

Bally®

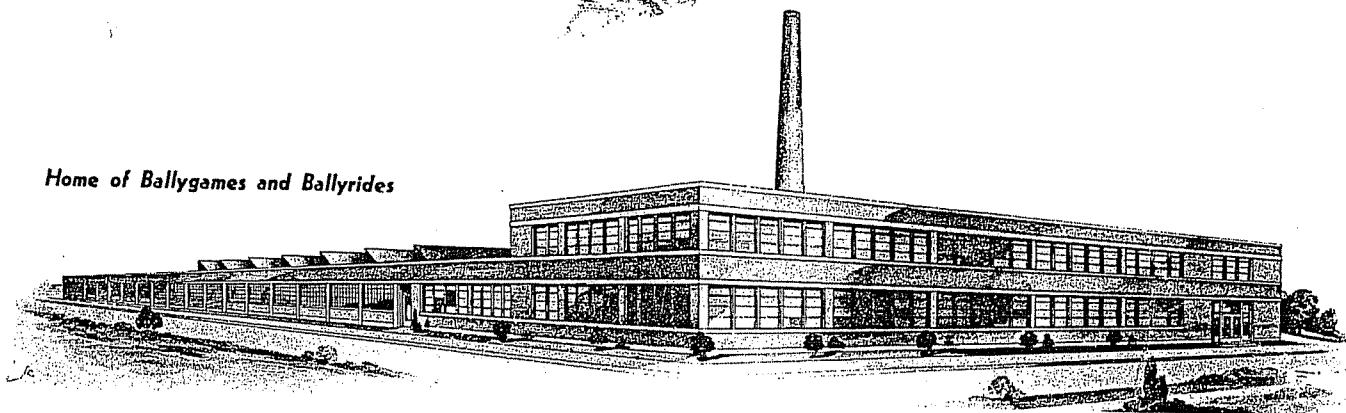
SKILL-ROLL

OPERATING INSTRUCTIONS AND PARTS CATALOG

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

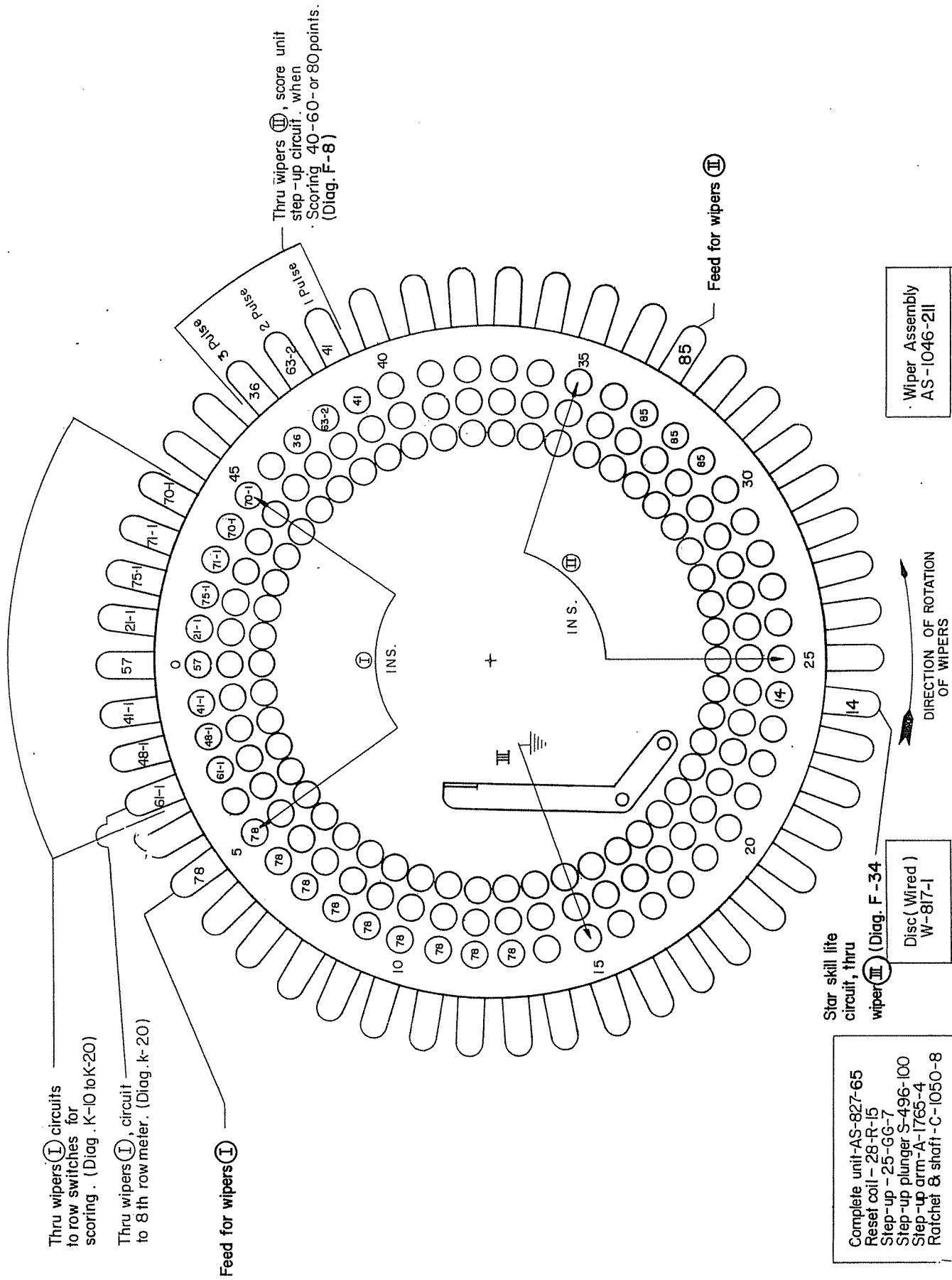
**FOR QUICKEST SERVICE
STATE CORRECT PART NUMBER
WHEN ORDERING PARTS**

Home of Ballygames and Ballyrides



ROW COUNTER UNIT viewed from BUTTON or WIPER side

9 step unit. Wipers shown in zero or reset position



Thru wipers **I**, circuits to row switches for scoring. (Diag. K-10 to K-20)

Thru wipers **II**, circuit to 8th row meter. (Diag. K-20)

Feed for wipers **I**

Thru wipers **III**, score unit step-up circuit. when Scoring 40-60- or 80 points. (Diag. F-8)

Feed for wipers **II**

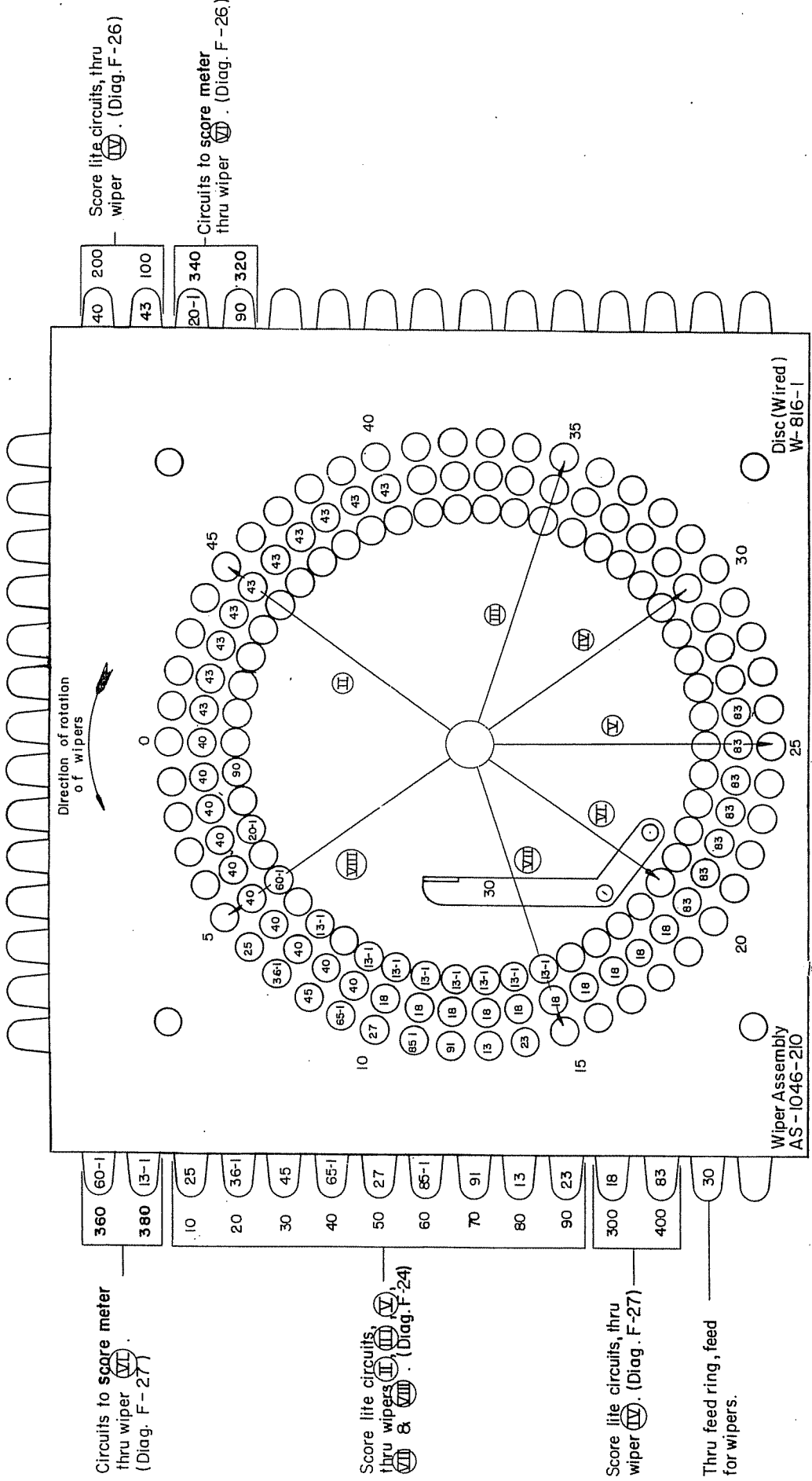
Wiper Assembly AS-1046-2II

Star skill life circuit, thru wiper **III** (Diag. F-34)

Disc (Wired) W-817-1

- Complete unit-AS-827-65
- Reset coil - 28-R-15
- Step-up - 25-GG-7
- Step-up plunger S-496-100
- Step-up arm-A-1765-4
- Ratchet & shaft-C-1050-8

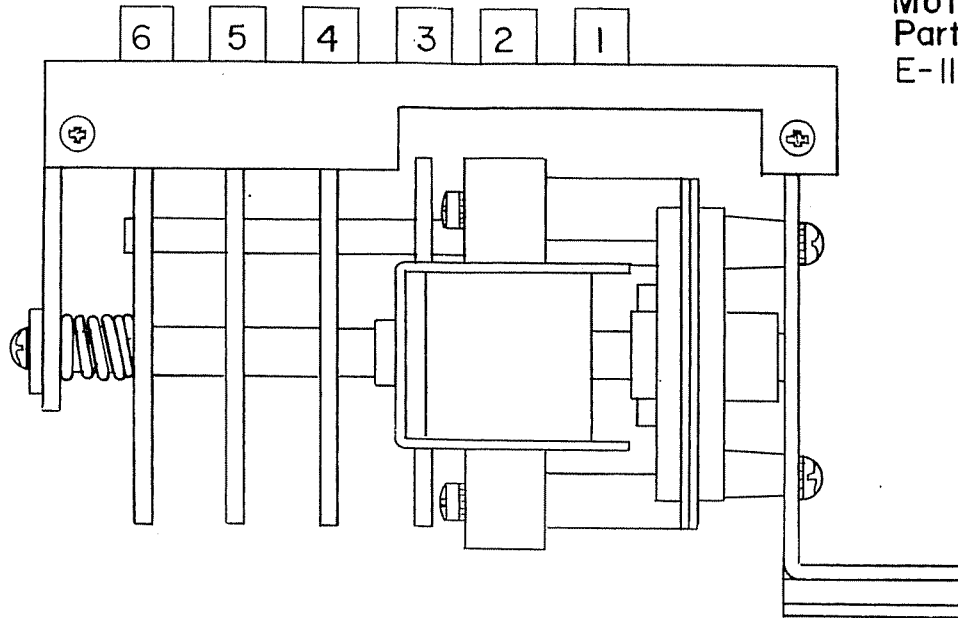
SCORE UNIT viewed from BUTTON or WIPER side



- Complete unit - AS-1022-40
- Reset coil - 28-R-15
- Step-up coil - 25-GG-7
- Step-up plunger - S-496-100
- Step-up arm - A-1765-4
- Futchet & shaft - C-1050-46

EQUENCE MOTOR PICTORIAL VIEW

NUMBERS CORRESPOND TO SWITCH CHART



Motor
Part No.
E-119-154

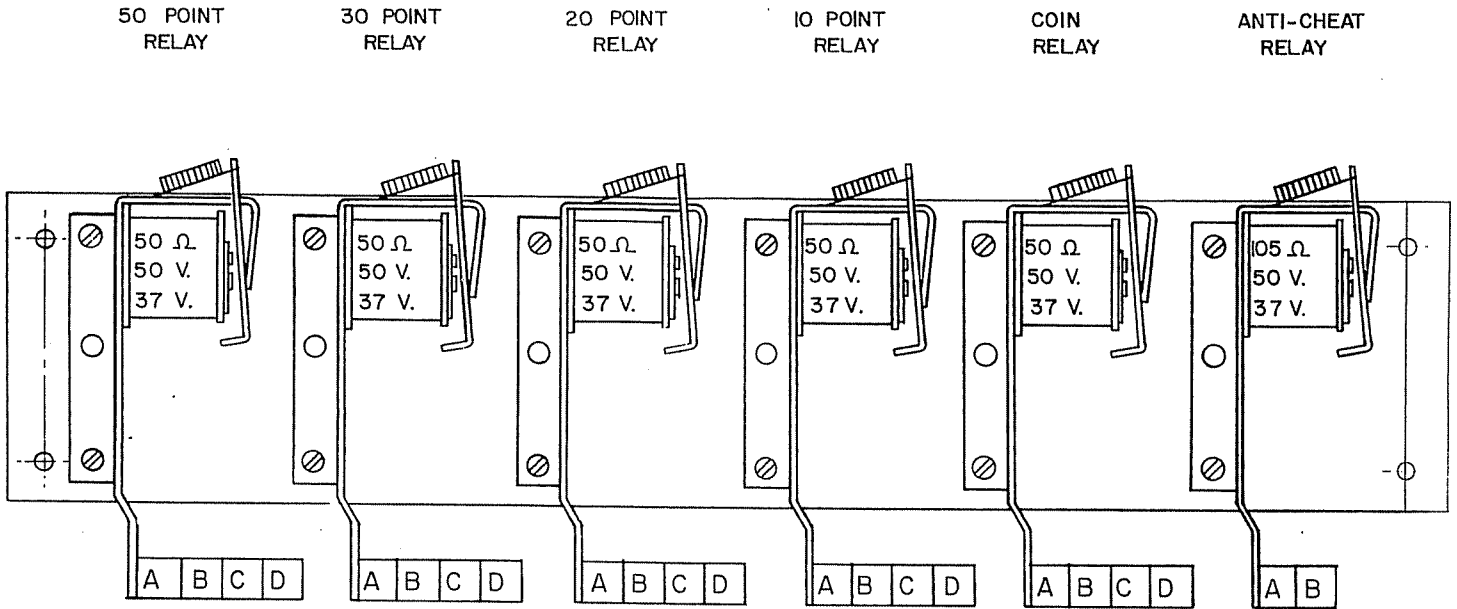
CODE
 N.C.----- Normally Closed
 N.O.----- Normally Open
 M.B.B.----- Make Before Break
 S.P.D.T.---- Single Pole Double Throw

EQUENCE MOTOR SWITCH CHART FOR POSITION OF SWITCHES REFER TO PICTORIAL VIEW

CAM SWITCH	LOCATION ON DIAGRAM	WIRE No.	WIRE COLORS	FUNCTION OF SWITCHES
1 N.O.	C-9	30 60	Yellow Brown	Carry-over for sequence motor.
2 S.P.D.T.	J-9	23 78 70	Blue-Yellow Orange-Black Orange	Directs circuit from point relays to row counter step-up coil.
3 N.O. 1 PULSE	K-6	18-1 30	Red-Black Yellow	Completes circuit to score unit step-up coil, and bell coil, for scoring 10 points. Also resets row counter unit, and score unit, when starting new game.
4 N.O. 2 PULSE	K-7	63-2 78	Brown-Yellow Orange-Black	Completes circuit to score unit step-up coil, and bell coil, for scoring 20 points.
5 N.O. 3 PULSE	K-7	36 78	Yellow-Brown Orange-Black	Completes circuit to score unit step-up coil, and bell coil, for scoring 30 points.
3 N.O. 5 PULSE	K-7	65 78	Brown-White Orange-Black	Completes circuit to score unit step-up coil, and chime coil, for scoring 50 points.

6 RELAY BANK PICTORIAL VIEW

LETTERS CORRESPOND TO SWITCH CHART



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

6 RELAY BANK SWITCH CHART FOR POSITION OF SWITCHES REFER TO PICTORIAL VIEW

RELAY SWITCH	LOCATION ON DIAGRAM	WIRE No.	WIRE COLORS	FUNCTION OF SWITCHES
50 POINT RELAY COIL	B-9	56 80	White-Brown Black	Energized thru row counter disc, by score 50 coin switches.
A S.P.D.T.	F-9	21 23 56	Blue-Red Blue-Yellow White-Brown	Breaks lock-in circuit for other point relays, and completes lock-in circuit for this relay.
B N.O.	F-7	65 85	Brown-White Black-White	Completes circuit to step score unit and energize chime coil.
C N.O.	J-3	60 30	Brown Yellow	Runs sequence motor.
D S.P.D.T.	D-7	61 85 48	Brown-Red Black-White Green-Black	Breaks circuit to bell coil, and completes circuit to chime coil.
30 POINT RELAY COIL	B-10	54 80	White-Green Black	Energized thru row counter disc, by score 30 coin switches.
A N.O.	F-7	36 85	Yellow-Brown Black-White	Completes circuit to step score unit, and energize bell coil.
B N.O.	I-3	60 30	Brown Yellow	Runs sequence motor.
C N.O.	D-10	21 54	Blue-Red White-Green	Lock-in circuit for this relay.
D N.C.	H-4	25-1 38	Blue-White Yellow-Black	(Safety circuit) A.C. relay.

CONCLUDED ON NEXT PAGE

RELAY BANK SWITCH CHART — CONCLUDED

RELAY SWITCH	LOCATION ON DIAGRAM	WIRE No.	WIRE COLORS	FUNCTION OF SWITCHES
0 POINT RELAY COIL	B-10	52 80	White-Blue Black	Energized thru row counter disc, by score 20 coin switches.
N. O.	F-7	63-2 85	Brown-Yellow Black-White	Completes circuit to step score unit, and energize bell coil.
N. O.	D-10	21 52	Blue-Red White-Blue	Lock-in circuit for this relay.
N. O.	G-3	60 30	Brown Yellow	Runs sequence motor.
N. C.	F-4	15-1 38	Red-White Yellow-Black	(Safety circuit) A. C. relay.
10 POINT RELAY COIL	B-9	51 80	White-Red Black	Energized thru row counter disc, by score 10 coin switches.
N. O.	F-6	41 85	Green-Red Black-White	Completes circuit to step score unit, and energize bell coil.
N. O.	D-9	21 51	Blue-Red White-Red	Lock-in circuit for this relay.
N. O.	E-3	60 30	Brown Yellow	Runs sequence motor.
N. C.	H-4	15-1 25-1	Red-White Blue-White	(Safety circuit) A. C. relay.
15 POINT RELAY COIL	B-5	31 80	Yellow-Red Black	Energized by coin switch, when starting new game.
S. P. D. T.	K-3	71 30 60	Orange-Red Yellow Brown	Breaks lock-in circuit to A. C. relay, and completes circuit to run sequence motor.
N. O.	H-5	31 63	Yellow-Red Brown-Yellow	Lock-in circuit for this relay.
N. O.	D-22	93 30	Gray-Yellow Yellow	Energizes skill coin release coil.
S. P. D. T.	J-5	41 18-1 75	Green-Red Red-Black Orange-White	Breaks 10 point score step-up circuit, and resets row counter unit, and score unit.
C. RELAY COIL	B-4	74 80	Orange-Green Black	Energized thru score unit step-up arm switch.
S. P. D. T.	H-23	15 30 78	Red-White Yellow Orange-Black	Opens scoring circuits, and lites tilt lite, when this relay drops out.

MISCELLANEOUS PARTS

PART NO.	
L-409	Ballast Transformer
A-800-69	Cam Assembly for Sequence Motor assembly
L-101-45	Coil for E-101-48 Magnet
P-1900-34	Coin Box
AS-849-3	Coin Drop assembly complete
L-229-8	Coin drop casting 5¢
-286-15	Coin reject button
L-130-10	Counter
L-2768-7	Cup for M-281-6 lock
S-1753	Front door assembly complete
A-567-58	Front door only
L-283	Front glass (screened)
-158-1	Handle
-254-45	Hinge for front door
L-163-4	Leg Adjuster
L-281-6	Lock and keys — Front door
L-281-22	Lock and keys — Back door
S-277-41	Lock-out relay assembly complete
-2210-44	Plate 5¢
L-910	Playfield plexiglass
-101-48	Magnet — Coin lock-out
-119-154	Sequence motor
S-232-54	Sequence motor unit assembly
L-280-15	Slug rejector 5¢
P-200-38	Spring for S-286-15 button
L-732-1	Socket driver (#10 Gulamite for #10 screw)
-122-55	Transformer