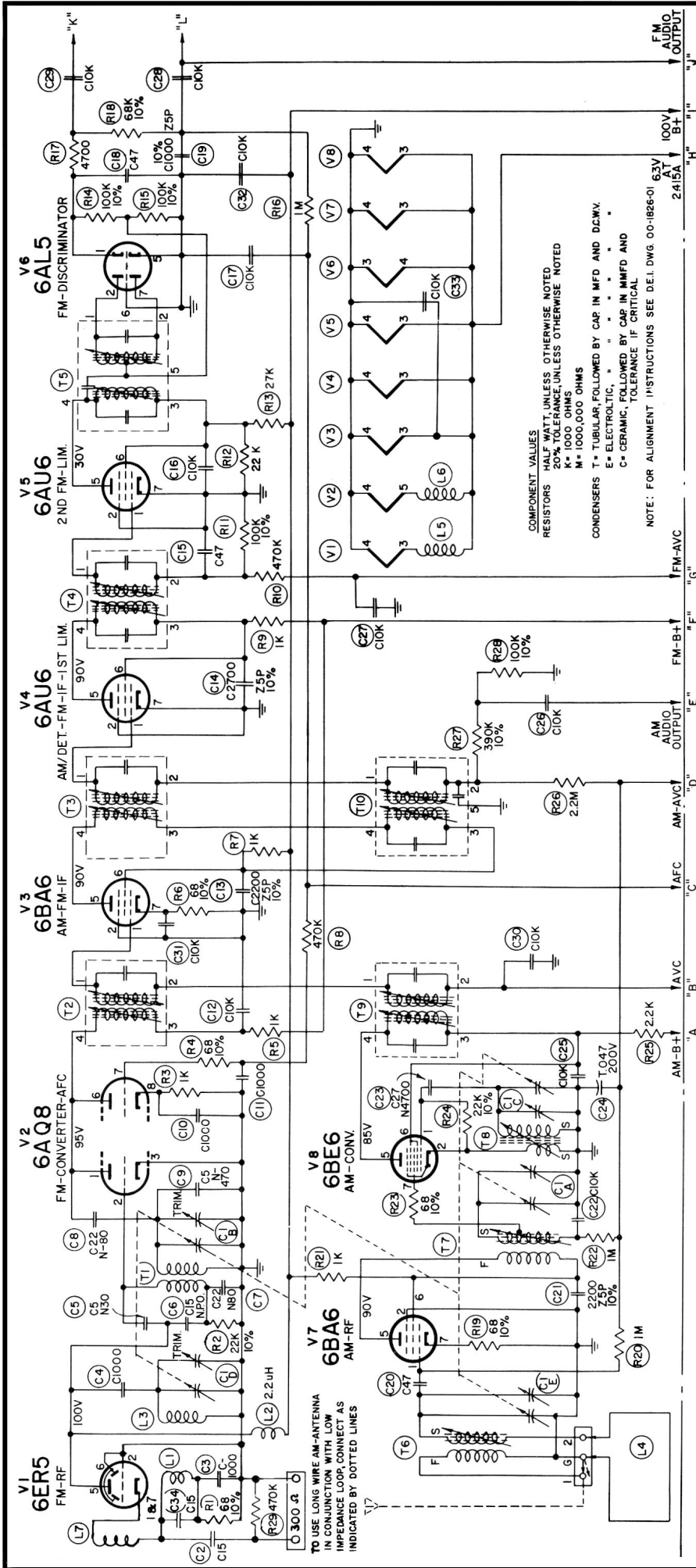




# AM-FM TUNER



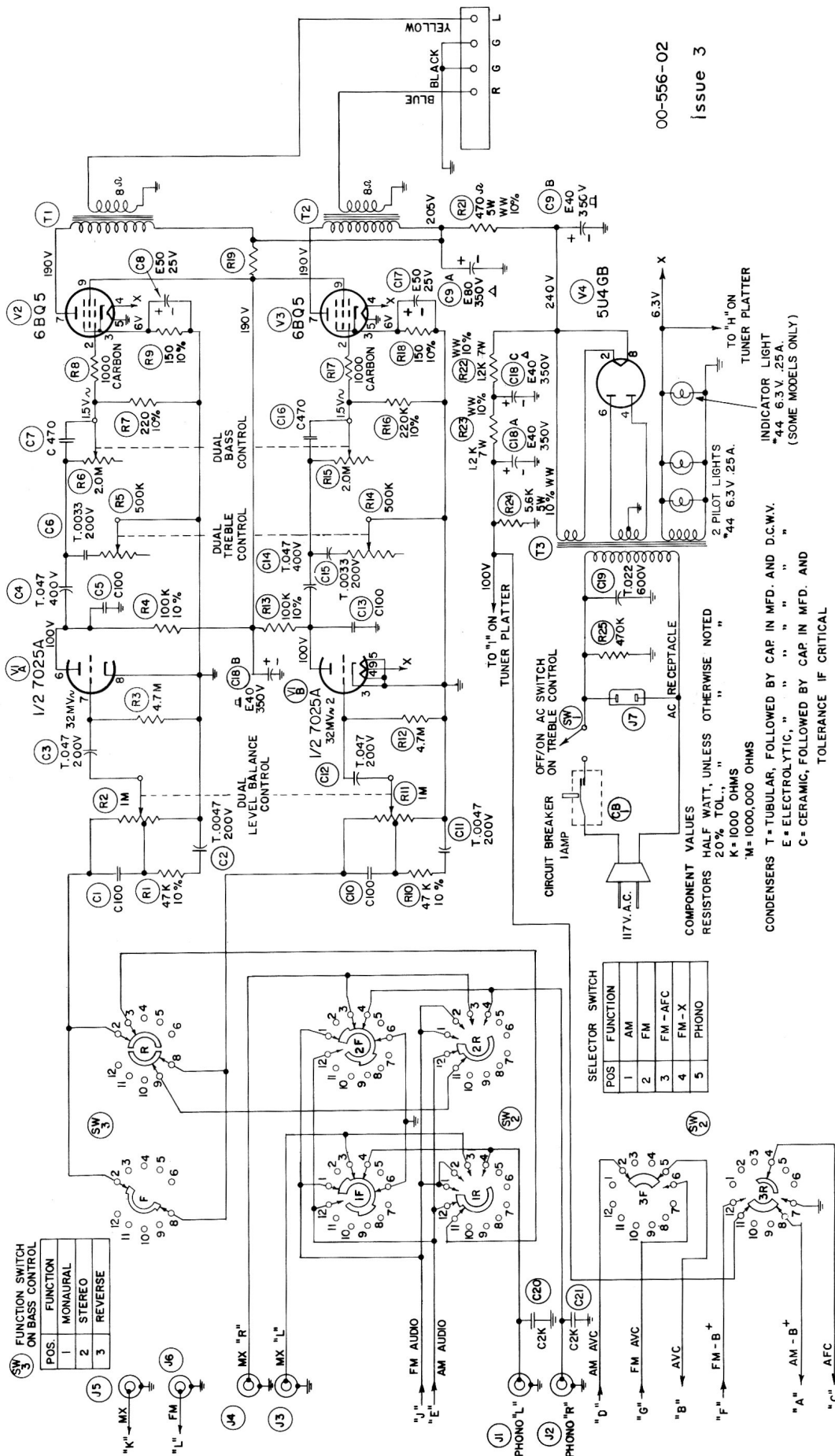
# AM-FM TUNER ALIGNMENT

STEP	DUMMY ANTENNA	SIGNAL APPLIED TO	FREQ.	MODULATION	BAND-SWITCH SETTING	DIAL POINTER SETTING	INDICATING METER	ADJUST	REMARKS	NOMINAL SENSITIVITY
1	.05 uf	Pin # 1 V3 6BA6	455 Kc/s	400 c.p.s. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "E"	T10 2nd. AM-IF	Adjust for maximum output.	5000 uv for 20 mv output
2	.05 uf	Pin # 7 V8 6BE6	455 Kc/s	400 c.p.s. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "E"	T9 1st. AM-IF	Adjust for maximum output.	350 uv for 20 mv output
3	200 uuf	AM Ant. Term. Strip # 1	600 Kc/s	400 c.p.s. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "E"	T6, T7 and T8	Connect for long wire antenna, adjust for maximum output.	3.5 mv for 20 mv output
4	200 uuf	AM Ant. Term. Strip # 1	1460 Kc/s	400 c.p.s. AM at 30%	AM	1460 Kc/s	AC-VTVM To Point "E"	C1E, C1A and C1C Trimmers	Connect for long wire antenna, adjust for maximum output.	2.5 mv for 20 mv output
5	Repeat steps 3 and 4, check for band coverage at 535 Kc/s - 1650 Kc/s and for tracking at 950 Kc/s.									
6	-	Pin # 1 V4 6AU6	10.7 Mc/s	-	FM	Point of no inter- ference	DC-VTVM To Point "G"	T4 3rd. FM-IF	Adjust for maximum meter deflection.	15000 uv for 1V output
7	-	Pin # 1 V3 6BA6	10.7 Mc/s	-	FM	Point of no inter- ference	DC-VTVM To Point "G"	T3 2nd. FM-IF	Adjust for maximum meter deflection.	250 uv for 1V output
8	-	C1D FM Gang	10.7 Mc/s	-	FM	Point of no inter- ference	DC-VTVM To Point "G"	T2 1st. FM-IF	Adjust for maximum meter deflection.	-
9	-	Pin # 1 V4 6AU6	10.7 Mc/s	-	FM	Point of no inter- ference	DC-VTVM To Pin # 5 of T5	T5 FM Discriminator Primary	Adjust for maximum meter deflection.	10000 uv for 3V output
10	-	Pin # 1 V4 6AU6	10.7 Mc/s	-	FM AFC	Point of no inter- ference	DC-VTVM To Point "C"	T5 FM Discriminator Secondary	Adjust for zero voltage.	-
11	270 ohms	FM-Ant. Term. Strip	90 Mc/s	400 c.p.s. FM 22.5 Kc/s Deviation	FM	90 Mc/s	AC-VTVM To Point "J"	Expand or compress L3 and T1	Adjust for maximum output.	3 uv for 100 mv output
12	270 ohms	FM-Ant. Term. Strip	106 Mc/s	400 c.p.s. FM 22.5 Kc/s Deviation	FM	106 Mc/s	AC-VTVM To Point "J"	C1B and C1D Trimmers	Adjust for maximum output.	2.5 uv for 100 mv output
13	Repeat steps 11 and 12 until output drops at least 20 db. when mod. is turned off.									

NOTE: To achieve more accurate alignment of FM I. F. 's and Discriminator it is preferable to use a proper sweep generator and oscilloscope.



# AM-FM AMPLIFIER



SW 3 FUNCTION SWITCH ON BASS CONTROL

POS.	FUNCTION
1	MONAURAL
2	STEREO
3	REVERSE

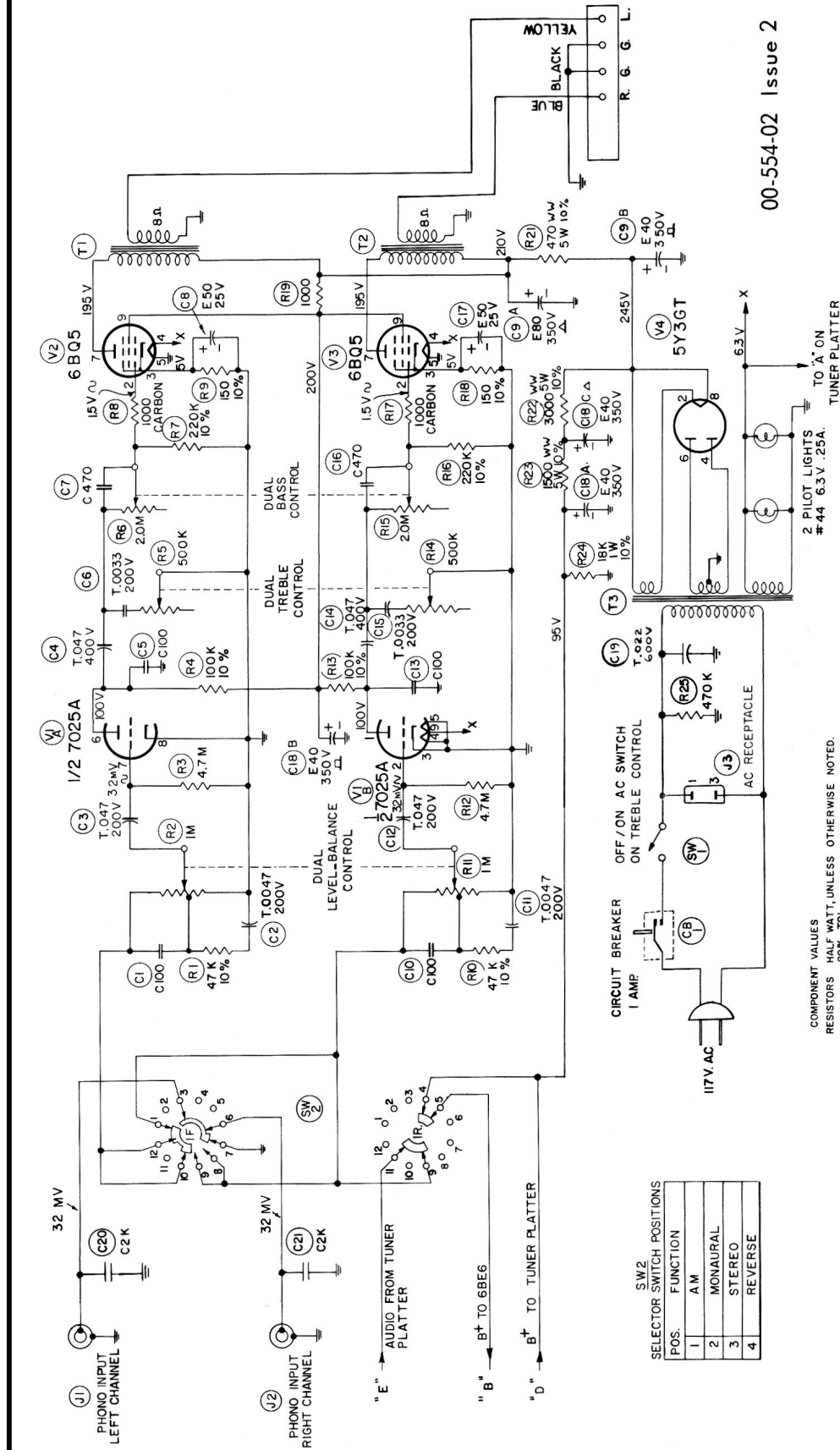
SELECTOR SWITCH

POS.	FUNCTION
1	AM
2	FM
3	FM-AFC
4	FM-X
5	PHONO

COMPONENT VALUES  
 RESISTORS HALF WATT, UNLESS OTHERWISE NOTED  
 20% TOL.  
 K = 1000 OHMS  
 M = 1000,000 OHMS  
 CONDENSERS T = TUBULAR, FOLLOWED BY CAP. IN MFD. AND D.C.W.V.  
 E = ELECTROLYTIC, " " " " " "  
 C = CERAMIC, FOLLOWED BY CAP. IN MFD. AND TOLERANCE IF CRITICAL

00-556-02  
 ISSUE 3

# AM AMPLIFIER



COMPONENT VALUES  
 RESISTORS HALF WATT, UNLESS OTHERWISE NOTED.  
 20% TOL. UNLESS NOTED.  
 K = 1000 OHMS  
 M = 1000,000 OHMS  
 CONDENSERS T = TUBULAR, FOLLOWED BY CAP IN MFD. AND D.C.W.V.  
 E = ELECTROLYTIC, " IN MFD. AND D.C.W.V.  
 C = CERAMIC, FOLLOWED BY CAP IN MMFD AND TOLERANCE IF CRITICAL.

# REPLACEMENT PARTS LIST

## RCS-452, 453, RCS-469

### TUNER PLATTER CHASSIS - AM

Part No.	Description
(T1) 21-410-01	B.C. Antenna Coil
(T3) 21-421-01	B.C. Osc. Coil
(T2) 21-428-01	B.C. Int. Coil
(T4) 21-432-01	AM IF Trans. 1st.
(T5) 21-432-03	AM IF Trans. 2nd.
(C1) 45-41-01	AM Gang Condenser

### TUNER PLATTER CHASSIS - AM-FM

(L7) 21-300-01	Coil - RF Low Pass Filter
21-300-02	R.F. Heater Choke (L5,L6), & Peaking Coil (L1)
(L2) 21-439-02	R.F. Choke 2.2 uh
(T6) 21-410-01	B.C. Ant. Coil
(T5) 21-455-01	Discriminator Trans. - FM
(T8) 21-421-01	B.C. Osc. Coil
(T7) 21-428-01	B.C. Int. Coil
(T9) 21-432-01	AM IF Trans. - 1st.
(T10) 21-432-03	AM IF Trans. - 2nd.
(T2) 21-433-01	FM IF Trans. - 1st.
(T3) 21-433-02	FM IF Trans. - 2nd.
(T4) 21-433-03	FM IF Trans. - 3rd.
(L3) 21-458-01	FM RF Coil
(T1) 21-457-01	FM Osc. Coil
(T1) 21-445-02	FM Feedback Coil
(C1) 45-31-01	AM-FM Gang Condenser
(C1) 45-36-01	FM Trimmer

### AMPLIFIER

(T3) 24-10064-01	Power Trans. - 60 cy AM-FM (RCS-452, RCS-469)
(T3) 24-10043-02	Power Trans. - 60 cy AM (RCS-453)
(T3) 24-20064-01	Power Trans. - 25 cy AM (RCS-453)
(T1,T2) 24-80035-03	Output Trans. - 8 ohm V.C.
(CB1) 26-65-02	Circuit Breaker 1 amp. (1.6 amp. break current)
35-602-01	Pointer Carriage
35-519-01	Drive Shaft
35-520-01	Drive Shaft Bushing
(SW2) 26-73-01	Selector Switch (RCS-452, RCS-469)
(SW2) 26-37-01	Selector Switch (RCS-453)
(R5,R14,SW1) 41-120-06	Control - Dual Treble, Off-ON
(R6,R15) 41-121-05	Control - Dual Bass (RCS-453 only)
(R6,R15,SW3) 41-150-01	Control - Dual Bass and Function Switch
(R2,R11) 41-122-05	Control - Dual Balance Level
(R24) 42-1-09	W.W. Resistor 5600 ohm $\pm$ 10% 5W (RCS-452, RCS-469)
(R21) 42-1-46	W.W. Resistor 470 ohm $\pm$ 10% 5W

(R22) 42-1-59	W.W. Resistor 3000 ohm ± 10% 5W (RCS-453)
(R23) 42-1-27	W.W. Resistor 1500 ohm ± 10% 5W (RCS-453)
(R22,R23) 42-1-61	W.W. Resistor 1200 ohm ± 10% 7W (RCS-452,RCS-469)
(C8,C17) 44-40-04	Electrolytic - Tub. 50 ufd. x 25V
(C9) 44-113-01	Electrolytic - Dual 80,40 ufd. x 350V
(C18) 44-118-01	Electrolytic - Triple 40,40,40 ufd. x 350V
(J1,J2,J3,J4,J5,J6) 34-150-03	Triple Phono Socket (RCS-452,RCS-469)
(J1,J2) 34-150-02	Dual Phono Socket (RCS-453)

## FINAL ASSEMBLY

* 16-90017-01	BSR UA10 Changer with BSR TC8S Cart. 60 cy (RCS-452,RCS-453)
16-90017-02	BSR UA10 Changer with BSR TC8SD Cart. 60 cy (RCS-469)
16-220002-01	Alliance 25 cy Phono Motor & Hub. 25 cy (RCS-452)
16-250013-01	BSR TC8S Replacement Cartridge (RCS-452,RCS-453)
16-250013-02	BSR TC8SD Replacement Cartridge (RCS-469)
16-120036-01	Replacement L.P. Stylus Type BSR - TC8RS (Sapphire)
16-120047-01	45 rpm Insert
16-120017-02	Replacement 78 Stylus Type BSR - TC8G (Sapphire)
16-120036-03	Replacement L.P. Stylus Type BSR - TC8RSD (Diamond)
19-70011-01	6" x 9" P.M. Speaker 8 ohm (RCS-452, RCS-453)
19-30003-02	3½" P.M. Speaker 8 ohm (RCS-469)
19-80006-03	8" P.M. Speaker 8 ohm (RCS-469)
27-1-01	Pilot Lamp 6-8 V No. 44 .25 Amp.
30-158-01	Backing Plate, printed (RCS-452, RCS-469)
30-157-01	Backing Plate, printed (RCS-453)
30-159-02	Control Panel Glass (RCS-452, RCS-469)
30-159-01	Control Panel Glass (RCS-453)
35-459-01	Sliding Pointer - Brass
53-142-01	Viking Ship Medallion
53-490-01	Knob - Tuning
53-489-02	Glass Retaining Strip
53-490-06	Knob Treble & Off-On, Selector (also Bass on RCS-453)
53-490-07	Knob Level - Balance (also Bass on RCS-452, RCS-469)
53-485-04	Switch Knob Level-Balance (also Mon., Stereo, Reverse on RCS-452, RCS-469)

\* NOTE: For 25 cy. changer for model RCS-452 order 16-90017-01 less motor and hub.

## NOTES: