

PHOTO FINISH

INSTALLATION INSTRUCTIONS:

After uncrating, remove terminal board attached to rear of cabinet opening. Put lite box in place, drawing terminal board through opening in it. Secure lite box with four bolts and washers furnished. Attach terminal board by means of the two turn bits.

Insert plugs into respective sockets, being careful to push them STRAIGHT into position. Drop service cord down through the opening in the bottom of the rear leg which can be seen when looking down thru the inside of the lite box.

Install leg levelers in each corner and level machine lengthwise and crosswise for the proper play board slant. Correct play board angle is obtained when a spirit level laid up against the straight section of the bottom edge of the cabinet shows level.

IMPORTANT! If play board angle is too great, there will be a tendency towards higher pay-offs throughout because balls will run down to the WIN and PLACE sections more frequently.

Insert ball or balls through upper right corner of run-off trough alongside of shuffle motor.

POWER SUPPLY:

Plug service cord into a GOOD 110-120 volt, 60 cycle A.C. line, avoiding if possible, overloaded lines, old extension cords, etc., as low voltage will cause incorrect operation and a momentary interruption of the circuit from a bad connection might put the game on tilt and reset all free games.

Direct current, or any other frequency such as 25 or 30 cycle requires a converter unit of at least 300 to 500-watt capacity operating continuously.

SCORE CARDS:

Several types of score cards are furnished with each machine. Be sure to change them, if necessary, to the desired type of operation.

TO TURN OUT LITES:

Depress button on right, back of front pedestal. (This button also resets any free plays which might be showing.)

REPLAY REDEMPTION (Free Play Operation Only)

Where free plays are redeemed and not played off, the replay reset button should be depressed by the merchant, which will bring the replay register unit back to zero and record the number of redemptions on the meter. The free-play redemption button is the upper button on the left side of the pedestal.

Note: If plug is pulled out momentarily from wall outlet, all free games will be taken off machine automatically.

REPLAY METER:

The replay meter can be seen upon opening the front door. Locations should receive the difference between present and last meter reading.

FEATURE RACE:

Where buildup operation of the feature is used, award is made over the counter. At this time, feature reset button must be operated by location attendant while the feature lite is still on and the ball is in the feature pocket. Feature reset button is the lower button on the left side back, of the front pedestal.

Feature change-over plug (adjacent selector unit on left side of mechanism panel) should be in socket connected to black-red wire.

NOTE: Be sure to use correct score cards. (See adjustment sheet regarding rate of buildup.)

FEATURE RACE METER:

The feature race meter is located inside the front door, registering once for each step of the feature race dial. It, therefore, determines the amount that has been awarded by the location in this type of operation.

FEATURE RACE STARTING SCORE:

It is recommended that this score be started at a high enough point to make it interesting to players.

FEATURE RACE — FLAT AMOUNT SCORING 40, 80, 160-

Feature race change-over plug and 2-point socket is located on left side of mechanism panel adjacent to selector unit. Plug inserted into socket with white wire attached causes game to score 40, 80 or 160, depending on position of odds (40 relays to 5th odds, 80 for 6th and 7th, 160 for 8th, 9th and 10th).

5-BALL OPERATION:

- (a) Remove Skill Lane cover.
- (b) Loosen screw holding sliding plate, push it towards the rear until the brass rivet can come up in the 4th ball position, then retighten screws. It may be necessary to readjust contact blades under this rivet. Replace Skill Lane cover.
- (c) Remove regular rebound bumper and replace with gate and spring.
- (d) Place 5 balls in game.
- (e) Attach correct 5-ball instruction cards.
- (f) Move ball-lifter cable plug one position away from socket key.
- (g) IMPORTANT: The balls are raised individually by depressing button immediately below the shooter.

TO SERVICE MAIN MECHANISM PANEL:

Remove shipping bolt at left front of mechanism panel, whereupon panel can be brought out and forward as far as desired. When slid out to extreme lengths, the support leg should be inserted into the bracket on the front of the panel.

TO REPLACE LITE BULBS:

To replace lamps in lite box, lock is at upper right corner of back box. (Same key is used for back door.) Glass frame can be lifted straight up and out.

IMPORTANT: BOTH 6 and 18 VOLT LAMPS ARE USED. DO NOT INTERCHANGE.

LITE BOX INSERT:

The lite box has shipping blocks fastened to the side of the cabinet in the back and for service these screws should be removed.

After shipping block screws have been removed, lite box can be serviced from the front by removing glass frame and removing wedge at top of insert. Loosen the two locking screws at top of insert and move locking brackets sideways, whereupon insert will swing forward.

Insert may, if convenient, also be serviced through the back door of the lite box.

(Revised 6/3/49)

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PHOTO FINISH ADJUSTMENTS

SELECTIONS — REGULAR PLAY: (Prior to Depressing Entry Flash Button)

Selections are entirely automatic without adjustment.

ODDS:

Odds adjustment is made by moving the 6 point plug alongside of odds unit at the right rear of the mechanism panel towards the front of game to make it more conservative. Each position towards the front, beginning with the highest odds, reduces the frequency of the odds in 10th pos., 9th pos., 8th pos., etc., down to the last socket position where all odds except the first five are conservative.

NOTE: This plug as moved backwards changes the circuit handling the higher odds to go through the 1 - 6 switch on the selector unit. If too conservative or not conservative enough, actuating studs and washers on the 1 - 6 disc may be added or removed. Adding actuators make odds more liberal.

ENTRY FLASH — OVERALL ADJUSTMENT:

Adding short screws in outside row in disc on 400 - 1 unit makes entire Entry Flash more liberal, removing screws more conservative.

INDIVIDUAL ADJUSTMENTS:

All of the following Entry Flash adjustments are made by means of the plugs and 8 point socket immediately to the rear of the selector unit. Any plug inserted into the sockets with the black white wire will become effective from the 6th position odds upwards. Any plug inserted into the sockets with black green wire becomes effective at all times excepting when the circuit is opened on the 400 - 1 switch by the outer row of short screws.

The 4 black green sockets are closest to the socket upright.

PURSE AND PLACE SECTION SCORES WIN ODDS:

The green plug in spare socket is normal, black white socket conservative, black green socket extra conservative.

SHOW AND PLACE SECTION SCORES WIN ODDS: PLUS ENTIRE WIN SECTION WINS

The blue plug in spare socket is normal, black white socket conservative, black green socket extra conservative.

ALL 7 SELECTIONS LITE:

Grey plug. (This position is automatically connected to black white wire, therefore, grey plug when used should be inserted only into black green socket.)

#3 - 5 SELECTION: (reduces 3 - 4 - 5)

Brown plug in spare socket normal, black green socket conservative.

#4 SELECTION: (reduces 3 - 4)

Orange plug in spare socket is normal, black green socket conservative.

BOOT AND SADDLE FREQUENCY:

Two plugs on upper right hand corner of selector disc, green black wires, adding plugs increases frequency.

FEATURE RACE:

Plugs on blue black wires in upper left hand corner of selector disc, adding plugs increases frequency.

FEATURE BUILD UP:

Plug and 2 way socket immediately to rear of selector unit in center of mechanism panel. Plug in left socket, black white wire reduces rate of build up through alternator switch.

PHOTO FINISH

400-TO-1 UNIT SWITCH CHART

CODE

N.C. ——— NORMALLY CLOSED

N.O. ——— NORMALLY OPEN

SWITCHES	SWITCH TYPE	WIRE COLORS	FUNCTION OF SWITCH
SWITCH 1 400-1 DRIVE SWITCH	N.O.	RED-WHITE BLUE-WHITE	FEATURE LITE FLASH.
SWITCH 2 400-1 SWITCH	N.O.	WHITE-BLACK RED-WHITE	1/20 SWITCH, CONTROLS FEATURE RACE STEPUP.
SWITCH 3 3/20 SWITCH	N.O.	GRAY-WHITE GRAY-RED	CONTROLS 7 ODDS.
SWITCH 4 1/400 SWITCH	N.O.	YELLOW-WHITE RED-WHITE	IN SERIES WITH SWITCH 2.
SWITCH 5 4/20 SWITCH	N.O.	BROWN-RED BLACK-WHITE	CONTROLS 6 ODDS.
SWITCH 6A 1/20 SWITCH	N.O.	GRAY-GREEN WHITE-BROWN	CONTROLS 9 ODDS.
SWITCH 6B 1/20 SWITCH	N.O.	GRAY-YELLOW BROWN-BLACK	CONTROLS 8 ODDS.
SWITCH 7A 1/20 SWITCH	N.O.	BLUE-WHITE BLUE-BLACK	CONTROLS FEATURE RACE HOLE.
SWITCH 7B 1/20 SWITCH	N.O.	GRAY-BLACK BROWN-WHITE	CONTROLS 10 ODDS.
SWITCH 8 20-1 SWITCH	N.C.	BLUE-GREEN GRAY-RED	CONTROLS ENTRY FLASH.
SWITCH 9 20-1 SWITCH	N.C.	RED-YELLOW BLACK-BLUE	SELECTION CONTROL SWITCH.

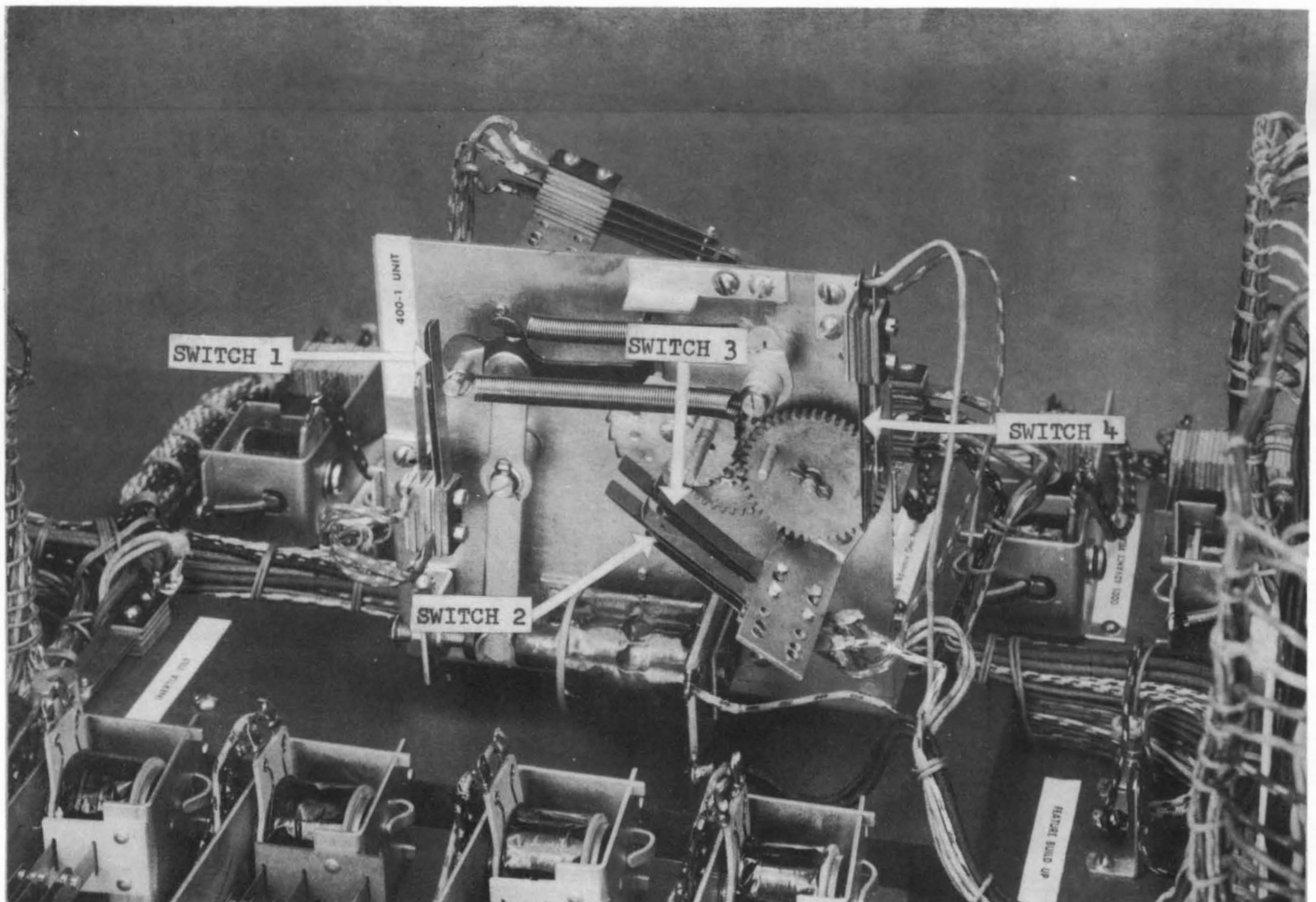


PHOTO FINISH

400-TO-1 UNIT SWITCH CHART (continued)

CODE	
N.C. — —	NORMALLY CLOSED
N.O. — —	NORMALLY OPEN

SWITCHES	SWITCH TYPE	WIRE COLORS	FUNCTION OF SWITCH
SWITCH 1 400-1 DRIVE SWITCH	N.O.	RED-WHITE BLUE-WHITE	FEATURE LITE FLASH.
SWITCH 2 400-1 SWITCH	N.O.	WHITE-BLACK RED-WHITE	1/20 SWITCH, CONTROLS FEATURE RACE STEPUP.
SWITCH 3 2/20 SWITCH	N.O.	GRAY-WHITE GRAY-RED	CONTROLS 7 ODDS.
SWITCH 4 1/400 SWITCH	N.O.	YELLOW-WHITE RED-WHITE	IN SERIES WITH SWITCH 2.
SWITCH 5 4/20 SWITCH	N.O.	BROWN-RED BLACK-WHITE	CONTROLS 6 ODDS.
SWITCH 6A 1/20 SWITCH	N.O.	GRAY-GREEN WHITE-BROWN	CONTROLS 9 ODDS.
SWITCH 6B 1/20 SWITCH	N.O.	GRAY-YELLOW BROWN-BLACK	CONTROLS 8 ODDS.
SWITCH 7A 1/20 SWITCH	N.O.	BLUE-WHITE BLUE-BLACK	CONTROLS FEATURE RACE HOLE.
SWITCH 7B 1/20 SWITCH	N.O.	GRAY-BLACK BROWN-WHITE	CONTROLS 10 ODDS.
SWITCH 8 20-1 SWITCH	N.C.	BLUE-GREEN GRAY-RED	CONTROLS ENTRY FLASH.
SWITCH 9 20-1 SWITCH	N.C.	RED-YELLOW BLACK-BLUE	SELECTION CONTROL SWITCH.

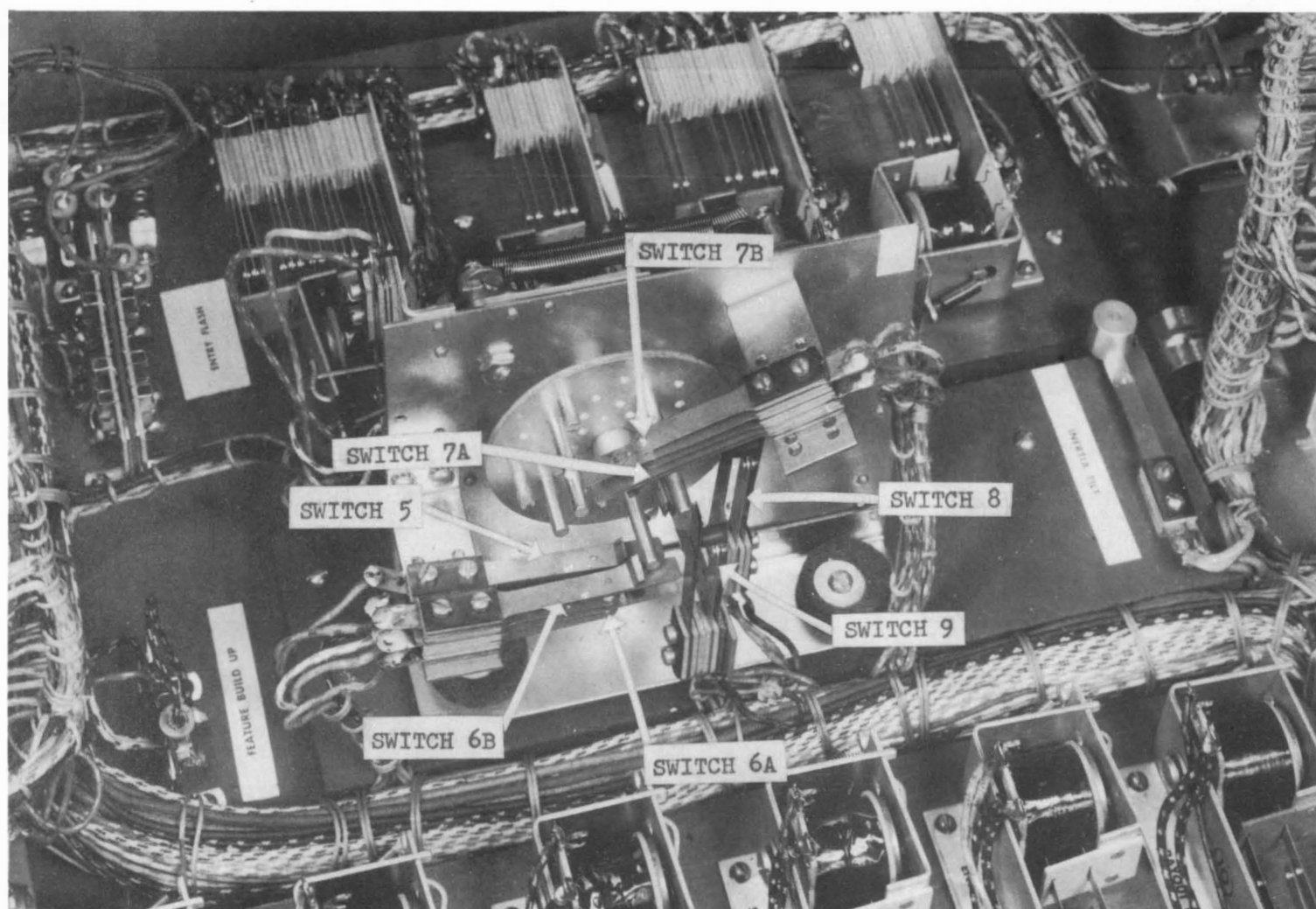
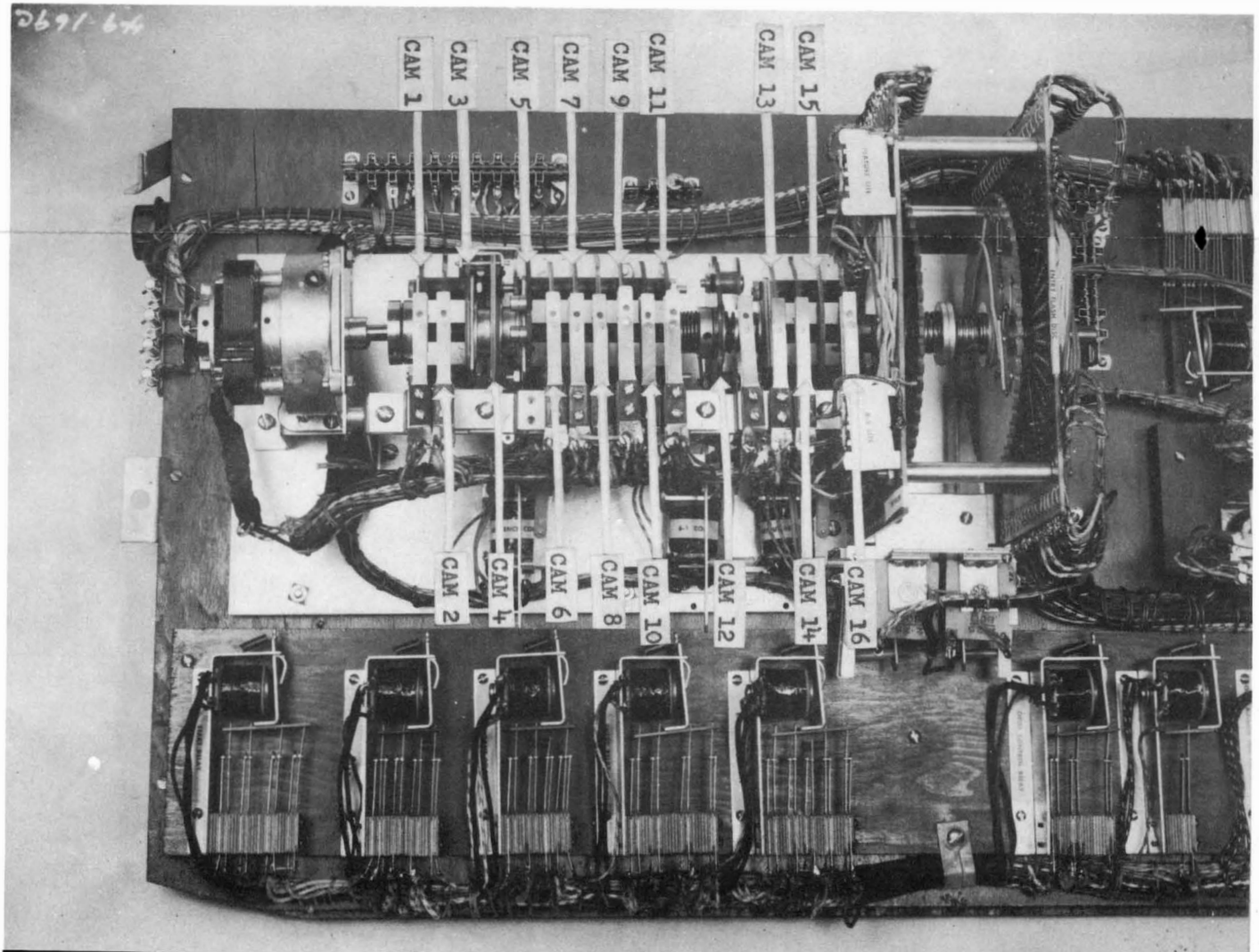


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SPINNER MOTOR SWITCH CHART

CODE

N.C.  NORMALLY CLOSEDN.O.  NORMALLY OPENM.B.  MAKE AND BREAK

SWITCHES ARE NUMBERED FROM THE FRAME UP.

SWITCH NO.	SWITCH TYPE	WIRE COLORS	FUNCTION OF SWITCH
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CAM 1 400 TO 1 IMPULSER

SWITCH 1	M.B.	N.C. ORANGE-RED ORANGE-GREEN	OPENS ENTRY FLASH RELEASE COIL.
		N.O. ORANGE-GREEN ORANGE-BLACK	STEP UP 400 TO 1 UNIT.

CAM 2 FREE PLAY TAKEOFF

SWITCH 1	N.O.	WHITE-GREEN WHITE-BLUE	FREE GAME RESET SWITCH.
SWITCH 2	N.O.	YELLOW WHITE-BROWN	ENERGIZES ODDS ADVANCE COIL TO ODDS CONTROL RELAY.

CAM 3 MIXER RELEASE CAM

CAM 4 FLOATING MIXER

CAM 5 SEQUENCE INDEX CAM

CAM 6 START

SWITCH 1	N.C.	RED YELLOW-BLACK	FEEDS ENTRY PUSH BUTTON.
SWITCH 2	N.C.	RED BROWN-GREEN	START RELAY LOCK IN.

CAM 7 C-2 SPINNER

SWITCH 1	N.C.	GREEN-YELLOW BLUE-YELLOW	COMPLETES ODDS ADVANCE CIRCUIT.
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CAM 8 SELECTION CONTROL

SWITCH 1	N.O.	ORANGE-GREEN YELLOW	FEEDS ENTRY FLASH RELEASE COIL THRU CAM 1.
SWITCH 2	N.O.	YELLOW YELLOW-GREEN	FEEDS SELECTION RELEASE COIL THRU ENTRY RELAYS

CAM 9 ALTERNATOR

SWITCH 1	N.C.	GREEN-YELLOW	FEEDS SADDLE LITE FROM SELECTOR DISC.
	N.O.	GREEN-BLACK GREEN-BLACK GREEN-WHITE	FEEDS BOOT LITE FROM SELECTOR DISC.
SWITCH 2	N.O.	BLUE-GREEN YELLOW-BLUE	CONTROLS ODDS ADVANCE IN PARALLEL WITH BUMPER STEPUP.
SWITCH 3	N.O.	BLACK-WHITE WHITE-BLACK	CONTROLS FEATURE RACE STEPUP IN PARALLEL TO FEATURE BUILD UP PLUG.

CAM 10 RESET

SWITCH 1	N.O.	GREEN-RED RED	ENERGIZES 6-1 INDEX RELEASE COIL.
SWITCH 2	N.O.	RED BLACK-YELLOW	PULLS IN ENTRY FLASH RELAY THRU ENTRY RELAY SWITCH 2.

CAM 11 START

SWITCH 1	N.O.	GREEN-YELLOW GREEN-BROWN	COMPLETES CIRCUIT TO TILT RELAY.
	N.C.	GREEN-BROWN GREEN-RED	COMMUTATOR TO PAYOUT RELAY.
SWITCH 2	N.O.	BROWN-GREEN BROWN-BLACK	FEEDS ENTRY FLASH DISC FROM ENTRY FLASH SWITCH 2.

CAM 12 6-1 INDEXER

SWITCH 1	N.C.	BROWN-GREEN BROWN-YELLOW	CONTROLS ODDS ADVANCE IN PARALLEL WITH ODDS ADJUSTMENT PLUG.
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CAM 13

SWITCH 1	N.O.	GREEN-WHITE YELLOW-GREEN	CONTROLS PAYOUT COUNTER TO ODDS STEPUP.
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CAM 14 PAYOUT

SWITCH 1	N.O.	GREEN-WHITE GREEN-YELLOW	CONTROLS PAYOUT COUNTER TO ODDS STEPUP.
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CAM 15 PAYOUT INDEX CAM

CAM 16 PAYOUT

SWITCH 1	N.O.	GREEN-WHITE YELLOW-BROWN	FREE GAME STEPUP THRU PAYOUT RELAY SWITCH 3. ALSO FEEDS PAYOUT COUNTER THRU ODDS DISC.
SWITCH 2	N.O.	WHITE-RED RED-WHITE	PAYOUT LOCKING CIRCUIT THRU PAYOUT RELAY SWITCH 1.

PHOTO FINISH RELAY CHART

CODE	
D.M.	 DOUBLE MAKE
N.C.	 NORMALLY CLOSED
N.O.	 NORMALLY OPEN
M.B.	 MAKE AND BREAK

SWITCHES ARE NUMBERED BEGINNING FROM THE RELAY FRAME.

SWITCH NO.	SWITCH TYPE	WIRE COLORS	FUNCTION OF SWITCH
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START RELAY STARTS MACHINE FROM COIN SWITCH OR REPLAY PUSH BUTTON.

SWITCH 1	N.O.	BROWN-GREEN BROWN-BLACK	LOCKING CONTACT. TO CAM 6 SWITCH 2.
SWITCH 2	N.O.	ORANGE-GREEN ORANGE-BLACK	STARTS SHUFFLE MOTOR.
SWITCH 3	N.O.	ORANGE-WHITE YELLOW	PULLS IN SEQUENCE COIL, ALSO FEEDS FEATURE STEPUP.

ANTI-TILT RELAY PREVENTS MACHINE CHEATING.

SWITCH 1	N.O.	ORANGE-RED RED	LOCKING CONTACT TO INERTIA TILT SWITCH.
	M.B. { N.C.	RED ORANGE-GREEN	TO SHUFFLE MOTOR THRU START RELAY.
SWITCH 2	N.O.	WHITE-BLACK WHITE-BLACK	FUSE TO 6 VOLT SUPPLY LINE.
SWITCH 3	N.O.	WHITE-RED WHITE-RED	FUSE TO 17 VOLT SUPPLY LINE.
SWITCH 4	N.O.	WHITE-ORANGE RED-GREEN	REPLAY BAR FEED LINE.
	M.B. { N.C.	WHITE-BLUE	PULLS IN FREE GAME RELAY

FREE GAME RELAY ENERGIZED DURING FREE GAME RESET.

SWITCH 1	N.O.	WHITE-BLUE RED-GREEN	TILT RELAY LOCK IN FROM FREE GAME "O" SWITCH.
SWITCH 2	N.O.	YELLOW YELLOW-RED	OPERATES SPINNER MOTOR FOR FREE GAME TAKE OFF.
SWITCH 3	N.C.	BROWN-BLACK BROWN-YELLOW	OPENS START RELAY LINE.
SWITCH 4	N.O.	WHITE-GREEN WHITE-RED	OPERATES FREE GAME METER AND FREE GAME RESET
	M.B. { N.C.	WHITE-RED GREEN-RED	OPERATES 6-1 COIL AND FREE GAME RESET, THRU C-10

ENTRY RELAY PULLED IN BY ENTRY FLASH PUSH BUTTON.

SWITCH 1	N.O.	YELLOW-BLUE GREEN-BROWN	ENTRY RELAY LOCK IN THRU 1/8 SHUFFLE SWITCH.
SWITCH 2	N.O.	YELLOW-BLACK BLACK-YELLOW	CLOSES ENTRY FLASH RELAY LINE THRU C-10.
SWITCH 3	N.O.	BLACK-BLUE RED-WHITE	ENTRY FLASH LITE
SWITCH 4	N.C.	YELLOW-GREEN WHITE-RED	SELECTION RELEASE COIL AND ODDS FIRST FOUR POSITIONS.

ENTRY FLASH RELAY CONTROLS ENTRY CIRCUITS.

SWITCH 1	N.O.	YELLOW-BLUE YELLOW-BLACK	ENTRY FLASH RELAY LOCK IN THRU ENTRY RELAY
SWITCH 2	N.O.	BROWN-GREEN RED-WHITE	ENTRY FLASH SELECTION FEED LINE TO C-11.
SWITCH 3	N.O.	BROWN-RED RED-WHITE	ENTRY FLASH FEED, THRU ENTRY FLASH DISC RELEASE ARM SWITCH AND LOCK IN CIRCUIT FOR #3-4-5 AND FAN SELECTIONS.
SWITCH 4	N.C.	ORANGE-WHITE GREEN-YELLOW	ODDS CONTROL FEED TO C-7, FROM TILT RELAY.
SWITCH 5	N.C.	WHITE-BLACK RED-GREEN	ODDS FLASH FEED LINE TO C-11.

ODDS CONTROL RELAY ADVANCES THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	BROWN-WHITE WHITE - BROWN	ODDS UNIT STEPUP THRU C-2.
SWITCH 2	N.O.	YELLOW YELLOW - RED	OPERATES SPINNER MOTOR
SWITCH 3	N.C.	BROWN-YELLOW RED - BLACK	FEED LINE FOR START RELAY,

ODDS ADVANCE RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	ORANGE-WHITE BROWN-GREEN	FEED LINE TO ODDS CONTROL RELAY.
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ODDS ADVANCE 1 POSITION RELAY ENERGIZED BY END OF STROKE ON ODDS ADVANCE UNIT.

SWITCH 1	M.B.	N.O.	BLACK-YELLOW	ODDS ADVANCE 1 STEP RELAY LOCK IN THRU ENTRY FLASH DISC.
		N.C.	ORANGE-BLACK ORANGE-BLACK BLUE-WHITE	
SWITCH 2	N.C.		GRAY-RED GRAY-RED GRAY-RED	BREAKS ENTRY CONTROL RELAY FEED LINE.

SELECTION CONTROL RELAY PREVENTS SELECTIONS FROM STOPPING ON CONTROLLED POSITIONS.

SWITCH 1	N.O.	YELLOW YELLOW-GREEN	SELECTION DISC RELEASE COIL FEED THRU ENTRY RELAY.
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ENTRY CONTROL RELAY PREVENTS ENTRY FLASH DISC FROM STOPPING ON CONTROLLED POSITIONS.

SWITCH 1	N.O.	YELLOW ORANGE - RED	FEED FOR ENTRY FLASH DISC RELEASE COIL.
SWITCH 2	N.O.	YELLOW YELLOW-RED	STARTS SPINNER MOTOR.

PAYOUT RELAY ENERGIZED THRU PAYOUT COUNTER FOR ALL WINNERS.

SWITCH 1	N.O.	WHITE-RED GREEN-RED	PAYOUT RELAY LOCK IN THRU 4TH BALL SWITCH.
SWITCH 2	N.O.	GREEN-BLACK YELLOW	PAYOUT RELEASE COIL FEED.
SWITCH 3	N.C.	RED-BLACK YELLOW-GREEN	BREAKS REPLAY FEED LINE.
SWITCH 4	N.O.	GREEN-WHITE BROWN-WHITE	PAYOUT FEED FOR FREE GAME STEPUP AND PAYOUT COUNTER

FAN RELAY GIVES ALL SELECTIONS.

SWITCH 1	D.M.	BROWN-RED BLUE-WHITE BLUE-RED	FAN RELAY LOCK IN THRU ENTRY FLASH RELAY, #7 SELECTION LITE AND HOLE SWITCH.
SWITCH 2	D.M.	BLACK-BLUE BLACK-WHITE RED-WHITE	#5 AND #6 SELECTION LITE AND HOLE SWITCH FEED.
SWITCH 3	N.O.	GRAY-YELLOW GRAY-RED	ENTRY CONTROL RELAY FEED.
SWITCH 4	D.M.	RED-WHITE BLACK-GREEN BLACK-YELLOW	#3-#4 SELECTION LITE AND HOLE SWITCH FEED.
SWITCH 6	D.M.	RED-WHITE BLACK-GREEN BLACK-YELLOW	#1 - #2 SELECTION LITE AND HOLE SWITCH FEED.

#5 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	M.B.	{ NO ORANGE-GREEN ORANGE-GREEN ORANGE-GREEN BLACK-BLUE	#5 SELECTION RELAY FEED FROM ENTRY FLASH DISC. #5 SELECTION RELAY LOCK IN THRU ENTRY FLASH LITE.
SWITCH 2	N.O.	RED-WHITE BLACK-BLUE	FEED FOR #5 SELECTION LITE AND #5 HOLE SWITCH.

#4 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	M.B.	{ NO. ORANGE-BLACK ORANGE-BLACK ORANGE-BLACK BROWN-RED NC	#4 SELECTION RELAY FEED FROM ENTRY FLASH DISC, #4 SELECTION RELAY LOCK IN THRU ENTRY FLASH RELAY.
SWITCH 2	NO.	RED-WHITE BLACK-GREEN	FEED FOR #4 SELECTION LITE AND #4 SELECTION HOLE SWITCH.
SWITCH 3	N.O.	GRAY-RED GRAY-YELLOW	ENTRY CONTROL RELAY FEED.

#3 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	MB	N.O.	GREEN-BROWN	#3 SELECTION RELAY FEED FROM ENTRY FLASH DISC.
		N.C.	GREEN-BROWN BROWN-RED	#3 SELECTION RELAY LOCK IN THRU ENTRY FLASH RELAY.
SWITCH 2		N.O.	RED-WHITE BLACK-YELLOW	#3 SELECTION LITE AND HOLE SWITCH FEED.

ODDS CONTROL RELAY ADVANCES THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	BROWN-WHITE WHITE - BROWN	ODDS UNIT STEPUP THRU C-2.
SWITCH 2	N.O.	YELLOW YELLOW - RED	OPERATES SPINNER MOTOR
SWITCH 3	N.C.	BROWN-YELLOW RED - BLACK	FEED LINE FOR START RELAY,

ODDS ADVANCE RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	ORANGE-WHITE BROWN-GREEN	FEED LINE TO ODDS CONTROL RELAY.
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ODDS ADVANCE 1 POSITION RELAY ENERGIZED BY END OF STROKE ON ODDS ADVANCE UNIT

SWITCH 1	M.B.	N.O. ORANGE-BLACK N.C. ORANGE-BLACK BLUE-WHITE	ODDS ADVANCE 1 STEP RELAY LOCK IN THRU ENTRY FLASH DISC. ODDS ADVANCE RELAY FEED.
SWITCH 2	N.C.	GRAY-RED GRAY-GREEN	BREAKS ENTRY CONTROL RELAY FEED LINE.

SELECTION CONTROL RELAY PREVENTS SELECTIONS FROM STOPPING ON CONTROLLED POSITIONS.

SWITCH 1	N.O.	YELLOW YELLOW-GREEN	SELECTION DISC RELEASE COIL FEED THRU ENTRY RELAY.
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ENTRY CONTROL RELAY PREVENTS ENTRY FLASH DISC FROM STOPPING ON CONTROLLED POSITIONS.

SWITCH 1	N.O.	YELLOW ORANGE - RED	FEED FOR ENTRY FLASH DISC RELEASE COIL.
SWITCH 2	N.O.	YELLOW YELLOW-RED	STARTS SPINNER MOTOR.

PAYOUT RELAY ENERGIZED THRU PAYOUT COUNTER FOR ALL WINNERS.

SWITCH 1	N.O.	WHITE-RED GREEN-RED	PAYOUT RELAY LOCK IN THRU 4TH BALL SWITCH.
SWITCH 2	N.O.	GREEN-BLACK YELLOW	PAYOUT RELEASE COIL FEED.
SWITCH 3	N.C.	RED-BLACK YELLOW-GREEN	BREAKS REPLAY FEED LINE.
SWITCH 4	N.O.	GREEN-WHITE BROWN-WHITE	PAYOUT FEED FOR FREE GAME STEPUP AND PAYOUT COUNTER

FAN RELAY GIVES ALL SELECTIONS.

SWITCH 1	D.M.	BROWN-RED BLUE-WHITE BLUE-RED	FAN RELAY LOCK IN THRU ENTRY FLASH RELAY, #7 SELECTION LITE AND HOLE SWITCH.
SWITCH 2	D.M.	BLACK-BLUE BLACK-WHITE RED-WHITE	#5 AND #6 SELECTION LITE AND HOLE SWITCH FEED.
SWITCH 3	N.O.	GRAY-YELLOW GRAY-RED	ENTRY CONTROL RELAY FEED.
SWITCH 4	D.M.	RED-WHITE BLACK-GREEN BLACK-YELLOW	#3-#4 SELECTION LITE AND HOLE SWITCH FEED.
SWITCH 5	D.M.	RED-WHITE BLACK-GREEN BLACK-YELLOW	#1 - #2 SELECTION LITE AND HOLE SWITCH FEED.

#5 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	M.B.	{ NO ORANGE-GREEN ORANGE-GREEN ORANGE-GREEN BLACK-BLUE NC	#5 SELECTION RELAY FEED FROM ENTRY FLASH DISC. #5 SELECTION RELAY LOCK IN THRU ENTRY FLASH LITE.
SWITCH 2	N.O.	RED-WHITE BLACK-BLUE	FEED FOR #5 SELECTION LITE AND #5 HOLE SWITCH.

#4 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	M.B.	{ NO. ORANGE-BLACK ORANGE-BLACK ORANGE-BLACK BROWN-RED NC	#4 SELECTION RELAY FEED FROM ENTRY FLASH DISC, #4 SELECTION RELAY LOCK IN THRU ENTRY FLASH RELAY.
SWITCH 2	N.O.	RED-WHITE BLACK-GREEN	FEED FOR #4 SELECTION LITE AND #4 SELECTION HOLE SWITCH.
SWITCH 3	N.O.	GRAY- RED GRAY-YELLOW	ENTRY CONTROL RELAY FEED.

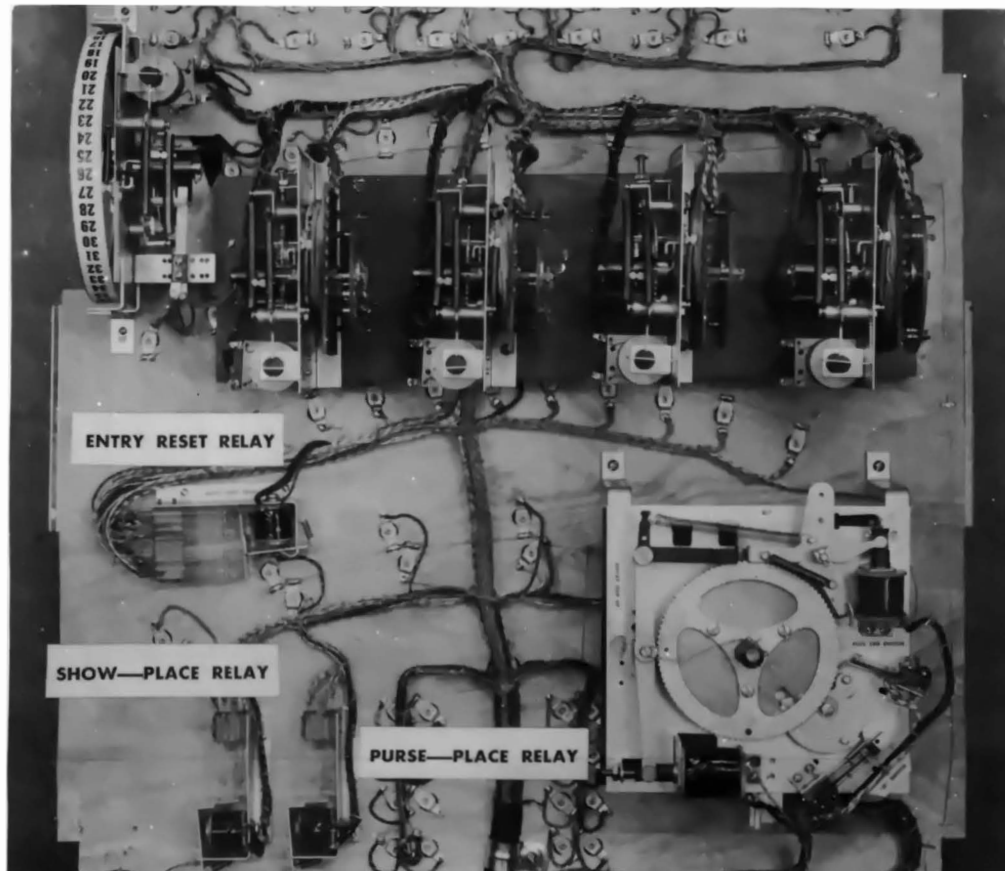
#3 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	M.B.	{ NO. GREEN-BROWN GREEN-BROWN N.C. GREEN-BROWN BROWN-RED	#3 SELECTION RELAY FEED FROM ENTRY FLASH DISC. #3 SELECTION RELAY LOCK IN THRU ENTRY FLASH RELAY.
SWITCH 2	N.O.	RED-WHITE BLACK-YELLOW	#3 SELECTION LITE AND HOLE SWITCH FEED.

PHOTO FINISH RELAY CHART (continued)

CODE	
D.M. 	DOUBLE MAKE
N.C. 	NORMALLY CLOSED
N.O. 	NORMALLY OPEN
M.B. 	MAKE AND BREAK

SWITCHES ARE NUMBERED BEGINNING FROM THE RELAY FRAME,



SWITCH NO.	SWITCH TYPE	WIRE COLORS	FUNCTION OF SWITCH
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ENTRY RESET RELAY RESETS ADDED ENTRY STEP UP AFTER WINNERS:

SWITCH 1	M.B.	N.O.	WHITE-RED BROWN-WHITE	FEED FOR SHOW, PLACE AND WIN ENTRY STEPUPS, FROM 17 VOLT 10 AMPERE FUSE.
		N.C.	BROWN-WHITE RED-WHITE	FEED FOR SHOW, PLACE AND WIN ENTRY STEPUPS, FROM TILT RELAY.
SWITCH 2	M.B.	N.O.	BROWN-BLACK YELLOW-BROWN	SHOW PAYOUT LINE TO SHOW ENTRY STEPUP RESET LINE.
		N.C.	YELLOW-BROWN YELLOW-GREEN	PAYOUT LINE FROM SHOW HOLE SWITCH TO ODDS STEPUP.
SWITCH 3	M.B.	N.O.	BROWN-RED ORANGE-WHITE	PLACE PAYOUT LINE TO PLACE ENTRY STEPUP RESET LINE.
		N.C.	ORANGE-WHITE YELLOW-BLUE	PAYOUT LINE FROM PLACE HOLE SWITCH TO ODDS STEPUP.
SWITCH 4	M.B.	N.O.	GREEN-BROWN WHITE-BLUE	WIN PAYOUT LINE TO WIN ENTRY STEPUP RESET LINE.
		N.C.	WHITE-BLUE YELLOW-BLACK	PAYOUT LINE FROM WIN HOLE SWITCH TO ODDS STEPUP

SHOW PLACE RELAY COMPLETES WIN ODDS CIRCUIT FROM SHOW AND PLACE SECTION

SWITCH 1	N.O.	YELLOW-BLUE YELLOW-GREEN	SHOW PAYOUT LINE TO PLACE PAYOUT LINE.
SWITCH 2	N.O.	YELLOW-BLUE YELLOW-BLACK	PLACE PAYOUT LINE TO WIN PAYOUT LINE.

PURSE PLACE RELAY COMPLETES WIN ODDS CIRCUIT FROM PURSE AND PLACE SECTIONS.

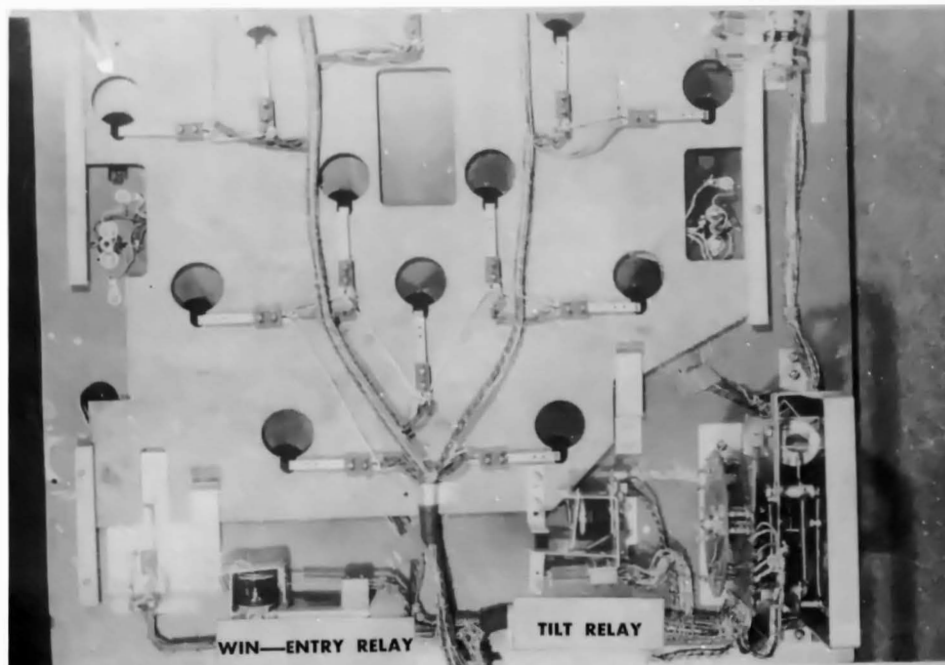
SWITCH 1	N.O.	YELLOW-BLUE YELLOW-RED	PURSE PAYOUT LINE TO PLACE PAYOUT LINE.
SWITCH 2	N.O.	YELLOW-BLUE YELLOW-BLACK	PLACE PAYOUT LINE TO WIN PAYOUT LINE.

PHOTO FINISH

RELAY CHART (continued)

SWITCHES ARE NUMBERED BEGINING FROM THE RELAY FRAME,

CODE	
D.M.	DOUBLE MAKE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
M.B.	MAKE AND BREAK



WIN ENTRY RELAY ENERGIZED BY "D" BUMPER.

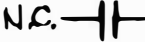
SWITCH 1	M.B.	N.O.	BROWN-WHITE	ADVANCES WIN ENTRY STEPUP. OPENS "C" BUMPER.
		N.C.	RED-WHITE RED-WHITE BLACK-WHITE	

TILT RELAY PREVENTS MACHINE CHEATING.

SWITCH 1	M.B.	N.O.	ORANGE WHITE-RED	FEED FOR TILT LITE. 17 VOLT SUPPLY.
		N.C.	WHITE-RED RED-WHITE	
SWITCH 2	N.O.		ORANGE-WHITE ORANGE-RED	30 VOLT SUPPLY.

PHOTO FINISH

400-TO-1 UNIT SWITCH CHART

CODE	
N.C. 	NORMALLY CLOSED
N.O. 	NORMALLY OPEN

SWITCHES	SWITCH TYPE	WIRE COLORS	FUNCTION OF SWITCH
SWITCH 1 400-1 DRIVE SWITCH	N.O.	RED-WHITE BLUE-WHITE	FEATURE LITE FLASH.
SWITCH 2 400-1 SWITCH	N.O.	WHITE-BLACK RED-WHITE	1/20 SWITCH, CONTROLS FEATURE RACE STEPUP.
SWITCH 3 2/20 SWITCH	N.O.	GRAY-WHITE GRAY-RED	CONTROLS 7 ODDS.
SWITCH 4 1/400 SWITCH	N.O.	YELLOW-WHITE RED-WHITE	IN SERIES WITH SWITCH 2.
SWITCH 5 4/20 SWITCH	N.O.	BROWN-RED BLACK-WHITE	CONTROLS 6 ODDS.
SWITCH 6A 1/20 SWITCH	N.O.	GRAY-GREEN WHITE-BROWN	CONTROLS 9 ODDS.
SWITCH 6B 1/20 SWITCH	N.O.	GRAY-YELLOW BROWN-BLACK	CONTROLS 8 ODDS.
SWITCH 7A 1/20 SWITCH	N.O.	BLUE-WHITE BLUE-BLACK	CONTROLS FEATURE RACE HOLE.
SWITCH 7B 1/20 SWITCH	N.O.	GRAY-BLACK BROWN-WHITE	CONTROLS 10 ODDS.
SWITCH 8 20-1 SWITCH	N.C.	BLUE-GREEN GRAY-RED	CONTROLS ENTRY FLASH.
SWITCH 9 20-1 SWITCH	N.C.	RED-YELLOW BLACK-BLUE	SELECTION CONTROL SWITCH.

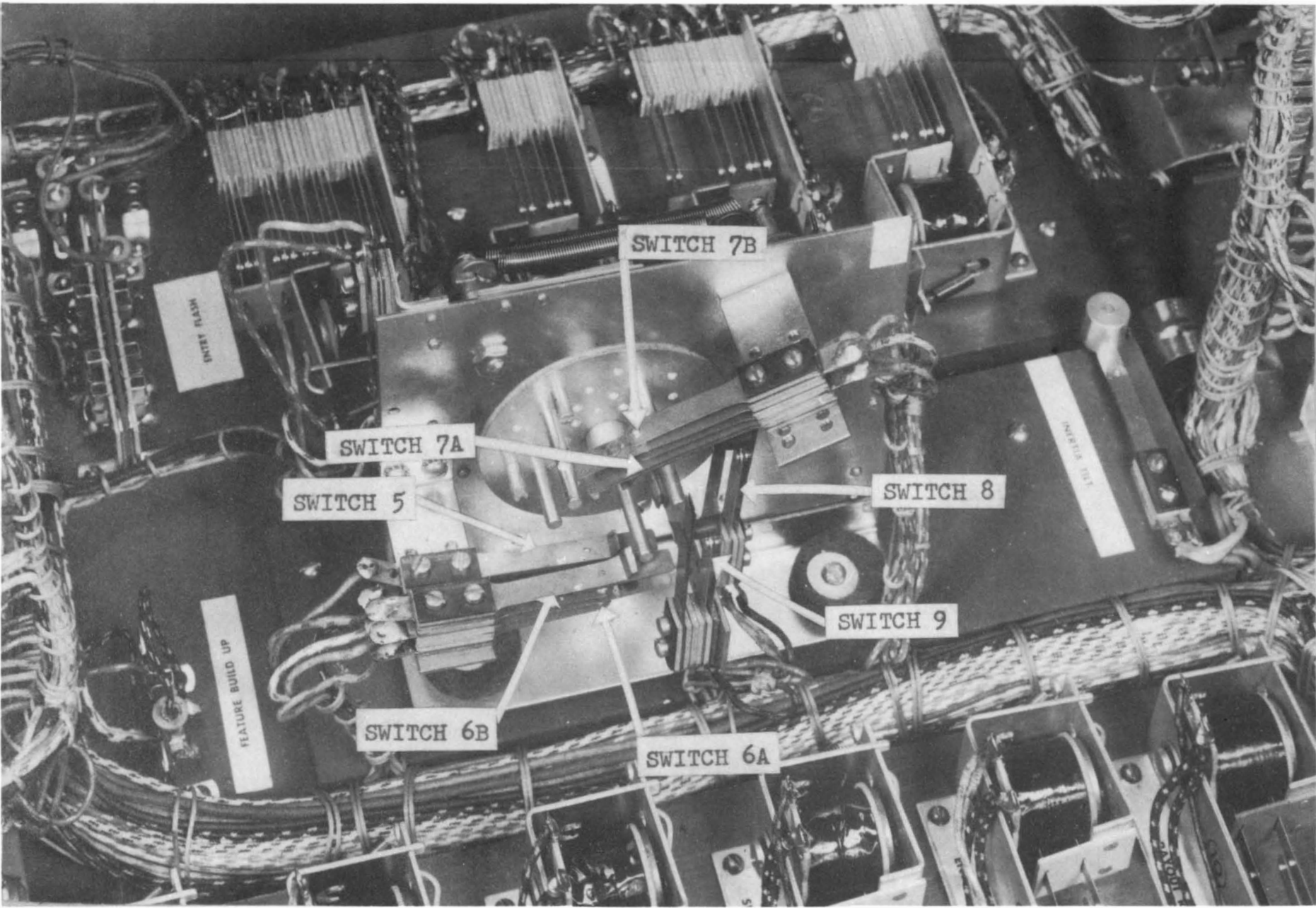
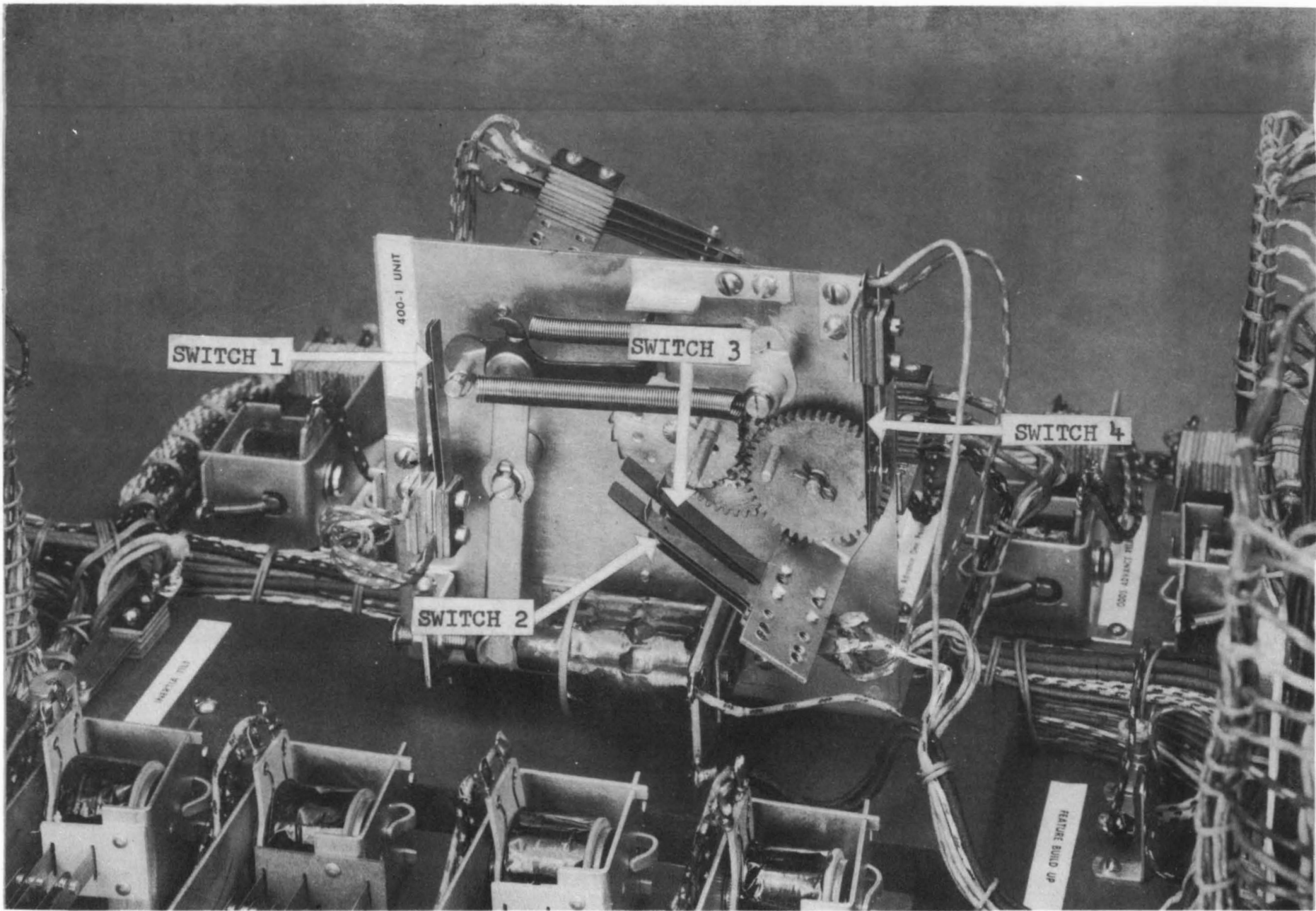


PHOTO FINISH

SPINNER MOTOR SWITCH CHART

SWITCHES ARE NUMBERED FROM THE FRAME UP.

CODE	
NC, 	NORMALLY CLOSED
NO, 	NORMALLY OPEN
MB, 	MAKE AND BREAK

SWITCH NO.	SWITCH TYPE	WIRE COLORS	FUNCTION OF SWITCH
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CAM 1 400T01 IMPULSER

SWITCH 1	M.B. {	NC. ORANGE-RED ORANGE-GREEN	OPENS ENTRY FLASH RELEASE COIL.
		NO. ORANGE-GREEN ORANGE-BLACK	STEP UP 400 TO 1 UNIT.

CAM 2 FREE PLAY TAKEOFF

SWITCH 1	N.O.	WHITE-GREEN WHITE-BLUE	FREE GAME RESET SWITCH.
SWITCH 2	N.O.	YELLOW WHITE-BROWN	ENERGIZES ODDS ADVANCE COIL TO ODDS CONTROL RELAY.

CAM 3 MIXER RELEASE CAM

CAM 4 FLOATING MIXER

CAM 5 SEQUENCE INDEX CAM

CAM 6 START

SWITCH 1	N.C.	RED YELLOW-BLACK	FEEDS ENTRY PUSH BUTTON.
SWITCH 2	N.C.	RED BROWN-GREEN	START RELAY LOCKIN.

CAM 7 C-2 SPINNER

SWITCH 1	N.C.	GREEN-YELLOW BLUE-YELLOW	COMPLETES ODDS ADVANCE CIRCUIT.
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CAM 8 SELECTION CONTROL

SWITCH 1	NO.	ORANGE-GREEN YELLOW	FEEDS ENTRY FLASH RELEASE COIL THRU CAM 1.
SWITCH 2	N.O.	YELLOW YELLOW-GREEN	FEEDS SELECTION RELEASE COIL THRU ENTRY RELAYS

CAM 9 ALTERNATOR

SWITCH 1	M.B. {	NC. GREEN-YELLOW GREEN-BLACK	FEEDS SADDLE LITE FROM SELECTOR DISC.
		NO. GREEN-BLACK GREEN-WHITE	FEEDS BOOT LITE FROM SELECTOR DISC.
SWITCH 2	N.O.	BLUE-GREEN YELLOW-BLUE	CONTROLS ODDS ADVANCE IN PARALLEL WITH BUMPER STEPUP.
SWITCH 3	N.O.	BLACK-WHITE WHITE-BLACK	CONTROLS FEATURE RACE STEPUP IN PARALLEL TO FEATURE BUILD UP PLUG.

CAM 10 RESET

SWITCH 1	N.O.	GREEN-RED RED	ENERGIZES 6-1 INDEX RELEASE COIL.
SWITCH 2	N.O.	RED BLACK-YELLOW	PULLS IN ENTRY FLASH RELAY THRU ENTRY RELAY SWITCH 2.

CAM 11 START

SWITCH 1	MB {	NO. GREEN-YELLOW GREEN-BROWN	COMPLETES CIRCUIT TO TILT RELAY.
		NC. GREEN-BROWN GREEN-RED	COMMUTATOR TO PAYOUT RELAY.
SWITCH 2	NO.	BROWN-GREEN BROWN-BLACK	FEEDS ENTRY FLASH DISC FROM ENTRY FLASH SWITCH 2.

CAM 12 6-1 INDEXER

SWITCH 1	N.C.	BROWN-GREEN BROWN-YELLOW	CONTROLS ODDS ADVANCE IN PARALLEL WITH ODDS ADJUSTMENT PLUG.
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CAM 13

SWITCH 1	N.O.	GREEN-WHITE YELLOW-GREEN	CONTROLS PAYOUT COUNTER TO ODDS STEPUP.
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CAM 14 PAYOUT

SWITCH 1	N.O.	GREEN-WHITE GREEN-YELLOW	CONTROLS PAYOUT COUNTER TO ODDS STEPUP.
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CAM 15 PAYOUT INDEX CAM

CAM 16 PAYOUT

SWITCH 1	N.O.	GREEN-WHITE YELLOW-BROWN	FREE GAME STEPUP THRU PAYOUT RELAY SWITCH 3. ALSO FEEDS PAYOUT COUNTER THRU ODDS DISC.
SWITCH 2	N.O.	WHITE-RED RED-WHITE	PAYOUT LOCKING CIRCUIT THRU PAYOUT RELAY SWITCH 1.

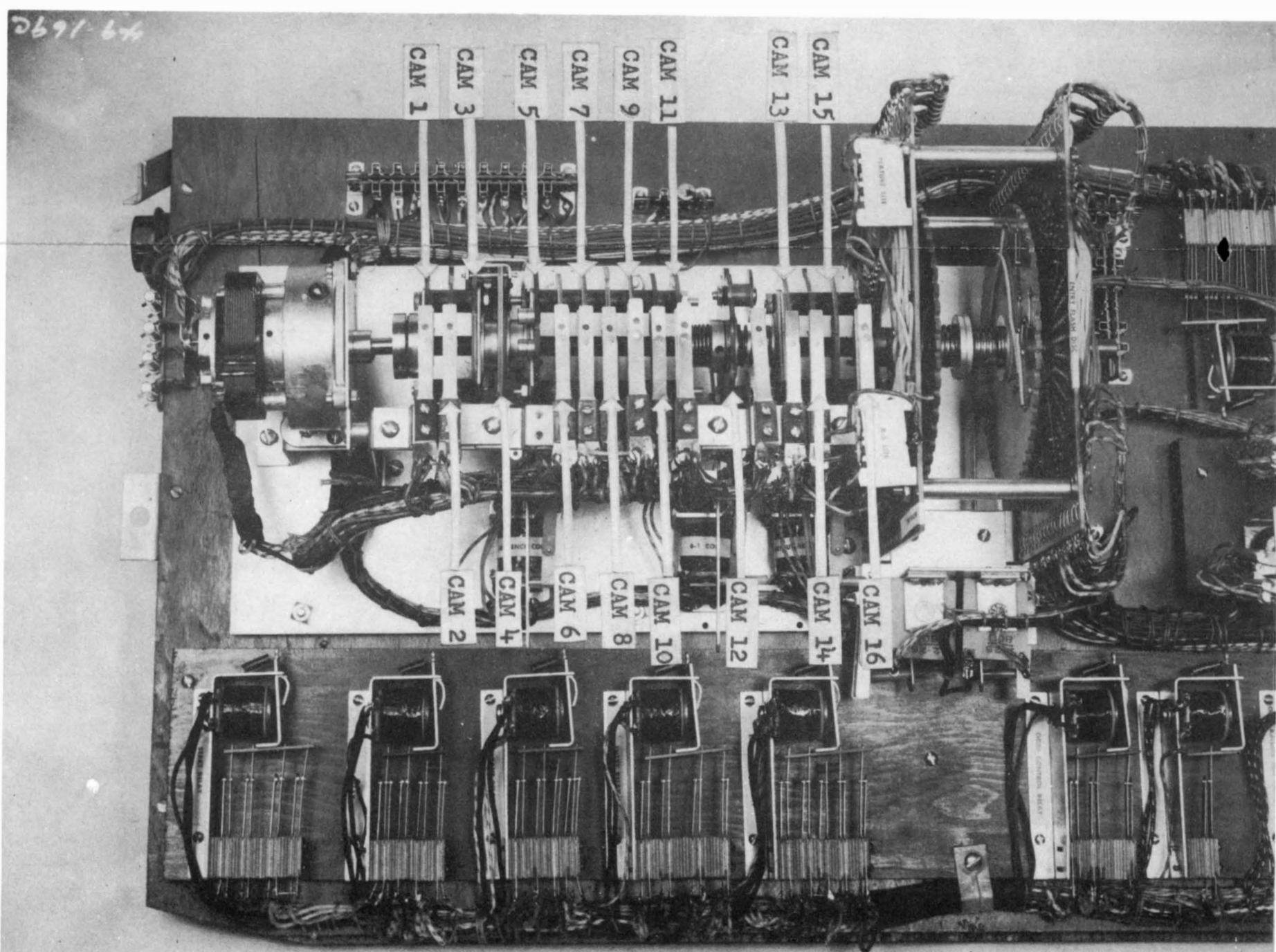


PHOTO FINISH
RELAY CHART

CODE	
D.M.	DOUBLE MAKE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
M.B.	MAKE AND BREAK

SWITCHES ARE NUMBERED BEGINING FROM THE RELAY FRAME,

SWITCH NO.	SWITCH TYPE	WIRE COLORS	FUNCTION OF SWITCH
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START RELAY STARTS MACHINE FROM COIN SWITCH OR REPLAY PUSH BUTTON.

SWITCH 1	N.O.	BROWN-GREEN BROWN-BLACK	LOCKING CONTACT. TO CAM 6 SWITCH 2.
SWITCH 2	N.O.	ORANGE-GREEN ORANGE-BLACK	STARTS SHUFFLE MOTOR.
SWITCH 3	N.O.	ORANGE-WHITE YELLOW	PULLS IN SEQUENCE COIL, ALSO FEEDS FEATURE STEPUP.

ANTI-TILT RELAY PREVENTS MACHINE CHEATING.

SWITCH 1	M.B.	N.O. ORANGE-RED RED	LOCKING CONTACT TO INERTIA TILT SWITCH.
		N.C. RED ORANGE-GREEN	TO SHUFFLE MOTOR THRU START RELAY.
SWITCH 2	N.O.	WHITE-BLACK WHITE-BLACK	FUSE TO 6 VOLT SUPPLY LINE.
SWITCH 3	N.O.	WHITE-RED WHITE-RED	FUSE TO 17 VOLT SUPPLY LINE.
SWITCH 4	M.B.	N.O. WHITE-ORANGE RED-GREEN	REPLAY BAR FEED LINE.
		N.C. WHITE-BLUE	PULLS IN FREE GAME RELAY

FREE GAME RELAY ENERGIZED DURING FREE GAME RESET.

SWITCH 1	N.O.	WHITE-BLUE RED-GREEN	TILT RELAY LOCK IN FROM FREE GAME "O" SWITCH.
SWITCH 2	N.O.	YELLOW YELLOW-RED	OPERATES SPINNER MOTOR FOR FREE GAME TAKE OFF.
SWITCH 3	N.C.	BROWN-BLACK BROWN-YELLOW	OPENS START RELAY LINE.
SWITCH 4	M.B.	N.O. WHITE-GREEN WHITE-RED	OPERATES FREE GAME METER AND FREE GAME RESET
		N.C. WHITE-RED GREEN-RED	OPERATES 6-1 COIL AND FREE GAME RESET, THRU C-10

ENTRY RELAY PULLED IN BY ENTRY FLASH PUSH BUTTON.

SWITCH 1	N.O.	YELLOW-BLUE GREEN-BROWN	ENTRY RELAY LOCK IN THRU 1/8 SHUFFLE SWITCH.
SWITCH 2	N.O.	YELLOW-BLACK BLACK-YELLOW	CLOSES ENTRY FLASH RELAY LINE THRU C-10.
SWITCH 3	N.O.	BLACK-BLUE RED-WHITE	ENTRY FLASH LITE
SWITCH 4	N.C.	YELLOW-GREEN WHITE-RED	SELECTION RELEASE COIL AND ODDS FIRST FOUR POSITIONS.

ENTRY FLASH RELAY CONTROLS ENTRY CIRCUITS.

SWITCH 1	N.O.	YELLOW-BLUE YELLOW-BLACK	ENTRY FLASH RELAY LOCK IN THRU ENTRY RELAY
SWITCH 2	N.O.	BROWN-GREEN RED-WHITE	ENTRY FLASH SELECTION FEED LINE TO C-11.
SWITCH 3	N.O.	BROWN-RED RED-WHITE	ENTRY FLASH FEED, THRU ENTRY FLASH DISC RELEASE ARM SWITCH AND LOCK IN CIRCUIT FOR #3-4-5 AND FAN SELECTIONS.
SWITCH 4	N.C.	ORANGE-WHITE GREEN-YELLOW	ODDS CONTROL FEED TO C-7, FROM TILT RELAY.
SWITCH 5	N.C.	WHITE-BLACK RED-GREEN	ODDS FLASH FEED LINE TO C-11.

ODDS CONTROL RELAY ADVANCES THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	BROWN-WHITE WHITE-BROWN	ODDS UNIT STEPUP THRU C-2.
SWITCH 2	N.O.	YELLOW YELLOW-RED	OPERATES SPINNER MOTOR
SWITCH 3	N.C.	BROWN-YELLOW RED-BLACK	FEED LINE FOR START RELAY.

ODDS ADVANCE RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	ORANGE-WHITE BROWN-GREEN	FEED LINE TO ODDS CONTROL RELAY.
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ODDS ADVANCE 1 POSITION RELAY ENERGIZED BY END OF STROKE ON ODDS ADVANCE UNIT

SWITCH 1	M.B.	N.O. BLACK-YELLOW ORANGE-BLACK	ODDS ADVANCE 1 STEP RELAY LOCK IN THRU ENTRY FLASH DISC.
		N.C. ORANGE-BLACK BLUE-WHITE	ODDS ADVANCE RELAY FEED.
SWITCH 2	N.C.	GRAY-RED GRAY-GREEN	BREAKS ENTRY CONTROL RELAY FEED LINE.

SELECTION CONTROL RELAY PREVENTS SELECTIONS FROM STOPPING ON CONTROLLED POSITIONS.

SWITCH 1	N.O.	YELLOW YELLOW-GREEN	SELECTION DISC RELEASE COIL FEED THRU ENTRY RELAY.
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ENTRY CONTROL RELAY PREVENTS ENTRY FLASH DISC FROM STOPPING ON CONTROLLED POSITIONS.

SWITCH 1	N.O.	YELLOW ORANGE-RED	FEED FOR ENTRY FLASH DISC RELEASE COIL.
SWITCH 2	N.O.	YELLOW YELLOW-RED	STARTS SPINNER MOTOR.

PAYOUT RELAY ENERGIZED THRU PAYOUT COUNTER FOR ALL WINNERS.

SWITCH 1	N.O.	WHITE-RED GREEN-RED	PAYOUT RELAY LOCK IN THRU 4th BALL SWITCH.
SWITCH 2	N.O.	GREEN-BLACK YELLOW	PAYOUT RELEASE COIL FEED.
SWITCH 3	N.C.	RED-BLACK YELLOW-GREEN	BREAKS REPLAY FEED LINE.
SWITCH 4	N.O.	GREEN-WHITE BROWN-WHITE	PAYOUT FEED FOR FREE GAME STEPUP AND PAYOUT COUNTER

FAN RELAY GIVES ALL SELECTIONS.

SWITCH 1	D.M.	BROWN-RED BLUE-WHITE BLUE-RED	FAN RELAY LOCK IN THRU ENTRY FLASH RELAY, #7 SELECTION LITE AND HOLE SWITCH.
SWITCH 2	D.M.	BLACK-BLUE BLACK-WHITE RED-WHITE	#5 AND #6 SELECTION LITE AND HOLE SWITCH FEED.
SWITCH 3	N.O.	GRAY-YELLOW GRAY-RED	ENTRY CONTROL RELAY FEED.
SWITCH 4	D.M.	RED-WHITE BLACK-GREEN BLACK-YELLOW	#3-#4 SELECTION LITE AND HOLE SWITCH FEED.
SWITCH 6	D.M.	RED-WHITE BLACK-GREEN BLACK-YELLOW	#1-#2 SELECTION LITE AND HOLE SWITCH FEED.

#5 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	M.B.	N.O. ORANGE-GREEN ORANGE-GREEN	#5 SELECTION RELAY FEED FROM ENTRY FLASH DISC.
		N.C. ORANGE-GREEN BLACK-BLUE	#5 SELECTION RELAY LOCK IN THRU ENTRY FLASH LITE.
SWITCH 2	N.O.	RED-WHITE BLACK-BLUE	FEED FOR #5 SELECTION LITE AND #5 HOLE SWITCH.

#4 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	M.B.	N.O. ORANGE-BLACK ORANGE-BLACK ORANGE-BLACK	#4 SELECTION RELAY FEED FROM ENTRY FLASH DISC.
		N.C. BROWN-RED	#4 SELECTION RELAY LOCK IN THRU ENTRY FLASH RELAY.
SWITCH 2	N.O.	RED-WHITE BLACK-GREEN	FEED FOR #4 SELECTION LITE AND #4 SELECTION HOLE SWITCH.
SWITCH 3	N.O.	GRAY-RED GRAY-YELLOW	ENTRY CONTROL RELAY FEED.

#3 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	M.B.	N.O. GREEN-BROWN GREEN-BROWN	#3 SELECTION RELAY FEED FROM ENTRY FLASH DISC.
		N.C. GREEN-BROWN BROWN-RED	#3 SELECTION RELAY LOCK IN THRU ENTRY FLASH RELAY.
SWITCH 2	N.O.	RED-WHITE BLACK-YELLOW	#3 SELECTION LITE AND HOLE SWITCH FEED.

SWITCH NO.	SWITCH TYPE	WIRE COLORS	FUNCTION OF SWITCH
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ENTRY RESET RELAY RESETS ADDED ENTRY STEP UP AFTER WINNERS.

SWITCH 1	M.B.	N.O.	WHITE - RED BROWN-WHITE	FEED FOR SHOW, PLACE AND WIN ENTRY STEPUPS, FROM 17 VOLT 10 AMPERE FUSE.
		N.C.	BROWN-WHITE RED - WHITE	FEED FOR SHOW, PLACE AND WIN ENTRY STEPUPS, FROM TILT RELAY.
SWITCH 2	M.B.	N.O.	BROWN-BLACK YELLOW-BROWN	SHOW PAYOUT LINE TO SHOW ENTRY STEPUP RESET LINE.
		N.C.	YELLOW-BROWN YELLOW-GREEN	PAYOUT LINE FROM SHOW HOLE SWITCH TO ODDS STEPUP.
SWITCH 3	M.B.	N.O.	BROWN-RED ORANGE-WHITE	PLACE PAYOUT LINE TO PLACE ENTRY STEPUP RESET LINE.
		N.C.	ORANGE-WHITE YELLOW-BLUE	PAYOUT LINE FROM PLACE HOLE SWITCH TO ODDS STEPUP.
SWITCH 4	M.B.	N.O.	GREEN-BROWN WHITE-BLUE	WIN PAYOUT LINE TO WIN ENTRY STEPUP RESET LINE.
		N.C.	WHITE-BLUE YELLOW-BLACK	PAYOUT LINE FROM WIN HOLE SWITCH TO ODDS STEPUP

SHOW PLACE RELAY COMPLETES WIN ODDS CIRCUIT FROM SHOW AND PLACE SECTION

SWITCH 1	N.O.	YELLOW-BLUE YELLOW-GREEN	SHOW PAYOUT LINE TO PLACE PAYOUT LINE.
SWITCH 2	N.O.	YELLOW-BLUE YELLOW-BLACK	PLACE PAYOUT LINE TO WIN PAYOUT LINE.

PURSE PLACE RELAY COMPLETES WIN ODDS CIRCUIT FROM PURSE AND PLACE SECTIONS.

SWITCH 1	N.O.	YELLOW-BLUE YELLOW-RED	PURSE PAYOUT LINE TO PLACE PAYOUT LINE.
SWITCH 2	N.O.	YELLOW-BLUE YELLOW-BLACK	PLACE PAYOUT LINE TO WIN PAYOUT LINE.

WIN ENTRY RELAY ENERGIZED BY "D" BUMPER.

SWITCH 1	M.B.	N.O.	BROWN-WHITE RED - WHITE	ADVANCES WIN ENTRY STEPUP.
		N.C.	RED - WHITE BLACK-WHITE	OPENS "C" BUMPER.

TILT RELAY PREVENTS MACHINE CHEATING.

SWITCH 1	M.B	NO.	ORANGE	FEED FOR TILT LITE.
		NC.	WHITE-RED	
SWITCH 2	NO.		WHITE-RED	17VOLT SUPPLY.
			RED-WHITE	
SWITCH 2	NO.		ORANGE-WHITE	30 VOLT SUPPLY.
			ORANGE-RED	

