

WINNER

RELAY CHART

DWG. NO. 522-B-91

	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 Sw.2
SWITCH 2	N.O.	Orange-Green Orange-Black	Starts Shuffle Motor, Entry Reset Relay.
SWITCH 3	N.O.	Yellow Orange-White	Pulls in Sequence Coil, also Feeds Feature Step-Up.
SWITCH 4	N.O.	Red-Yellow Brown-White	Ball Shooter Sw. to Entry Relay Sw.5
SWITCH 5	N.O.	Yellow Blue-White	Entry Feature Relay.
SWITCH 6	N.C.	Yellow Blue-Red	3rd Odds Relay Lockin Circuit.

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 Replay Relay.

REPLAY RELAY ENERGIZED DURING FREE GAME RESET.

SWITCH 1	N.O.	White-Blue Red-Green	Tilt Relay Lock in From Replāy "0" Switch.
SWITCH 2	N.O.	Yellow Yellow-Red	Operates Spinner Motor For Replay Take Off.
SWITCH 3	N.C.	Brown-Black Brown-Yellow	Opens Start Relay Line.
SWITCH 4	M.B. {	N.O.	Operates Replay Meter and Replay Coin Reset.
		White-Green White-Red White-Red	Operates 8-1 Coil And Replay Reset.

SWITCH 5	N.O.	Yellow Blue-White	Entry Feature Relay.
SWITCH 6	N.C.	Yellow Blue-Red	3rd Odds Relay Lockin Circuit.

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 Replay Relay.

REPLAY RELAY ENERGIZED DURING FREE GAME RESET.

SWITCH 1		N.O.	White-Blue Red-Green	Tilt Relay Lock in From Replay "0" Switch.
SWITCH 2		N.O.	Yellow Yellow-Red	Operates Spinner Motor For Replay 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 Replay Meter and Replay Coin Reset.
		N.C.	White-Red Green-Red	Operates 8-1 Coil And Replay 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.C.	Yellow-Green White-Red	Selection Release Coil And Odds First Four Positions.
SWITCH 3		N.O.	Black-Blue Red-White	Entry Flash Lite.
SWITCH 4		N.O.	Yellow-Black Black-Yellow	Closes Entry Flash Relay Line Thru C-10
SWITCH 5		N.O.	Brown-White Brown-Yellow	From Start Relay to 400-1 Unit to Entry Feature Step-Up.

ENTRY FLASH RELAY CONTROL'S ENTRY CIRCUITS

SWITCH 1		N.O.	Yellow-Black Yellow-Blue	Entry Flash Relay Lockin Thru Entry Relay.
SWITCH 2		N.O.	Brown-Green Red-White	Entry Flash Selection Feedline Thru Cam-11.
SWITCH 3		D.M.	Red-White White-Orange Brown-Red	Entry Flash Feed Thru Entry Flash Disc Release Arm Also Feed For Odds Advance Relay Lockin. Lockin For Fan 3, 4, & 5 Relays.
SWITCH 4		N.C.	Yellow Orange-White	Odds Adv. Feed Thru A.B.C.D. Disc & Cam 9 Odds Control Relay Thru Odds End of Stroke Sw.

SWITCH 3	N.O.	Black-Blue Red-White	Entry Flash Lite.
SWITCH 4	N.O.	Yellow-Black Black-Yellow	Closes Entry Flash Relay Line Thru C-10
SWITCH 5	N.O.	Brown-White Brown-Yellow	From Start Relay to 400-1 Unit to Entry Feature Step-Up.

ENTRY FLASH RELAY CONTROL'S ENTRY CIRCUITS

SWITCH 1	N.O.	Yellow-Black Yellow-Blue	Entry Flash Relay Lockin Thru Entry Relay.
SWITCH 2	N.O.	Brown-Green Red-White	Entry Flash Selection Feedline Thru Cam-11.
SWITCH 3	D.M.	Red-White White-Orange Brown-Red	Entry Flash Feed Thru Entry Flash Disc Release Arm Also Feed For Odds Advance Relay Lockin. Lockin For Fan 3,4, & 5 Relays.
SWITCH 4	N.C.	Blue-Yellow Orange-White	Odds Adv. Feed Thru A.B.C.D. Disc & Cam 9 Odds Control Relay Thru Odds End of Stroke Sw.
SWITCH 5	N.C.	Red-Green White-Black	Odds Flash Feed Thru Selection Release Arm Sw.
SWITCH 6	N.O.	White-Red Gray-Black	Feed To Entry Feature Disc Sec.2

ODDS CONTROL RELAY ADVANCES THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	Brown-White White-Brown	Odds Unit Step-Up 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 White-Brown	Feeds Odds Control Relay Thru Odd 1 Step Relay Sw. 2 & Cam-7.
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ODDS 1 STEP RELAY ENERGIZED BY END OF STROKE SWITCH ON ODDS ADVANCE UNIT.

SWITCH 1	N.O.	Black-Brown Red-Blue	Odds Advance 1 Step Lock in Thru Cam-6.
SWITCH 2	N.C.	White-Brown Brown-Green	From Entry Flash Disc To Odds Control Relay Thru Cam-7.
SWITCH 3	N.O.	Orange-Black White-Orange	Locking Circuit For Odds Advance Relay From Entry Flash Disc.

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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SCORE RELAY ENERGIZED THRU SCORE COUNTER FOR ALL WINNERS.

SWITCH 1	N.O.	Green-Red White-Red	Score relay lock in thru tilt relay and 4th ball switch from cam 14.
SWITCH 2	N.O.	Yellow Green-Black	Score release coil feed.
SWITCH 3	N.C.	Yellow-Green Red-Black	Breaks replay feed line.

SWITCH 3	N.O.	Orange-Black White-Orange	Locking Circuit For Odds Advance Relay From Entry Flash Disc.
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10 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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11 SCORE RELAY ENERGIZED THRU SCORE COUNTER FOR ALL WINNERS.

SWITCH 1	N.O.	Green-Red White-Red	Score relay lock in thru tilt relay and 4th ball switch from cam 14.
SWITCH 2	N.O.	Yellow Green-Black	Score release coil feed.
SWITCH 3	N.C.	Yellow-Green Red-Black	Breaks replay feed line.
SWITCH 4	N.O.	Green-White Brown-White	Replay feed for replay step up and score counter step up.
SWITCH 5	N.O.	White-Blue Black-Yellow	Daily Double relay feed.
SWITCH 6	N.C.	Brown-White Red-Blue	Closes circuit to Daily Double SW. 2 from score counter '0' Switch.

12 DAILY DOUBLE RELAY ENERGIZED FROM ENTRY FLASH DISC.

SWITCH 1	N.O.	White-Blue Black-Blue	Locking Circuit For Daily Double Relay.
SWITCH 2	D.M.	Blue-White Brown-White Orange-Black	Feeds Entry Feature Relay Feed Line From Replay Sw.6 Feeds Shuffle Motor Entry Reset Relay & Feature '0' Switch.
SWITCH 3	N.C.	Orange-White Orange-Red	Odds Reset From Cam 8.

13 #3 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	Red-White Black-Yellow	#3 Selection Lite And Hole Switch Feed.
SWITCH 2	N.O.	Brown-Red	#3 Selection Relay Feed From Entry Flash Disc. #3 Selection Relay Lock in Thru Entry Flash Relay.
	N.C.	Green-Brown Green-Brown Brown-Green	

14 #4 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	Brown-Red Green-White	#4 Selection Relay Feed From Entry Flash Disc. #4 Selection Relay Lock In Thru Entry Flash Relay.
	N.C.	Green-White White-Green	
SWITCH 2	N.O.	Red-White Black-Green	Feed For #4 Selection Lite And #4 Sel- ection Hole Switch.
SWITCH 3	N.C.	Blue-Black White-Green	Entry Flash Control

15 #5 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	Red-White Black-Blue	Feed For #5 Selection Lite and #5 Hole Switch.
SWITCH 2	N.O.	Brown-Red Green-Red	#5 Selection Relay Feed From Entry Flash Disc. #5 Selection Relay Lock in Thru Entry Flash Lite.
	N.C.	Green-Red Red-Green	

SWITCH 1	N.O.	Black-Blue	Locking Circuit For Daily Double Relay.
SWITCH 2	D.M.	Blue-White Brown-White Orange-Black	Feeds Entry Feature Relay Feed Line From Replay Sw.6 Feeds Shuffle Motor Entry Reset Relay & Feature '0' Switch.
SWITCH 3	N.C.	Orange-White Orange-Red	Odds Reset From Cam 8.

#3 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

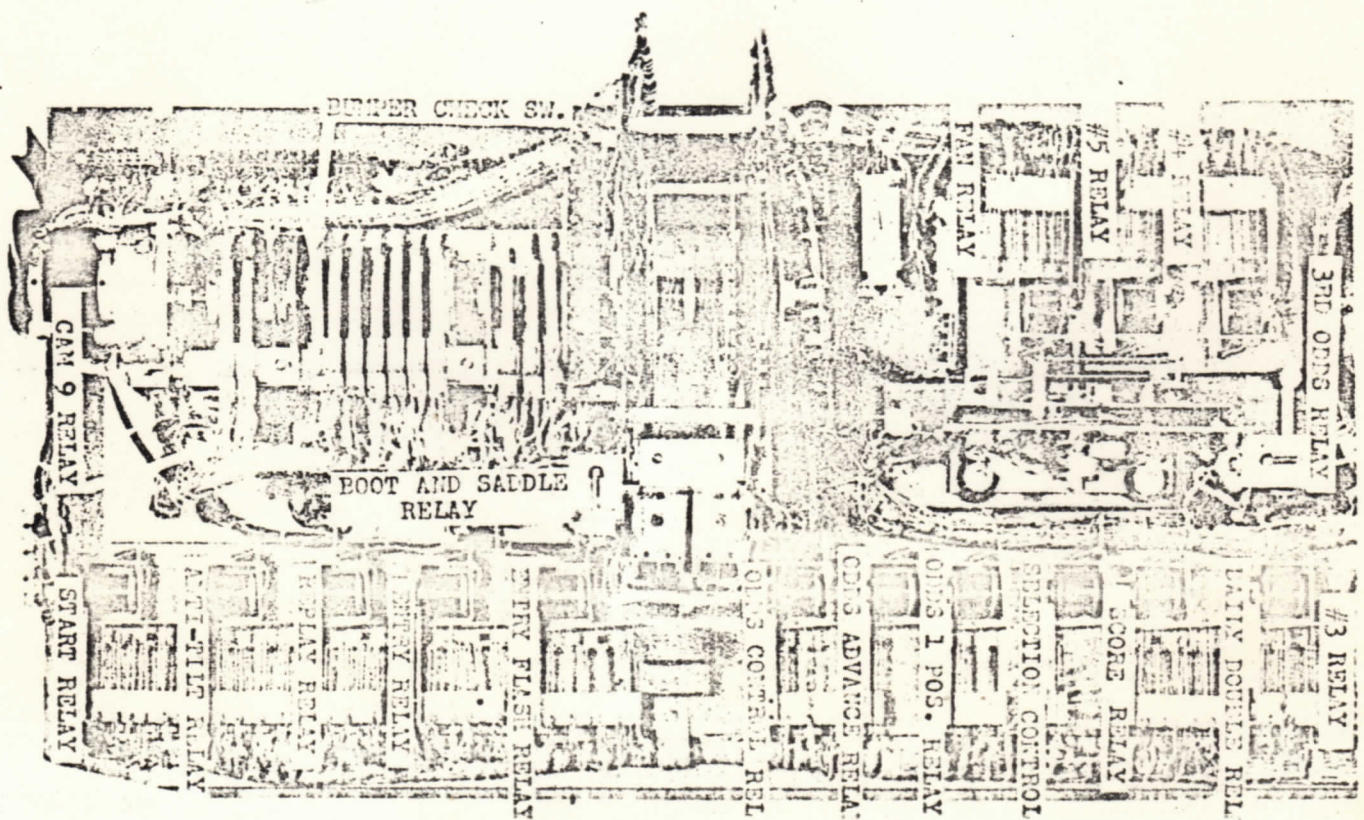
SWITCH 1	N.O.	Red-White Black-Yellow	#3 Selection Lite And Hole Switch Feed.
SWITCH 2	N.O. M.B. N.C.	Brown-Red Green-Brown Green-Brown Brown-Green	#3 Selection Relay Feed From Entry Flash Disc. #3 Selection Relay Lock in Thru Entry Flash Relay.

#4 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	N.O. M.B. N.C.	Brown-Red Green-White Green-White White-Green	#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 Sel- ection Hole Switch.
SWITCH 3	N.C.	Blue-Black White-Green	Entry Flash Control

#5 SELECTION RELAY ENERGIZED THRU ENTRY FLASH DISC.

SWITCH 1	N.O.	Red-White Black-Blue	Feed For #5 Selection Lite and #5 Hole Switch.
SWITCH 2	N.O. M.B. N.C.	Brown-Red Green-Red Green-Red Red-Green	#5 Selection Relay Feed From Entry Flash Disc. #5 Selection Relay Lock in Thru Entry Flash Lite.



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FAN RELAY GIVES ALL SELECTIONS.

SWITCH 1	D.M.	Green-White Blue-White Brown-Red	Energizes #4 Selection Relay Fan Lock in Circuit.
SWITCH 2	D.M.	Black-White Blue-Red Red-White	#6 Selection #7 Selection 17 Volt Feed
SWITCH 3	D.M.	Black-Blue Black-Yellow Red-White	#5 Selection #3 Selection 17 Volt Feed
SWITCH 4	D.M.	Black-Red Black-Brown Red-White	#2 Selection #1 Selection 17 Volt Feed

CAM 9 RELAY ENERGIZED THRU CAM 9 SW.1

SWITCH 1	M.B. {	N.O. N.C.	Blue Blue-Black Green	Feed Line to Boot Pocket Feed Line from B & S Relay Feed Line to Saddle Pocket
SWITCH 2	M.B. {	N.O. N.C.	Green-Yellow Gray-Black Green-White	Boot Lite Feed Line from B & S Relay Saddle Lite
SWITCH 3		N.O.	Brown-Red Brown-Green	Special Selection Step-Up Special Selection Step-Up Thru 1-20

B & S OR BOOT & SADDLE RELAY: ENERGIZED FROM SELECTION DISC

SWITCH 1	N.O.	Blue-Black Red-White	Feed Line to Cam 9 Relay Sw.1 17 V. Feed Line Thru Tilt Relay
SWITCH 2	N.O.	Red-White Gray-Black	17 V. Feed Line Thru Tilt Relay Feed Line to Cam 9 Relay Sw.2
SWITCH 3	N.O.	Blue-Yellow Blue-Green	Name Step-Up Coil Replay Counter 'O' Switch

3rd ODDS RELAY ENERGIZED THRU ODDS STEP-UP UNIT & CAM 10

SWITCH 1	N.O.	Blue-Red Orange-White	Locking Circuit From Start Relay Sw.6 & Cam 7 Sw.3
SWITCH 2	N.C.	Gray-Red Gray-White	Breaks 4th, 5th & 6th Odds Feed To Entry Flash Disc Feed Line to Entry Flash Disc.
SWITCH 3	N.C.	Blue-Green Yellow-Green	Feed Line From Bumper S. U. & Cam 9 to Odds Adjustment, Odds Adjustment Control
SWITCH 4	N.C.	Yellow-Green Black-Blue	Odds Adjustment Control Controls 8-9-10 Odds Thru Adjustment Plug.

ENTRY RESET RELAY RESETS ADDED ENTRY STEP UP AFTER WINNERS.

SWITCH 1	M.B. {	N.O. Brown-White Brown-White	Feed For Show, Place and Win Entry Stepups, From 17 Volt 10 Ampere Fuse. Feed For Show, Place and Win Entry
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3 B & S OR BOOT & SADDLE RELAY: ENERGIZED FROM SELECTION DISC

SWITCH 1	N.O.	Blue-Black Red-White	Feed Line to Cam 9 Relay Sw.1 17 V. Feed Line Thru Tilt Relay
SWITCH 2	N.O.	Red-White Gray-Black	17 V. Feed Line Thru Tilt Relay Feed Line to Cam 9 Relay Sw.2
SWITCH 3	N.O.	Blue-Yellow Blue-Green	Name Step-Up Coil Replay Counter '0' Switch

4 3rd ODDS RELAY ENERGIZED THRU ODDS STEP-UP UNIT & CAM 10

SWITCH 1	N.O.	Blue-Red Orange-White	Locking Circuit From Start Relay Sw.6 & Cam 7 Sw.3
SWITCH 2	N.C.	Gray-Red Gray-White	Breaks 4th, 5th & 6th Odds Feed To Entry Flash Disc Feed Line to Entry Flash Disc.
SWITCH 3	N.C.	Blue-Green Yellow-Green	Feed Line From Bumper S. U. & Cam 9 to Odds Adjustment, Odds Adjustment Control
SWITCH 4	N.C.	Yellow-Green Black-Blue	Odds Adjustment Control Controls 8-9-10 Odds Thru Adjustment Plug.

5 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 Score Line to Show Entry Step Up Reset Line.
		N.C.	Yellow-Brown Yellow-Green	Score Line From Show Hole Switch To Odds Step-Up.
SWITCH 3	M.B. {	N.O.	Brown-Red Orange-White	Place Score Line To Place Entry Step Up Reset Line.
		N.C.	Orange-White Yellow-Blue	Score Line From Place Hole Switch To Odds Stepup.
SWITCH 4	M.B. {	N.O.	Green-Red White-Blue	Win Score Line To Win Entry Step- Up Reset Line.
		N.C.	White-Blue Yellow-Black	Score Line From Win Hole Switch To Odds Step-Up.

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

SWITCH 1	N.O.	Yellow-Green Yellow-Black	Show Score Line to Win Score Line.
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7 PURSE RELAY COMPLETES WIN ODDS CIRCUIT FROM PURSE AND PLACE SECTIONS

SWITCH 1	N.O.	Yellow-Red Yellow-Black	Purse Score Line to Win Score Line.
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8 WIN ENTRY RELAY ENERGIZED BY "D" BUMPER.

SWITCH 1	M.B. {	N.O.	Brown-White Red-White	Advances Win Entry Step-Up.
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SWITCH 1	N.O.	Yellow-Green Yellow-Black	Show Score Line to Win Score Line.
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PURSE RELAY COMPLETES WIN ODDS CIRCUIT FROM PURSE AND PLACE SECTIONS

SWITCH 1	N.O.	Yellow-Red Yellow-Black	Purse Score Line to Win Score Line.
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WIN ENTRY RELAY ENERGIZED BY "D" BUMPER.

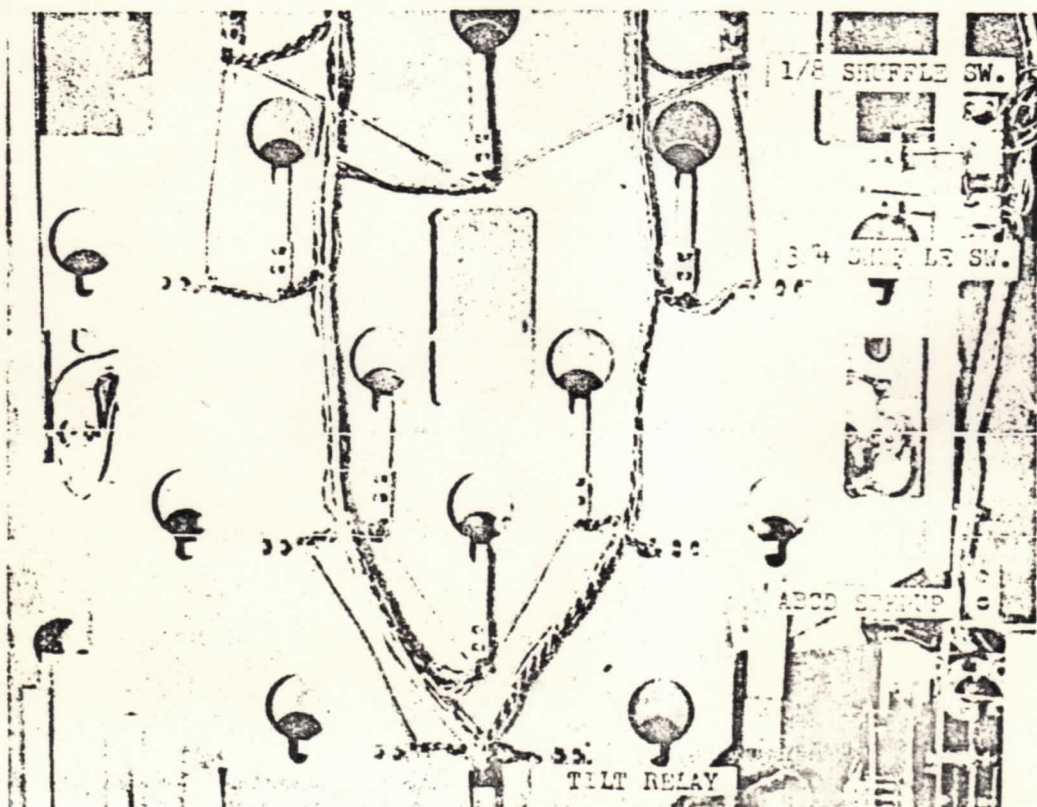
SWITCH 1	M.B. {	N.O.	Brown-White Red-White	Advances Win Entry Step-Up.
		N.C.	Red-White Black-White	Opens "C" Bumper.

TILT RELAY PREVENTS MACHINE CHEATING.

SWITCH 1	M.B. {	N.C.	Orange White-Red	Feed For Tilt Lite.
		N.O.	White-Red Red-White	17 Volt Supply
SWITCH 2		N.C.	Orange-White Orange-Red	30 Volt Supply.
SWITCH 3		N.C.	Black-Red Black-Red	Completes Feed To Replay Relay

SPECIAL SELECTION RELAY RESETS ENTRY FEATURE STEP-UP AFTER WINNER

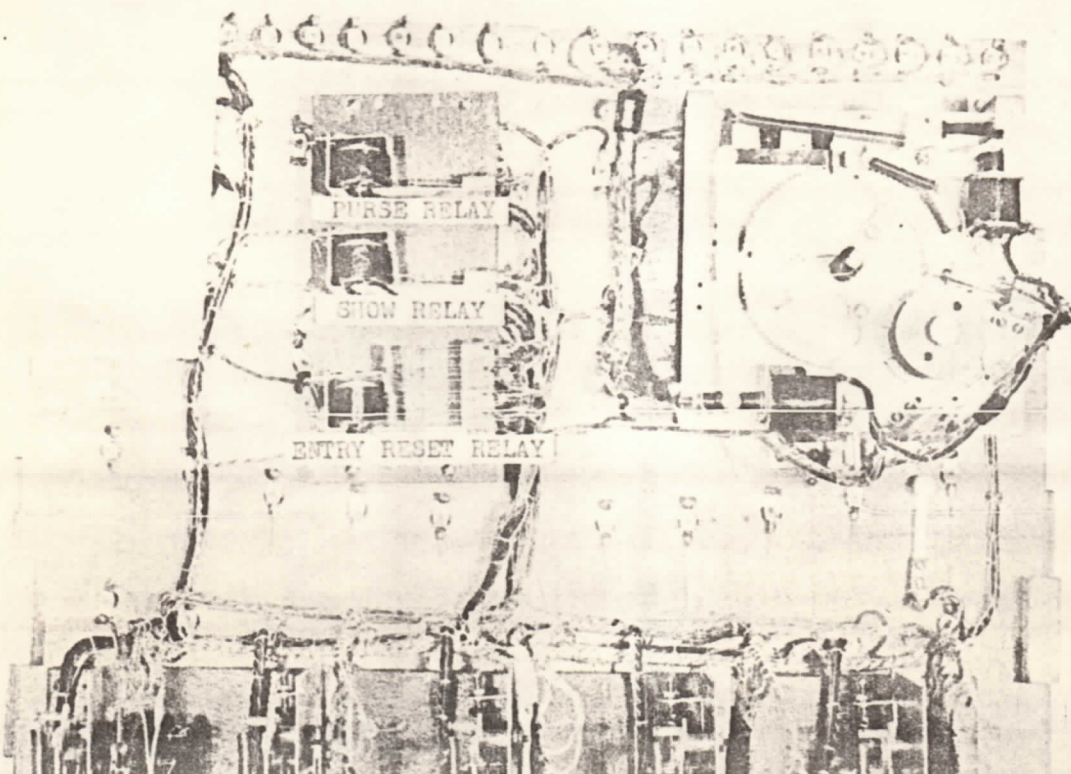
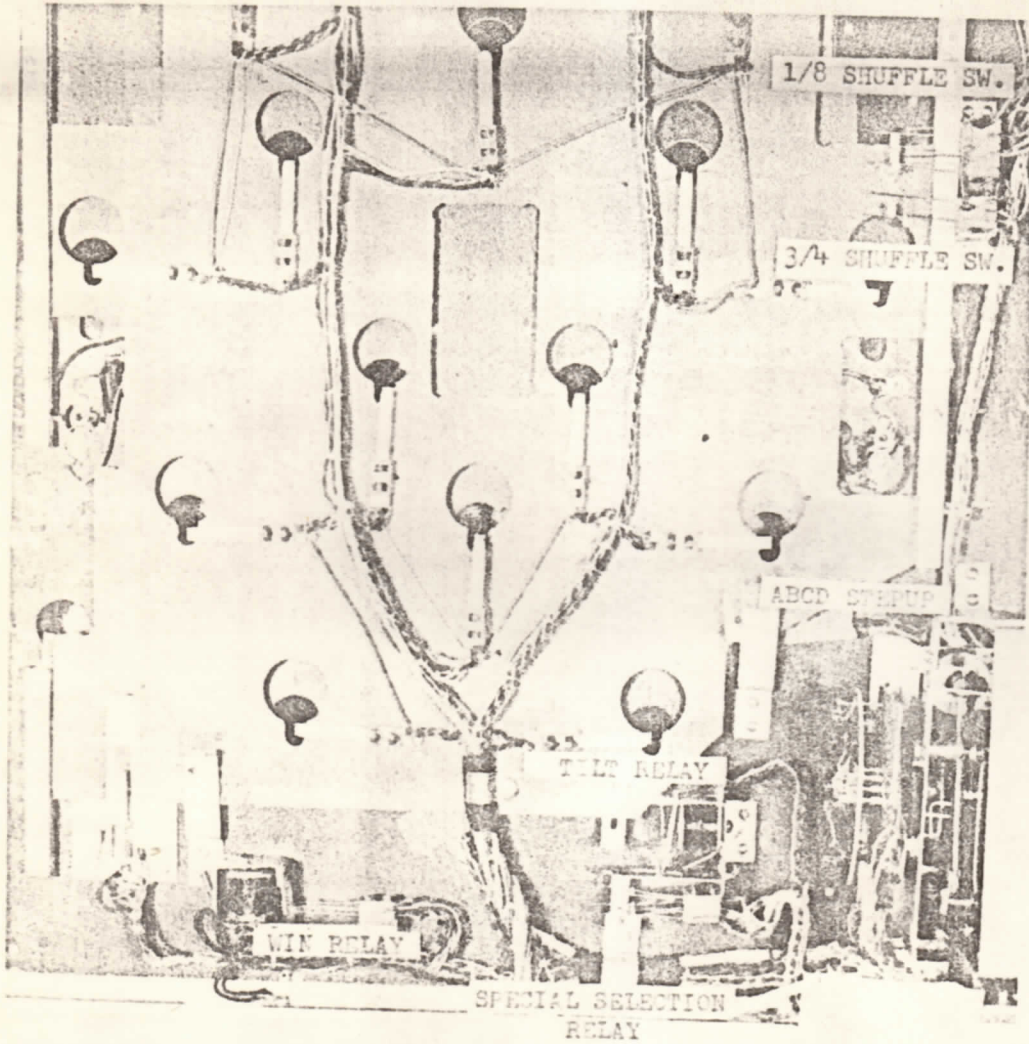
SWITCH 1	M.B. {	N.O.	Brown-Black Brown-White	Special Selection Reset Feed Line From Boot, Saddle, Feature & #4 Purse Pocket Purse Replay Line.
		N.C.	Yellow-Red	
SWITCH 2	M.B. {	N.O.	Brown-Black Gray-Black	Special Selection Reset Feedline From #4 Show Pocket Show Replay Line
		N.C.	Yellow-Green	
SWITCH 3	M.B. {	N.O.	Brown-Black Brown-Red	Special Selection Reset Feed Line From #4 Place Pocket Place Replay Line
		N.C.	Yellow-Blue	

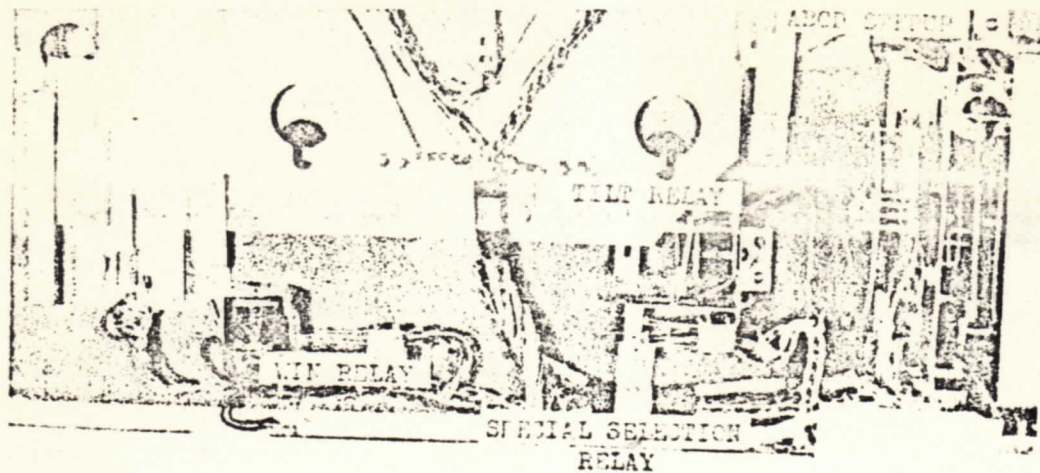


N.C.

Brown-Red
Yellow-Blue

Special Selection Reset
Feed Line From #4 Place Pocket
Place Replay Line





12

