

# Instruction Manual for **TRIPLE ACTION**



**Williams®**

**ELECTRONICS**

A DIVISION OF  
THE SEEBURG CORPORATION OF DELAWARE

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Chicago, Ill.  
Cable Address

**10 POINT RELAY**

IS PULSED BY:  
1. STAND-UP SWITCHES.  
2. KICKER SWITCHES.  
3. SPINNER RELAY.  
4. IMPULSE CAM SWITCH E, THRU 50  
POINT RELAY.

# "TRIPLE ACTION"

## SINGLE PLAYER

### GAME OPERATES AS FOLLOWS:

MAKING ANY ONE OF THREE (3) TOP ROLLOVER BUTTONS OR MAKING ANY DROP TARGET ADVANCES BONUS FROM 1,000 TO 2,000 TO 3,000 UP TO 10,000.

CENTER SPINNER AND TOP LIT ROLLOVER LANE ADVANCES BONUS FROM SINGLE TO DOUBLE TO TRIPLE.

ACCUMULATED BONUS SCORES WHEN BALL LEAVES PLAYFIELD.

NOTE: HI-SCORE ADJUSTMENTS FOR REPLAYS AND EXTRA BALLS INDICATE CLEARLY ON "SCORE ADJUSTMENT" CARD IN BACK BOX. ADJUSTMENTS FOR 3 BALL PLAY RANGE FROM 11,000 TO 110,000 ONLY, AND FOR 5 BALL PLAY RANGE FROM 101,000 TO 199,000 ONLY.

ADJUSTABLE JACK IN BACK BOX CAN BE SET INTO FOUR DIFFERENT POSITIONS TO SATISFY ANY LOCATION. WHEN REPLAYS ARE DESIRED ON BOTH HI-SCORE AND SPECIALS, USE POSITION #1.

FOR REPLAYS ON HI-SCORE ONLY, BUT EXTRA BALLS ON SPECIALS, USE POSITION #2.

FOR EXTRA BALLS ON BOTH HI-SCORE AND SPECIALS, USE POSITION #3.

FOR NOVELTY AREAS, WHERE SPECIALS WILL SCORE 10,000 POINTS, USE POSITION #4.

WHATEVER POSITION IS USED, REFER TO ADJUSTMENT SHEET FOR SCORE CARDS.

#### ADJUSTMENTS ARE LOCATED IN BACK BOX:

ADJUSTMENT

ADJUSTMENT "ON-OFF"

ADJUSTMENT

JACK (4 POSITION)

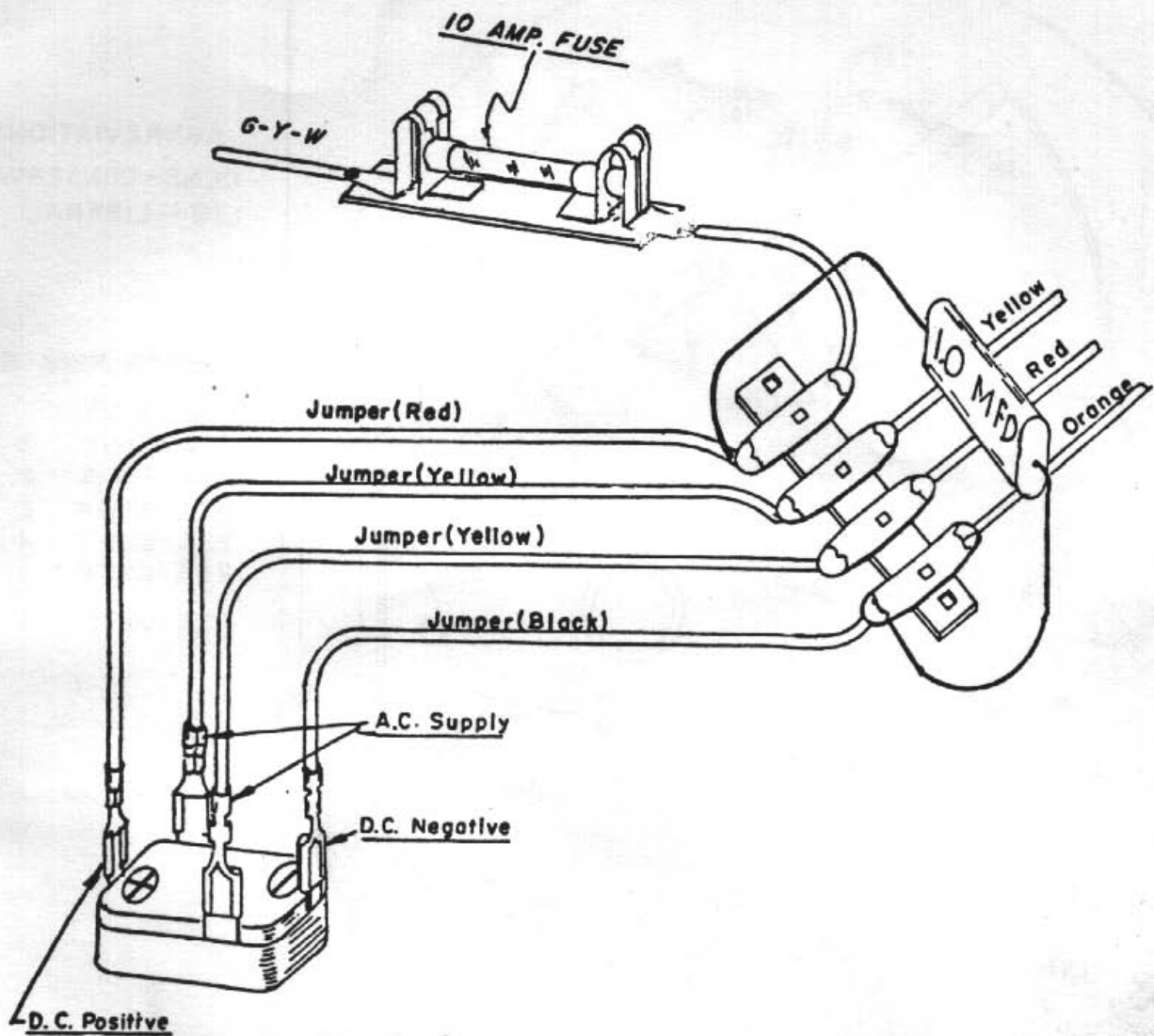
REPLAYS ON SPECIALS AND HI-SCORE

REPLAYS ON HI-SCORE, EXTRA BALL ON SPECIAL

EXTRA BALL ON HI-SCORE AND SPECIAL

NOVELTY - 10,000 POINTS ON SPECIAL

## 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.

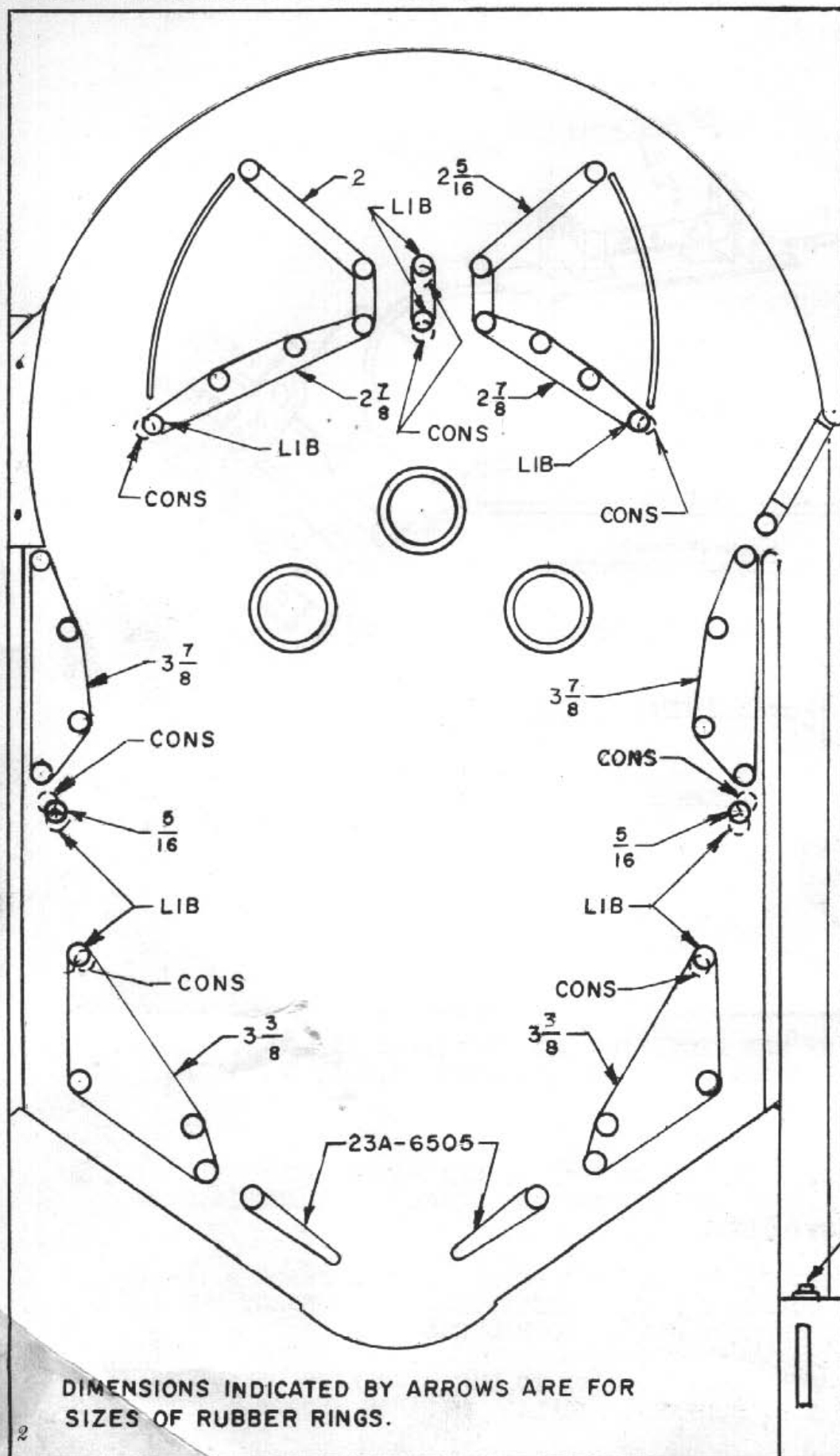
IF, HOWEVER, THE 15 AMP 24 VOLT FUSE ON THE MECHANISM PANEL OPENS, IT COULD BE DUE TO A FAULTY RECTIFIER. DISCONNECT THE A.C. INPUT TO RECTIFIER, REPLACE FUSE, AND RECHECK.

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



# "TRIPLE ACTION" - POST ADJUSTMENT SHEET

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



ABBREVIATIONS:-  
CONS - CONSERVATIVE  
LIB - LIBERAL

## RUBBER RING NUMBERS:-

23A-6300	5/16" I.D.
23A-6309	3 7/8 I.D.
23A-6305	2 I.D.
23A-6306	2 5/16" I.D.
23A-6307	2 7/8" I.D.
23A-6308	3 3/8" I.D.
23A-6505	1 1/2" I.D.

DIMENSIONS INDICATED BY ARROWS ARE FOR SIZES OF RUBBER RINGS.

## **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.

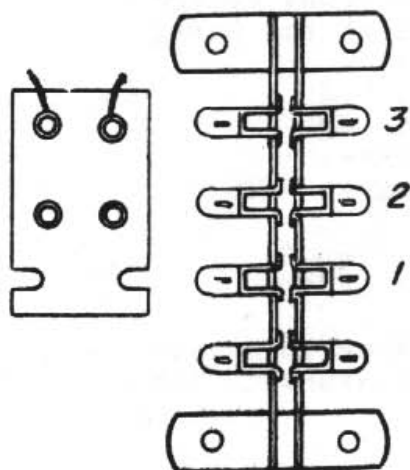
Solenoid Plungers should not have a lubricant of any kind. Should there be a sluggish tendency or if plungers are sticking, the parts should be cleaned with a solvent and flaked graphite applied on reassembly.

## **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.

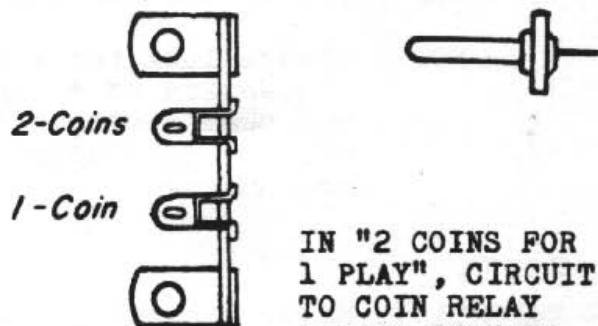
# ADJUSTMENTS ON MECHANISM PANEL

## 10¢ Adjustment



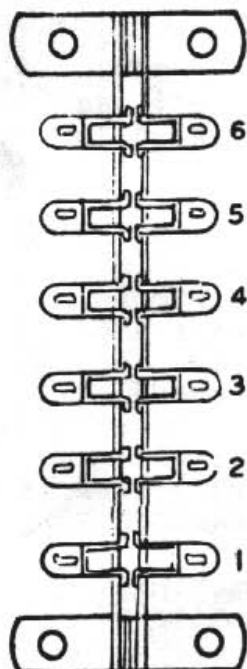
PROVIDES  
1, 2 OR  
3 PLAYS  
FOR ONE  
COIN.

## 5¢ Adjustment



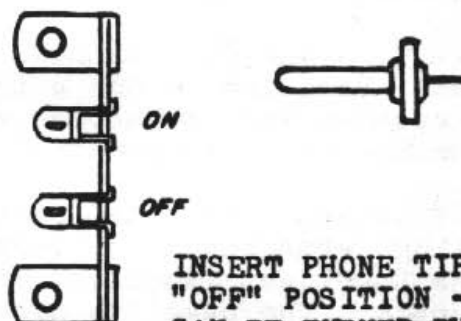
IN "2 COINS FOR  
1 PLAY", CIRCUIT  
TO COIN RELAY  
PASSES THRU SW.  
ON ALTERNATOR  
UNIT.

## 25¢ Adjustment



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

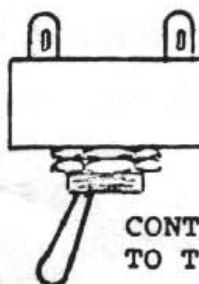
## Motor Service Jack



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

# ADJUSTMENTS IN BACKBOX

## SCORE ADJUSTMENT

### 3-BALL GAME

Adjustment Range From  
11,000 to 110,000 Only

PLUG IN PURPLE WIRE FOR SCORES  
101,000 to 110,000 - 3 BALL or  
5 BALL

PLUG IN RED WIRE FOR SCORES  
11,000 to 20,000 - 3 BALL  
111,000 to 120,000 - 5 BALL

PLUG IN BLUE WIRE FOR SCORES  
21,000 to 30,000 - 3 BALL  
121,000 to 130,000 - 5 BALL

PLUG IN YELLOW WIRE FOR SCORES  
31,000 to 40,000 - 3 BALL  
131,000 to 140,000 - 5 BALL

PLUG IN GREEN WIRE FOR SCORES  
41,000 to 50,000 - 3 BALL  
141,000 to 150,000 - 5 BALL

EXAMPLE:- Blue Wire Into 1000 Position Scores 21,000 on 3 Ball Game, or 121,000 on 5 Ball Game.

1000 ☐

2000 ☐

3000 ☐

4000 ☐

5000 ☐

☐ 6000

☐ 7000

☐ 8000

☐ 9000

☐ 0000

### 5-BALL GAME

Adjustment Range From  
101,000 to 199,000 Only

PLUG IN WHITE WIRE FOR SCORES  
51,000 to 60,000 - 3 BALL  
151,000 to 160,000 - 5 BALL

PLUG IN BROWN WIRE FOR SCORES  
61,000 to 70,000 - 3 BALL  
161,000 to 170,000 - 5 BALL

PLUG IN ORANGE WIRE FOR SCORES  
71,000 to 80,000 - 3 BALL  
171,000 to 180,000 - 5 BALL

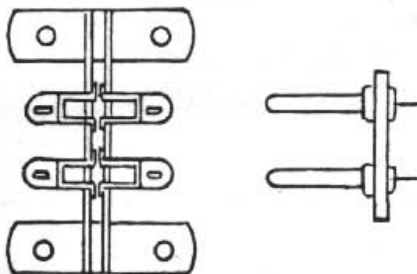
PLUG IN BLACK WIRE FOR SCORES  
81,000 to 90,000 - 3 BALL  
181,000 to 190,000 - 5 BALL

PLUG IN GRAY WIRE FOR SCORES  
91,000 to 100,000 - 3 BALL  
191,000 to 199,000 - 5 BALL

434-5

### No. of Balls Adjustment

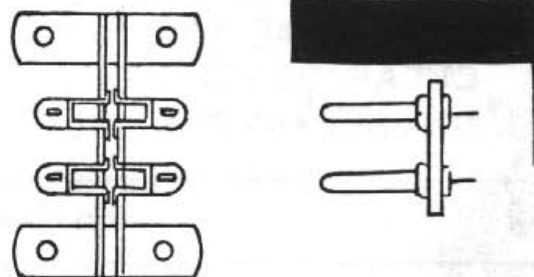
3 BALL — 5 BALL



THIS JACK CHANGES 3 BALL  
TO 5 BALL PLAY OR VICE VERSA.

### NUMBER MATCH ADJUSTMENT

ON — OFF



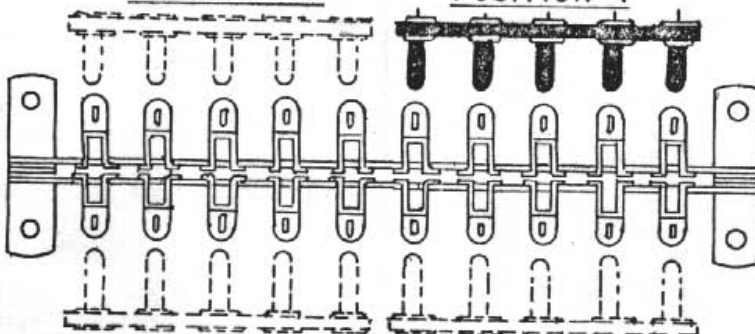
IN "ON" POSITION, NUMBER MATCH LITE WILL  
APPEAR WHEN GAME IS OVER. IF THIS NUMBER  
MATCHES THE LAST TWO DIGITS OF POINT  
SCORE, A REPLAY IS AWARDED.  
IN "OFF" POSITION, NUMBER MATCH IS IN-  
OPERATIVE.

NOVELTY.  
10,000 ON SPECIAL.

POSITION-4

REPLAYS ON SPECIAL  
AND HI-SCORE.

POSITION-1



POSITION-3

EXTRA BALL ON HI-  
SCORE AND SPECIAL.

POSITION-2

REPLAYS ON HI-SCORE,  
EXTRA BALL ON  
SPECIAL.

### PLAY ADJUSTMENT

#### JACK

NOTE: IN "POSITION-3", NUM-  
BER MATCH ADJUSTMENT JACK  
SHOULD BE IN "OFF" POSITION.



# 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-7456-3	A-6402-10	
NO. MATCH	C-6414	B-7456-2	A-6401	
SPINNER	C-6417	B-7456-30	B-6402-20	
ADVANCE	C-6417	B-7456-29	A-6402-10	SCORE MOTOR
10 POINT	B-7253	A-6294	3C-7272	14A-7883 (60 CYCLE)
100 POINT	-----	-----	3C-7272	14A-7884 (50 CYCLE)
1000 POINT	B-7253	A-6294	3C-7272	
10000 POINT	B-7253	A-6294	3C-7272	
ALTERNATOR	-----	-----	3C-7272	



# **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.**

## **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.

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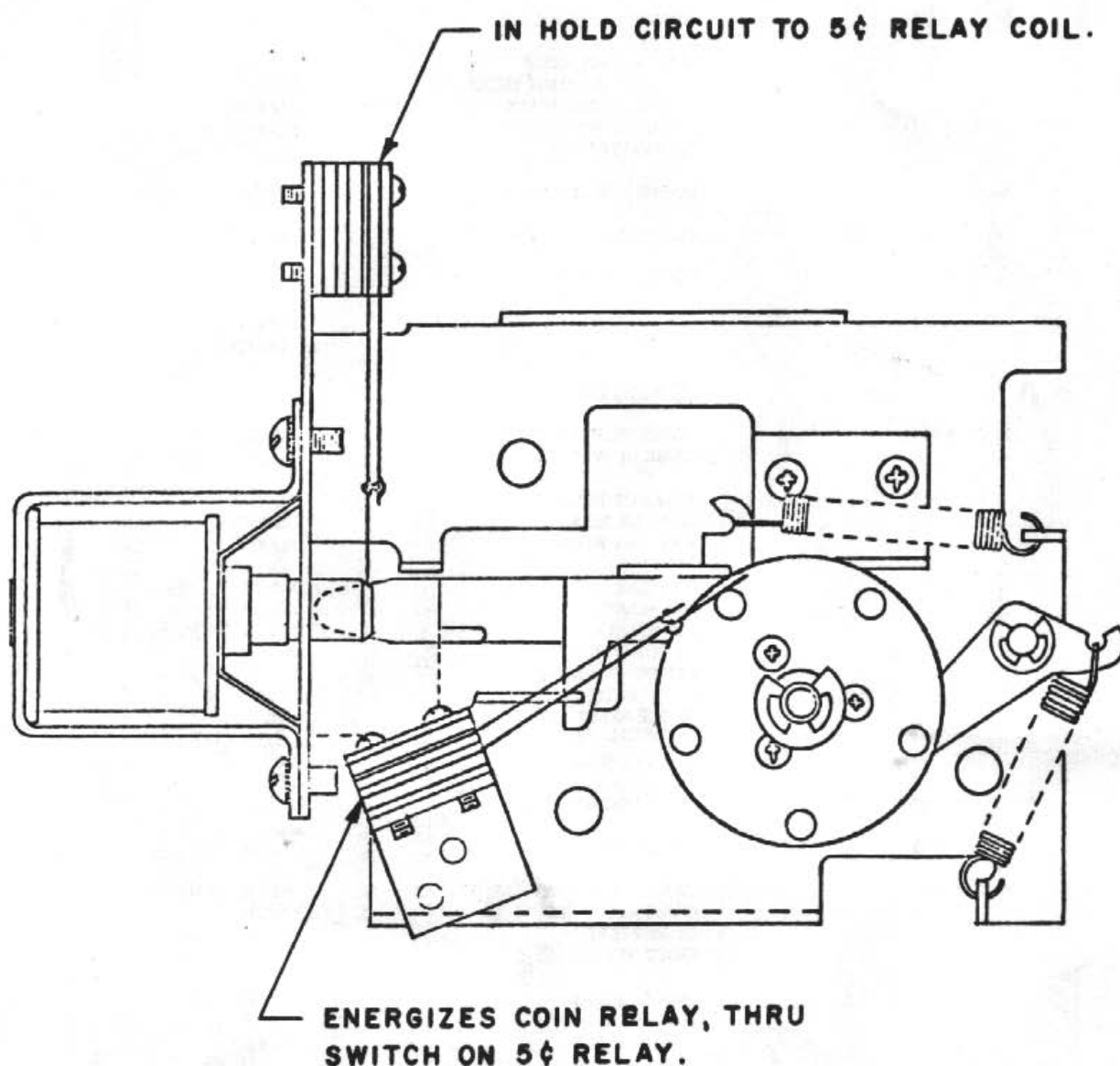
## **SERVICEMAN TO REMOVE BACKGLASS:**

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

# ALTERNATOR UNIT

LOCATED ON MECHANISM PANEL.

USED IN CONJUNCTION WITH 5¢ RELAY FOR "2 COINS-1 PLAY" FEATURE.



"TRIPLE ACTION" COIL CHART

NOTICE:

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

<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
14 A-7884	SCORE MOTOR - 50 CYCLE	MECH. PANEL
14 A-7883	SCORE MOTOR - 60 CYCLE	MECH. PANEL
15 A-6771	TRANSFORMER - 60 CYCLE	MECH. PANEL
15 A-6782 -1	TRANSFORMER -50 CYCLE	MECH. PANEL
B 6396	24 VOLT METER	MECH. PANEL
<u>SOLENOID COILS</u>		
A 22-550	BALL COUNT UNIT STEP UP	INSERT
	BALL RELEASE	PLAYFIELD
	ADVANCE UNIT STEP UP	PLAYFIELD
	SPINNER UNIT STEP UP	PLAYFIELD
A 23-600	REPLAY UNIT STEP UP	INSERT
	NUMBER MATCH UNIT STEP UP	INSERT
A2-23-750	KNOCKER	MECH. PANEL
A2-26-1300	CHIME ... (3 req'd.)	CABINET
B 26-800	REPLAY UNIT RESET	INSERT
	BALL COUNT UNIT RESET	INSERT
	SPINNER UNIT RESET	PLAYFIELD
	ADVANCE UNIT RESET	PLAYFIELD
	ALTERNATOR UNIT	MECH. PANEL
B1-26-800	SCORE DRUM UNITS ... (4 req'd.)	INSERT
FL 20-300/28-400	FLIPPERS ... (2 req'd.)	PLAYFIELD
G 22-550	TARGET RESET ... (4 req'd.)	PLAYFIELD
G 23-750 D.C.	JET BUMPERS ... (3 req'd.)	PLAYFIELD
	KICKERS ... (2 req'd.)	PLAYFIELD
<u>RELAY COILS</u>		
M 29-1000	GAME OVER RELAY TRIP	MECH. PANEL
	GAME RELAY TRIP	MECH. PANEL
M 29-1100	ADVANCE RELAY	PLAYFIELD
	SPINNER RELAY	PLAYFIELD
	50 POINT RELAY	PLAYFIELD
	500 RELAY	PLAYFIELD
	5¢ RELAY	MECH. PANEL
	10¢ RELAY	MECH. PANEL
	25¢ RELAY	MECH. PANEL
	10 POINT RELAY	INSERT
	100 POINT RELAY	INSERT
	1,000 POINT RELAY	INSERT
	SCORE RESET RELAY	INSERT
	OUTHOLE RELAY	MECH. PANEL
M 30-1300	100,000 RELAY	INSERT
M1-31-1500	COIN LOCKOUT	DOOR
XM 27-675	METER COIL	MECH. PANEL
Z 27-1000	GAME OVER RELAY LATCH	MECH. PANEL
	GAME RELAY LATCH	MECH. PANEL
	COIN RELAY	MECH. PANEL
	RESET RELAY	MECH. PANEL
	TARGET RELAY	MECH. PANEL
	SPECIAL RELAY	MECH. PANEL
	BONUS RELAY	PLAYFIELD
Z 28-1150	TRIPLE BONUS RELAY	PLAYFIELD
	BALL INDEX RELAY	MECH. PANEL
Z 28-1200	DOUBLE BONUS RELAY	PLAYFIELD
Z 29-1250	LOCK RELAY	MECH. PANEL
	STAR RELAY	MECH. PANEL



## BALL COUNT UNIT DISC

DURING RESET CYCLE, THIS UNIT RESETS TO ZERO AND THEN ADVANCES 5 STEPS.

DURING PLAY, IT RESETS ONE STEP EACH TIME THE BALL MAKES OUTHOLE SWITCH.

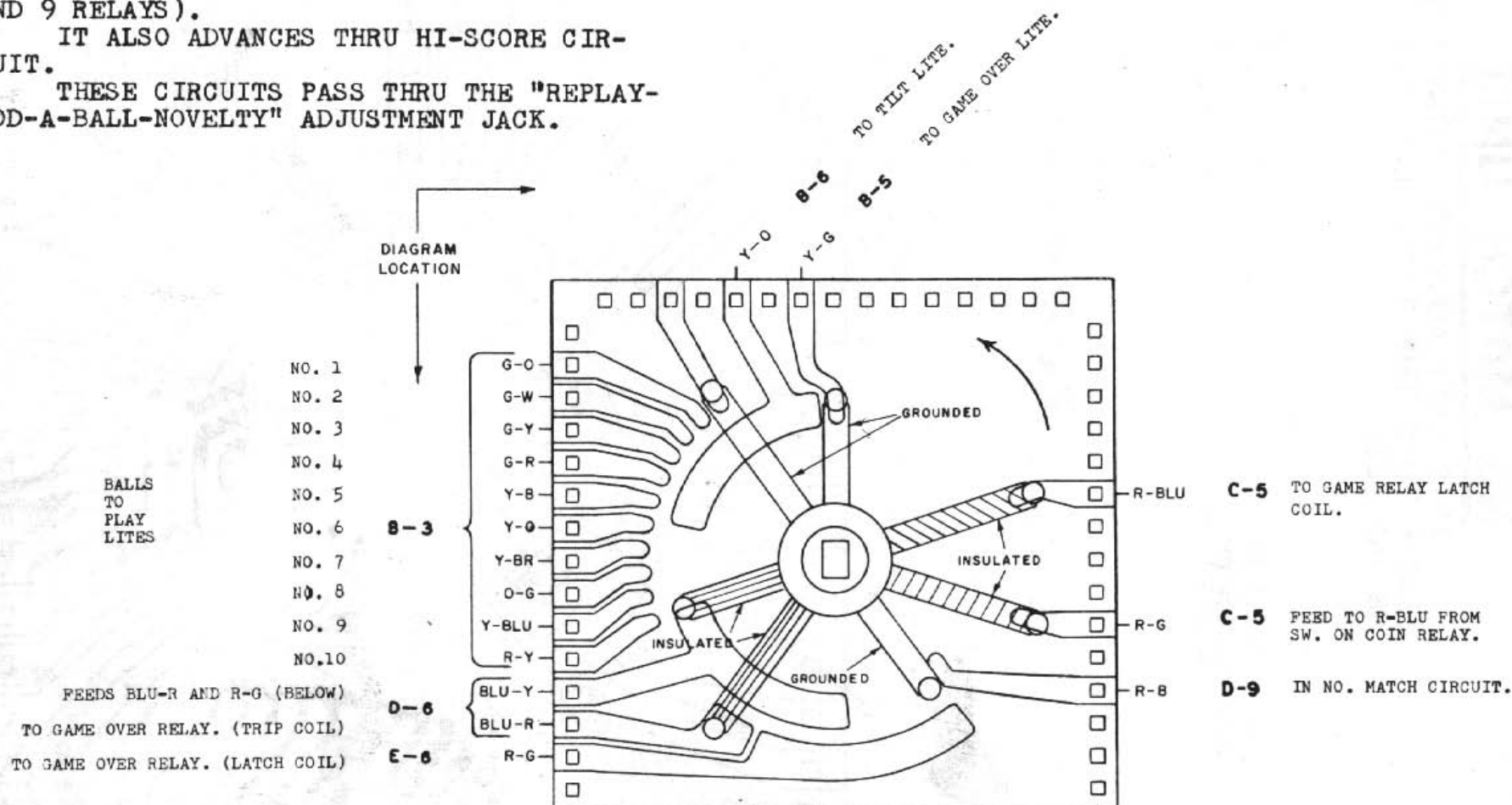
IT ADVANCES ONE STEP WHEN "SPECIAL RESET RELAY" OR "3-IN-LINE-RESET RELAY" ARE ENERGIZED.

IT ADVANCES ONE, TWO OR THREE STEPS WHEN 4 CORNERS ARE MADE. (NO. 1, 3, 7 AND 9 RELAYS).

IT ALSO ADVANCES THRU HI-SCORE CIRCUIT.

THESE CIRCUITS PASS THRU THE "REPLAY-ADD-A-BALL-NOVELTY" ADJUSTMENT JACK.

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

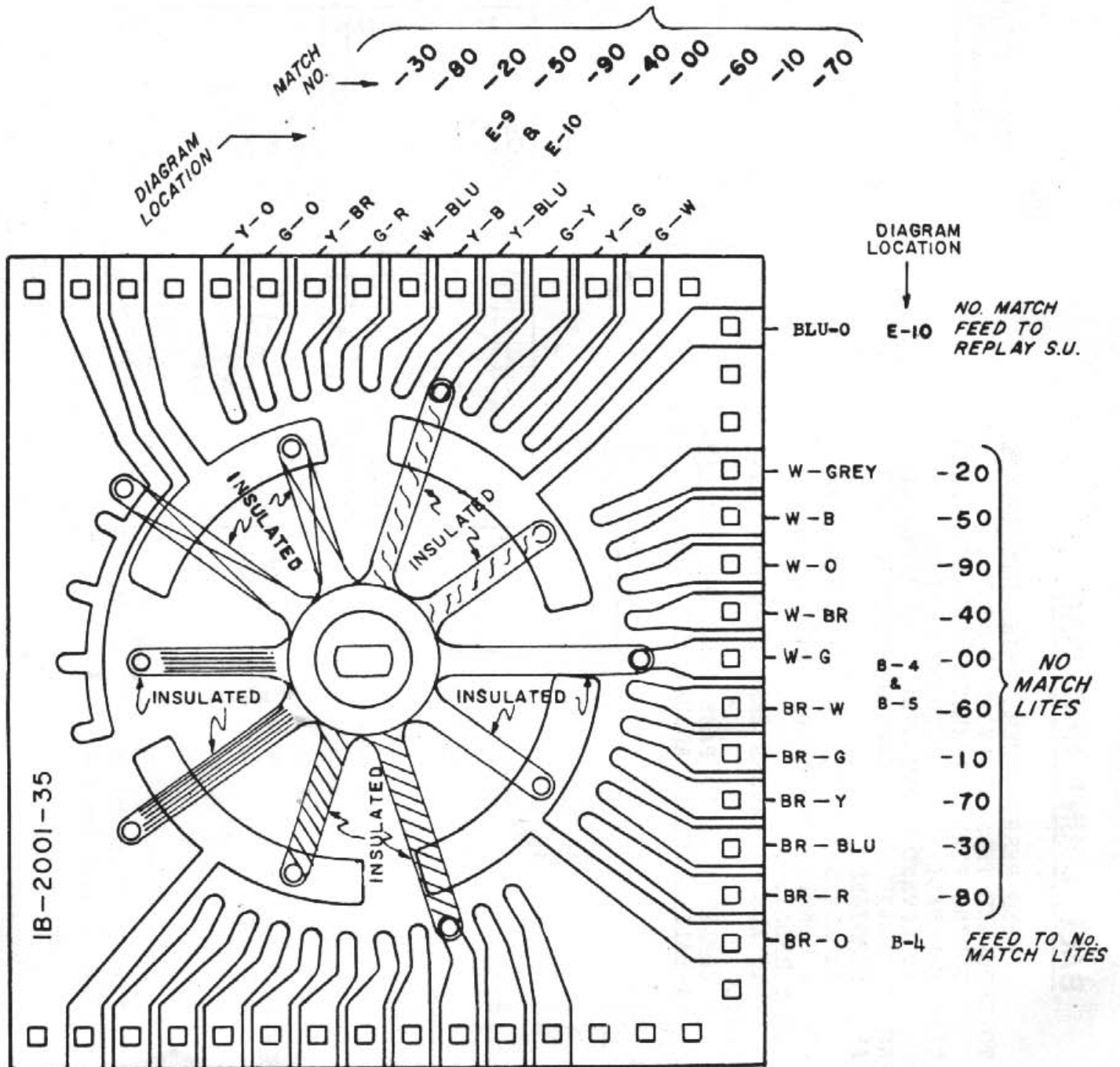


# No. MATCH UNIT

THIS UNIT ADVANCES ONE STEP EACH TIME THE TEN POINT RELAY IS PULSED.

VIEW LOOKING AT  
WIPER FINGER SIDE

IN NO. MATCH CIRCUIT,  
THESE WIRES COME FROM  
10 PT. D.U. DISC.



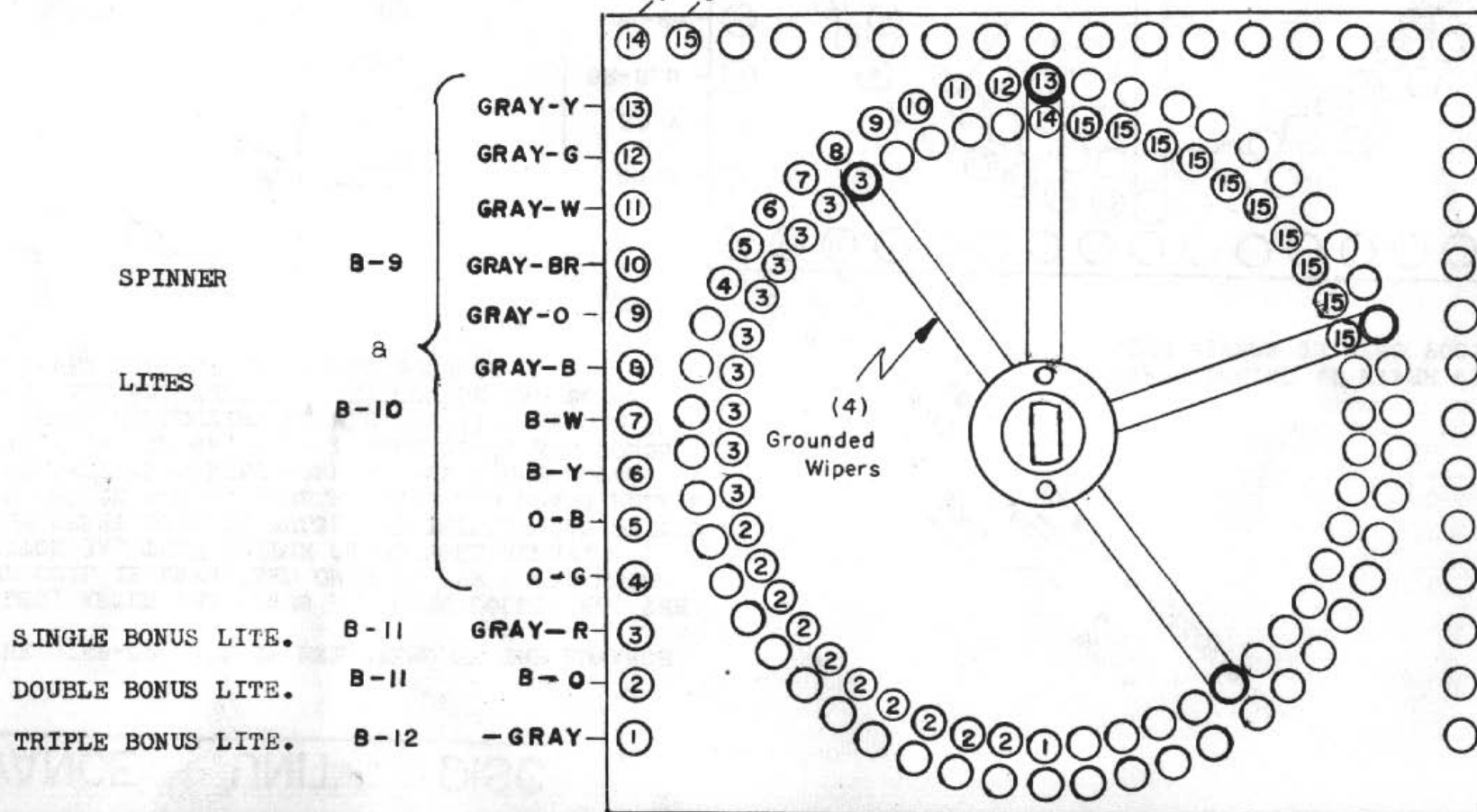
# SPINNER UNIT DISC

THIS UNIT IS ADVANCED BY  
THE SPINNER RELAY OR 500 RELAY.  
IT RESETS, TOTALLY, BY  
SCORE MOTOR LONG DWELL SWITCH  
2A, THRU EITHER THE COIN RELAY  
OR OUTHOLE RELAY.

ENERGIZES TRIPLE BONUS RELAY.  
ENERGIZES DOUBLE BONUS RELAY.

Y-R (D-13)  
GRAY-BLU (C-13)

VIEW LOOKING AT WIPER FINGERS,  
WITH WIPERS IN ZERO POSITION.



THE STEP-UP COIL IS ENERGIZED BY THE ADVANCE RELAY.

ALSO, AFTER THE BONUS HAS BEEN COLLECTED, THE STEP-UP COIL IS ENERGIZED ONCE BY THE SCORE MOTOR CAM SWITCH 3A, THRU SWITCH ON OUTHOLE RELAY.

THE RESET COIL IS PULSED BY IMPULSE CAM SWITCH C, THRU TRIPLE BONUS, DOUBLE BONUS AND BONUS RELAYS (WHEN COLLECTING SINGLE BONUS)---BY SCORE MOTOR CAM SWITCH 3B AND 6A, THRU DOUBLE BONUS AND BONUS RELAYS (WHEN COLLECTING DOUBLE BONUS)---BY CAM SWITCH 3B AND 6A, THRU TRIPLE, DOUBLE AND BONUS RELAYS (WHEN COLLECTING TRIPLE BONUS).

BONUS

LITES

L. TOP ROLLOVER LITE

R. TOP ROLLOVER LITE

IN CIRCUIT TO 500 RELAY

IN CIRCUIT TO 100 PT.RE

TO L. TOP ROLLOVER SW

3000

4000

5000

6000

7000

8000

9000

10000

B-7

B-8

B-8

B-8

D-15

D-15

D-15

D-15

D-15

D-15

D-15

D-15

D-15

BR-G

BR-Y

BR-BLU

W-BR

W-G

W-BLU

G-O

-G

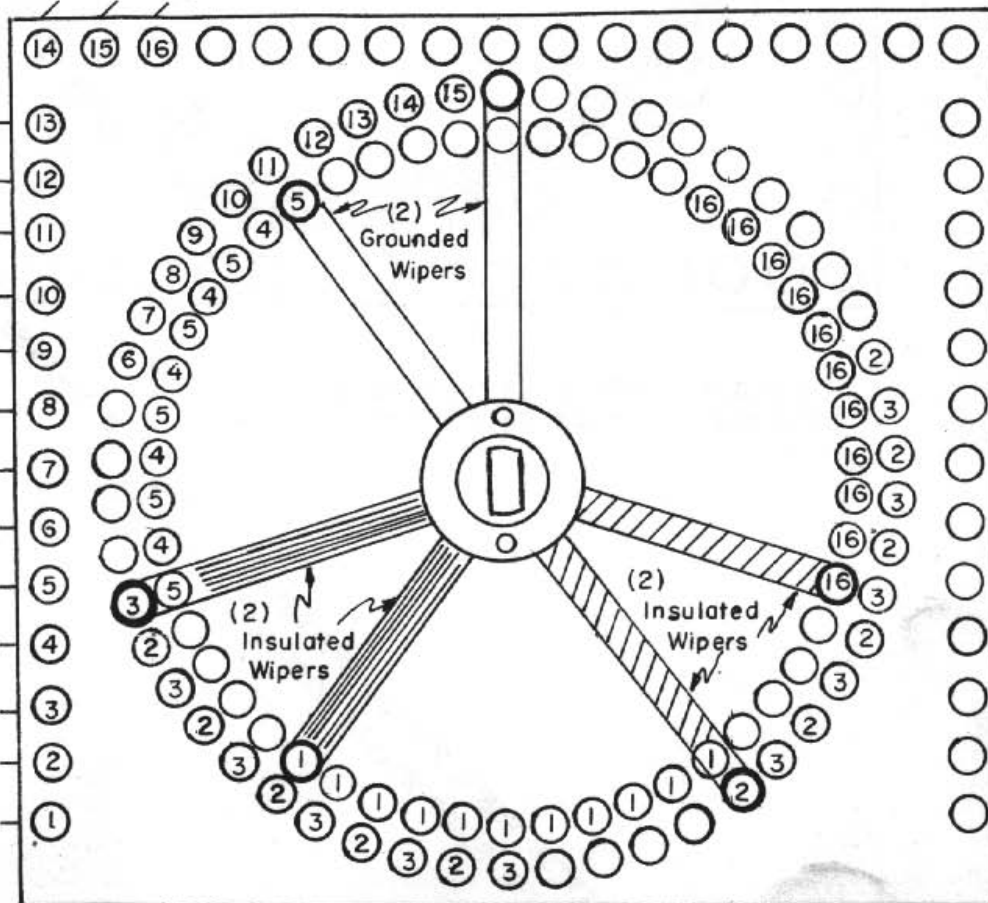
BLU-O

BR-R

BR-B

W-R

GRAY-W



VIEW LOOKING AT WIPER FINGERS,  
WITH WIPERS IN ZERO POSITION.

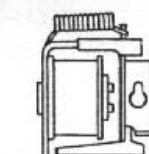
BONUS  
LITES  
TO R. TOP ROLLOVER SW.

(B-7)  
(B-7)  
(D-15)

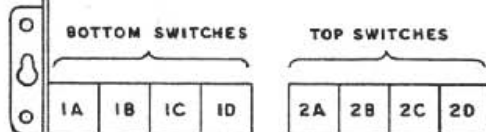
BR-W  
BR-O  
BR-

2000  
1000





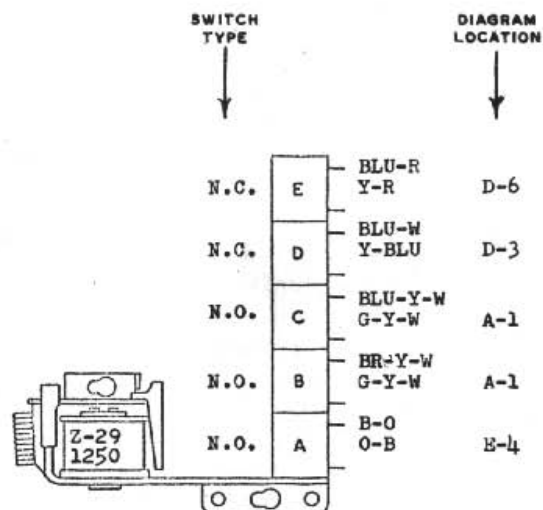
TYPICAL "M" RELAY SWITCH  
POSITION



## RELAYS & SWITCHES LOCATED ON MECHANISM PANEL

### LOCK RELAY

IS ENERGIZED BY 5¢ RELAY, LEFT FLIPPER  
SWITCH OR SCORE MOTOR CAM SWITCH 1B.



ENERGIZES GAME-OVER RELAY (TRIP COIL).

IN CIRCUIT TO RESET RELAY.

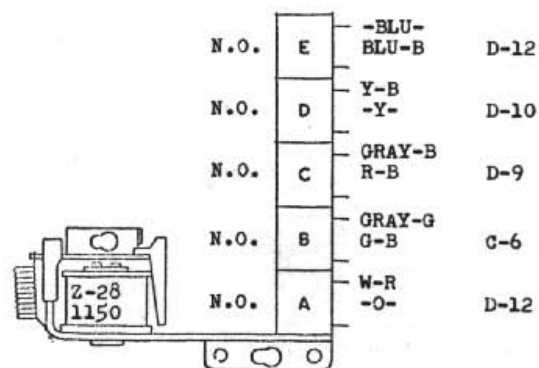
6 VOLTS FROM TRANSFORMER TO LITES.

6 VOLTS FROM TRANSFORMER TO LITES.

IN HOLD CIRCUIT TO THIS RELAY, THRU CABINET BOTTOM KICK-OFF  
SWITCH.

### BALL INDEX RELAY

IS ENERGIZED BY 100 POINT RELAY, THRU  
ZERO POSITION SWITCH ON ADVANCE UNIT---  
ALSO BY OUTHOLE RELAY, THRU GAME-OVER  
RELAY.



IN CIRCUIT TO STAR RELAY. (SEE SWITCH D ON SPECIAL RELAY).

IN SERIES WITH SWITCH B ON GAME RELAY.

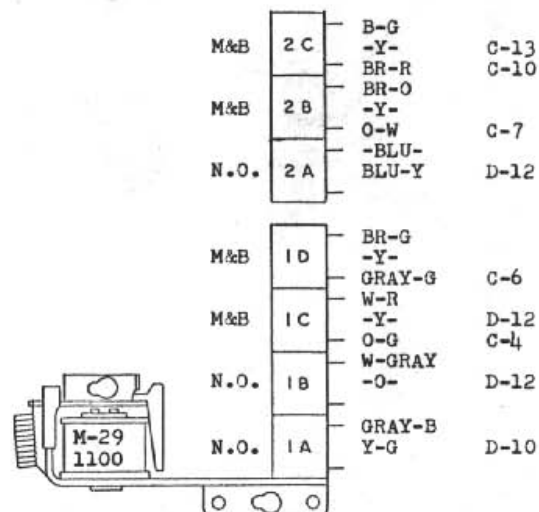
IN SERIES WITH SWITCH 1A ON OUTHOLE RELAY.

IN CIRCUIT TO BALL COUNT RESET COIL AND GAME-OVER RELAY  
TRIP & LATCH COILS.

IN HOLD CIRCUIT TO THIS RELAY.

## OUTHOLE RELAY

IS ENERGIZED BY BALL COUNT UNIT ZERO SWITCH, THRU ADVANCE UNIT ZERO SWITCH AND BONUS RELAY SWITCH F.



OPENS IN HOLD CIRCUIT TO DOUBLE AND TRIPLE BONUS RELAYS, AND CLOSSES IN CIRCUIT TO SPINNER UNIT RESET COIL. OPENS IN HOLD CIRCUIT TO "STAR RELAY", THRU NO. 1 POS. ON "PLAY ADJ. JACK", AND CLOSSES TO A, B, C & D TARGET RESET COILS.

IN HOLD CIRCUIT TO THIS RELAY.

OPENS IN SERIES WITH SWITCH B ON SPECIAL RELAY AND CLOSSES IN SERIES WITH SWITCH B ON BALL INDEX RE.

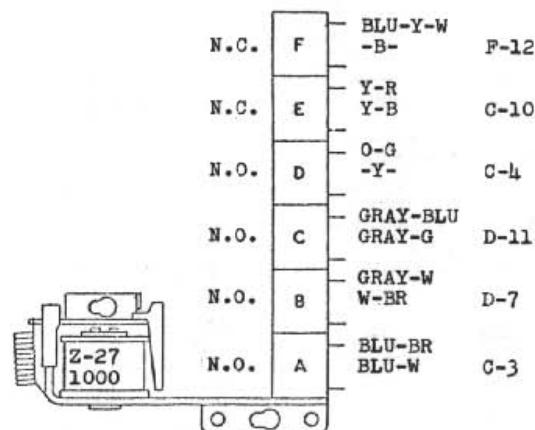
OPENS IN HOLD CIRCUIT TO BALL INDEX RELAY AND CLOSSES TO RUN SCORE MOTOR.

ENERGIZES BALL INDEX RELAY, THRU SWITCH ON GAME-OVER RELAY.

IN NUMBER MATCH CIRCUIT, TO REPLAY S.U., BALL COUNT S.U. OR 10,000 POINT DRUM UNIT COIL.

## RESET RELAY

IS ENERGIZED BY COIN RELAY.



OPENS CIRCUITS TO PLAYFIELD SWITCHES.

OPENS CIRCUIT TO ENERGIZE 100,000 RELAY.

RUNS SCORE MOTOR.

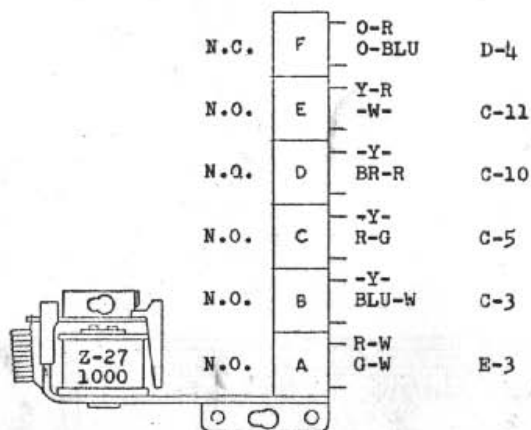
ENERGIZES BONUS RELAY, THRU ZERO SWITCH ON ADVANCE UNIT.

PULSES "SCORE RESET" RELAY, THRU IMPULSE CAM SWITCH B.

IN HOLD CIRCUIT TO THIS RELAY.

## COIN RELAY

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



OPENS CIRCUIT TO KNOCKER COIL.

ENERGIZES A, B, C & D TARGET RESET COILS, THRU LONG DWELL CAM SWITCHES 2B & 2C.

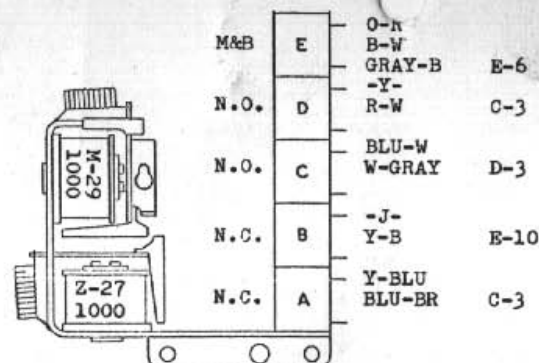
ENERGIZES SPINNER UNIT RESET COIL, THRU SCORE MOTOR LONG DWELL CAM SWITCH 2A. IN CIRCUIT TO LATCH COILS ON GAME RELAY AND GAME-OVER RELAY---ALSO TO RESET & S.U. COILS ON BALL COUNT UNIT.

ENERGIZES RESET RELAY.

IN HOLD CIRCUIT TO THIS RELAY.

## GAME RELAY (INTERLOCK)

LATCH COIL IS ENERGIZED BY SWITCH C ON COIN RELAY, THRU WIPER FINGERS ON BALL COUNT UNIT (AT ZERO POSITION). TRIP COIL IS ENERGIZED BY BALL INDEX RELAY.



OPENS IN CIRCUIT TO BALL COUNT S.U. COIL, AND CLOSES TO BALL COUNT RESET COIL.

IN HOLD CIRCUIT TO COIN RELAY.

IN CIRCUIT TO COIN RELAY, THRU RELAY UNIT ZERO SW. AND REPLAY BUTTON.

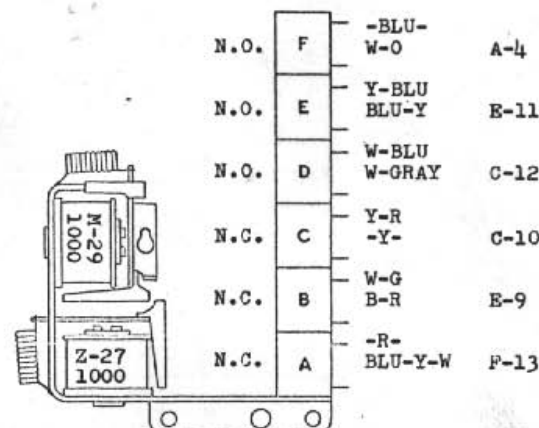
TO GAME RELAY TRIP COIL.

IN CIRCUIT TO RESET RELAY.

## GAME-OVER RELAY (INTERLOCK)

LATCH COIL IS ENERGIZED BY SWITCH C ON COIN RELAY---ALSO BY SERIES CIRCUIT THRU OUTHOLE RELAY, BALL INDEX RELAY AND BALL COUNT UNIT DISC.

TRIP COIL IS ENERGIZED BY LOCK RELAY OR TILT SWITCHES---ALSO BY SERIES CIRCUIT THRU OUTHOLE RELAY BALL INDEX RELAY AND BALL COUNT UNIT DISC (IN ZERO OR FIRST POSITION).



TO TILT, GAME-OVER AND NUMBER MATCH LITES.

IN CIRCUIT TO ENERGIZE TARGET RELAY.

IN SERIES WITH SWITCH 1B ON OUTHOLE RELAY.

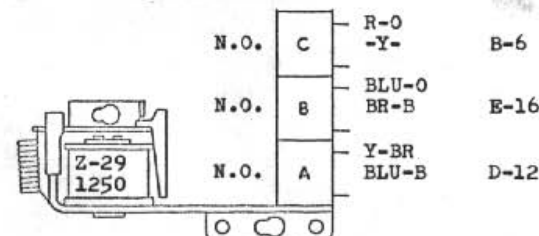
IN CIRCUIT TO GAME-OVER RELAY (TRIP COIL).

OPENS HI-SCORE AND NUMBER MATCH CIRCUITS.

OPENS CIRCUITS TO MOST PLAYFIELD SWITCHES.

## STAR RELAY

IS ENERGIZED BY SERIES CIRCUIT THRU SPECIAL RELAY, TARGET RELAY AND BALL INDEX RELAY. (SEE SWITCH D ON SPECIAL RELAY).



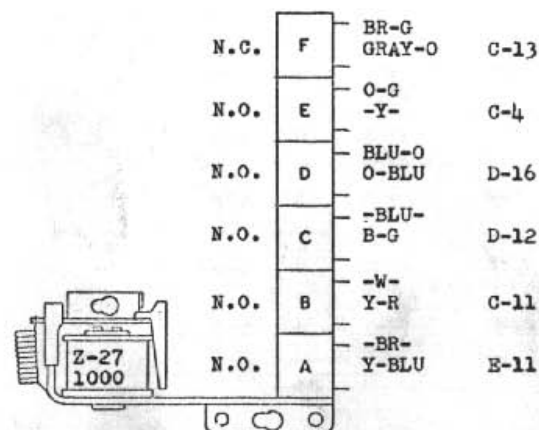
TO "STAR SPECIAL" LITES.

ENERGIZES SPECIAL RELAY, THRU SWITCH ON TARGET RELAY.

IN HOLD CIRCUIT TO THIS RELAY.

## TARGET RELAY

IS ENERGIZED BY SERIES CIRCUIT THRU A, B, C AND D TARGET SWITCHES, 500 RELAY AND 50 POINT RELAY. (SEE SWITCH D ON 50 POINT RELAY).



IN CIRCUIT TO ENERGIZE "ADVANCE RELAY", THRU A, B, C OR D TARGET SWITCHES.

RUNS SCORE MOTOR.

IN SERIES WITH SWITCH B ON STAR RELAY.

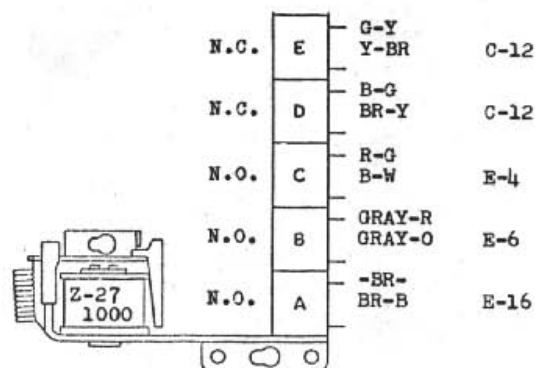
IN SERIES WITH SWITCH E ON BALL INDEX RELAY.

ENERGIZES A, B, C AND D TARGET RESET COILS, THRU SCORE MOTOR LONG DWELL CAM SWITCHES 2B AND 2C.

IN HOLD CIRCUIT TO THIS RELAY.

## SPECIAL RELAY

IS ENERGIZED BY SWITCH D ON TARGET RELAY, THRU SWITCH ON STAR RELAY AND INDEX CAM SWITCH B.



IN HOLD CIRCUIT TO STAR RELAY.

IN SERIES WITH SWITCH C ON TARGET RELAY. (FROM SCORE MOTOR CAM SWITCH 4B).

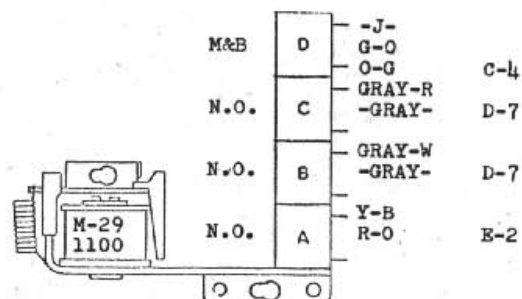
IN CIRCUIT TO KNOCKER COIL.

IN CIRCUIT TO REPLAY S.U., COIL, THRU "PLAY ADJUSTMENT JACK".

IN HOLD CIRCUIT TO THIS RELAY, THRU SCORE MOTOR CAM SWITCH 5A.

## 25¢ RELAY

IS ENERGIZED BY 25¢ COIN SWITCH.



OPENS IN CIRCUIT TO KNOCKER COIL AND CLOSSES TO RUN SCORE MOTOR.

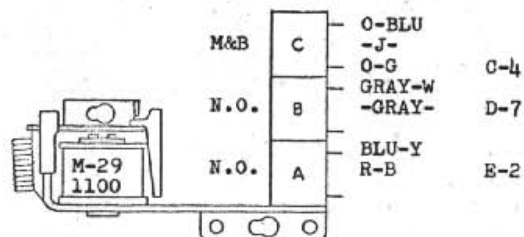
PULSES REPLAY S.U. COIL, THRU 25¢ ADJUSTMENT JACK (1ST POSITION OR 6TH POSITION).

ENERGIZES REPLAY S.U. COIL, THRU IMPULSE CAM SWITCH B.

IN HOLD CIRCUIT TO THIS RELAY.

## 10¢ RELAY

IS ENERGIZED BY 10¢ COIN SWITCH (BLU-BR AND Y-R), IF 10¢ ADJUSTMENT JACK IS IN "2 PLAYS" OR "3 PLAYS" POSITION.



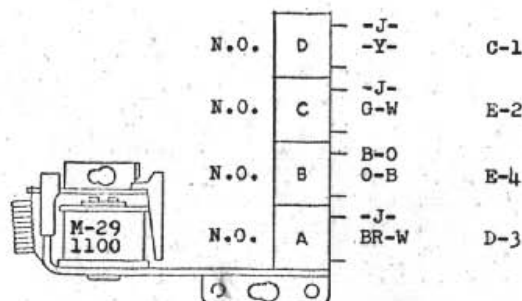
OPENS IN CIRCUIT TO KNOCKER COIL AND CLOSSES TO RUN SCORE MOTOR.

ENERGIZES REPLAY S.U. COIL, THRU IMPULSE CAM SWITCH B.

IN HOLD CIRCUIT TO THIS RELAY.

## 5¢ RELAY

IS ENERGIZED BY 5¢ COIN SWITCH (W-B AND Y-R), IF 5¢ ADJUSTMENT JACK IS IN "2 COINS FOR 1 PLAY" POSITION.



ENERGIZES ALTERNATOR UNIT S.U. COIL.

ENERGIZES COIN RELAY, THRU SWITCH ON ALTERNATOR UNIT.

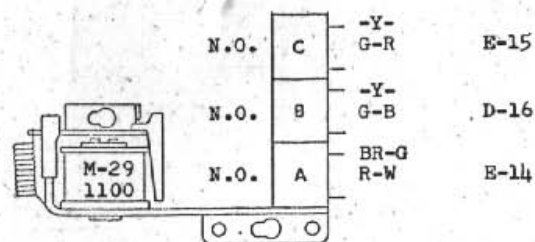
ENERGIZES LOCK RELAY.

IN HOLD CIRCUIT TO THIS RELAY, THRU END-OF-STROKE SWITCH ON ALTERNATOR UNIT.



## SPINNER RELAY

IS ENERGIZED BY SPINNER SWITCH, THRU SWITCH E ON TRIPLE RELAY.



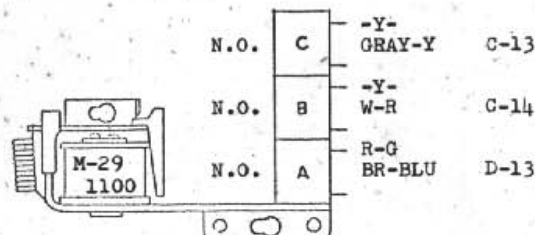
ENERGIZES SPINNER UNIT S.U. COIL.

PULSES 10 POINT RELAY.

HOLD CIRCUIT TO THIS RELAY, THRU END-OF-STROKE SWITCH ON SPINNER S.U. UNIT.

## ADVANCE RELAY

IS ENERGIZED BY (3) TOP ROLLOVER BUTTONS OR BY A,B,C OR D TARGET SWITCHES, THRU SWITCH F ON TARGET RELAY.



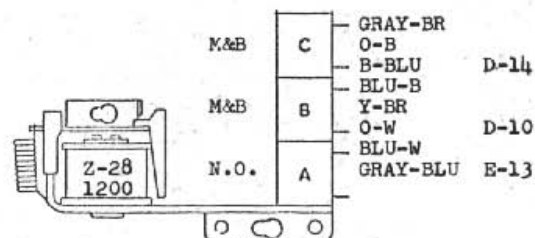
ENERGIZES ADVANCE UNIT S.U. COIL.

PULSES 100 POINT RELAY.

HOLD CIRCUIT TO THIS RELAY, THRU END-OF-STROKE SWITCH ON ADVANCE UNIT.

## DOUBLE BONUS RELAY

IS ENERGIZED BY WIPER FINGER ON SPINNER UNIT DISC (POSITION 11 TO 20).



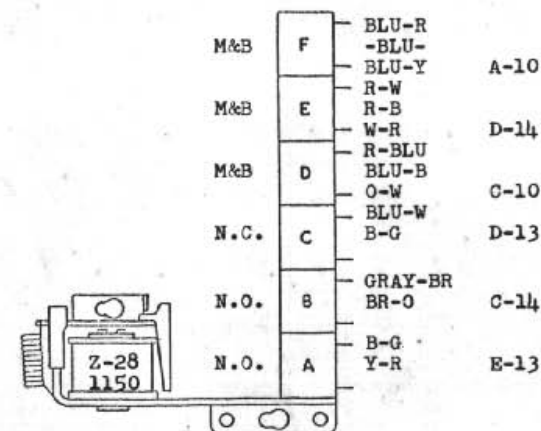
IN SERIES WITH SWITCH B ON BONUS RELAY.

IN SERIES WITH SWITCH C ON BONUS RELAY.

IN HOLD CIRCUIT TO THIS RELAY.

## TRIPLE BONUS RELAY

IS ENERGIZED BY WIPER FINGER ON SPINNER UNIT DISC (POSITION 21).



OPENS TO "SPINNER-10 POINTS" LITE, AND CLOSSES TO "SPINNER-100 POINTS" LITE.

OPENS TO SPINNER RELAY AND CLOSSES TO 100 POINT RELAY (THRU SPINNER SWITCH).

IN SERIES WITH SWITCH B ON DOUBLE BONUS RELAY.

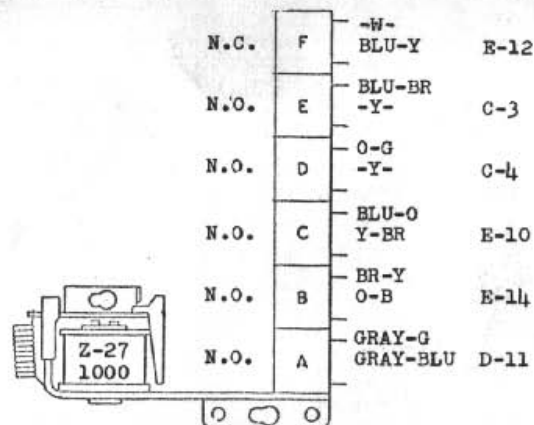
IN SERIES WITH SWITCH A ON DOUBLE BONUS RELAY.

IN SERIES WITH SWITCH C ON DOUBLE BONUS RELAY.

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

## BONUS RELAY

IS ENERGIZED BY RESET RELAY, THRU ZERO SWITCH ON ADVANCE UNIT---ALSO BY OUTHOLE SWITCH, THRU ANOTHER ZERO SWITCH ON ADVANCE UNIT, AND A ZERO SWITCH ON BALL COUNT UNIT.



IN CIRCUIT TO ENERGIZE OUTHOLE RELAY.

IN HOLD CIRCUIT TO RESET RELAY.

RUNS SCORE MOTOR.

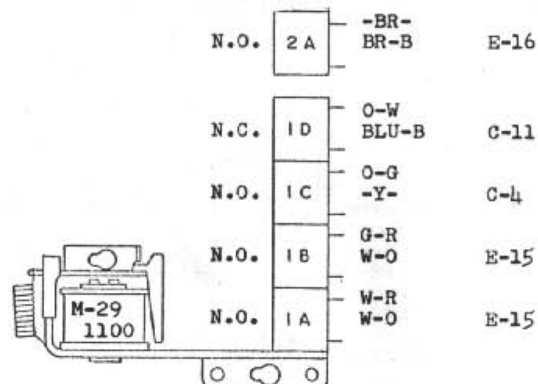
IN CIRCUIT TO PULSE ADVANCE UNIT RESET COIL.

IN CIRCUIT TO PULSE 1,000 POINT RELAY.

HOLD CIRCUIT TO THIS RELAY, THRU ZERO POSITION SWITCH ON ADVANCE UNIT.

## 500 RELAY

IS ENERGIZED BY LEFT OR RIGHT TOP ROLLOVER SWITCH, THRU ADVANCE UNIT DISC.



HOLD CIRCUIT TO THIS RELAY, THRU SCORE MOTOR CAM SWITCH 5A.

IN CIRCUIT TO TARGET RELAY, THRU A, B, C AND D TARGET SWITCHES.

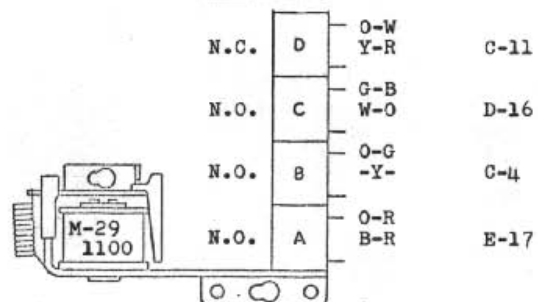
RUNS SCORE MOTOR.

IN CIRCUIT TO PULSE SPINNER UNIT S.U. COIL.

IN CIRCUIT TO PULSE 100 POINT RELAY.

## 50 POINT RELAY

IS ENERGIZED BY LEFT OR RIGHT SIDE STAND-UP SWITCHES.



IN SERIES WITH SWITCH 1D ON 500 RELAY.

IN CIRCUIT TO PULSE 10 POINT RELAY.

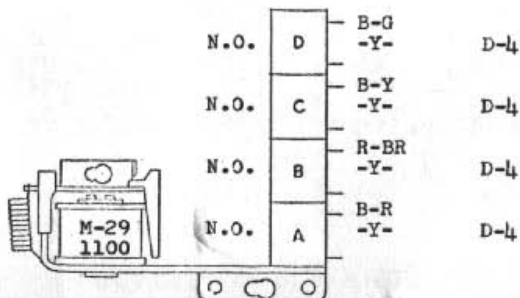
RUNS SCORE MOTOR.

HOLD CIRCUIT TO THIS RELAY, THRU SCORE MOTOR CAM SWITCH 6B.

LOCATED ON BACK BOX

## SCORE RESET RELAY

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



PULSES 10,000 POINT DRUM UNIT, THRU ZERO SWITCH ON THAT UNIT.

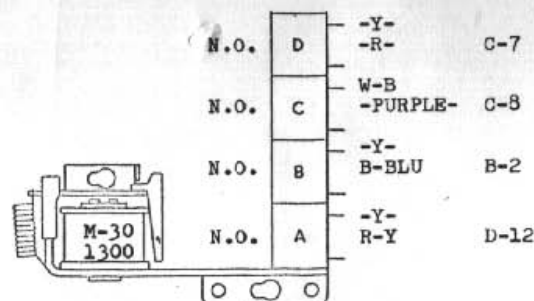
PULSES 1,000 POINT DRUM UNIT, THRU ZERO SWITCH ON THAT UNIT.

PULSES 100 POINT DRUM UNIT, THRU ZERO SWITCH ON THAT UNIT.

PULSES 10 POINT DRUM UNIT, THRU ZERO SWITCH ON THAT UNIT.

## 100,000 RELAY

IS ENERGIZED BY 10,000 POINT DRUM UNIT 9TH POSITION SWITCH, THRU 10,000 POINT DRUM UNIT END-OF-STROKE SWITCH.  
NORMALLY CLOSED SWITCHES ON RESET RELAY AND GAME-OVER RELAY ARE ALSO IN THIS CIRCUIT.



IN HI-SCORE CIRCUIT. (IN 5 BALL PLAY).

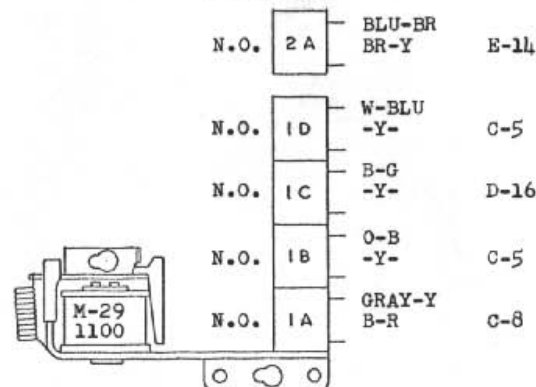
IN HI-SCORE CIRCUIT. (FOR 101,000 TO 110,000).

TO "100,000" LITE.

HOLD CIRCUIT TO THIS RELAY.

## 1,000 POINT RELAY

IS PULSED BY IMPULSE CAM SWITCH D, THRU SWITCH ON DOUBLE BONUS RELAY---ALSO BY CAM SWITCH 6B, THRU SWITCHES ON TRIPLE RELAY AND DOUBLE RELAY.



HOLD CIRCUIT TO THIS RELAY, THRU END-OF-STROKE SWITCH ON 1,000 POINT DRUM UNIT.

ENERGIZES 10,000 POINT DRUM UNIT, THRU 9TH POSITION SWITCH ON 1,000 POINT DRUM UNIT.

PULSES LARGE CHIME COIL.

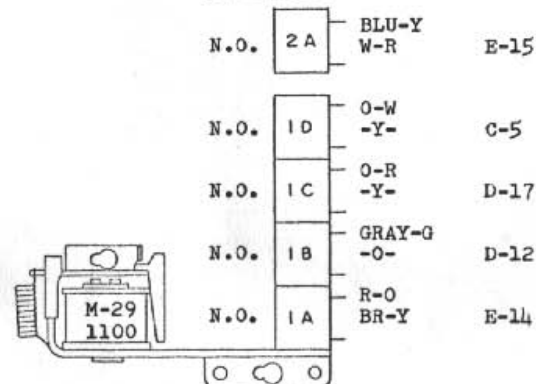
PULSES 1,000 POINT DRUM UNIT.

IN HI-SCORE CIRCUIT, THRU "PLAY ADJUSTMENT JACK".

## 100 POINT RELAY

IS PULSED BY:

1. ADVANCE RELAY.
2. SPINNER SWITCH, THRU TRIPLE BONUS RELAY.
3. THREE JET BUMPER SWITCHES.
4. IMPULSE CAM SWITCH E, THRU 500 RELAY.



HOLD CIRCUIT TO THIS RELAY, THRU END-OF-STROKE SWITCH ON 100 POINT DRUM UNIT.

PULSES 100 POINT DRUM UNIT.

PULSES SMALL CHIME COIL.

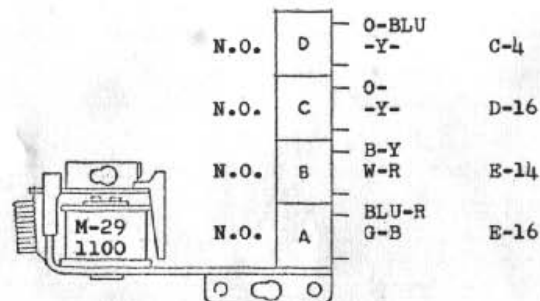
ENERGIZES BALL INDEX RELAY, THRU ZERO POSITION SWITCH ON ADVANCE UNIT.

PULSES 1,000 POINT RELAY, THRU 9TH POSITION SWITCH ON 100 POINT DRUM UNIT.

## 10 POINT RELAY

IS PULSED BY:

1. STAND-UP SWITCHES.
2. KICKER SWITCHES.
3. SPINNER RELAY.
4. IMPULSE CAM SWITCH E, THRU 50 POINT RELAY.



PULSES 10 POINT DRUM UNIT.

PULSES MEDIUM CHIME COIL AND NUMBER MATCH UNIT S.U. COIL.

PULSES 100 POINT RELAY, THRU 9TH POSITION SWITCH ON 10 POINT DRUM UNIT.

HOLD CIRCUIT TO THIS RELAY, THRU END-OF-STROKE SWITCH ON 10 POINT DRUM UNIT.

# **CATALOG SUPPLEMENT "F-F-F"**

**WITH  
NEW PARTS & UNITS**

**FOR**

# **TRIPLE ACTION**



**Williams<sup>®</sup> ELECTRONICS**

A DIVISION OF  
THE SEEBURG CORPORATION OF DELAWARE

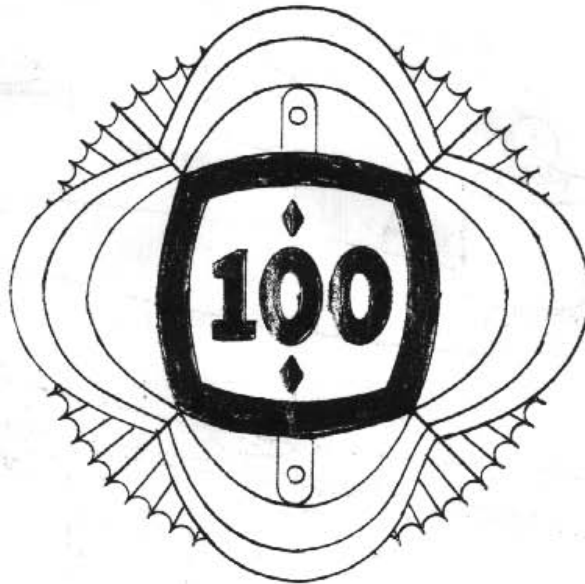
3401 N. California Ave.  
(312) 267-2240

FEBRUARY 1974

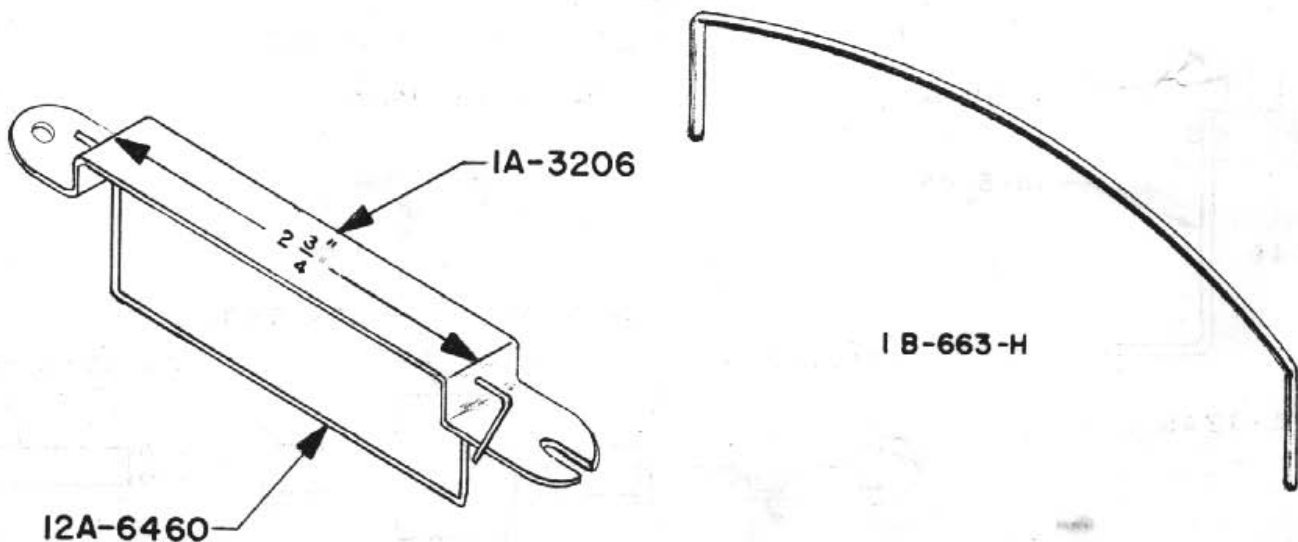
Chicago, Ill. 60618, U.S.A.  
Cable Address: Wilcoin



PLAYFIELD PARTS  
FOR "TRIPLE ACTION"



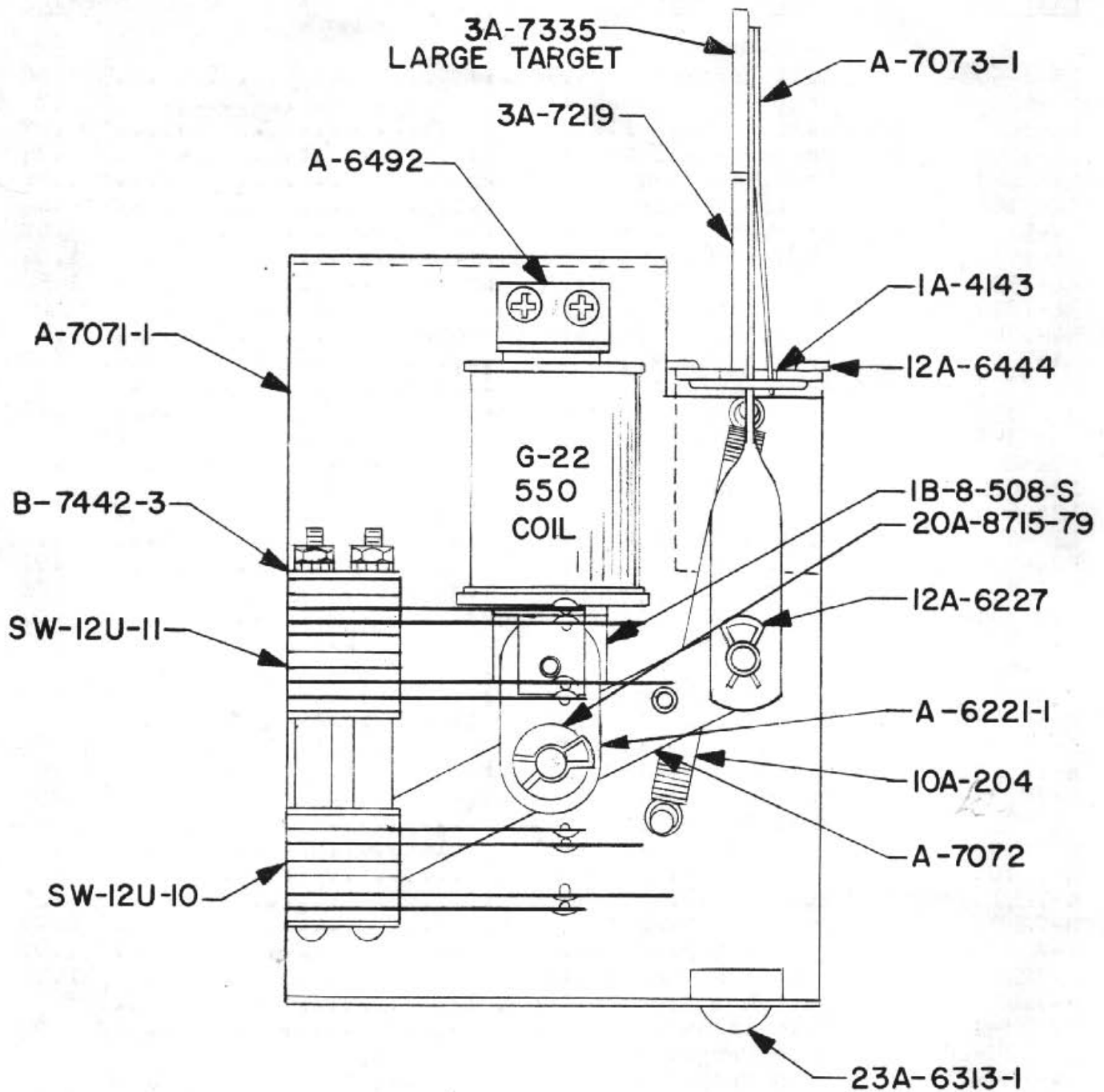
JET BUMPER CAP  
(WITH HOT STAMP)  
3B-7349-2-1



# DROP TARGET ASSEMBLY

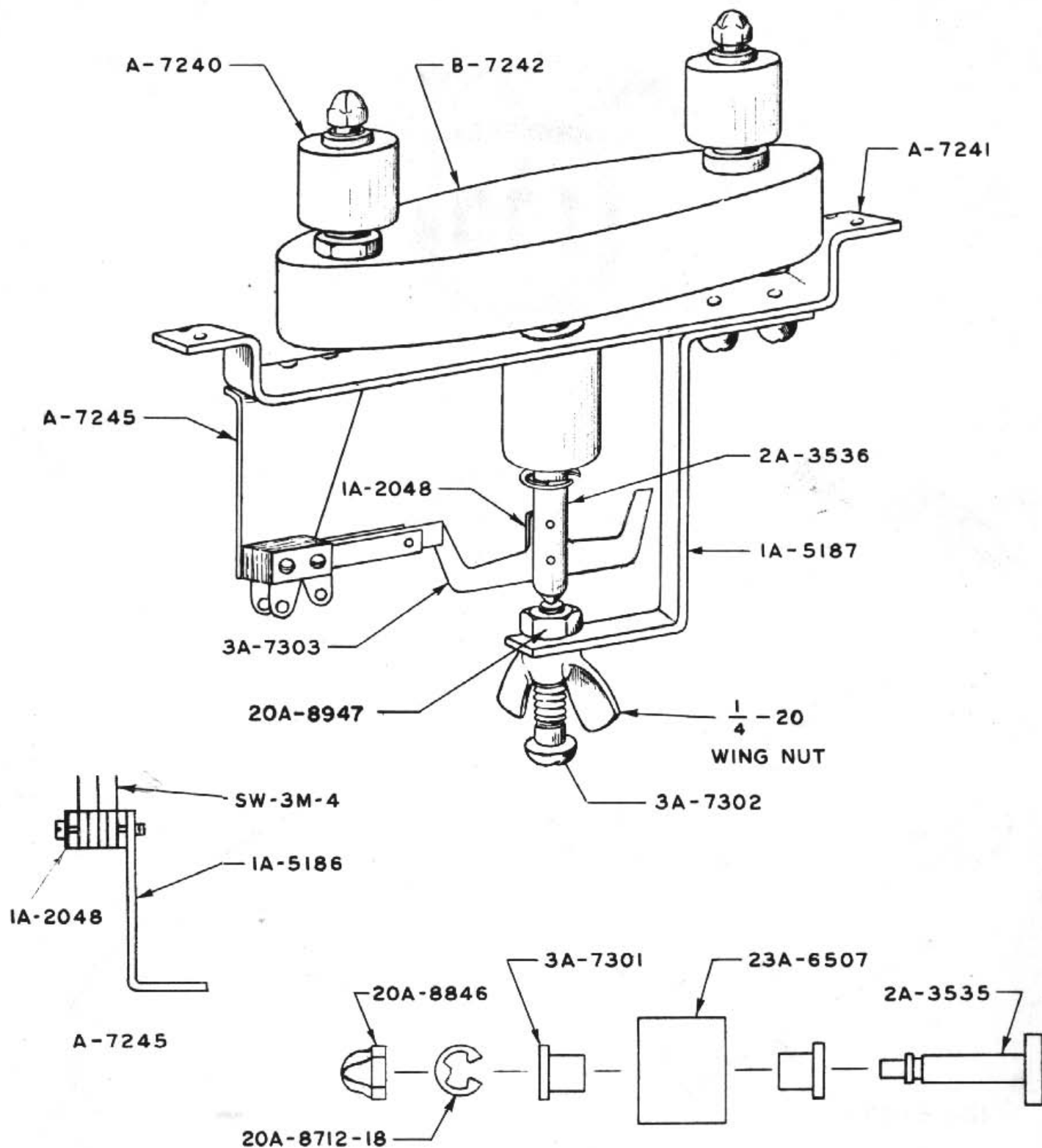
C-7090-1 (WITH LARGE TARGET)

USED ON "TRIPLE ACTION"



NOTE: SPECIFY DESIGN 8 COLOR ON TARGET

# ROTATING BUMPER UNIT ASS'Y. A-7248



A-7240 RUBBER POST ASS'Y.

PRICE LIST  
ARRANGED IN NUMERICAL ORDER

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>PRICE</u>
1B-8-508-S	Coil Bracket.....	.10
1B-663-H	Ball Guide Wire.....	.74
1A-2048	Switch Cover Plate.....	.02
1A-3206	Bracket-Ball Gate.....	.74
1A-4143	Drop Target-Guide Bracket.....	.70
1A-5186	Switch Bracket.....	.60
1A-5187	Bracket-Thrust Bearing.....	.60
2A-3535	Stud - (Rotating Bumper).....	1.04
2A-3536	Shaft - (Rotating Bumper).....	1.50
3A-7219	Drop Target.....	.06
3A-7301	Insulator - (Rotating Bumper).....	.12
3A-7302	Thrust Screw.....	.12
3A-7303	Nylon Switch Actuator.....	.30
3A-7335	Target-Drop Type (large).....	.16
3B-7349-2-1	Jet Bumper Cap-With Hot Stamp.....	.40
10A-204	Return Spring.....	.10
12A-6227	Hair Pin Clip.....	.02
12A-6444	Wire Form-Target Arm Guide.....	.08
12A-6460	Wire-Ball Gate.....	.26
20A-8712-18	"E" Retaining Ring-3/16 Shaft.....	.02
20A-8715-79	Washer (Drop Target Assembly).....	.02
20A-8846	Palnut (Rotating Bumper).....	.04
20A-8947	1/4-20 Hex Nut.....	.02
23A-6313-1	Rubber Grommet.....	.04
23A-6507	Rubber Bumper (Rotating Bumper).....	.20
A-6221-1	Drop Target Armature & Link Assembly.....	.90
A-6492	Coil Stop Assembly.....	.70
A-7071-1	Frame Assembly.....	2.50
A-7072	Target Crank.....	1.90
A-7073-1	Drop Target Arm.....	1.86
C-7090-1	Drop Target Assembly Complete.....	15.50
A-7240	Rubber Post Assembly.....	1.54
A-7241	Base Assembly.....	3.20
B-7242	Spinning Bumper.....	6.70
A-7245	Switch & Bracket.....	2.00
A-7248	Rotating Bumper Assembly.....	21.16
B-7442-3	Switch & Bracket Assembly.....	5.00
SW-3M-4	Spinner Switch.....	.84
SW-12U-10	Drop Target Switch.....	1.20
SW-12U-11	Drop Target Switch.....	1.80
G-22-550	Coil Assembly.....	2.00
	1/4-20 Wing Nut.....	.40

\_\_\_\_\_  
SCORES 1 REPLAY

434-32

103,000 SCORES 1 REPLAY

134,000 SCORES 1 REPLAY

434-34

107,000 SCORES 1 REPLAY

138,000 SCORES 1 REPLAY

434-36

\_\_\_\_\_  
SCORES 1 REPLAY

434-56

50,000 ADDS 1 EXTRA BALL

434-58

70,000 ADDS 1 EXTRA BALL

434-60

110,000 ADDS 1 EXTRA BALL

434-62

\_\_\_\_\_  
ADDS 1 EXTRA BALL

434-64

131,000 SCORES 1 REPLAY

162,000 SCORES 1 REPLAY

434-48

135,000 SCORES 1 REPLAY

166,000 SCORES 1 REPLAY

434-50

110,000 SCORES 1 REPLAY

434-52