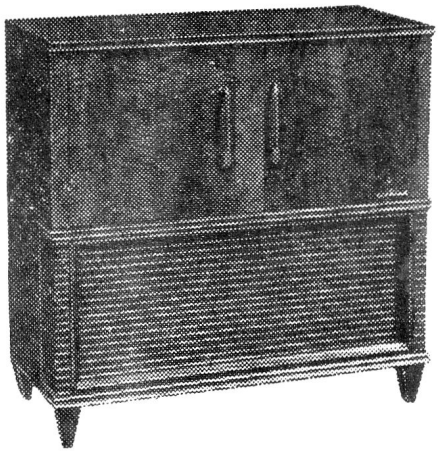
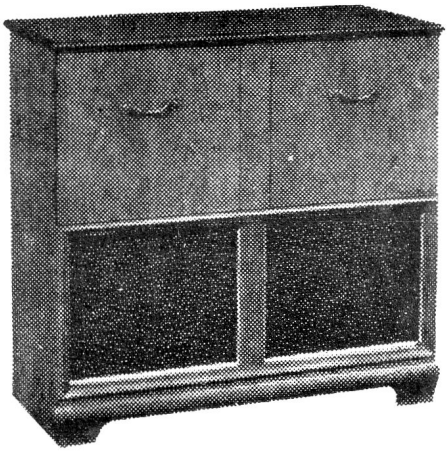
VIKING Service Information for Models

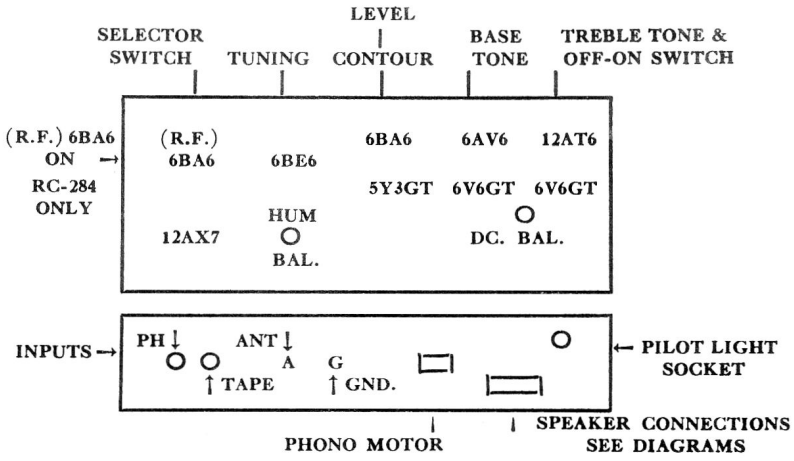
RC-283
RC-283R
RC-284

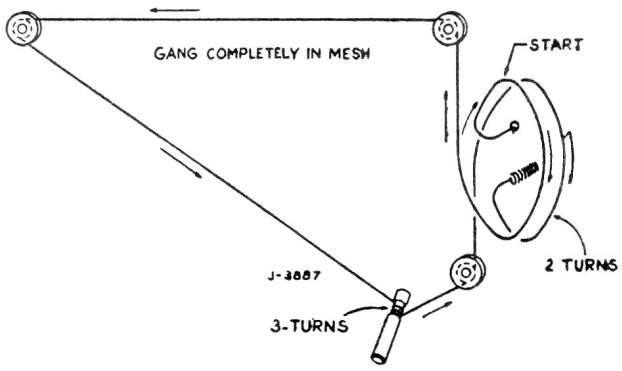


MODEL RC-283, RC-283R 8 TUBE



MODEL RC-284 9 TUBE





STRINGING DETAIL

SPECIFICATIONS

Standard Broadcast Range ..... 535 Kc. — 1650 Kc.
Intermediate Frequency ..... 455 Kc.
Power Consumption (Radio only)
RC-283, RC-283R 80 watts
RC-284 90 watts
Power Consumption (Radio & Phono)
RC-283, RC-283R 95 watts
RC-284 105 watts

With tone controls in flat position, level and contour controls full clockwise, all measurements (nominal) taken at level control input and 16 ohm output.

Frequency Response—1w level 1 db. 30 cps. to 15,000 Kc.

*__Harmonic Distortion__—Less than 1% at normal operating levels

*__Intermodulation Distortion__ — Less than 1% at normal operating levels (60 & 3000 cps. 4:1).

Hum and Noise—30 db. below rated output.

Maximum Power Output at 400 C.P.S.—14 watts

Undistorted Power Output at 400 C.P.S.—10 watts.

*With matched output Tubes + 5%

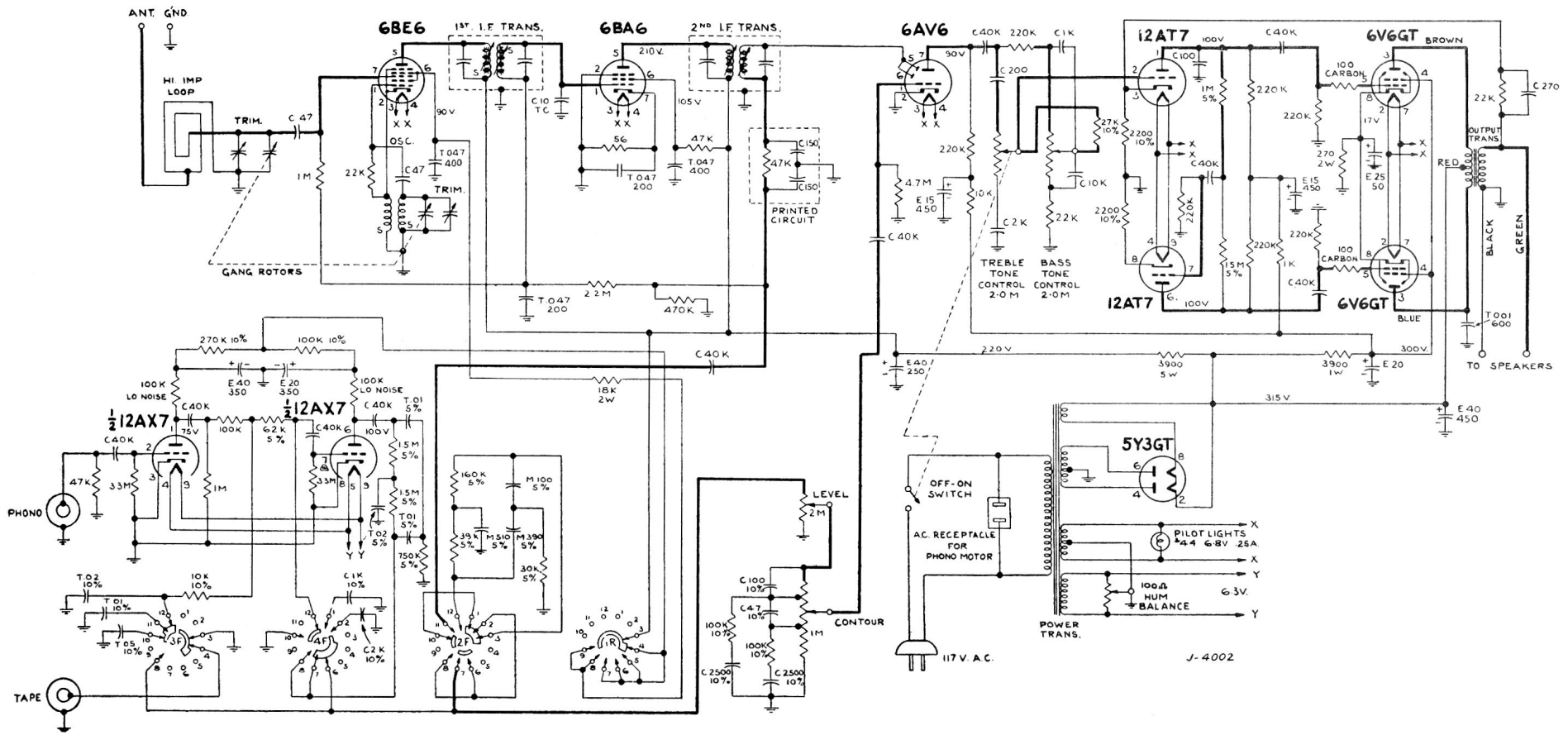
FOR ALIGNMENT AND SENSITIVITY DATA SEE SCHEMATIC

For Operation on 110-120 Volts A.C. Cycle as Marked

T. EATON Co LIMITED
CANADA

J-4028 (750-157B.)

SCHEMATIC FOR MODELS RC-283 and RC-283R



ALIGNMENT AND SENSITIVITY: SIGNAL GENERATOR MODULATED 30% AT 400 CY						
STEP	APPLY SIGNAL AT KC	APPLY SIGNAL TO	THRU SERIES DUMMY	SET GANG AT	ADJUST FOR MAX OUTPUT	NOMINAL SENSITIVITY FOR 500 M.W. MILLIWATTS OUTPUT
1	455	6BA6 I.F. NO.1 PIN	.05	-	2ND I.F.	3200 μV CONTROLS MAX POSITION
2	455	6BE6 NO.7 PIN	.05	MIN CAPACITY	1ST I.F. 2ND I.F.	80 μV CONTROLS MAX POSITION
3	1460	6BE6 NO.1 PIN	.05	1460 KC	OSC TRIMMER	—
4	1460	ANT	400 Ω	1460 KC	ANT TRIMMER	18 μV CONTROLS MAX POSITION
5	600	ANT	400 Ω	600 KC	—	26 μV " " "

COMPONENT VALUES

RESISTORS : HALF WATT, UNLESS OTHERWISE SPECIFIED.
20% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
K = 1000 OHMS.
M = 1,000,000 OHMS.

CONDENSERS : T = TUBULAR, FOLLOWED BY CAPACITY IN MFD AND D.C.W.V.
E = ELECTROLYTIC, FOLLOWED BY CAPACITY IN MFD. AND D.C.W.V.
C = CERAMIC, FOLLOWED BY CAPACITY IN MMFD & TOL. IF CRITICAL.
M = MICA, FOLLOWED BY CAPACITY IN MMFD & TOL. IF CRITICAL.
TC = TEMPERATURE COMPENSATED.

SWITCH SHOWN IN EXTREME COUNTER CLOCKWISE POSITION

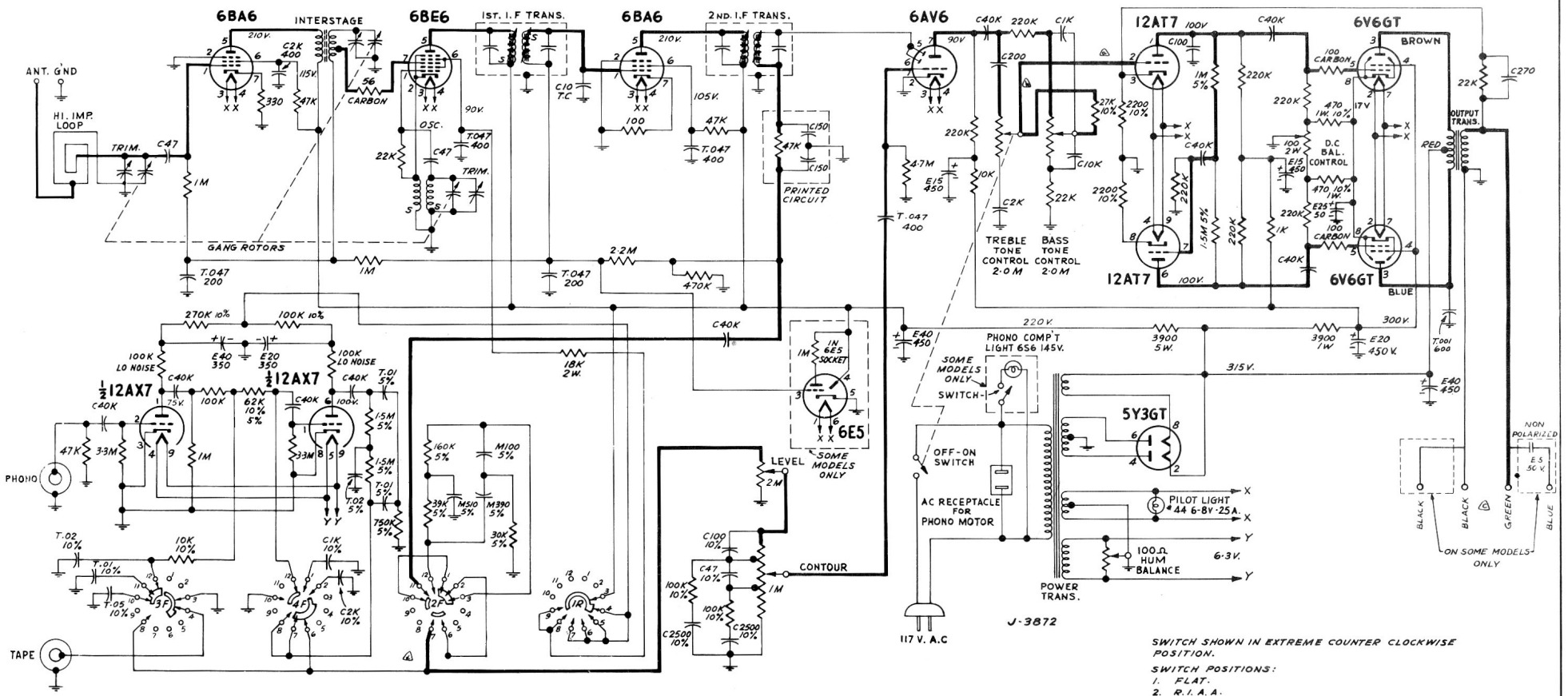
SWITCH POSITIONS :
1. FLAT.
2. R.I.A.A.
3. 78 EARLY
4. TAPE
5. RADIO, 10 KC FILTER OUT.
6. RADIO, 10 KC FILTER IN.

ALL VOLTAGES ±10% MEASURED TO B- WITH 20,000 OHM/VOLT METER, 117 VOLT 60 CYCLE LINE AND ZERO SIGNAL INPUT.

CH. NO.	DATE	CHANGE	SYMB.	CHK.
56 BOS	11-MAR-56	ON 12AT7 = 7 PIN WAS 9 PIN	Q	

J-4002

SCHEMATIC FOR MODEL RC-284



SWITCH SHOWN IN EXTREME COUNTER CLOCKWISE POSITION.

SWITCH POSITIONS:

1. FLAT.
2. R.I.A.A.
3. 78. EARLY
4. TAPE.
5. RADIO. 10 KC FILTER OUT.
6. RADIO. 10 KC FILTER IN.

ALL VOLTAGES ±10% MEASURED TO B- WITH 20,000 OHM/VOLT METER, 117 VOLT 60 CYCLE LINE AND ZERO SIGNAL INPUT.

ALIGNMENT AND SENSITIVITY

SIGNAL GENERATOR MODULATED 30% AT 400 CY.

STEP	APPLY SIGNAL AT KC	APPLY SIGNAL TO	THRU SERIES DUMMY	SET GANG AT	ADJUST FOR MAX. OUTPUT	NOMINAL SENSITIVITY FOR 500 MILLIWATTS OUTPUT
1	455	6BA6 I.F No. 1 PIN	.05	—	2ND. I.F	THESE VALUES APPLY WITH TONE CONTROL IN MAX. POSITION. 4500 μV.
2	455	6BE6 No. 7 PIN	.05	MIN. CAPACITY	1ST. I.F 2ND. I.F	160 μV.
3	1460	6BA6 No. 1 PIN	.05	1460 KC.	OSC. AND INTERSTAGE TRIMMERS	
4	1460	ANT.	400Ω	1460 KC.	ANTENNA & INTERSTAGE TRIMMERS	6 μV.
5	600	ANT.	400Ω	600 KC.	INTERSTAGE SLUG	12 μV.

COMPONENT VALUES

RESISTORS: HALF WATT, UNLESS OTHERWISE SPECIFIED. 20% TOLERANCE, UNLESS OTHERWISE SPECIFIED. K = 1000 OHMS. M = 1000,000 OHMS.

CONDENSERS: T = TUBULAR, FOLLOWED BY CAPACITY IN MFD. AND D.C.W.V. E = ELECTROLYTIC, FOLLOWED BY CAP. IN MFD. AND D.C.W.V. C = CERAMIC, FOLLOWED BY CAP. IN MMFD. & TOL. IF CRITICAL. M = MICA, FOLLOWED BY CAP. IN MMFD. & TOL. IF CRITICAL. T.C = TEMPERATURE COMPENSATED.

CONNECT D.C VOLTMETER ACROSS OUTPUT TRANSFORMER PRIMARY AND ADJUST D.C BALANCE CONTROL FOR ZERO VOLTAGE.

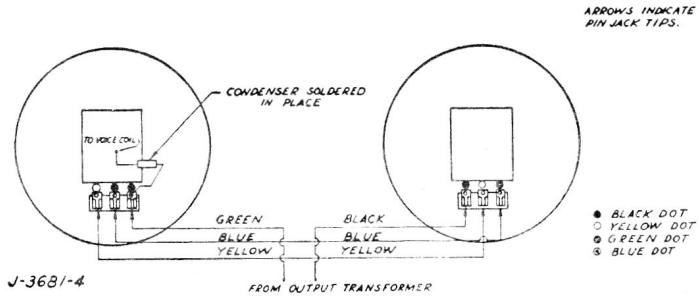
C.N. No	DATE	CHANGE	SYM.	CH'K
86-870	7-11-86	DELETED: 24 μμF CONDENSER (a); 47K RESISTOR (b)		
86-603	7-17-86	BLACK & GREEN LEADS INTERCHANGED	C	
50-953	10-17-50	WIRE BETWEEN LUGS 6 & 4 ON 2F SWITCH DELETED	d	

J-3872

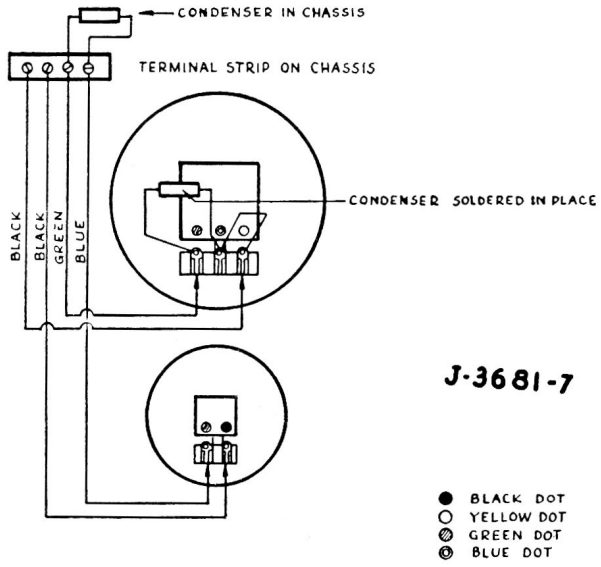
HUM BALANCER

A Hum-Balancer has been incorporated in this receiver to balance out hum which may be present because of the high gain and wide frequency response of the audio portion of the receiver. It may be found necessary to re-adjust the hum balancer for minimum hum reproduction when the 12AX7 tube is replaced. Set the tone control in its extreme left hand position, turn the selector switch to phono position, the volume control full on and adjust the hum-balancer for minimum hum level.

SPEAKER CONNECTIONS



RC-283, RC-283R To 16 ohm Voice Coil



RC-284 To 8 ohm Voice Coil

REPLACEMENT PARTS LIST

A-3004.....Dial Scale RC-284
A-3009.....Dial Scale RC-283, RC-283R
B-4123-10.....Drive Shaft
G-503.....Electrolytic 40 and 20 ufd x 450 DC WV 25 ufd x 50 DC WV.
G-522.....Electrolytic 40, 40 and 20 ufd x 375 DC WV
G-591.....Electrolytic 15 and 15 ufd x 450 DC WV
G-604-1.....Electrolytic 5 ufd x 20 V. Non-polarized on RC-284 only.
H-536-7.....Resistor Wirewound 4700 ohm + 10% 5W
H-536-13.....Resistor Wirewound 3900 ohm + 10% 5W
H-537-3.....Resistor Deposited Carbon — Low Noise 100,000 ohm + 10% ½ watt
K-771A.....Pilot Lamp 6 - 8V .25A #44 RC-284, RC-283, RC-283R
K-1394.....Printed Circuit — Filpec
LK-601-1.....Power Transformer 60 cycle
LK-602-1.....Power Transformer 25 cycle
LK-603-1.....Output Transformer 8 ohm Voice Coil RC-284 only.
LK-605-1.....Output Transformer 16 ohms Voice Coil RC-283, RC-283R
MP-1204-50.....Pointer and Slider Assembly
P-2704-1.....Coil—BC Interstage RC-284
P-2876-1.....Coil—BC Oscillator RC-283, RC-283R
P-2876-2.....Coil—BC Oscillator RC-284
P-2923.....I.F. Transformer—1st and 2nd
P-2944-1.....Loop Antenna Assembly RC-284
P-2944-2.....Loop Antenna Assembly RC-283, RC-283R
Q-341-3.....Switch — Selector
R-375-10.....Control—Bass Tone
R-376-10.....Control—Treble Tone
R-391-1.....Potentiometer 100 ohm — Hum & DC Balance on RC-284 Hum Balance on RC-283, RC-283R
R-442-1.....Control — Level and Contour
V-393-1.....Gang Condenser — Geared — Three Section RC-284
V-394-1.....Gang Condenser—Two section RC-283, RC-283R

INSTALLATION REPLACEMENT PARTS LIST

	RC-284	RC-283	RC-283R
Control Panel	A-4024	A-3010-1	.....
Glass Retaining Strip—Top	B-4706-2	B-4706-2	.....
Glass Retaining Strip—Bottom	C-1024-1	C-1024-1	.....

Speakers—RC-284—(1) 8" P.M. K-1546
(1) 12" Triaxial K-1682

Speakers—RC-283—(1) 12" Coaxial K-1653
RC-283R-(1) 12" Coaxial K-1659

N-484-1.....Knob—Front—Dual Knob
N-485-1.....Knob—Rear—Dual Knob
N-486-1.....Knob—Tuning
N-486-2.....Knob—Bass Tone, Treble Tone, Selector Switch

	**RC-283	RC-283R	RC-284
Garrard RC-88 Changer 60 Cycle 3 Speed	P-2926-2	.....	.....
Garrard RC-88 Changer 25 Cycle 3 Speed	P-2927-2	.....	.....
Garrard RC-88 Changer 60 Cycle 4 Speed	P-3000-3	P-3000-3	P-3000-4
Garrard RC-88 Changer 25 Cycle 4 Speed	P-3001-3	P-3001-3	P-3001-4

K — 1529 — 1 G.E. Cartridge

Replacement Needles—
LP—RPJ—01S (Sapphire), * PPJ—01D (Diamond)
78—PPJ—03S (Sapphire)

* This is not supplied in original equipment, it may be procured as an extra cost replacement for RPJ—01S needle if a diamond stylus is preferred.

** When ordering service parts for the changer used on this model, check changer carefully, both 3 and 4 speed changers were used.