JUNGLE JIVE

(2 Player)

(USA (UL) EDITION)

Produced by :
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Contents

1.1 Commissioning

Upon receipt of machine carefully remove all protective packaging and establish machine on a flat and level floor. Take care to protect the machine from sudden shocks etc. when lifting or man-handling.

The machine should only be situated indoors, and should not be subjected to any other environments. Ensure all ventilation grills have at least 4" (100mm) clearance from other surfaces to permit adequate cooling.

1.2 Electrical Connection

The Jungle Jive machine should be connected to the mains supply via a suitable plug to suit your installation requirements. This should always be carried out by a competent trained person. If in any doubt, consult a qualified electrician.

Mains wiring:	Live	Black
	Neutral	White
	Earth	Green

THIS MACHINE MUST BE EARTHED

1.4 Initial Operation

Connect the mains supply and switch ON.

The Top-Sign and Coin-Entry fluorescent lamps will illuminate and the pusher boxes start moving.

The alarm will sound and the coin hoppers will run to empty themselves; (should any coins be present and fall from the playfield, they will be routed to the cash box). After approximately 10 seconds the alarm should cease and the playfield lights illuminate. The coin hoppers should also cease within a few seconds of this as well.

A short time latter the 'Attract' sound will operate depending on the switch settings on the Sound Board. The volume level may be adjusted if required by means of a trimmer fitted on the Sound Board.

Insert a coin in any of the coin entry chutes, a tone will be heard as the coin is accepted. The corresponding section coin-in counter will increment. The game is now initiated and will remain so for approximately 20 seconds.

Drop a coin down the win chute to simulate a coin falling from the playfield. The win hopper should start running and empty the coin into the cash box. The ticket machine will pay out depending on the switch settings on the logic board

The anti abuse 'slam-tilt' alarm feature may be tested by thumping on a lower cabinet door. The alarm should sound and the playfield lights go out. Any coins going down the win chute are emptied in to the cashbox and no awards are made. The operation of the tilt or slam tilt alarm stops all games in progress and lasts 5-15 seconds.

A safety feature is incorporated which will stop the pusher drive motor should a jam or restriction occur. This may be tested simply by holding back an advancing pusher box. To effect reset of this feature, operate the reset switch located on the top surface (RHS viewed from the front) of the topsign.

2. Jungle Jive Technical Specification.

2.1 Electrical Ratings:

2 Player:	115 Volts 60 Hz
	280 watts
	3.25 Amps

3. Access To Machine

Important Note:

WARNING - DANGEROUS VOLTAGES EXIST WITHIN THIS MACHINE

As a matter of sensible practice and safety, the machine should always be switched OFF prior to entering - the only possible exception to this being when refilling tickets during normal use.

Playfield

Locate the securing chain on the top surface of the topsign and release from its holding position. Release the lock at the bottom of the window, hinge upward and secure in place by connecting chain.

Coin-Entry

Release the two locks at the top of the door and hinge back and lift clear.

Lower Cabinet

Each player section has an access door below the playfield which may be fully removed by releasing the locks, hinge outward, disconnect cables at connectors and lift clear.

Cashbox

Each player section has an access door located below the lower cabinet which can be fully removed by releasing the lock at the top, hinge outward and lift clear. The cash box is located within.

Top-Sign

To gain entry to the topsign, rotate the latches on the top and hinge the small front section upwards. This allows the artwork panel to be removed, permitting access.

Rear Access Panel

The rear access panel may be removed by releasing the locks at the top, hinging backward slightly and lifting clear.

4. The Game

Attract Mode

When not in active play, the machine lighting and pusher box mechanism operate continuously. The attract tune is played at intervals dependant on the settings made on the Sound Board.

Active Play Mode

When coins of the correct type are inserted in to the coin entry chutes they pass down the pin perspex to the playfield, activating the security system for that particular player section by means of optical sensors. Coins of the incorrect type fall through the chute and are collected in the reject trays, not activating the sensors.

When the security system for that player section is active, winnings are counted and pay outs made accordingly. After coin entry, a player section remains enabled for approximately 20 seconds, allowing the player the full benefits from the effects of his coin.

Players winnings falling from the playfield are counted in to the cashbox and this count is used to award the tickets dependant on the DIP-Switch settings on the logic board.

Coins in and awards made are recorded on separate electro-mechanical counters. It is recommended that readings of these counters be taken regularly, to establish a clear pattern of usage/profit and thus any significant deviations may highlight a fault condition requiring attention.

Should the supply of tickets run low, then an L.E.D. (light emitting diode) will illuminate on the lower cabinet door of that play section.

4.1 Priming The Playfields With Coins.

Each player section requires approximately 800 coins, of which the first 750 may be hand placed on the playfield. The final 50 for each section should be played in to the machine via the coin entry slots in order to achieve the best possible visual appearance of the playfield area.

Remember to record the coin counter readings after priming for your records.

4.2 General Maintenance & Care

The Jungle Jive is a robust and reliable machine, which looked after will give years of profitable service. Regular cleaning is the key to optimum condition and performance.

To maintain all visible surfaces in an 'as new condition':

1. Laminated Cabinet Body - clean with an all purpose non-aggressive cleaner and finish to a high gloss using a furniture polish.

2. Glass and Chrome - clean with a quality window cleaning solution.

3. Plastic and Glass Fibre - use a general purpose furniture polish.

Do not use caustic or abrasive cleaners. Always use cleaning products in accordance with the manufacturers instructions.

The Jungle Jive utilises 'sealed for life' type bearings and a high quality mechanical components that do not require greasing or regular servicing.

It is recommended an initial inspection be carried out after approximately two months usage, to check the drive belt tension and look for any signs of wear on the moving parts. Adjust as required, and thereafter inspect annually.

Electrical Systems

5.1 Circuit Protection

Mains Supply Fuse

The Mains Supply enters the machine via a 3 Amp circuit breaker. This circuit breaker is located alongside the On/Off switch, in the lower RHS compartment. To reset this device, simply push the amber centre back in to the body.

Motor Fuse

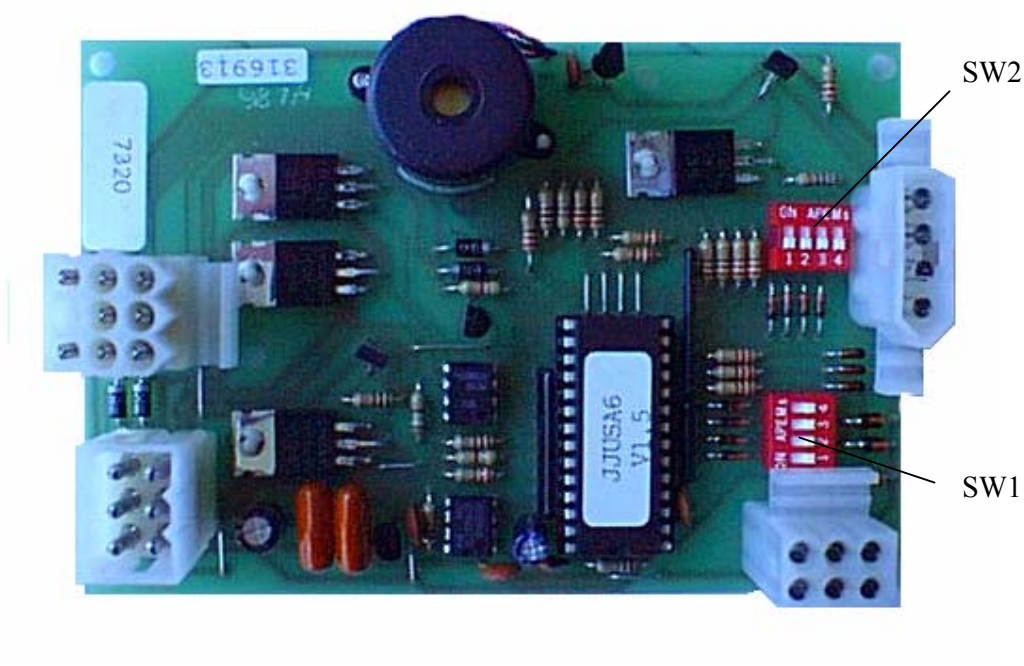
The Motor fuse is mounted on the motor control board, and is a 20mm 2A type. The motor itself is impedance limited, and this fuse is intended as additional protection for the solid state relay (also on this board) that is used to switch the supply to the motor. The motor control board (and Tilt board) have line (mains) voltage present on them, and thus are enclosed in a grounded enclosure in the rear of the LHS lower compartment.

Power Supply

The outputs from the 12 and 24 volt power supplies are split into separate supplies for each side of the machine. Each circuit is protected by a circuit breaker, located on the front of the power supply enclosure. These devices may be reset when tripped by simply pressing the white button back in to the body of the device.

5.2 **Ticket Board** (7320)

The Ticket Board controls the main logic functions for each player section. The board is located in the coin-entry cabinet area of each player section, on the side wall.



Ticket Board

Program Version: JJUSA6 V1.5

DIP Switch Settings:

DIP Switch 1 (Adjacent to 6 way connector)

Poles 1-3: Consolation awarded on coin entry

1	2	3	Qty Award
0	0	0	0
1	0	0	1
0	1	0	2
1	1	0	3
0	0	1	4
1	0	1	5
0	1	1	6
1	1	1	7

Pole 4: OFF -Token award for coins won
ON -Ticket award for coins won

cont'...

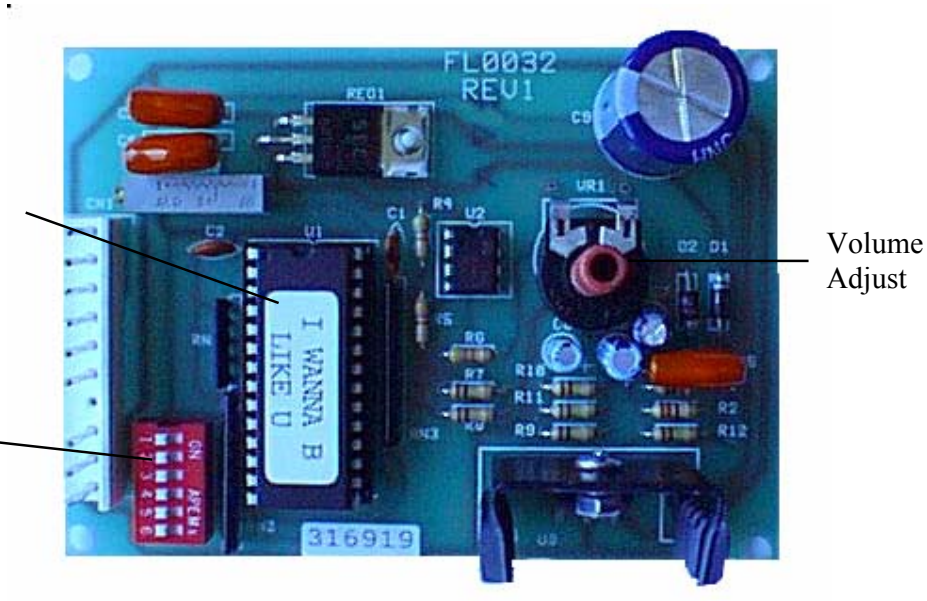
DIP Switch 2 (Adjacent to 4 way connector)

Poles 1-4: Payout ratio - No. coins over the edge for award.

1	2	3	4	Qty Coins
0	0	0	0	1
1	0	0	0	2
0	1	0	0	3
1	1	0	0	4
0	0	1	0	5
1	0	1	0	6
0	1	1	0	7
1	1	1	0	8
0	0	0	1	9
1	0	0	1	10
0	1	0	1	11
1	1	0	1	12
0	0	1	1	13
1	0	1	1	14
0	1	1	1	15
1	1	1	1	16

5.3 Sound Board (6872)

The sound board is located within the RHS coin entry compartment, on the RHS side wall.



Sound Board

DIP-Switch settings

The time between the attract tunes can be adjusted by altering the 6-pole DIP-switch:

Pole	Seconds Delay
all off	9
1	+11
2	+24
3	+48
4	+96
5	+192
6	+384

Loudspeaker (6979)

The loud speaker is located in the roof of the coin entry compartment.
It is rated at 8 Ohms 25 watts.

5.4 Hoppers (6144)

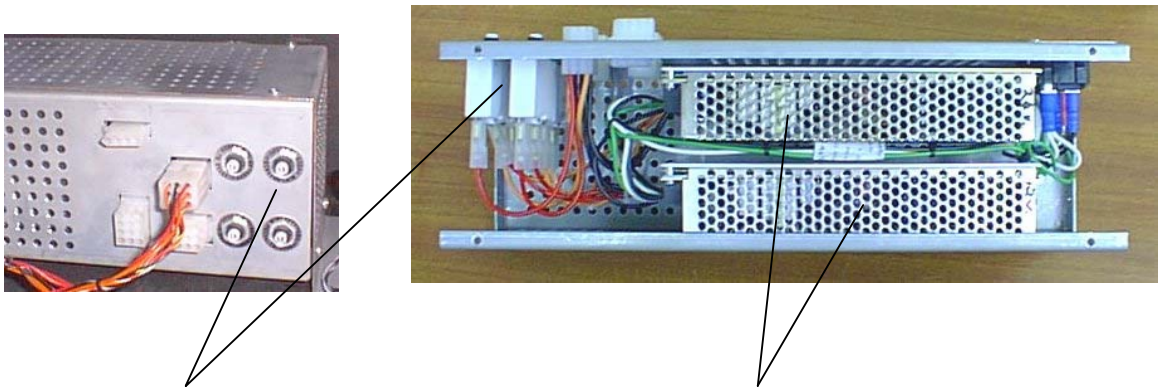
There is one hopper in each player section, located centrally in the lower compartment:

The Win hopper (6144) counts coins won in to the cash box, and is started when coins are detected falling down the win chute by the microphone/sound detector. This hopper always empties. Tickets are awarded from the ticket machine according to the switch settings on the logic board. Any coins falling when the game is not active are still counted to the cash box, but no ticket award is made. Should a 'tilt' be detected, coins falling from all playfields are subject to 'no award'.

5.5 Power Supply

WARNING - Dangerous voltages within - Disconnect from the mains supply before opening!

The low voltage supplies (12 & 24VDC) are supplied by two switch mode PSUs which are housed in a grounded metal enclosure. This enclosure is located on the base of the machine. Circuit breakers for the LV circuits are also housed in the assembly.

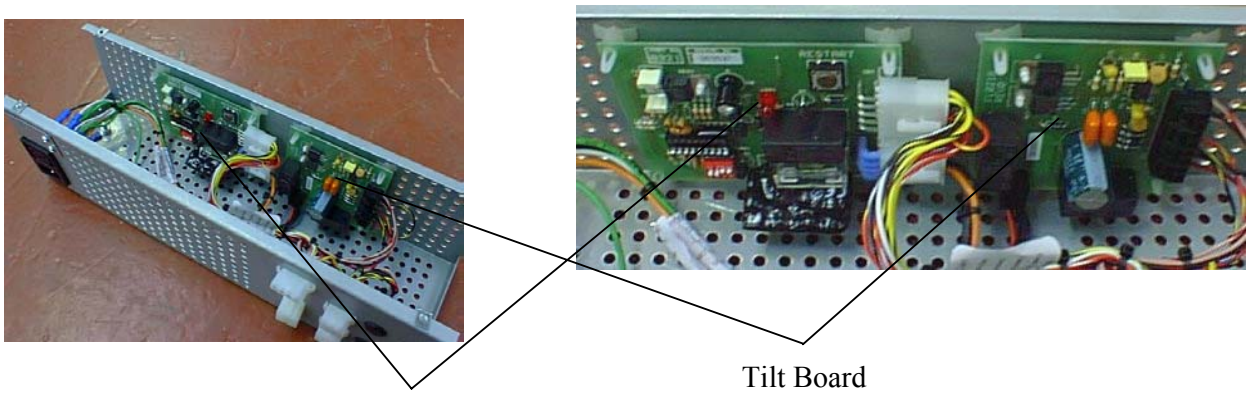


Circuit Breakers

LV Switch Mode Power Supplies

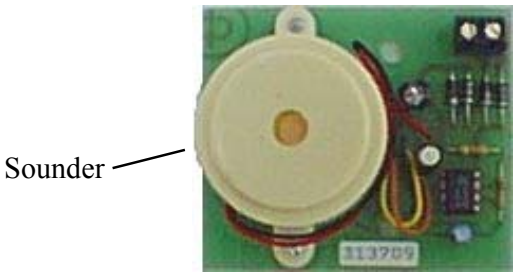
5.6 **Tilt Board** (6099)

The Tilt Board provides the machine security feature. This board is located in a grounded metal container in the base of the machine. In the event of activation, an alarm sounds and some of the mains lighting is switched off, identifying the machine. The inputs to this board are the slam tilt switches located on the lower cabinet doors/walls and the pendulum tilt device located in the topsign.



5.8 **Alarm Board** (7819)

Located in the topsign, this board drives a sounder to produce the alarm tone for tilt, motor jam etc.

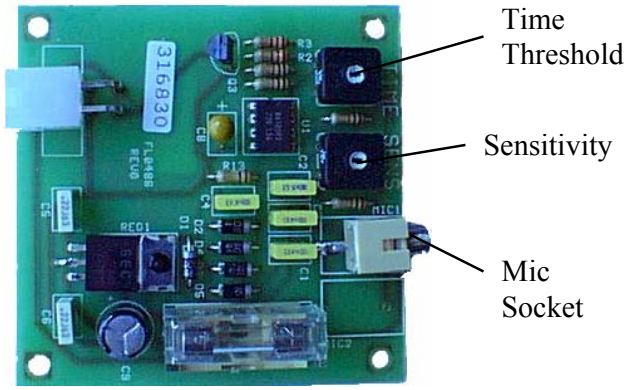


Alarm Board

5.9 **Hopper Microphone Board** (8498)

The microphone board is located on the RHS side wall of each lower compartment.

When coins fall from the playfield, they are detected by a microphone (6706) fitted to the win chute. The signal produced by this microphone is processed by the microphone board, which in turn signals the main logic board. The logic board starts the win hopper running and processes the count produced by it.



Microphone Board

5.10 **Counters** (8639)

Two electro-mechanical counters are provided per player section. These counters record the number of coins in and the number of tickets paid out. Taking readings of these counters regularly will obviously facilitate the monitoring of the machine performance and assist in cash accounting.

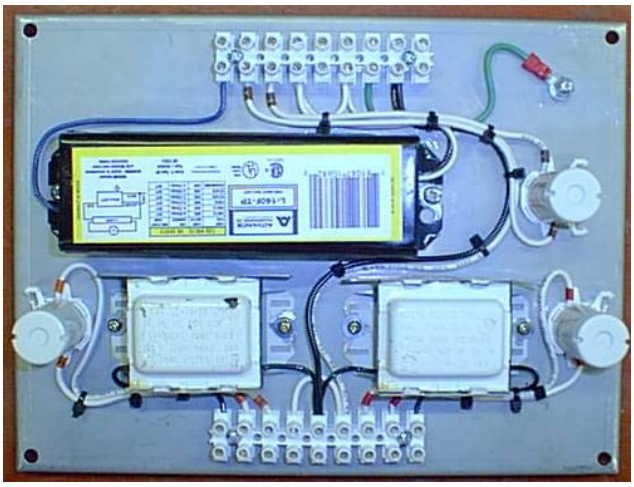
5.11 Cabinet Lighting

Fluorescent tube lighting is situated:

- Inside each player section coin-entry compartment.
- Inside the metal window frame at the top of the playfield.
- Inside the topsign.

WARNING – Dangerous Voltages - switch OFF prior to replacing!

The light board/trays contains the chokes (ballast's) and starters required for the fluorescent lights within the machine. These boards/trays are located in the coin entry area and the top sign of the machine.



Coin Entry Area Tray

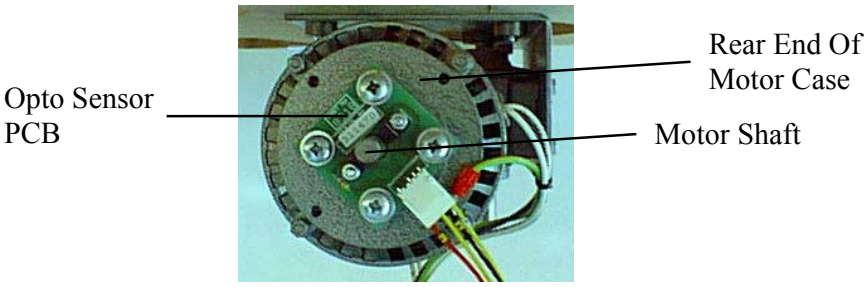
Top Sign Area Tray

6 Mechanical Systems

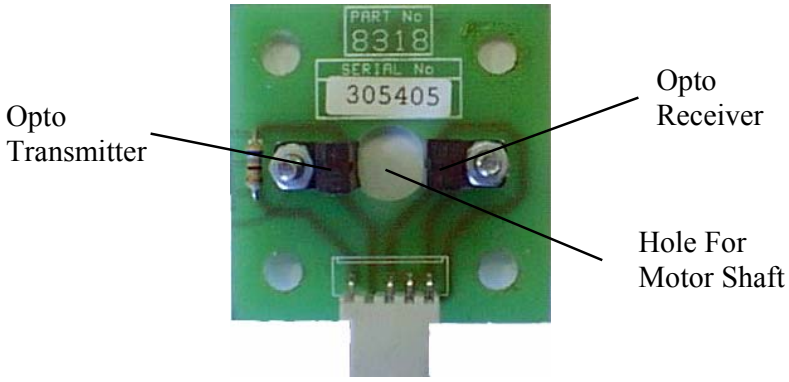
6.1 Pusher Motor Drive

This system utilises an opto-electronic method to monitor the motor load, and stop the motor in the event of a restriction/jam.

The motor drive shaft extends some 35mm out of the rear end of the motor case. It is here that the opto sensor PCB is located, secured to the motor case. The motor shaft has a hole drilled in it, through which the infrared beam may pass when correctly aligned. With the rotation of the motor shaft, this results in the beam being continually interrupted, and a resultant string of pulses produced by the opto receiver.



Opto Sensor PCB Mounted To Motor



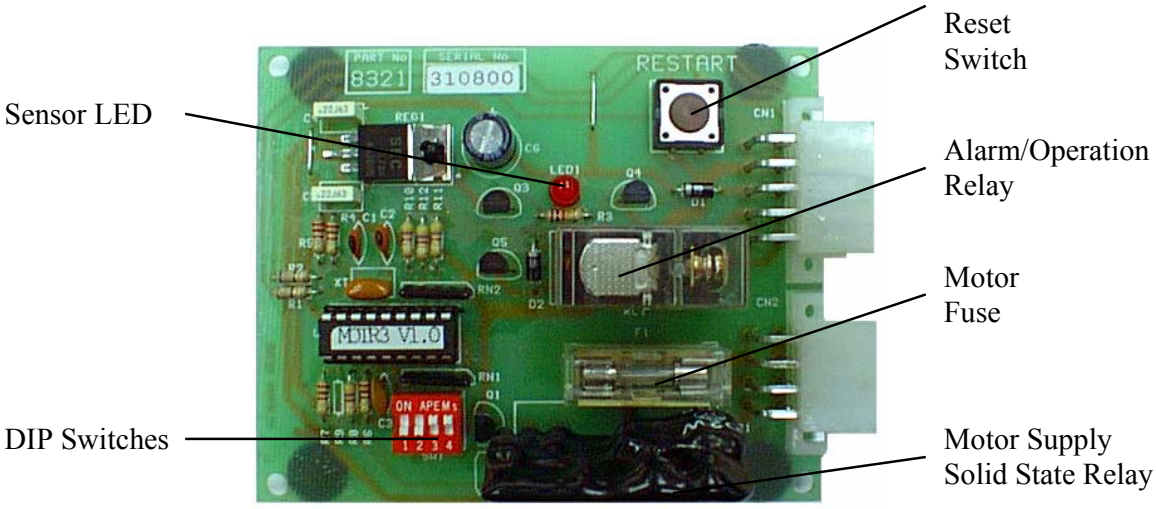
Close Up Of Opto Sensor PCB

The pulses produced by the opto receiver are monitored by the circuitry of the motor control PCB. This control circuit basically monitors for a given number of pulses within a set time frame. Should this number of pulses decrease beyond the tolerated amount, the supply to the motor is immediately switched off via a solid-state relay.

The control of the motor cut off point may be set by way of a 4 way DIP switch mounted on the motor control board thus (located in the power supply unit):

Pole	1	2	Response
	off	off	Fastest
	on	off	2nd Fastest
	off	on	2nd Slowest
	on	on	Slowest

Pole	3	4	Stop Resistance
	off	off	Weakest
	on	off	2nd Weakest
	off	on	2nd Hardest
	on	on	Hardest



When the system operates and stops the motor, the supply to the motor remains off until manual reset is initiated. This creates the opportunity to ensure the machine is in a safe state to re-start; a visual check by the attendant ensuring that there is no longer any item causing the obstruction. Reset of the system is done by depressing the *'Restart'* switch on the Motor Control PCB or by way of the remotely located reset switch (mounted on a T-board in the rear of section one).

There is an LED on the Motor Control PCB, which indicates the output of the opto-sensor. In normal operation this will appear to be continuously ON, due to the high repetition rate of the pulses. This facility may be used to check the operation of the sensors, by manually rotating the motor shaft and observing the LED. The LED should turn on then off as the hole in the shaft passes between the sensors.

The 20mm fuse on this PCB is to provide over current protection to the solid-state relay/motor combination (Refer to specific machine manuals for type and rating).

The other relay (RL1) is used to provide a switching function upon system operation, which is used for signalling to other circuits for alarm operation etc.

6.2 Pusher boxes

The pusher boxes are mounted on two Accuride slide bearings. An annual check to remove any build up of dust, and a light coat of grease will ensure many years of reliable service.
The nylon wheel on the box drive may eventually show signs of wear, (noticeable by the pusher box movement not being smooth at the change of direction). Adjust the drive plates to take up slight wear, or replace the wheel.

Ensure that the coin scraper system is fully intact and working smoothly and freely, replace any suspect parts.

6.3 Coin Entry Chutes

Each player section has three coin entry chutes. The chutes are designed to reject fraud coins into a reject tray just inside the door. This is not a high level of discrimination, but serves well and reliably in this application. Coin entry chutes are situated on the front of the machine. The two outside chutes are fixed and require no maintenance. The middle chute is a moving coin chute and should require little maintenance other than a clean and occasional light grease.

7 Fault Finding

It is of mutual interest that your pusher is kept in excellent working condition, therefore when required please order original replacement parts from your distributor or Harry Levy Amusement Contractor Ltd.

If a fault occurs with any electrical system **SWITCH THE MACHINE OFF.** Check that:-

a) There is a suitable mains supply.
b) All fuses are intact.
c) All plugs and sockets are correctly mated.
d) No wires are trapped, damaged or broken.
e) All wires are properly secured to their terminals and pins.

Wiring check.
A visual inspection will reveal the general condition of the wiring. A more thorough test using a continuity tester will be needed to check apparently intact wires, however once a machine has been playing successfully for some time wiring is not usually at fault.

Device testing.
Disconnect the machine from the mains supply then check the physical condition and operation of the suspect device (remove from the machine if necessary). Bench test if possible using a suitable power supply.

In general PCB's are not user serviceable. Should a problem develop indicating a board fault it is recommended that the board is returned to your distributor/Harry Levy for repair.

Systems Checking

When a fault occurs that affects the whole of the machine, the power supply and regulation system should be investigated first.

Check the input, and output fuses.
Refer to schematics and drawings to check power connections, voltages etc.

If the fault is not visual, or easily measurable it is often helpful to disconnect the outputs from the PSU, check that the PSU is functioning then connect the loads one at a time.
It is easy to identify the faulty system, then use a similar technique within that system (such as disconnecting all hoppers) to identify the faulty component.

Basic Checks

Symptom	Possible Fault	Remedy
Will not start	Internal switch OFF	Check internal switch is ON
	Fuse blown	Check plug fuse then internal fuses.
No sound	Volume	Adjust volume
	Speaker	Check wiring. Replace if faulty
	Sound board	Check power supply & connectors, replace board if faulty.
Light failed	Tube failed	Check end caps & wiring Replace tube.
	Starter failed	Replace with same type.
	Choke (ballast) failed	Replace with same rating.
Pusher boxes not moving	Power to motor	Check power & connections.
	Mechanical jam	Check for coins or swag causing jam. Clear & reset.
Tilt alarm not working	Pendulum stuck	Check pendulum & adjust.
	Door bump sensor	Check & adjust.
	Sounder	Test connections & power
	Tilt P.C.B	Check connections & power.
Counter not working	Wiring	Check connectors & loom
	Counter	Bench test / replace.
	Opto sensor	Check every opto sensor.
Hopper not working	Hopper motor.	Bench test with 24V DC.
	Power.	Check supply & connections.
	Jammed.	Check for obstruction.

8 Spare Parts List

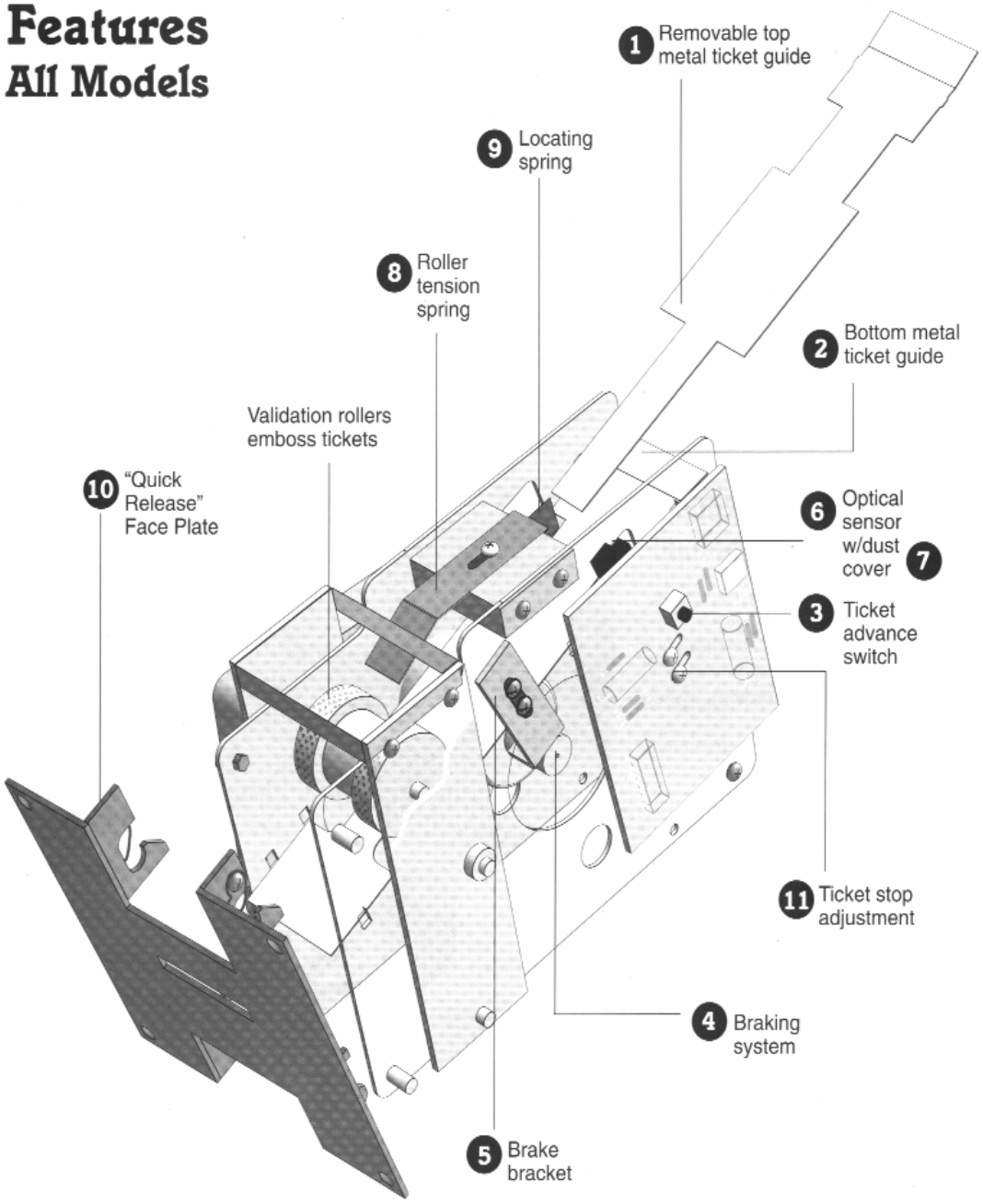
This spares list is by no means fully comprehensive; since to provide the full listing would require another volume! The following are some of the more commonly required items that you may need. If the item you require is not listed, please contact either your distributor or Harry Levy Amusements and we will be pleased to assist you.

Description	Harry Levy Stock Number
201 lock & keys	6278
301 lock & keys	6087
Accuride pusher box slide	6081
Bulb 12V 2.2W	6082
Coin entry	4086
Coin scraper	4970
Counter	8639
Fan	6141
Electronic alarm board	7819
Filter - Mains 6 A	8178
Fluorescent tube 30W	6185
Hopper (Coin Controls)	6144
Low LED	6245
Logic/ticket board	7320
Microphone	6594
Microphone board	8498
Motor	8567
Nylon pegs - coin stops	6069
Opto sensor - coin in	6928
Sound board	6872
Speaker	6979
Switch - ON / OFF	6036
Switch - reset	6127
Switch - pendulum tilt	CC004
Switch - tilt	6149

Other items may be available on request

10. Ticket Machine

"Quick Release" Ticket Dispenser Features
All Models



Deltronic Labs, inc. 120 Liberty Lane, Chalfont, PA 18914 • 215-997-8616 • FAX# 215-997-9506

1 Top Metal Ticket Guide
For servicing, the top metal ticket guide can be removed and replaced. With unit facing you, gently spread side plates with thumb and index finger. Tilt guide to right at 45° angle and snap left side tab out and pull straight back. When replacing, simply reverse these steps. Note there is no need to spread side plates while replacing guide. Tilt to right and insert right tab first.
Note: When PCB has opto-sensor cover, guide is inserted over sensor then directed down to right. Be sure guide is **BELOW** brake bracket screws when replaced.

2 Bottom Metal Ticket Guide
The longer, more durable ticket guide extends through the face plate allowing for better guidance plus a larger opening in the face plate prevents curled tickets from catching.

3 Loading of tickets with ticket advance switch
Tickets are inserted in the rear of machine between the top and bottom ticket guides and pushed forward to the rollers. If needed, gently push the locating spring (9) away from the ticket guides. Then push the ticket advance switch until you see the edge of first ticket.

4 Braking system
Our impressive new braking system eliminates brake slippage allowing foolproof, accurate dispensing. The new design also reduces wear and tear on the dispenser.

5 Brake bracket
The brake is easily accessible and can be adjusted to engage immediately when ticket is pulled. (Minimum of 1/8" from brake wheel.)

6 Opto-Sensor
Included as part of the controller is an opto-electronic beam sensor which detects the notch between tickets. The output of the ticket sensing circuitry is an open collector transistor.

7 Opto-Sensor Dust Cover
In addition, an optical sensor dust cover is also included to eliminate the possibility of ticket dust accumulating on the optical sensor. This increases the accuracy of the ticket count and reduces maintenance.

8 Roller Tension Spring
The roller tension springs keep constant tension on tickets which insures proper delivery and prevents the tickets from being "pulled through" when the dispenser is idle. To increase the tension, loosen the screw and move the spring forward. Tension is correctly adjusted when tickets cannot be pulled from the dispenser and validation rollers lightly emboss the tickets.

9 Locating Spring
The ticket guide spring insures that the notches in the tickets pass through the opto-sensor. To decrease tension, loosen the screw and move the outer tension spring up. This changes the tension on the inner spring. The tickets should be snug between the spring and the side plate but not deformed by the excess tension. The spring is adjusted at the factory for 1-5/32" wide tickets and positioned 1/8" from ticket guides.

10 "Quick Release" Face Plate
The dynamic new design allows the ticket dispenser to "quickly release" from its face plate on your cabinet or ticket door. This can be done manually and no tools are needed. This gives you complete access to the front of the rollers and to the ticket guides. Plus you can "snap out" one ticket dispenser and immediately replace it with another in just seconds.

11 Ticket Stop Adjustment
The ticket stop adjustment allows you to position the tickets while the machine is off. The tickets should protrude through the slot at least 1/16". The ticket dispenser PC board is mounted on spacer with two screws with washers in two slotted holes. Loosening the screws and moving the board forward will allow the tickets to stop further out beyond the edge of the slot.

Dispenser Specifications

The quick release ticket dispenser greatly improves serviceability and reduces maintenance. Now standard on all Deltronic Labs Ticket Dispensers.

- Low voltage operations, only 12V DC
- Solid state output allows interfacing with electronic games
- Compact size, only 3-1/8" W x 4" H x 5-1/2" L
- Weight: 2-1/4 lbs.
- Validation "diamond" mark identifies tickets that have been dispensed.
- Adjustable ticket stop
- Dispenses 2"L x 1-5/32"W tickets
- One year warranty
- Standard face plate: 4"H x 3 3/4"W
- Narrow face plate: 4"H x 3-1/8"W

Control Board

DL-1275 with 12V meter output

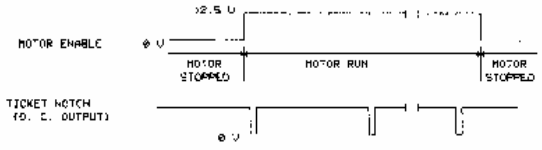
This dispenser is controlled by the game software. The game turns on the dispenser with a logic high signal and monitors a return notch signal from the ticket dispenser to turn it off. It will dispense as may tickets as game options allow.

	MIN.	TYP.	MAX.
MOTOR SUPPLY - V	11 V	12 V	13 V
I (START)	1.3 A	1.5 A	1.7 A
I (RUN)	------	.4 A	.85 A
I (STANDBY)	------	------	30 MA
MOTOR ENABLE ON - V	2.5 V	------	+12 V
I	250 UA	------	2.5 MA
MOTOR ENABLE OFF - V	------	------	1.0 V
I	------	------	0 MA
TICKET NOTCH - I SINK	------	------	50 MA
V PULL-UP	------	------	30 V

Note: Tickets should be opaque. If tickets are slightly translucent the 4.3K collector resistor (R3) of the H21A1 sensor may be changed in value to allow sensor to work properly.

Note: On REV. 1-4 PCB's, Q1 & Q2 transistors are D40K1 or equivalent.

Note: Diodes, CR2, CR3 & CR4 are 1N457A or 1N914.



INTERFACE SPECIFICATIONS

Connector is a Molex #03092041.

Ticket Dispenser Assembly

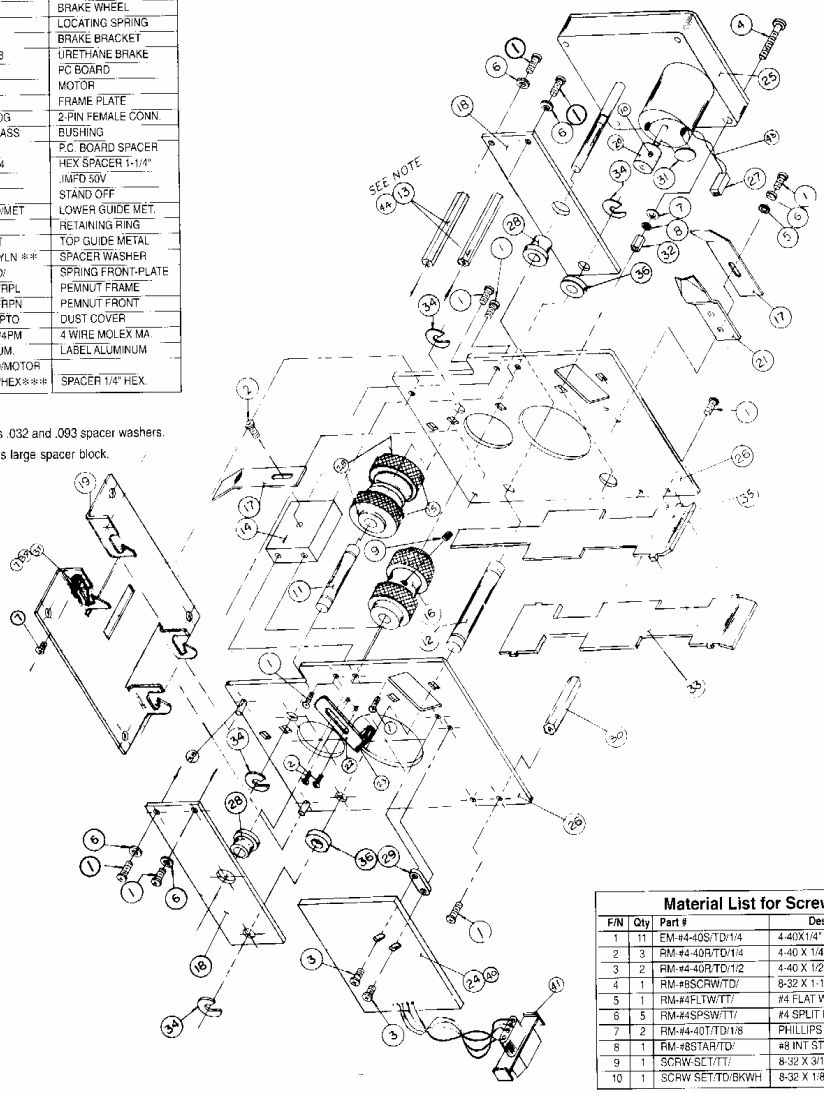
Details of Parts

F/N	Qty	Deltronic Labs P/N	Name
11	1	SHFT-IDLRLR/TD/	IDL. ROLLER SHAFT
12	1	RM-SFTMTR/TD/	MOTOR PIVOT SHAFT
13	1	SPAC PIVBLK/TD/4HOL	PIVOT BRACKET SPAC.
14	1	RM-SPCPB/TD/	SPACER BLOCK
15	2	RM-RLRIDL/TD/VALD	IDLER ROLLER
16	1	RM-RLRDRV/TD/VALD	DRIVE ROLLER
17	2	SPRG-TENSN/TD/	TENSION SPRING
18	2	RM-BKTPVT/TD	MTR PIVOT BKT.
19	1	RM-PANLFT/TD/NOPM	FRONT PANEL
20	1	RM-WHLBRK/TD/	BRAKE WHEEL
21	1	SPRG-LOCAT/TD/	LOCATING SPRING
22	1	RM-BKTBRK/TD/	BRAKE BRACKET
23	1	RM-BKTTUB/TD/3/8	URETHANE BRAKE
24	1	PCBD-1275/TD/*	PC BOARD
25	1	RM MOTOR/TD/	MOTOR
26	2	RM-PLATFR/TD	FRAME PLATE
27	1	RM-CONN2P/TE/20G	2-PIN FEMALE CONN.
28	4	BRNG-F312/TT/BRASS	BUSHING
29	1	SPAC-PCBD/TD/	P.C. BOARD SPACER
30	1	SPAC/HEX/TD/1-1/4	HEX SPACER 1-1/4"
31	1	RM .1M/TT/50V	.1MFD 50V
32	1	SPAC-HEX/TD/1/4"	STAND OFF
33	1	GUID-BOTTOM/TD/MET	LOWER GUIDE MET.
34	4	RING-E25RT/TT/	RETAINING RING
35	1	GUID-TOP/TD/MET	TOP GUIDE METAL
36	2	PULY-SP212/TE/NYLN **	SPACER WASHER
37	2	SPRG FRONTP/TD/	SPRING FRONT-PLATE
38	4	RM-PEMNUT/TD/FRPL	PEMNUT FRAME
39	2	RM-PEMNUT/TD/FRPN	PEMNUT FRONT
40	1	COVR-H21A/TD/OPTO	DUST COVER
41	1	CONN MOLEX/TD/4PM	4 WIRE MOLEX MA
42	1	RM-LABEL/TD/ALUM.	LABEL ALUMINUM
43		WIRE-REDBLK/TD/MOTOR	
44	2	SPAC-PIVBRK/TD/HEX***	SPACER 1/4" HEX.

* Order by Model #

** Note: F/N #36 replaces .032 and .093 spacer washers.

*** Note: F/N #44 replaces large spacer block.



Material List for Screws

F/N	Qty	Part #	Description
1	11	EM-#4-40S/TD/1/4	4-40X1/4" SCREW
2	3	RM-#4-40R/TD/1/4	4-40 X 1/4" WASHER HEAD
3	2	RM-#4-40R/TD/1/2	4-40 X 1/2" WASHER HEAD
4	1	RM-#8SCRW/TD/	8-32 X 1-1/4
5	1	RM-#4FLTW/TT/	#4 FLAT WASHER
6	5	RM-#4SPSW/TT/	#4 SPLIT LOC. WASHER
7	2	RM-#4-40T/TD/1/8	PHILLIPS TRUSSHEAD
8	1	RM-#8STAR/TD/	#8 INT STAR WASHER
9	1	SCRW-SET/TT/	8-32 X 3/16" SET SCREW
10	1	SCRW SET/TD/BKWH	8-32 X 1/8 SFT SCREW