

Keeney's



OPERATION AND SERVICE MANUAL

J. H. KEENEY & CO., INC.

2600 WEST 50th STREET

CHICAGO 32, ILLINOIS

SHAWNEE

- SHAWNEE -

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SELECTOR SWITCH

POSITION	CONDITION
1 _____	H. L.
2 _____	M. L.
3 _____	L. L.
4 _____	H. N.
5 _____	M. N.
6 _____	L. N.
7 _____	H. C.
8 _____	M. C.
9 or 10 _____	L. C.

SEE SCHEMATIC FOR
EXPLANATION

KEENEY'S SHAWNEE

GENERAL DESCRIPTION

Shawnee is an upright amusement game designed for multiple play. Shawnee is not a cash payout game.

The game can be played with nickels, dimes or quarters, with plays being registered in 5¢ increments.

For example: nickel = 1 Mult.
 dime = 2 Mult.
 quarter = 5 Mult.

Any one game can be played from 1 to 7 multiples. As multiples are increased winning score is also increased. Another feature of Shawnee is a 'credit' or 'coin play' selector. This enables operator to select the mode of operation.

On credit play the credit unit is advanced 1 position for each nickel inserted into coin slot, 2 positions for each dime and 5 positions for each quarter. Any number of coins can be deposited in credit play. On credit play games are played to desired multiples by depressing replay button on front door. On coin play, games are played by inserting a nickel, dime or quarter. But only one coin per play.

A proportionate multiple will appear on light glass, one multiple for a nickel, 2 multiples for a dime and 5 multiples for a quarter. Game will not accept more than one coin per play in 'coin play' position. Should it be desired to operate game on multiple coin play, i.e., more than one coin per play refer to paragraph 1.3

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SPECIFICATIONS

HEIGHT	56"
WIDTH	28"
DEPTH	17½ OA
WEIGHT (uncrated)	165 lbs.
OPERATING VOLTAGE	105-125V 60 CY AC
OPERATING CURRENT (MAX)	3.0 AMPS.
OPERATING CURRENT (IDLE)	0.5 AMPS.
COIN CHUTE	COMBINATION NICKEL, DIME, QUARTER
NUMBER OF MULTIPLE PLAYS	7
HIGHEST SCORE FOR ANY ONE GAME	700
MAX. NUMBER OF REPLAYS	999
SHIPPING WEIGHT	200 lbs.

INSTALLATION1.1 SETTING UP:

After removing game from carton attach 4 leg adjusters (provided in cloth bag) to bottom of cabinet, level cabinet. Before inserting line cord make certain all cable connectors are mating properly.

Insert line plug into nominal 115V. AC outlet. Throw toggle switch (located on back door) to "on" position.

1.2 SINGLE COIN PLAY

For single coin play operation set adjustment plug located at upper right hand section of back door (inside) to "coin play". Insert nickel, dime or quarter into coin slot on front door (only one coin per play) multiple light will advance to proper position. Depress handle located on front of cabinet to start game. Game will score as indicated on glass in event of a winner. Winning combination will advance credit unit behind front glass. Once credit unit has advanced game can be played without coins until it has reached "0" position. One multiple for each point.

1.3 MULTIPLE COIN PLAY

Should it be desired to operate game to accept multiple coins the following modification will have to be made.

- a - Locate "initial coin relay"
- b - Unsolder "brown wire" located on one set of normally closed contacts and join with "black white" wire located on the other blade of same set of contacts.

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Game can now be played with more than one coin per play. Multiple will advance only one position for each nickel, two positions for a dime and 5 positions for a quarter. Any number of multiples (up to 7) can be had per play providing correct amount of coins are deposited.

1.4 CREDIT PLAY

To operate game on "credit play" set adjustment plug to "credit play" position, deposit any number of coins (one at a time) nickels, dimes or quarters. Credit unit will advance one position for each 5¢ value.

Game is then played by depressing replay button (located on front door) to desired multiple. To start game, operate start handle. Should winning combination appear credit unit will advance by the amount indicated on back glass for that combination.

Game can be played as long as credit unit indicates above "0".

SECTION II

OPERATION

2.1 VOLTAGES

All relay coils, stepup coils and flasher unit coils operate on 50 volts AC.

All lamps are operated on 6 volts A.C.

All motors with exception of the variator motor are operated on 50 volts A.C. The variator being operated on 115 Volts A.C.

All voltages are nominal.

2.2 COIN MECHANISM

The coin mechanism in this game is of the multiple coin type.

It will accept nickels, dimes and quarters. A lockout coil is incorporated in the assembly to make the mechanism return coins in the event current is shut off or in single coin operation after 1st coin is deposited.

To assure trouble free operation of this unit it should be cleaned periodically as coins handled by moist hands sometimes leave a residue and tends to build up in mechanism.

2.3 FLASHER UNITS

The flasher units control and operate the symbol, flash and positioning. The "on" time and sequence is controlled by the variator and sequence disc located on left flasher unit. The coils on the flasher units are energized thru contacts on "flasher relays".

2.4 VARIATOR

The variator unit controls "on" time of the "flasher units". It also provides a mixing action to prevent cycling. This unit is

a continuous duty motor which is on as long as game is operating.

2.5 COMMUTATORS

All commutator units cause the credit unit to advance proper number of points should a winning combination appear. The advance coil on each commutator unit is energized thru contacts on the "commutator advance relay" and "commutator relay". The correct amount of advances of the commutator is controlled by a series of contacts on the "left", "center" and "right flasher" discs. These contacts feed contacts on the commutator disc in proportionate steps according to winning combination value. Each commutator is controlled by its own "commutator relay". The pulsing of the "commutator advance relay" is controlled by contacts on the "impulse" disc.

2.6 CREDIT UNIT (or free game stepup)

The credit unit provides a means of visually totalizing score and also cancelling credits as game is played off. It also on credit play position (see Par. 1.4) accumulates points as coins are deposited into coin slot. The advance coil is energized thru contacts on the "free game advance relay". The "free game advance relay" coil is energized thru contacts on the "commutator relays" and "impulse disc" contacts, the "free game advance relay" coil is also energized by the coin switch when game is set on "credit play" position.

2.7 CANCEL CREDITS (Free Game Reset)

Credits are cancelled three ways.

#1 - On "Credit Play" 1 point is subtracted for each multiple played.

#2 - When it is desired to cancel all the credits, the toggle switch located on rear door is thrown to the "off" position momentarily. This action will cause the "anti-cheat relay" to de-energize.

Refer to par. 2.7

#3 - When the game is tilted or shocked. Refer to Par. 2.8

2.8 ANTI-CHEAT

This game is provided with an anti-cheat circuit.

It has two functions.

1. - To void the game in case of a tilt or shock.
2. - To cancel out credits or free games when desired.

Refer to Par. 2.7 (2)

2.9 METER

A meter is provided for the purpose of tabulating cancelled credits.

This meter is located behind front door.

2.10 ADJUSTMENTS

There are three different adjustments in this game.

1. - Credit play to coin play. Refer to Par. 1.2 & 1.4
2. - Score control switch refer to Par. 1.5
3. - Line voltage adjustment. A tap has been provided on the power transformer to compensate for low line voltage conditions. This adjustment is in a form of an extra fuse receptacle located in line with other fuses. Should line voltage be below 105 volts, simply move fuse from fuse receptacle marked "normal", to fuse receptacle marked "low".

Caution: Never leave fuses in both of these receptacles at one time. This will cause a short condition across transformer.

MAINTENANCE3.1 MAINTENANCE & LUBRICATION INSTRUCTIONS

Like any other piece of equipment this machine requires maintenance and periodic lubrication. By following the instructions listed below, operating troubles will be greatly minimized.

1. A periodic check of entire machine for any parts which may require slight adjustments.
2. A periodic check of female sockets by crimping slightly with fingers to insure a positive contact with male portion of same socket.
3. All relay and switch stacks may occasionally require tightening.
4. After tightening relay and switch stacks, all relay and switch contacts should be reinspected for proper contact and gap.
A minimum of 1/32 inch follow thru is required for proper relay and switch contact operation.
If necessary to clean relay and switch contacts a burnishing tool or crocus cloth may be used.
Under no circumstances use a file of any type to clean contacts.
5. Fuse clips may occasionally be tightened to insure proper fuse contact.

Clutch spring tension adjustments should be made only after clutch leather washers are lubricated as per instructions under (Lubrication).

3.2 LUBRICATION

CAUTION

Over lubrication is sometimes more harmful than too little lubrication. All lubricants should be used sparingly for proper operation. Never under any circumstances use Vaseline as a lubricant.

3.3 LUBRICATION INSTRUCTION

1. All contact discs should be cleaned periodically with a suitable solvent (carbon tetrachloride is considered excellent for this purpose). After contact discs are cleaned of all residue a very light film of coin machine grease should be applied to contact disc.
2. Shafts and levers of stepup units and all other levers and linkages should be sparingly lubricated with an oil of the 3 in 1 type.
3. Ratchets of stepup units should be lubricated slightly with coin machine grease.
4. Leather washers on units utilizing slip clutches should be soaked in neatsfoot oil as a lubricant.
5. All linkages on latch bank should be lubricated with oil.

CAUTION

Never lubricate a plunger or a solenoid. A periodic disassembly of solenoid and plunger, after which both

units should be wiped clean is all that is required.

6. Contact wipers on stepup units and all other units utilizing wiper fingers should be occasionally checked for finger tension. The proper amount of tension can be noted if the disc is moved away from the wiper. This wiper should follow the disc for approximately 1/32 inch before the wiper leaves the disc. On slightly warped discs, tension of fingers may be slightly increased. Discs that are extremely warped should be replaced.

Note! Too much wiper tension will cause a unit to operate very sluggishly and fail to reset properly.

Too light tension will cause intermittent failure of some portion of circuit which it operates.

7. Units utilizing a slip clutch should be checked for clutch spring tension occasionally.

A) A clutch spring tension that is too tight will cause a strain on the motor which will eventually become weak and cause failures.

B) A clutch spring that is too loose will not allow fingers to rotate due to extreme slippage and will not function properly.

SECTION IV

REPLACEMENT PARTS LIST

WHEN ORDERING REPLACEMENT PARTS ALWAYS

MENTION TYPE OF GAME, SERIAL NUMBER, DES-

CRIPTION OF DEFECTIVE PART AND PART NUMBER

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>DIAGRAM LOCATION</u>
<u>COILS</u>			
A.C. RELAY	100 OHM	1326-B3-16	H-1
CANCEL RELAY	100 OHM	1326-B3-16	H-1
CENTER FLASHER RELAY	80 OHM	1326-B3-15	D-1
CENTER FLASHER SOLENOID	28 OHM	1326-B4-24	E-1
COIN LOCKOUT (50 V)	ABT. REJ.	AVM-31500	F-1
#1 COMMUTATOR RELAY	80 OHM	1326-B3-15	O-1
#2 COMMUTATOR RELAY	80 OHM	1326-B3-15	Q-1
#3 COMMUTATOR RELAY	80 OHM	1326-B3-15	S-1
#1 COMMUTATOR RESET	15 OHM	1326-B4-2	J-1
#2 COMMUTATOR RESET	15 OHM	1326-B4-2	J-1
#3 COMMUTATOR RESET	15 OHM	1326-B4-2	J-1
#1 COMMUTATOR STEPUP	10 OHM	1326-B4-3	J-1
#2 COMMUTATOR STEPUP	10 OHM	1326-B4-3	J-1
#3 COMMUTATOR STEPUP	10 OHM	1326-B4-3	J-1
COMMUTATOR ADVANCE RELAY	80 OHM	1326-B3-15	L-1
COMMUTATOR RESET RELAY	80 OHM	1326-B3-15	J-1
CUT-OFF RELAY	100 OHM	1326-B3-16	F-1
FREE GAME ADVANCE RELAY	80 OHM	1326-B3-15	I-1
FREE GAME STEPUP	10 OHM	1326-B4-33	I-1
FREE GAME RESET	10 OHM	1326-B4-33	H-1
FREE GAME RESET RELAY	80 OHM	1326-B3-15	I-1

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>DIAGRAM LOCATION</u>
<u>COILS. (CONT'D)</u>			
IMPULSE MOTOR RELAY	80 OHM	1326-B3-15	I-1
INITIAL COIN RELAY	80 OHM	1326-B3-15	K-1
LEFT ADJUSTMENT RELAY	100 OHM	1326-B3-16	M-1
LEFT FLASHER RELAY	80 OHM	1326-B3-15	D-1
LEFT FLASHER SOLENOID	28 OHM	1326-B4-24	D-1
LEFT 'PIPE' RELAY	100 OHM	1326-B3-16	M-1
MULTIPLE RELAY	80 OHM	1326-B3-15	F-1
MULTIPLE RESET	15 OHM	1326-B4-2	H-1
MULTIPLE STEPUP	10 OHM	1326-B4-3	H-1
RIGHT ADJUSTMENT RELAY	100 OHM	1326-B3-16	N-1
RIGHT FLASHER RELAY	80 OHM	1326-B3-15	E-1
RIGHT FLASHER SOLENOID	28 OHM	1326-B4-24	E-1
RIGHT 'CANOE' RELAY	100 OHM	1326-B3-16	O-1
SEQUENCE RELAY	80 OHM	1326-B3-15	K-1
SEQUENCE SOLENOID	28 OHM	1326-B4-24	K-1
TILT RELAY	100 OHM	1326-B3-16	K-1
TEPEES (2) RELAY	100 OHM	1326-B3-16	U-1
TEPEES (3) RELAY	100 OHM	1326-B3-16	U-1
10¢ RELAY	80 OHM	1326-B3-15	G-1
25¢ RELAY	80 OHM	1326-B3-15	G-1
<u>FUSES</u>			
115V. CIRCUIT	5 AMP.	118-K-105	B-5
50V. CIRCUIT	10 AMP.	118-K-106	B-2
6V. CIRCUIT	15 AMP.	118-K-107	B-5

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>DIAGRAM LOCATION</u>
<u>LAMPS</u>			
DISPLAY	#51	127-K-406	
FLASHER	#51	127-K-406	
MULTIPLE	#51	127-K-406	
<u>METERS</u>			
CANCEL (50 V.)	5 DIGIT	E-2674ND	H-1
<u>MOTORS</u>			
CENTER AND RIGHT FLASHER (50 V.)	12 RPM	E-2677A	K-1
COIN (50 V.)	36 RPM	E-2719 A	G-1
IMPULSE (50 V.)	12 RPM	E-2718A	M-1
SEQ. AND LEFT FLASHER (50 V.)	12 RPM	E-2677A	K-1
VARIATOR (115V.)	8 RPM	E-2694A	B-3
<u>SWITCHES</u>			
5¢ COIN	ABT#-V4-14		F-3
10¢ COIN	ABT#-V4-10		G-3
25¢ COIN	ABT#-V4-14		G-3
TOGGLE, POWER	SPST		
<u>TRANSFORMERS</u>			
POWER	PRI-115V TAP AT 105V.60CY	TR-1003-B	B-4
	SEC#1-50V	10 AMPS	
	SEC#2-6 V	15 AMPS	
<u>MISCELLANEOUS</u>			
CENTER AND RIGHT FLASHER ASS'Y - FOR BREAKDOWN REFER TO FIGURE 3			
SEQUENTIAL AND LEFT FLASHER ASS'Y - FOR BREAKDOWN REFER TO FIGURE 3			
BACKGLASS	SHAWNEE		
SLUG REJECTOR	5¢, 10¢, and 25¢, COMBINATION		

