RA-43

RA-43

ZENITH®

SERVICE MANUAL

MODELS "ROYAL D7000 AND ROYAL D7000-1"

"TRANSOCEANIC"®

CHASSIS 500MDR70

SOLID STATE AC/BATTERY PORTABLE

LW/AM/FM/SW/WB RADIO

ZENITH RADIO CORPORATION

1900 N. AUSTIN AVENUE CHICAGO, ILLINOIS 60639

RA43
24M — RR

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To the Service Technician

PRODUCT SAFETY SERVICING GUIDELINES FOR ALL AUDIO AMPLIFIERS AND RADIO RECEIVERS

CAUTION: No modification of the circuit should be attempted. Service work should be performed only after you are thoroughly familiar with all of the following precautions. To do otherwise increases the risk of potential hazards and injury to the user.

SAFETY CHECKS

SUBJECT: Fire & Shock Hazard

1. Be sure that all components are positioned in such a way to avoid possibility of adjacent components shorts. This is especially important on those chassis which are transported to and from the repair shop.

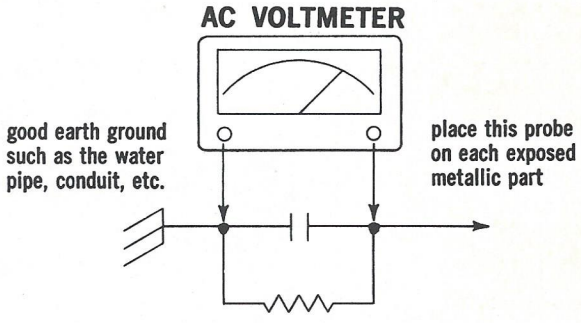
2. Always replace all protective devices such as insulators and barriers after working on a set.

3. Check for frayed insulation on wires including the AC cord.

4. Check across-the-line components for damage and replace if necessary.

5. After re-assembly of the set always perform an AC leakage test on the exposed metallic parts of the cabinet such as the knobs, antenna terminals, etc. to be sure the set is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this test. Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner: Connect a 1500 ohm 10 watt resistor, paralleled by .15 mfd. AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination 1500 ohm resistor and .15 mfd. capacitor. Reverse the AC plug on the set and repeat AC voltage measurements again for each exposed metallic part. Voltage measured must not exceed .3 volts RMS. This corresponds to 0.2 milliamp AC.

Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



SPECIFICATIONS

Power Supply ------ AC ------ 115/230V, 50/60 Hertz
Battery --- 9, Type Z4NL, 1-1/2 V, "D" Cells (1 cell powers dial and chart lights).
Current Drain—No signal condition with volume control at min. Approximately 27 milliamperes

Frequency Ranges -----

Band	Meters			Megahertz		
VHF	1.83	to	1.86	161	to	164
FM	3.4	to	2.8	88	to	108
LW	2000	to	750	.15	to	.4
BC	555	to	188	.54	to	1.6
SW 1	188	to	85	1.6	to	3.5
SW 2	85	to	33	3.5	to	9.0
31	31			9.4	to	10.1
25	25			11.4	to	12.3
19	19			14.6	to	15.8
16	16			17.1	to	18.5
13	13			20.6	to	22.4

Intermediate Frequency --
FM ---------- 10.7 MHz
AM ---------- 455 KHz

Sensitivity (Approx.) ---- Referenced to .05 watt output above noise. All bands measured with tone control at maximum and Normal/Sharp switch in NORMAL, and Manual Gain in NORMAL position.

VHF	(16.0 KHz deviation) 2.0	microvolts
FM	(22.5 KHz deviation) 2.0	microvolts
LW	---------- 75	microvolts/m
BC	---------- 20	microvolts/m
SW1	---------- 3.0	microvolts
SW2	---------- 2.5	microvolts
31	---------- 1.0	microvolts
25	---------- 2.0	microvolts
19	---------- 2.0	microvolts
16	---------- 2.0	microvolts
13	---------- 2.0	microvolts

Antennas — Waverod (in top of cabinet back — all except BC/LW
BC/LW Wavemagnet® (in cabinet) — BC/LW only
External ---------- All except VHF

Power Output @10% THD ---------- 500 milliwatts

Outputs ---- Speaker ------ 4x6 inch 22 ohms at 400 Hertz
Headphone (39-34, optional) 8 ohms at 400 "
Earphone (39-75) 8 ohms at 400 "

CAUTION:

1. When adjustments are made on these chassis, a line isolation transformer (120-V input to 120-V output) is recommended in order to avoid a shock hazard. If an isolation transformer is not available, check the AC voltage between chassis and bench ground; and if there is any indication of line voltage, reverse the plug before handling the set.

2. Do not operate without proper speaker load.

3. Do not short out the audio output when power is connected.

4. If the receiver is not to be operated on batteries for several weeks, the batteries should be removed.

5. Matched transistors are used in the output stage. Should one transistor fail, both transistors must be replaced, since they will not perform properly unless matched.

6. If a power transistor fails be certain to replace the emitter resistors. Also be certain to check the condition of the rectifiers, and related components.

CIRCUIT DESCRIPTION

Model RD7000-1 is basically identical to RD7000 except for the addition of a thermal circuit breaker which will provide protection should the receiver be connected to an incorrect power source, or for any other condition which could possibly damage the power supply. When the circuit breaker "opens", it will cut off all power to the receiver for approximately 15 minutes. After this time it will automatically reset, restoring power to the receiver. If the circuit breaker cuts out again within a few minutes, check the voltage selector switch (See Figure 4, Item 29, in the Operating Guide) to be certain that it is set to the correct voltage position. In the event this fails to correct the condition, contact a qualified service technician.

Separate tuners are used on the FM (88-108 MHz) and the VHF Weather Band (161-164 MHz). The FM tuner consists of a RF amplifier and an Autodyne Converter operating in common base circuits. CR1 is the AFC diode. On the VHF Band the RF and Oscillator stages operate in common base circuits, while the Mixer is a common emitter circuit. The VHF VFO operates 10.7 MHz below the reception frequency. AFC is not applied to the VHF tuner. AGC for both tuners is obtained from the collector of the 2nd IF, via a small value capacitor, to diode CR201, and then to the base of the RF transistor as reverse bias. Two matched diodes located in T208 form part of the Ratio Detector circuit.

On AM the RF stage is common base for LW and BC, but is common emitter for all other bands (SW1 thru 31M). The Oscillator uses a common base circuit, while the Mixer and IF stages are in common emitter circuits. AM AGC is obtained from the AM Detector diode and supplied to the base of the RF transistor. AGC is then taken from the emitter of the RF transistor and fed to the base of the mixer and 1st IF transistors.

Audio circuitry is common to all bands and consists of 1st Audio, Pre-Driver, Driver, and diode biased class "B" push-pull complementary symmetry Output stage consisting of one NPN and one PNP transistor. An output jack, located on the upper part of the cabinet back, connected to the output of the 1st audio stage, permits this unit to be connected to external amplifiers. Gain of the Pre-Driver is increased when on the VHF band to compensate for the lower recovered audio, due to the reduced deviation of VHF Band transmissions.

This set can be operated from either 115 or 230 Volt AC sources. A switch, provided inside the set must be set to the desired voltage. In addition this set can be operated on 9, 1½ Volt "D" Cells (one cell only powers the Dial and Chart Lights, and must be installed if it is desired to use these lights while on AC operation). Automatic switching between AC and Battery operation is achieved by inserting the AC Cable into a socket located on the cabinet back.

TROUBLE SHOOTING AND SIGNAL TRACING

The old technique of "screwdriver testing" is definitely not recommended while trouble shooting any solid state product. In that method various circuit points were touched or shorted to ground to cause a hum or click in the speaker. This must be avoided because a solid state component can be destroyed if excessive voltage or if wrong polarity is applied.

Only standard point to point signal tracing with the proper RF, IF, and Audio Signal Sources should be used.

AM OSCILLATOR BIAS ADJUSTMENT

Stability of the AM Oscillator may be maintained over a wide range of battery supply voltage's. If a variable DC voltage supply is available adjustment may be made as follows:

1. Set Manual Gain Control to maximum clockwise position.
2. Rotate Band Switch to 13 meter position.
3. Connect the positive end of a 4½ volt battery to Test Point 3 while the negative end is connected in series with a volt meter. The other end of the meter is connected to Test Point 6. There should be a meter reading of approximately 0.5 to 1.0 volt.
4. Adjust Bias Control R118 for minimum voltage change on the meter while varying the DC supply between 8 and 12 volts.
5. Return Manual Gain Control to the Normal position.

BATTERY LEVEL METER ADJUSTMENT

This receiver is equipped with a combination Tuning and Battery Level Meter which will indicate the condition of the batteries being used. A meter reading in the blue section indicates good batteries. Under normal conditions no adjustment should be necessary. If the meter has been replaced or other repairs made which affect the meter circuit, adjustment may be made as follows. Use a supply of 9 volts and while holding the "Dial Light/Battery Level" switch in the BATTERY LEVEL position adjust control R507 so that the meter pointer lines up with the left edge of the blue section of the meter.

ALIGNMENT

Alignment wrenches, Zenith part number 68-32, 68-35, and 68-45 may be used for aligning this receiver. Charts for proper alignment are included in this service manual.

CHASSIS REMOVAL INSTRUCTIONS

To remove this chassis it will first be necessary to remove the B.F.O., Manual Gain, Tone, Volume and Tuning Knobs from the front panel. A set screw holds the Band Selector knob in place, and will be visible, from the rear, when in the 19M position. Loosen screw and remove knob. The chassis is mounted by five (5) screws. (See chassis layout drawing for location). Remove the screws and also the bracket secured by the three (3) right hand screws. Disconnect the speaker and chart light leads. The chassis is now free to be removed. *Note* – be certain to replace the bracket and screws when replacing chassis.

DIAL LIGHT REPLACEMENT

The dial light assembly is mounted to the dial scale drum by two screws. Lights may be replaced in the following manner. Remove cabinet back. Rotate Band Selector to BC position. Remove shield by *loosening* right hand screw (long) and remove the left hand screw. Lift shield out noting proper position. The dial drum will now be visible through a rectangular cut out at the top of the chassis. Remove the two screws (one at each end of the dial light assembly). Lift plate. These lights are Part Number 100-218.

Replace shield by inserting end tab in to ¼" hole in end of chassis and the folded tab over chassis. Replace left screw and tighten right hand screw.

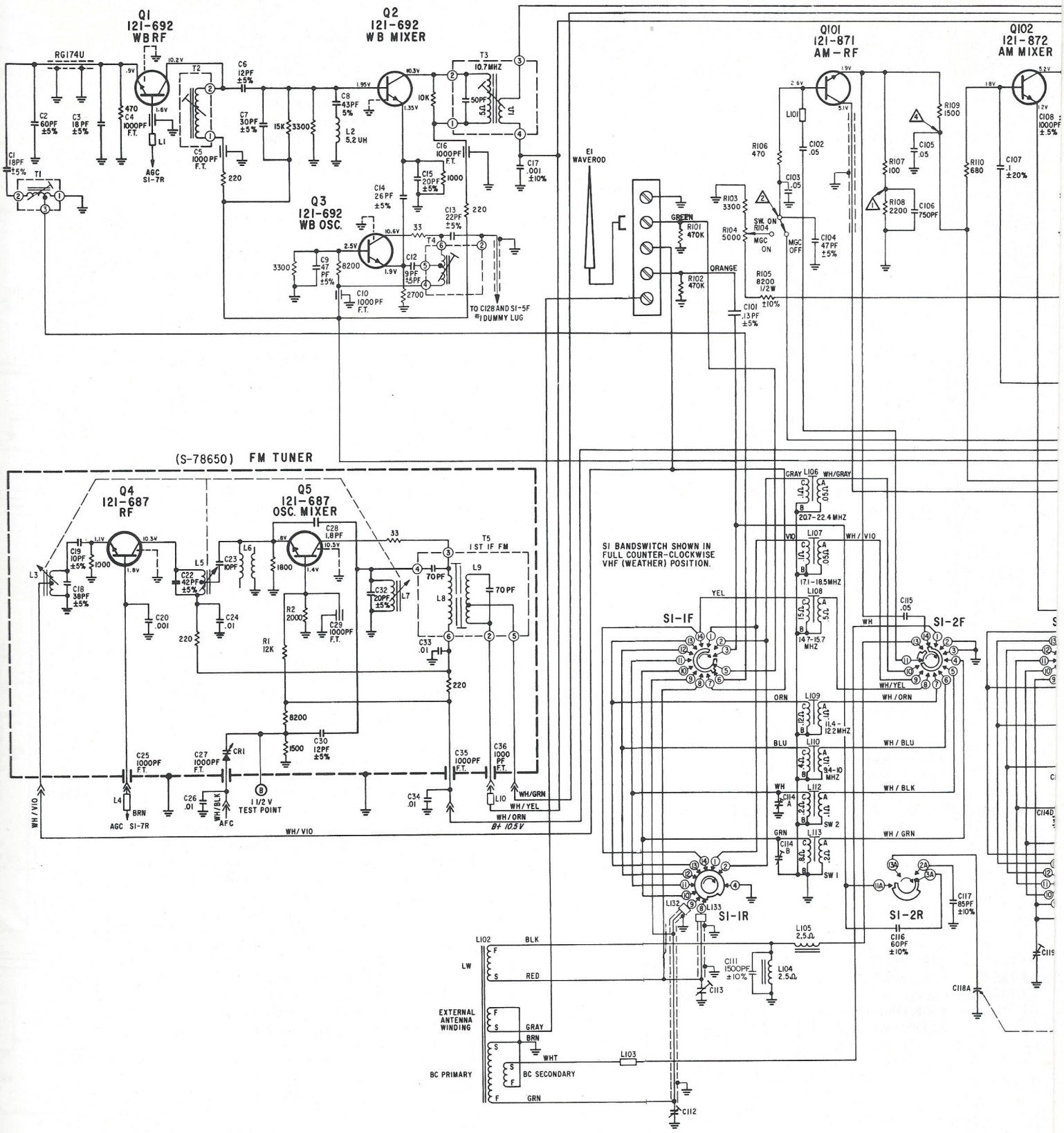
ALIGNMENT PROCEDURE

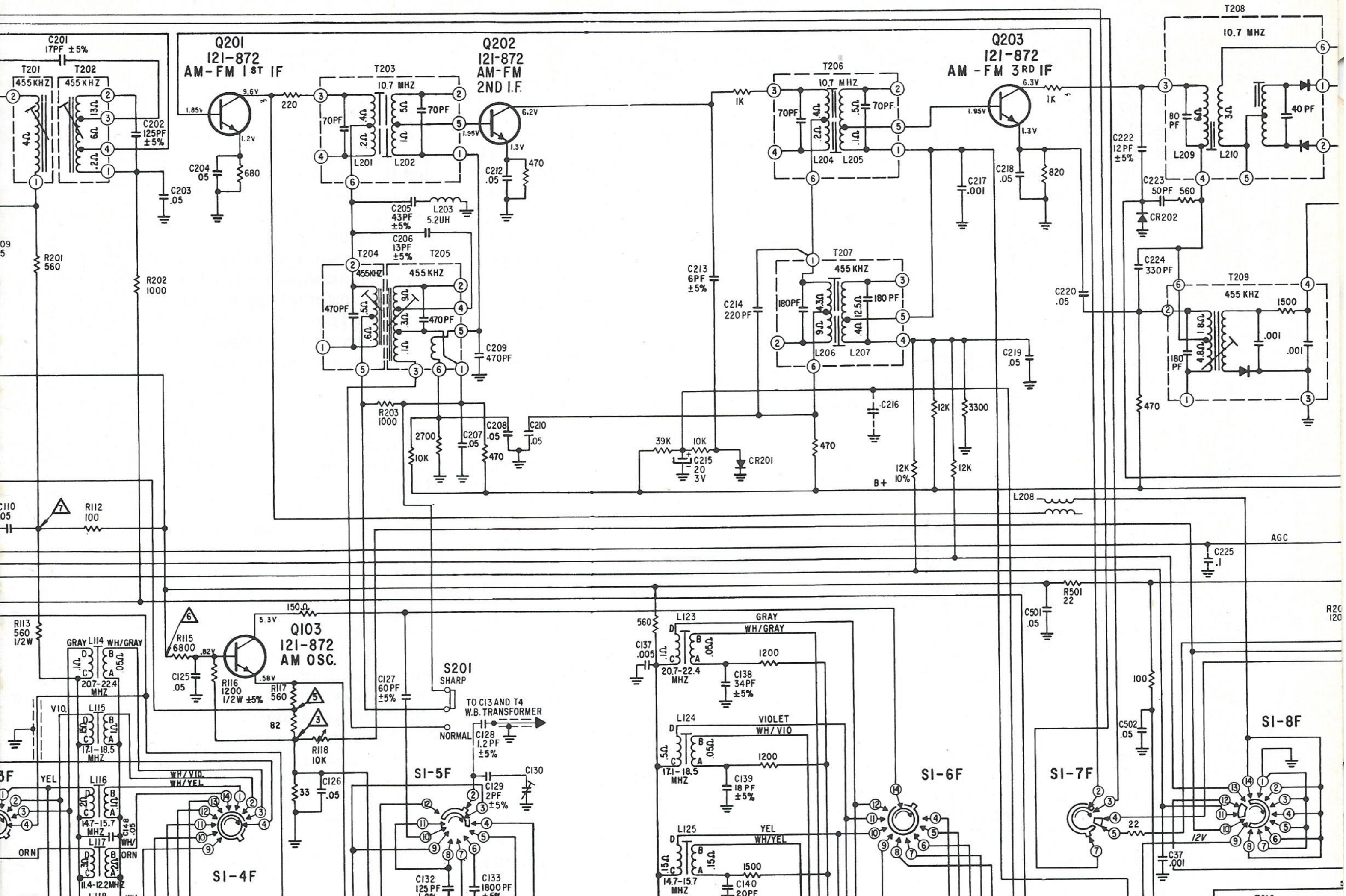
STEP NO.	CONNECT GENERATOR TO	INPUT SIGNAL FREQUENCY	BAND I	DIAL FREQUENCY	ADJUST	PURPOSE
NOTE - Perform A.M. I.F. and B.F.O. alignment with bandwidth switch in sharp position, manual gain control off. Connect meter across speaker voice coil.						
1	Test Point "5"	455 KHz	BC	1600 KHz	T201, T202, T204 T205, T207, T209	Align A.M. I.F. for ma
NOTE - Turn B.F.O. Control ON and set to mid rotation with bandwidth switch in sharp.						
2*	Test Point "5"	455 KHz	BC	1600 KHz	T210	Adjust BFO for zero beat.
NOTE - Place bandwidth switch to normal and turn B.F.O. to off.						
3*	One turn loop loosely coupled to wavemagnet	1620 KHz	BC	1620 KHz Gang Open	C119C	Set B.C. oscillator to scale
4*		600 KHz	BC	600 KHz	C136	
5		Repeat steps 3 and 4 until minimum change				
6*		1420 KHz	BC	1420 KHz	C112, C119A	Align B.C. antenna and mixer for maximum
7*		600 KHz	BC	600 KHz	L122A	
8*		Repeat steps 6 and 7 until minimum change				
9*		405 KHz	LW	405 KHz Gang Open	C119D	Set L.W. Oscillator to scale.
10*		160 KHz	LW	160 KHz	C119E	
11		Repeat steps 9 and 10 until minimum change				
12*		375 KHz	LW	375 KHz	C113, C119B	Align L.W. Antenna and mixer for maximum
13*		160 KHz	LW	160 KHz	L122B	
14		Repeat steps 12 and 13 until minimum change				
NOTE - Align F.M. with A.F.C. switch off.						
15	Test Point "B" (* *)	10.7 MHz modulated	FM	98 MHz	T5, T203, T206, and top of T208	Align F.M. I.F. and Ratio Detector Pri. Connect meter across voice coil and reduce input so output will not be greater than 0.4 volts.
16		10.7 MHz modulated	FM	98 MHz	Bottom of T208	Align FM Ratio Detector Sec. Place meter probe on pin 6 of T208 and adjust bottom of T208 zero after determining that there is a symmetrical swing around this zero point.
17		Repeat steps 15 and 16 until minimum change				
18	FM Antenna Terminals (* *)	98 MHz modulated	FM	98 MHz	L7	Set FM Oscillator to scale-meter across voice coil.
19		98 MHz modulated	FM	98 MHz	L3, L5	Align FM antenna and detector for maximum
20		164 MHz	VHF	164 MHz	T4, T1, T2, T3	Align VHF
21		161 MHz	VHF	161 MHz	C130	Set VHF Oscillator to scale.
22		164 MHz	VHF	164 MHz	T4	
23		Repeat steps 21 and 22 until minimum change				
24		161 MHz	VHF	161 MHz	T2	Adjust T2 for equal output at 161 MHz and 164 MHz.
25		164 MHz	VHF	164 MHz	T2	
26		Repeat steps 24 and 25 until minimum change				
27	3 feet of wire approximately 1 foot from and parallel to Extended Waverod.	3.4 MHz	SW1	3.4 MHz	C114F	Set SW1 Oscillator to scale
28		1.8 MHz	SW1	1.8 MHz	L129	
29		Repeat steps 27 and 28 until minimum change				
30		3.4 MHz	SW1	3.4 MHz	C114B, C114D	Align SW1 Antenna & mixer for maximum
31		1.8 MHz	SW1	1.8 MHz	L120, L113	
32		Repeat steps 30 and 31 until minimum change				
33		8.75 MHz	SW2	8.75 MHz	C114E	Set SW2 Oscillator to scale.
34		3.9 MHz	SW2	3.9 MHz	L128	
35		Repeat steps 33 and 34 until minimum change				
36		8.75 MHz	SW2	8.75 MHz	C114A, C114C	Align SW2 Antenna & mixer for maximum
37		3.9 MHz	SW2	3.9 MHz	L112, L119	
38		Repeat steps 36 and 37 until minimum change				
39		9.7 MHz	31M	9.7 MHz	L110, L118, L127	Align 31M, 25M, 19M, 16M, and 13M Oscillator, Antenna and Mixer.
40		11.8 MHz	25M	11.8 MHz	L109, L117, L126	
41		15.2 MHz	19M	15.2 MHz	L108, L116, L125	
42		17.8 MHz	16M	17.8 MHz	L107, L115, L124	
43		21.6 MHz	13M	21.6 MHz	L106, L114, L123	

* Rock Tuning Capacitor when making adjustment.

** Probe from generator should be isolated through a .05 MFD Capacitor.

*** Probe from generator should be terminated with the proper resistor to match 72 ohm line output impedance.


Q1
121-692
WB RF
Q2
121-692
WB MIXER
Q3
121-692
WB OSC.
Q101
121-871
AM-RF
Q102
121-872
AM MIXER
RG174U
T1
T2
T3
10.7MHZ
T4
T5
1ST IF FM
E1
WAVEROD
GREEN
ORANGE
SW. ON
MGC
ON
MGC
OFF
AGC
SI-7R
TO C128 AND SI-5F
#1 DUMMY LUG
(S-78650) FM TUNER
Q4
121-687
RF
Q5
121-687
OSC. MIXER
SI BANDSWITCH SHOWN IN
FULL COUNTER-CLOCKWISE
VHF (WEATHER) POSITION.
SI-1F
SI-2F
SI-1R
SI-2R
207-22.4 MHZ
17.1-18.5MHZ
14.7-15.7
MHZ
11.4-
12.2MHZ
9.4-10
MHZ
SW 2
SW 1
1 1/2 V
TEST POINT
AFC
B+ 10.5V
LW
EXTERNAL
ANTENNA
WINDING
BC PRIMARY
BC SECONDARY

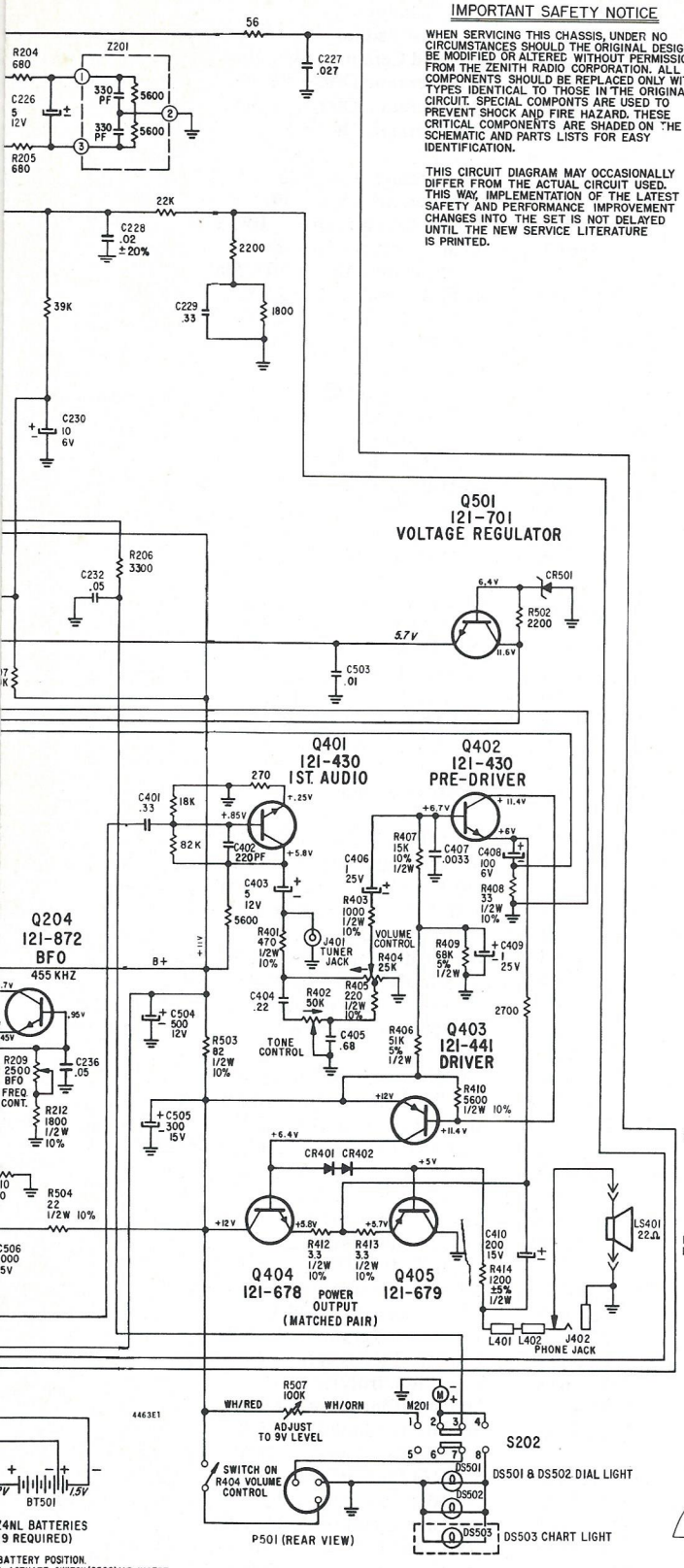

Q201
121-872
AM-FM 1ST IF
Q202
121-872
AM-FM
2ND I.F.
Q203
121-872
AM - FM 3RD IF
Q103
121-872
AM OSC.
T201
455KHZ
T202
455KHZ
T203
10.7 MHZ
T204
455KHZ
T205
455KHZ
T206
10.7 MHZ
T207
455KHZ
T208
10.7 MHZ
T209
455KHZ
T210
C201
17PF ±5%
C202
125PF
±5%
C203
.05
C204
.05
C205
43PF
±5%
L203
5.2UH
C206
13PF
±5%
C209
470PF
C212
.05
C213
6PF
±5%
C214
220PF
C215
20
3V
CR201
CR202
C217
.001
C218
.05
C219
.05
C220
.05
C222
12PF
±5%
C223
50PF
C224
330PF
C225
.1
AGC
L208
R201
560
R202
1000
R203
1000
B+
S201
SHARP
NORMAL
TO C13 AND T4
W.B. TRANSFORMER
C128
1.2PF
±5%
C129
2PF
±5%
C130
C132
125PF
±2%
C133
1800PF
±5%
C134
30PF
5%
C135
3900PF
±5%
C136
C114E
C114F
R113
560
1/2W
R115
6800
R116
1200
1/2W ±5%
R117
560
R118
10K
C125
.05
C126
.05
C127
60PF
±5%
C110
.05
R112
100
S1-4F
S1-4R
S1-5F
SW1-5R
S1-6F
S1-6R
S1-7F
S1-7R
S1-8F
S1-8R
L114
20.7-22.4
MHZ
L115
17.1-18.5
MHZ
L116
14.7-15.7
MHZ
L117
11.4-12.2MHZ
L118
9.4-10MHZ
L119
SW2
L120
SW1
L122A
BC
L122B
LW
C119A
C120
.05
R114
1800
C122
.05
C123
25PF
±10%
C124
50PF
±10%
C118B
C118C
L123
C137
.005
C138
34PF
±5%
L124
C139
18PF
±5%
L125
C140
20PF
±5%
L126
C142
4PF
±.25PF
L127
C143
12PF
±5%
L128
C145
.05
SW-2
L129
SW-1
C144
.001
C147
.05
L130A
L130B
L.W.
C146
.0022
±10%
C119C
C119E
C119D
C501
.05
R501
22
C502
.05
C37
.001
12V
C233
330PF
10%
R208
680
C234
.05
C235
.001
L212
SWITCH ON R209
BFO CONTROL
FM
AGC
WB
AGC
6800
AFC
ON
OFF
S2
F.M. TUNER
A.F.C
R3
470K
J502
(FRONT VIEW)
NOTE
THERMAL CIRCUIT-
BREAKER USED ON
MODEL RD-7000Y-1
ONLY
A.C. SUPPLY
S-503
P502
A.C. INPUT
115-230
V.A.C.
S501
115V.A.C.
230VAC
BRN
GRAY
BRN/GRAY
BLK
RED/BLK
T501
RED
RED/YEL
CR502
CR503
C507
.01
C508
.01
C509
500
20V
R505
3.3 MEG
1/2W 10%
R506
15Ω
1/2W 10%
A.C.POS.
BATTERY
POS.
S502
SWITCH SHOWN IN
FOR A.C. OPERATIO
EXTERNAL LINE

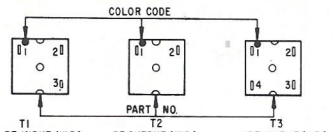
SCHEMATIC

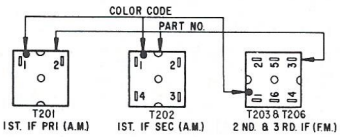
IMPORTANT SAFETY NOTICE

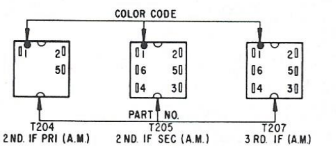
WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE ZENITH RADIO CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT. SPECIAL COMPONTS ARE USED TO PREVENT SHOCK AND FIRE HAZARD. THESE CRITICAL COMPONENTS ARE SHADED ON THE SCHEMATIC AND PARTS LISTS FOR EASY IDENTIFICATION.

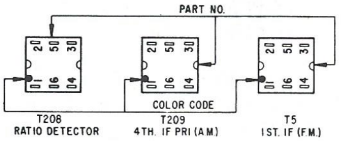
THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

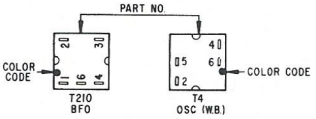


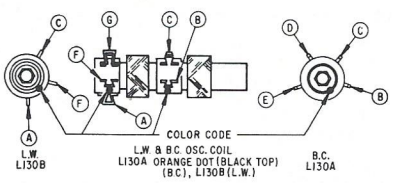


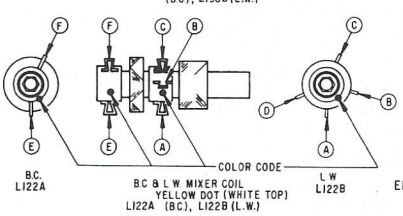


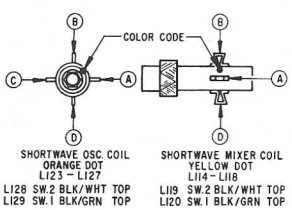


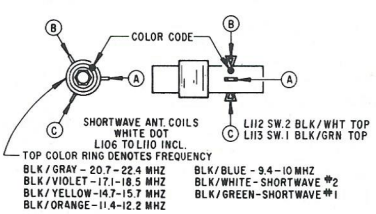


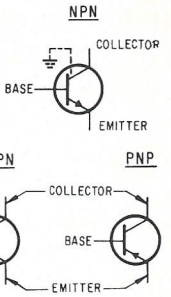




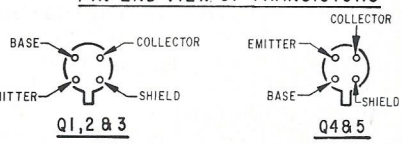


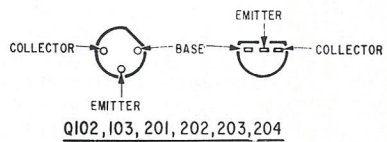


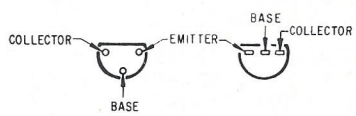


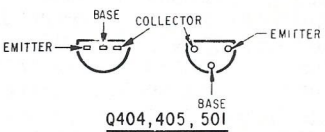


PIN END VIEW OF TRANSISTORS









NOTES:

1. ALL RESISTORS ±5% TOLERANCE, 1/4 WATT, CARBON UNLESS OTHERWISE SPECIFIED.
2. RESISTANCE VALUES IN OHMS, CAPACITANCE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
3. ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.
4. D.C. VOLTAGES SHOWN ARE MEASURED WITH NO SIGNAL USING A VACUUM TUBE VOLTMETER.
5. ⚠ NUMBERS IN TRIANGLES INDICATE VOLTAGE TEST POINTS. REFER TO NUMBERS IN TRIANGLES ON 123-4464 TRANSISTOR AND TRIMMER LAYOUT.
6. NO SIGNAL CURRENT DRAIN IS 25 MA.
7. USE ONLY ZENITH NON-INDUCTIVE ELECTROLYTIC CONDENSERS FOR REPLACEMENT. IF ANY OTHER TYPE OF ELECTROLYTIC IS USED, IT WILL BE NECESSARY TO ADD C216 AND C225, SHOWN IN DOTTED LINES.
   DENOTES CHASSIS ⏚
8. THE OUTPUT TRANSISTOR MATCHING IDENTIFICATION WILL BE BY COLOR. A MATCHED PAIR MUST CONSIST OF ONE 121-678 AND ONE 121-679 WITH THE SAME (BETA) COLOR CODE.

CHASSIS 500MDR70

ITEM NO.	PART NO.	DESCRIPTION
C1	22-5432	18 Pf Ceramic Cisc ± 5% 500 V
C2	22-2595	60 Pf Ceramic Disc ± 5% 500 V
C3	22-5432	18 Pf Ceramic Disc ± 5% 500 V
C4	22-4728	1000 Pf F.T. 500 V
C5	22-4728	1000 Pf F.T. 500 V
C6	22-2379	12 Pf Ceramic Disc ± 5% 500 V
C7	22-5092	30 Pf Ceramic Disc ± 5% 500 V
C8	22-5586	43 Pf Ceramic Disc ± 5% 500 V
C9	22-2467	47 Pf Ceramic Disc ± 5% 500 V
C10	22-4728	1000 Pf F.T. 500 V
C11		
C12	22-2514	9 Pf Ceramic Disc ± .5 Pf 500 V
C13	22-3919	22 Pf Ceramic Disc ± 5% 500 V
C14	22-3939	26 Pf Ceramic Disc ± 5% 500 V
C15	22-3751	20 Pf Ceramic Disc ± 5% 500 V
C16	22-4728	1000 Pf F.T. 500 V
C17	22-3748	.001 Mfd Ceramic Disc ± 10% 1000 V
C18	22-5319	38 Pf Ceramic Disc ± 5% 500 V
C19	22-2731	10 Pf Ceramic Disc ± .5 Pf 500 V
C20	22-2729	.001 Mfd Ceramic Disc 25 V
C21		
C22	22-5320	42 Pf Ceramic Disc ± 5% 500 V
C23	22-3066	10 Pf Tubular Gimmick 500 V
C24	22-3393	.01 Mfd Ceramic Disc 25 V
C25	22-4613	1000 Pf F.T. 500 V
C26	22-3393	.01 Mfd Ceramic Disc 25 V
C27	22-4613	1000 Pf F.T. 500 V
C28	22-3309	1.8 Pf Tubular Gimmick 500 V
C29	22-4613	1000 Pf F.T. 500 V
C30	22-2379	12 Pf Ceramic Disc ± 5% 500 V
C31		
C32	22-3849	20 Pf Ceramic Disc ± 5% 500 V
C33	22-3393	.01 Mfd Ceramic Disc 25 V
C34	22-3393	.01 Mfd Ceramic Disc 25 V
C35	22-4613	1000 Pf F.T. 500 V
C36	22-4613	1000 Pf F.T. 500 V
C37	22-2729	.001 Mfd Ceramic Disc 25 V
C101	22-2898	13 Pf Ceramic Disc ± 5% 500 V
C102	22-3689	.05 Mfd Ceramic Disc 25 V
C103	22-3689	.05 Mfd Ceramic Disc 25 V
C104	22-2467	47 Pf Ceramic Disc ± 5% 500 V
C105	22-3689	.05 Mfd Ceramic Disc 25 V
C106	22-5585	750 Pf Ceramic Disc ± 10% 500 V
C107	22-3955	.1 Mfd Mylar Tubular ± 20% 50 V
C108	22-3749	1000 Pf Mica ± 100 V
C109	22-3689	.05 Mfd Ceramic Disc 25 V
C110	22-3689	.05 Mfd Ceramic Disc 25 V
C111	22-5459	1500 Pf Ceramic Disc ± 10% 500 V
C112	22-6045	B.C. Antenna Trimmer (Fixed)
C113	22-6017	L.W. Antenna Trimmer (Fixed)
C114A	22-5705	S.W. 2 Antenna Trimmer
C114B		S.W. 1 Antenna Trimmer
C114C		S.W. 2 Mixer Trimmer
C114D		S.W. 1 Mixer Trimmer
C114E		S.W. 2 Oscillator Trimmer
C114F		S.W. 1 Oscillator Trimmer
C115	22-3689	.05 Mfd Ceramic Disc 25 V
C116	22-5588	60 Pf Ceramic Disc ± 10% 500 V
C117	22-5589	85 Pf Ceramic Disc ± 10% 500 V
C118A	22-6874	Antenna Tuning
C118B		Mixer Tuning
C118C		Oscillator Tuning
C119A	22-5861	B.C. Mixer Trimmer
C119B		L.W. Mixer Trimmer
C119C		B.C. Oscillator Trimmer
C119D		L.W. Oscillator Trimmer
C119E		L.W. Oscillator Padder
C120	22-3689	.05 Mfd Ceramic Disc 25 V
C121		
C122	22-3689	.05 Mfd Ceramic Disc 25 V
C123	22-2371	25 Pf Ceramic Disc ± 10% 500 V
C124	22-5590	50 Pf Ceramic Disc ± 10% 500 V
C125	22-3689	.05 Mfd Ceramic Disc 25 V
C126	22-3689	.05 Mfd Ceramic Disc 25 V
C127	22-2979	60 Pf Ceramic Tubular ± 5% 500 V
C128	22-5164	1.2 Pf Molded Gimmick Cap. ± 5% 500 V
C129	22-2461	2 Pf Molded Gimmick Cap. ± 5% 500 V
C130	22-5348	Ceramic Trimmer Capacitor 500 V
C132	22-5276	125 Pf Ceramic Tubular ± 2% 500 V
C133	22-6335	1800 Pf Polystyrene Cap. ± 5% 30 V
C134	22-5092	30 Pf Ceramic Disc ± 5% 500 V
C135	22-6337	3900 Pf Polystyrene Cap. ± 5% 30 V
C136	22-3902	Broadcast Padder
C137	22-5037	.005 Mfd Ceramic Disc 25 V
C138	22-5318	34 Pf Ceramic Disc ± 5% 500 V
C139	22-5432	18 Pf Ceramic Disc ± 5% 500 V
C140	22-3849	20 Pf Ceramic Disc ± 5% 500 V
C141		
C142	22-5128	4 Pf Ceramic Disc ± .25 Pf 500 V
C143	22-2379	12 Pf Ceramic Disc ± 5% 500 V
C144	22-3748	1000 Pf Ceramic Disc ± 10% 1000 V
C145	22-3689	.05 Mfd Ceramic Disc 25 V
C146	22-18	.0022 Ceramic Disc ± 10% 500 V
C147	22-3689	.05 Mfd Ceramic Disc 25 V
C148	22-3689	.05 Mfd Ceramic Disc 25 V
C201	22-2594	17 Pf Ceramic Disc ± 5% 500 V
C202	22-3538	125 Pf Mica ± 5% 100 V
C203	22-3689	.05 Mfd Ceramic Disc 25 V
C204	22-3689	.05 Mfd Ceramic Disc 25 V
C205	22-5586	43 Pf Ceramic Disc ± 5% 500 V
C206	22-2898	13 Pf Ceramic Disc ± 5% 500 V
C207	22-3689	.05 Mfd Ceramic Disc 25V
C208	22-3689	.05 Mfd Ceramic Disc 25 V
C209	22-5761	470 Pf Ceramic Disc ± 10% 1000 V
C210	22-3689	.05 Mfd Ceramic Disc 25 V
C211		
C212	22-3689	.05 Mfd Ceramic Disc 25 V
C213	22-5819	6 Pf Ceramic Disc ± 5% 500 V
C214	22-2703	220 Pf Ceramic Disc ± 10% 1000 V
C215	22-3753	20 Mfd Electrolytic 3 V
C216	22-3955	.1 Mfd Mylar Tubular ± 10% 50 V
C217	22-2729	.001 Mfd Ceramic Disc 25 V
C218	22-3689	.05 Mfd Ceramic Disc 25 V
C219	22-3689	.05 Mfd Ceramic Disc 25 V
C220	22-3689	.05 Mfd Ceramic Disc 25 V
C221		
C222	22-2379	12 Pf Ceramic Disc ± 5% 500 V
C223	22-2654	50 Pf Ceramic Disc ± 5% 500 V
C224	22-3255	330 Pf Ceramic Disc ±10% 500 V
C225	22-3955	.1 Mfd Mylar Tubular ± 10% 50 V
C226	22-2884	5 Mfd Electrolytic 12 V
C227	22-5652	.027 Mfd Mylar Tubular ± 10% 50 V
C228	22-5989	.02 Mfd Ceramic Disc ± 20% 25 V
C229	22-5596	.33 Mfd Mylar Tubular ± 20% 50 V
C230	22-3256	10 Mfd Electrolytic 6 V
C231		
C232	22-3689	.05 Mfd Ceramic Disc 25 V
C233	22-3255	330 Pf Ceramic Disc ± 10% 500 V
C234	22-3689	.05 Mfd Ceramic Disc 25 V
C235	22-3748	.001 Mfd Ceramic Disc ± 10% 1000 V
C236	22-3689	.05 Mfd Ceramic Disc 25 V
C401	22-5596	.33 Mfd Mylar Tubular ± 20% 50 V
C402	22-2703	220 Pf Ceramic Disc ± 10% 500 V
C403	22-2884	5 Mfd Electrolytic 12 V
C404	22-5583	.22 Mfd Mylar Tubular ± 20% 50 V
C405	22-5709	.68 Mfd Ceramic Disc ± 30% 3 V
C406	22-3615	1 Mfd Electrolytic 25 V
C407	22-13	.0033 Mfd Ceramic Disc 500 V
C408	22-5413	100 Mfd Electrolytic 6 V
C409	22-3615	1 Mfd Electrolytic 25 V
C410	22-4571	200 Mfd Electrolytic 15 V
C501	22-3689	.05 Mfd Ceramic Disc 25 V
C502	22-3689	.05 Mfd Ceramic Disc 25 V
C503	22-3393	.01 Mfd Ceramic Disc 25 V
C504	22-2985	500 Mfd Electrolytic 12 V
C505	22-5192	300 Mfd Electrolytic 15 V
C506	22-4573	1000 Mfd Tubular Electrolytic 15 V
C507	22-4617	.01 Mfd Ceramic Disc 500 V
C508	22-4617	.01 Mfd Ceramic Disc 500 V
C509	22-6316	500 Mfd Electrolytic 20 V
R1	63-9921-98	12K ± 5% 1/4 W
R2	63-9921-79	2000 ± 5% 1/4 W
R3	63-9922-36	470 K ± 5% 1/4 W
R101	63-9922-36	470K ± 5% 1/4 W
R102	63-9922-36	470K ± 5% 1/4 W
R103	63-9921-84	3300 ± 5% 1/4 W
R104	63-7530	5KΩ Manual Gain Control & Switch
R105	63-1824	8200 ± 10% 1/2 W

*Denotes Parts Not Previously Used.

ITEM NO.	PART NO.	DESCRIPTION
R106	63-9921-64	470 ± 5% 1/4 W
R107	63-9921-48	100 ± 5% 1/4 W
R108	63-9921-80	2200 ± 5% 1/4 W
R109	63-9921-76	1500 ± 5% 1/4 W
R110	63-9921-68	680 ± 5% 1/4 W
R111		
R112	63-9921-48	100 ± 5% 1/4 W
R113	63-9921-66	560 ± 5% 1/4 W
R114	63-9921-78	1800 ± 5% 1/4 W
R115	63-9921-92	6800 ± 5% 1/4 W
R116	63-1788	1200 ± 5% 1/2 W
R117	63-9921-66	560 ± 5% 1/4 W
R118	63-7126	Oscillator Bias Control 10KΩ
R201	63-9921-66	560 ± 5% 1/4 W
R202	63-9921-72	1000 ± 5% 1/4 W
R203	63-9921-72	1000 ± 5% 1/4 W
R204	63-9921-68	680 ± 5% 1/4 W
R205	63-9921-68	680 ± 5% 1/4 W
R206	63-9921-84	3300 ± 5% 1/4 W
R207	63-9922-22	120K ± 5% 1/4 W
R208	63-9921-68	680 ± 5% 1/4 W
R209	63-7528	B.F.O. Control and Switch 2500Ω
R210	63-9921-62	390 ± 5% 1/4 W
R211		
R212	63-1796	1800 ± 10% 1/2 W
R401	63-1771	470 ± 10% 1/2 W
R402	63-7529	50K Tone Control
R403	63-1785	1000 ± 10% 1/2 W
R404	63-7135	25K Volume Control & Switch
R405	63-1757	220 ± 10% 1/2 W
R406	63-1857	51K ± 5% 1/2 W
R407	63-1834	15K ± 10% 1/2W
R408	63-1722	33 ± 10% 1/2 W
R409	63-1861	68K ± 5% 1/2 W
R410	63-1817	5600 ± 10% 1/2 W
R411		
R412	63-4522	3.3 ± 10% 1/2 W
R413	63-4522	3.3 ± 10% 1/2 W
R414	63-1788	1200 ± 5% 1/2 W
R501	63-9921-32	22 ± 5% 1/4 W
R502	63-9921-80	2200 ± 5% 1/4 W
R503	63-1740	82 ± 10% 1/2 W
R504	63-1715	22 ± 10% 1/2 W
R505	63-1932	3.3 Meg ± 10% 1/2 W
R506	63-1708	15 ± 10% 1/2 W
R507	63-7125	Meter Adjustment Control 100K Ohm
L1	149-311	Iron Core Sleeve
L2	S-23757	5.2 UH Choke Coil
L3	S58095	Antenna Coil Assembly
L4	149-311	Iron Core Sleeve
L5	S58095	Det. Coil Assembly
L6	20-1256	10.7 MHz Trap Coil
L7	S58095	Osc. Coil Assembly
L8	IN T5	1st IF Transformer Pri. F.M.
L9	IN T5	1st IF Transformer Sec. F.M.
L10	149-311	Iron Core Sleeve
L101	149-311	Iron Core Sleeve
L102	S-85229	Wavemagnet Winding Assembly (Fixed)
L103	149-311	Iron Core Sleeve
L104	S-45000	Series Antenna Coupling Coil Assembly
L105	S-45000	Series Antenna Coupling Coil Assembly
L106	S-78083	13M Antenna Coil (20.7-22.4 MHz)
L107	S-78082	16M Antenna Coil (17.1-18.5 MHz)
L108	S-78081	19M Antenna Coil (14.7-15.7 MHz)
L109	S78080	25M Antenna Coil (11.4-12.2 MHz)
L110	S-78079	31 M Antenna Coil (9.4-10 MHz)
L111		
L112	S-78078	S.W. 2 Antenna Coil
L113	S-78077	S.W. 1 Antenna Coil
L114	S-78097	13M Mixer Coil (20.7-22.4 MHz)
L115	S-78096	16M Mixer Coil (17.1-18.5 MHz)
L116	S-78095	19M Mixer Coil (14.7-15.7 MHz)
L117	S-78094	25M Mixer Coil (11.4-12.2 MHz)
L118	S-78093	31M Mixer Coil (9.4-10 MHz)
L119	S-78092	S.W. 2 Mixer Coil
L120	S-78091	S.W. 1 Mixer Coil
L121		
L122A, L122B	S-83512	B.C. Mixer Coil; L.W. Mixer Coil
L123	S-78090	13M Oscillator Coil (20.7-22.4 MHz)

*Denotes Parts Not Previously Used.

ITEM NO.	PART NO.	DESCRIPTION
L124	S-78089	16M Oscillator Coil (17.2-18.5 MHz)
L125	S-78088	19M Oscillator Coil (14.7-15.7 MHz)
L126	S-78087	25M Oscillator Coil (11.4-12.2 MHz)
L127	S-78086	31M Oscillator Coil (9.4-10 MHz)
L128	S-78085	S.W. 2 Oscillator Coil
L129	S-78084	S.W. 1 Oscillator Coil
L130A, L130B	S-78076	B.C. Oscillator Coil; L.W. Oscillator Coil
L132	149-311	Iron Core Sleeve
L133	149-311	Iron Core Sleeve
L201	IN T203 TOP	2nd IF Transformer Pri 10.7 MHz
L202	IN T203 BOT	2nd IF Transformer Sec 10.7 MHz
L203	S-23757	5.2 UH Choke Coil
L204	IN T206 TOP	3rd IF Transformer Pri 10.7 MHz
L205	IN T206 BOT	3rd IF Transformer Sec 10.7 MHz
L206	IN T207 TOP	3rd IF Transformer Pri 455 KHz
L207	IN T207 BOT	3rd IF Transformer Sec 455 KHz
L208	20-1256	10.7 MHz Trap Coil
L209	IN T208 BOT	Ratio Detector Transformer Pri 10.7 MHz
L210	IN T208 TOP	Ratio Detector Transformer Sec 10.7 MHz
L211		
L212	149-333	Iron Core Sleeve
L401	149-333	Iron Core Sleeve
L402	149-333	Iron Core Sleeve
T1	95-2985	RF Input Transformer (W.B.)
T2	95-2613	RF Output Transformer (W.B.)
T3	95-2611	10.7 MHz I.F. Transformer (W.B.)
T4	95-2986	Oscillator Transformer (W.B.)
T5	95-2609	1st IF Transformer (FM)
T201	95-2002	1st IF Primary Transformer (AM)
T202	95-2003	1st IF Secondary Transformer (AM)
T203	95-2610	2nd IF Transformer (FM)
T204	95-2604	2nd IF Primary Transformer (AM)
T205	95-2605	2nd IF Secondary Transformer (AM)
T206	95-2610	3rd IF Transformer (FM)
T207	95-2606	3rd IF Transformer (AM)
T208	95-2608	Ratio Detector Transformer (FM)
T209	95-2607	4th IF Primary Transformer (AM)
T210	95-2634	B.F.O. Transformer
T501	95-2671	Power Transformer
CRI	103-39	AFC Diode
CR201	103-44	Crystal Diode
CR202	103-31	Crystal Diode
CR401	103-141	Audio Diode
CR402	103-141	Audio Diode
CR501	103-140	Zener
CR502	212-76	Silicon Rectifier
CR503	212-76	Silicon Rectifier
S1	85-1208	Bandswitch
S2	85-1013	Sideswitch S.P.D.T. A.F.C. (White)
S201	85-1014	Sideswitch S.P.D.T. Bandwidth (Blue)
S202	85-1015	Sideswitch (Momentary Contact) (Black)
S501	85-818	Sideswitch D.P.D.T. 230-115V.A.C.
S502	85-1043	Sideswitch S.P.S.T.
S503	85-1393	Circuit Breaker, Thermal, Self-setting (Used on RD-7000Y-1 Only)
DS501	100-218	Dial Light Lamp
DS502	100-218	Dial Light Lamp
DS503	100-218	Chart Lamp
P401	58-214	Tuner Plug (On Cabinet Back)
P501	58-235	Three Pin Power Supply Connector
P502	58-316	AC-Input Plug
J401	78-644	Tuner Output Jack
J402	44-34	Headphone Jack
J403	44-84	Tuner Jack
J501	78-1101	Battery Socket
BT501	Z4NL	1½V Battery (9 Required)
LS401	49-1143	4" x 6" P.M. Speaker
M201	122-38	Meter (Tuning and Battery Level)
Z201	105-96	Integnet
E1	1-19	Waverod

CHASSIS 500MDR70

PART NO.	DESCRIPTION
12-4850	Meter Mtg. Bracket
20-1256	10.7 MHz Trap Coil
22-13	.0033 MF Disc Capacitor – 500V.

PART NO.	DESCRIPTION
22-2379	12 PF Disc Capacitor – 500V. (3 Req.)
22-2467	47 PF Ceramic Disc Capacitor – 500V. (2 Req.)
22-2594	17 PF Ceramic Disc Capacitor – 500V.
22-2595	60 PF Disc Capacitor – 500V.
22-2654	50 PF Disc Capacitor – 500V.
22-2703	220 PF Disc Capacitor – 500V. (2 Req.)
22-2729	.001 MF Disc Capacitor – 25V.
22-2884	5 MF Electrolytic Capacitor – 12V. (2 Req.)
22-2898	13 PF Disc Capacitor – 500V.
22-2985	500 PF Electrolytic Capacitor – 12V.
22-3255	330 PF Disc Capacitor – 500V. (2 Req.)
22-3256	10 MF Electrolytic Capacitor – 6V.
22-3393	.01 MF Disc Capacitor – 25V.
22-3615	1 MF Electrolytic Capacitor – 25V. (2 Req.)
22-3689	.05 MF Disc Capacitor – 25V. (12 Req.)
22-3748	.001 Disc Capacitor – 1000V. (2 Req.)
22-3753	20 MF Electrolytic Capacitor – 3V.
22-3939	26 PF Disc Capacitor – 500V.
22-4571	200 MF Electrolytic Capacitor – 15V.
22-4573	1000 MF Electrolytic Capacitor – 15V.
22-4728	1000 PF Feed-Thru Capacitor – 500V. (4 Req.)
22-5092	30 PF Capacitor – 500V.
22-5192	300 MF Electrolytic Capacitor – 15V.
22-5413	100 MF Electrolytic Capacitor – 6V.
22-5432	18 PF Disc Capacitor – 500V. (3 Req.)
22-5583	.22 MF Capacitor – 50V.
*22-5586	43 PF Disc Capacitor – 500V. (2 Req.)
22-5596	.33 MF Capacitor – 50V. (2 Req.)
22-5652	.027 MF Tubular Capacitor – 50V.
22-5658	150 PF Disc Capacitor 10% – 1000V.
*22-5709	.68 MF Disc Capacitor – 3V.
22-5761	470 PF Disc Capacitor – 1KV.
22-5819	6 PF Ceramic Disc Capacitor – 500V. (2 Req.)
22-5989	.02 MF Disc Capacitor – 16V.
*34-552	Drive Gear
*34-662	Gear
44-34	Headphone Jack
*52-1458	Shielded Lead
54-139	3/8-32 x 9/16 Hex Palnut – Cadmium (1 Used On Ea. 63-7135, 63-7528, 63-7529, 63-7530)
54-560	1/4-32 x 3/8 Palnut (Mts. 44-34)
54-633	Socket Retaining Nut (3 Used On 78-1685 Or 78-1844)
58-235	3 Prong Plug (Power Supply Connector)
*59-904	Dial Pointer
61-222	Idler Pulley (Pt. Of S-78717)
63-1715	22 Ohm Resistor – 1/2 W. 10% (2 Req.)
63-1722	33 Ohm Resistor – 1/2 W. 10%
63-1740	82 Ohm Resistor – 1/2 W. 10%
63-1757	220 Ohm Resistor – 1/2 W. 10%
63-1768	390 Ohm Resistor – 1/2 W. 10%
63-1771	470 Ohm Resistor – 1/2 W. 10%
63-1778	680 Ohm Resistor – 1/2 W. 10% (3 Req.)
63-1785	1000 Ohm Resistor – 1/2 W. 10% (2 Req.)
63-1788	1200 Ohm Resistor – 1/2 W. 5%
63-1796	1800 Ohm Resistor – 1/2 W. 10%
63-1806	3300 Ohm Resistor – 1/2 W. 10% (2 Req.)
63-1817	5600 Ohm Resistor – 1/2 W. 10%
63-1824	8200 Ohm Resistor – 1/2 W. 10%
63-1834	15K Ohm Resistor – 1/2 W. 10%
63-1857	51K Ohm Resistor – 1/2 W. 5%
63-1861	68000 Ohm Resistor – 1/2 W. 5%
63-1897	470K Ohm Resistor – 1/2 W. 10%
63-4122	33 Ohm Resistor – 1/4 W. 10%
63-4133	56 Ohm Resistor – 1/4 W. 10%
63-4143	100 Ohm Resistor – 1/4 W. 10%
63-4147	120 Ohm Resistor – 1/4 W. 10%
63-4157	220 Ohm Resistor – 1/4 W. 10% (3 Req.)
63-4161	270 Ohm Resistor – 1/4 W. 10%
63-4171	470 Ohm Resistor – 1/4 W. 10% (5 Req.)
63-4175	560 Ohm Resistor – 1/4 W. 10%
63-4178	680 Ohm Resistor – 1/4 W. 10% (2 Req.)
63-4182	820 Ohm Resistor – 1/4 W. 10%
63-4185	1000 Ohm Resistor – 1/4 W. 10% (3 Req.)
63-4192	1500 Ohm Resistor – 1/4 W. 10%
63-4196	1800 Ohm Resistor – 1/4 W. 10%
63-4198	2200 Ohm Resistor – 1/4 W. 5%
63-4199	2200 Ohm Resistor – 1/4 W. 10%
63-4203	2700 Ohm Resistor – 1/4 W. 10% (3 Req.)
63-4206	3300 Ohm Resistor – 1/4 W. 10% (3 Req.)
63-4217	5600 Ohm Resistor – 1/4 W. 10%
63-4227	10K Ohm Resistor – 1/4 W. 10% (4 Req.)
63-4231	12K Ohm Resistor – 1/4 W. 10% (2 Req.)
63-4234	15K Ohm Resistor – 1/4 W. 10%
63-4238	18K Ohm Resistor – 1/4 W. 10%
63-4241	22K Ohm Resistor – 1/4 W. 10%
63-4252	39K Ohm Resistor – 1/4 W. 10% (2 Req.)
63-4266	82K Ohm Resistor – 1/4 W. 10%
63-4272	120K Ohm Resistor – 1/4 W. 5%
63-4522	3.3 Ohm Resistor – 1/2 W. 10% (2 Req.)
*63-7125	Meter Adjust Control
*63-7126	Oscillator Bias Control
63-7135	Volume Control & Switch
*63-7528	B.F.O. Control & Switch
*63-7529	Tone Control
*63-7530	Manual Gain Control & Switch – 5K Ohm
64-6	1/8" Dia. x 3/16" Lg. Tubular Rivet (2 Req.)
64-7	1/8" Dia. x 5/32" Lg. Tubular Rivet (2 Req.)
64-88	.088 Dia. x 1/8" Lg. Tubular Rivet (7 Req.)
64-151	.088 Dia. x 3/32" Lg. Tubular Rivet (2 Pt. Of S-78651)
64-288	Shoulder River (Pt. Of S-78717)
73-88	4-40 x 1/8 Allen Hd. Set Screw – Couppoint (Used On 34-662)
78-644	Connector Socket, Single Contact (Tuner Output Jack)
78-1675 OR 78-1844	Transistor Socket (3 Req.) Transistor Socket (3 Req.)
78-1838	Transistor Socket (4 Req.)
78-1842	Transistor Socket (6 Req.)
79-174-12	No. 18 Sleeving – Yellow – 1-1/2"
80-1140	Drive Tension Spring (2 Req.)
*80-2125	Pointer Spring (Pt. Of S-78739)
83-3586	12 Lug Terminal Strip (2 Req.)
83-3588	7 Lug Terminal Strip (2 Req.)
83-3641	5 Lug Terminal Strip
83-4997	4 Lug Terminal Strip (Pt. OF S-78651)
83-5187	11 Lug Terminal Strip
83-5268	8 Lug Terminal Strip
83-5410	3 Lug Terminal Strip
*83-7596	Antenna Mtg. Strip (Pt. OF S-85229)
*85-1013	Slide Switch – AFC (White) S.P.D.T.
*85-1014	Slide Switch – Bandwidth (Blue) S.P.D.T.
85-1015	Slide Switch – Tuning Meter & Dial Light (Black)
86-329	Connector Terminal (1 Used on Ea. White & Black Wire)
86-441	Insulated Feed-Thru Terminal (3 Req.)
93-1043	Spring Washer
*93-1792	.062 Thk. x .257 x 3/8 Wahser (Used On 34-552)
*93-1825	3.8 O.D. x .257 I.D. x .031 Thk. Washer
*94-1487	Spacer (1 Used On Ea. 114-627) (2 Req.)
*95-2604	2nd I.F. Primary Transformer (AM)
*95-2605	2nd. I.F. Secondary Transformer (AM)
95-2606	3rd. I.F. Transformer (AM)
*95-2607	4th I.F. Transformer (AM)
*95-2608	Ratio Detector Transformer (FM)
95-2610	2nd. & 3rd. I.F. Transformer – FM (2 Req.)
*95-2611	10.7 MHz I.F. Transformer (WB)
95-2613	RF Output Transformer 9WB)
*95-2634	B.F.O. Transformer
*95-2985	RF Input Transformer (W.B.)
*95-2986	Oscillator Transformer (W.B.)
100-218	Dial Light – GE No. 123 (2 Req.)
103-31	Diode
103-44	Diode
103-140	Diode (Zener)
*103-141	Diode – Audio (2 Req.)
105-96	Integnet
*112-2099	6-20 x 1/4 Special Phillips Pan Hd. Self-Tap. Screw – Cadmium (2 Used On S-78651)
113-40	6-32 x 1/4 Phillips Rd. Hd. Mach. Screw– Cadmium - Internal Shadeproof Lockwasher (2 Used On S-78717)
113-182	8-32 x 1/4 Lg. Phillips Rd. Hd. Mach. Screw– Cadmium – Ext. Shakeproof Lockwasher (2 Mt. S-78651 & 1 Mts. S-78717) (3 Req.)
*113-210	8-32 x 0.875 CD 0.312 Hex Hd. Slotted Mach. Screw W/Washer (Mts. S-78651)
114-39	8-32 x 1/4 x 1/4 Hex Hd. Self-Tap. Screw– Cadmium (3 Mt. RF. Tuner)

*Denotes Parts Not Previously Used.

PART NO.	DESCRIPTION
114-571	*4-24 x 3/16 Hex Slotted Hd. Self-Tap. Screw-Stat. Bronze (2 Uded On S-78718)*
114-627	8-18 x 1-1/8 Hex Hd. Self-Tap. Screw – Cadmium Flat Washer Att. (2 Used On S-85229)
*114-784	8-18 x 0.310 x 0.250 Hex Hd. Slotted Screw – Stat. Bronze
121-430	Transistor 1st. Aduio, Pre-Driver (2 Req.)
121-441	Transistor – Driver
121-692	Transistor – R.F. Oscillator Mixer (3 Req.)
*121-701	Transistor – Voltage Regulator
*121-872	Transistor – AM Mixer, AM - FM 1st. IF, AM-FM 2nd. IF & AM - FM 3rd. IF (4 Req.)
*122-38	Tuning Meter (R.F. & Battery Checker)
126-1554	Heat Sink
149-311	Ferrite Sleeve (4 Req.)
149-333	Ferrite Sleeve (3 Req.)
166-105	Bumper (2 Req.)
800-245	Output Trans. Asm. (Consists of 1-21-678 & 1-679)
S-23757	Choke Coil Assem. (2 Req.)
S-75005	Indicator Lamp Socket & Mtg. STrip Assem.
S-78651	Control Mtg. Bracket Assem.
*S-78717	Pulley & Bracket Assem.
*S-78718	Dial Drum Assem.
*S-78739	Drive Cord, Eyelet & Spring Assem. – Pointer Guide
*S-78740	Drive Cord & Eyelet Assem. – Dial Drive
*S-78741	Drive Cord & Eyelet Assem. – Dial Drive
S-85229	Wavemagnet Antenna Assem.
*S-90843	Dial Scale Assem. – Rectangular Scale & Drum (Radio)

R.F. TUNER COMPONENTS

12-3514	Coil Mtg. Bracket
12-3515	Slide Stop Bracket
12-3517	Tuner Slide Bracket
*12-5871	RF Shelf Bracket (Pt. Of S-90975)
19-322	Coil Mtg. Clip (2 Part Of S-78743 & 3 Part Of S-78649) (5 Req.)
19-442	Coil Mtg. Clip (21 Part Of S-78743)
20-1256	10.7 MHz Trap Coil
22-18	.0022 MF Disc Cpacitor – 500V.
22-2371	25 PF Disc Capacitor – 25V.
22-2379	12 PF Disc Capacitor – 500V. (2 Req.)
22-2461	2 PF Glimmick Capacitor – 500V.
22-2594	17 PF Disc Capacitor – 500V.
22-2729	.001 MF Disc Capacitor – 25V.
22-2731	10 PF Disc Capacitor – 500V.
22-2898	13 PF Disc Capacitor
22-2979	60 PF Ceramic Capacitor – 500V.
22-3066	10 PF Gimmick Capacitor – 500V.
22-3309	1.8 PF Gimmick Capacitor – 500V.
22-3393	.01 MF Disc Capacitor – 25V. (4 Req.)
22-3538	125 PF Mica Capacitor – 100V.
22-3689	.05 MF Disc Capacitor – 25V. (14 Req.)
22-3748	.001 MF Disc Capacitor – 1KV.
22-3749	1000 PF Mica Capacitor – 100V.
22-3849	20 PF Disc Capacitor – 500V. (2 Req.)
22-3902	Single Section Trimmer Capacitor (Broadcast Padder)
22-3955	.1 MFD. Capacitor – 50 V.
22-4613	1000 PF Feed-Thru Capacitor – 500V. (5 Req.)
22-5037	.005 MF Disc Capacitor – 25V.
22-5092	30 PF Ceramic Capacitor – 500V.
22-5128	4 PF Disc Capacitor – 500V.
22-5164	1.2 PF Gimmick Capacitor – 500V.
22-5276	125 PF Ceramic Capacitor – 500V.
22-5318	34 PF Disc Capacitor – 500V.
22-5319	38 PF Disc Capacitor – 500V.
22-5320	42 PF Capacitor – 500V.
22-5348	Trimmer Capacitor – 500V.
22-5432	18 PF Disc Capacitor – 500V.
22-5585	750 PF Disc Capacitor – 500V.
*22-5588	60 PF Disc Capacitor – 500V.
22-5589	85 PF Disc Capacitor – 500V.
*22-5590	50 PF Ceramic Capacitor – 500V.
22-5705	Six Section Trimmer Capacitor – S.W. 2 Antenna Trimmer, S.W. 1 Antenna Trimmer, S.W. 2 Mixer Trimmer, S.W. 1 Mixer Trimmer, S.W. 2 Oscillator Trimmer, S.W. 1 Oscillator Trimmer

*Denotes Parts Not Previously Used.

PART NO.	DESCRIPTION
*22-5861	*Five Section Trimmer Capacitor – B.C. Mixer, L.W. Mixer, B.C. Oscillator, L.W. Oscillator & L.W. Oscillator Padder*
*22-6017	*Trimmer Capacitor – L.W. Antenna Trimmer* (Fixed)
*22-6045	Trimmer Capacitor – B.C. Antenna Trimmer (Fixed)
22-6335	1800 PF Polystyrene Capacitor – 30V. 5%
22-6337	3900 PF Polystyrene Capacitor – 30V. 5%
*22-6874	3 Section Variable Capacitor (Antenna, Mixer & Oscillator Tuning)
22-1170	FM Tuner Cover
*52-1486	Coaxial Cable
*52-1608	Shielded Cable
*52-1781	Shielded Cable
*52-2034	Cable, 75 Ohm Coaxial
54-139	3/8-32 Hex Palnut (Used On 85-1208)
54-227	4-40 x 1/4 x 3/32 Thk. Hex Nut – N.P. (2 Used On 85-1208)
54-490	Hex Palnut Tension Nut (Used On S-90975)
54-633	Retaining Nut (Use Only When 78-165 Is Used) (2 Part Of S-79040)
*56-493	Guide Pin
*57-6678	Switch Mtg. Plate
*57-6867	Trimmer Mtg. Plate
61-222	Idler Pulley (2 Part Of S-78724)
63-1743	100 Ohm Resistor – 1/2 W. 10% (2 Req.)
63-1772	470 Ohm Resistor – 1/2 W. 20%
63-1775	560 Ohm Resistor – 1/2 W. 10% (2 Req.)
63-1779	680 Ohm Resistor – 1/2 W. 20%
63-1788	1200 Ohm Resistor – 1/2 W. 5%
63-1792	1500 Ohm Resistor – 1/2 W.10%
63-1796	1800 Ohm Resistor – 1/2 W.10%
63-1797	2000 Ohm Resistor – 1/2 W. + 5% – Insulated
63-1799	2200 Ohm Resistor – 1/2 W. 10%
63-1819	6800 Ohm Resistor – 1/2 W.5%
63-1830	12K Ohm Resistor – 1/2 W. 5%
63-1897	470K Ohm Resistor – 1/2 W. 10% (2 Req.)
63-4101	10 Ohm Resistor – 1/4 W. 10%
63-4122	33 Ohm Resistor – 1/4 W. 10% (2 Req.)
*63-4140	82 Ohm Resistor – 1/4 W. 10%
63-4150	150 Ohm Resistor – 1/4 W. 10%
63-4157	220 Ohm Resistor – 1/4 W. 10% (2 Req.)
63-4175	560 Ohm Resistor – 1/4 W. 10%
63-4185	1000 Ohm Resistor – 1/4 W. 10%
63-4186	1000 Ohm Resistor – 1/4 W. 20%
63-4189	1200 Ohm Resistor – 1/4 W. 10% (2 Req.)
63-4192	1500 Ohm Resistor – 1/4 W. 10% (3 Req.)
63-4196	1800 Ohm Resistor – 1/4 W. 10%
63-4199	2200 Ohm REsistor – 1/4 W. 10% (2 Req.)
63-4220	6800 Ohm Resistor – 1/4 W. 10%
63-4224	8200 Ohm Resistor – 1/4 W. 10%
63-4231	12K Ohm Resistor – 1/4 W. 10% (2 Req.)
73-24	8-32 x 1/4 Slotted Hex Hd. Set Screw – Cuppoint (2 Part Of S-58142)
76-1474	Driver Shaft (Part Of S-64842)
78-1675	Transistor Socket (5 Req.)
78-1842	Transistor Socket (3 Req.)
79-174-12	No. 18 Sleeving – Yellow – 1-1/2"
80-209	Drive Cord Tension Spring
80-1467	Spring
80-1672	Retaining Spring
80-1951	Retaining Spring (1 Used On Ea. 94-613) (3 Req.)
83-2770	7 Lug Terminal Strip (Part Of S-90975)
83-3218	2 Lug Terminal Strip (Part Of S-79780)
*83-5668	4 Lug Terminal Strip (Part Of S-90975)
*83-6983	Antenna Terminal Strip (Part Of S-80653)
*85-1208	Bandswitch
86-306	Terminal
86-441	Insulated Feed-Thru Terminal (3 Req.)
93-920	.020 x .093 x 7/32 Steel Washer – Cadmium Plate (2 Part Of S-78724)
93-966	No. 1205 Internal Shakeproof Lockwasher– Cadmium (1 Used On Ea. 54-227) (2 Req.)
93-1793	Nylon Washer (Used On S-78724)
94-334	Capacitor Mtg. Bushing (3 Req.)
94-613	Iron Core Bushing (3 Req.)
95-2002	1st. I.F. Transformer (Primary) – AM
95-2003	1st. I.F. Transformer (Secondary) – AM

PART NO.	DESCRIPTION
*95-2609	1st. I.F. Transformer (FM)
103-39	Diode, AFC
112-1373	Trimmer, Adjusting Screw
112-1467	2-56 x 5/16 Phillips Pan Hd. Mach. Screw - Cadmium (1 Mts. S-64842)
113-8	6-32 x 1/4 x 1/4 Hex Hd: Mach. Screw - N.P.- Internal Shakeproof Lockwasher (1 Mts. 22-5705 & 2 Mt. 22-5861) (3 Req.)
113-10	6-32 x 3/16 x 1/4 Hex Hd. Mach. Screw - N.P.- Internal Shakeproof Lockwasher (1 Mts. S-78649)
113-13	6-32 x 7/16 x 1/4 Hex Hd. Mach. Screw - N.P. - Ext. Shakeproof Lockwasher (3 Mt. 22-6874)
113-33	4-40 x 1/4 x 7/32 Hex Hd. Mach. Screw - Cadmium Internal Shakeproof Lockwasher
113-121	6-32 x 7/32 Phillips Rd. Hd. Mach. Screw - N.P. 22-3902 & 57-6867)
113-123	4-40 x 3/16 Phillips Rd. Hd. Mach. Screw - Cadmium - Internal Shakeproof Lockwasher (Mts. 12-3515)
114-39	8-32 x 1/4 x 1/4 Hex Hd. Self-Tap. Screw - Cadmium (1 Uded on S-78743, 4 Used on S-90975, 2 Used on S-79040 & 57-6678 & 2 join S-78743 & S-80653) (11 Required)
*121-687	Transistor - FM/AM Amplifier & Oscillator- R.F. Oscillator & Mixer (2 Required)
*121-871	Transistor, AM/RF
*121-872	Transistor, AM Mixer, AM-FM 1st. IF, AM-FM 2nd, IF, AM Oscillator, AM-FM 3 RD. IF & BFO (6 Required)
125-94	Rubber Grommet (3 Used on 22-6784)
126-857	Coil Shield (2 Required)
126-1027	Coil Shield (Part of S-78649)
*126-1331	Coil Shield (Part of S-78649)
149-74	Iron Core (1 Part of ea. S-45000) (2 Required)
149-211	Iron Core (25 Required)
149-311	Iron Core Sleeve (2 Required)
149-316	Iron Core & Pring (3 Required)
S-45000	Series Antenna Coupling Coil Assem. (2 Req.)
S-58095	FM Tuning Coil Assem. (3 Required)
S-58142	Pulley & Bushing Assem.
S-58179	Drive Cord & Eyelet Assem. - Gang (2 Req.)
S-64842	FM Tuner Driver Shaft Assembly
*S-78076	Oscillator Coil Assem. (B.C. & L.W.)
S-78077	Antenna Coil Assem. (2-4 MHz) S.W. 1 Ant. Coil
*S-78078	Antenna Coil Assem. (4-9 MHz) S.W. 2 Ant. Coil
*S-78079	Antenna Coil Assem. (9.4-10 MHz) 31M
*S-78080	Antenna Coil Assem. (11.4-12.2 MHz) 25M
*S-78081	Antenna Coil Assem. (14.7-15.7 MHz) 19M
*S-78082	Antenna Coil Assem. (17.1-18.5 MHz) 16M
*S-78083	Antenna Coil Assem. (20.7-22.4 MHz) 13M
*S-78084	Oscillator Coil Assem. (2-4 MHz) S.W. 1 Osc. Coil
*S-78085	Oscillator Coil Assem. (4-9 MHz) S.W. 2 Osc. Coil
*S-78086	Oscillator Coil Assem. (9.4-10 MHz)
*S-78087	Oscillator Coil Assem. (11.4-12.2 MHz)
*S-78088	Oscillator Coil Assem. (14.7-15.7)
*S-78089	Oscillator Coil Assem. (17.1-18.5 MHz)
*S-78090	Oscillator Coil Assem. (20.7-22.4 MHz)
*S-78091	Mixer Coil Assem. (2-4 MHz) S.W. 1 Mixer Coil
*S-78092	Mixer Coil Assem. (4-9 MHz) S.W. 2 Mixer Coil
*S-78093	Mixer Coil Assem. (9-4-10 MHz)
*S-78094	Mixer Coil Assem. (11.4-12.2 MHz)
*S-78095	Mixer Coil Assem. (14.7-15.7 MHz)
*S-78096	Mixer Coil Assem. (17.1-18.5 MHz)
*S-78097	Mixer Coil Assem. (20.7-22.4 MHz)
*S-78649	Coil, Bracket & Shield Assem.
*S-78672	Oscillator Coil & Wire Assem. (B.C. & L.W.)
*S-78676	Oscillator Coil & Wire Assem. (11.4-12.2 MHz)
*S-78677	Oscillator Coil & Wire Assem. (14.7-15.7 MHz)
*S-78678	Oscillator Coil & Wire Assem. (17.1-18.5 MHz)
*S-78679	Oscillator Coil & Wire Assem. (20.7-22.4 MHz)
*S-78689	Mixer Coil & Wire Assem. (B.C. & L.W.)
*S-78691	Mixer Coil & Wire Assem. (4-9 MHz)
*S-78693	Mixer Coil & Wire Assem. (11.4-12.2 MHz)
*S-78694	Mixer Coil & Wire Assem. (14.7-15.7 MHz)
*S-78724	R.F. Housing Assembly
*S-78743	Coil Mtg. Bracket & Clip Assembly
*S-79040	Tuner Housing Assembly
*S-79780	Coil Mtg. Bracket Assembly
*S-80653	Bracket & Terminal Strip Assembly
*S-90975	RF Shelf Bracket & Terminal Strip Assem.

*Denotes Parts Not Previously Used.

PART NO.	DESCRIPTION

MODELS ROYAL D7000Y AND ROYAL D7000Y-1
USING CHASSIS 500DMR70

Z4NL	1-1/2V. Battery (9 Required)
1-19	Telescopic Antenna
11-247	Line Cord (Part of S-90896)
15-108	Socket Shell (Cabinet Back Assem.)
16-4205	Packing Carton
*26-2373	Dial Scale - Compass Circular 3 IN/8 Points (Part of S-91089)
*30-328	Decoration - Trim Strip - Left Side (Part of S-91160)
*30-329	Decoration - Trim Strip - Right Side (Part of S-91160)
*30-330	Decoration - Overlay, Radio - Trans - Oceanic (National Weather Service Band - Zenith Trans - Oceanic)
30-335	Decoration - Lower Cover Plate (Part of S-91089)
36-710	Handle (Portable Radio)
39-75B	Earphone (Part of S-90896)
43-965	Antenna Pivot Housing
43-1040	Battery Container (2 Required)
43-1099	Battery Container
*44-84	Jack (Tuner or Phono) (For 58-214)
46-6251	Sprocket Knob (2 Used on S-78786)
46-6361	Control Knob - Volume - Tone - Manual Gain (3 Required)
46-6828	Control Knob - B.F.O.
46-7382	Tuning Knob
*46-9437	Band Selector Control Knob
49-1143	4" x 6" PM Speaker
54-12	6-32 x 5/16 Hex Nut – Nickel (Part of S-85392)
54-347	6-32 'Keps' Nut (11 Mt. 112-1438, 4 Mt. 112-2066 & 4 Mt. 49-1143)
54-412	Speed Nut (4 Part of S-91160)
54-853	1/4-32 x 3/8 Hex Nut (Used on 44-84)
*54-789	Palnut (5 Mt. S-78792)
54-794	Tinnerman Speed Nut (3 Mt. 57-6658)
54-817	Tinnerman Speed Nut (8 Mt. 192-418)
56-557	Upper Door Pin (2 Required)
56-596	Lower Door Pin
56-605	Lower Door Pin
57-6649	Name Plate (Part of S-85394)
57-6657	Cabinet Top
57-6658	Base Plate, Cabinet
57-6679	Chart Light & Tuning Escutcheon (Part of S-78792)
57-6708	Speaker Escutcheon 857-181 Control Overlay 883-91 Grille Backing Strip 938-16 Grille
57-6801	Name Plate - Trans-Oceanic
57-6971	Battery Panel (Part of S-90896)
57-6994	Cord Retaining Plate (2 Part of S-90896)
57-7330	Chassis Support Plate
57-7769	Selector Knob Background Plate
58-214	Plug - Jack (Used on 44-84)
58-316	A.C. Input Plug (Part of S-85392)
*59-1048	Dial Slide
69-262	8-32 x 1/2 Phillips Rd. Hd. Mach. Screw-Stat. Bronze (3 Used on S-85392)
*73-123	8-32 x 1/4 Allen Hd. Set Screw - Cuppoint (Part of 46-9437)
76-1770	Pivot Shaft (Part of S-78773)
78-1101	Three Contact Battery Socket (Cabinet Back Assem.)
78-1834	Pilot Light Socket & Wire (Part of S-78772)
80-1091	Dial Cord Tension Spring
80-1998	Contact Spring (Part of S-85392)
80-2010	Handle Spring (2 Required)
80-2047	Contact Spring (Part of S-78778)
80-2048	Contact Spring (Part of S-78778 & S-78779) (2 Required)
80-2078	Spring (Part of S-78777)
*80-2159	Spring - Lower Door (Part of S-85389)
80-2165	Lower Door Spring (Part of S-91160)
83-2785	Rubber Strip (Cabinet Back)
83-3024	Rubber Strip (Cabinet Assembly)
*83-4311	Cushioning Material 12 x 12 (Cabinet Assembly)
83-6538	Trim Strip (Used on 57-6658)
83-6543	Time Indicator Strip

PART NO.	DESCRIPTION
83-6544	Trim Strip (Part of S-78794)
83-6545	Trim Strip (Part of S-78794)
83-6574	Tuning Escutcheon Trim Strip (Part of S-78792)
83-6575	Chart Light Trim Strip (Part of S-78791)
83-7000	Lower Door Trim Strip (Part of S-91088)
83-7006	Protective Strip (Used on S-85392)
83-7420	Slide Switch Strip (Part of S-80963)
*83-7628	Grille Backing Strip (Cabinet Assem.)
*83-7629	Protective Cover Strip (Cabinet Assem.)
*83-8290	Insulating Strip Without Perforation (Cabinet Assembly)
85-1043	Slide Switch (Part of S-85392)
86-221	Terminal (Used on Black Wire)
86-232	Spade Terminal (2 Required)
93-799	Brass Washer (2 Part of S-85392)
93-1289	3/16 x 7/16 x 1/32 Thick Fibre Washer (Joins 15-108 & 78-1101)
93-1794	.082 x 1/4 x .015 Thick Brass Washer (1 Part of ea. S-78766) (2 Req.)
93-1818	Shoulder Washer (3 Joins S-80963 & S-85392)
*93-1863	Vinyl Washer (Part of 46-9437)
93-1884	Spring Washer (Part of S-91089)
*93-1892	Finish Washer (Used on Jack & Plug)
*94-1549	Bushing (Cover Panel) (Part of S-90896)
96-696	Pivot Leg (1 Part of ea. S-78766)
97-812	Stud (Part of S-78786)
*97-832	Stud (Part of S-91089)
*97-851	Shoulder Stud (Part of S-85389)
100-218	Chart Light Lamp - GE No. 123
*101-4976	Transistor Layout & Patent Label
*110-607	Grille Cloth (Part of S-85392)
112-320	6-20 x 3/8 Pan Hd. Self-Tap. Screw-Stat. Bronze (Joins 43-965 & 1•19)
112-1124	4-24 x 11/32 Special Fillister Hd. Self-Tap. Screw - Black Zinc Plate (4 Used on S-78786)
112-1376	4-24 x 3/8 Phillips Pan Hd. Self-Tap. Screw-Stat. Bronze (2 Mt. S-85392)
112-1438	6-32 x 5/16 Special Hd. Mach. Screw (4 used on 57-6708, 5 Mt. S-85389 & 6Mt. S-85390)
112-1714	6-32 x 3/16 Phillips Pan Hd. Mach. Screw - Cadmium (4 Join 83-6544 & S-78794)
112-1865	6-20 x 7/16 Phillips Pan Hd. Self-Tap. Screw - Cadmium (1 Mts. 500MDR70)
112-1865	6-20 x 7/16 Phillips Pan Hd. Self-Tap. Screw - Cadmium (1 Mts. 500MDR70)
112-2032	6-20 x 7/16 Special Hd. Self-Tap. Screw-Stat. Bronze (1 Mts. Ea. 166-193) (4 Required)
112-2038	6-32 x 5/32 Special Hd. Mach. Screw-Stat. Bronze (4 Mt. 57-6658)
112-2065	4-24 x 1/4 Phillips Fl. Hd. Self-Tap. Screw-Chrome (4 Mt. S-78774)
112-2066	6-32 x 5/16 Special Hd. Mach. Screw - Chrome (4 Mt. 36-710)
112-2071	4-24 x 1/4 Phillips Pan Hd. Self-Tap. Screw - Stat. Bronze (1 Used on 80-1091 & 2 Used on 83-7006) (3 Required)
112-2072	6-20 x 3/8 Phillips Truss Hd. Self-Tap. Screw - Stat. Bronze (1 Mts. ea. 57-6994, S-85392 & 3 Part of S-80963) (6 Required)
112-2096	6-20 x 3/8 Phillips Fl. Hd. Self-Tap. Screw - Cadmium (2 Mt. ea. S-78766) (4 Required)
112-2097	6-20 x 1/2 Phillips Pan Hd. Self-Tap. Screw - Cadmium (3 Mt. 500MDR70)
*112-2122	4-24 x 1/4 Special Fl. Trim Hd. Screw - Cadmium (2 Mt. S-91088 & 6 Mt. S-91160) (8 Required)
114-811	6-20 x 1/4 x 1/4 Hex Hd. Self-Tap. Screw-Stat. Bronze (2 Mt. ea. S-78786)
114-813	6-20 x 3/8 Hex Hd. Self-Tap. Screw-Stat. Bronze (4 Mt. S-78777)
114-1095	Special Hex Hd. Screw (Part of S-85392)
*166-105	Bumper (4 Required)
166-193	Cabinet Foot (4 Required)
188-140	Retaining Ring (Part of S-90896)
188-155	Knob Clamping Ring (Part of 46-7382)
188-168	Retaining Ring (1 Joins ea.46-6251 & S-78786) (2 Required)
188-441	Knob Clamping Ring (Part of 46-6361 or 46-6828)
189-372	Plastic Bag
189-377	Envelope (For 57-6801)

*Denotes Parts Not Previously Used.

PART NO.	DESCRIPTION
192-418	Dial Crystal
199-466	Antenna Sleeve
*202-3433	Short Wave Chart Book
*202-3442	Instruction Book
*202-3443	Specifications Booklet, Operating
*202-3444	Service Manual Instruction Book (RD7000Y only)
*202-3658	Operating Guide Supplement. (RD7000Y-1 only)
*202-3659	Service Manual
*203-1399	Registration Card
220-142	Packing Cushioning Material (3 Required)
S-78766	Handle Swivel Assembly (2 Required)
S-78772	Chart Light Door & Socket Assembly (Part of S-78773)
S-78773	Chart Light & Tuning Escutcheon Assembly (Part of S-91160)
S-78777	Antenna & Sleeve Assembly
S-78778	Contact Spring & Strip Assembly – R.H.
S-78779	Contact Spring & Strip Assembly – L.H.
S-78786	Bracket & Stud Assembly (2 Required)
S-78791	Chart Light & Trim Strip Assembly
S-78792	Tuning Esutcheon & Trim Strip Assembly
S-78794	Upper Door & Trim Assembly
S-80527	Map Housing & Crystal Assem. (Trans-Oceanic - Zone Time)
S-80963	Plate & Stud Assem.
*S-85389	Cabinet End Plate Assem. – R.H.
*S-85390	Cabinet End Plate Assem. – L.H.
*S-85392	Cabinet Back Assem.
*S-85394	Lower Door & Trim Assem.
*S-90896	Battery Cover Assem.
*S-91088	Lower Door & Trim Assem. (Control Cover & Decoration)
*S-91089	Dial Scale Assem. (Compass Circular)
*S-91160	Main Cabinet & Trim Assem.

POWER SUPPLY COMPONENTS

22-4617	.01 MF
*22-6316	500 MF Electrolytic – 1 Section – 500V.
*23-38	Splice Cap. (RD7000Y-1 only)
63-1708	15 Ohm Resistor – 1/2 W. 10%
63-1932	3.3 Megohm Resistor – 1/2 W. 10%
79-174-12	No. 18 Sleeving – Yellow – 1- 1/2"
83-3672	8 Lug Terminal Strip (Part of S-80964)
85-818	Slide Switch (Part Of S-80964)
*85-1393	Circuit Breaker, Thermal, Self-Setting (RD7000Y-1 only)
86-512	Miniature Contacts (Wire Retaining Pin)
95-2671	Power Transformer
112-1438	6-32 x 5/16" Special Hd. Mach. Screw (Mts. 95-2671)
112-2072	6-20 x 3/8" Ph. Truss Hd. Self-Tap. Screw– Stat. Bronze (1 Mts. 95-2671 & S-80964, 2 Used On 83-3672) (4 Req.)
205-51	Silicone Grease
212-76	Silicon Rectifier (2 Req.)
S-80964	Switch Bracket & Terminal Strip Assem.

"OPTIONAL AT EXTRA COST"

S-75893	Swivel Base Assem.
16-3527	Carton
57-6620	Base Support (Ring)
80-2034	Tension Spring (2 Req.)
93-1682	Spring Washer
93-1790	Base Washer
96-694	Leg - Left (2 Req.)
96-695	Leg - Right (2 Req.)
112-2041	6-18 x 1/4 Phillips Pan Hd. Self-Tap. Screw – N.P. (2 Mt. Ea. Leg Support)
112-2043	8-32 x 1/4 Phillips Fl. Hd. Mach. Screw – N.P. (3 Mt. S-78811)
112-2109	6-32 x 3/8 Phillips Fl. Hd. Mach. Screw – Spec. – N.P. (1 Used On Ea. 96-694 & 96-695) (4 Req.)
188-140	Retaining Ring
199-464	Spacer Sleeve (1 Used On Ea. 96-694 & 96-695) (4 Req.)
202-3070	Instruction Sheet
S-78811	Swivel Base Plate Assem. (Top)

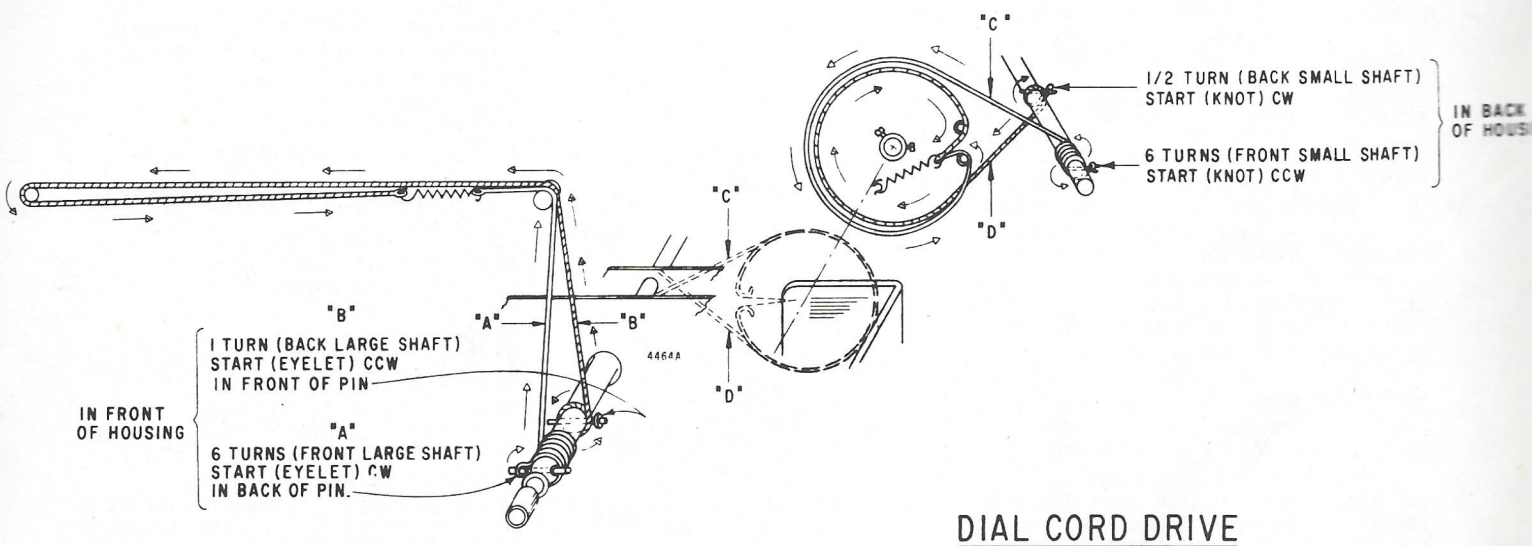
NO.	TRANSISTOR CHART
Q1	121-692 WB RF
Q2	121-692 WB MIXER
Q3	121-692 WB OSCILLATOR
Q4	121-687 RF TRANSISTOR (FM)
Q5	121-687 OSCILLATOR MIXER (FM)
Q101	121-871 RF (AM)
Q102	121-872 MIXER (AM)
Q103	121-872 OSCILLATOR (AM)
Q201	121-872 1st. IF TRANSISTOR (AM-FM)
Q202	121-872 2nd IF TRANSISTOR (AM-FM)
Q203	121-872 3rd IF TRANSISTOR (AM-FM)
Q204	121-872 BFO
Q401	121-430 1st. AUDIO
Q402	121-430 PRE-DRIVER
Q403	121-441 DRIVER
Q404	121-678 OUTPUT (NPN) } MATCHED PAIR
Q405	121-679 OUTPUT (PNP) } MATCHED PAIR
Q501	121-701 VOLTAGE REGULATOR

NO.	TRIMMER CHART
C112	BROADCAST ANTENNA TRIMMER
C113	LONG WAVE ANTENNA TRIMMER
C114 (A)	SW2 ANTENNA TRIMMER
C114 (B)	SW1 ANTENNA TRIMMER
C114 (C)	SW2 MIXER TRIMMER
C114 (D)	SW1 MIXER TRIMMER
C114 (E)	SW2 OSCILLATOR TRIMMER
C114 (F)	SW1 OSCILLATOR TRIMMER
C119 (A)	BROADCAST MIXER TRIMMER
C119 (B)	LONG WAVE MIXER TRIMMER
C119 (C)	BROADCAST OSCILLATOR TRIMMER
C119 (D)	LONG WAVE OSCILLATOR TRIMMER
C119 (E)	LONG WAVE OSCILLATOR PADDER
C130	VHF OSCILLATOR TRIMMER
C136	BROADCAST OSCILLATOR PADDER

NO.	COIL CHART	
L102	ANTENNA (LW AND BC)	
L106	13M ANTENNA COIL	(TOP)
L107	16M ANTENNA COIL	(BOTTOM)
L108	19M ANTENNA COIL	(TOP)
L109	25M ANTENNA COIL	(BOTTOM)
L110	31M ANTENNA COIL	(TOP)
L112	SW2 ANTENNA COIL	(BOTTOM)
L113	SW1 ANTENNA COIL	(TOP)
L114	13M MIXER COIL	(TOP)
L115	16M MIXER COIL	(TOP)
L116	19M MIXER COIL	(TOP)
L117	25M MIXER COIL	(TOP)
L118	31M MIXER COIL	(TOP)
L119	SW2 MIXER COIL	(TOP)
L120	SW1 MIXER COIL	(TOP)
L122A	BC MIXER COIL	(TOP)
L122B	LW MIXER COIL	(BOTTOM)
L123	13M OSCILLATOR COIL	(BOTTOM)
L124	16M OSCILLATOR COIL	(BOTTOM)
L125	19M OSCILLATOR COIL	(BOTTOM)
L126	25M OSCILLATOR COIL	(BOTTOM)
L127	31M OSCILLATOR COIL	(BOTTOM)
L128	SW2 OSCILLATOR COIL	(BOTTOM)
L129	SW1 OSCILLATOR COIL	(BOTTOM)
L130A	BC OSCILLATOR COIL	(BOTTOM)
L130B	LW OSCILLATOR COIL	(TOP)
L201	2nd IF TRANSFORMER PRIMARY (TOP)	T203
L202	2nd IF TRANSFORMER SECONDARY (BOTTOM)	T203
L204	3rd IF TRANSFORMER PRIMARY (TOP)	T206
L205	3rd IF TRANSFORMER SECONDARY (BOTTOM)	T206
L206	3rd IF TRANSFORMER PRIMARY (TOP)	T207
L207	3rd IF TRANSFORMER SECONDARY (BOTTOM)	T207
L209	RATIO DETECTOR TRANSFORMER PRI (BOTTOM)	T208
L210	RATIO DETECTOR TRANSFORMER (TOP)	T208

NO.	TRANSFORMER CHART
T1	RF INPUT TRANSFORMER (WB)
T2	RF OUTPUT TRANSFORMER (WB)
T3	10.7 MHZ IF TRANSFORMER (WB)
T4	OSCILLATOR TRANSFORMER (WB)
T5	1st IF TRANSFORMER (FM)
T201	1st IF PRIMARY (AM)
T202	1st IF SECONDARY (AM)
T203	2nd IF TRANSFORMER (FM)
T204	2nd IF TRANSFORMER PRIMARY (AM)
T205	2nd IF TRANSFORMER SECONDARY (AM)
T206	3rd IF TRANSFORMER (FM)
T207	3rd IF TRANSFORMER (AM)
T208	RATIO DETECTOR TRANSFORMER (FM)
T209	4th IF TRANSFORMER PRIMARY (AM)
T201	BFO TRANSFORMER

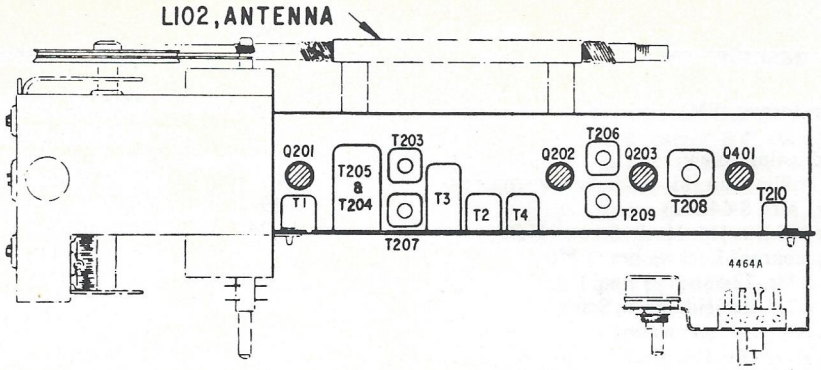
REAR VIEW OF CHASSIS

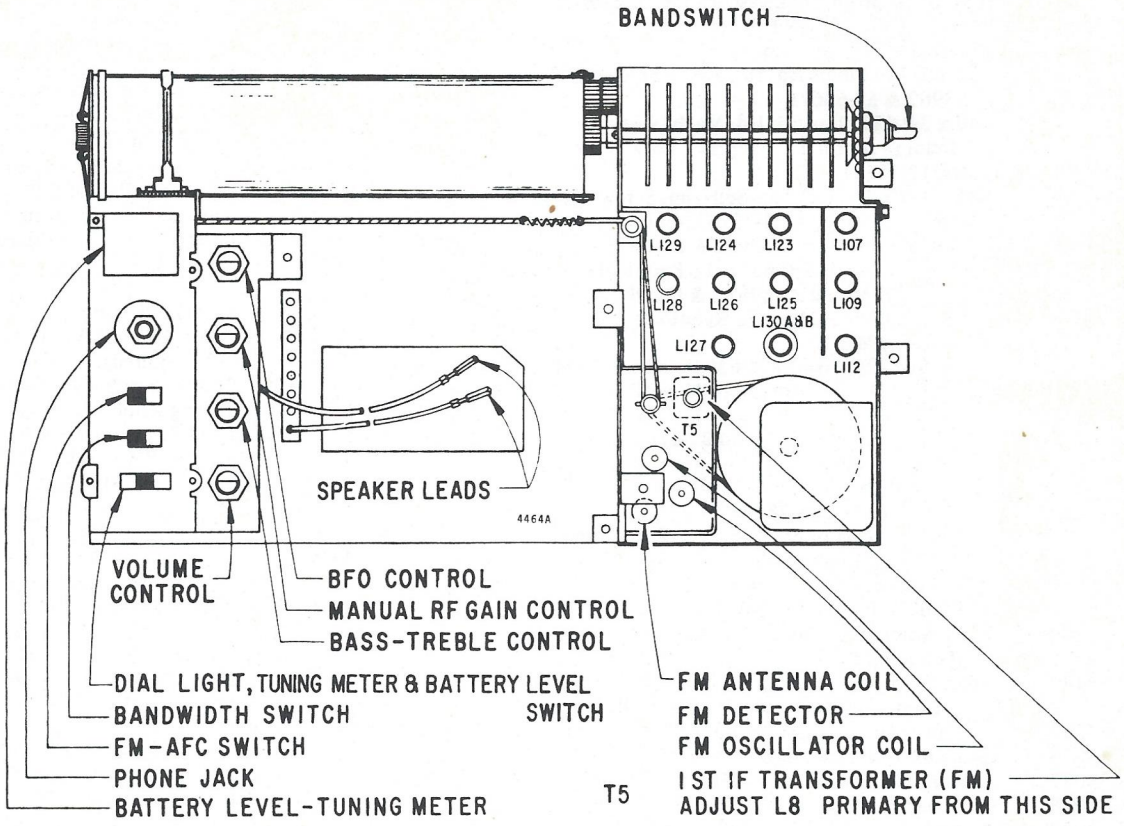


FRONT VIEW OF CHASSIS

DIAL CORD DRIVE

SHOWN IN FULL COUNTERCLOCKWISE POSITION





TEST POINT VOLTAGES

(NO SIGNAL)

	AM	FM
1	1.75	.85
2	2.5	1.5
3	.03	0
4	1.8	1.3
5	.2	0
6	5.4	.53
7	5.2	.54