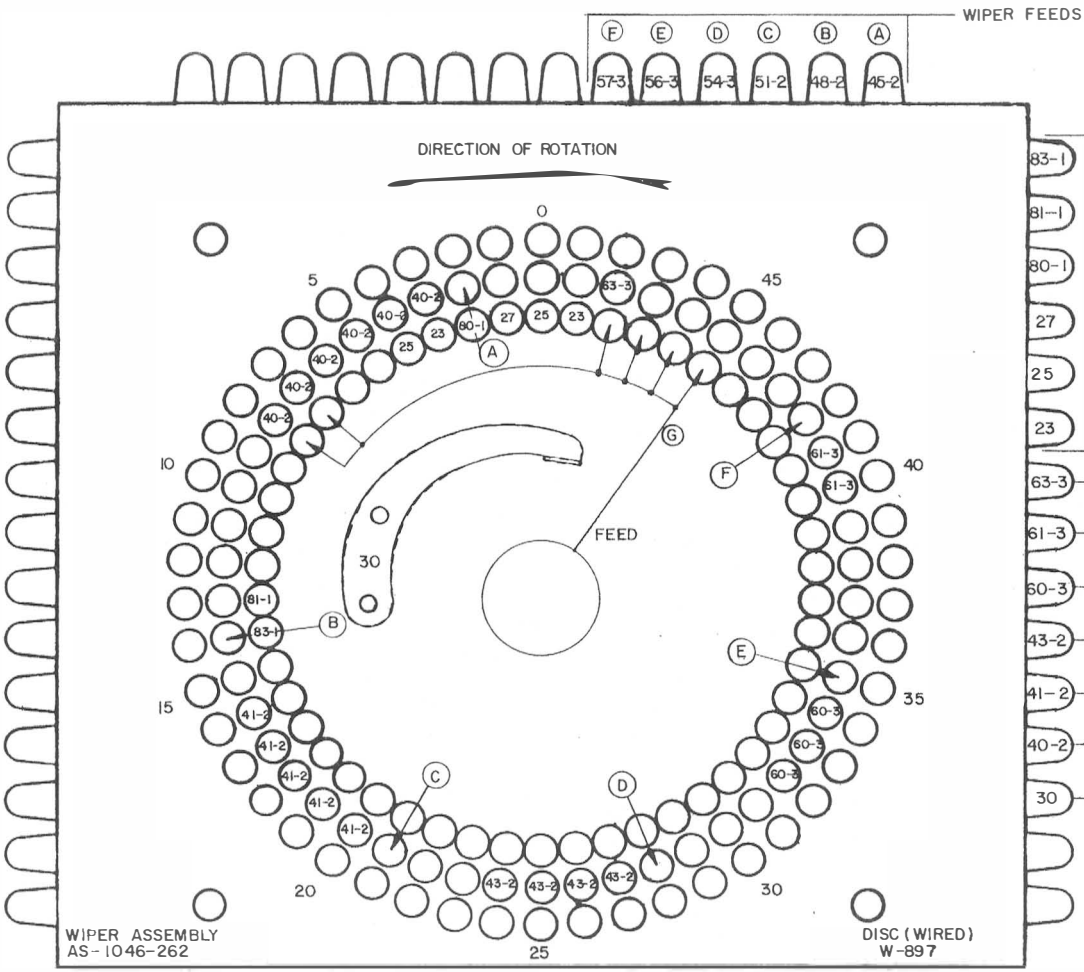
Home of Ballygames and Ballyrides




BARREL O' FUN
10,000
20,000
FIRST
SECOND
THIRD
FOURTH
FIFTH
SIXTH

SELECTION UNIT DISC viewed from BUTTON or WIPER side

6 step unit. Wipers shown in zero or reset position



83-1 6 TH
81-1 5 TH
80-1 4 TH
27 3 RD
25 2 ND
23 1 ST

THRU WIPERS Ⓖ. CIRCUITS TO LITE SELECTION LITES. (DIAG. K-7)

63-3 — 6 TH SELECTION, THRU WIPER Ⓕ. (DIAG. C-29)
61-3 — 5 TH SELECTION, THRU WIPER Ⓔ. (DIAG. C-28)
60-3 — 4 TH SELECTION, THRU WIPER Ⓓ. (DIAG. C-26)
43-2 — 3 RD SELECTION, THRU WIPER Ⓒ. (DIAG. C-22)
41-2 — 2 ND SELECTION, THRU WIPER Ⓑ. (DIAG. C-21)
40-2 — 1 ST SELECTION, THRU WIPER Ⓐ. (DIAG. C-19)

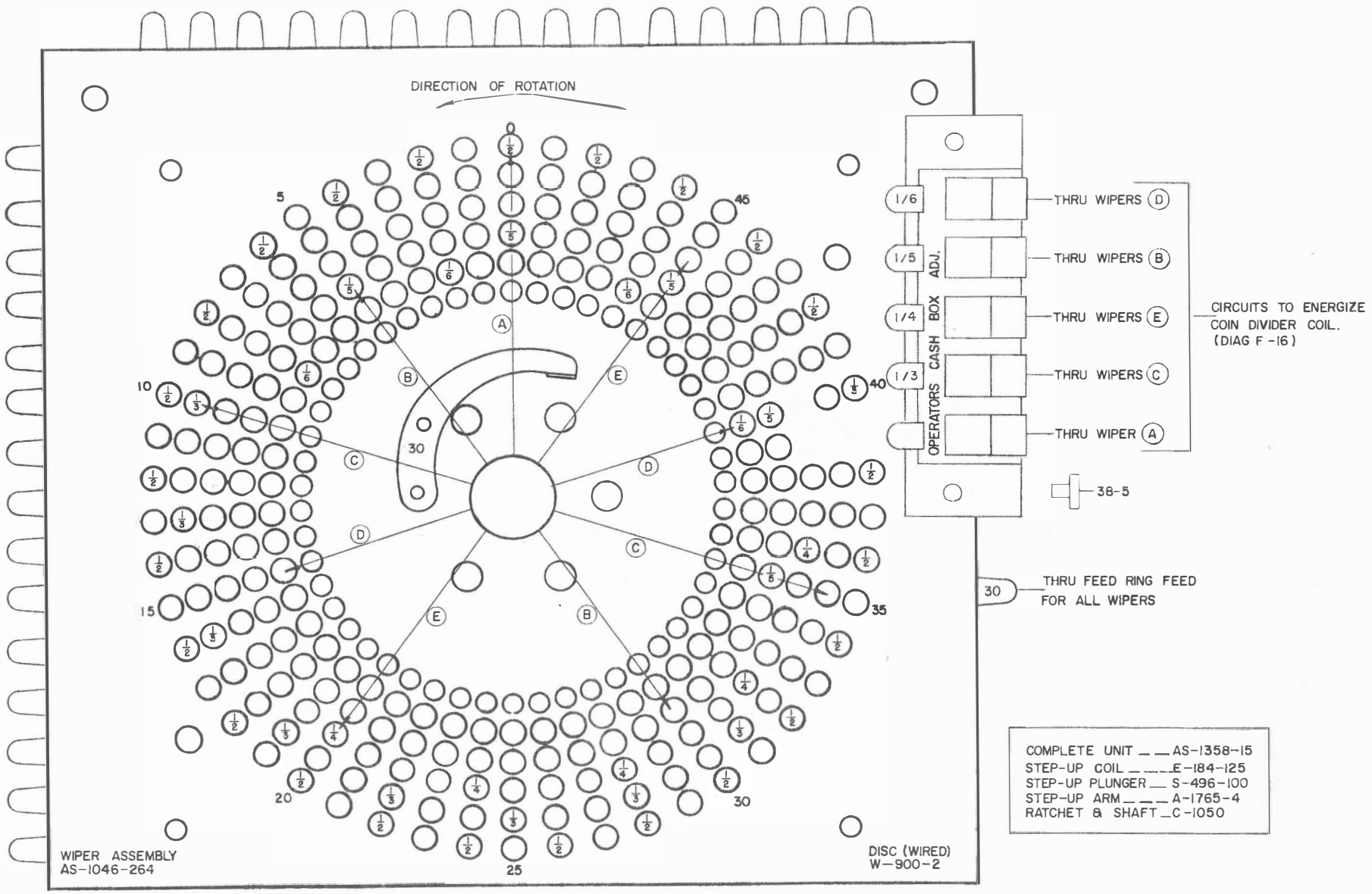
SCORING CIRCUITS FOR THE 6 SELECTIONS.

30 — THRU FEED RING, FEED FOR WIPERS Ⓖ.

COMPLETE UNIT	AS-1022-47
RESET COIL	28-R-15
STEP-UP COIL	25-GG-7
STEP-UP PLUNGER	S-496-100
STEP-UP ARM	A-1765-4
RATCHET & SHAFT	C-1050-6-39

COIN UNIT DISC viewed from BUTTON or WIPER side

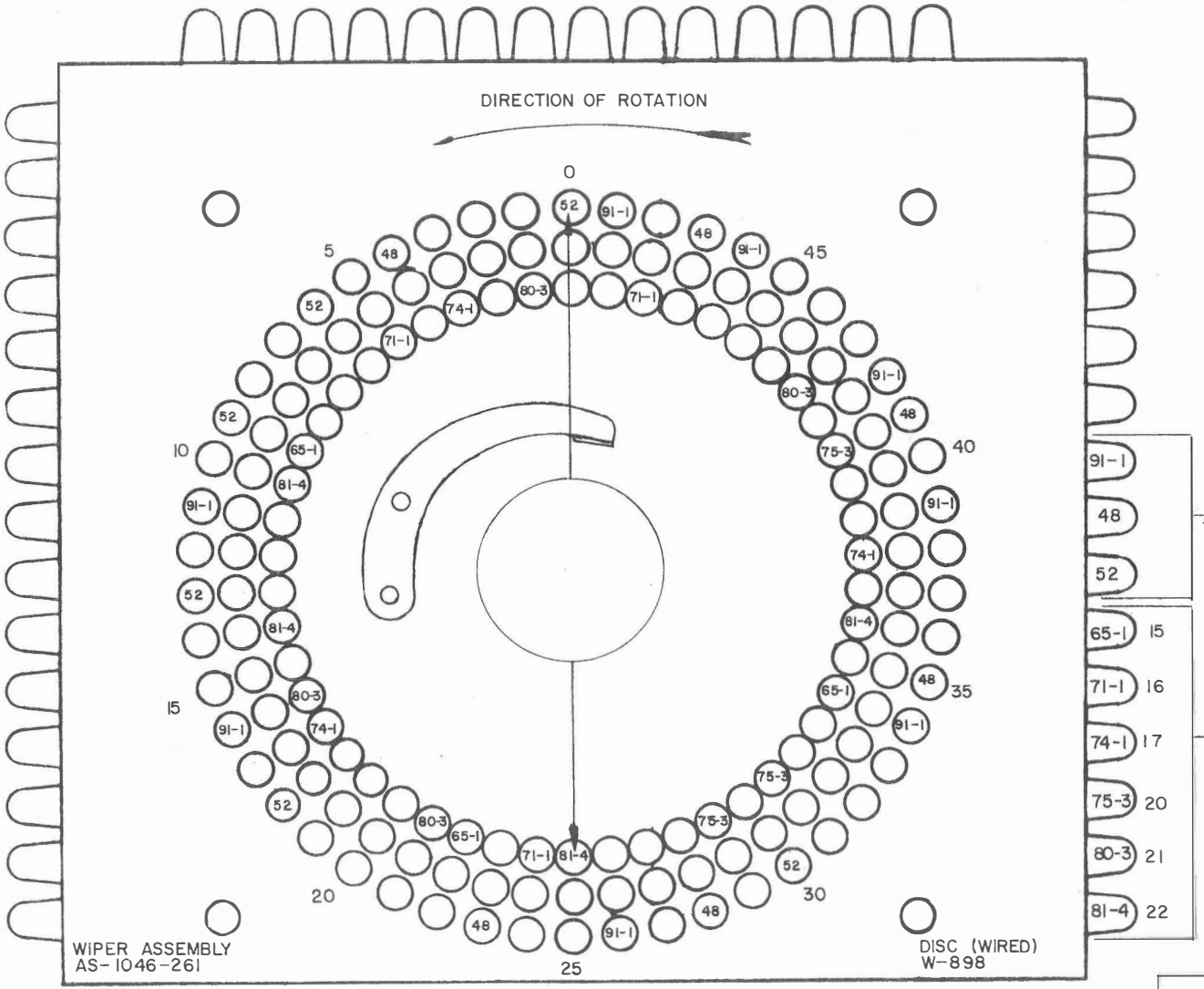
Continuous step unit.



COMPLETE UNIT	AS-1358-15
STEP-UP COIL	E-184-125
STEP-UP PLUNGER	S-496-100
STEP-UP ARM	A-1765-4
RATCHET & SHAFT	C-1050

SPOTTING UNIT DISC viewed from BUTTON or WIPER side

Continuous step unit. Wipers shown in zero or reset position



91-1
48
52

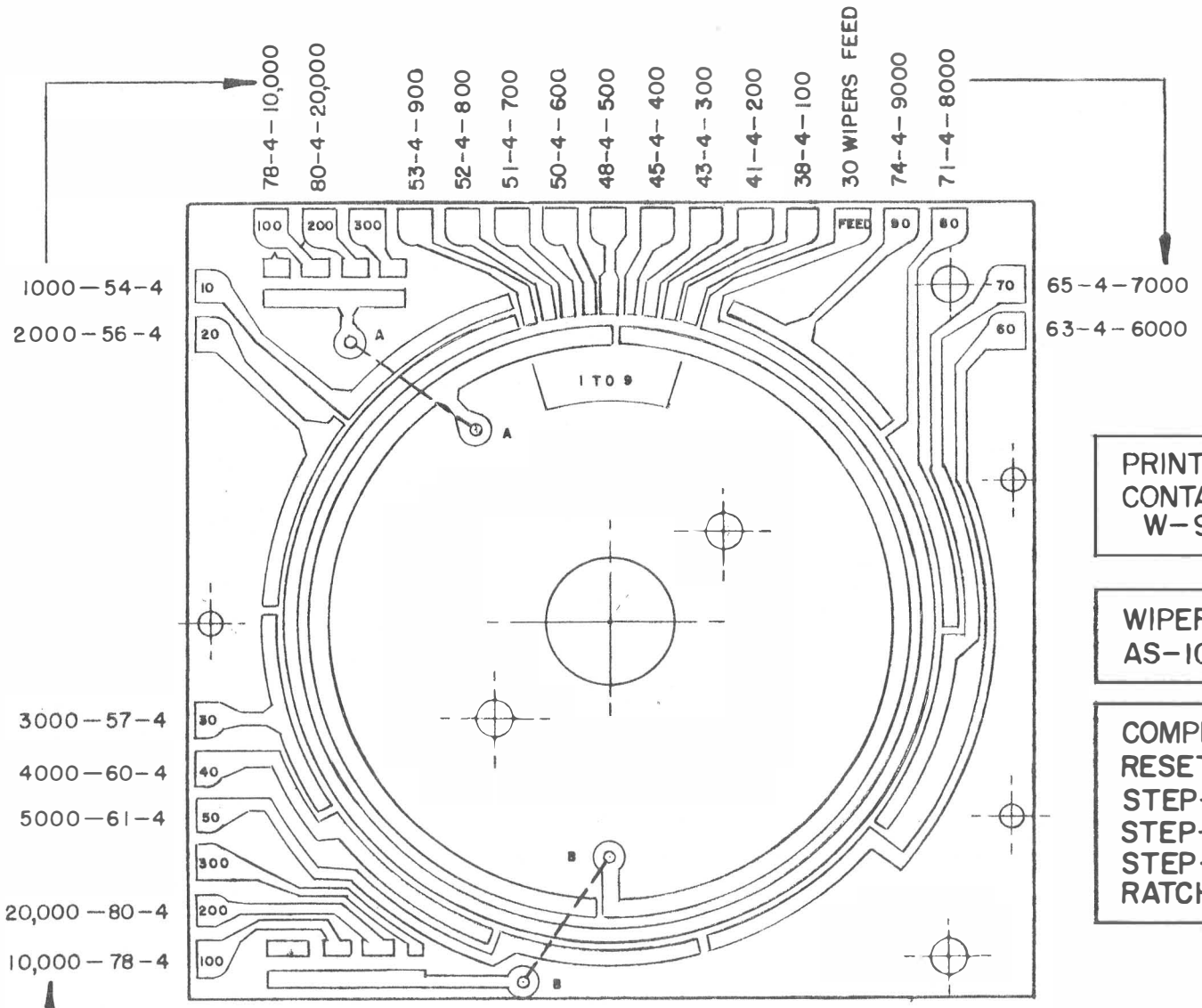
FEEDSFOR WIPERS.

65-1 15
71-1 16
74-1 17
75-3 20
80-3 21
81-4 22

CIRCUITS TO LITE CENTER LITES (SPOTTED) IN THE 6 SELECTIONS. ALSO CIRCUITS TO THE SEARCH DISCS, FOR SCORING. (Diag. K-10)

COMPLETE UNIT_____AS-1358-10
STEP-UP COIL_____E-184-125
STEP-UP PLUNGER___S-496-100
STEP-UP ARM_____A-1765-4
RATCHET & SHAFT___C-1050

SCORE INDICATOR UNIT viewed from WIPER side



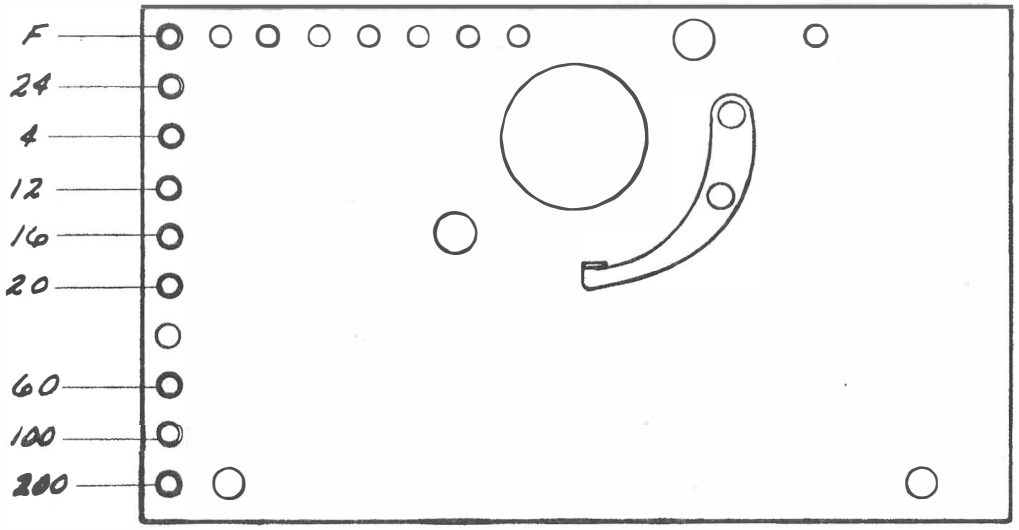
PRINTED CIRCUIT
CONTACT PLATE
W-923-3

WIPER ASSEMBLY
AS-1046-293

COMPLETE UNIT AS-797-50
RESET COIL — 28-R-15
STEP-UP COIL — 25-GG-7
STEP-UP PLUNGER - S-496-116
STEP-UP ARM — A-1765-6
RATCHET & SHAFT — C-100

SCORE COUNTER viewed from BUTTON or WIPER side

6 used (see code box at right)



LUG	SCORE COUNTERS					
	#1	#2	#3	#4	#5	#6
F	45-2	48-2	51-2	54-3	56-3	57-3
24	14-4	23-6	36-6	48-6	53-6	61-6
4	52-2	52-2	52-2	27-3	27-3	27-3
12	10-6	18-6	27-6	71-6	51-6	56-6
16	53-2	53-2	53-2	41-3	41-3	41-3
20	18-4	21-6	31-6	43-6	53-6	57-6
60	15-4	25-6	38-6	75-6	54-6	63-6
100	54-2	54-2	54-2	45-3	45-3	45-3
200	60-2	60-2	60-2	48-3	48-3	48-3

WIRE COLORS

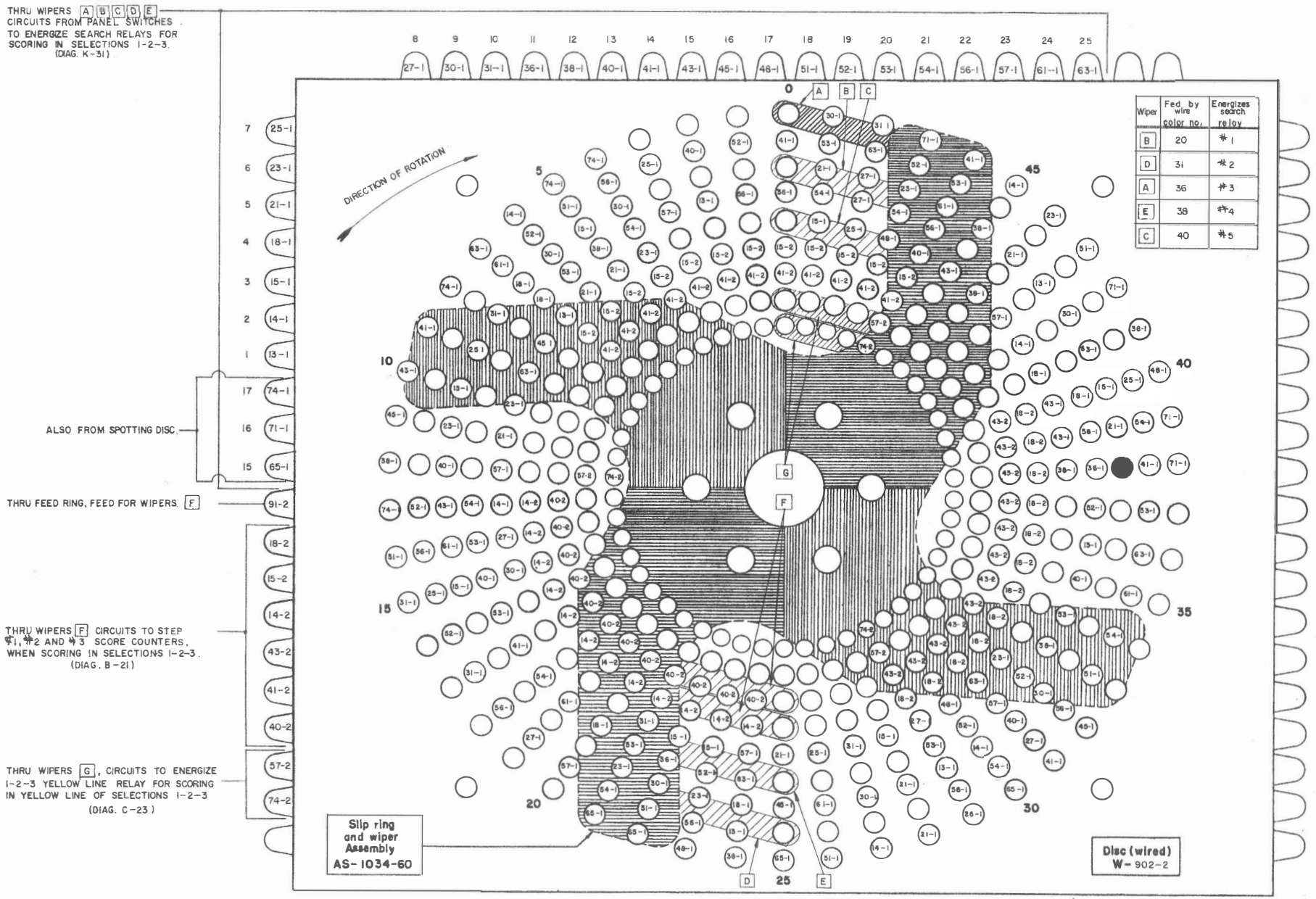
SCORE VALUES

COMPLETE UNIT	AS-797-51
RESET COIL	28-R-15
STEP-UP COIL	25-GG-7
STEP-UP PLUNGER	S-496-116
STEP-UP ARM	A-1765-4
RATCHET & SHAFT	C-100

PRINTED CIRCUIT CONTACT PLATE W-945

WIPER ASSEMBLY (NOT SHOWN) AS-1046-263

SEARCH DISC for Selections 1, 2, 3 viewed from BUTTON or WIPER side



(SELECTIONS 1-2-3)

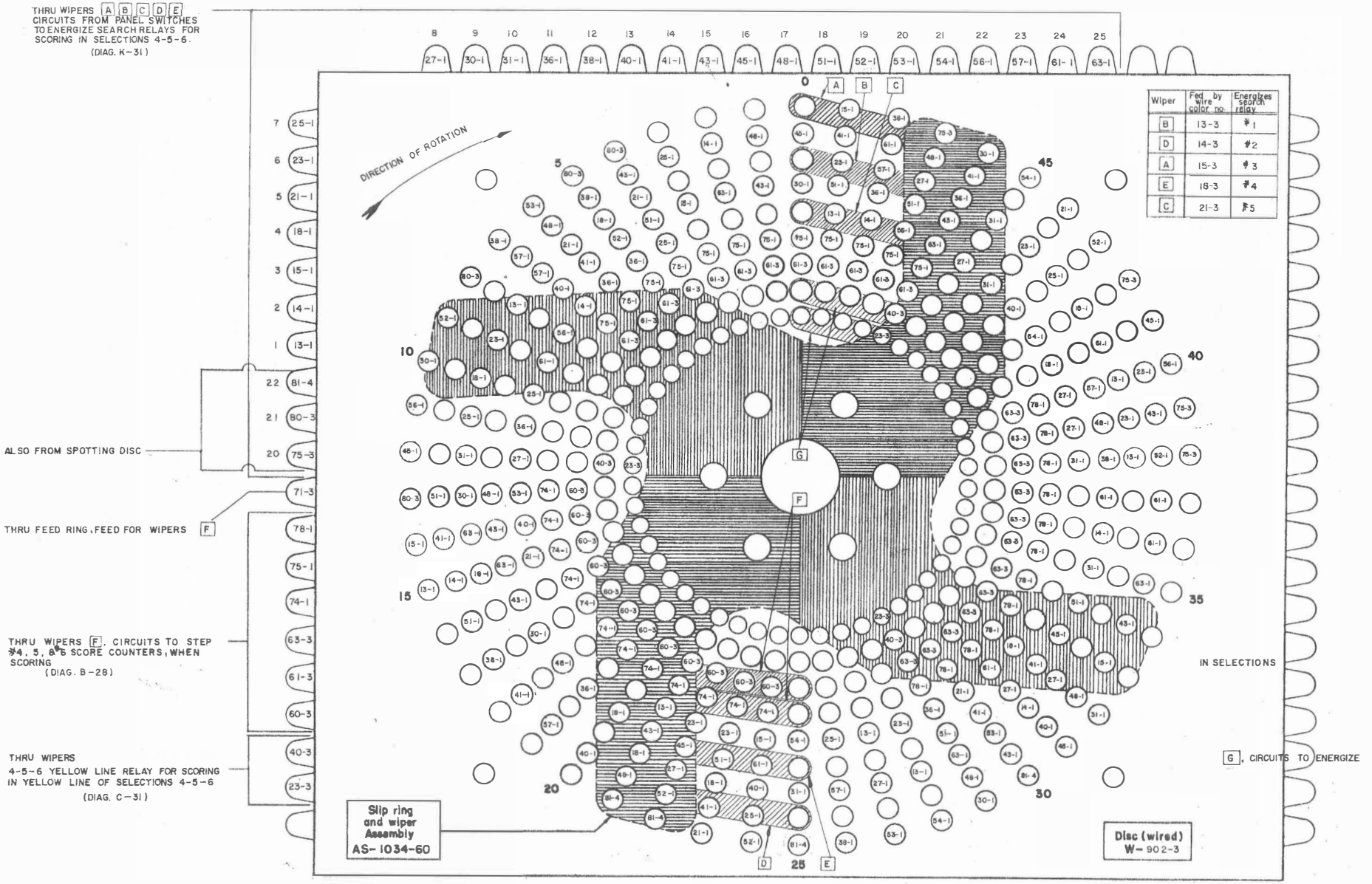
SEARCH POSITIONS CHART

WIPER [A] AT POSITION	WIPER [B] ROW 7 SEARCH RELAY # 1	WIPER [D] ROW 8 SEARCH RELAY # 2	WIPER [A] ROW 9 SEARCH RELAY # 3	WIPER [E] ROW 6 SEARCH RELAY #4	WIPER [C] ROW 5 SEARCH RELAY #5	
1						
2						
3						
4	9	22	17	20	6	SELECTION-3
5	3	21	17	19	5	
6	9	8	2	23	5	
7	4	22	11	19	1	
8	10	18	17	12	16	
9	7	21	14	20	25	
10	3	24	15	13	6	
11	6	25	16	1	5	
12	13	20	12	19	23	
13	15	14	17	11	2	
14	24	21	18	22	8	
15	3	7	10	4	9	
16						
17						
18						
19						
20						
21	6	20	15	22	10	SELECTION-2
22	9	19	15	21	3	
23	6	25	17	8	3	
24	4	20	12	21	23	
25	16	14	15	11	5	
26	24	19	18	22	7	
27	9	13	2	1	10	
28	10	7	5	23	3	
29	1	22	11	21	8	
30	2	18	15	12	17	
31	13	19	14	20	25	
32	9	24	16	4	6	
33						
34						
35						
36						
37						
38	3	19	16	21	12	SELECTION-1
39	5	22	16	20	15	
40	3	7	17	13	15	
41	25	19	11	20	4	
42	9	10	16	14	2	
43	1	22	18	21	23	
44	5	8	6	24	12	
45	12	23	2	4	15	
46	24	21	14	20	13	
47	6	18	16	11	17	
48	8	22	10	19	7	
49	5	1	9	25	3	
50						

DIAGONAL
VERTICAL
YELLOW LINE
HORIZONTAL
DIAGONAL
VERTICAL
YELLOW LINE
HORIZONTAL
DIAGONAL
VERTICAL
YELLOW LINE
HORIZONTAL

ROTATION OF SEARCH DISC WIPERS - FROM 50 TO 1

SEARCH DISC for Selections 4, 5, 6 viewed from BUTTON or WIPER side



(SELECTIONS 4-5-6)

SEARCH POSITIONS CHART

WIPER A AT POSITION	WIPER B ROW 7 SEARCH RELAY #1	WIPER D ROW 8 SEARCH RELAY #2	WIPER A ROW 9 SEARCH RELAY #3	WIPER E ROW 6 SEARCH RELAY #4	WIPER C ROW 5 SEARCH RELAY #5
1					
2					
3					
4	5	17	21	18	7
5	4	15	21	14	11
6	5	13	20	8	11
7	23	17	12	14	2
8	1	3	21	16	22
9	6	15	19	18	24
10	4	25	9	10	7
11	7	24	22	2	11
12	10	18	16	14	8
13	9	19	21	12	20
14	25	15	3	17	13
15	4	6	1	23	5
16					
17					
18					
19					
20					
21	4	14	22	15	1
22	8	17	22	18	6
23	4	24	5	11	6
24	13	14	19	18	3
25	10	16	22	9	21
26	23	17	12	15	7
27	8	2	20	25	1
28	1	7	21	3	6
29	25	15	9	18	11
30	20	12	22	19	5
31	2	17	16	14	24
32	8	23	10	13	4
33					
34					
35					
36					
37					
38	1	18	20	17	10
39	6	14	20	15	8
40	1	2	22	25	8
41	24	18	16	15	4
42	3	12	20	9	21
43	7	14	19	17	13
44	6	23	5	11	10
45	10	13	21	4	8
46	11	17	9	15	25
47	5	19	20	16	22
48	23	14	12	18	2
49	6	7	3	24	1
50					

DIAGONAL
VERTICAL
YELLOW LINE
HORIZONTAL

SELECTION-6

DIAGONAL
VERTICAL
YELLOW LINE
HORIZONTAL

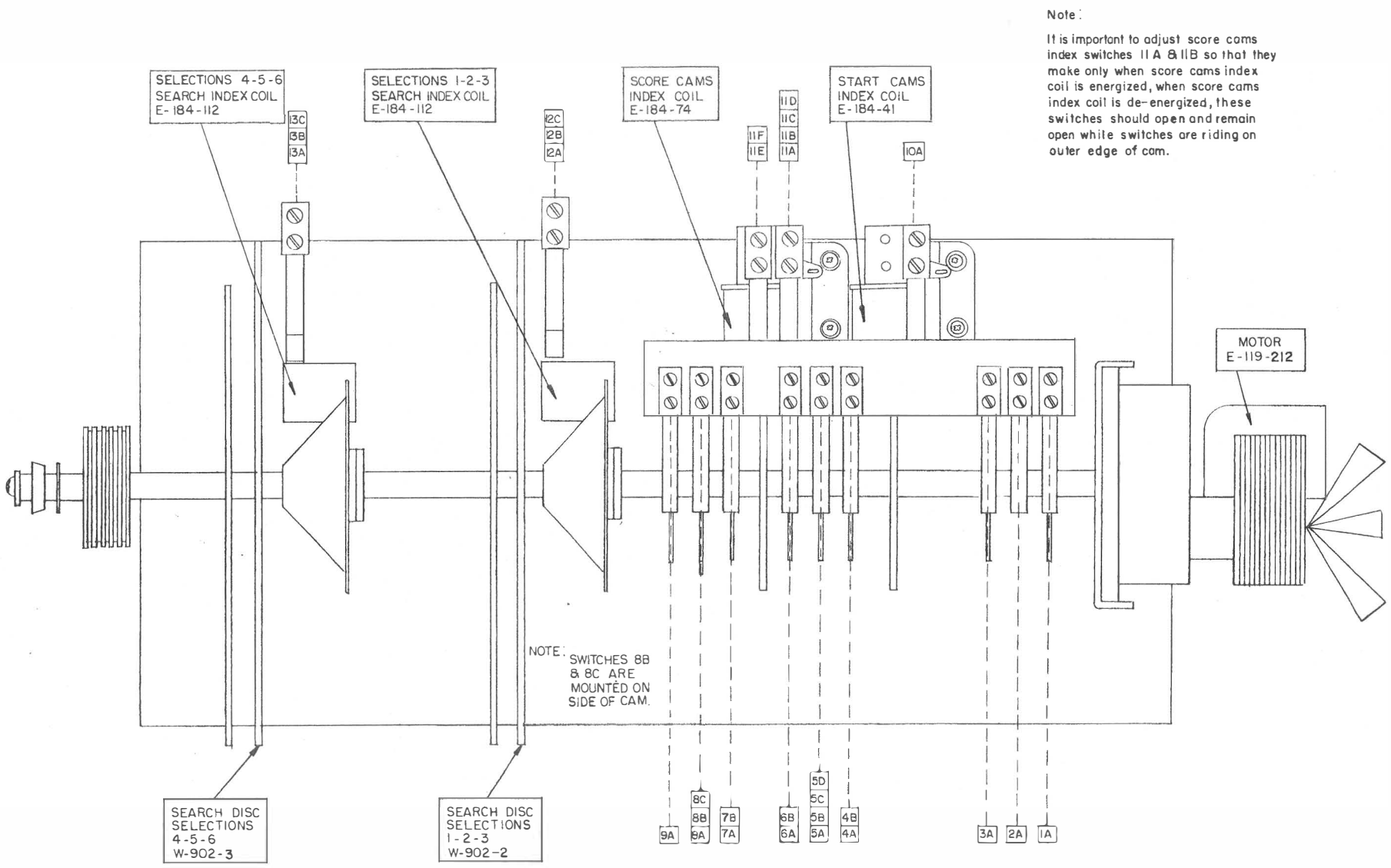
SELECTION-5

DIAGONAL
VERTICAL
YELLOW LINE
HORIZONTAL

SELECTION-4

ROTATION OF SEARCH DISC WIPERS—FROM 50 TO 1

CONTROL UNIT PICTORIAL VIEW NUMBERS CORRESPOND TO SWITCH CHART ON PAGE 41

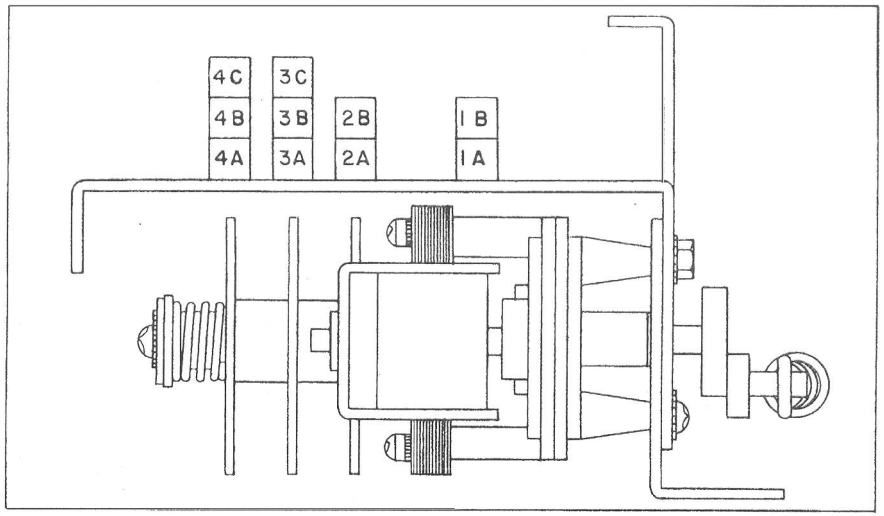


CONTROL UNIT CAM SWITCH CHART FOR POSITION OF SWITCHES REFER TO PICTORIAL VIEW ON PAGE 40

CAM SWITCH	LOCATION ON DIAGRAM	WIRE No.	WIRE COLORS	FUNCTION OF SWITCHES
1A N.O.	C-14	10-2 13-2	Red Red-Yellow	In series with control unit cam switch #4B, energizes spotting unit step-up coil.
2A N.O. PIN SWITCH	C-8	63-2 93-2	Brown-Yellow Gray-Yellow	Pulses timet unit step-up coil, when circuit complete thru all other factors.
3A N.O.	C-7	75 83	Orange-White Black-Yellow	Pulses score indicator escapement coil, when score reset relay is energized.
4A N.C.	1-6	93-1 30	Gray-Yellow Yellow	Opens start circuit.
4B N.O.	D-14	10-2 36-4	Red Yellow-Brown	In series with control unit cam switch #1A, energizes timer unit step-up coil.
5A N.O.	C-4	51 30	White-Red Yellow	Energizes anti-cheat relay.
5B N.O.	F-8	45 63	Green-White Brown-Yellow	Pulses coin unit step-up coil on each coin played, when score indicator unit is at zero.
5C N.O.	F-8	50-1 63	White Brown-Yellow	Pulses coin unit step-up coil on 1st coin played, when score indicator unit is not at zero.
5D S.P.D.T.	D-6	81 14-5 13-5	Black-Red Red-Green Red-Yellow	Opens start circuit, and completes a circuit to energize tilt relay if coin switch is closed too long.
6A N.O.	F-14	36-4 53-3	Yellow-Brown White-Yellow	Pulses selection unit step-up coil.
6B N.O.	G-5	43 30	Green-Yellow Yellow	Pulses score indicator unit escapement coil, when selection unit open at "O" switch is closed, and score reset relay is not energized.
7A N.O.	A-19	75-4 90	Orange-White Gray	Pulses score counter unit #1, #2 or #3 step-up coil, when a scoring circuit is completed in selection 1-2 or 3.
7B N.O.	A-25	78-2 80	Orange-Black Black	Pulses score counter unit #1, #2 or #3 step-up coil, when a scoring circuit is completed in selection 1, 2 or 3.
8A N.O.	D-15	21-2 23-2	Blue-Red Blue-Yellow	Pulses score indicator unit step-up coil when a scoring circuit is completed.
8B N.O. VERTICAL SWITCH	E-17	27-2 91-2	Blue-Orange Gray-Red	In series with scoring lock-in circuit when scoring in selections 1, 2 or 3.
8C N.O. VERTICAL SWITCH	E-25	27-2 71-3	Blue-Orange Orange-Red	In series with scoring lock-in circuit when scoring in selections 4, 5 or 6.
9A N.C.	H-17	27-2 90-1	Blue-Orange Gray	In series with scoring circuits when scoring in any selections.

CAM SWITCH	LOCATION ON DIAGRAM	WIRE No.	WIRE COLORS	FUNCTION OF SWITCHES
START CAMS INDEX COIL	A-10	56 70	White-Brown Orange	Energized thru shutter motor cam switch #4C when srart relay is energized.
10A N.O.	E-2	10P 20P	Red (Plastic) Blue (Plastic)	Completes a circuit to run control unit motor.
SCORE CAMS INDEX COIL	A-15	21-2 70	Blue-Red Orange	Energized when scoring in any selection, and releases scoring cams.
11A N.O.	H-17	27-2 50	Blue-Orange White	In series with scoring lock-in circuits when scoring in any selection.
11B N.O.	H-16	50 90-1	White Gray	Same as above switch.
11C N.C.	B-17	51-3 91-2	White-Red Gtay-Red	Opens direct 50 volt circuit to selection 1-2-3 search index coil, coil then held in thru resistor.
11D N.C.	B-25	52-3 71-3	White-Blue Orange-Red	Opens direct 50 volt circuit to selection 4-5-6 search index coil, coil then held in thru resistor.
11E N.O.	E-2	10P 20P	Red (Plastic) Blue (Plastic)	Completes a circuit to run control unit motor.
11F N.C.	E-8	61-2 63-2	Brown-Red Brown-Yellow	Opens timer unit step-up circuit.
SELECTIONS 1-2-3 SEARCH INDEX COIL	B-17	51-3 90	White-Red Gray	Energized when a scoring circuit is completed in selection 1-2 or 3.
12A N.C.	H-6	15-5 93-1	Red-White Gray-Yellow	Opens start circuit.
12B N.C.	A-24	80 70	Black Orange	Opens circuit to selection 4-5-6 search index coil.
12C N.O.	H-15	21-2 91-2	Blue-Red Gray-Red	In series with a circuit to energize score cams index coil, and step score indicator unit.
SELECTIONS 4-5-6 SEARCH INDEX COIL	A-25	52-3 80	White-Blue Black	Energized when a scoring circuit is completed in selection 4, 5 or 6.
13A N.C.	G-6	15-5 57	Red-White White-Orange	Opens start circuit.
13B N.C.	A-17	90 70	Gray Orange	Opens circuit to selection 1, 2, 3 search index coil.
13C N.O.	G-15	21-2 71-3	Blue-Red Orange-Red	In series with a circuit to energize score cams index coil, and step score indicator unit.

SHUTTER MOTOR PICTORIAL VIEW



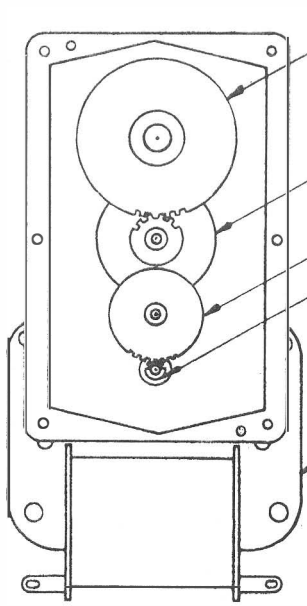
SHUTTER MOTOR CAM SWITCH CHART

FOR POSITION OF SWITCHES SEE PICTORIAL VIEW

CAM SWITCH	LOCATION ON DIAGRAM	WIRE No.	WIRE COLORS	FUNCTION OF SWITCHES
1A N.C.	H-16	90-1 30	Gray Yellow	Opens scoring circuits when starting new game.
1B N.O.	C-9	80-2 30	Black Yellow	Carry-over circuit for shutter motor.
2A N.O.	F-10	98 30	Gray-Black Yellow	Energizes the ball gate relay when starting new game.
2B N.O.	H-12	85 30	Black-White Yellow	Resets the (6) score counter units, selection unit, timer unit, and energizes the tilt reset coil when starting new game.
3A N.O.	F-9	38-2 61	Yellow-Black Brown-Red	In series with cam #3C circuit. Also in series with circuit to close shutter when 1st ball is shot.
3B N.C.	I-9	91-1 30	Gray-Red Yellow	Opens circuit to spotted no. lites when starting new game.
3C N.O.	B-9	61 80-2	Brown-Red Black	In series circuit to close shutter if game is tilted before 1st ball is shot.
4A N.O.	C-7	78 81	Orange-Black Black-Red	Circuit to energize start relay thru score indicator zero switch.
4B N.C.	F-8	60-1 93-2	Brown Gray-Yellow	Opens timer unit step-up circuit when starting new game.
4C S.P.D.T.	B-9	80-2 54 56	Black White-Green White-Brown	Directs circuit to open shutter, and energize start cams index coil when starting new game.

SHUTTER MOTOR

(MOTOR PART NO. E-119-99)



GEAR & SHAFT ASSEMBLY
ZGS-5922-1

GEAR
G-5818

GEAR G-4109

GEAR ROTOR & SHAFT ASSEMBLY
ZRST-1715-30-1

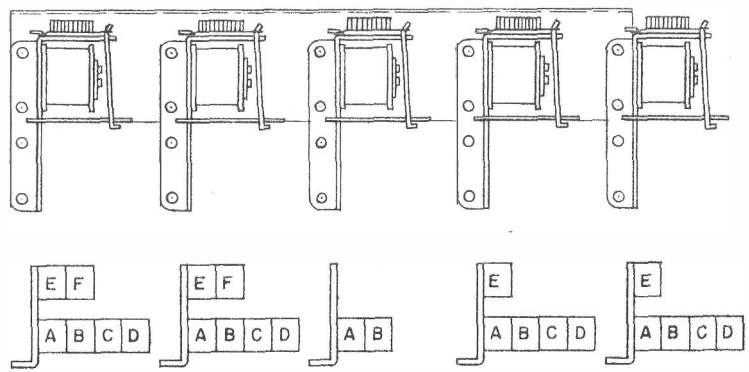
STATOR & COIL ASSEMBLY
ZS-1704-251

NOTE:

WHEN ORDERING GEARS FOR SHUTTER MOTOR, REFER TO PART NUMBERS SHOWN ABOVE.

5 RELAYS BANK PICTORIAL VIEW

NUMBERS CORRESPOND TO SWITCH CHART AT RIGHT



Name	4-5-6 YELLOW LINE RE.	1-2-3 YELLOW LINE RE.	START RE.	ANTI-CHEAT RE.	SCORE RESET RE.
Coil turns & wire gauge	1700 #33	1700 #33	1800 #33	2300 #33	2300 #33
Coil resistance (nominal)	60 Ω	60 Ω	65 Ω	85 Ω	85 Ω
Operating voltage	50 V.	50 V.	50 V.	50 V.	50 V.
Test voltage	37 V.	37 V.	32 V.	39 V.	37 V.
Extension spring load	GREEN	GREEN	GREEN	YELLOW	YELLOW
Sw actuator stroke	3/32	3/32	3/32	3/32	3/32
Additional information				THERMALEZE WIRE OR EQUIVALANT NO WRAP ON COIL.	

SPRING CODE		
COLOR	PART NO.	LOAD
CLEAR	SP-199-13	13 OZ. AT 15/16
BLUE	SP-199-14	21 OZ. AT 15/16
YELLOW	SP-199-15	15 OZ. AT 15/16
RED	SP-199-16	9 OZ. AT 15/16
GREEN	SP-199-17	17 OZ. AT 15/16

5 RELAYS BANK SWITCH CHART

FOR POSITION OF SWITCHES REFER TO PICTORIAL VIEW

RELAY SWITCH	LOCATION ON DIAGRAM	WIRE No.	WIRE COLORS	FUNCTION OF SWITCHES
4-5-6 YELLOW LINE RELAY COIL	A-31	40-3 70	Green Orange	Energized thru selections 4-5-6 search disc when scoring in yellow line of selections 4-5 or 6.
A S.P.D.T.	E-25	41-3 71-6 27-3	Green-Red Orange-Red Blue-Orange	Opens circuit for 4th selection regular 4-in-line scoring, and completes circuit for 4th selection yellow 3-in-line scoring.
B S.P.D.T.	F-26	45-3 75-6 41-3	Green-White Orange-White Green-Red	Opens circuit for 4th selection regular 5-in-line scoring, and completes circuit for 4th selection yellow 4-in-line scoring.
C S.P.D.T.	E-27	41-3 51-6 27-3	Green-Red White-Red Blue-Orange	Opens circuit for 5th selection regular 4-in-line scoring, and completes circuit for 5th selection yellow 3-in-line scoring.
D S.P.D.T.	F-28	45-3 54-6 41-3	Green-White White-Green Green-Red	Opens circuit for 5th selection regular 5-in-line scoring, and completes circuit for 5th selection yellow 4-in-line scoring.
E S.P.D.T.	E-28	41-3 56-6 27-3	Green-Red White-Brown Blue-Orange	Opens circuit for 6th selection regular 4-in-line scoring, and completes circuit for 6th selection yellow 3-in-line scoring.
F S.P.D.T.	F-29	45-3 63-6 41-3	Green-White Brown-Yellow Green-Red	Opens circuit for 6th selection regular 5-in-line scoring, and completes circuit for 6th selection yellow 4-in-line scoring.
1-2-3 YELLOW LINE RELAY COIL	A-24	57-2 70	White-Orange Orange	Energized thru selections 1-2-3 search disc when scoring in yellow line of selections 1, 2 or 3.
A S.P.D.T.	E-18	53-2 10-6 52-2	White-Yellow Red White-Blue	Opens circuit for 1st selection regular 4-in-line scoring, and completes circuit for 1st selection yellow 3-in-line scoring.
B S.P.D.T.	F-19	54-2 15-4 53-2	White-Green Red-White White-Yellow	Opens circuit for 1st selection regular 5-in-line scoring, and completes circuit for 1st selection yellow 4-in-line scoring.
C S.P.D.T.	E-20	53-2 18-6 52-2	White-Yellow Red-Black White-Blue	Opens circuit for 2nd selection regular 4-in-line scoring, and completes circuit for 2nd selection yellow 3-in-line scoring.
D S.P.D.T.	F-21	54-2 25-6 53-2	White-Green Blue-White White-Yellow	Opens circuit for 2nd selection regular 5-in-line scoring, and completes circuit for 2nd selection yellow 4-in-line scoring.
E S.P.D.T.	E-22	53-2 27-6 52-2	White-Yellow Blue-Orange White-Blue	Opens circuit for 3rd selection regular 4-in-line scoring, and completes circuit for 3rd selection yellow 3-in-line scoring.
F S.P.D.T.	F-22	54-2 38-6 53-2	White-Green Yellow-Black White-Yellow	Opens circuit for 3rd selection regular 5-in-line scoring, and completes circuit for 3rd selection yellow 4-in-line scoring.
START RELAY COIL	A-6	98-3 70	Gray-Black Orange	Energized on each spin of game, thru coin switch, replay button switch, and also thru automatic selection step-up circuit.
A N.O.	F-6	57 81	White-Orange Black-Red	Lock-in circuit for this relay.
B N.O.	C-9	54 30	White-Green Yellow	Completes circuit to open shutter, and energize start cams index coil.

CONCLUDED ON NEXT PAGE

5 RELAYS BANK SWITCH CHART

FOR POSITION OF SWITCHES REFER TO PICTORIAL VIEW

RELAY SWITCH	LOCATION ON DIAGRAM	WIRE No.	WIRE COLORS	FUNCTION OF SWITCHES
ANTI-CHEAT RELAY COIL	A-5	51 70	White-Red Orange	Energized by control unit cam switch #5A. Switches on this relay protect scoring, lite, and game playing circuits.
A N.O.	B-5	51 30	White-Red Yellow	Lock-in circuit for this relay.
B N.O.	L-6	14 15	Red-Green Red-White	Opens 17 volt circuit when this relay drops out.
C N.C.	E-8	74 75	Orange-Green Orange-White	Completes circuit to energize score reset relay when this relay drops out.
D N.C.	L-4	18 31-4	Red-Black Yellow-Red	Completes a circuit to lite tilt lite when this relay drops out.
E N.O.	L-4	31-4 41	Yellow-Red Green-Red	Opens circuit to score indicator lites when this relay drops out.
SCORE RESET RELAY COIL	A-8	75 70	Orange-White Orange	Energized thru score indicator unit "O" switch when anti-cheat relay drops out.
A N.O.	E-7	74 75	Orange-Green Orange-White	Lock-in circuit for this relay.
B N.O.	C-2	10P 20P	Red (Plastic) Blue (Plastic)	Completes a circuit to run control unit motor.
C N.C.	D-8	53 61-2	White-Yellow Brown-Red	Opens timer unit step-up circuit.
D N.C.	B-6	81 98-3	Black-Red Gray-Black	Opens start circuit.
E S.P.D.T.	C-7	91 93 83	Gray-Red Gray-Yellow Black-Yellow	Opens circuit to pulse score indicator unit escapement coil thru control unit cam switch #6B, and completes circuit to pulse coil thru control unit cam switch #3A.

MISCELLANEOUS RELAYS SWITCH CHART

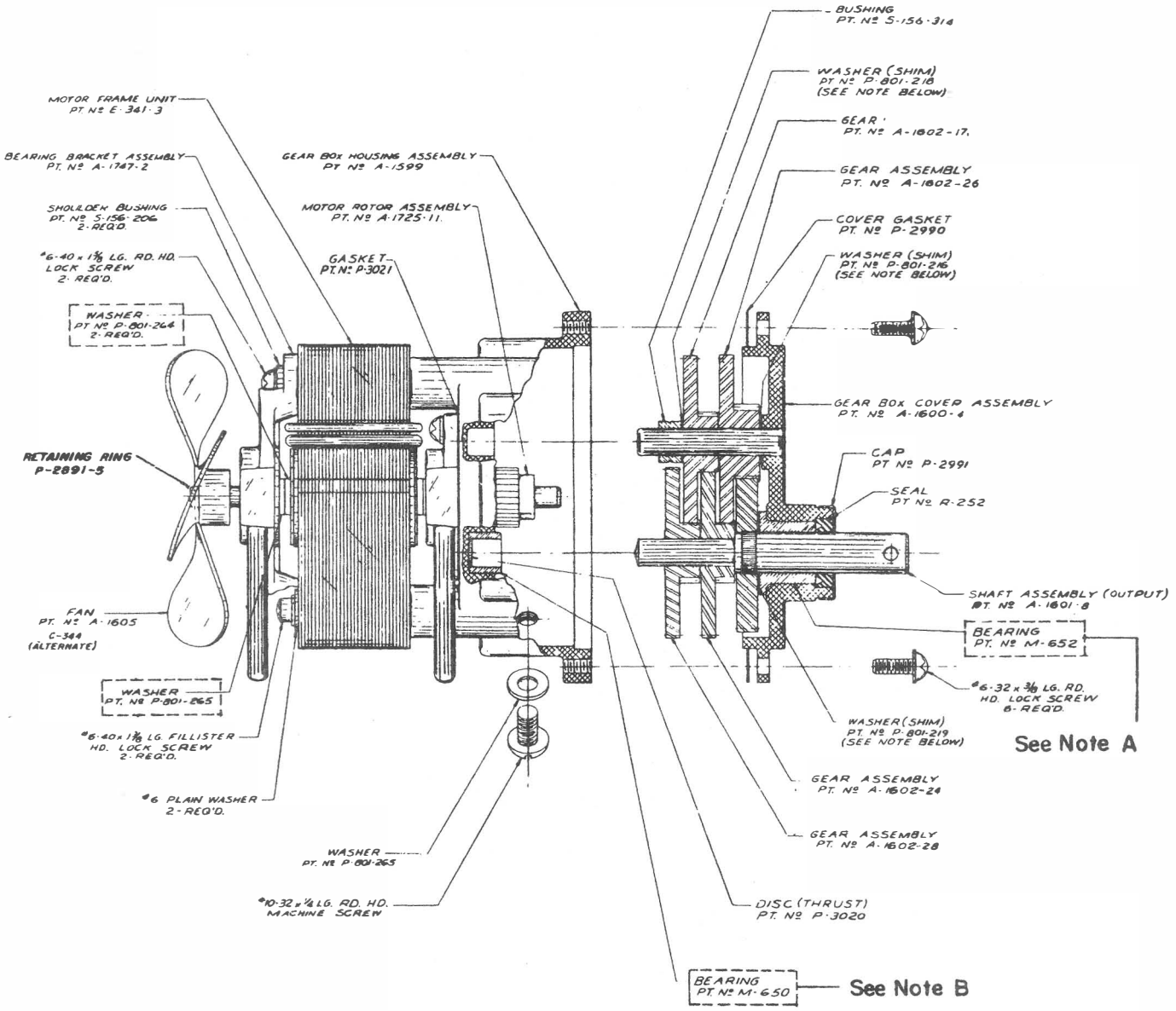
RELAY SWITCH	LOCATION ON DIAGRAM	WIRE No.	WIRE COLORS	FUNCTION OF SWITCHES
TILT RESET COIL	A-11	85 70	Black-White Orange	Energized by shutter motor cam switch #2B, when starting new game. When this coil is energized, tilt relay coil drops out.
TILT RELAY COIL	A-5	J 70	Jumper Orange	Energized by tilt switches or plumb-bob tilt. Also thru control unit cam switch #5D if coin switch is closed too long.
A N.C.	D-1	10P 50P	Red (Plastic) White (Plastic)	Opens circuit to control unit motor.
B N.C.	B-5	13-5 J	Red-Yellow Jumper	Opens circuit to tilt relay coil.
C N.C.	M-6	10 15	Red Red-White	Opens 17 volt circuits.
D N.O.	L-4	18 31-4	Red-Black Yellow-Red	Completes a circuit to tilt lite.
E S.P.D.T.	H-8	60-1 30 38-2	Brown Yellow Yellow-Black	Opens timer unit step-up circuit, and completes circuit to close shutter if game is tilted before 1st ball is shot.
BALL GATE RELAY COIL	A-10	98 70	Gray-Black Orange	Energized by shutter motor cam switch #2A when starting new game.
A N.C.	G-9	61 30	Brown-Red Yellow	Completes a circuit to close shutter when this relay drops out. (1st ball is shot)
B N.O.	E-10	71 98	Orange-Red Gray-Black	Completes lock-in circuit to this relay until 1st ball is shot.

NEW ANTI-CHEAT COIN SWITCH CIRCUIT

The coin switch gives a very short pulse, when operated by a coin. With this new circuit, the game will tilt if the pulse is not as short as from a coin, so that operating the coin switch with wire, strings, etc., usually results in a tilt.

The circuit is completed thru control unit cam switch #5D (on wiring diagram at D-6).

MOTOR ASSEMBLY (Part No. E-119-212)



NOTE
IN ORDER TO MAINTAIN PROPER CLEARANCES BETWEEN GEARS IT IS MOST IMPORTANT THAT WHEN REASSEMBLING GEAR TRAIN:
1. SHIMS BE REPLACED IN THEIR RESPECTIVE LOCATIONS.
2. SAME NUMBER OF SHIMS BE REPLACED IN EACH RESPECTIVE LOCATION.

NOTE A: Bearing M-652 is part of Gear Box Cover Assembly A-1600-4 and cannot be ordered separately.

NOTE B: Bearing M-650 is part of Gear Box Housing Assembly A-1599 and cannot be ordered separately.

NOTES

MISCELLANEOUS PARTS

Back Cabinet Assembly:

Part No.	Name of Part
G-303-2	Back Glass—FUN SPOT
G-303-3	Back Glass—BARREL O' FUN
M-281-14	Lock and keys (2) keyed alike

Back Door Assembly:

M-281-22	Lock and keys
P-758-17	Lock cam
E-122-19	Transformer

Front Cabinet Assembly:

M-168-15	Ball
AS-187-18	Ball shooter assembly
A-1540-3	Ball shooter housing
A-100-7	Ball shooter rod
SP-200-24	Ball shooter spring (long)
SP-243	Ball shooter spring (short)
R-108-3	Ball shooter tip
P-711-1	Cigarette holder
P-2210-80	Coin entry plate 10¢
P-2210-81	Coin entry plate 5¢
CA-1016-5	Front moulding only
M-281-22	Lock and keys—side door
P-4052	Leg
M-106-1	Leg bolt
M-163-4	Leg adjuster
CA-1016-7	Side door only

Front Door Assembly:

Part No.	Name of Part
A-1538-3	Armature plate (AS-277-56)
E-101-45	Coil—coin lockout
AS-277-56	Coin switch assembly 5¢ or 10¢
CA-567-109	Front door only—FUN SPOT
CA-567-110	Front door only—BARREL O' FUN
AS-1971-2	Front door assembly complete—FUN SPOT
AS-1971-3	Front door assembly complete—BARREL O' FUN
A-254-33	Hinge and bracket
M-281-6	Lock and keys
P-4005	Lock cam
E-108-32	Micro switch 5c and 10c
A-1729-6	Push button—replay
SW-100-157	Push button switch
P-2768-5	Ring for A-1729-6 button
P-2768-7	Ring for M-281-6 lock
M-280-15	Slug rejector 5¢
M-280-16	Slug rejector 10¢

Panel Assembly:

AS-1315	Ball gate and switch assembly
C-326-9	Light Shield post
R-115-4	Rebound rubber
M-170	Rebound spring-Double post
R-243	Rubber ring for Yellow post
R-243-2	Rubber ring for Red post

Bally pin game lubricant now available in one half-pint (8 Oz.) containers with plastic spout and screw cap.

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