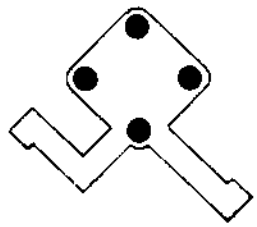
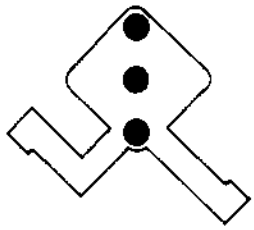
INSTRUCTIONS
AND
PARTS CATALOG

GALLOPING DOMINOS





PACER

BANG TAILS

LUCKY STAR

H. C. EVANS & COMPANY
1520-30 WEST ADAMS STREET
CHICAGO, ILLINOIS

TO you as well as to all our other patrons, this manual is dedicated. After careful preparation and study we give you in concise terms and explanations, helpful suggestions in the operation and maintenance of the various machines which this catalog covers, and sincerely hope that our efforts will assist you to a thorough understanding of your machine.

H. C. EVANS & COMPANY.

INSTRUCTIONS FOR
GALLOPING DOMINOS—BANG TAILS—PACERS—LUCKY STAR

The four games, Galloping Dominos, Bang Tails, Pacers and Lucky Star, are almost alike in their mechanism and construction. The parts for all these machines are illustrated in this manual and the following instructions are of general nature and apply to all the games unless otherwise specified.

When ordering repair parts, specify the part number and description, also give model and serial number of machine. Locate illustrations in this book to ascertain the correct part number and description of part, or parts desired.

SETTING UP MACHINE FOR USE

The machine comes to you ready for operation. Unlock and raise top, remove shipping paper from around spinner arm, fill payout tube with coins dropping them into tube slowly. Plug cord into any 110 volt, A. C. 60 cycle outlet and the machine is ready for play.

To operate the game play one to seven coins in the desired slots, pull the handle all the way down, and let it go all the way back up as the game will not start until handle returns to original position.

No provision is made for turning off the lights when the machine is not in play, as it is felt that due to the small amount of current used the location is more than compensated by the attractiveness of the machine with the lights burning. The cord should be pulled from the outlet at the end of the days business.

TIMER UNIT

All operations of the game are controlled by the timer unit. This unit is motor driven and makes one complete revolution, driving brush arm which sets up circuits to function all operations of the game. The timer index magnet that starts the timer is energized when a coin is played, and the start switches in the coin head make contact. (See instructions on coin head.)

When the game is over the brush arm should always be on the stop position contact rivet. This rivet is marked with red paint, and if brush arm comes loose or is removed, to reset put index dog in notch of stop disc, set outside arm switch on stop position contact rivet and tighten set screw that holds arm. When replacing tension spring apply the full tension so arm will not stop until it has made complete revolution and the index dog drops in notch shutting off motor. When running, test by stopping the arm, making sure it starts from any position and only stops when index dog drops in notch.

SPINNER UNIT

If spinner arm comes loose or is removed to replace parts, when re-aligning set the arm so it lights up the number "11" on the Domino glass or the "Daily Double" on Bang Tails glass and then tighten set screws that hold the arm. Then reset commutator so outside switch on the spinner arm lines up with the rivet marked with red paint. When replacing collar at the top allow a little play between collar and arm so arm can spin freely. Oil spinner arm with light oil through oil cup on collar frequently. If motor that spins arm runs too fast the stop arm that drops in the star wheel to stop the arm will likely be thrown out and set up again leaving the spinner arm running free. The speed of the motor may be regulated by moving the sliding tap on resistor to "fast" or "slow" as desired.

PAYOUT UNIT

Should the payout unit refuse to work, check the payout fuse at back of case, and if this has blown out reset with pin through hole in the back of cabinet. This fuse will blow if coins jam or stand up in payout tube. Should the payout continue to jam without the coins standing up in tube, check coin regulator spring under the payout tube holder casting, as this spring should be adjusted so it will allow only two nickels to pass. The brass plate and contact fingers should be cleaned occasionally with fine emery cloth. If the plunger of the large solenoid becomes sticky it should be oiled with a good grade of light oil.

The trough leading from the coin head to the payout tube should not overlap the top of tube, but should meet it sufficiently to allow coins to go into tube. If it overlaps there is a tendency for coins to stand up in tube and jam the payout.

CHANGING ODDS SELECTOR

The revolving drum should spin freely. Oil shaft with light oil at both ends as needed. The star wheel at the end should be greased so arm will index drum. Keep contacts adjusted so they make good contact on commutator rivet contacts but not too tight so they keep drum from turning freely. Care should be taken to see that wire contacts are always in the right grooves. If a wire jumps to another groove the odds selector will not work properly and the payout will not be correct.

BALL CONTROL FOR ODDS SELECTOR

The function of the Ball Control for the odds is to vary the spin of the drum. In case odds changer fails to work, check lever on bottom of ball control box. This lever should operate switch so it makes contact when ball is kicked up in the box, and it should open the switch when ball is back on lever.

COIN HEAD

The seven switches in the coin head that make contact from the coins, control the payout and light the light that shows the number played. If there is a winner and payout fails, check these switches, making sure pin that coin contacts pushes back far enough so switches make good contact. The single make switch on switch rack casting is the game start switch. This switch should make contact when coin is played and handle pulled down so rack drops back, then when handle comes up all the way the game should start as this sets up circuit to timer index magnet. When game is in operation switch rack magnet should set up switch rack, making switches where coins have been played and breaking game start switch so game will not start again until another coin is played.

CHEAT RELAY

Should the player try to cheat by pulling the electric cord from the outlet, the cheat relay comes into play and breaks down the circuit to the payout if there is a winner. The tilt switch will also break down the cheat relay if the machine is tipped or bounced around. After this relay has been broken down it will reset from the timer on the next play.

ODDS CONTROL RELAY

This is a latch relay and has two switches on it. One switch sets up the circuit to the odds selector solenoid when ball is kicked off switch of ball control, and the other switch sets up circuit to index magnet on Jack Pot flasher unit. The relay with the switches set up from the timer when game starts, and the release relay break it down getting the circuit from the timer before the game ends.

On machines without Jack Pot this relay has only one switch used for the odd selector circuit only.

JACK POT FLASHER

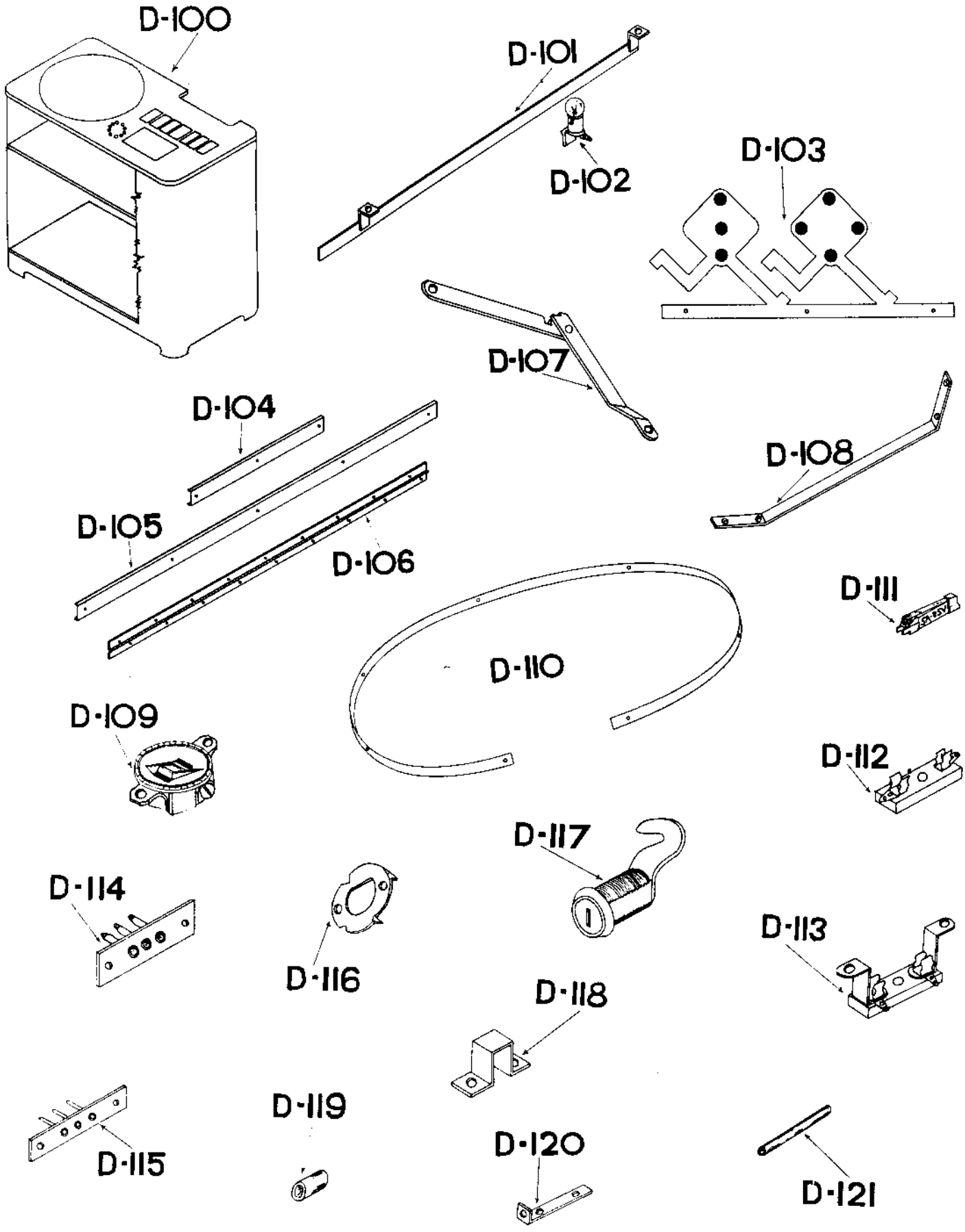
The Jack Pot flasher sets up circuit to Jack Pot payout solenoid only, when the red light is lit and this should be when arm is at the bottom and switches make contact on rivet contacts. The outside rivet lights the red light and the two inside set up Jack Pot circuit from the timer.

POWER SUPPLIES AND ACCESSORIES

The power supplies and accessories need no special attention with the exception of being sure that at all times they have the proper fuses, extra ones being furnished to you with the machine.

CABINET AND TRIM

D-100.	Cabinet	$37.50
D-101.	Selection light bar	.40
D-102.	Selection light socket and lamp, complete	.45
D-103.	Galloping Domino cabinet ornament	2.00
D-104.	Short nickel plated moulding	.35
D-105.	Long nickel plated moulding	.85
D-106.	Cabinet hinge	1.00
D-107.	Top holding hinge	.75
D-108.	Shelf bracket	.15
D-109.	110 volt socket	.40
D-110.	Spinner arm guard	.75
D-111.	Spring fuse	.50
D-112.	Fuse block	.25
D-113.	Spring fuse block	.50
D-114.	Three-way female plug	.40
D-115.	Three-way male plug	.35
D-116.		
D-117.	Lock complete	1.25
D-118.		
D-119.	Fiber bushing	.05
D-120.	Top holding hinge bracket	.15
D-121.	Brass bushing	.15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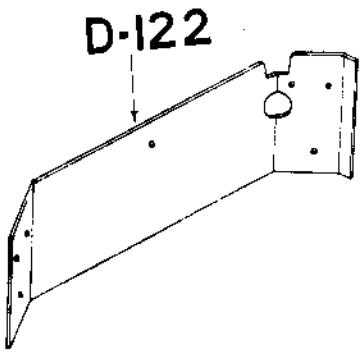
CABINET AND TRIM

D-122.	Metal guard for end of cabinet	1.25
D-123.	Small corner moulding	1.00
D-124.	Coin head moulding	3.00
D-125.	Long tin coin slide	1.25
D-126.	Cash box	1.50
D-127.	Coin trough	1.25
D-128.	Metal guard for front of cabinet	1.25
D-129.	Payout cup	2.50
D-130.	Lock front for payout cup	.50
D-130A.	Lock	1.25
D-131.	Payout cup front casting	.75
D-132.	Metal guard for back of cabinet	1.25
D-133.	Coin chute coin slide	1.00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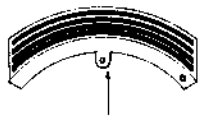
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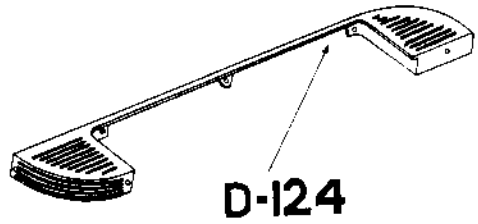
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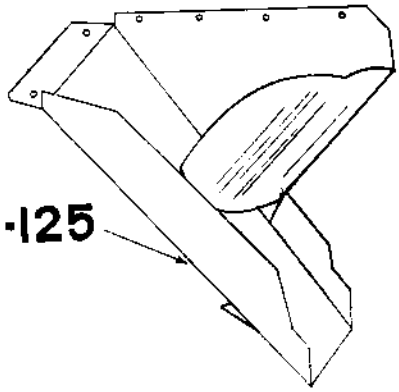
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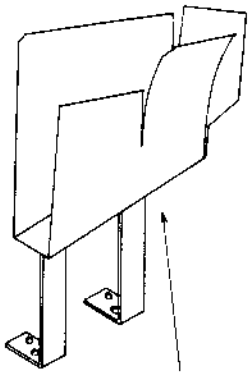
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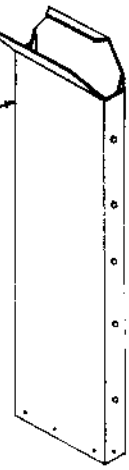
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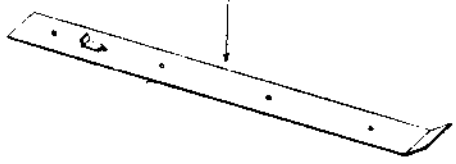
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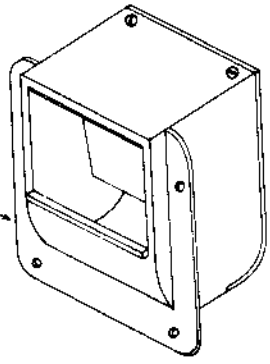
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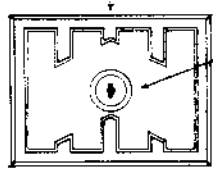
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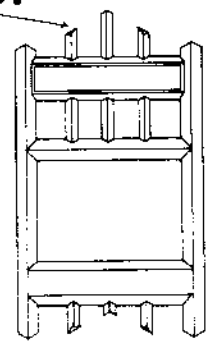
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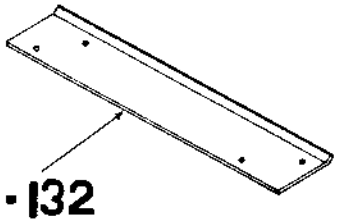
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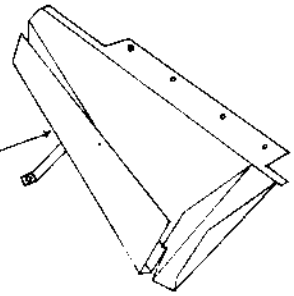
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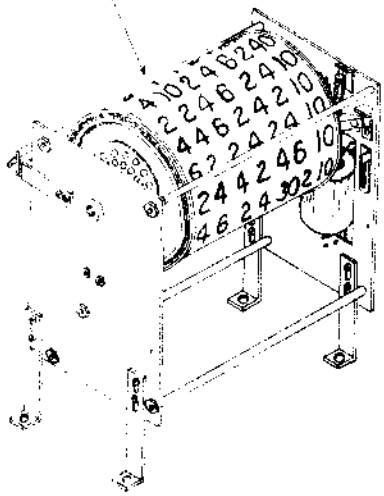
ODDS SELECTOR AND PARTS

D-134.	Odds selector complete	$22.50
D-135.	Star wheel	1.25
D-136.	Odds selector solenoid	1.60
D-137.	Solenoid plunger and link assembly	2.50
D-138.	Odds selector contact assembly	1.50
D-139.	Metal guard	.60
D-140.	Commutator	5.00
D-141.	Wire contacts assembly	1.00
D-142.	Solenoid mounting bracket	.25

PAYOUT UNIT AND PARTS

D-143.	Payout complete	$20.00
D-144.	Payout slide solenoid	5.00
D-145.	Brass contact plate	.50
D-146.	Finger contacts assembly	1.25
D-147.	Payout tube holder casting	1.50
D-148.	Payout tube and apron	.75
D-149.	Payout reset magnet	1.25

D-134



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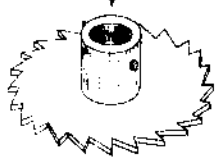

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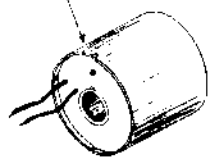

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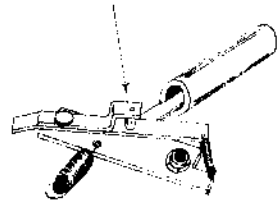

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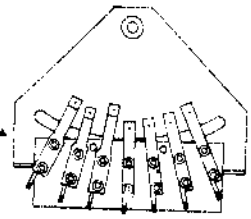

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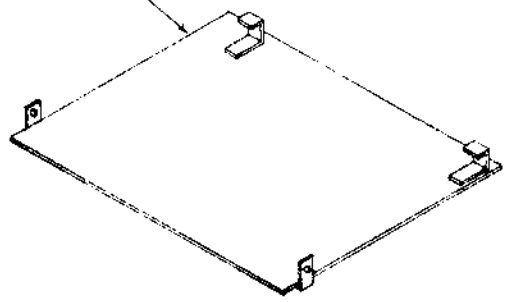

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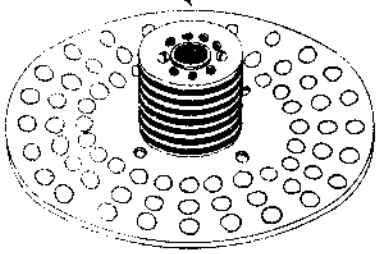

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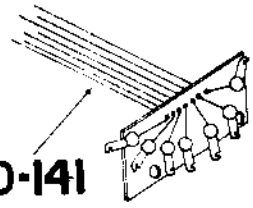

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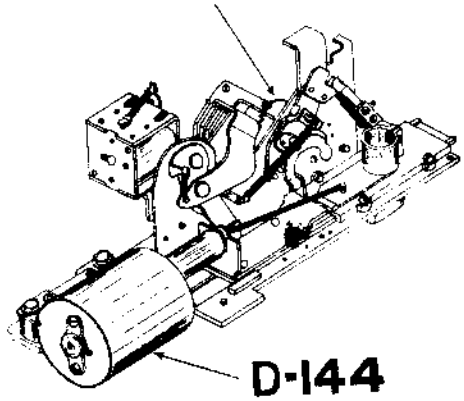

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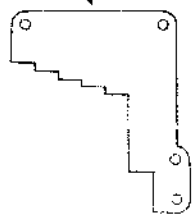

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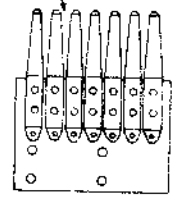

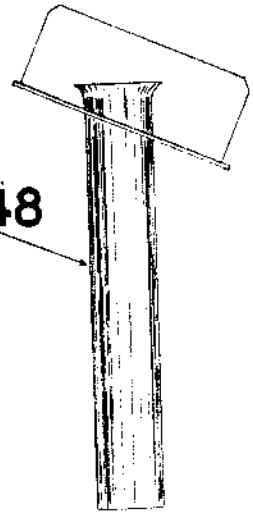

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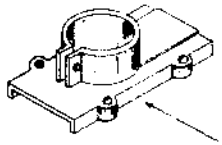

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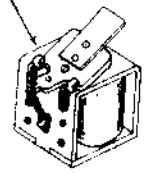
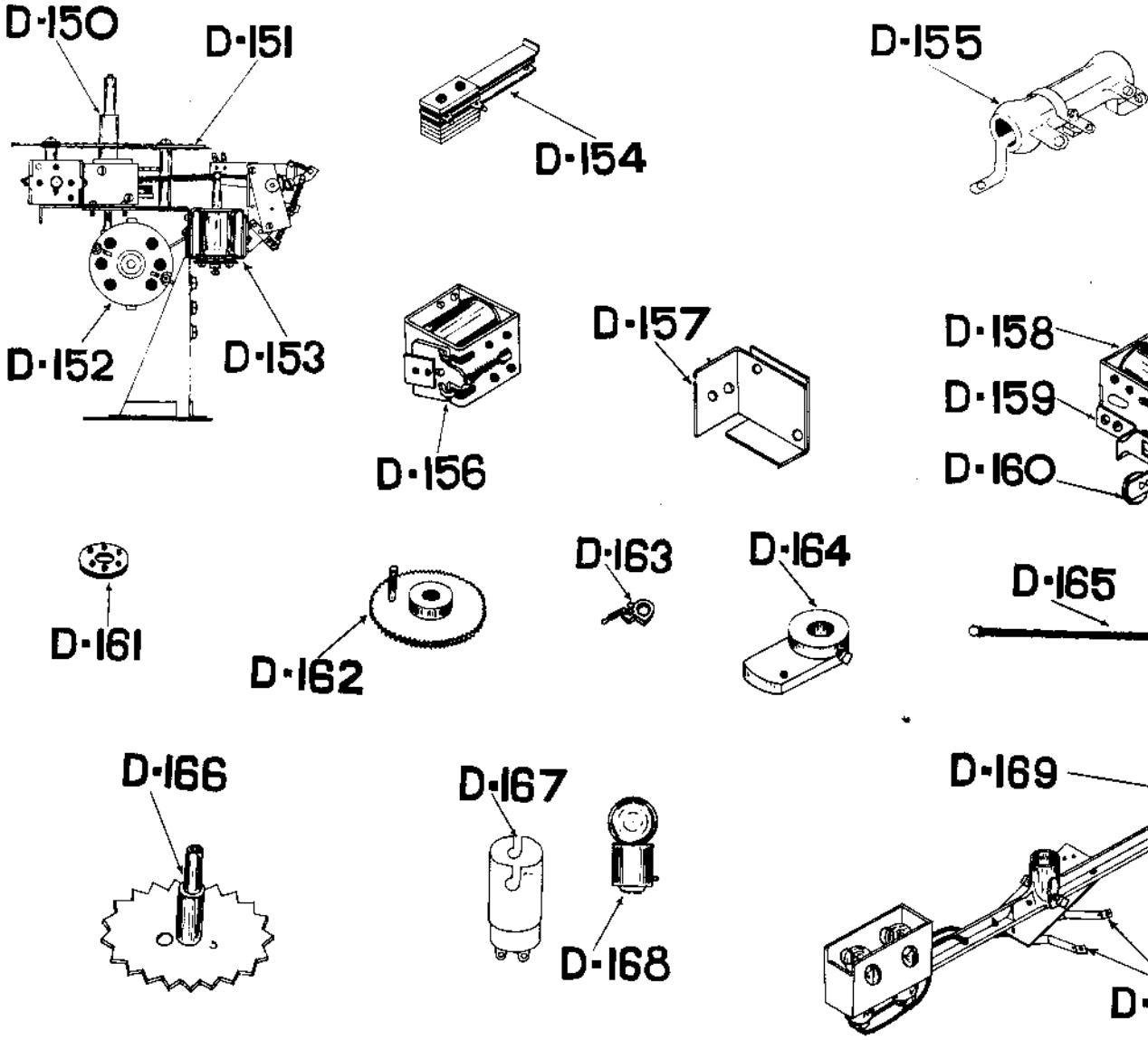


SPINNER UNIT AND PARTS

D-150.	Spinner unit complete less arm	$30.00
D-151.	Spinner commutator	4.25
D-152.	Spinner motor	11.00
D-153.	Spinning arm variator	4.25
D-154.	Variator switch	.40
D-155.	Spinner motor resister	1.50
D-156.	Latch magnet	1.25
D-157.	Stop and Latch magnet bracket	.25
D-158.	Stop magnet complete	1.50
D-159.	Stop arm guide	.25
D-160.	Arm and armature	.35
D-161.	Ball bearing race	.40
D-162.	Drive ratchet	1.00
D-163.	Drive dog and spring	.35
D-164.	Drive dog mounting casting	.50
D-165.	Long variator spring	.25
D-166.	Spinner arm star wheel	1.50
D-167.	Spinner arm light socket	.25
D-168.	Lamp	.20
D-169.	Spinner arm complete	5.00
D-170.	Rotating contact switch	.25

TIMER UNIT AND PARTS

D-171.	Timer unit complete	$15.00
D-172.	Index Magnet	1.00
D-173.	Timer Commutator	4.00
D-174.	Contact switch	.25
D-175.	Brush arm, complete	2.50
D-176.	Index dog	.50
D-177.	Tension Spring	.25
D-178.	Brass collar	.15
D-179.	Index dog spacer	.25
D-180.	Stop disc	1.00
D-181.	Leather clutch	.10
D-182.	Clutch pulley	.50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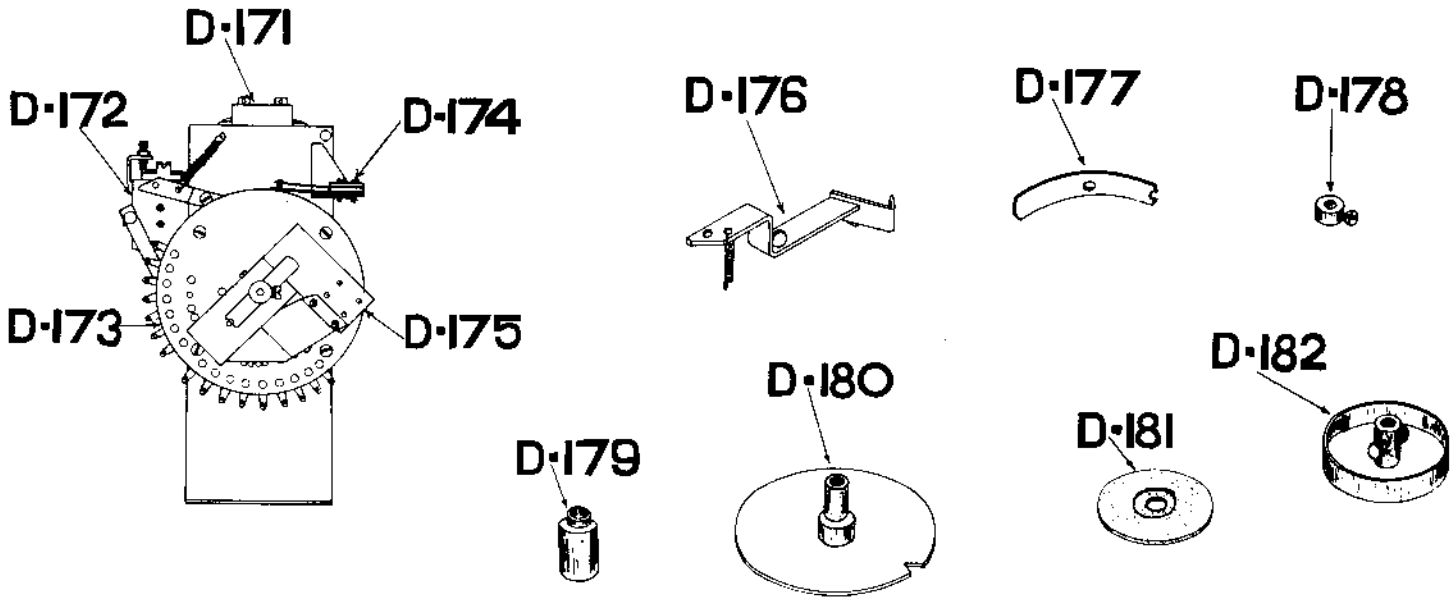
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MISCELLANEOUS

D-183.	Latch magnet variator	$10.00
D-184.	Tilt switch	.60
D-185.	Giant power pack	12.50
D-186.	Odds control relay	3.00
D-187.	Spinner motor relay	1.75
D-188.	Cheat relay	2.00
D-189.	Ball control micro switch	1.75
D-190.	Ball control magnet	1.00
D-191.	Ball control	6.50
D-192.	Ball timer switch lever	.35
D-193.	Bayonet light socket	.30
D-194.	Lamp	.15

JACKPOT PARTS

JP-20.	Jackpot payout complete	$ 6.00
JP-21.	Tube holder casting	1.50
JP-22.	Slide solenoid	2.50
JP-23.	Jackpot tube and apron	1.25
JP-23A.	Coin holding magnet	1.50
JP-24.	Payout tube and apron used on automatic payout only	.75
JP-25.	Flasher unit complete	15.00
JP-26.	Index magnet	1.25
JP-27.	Flasher brush arm	2.25
JP-28.	Commutator	5.00
JP-29.	Two make contact switch	.60
JP-30.	Cheat relay	2.00
JP-31.	Flasher unit star wheel	1.50

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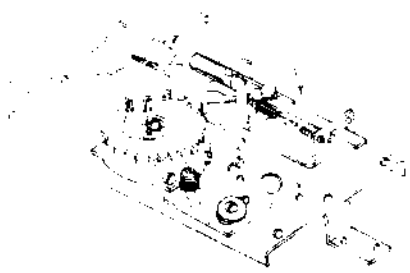

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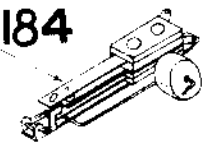

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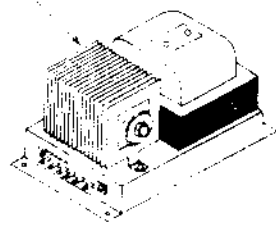

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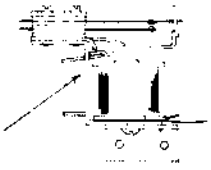

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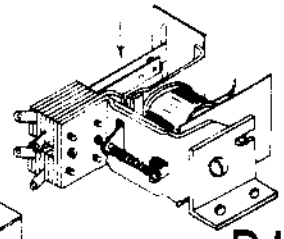
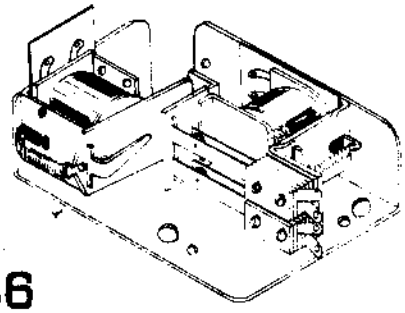
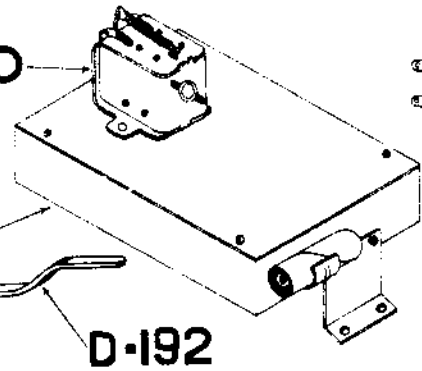


D-186



D-190



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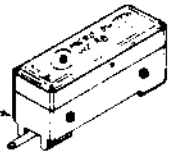
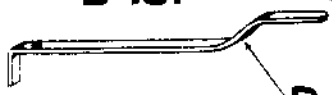
D-189



D-192



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JP-20

JP-22

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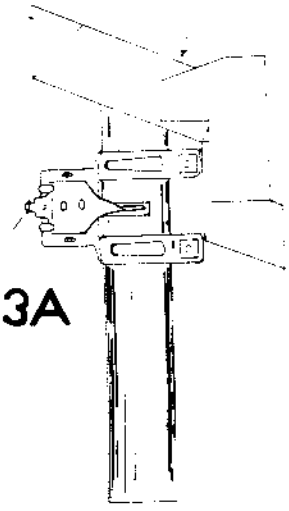

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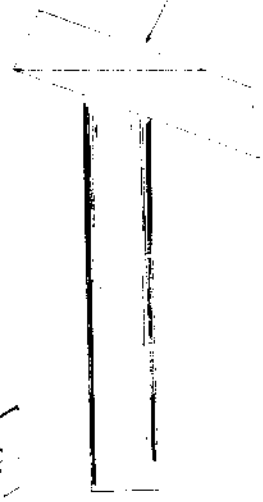
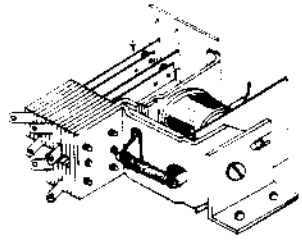


JP-23A

JP-30



JP-25

JP-26

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JP-27

PACER PARTS

P-75.	Spinner unit complete	$35.00
P-76.	Commutator	4.25
P-77.	Stop arm solenoid	2.50
P-78.	Horse mounting disc	5.00
P-79.	Spinner motor	11.50
P-80.	Latch magnet	1.25
P-81.	Horse	.50
P-82.	Long variator spring	.10
P-83.	Stop arm	2.50
P-84.	Nickel plated arch	.75
P-85.	Rotating contact switch	.35
P-86.	Red light dome	1.00
P-87.	Star wheel	1.50
P-88.	Racetrack glass dome	3.50
P-89.	Large dome moulding	1.50
P-90.	Small dome moulding	.75
P-91.	Small dome moulding	.75
P-92.	Winning light flasher complete	15.00
P-93.	Index magnet	1.25
P-94.	Brush arm	2.25
P-95.	Commutator	5.00

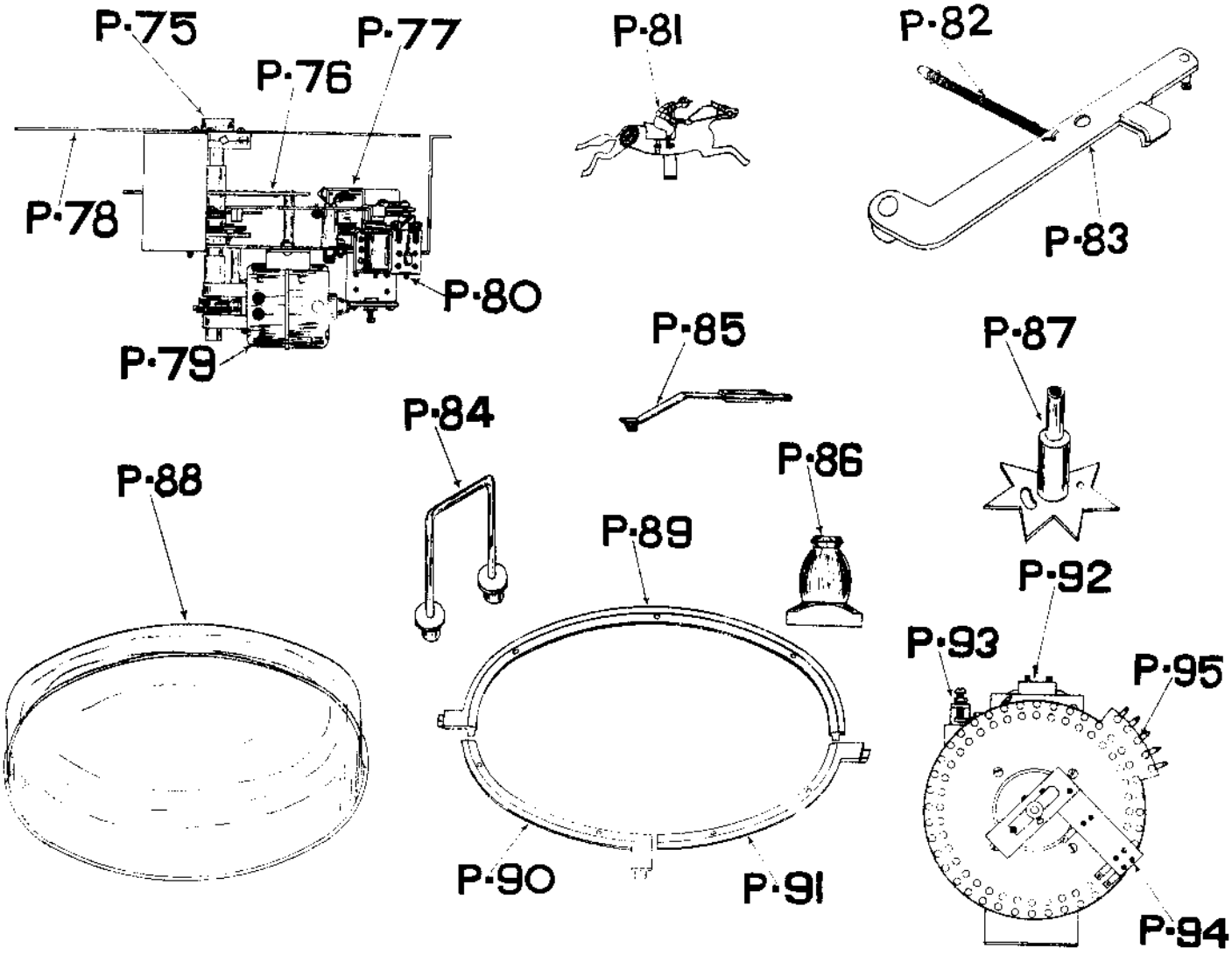
BANG TAIL PARTS

BT-1.	Cabinet ornament	$ 2.00
BT-2.	Selection light bar	1.00

TOP GLASS

D.	Top glass for 1940 and previous model Galloping Domino	$11.00
P.	Top glass for 1940 Pacer (3 pieces)	13.50
P-A.	Large section of Pacer glass	9.00
P-B.	Front left section of Pacer glass	3.00
P-C.	Back left section of Pacer glass	3.00
BT.	Top glass for 1940 and previous model Bang Tails	13.50

1941 and subsequent model top glasses for all Machines, write for prices.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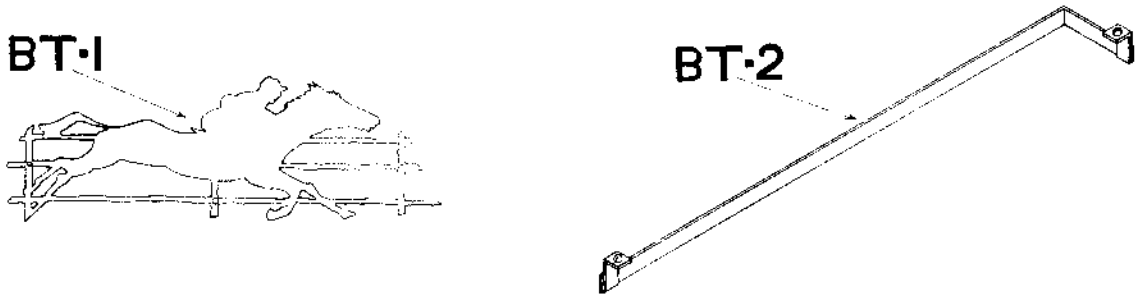
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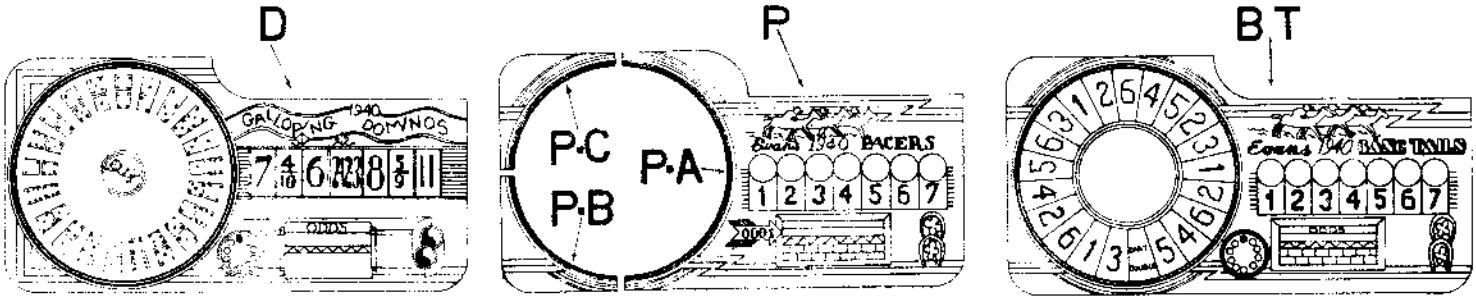
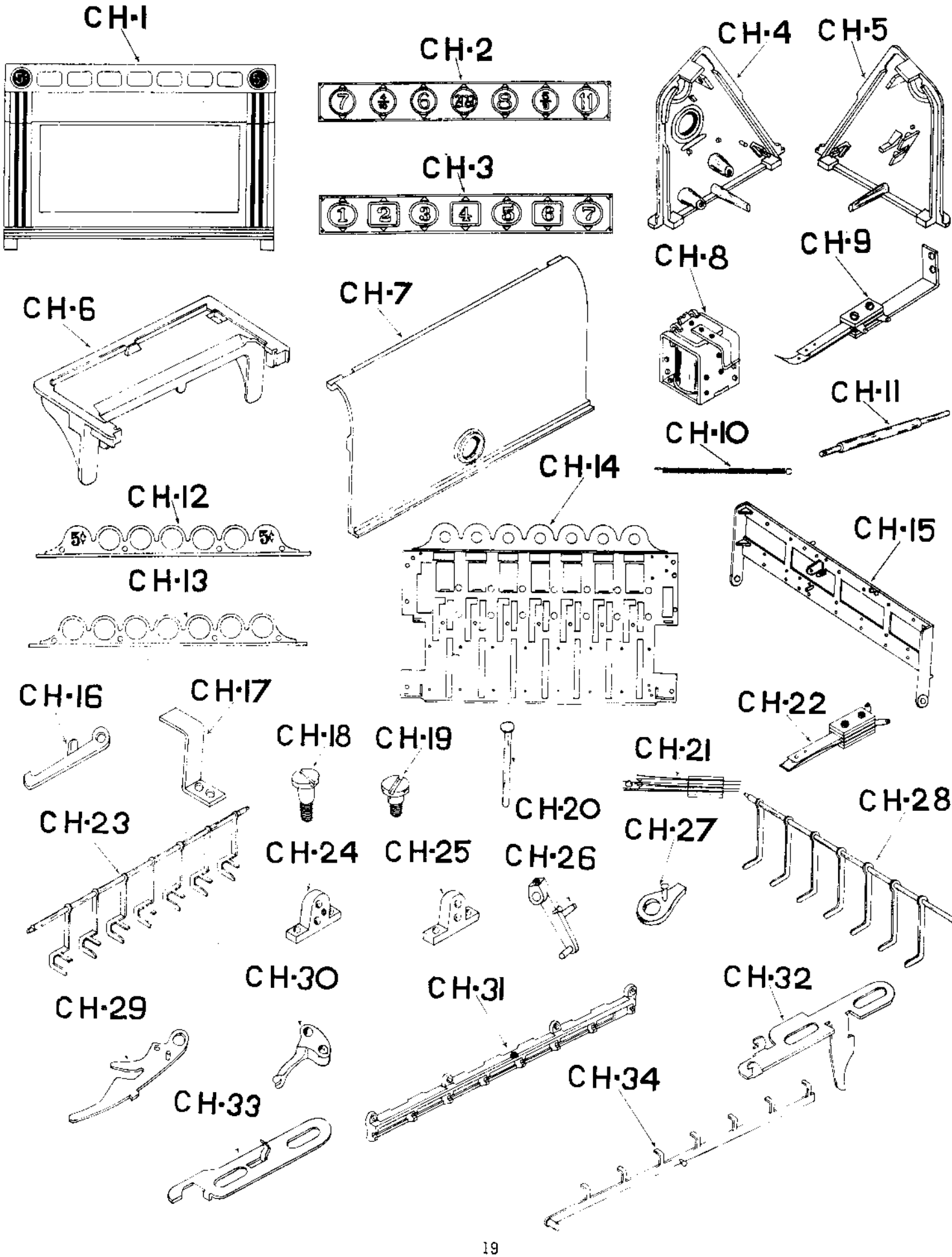
BT·2


D
P
BT
P·C
P·A
P·B
BACERS
GALLOPING DOMINOS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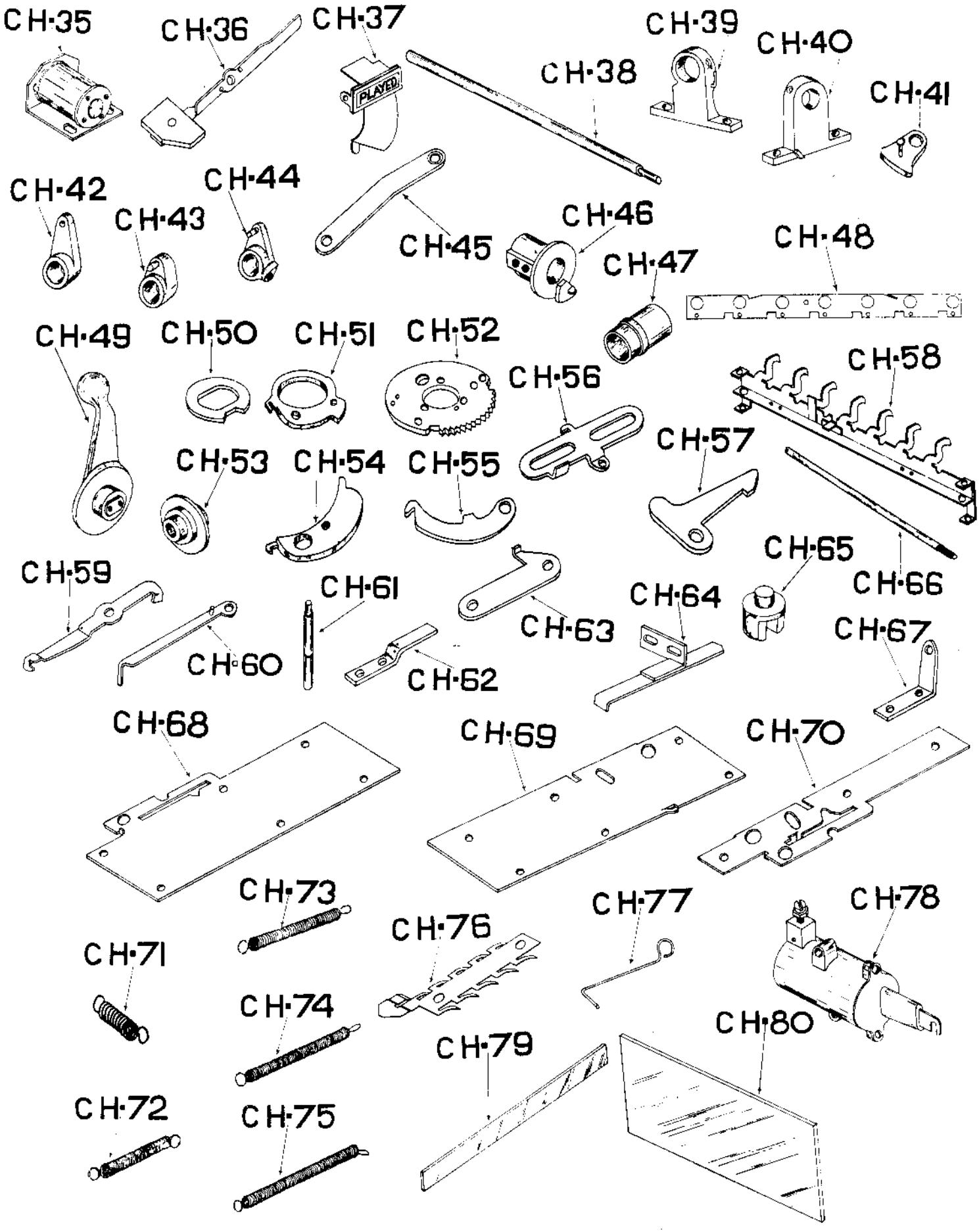
CH-34

COIN HEAD PARTS

CH-35.	Lock magnet	$1.25
CH-36.	Lock magnet arm and armature	.50
CH-37.	Butterfly	.25
CH-38.	Main shaft	.30
CH-39.	Right shaft bearing	.50
CH-40.	Left shaft bearing	.50
CH-41.	Coin retainer cam dog	.35
CH-42.	Main shaft casting	.25
CH-43.	Clutch cam	.25
CH-44.	Lock cam	.25
CH-45.	Main shaft link	.25
CH-46.	Coin retainer cam	.50
CH-47.	Brass spring roller	.15
CH-48.	Kicker bar stamping	.50
CH-49.	Handle	1.50
CH-50.	Clutch stamping	.15
CH-51.	Clutch stamping	.25
CH-52.	Ratchet wheel for handle	.65
CH-53.	Brass bushing for end of main shaft	.40
CH-54.	Stamping for clutch ratchet wheel	.15
CH-55.	Clutch stamping	.15
CH-56.	Stamping for handle lock	.25
CH-57.	Stamping for handle lock	.25
CH-58.	Coin rake stamping	3.50
CH-59.	Lock stamping for kicker bar	.30
CH-60.	Kicker bar stamping	.25
CH-61.	Ratchet wheel pin	.15
CH-62.	Kicker bar guide	.15
CH-63.	Stamping for handle lock	.30
CH-64.	Stamping for kicker bar	.25
CH-65.	Steel stud for ratchet wheel	.15
CH-66.	Coin rake shaft	.15
CH-67.	Stamping for main shaft link	.15
CH-68.	Front plate	.60
CH-69.	Front plate	.60
CH-70.	Front plate	.40
CH-71.	Switch bar lock spring	.05
CH-72.	Spring for lock bar stamping	.10
CH-73.	Large lock stamping spring	.10
CH-74.	Main spring right side	.10
CH-75.	Main spring left side	.10
CH-76.	Coin retaining spring	.30
CH-77.	Pump wire spring	.05
CH-78.	Pump	1.00
CH-79.	Narrow glass	.20
CH-80.	Large glass	.35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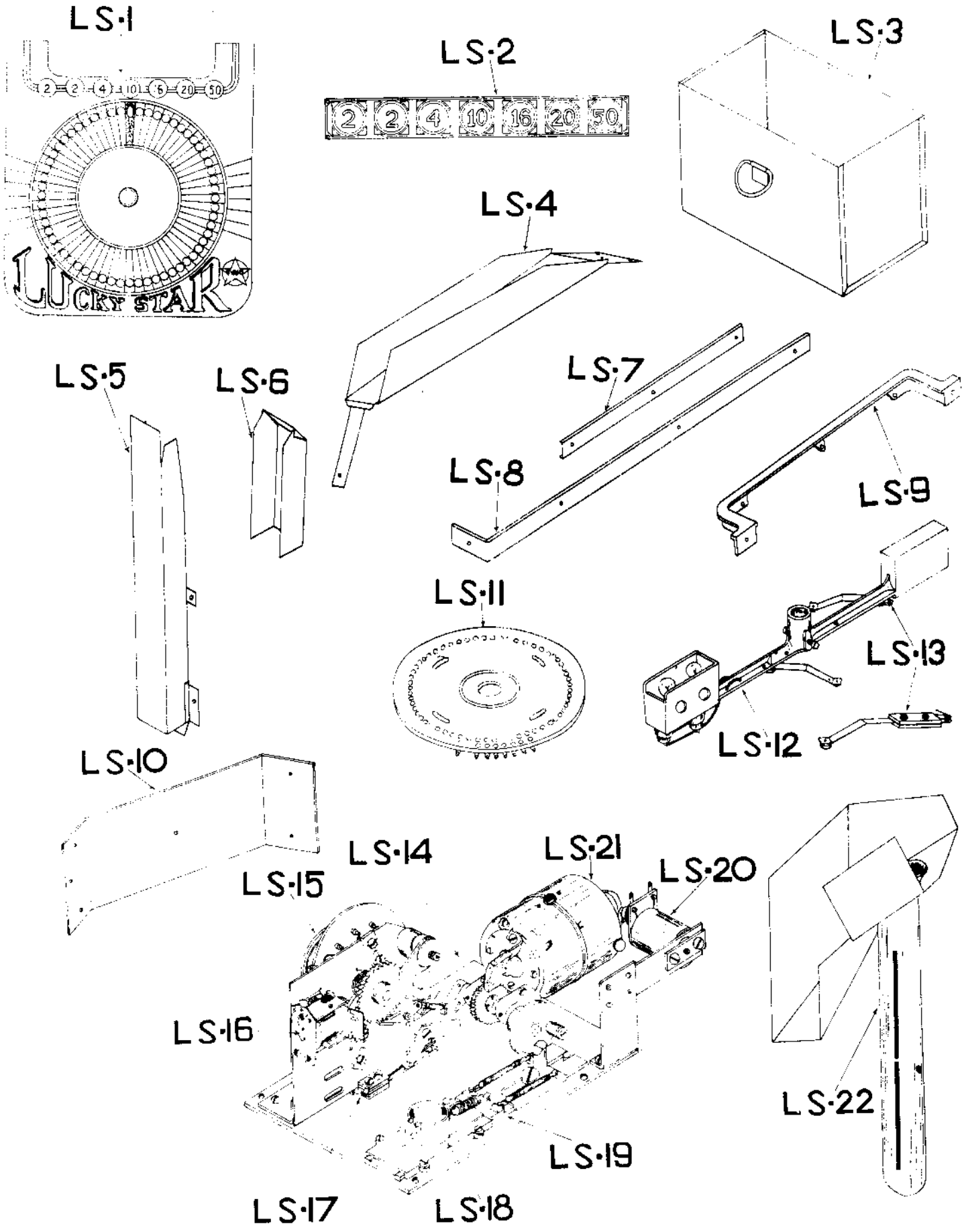
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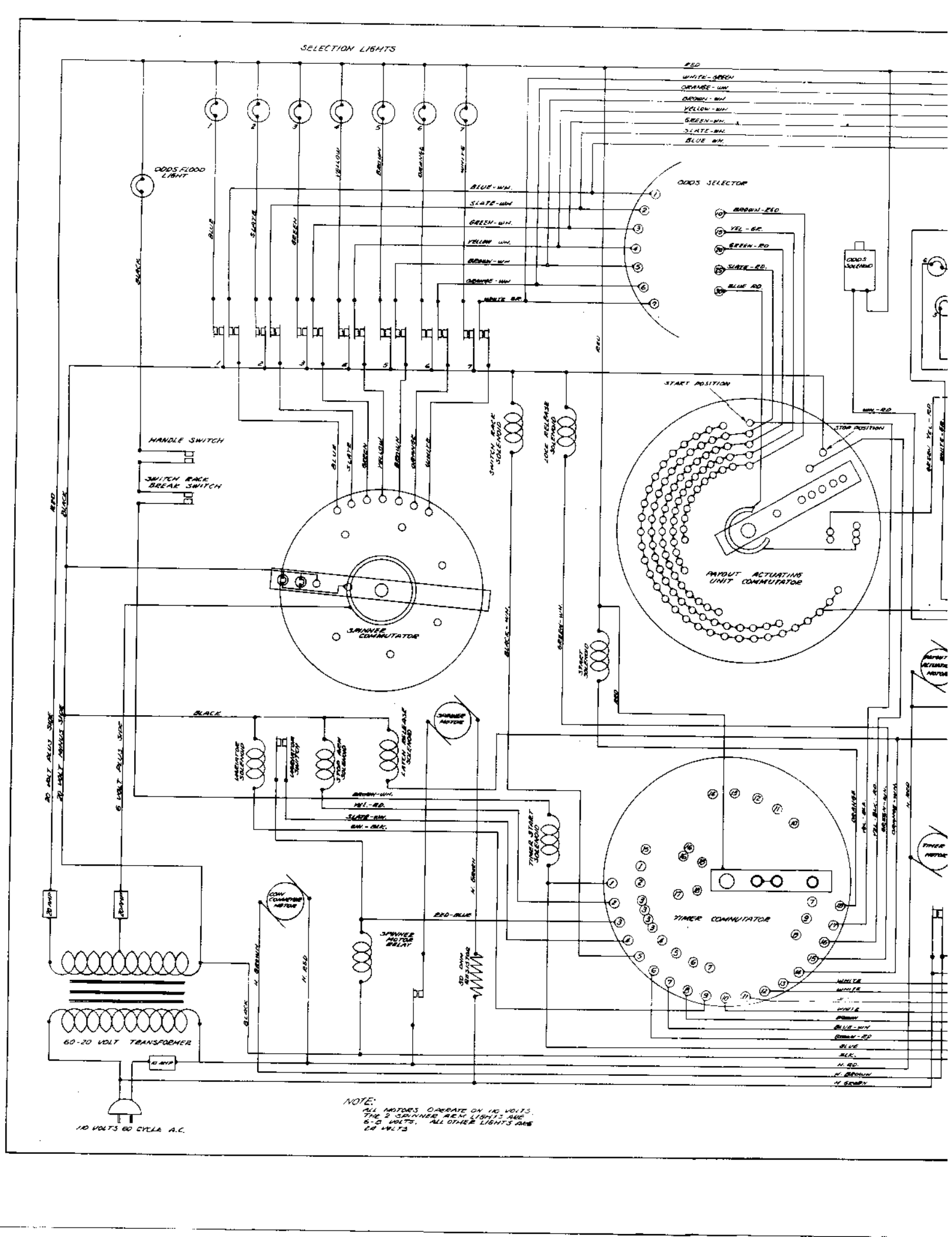
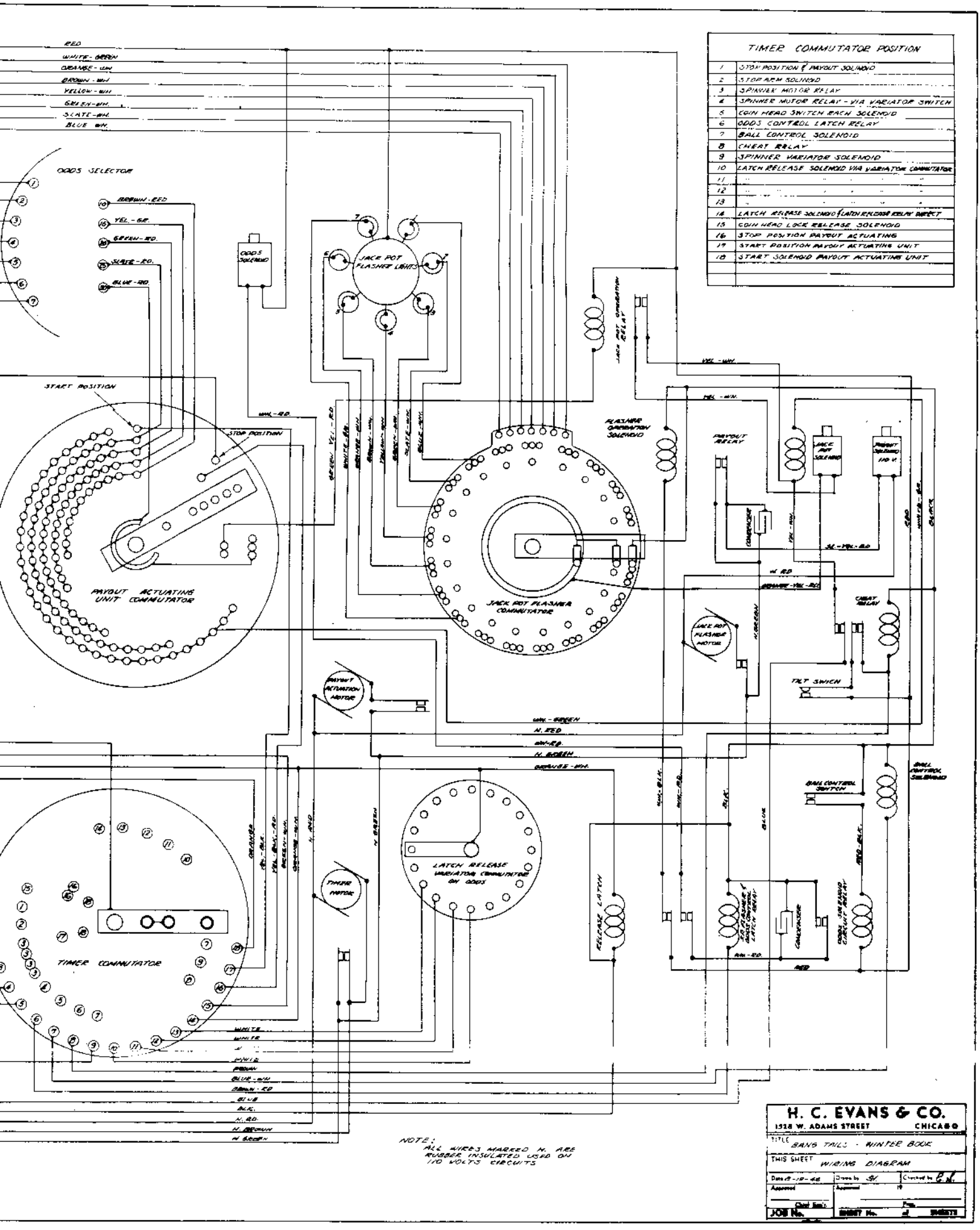
LUCKY STAR



NOTE:
ALL MOTORS OPERATE ON 110 VOLTS.
THE 2 SPINNER ARM LIGHTS ARE 6-8 VOLTS. ALL OTHER LIGHTS ARE 24 VOLTS



TIMER COMMUTATOR POSITION	
1	STOP POSITION & PAYOUT SOLENOID
2	STOP ARM SOLENOID
3	SPINNER MOTOR RELAY
4	SPINNER MOTOR RELAY - VIA VARIATOR SWITCH
5	COIN HEAD SWITCH EACH SOLENOID
6	ODDS CONTROL LATCH RELAY
7	BALL CONTROL SOLENOID
8	CHEAT RELAY
9	SPINNER VARIATOR SOLENOID
10	LATCH RELEASE SOLENOID VIA VARIATOR COMMUTATOR
11	" " " " "
12	" " " " "
13	" " " " "
14	LATCH RELEASE SOLENOID & LATCH RELEASE RELAY SWITCH
15	COIN HEAD LOCK RELEASE SOLENOID
16	STOP POSITION PAYOUT ACTUATING
17	START POSITION PAYOUT ACTUATING UNIT
18	START SOLENOID PAYOUT ACTUATING UNIT

NOTE:
ALL WIRES MARKED N. ARE RUBBER INSULATED USED ON 110 VOLTS CIRCUITS

H. C. EVANS & CO.
1528 W. ADAMS STREET CHICAGO

TITLE BANG TAIL - WINTER BOOK
THIS SHEET WIRING DIAGRAM
Date 8-12-46 Drawn by SV Checked by C.N.
Approved Approved
Chief Engr. Pres.
JOB No. SHEET No. of SHEETS