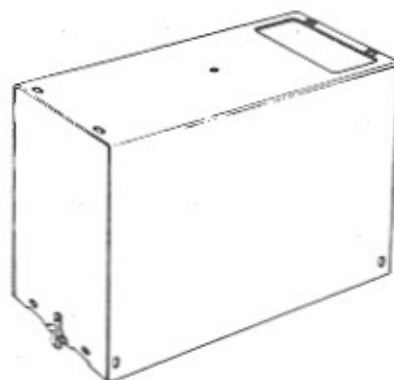
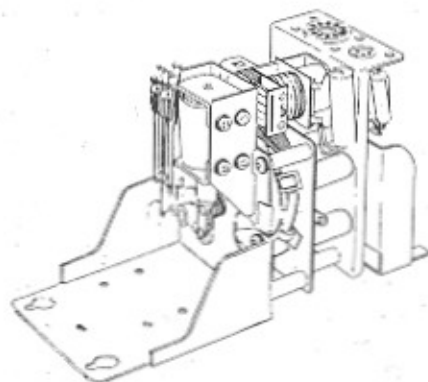


SEEBURG

SINGLE PRICING UNIT

Type SPU1



Pricing Unit Cover

The Single Pricing Unit, Type SPU1, is a part of the Tormat Selection System for making selections for nickels, dimes and quarters deposited at the phonograph. Its function is to store credit for coin deposited, cancel the credit as it is used for selections and to control the selection system write-in current pulse. Power for operation is taken from a Selection Receiver or Power and Control Unit with which it is associated and to which it is connected with a cable and plug.

The principle parts of the unit are three credit solenoids, a cancel solenoid, two cam operated switch groups and a timing relay. These may be identified in *Figure 2*.

The credit switch is a "wheel" supporting six equally spaced snap-action switches which are parallel connected and terminate at a collector ring and the grounded frame of the unit. The snap-action switches are closed by the plungers of the credit solenoids. Closing any one of them establishes "credit" so selections can be made. Each time a selection is made, the cancel solenoid in the Unit advances the credit switch one sixth turn. It is advanced, therefore, one position - the distance between the snap-action switches - for each selection made.

A reset bracket is mounted on the assembly so a snap-action switch moves past it each time a selection is made. When a snap-action switch that has been turned "on" (by a credit solenoid plunger) passes the bracket, it is engaged by the bracket and reset to the "off" position.

A Pricing Unit associated with selection pricing of one play for five cents, two plays for ten cents, and six plays for a quarter will have a credit coil connected to a 5-cent, a 10-cent and a quarter coin switch in the phonograph so there is a "5¢ solenoid", a "10¢ solenoid" and a "25¢ solenoid".

The 5¢ solenoid is mounted so its plunger turns on the snap-action switch which is one position from the reset bracket. Because the switch will be opened with one operation of the cancel solenoid, one credit is set up when a 5¢ coin is deposited.

The 10¢ solenoid turns on the snap-action switch which is two positions from the reset bracket allowing two selections to be made before the switch is reset.

The 25¢ solenoid is six positions from the reset bracket and will turn on a snap-action switch permitting six selections to be made.

If selection pricing other than described above, the credit coils may be shifted to other positions with respect to the reset bracket. The unit is designed so the coil positions and the reset bracket position can be arranged for any combination of credits, up to six, for any of the three coins.

The cancel solenoid plunger is linked to one of the switch cams so the cam is rotated approximately 60 degrees when the solenoid is energized. This cam is pinned to a shaft which drives the other of the two switch cams.

A pawl on the second cam engages a ratchet on the credit switch and moves it one position each time the solenoid plunger operates.

The timing relay operates at approximately 25 volts d.c. and is loaded with copper slugs that delay starting of its armature from the rest position. The delay is introduced to control the time the contacts in the switch groups are closed.

The switch contact functions are detailed in the table on Page 16011.

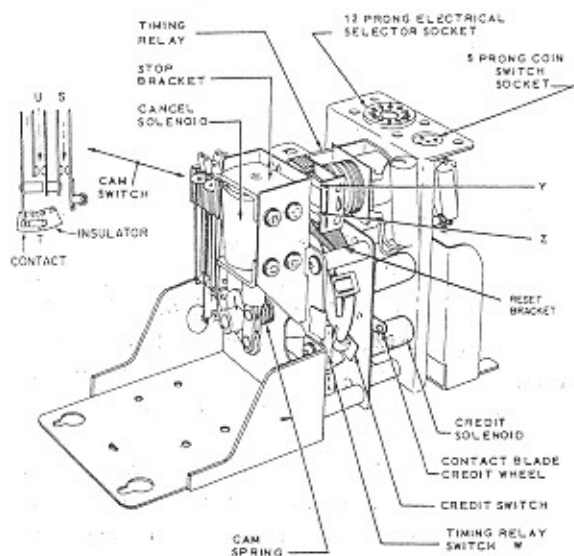


Figure 2.

MECHANICAL ADJUSTMENTS

1. The Pawl Arm Stop limits the rotation of the credit switch when the Cancel Solenoid plunger returns to normal rest position. It should be adjusted so the credit switch rotates far enough to allow the Lock Pawl to fall into the ratchet and have approximately 1/64" overtravel. The adjustment must

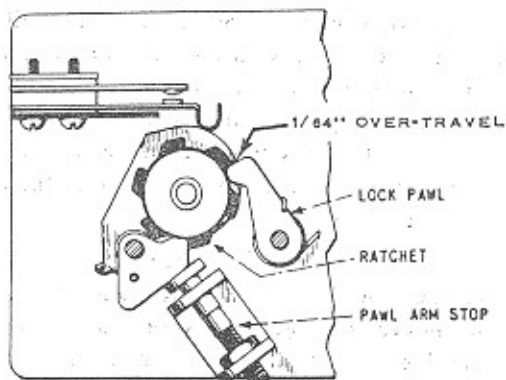


Figure 3.

be checked at all six positions of the credit wheel and the ratchet. After adjustment, set the locknut tight. See Figure 3.

2. Adjust the position of the Cancel Solenoid Stop Bracket so the Cancel Pawl over-travels the ratchet teeth approximately 1/32" when the solenoid plunger bottoms against the Stop. Set the Stop mounting screws firmly after adjustment. See Figure 4.

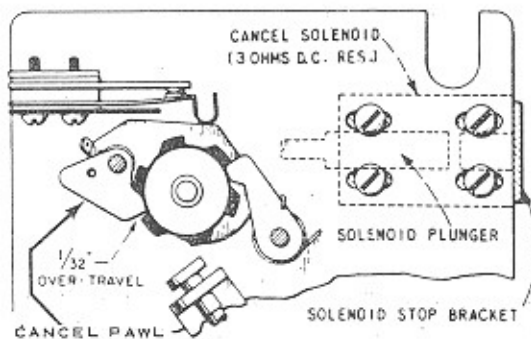


Figure 4.

3. Set the end of the Cam Spring in the first hole in the panel. The Cam Spring may be identified in Figure 2. Check operation by closing all snap-action credit switches and allow the Cam Spring to rotate the switches past the reset bracket. This should be checked slowly to determine if the Spring pressure is adequate to reset the switches without benefit of inertia. If more spring pressure is required, move to the second hole and repeat the test. Use the lowest spring pressure (consistent with positive operation) to insure minimum wear and optimum low voltage operation.

4. The pressure of the credit wheel contact blade against the ring on the credit switch should be approximately 2 1/2 oz. Excessive pressure will result in excessive wear and sluggish rotary action of the credit switch.

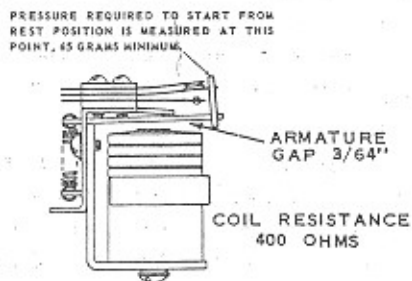
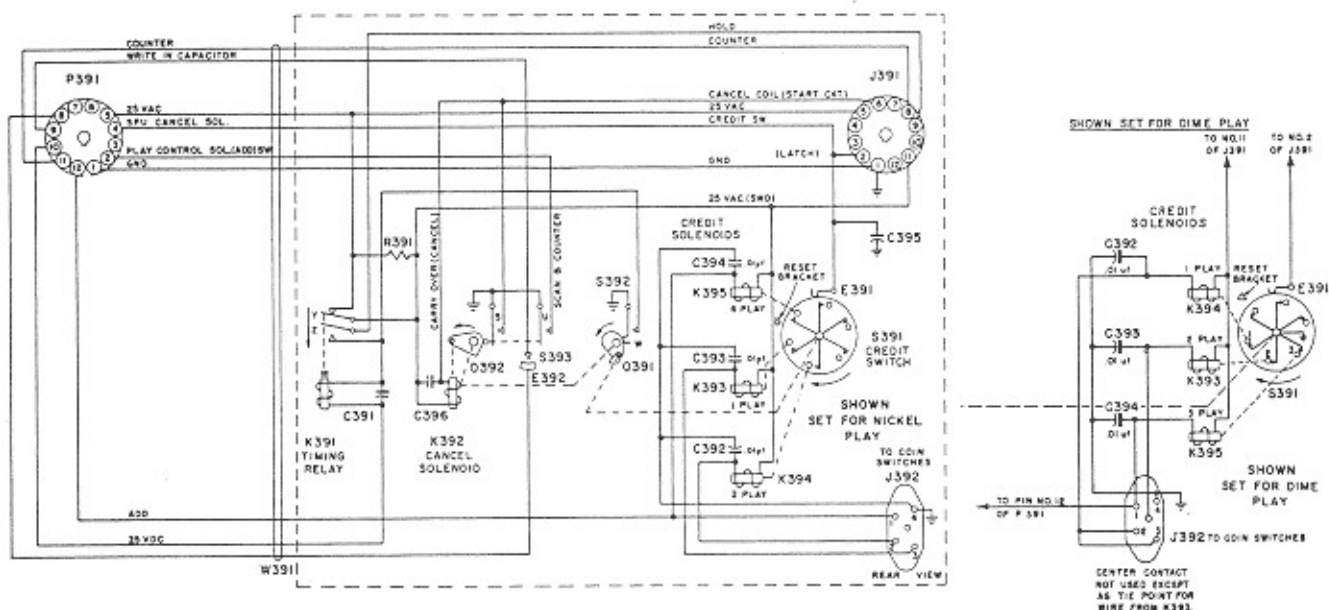


Figure 5.

SINGLE PRICING UNIT, TYPE SPU1



PARTS LIST (For Schematic Diagram)

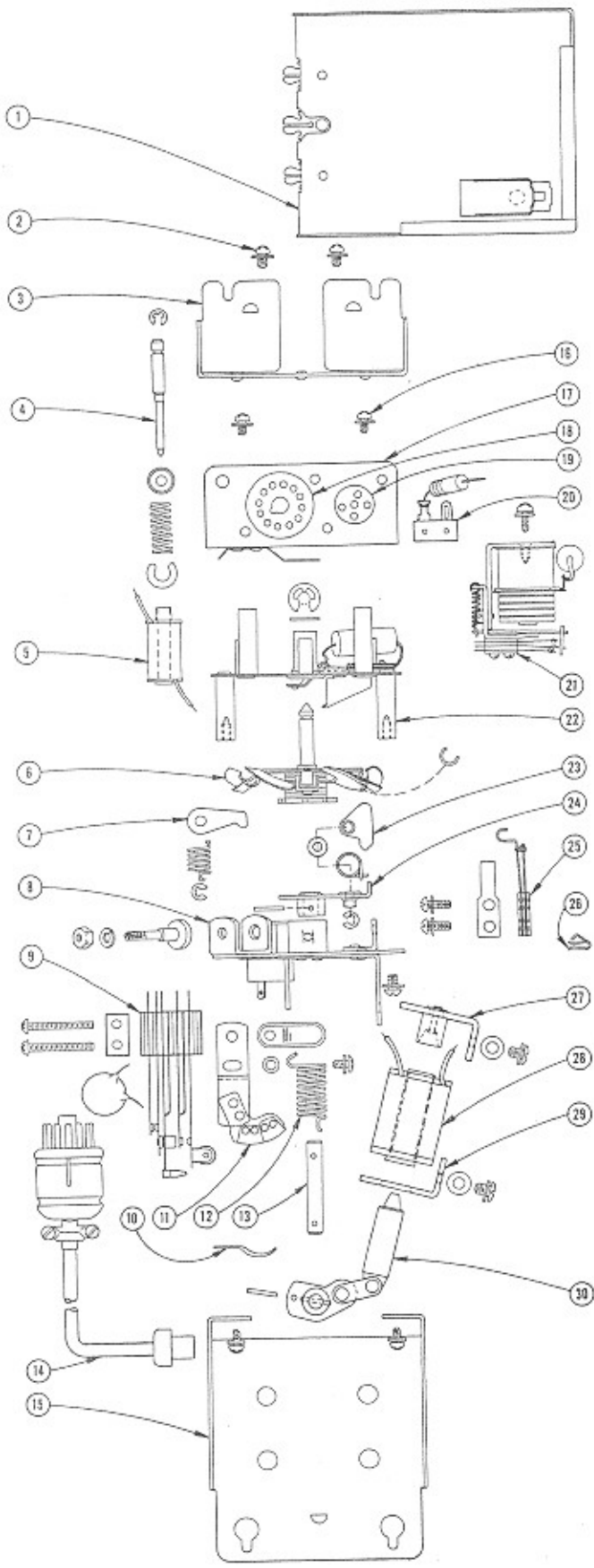
Item	Part No.	Description	Item	Part No.	Description
C391	86235	Condenser .05 200 V.	K394	400485	Credit Solenoid 10¢
C392	86313	Condenser .01 Ceramic	K395	400486	Credit Solenoid 25¢
C393	86313	Condenser .01 Ceramic	O391	400548	Pawl Assembly
C394	86313	Condenser .01 Ceramic	O392	400932	Cam Assembly
C395	86140	Condenser, Ceramic .05 400 V.	P391	410707	Plug Assembly 12 Prongs
C396	86258	Condenser, Ceramic .04	R391	82746	Resistor 1 W. 1000 OHMS
E391	400507	Wiper Switch Assembly	S391	400665	Rotary Credit Switch Assembly
E392	400460	Write-In Segment Assembly	S392	400618	Cam Switch (Used on Code C Units)
J391	201275	Socket (12 Prong)		400472	Cam Switch
J392	450735	Socket (5 Pin)	W391	400481	Cable & Plug Assembly
K391	450280	Relay Assembly			
K392	400685	Cancel Solenoid			
K393	400484	Credit Solenoid 5¢			

SWITCH	CONTACT	PRESSURE	CONTACT GAP	NORMAL POSITION	FUNCTION
CAM SWITCH	S	3/8 oz.	1/64"	OPEN	Carry-Over Contact For Cancel Solenoid.
	T	2/3 oz.	.040" ON INSULATOR	OPEN	Selection Write-In Pulse Trigger Switch.
	U	1 oz.	1/64"	OPEN	Operates Phonograph Selection Counter And Play-Control Add Solenoid.
TIMING	Y	1-1/8 oz.	1/32"	CLOSED	Completes 25-Volt Circuit To Cancel And Credit Solenoids And Electrical Selector Latch And Solenoid.
RELAY	Z	1-1/8 oz.	1/32"	OPEN	Timing Relay Interlock.
SWITCH	W	2/3 oz.	3/64"	OPEN	Operates Timing Relay.

Contact Operation & Gap Adjustment

SINGLE PRICING UNIT, TYPE SPUI

PARTS LIST



Item	Part No	Description
1	400473	Cover Assembly
2	914135	8-32 x 1/8 Sems
3	400470	Mtg. Bracket Riveted Assem.
4	400672	Solenoid Plunger Assembly
	400658	Compression Spring
	400603	Cup Washer
	R-231163	Retaining Ring
5	400484	Credit Solenoid
	400485	Credit Solenoid
	400486	Credit Solenoid
	11445	"C" Washer
6	400655	Rotary Credit Switch Assem.
	125408	Retaining Ring
	921551	Flatwasher, Spring Steel
7	400682	Lock Pawl & Shaft Assembly
	400545	Lock Pawl Spring
	R-231163	Retaining Ring
8	400677	Front Panel Riveted Assembly
	400540	Pawl Arm Stop
	925494	No. 10 Kantlink Lockwasher
	902360	10-32 Hex Nut
9	400472	Cam Switch Assembly
	400618	Cam Switch Assembly
		(Used On Code C Units)
	912597	5-40 x 1-1/8 Phillips Pan H.M.S.
	400597	Tension Plate
	86258	0.04 MFD Ceramic Condenser, +80% -20%
10	F-1960	Cable Clamp
11	400460	Write-In Segment & Brkt. Assembly
	920741	Flatwasher
	913026	6-32 x 1/4 Sems
	F-1960	Cable Clamp
12	400557	Cam Spring
13	400929	Rotary Switch Shaft
14	400481	Cable & Plug Assembly
	450278	Strain Relief Clamp
	410708	12 Prong Plug
	408259	Cap & Liner
15	400482	Mounting Bracket (Top)
	914135	8-32 x 1/4 Sems
	914135	8-32 x 1/4 Sems
16	400467	Socket Panel Assembly
17	201275	12 Contact Socket
18	450735	5 Pin socket
	86313	0.01 MFD Ceramic Condenser
19	400429	Terminal Strip
	82746	1000 Ohm Resistor, 1 W. 10%
20	450280	Relay Assembly
	86235	0.05 MFD Condenser, 200 V. +20% -10%
	914371	8-32 x 3/8 Sems
21	400466	Coin Solenoid Panel Assembly
	86140	0.05 MFD Ceramic Condenser, 400 Volt
22	400553	Pawl & Pin Assembly
	400556	Pawl Spring
	R-231163	Retaining Ring
23	400549	Pawl Arm & Hub Assembly
24	400589	Timing Relay Switch
	400611	Buffer Spring
	912472	5-40 x 7/16 Sems
25	400972	Spring Clip
26	400958	Solenoid Brkt. & Stop Assem.
	914135	8-32 x 1/4 Sems
	920914	Flatwasher
27	400685	Solenoid Cancel
	400570	Solenoid Bracket
	914135	8-32 x 1/4 Sems
28	400946	Cam & Plunger Assembly