

SEEBURG

WIRED SELECTOR RECEIVER

Types

WSR7-L6 / WSR8-L6 / WSR7-L6D

SEEBURG

WIRED SELECTION RECEIVER

TYPE WSR7-L6

The Wired Selection Receiver, Type WSR7-L6, is the power distribution and control center of the Select-O-Matic for operation from the Electric Selector and Wired Wall-O-Matics. Power enters the Receiver through the line cord and main switch and is distributed, directly at 117-volts or through transformers, to the electric selector, the Select-O-Matic Mechanism, the cabinet lighting, the amplifier, and the Wall-O-Matics. All connections to the Receiver are made with plugs which are of different types and sizes to avoid possibility of incorrect connections.

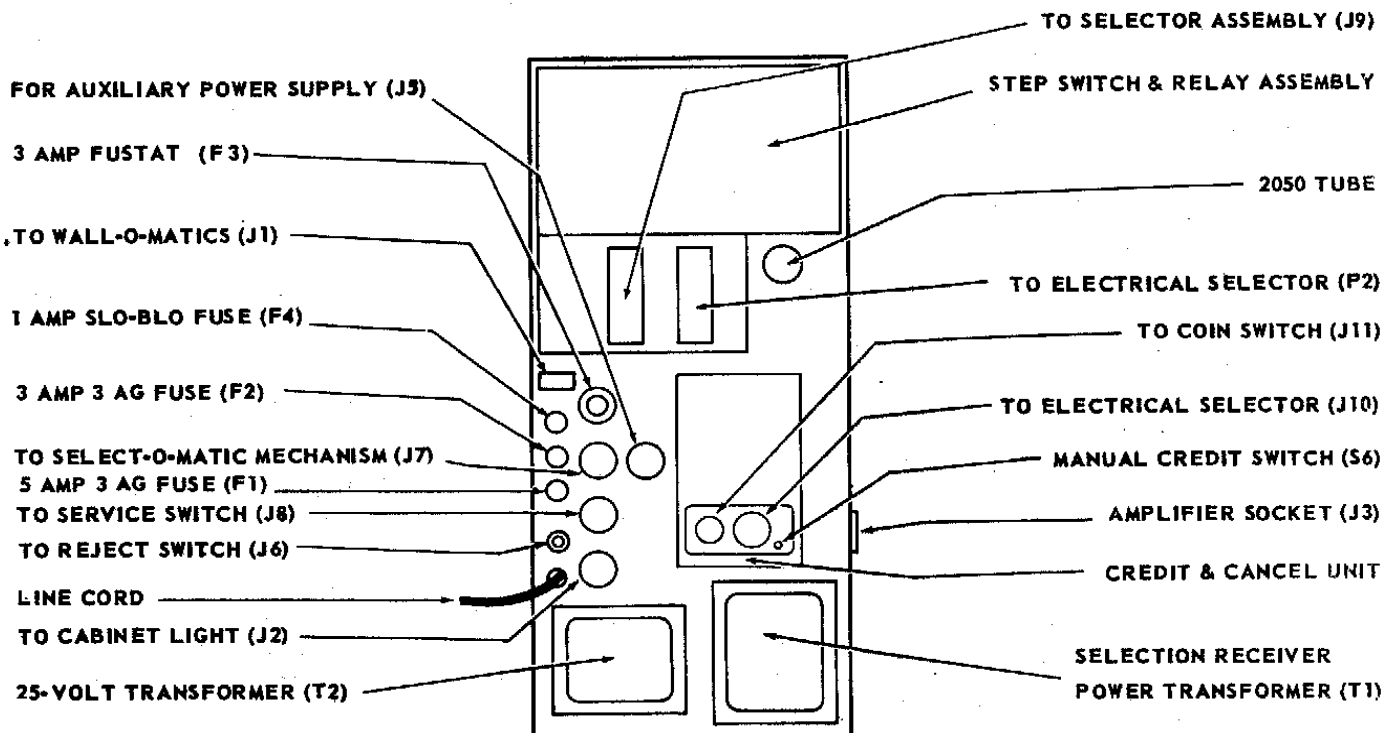
Included in the Receiver are a Step Switch and Relay Assembly, a 2050 tube, and a Credit and Cancel Unit for selection of records. The Step Switch and Relay Assembly and the 2050 tube are for selections from Wired Wall-O-Matics. The Credit and Cancel Unit is a part of the electric selector system for selections made at the Select-O-Matic.

A 25-volt transformer supplies power for up to six Type "3W-1" Wired Wall-O-Matics. Another transformer, the selection receiver power transformer, has five output windings for

control circuits, the Select-O-Matic Mechanism indicator lights, and heater current for the tubes in the Master Remote Amplifier.

One of the secondaries of the selection receiver power transformer provides approximately 30-volts, a.c. This 30-volt output is rectified by a full-wave selenium rectifier for 25-volt d.c. supply for some of the relays of the Step Switch and Relay Assembly, for d.c. supply for a timing relay in the Credit and Cancel Unit, and for bias supply for the 2050 tube. Another secondary provides approximately 150-volts for operating the step switches through the plate circuit of the 2050 tube.

Access to the interior wiring and components is had, while the unit is normally operating, by removing the cover plate on the outside of the rear door of the Select-O-Matic "100". To remove the cover plate, take off the three wing-nuts located inside the door just above the amplifier and selection receiver and loosen the screw at the center of the bottom edge of the plate. After removing the nuts, pull out on the plate so the three bolts are out of the holes in the door and lift up on the plate to disengage



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hooks at the lower edge.

The Selection Receiver may be removed from its mounting by removing the cover plate and loosening the four screws holding the flanges of

the unit. With the four screws loosened, slide the unit away from the amplifier to disengage the locating pins and amplifier socket connection. It may then be lifted from the mounting frame.

CREDIT AND CANCEL UNIT, TYPE CCU-3

The Credit and Cancel Unit, although included in the selection receiver, is a part of the electrical selector system of the Select-O-Matic "100". The operation and adjustments of

the unit are discussed in detail in the information on the Electrical Selector, Type ES11-L6, beginning on page 3069.

STEP SWITCH AND RELAY ASSEMBLY OPERATION

The fundamental purpose of the Step Switch and Relay Assembly is to energize a selector coil and a group solenoid in the Solenoid Assembly (of the Select-O-Matic Mechanism) according to the selection made with a Type "3W-1" Wired Wall-O-Matic. The Assembly consists of two step switches, a reset magnet, a transfer relay, two timing relays, and a play control relay. (The play control relay is not directly involved in the operation of the remote control system.)

When a selection is made from a Wall-O-Matic, a rotating switch blade in the Wall-O-Matic causes intermittent grounding of the grid of the 2050 tube in the selection receiver. The grounding occurs in two series of "pulses". These pulses are of approximately 1/25 second duration with a 1/25 second interval between each successive pulse and with approximately 1/5 second interval between the two series. The number of pulses in each of the two series is determined by which selector buttons are operated at the Wall-O-Matic and will determine, in turn, which selector coil and which group solenoid will be energized.

Each time the grid of the 2050 tube is grounded during one of the "pulses", the tube passes current through its plate circuit and a step relay coil in that circuit. The relay coil attracts its armature and operates the ratchet of the step switch so the switch is advanced one step. In the normal rest position of the Assembly, none of the relays are energized, the two step switches are in "zero" position and the coil of the Unit Step Relay is in the plate circuit of the 2050 tube through Contact "A" of the Transfer Switch. When a selection is

made, the first pulse of the first series energizes the Unit Step Relay, advances the step switch one contact, and closes contacts "G" and "F". Contact "G" completes a d.c. circuit to the Reset Magnet causing that magnet to be energized and engage pawls with the ratchets of both step relays. Contact "F" completes a d.c. circuit to the Transfer Relay so it is energized, opening Contact "D" and closing Contact "E". Both the Reset Magnet and the Transfer Relay have slow-release timing so they remain in the energized positions for an appreciable time after the first pulse from the 2050 tube had ended to permit the Step Relay armature to return to its normal position with Contacts "G" and "F" open. Before either relay will drop out, the second pulse of the series operates the armature of the Unit Step Relay and again the relays are energized. As long as the pulses continue with 1/25 second intervals between them the following condition will prevail: Contacts "G" and "F" open and close with each "pulse" from the Wall-O-Matic, the pawls engage with the step switch ratchets, and the Transfer relay Contact "E" remains closed. Because the step switch ratchets are engaged by the pawls, the step relay will advance the step switch one step or contact with each pulse.

When the second pulse of the first pulse series advances the Unit Step Switch a second time, a cam on that switch operates the make-before-break contacts of the Transfer Switch so the 2050 tube plate circuit is connected to the Unit Step Relay through Contacts "B" ("A" open) and Contact "E" of the Transfer Relay. This circuit condition is retained through subsequent steps of the Unit Step Switch.

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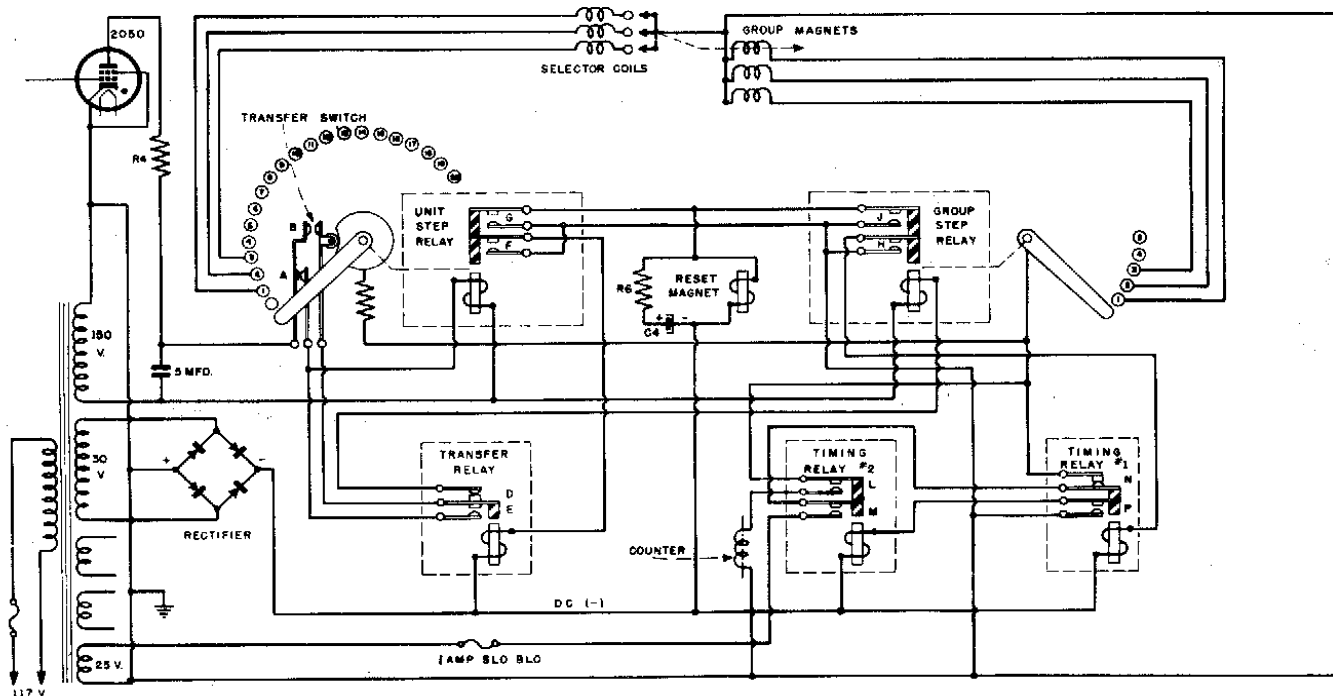


Figure 2. Simplified Schematic Diagram - Step Switch Assembly

The $1/5$ second interval between the end of the last pulse of the first series and the beginning of the first pulse of the second series causes the Unit Step Relay to open the "G" and "F" contacts long enough to allow the Transfer Relay to drop out but not long enough to allow the Reset Magnet to disengage the Step Switch ratchet pawls. Therefore, during this $1/5$ second interval when the Transfer Relay drops out, the Unit Step Switch remains in the advanced position and the plate circuit of the 2050 tube is transferred to the Group Step Relay through Contacts "B" and "D". When the first pulse of the second series operates the 2050 tube, the Group Step Relay will be energized and Contacts "J" and "H" will be closed for the duration of the pulse.

Contact "J" energizes the Reset Magnet so it maintains its energized position as long as the pulses of the second series operate the Group Step Relay. Contact "H" closes the d.c. circuit to the No. 1 Timing Relay. This relay has slow-release timing so it remains in the energized position during the $1/25$ second intervals between the pulses forming the second series. When the No. 1 Timing Relay is energized Contact "N" opens and Contact "P" closes. Contact "P" closes the d.c. circuit to the No. 2 Timing Relay which, in turn, closes Contact "M" and Contact "L".

The conditions prevailing as long as the pulses of the second series continues with $1/25$ second interval between them are: advance of the Group Step Switch with each pulse (Group Step Relay energized through Contacts "B" and "D"); the Reset Magnet energized so the Unit Step Switch is in its advance position; the Timing Relays No. 1 and No. 2 energized; Contact "M" closed; Contact "L" closed; Contact "N" open.

After the last pulse of the second series has operated the Group Step Relay, Contacts "J" and "H" remain open and the No. 1 Timing Relay drops out. When this occurs, Contact "P" opens and Contact "N" closes. Contact "N" will close the "Selection Circuit" for current supply to a selector coil and a group solenoid. The No. 2 Timing Relay has slow-release timing so there will be an interval of approximately $1/20$ second before Contact "M" is opened to interrupt the selection circuit. The Reset Magnet timing is such that it drops out after Contact "M" has opened, releases the Step Switch ratchet pawls, and the step switches reset to normal position.

Contact "L", which is closed during the second series of pulses, completes a circuit to a selection counter solenoid in the Electrical Selector.

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The number of steps the Unit Step Switch makes during the first series of pulses determines which one of twenty selector coil circuits will be energized. Because there is one open contact for the first step, the number of this circuit will be, numerically, one less than the number of pulses in the first series. The number of steps made by the Group Step Switch will determine which one of five group solenoids will be energized. The first pulse of the second series will advance the group switch to the A-B solenoid circuit, the second to the C-D solenoid circuit, and so on to the fifth pulse for the J-K solenoid circuit. The selection made, then, will require from two to twenty-one pulses in the first series and from one to five in the second series with the predetermined interval of approximately 1/5 second between the two series.

It is to be noted that operation of the relays is determined largely by the time interval between pulses, not by the duration of the individual pulses. The individual pulses of a selec-

tion series must be of only sufficient duration to insure full operating strokes of the step relay armatures but may be of any duration more than this minimum requirement. The intervals between the pulses must be long enough for the step relay armatures to return to normal position for another stroke but not enough to permit the transfer relay to release during the first series or the No. 1 Timing Relay to release during the second series. The interval between the last pulse of the first series and the first pulse of the second series must be timed to permit the transfer relay to release but must not be long enough to allow the release magnet to return to normal position.

Both the pulse length and the intervals between pulses is determined by the design and operation of the Wall-O-Matic. The contacts on the selector plate and the rotating control arm of the Wall-O-Matic are arranged for correct pulsing when the arm operates between the speed limits of 22 to 26 revolutions per minute.

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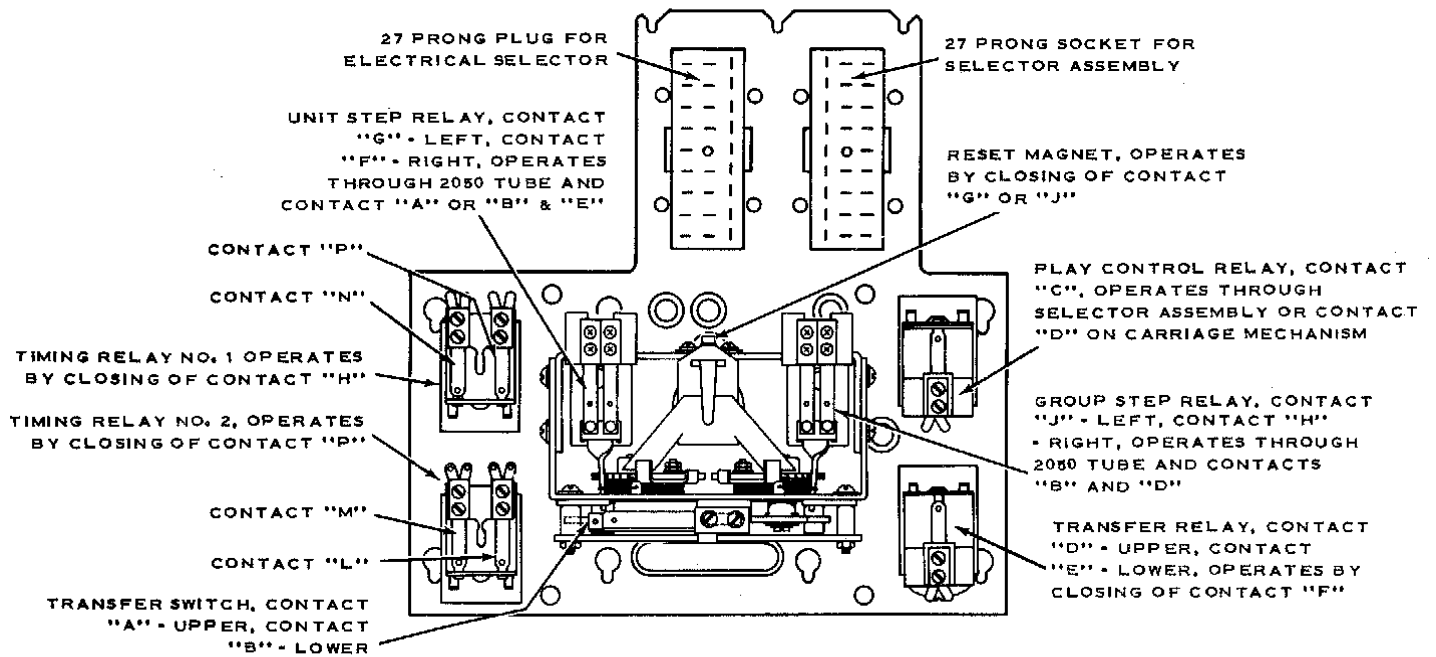


Figure 3. Top View of Step Switch & Relay Assembly

RELAY ADJUSTMENTS

Relay	Armature Gap	Contact	Contact Gap	Normal Position
Timing Relay #1	1/32"	N	1/64"	Closed
		P	1/64"	Open
Timing Relay #2	1/32"	L	1/64"	Open
		M	1/64"	Open
Transfer Relay	3/64"	D	1/32"	Closed
		E	1/32"	Open
Play Control Relay*	3/64"	C	1/32"	Open
Transfer Switch	See Step	A	1/64"	Closed
		B	App. 1/32"	Open
Group Step Magnet	Switch	H	1/64"	Open
		J	1/64"	Open
Unit Step Magnet	Adjustments	F	1/64"	Open
		G	1/64"	Open
Reset Magnet**	See RESET MAGNET POSITION, Page 5101			

All Coil Resistance = 500 ohms, except * = 40 ohms & ** = 325 ohms

STEP SWITCH ASSEMBLY
ADJUSTMENTS

RATCHET AND SWITCH

The ratchets are attached to the switch shafts with pins or set screws. They should be positioned so the outer blades of the step switches are approximately centered on the lowest contact (on the contact plate) when the stud on the side of the ratchet wheel is against the stop on the assembly frame.

The ratchets should be set on the shafts for a minimum of end play consistent with no binding.

RATCHET RETURN SPRING

The ratchet return spring for the unit step switch should have enough tension to require 90 to 115 grams (3-1/4 to 4 oz.) tangential force to move the ratchet to the 5th position of the step switch. This force is measured at the point of a ratchet tooth with the switch contact plates removed and will be approximately correct if the spring is wound one full turn when the switch is in the rest position.

The return spring for the group step switch should require 60 to 75 grams (2 to

2-3/4 oz.) tangential force to move the ratchet to the 5th position. The tension will be approximately correct if the spring is wound 3/4-turn when the switch is in the rest position.

STEP RELAY MAGNET POSITION

Adjust the step relay magnet vertically so the ratchet wheel tooth will over-ride the end of the release dog .010" to .020" when the armature is seated.

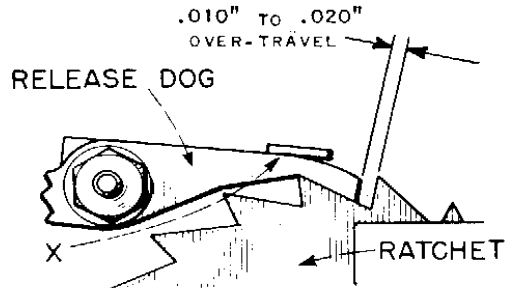


Figure 5. Side View - Release Dog & Ratchet

The upper edge of the pawl guide opening is the stop for upward travel of the pawl. With the pawl against the guide, the clearance between the ratchet teeth and the pawl should not be less than .005".

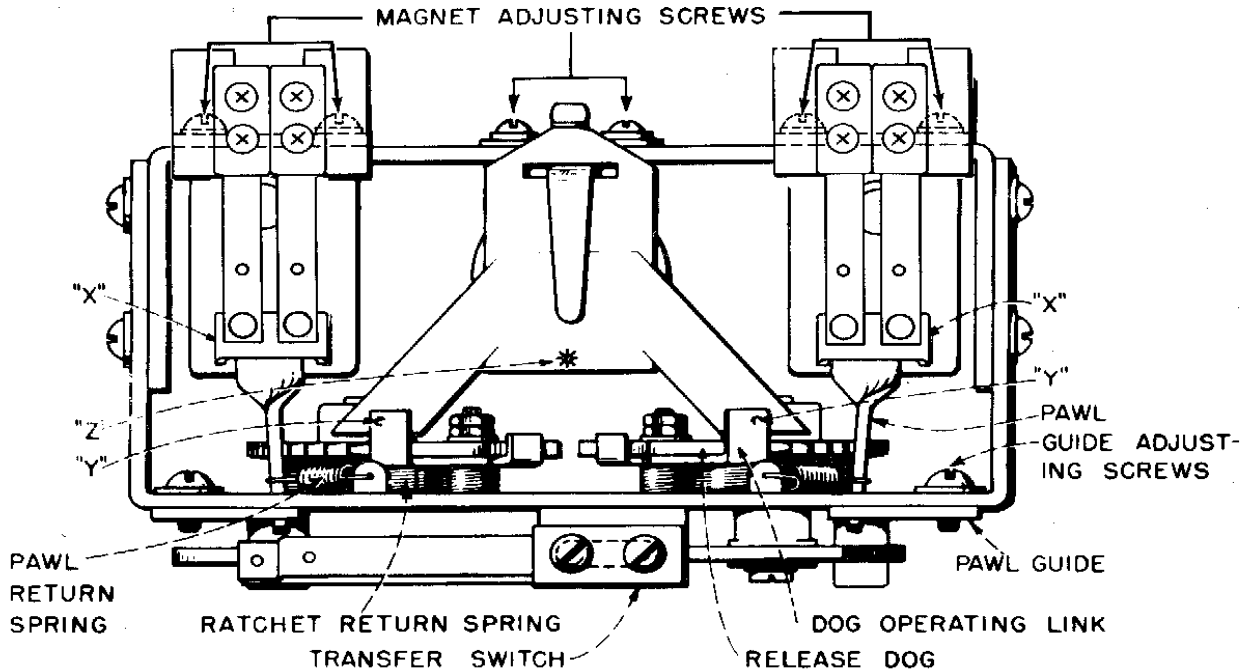


Figure 4. Top View of Step Switch Assembly

PAWL GUIDE

The pawl guides are adjusted so the pawls will strike the bottom of the ratchet teeth when the pawl moves down to engage the ratchet.

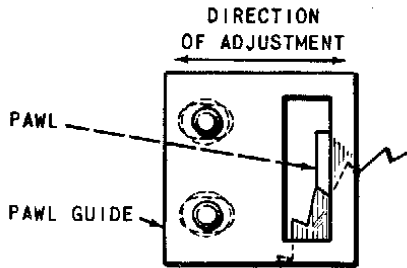


Figure 6. Pawl Guide Position

The guide adjustment must be made so there will be a .004" to .010" gap between the pawl and the guide at the bottom of the stroke.

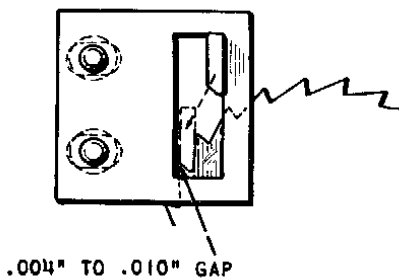


Figure 7. Pawl & Guide Gap

PAWL RETURN SPRING

The pawl return spring should have enough tension to require 10 to 15 grams (approximately 1/2 oz.) force to start the pawl away from the side of the pawl guide. This force is measured on the pawl, at the spring, with the pawl in the rest position.

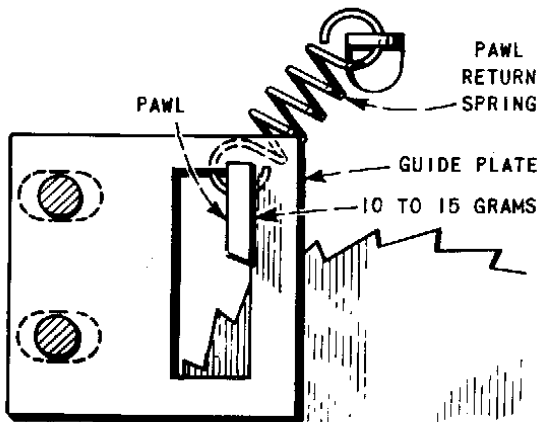


Figure 8. Return Spring Tension

STEP MAGNET TAIL SPRINGS

The tail spring pressure, measured at the front of the bridge on the step magnet armature ("X", Figure 4) should be 50 to 75 grams (1-3/4 to 2-1/2 oz.) to just close the switch contacts (when the contacts are correctly adjusted).

CONTACT PLATE SWITCH BLADES

The switch blades should have 10 to 35 grams pressure against the contacts. The pressure will be approximately correct if the blades are formed so their tips extend 5/32" above the contact assembly when the plates are removed.

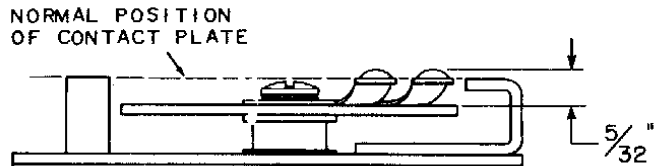


Figure 9. Switch Blade Position

When the contact plates are in position the switch blades should move freely over the contacts. If the contacts become rough or gummed, they should be cleaned with a clean cloth. Tarnish or dirt can be removed by polishing with a clean cloth moistened, slightly, with light oil. *Do not use sandpaper or emery cloth for cleaning the contacts and do not lubricate them with vaseline, grease or oil.*

RESET MAGNET POSITION

Adjust the reset magnet vertically so the release dogs engage the ratchet teeth with the armature extension clearing the dimples ("Y", Figure 4) on the dog operating links 1/64" when the magnet is energized.

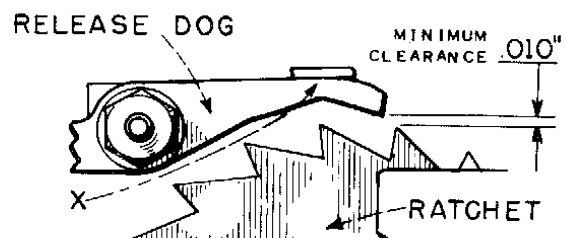


Figure 10. Release Dog Clearance

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The armature travel must be sufficient to permit the release dogs to lift and clear the ratchet teeth .010" minimum when the magnet is not energized.

The tabs on the release dog operating links which engage the dogs and couple them to the reset magnet should not bind tightly but should not permit more than .005" free travel between the dogs and the links.

RESET MAGNET TAIL SPRING

The pressure applied to the end of the reset magnet armature ("Z", Figure 4) to start it from the rest position should be 100 to 140 grams (3-1/2 to 5 oz.).

RELEASE DOG SPRINGS

An upward pressure of 15 to 20 grams (1/2 to 3/4 oz.) applied at the dimple on the release dog operating links ("Y", Figure 4) should start the dogs from seated position. This pressure will be approximately correct if the springs are wound 1/2 to 3/4 turn.

TRANSFER SWITCH POSITION

Adjust the position of the switch on the mounting bracket so the roller is in the

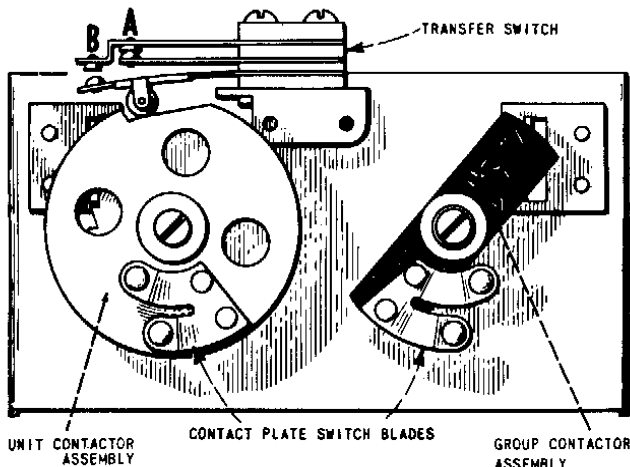


Figure 11. Side View - Transfer Switch

notch of the contactor assembly disc and the first operation of the step magnet causes no change from normal position of the roller blade. The second operation of the step magnet should raise the roller to the outer diameter of the disc.

The position of the switch should be such that the disc does not bind or drag on the flanges of the roller and the roller bracket should not strike the switch contact plate.

TRANSFER SWITCH CONTACTS

1. With the step switch in the rest position so the roller is in the notch of the contactor disc, adjust the lower blade for 1/2 to 3/4 oz. pressure of the roller against the disc.

Adjust contact "B" gap 1/64".

Adjust contact "A" pressure 1 oz.

2. The second operation of the step magnet should result in closing contact "B" with 1 oz. pressure and opening contact "A" 1/64" to 1/32" gap.

LUBRICATION

The following points should be lubricated with a drop of *Seeburg No. 53014 Special Purpose Oil*.

1. Pawl pivots and sliding surfaces of the pawls on the step relay armatures.
2. Pawl guides at area of contact with pawls.
3. Step switch shaft bearings.
4. Roller on roller blade of transfer switch.
5. Relay hinges.

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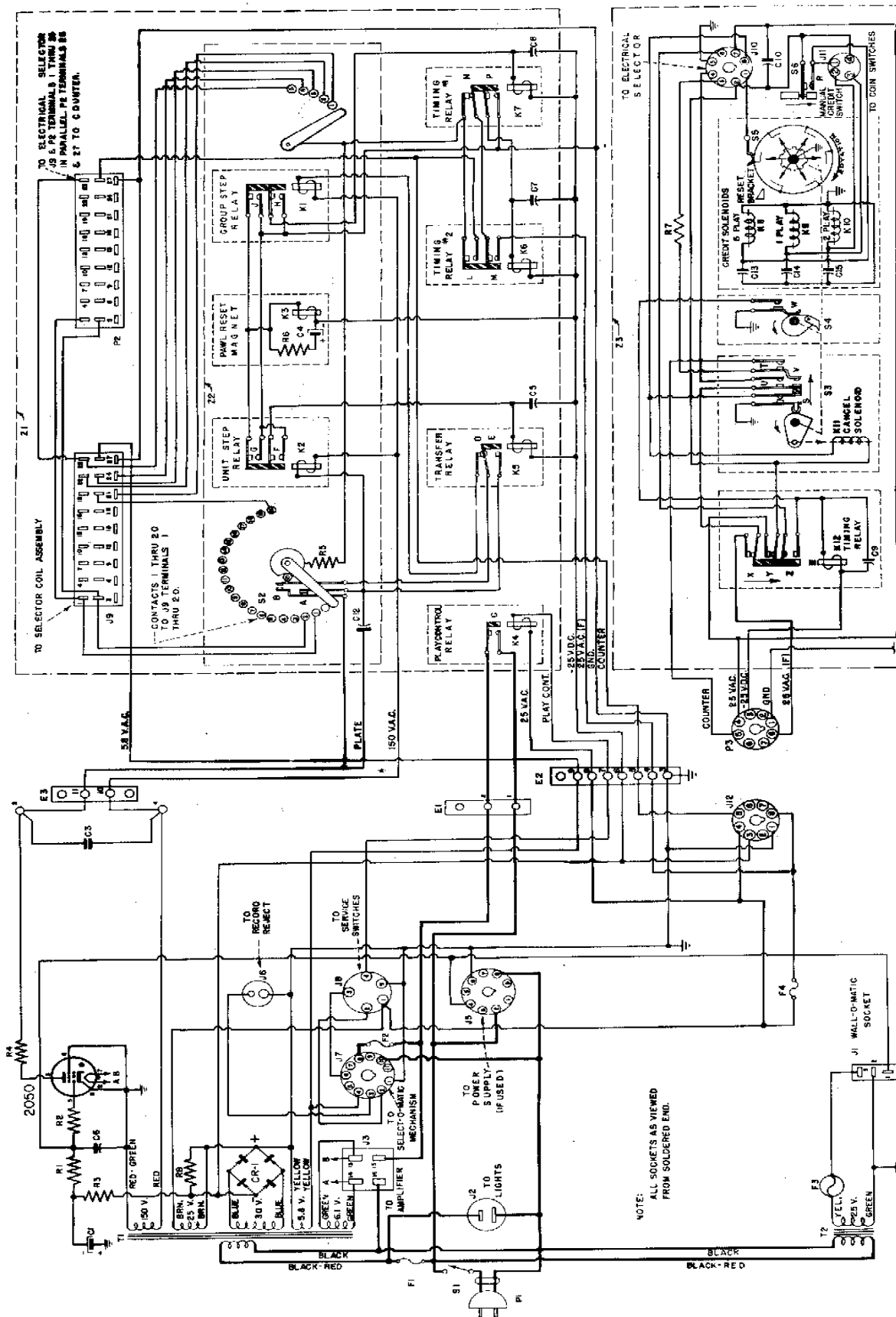


Figure 12. Schematic Diagram

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P A R T S L I S T

Item	Part No.	Part Name	Item	Part No.	Part Name
C1	87571	25 mfd. 50 v. Electrolytic	K2	303391	Unit Step Relay
C3	11076	5.0 mfd. 300 v. Condenser	K3	303392	Pawl Release Magnet
C4	87611	300 mfd. 50 v. Electrolytic	K4	303077	Play Control Relay
C5	86009	.05 mfd. 200 v. Condenser	K5	303074	Transfer Relay
C6	86009	.05 mfd. 200 v. Condenser	K6	303255	Timing Relay No. 2
C7	86009	.05 mfd. 200 v. Condenser	K7	303075	Timing Relay No. 1
C8	86009	.05 mfd. 200 v. Condenser	K8	400664	Credit Solenoid
C9	86009	.05 mfd. 200 v. Condenser	K9	400664	Credit Solenoid
C10	86009	.05 mfd. 200 v. Condenser	K10	400664	Credit Solenoid
CR1	400587	Selenium Rectifier	K11	400685	Cancel Solenoid
C12	86069	.005 mfd. 1000 v. Condenser	K12	400696	Timing Relay Assembly
C13	86173	.01 mfd. 200 v. Condenser	P1	303334	Line Cord & Plug Assembly
C14	86173	.01 mfd. 200 v. Condenser	P2	303080	27 Prong Plug
C15	86173	.01 mfd. 200 v. Condenser	P3	400695	Octal Plug
E1	303361	Terminal Strip	R1	82448	.1 meg 10% ½ w. Resistor
E2	303363	Terminal Strip	R2	82436	10,000 ohm 10% ½ w. Resistor
E3	303365	Terminal Strip	R3	82444	47,000 ohm 10% ½ w. Resistor
F1	602411	5 amp. Fuse, 3 AG	R4	82764	47 ohm 10% 1 w. Resistor
F2	303257	3 amp. Fuse, 3 AG	R5	81169	1 ohm w.w. 4 w. Resistor
F3	301205	3 amp. Fuse, Fustat	R6	82403	18 ohm 10% ½ w. Resistor
F4	303275	1 amp. Fuse, Slo-Blo	R7	81169	1 ohm w.w. 4 w. Resistor
J1	12006	3 Contact Socket	R8	82432	4700 ohm 10% ½ w. Resistor
J2	11401	A.C. Socket	S1	303112	Toggle Switch
J3	301020	4 Contact Socket	S2	303115	Transfer Switch
J5	84244	9 Contact Socket	S3	400686	Cam Switch Assembly
J6	301019	2 Contact Socket	S4	400589	Timing Relay Switch
J7	303253	11 Contact Socket	S5	400665	Credit Switch Assembly
J8	84283	5 Contact Socket	S6	400671	Manual Credit Switch
J9	11202	27 Contact Socket	T1	303340	Power Transformer
J10	84292	Octal Socket	T2	303342	25 v. Transformer
J11	84293	Small 4 Contact Socket	Z1	303370	Step Switch & Relay Assembly
J12	84292	Octal Socket	Z2	303390	Step Switch Assembly
K1	303393	Group Step Relay	Z3	400640	Credit & Cancel Assembly

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PARTS LIST

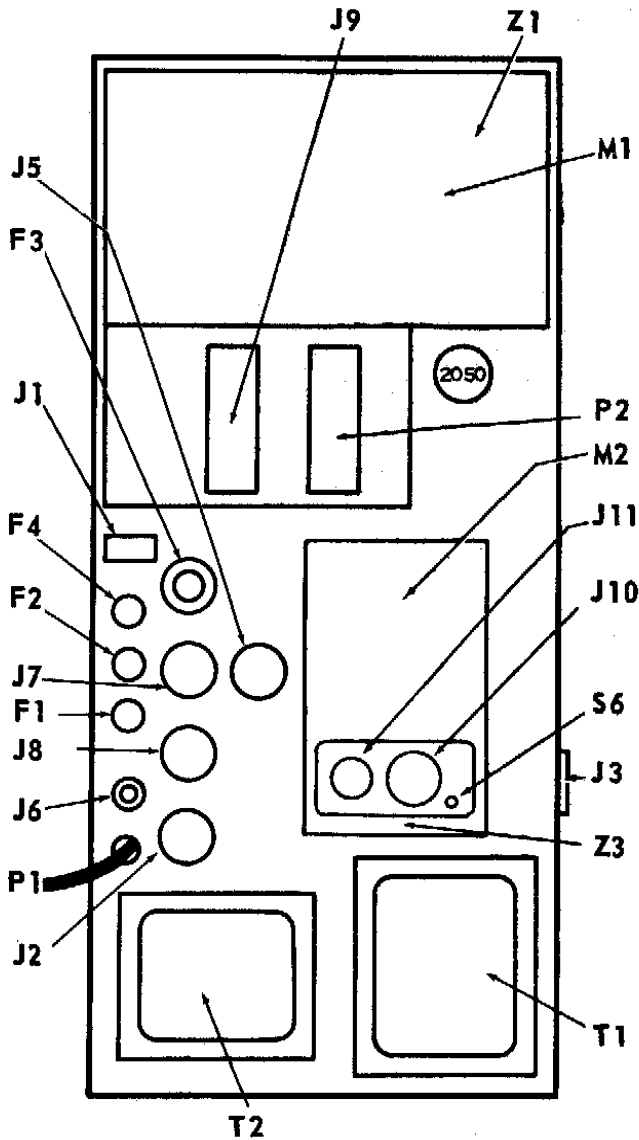


Figure 13.

Item	Part No.	Part Name
F1	602411	5 amp. 3AG Fuse
	300061	Fuse Receptacle
F2	303257	3 amp. 3AG Fuse
	300061	Fuse Receptacle
F3	301205	3 amp. Fustat
	303380	Fustat Receptacle
F4	303275	1 amp. Slo-Bio Fuse
	300061	Fuse Receptacle
J1	12006	3- contact Socket
J2	11401	A.C. Socket
J5	84244	9- contact Socket
J6	301019	2- contact Socket
J7	303253	11- contact Socket
J8	84283	5- contact Socket
J9	11202	27- contact Socket
J10	84292	Octal Socket
J11	84293	Small 4- contact Socket
M1	303345	Adjustment Label
M2	400694	Adjustment Label
P1	303334	Line Cord & Plug
P2	303080	27- contact Plug
S6	400671	Manual Credit Switch
	400597	Tension Plate
	70822	Screws - 2 Required
T1	303340	Power Transformer
T2	303342	25- volt Transformer
Z1	303370	Step Switch & Relay Assembly
Z3	400640	Credit & Cancel Assembly
Z4	303336	Cover
Z5	400687	Cover

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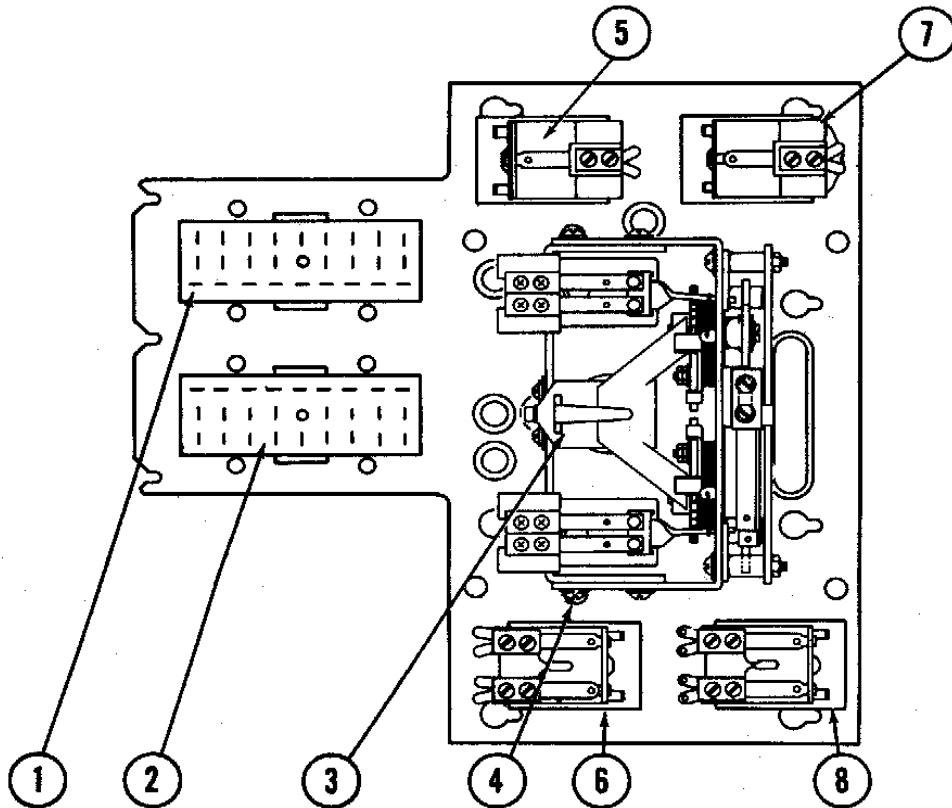


Figure 14. No. 303370 Step Switch & Relay Assembly

PARTS LIST

Item	Part No.	Part Name
1	11202	27-contact Socket (J9)
2	303080	27-contact Plug (P2)
3	303390	Step Switch Assembly (Z)
4	10848	Cup Washer
	78000	Grommet
5	303077	Play Control Relay (RY4)
	303128	Coil & Frame Assembly
	303127	Contact Assembly (C)
6	303075	Timing Relay No. 1 (K7)
	303094	Coil & Frame Assembly
	303093	Contact Assembly (N)
	303092	Contact Assembly (P)
7	303074	Transfer Relay (K5)
	303130	Coil & Frame Assembly
	303129	Contact Assembly (D & E)
8	303255	Timing Relay No. 2 (K6)
	303096	Coil & Frame Assembly
	303095	Contact Assembly (M)
	303095	Contact Assembly (L)

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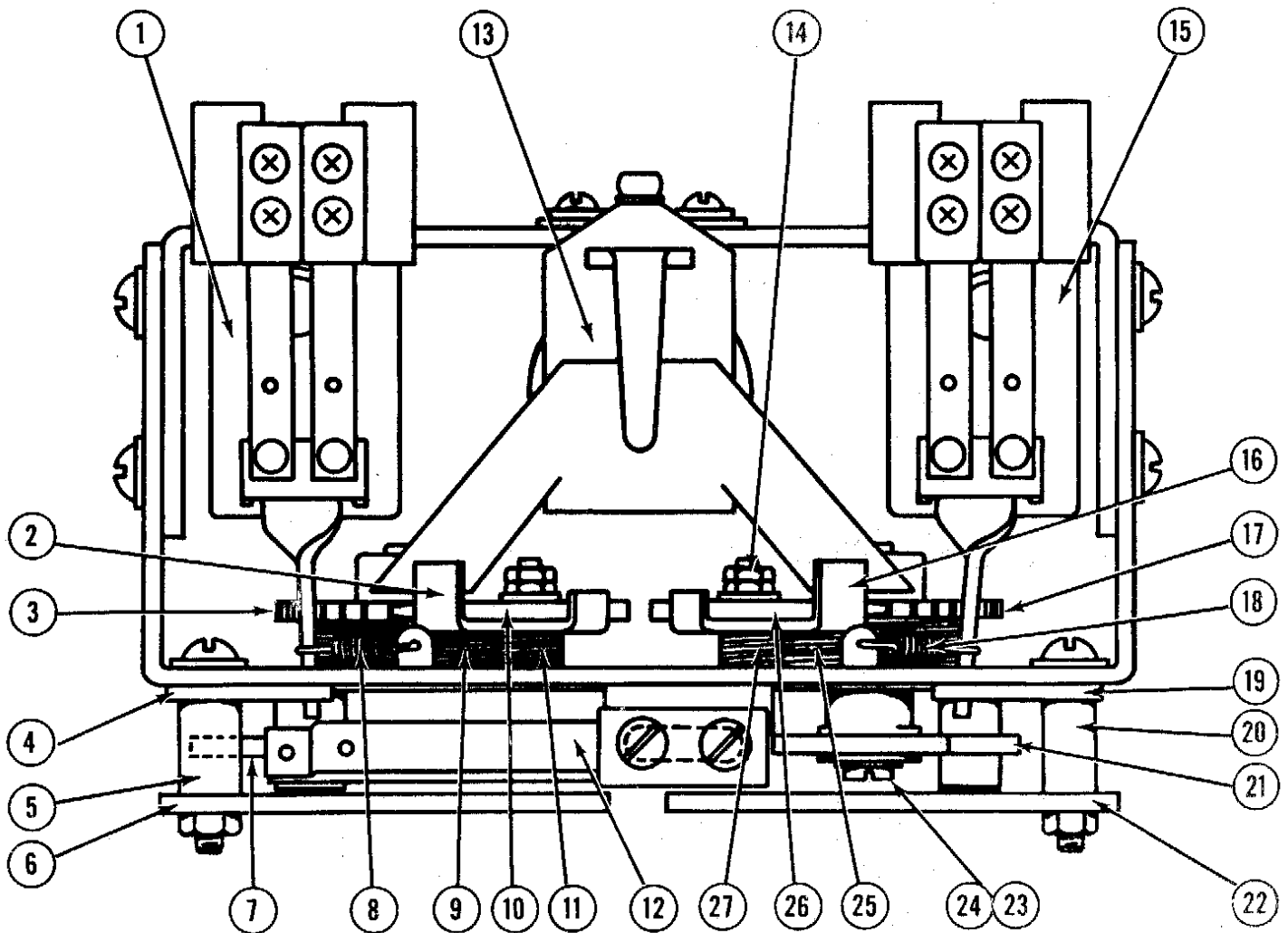


Figure 15. No. 303390 Stepper Assembly

PARTS LIST

ITEM	PART NO.	PART NAME	ITEM	PART NO.	PART NAME
1	303397	UNIT STEPPER RELAY (INCLUDES 303391, 303100, 303102)	303115	TRANSFER SWITCH (CONTACTS A AND B)	
	303391	MAGNET & FRAME ASSEMBLY	303189	SWITCH RETAINER PLATE	
	303100	ARMATURE ASSEMBLY	303392	PAWL RELEASE MAGNET, COMPLETE	
	303102	TAIL SPRING	303103	TAIL SPRING, ONLY	
	303192	SWITCH ASSEMBLY (CONTACT G AND F)	14	303185	2-5/8" HEX. NUTS
	303191	SWITCH MOUNTING SCREWS (3-48 X 11/32 R.H.)	303186	NO. 2 WASHERS (UNDER NUTS)	
	303176	SWITCH MOUNTING BRACKET	15	303398	GROUP STEPPER RELAY (INCLUDES 303393, 303101, 303102)
2	303177	DOG OPERATING LINK	303393	MAGNET AND FRAME ASSEMBLY	
3	303179	RATCHET AND SHAFT	303101	ARMATURE ASSEMBLY	
4	303187	PAWL GATE	303102	TAIL SPRING	
5	303188	CONTACT PLATE SPACER	303192	SWITCH ASSEMBLY (CONTACT J AND H)	
6	303394	CONTACT PLATE	303191	SWITCH MOUNTING SCREWS (3-48 X 11/32)	
7	303071	CONTACTOR	303176	SWITCH MOUNTING BRACKET	
	303184	CONTACTOR MOUNTING WASHER (NOT SHOWN)	303178	DOG OPERATING LINK	
	303183	CONTACTOR MOUNTING SCREW (NOT SHOWN)	17	303180	RATCHET AND SHAFT
8	303106	PAWL RETURN SPRING	18	303106	PAWL RETURN SPRING
9	303104	RETURN SPRING	19	303187	PAWL GATE
10	303181	DOG	20	303188	CONTACT PLATE SPACER
11	303107	DOG RETURN SPRING	21	303072	CONTACTOR
12	303099	TRANSFER SWITCH ASSEMBLY (INCLUDES FOLLOWING 4 ITEMS)	22	303395	CONTACT PLATE
	303182	SWITCH MOUNTING SCREWS (5-40 X 9/16)	23	303184	CONTACTOR MOUNTING WASHER
	303117	SWITCH MOUNTING BRACKET	24	303183	CONTACTOR MOUNTING SCREW
			25	303105	RETURN SPRING
			26	303181	DOG
			27	303108	DOG SPRING

WIRED SELECTION RECEIVER, TYPE WSR7

PARTS LIST

Item	Part No.	Part Name
1	400640	COMPLETE CREDIT & CANCEL UNIT
	400687	COVER (NOT SHOWN)
	400694	INSTALLATION LABEL (NOT SHOWN)
2	71757	8-32 X 1/4 R. H. MACHINE SCREW, SEMS
	74106	SOLDER LUG
3	86009	.05 MFD 200 V. CONDENSER (PAPER)
4	71950	8-32 X 3/8 B. H. MOUNTING SCREWS
5	400674	RETAINER PLATE
6	400671	MANUAL CREDIT SWITCH
	400597	TENSION PLATE
	70822	5-40 X 9/16 R. H. MACHINE SCREW
7	400667	SOCKET PANEL ASSEMBLY
	84292	OCTAL SOCKET
	84293	4 PIN SOCKET
	78042	RUBBER GROMMET
8	400696	TIMING RELAY
	71755	8-32 X 1/4 R. H. MACHINE SCREW, SEMS
	400612	CONTACTS & ARM
	400613	TAIL SPRING
9	400660	COIN SOLENOID PANEL ASSEMBLY
10	400665	ROTARY CREDIT SWITCH ASSEMBLY
	504142	"C" SPRING
	72293	SPRING WASHER
	125403	RETAINING RING
11	400682	LOCK PAWL & SHAFT ASSEMBLY
	400545	LOCK PAWL SPRING
	R231163	RETAINER
12	400677	FRONT PANEL ASSEMBLY
	400540	PAWL ARM STOP
	70003	10-32 HEXAGON NUT
	71757	8-32 X 1/4 R. H. MACHINE SCREW, SEMS
13	400686	CAM SWITCH ASSEMBLY
	70823	5-40 X 1 1/4 R. H. MACHINE SCREW
	400597	TENSION PLATE
	74007	SOLDER LUG
	81169	1 OHM RESISTOR
14	400684	TOP MOUNTING BRACKET
	71757	8-32 X 1/4 R. H. MACHINE SCREW, SEMS
15	400695	OCTAL PLUG
16	400931	CAM & PLUNGER ASSEMBLY
	80093	GROOVE PIN
17	400929	ROTARY SWITCH SHAFT
18	400557	CAM SPRING
19	400570	SOLENOID BRACKET
	71794	8-32 X 1/4 B. H. MACHINE SCREW, SEMS
20	400685	CANCEL SOLENOID
21	400958	SOLENOID BRACKET & STOP ASSEMBLY
22	127085	CABLE CLAMP
	72191	3/8 X 0.172 X 1/32 FLAT WASHER
	71755	8-32 X 3/8 R. H. MACHINE SCREW, SEMS
23	400972	SPRING CLIP
24	400589	TIMING RELAY SWITCH
	400611	BUFFER SPRING
	71676	5-40 X 7/16 R. H. MACHINE SCREW
	73023	NO. 2 LOCK WASHER
25	400549	PAWL ARM & HUB ASSEMBLY
	80098	GROOVE PIN
26	400553	PAWL & PIN ASSEMBLY
	400556	PAWL SPRING
	R231163	RETAINER RING
27	400664	CREDIT SOLENOID
	11445	"C" WASHER
28	400672	SOLENOID PLUNGER ASSEMBLY
	400658	COMPRESSION SPRING
	400603	CUP WASHER
	R231163	RETAINER
29	86173	.01 MFD 200 V. CONDENSER (PAPER)

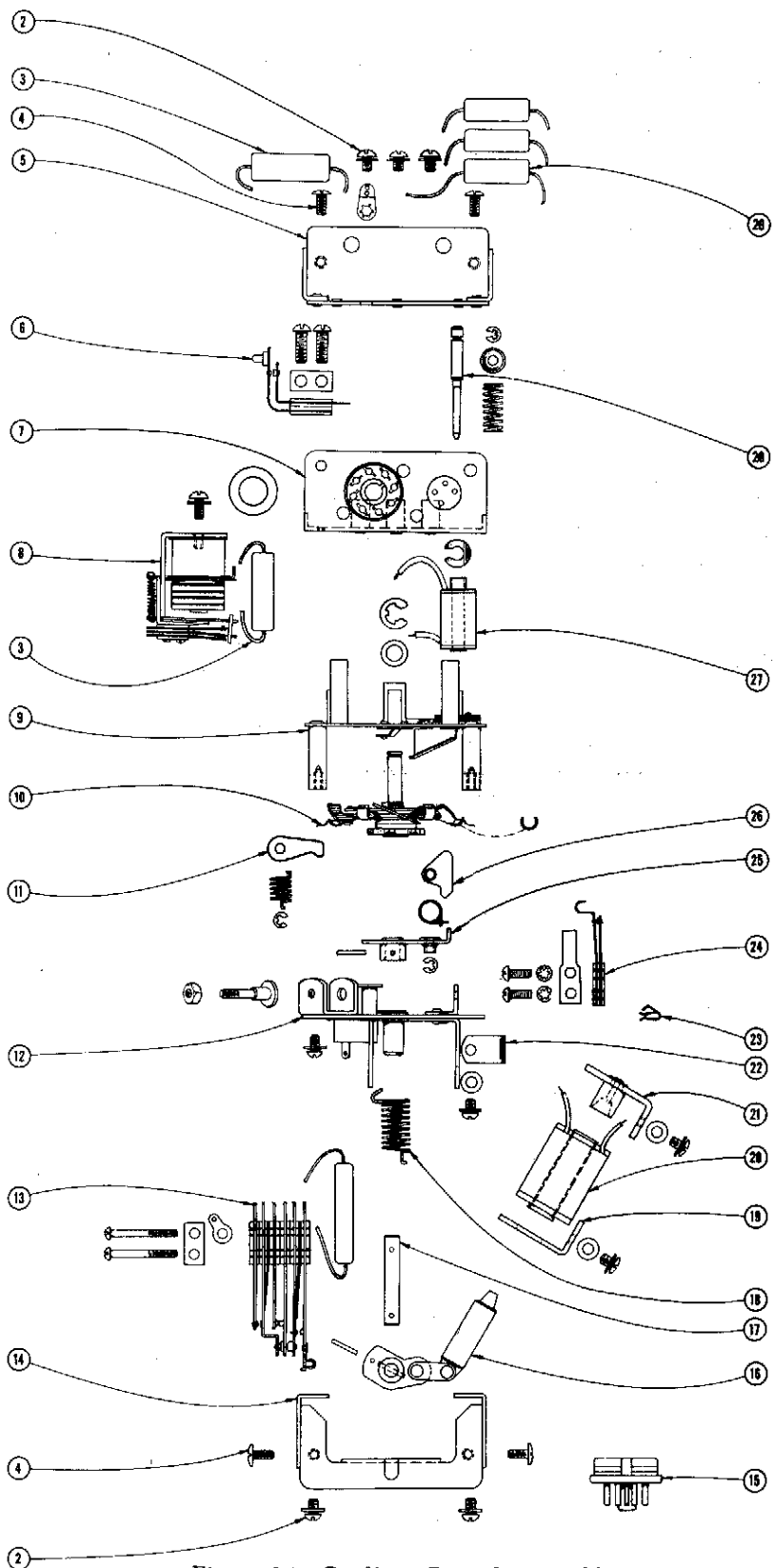


Figure 16. Credit & Cancel Assembly

SEEBURG WIRED SELECTION RECEIVER

Type WSR8-L6

The Wired Selection Receiver, Type WSR8-L6, is the power distribution and control center of the Select-O-Matic "100" R. C. Special, Model HHF100R for operation from wired Wall-O-Matics, Type 3W1. Power enters the Receiver through the line cord and main switch and is distributed, directly at 117-volts or through transformers, to the Select-O-Matic Mechanism, the cabinet lighting, the amplifier, and the Wall-O-Matics. All connections to the Receiver are made with plugs which are of different types and sizes to avoid possibility of incorrect connections. Included in the Receiver are a Step Switch and Relay Assembly, and a 2050 tube, for selection of records from Wired Wall-O-Matics.

A 25-volt transformer supplies power for up to six Type "3W-1" Wired-O-Matics. Another transformer, the selection receiver power transformer, has five output windings for control circuits, and heater current for the tubes in the

Master Remote Amplifier.

One of the secondaries of the selection receiver power transformer provides approximately 30-volts, a.c. This 30-volt output is rectified by a full-wave selenium rectifier for 25-volt d.c. supply for some of the relays of the Step Switch and Relay Assembly, and for bias supply for the 2050 tube. Another secondary provides approximately 150-volts for operating the step switches through the plate circuit of the 2050 tube.

Operation of Selection Receiver, Type WSR8-L6, is the same as that of the Type WSR7-L6. All service notes, schematic diagrams, and parts lists applying to the Type WSR7-L6 apply to the Type WSR8-L6 except that there is no Credit and Cancel Unit incorporated for operation of an electrical selector. The space on the chassis of the WSR8-L6 is used for a Selection Counter, Part No. 400624. The parts list for this counter is given below.

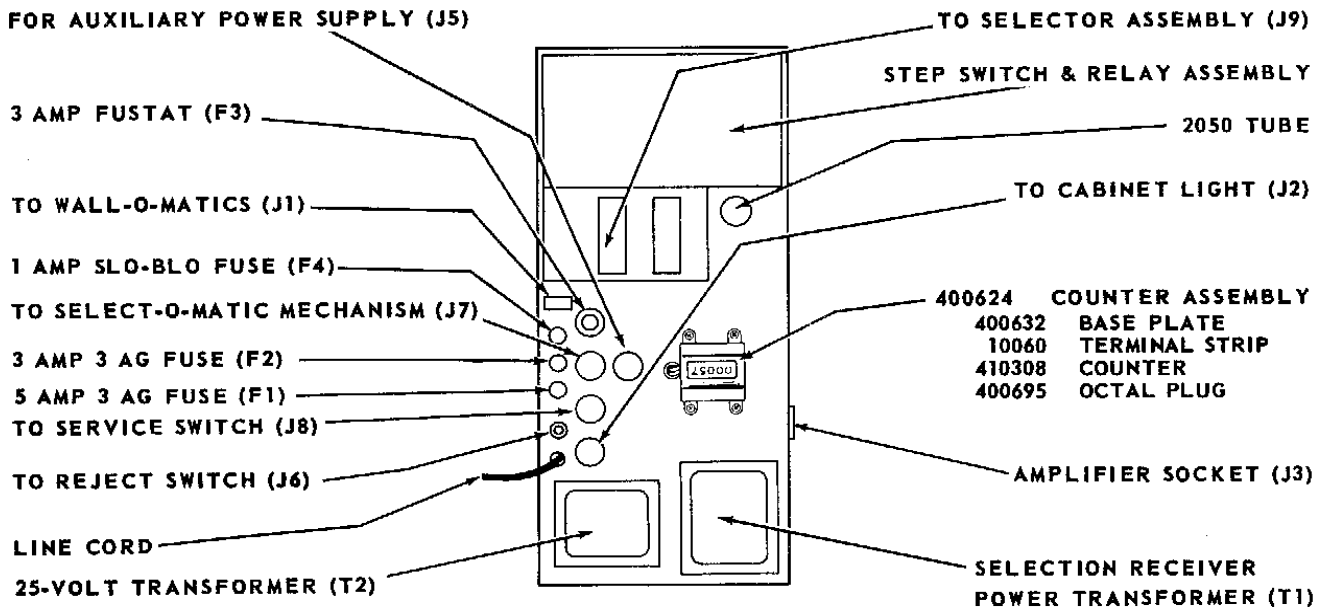


Figure 1. Top View of Selection Receiver

Seeburg

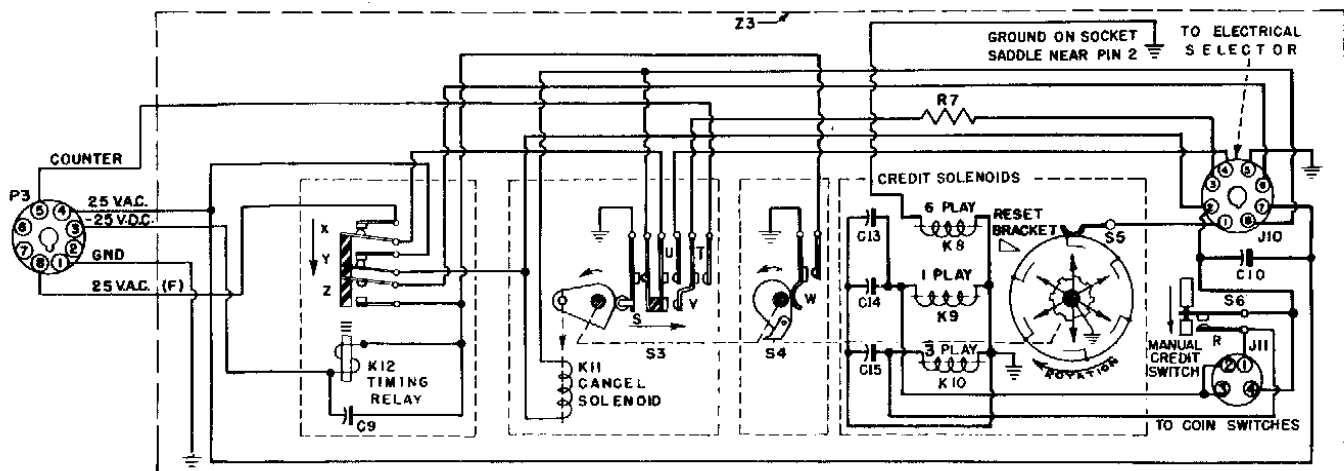
WIRED SELECTION RECEIVER Type WSR7-L6D

The Wired Selection Receiver, Type WSR7-L6D, is the power distribution and control center of the Select-O-Matic "100" for operation from the Electrical Selector and Wall-O-Matics. It is the same as the Type WSR7-L6 in all respects except that the Credit and Cancel Unit is arranged for three plays for a 25-cent coin and one play for either a dime or two nickels. Operation for two nickels is made possible only by association of this receiver with a slug rejector that incorporates a "nickel diverter." Such a slug rejector is designed to accept quarters, dimes and nickels. Each quarter and dime operates, respectively, a quarter and dime coin switch but only alternate nickels operate the associated nickel coin switch. Operation of the nickel coin switch by alternate nickels is accomplished with the nickel diverter. Its operation is such that the first of two nickels is diverted from the coin switch. The coin passes into the cash box but tilts the diverter so the second nickel operates the coin switch as it drops from the rejector. In this manner the 5-cent coin switch will be closed only once for two nickels, and, because this switch and the dime switch are both connected to the credit solenoid that is in the 1-credit position, one credit will be set up for 10 cents whether it be a single 10-cent coin or two nickels.

If the WSR7-L6D Selection Receiver is associated with a slug rejector that does not incorporate the nickel diverter, it is necessary that the path of the nickels through the rejector be obstructed so the 5-cent coins will be rejected. If this is not done, a single credit will be established in the Credit and Cancel Unit for each nickel that passes into the cash box.

All of the operational and service information given in pages 5095 to 5108 for the WSR7-L6 applies equally well to this receiver, with the exception of the Credit and Cancel Unit portion of the diagram on page 5103 and the references to the type and part number of the Credit and Cancel Unit.

The Credit and Cancel Unit used in this receiver is Type CCU3-L6D shown below. The part number of the CCU3-L6D is 400649. It is identified as Item Z3 on Page 5105 and as Item 1 on page 5108. Except for the part number for the complete Credit and Cancel Unit, all of the parts and part numbers listed on page 5108 are for the CCU3-L6 and the CCU3-L6D.



Schematic Diagram. Type CCU3-L6D