

SEEBURG

COON HUNT

RAY-O-LITE

RIFLE RANGE

MODEL G5

TO PREPARE FOR OPERATION

DAMAGE CAUSED BY SHIPPING

Examine the instrument immediately after unboxing. If any damage is found, notify the transportation representative and obtain signature on the transportation bill with notation of damage.

TARGET CABINET

Remove packing that holds target figures and the block under the motor. Take out the two screws that hold down the amplifier.

Insert the plastic sign in the slot through the top of the cabinet and fasten the metal angle brackets with the screws furnished.

TARGET CABINET LEGS

The Amplifier-Controller Unit should first be removed from cabinet to provide access to leg bolts on rear of cabinet. Target Cabinet can be laid on its back to facilitate assembling legs.

GUN STAND

The Gun Stand is shipped ready for operation and requires only careful unpacking.

CURRENT SUPPLY

A name plate, mounted on cabinet back, designates the type of current and voltage. The type of current at the location may be determined by examining the current meter name plate or by inquiring at the local electric company for information. Should the instrument be connected to a type of current or voltage other than that designated on the name plate, the electrical equipment in the instrument will be damaged.

Part No. 127416

J. P. Seeburg Corporation, Chicago 22, Ill.

Seeburg Coon Hunt, Model G5

I N S T A L L A T I O N

TARGET CABINET

The Target Cabinet can be used with the legs as furnished or it may be installed on a shelf or table. If it is to be on a shelf or table it should be set up on cleats so there will be not less than three inches (3") clearance beneath it for ventilation. If the cabinet ventilation is restricted there may be serious damage from over heating.

C O N N E C T I O N S

The service cord is brought out through a hole at the left in the bottom of the cabinet. A split rubber plug is installed in the hole to provide a snug fit around the cord. Remove the plug, thread the cord through the hole and replace the plug after fitting it around the cord.

The main cable from the Gun Stand is brought through a hole at the right in the bottom of the cabinet. The seven-prong plug on this cable should be inserted in the seven-contact socket in the Amplifier-Controller.

The Gun should be connected to the terminal strip in the Gun Stand as shown.

The shooting distance most generally employed is about twenty-five feet, although fifty feet of cable is supplied. This cable should not be shortened or lengthened, because the voltage on the gun lamp will be affected.

The location of the target cabinet in the room is very important. Do not have the cabinet facing large windows, mirrors reflecting bright lights or flood lights. If too much light falls upon the cabinet and target, the photo cell does not respond to the light of the gun lamp.

Remember: Do not have the target cabinet facing large windows, floodlights or mirrors reflecting bright lights.

Seeburg Coin Hunt, Model G5

OPERATION AND MAINTENANCE

Power should be turned on with the main switch that is in the lower left side of the target cabinet. The red pilot light in the front of the Gun Stand will light when the power is on.

The operation of the game except the power switch is from the Gun Stand and starts when either of the two coin slides on the stand have been pushed in to the limit of travel and then pulled out.

The targets are hollow figures with photoelectric cells that are exposed to light through the lenses in the sides of the targets. When the gun is aimed and fired, it flashes a ray of light at the target. If it is aimed accurately, the photoelectric cell in the target is actuated by the light and a hit is scored. A "game" consists of 20 shots with score indicating lights in the target cabinet showing how many of the twenty shots resulted in hits. In addition to indicating the number of hits made, the score lights give a proficiency rating of Marksman, Sharpshooter or Expert. The rating of Marksman is given for a score of 12 to 15 hits; Sharpshooter, for a score of 16 to 18; Expert, is for a score of 19 or 20 hits.

The two targets operate independently although the score is added if either one is hit. When a game is started each target "climbs" its tree and, when it has reached the top, turns behind the tree and rapidly drops to the bottom. When it is all the way down, it again starts climbing, then turns so it is to the right or left of the tree where it completes its climb. The targets continue climbing and dropping until 20 shots have been fired.

If a hit is scored, the target hit will immediately drop a few inches, turning, as it does, so it is back of the tree. It remains motionless behind the tree until the next shot is fired or until the other target reaches the upper or lower limit of its travel. It then moves from behind the tree, to right or left, and resumes climbing.

If, when the 20th shot is fired, the target at the left is back of the tree, the motion continues until it is again at the side. No additional shots can be fired while this extended target movement takes place.

Normal operation of the game involves target motion that follows a definite pattern for every condition except the target movement from behind the tree. Whether the target will appear at the left or right is determined only by the random position of a turning cam at the instant the gun is fired or at the instant a target gets to the top or bottom of the tree.

SENSITIVITY CONTROL

The Sensitivity Control, located on the front of the Amplifier-Controller, adjusts the target sensitivity to hits. Increasing the setting makes the amplifier score from partial hits (light from gun not accurately centered on the target lens); decreasing the setting makes scoring more difficult. An average setting is about 4 or 5 but the control should be set for as low as possible, consistent with desired shooting conditions.

Seeburg Coon Hunt, Model G5

MANUAL RESET

On the Amplifier-Controller Unit, under a shield, back of the 2050 tubes, is a manual reset button for starting game in operation without depositing a coin.

GUN LAMP VOLTAGE

On the Amplifier-Controller Unit, is a gun lamp voltage control panel. It is normally set on the standard position, marked "STD". Should low line voltage be encountered and the light from the gun lamp be insufficient, the link can be changed to the "HI" position, which will raise the voltage to the gun lamp.

Caution: Do not move the link to the "HI" position unless the line voltage is KNOWN to be low, as the life of the gun lamp will be shortened by using it on "HI" position with normal line.

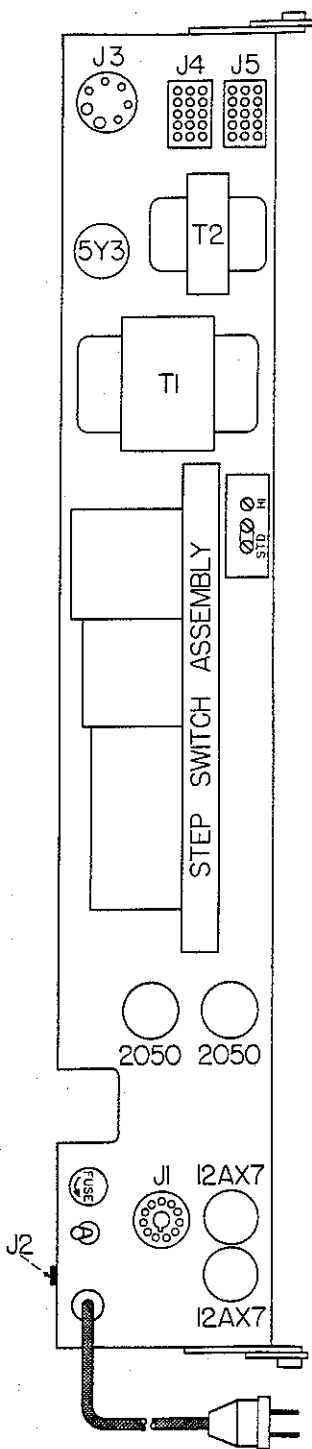
COIN MECHANISM

The action of either coin slide operates a toggle switch. When a single game coin slide is pushed all the way in, the circuit is closed to the single credit solenoid coil. This single credit solenoid actuates a credit switch, that will cancel after one game has been started. When the multiple game coin slide is pushed all the way in, the circuit is closed to a multiple credit solenoid coil. This multiple credit solenoid, actuates a credit switch, that will cancel after the fourth game has been started. Either slide-operated toggle switch also opens the start button switch so that a game cannot be started until the coin slide has been pulled all the way out. Each game must be started by pushing the start button. The green jewel light remains on as long as there is a credit. This credit must be used before another coin is inserted or some credit may be lost. The amber jewel light remains on only while a game is in progress.

The action of either coin slide also operates a coin counter which registers the number of times coins have been accepted. Separate counters are installed on each slide.

MUZZLE BLAST SOUNDER

Fastened to the inside of the gun stand is a solenoid which simulates the muzzle blast effect of



Seeburg Coon Hunt, Model G5

the gun. This solenoid operates each time the trigger is pulled.

SHOT TIMING POTENTIOMETER

There is a shot timing potentiometer mounted on the Credit & Relay Assembly chassis in the gun stand. This potentiometer is connected across the coil of the shot timing relay. It is adjusted at the factory to give a gun lamp light pulse .10 - .13 seconds long. Turning the potentiometer arm clockwise shortens the light pulse duration.

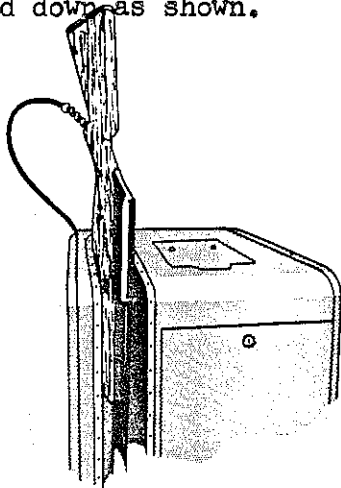
Caution: If the pulse duration is lengthened the life of the gun lamp will be seriously shortened. The potentiometer setting should not be changed unless there is some means of measuring the pulse length.

The Shot Timing Relay in the gun stand must not be operated manually. Slow operation of the relay (by hand) will result in a burned out gun lamp.

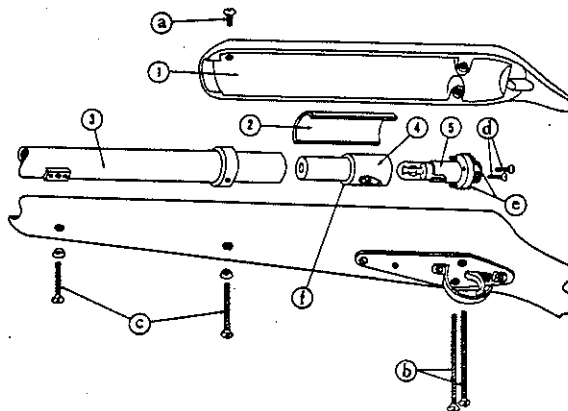
In the Amplifier-Controller is a control that requires a screwdriver for operation. This control adjusts the supply voltage for the Shot Timing condenser in the gun stand and should be set for exactly 50 volts as measured at the condenser C1 to ground.

GUN

When not in use, the gun should be placed in the gun stand with the muzzle pointed down as shown.



Gun Stand



GUN LAMP

Gun Assembly

The gun lamp is enclosed in a housing which clamps on the rear end of the gun barrel. It is important that the gun lamp be properly centered in the cartridge to give maximum light to operate the photo cell.

If it becomes necessary to adjust or replace a lamp, observe the following procedure:

1. Remove rear sight from (1) by taking out screws (a) and (b).
2. Remove rubber pad (2).

Seeburg Coon Hunt, Model G5

3. Remove screws (c) holding gun barrel in stock and lift barrel and cartridge (4) from the stock.
4. Move gun barrel away from the lamp cartridge so the cartridge slips out of the barrel.
5. Remove the gun lamp socket (5) by removing screws (d). Do not take out screws (e).
6. Replace the gun lamp. Reassemble the lamp cartridge and barrel. Fasten the barrel in the gun stock with the cartridge in the barrel so the shoulder (f) is against the end of the barrel.
7. It is important that the gun lamp is centered in the cartridge. If it is not, the light from the gun will be reduced and the pattern of the spot of light will be uneven. Test the centering by "shooting" at a white wall or piece of white cardboard about 20 feet from the end of the gun. The pattern should be round and of uniform brightness. If it is not, correct by adjusting the position of the screws (d) and (e) at the end of the cartridge. Tighten the screw on the side corresponding to the dark side of the light pattern (first loosening the screw on the opposite side).

The lamp cartridge should be seated firmly against the end of the gun barrel when checking the lamp centering.

8. After the lamp has been correctly centered, place the rubber pad (2) over the cartridge and gun barrel and reassemble the rear sight frame (1).

The muzzle lens assembly is located in the front end of the gun barrel. To remove lens, loosen the front screw on the gun sight, which will allow the lens to be removed by inserting a finger and twisting while pulling out. After replacing the lens, be sure it is pushed against its stop and then tighten screw. It is very important that the muzzle lens and the small cartridge lens be kept clean and that the gun lamp is properly centered.

LOCKS

There are two sets of locks; the locks on the target cabinet and door of the gun stand are alike and operated by the same key. The cash box in the gun stand has a different lock, operated by a separate key.

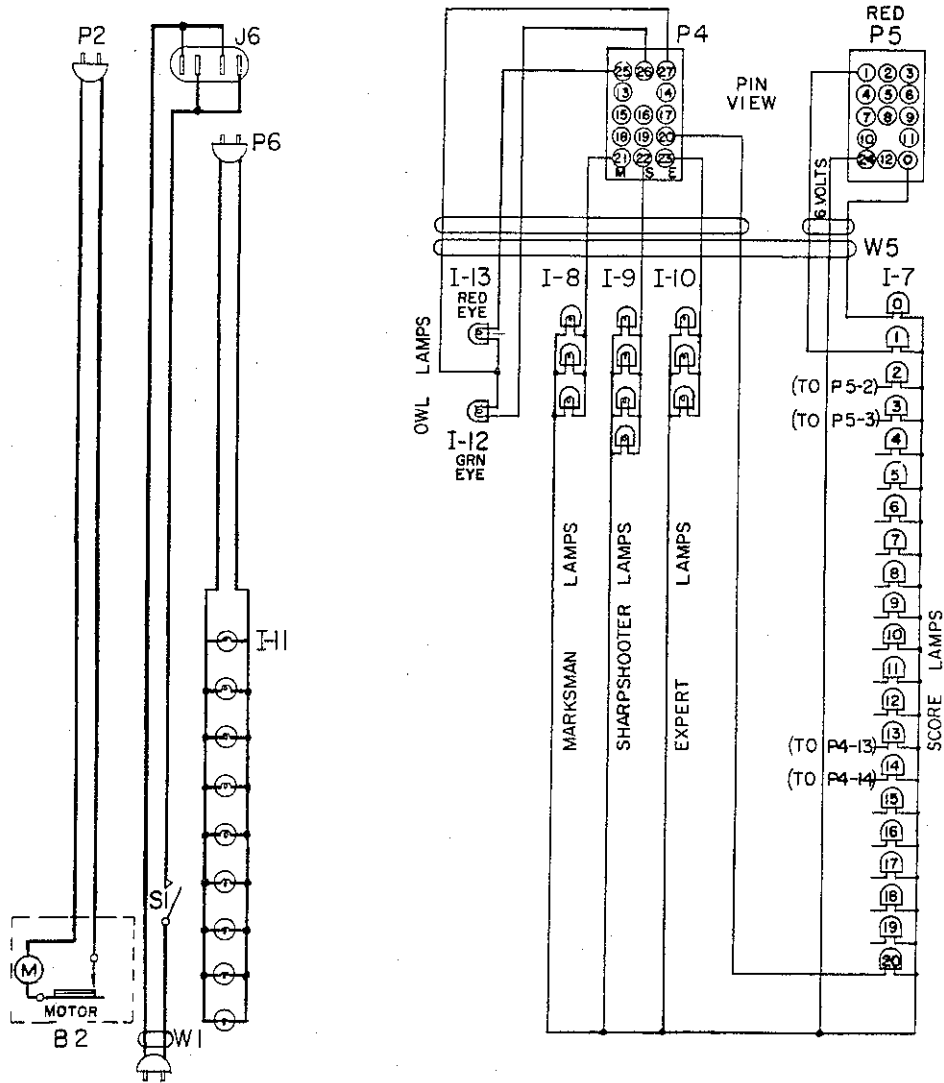
LUBRICATION

The target motor should be oiled at regular intervals with Seeburg Select-O-Matic Special Purpose Oil. On the target mechanism, all metal gears and sliding surfaces (except the target contact rails) should be lubricated with Lubriplate. All shaft bearings and rollers should be oiled with Select-O-Matic Special Purpose Oil. (See Lubrication Chart). Use only DC-5 on the contact rails.

Special attention should be given the two sprocket and gears adjacent to the column turn detent discs on the lower main shaft.

Seeburg Coon Hunt, Model G5

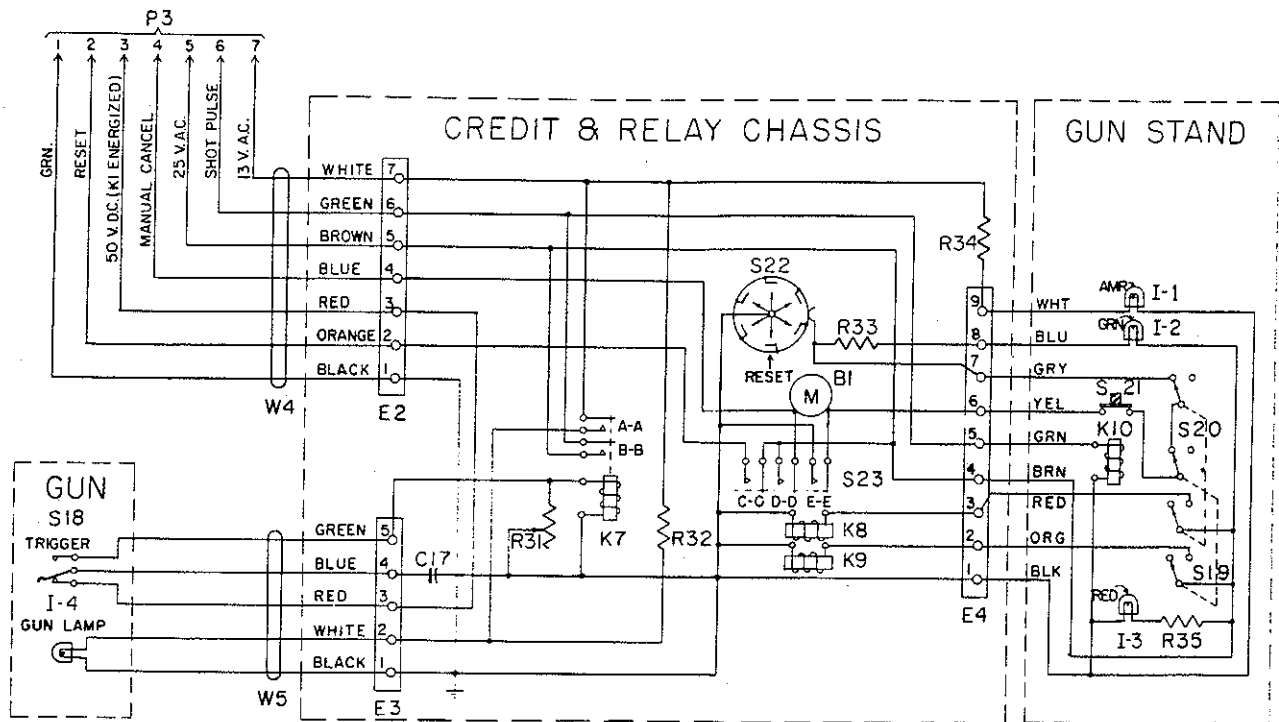
All bearings of the credit motor in the gun stand should be oiled with Seeburg Select-O-Matic Special Purpose Oil every six months. Only a drop or two are necessary. The same applies to the associated gear train.



CABINET WIRING

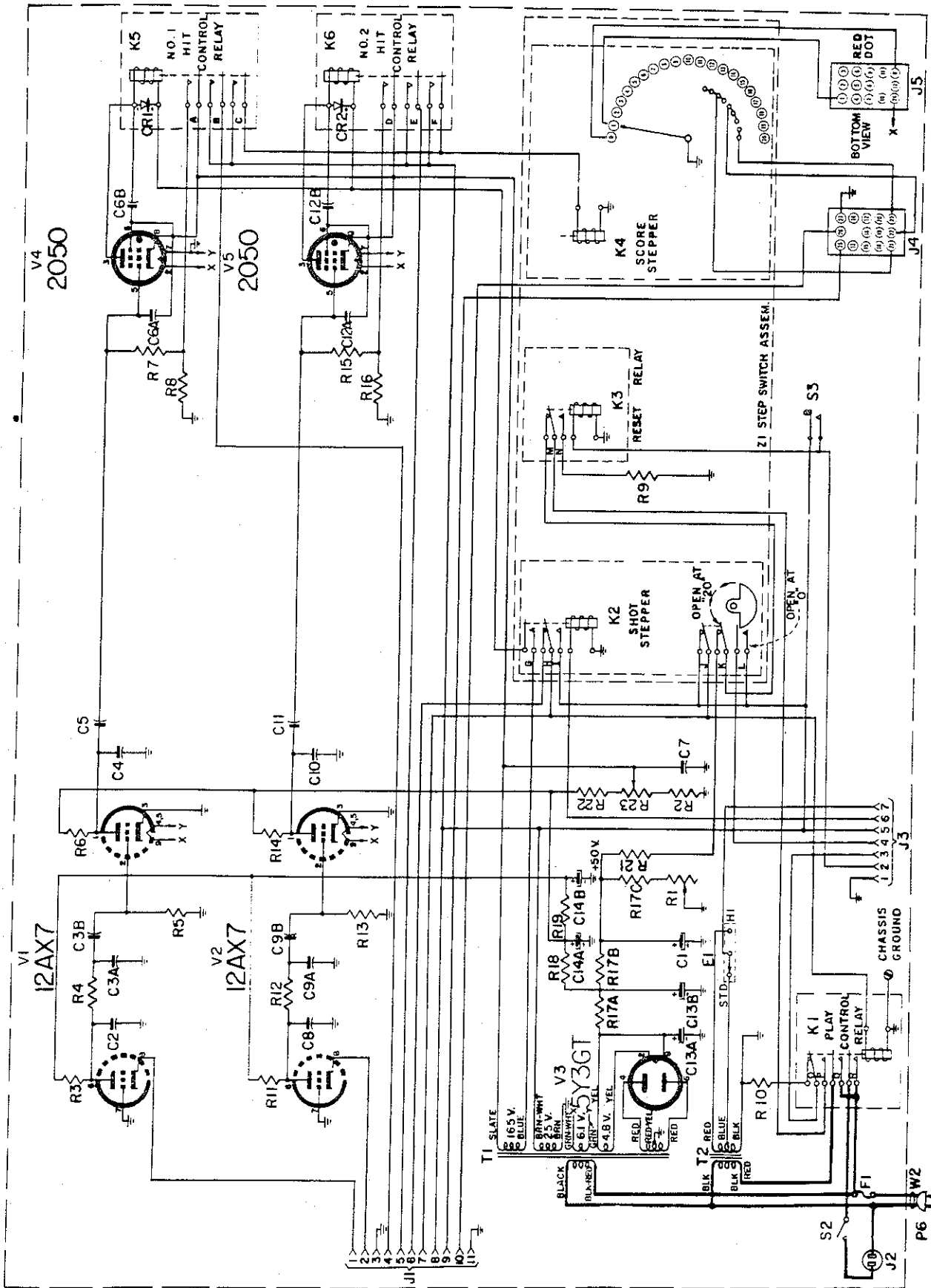
Item	Part No.	Description	Item	Part No.	Description
B2	126397	Motor Drive	J6	F402253	A. C. Outlet
I7	10242	#51 Lamp-Scope	P2	10895	2-Prong Plug
I8	10242	#51 Marksman Lamp	P4	125632	14-Prong Plug
I9	10242	#51 Sharpshooter Lamp	P6	10895	2-Prong Plug
I10	10242	#51 Expert Lamp	S1	S21168	Main Toggle Switch
I11	125672	15 W. Cabinet Lamp	W1	F402781	Plug & Line Cord Assem.
I12	10242	#51 Owl Lamp	W5	127404	Score Cable
I13	10242	#51 Owl Lamp	P5	125632	14-Prong Plug

Seeburg Coon Hunt, Model G5



GUN STAND

Item	Part No.	Description	Item	Part No.	Description
B1	126141	Motor Assembly	R31	126125	500 ohm Rheostat
C17	87608	200 mfd. 50 v, Electrolytic	R32	81021	11 ohm W.W. 25W. Resistor
E2	125142	7 Lug Terminal Strip	R33	81126	100 ohm W.W. 5W. Resistor
E3	125144	5 Lug Terminal Strip	R34	81131	35 ohm W.W. 5W. Resistor
E4	125145	9 Lug Terminal Strip	R35	81126	100 ohm W.W. 5W. Resistor
I1	10242	Ready Lamp #51	S18	S21010	Trigger Switch
I2	10242	Credit Lamp #51	S19	125122	Single Credit Switch
I3	10242	Pilot Lamp #51	S20	125122	Multiple Credit Switch
I4	S85	Gun Lamp	S21	12105	Start Button
K7	125141	Shot Timing Relay	S22	504140	Credit Switch
K8	505082	Multiple Credit Coil	S23	126122	Carryover Switch
K9	505082	Single Credit Coil	W4	S21116	Target Cable
K10	125150	Muzzle Blast Sounder	W5	S21017	Gun Cable
P3	F402041	7-Prong Male Plug			

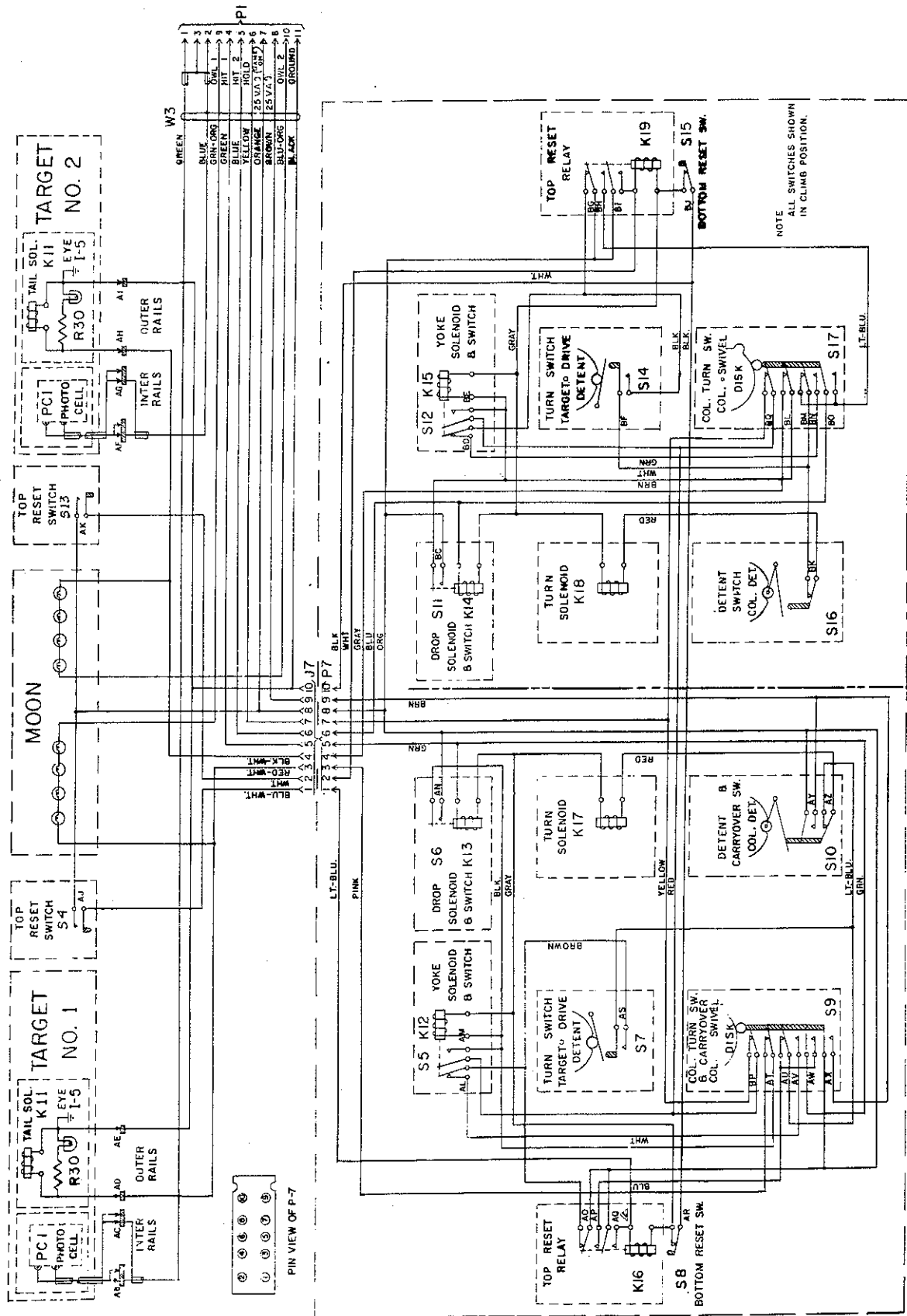


SCHMATIC: AMPLIFIER-CONTROLLER

Seeburg Coon Hunt, Model G5

AMPLIFIER - CONTROLLER

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Item</u>	<u>Part No.</u>	<u>Description</u>
C1	87608	200 mfd. 50 v. Electrolytic	K5	306176	Hit Control Relay
C2	86140	0.05 mfd. 400 v. Condenser	K6	306176	Hit Control Relay
C3	86217	.01 - .01 mfd 600 v. Condenser	R1	306228	1 k 50 v. Adjust. Resistor
C4	86140	0.05 mfd 400 v. Condenser	R2	82428	15 K 1/2 W. Resistor
C5	86155	1 mfd 400 v. Condenser	R3	82456	470 k 1/2 W. Resistor
C6	86126	.005-.005 mfd 600 v. Condenser	R4	82462	1.5 meg 1/2 W. Resistor
C7	86043	0.25 mfd 200 v. Condenser	R5	82505	18 meg 1/2 W. Resistor
C8	86140	0.05 mfd 400 v. Condenser	R6	82456	470 k 1/2 W. Resistor
C9	86217	.01 - .01 mfd 600 v. Condenser	R7	82436	10 k 1/2 W. Resistor
C10	86140	0.05 mfd 400 v. Condenser	R8	82460	1 meg. 1/2 W. Resistor
C11	86155	1 mfd 400 v. Condenser	R9	82412	100 ohms 1/2 W. Resistor
C12	86216	.005 - .005 mfd 600 v. Condenser	R10	82412	100 ohms 1/2 W. Resistor
C13	87607	20-20 mfd 350 v. Electrolytic	R11	82456	470 k. 1/2 W. Resistor
C14	87607	20-20 mfd 350 v. Electrolytic	R12	82462	1.5 meg 1/2 W. Resistor
CR1	306220	Selenium Rectifier	R13	82505	18 meg 1/2 W. Resistor
E1	306012	Terminal Strip	R14	82456	470 k. 1/2 W. Resistor
F1	602411	5 Amp. Fuse	R15	82436	10 k. 1/2 W. Resistor
J1	84230	11-Prong Socket	R16	82460	1 meg 1/2 W. Resistor
J2	602386	A.C. Outlet	R17a	81157	1 k W.W. Resistor
J3	84265	7-Prong Socket	R17b	81157	8 k W.W. Resistor
J4	306014	14-Prong Socket	R17c		1.6 k W.W. Resistor
J5	306014	14-Prong Socket	R18	82437	12 k 1/2 W. Resistor
P6	303113	Plug & Line Cord Assembly	R19	82448	100 k 1/2 W. Resistor
K1	306177	Play Control Relay	R21	82408	47 ohms 1/2 W. Resistor
K2	306216	Shot Stepper Relay	R22	82452	220 k 1/2 W. Resistor
K3	306043	Reset Relay	R23	306018	100 k Sen Control Resistor
K4	306215	Score Stepper Relay	S2	303112	Motor Toggle Switch
CR2	306220	Selenium Rectifier	S3	306013	Manual Reset Switch
			T1	306196	Low Voltage Trans.
			T2	306197	Power Transformer
			V1	12AX7	Tube
			V2	12AX7	Tube
			V3	5Y3GT	Tube
			V4	2050	Tube
			V5	2050	Tube
			W2	303113	Plug & Line Cord Assembly
			Z1	306175	Step Switch Assembly



SCHEMATIC: MECHANISM & TARGETS

Seeburg Coon Hunt, Model G5

MECHANISM & TARGET

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
I5	10242	Lamp #51
I6	10242	Lamp #51
J7	127440	10-Prong Socket
K11	127059	Tail Solenoid
K12	126531	Yoke Solenoid
K13	400567	Drop Solenoid
K14	400567	Drop Solenoid
K15	126531	Yoke Solenoid
K16	126421	Top Reset Relay
K17	126531	Turn Solenoid
K18	125631	Turn Solenoid
K19	126421	Top Reset Relay
P7	126592	10-Prong Plug
PC1	127068	Photo Electric Cell
R30	81126	100 ohm 5 w. Resistor
S4	127379	Top Reset Switch
S5	126432	Yoke Switch
S6	126438	Drop Solenoid Switch
S7	126430	Turn Switch
S8	126536	Bottom Reset Switch
S9	126404	Col Turn & Carryover Switch
S10	126486	Detent & Carryover Switch
S11	126428	Drop Solenoid Switch
S12	126432	Yoke Switch
S13	127379	Top Reset Switch
S14	126430	Turn Switch
S15	126536	Bottom Reset Switch
S16	126552	Detent Switch
S17	126459	Column Turn Switch
W3	127441	Control Cable
F1	A250942	11-Prong Plug