
COINS PLAYED
ROYAL FLUSH 250 500 750 1000
STRT. FLUSH 50 100 150 200 250
4 OF A KIND 25 50 75 100 125
FULL HOUSE 9 18 27 36 45
FLUSH 6 12 18 24 30
STRAIGHT 4 8 12 16 20
3 OF A KIND 3 6 9 12 15
2 PAIR 2 4 6 8 10
PLAY 1 TO 5 COINS
DRAW POKER

SECTION I
GENERAL INFORMATION

INTRODUCTION

The IGT Fortune I Series machines are microprocessor controlled video gaming machines, professionally engineered for economical installation and maintenance ease.

SPECIAL FEATURES AND OPTIONS

Some of the special features of the Fortune I machine include:

- 13" Monitor
- Microprocessor control of the game.
- Back-up battery for memory circuit.
- Modular component design.
- Self Test and Statistical Display modes.
- Error detection circuitry.
- Low voltage sensing circuitry.
- Sound generation.

The monitor controls and hopper adjustments are located inside the front portion of the cabinet liner for easy access. The microprocessor is located behind a locking door inside the cabinet for added security.

The following options are available for the Fortune I machine:

- Choice of a variety of percentages.
- Choice of coin denomination.
- Choice of six standard cabinet finishes or colors.
- Credit play feature.
- Progressive feature.
- 220 VAC isolation transformer kit.

SPECIFICATIONS

Table 1-1 lists the electrical, physical and environmental specifications for the Fortune I machine.

POWER REQUIREMENTS

The Fortune I machine operates from 103-125 VAC at 50/60 Hz and at 200 VAC at 50/60 Hz for foreign games. A transformer is used to provide power to all components requiring isolated voltages.

FCC DATA

This equipment generates and uses radio frequency energy. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Part 15 of FCC rules, which are designed to provide reasonable protection against radio and television interference in an industrial installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, the user is encouraged to try to correct the interference.

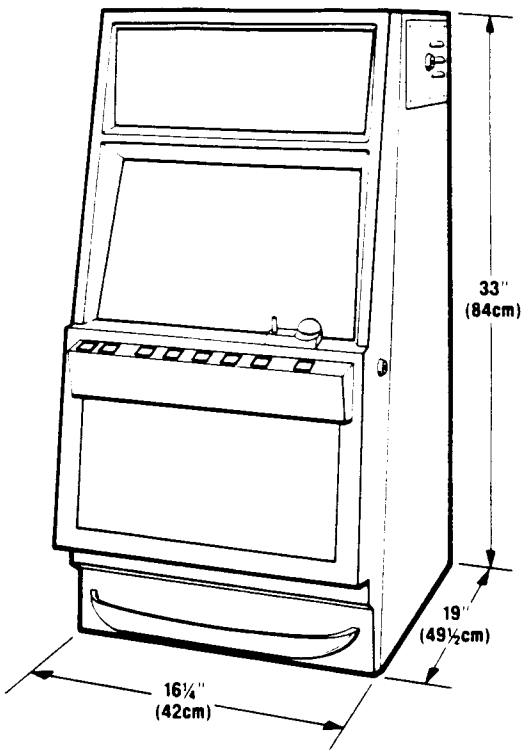


Figure 1-1

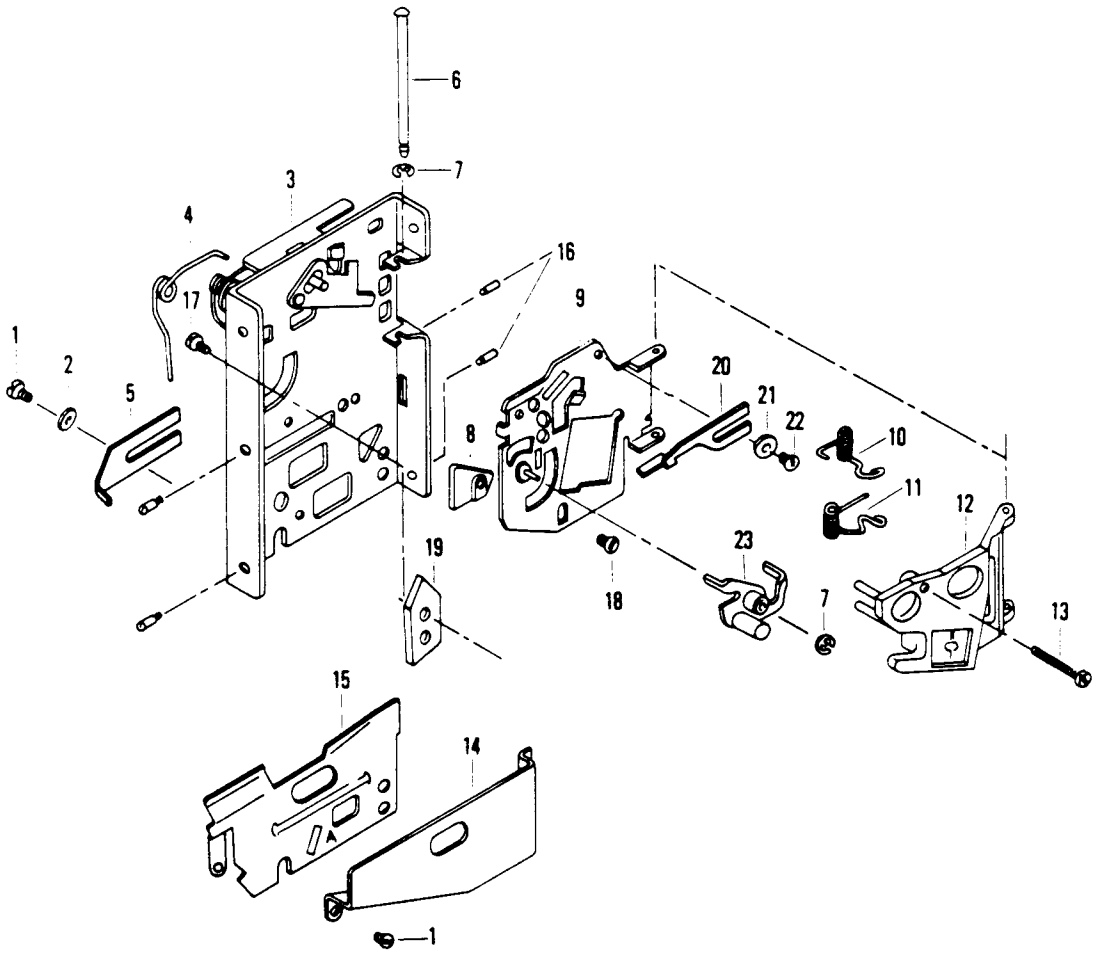
Overall Physical Dimensions

ELECTRICAL		
Power Consumption:	115 VAC LINE INPUT AT 50/60/ Hz STANDARD	
Small Hopper	230 Watts - 115 VAC @ 2.0 Amps	
Large Hopper	575 Watts - 115 VAC @ 5.0 Amps	
Power Consumption:	220 VAC LINE INPUT AT 50/60 Hz STANDARD	
Small Hopper	220 Watts - 220 VAC @ 1.0 Amps	
Large Hopper	555 Watts - 220 VAC @ 2.5 Amps	
PHYSICAL		
Dimensions	Height	33" (84 cm)
	Base Width	16 1/4" (42 cm)
	Base Depth	19" (49.5 cm)
Weight	Set Up	190 Lbs (86 Kgs)
	Shipping	210 Lbs (95.25 Kgs)
ENVIRONMENTAL		
Temperature	Operating	32°F - 122°F AMB
		0°F - 80°F AMB
	Storage	32°F - 176°F AMB
		0°F - 80°F AMB
Humidity (Relative)	5% - 9% Non-Condensing	

Table 1-1, General Specifications

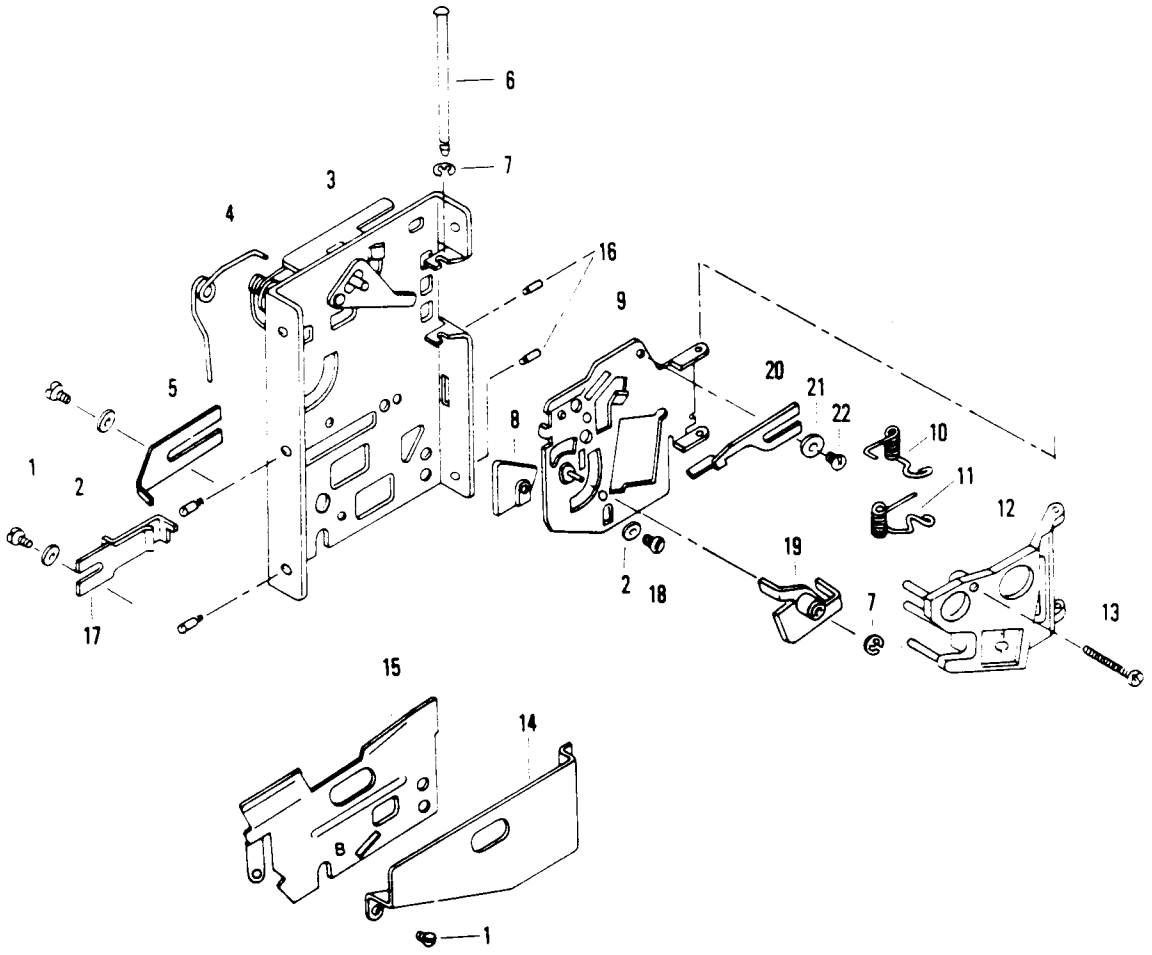
Section II

5¢ U.S.A. MECHANISM: N-110



	Part No.	Name of Part	Qty.
1.	186-6-2	6/32 x 1/8 R.H.M. Screw: Serr	2
2.	600-6	#6 Washer	1
3.	4042-1	5c Mainplate Ass'y	1
4.	1027	Oper. Lever Spring	1
5.	1009-1	Kicker	1
6.	1024	Gate Pivot Pin	1
7.	1046	"C" Washer	2
8.	1021	5c Rail	1
9.	4001	5c Gate Ass'y	1
10.	1028-1	Upper Gate Spring	1
11.	1029	Lower Gate Spring	1
12.	4015	White Magnet Gate Ass'y	1
13.	1032	Thickness Screw	1
14.	1004	Return Coverplate	1
15.	1005	"A" Coverplate	1
16.	1050	#6 Stud	4
17.	106-6-3	6-32 x 3/16 B.H.M. Screw	1
18.	106-6-5A	6-32 x 5/32 B.H.M. Screw	1
19.	1048	Anvil	1
20.	1013	Adj. Dia. Gauge	1
21.	600-4	#4 Washer	1
22.	100-4-2	4-36 x 1/8 R.H.M. Screw	1
23.	4017	5c Cradle Ass'y.	1

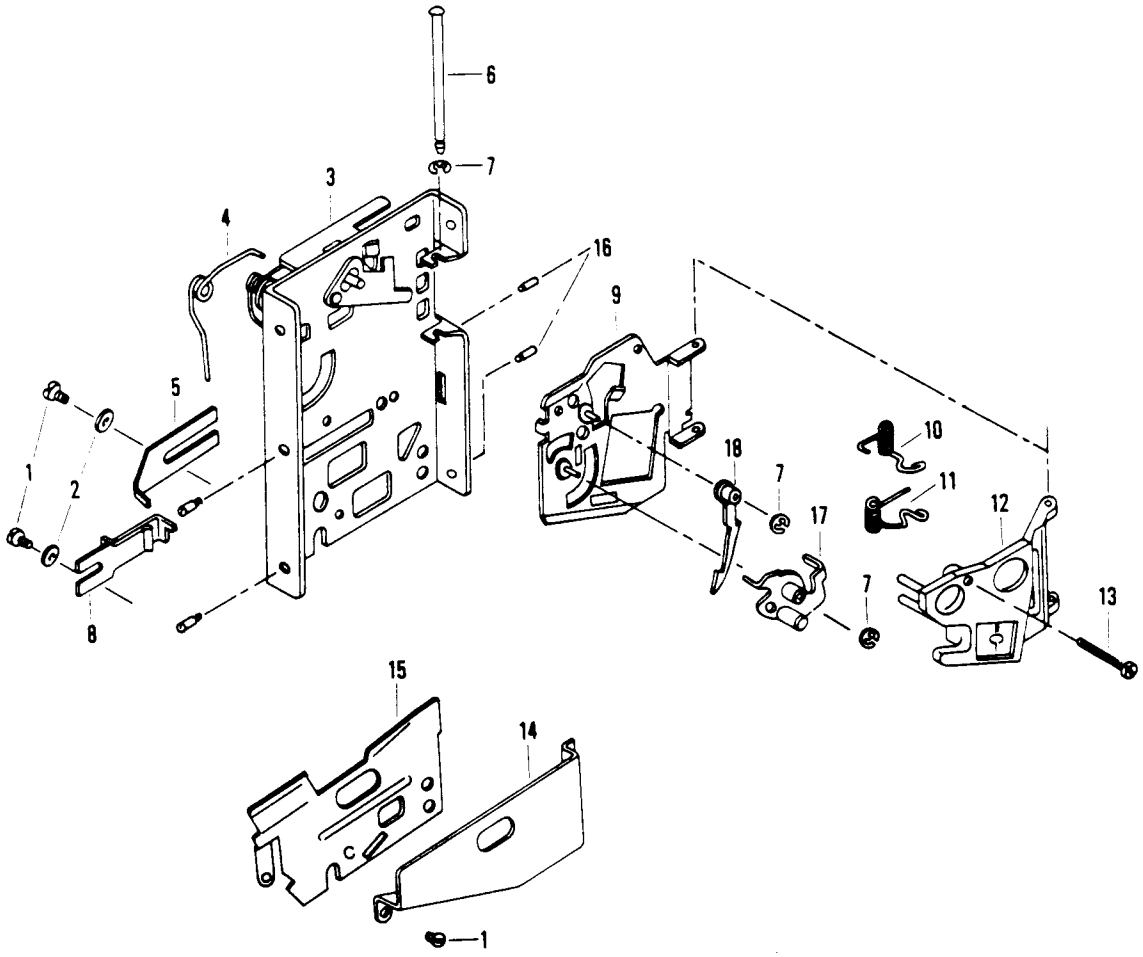
D-120 10¢ U.S.A. MECHANISM:



	Part No.	Name of Part	Qty.
1.	188-6-2	6-32 x 1/8 R.H.M. Screw: Serr	3
2.	600-6	#6 Washer	3
3.	4010	10c Mainplate Ass'y	1
4.	1027	Oper. Lever Spring	1
5.	1009-1	Kicker	1
6.	1024	Gate Pivot Pin	1
7.	1046	"C" Washer	2
8.	1022	10c Rail	1
9.	4002	10c Gate Ass'y	1
10.	1028-1	Upper Gate Spring	1
11.	1029	Lower Gate Spring	1
12.	4014-1	Green Magnet Gate Ass'y	1
13.	1032	Thickness Screw	1

	Part No.	Name of Part	Qty.
14.	1004	Return Coverplate	1
15.	1006	"B" Coverplate	1
16.	1068	#6 Stud	4
17.	4000	Separator Ass'y	1
18.	106-6-5A	6-32 x 5/32 B.H.M. Screw	1
19.	4008	10c Cradle Ass'y	1
20.	1013	Adj. Dia. Gauge	1
21.	600-4	#4 Washer	1
22.	100-4-2	4-36 x 1/8 R.H.M. Screw	1

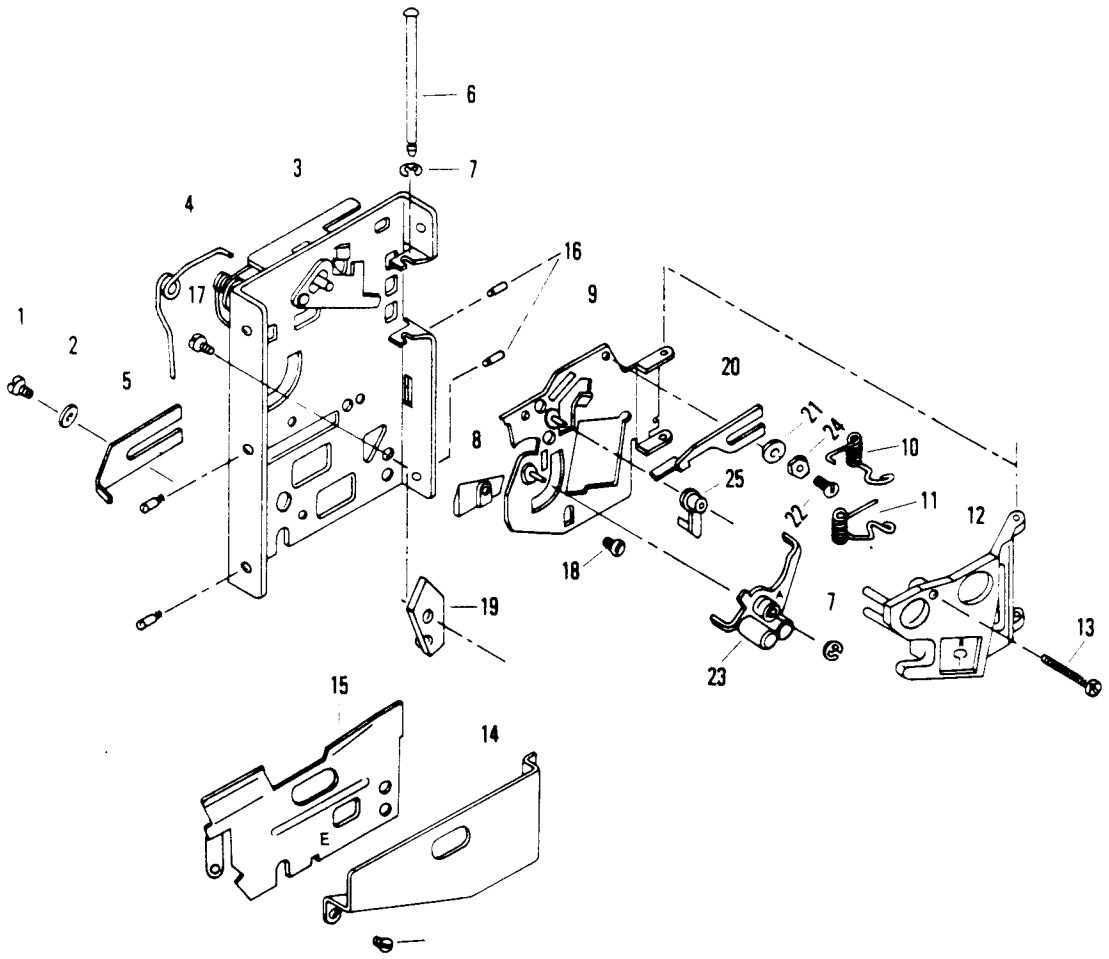
25¢ U.S.A. MECHANISM: Q-130



	Part No.	Name of Part	Qty.
1.	188-6-2	6-32 x 1/8 R.H.M. Screw: Serr	3
2.	600-6	#6 Washer	2
3.	4042-1	25c Mainplate Ass'y	1
4.	1027	Oper. Lever Spring	1
5.	1009-1	Kicker	1
6.	1024	Gate Pivot Pin	1
7.	1046	"C" Washer	3
8.	4009	Separator Ass'y	1
9.	4008	25c Gate Ass'y	1
10.	1025-1	Upper Gate Spring	1
11.	1029	Lower Gate Spring	1
12.	4014	Green Magnet Gate Ass'y.	1
13.	1032	Thickness Screw	1

	Part No.	Name of Part	Qty.
14.	1004	Return Coverplate	1
15.	1007	"C" Coverplate	1
16.	1060	#6 Stud	4
17.	4016-6	25c Cradle Ass'y.	1
18.	4004	Underrate Lever Ass'y	1

140-0 50¢ U.S.A. MECHANISM:



	Part No.	Name of Part	Qty.
1.	188-6-2	6-32 x 1/8 R.H.M. : Serr. Screw	2
2.	600-6	#6 Washer	1
3.	4042-1	25c Mainplate Ass'y. Long Pin	1
4.	1027	Oper. Lever Spring	1
5.	1009-1	Kicker	1
6.	1024	Gate Pivot Pin	1
7.	1046	"C" Washer	3
8.	1021-1	5c Rail (Ground)	1
9.	4031	Gate Ass'y. (Cut)	1
10.	1028-1	Upper Gate Spring	1
11.	1029	Lower Gate Spring	1
12.	4014	Green Magnet Gate Ass'y.	1

	Part No.	Name of Part	Qty.
13.	1032	Thickness Screw	1
14.	1004	Return Cover Plate	1
15.	1047	"E" Coverplate	1
16.	1050	#6 Stud	4
17.	106-6-3	6-32 x 3/16 B.H.M. Screw	1
18.	106-6-5A	6-32 x 5/32 B.H.M. Screw	1
19.	1058	Cut Anvil	1
20.	1013	Adjustable Dia. Gauge	1
21.	600-4	#4 Washer	1
22.	100-4-6	4-36 x 3/8 R.H.M. Screw	1
23.	4018-A	50c Cradle Ass'y.	1
24.	400-4	4-36 Hex Nut	1
25.	4025	Cut Undersize Lever	1

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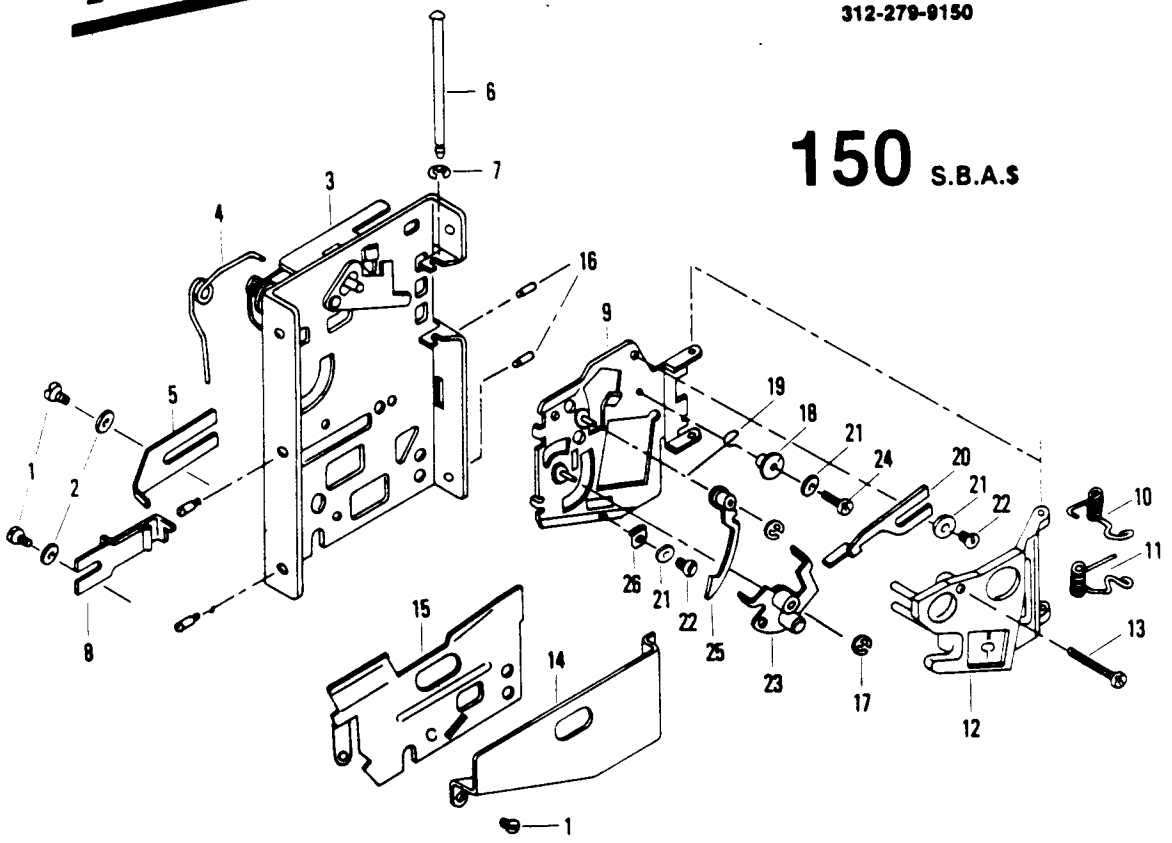
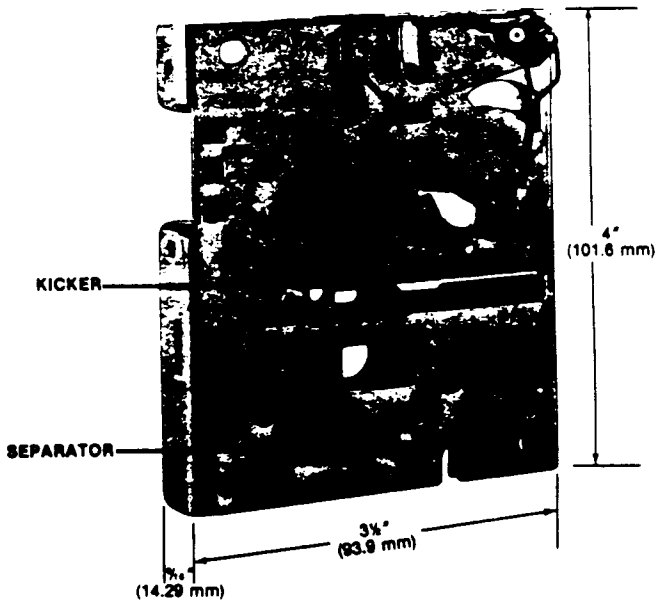
150 S.B.A.$



	Part No.	Name Of Part	Qty.
1.	188-6-2	6-32 x 1/8 RHM Serr. Screw	3
2.	600-6	#6 5/16 x 1/32 Flat Washer	2
3.	4042-1	Long Pin S/25a/S Mainplate	1
4.	1027	Operating Lever Spring	1
5.	1009-1	Kicker	1
6.	1024	Gate Pivot Pin	1
7.	1046	"C" Washer	2
8.	4043	S.B.A.S Separator	1
9.	4044	S.B.A.S Gate-Staked	1
10.	1028-1	Upper Gate Spring	1
11.	1029	Lower Gate Spring	1
12.	4015	White Magnet Gate Ass'y	1
13.	1032	Thickness Screw	1
14.	1004	Return Coverplate	1
15.	1007	"C" Coverplate	1
16.	1050	#6 Stud	4
17.	1125	"C" Washer	1
18.	1120	Spring Retainer	1
19.	1121	U.S. Lever Spring	1
20.	1013	Adj. Dia. Gauge	1
21.	600-4	#4 Washer	3
22.	100-4-2	4-36 x 1/8 RHM Screw	2
23.	4046	S.B.A.S Cradle Ass'y	1
24.	100-4-5	4-36 x 5/16 RHM Screw	1
25.	4052	S.B.A.S Undersized Lever	1
26.	1108	S.B.A.S Rail	1

BACK VIEW



FRONT VIEW

S.B.A. $ ADJUSTMENTS

All S.B.A.$ mechs leave the factory adjusted for maximum performance. If, however, more critical adjustments are desired, or if unit has been disassembled for service, the following adjustment procedure is suggested.

Set the coin mech with the back of the unit facing you in the test position.

A. Separator Assembly

1. Loosen screw holding the separator ass'y and move as far to the right as it will go. Tighten screw.
2. Insert several coins, and note that some are returned by striking the separator.
3. Loosen screw and move separator a slight amount to the left. Tighten screw.
4. Insert coins again and, if some are still returned, repeat step #3 until all coins are accepted.

B. Kicker

5. Loosen screw and move kicker as far to the left as it will go. Tighten screw.
6. Insert several coins and some may be returned.
7. Loosen screw and move kicker a slight amount to the right. Tighten screw.
8. Insert coins and, if some are still returned, repeat step #7 to accept all coins.

For more adjustments turn mech to front view and proceed.

C. Diameter gauge

9. Loosen screw, move diameter gauge to left, insert coin and move gauge to right until coin passes, then tighten screw.

D. Magnet gate assembly

10. Turn thickness screw counter clockwise several turns or until coin hangs up (when dropped in) then turn screw clockwise until coin just passes, now turn 1/8 turn more.

E. Undersize lever spring

11. Open undersize lever, hold cradle with weight up. Loosen retainer screw and turn retainer counter clockwise until cradle is held by lever.
12. Now turn retainer clockwise until cradle is released to normal position and does not hang at bottom of undersize lever. Test several coins to avoid jamming.

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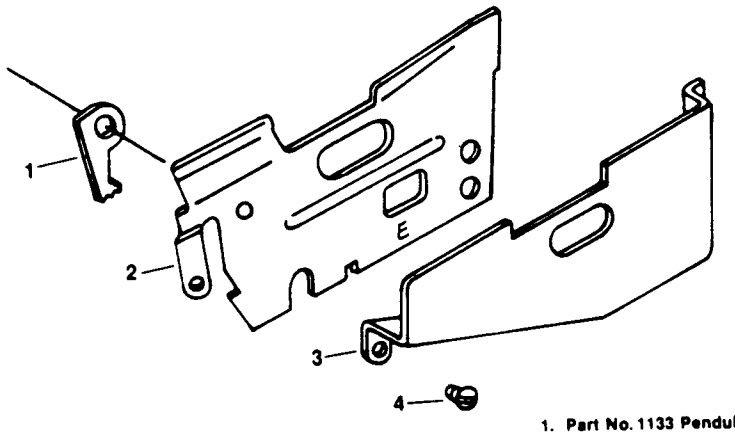
50¢ ANTI-CHEAT PENDULUM KIT NO. 5010

This security device has been developed and tested to achieve greater safety against "cheaters" as an optional part of the mech.

With proper setting between switch wire and pendulum, tests have proven virtually 100% effective.

Aside from "stringing" protection, the "pendulum" acts as a dampener and deflector for smaller coins, such as pennies to help by pass the switch wire.

50¢ ANTI-CHEAT PENDULUM KIT NO. 5010



1. Part No. 1133 Pendulum
2. Part No. 4060-E Coverplate Ass'y.
3. Part No. 1004 Return Coverplate
4. Part No. 188-6-2 6-32 X 1/8 R.H.M.S.

Step 1 Remove Return Coverplate (Upper) and (Lower) Coverplate.

Step 2 Assemble Coverplate 2 and Pendulum 1. as shown above.

Step 3 Check Pendulum action assuring free motion.

Step 4 Check switch wire below Coin Mech for proper clearance, it should be approximately 3/4" minimum, below Pendulum before contacts are closed.
Thus ensuring greater safety of mechanism.

PATENT PENDING

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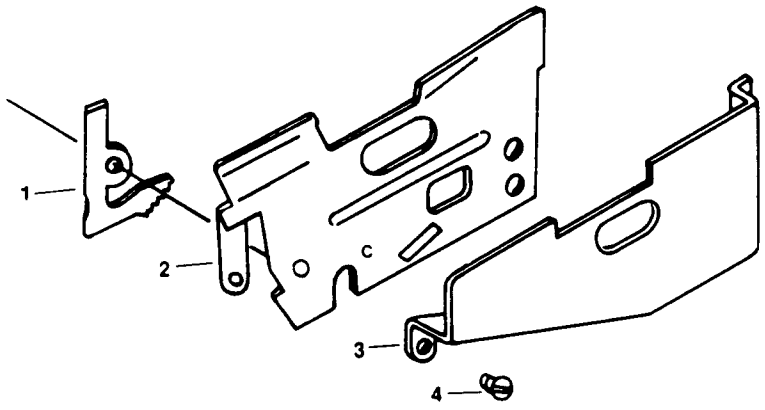
ANTI-CHEAT PENDULUM KIT NO. 5008

This security device has been developed and tested to achieve greater safety against "cheaters" as an optional part of the mech.

With proper setting between switch wire and pendulum, tests have proven virtually 100% effective.

Aside from "stringing" protection, the "pendulum" acts as a dampener and deflector for smaller coins, such as pennies to help by pass the switch wire.

ANTI-CHEAT PENDULUM KIT
NO. 5008



1. Part No. 1131 Pendulum
2. Part No. 4059-C Coverplate Ass'y.
3. Part No. 1004 Return Coverplate
4. Part No. 188-6-2 6-32 X 1/8 R.H.M.S.

Step 1 Remove Return Coverplate (Upper) and (Lower) Coverplate.

Step 2 Assemble Coverplate 2 and Pendulum 1. as shown above.

Step 3 Check Pendulum action assuring free motion.

Step 4 Check switch wire below Coin Mech for proper clearance, it should be approximately 3/4" minimum, below Pendulum before contacts are closed.
Thus ensuring greater safety of mechanism.

PATENT PENDING

SECTION II
INSPECTION AND INSTALLATION

INTRODUCTION

This section provides general inspection and installation procedures for the Fortune I machine. Guidelines for returning damaged machines are also provided.

INSPECTION

Check the exterior of the machine to verify that the machine is free from scratches, chips, blemishes and any mechanical damage.

Check the glass for proper alignment, scratches and cracks.

Check the interior of the machine, making sure none of the components are disconnected or loose.

The security door and the main door are shipped from the factory with shipping locks installed. Change these to secure locks to insure proper key control.

Open the security door and make sure the Microprocessor board is securely connected to the Mother board.

Check that the wire harness is properly routed and secured.

Make sure that all electrical connections are tight and that proper antichafe protection has been used.

INSTALLATION

To mount the machine on the stand, proceed as follows:

1) Set the machine on the stand and align the mounting holes on the floor of the cabinet with those on the top of the stand. See Figure 2-1.

2) Insert two 5/16 X 2-1/2 carriage bolts in each hole from the inside of the machine.

CAUTION

Do not use machine for drilling mounting holes.

3) Secure the machine to the stand with two flat washers and two nuts. (If stand is not pre-drilled use Template Drawing 781 Ø26 ØØ)

4) Tighten the nuts with a wrench.

5) Route the power cord down into the stand and out through the back, and connect to a 11Ø VAC outlet.

FUNCTIONAL CHECKOUT

After the power has been connected to the machine, turn the main power switch on and check that all of the machine lights are illuminating.

Monitor should display the attract mode of the game and colors should be acceptable.

The game should be coin tested for proper game sequences, as well as proper coin handling.

NOTE

If any problems with the game or equipment are encountered, refer to Section V, Field Service and Troubleshooting, and Section VI, Self Test and Statistical Display Modes.

ADJUSTMENTS

Section V, Field Service and Troubleshooting, provides complete instructions on all adjustments concerning the Fortune I series. Section IV provides complete information on all of the components of the machine and a wiring diagram is also provided in the Appendix of this manual.

RETURNING FOR DAMAGE ADJUSTMENT

As per the "General Terms and Conditions of Sales", no merchandise may be returned for adjustment without prior written approval of IGT. No credit or replacement will be effected until alleged defects are established to IGT's satisfaction by tests and inspections to be performed by IGT at any reasonable time and place it designates.

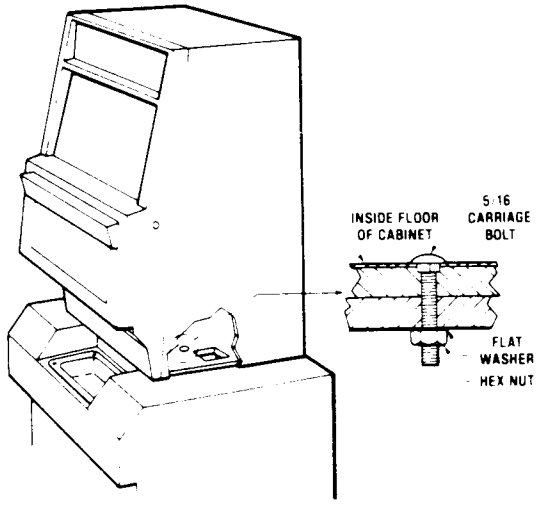


Figure 2-2
Location of Bolts

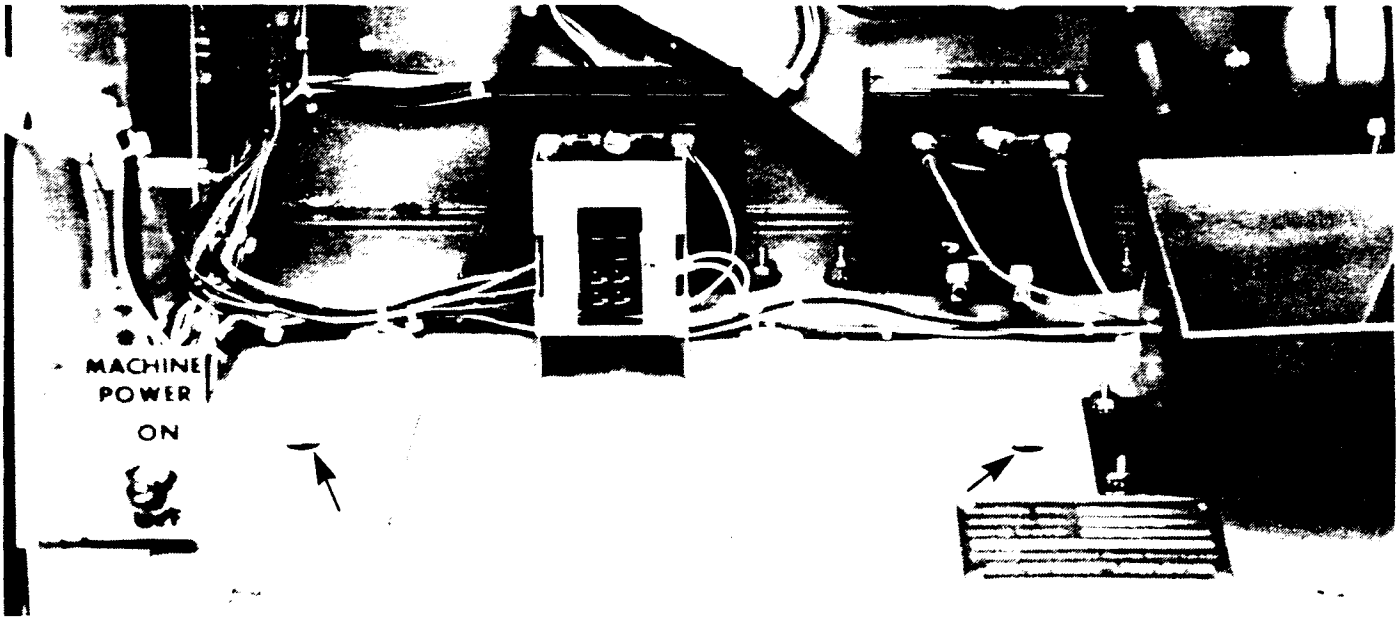


Figure 2-1
Location of Cabinet Mounting Holes

Section III

SECTION III
GAME INSTRUCTIONS

INTRODUCTION

This section provides game instructions for the following Fortune I Series machines:

- Regular Draw Poker
- Progressive Draw Poker
- Joker Wild Draw Poker
- Double Up Draw Poker
- Credit Draw Poker
- Lucky 7 (Seven Card Stud Poker)
- Regular 21 (Blackjack)
- Live 21
- Count Down 21
- 2 Hand 21
- In Between
- Regular Slot
- Credit Slot

GAME INSTRUCTIONS
REGULAR DRAW POKER

Player Switches are DRAW, CANCEL, HOLD(5), and DEAL.

One to five coins can be played to start the game. Five cards will be dealt face-down. After the first coin is inserted, **GOOD LUCK** will appear on the screen and the DEAL button will illuminate. Each time a coin is played **COIN ACCEPTED** will flash on the screen. **INSERT COIN** will continue to flash on the screen. until the maximum number of coins are played or until the DEAL button is pushed. After the fifth coin is played the deal will be automatic. The number of coins played are shown in the **COINS IN** box on the screen.

When the desired number of coins have been played the DEAL button can be pushed. Five (5) cards are dealt from one (1), fifty-two (52) card deck. After all five cards are dealt they will be turned face-up and the DRAW and CANCEL buttons will illuminate. The player can hold all, none, or any combination of cards by pressing the HOLD buttons below the cards. The word **HOLD** will appear above the card or cards selected. If a mistake has been made, the CANCEL button can be pushed to return the hand to the original five card configuration. After the cards to be held have been chosen the DRAW button can be pushed. The replacement cards for those not held will be dealt face-down and turned over to show the new hand. If none were held, a complete new five card hand will be dealt. After the draw has taken place **GAME OVER** will appear on the screen.

LOSE CONDITION

If the final hand does not match one of the winning combinations the words **GAME OVER** and **PLAY 1 TO 5 COINS** will appear on the screen above the cards. The final hand will remain on the screen until the next game is played and the machine will be in idle mode.

WIN CONDITION - HOPPER PAY

If the final hand contains a winning combination a written explanation will appear on the screen just above the cards (i.e., 4 of a Kind). On the same line a coin out box simultaneous-

ly displays the number of coins paid out by the hopper. Below the box the words **WINNER PAID** will appear after the correct number of coins have been paid.

WIN CONDITION - HAND PAY

A hand pay condition occurs when the amount won is in excess of the maximum hopper pay out. When a large jackpot occurs the machine will lockout until the jackpot is paid and the game is reset by authorized personnel.

The game is reset by turning the jackpot reset key clockwise (refer to Section V). When the game has been reset the machine will return to the idle mode.

GAME INSTRUCTIONS
PROGRESSIVE DRAW POKER

Player switches are DRAW, CANCEL, HOLD (5), and DEAL.

The game instructions for Progressive Draw Poker are the same as Regular Draw Poker except as follows:

WIN CONDITION -
PROGRESSIVE JACKPOT

When a Royal Flush is dealt, or is the final hand, the player's machine and all others connected to the progressive display unit will lockout until the jackpot is paid and the progressive unit and machine have been reset by authorized personnel. Refer to the IGT Progressive System Manual for progressive unit reset.

GAME INSTRUCTIONS
JOKER WILD DRAW POKER

Player switches are DEAL/DRAW, HOLD/CANCEL(5), YES and NO.

The game instructions for Joker Wild Poker are the same as regular Draw Poker except as follows:

A joker card is added to the regular 52 card deck and may be used as a "wild" card in place of any card. "Five of a Kind" then becomes the highest hand possible.

GAME INSTRUCTIONS
DOUBLE UP POKER

Player switches are DEAL/DRAW, HOLD/CANCEL(5), YES and NO.

The game instructions for Double Up Poker are the same as regular Draw Poker except as follows:

WIN CONDITION

If the final hand contains a winning combination (other than a Royal Flush with maximum coins bet), the question **DOUBLE UP?** will flash above the hand and the YES and NO buttons will illuminate. If the player chooses 'no' then the game will proceed as in regular Draw Poker. If 'yes' is chosen then the winning hand will disappear and a single card will be dealt face down. The question **HIGH ?** will appear on the screen and the YES and NO buttons will illuminate again for another yes/no decision. If 'yes' is chosen then the player is wagering his winnings that the card will have the value of 9 through Ace. If the player chooses 'no' then the value of the card must be 2 through 7 to win. As soon as this decision is made the card is turned face up. If the card value is within the range selected then the hopper will pay out double the amount that was won on the last Draw Poker hand. If the card is outside the range selected, or the card is an 8, then the player loses and the machine returns to the idle mode.

GAME INSTRUCTIONS
CREDIT DRAW POKER

Player switches are DEAL/DRAW, CASHOUT, BET 1 COIN, BET 10 COINS, and HOLD/CANCEL(5).

The game instructions for Credit Draw Poker are the same as regular Draw Poker except as follows:

One to one hundred coins or credits can be played to start the game. The paytable is shown on the screen. To play credits, the player can push either the BET 1 COIN or the BET 10 COINS buttons. A bonus of 1,000 extra coins for a Royal Flush is added to the pay table at 20. 2,000 bonus coins are added when 40, 60, and 80 coins or credits are wagered. A bonus of 3,000 extra coins is added to the paytable when 100 coins or credits are bet for a total of 10,000 bonus coins when 100 coins or credits are wagered.

WIN CONDITION

If the final hand contains a winning combination, **WINNER PAID** will appear when the credits are incremented under **CREDITS** on the screen. When CASHOUT is pushed the hopper will pay out up to 999 coins.

WIN CONDITION - HAND PAY

If the win on the paytable or when the CASHOUT button is pushed with an accumulation of 1,000 or more credits, the machine will lockout until the jackpot is paid and the machine is reset by authorized personnel.

GAME INSTRUCTIONS
LUCKY 7

Player switches are DEAL, END GAME, YES and NO.

Lucky 7 is 7 Card Stud Poker. One to three coins can be played to start the game for the first five cards. One coin each is played for the sixth and seventh cards.

After the first five cards are dealt and turned face up **INSERT COIN** will appear and the END GAME button will illuminate. The player can choose to insert a coin for the sixth card and the game will continue or push the END GAME button and the machine will return to the idle mode. If the player continues the game, the sixth card will be dealt face up next to the original five cards. **INSERT COIN** will come onto the screen and the END GAME button will illuminate. The player can make the same choices as with the sixth card. If a coin is inserted the seventh card will be dealt next to the other six.

At the end of the game if there is a winning combination other than a Royal Flush, **DOUBLE UP** will appear on the screen and the YES and NO buttons will illuminate. If the player chooses 'no', the game will end and the machine will advance into the win condition. If the player chooses 'yes', the seven cards will disappear and one card will be dealt face down to wager double or nothing on the winning hand. After the single card is dealt, **RED?** will appear above the card and the YES and NO buttons will illuminate. The player chooses 'yes' or 'no' and then the card turns over. If the correct choice is made the game advances to the win condition and pays double the original amount won.

If the incorrect choice is made the machine returns to the idle mode with the last hand and **INSERT COIN** on the screen.

WIN CONDITION
HOPPER PAY

If the win condition is any winning combination of cards other than a Royal Flush the hopper will pay out the amount won at the end of the game and increment the amount paid in the win box above **WINNER PAID** on the screen. After the hopper has paid out the coins the game will return to the idle mode.

WIN CONDITION
HAND PAY

Same as regular Draw Poker

GAME INSTRUCTIONS - REGULAR 21

Player switches are DEAL, HIT, STAND and DOUBLE.

One to five coins can be played to start the game from one 52 card deck. After the first coin is inserted, **GOOD LUCK** will appear on the screen and the DEAL button will illuminate.

Each time a coin is played **COIN ACCEPTED** will flash on the screen and **INSERT COIN** will continue to flash until the maximum number of coins are played or until the DEAL button is pushed. The number of coins played are shown in the **COINS IN** box on the screen.

Four cards are dealt alternately between the player and the dealer. Both of the player's cards and one of the dealer's cards will be face up. After the deal is completed the HIT and STAND buttons will illuminate. The player can choose to have cards dealt to improve his hand or to stand with the hand dealt.

If the player was dealt 10 or 11 the DOUBLE button will illuminate, allowing the player to bet more coins up to his original bet and receive one card. If the double option is chosen and the maximum number of coins are not played the HIT button must be pushed to continue the game. After the player's choices are completed, the dealer's second card is turned face up.

If the dealer's hand is less than 17, cards are added to the hand automatically until it is equal to or greater than 17, but less than or equal to 21, or until the dealer breaks. The two hands are then compared. If the player's hand is greater than the dealer's hand, but less than or equal to 21, the machine will go into the win condition.

If the player's hand is equal to the dealer's, the machine will either return the player's bet or go into the lose condition. If the player's hand is less than the dealer's and less than 21, or the player busts (exceeds 21), the machine will go into the lose condition. If the dealer's hand with two cards is 21 (Blackjack) then the machine will go into the lose condition.

WIN CONDITION

If the player has beaten the Dealer's hand the hopper will pay out two for one bet (five for two for Blackjack on some machines) and the amount of coins will be incremented in the box above **WINNER PAID** on the screen. The machine will then return to the idle mode with **INSERT COIN** flashing on the screen.

LOSE CONDITION

When the player has busted (exceeded 21) or lost to the dealer's hand, the machine will return to the idle mode.

GAME INSTRUCTIONS - LIVE 21

Player switches are DEAL, HIT, STAND, DOUBLE, SURRENDER, INSURANCE and SPLIT.

The game instructions for Live 21 are the same as Regular 21 except as follows:

After the deal is completed the SURRENDER button is illuminated. If the player does not like his cards and does not want to continue the game, he can push the SURRENDER button and recoup half of his bet.

If the dealer's face up card is an ace, the INSURANCE button will illuminate and give the player the opportunity to cover his bet. By pushing the button and inserting the number of coins originally wagered, the player insures against the dealer's hand being a Blackjack or 21.

If the player's two cards match, the SPLIT button will illuminate. The player may choose to split the two cards and play two hands. If the player pushes the SPLIT button, he must insert one to the number originally bet to continue.

After inserting the coin(s) the HIT button must be pushed to play the first hand unless the maximum coins were played, then the first hit would be automatic. When the player decides to stand on the first hand, the player then pushes the STAND button.

The second hand will then be dealt one card. If the player busts (exceeds 21) on the first hand, the first hit to the second hand is dealt automatically. The player may hit again or stand. Wins or losses will be determined for each of the two hands against the dealer's hand.

GAME INSTRUCTIONS - COUNTDOWN 21

Player switches are DEAL, CASH OUT, STAND and DOUBLE.

The game instructions for Countdown 21 are the same as Regular 21, except as follows:

One 52 card deck is used in a series of hands. The deal will be thirty to forty cards before the deck is shuffled. The DEAL button is used for HIT. The player can let his credits ride up to 100 credits. The words **LET IT RIDE?** will appear on the screen and the DEAL and CASH OUT buttons will illuminate after a winning hand. The player can push CASH OUT at any time after any hand to end the game.

GAME INSTRUCTIONS - TWO HAND 21

Player switches are DEAL, HIT, STAND and DOUBLE DOWN.

The game instructions for Two Hand 21 are the same as Regular 21 except as follows:

One to ten coins per hand can be played to start the game. After the first coins are accepted the DEAL button will illuminate. After 10 coins for each hand have been played then the deal will be automatic.

The cards are dealt alternately between the three hands starting with the first player hand and then to the second and finally to the dealer. An arrow appears when it is time to hit or stand, first over the first hand until player stands or busts, then over the second hand.

The player may DOUBLE DOWN on the first two cards on either hand. The player plays his first hand through like Regular 21 then the second hand is played. After the

second hand has been played then the dealer's hand will be played as in Regular 21.

GAME INSTRUCTIONS - IN BETWEEN

Player switches are DEAL and DRAW.

One to ten coins can be played to start the game. After the first coin has been accepted **GOOD LUCK** will appear on the screen and the DEAL button will illuminate.

Each time a coin is played **COIN ACCEPTED** will flash on the screen **INSERT COIN** will continue to flash on the screen until the maximum number of coins are played or the DEAL button is pushed. After the tenth coin the deal is automatic.
Two cards are dealt face up from one 52 card deck. After the first two cards are dealt, the DRAW button will illuminate and the word **RAISE** will appear on the screen. The player then has the opportunity to increase the wager by inserting more coins. If the player chooses not to raise, the DRAW button must be pushed and the third card will be dealt between the first two.

If the first two cards dealt have no spread (4 and 5) or they match (3 and 3), then the deal for the third card will be automatic and there is no opportunity to raise the bet.

WIN CONDITION

If the third card is 'in between' the first two, the hopper will pay out according to the spread of the first two cards. the words **WINNER PAID** will appear on the screen and the amount paid out by the hopper will be incremented on the screen.

If the first two cards had no spread (i.e. 4 & 5), the original bet will be returned if the third card matches one of the first two. If the first two cards match and the third card matches, then the hopper will pay out a bonus according to the paytable.

LOSE CONDITION

If the third card is outside the first two cards, then the words **GAME OVER** will appear on the screen and the machine will return to the idle mode with **INSERT COIN** flashing on the screen.

If the first two cards had no spread and the third card did not match either of them, the machine will return to the idle mode. If the first two cards matched and the third card did not, then the machine will return to the idle mode.

GAME INSTRUCTIONS - REGULAR SLOT

One to three, or one to five, coins can be played to start the game. After the first coin is accepted the handle can be pulled to start the game. The **INSERT COIN** message will continue to flash on the screen until the handle is pulled or the maximum number of coins have been played. When the desired number of coins have been accepted and the handle is pulled the reels will start to spin on the screen much like a mechanical slot machine. The reels will stop from left to right.

WIN CONDITION - HOPPER PAY

A win condition is any one of the winning combinations shown on the paytable. When a win condition occurs the word **WIN** will flash on the screen. The message **WINNER PAID** will appear on the screen and the number of coins will be

incremented under the message as they are paid out by the hopper. After the win has been paid, the **INSERT COIN** message will appear on the screen and the machine will return to the idle mode.

WIN CONDITION - HAND PAY

A "hand pay" condition occurs when the amount won is in excess of the maximum hopper pay. When a large jackpot is hit the words **JACKPOT** and **CALL ATTENDANT** will flash alternately on the screen and the bell and jackpot light will come on. The machine will lockout until the jackpot has been paid and the game reset by authorized personnel.

The game is reset by turning the jackpot key clockwise. Refer to Section V for switch information. When the machine has been reset the bell and jackpot light will go off, the win messages will disappear from the screen and the machine will return to the idle mode.

LOSE CONDITION

If no win occurs on a game the **INSERT COIN** message and any attract messages will appear on the screen and the machine will have returned to the Idle mode.

GAME INSTRUCTIONS - CREDIT SLOT

Player switches are CASH OUT, BET MAX COINS,BET 1 COIN and START.

The game instructions for Credit Slot are the same as for Regular Slot except for as follows:

One to three coins or credits can be played to start the game. The game can be started by pulling the handle or pushing the START button. The winnings will be incremented on the screen as credits. The CASH OUT button must be pushed to collect the winnings.

GAME INSTRUCTIONS PROGRESSIVE SLOT

The game instructions for Progressive Slot are the same as Regular Slot except as follows:

WIN CONDITION PROGRESSIVE JACKPOT

When the progressive jackpot symbols have lined up on the progressive jackpot pay line, the player's machine and all others connected to the progressive display unit will lockout until the jackpot is paid and the progressive unit and machine have been reset by the authorized personnel. Refer to the IGT Progressive System Manual for progressive unit reset.

Section IV

SECTION IV
MODULAR COMPONENTS

INTRODUCTION

The following information is provided to give basic descriptions, functions, removal/installation instructions, adjustments, and functional checks of the major components of the Fortune I Series machine.

For more detailed information on the circuit boards and electronics, refer to the IGT 8039 Tester Manual or contact IGT Customer Service. A complete set of schematics and a wiring diagram are included in the Appendix of this manual.

MONITOR ASSEMBLY

The monitor assembly consists of a cathode ray tube (CRT), chassis and wire harness. The monitor is the primary output for the microprocessor. The monitor screen is used for the game cycle and the Statistical Display mode.

MONITOR REMOVAL/INSTALLATION

To remove the monitor assembly, proceed as follows:

1) Turn the main power to the machine OFF. See Figure 4-1.

DANGER

HIGH VOLTAGE exists in any monitor even when the **POWER IS DISCONNECTED.** DO NOT touch electrical parts of the CRT yoke with your hands or with metal objects in your hands. See Figure 4-5.

2) Unplug the 15 pin Molex connector that is located under the monitor on the bottom of the video display shelf. Refer to Figure 4-2.

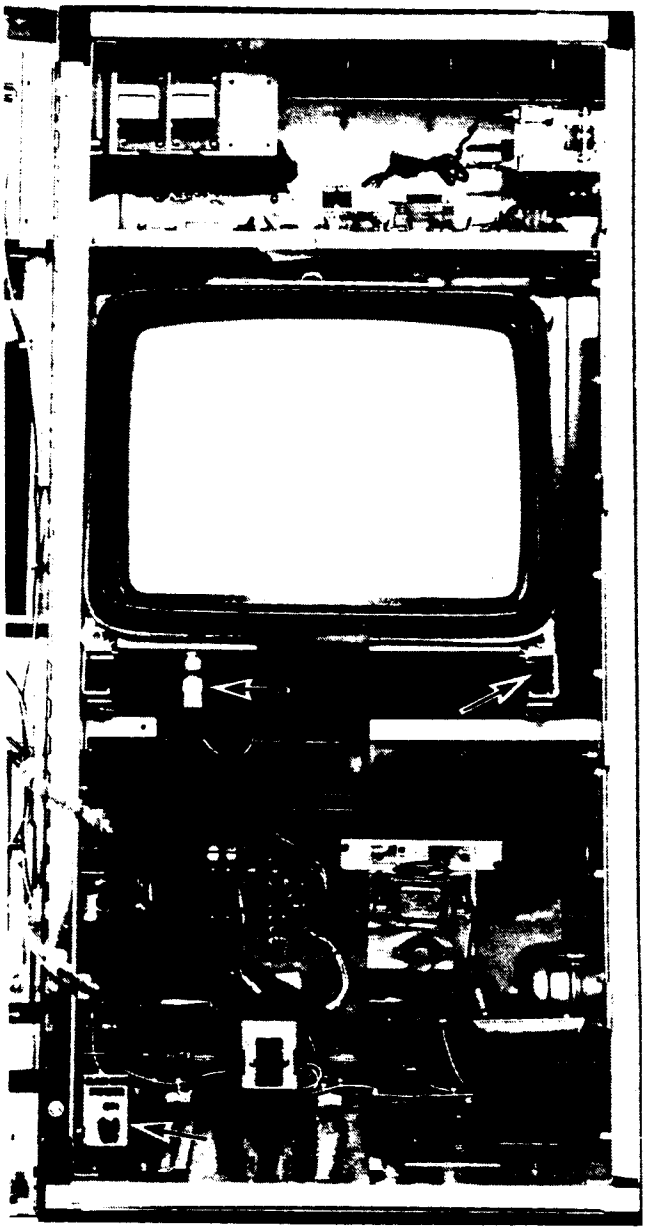


Figure 4-1
Location of Main Power Switch, Monitor Connector and Monitor Rails in Cabinet.

Figure 4-2
Monitor Plug

3) Grasp each side of the monitor assembly by the rails and gently pull forward and slightly upward.

4) Move hands back on the rails to balance the monitor as it is removed from the machine. Refer to Figure 4-3.

To replace the monitor, proceed as follows:

1) Turn the main power to the machine OFF.

2) Grasp the monitor assembly on each side by the rails.

3) Tilt the front of the monitor assembly slightly upward and place back ends of the rails under the guides on the video display shelf.

4) Gently slide the monitor assembly back into the cabinet until it stops in place. See Figure 4-4.

CAUTION

Because of the angle of the monitor shelf and the edge on the monitor rails, use caution when replacing the monitor assembly to avoid possible injury to the hands.

5) Reconnect the 15 pin molex plug on the bottom of the monitor assembly.

Figure 4-3
Monitor Removal

Figure 4-4
Monitor Installation

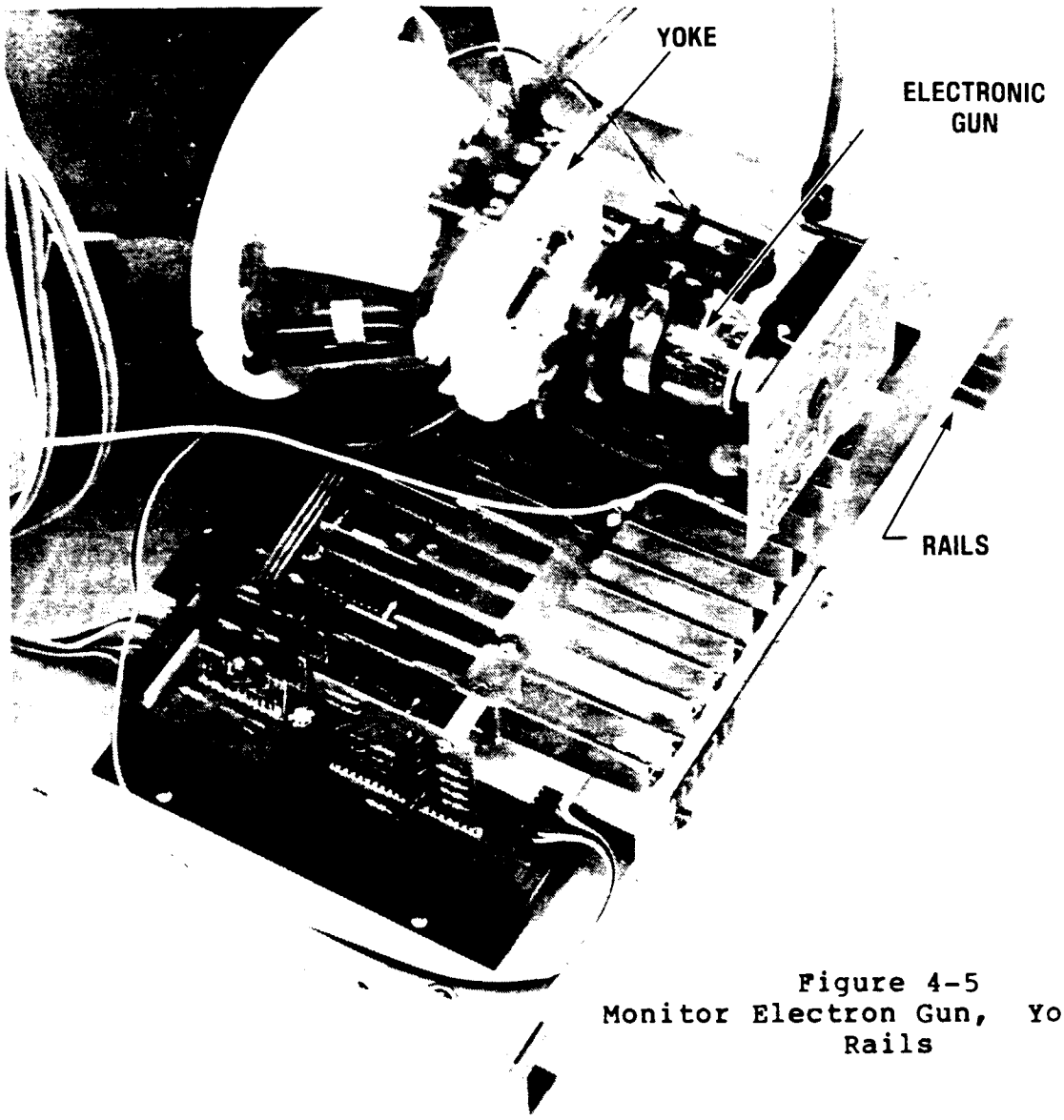


Figure 4-5
Monitor Electron Gun, Yoke and Rails

MONITOR ASSEMBLY - ADJUSTMENTS

The following information describes various adjustments for the monitor assembly.

CAUTION

Use only one hand when working on any monitor while the **POWER IS ON OR CONNECTED.**

RGB MONITOR ADJUSTMENTS

Refer to Figure 4-6 for the location of the adjustment potentiometers on the RGB monitor.

COLOR ADJUSTMENTS

The color adjustments are made with the three pots on the top right hand side of the monitor.

1) Put the mode switch in the set up position. A thin line will appear across the center of the screen.

2) Turn the three color control pots (red, green and blue) fully counterclockwise until NO LINE appears on the monitor.

3) Increase the RED by turning the red control pot clockwise until a RED LINE is just visible on the monitor.

4) Increase the GREEN by turning the green control pot clockwise until the RED LINE on the monitor turns YELLOW.

5) Increase the BLUE by turning the blue control pot clockwise until the YELLOW LINE turns WHITE.

6) Return the mode switch to the normal position.

NOTE

If one of the colors produces a separate line above or below the RED line, the monitor needs convergence adjustment. Contact IGT Customer Service and DO NOT ATTEMPT to make any further test or adjustment.

COLOR GAIN

The COLOR GAIN control is the pot located to the left of the mode switch and is for minor adjustments only.

Clockwise adjustment will increase the video brightness, while counterclockwise adjustment will decrease the video brightness.

HORIZONTAL ADJUSTMENT

The horizontal alignment can be adjusted by turning the pot located to the left of the mode switch.

Clockwise adjustment will shift the picture to the left of the screen, while counterclockwise adjustment will shift the picture to the right.

VERTICAL SIZE AND LINEARITY

The vertical size and linearity are the two pots located to the extreme left of the mode switch.

The left hand pot controls the vertical size of the picture. Clockwise adjustment of this pot will enlarge the size of the picture, while counterclockwise adjustment will cause the picture to shrink.

The right hand pot controls the vertical height or linearity of the picture (top to bottom video alignment). Clockwise adjustment of this pot will shift the picture toward the bottom of the screen, while counterclockwise adjustment will shift the picture toward the top of the screen.

ELECTROHOME MONITOR ADJUSTMENTS

Refer to Figure 4-7 for the location of the adjustment pots on the Electrohome monitor.

COLOR ADJUSTMENTS

To adjust the color, turn the three color bias controls on the top of the monitor to optimize color definition.

HORIZONTAL CENTER

The horizontal centering can be adjusted by turning the thumb wheel pot located to the right of the color controls.

Clockwise adjustment of this pot will shift the picture to the left of the screen, while counterclockwise adjustment will shift the picture to the right.

VERTICAL CENTER

The vertical center control pot is located to the immediate left of the horizontal center pot. The

picture can be vertically centered by adjusting the pot with a small screwdriver.

Clockwise adjustment of this pot will shift the picture toward the top of the screen, while counterclockwise adjustment will shift the picture toward the bottom of the screen.

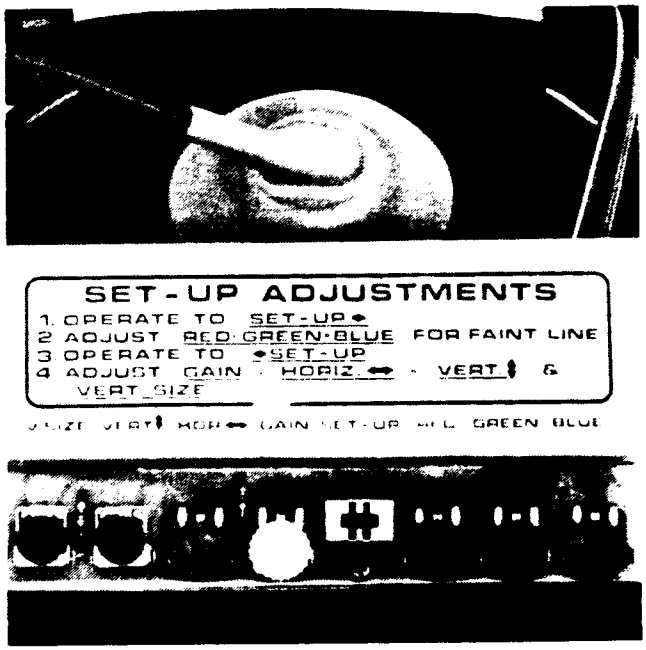


Figure 4-6
RGB Monitor Adjustment Pots

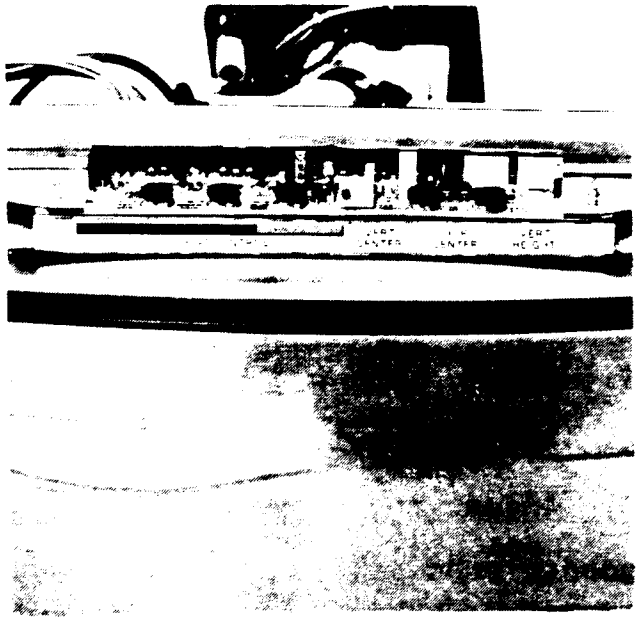


Figure 4-7
Electrohome Monitor Adjustment Pots

VERTICAL SIZE

The vertical size control pot is located to the right of all the controls and adjusts the vertical size of the picture.

Clockwise adjustment of this pot will enlarge the size of the picture, while counterclockwise adjustment will cause the picture to shrink.

HOPPER

The hopper is an electro-mechanical assembly which holds and counts the coins paid out by the machine. The hopper weight switch activates the coin diverter mechanism. The mechanical operation of the assembly is controlled by the electronics of the 8039 system.

HOPPER REMOVAL/INSTALLATION

To remove the hopper assembly, proceed as follows:

1) Release the hopper lock, which is located at the base of the hopper. See Figure 4-8.

2) Grasp the front hopper mounting bracket with your left hand and the hopper bowl with your right hand.

NOTE

If the hopper bowl is full of coins tilt it up slightly to prevent the coins from spilling out.

3) Firmly pull the hopper assembly out of the machine. As the hopper is removed, support the hopper base with your left hand.

To install the hopper assembly, proceed as follows:

1) Hold the hopper bowl with the right hand tilting it slightly upward. Place the left hand under the hopper on the base.

2) Slide the rails on the hopper base under the guides in the cabinet and push the hopper back in the cabinet. Make sure that it is securely connected to the hopper socket in the cabinet.

3) Secure the hopper lock and make sure that it is under the guide rail in the cabinet.

HOPPER - DISASSEMBLY/ASSEMBLY INSTRUCTIONS

This section describes the procedure for disassembly and assembly of the hopper for motor replacement.

To disassemble the hopper, proceed as follows:

1) Remove the four Phillips head screws that secure the hopper bowl in place and remove the bowl.

2) Loosen the two screws holding the coin cover and knife.

3) Loosen set screw on top of hopper.

4) Back off brake screw approximately one-half inch.

5) Remove pinwheel assembly.

6) Desolder the AC leads on the motor.

7) Remove the four flat head screws holding the motor in place. and remove motor. (Refer to Section VII).

Figure 4-8
Hopper Removal

To assemble the hopper with a new motor, proceed as follows:

1) Insert the four flat head screws that hold the motor in place.

2) Solder the AC leads on the terminals of the motor.

NOTE

Be sure that the new motor has the drive-pin in the shaft and that the pin does not scrape the housing as it turns.

3) Replace the pinwheel.

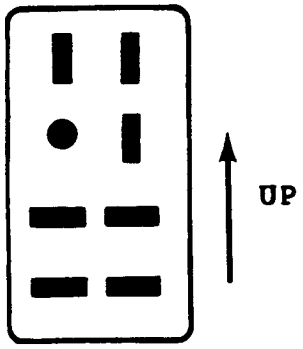
4) Replace bowl.

5) Adjust the hopper.

HOPPER PLUG

If it becomes necessary to replace the hopper plug, make sure that is correctly oriented to

align with the receptacle in the cabinet. Refer to Figure 4-9 for proper alignment.



LOOKING INTO
THE CABINET
Figure 4-9
Hopper Receptacle

HOPPER ADJUSTMENTS

The following adjustment procedures refer to the side eject type hopper.

TOP PINWHEEL BEARING (PIN TYPE)

1) Be sure that the vee edge on the pinwheel is in the groove of the bottom two pinwheel bearings.

2) Tighten the top bearing set screw with a 3/32" allen wrench, making sure that the pinwheel vee edge fits into the bearing above. Back off the set screw 1/4 turn after tightening. Depress the motor brake and rotate the pinwheel to check for smooth operation.

3) If it is necessary to space the pinwheel surface out to be flush with the wheel housing casting surface, use a shim (refer to Section VII, Replaceable Parts List, for shim part number). Place shim on the pin between the top bearing and the wheel housing casting as required.

TOP PINWHEEL BEARING (ECCENTRIC TYPE)

1) Be sure that the vee edge on the pinwheel is in the groove of the bottom two pinwheel bearings.

2) Tighten the top bearing set screw with a 3/32" allen wrench so that the eccentric can be turned with a flat bladed screwdriver.

3) Turn the eccentric counterclockwise, making sure that the pinwheel vee edge fits into the bearing groove.

4) While holding the bearing snugly against the pinwheel with a flat bladed screwdriver, tighten the set screw. Depress the motor brake and rotate the pinwheel to check for smooth operation.

5) If it is necessary to bring the pinwheel surface out to be flush with the wheel housing casting surface, push the eccentric toward you. Tighten in the desired position.

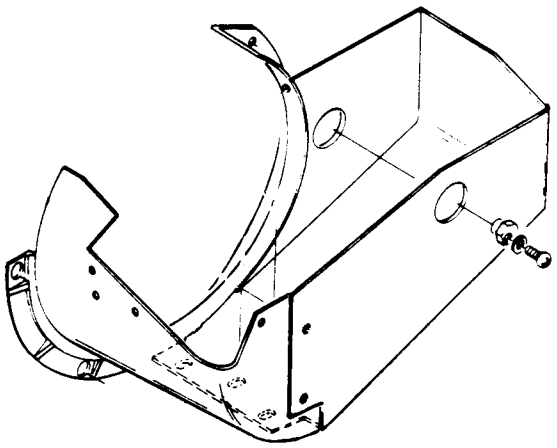


Figure 4-10
Hopper Bowl Eccentric Adjustment

BOWL ECCENTRIC

1) Loosen the screw holding the bowl eccentric located on the right side of the hopper bowl flange with a Phillips screwdriver.

2) Turn the eccentric with a 7/16" open end wrench until there is an even, minimum clearance between the hopper bowl and the edge of the pinwheel.

3) Holding the eccentric in place with the wrench, tighten the retaining screw.

KNIFE ADJUSTMENT

1) Loosen knife retaining screws with a Phillips screwdriver.

2) Depress the motor brake and rotate the pinwheel to find the high point on the shelf wheel, if any. Adjust to this point.

3) Hold knife blade assembly to the top of the shelf wheel.

4) Knife may need to be bent inward (toward the pinwheel) so that the knife tip is flat against the pinwheel.

5) Tighten knife retaining screws. Rotate the pinwheel to check for smooth operation.

COIN WIPER

1) Loosen the coin wiper retaining screws with a Phillips screwdriver.

2) Place a coin on the shelf wheel under the tip of the coin wiper.

3) Position the tip of the coin wiper to just touch the edge of the coin.

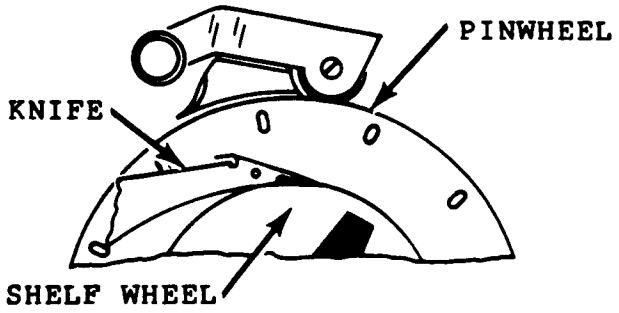


Figure 4-11
Knife Adjustment

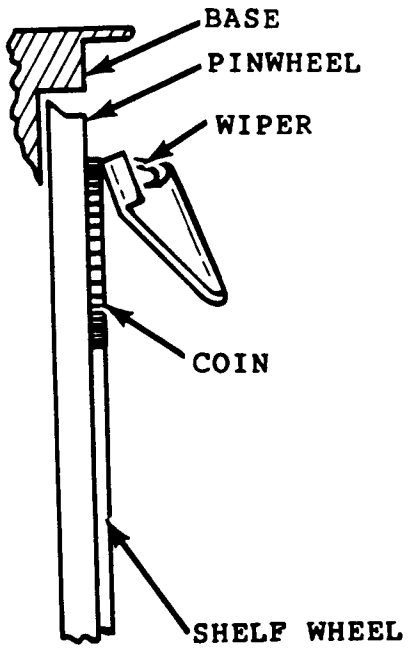


Figure 4-12
Coin Wiper Adjustment

4) Tighten retaining screws, using care not to change the position of the coin wiper.

BOWL WEIGHT SWITCH

1) Fill hopper bowl with desired number of coins (dependent on denomination).

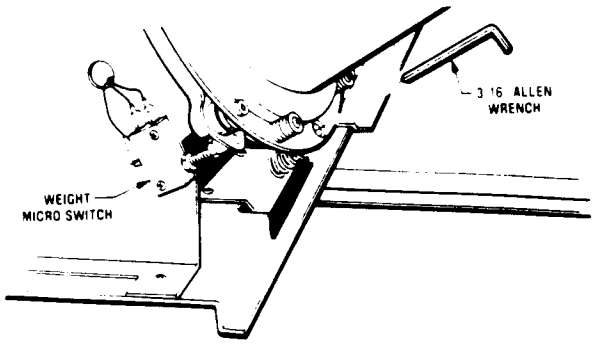


Figure 4-13
Hopper Weight Adjustment

2) Turn the set screw, centered under the hopper bowl, clockwise with a 3/16" allen wrench until the microswitch plunger is in the up position. See Figure 4-13.

3) Adjust the switch activating screw (attached to the wheel housing casting) by loosening the 3/8" jam nut and turning the screw head with a 5/16" wrench until there is no clearance between the screw head and the microswitch plunger. Tighten the jam nut while holding the screw head in position.

4) Very gradually back off the set screw, centered under the hopper bowl, counterclockwise until the microswitch clicks into the down position. The hopper is now set at the desired capacity. See Figure 4-10.

COIN COUNTING SWITCH

See Figures 4-14a, 4-14b, 4-14c.

1) As the coin passes under the coin counting roller on 50¢ and dollar hoppers, the switch should click on at the 11:00 position and click off at the 1:00 position. On 5¢, 10¢ and 25¢ hoppers, the switch should click on when the coin is in the 10:00 position and click off when the coin is in the 2:00 position.

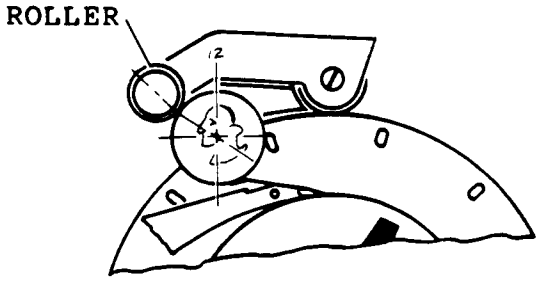


Figure 4-14a
Counting Switch Adjustment

2) Hold the nylon screw which activates the coin counting switch with a screwdriver and loosen the jam nut with a 5/16" open end wrench.

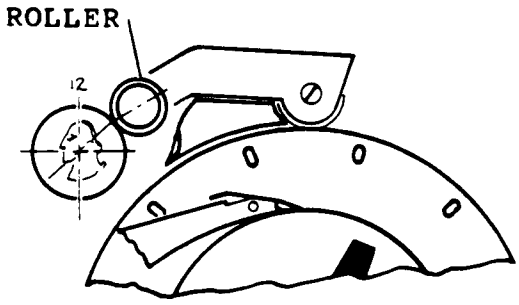


Figure 4-14b
Counting Switch Adjustment

3) Turning the nylon screw clockwise will activate the switch sooner and deactivate it later, providing a longer sweep over the coin. Turning the screw counterclockwise will activate the switch later and deactivate it sooner, providing a shorter sweep over the coin.

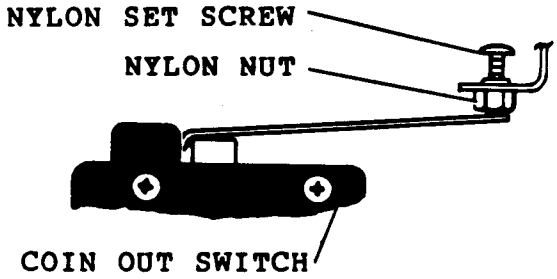


Figure 4-14c
Counting Switch Adjustment

4) Hold the screw in place with a screwdriver and tighten the jam nut with the wrench.

SLOT HANDLE MECHANISM

SLOT HAND MECHANISM DESCRIPTION/ FUNCTION

The slot handle mechanism is located on the right hand wall of the cabinet and is a mechanical ratchet assembly that simulates the reel spin.

The handle mechanism has one switch which indicates the handle has been fully extended, which in turn activates the reel spin. The handle mechanism has two dash pots to absorb the shock of hard handle pulls or returns.

SLOT HANDLE MECHANISM REMOVAL/ INSTALLATION

To remove the slot handle mechanism, proceed as follows (Refer to Section VII):

1) Turn the main power to the machine OFF.

2) Stuff a shop rag into the coin overflow bin to prevent parts from falling into the slot stand.

3) Unplug the wire harness from the switch mounted on the base plate.

4) Remove the spring from the hammer post and the base plate post.

5) Remove the spring with the shrink tube from the action plate post and base post.

6) Remove the two #1/4-20 socket head screws which hold the slot handle brace to the base plate posts.

7) Remove the 3/8-16 button head socket cap screw, ground connector and helical washer from the handle shaft.

8) Remove the two dashpots from the base plate, and the hammer and action plates.

9) Remove the hammer, spacer and action plate from the handle shaft.

10) Remove the handle arm assembly by sliding it out through the bearing.

11) Remove the base plate from the inside of the cabinet. The base plate is attached with three nuts to the carriage bolts which hold the outside ring.

To install the slot handle mechanism, proceed as follows:

1) Turn the main power to the machine OFF.

2) Stuff a shop rag into the coin overflow bin to prevent parts from falling into the slot stand.

3) Fit the base plate assembly inside the machine and line up the mounting holes. Make sure there are no obstructions preventing a flush mount.

4) Insert the bearing and the ring into the hole in the cabinet.

5) Insert the three carriage bolts through the ring and the cabinet hole spacers.

6) Install the spring washer over the bearing exposed to the inside of the cabinet.

7) Take the base plate assembly and insert it over the bear-

ing exposed to the cabinet interior. Orient the mounting holes in the base plate to the carriage bolts and secure using the three special nuts and removable thread locking adhesive (Loctite #242 or equivalent recommended).

8) Preassemble the screw, ground connector and helical washer and set aside.

9) Preassemble the action plate assembly, bushing spacer and hammer, and set aside.

10) Lubricate the inside of the bearing with a molybdenum disulfide based grease (Molykote or equivalent recommended).

11) Insert the handle arm assembly through the bearing.

12) Install the dashpot assembly and retainer onto the hammer post.

13) Install the other dashpot assembly and retainer onto the action plate assembly post.

14) Orient the preassembled action plate assembly to the handle arm assembly and to the base plate ratchet pawls. Place the spacer and hammer assembly on the shaft and connect the dashpots to the base plate.

15) Using the screw and washer preassembled in Step 9, place a small amount of removable thread locking adhesive (Loctite #242 or equivalent recommended) on the screw and secure the action plate assembly and the hammer assembly to the handle assembly.

16) Install the brace to the base plate assembly with two screws and a small amount of removable thread locking adhesive (Loctite #242 or equivalent recommended). Check the dashpot assemblies by hand, making sure they do not bind anywhere through complete travel.

17) Install the spring to the hammer and the base plate post.

18) Install the spring with the shrink tube to the action plate post and to the base plate post.

19) Plug the leads from the wire harness into the switch on the base plate.

20) Lubricate all pivot points including the contact area between the bearing and the handle arm shaft with a heavy film of high strength spray lubricant (Tri-Flow or equivalent recommended). Lube all ratchets and pawls with a molybdenum disulfide based grease (Molykote or equivalent recommended).

21) Pull the handle through several complete cycles to insure that no binding exists.

22) Remove rag from coin overflow bin. Turn on the machine power and test for proper operation.

SLOT HANDLE MECHANISM ADJUSTMENTS

This section provides information for proper adjustments and basic operation checks for the slot handle mechanism.

1) To adjust the microswitch, pull the handle to the "bottom out" position and hold in place. Turn the microswitch

plate until the switch contacts "click". Lock the adjustment in place with the switch adjustment screw and release the handle.

2) The microswitch will not activate if the handle is not fully returning. If this occurs, check the following:

A) Check for binding in the damper and lubricate with a high film strength spray lubricant (Tri-Flow or equivalent recommended).

B) Clogged orifice in the damper. Clean orifice with a .Ø23 diameter #74 twist drill.

C) Check for binding in main bearing pin and lubricate with a high film strength spray lubricant (Tri-Flow of equivalent recommended).

3) If the handle is returning properly, but the reels are still not spinning correctly, check switch adjustments, Step 1.

4) If the cam is not engaging properly into the hammer, proceed as follows:

A) Lubricate all moving parts with a high film strength spray lubricant (Tri-Flow or equivalent recommended).

B) Check for binding of roller pin against action plate.

C) Check for burr on end of roller pin.

D) Check for proper orientation of torsion spring.

E) Check for wear on roller. If any wear is visible, replace part.

F) Check for binding of ground connector washer against hammer.

G) Check damper for binding or clogged orifice.

H) Check wear caused by hammer on stop pin of base plate. If excessive wear is causing the hammer not to engage with the cam roller, replace entire handle assembly.

COIN ACCEPTOR ASSEMBLY REMOVAL/-INSTALLATION

To remove the coin acceptor assembly, proceed as follows:

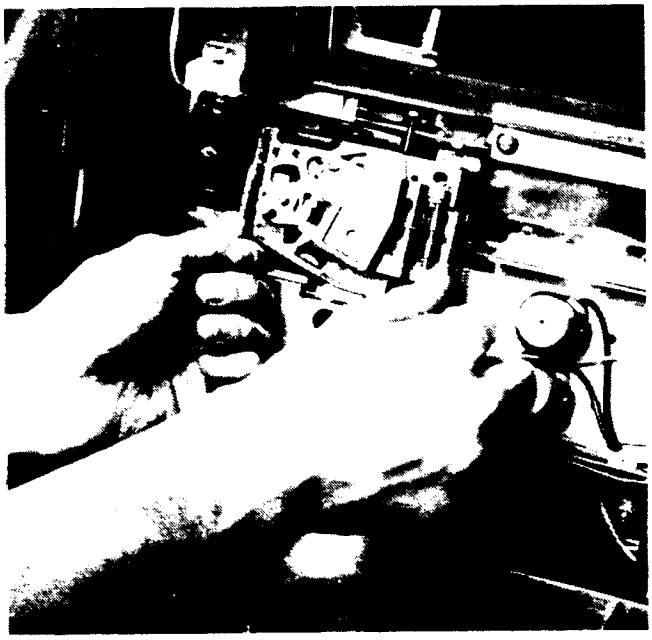


Figure 4-15
Coin Mechanism

1) Release the locks on the upper pins on the assembly.

2) Pull out on the top of the coin acceptor and up on the bottom, and remove the assembly.

To install the coin acceptor assembly, proceed as follows:

1) Place bottom pins on the coin acceptor in the guides on the channel on the door.

2) Hold the reject plunger down and snap the top of the coin acceptor in place.

LIGHTING

This section describes removal, installation and bulb replacement for the IGT Fortune I Series machines.

UPPER LIGHTS

To remove the fluorescent lights in the upper portion of the door, proceed as follows:

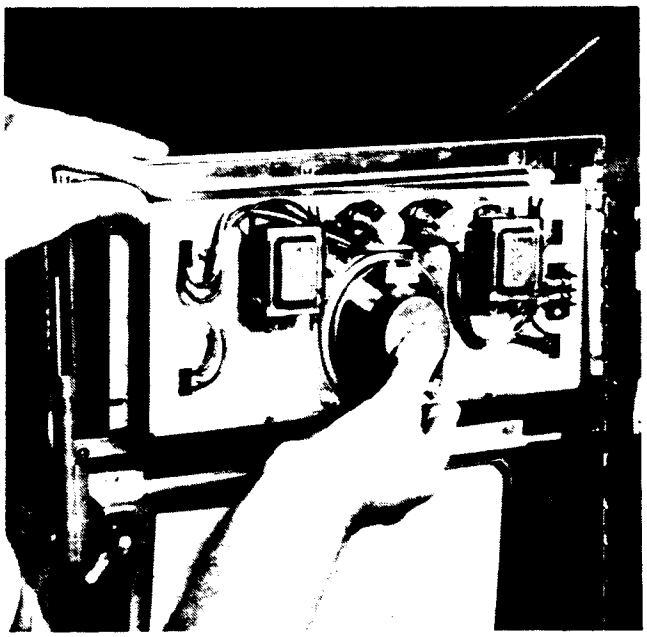


Figure 4-16
Upper Light Assembly Removal

NOTE

Before replacing a suspected bad fluorescent light, check the starter.

1) Remove the two Phillips screws on the left side of the upper lighting assembly panel. See Figure 4-16.

Figure 4-17
Upper Light Bulb Replacement

2) Loosen the two Phillips screws on the right side of the upper lighting assembly panel.

3) Holding the panel with both hands, gently swing out the left portion of the assembly and slide the right portion away from the loose screws.

4) Turn the light 1/2 turn or until the dual pins on the light are parallel with the opening in the lamp holder. See Figure 4-17.

5) Swing one side of the light out and extract other side from holder.

To install the fluorescent light, proceed as follows:

1) Place the far end of the light in the holder first, and then place the other end of the light in the holder slot and turn to lock in place.

2) Slide the right hand side of the panel under the two loosened Phillips screws.

3) Align holes in left hand side of panel, replace the two screws and tighten the two screws on the right hand side of the panel.

4) Turn on main power in the machine, verify that the replaced light is illuminating.

VIDEO LIGHT

To remove the video fluorescent light in the door, proceed as follows:

1) Hold the guard and remove the upper and lower screws in the assembly. See Figure 4-18.

2) Turn the lamp assembly down and remove and replace the fluorescent light. See Figure 4-19.

To replace the assembly, follow the reverse procedure.

Figure 4-18
Monitor Light Assembly Removal

Figure 4-19
Monitor Light Bulb Replacement

LOWER LIGHTS

To remove the fluorescent lights in the lower part of the door, proceed as follows:

1) Remove coin acceptor assembly.

2) Use a 5/16 socket to remove the esna nut from the upper left portion of the light assembly.

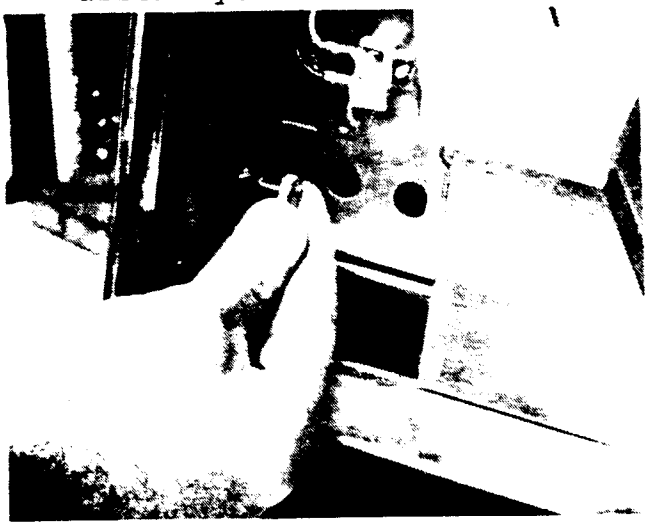


Figure 4-20
Lower Light Assembly Removal

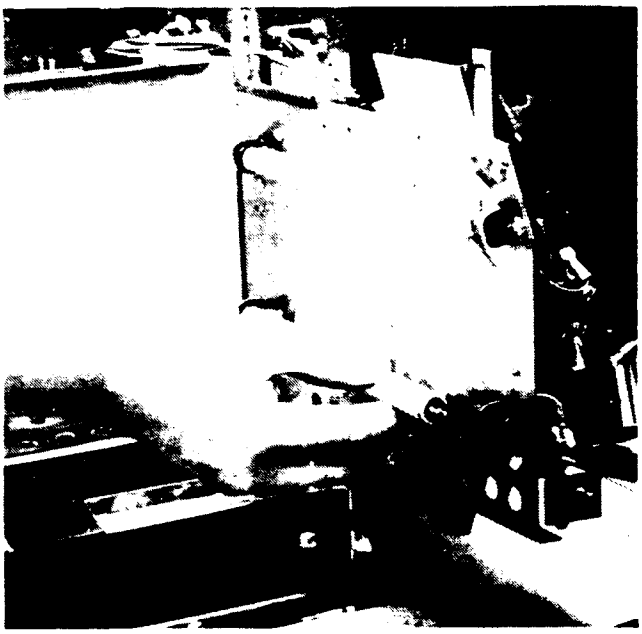


Figure 4-21
Lower Light Bulb Replacement

3) Pull out the spring pin that is located on the lower left side of the light assembly. See Figure 4-20.

4) While holding the spring pin out, swing the lamp assembly to the right to reach the lights.

NOTE

Hold the light panel secure while it is swung out.

5) Remove and replace the lamp. See Figure 4-21.

To replace the lower light assembly, proceed as follows:

1) Hold the spring pin out and swing the lower light assembly back in place.

2) Align the upper portion of the light assembly and replace the esna nut.

3) Replace the coin acceptor assembly.

NOTE

Make sure that the coin acceptor mechanism assembly is aligned with the coin in chute.

PUSHBUTTON SWITCH LIGHTS

Some of the player pushbutton switches are lighted when that function can be used.

To replace the bulb proceed as follows:

1) Open the door.

2) Turn the machine power off.

3) Use a 1/16" diameter rigid wire and insert it through the hole on the bottom of the switch to release the cap on top of the switch.

4) Push and turn the bayonet type bulb to remove.

To install the replacement bulb proceed as follows:

1) Insert the bulb into the socket and turn to engage the bayonets.

2) Replace the switch cap, legend right reading, and gently push down until it snaps in place.

3) Turn the machine on.

4) Close and lock the door.

SWITCHES

This section provides a list of all switches and a description of the function of each for the Fortune I Series machines.

JACKPOT RESET/STATISTICAL DISPLAY MODE KEY SWITCH (ALL GAMES)

This multi-functional key switch is located on the upper right hand side of the machine cabinet next to the cooling fan. Turn the key clockwise and returning it to center to reset the machine after a jackpot. Turn the key counterclockwise to put the machine into the Statistical Display mode and turn the key counterclockwise again to exit the Statistical Display mode.

COIN OUT SWITCH (ALL GAMES)

This microswitch is mounted on the hopper and counts the coins as they are paid out by the hopper.

COIN IN SWITCH (ALL GAMES)

This microswitch is mounted on the coin channel assembly and provides coin in count input to the microprocessor upon proper coin entry.

HOPPER WEIGHT SWITCH (ALL GAMES)

This microswitch is mounted on the hopper when the machine is equipped with an encoder/diverter and provides input to the microprocessor for diverter actuation.

POWER ON SWITCH (ALL GAMES)

This toggle switch is mounted inside the cabinet on the lower left side and turns the main power to the machine on and off.

HANDLE SPIN SWITCH (SLOT MACHINES ONLY)

This microswitch is mounted on the handle mechanism on the inside right cabinet wall. It provides input to the microprocessor for reel spin actuation. See Section IV, Handle Mechanism.

PLAYER SWITCHES

These pushbutton switches are mounted on a panel on the front of the door and provide input of player decisions to the microprocessor during a game. They can be tested with the LEDs on the Interface board. Refer to Section III for information on which switch is applicable to which machine, and to Section VI for Self Test information. Each player switch is described as follows:

DEAL SWITCH

The DEAL pushbutton switch is illuminated after the first coin is accepted. The light goes out after the maximum number of coins are accepted or when the button is pushed to deal the cards.

DRAW SWITCH

The DRAW pushbutton switch is used in card games to draw cards from the deck and is illuminated when that function can be used.

DEAL/DRAW SWITCH

The DEAL/DRAW pushbutton switch is illuminated on coin entry and when that function can be used. The light will go out when the button is pushed or when that function cannot be used.

HOLD SWITCHES

These pushbutton switches are used to retain cards in draw poker games. They are not illuminated.

HOLD/CANCEL SWITCHES

These pushbutton switches are multi-function switches that are used to hold cards or cancel held cards in draw poker games. They illuminate when those functions can be used.

CANCEL SWITCH

This pushbutton switch is used to cancel held cards in draw poker games that have HOLD buttons. It illuminates when that function can be used.

YES SWITCH

This pushbutton switch is used to make YES decisions and illuminates when that function can be used.

NO SWITCH

This pushbutton is used to make NO decisions and illuminates when that function can be used.

HIT SWITCH

This pushbutton switch is used to take an extra card, or a "hit", in Blackjack and 21 games, and illuminates when that function can be used.

DOUBLE DOWN SWITCH

This pushbutton switch is used in Blackjack and 21 games to double the player's bet on 10 or 11 and illuminates when that function can be used.

END GAME SWITCH

This pushbutton switch is used to end the game in LUCKY 7 and illuminates when that function can be used.

STAND SWITCH

This pushbutton switch is used in 21 games to stay with the present cards. It illuminates when that function can be used.

SURRENDER SWITCH

This pushbutton switch is used in LIVE 21 to end the game and recoup half of the player's bet and illuminates when that function can be used.

INSURANCE SWITCH

This pushbutton switch is used in LIVE 21 to insure the player's bet when the dealer has an ACE showing and illuminates when that function can be used.

SPLIT SWITCH

This pushbutton switch is used in LIVE 21 when the player is dealt a pair and illuminates when that function can be used.

CASH OUT SWITCH

This pushbutton switch is used on credit machines to collect the player's winnings and illuminates when that function can be used.

BET 1 COIN OR PLAY 1 COIN SWITCH

This pushbutton switch is used on credit machines to wager one coin at a time and illuminates when that function can be used.

BET 10 COINS SWITCH

This pushbutton switch is used to bet 10 coins at a time on credit machines and illuminates when that function can be used.

START SWITCH

This pushbutton switch is used on credit slot machines and can be used to start the reel spin instead of pulling the handle. It illuminates when that function can be used.

CIRCUIT BOARDS

This section describes each of the circuit boards used in the Fortune I Series machines. Schematics of the boards are included in the Appendix of this manual. This section also de-

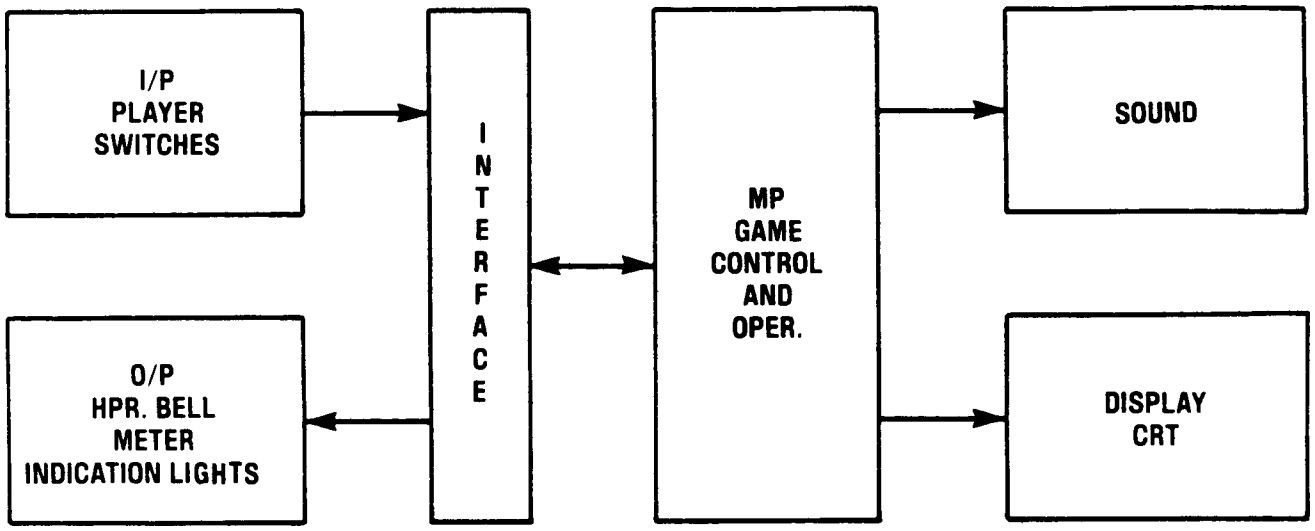


Figure 4-22
System Block Diagram

scribes the basic removal and installation instructions for the boards. See Figure 4-22 for the system block diagram, Figure 4-23 for the functional block diagram.

MICROPROCESSOR BOARD

The Microprocessor board is located in the upper portion of the cabinet, behind the security door. This board contains the game processor chip, which is the central element in the system. All input and output function data for the game operations are implemented under the control of the game program in the game processor memory. See Figure 4 - 24 for the functional block diagram.

The data and certain types of programs are stored in Random Access Memory (RAM) while the game programs are stored in Read Only Memory (ROM) circuitry. The microprocessor performs all the system functions by retrieving the instructions in the memory, processing them and communicating the results via the system input and output ports and the display monitor. The Microprocessor board incorporates the power supply and a battery back up for power failure.

INTERFACE BOARD

The Interface board provides the interface circuitry to connect the input and output to the microprocessor. The output ports permit the Central Processing Unit (CPU) to communicate the results of its processing to the external devices. The input ports enable the CPU to receive information from external sources. The Interface board is mounted inside of the cabinet liner on the lower left hand side.

TONE GENERATOR MODULE

The Tone Generator Module (TGM) provides a wide range of music and sound effects for the system. The sound generators are all under software control. The memory contains the instructions for the CPU for each application's sound or music requirements.

The TGM is located under the monitor shelf, and is mounted on the left rear portion of the shelf.

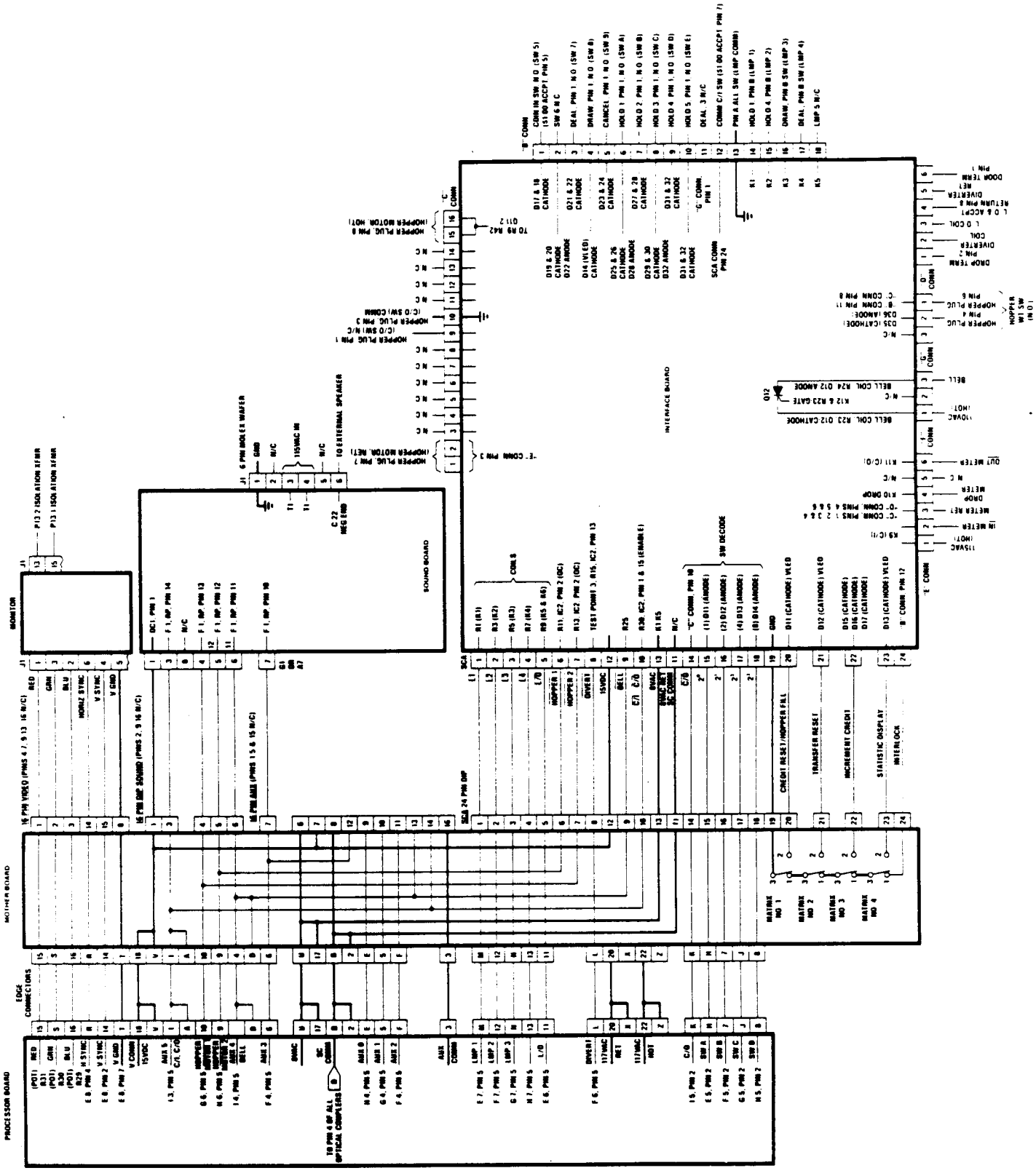


Figure 4-23
Functional Block Diagram
Overall Machine

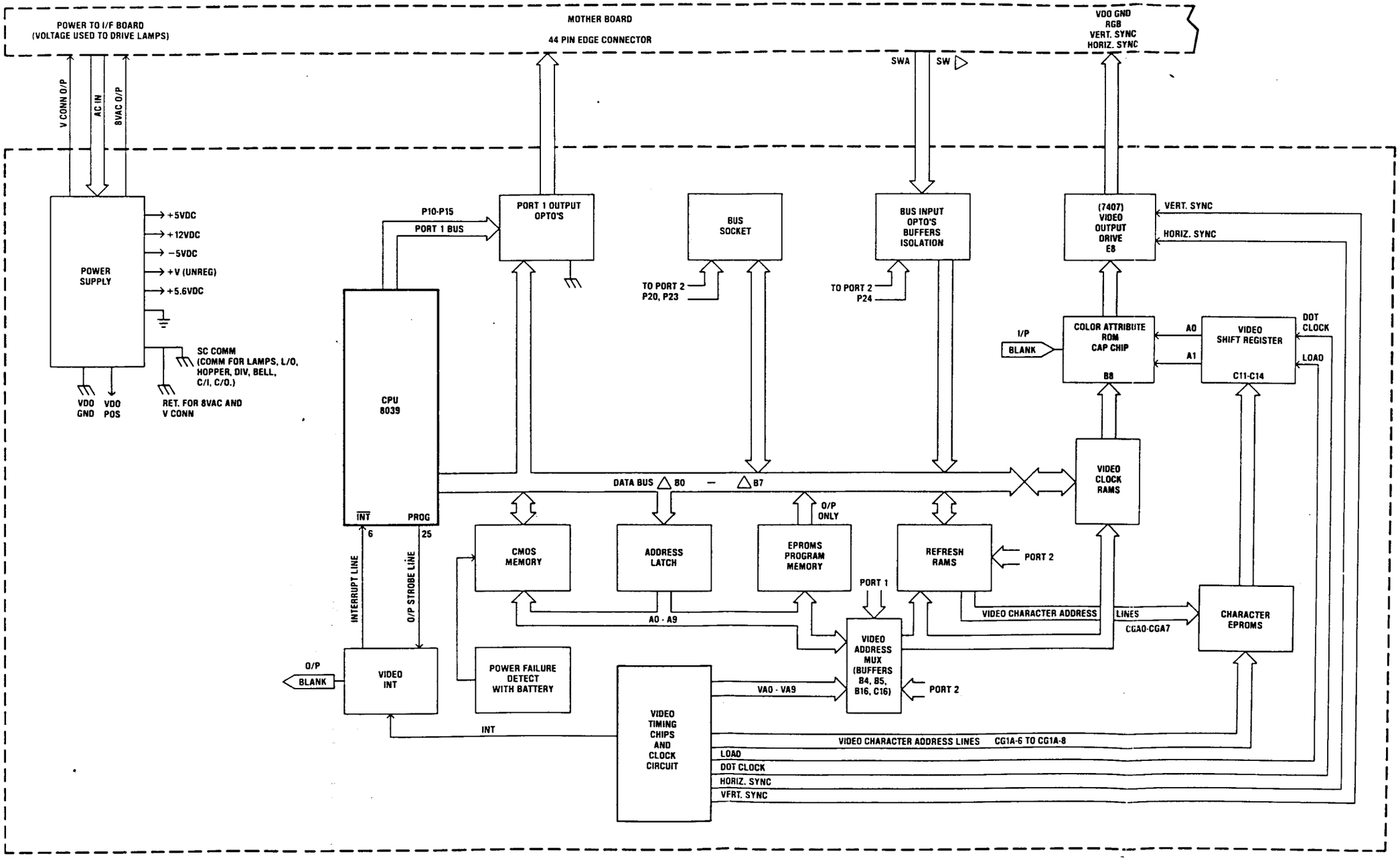


Figure 4-24
Functional Block Diagram
Microprocessor Board

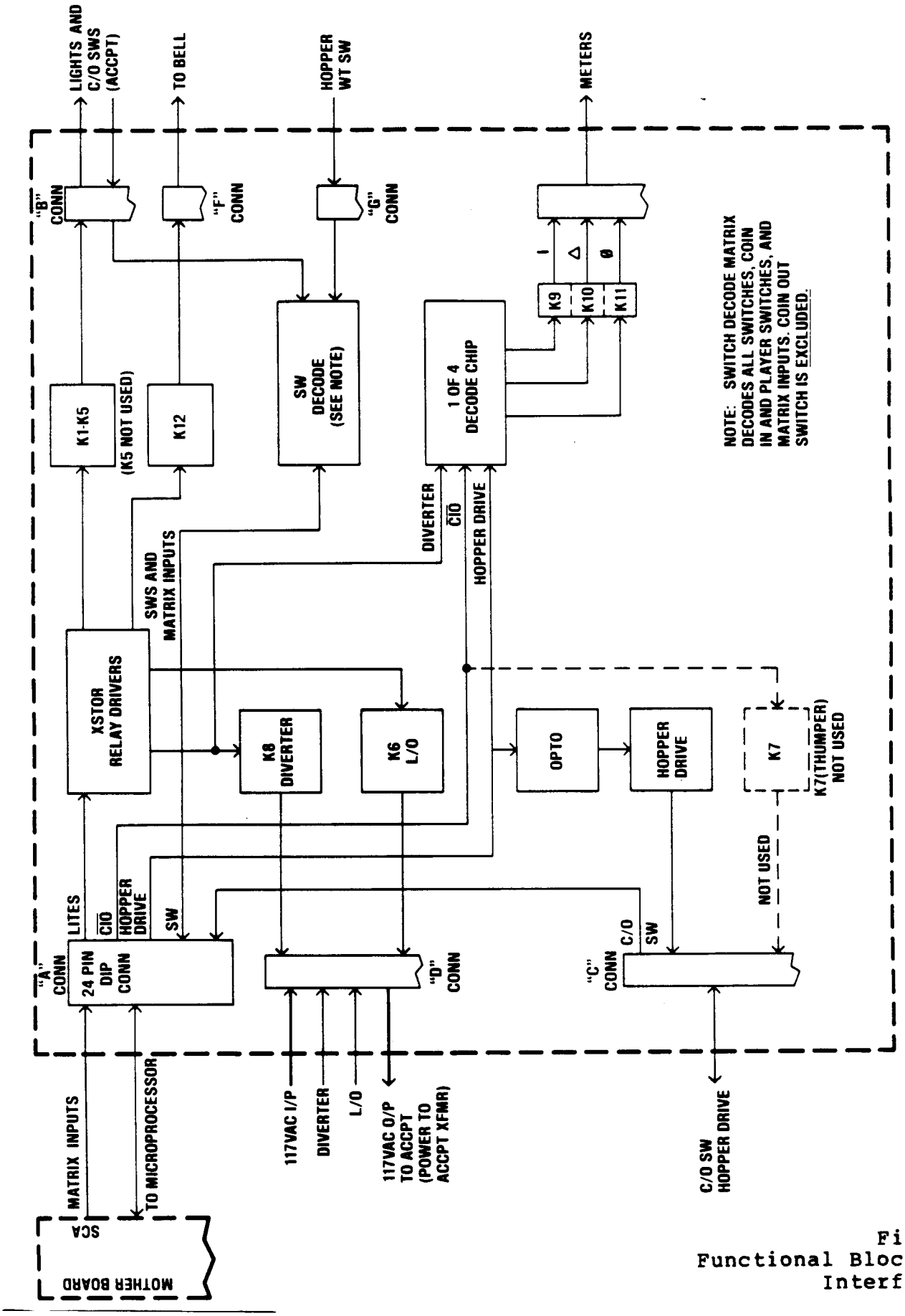


Figure 4-25
Functional Block Diagram
Interface Board

MOTHER BOARD

The Mother board is mounted on the back of the cabinet behind the Microprocessor board assembly and is the distribution center of the machine for inputs and outputs to and from the Microprocessor board. The Mother board also distributes the various regulated power requirements to the other boards.

PROGRESSIVE RELAY INTERFACE BOARD

The Progressive Relay Interface board is used on the Fortune I progressive models to interface the progressive unit with the machine.

The Progressive Relay Interface board is located inside of the cabinet on the lower left hand side, in front of the Interface board.

JACKPOT OR CHANGE LAMP BOARD

The Jackpot or Change Lamp board is used to interface a 2-stage candle with the machine.

When the Jackpot or Change Lamp board is used, it is located on the back of the cabinet behind the monitor, or on the upper right hand side of the cabinet near the fan.

MICROPROCESSOR BOARD REMOVAL/INSTALLATION

To remove the Microprocessor board assembly, proceed as follows:

1) Turn the main power to the machine OFF.

2) Unlock and open the security door, and return the key to the locked position to secure the door latches. See Figure 4-27.

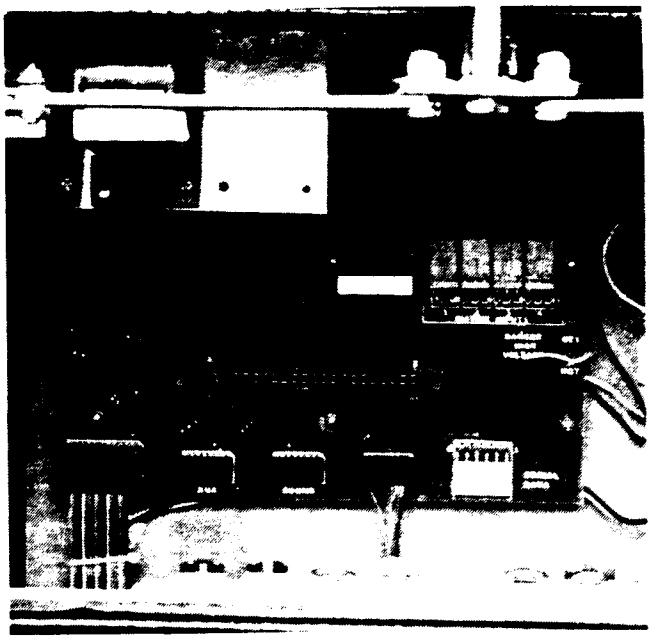


Figure 4-26
Mother Board Location

3) Grasp the Microprocessor board assembly on both sides of the tray and firmly, but carefully, pull the assembly straight out.

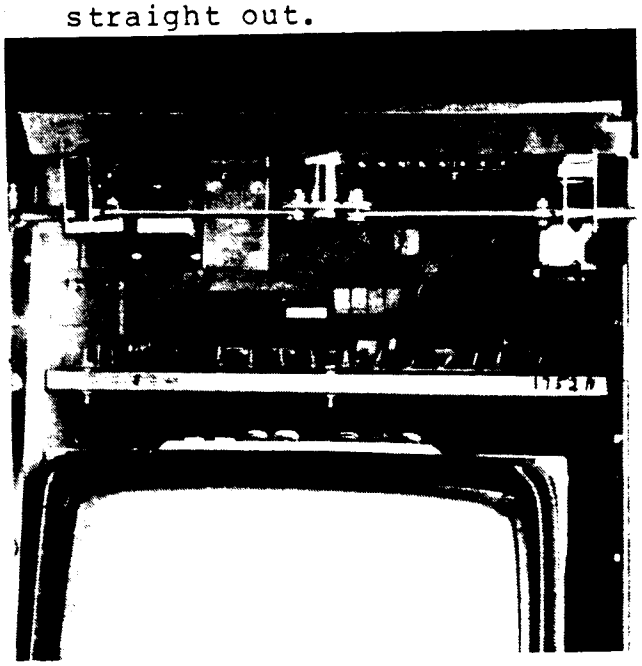


Figure 4-27
Microprocessor Board Location

To install the Microprocessor board assembly, proceed as follows:

1) Place the sides of the tray in the guides on the sides of the cabinet.

2) Align the edge connector on the Microprocessor board with the socket on the Mother board. See Figure 4-26.

3) Firmly push the Microprocessor board assembly in until the guide pins make secure contact with the sockets on the Mother board.

CAUTION

Be certain that the edge connector on the Microprocessor board is in line with the sockets on the Mother board and that the board is pushed straight in. Otherwise serious damage to either the Microprocessor board or the Mother board could result.

4) Release, close and lock the security door.

INTERFACE BOARD REMOVAL/INSTALLATION

To remove the Interface board, proceed as follows:

1) Turn the main power to the machine OFF.

2) Remove the hopper.

3) Unplug the harness connectors from the Interface board.

4) Remove the three nuts and one rubber tip holding the board to the cabinet.

Follow the reverse procedure to install the Interface board.

TONE GENERATOR MODULE REMOVAL/INSTALLATION

To remove the TGM board, proceed as follows:

1) Turn the main power to the machine OFF.

2) Remove the hopper.

3) Unplug the harness connectors to the TGM board.

4) Remove the four nuts holding the board to the shelf.

Follow the reverse procedure to install the TGM board.

MOTHER BOARD REMOVAL/INSTALLATION

To remove the Mother board, proceed as follows:

1) Turn the main power to the machine OFF.

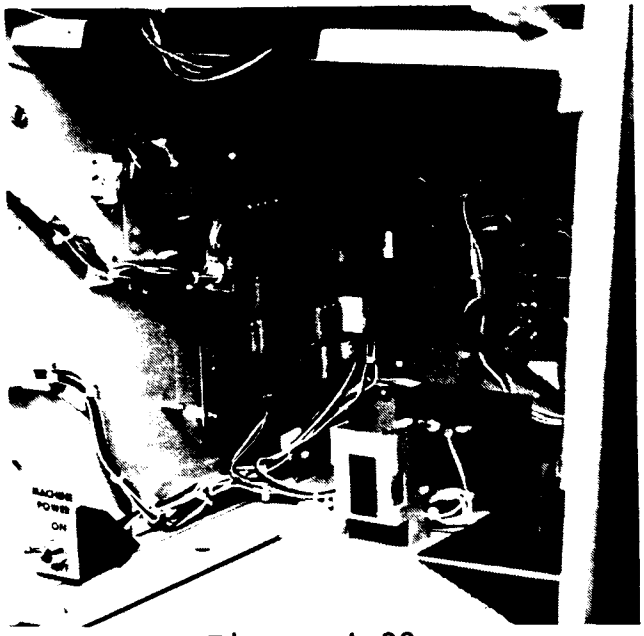


Figure 4-28
Interface Board Location

2) Remove the Microprocessor board.

3) Unplug the harness connectors from the Mother board. See Figure 4-27.

4) Remove the four nuts holding the board to the back wall of the cabinet.

Follow the reverse procedure to install the Mother board.

PROGRESSIVE RELAY INTERFACE BOARD REMOVAL/INSTALLATION

To remove the Progressive Relay Interface board, proceed as follows:

1) Turn the main power to the machine OFF.

2) Unplug the harness connectors to the board.

3A) If the board is attached with a wire ty-rap, cut the ty-rap to remove the board.

3B) If the board is attached with screws on standoffs, remove the two screws to remove the board.

Follow the reverse procedure to install the Progressive Relay Interface board.

JACKPOT OR CHANGE LAMP BOARD REMOVAL/INSTALLATION

To remove the Jackpot or Change Lamp board, proceed as follows:

1) Turn the main power to the machine OFF.

2) Unplug the harness connectors from the board.

3) Cut the ty-rap securing the board to the cabinet and remove the board.

Follow the reverse procedure to install the Jackpot or Change Lamp board.

Section V

SECTION V
FIELD SERVICE AND TROUBLESHOOTING

INTRODUCTION

The following field service procedures and troubleshooting charts are designed to aid in the functional check out of the Fortune I Series machines. For more detailed information, refer to the 8039 Tester Manual or contact IGT Customer Service.

PREVENTIVE MAINTENANCE

Preventive maintenance consists of cleaning and visual inspection, and should be performed on a regular basis.

CLEANING

Dust and dirt in the machine can cause overheating and component breakdown. Dust and dirt on a component can work as an insulating blanket and prevent proper dissipation of heat. It can also provide an electrical conduction path which could result in component failure. Any accumulation of dust and dirt should be removed as often as possible to provide good operating conditions for the machine.

Clean dust and dirt from the cabinet, chrome, glass and face of the CRT with a soft cloth. The face of the CRT acts as a magnet and attracts dust rapidly. Therefore, it should be cleaned often.

The coin acceptor, hopper and anything that accumulates grease and dust, and is not plastic, should be cleaned with a spray solvent. Use a vacuum to remove dust and dirt from the fan and the inside of the cabinet. The fan collects dust quickly and should be cleaned often for proper operation.

CLEANING THE CIRCUIT BOARDS

The circuit boards are cleaned with a soft long haired bush or with Freon. A Pink Pearl eraser can be used for cleaning dirty or corroded edge connector contacts on the boards.

WARNING

Turn the main power to the machine OFF before removing or replacing the monitor or any of the circuit boards.

The Microprocessor board must be removed to be cleaned. The Interface board, Mother board, Progressive Relay board and the Jackpot or Change Lamp board can be cleaned while still in place in the machine. Refer to Section IV.

VISUAL INSPECTION

The machine should be visually inspected at regular intervals for the following:

1) Harnesses and plugs for broken wires or loose connections.

2) Terminal strips for damage in the silicone sealant, loose connections or potential shorts.

3) Glass for chips or cracks.

4) Lamps, incandescent and fluorescent, and LEDs.

5) Starters for the fluorescent lights.

6) Player switches to make sure they are not sticking and that the ones with operational lights are illuminating properly.

7) The fan to verify that it is clean and operating.

8) Run the hopper to verify that it is operating properly.

9) Check hopper plug for loose or damaged wires and potential shorts.

10) Coin check the machine to verify that the coin acceptor mechanism is working correctly.

11) Coin in microswitch, check the wire and tinnerman nut for tension.

12) The coin return button.

13) Check fuses and/or circuit breakers.

NOTE

Fuses will be found on the Monitor. If the machine is connected to a progressive unit, there will also be fuses on the progressive display board and in the Power Supply located inside of the Progressive Display box.

14) Check the circuit boards for proper installation, board damage, damaged components, and heat damaged components, especially in the area of the power supply.

NOTE

Overheating usually indicates trouble in the circuit. It is important that the cause be located and corrected.

Remove and replace any defective component and clean where required.

LUBRICATION

Lubrication in Fortune I Series machines is limited to the hopper and slot handle assemblies. Refer to Section IV for lubrication of parts on these assemblies.

TROUBLESHOOTING

The following information is provided to aid troubleshooting the Fortune I Series machines. The charts contain symptoms or tilt conditions that may occur, possible causes and suggestions for repair. Refer to Section IV for component removal/installation instructions.

TROUBLESHOOTING - FORTUNE I SERIES

SYMPTOM	POSSIBLE CAUSE	ACTION TAKEN
No Power	1. Not plugged in.	1. Make sure power plug is secure in outlet. Make sure the other end of the power cord is secure in the line filter.
Player switches don't function.	1. Any defective switch can cause others to malfunction.	1. Refer to section V Self Test Mode (LED TESTS).
Player switches push button lights out*.	1. Bulb. 2. Interface board. * Not all player switches are illuminated. Refer to Sect. IV - Switches.	1. Replace bulbs in push buttons. 2. Replace interface board.
Game on coin in tilt, hopper tilt, etc.	1. Switch is energized somewhere in system. (Coin in, coin out, etc.)	1. Clear switch or jam. Reset by pushing both circuit breakers. When machine is first turned on monitor may come on scrambled or the horizontal is gone. Reset the monitor. Push JACKPOT RESET switch located in the upper right-hand corner of of the machine to clear after a jack pot has been hit. This can also be done by turning JACKPOT RESET on the outside of the machine. Turn the key to the RIGHT.
"Garbage" on screen or "scrambled" screen.	2. Bad microprocessor. board.	2. Replace microprocessor board with known good one.

TROUBLESHOOTING - FORTUNE I SERIES

SYMPTOM	POSSIBLE CAUSE	ACTION TAKEN
No vertical sync.	1. Bad video cable.	1. Repair or replace.
	2. Bad monitor.	2. Replace monitor.
	3. Bad microprocessor board.	3. Repair or replace microprocessor.
Monitor out, no picture, blank screen.	1. Blown or tripped circuit breaker.	1. Press circuit breakers several times, if blown, replace.
	2. Needs brightness on monitor turned up.	2. Adjust brightness pot on monitor.
	3. Bad microprocessor board.	3. Replace microprocessor board.
	4. Broken wire, bad Molex connection, or hopper plug.	4. Check and repair wiring, Molex connectors, or hopper plug.
	5. Bad monitor.	5. Replace monitor with good one.
Reject button missing or sticking down.	1. Needs adjusting or spring.	1. Adjust accordingly install new spring or replace entire reject button. (Applies to mechanical reject only).
Lockout coil not energizing to accept coins. (Applies only to electronic reject.)	1. Electronic reject unplugged or wire broken.	1. Check and repair broken wire.
Will not reject coin or lockout when pushed. (Applies to electronic reject only)	1. Reject switch bad.	1. Replace reject switch.

TROUBLESHOOTING - FORTUNE I SERIES

SYMPTOM	POSSIBLE CAUSE	ACTION TAKEN
Buzzing lockout coil.	1. Spring is too tight.	1. Loosen tension on spring.
	2. Coil is getting weak.	2. Replace coil.
	3. Lockout paddle needs to be adjusted.	3. Adjust lockout paddle.
Will not accept coins, always locked out.	1. Machine is on hopper tilt or coin in lockout.	1. Clear payout switch, clear coin in switch and reset.
	2. Game has not been completed.	2. See if game is on INSERT COIN, if not complete game. If still won't go to INSERT COIN clear RAM or change the microprocessor board.
	3. Lockout coil is burned out.	3. Replace lockout coil.
	4. Broken wire to lockout coil or elsewhere.	4. Check wiring with OHM meter.
	5. Circuit breaker is tripped or blown.	5. Push stuck circuit breakers several times to release. If blown, replace.
	6. Bad interface board.	6. Replace interface board. (Check OMIT SLOT jumper).
	7. Bad microprocessor board.	7. Replace microprocessor board.
Lockout always energized, not locking out, accepts too many coins	1. Paddle becomes magnetized to coil.	1. Replace coil.

TROUBLESHOOTING - FORTUNE I SERIES

SYMPTOM	POSSIBLE CAUSE	ACTION TAKEN
Lockout always energized (cont'd).	2. Spring too weak or spring fell off.	2. Replace spring or increase tension on spring.
	3. Tab on lockout paddle fell off.	3. Replace lockout paddle.
	4. Tab on paddle not lining up with hole in acceptor.	4. Adjust position of coil.
	5. Bad interface board.	5. Replace interface board. (Check OMIT SLOT jumper).
	6. Bad microprocessor board.	6. Replace the microprocessor board.
Won't accept, lockout not energizing.	1. Coil burned out.	1. Replace coil or entire coin in assembly
	2. Bad connection in Molex plugs.	2. Check Molex connectors.
	3. Hopper tilt, coin in tilt.	3. Clear all tilts or jams, then reset.
	4. One of the switches energized.	4. Check all switches then reset. Reset coin in switch.
	5. Broken wire, loose connection, or circuit breaker open.	5. Check wiring and look for bad connections to switches and in plugs. Push circuit breaker several times.
	6. Electronic reject unplugged.	6. Make sure electronic reject is plugged into coin in assembly.
	7. Bad interface board.	7. Replace interface board. (Check OMIT SLOT jumper).
	8. Bad microprocessor board.	8. Replace the microprocessor board.

TROUBLESHOOTING - FORTUNE I SERIES

SYMPTOM	POSSIBLE CAUSE	ACTION TAKEN
Coin Acceptors not accepting, falling through.	1. Reject lever stuck down or lever spring broken.	1. Clear reject lever. Check reject button and adjust or clean lever. If reject lever spring is broken, replace.
	2. Acceptor needs adjusting.	Align and adjust acceptor. (Refer Sect. VII Appendix-Coin Acceptor).
Coins sticking in acceptor.	1. Acceptor needs adjusting.	1. Align and adjust acceptor. (Refer Sect. VII-Coin Acceptor).
	2. Cradle is dirty.	2. Remove cradle and clean spindle.
Stealing coins.	1. Bad Coin-In switch.	1. Replace Coin-In switch.
	2. Bad interface board.	2. Replace interface board.
Coin in sensors stealing coins.	1. Bad sensors.	1. Replace encoder/diverter.
	2. Bad interface board.	2. Replace interface board.
Coin in tilt.	1. Coin tripping coin in switch too slow or sticking coin in switch down.	1. Adjust coin in assembly and switch arm.
	2. On dollar machines coin going through sensors too slow or in front of sensors.	2. Check alignment of acceptor to coin head. (Refer Sect. VII Appendix-Coin Acceptor).

TROUBLESHOOTING - FORTUNE I SERIES		
SYMPTOM	**POSSIBLE CAUSE**	**ACTION TAKEN**
Hopper will not drive.	1. Timed out, needs resetting, or is empty.	1. When hopper is stopped for no apparent reason but not jammed, lift up on PAYOUT switch. This will reset the hopper and it should start up and finish pay. Hopper will also "time out" if it is empty. If this happens, fill and reset.
	2. Jammed.	2. Locate jam, remove bent or incorrect denomination coin, reset and hopper should finish pay.
	3. Bad hopper motor brake.	3. To test to see if pinwheel is free press down on brake. Pinwheel then be free to hand turn. Make sure brake is releasing and that brake spring is installed correctly.
	4. Circuit breaker tripped or blown.	4. Push circuit breakers several times. If nothing happens measure AC IN and OUT. If one of the breakers is blown, replace.
	5. Bad interface board.	5. Replace interface board.
	6. Bad power supply.	6. Replace microprocessor board.
	7. Hopper motor and gearbox are bad.	7. Measure voltage to motor. If 110VAC is there and motor is not turning, the motor is bad. Replace motor. (Refer Sect. IV).
	8. Drive-pin broken or fell out.	8. If drive-pin is missing, tap new one in.
	9. Pinwheel or bearings	9. Replace pinwheel. (Refer Sect.IV). Replace bearings. (Refer Sect.IV).

TROUBLESHOOTING - FORTUNE I SERIES

SYMPTOM	POSSIBLE CAUSE	ACTION TAKEN
Hopper will not drive (cont'd).	10. Pinwheel jumping off bearings.	10. Adjust hopper. (Refer Sect. IV Hopper Adjustment).
	11. Bent knife.	11. Replace knife. (Refer Sect. IV Hopper Adjustment).
	12. Hopper Timed Out.	12. Hopper empty. Refill and reset hopper. Reset hopper by lifting coin out switch.
Arm on payout switch is broken.		1. Replace switch. (Refer Sect.IV Hopper).
Short paying or over paying.	1. Payout switch needs to be adjusted.	1. Adjust coin out switch. (Refer Sect. IV Hopper).
	2. Payout switch bad or broken.	2. Replace payout switch. (Refer Sect. IV Hopper).
	3. Broken wire or bad connection on switch terminal.	3. Check wiring and terminal connections and repair if needed.
	4. Hopper not aligned with opening to coin tray.	4. Align hopper properly. (Refer Sect. IV Hopper).
	5. Bad interface board.	5. Replace interface board.
	6. Bad hopper plug.	6. Make sure hopper plug is making contact and wires are connected.
	7. Bad hopper brake.	7. Make sure that the hopper brake is working correctly and that the brake spring is on and that the hopper is not coasting.

TROUBLESHOOTING - FORTUNE I SERIES

SYMPTOM	POSSIBLE CAUSE	ACTION TAKEN
Continuous "HOPPER TILT".	1. Coin stops under roller.	1. Adjust coin out switch. (Refer Sect. IV Hopper).
Hopper dumping. (Hopper "runs away").	1. Broken payout switch.	1. Replace coin out switch.
	2. Bad microprocessor board.	2. Replace microprocessor board.
Hopper "time out".	1. Hopper empty.	1. Fill hopper bowl and reset.
	2. Not picking up coins.	2. Make sure coin wiper is allowing coins through and that knife is adjusted correctly, then reset.
Diverter and hopper filling problems.	1. Coins not diverting into hopper, all coins going to drop.	1. Replace diverter coil.
	2. Broken wire or bad connection to diverter coil.	2. Check wiring and connection terminals, repair accordingly.
	3. Diverter mechanism bent or spring missing.	3. Adjust diverter mechanism, replace or adjust diverter spring.
	4. Bad interface board.	4. Replace interface board.
	5. Hopper weight switch bad or needs adjusting.	5. Adjust weight switch. (Refer Sect. IV - Hopper).

Section VI

SECTION VI
SELF TEST AND STATISTICAL DISPLAY MODES

INTRODUCTION

The following procedures and test modes are designed to aid in the functional checkout of the Fortune I Series machine.

SELF TEST MODE

This section describes the Light Emitting Diode (LED) tests for the switches on the Fortune I machine.

There is a column of four LEDs located on the upper right corner of the Interface board, designated D11, D12, D13 and D14. Each LED has a number to its left etched on the circuit board (1, 2, 4 and 8) for identification purposes. See Figure 6-1.

All of the switches, except the coin out switch, are functions of the Interface circuits. The switch inputs are decoded into a four bit binary code by a diode decode network. Each switch has its own unique code. This code is input to the buffers on the Microprocessor board. Table 6-1 lists the proper sequence of LEDs for each switch and the sequence of testing switches for a particular machine.

NOTE

Check switches in sequence. One faulty switch can cause others to appear bad.

To test the switches the machine must be in the Idle mode. Refer to Section III, Game Instructions. To test a switch refer to Table 6-1 and locate the appropriate LED sequence for the switch for that machine. Activate the switch and note the LEDs that illuminate on the upper right corner of the Interface board. See Figure 6-1.

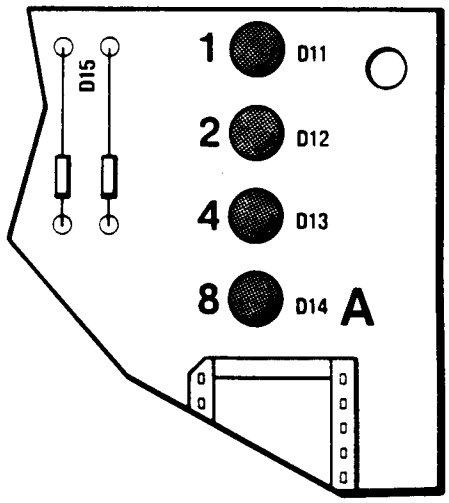


Figure 6-1
Interface Light Emitting Diodes

If the corresponding LEDs are faintly lit, or do not illuminate, check the following:

1) Check the 24 pin ribbon cable between the Interface board and the Mother board.

2) Check matrix input jumpers on the Mother board.

3) Check the continuity of the orange lead from the switch panel to the matrix jumpers on the Mother board.

4) Check the normally closed contacts on all of the other switches.

5) Check the "omit for slot" jumper on the Interface board.

6) Check the Interface board.

7) Check the Mother board.

Refer to the IGT 8039 Tester Manual or contact IGT Customer Service.

STATISTICAL DISPLAY MODE

The Statistical Display mode allows for the examination of the status of the RAM and tilt functions, as well as providing an audit trail.

To enter the Statistical Display mode, turn the Jackpot/Reset key switch clockwise and return.

To exit the Statistical Display mode, turn the Jackpot/Reset key switch clockwise and return.

The following figures show the various display configurations for each of the Fortune I Series machines.

NUMBERS TOTALED / NUMBERS OF LED'S	2	3	4	5	6	7	8	9	10	11	12	13	14	15
GAME	2	1&2	4	1&4	2&4	1,2&4	8	1&8	2&8	1,2&8	4&8	1,4&8	2,4&8	1,2,4&8
REGULAR DRAW POKER	DOOR INTERLOCK	J.P. RESET	MATRIX (DISPLAY)	COIN IN		DEAL	DRAW	CANCEL	HOLD 1	HOLD 2	HOLD 3	HOLD 4	HOLD 5	HOPPER WT SWITCH
PROGRESSIVE DRAW POKER														
JOKER WILD DRAW POKER														
DOUBLE UP DRAW POKER						DEAL/ DRAW	YES	NO	HOLD/ CANCEL 1	HOLD/ CANCEL 2	HOLD/ CANCEL 3	HOLD/ CANCEL 4	HOLD/ CANCEL 5	
CREDIT DRAW POKER					BET 1 COIN	BET 10 COINS	DEAL/ DRAW	CASH OUT						
LUCKY 7 POKER						DEAL	END GAME	YES	NO					
REGULAR 21							HIT	STAND	DOUBLE DOWN					
LIVE 21										SURRENDER	INSURANCE	SPLIT		
COUNT DOWN 21							CASH OUT							
TWO HAND 21							HIT							
IN BETWEEN							DRAW							
REGULAR SLOT													HANDLE	
CREDIT SLOT						CASH OUT	BET 10 COINS	BET 1 COIN	START					

• = OPTIONAL

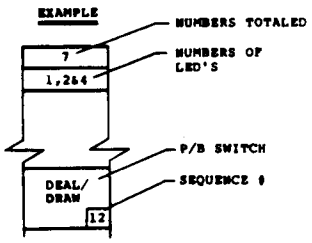
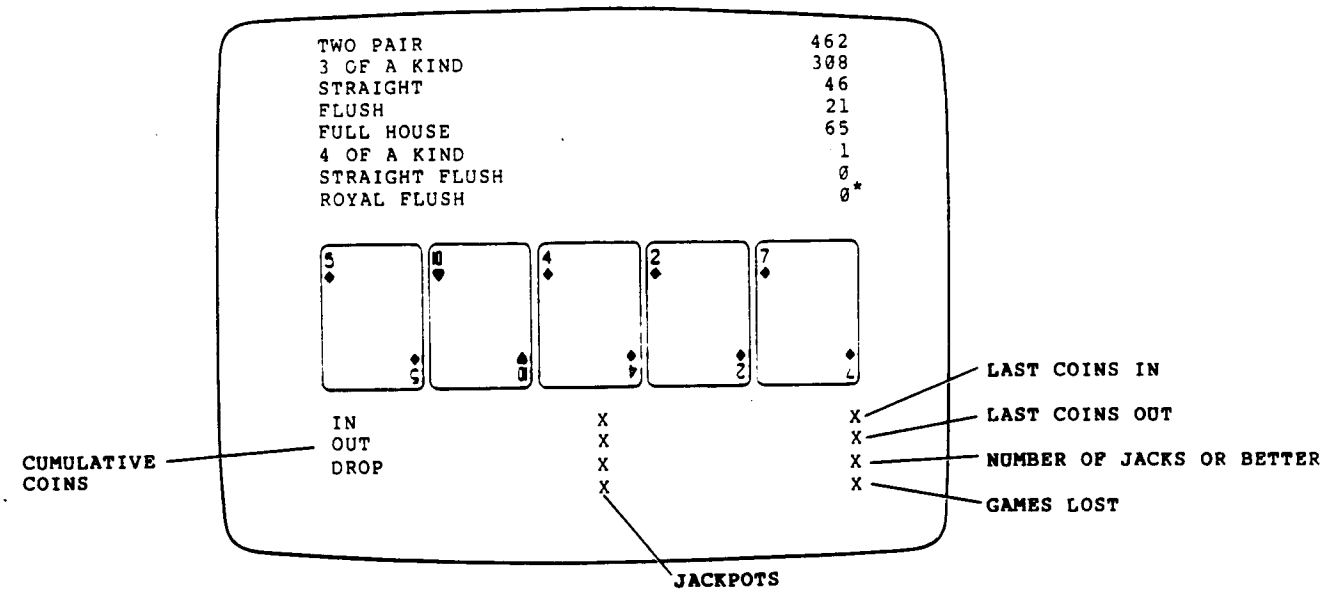


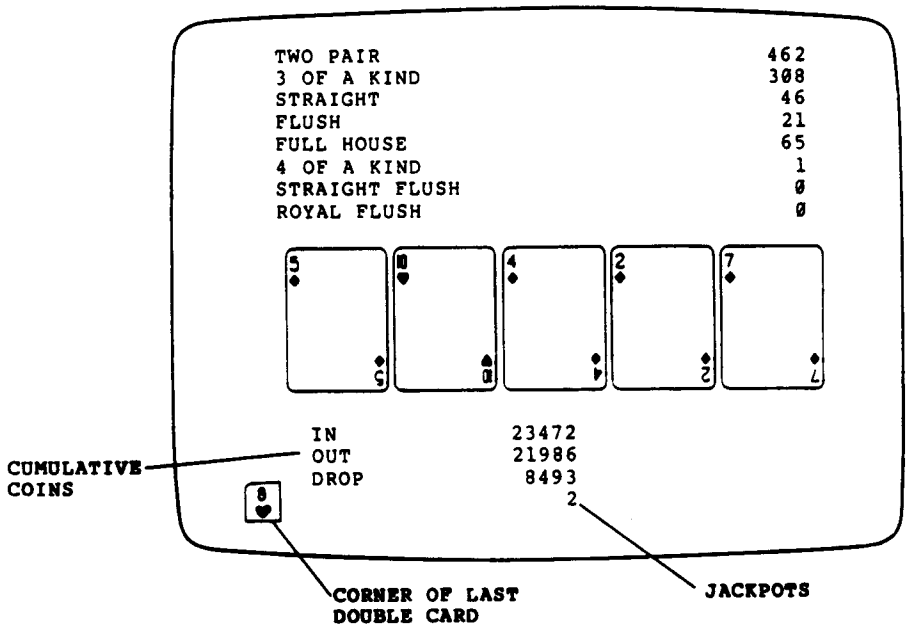
Table 6-1
Sequence Table for LEDs and Testing Switches



STATISTICAL DISPLAY

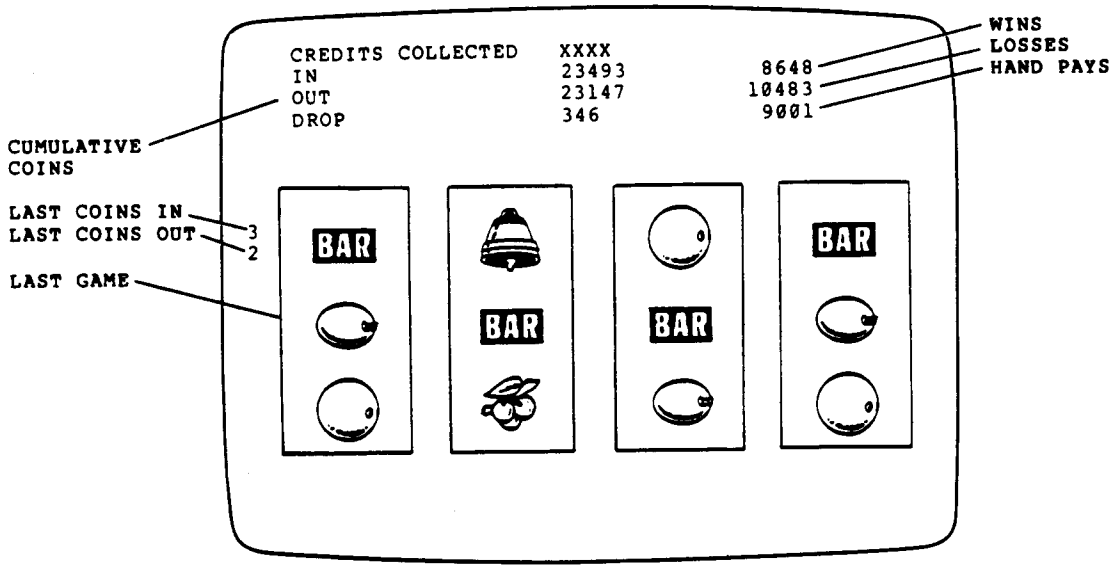
REGULAR & PROGRESSIVE DRAW POKER

*On Progressive Units, when a Progressive Jackpot is hit, this number will be incremented by one. So in the example shown, this machine has had 9,000 coins paid by hand and one Progressive hit. The amount that each machine has had in the Progressive payouts is stored in the Progressive Unit.



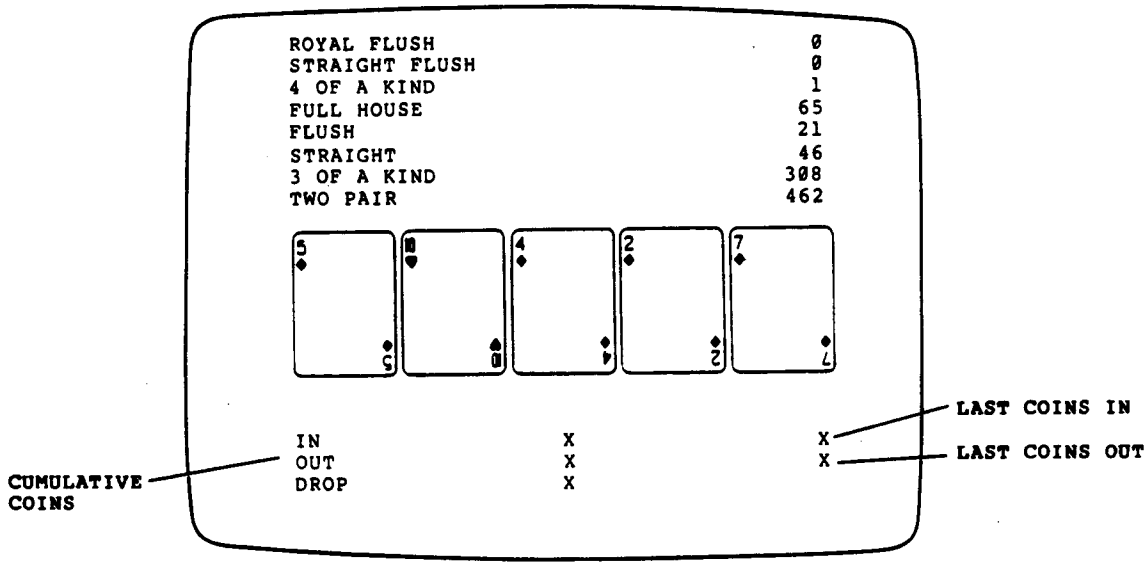
STATISTICAL DISPLAY

DOUBLE-UP POKER



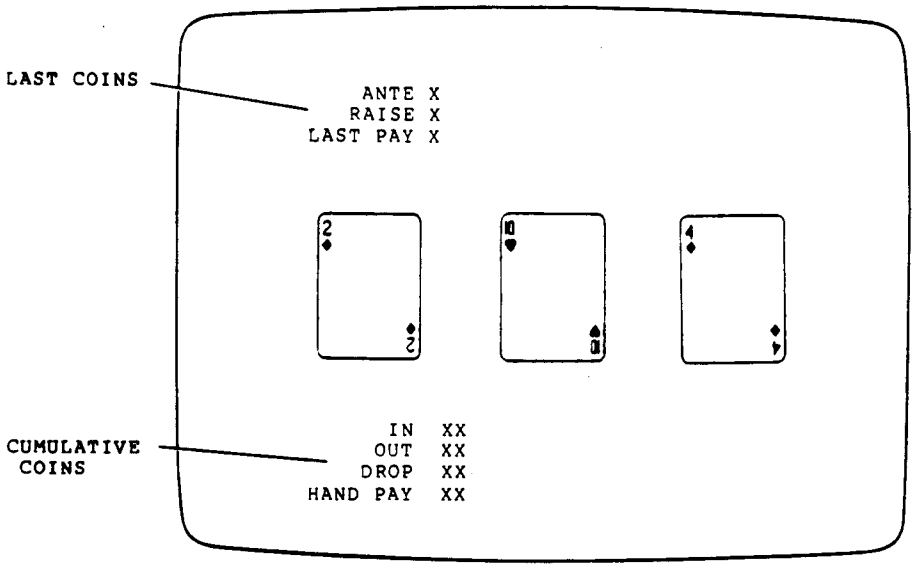
STATISTICAL DISPLAY

CREDIT SLOT



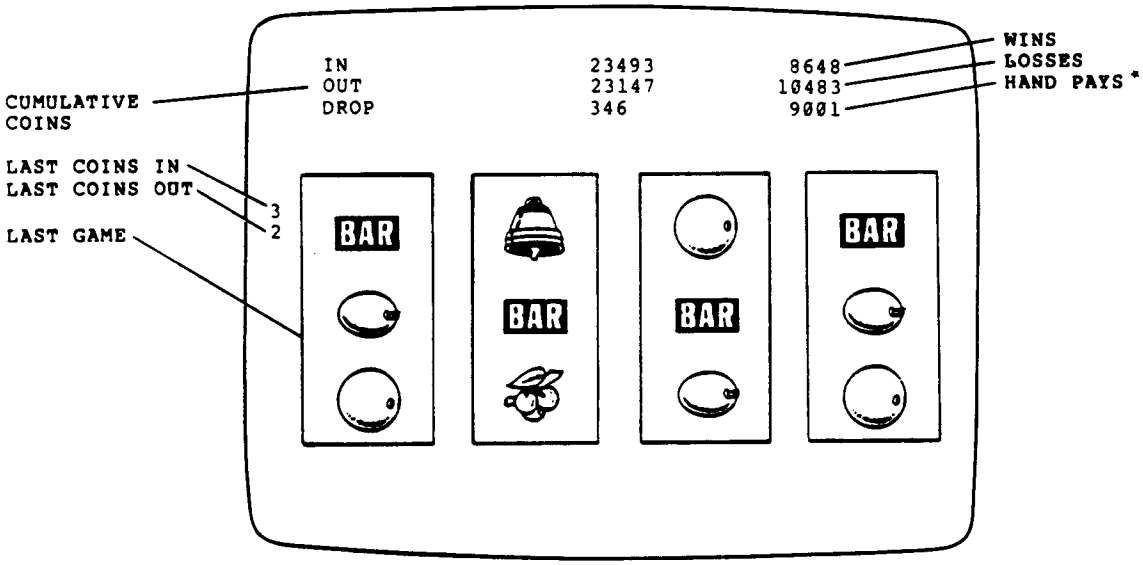
STATISTICAL DISPLAY

CREDIT DRAW POKER



STATISTICAL DISPLAY

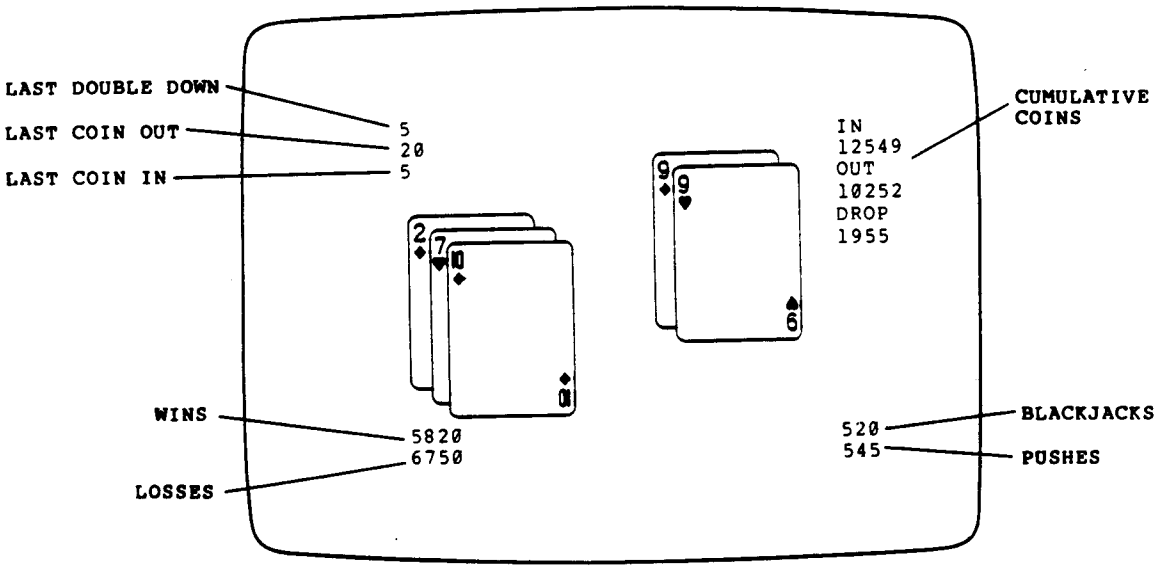
'IN BETWEEN'



STATISTICAL DISPLAY

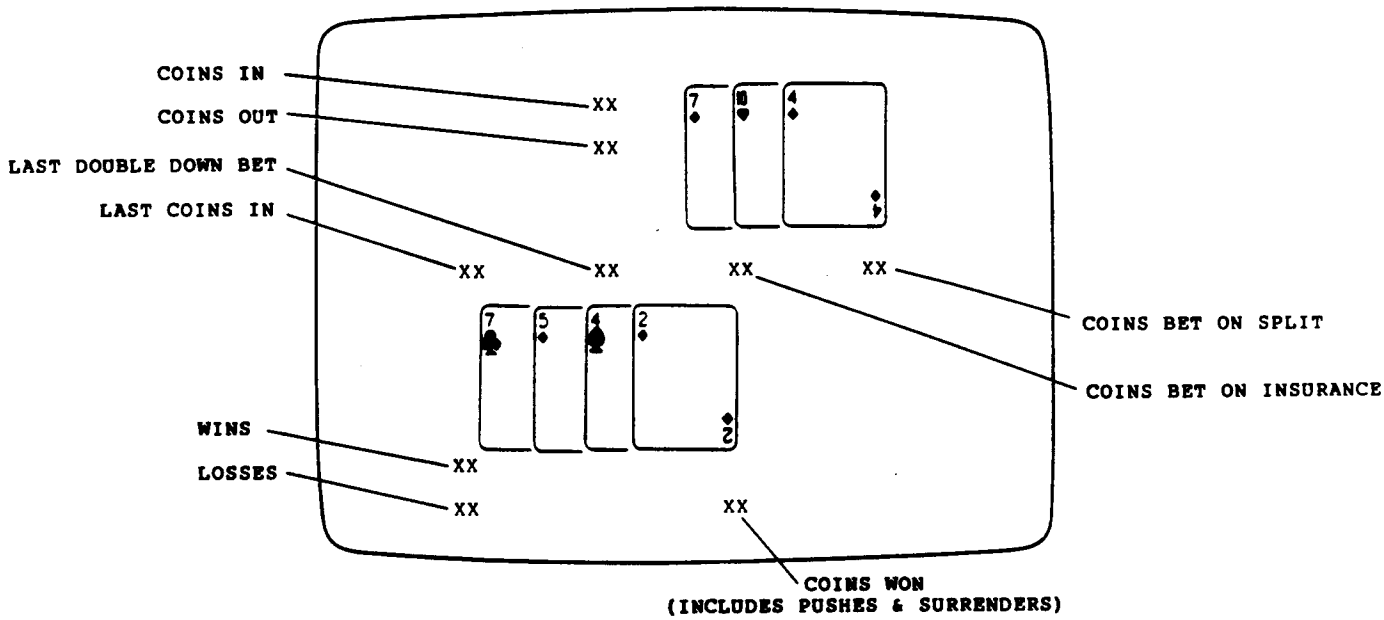
REGULAR & PROGRESSIVE SLOT

*On Progressive Units, when a Progressive Jackpot is hit, this number will be incremented by one. So in the example shown, this machine has had 9,000 coins paid by hand and one Progressive hit. The amount that each machine has had in the Progressive payouts is stored in the Progressive unit.



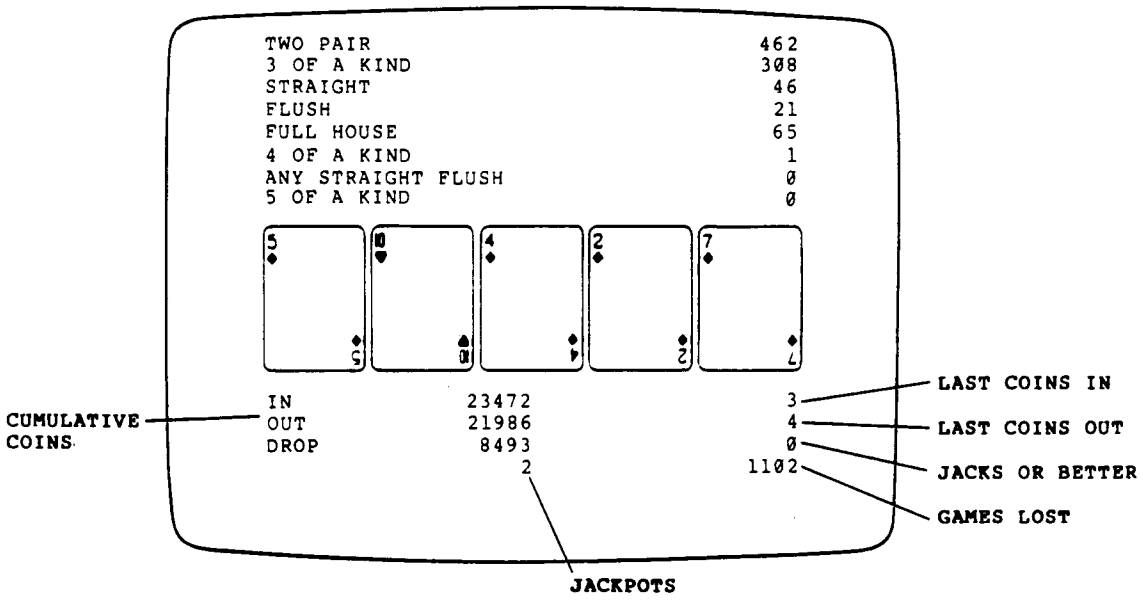
STATISTICAL DISPLAY

REGULAR 21



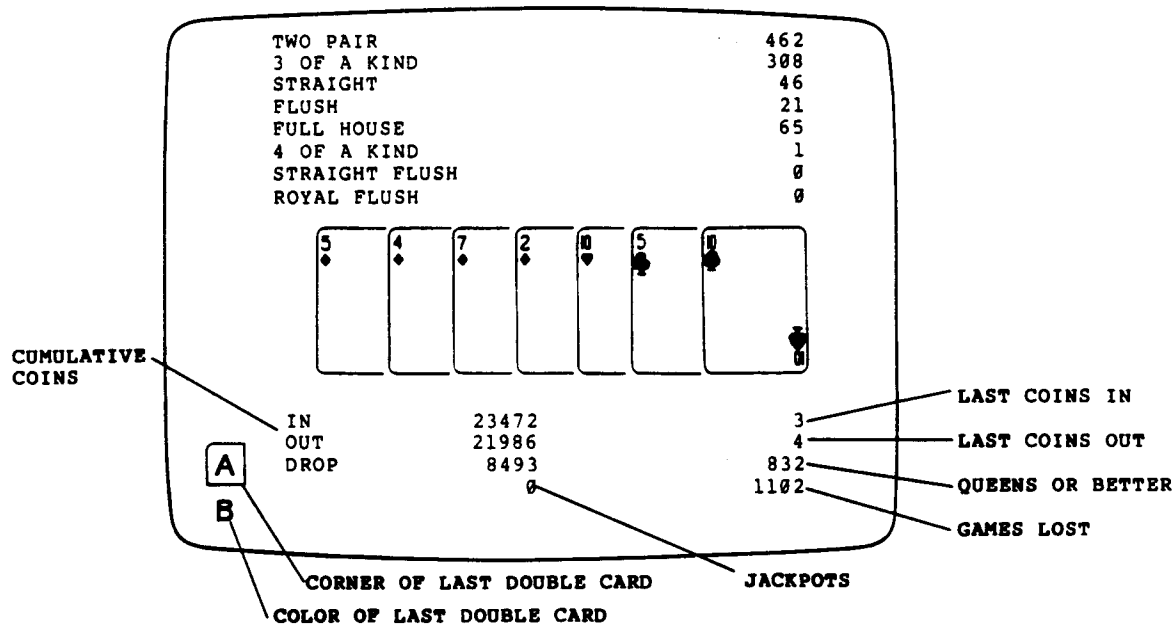
STATISTICAL DISPLAY

LIVE 21



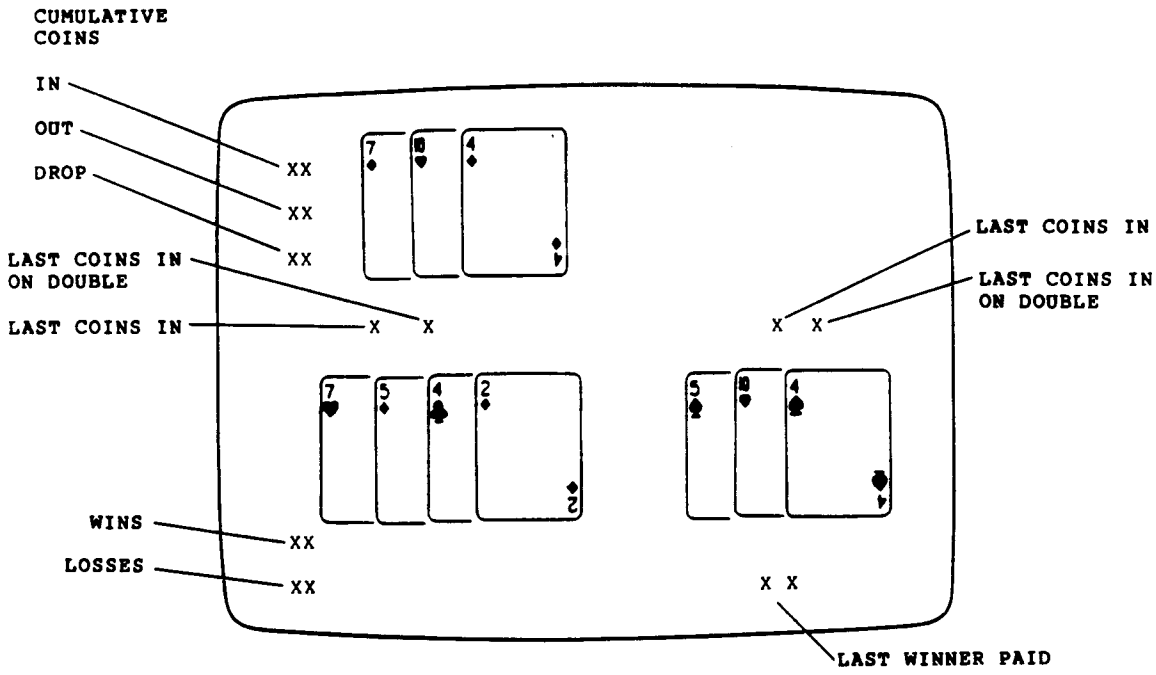
STATISTICAL DISPLAY

JOKER WILD DRAW POKER



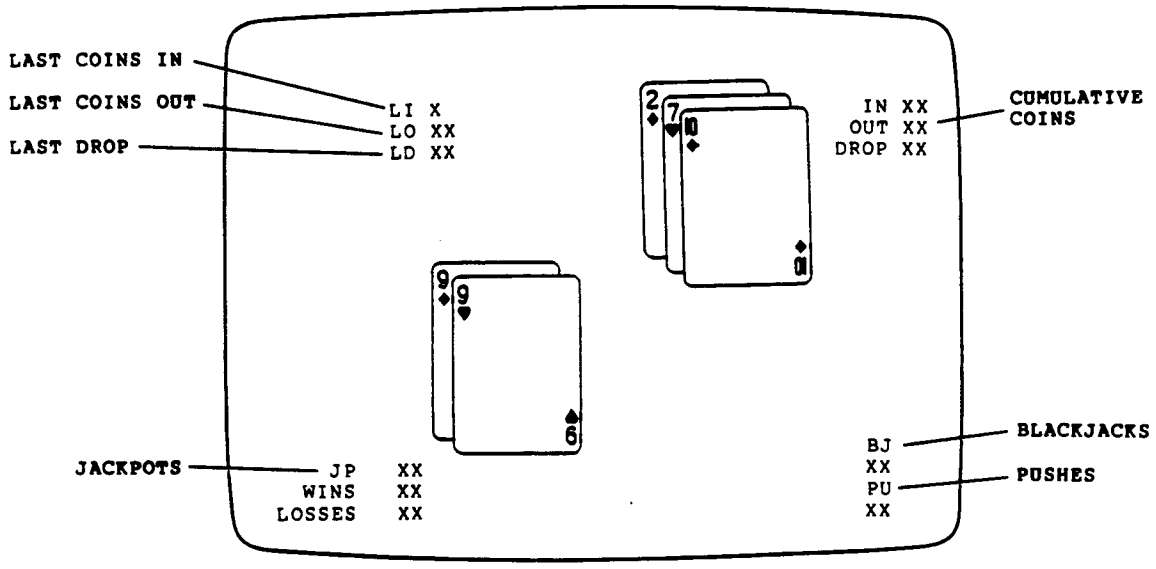
STATISTICAL DISPLAY

LUCKY 7



STATISTICAL DISPLAY

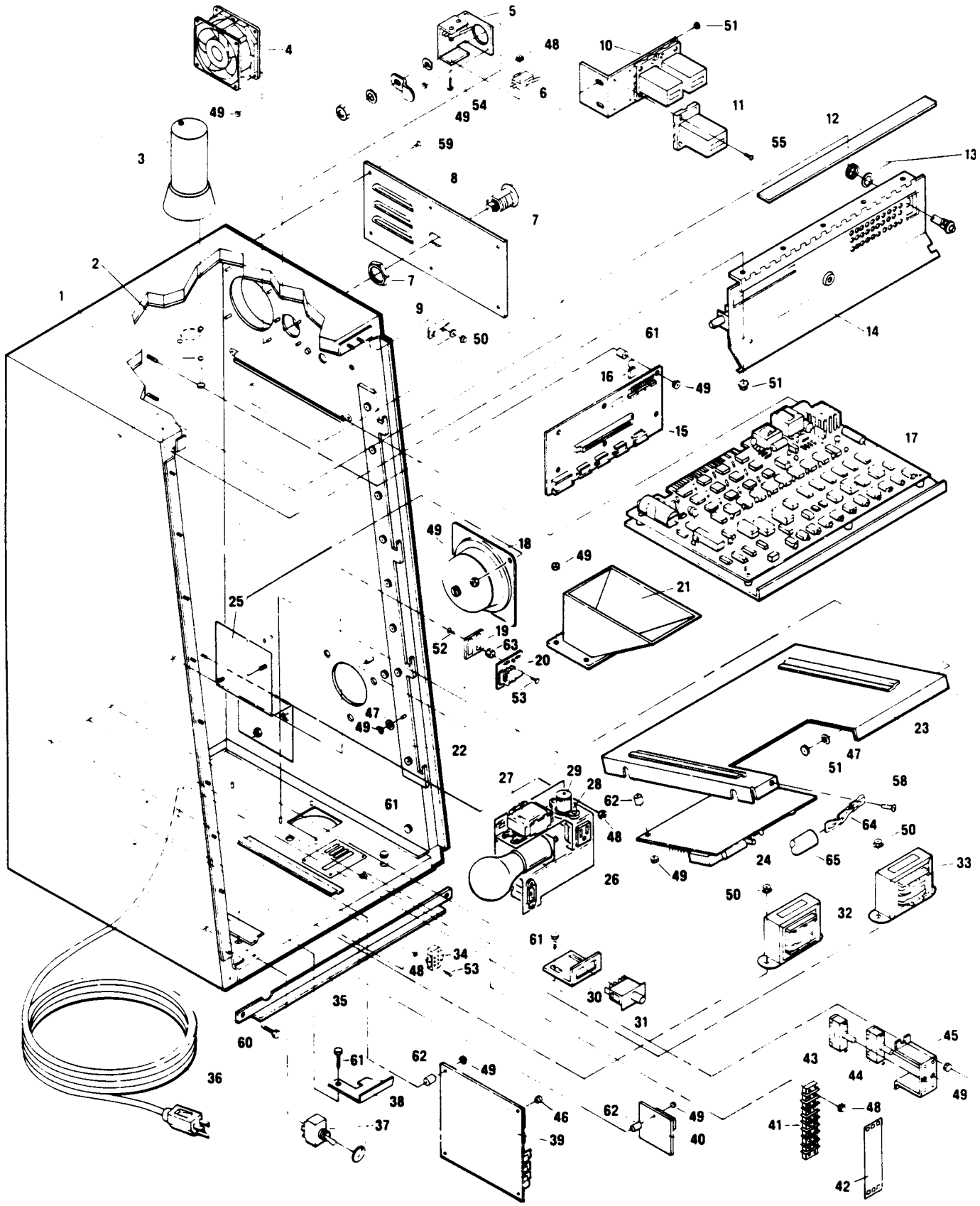
2 HAND 21



STATISTICAL DISPLAY

COUNTDOWN 21

Section VII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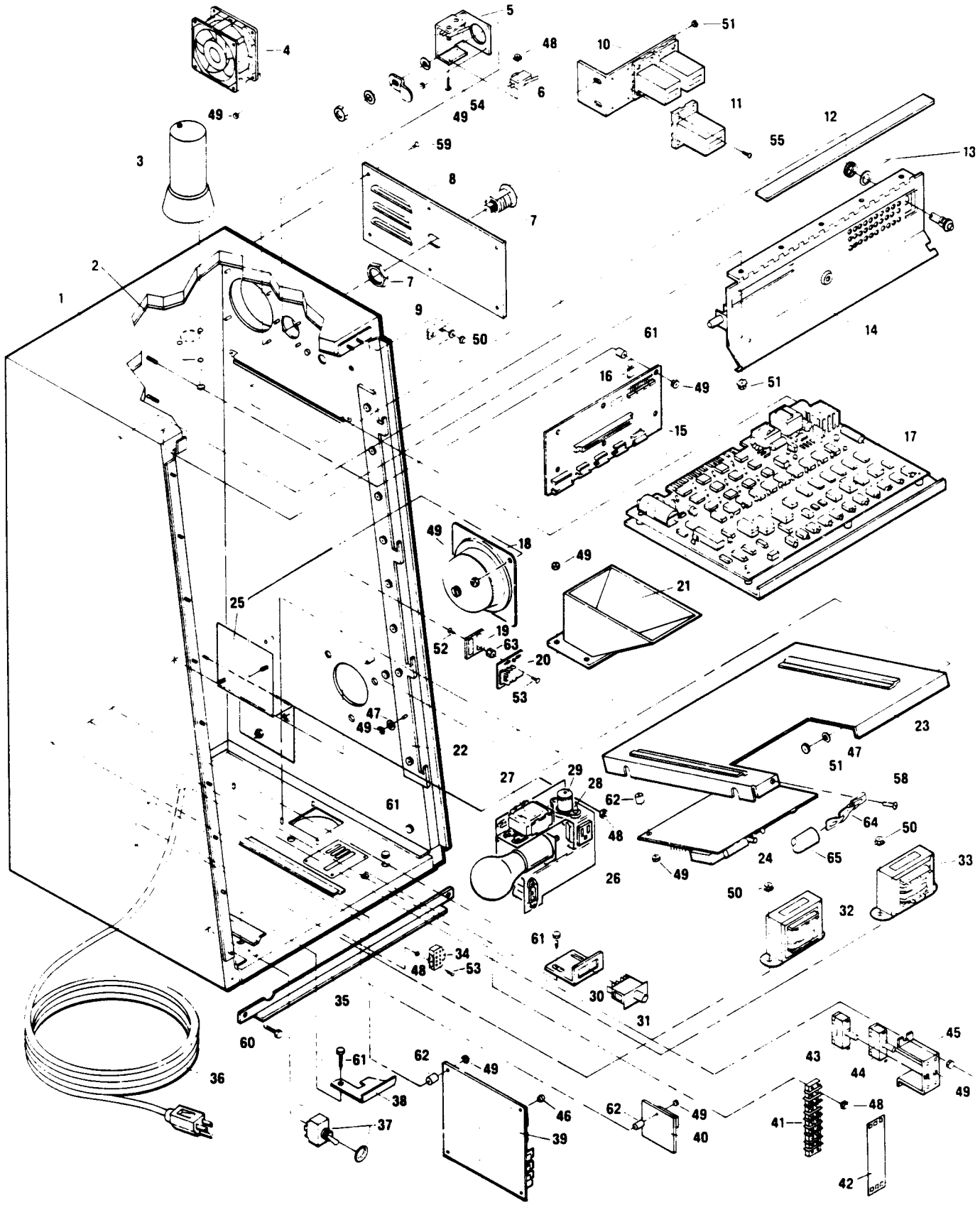
CABINET, FORTUNE I

ITEM	PART NUMBER	DESCRIPTION
1	141 001 00	Cabinet, Card, Fortune - Specify Finish
-	141 002 00	Cabinet, Slot, Fortune - Specify Finish
2	148 001 00	Liner, Cabinet
3	191 008 00	Candle Assy, Yellow
-	191 003 00	Candle Assy, Blue/White
-	191 004 00	Candle Assy, 4 in. Red/Yellow
-	191 021 00	Candle Assy, 4 in. Red/White
-	191 022 00	Candle Assy, 4 in. Green/White
-	191 023 00	Candle Assy, 4 in. Yellow/White
-	191 024 00	Candle Assy, 4 in. Orange/White
4	260 005 90	Fan, 115VAC- 3 in. Blade
5	636 031 00	Bracket, Display Switch
6	510 101 90	Switch, Snap. Mini, lever
7	802 003 90	Lock & Cam, 1-1/8 Cam
8	688 001 00	Cover, Fan, Plate, Louvered, Spec., Color
9	636 038 00	Bracket, Door ADJ.
10	636 231 00	Bracket, 3 Counter, Fortune I
11	292 011 90	Counter, 6 Digit Total, 120VAC
12	218 017 90	Strip, Magnet 13.12
13	516 029 90	Switch, P/B, STD, SPDT MOM
14	712 005 00	Door, Security, Sub-Assy, Fortune
15	759 004 00	Board, P.C., Mother
16	609 046 00	Harness, Jumper Plug
17	757 014 00	Board, P.C., Processor
18	228 003 00	Bell, Assy
19	653 056 00	Mount, Adh.
20	751 015 00	Board, P.C., J.P. Lamp Assy
21	501 001 00	Chute, Coin, Overflow
22	639 001 00	Bar, Locking
23	670 001 00	Shelf, Video Display
24	761 001 00	Board, P.C., Sound
25	653 083 00	Assy Mount, 4 in. Bell, Fortune
26	653 066 00	Mount Assy, Line Filter, Fortune
27	195 003 90	Ballast, 8W 118V
28	124 002 90	Socket, Starter
29	197 004 90	Starter, FS-5, 4, 6, 8W
30	446 023 00	Mount, Door Interlock
31	516 033 90	Switch, P/B, STD Interlock E79-30A
32	569 015 90	Transformer, @10.0 AMP, Single PRI
33	569 016 90	Transformer, 120VCT @.85 AMP, Single PRI
34	129 016 90	Socket, Hopper, 8-PIN F
35	636 035 00	Bracket, Door Jam
36	618 008 00	Cord, Assy Power 303278
37	511 008 90	Switch, Toggle, STD, DPST
38	659 038 00	Lock, Hopper
39	759 005 00	Board, P.C., Interface
40	757 003 00	Board, P.C., Prog Relay Assy
41	218 008 90	Terminal Block, 8 Pos., .375 CTR
42	688 074 90	Cover, Terminal Block, 8 Pos
43	521 003 90	Circuit Breaker, 5 AMP. L-Fuse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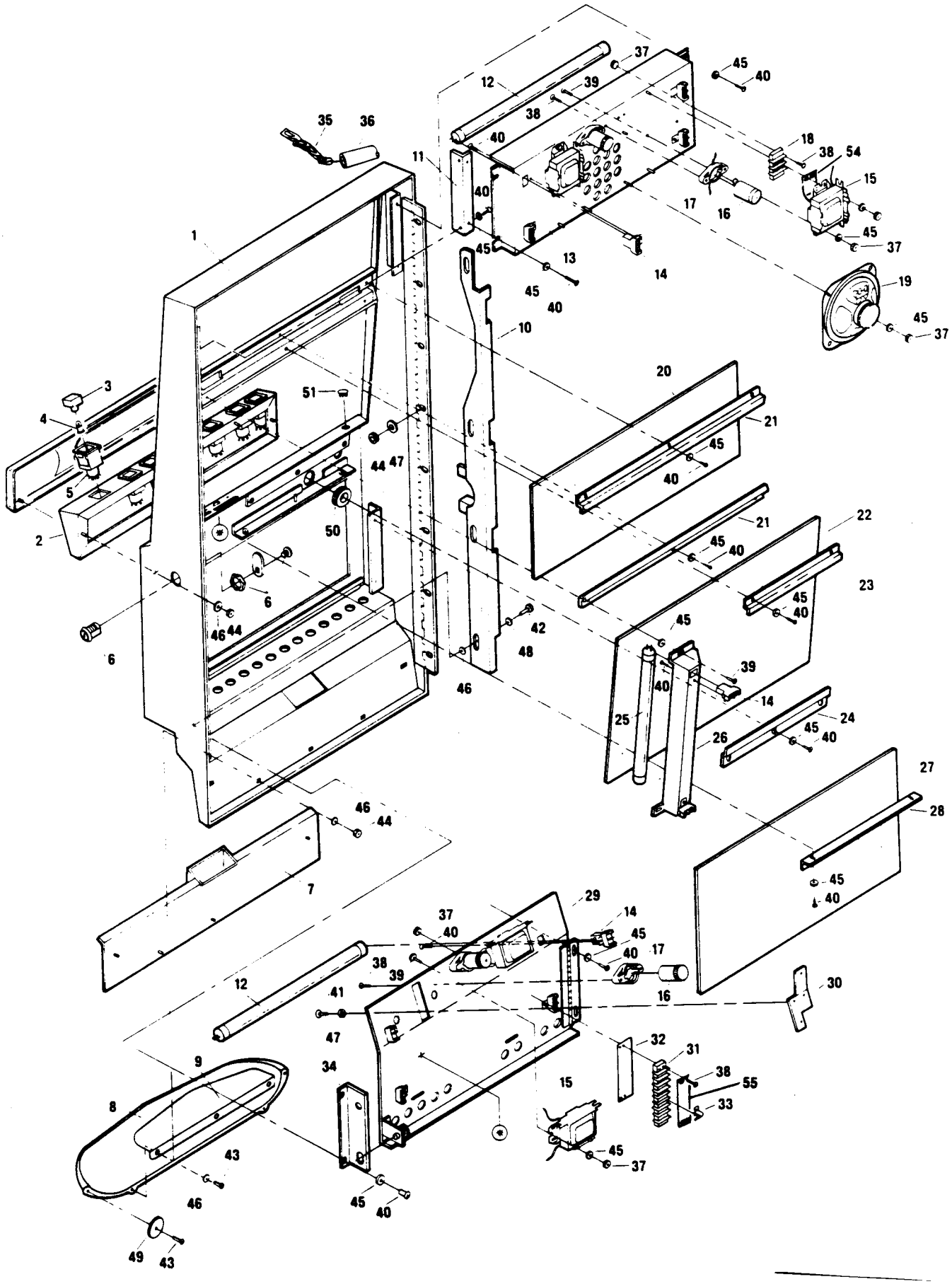
CABINET, FORTUNE I (Cont'd)

ITEM	PART NUMBER	DESCRIPTION
44	521 002 90	Circuit Breaker, 2.5 AMP Hold
45	636 036 00	Bracket, Circuit Breaker
46	659 091 90	Rubbertip F-Screw Post
47	430 008 99	Washer, Flat Steel #10
48	421 001 95	Nut, Lock Steel, Esna #4-40
49	421 003 95	Nut, Lock Steel, Esna #6-32
50	421 006 98	Nut, Lock Steel, Esna #8-32
51	421 008 99	Nut, Lock Steel, Esna #10-32
52	411 101 96	Screw, Mach PH F 4-40 X 1/4
53	411 101 97	Screw, Mach PH Pan 4-40 X 1/4
54	411 002 92	Screw, Mach PH Pan 4-40 X 3/4
55	411 003 99	Screw, Mach PH Pan 6-32 X 3/8
56	411 004 91	Screw, Mach PH Pan 6-32 X 1/2
57	411 008 90	Screw, Mach PH Pan 8-32 X 1-1/4
58	411 009 95	Screw, Mach PH Pan 10-32 X 1/2
59	417 004 91	Screw, Tap, AB PH Pan 6 X 1/2
60	417 407 96	Screw, Tap, AB Hex/Wash 8 X 5/8
61	417 009 98	Screw, Tap Sheet Metal HWHD 10 X 3/4
62	312 003 90	Spacer, Nylon 6 X 3/8
63	674 079 90	Spacer, Hex 4-40 X 3/8
64	289 004 90	Chain, Door
65	598 018 90	Tubing, Plastic
-	688 104 00	Cover, On-Off Switch, Fortune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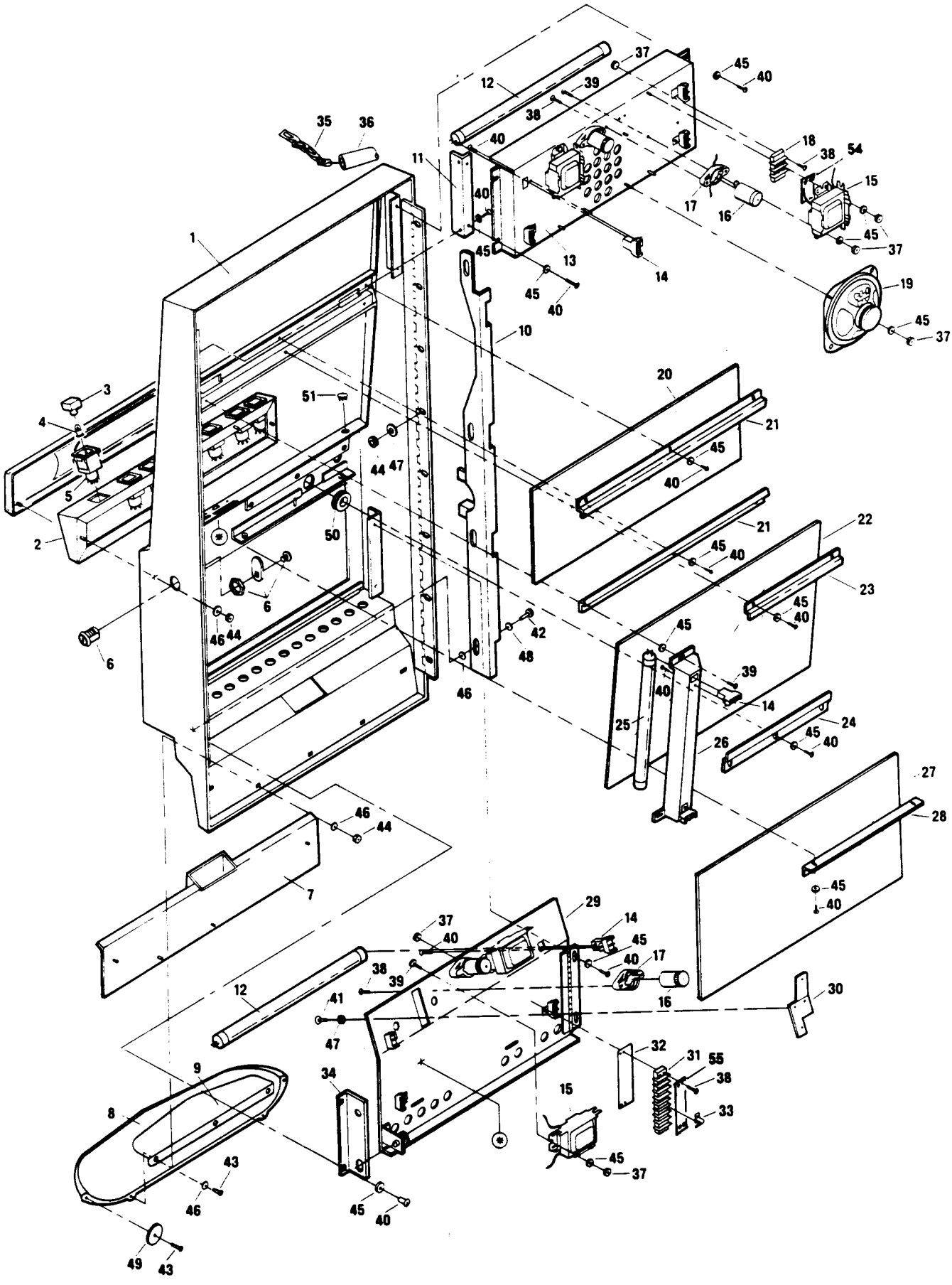
DOOR, FORTUNE I

ITEM	PART NUMBER	DESCRIPTION
1	710 001 00	Door, Card Game, Chromed
2	655 090 00	Panel Assy, Switch Poker
-	655 100 00	Panel Assy, Switch "21"
-	655 103 00	Panel Assy, Switch "Live 21"
-	655 104 00	Panel Assy, Switch In Between (Red Dog)
-	655 183 00	Panel Assy, Switch Double Up Poker
-	655 193 00	Panel Assy, Switch Lucky 7
-	655 203 00	Panel Assy, Switch Countdown 21
-	655 319 00	Panel Assy, Switch C/P Poker
-	655 241 00	Panel Assy, Switch C/P Slot
3	517 047 90	Cap, Legend SQ 'DEAL'
-	517 046 90	Cap, Legend SQ 'CANCEL'
-	517 048 90	Cap, Legend SQ 'DOUBLE DOWN'
-	517 049 90	Cap, Legend SQ 'HIT'
-	517 050 90	Cap, Legend SQ 'HOLD'
-	517 052 90	Cap, Legend SQ 'STAND'
-	517 061 90	Cap, Legend SQ 'BET'
-	517 070 90	Cap, Legend SQ 'DRAW'
-	517 082 90	Cap, Legend SQ 'YES'
-	517 083 90	Cap, Legend SQ 'NO'
-	517 084 90	Cap, Legend SQ 'HOLD/CANCEL'
-	517 085 90	Cap, Legend SQ 'DEAL DRAW'
-	517 094 90	Cap, Legend SQ 'CASHOUT'
-	517 095 90	Cap, Legend SQ 'INSURANCE'
-	517 096 90	Cap, Legend SQ 'SPLIT'
-	517 097 90	Cap, Legend SQ 'SURRENDER'
-	517 102 90	Cap, Legend SQ 'END GAME'
-	517 112 90	Cap, Legend SQ 'BET 1 COIN'
-	517 149 90	Cap, Legend SQ 'BET 10 COINS'
-	517 113 90	Cap, Legend SQ 'START'
4	193 008 90	Lamp, Min. FLG 10V .04 MA, I-376 MF
5	510 060 90	Switch, P/B, SQ W/O Cap & Plate EL
6	809 009 90	Lock, Shipping
7	581 065 00	Guide, Assy Fortune
8	597 004 00	Tray, Coin, 25, Buffed
9	636 037 00	Bracket, Coin Tray Wear
10	630 001 00	Angle, Locking
11	636 044 00	Bracket, Glass, Upper Light Display
12	194 007 90	Lamp, 12 in. Flo. F8T5/CW
13	655 073 00	Panel, Upper Light
14	120 008 90	Socket, Fluorescent Tube
15	195 003 90	Ballast, 8W,118V
16	197 004 90	Starter, FS-54,6,8W
17	124 002 90	Socket, Starter
18	218 004 90	Terminal Block, 2 Pos, .375 CTR
19	130 001 90	Speaker
20	OBD	Glass, Top
21	636 251 00	Bracket, Top Glass Mounting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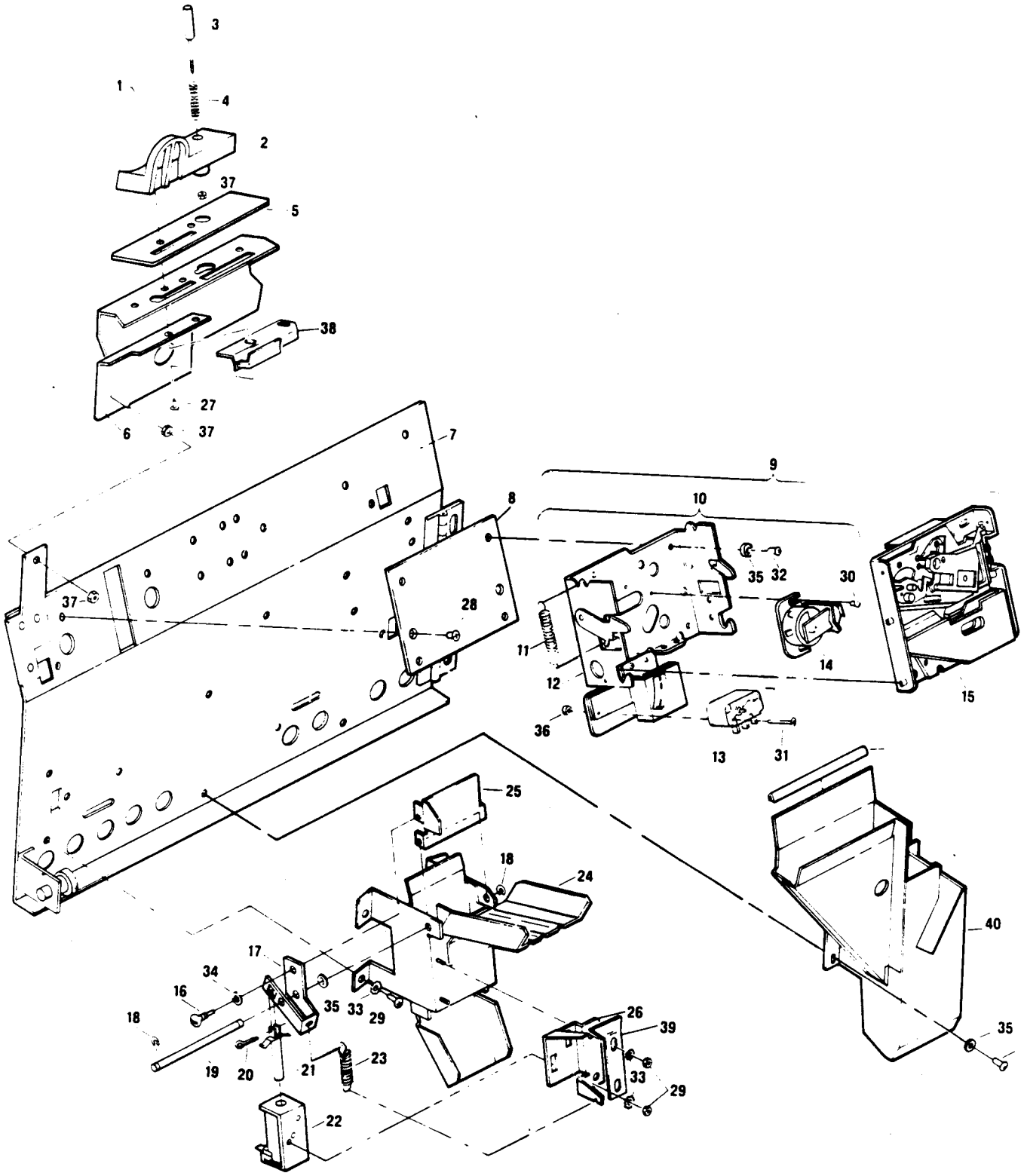
DOOR, FORTUNE I (cont'd)

ITEM	PART NUMBER	DESCRIPTION
22	OBD	Glass, Video
23	636 041 00	Bracket, Glass, Top Video
24	636 042 00	Bracket, Glass, Bottom Video
25	194 006 90	Lamp, 9 in. Flo. 6W F6T5/CW
26	196 002 00	Box, Light, Video Display
27	OBD	Glass, Bottom
28	636 040 00	Bracket, Glass, Bottom
29	655 074 00	Panel, Lower Fluorescent
30	631 001 00	Bracket, Locking, Lower Panel
31	218 008 90	Terminal Block, 8 Pos, .375 CTR
32	218 015 90	Term, Marker Strip MS8140
33	639 002 90	Jumper, Term Block Over
34	636 043 00	Bracket, Coin Mech Lock
35	289 004 90	Chain, Sash #30
36	598 018 90	Tubing, Plastic 1/2 in. DIA
37	421 003 95	Nut, Lock Esna #6-32
38	411 004 91	Screw, Mach, PH Pan 6-32 X 1/2
39	411 003 99	Screw, Mach PH Pan 6-32 X 3/8
40	411 003 97	Screw, Mach PH Pan 6-32 X 1/4
41	411 009 90	Screw, Mach PH Pan 6-32 X 1/4
42	419 004 90	Screw, Shldr 10-32 X .25 OD X .189 L
43	411 007 94	Screw, Mach PH Pan 8-32 X 1/2
44	421 006 98	Nut, Lock Esna #8-32
45	430 003 95	Washer, Flat Steel #6
46	430 006 98	Washer, Flat Steel #8
47	431 008 99	Washer, Lock INT Steel #10
48	439 016 90	Washer, Flat #8, Shoulder Bolt
49	439 010 99	Washer, Fender #8
50	281 008 90	Grommet, 3/4, Rubber, 2186
51	657 004 00	Plug, 1/2 in. Hole
52	856 001 00	Name Plate, IGT
53	688 074 90	Cover, Terminal Block 8 POS
-	601 003 00	Harn. Main, Card Game/NV. SLOT
-	601 005 00	Harn. Main, N.J. SLOT
54	688 074 90	Cover, Terminal Block 8 Pos
55	688 054 90	Cover, Terminal Block 2 Pos

OBD= Order by Description
***=** See Lower Door Panel

All parts and part numbers are subject to change. Please contact **IGT Customer Service** for updated information when ordering parts.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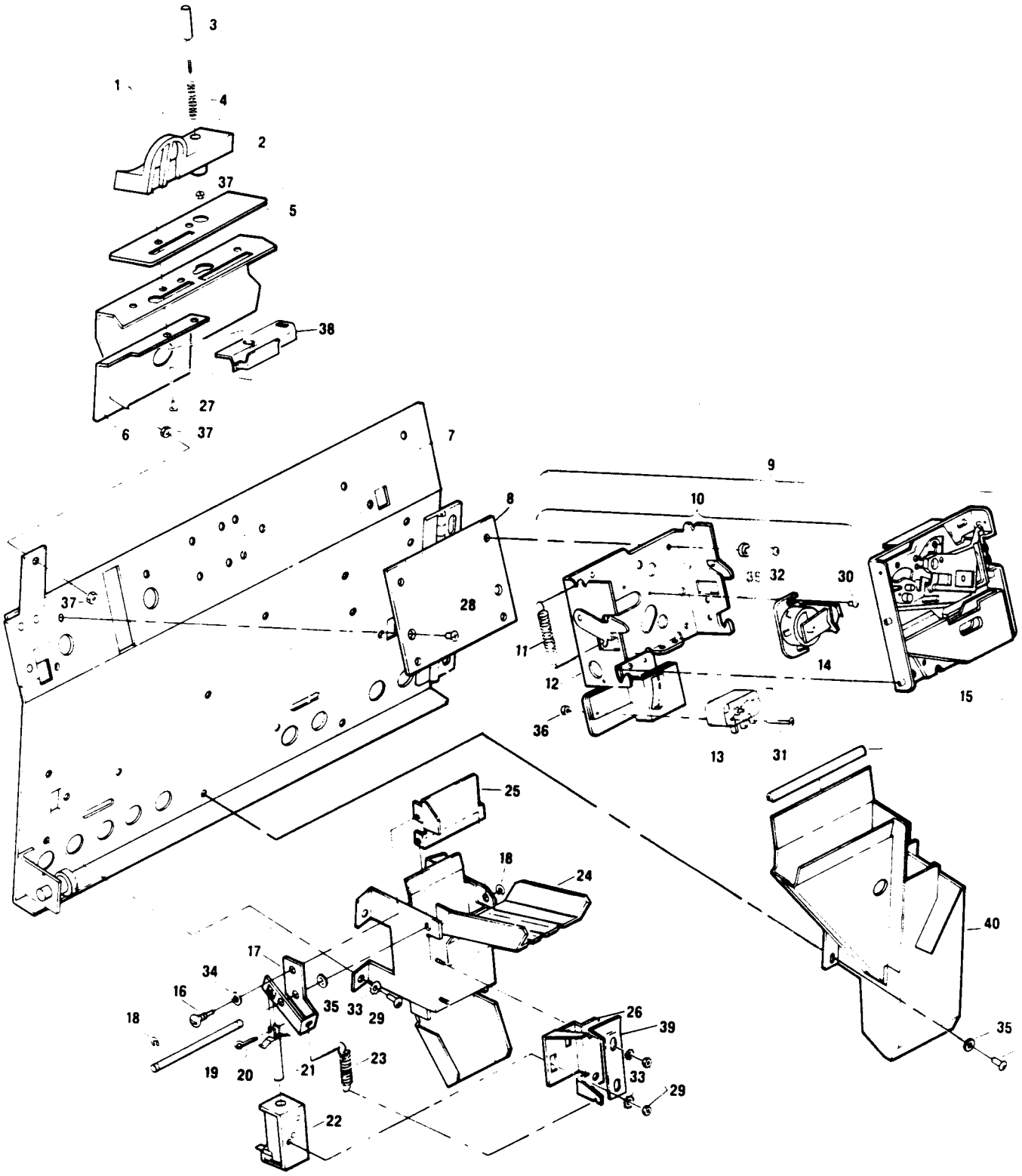
DOOR, LOWER PANEL, SMALL COIN

ITEM	PART NUMBER	DESCRIPTION
1	578 031 00	Entry Assy, Coin Div Fort 5 CT
-	578 032 00	Entry Assy, Coin Div Fort 10 CT
-	578 020 00	Entry Assy, Coin Div Fort 25 CT
-	578 033 00	Entry Assy, Coin Div Fort 50 CT
-	578 034 00	Entry Assy, Coin Div Fort SBA
2	578 019 00	Entry, Coin Fort 5 CT
-	578 019 01	Entry, Coin Fort 10 CT
-	578 019 02	Entry, Coin Fort 25 CT
-	578 019 03	Entry, Coin Fort 50 CT
-	578 019 04	Entry, Coin Fort SBA
3	658 013 00	Plunger, Coin Return, Short
4	331 014 00	Spring, Comp. 240 OD X 1 in.
5	589 037 00	Plate, Cover, Coin Entry
6	636 214 00	Bracket, Anchor, 10, 50, SBA, Dollar
7	655 074 00	Power, Lower Fluorescent
8	674 001 00	Spacer, Coin Mech.
9	570 030 90	Acceptor Assy, 115V 5 CT
-	570 058 90	Acceptor Assy, 115V 10 CT
-	570 055 90	Acceptor Assy, 115V 25 CT
-	570 046 90	Acceptor Assy, 115V 50 CT
-	570 057 90	Acceptor Assy, 115V SBA
10	642 038 90	Channel Assy, 115V 5 CT
-	642 039 90	Channel Assy, 115V 10 CT
-	642 028 90	Channel Assy, 115V 25 CT
-	642 041 90	Channel Assy, 115V 50 CT
-	642 032 90	Channel Assy, 115V SBA
11	330 027 90	Spring, Ext., C.A., 15/64 OD X .90L X .02
12	642 033 00	Channel, Mod, Acceptor
13	519 002 90	Switch & Wire, 25 CT & 50 CT
-	519 003 90	Switch & Wire, 5 CT
-	519 004 90	Switch & Wire, 10 CT
14	459 009 90	Solenoid, Crem, 115VAC
15	570 011 90	Acceptor, Mech., Coin 5 CT
-	570 012 90	Acceptor, Mech., Coin 10 CT
-	570 013 90	Acceptor, Mech., Coin 25 CT
-	570 014 90	Acceptor, Mech., Coin 50 CT
-	570 015 90	Acceptor, Mech., Coin SBA
16	445 001 00	Pin, Drive
17	631 028 00	Arm, Drive
18	447 001 90	Ring, E, 133-.12 Shaft
19	440 005 00	Pin, Hinge
20	443 003 90	Pin, Cotter, .125 DIA X .50LG
21	658 011 90	Plunger, Solenoid 53785-40
22	450 011 90	Solenoid, 120VAC, Cont. W/Spring
23	330 045 00	Spring, Ext. 260 OD X 1.455 Lg. Spec.
24	676 033 00	Support, Div/MTG 40 M.M.
25	589 080 00	Plate, Diverter
26	636 179 00	Bracket, Solenoid, Diverter
27	411 007 94	Screw, Mach PH Pan 8-32 X 1/2
28	411 103 99	Screw, Mach PH F 6-32 X 3/8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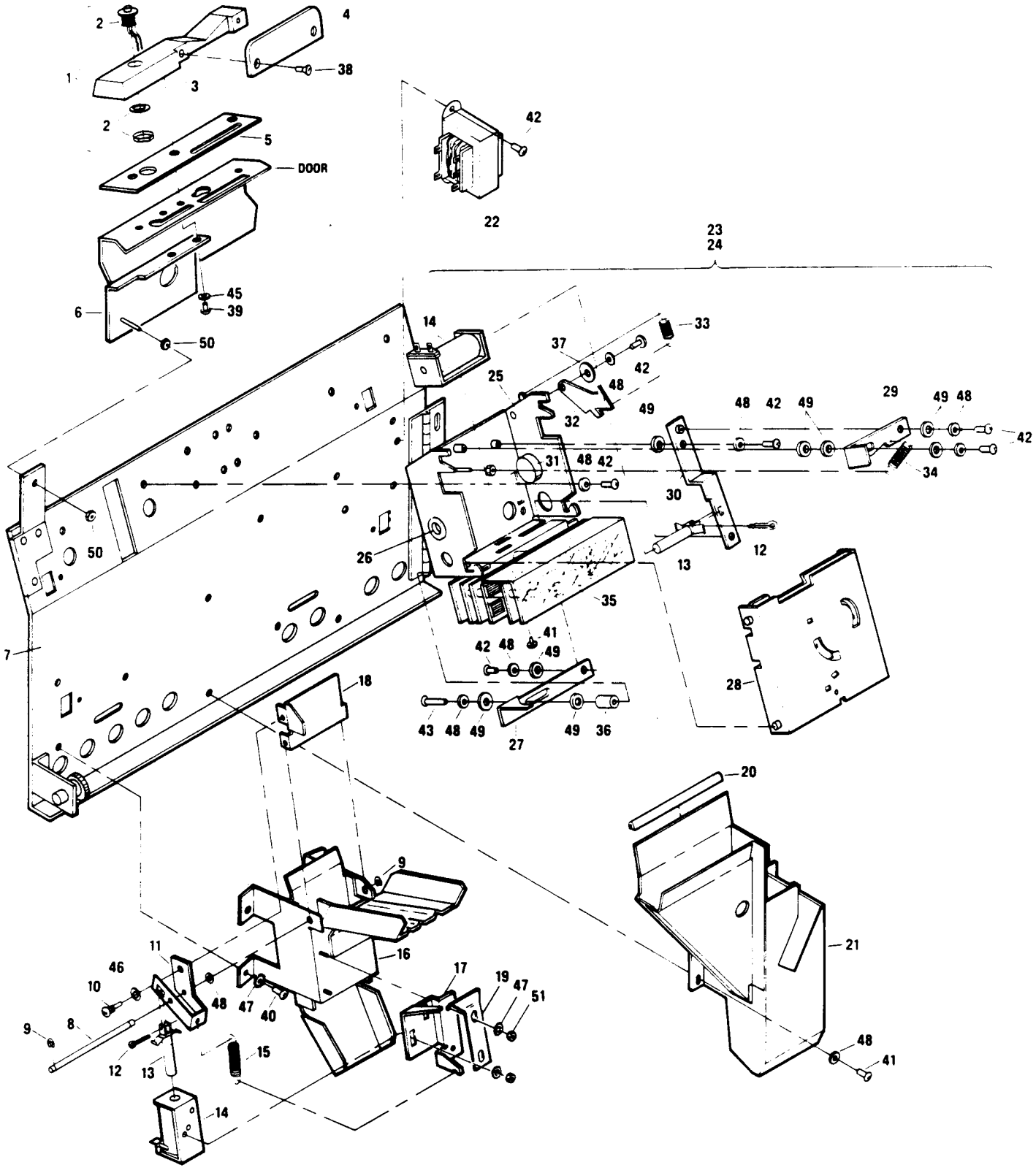
DOOR, LOWER PANEL, SMALL COIN (cont'd)

ITEM	PART NUMBER	DESCRIPTION
29	420 003 95	Nut, Hex, Steel #6-32
30	411 003 95	Screw, Mach PH Pan 6-32 X 1/8
31	411 002 92	Screw, Mach PH Pan 4-40 X 3/4
32	411 003 97	Screw, Mach PH Pan 4-40 X 1/4
33	431 019 95	Washer, Lock, EXT #6
34	431 006 98	Washer, Lock, INT Steel #8
35	430 003 95	Washer, Flat Steel #6
36	420 001 95	Nut, Hex, Steel #4-40
37	421 003 95	Nut, Lock, Esna #6-32
38	581 080 00	Guide WLDMT, Coin 25 Ct Div.
-	581 080 01	Guide WLDMT, Coin 50 Ct Div.
39	669 030 00	Stop, Diverter
40	581 053 00	Guide, Award Reject
41	365 003 90	Extrusion, Rubber 849 X 24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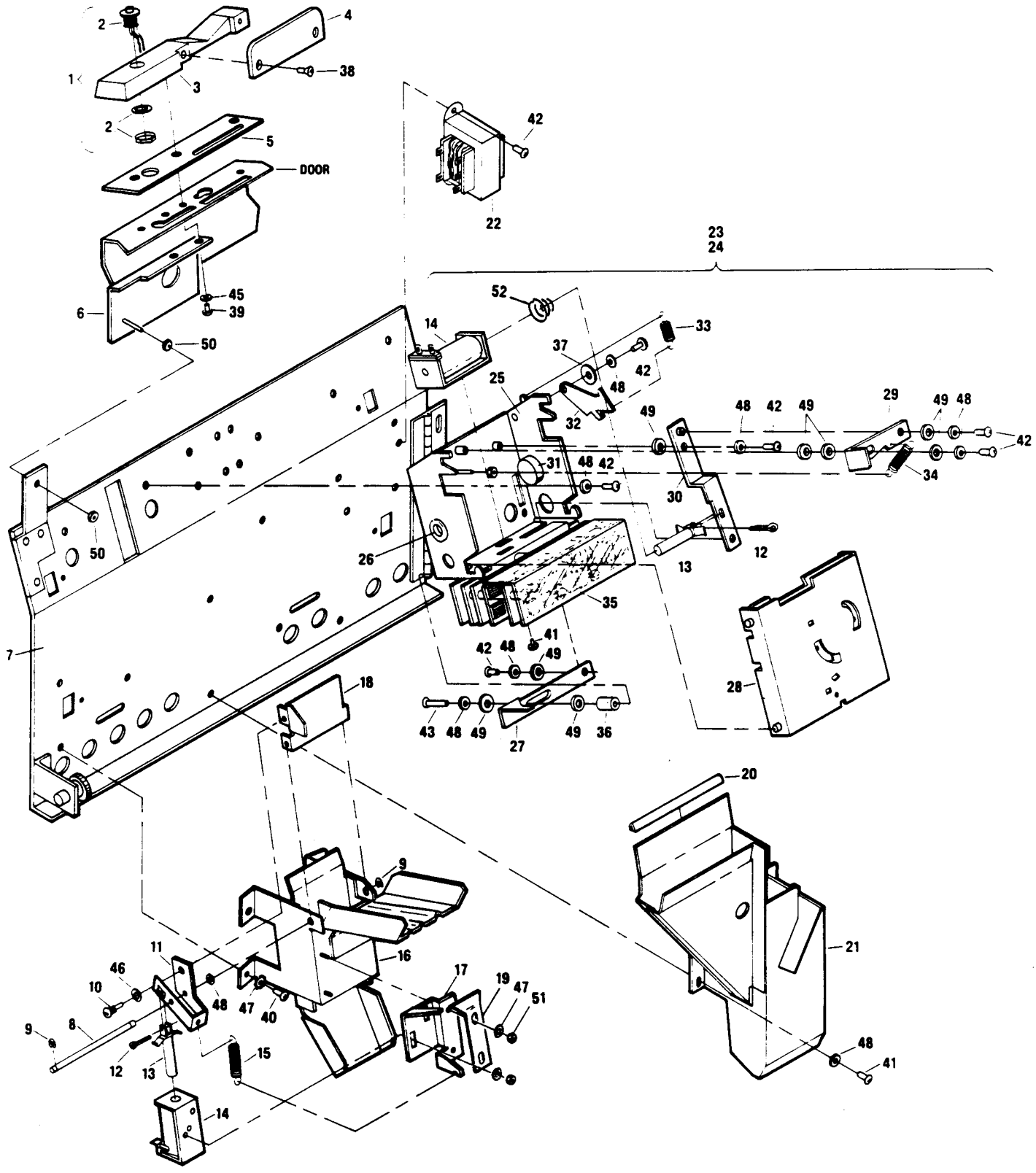
DOOR, LOWER PANEL,LARGE COIN DOLLAR

ITEM	PART NUMBER	DESCRIPTION
1	587 025 00	Entry Assy, Coin, Fort, Ike
-	578 039 00	Entry Assy, Coin, Div Fort, 40MM
2	608 024 00	Harn. Switch Ike Reject
-	OBD	Harn. Switch Reject
3	578 002 50	Entry, Coin, Dollar, W/Hole, UN/C
4	589 034 00	Plate, Back, Entry, Chrome
5	589 081 00	Plate, Adaptor, Dollar
6	636 214 00	Bracket, Anchor, 10 to 50 SBA NON/DV
7	655 074 00	Panel, Lower Fluorecsent
8	440 005 00	Pin, Hinge
9	447 001 90	E Ring
10	445 001 00	Pin, Drive
11	631 028 00	Arm, Drive
12	443 003 90	Pin, Cotter, .125 DIA X .50 LG
13	685 011 90	Plunger, Solenoid, 53785-40
14	450 011 90	Solenoid, 120VAC, CONT. W/Spring
15	330 045 00	Spring, Ext. .260 OD X 1.455 LG Spec
16	676 033 00	Support, Div/MYG 40MM
17	636 179 00	Bracket, Solenoid, Diverter
18	589 080 00	Plate Diverter
19	669 030 00	Stop, Diverter
20	365 003 90	Extrusion, Rubber 894X24
21	581 053 00	Guide, Award Reject
22	569 007 90	Transformer, 16V .4A, Cent/Tap, Flang Mt.
23	570 052 00	Acceptor Assy, Sircoma Non-NJ $
-	570 052 01	Acceptor Assy, Sircoma NV $
24	642 037 00	Channel Assy, Sircoma Non-NJ $
-	642 037 01	Channel Assy, Sircoma NJ $
25	642 026 00	Channel, Acceptor, Sircoma
26	281 006 90	Grommet, 1/2, RG 1/2
27	570 006 00	Acceptor, Coin, Shuttle
28	570 004 90	Acceptor, Mech. Solenoid $
29	586 011 00	Coin Accept. Rej., Trip Lever
30	586 010 00	Lever, Coin Acceptor Rej. Drive
31	637 003 90	Bumper, Rubber, 1/4 X 3/4
32	631 012 00	Arm, Acceptor, Retainer
33	330 027 00	Spring, Ext, 15/64 OD X .90 L X .021
34	330 024 00	Spring, Ext .250 OD X 1.00 L X .029 W
35	688 017 00	Cover, P.C. Board
36	674 077 90	Spacer, ST RD .260 ID X .34 OD X .294 LG
37	674 076 00	Spacer, Arm, Coin Accept
38	411 107 91	Screw, Mach PH F 8-32 X 3/8
39	411 007 95	Screw, Mach PH Pan 8-32 X 5/8
40	419 901 99	Screw, Mach PH Truss 6-32 X 1/8
41	411 003 95	Screw, Mach PH Pan 6-32 X 1/8
42	411 003 97	Screw, Mach PH Pan 6-32 X 1/4
43	411 003 91	Screw, Mach PH Pan 6-32 X 1/2
44	411 005 99	Screw, Mach PH Pan 6-32 X 1-1/2
45	430 006 98	Washer, Flat Steel #8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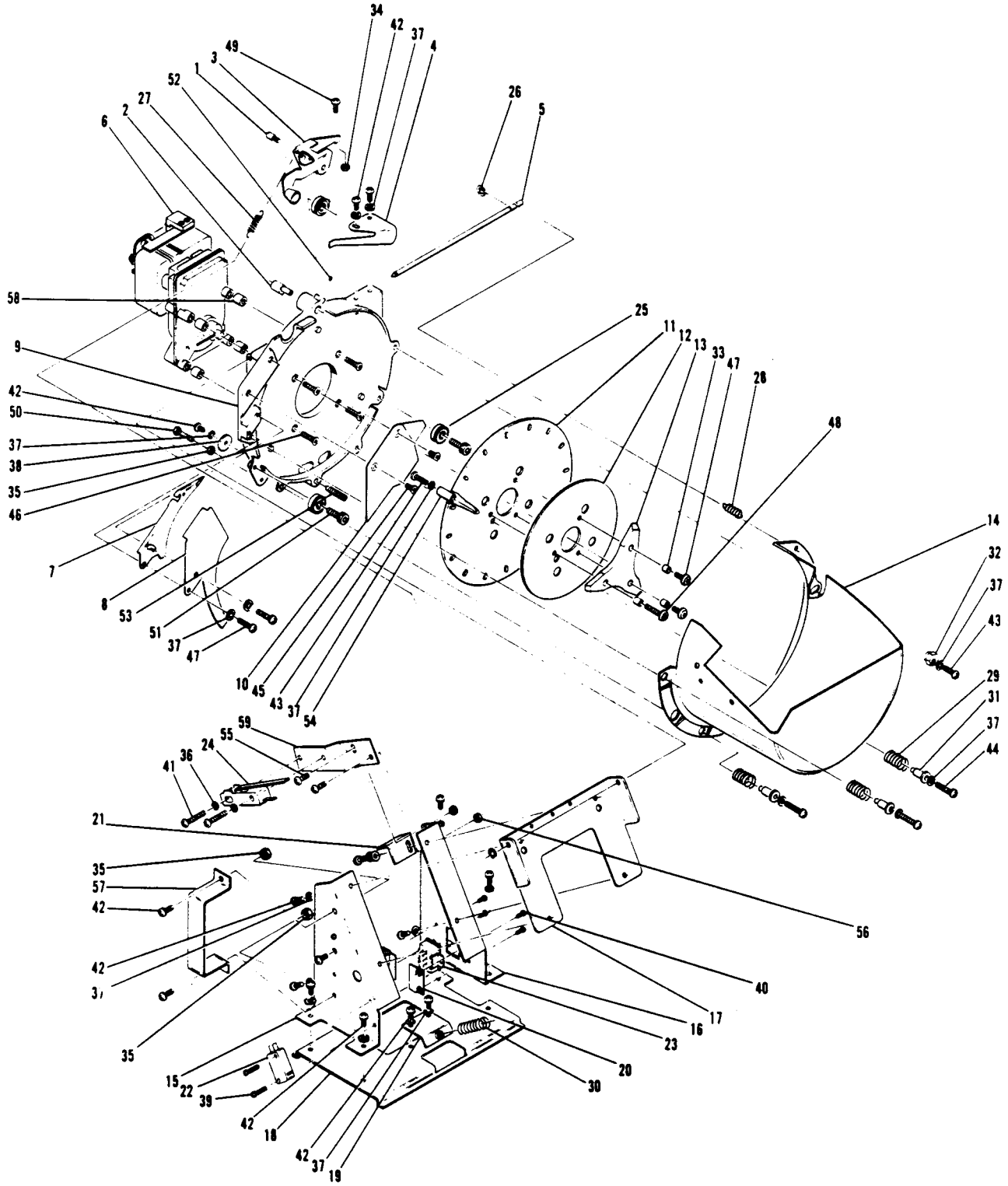
DOOR, LOWER PANEL, LARGE COIN (cont'd)

ITEM	PART NUMBER	DESCRIPTION
46	431 006 98	Washer, Lock INT Steel #8
47	431 019 95	Washer, Lock Ext Steel #6
48	430 003 95	Washer, Flat Steel #6
49	439 009 99	Washer, Burnished, Flat #6
50	421 003 95	Nut, Lock Esna #6-32
51	420 003 95	Nut, Hex Steel #6-32
52	339 026 00	Spring, Conical Solenoid, 30Z

OBD= Order by Description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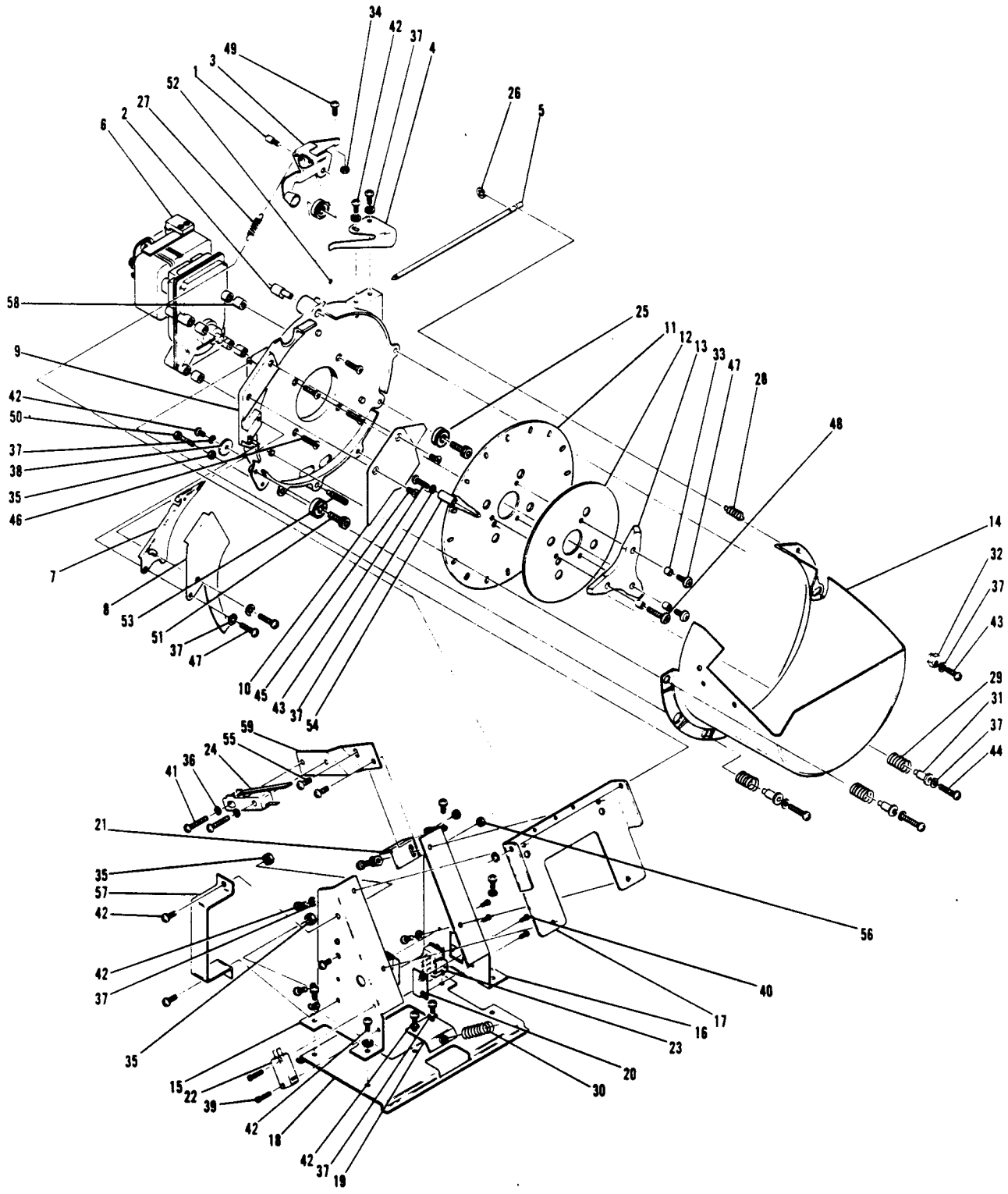
HOPPER, SMALL BOWL, FORTUNE I

ITEM	PART NUMBER	DESCRIPTION
1	419 010 00	Screw, Special-Cam
2	659 044 00	Cam, Adjustment-Hopper
3	631 014 00	Arm, Rocker
4	681 005 00	Wiper, Coin, Hopper
5	664 001 00	Rod, Pivot, Hopper
6	358 010 90	Motor, Hopper, 25 RPM LD
7	585 001 00	Knife, Hopper, 1CT-$ Bally
8	688 010 00	Cover, Coin Outlet, 1CT-SBA
-	688 077 00	Cover, Coin Outlet, 50CT-40MM
9	649 003 00	Housing, Wheel, Hopper 1CT-1$
10	574 003 00	Deflector, Coin, Hopper
11	588 005 00	Pinwheel, Hopper, 16 Pin, Round
12	680 016 00	Wheel, Shelf, Hopper, 5CT
-	680 017 00	Wheel, Shelf, Hopper, 10CT
-	680 015 00	Wheel, Shelf, Hopper, 25Ct
-	680 012 00	Wheel, Shelf, Hopper, SBA
-	680 014 00	Wheel, Shelf, Hopper, 50CT
13	572 002 00	Agitator, Coin, Hopper, 3 Star
14	620 001 00	Bowl, Hopper, Div., 1CT-$
15	636 081 00	Bracket, Hopper MTG, Narrow, LH
16	636 080 00	Bracket, Hopper MTG, Narrow, RH
17	636 028 00	Bracket, Pivot, Hopper
18	633 013 00	Base, Narrow, Hopper
19	636 052 00	Bracket, Spring Retainer, Hopper
20	661 028 00	Retainer, Hopper Plug, Small
21	636 254 00	Bracket, Stop, C/Switch, Hopper
22	510 031 90	Switch, V3-154-D8
23	217 032 90	Plug, 8 Pin, W/MTG Flange
24	510 019 90	Switch, E13-50H
25	399 003 90	Bearing, Pinwheel, Hopper
26	447 002 90	E Ring, 5133-1B
27	330 016 00	Spring, Ext., .26 OD X 1.38 L X .018 W
-	330 019 00	Spring, Ext., .30 OD X 1.39 L X .031 W
28	330 010 00	Spring, Ext., .312 OD X 1.00 L X .037 W
29	331 008 00	Spring, Comp., .48 OD X .76 L X .045 W
-	331 010 00	Spring, Comp., .48 OD X .76 L X .055 W
30	331 015 00	Spring, Comp., .36 OD X 1.39 L X .042 W
-	331 009 00	Spring, Comp., .41 OD X 1.07 L X .065 W
31	653 006 00	Mount, Bowl Spring, 1CT-SBA CAD.
-	653 006 01	Mount, Bowl Spring, 50CT, $ BLK
32	653 004 00	Mount, Eccentric, 1CT-SBA CAD.
-	653 004 01	Mount, Eccentric, 50CT, 1$, 40MM BLK
33	674 099 90	Spacer,STL, .203 ID X .266 OD X .25
34	424 003 95	Nut, Kep Steel #6-32
35	424 008 99	Nut, Kep Steel #10-32
36	431 003 95	Washer, Lock INT Steel #6
37	431 008 99	Washer, Lock INT Steel #10
38	439 011 90	Washer, Fender #10
39	411 002 91	Screw, Mach PH Pan 4-40 X 5/8
40	411 003 97	Screw, Mach PH Pan 6-32 X 1/4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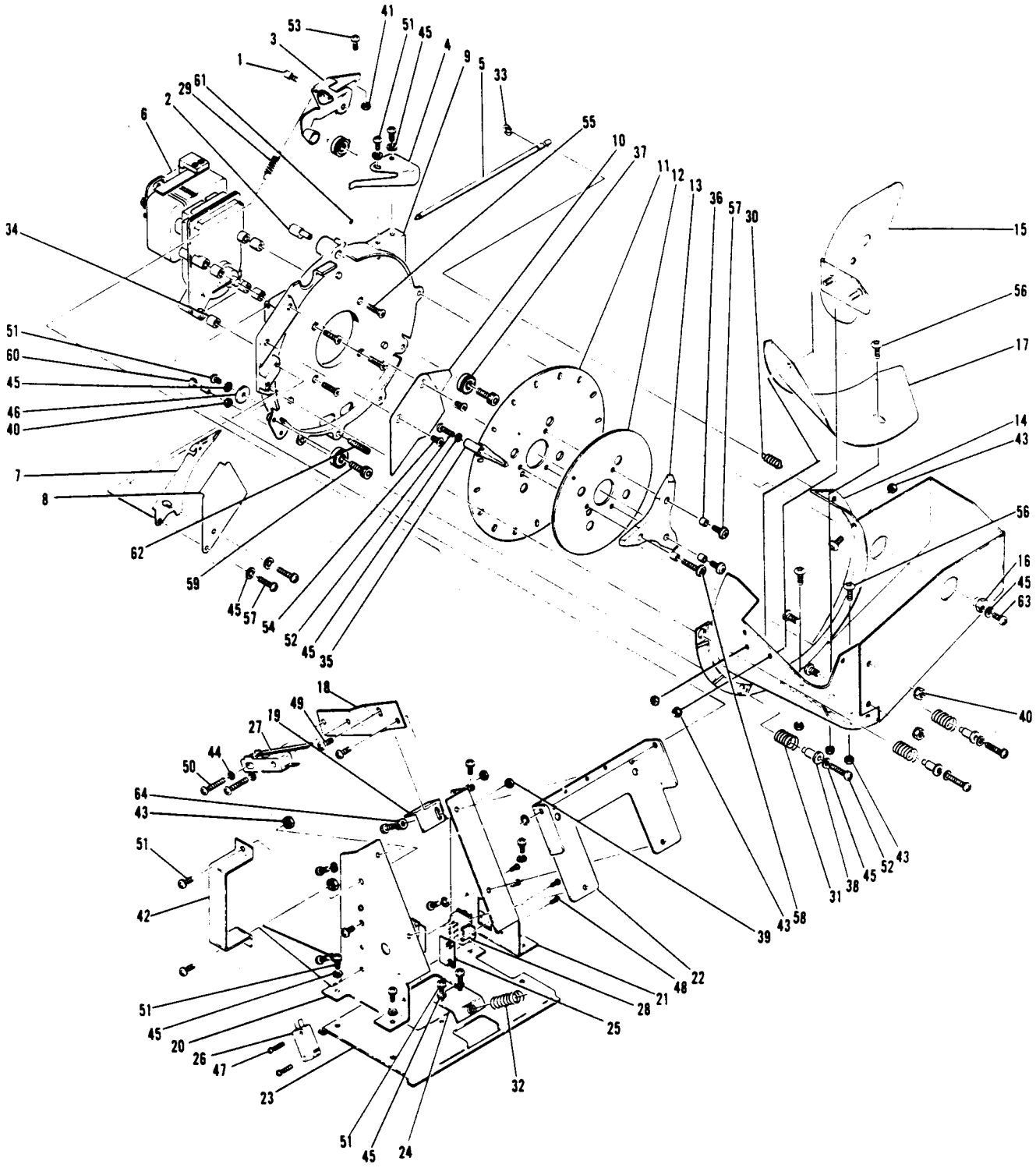
HOPPER, SMALL BOWL, FORTUNE I, (cont'd)

ITEM	PART NUMBER	DESCRIPTION
41	411 004 93	Screw, Mach PH Pan 6-32 X 3/4
42	411 009 91	Screw, Mach PH Pan 10-32 X 3/8
43	411 009 96	Screw, Mach PH Pan 10-32 X 5/8
44	411 010 90	Screw, Mach PH Pan 10-32 X 1
45	411 107 90	Screw, Mach PH F 8-32 X 3/8
46	411 109 95	Screw, Mach PH F 10-32 X 1/2
47	419 909 96	Screw, PH Truss HD 10-32 X 1/2
48	413 822 90	Screw, Mach Soc But, 10-32 X 1-1/4
49	413 004 91	Screw, Nylon SL Pan 6-32 X 1/2
50	411 510 90	Screw, Mach Hex HD 10-32 X 1
51	414 611 93	Screw, Cap, Hex Soc 1/4-28 X 5/8
52	416 609 91	Screw, Set, Hex/Soc 10-32 X 1/4
53	416 615 91	Screw, Set, Hex, Half Dog Pt. 3/8 X 1
54	638 036 00	Bushing, .38 OD X .20 ID X .37
55	411 003 99	Screw, Mach PH Pan 6-32 X 3/8
56	421 003 96	Nut, Lock Esna Thin #6-32
57	380 007 00	Handle, Hopper IGT
58	674 101 90	Spacer, STL .203 ID X .312 OD X .375
59	636 119 00	Bracket, Hopper, Switch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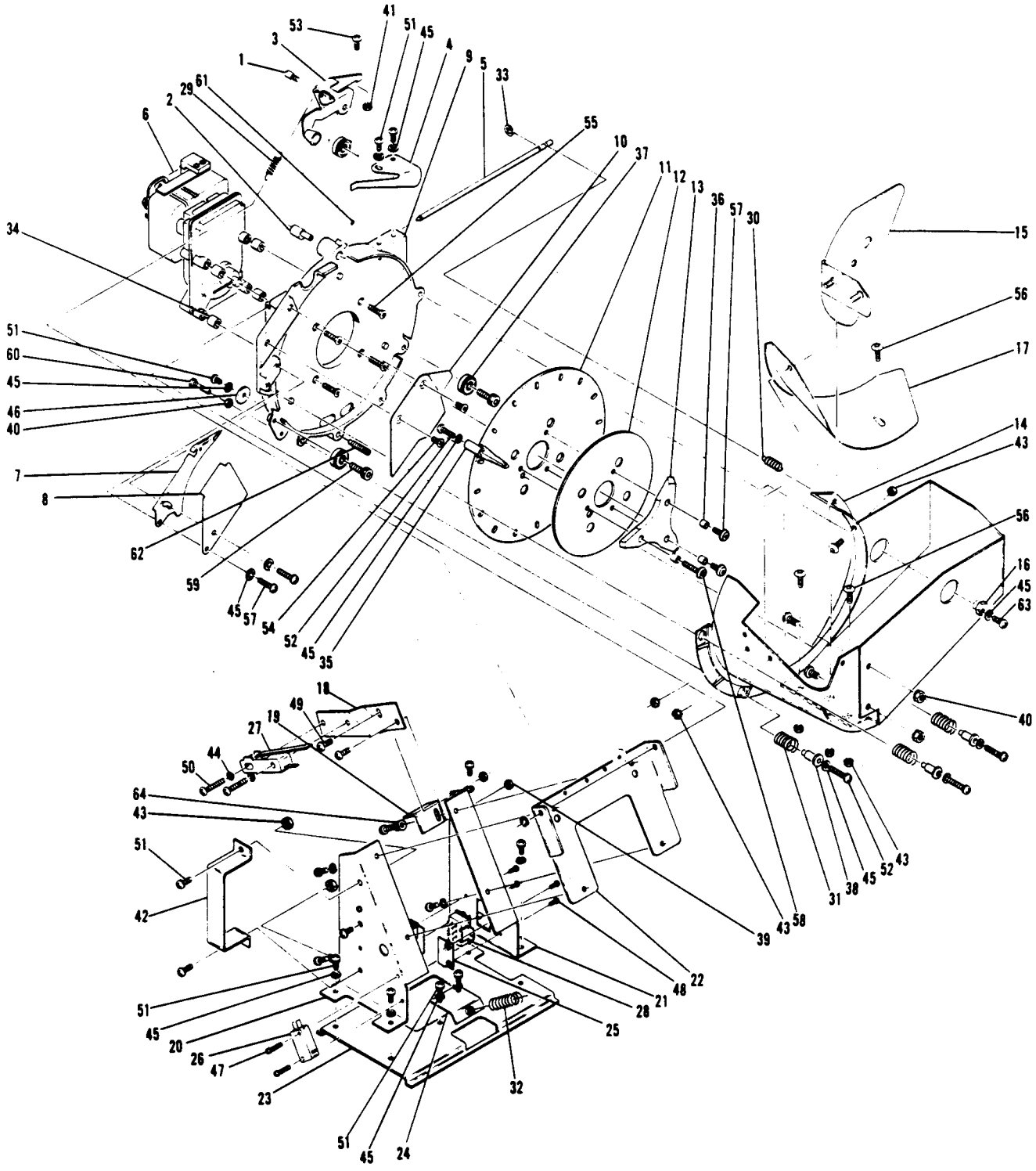
HOPPER, EXTENDED BOWL, FORTUNE I

ITEM	PART NUMBER	DESCRIPTION
1	419 010 00	Screw, Special-Cam
2	659 044 00	Cam, Adjustment-Hopper
3	631 014 00	Arm, Rocker
4	681 005 00	Wiper, Coin, Hopper
5	664 001 00	Rod, Pivot, Hopper
6	358 009 90	Motor, Hopper, 35 RPM HD
7	585 001 00	Knife, Hopper, 1CT-$ Bally
8	688 077 00	Cover, Coin Outlet, 40MM
9	649 003 00	Housing, Wheel, Hopper, 1CT-$
10	574 003 00	Deflector, Coin, Hopper
11	588 008 00	Pinwheel, Hopper, 10 Pin Oval
-	588 009 00	Pinwheel, Hopper, 11 Pin Oval
12	680 014 00	Wheel, Shelf, Hopper, 50CT
-	680 013 00	Wheel, Shelf, Hopper, IKE
-	680 009 00	Wheel, Shelf, Hopper, 40MM
13	572 002 00	Agitator, Coin, Hopper, 3 Star
14	620 011 00	Bowl, Assy, Hopper, Side Ext.
15	632 005 00	Baffel, Hopper, W/O Bend
16	653 004 00	Mount, Eccent. 50CT, $, 40MM BLK
-	653 004 01	Mount, Eccentric, 1CT-SBA CAD
17	628 003 00	Liner, Hopper, Ext. Bowl
18	636 119 00	Bracket, Hopper Switch
19	636 254 00	Bracket, Stop, C/Switch, Hopper
20	636 081 00	Bracket, Hopper MTG, Narrow, LH
-	636 403 00	Bracket, Hopper MTG, 40MM, LH
21	636 080 00	Bracket, Hopper MTG, Narrow, RH
-	636 404 00	Bracket, Hopper MTG, 40MM, RH
22	636 028 00	Bracket, Pivot, Hopper
23	633 013 00	Base, Narrow, Hopper
24	636 052 00	Bracket, Spring Retainer, Hopper
-	636 405 00	Bracket, Spring Retainer, Hopper 40MM
25	661 028 00	Retainer, Hopper Plug, Small
26	510 031 90	Switch, V3-154-08
27	510 019 90	Switch, E13-50H
28	217 032 90	Plug, 8 Pin, W/MTG Flange
29	330 019 00	Spring, Ext., .30 OD X 1.39 L X .031 W
30	330 010 00	Spring, Ext., .312 OD X 1.00 L X .037 W
31	331 008 00	Spring, Comp., .48 OD X .76 L X .045 W
-	331 010 00	Spring, Comp., .48 OD X .76 L X .055 W
32	331 009 00	Spring, Comp., .41 OD X 1.07 L X .065 W
33	447 002 90	E Ring 5133-88
34	674 101 90	Spacer, STL .203 ID X .312 OD X .375
35	638 025 00	Bushing, .38 OD X .20 ID X .75
36	674 099 90	Spacer, STL .203 ID X ,266 OD X .75
-	674 100 90	Spacer, STL .203 ID X .266 OD X .375
37	399 003 90	Bearing, Pinwheel, Hopper
38	653 006 01	Mount, Bowl Spring, 50CT, $ BLK
39	421 003 96	Nut, Lock Esna Thin #6-32
40	420 006 99	Nut, Hex 10-32
41	424 003 95	Nut, Kep Steel #6-32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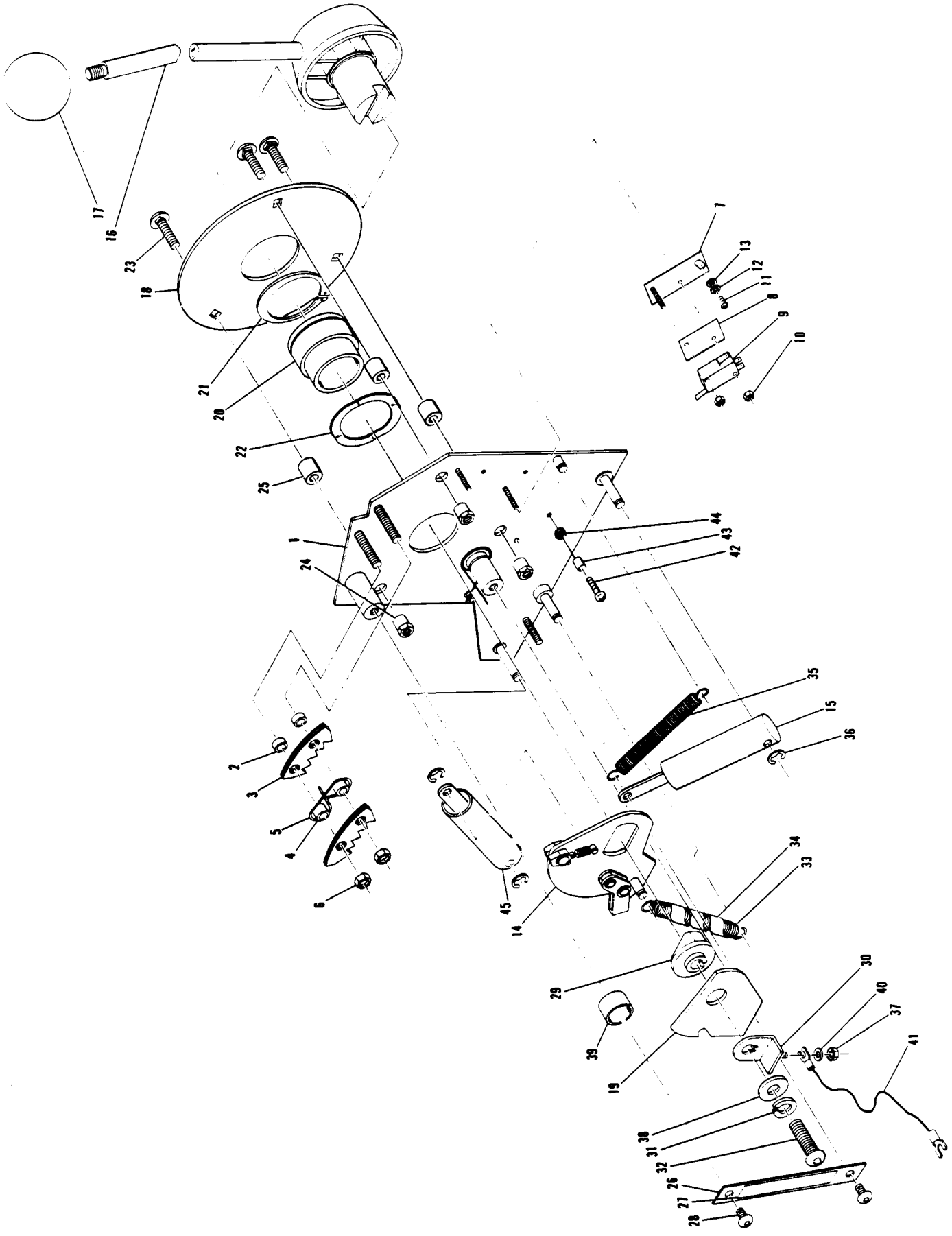
HOPPER, EXTENDED BOWL, FORTUNE I (cont'd)

ITEM	PART NUMBER	DESCRIPTION
42	380 007 00	Handle, Hopper IGT
43	424 008 99	Nut, Kep Steel #10-32
44	431 003 95	Washer, Lock INT Steel #6
45	431 008 99	Washer, Lock INT Steel #10
46	439 011 90	Washer, Fender #10
47	411 002 91	Screw, Mach PH Pan 4-40 X 5/8
48	411 003 97	Screw, Mach PH Pan 6-32 X 1/4
49	411 003 99	Screw, Mach PH Pan 6-32 X 3/8
50	411 004 94	Screw, Mach PH Pan 6-32 X 7/8
51	411 009 91	Screw, Mach PH Pan 10-32 X 3/8
52	411 010 90	Screw, Mach PH Pan 10-32 X 1
53	413 004 91	Screw, Nylon, SL Pan 6-32 X 1/2
54	411 107 91	Screw, Mach PH F 8-32 X 3/8
55	411 109 98	Screw, Mach PH F 10-32 X 3/4
56	419 909 98	Screw, PH Truss HD 10-32 X 3/8
57	419 909 96	Screw, PH Truss HD 10-32 X 1/2
-	419 909 90	Screw, PH Truss HD 10-32 X 5/8
58	413 822 90	Screw, Mach Soc Bot 10-32 X 1-1/4
-	419 910 95	Screw, PH Truss HP 10-32 X 1-3/8
59	414 611 93	Screw, Cap, Hex Soc 1/4-28 X 5/8
60	411 510 90	Screw, Mach Hex HD 10-32 X 1
61	416 609 91	Screw, Set, Hex/Soc 10-32 X 1/4
62	416 615 91	Screw, Set, Hex, Half Dog Pt. 3/8 X 1
63	411 009 96	Screw, Mach PH Pan 10-32 X 3/8
64	430 008 99	Washer, Flat Steel #10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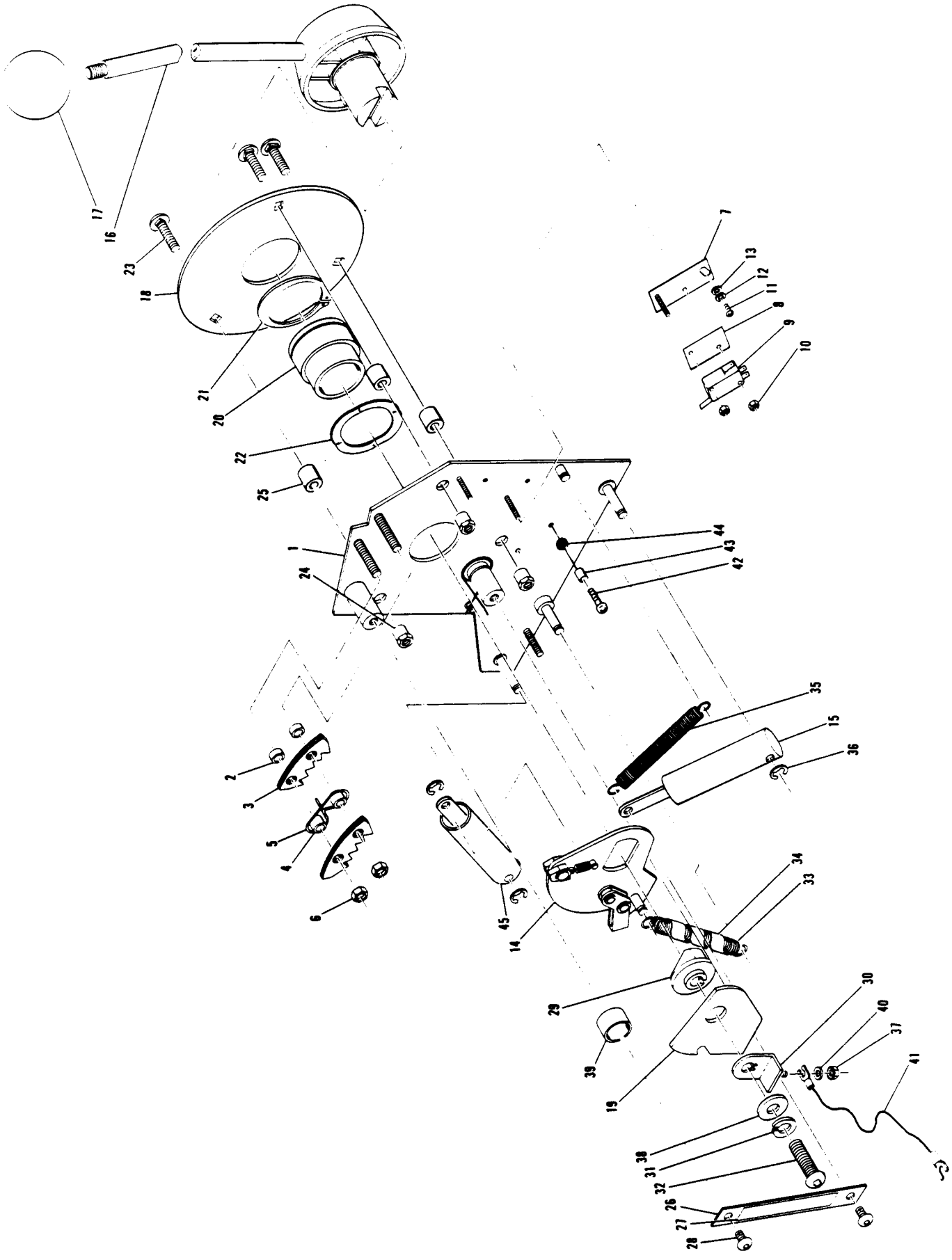
HANDLE ASSEMBLY, FORTUNE I

ITEM	PART NUMBER	DESCRIPTION
-	589 111 00	Plate Assy, Base Slot Handle, IGT
1	589 110 00	Plate Cover Assy
2	674 084 01	Spacer, Handle, .257 ID X .37 OD X.145 L
3	590 001 00	Rack, Slot Handle
4	674 084 00	Spacer, Handle, .257 ID X .37 OD X .245 L
5	339 023 00	Spring Rack
6	421 011 90	Nut, Lock Esna 1/4-20
7	589 100 00	Plate, Switch
8	310 015 01	Insulator, Switch, Upper
9	510 030 90	Switch, Snap-Mini Lever
10	421 001 95	Nut, Lock Esna 4-40
11	411 003 98	Screw, Mach, PH Pan 6-32 X 5/16
12	431 019 95	Washer, Lock, Ext #6
13	430 003 95	Washer, Flat, Steel #6
14	589 112 00	Plate Action Assy Slot Hld IGT
-	589 099 00	Plate, Sub Assy Slot Handle
-	656 014 00	Pawl, Slot Handle
-	330 039 00	Spring, Ext. Pawl
-	447 055 90	Ring, E, 133-.310 Shaft
-	430 013 90	Washer, Shim, .250 ID X .035 THK
-	599 044 00	Cam, Slot Handle
-	332 008 00	Spring, Torsion, Cam
-	447 040 90	Ring, E, 133-.250 Shaft
-	447 002 90	Ring, E, 133-.18 Shaft
-	440 009 00	Pin, Cam
-	655 006 00	Roller, Cam
15	599 042 00	Dash Pot Assy, Slot Handle
-	311 004 01	Sleeve, Short Slot Handle
-	599 043 00	Piston, Nylon
-	162 002 90	Lubricant, Spray Tri-Flow
-	663 013 90	Ring, O .549 ID X .103 Cross Sect
-	440 008 00	Pin, Piston
-	664 005 01	Rod Piston, Short Slot Handle
-	388 008 00	Handle Arm Assy, IGT Chrome
16	380 006 00	Handle, Arm SubAssy IGT Slot
-	582 008 00	Hub, Cover Casting, Handle
-	667 007 00	Shaft, Hub Slot Handle
-	164 009 90	Adhesive, Loctite RC/601 Omnift
-	631 058 00	Arm, Handle IGT
-	164 009 90	Adhesive, Loctite RC/601 Omnift
-	416 616 91	Screw, Set Oval 5/16-18 X 1/2
-	164 009 90	Adhesive, Loctite RC/601 Omnifit
17	383 005 90	Knob, Slot Handle 1-7/8 in. DIA
-	164 009 90	Adhesive, Loctite RC/601 Omnifit
-	609 204 00	Harn, Handle Retrofit
-	611 111 90	Wire, 22GA PVC INS Brown
-	611 133 90	Wire, 22GA PVC INS Orange
-	611 155 90	Wire, 22GA PVC INS Green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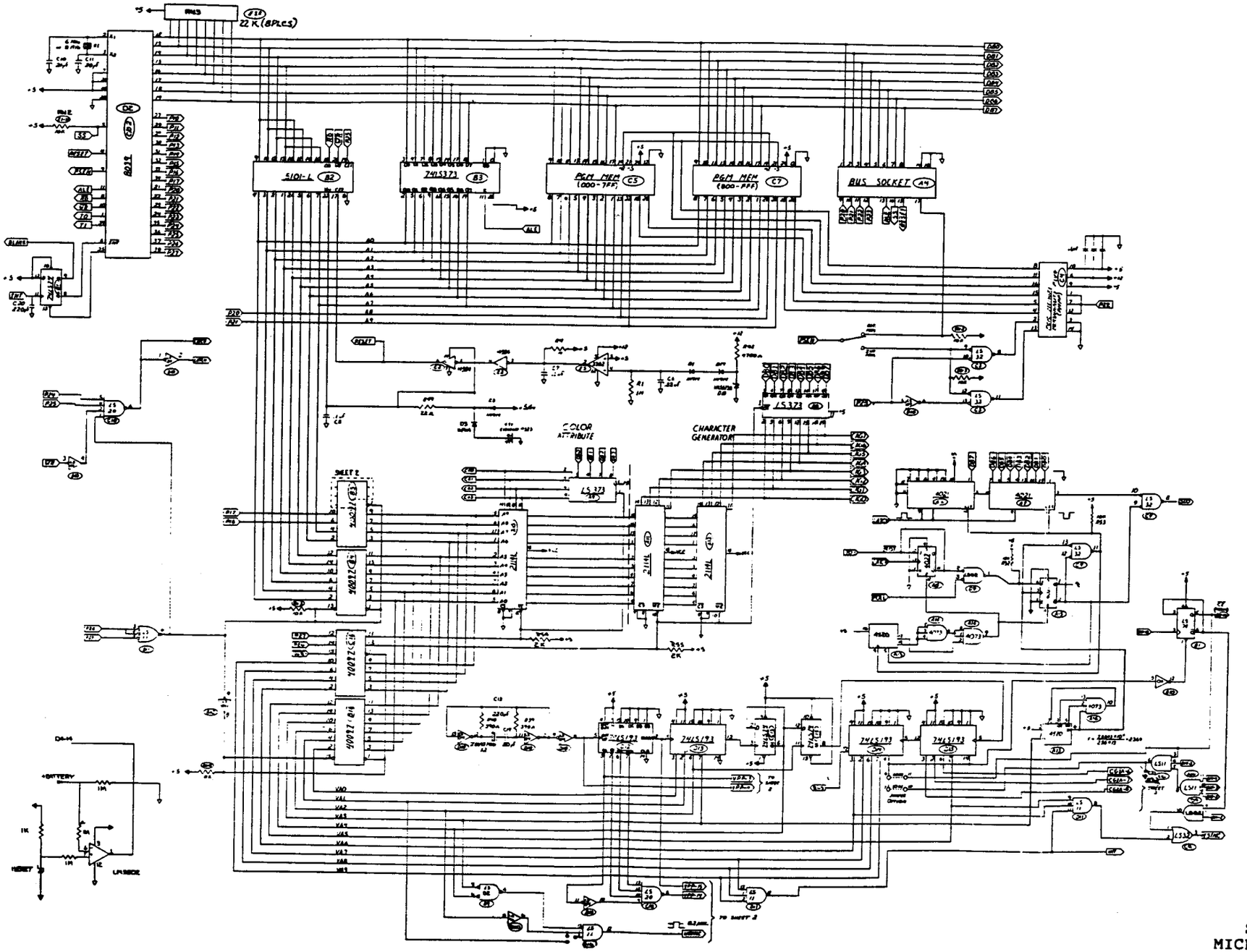
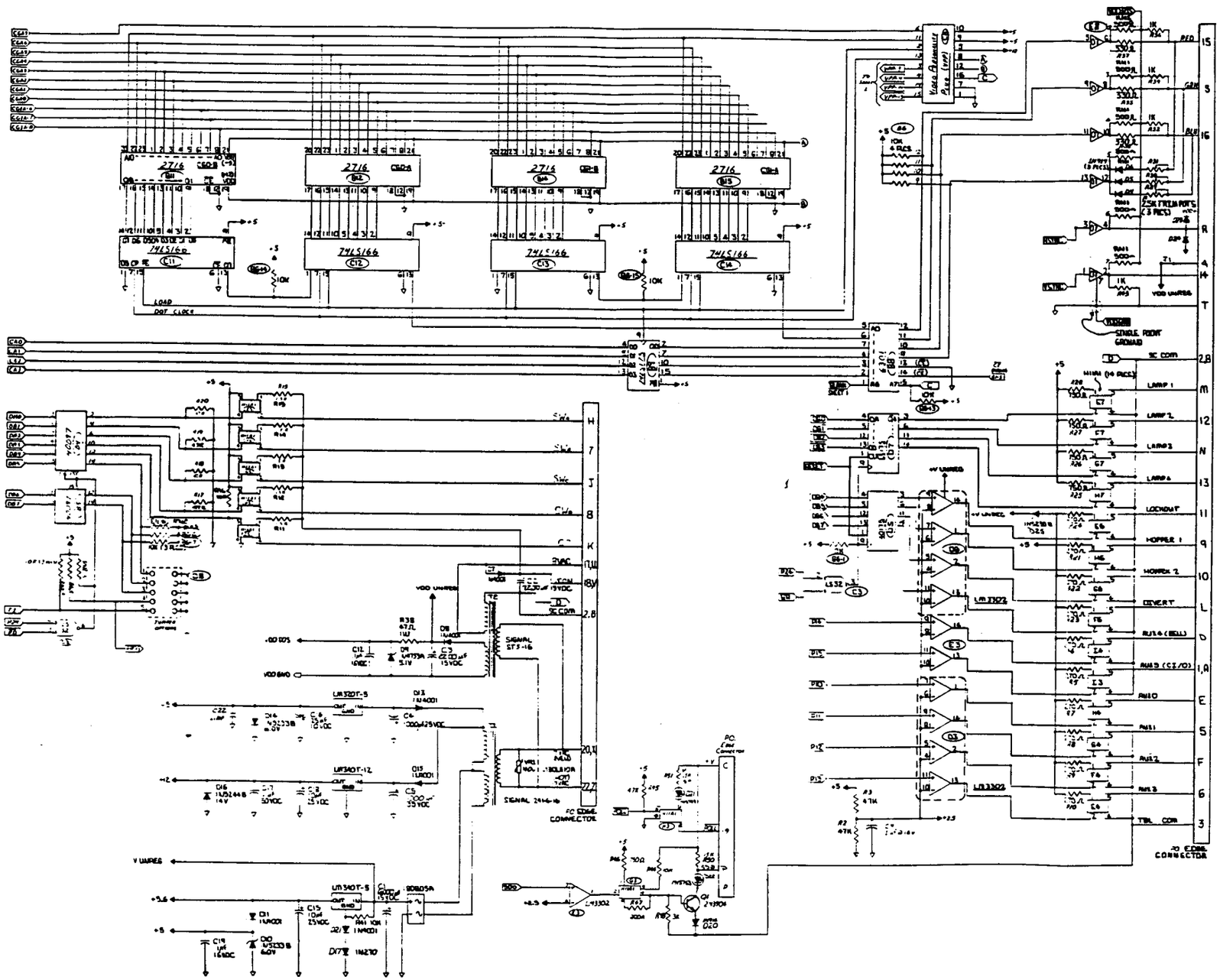
HANDLE ASSEMBLY, FORTUNE 1 (cont'd)

ITEM	PART NUMBER	DESCRIPTION
-	289 003 90	Ty-Rap, Small Cable
-	216 015 90	Term, CRP QDISC-F .187 R FISD
-	216 068 90	Term, CRP B-SPLC 22-16
-	911 047 00	Kit, Assy Parts, Slot Hndl. IGT
-	810 003 90	Bag, Plastic 9 in. X 12 in.
18	663 012 00	Ring, Slot Handle
19	599 041 00	Hammer, SubAssy, Slot Handle
20	399 008 00	Bearing, Slot Handle
21	447 039 90	Ring, Bsc. 100-1.75 Shaft
22	434 004 90	Washer, Spring, 5806-165-2
23	412 113 95	Bolt, Carr. RDHD 1/4-20 X 1 NI/PT
24	429 019 00	Nut, Special 1/4-20 X 1/4 Slot/HD
25	674 127 90	Spacer, AL RD .257 ID X .50 0D X .438
26	635 010 00	Brace, Slot Handle
27	850 087 00	Lable Brace, Slot Handle
28	413 820 90	Screw, Mach Soc But 1/4-20 X 1/2
29	674 082 00	Spacer, Bushing, Slot Handle
30	439 031 00	Washer, Gnd Connection 3/8 I.D.
31	439 014 90	Washer, Helical Spring 3/8
32	413 810 98	Screw, Mach Soc But 3/8 -16 X 1-1/4
33	330 077 00	Spring, Ext. Plate Return
34	289 010 90	Wrapping, Har 3/8 OD Poly
35	330 076 00	Spring, Ext Cam Return
36	447 040 90	Ring, E, 133-.250 Shaft
37	424 008 99	Nut, Kep Steel 10-32
38	430 009 93	Washer, Flat Steel 3/8
39	665 016 00	Roller, Cam Arm, Handle
40	430 008 99	Washer, Flat Steel #10
41	609 282 01	Harn, Grounding, 16 GA. X 6.50 in.
42	411 005 96	Screw, Mach PH Pan 6-32 X 1
43	311 005 90	Sleeve, Shrink 1/8 in. Black
44	424 003 95	Nut, Kep Steel 6-32
-	824 041 00	Instr, IGT Handle Retrofit 1 SW
-	500 035 90	Box, Cardboard, IGT Handle
45	599 042 01	Dashpot, Assy, Slot Handle OPT
-	311 004 00	Sleeve, Handle Assy
-	599 043 00	Piston, Nylon
-	162 002 90	Lubricant, Spray Tri-Flow
-	663 013 90	Ring, O .549 ID X .103 Cross Section
-	440 008 00	Pin, Piston
-	664 005 00	Rod, Piston

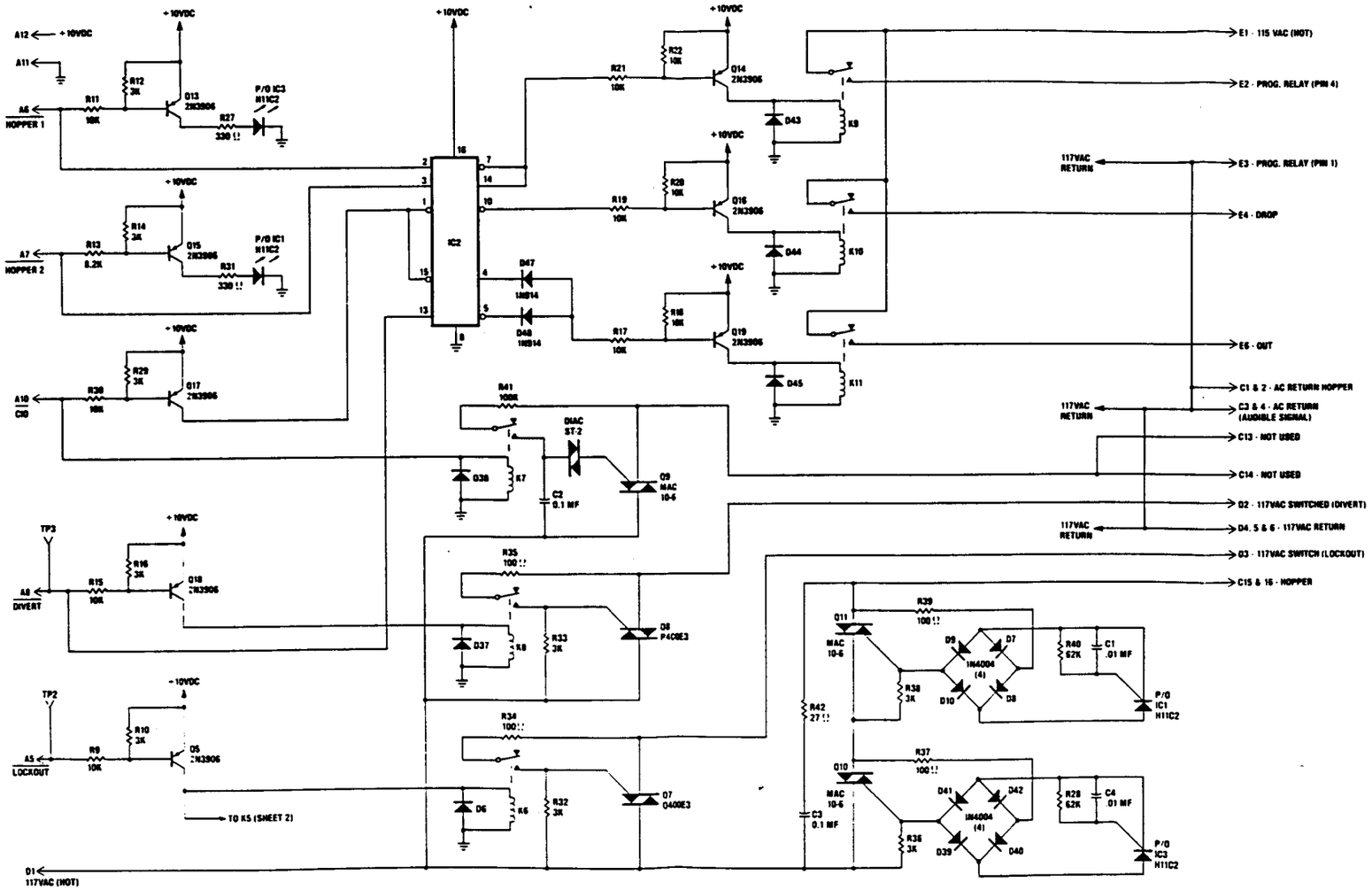
Section VIII



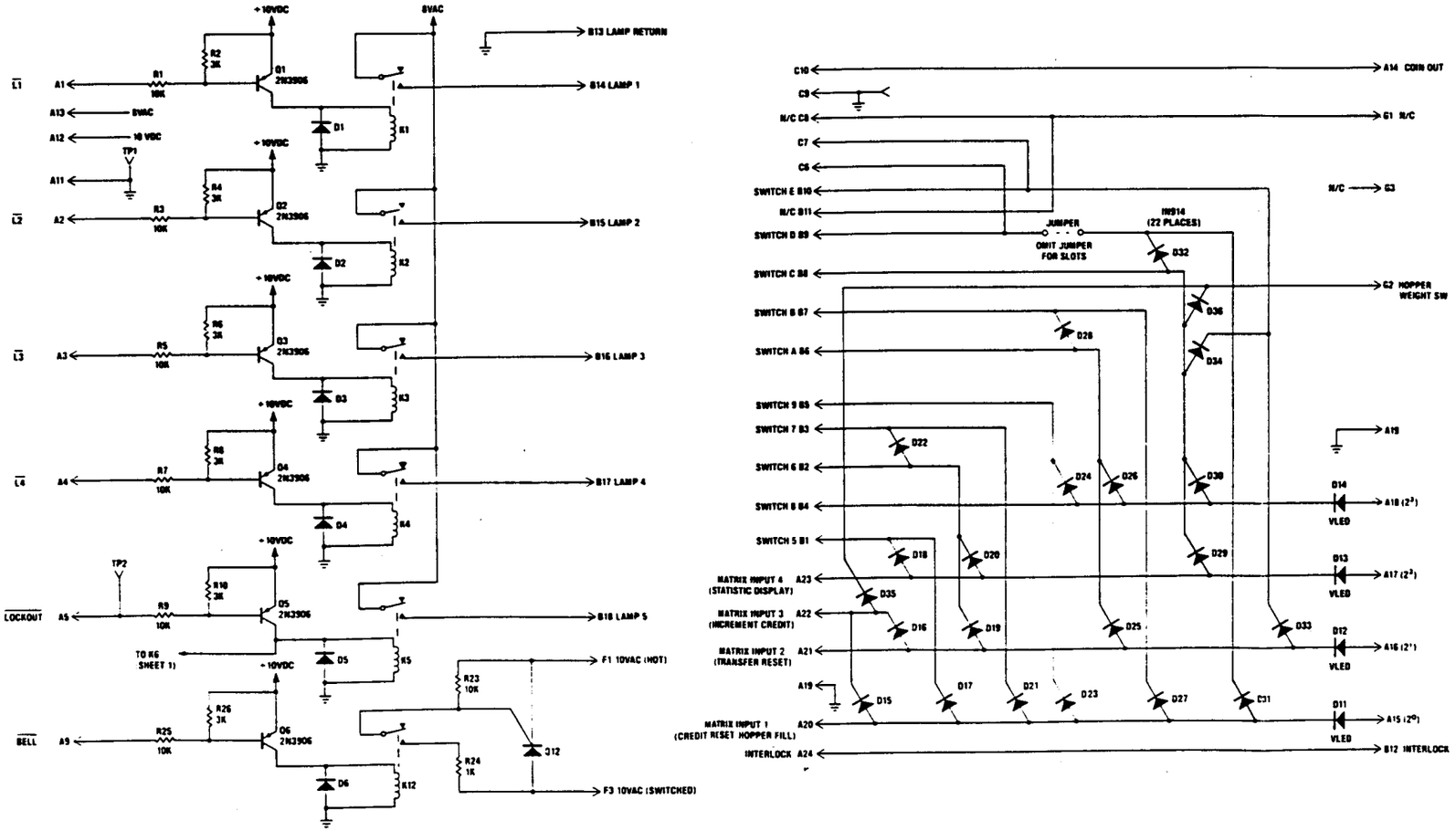
SCHEMATIC DIAGRAM
MICROPROCESSOR BOARD
Sheet 1 of 2



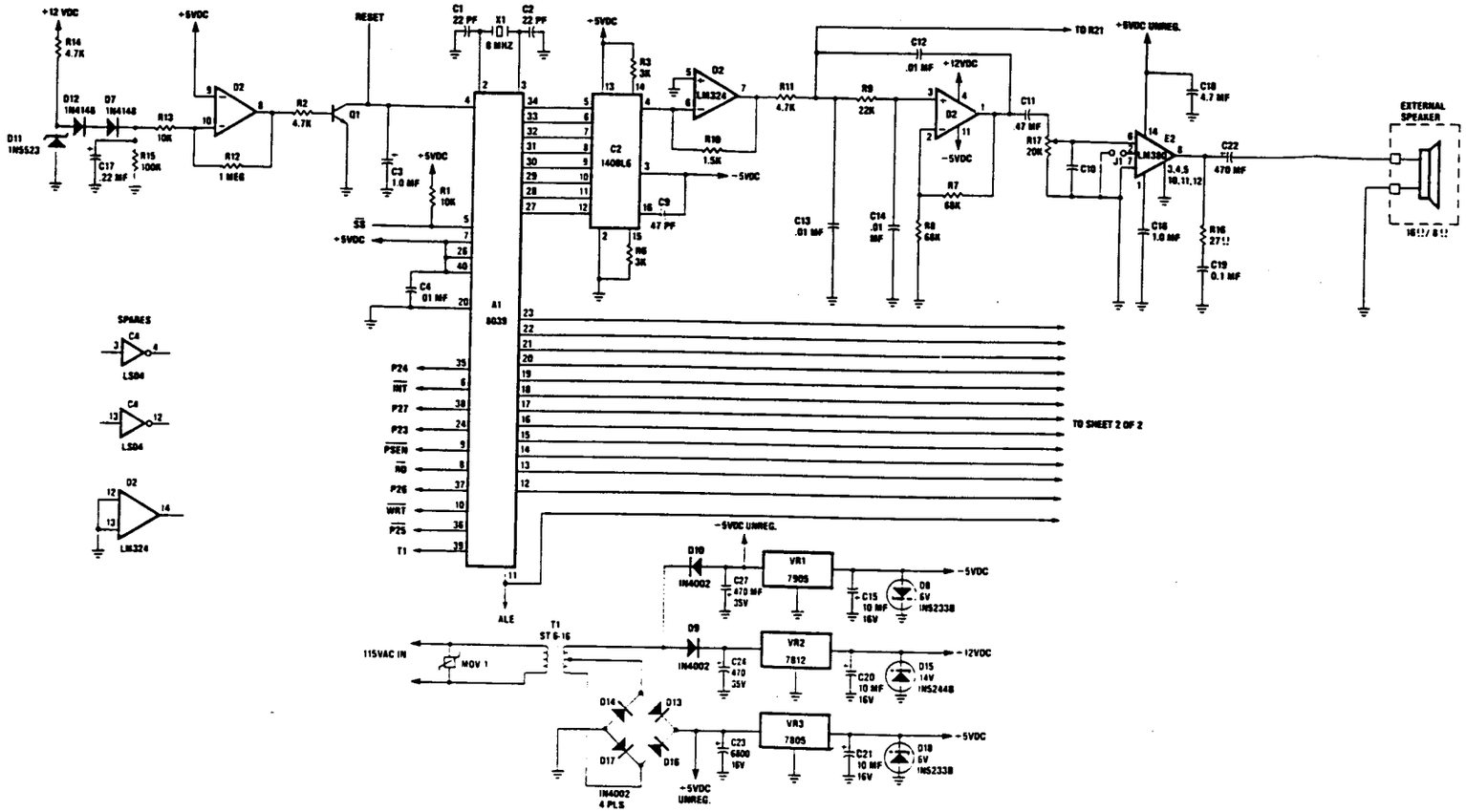
SCHEMATIC DIAGRAM
MICROPROCESSOR BOARD
Sheet 2 of 2



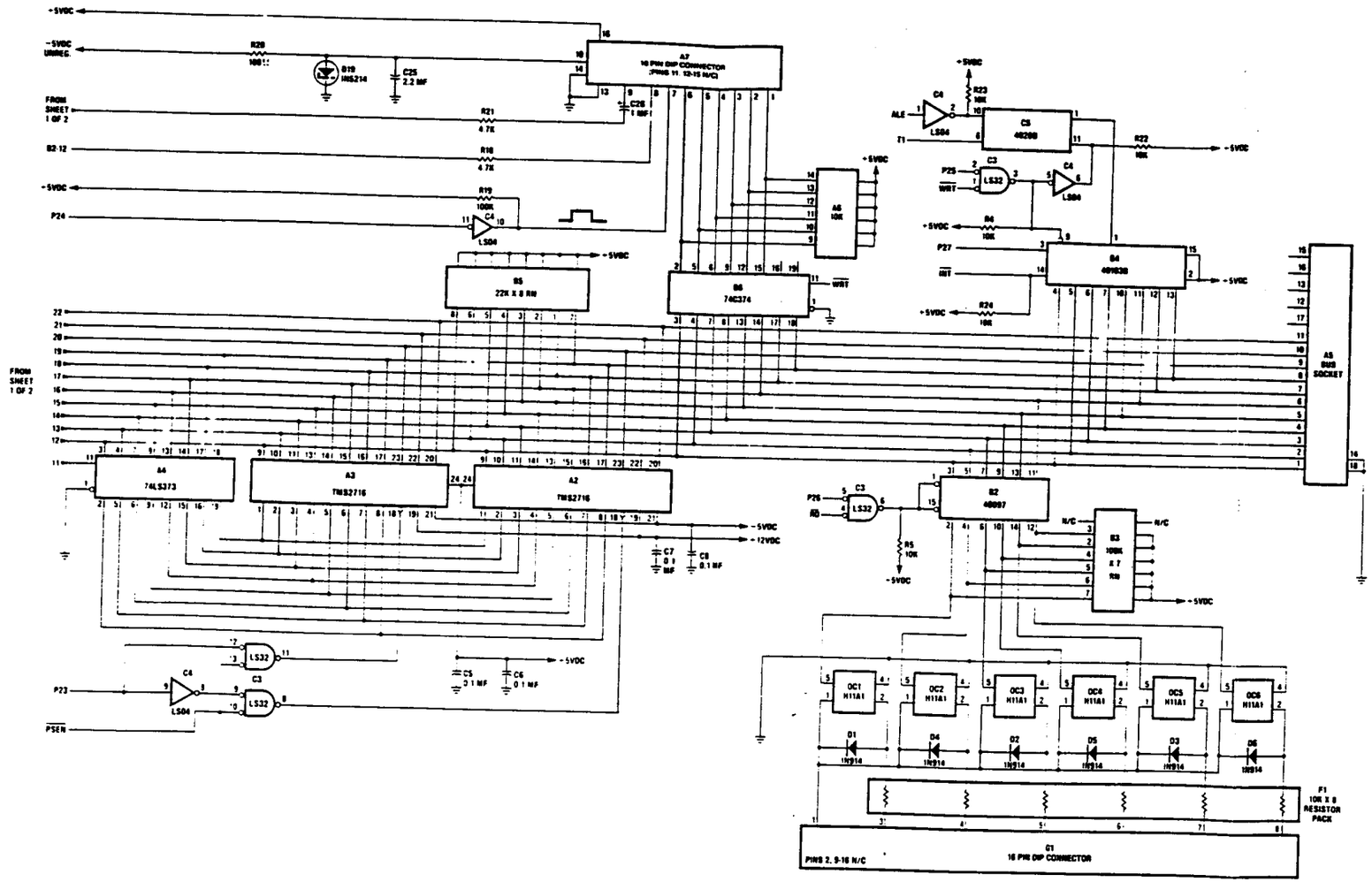
SCHEMATIC DIAGRAM
INTERFACE BOARD
Sheet 1 of 2



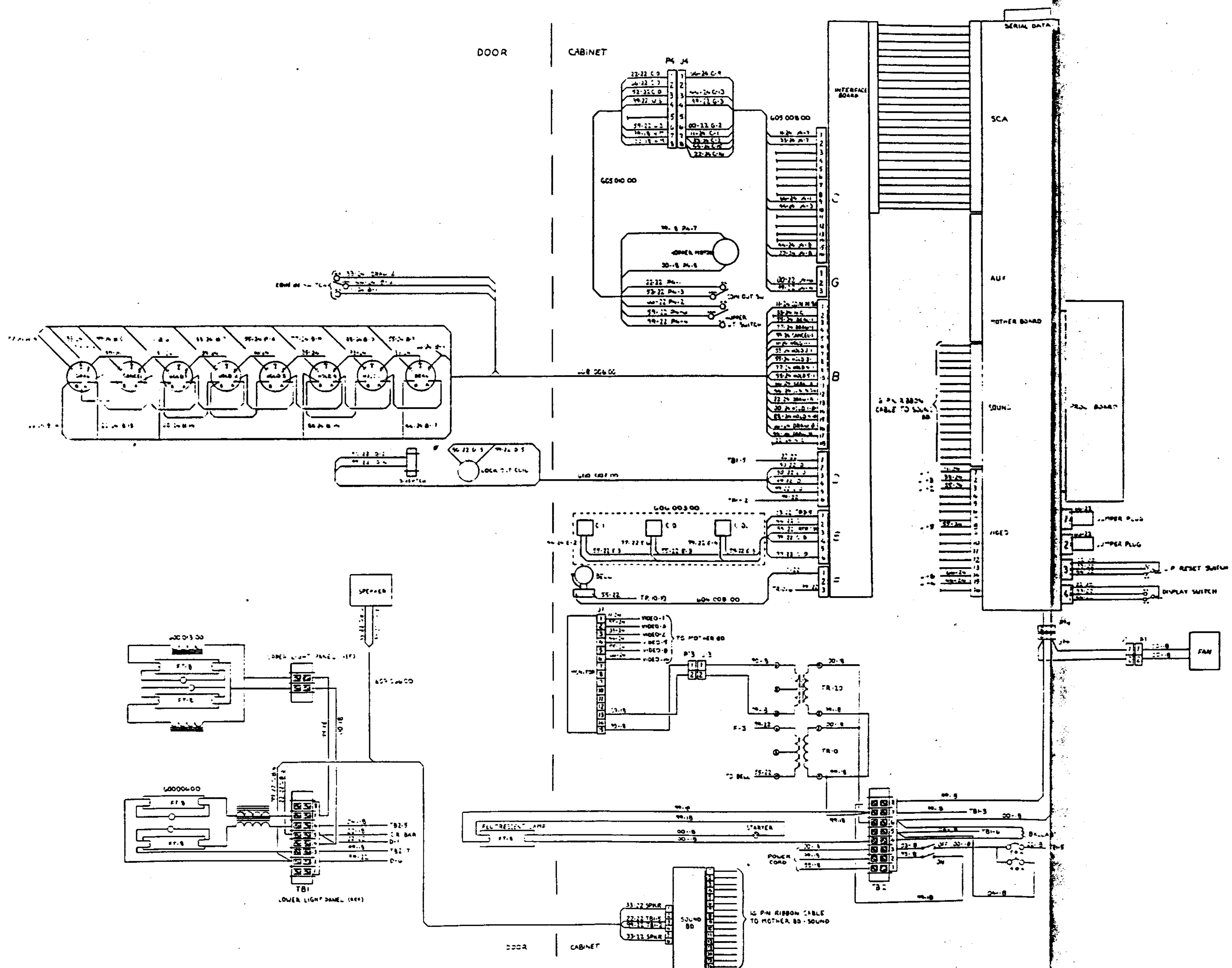
SCHEMATIC DIAGRAM
INTERFACE BOARD
Sheet 2 of 2



SCHEMATIC DIAGRAM
SOUND BOARD
Sheet 1 of 2



SCHEMATIC DIAGRAM
SOUND BOARD
Sheet 2 of 2


DOOR
CABINET
P4
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INTERFACE BOARD
SERIAL DATA
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JUMPER PLUG
DISPLAY SWITCH
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MONITOR
TO MOTHER BD
TR-10
TR-9
BELL
STARTER
FLUORESCENT LAMP
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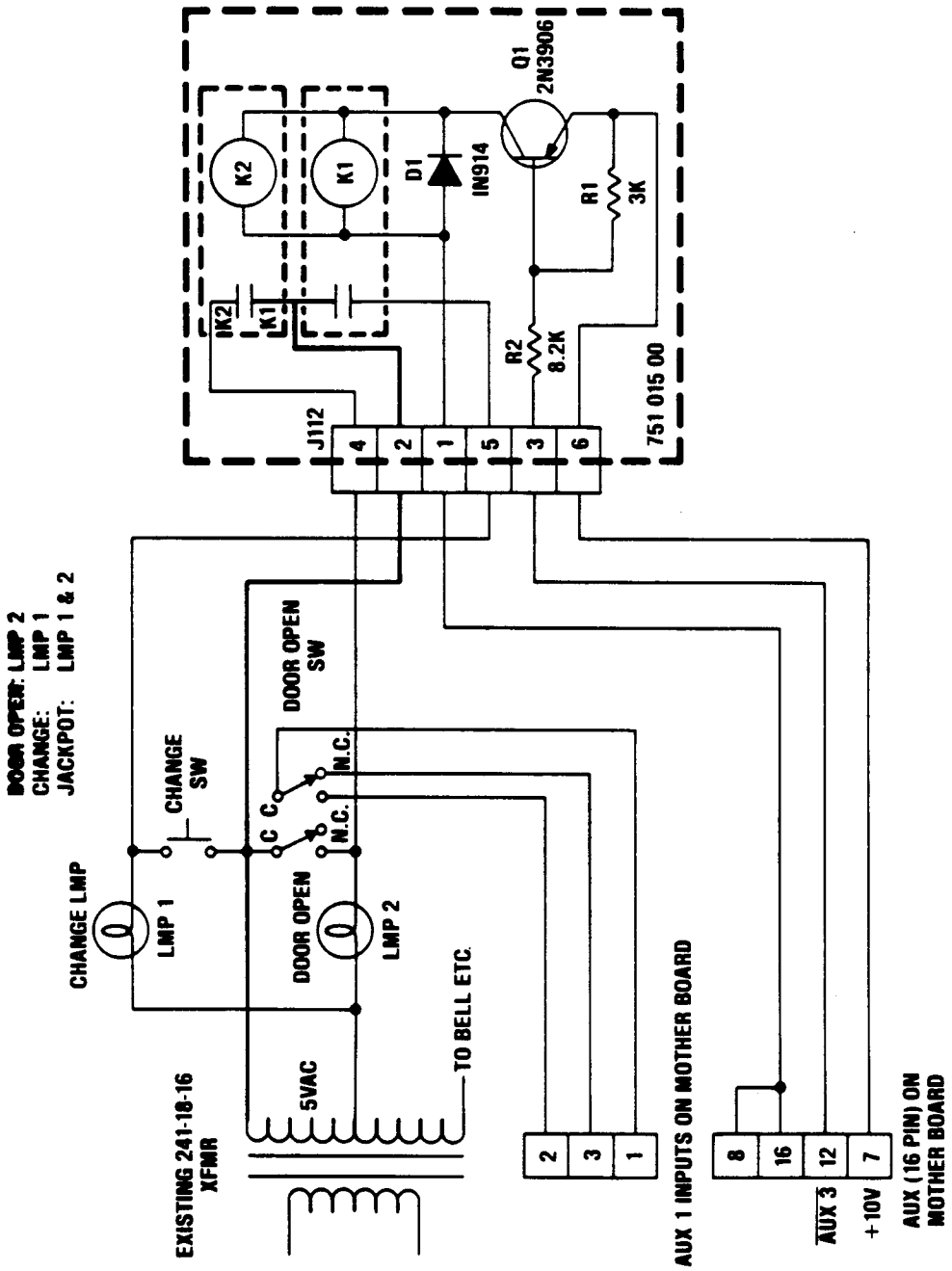
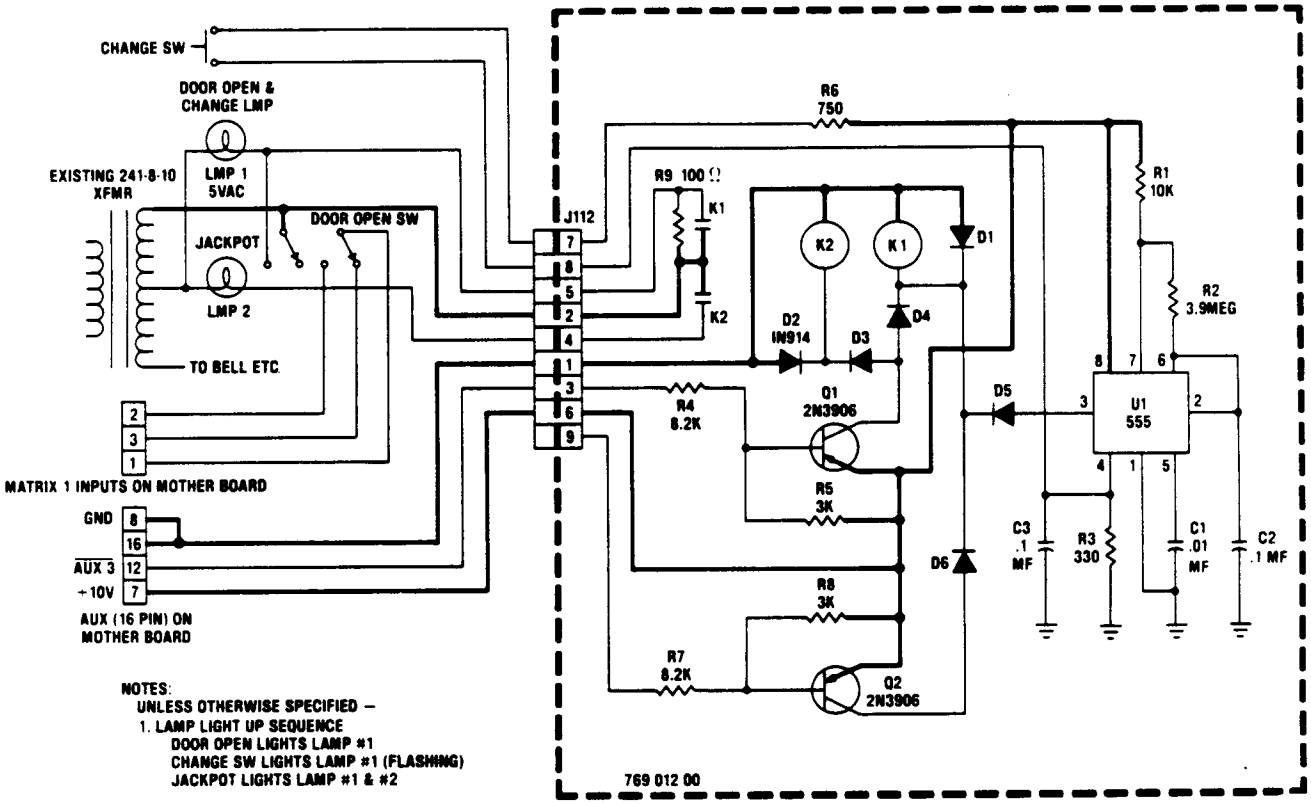
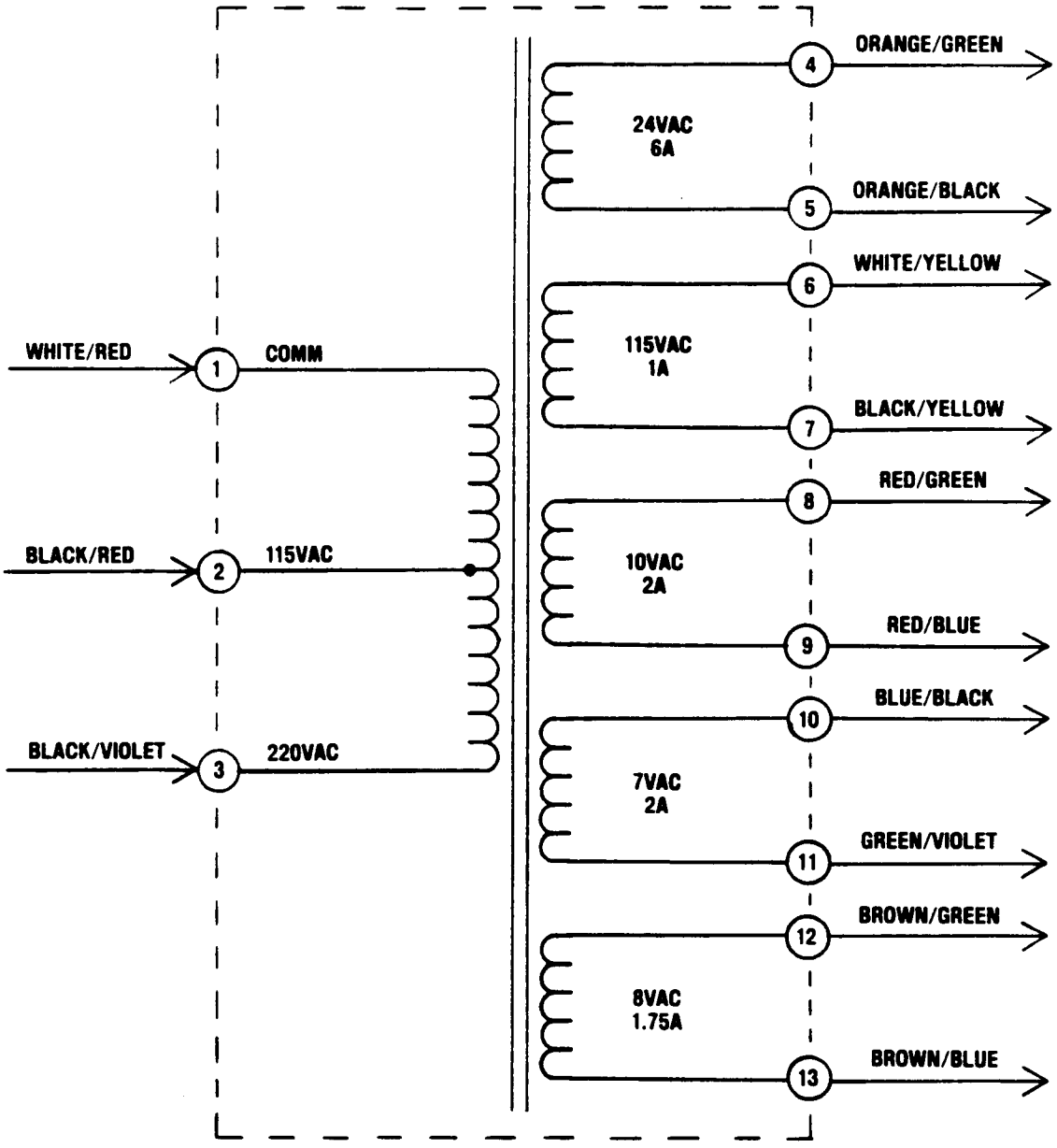
LOWER LIGHT PANEL
SOUND BD
16 PIN RIBBON CABLE TO MOTHER BD - SOUND
DOOR
CABINET



SCHEMATIC DIAGRAM
JACKPOT LAMP BOARD



SCHEMATIC DIAGRAM
2 STAGE CANDLE



SCHEMATIC DIAGRAM
TRANSFORMER

COIN MECHANISMS INC.

817 INDUSTRIAL DRIVE
ELMHURST, IL 60126
312-279-9150

Operation and Service Manual

100 SERIES COIN MECH.

DOMESTIC, FOREIGN & TOKEN MECHS.

THE FOLLOWING PAGES REPRODUCED WITH PERMISSION

OPERATION

The "Series 100" Coin Mechanisms are designed to require a minimum of maintenance and field adjustment. Detection and rejection of undesired or counterfeit coins are determined by size (both thickness and diameter), weight, metallic content, and bounce.

Cradles are used to test the size of the coin. Undersize diameter coins will pass between the legs of the cradle and will be returned. Oversize diameter coins will fail to pass between the cradle and the diameter gauge and will be returned by actuating the wiper operating lever. In the case of the quarter acceptor, an undersize lever must first be pivoted to unlock the cradle. Undersize diameter "quarters" will fail to unlock the cradle and will be returned by actuating the wiper operating lever. Coins that are oversize in thickness will fail to pass between the magnet gate and the main channel and will have to be dislodged and returned by actuating the wiper operating lever.

Cradles are also used to test the weight of the coin. Underweight coins will fail to overcome the cradle counterweight and will be returned by actuating the wiper operating lever.

A magnet is used to test the metallic content of the coin. Highly magnetic coins, such as steel or iron, will be retained by the magnet and will be returned by actuating the wiper operating lever. Coins having comparatively high magnetic properties, such as copper, will be slowed down by the magnet and will drop off the end of the rail short of the "accept" entrance and be returned. Coins having little or no magnetic properties, such as brass or zinc, will pass through the magnetic field so fast that they will "overshoot" the "accept" entrance and be returned.

In the case of the Nickel Coin Mechanism, a bounce tester is used to test the bounceability of the coin. Due to its magnetic properties, a genuine nickel passes quickly through the magnetic field and drops off the end of the rail in an arc that causes it to hit the bounce tester which, because of the coin's elasticity, "bounces" it into the "accept" entrance. A counterfeit coin passing through the magnetic field at the same speed as a genuine nickel will not have the same elasticity and so will not have the same "bounce" as a genuine nickel and will miss the "accept" entrance and be returned.

Serration Detector Ass'y (US – Canadian Mechs)

As coins pass the detector spring it senses the serration on the coin edge, therefore directing coin to accept side of mech.

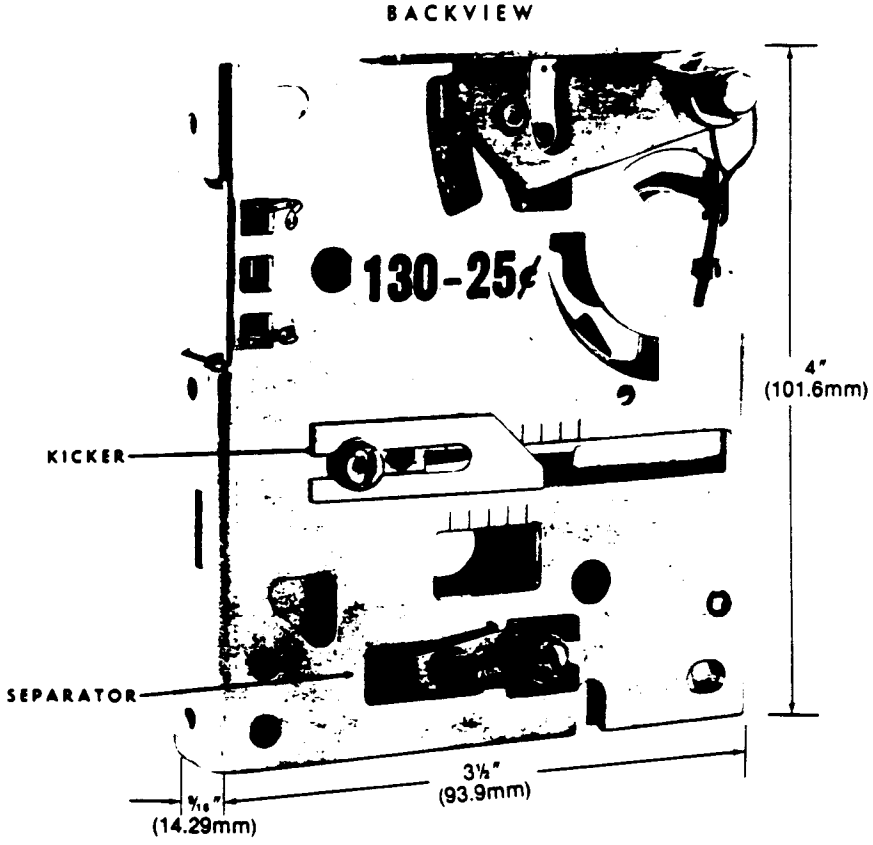
ADJUSTMENTS

All "Series 100" Coin Mechanisms leave the factory adjusted for maximum performance. If, however, more critical adjustments are desired, or if the unit has been completely disassembled for service, the following adjustment procedure is suggested:

A. Separator Assembly (On Dime and Quarter Coin Mechanisms only)

Set the Coin Mechanism with the back of the unit facing you in the test position.

1. Loosen the screw holding the separator and move as far to the right as it will go. Tighten the screw.
2. Insert several coins (both old and new) and note that some are returned by striking the separator.
3. Loosen the separator screw and move the separator a slight amount to the left. Tighten the screw.
4. Insert the coins again and, if some of them are still returned, repeat Step 3 until all of the coins are accepted.



ADJUSTMENTS – *(Continued)*

B. Kicker

5. Loosen the kicker screw and move the kicker as far to the left as it will go. Tighten the Screw.

6. Insert several coins and note that some of them are returned.

7. Loosen the kicker screw and move the kicker a slight amount to the right. Tighten the screw.

8. Insert the coins again and, if some of them are still returned, repeat Step 7 until all of the coins are accepted.

9. Be sure the screws are tight after all adjustments are made.

C. The diameter gauge adjustment

Loosen screw, move diameter gauge to left, insert new coin and move diameter gauge to right until the coin passes, then tighten screw.

D. Magnet Gate Assembly

Turn thickness screw counter clockwise several turns or until coin hangs up (when dropped in) then turn screw clockwise until coin just passes, now turn 1/8 turn more.

E. Serration Detector Ass'y (US — Canadian Mechs)

To Adjust: A slight pressure downward on serration spring will enable a greater variety including smooth edged coins to be accepted.

Should a coin become wedged between the spring and rail a slight upward pressure on spring is advised.

Caution and care must be taken to avoid damage or distortion to spring.

MAINTENANCE

Depending upon the environment in which the Coin Mechanism is used, periodic preventive maintenance should be performed.

The mainplate may be cleaned with any household cleanser. Thorough rinsing and drying are necessary to remove deposits and/or film.

Remove all filings from the magnet by guiding the point of a screwdriver along the edges of the magnet. You will notice the filings will cling to the point of the tool.

Remove the cradles and undersize levers and clean the bushings. A pipe cleaner makes a good bushing cleaner. Also clean the pivot pin. Apply powdered graphite or pencil lead sparingly to the pivot pin and bushing and reassemble.

On Nickel units make certain all foreign matter is removed from the bounce tester, also make certain the bounce tester fastening screws are tight.

In the event the recommended adjustment and maintenance procedures do not render your "Series 100" Coin Mechanism serviceable, check for worn or damaged parts and replace as necesary.

For service assistance or sales requirements, contact our office.