

Super Big Tent

Keeney's

**SUPER
BIG TENT**

MANUAL of OPERATION

J. H. KEENEY & CO., INC.

2600 W. 50th Street

Chicago, Illinois

INDEX

DESCRIPTION	PART NO.	RATING	LOCATION
A-C Relay		90 OHM	A-5
Adjustment Relay		90 OHM	E-5
Advance Relay		80 OHM	A-7
Bell	1326-B4-5	25-OHM	A-12
Cancel Relay		80-OHM	A-9
Coin Lockout			A-4
Commutator Relay		80-OHM	A-8
Commutator Resets.	1326-B4-2	15-OHM	A-4 thru A-5
Commutator Step-Ups.	1326-B4-3	10-OHM	F-4
Credit Relay		80-OHM	A-4
Flasher Relays Set-Up.			
Multiple		80-OHM	E-6
Double		80-OHM	E-7
Left		80-OHM	E-8
Center		80-OHM	E-9
Right.		80-OHM	E-10
Flasher Relays Trip.			
Multiple		80-OHM	A-4
Double		80-OHM	A-8
Left		80-OHM	A-8
Center		80-OHM	A-8
Right.		80-OHM	A-8
Flasher Solenoid	1326-B4-24	28-OHM	A-10
Double	1326-B4-24	28-OHM	A-10
Left	1326-B4-24	28-OHM	A-10
Center	1326-B4-24	28-OHM	A-11
Right.	1326-B4-24	28-OHM	A-11
Impulse Solenoid	1326-B4-24	28-OHM	A-12
Jumbo Relay		90-OHM	A-14
Meter, Replays	1314-ND-167	50-V	A-12
Meter, Total Plays	1314-ND-167	50-V	A-6
Monkey Relay		90-OHM	A-11
Motors			
Multiple	E-2616-A	8 RPM-50-V	A-12
Double & Left.	E-2556-A	8 RPM-50-V	A-13
Center & Right	E-2556-A	8 RPM-50-V	A-13
Sequence Control & Impulse	E-2556-A	8 RPM-50-V	A-14
Variator	E-2617-A	8 RPM-50-V	A-9
Reset Relay		80-OHM	A-7
Replay Unit Reset.	1326-B4-23	7-OHM	A-6
Replay Unit Step Up.	1326-B4-23	7-OHM	A-6
Sequence Control Solenoid.	1326-B4-24	28-OHM	A-10
Ten Point Relay.		90-OHM	A-20
Two Point Relay.		90-OHM	A-20

GENERAL INFORMATION

MAINTENANCE

The Service Manual has been compiled primarily to simplify servicing and maintenance and to insure trouble-free operation of J. H. Keeney games. Before attempting to correct any part that may be working improperly, it is advisable that the service man first check through the schematic and also this Service Manual to help him find the method of correction.

The service man will also find that before touching any part of a machine, a visual inspection of fuses, loosened or broken springs, loose plugs and sockets or loose wires will limit the service call to minimum of time.

LUBRICATION

A special game lubricant can be applied when a step-up does not re-set properly. It is advisable that the discs be cleaned with a solvent every four to six months and recoated with a very light film of the lubricant. This lubricant may also be applied to the cams of the motors and ratchets of the step-up units--but very sparingly.

CAUTION: Never apply grease or oil on any solenoid plunger. If they become sticky for any reason a bit of powdered graphite applied will correct this condition.

SWITCH ADJUSTMENT

Never attempt to adjust contact switches on the operating relays, trip relays, or any other part of the machine until checking through the Service Manual. It is suggested that the service man check through the machine at intervals tightening each screw that fastens switches to units. Remember a loosened switch may at times cause intermittent failure in the operation of a game.

All switches should either make or break with an approximate 1/32" follow through on the short blade when closed.

FUSES

Never replace a blown fuse with one of a higher rating than is indicated on the card in the fuse block. The fuse block is located next to the transformer.

IF GAME DOES NOT LIGHT UP AND IS COMPLETELY "DEAD" WHEN COIN IS INSERTED

1. Check if line cord is inserted into a live 115 volt AC outlet.
2. Check the line toggle switch located at rear of machine.
3. Check the 5 amp. fuse which is located on the sub-panel inside the machine.
4. See that socket and plug between the sub-panel and the cabinet are inserted firmly.
5. Should all of the above prove to be in good order, check to see whether the line voltage is coming up to the sub-panel and transformer. This may be done with an ordinary 115 volt light bulb.

6.VOLT BULBS DO NOT LIGHT BUT GAME OPERATES OTHERWISE

1. Check 10 amp. fuse mounted on sub-panel.
2. Check all plugs and sockets in the game to be sure they are securely fastened together.

The following is a breakdown of individual units in this game. Items are listed in alphabetical order from "A" to "Z" and are marked as they appear on the diagram and as named by tags for various component parts. EXAMPLE: 2 Point Relay-Found in the alphabetical category of "T". Impulse Relay found in the alphabetical category of "I".

"A"

A-C RELAY

This relay energizes the cancel relay whenever the AC source is interrupted to the game, or the game is tilted. The blue wire connects thru a slam tilt switch to blue orange on the AC relay itself, and in turn makes with orange black to black thru the cancel relay. Initial pull in is made thru the credit relay, (blue orange to orange black) which is in parallel with the AC relay's lock in circuit.

ADJUSTMENT RELAY

This relay pulls in whenever the adjustment disc is in the first four positions and the multiple disc stops on certain positions. This will cause jumbo's of first or left column to change to monkeys. The adjustment relay is energized by green-orange to green black on the multiple solenoid switch. This green black is in turn energized thru the adjustment disc by yellow brown, yellow red, yellow black or gray, from the multiple disc.

ADVANCE RELAY

The Advance Relay energizes thru the credit relay (orange to black) whenever a coin is deposited. It is also pulsed thru either the 2 point or 10 point relay (orange to blue black) by the impulser disc whenever replays are scored. This then advances the replay unit and completes circuit for handle to start operation.

"B"

BELL

The Bell is connected in parallel to the replays meter and will ring with each replay.

"C"

CANCEL RELAY

The Cancel Relay will operate whenever brown makes with black yellow thru the AC relay (tilted, etc.) and replays are already scored on the replay unit (black yellow to black).

COIN LOCK OUT

This coil when energized allows coins to pass thru the slug rejector & register on the replay unit. However if the machine is turned off, or is in operation, opening any one of four switches in series (circuit solenoid, 2 point relay, 10 point relay, or cancel relay), it will reject coins deposited and prevent loss to player.

COMMUTATOR RELAY

The commutator relay will pulse once at the end of each sequence control cycle (green red to black). This will step the proper commutator, depending upon position of the multiple wipers, one position and place it in circuit for any replays scored. The 2 point relay (green red to green black) or ten point relay (green red to green white) will then pulse it, until circuit is broken, from the impulse disc.

COMMUTATOR RESET

All four commutator resets are energized by the reset relay (brown red to orange black) when the cancel relay is not energized (orange black to black).

COMMUTATOR STEP UP

All Four Commutator Step Up's are energized by the commutator relay (red to red black) whenever their circuit is completed thru the multiple disc. Only one of their circuits is completed at any given time. As noted below:

#1	Brown black to black
#2	Brown white to black
#3	Yellow blue to black
#4	Yellow green to black

CREDIT RELAY

The Credit Relay is pulsed by the coin switch (orange white to orange green) whenever the machine is at rest and the following holds true: circuit solenoid switch closed (orange green to orange brown) and the 2 point, 10 point, and cancel relays de-energized (orange brown to orange red to orange black to black).

"F"

FLASHER RELAY'S, TRIP

The double, left, center and right Flasher Trips will energize whenever the multiple flasher relay is tripped (green to black). The multiple flasher relay will trip when replays are registered, closing the replay unit "O" break switch (orange to orange blue) and the start handle is actuated (orange blue to orange green). The rest of the circuit to be completed is the same as the credit relay thru the circuit solenoid switch, and the 2 point 10 point, and cancel relays.

FLASHER RELAY'S, SET UP

The Flasher Relays are set up in sequence (multiple double, left, center and right) by the sequence control disc. Their length of time in operation is determined by the position of variator unit in respect to the sequence control disc.

FLASHER SOLENOIDS

The circuit and multiple Flasher Solenoids both energize during period that the multiple flasher relay is tripped. The double, left, center and right flasher solenoids all energize from their respective flasher relays. These solenoids feed direct to black thru relays described.

"I"

IMPULSE SOLENOID

The Impulse Solenoid acts whenever the 2 point, 10 point, or cancel relay is energized (brown yellow to black).

"J"

JUMBO RELAY

The Jumbo Relay is energized thru the right flasher relay (brown gray to orange green), whenever a jumbo appears on the right flasher (orange green to black).

"M"

METER, REPLAYS

The Replays Meter will record any replays scored. It is energized by the advance relay (black orange to brown yellow), when the 2 point or 10 point relay is closed (brown yellow to black).

METER, TOTAL PLAYS

The Total Plays Meter is pulsed by the reset relay (blue red to black) when the cancel relay is not energized (blue yellow to blue red).

MONKEY RELAY

The Monkey Relay is energized by the right flasher disc (white blue to white black) when the right flasher relay is in the set up position (white black to black).

MOTORS

The multiple, double and left, center and right, and the circuit and impulse motors are energized by end of stroke make switches on their individual solenoids. The variator motor is energized by the replay unit "O" break switch (black yellow to black).

"R"

RESET RELAY

The reset relay is energized once each time the sequence control unit operates (blue white to black). It also operates thru the cancel relay when energized (blue white to blue black) from the impulser disc (blue black to black).

REPLAY UNIT RESET

The Replay Unit Reset operates directly from the reset relay (blue red to black).

REPLAY UNIT STEP UP

The Replay Unit Step-Up operates directly from the advance relay (blue brown to black).

"T"

TEN (10) POINT RELAY

The Ten Point Relay will allow the commutator stepup to step once each time 10 replays are scored.

TOW (2) POINT RELAY

The Two Point Relay will allow the commutator stepup to step once each time 2 replays are scored.

SUMMARY

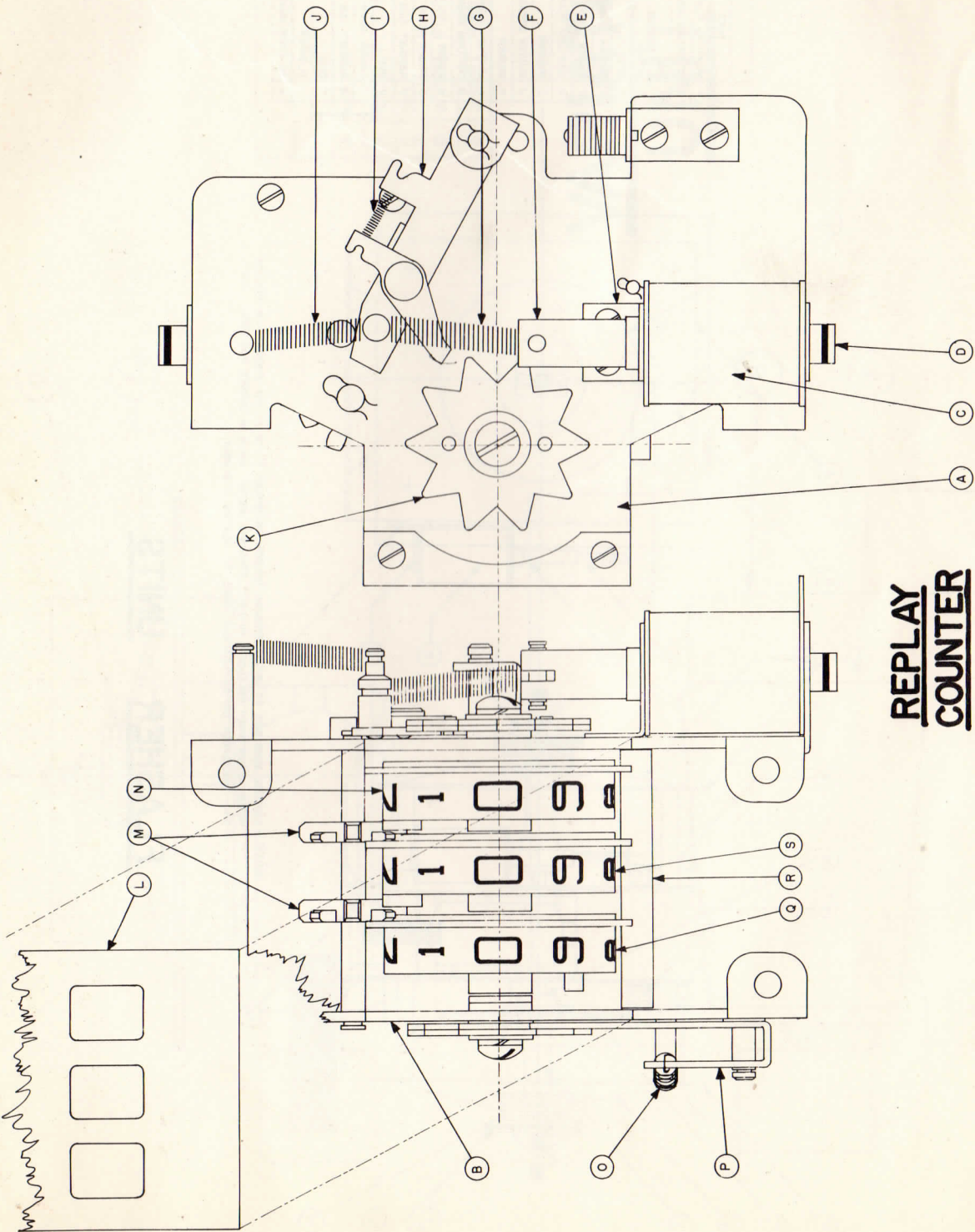
The circuit descriptions listed herein are in many cases not complete. We have tried to describe one or two possible conditions that each circuit will operate. In some cases the circuit divides into numerous branches which would entail a lengthy and complicated description. Light circuits are not described as they should be self explanatory. Refer to diagram wherever possible.

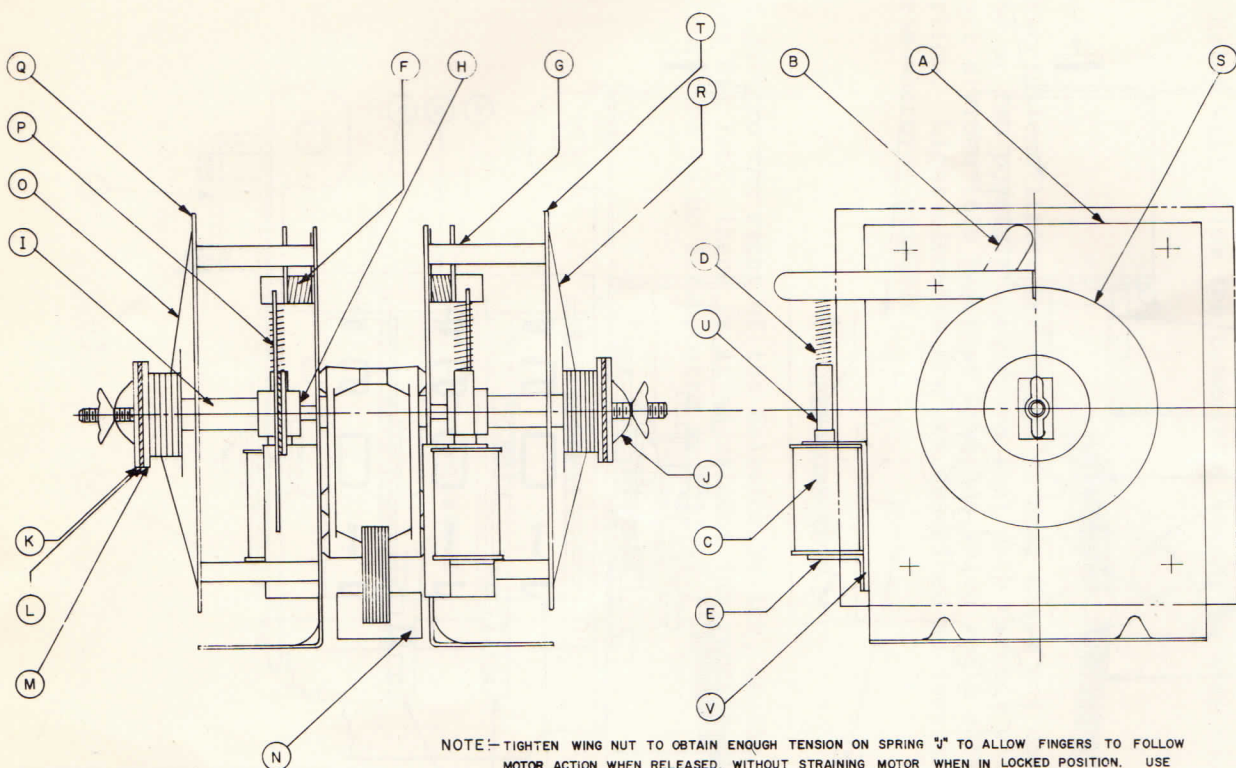
OPERATORS NOTE !!

Mounted just to the right of the Selector Switch, on the back door of your new Keeney Super Big Tent, there is an adjustment instruction card. The abbreviations found on this card are to be interpreted as follows.

- VL - Very Liberal
- L - Liberal
- N - Normal
- C - Conservative
- VC - Very Conservative

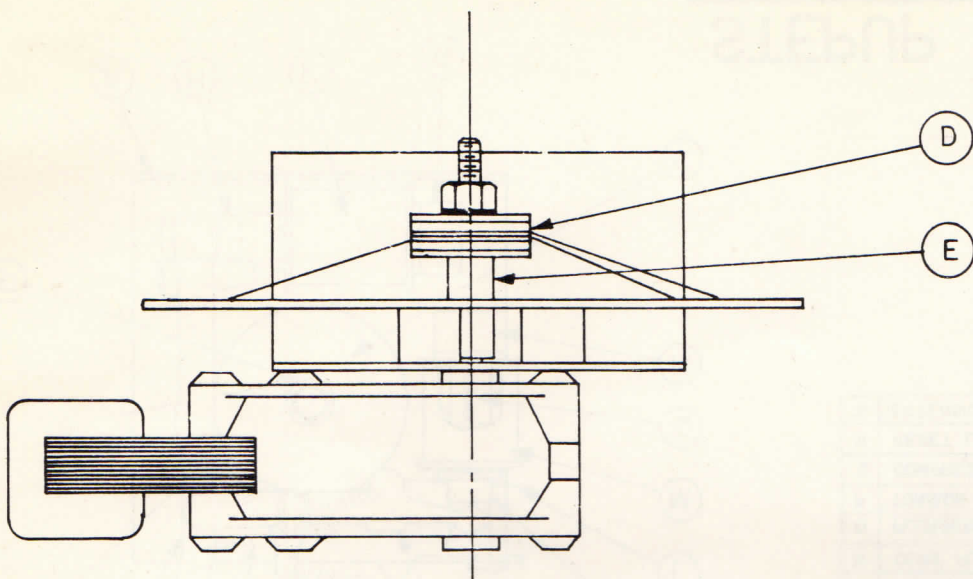
PART	PART NO.
A	SIDE PLATE (RIGHT HD) 1304-AS-28
B	SIDE PLATE (LEFT HD) 1304-AS-29
C	COIL 1304-B4-23
D	CORE PLUG 1304-AS-50
E	COIL MOUNTING BRKT. 1300-A152
F	PLUNGER 1304-A-5
G	SPRING 1304-A-44
H	ACTUATING LEVER 1304-AS-40
I	SPRING 1304-A-66
J	SPRING 1304-A-67
K	INDEX RATCHET 1304-A-13
L	WINDOW 1304-A-11
M	PIVOT 1304-A-11
N	WHEEL (RIGHT HAND) C-2326-A
O	SPRING 1304-A-65
P	INDEX HOLD PAWL 1304-A-9
Q	WHEEL (LEFT HAND) C-2307-A
R	ARM (ZERO SET) 1304-AS-36
S	WHEEL (CENTER) C-2306-A
T	





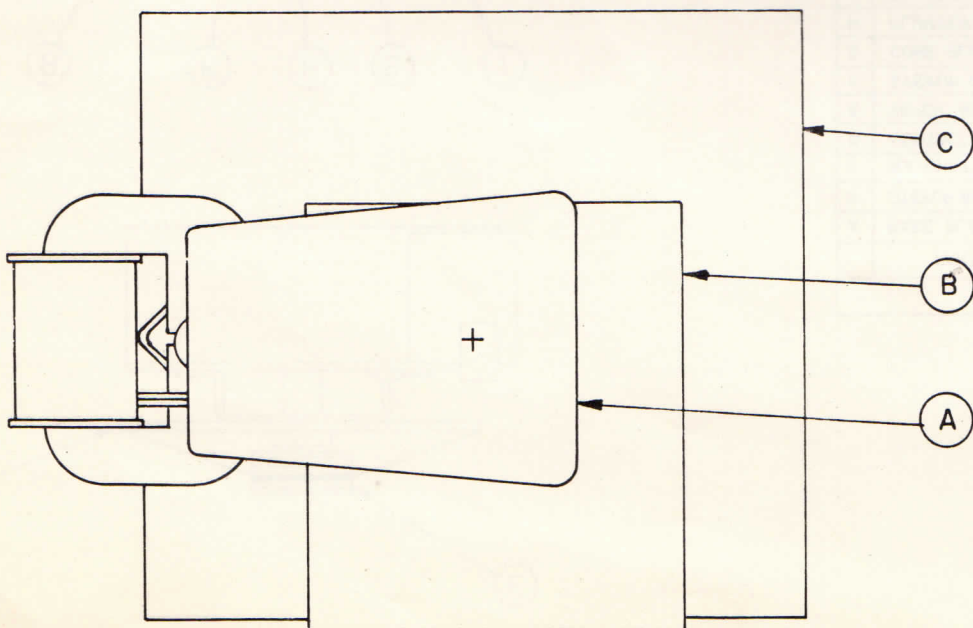
PART	SEQ. CONT. & IMPULSE	DOUBLE & LEFT	CENTER & RIGHT	MULTIPLE
	PART NUMBER			
A MOUNTING PLATE	P-2869-B	P-2869-B	P-2869-B	P-2869-B
B ACTUATING ARM	A-2301-A	A-2301-A	A-2301-A	A-2301-A
C COIL	I326-B4-24	I326-B4-24	I326-B4-24	I326-B4-24
D SPRING	I304-A-44	I304-A-44	I304-A-44	I304-A-44
E CORE PLUG	A-2316-A	A-2316-A	A-2316-A	A-2316-A
F RETURN SPRING	SP-2934-A	SP-2934-A	SP-2934-A	SP-2934-A
G SPACER STUD	S-2891-A	S-2891-A	S-2891-A	S-2891-A
H COUPLING FLANGE	S-2863-A	S-2863-A	S-2863-A	S-2863-A
I BUSHING	S-2889-A	S-2889-A	S-2889-A	S-2889-A
J CLUTCH SPRING	SP-2933-A	SP-2933-A	SP-2933-A	SP-2933-A
K WASHER	3I-K-909	3I-K-909	3I-K-909	3I-K-909
L LEATHER WASHER	3I-K-813	3I-K-813	3I-K-813	3I-K-813
M FRICTION WASHER	P-2858-A	P-2858-A	P-2858-A	P-2858-A
N MOTOR	E-2556-A	E-2556-A	E-2556-A	E-2616-A
O FINGER ASS'Y.	AS-2594-ND	AS-2585-ND	AS-2590-ND	AS-2597-ND
P RATCHET CAM	A-2297-A	A-2298-A	A-2298-A	A-2298-A
Q DISC	A-2330-ND	A-2326-ND	A-2328-ND	A-2332-ND
R FINGER ASS'Y.	AS-2595-ND	AS-2587-ND	AS-2591-ND	NOT USED
S RATCHET CAM	A-2305-A	A-2298-A	A-2298-A	" "
T DISC	A-2331-ND	A-2327-ND	A-2329-ND	" "
U PLUNGER	I304-A-5	I304-A-5	I304-A-5	I304-A-5
V SOLENOID BRACKET	P-2878-A	P-2878-A	P-2878-A	P-2878-A

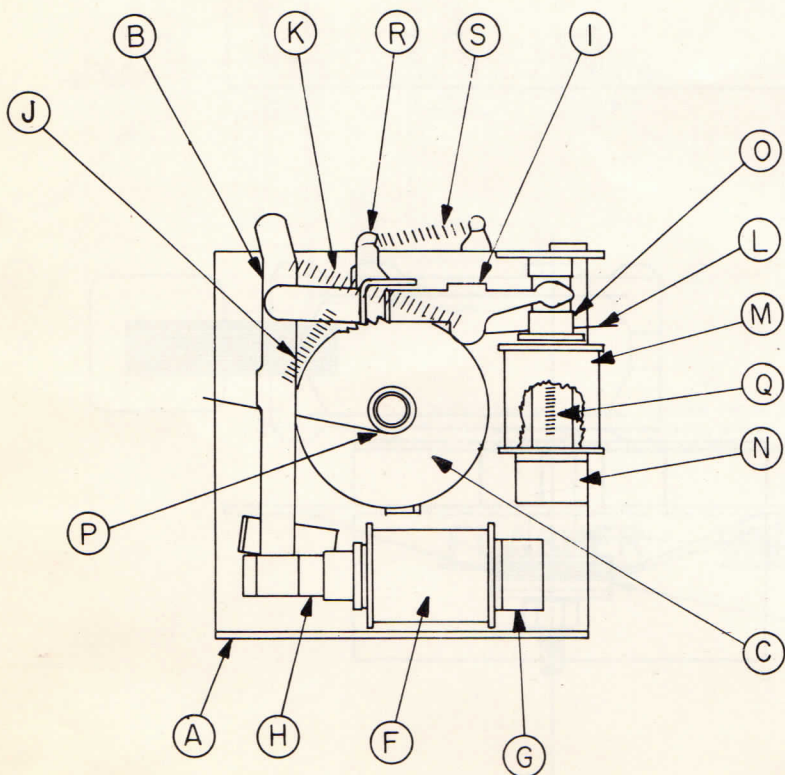
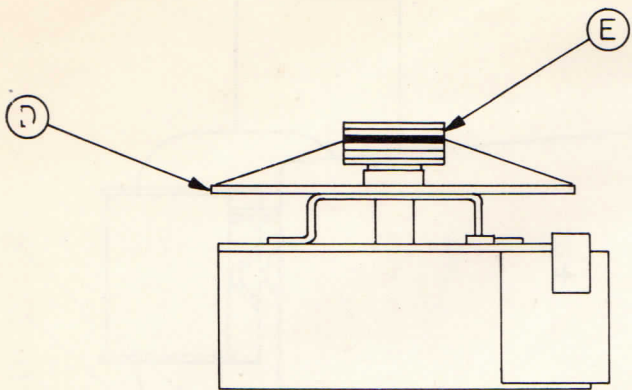
FLASHER UNITS



PART		PART NO.
A	MOTOR	E-2617-A
B	BASE PLATE	A-2324-A
C	DISC	A-2366-ND
D	WIPER FINGERS	AS-2604-ND
E	SHAFT HUB	2I-A-89

**VARIATOR
UNIT**





		NO. 1	NO. 2	NO. 3	NO. 4		
		COMMUTATOR	COMMUTATOR	COMMUTATOR	COMMUTATOR		
	PART	PART NUMBER					
A	BASE PLATE ASS'Y.	1300-B9-66	1300-B9-66	1300-B9-66	1300-B9-66		
B	STEPUP ARM ASS'Y.	1300-AS-194	1300-AS-194	1300-AS-194	1300-AS-194		
C	RATCHET ASS'Y.	A-2181-C-26	A-2181-C-26	A-2181-C-26	A-2181-C-26		
D	CONTACT DISC	A-2333-ND	A-2334-ND	A-2335-ND	A-2336-ND		
E	WIPER ASS'Y.	AS-2599-ND	AS-2599-ND	AS-2599-ND	AS-2599-ND		
F	STEPUP COIL	1326-B4-3	1326-B4-3	1326-B4-3	1326-B4-3		
G	CORE PLUG ASS'Y.	1300-AS-135	1300-AS-135	1300-AS-135	1300-AS-135		
H	PLUNGER	1300-A-92	1300-A-92	1300-A-92	1300-A-92		
I	RESET PAWL	1300-A-54	1300-A-54	1300-A-54	1300-A-54		
J	EXTENSION SPRING	1300-A-102	1300-A-102	1300-A-102	1300-A-102		
K	"	1300-A-101	1300-A-101	1300-A-101	1300-A-101		
L	TORSION "	1300-A-72	1300-A-72	1300-A-72	1300-A-72		
M	RESET COIL	1326-B4-2	1326-B4-2	1326-B4-2	1326-B4-2		
N	CORE PLUG ASS'Y.	1300-AS-149	1300-AS-149	1300-AS-149	1300-AS-149		
O	PLUNGER ASS'Y.	1300-AS-91	1300-AS-91	1300-AS-91	1300-AS-91		
P	TORSION SPRING	1300-A-100	1300-A-100	1300-A-100	1300-A-100		
Q	COMPRESSION "	1300-A-97	1300-A-97	1300-A-97	1300-A-97		
R	RESET LOCK	1300-B-53	1300-B-53	1300-B-53	1300-B-53		
S	EXTENSION SPRING	1300-A-103	1300-A-103	1300-A-103	1300-A-103		

STEPUP UNITS

