NAVSHIPS 91061

INSTRUCTION BOOK

for

DIVERSITY RADIO RECEIVING EQUIPMENT NAVY MODEL RDM-1

RADIO CORPORATION OF AMERICA
ENGINEERING PRODUCTS DEPARTMENT
Camden, New Jersey, U. S. A.

BUREAU OF SHIPS NAVY DEPARTMENT

Contract: NObsr-42198 IB-39505

ERRATA IN
INSTRUCTION BOOK NAVSHIPS 91061
FOR
DIVERSITY RADIO RECEIVING EQUIPMENT
MODEL RDM-1

(This errata supersedes errata a)

DISPOSITION: to be inserted in NAVSHIPS 91061.

TABLE 8-4

Page XXXVI

Add * to CR-1

Add *CR-1 Desc. - RECTIFIER, metallic: selenium; input 3.38 vac at 1000 cps and a 10,000-ohm series resistor in circuit, output is 0.05 v at 200 ma; L shaped, 21/32" lg x 7/16" wd x 7/16" h less term; one 0.125" diam mtg hole in base; moisture and fungus resistant; w/ 5 term, 2 color black, 1 color red, 2 color yellow; all term w/ 1-7/8" lg wire leads; to test spec RCA part/dwg #8842108; u/w 200 microammeter
Function - For Line Amplr Output Rectifier for M-1
Navy Type No. -20664
Mfr. - 213
Mfr. Desig. - Type #AD
Dwg. No. - 8842105-1
All Symbol Desig. - CR-1

Add footnote - *Either Navy Type No. -20638 or -20664 may be supplied.

Page XLIX

/J-5 to J-9 - Change Navy Type No. to -49659

Page L

/M-1 - Add Mfr. 1382

TABLE 8-7

Page LXVI

Add Code No. - 213
Fansteel Metallurgical Corp.
North Chicago, Ill.

(/ Changes added to previous errata)

RADIO CORPORATION OF AMERICA - RCA VICTOR DIVISION
Camden, New Jersey, U.S.A.

CONTRACT NObsr-42198

IB-39505-b
4-28-49

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TECHNICAL SUMMARY

Electrical Characteristics

Frequency Range—Total 6 Bands ..... 535 to 32,000 kc.
Band 1 ..... 535 to 1,600 kc.
Band 2 ..... 1,570 to 4,550 kc.
Band 3 ..... 4,450 to 12,150 kc.
Band 4 ..... 11,900 to 16,600 kc.
Band 5 ..... 16,100 to 22,700 kc.
Band 6 ..... 22,000 to 32,000 kc.
Maximum Undistorted Output (Tone Keyer and Combining Unit) ..... 12 milliwatts
Maximum Undistorted Output (Receiver Amplifier) ..... 2.5 watts approximately
Output Impedance—Tone Keyer ..... 600 ohms
Output Impedance—Receiver ..... 2.5 ohms and 600 ohms
Power Supply Rating ..... 100-117, 117-135, 135-165, 190-230, 200-260 volts, 50/60 cycles a-c
Power Requirement ..... 450 watts

Mechanical Specifications

Overall Dimensions						Weight	
Width		Height		Depth			
Inches	Cm.	Inches	Cm.	Inches	Cm.	Lbs.	294.84
22	55.88	84	213.36	21	53.34	650	Kg.

Tube Complement

a. Radio Receiver, Navy Type CRV-46246-B

R-F and I-F Amplifiers 5 RCA-6SG7
1st Detector (converter) 1 RCA-6SA7
Oscillator 1 RCA-6J5
2nd Detector 1 RCA-6H6
Noise Limiter 1 RCA-6H6
A-F Amplifier 1 RCA-6SJ7
Power Amplifier 1 RCA-6K6-GT
Beat Frequency Oscillator 1 RCA-6J5
Rectifier 1 RCA-5Y3-GT/G
Voltage Regulator 1 RCA-VR150-30

b. Tone Keyer, Navy Type CRV-35049-A

D-C Amplifier Limiter 1 RCA-6SL7-GT
D-C Amplifier Limiter and Line Amplifier 1 RCA-6SN7-GT
Keyed Amplifier 1 RCA-6SL7-GT
Oscillator 1 RCA-6SL7-GT
Phone Noise Limiter 1 RCA-6H6
Power Rectifier 1 RCA-5Y3-GT/G
Voltage Regulator 1 RCA-VR150-30
Voltage Regulator 1 RCA-VR75-30

c. Monitoring Unit, Navy Type CRV-23424-A

I-F Amplifiers 2 RCA-6SG7
A.V.C. 1 RCA-6H6
A-F Amplifier 1 RCA-6SJ7
Detector and Beat Frequency Oscillator 1 RCA-6SN7-GT

d. Monitoring Unit Power Supply, Navy Type CRV-20289-A.

Power Rectifier 1 RCA-5Y3-GT/G
Voltage Regulator 1 RCA-VR150-30

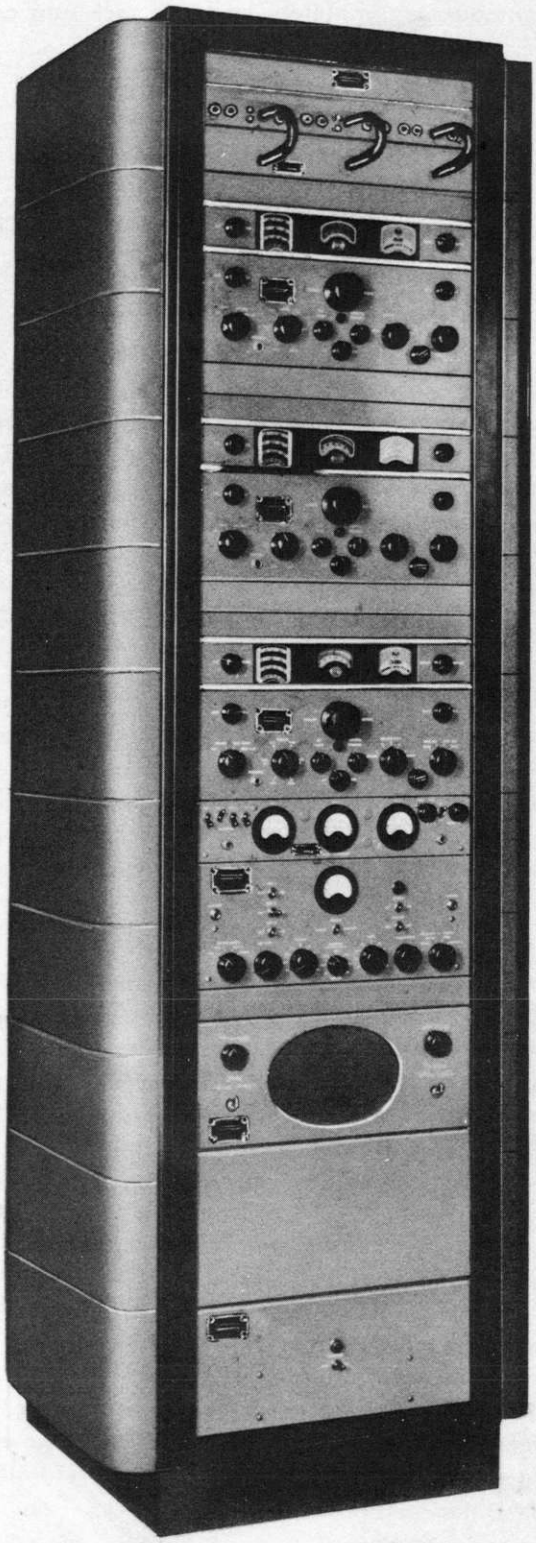
GUARANTEE

The equipment including all parts and spare parts, except vacuum tubes, batteries, rubber and material normally consumed in operation, is guaranteed for a period of one year from the date of delivery of the equipment to and acceptance by the Government with the understanding that all such items found to be defective as to material, workmanship or manufacture will be repaired or replaced, f.o.b. any point within the continental limits of the United States designated by the Government, without delay and at no expense to the Government; provided that such guarantee will not obligate the Contractor to make repair or replacement of any such defective items unless the defect appears within the aforementioned period and the Contractor is notified thereof in writing within a reasonable time and the defect is not the result of normal expected shelf life deterioration.

To the extent the equipment, including all parts and spare parts, as defined above, is of the Contractor's design or is of a design selected by the Contractor, it is also guaranteed, subject to the foregoing conditions, against defects in design with the understanding that if ten per cent (10%) or more of any such said item, but not less than two of any such item, of the total quantity comprising such item furnished under the contract, are found to be defective as to design, such item will be conclusively presumed to be of defective design and subject to one hundred per cent (100%) correction of replacement by a suitably redesigned item.

All such defective items will be subject to ultimate return to the Contractor. In view of the fact that normal activities of the Naval Service may result in the use of equipment in such remote portions of the world or under such conditions as to preclude the return of the defecive items for repair or replacement without jeopardizing the integrity of Naval communications, the exigencies of the Service, therefore, may necessitate expeditious repair of such items in order to prevent extended interruptions of communications. In such cases the return of the defectve items for examination by the Contractor prior to repair or replacement will not be mandatory. The report of a responsible authority, including details of the conditions surrounding the failure, will be acceptable as a basis for affecting expeditious adjustment under the provsions of this contractual guarantee.

The above one year period will not include any portion of time the equipment fails to perform satisfactorily due to any such defects, and any items repaired or replaced by the Contractor will be guaranteed anew under this provision.



PH-64201-1

Frontispiece—Diversity Radio Receiving Equipment, Navy Model RDM-1

EQUIPMENT

The equipment supplied is mounted on a completely enclosed rack and consists of the components listed in Table I.

TABLE I. COMPONENT PARTS

Quantity	Description	Approx. Weight Per Unit	RCA Type Designation	Navy Type No.
3	Radio Receivers	98 lbs.	MI-17104-C	CRV-46246-B
1	Tone Keyer	26 lbs.	MI-17106-B	CRV-35049-A
1	Monitoring Unit	11 lbs.	MI-17144-B	CRV-23424-A
1	Monitoring Unit Power Supply	18 lbs.	MI-17157-B	CRV-20289-A
1	Loudspeaker Assembly	12 lbs.	MI-17143-C	CRV-49526-A
1	Cabinet	280 lbs.	MI-17105-B	CRV-10692
1	Antenna Panel	—	T-626546-21	CRV-23425-A
1	Set of Interconnecting Cables	—	MI-17142-B	—
1	Instruction Book	—	IB-39505	—

All components are shipped complete with required tubes. Additional equipment that will be required for operation includes a complete diversity antenna system, a separately fused a-c power supply, and a set of high impedance headphones.

Headphones MI-5803-6 are recommended.

INTRODUCTION

The term "fading" as used in this instruction book is employed to denote variations in signal strength over periods of from several minutes duration to variations of only a fraction of a second. It is not to be construed as referring to the slow hour to hour, day to night, day to day, or seasonal variations in signal strength.

It is generally agreed that signal fading is caused by the fact that radio waves propagated from a transmitter may travel over two or more paths between transmitting and receiving antennas. Differences in the physical length of these paths cause the several signals arriving at a receiving antenna to have varied phase relationships. This variation in phase will result in either complete or partial addition or cancellation of signal potential.

The exact length of the distance traveled by the signal is principally controlled by three major factors. These are:

1. Distance between transmitting and receiving antennas.
2. Frequency of the transmitted signal.
3. The instantaneous height of the Kennelly-Heaviside layers above the earth's surface.

The first two of the factors are constant, but continuously changing ionospheric conditions make the third a variable.

Referring to Figure 1, the distance covered by the radio waves traveling over the two paths between the transmitter and receiver may be considered as equal to n wavelengths of the transmitted frequency. Assuming n to be equal to a whole number, the distance traveled over path "A" would then equal $n\lambda$. Considering this path only, if n were increased to $n + 1$, a constant signal would go through a complete cycle of phase shift with respect to a fixed receiving antenna.

If two or more signals are received from a single transmitter, as in Figure 1, and the distances that they travel are equal to $n\lambda$ and $(n + x)\lambda$, they will induce a total voltage E in the receiving antenna equal to $e_A + e_B$. See Figure 1a. As the value of x approaches $\frac{1}{2}$ (which will cause a 180° phase variation), the sum of the two voltages will approach zero. Differences in distance will cause unequal attenuation, therefore, the two signals will not be equal in value and will not suffer complete cancellation. It is obvious that through the range limited by

n and n + 1, values between n and n + ¼ and also those between n + ¾ and n + 1 will produce a total voltage E which will be greater than either e_A or e_B (see Figure 1b). Likewise, values between n + ¼ and n + ¾ will produce a total voltage E that will be less than either e_A or e_B (see Figure 1c).

The space diversity system of reception eliminates the possibility of cancellation by locating an antenna in such a position that the distance covered by signals cannot equal null points regardless of the value of $(n + x)\lambda$. This is done by erecting three antennas at the vertices of an equilateral triangle with each side of the triangle equal in length to several wavelengths. Signals may originate from any direction in a complete circle around the center point of such a triangle. The signal from each antenna is fed to a separate radio receiver and the rectified outputs are applied to a common load. This automatically selects the strongest of the three signals and suppresses the other two. Thus, the output will have the best signal-to-noise ratio for any combination of operating conditions. It is important to note that the final output of the Diversity Receiver is derived from the voltage induced on one antenna only. The outputs of the individual component receivers which are derived from the several antennas are not combined.

Referring to Figure 2, as the point of origin is rotated, it is noted that if distance A is equal to $(n + x)\lambda$, then distance B will be equal to $(n + x)\lambda + d$ and distance C will be equal to $(n + x)\lambda + d'$.

As the antennas form an equilateral triangle,
distance A = $(n + x)\lambda$
distance B =

$$\sqrt{S^2 + [(n + x)\lambda]^2 - 2S\,(n + x)\lambda \cos C}$$

where S = spacing between antennas
and $(n + x)\lambda$ = distance between transmitter and antenna A.

Extension d which is equal to distance B — distance A will then be a function of S. Distance C, which may be calculated from the same formula will then become a secondary function of the prime function S. Therefore, for any value of n or S, distance A can never equal **both** distance B and distance C, and the signal paths to each antenna **must** vary in phase relationship.

Maximum diversity is obtained when the point of origin of the transmitted signal is in the same plane as any two of the antennas. Minimum diversity results when the point of origin is at right angles with one of these planes as only two points will bear varied phase relationship.

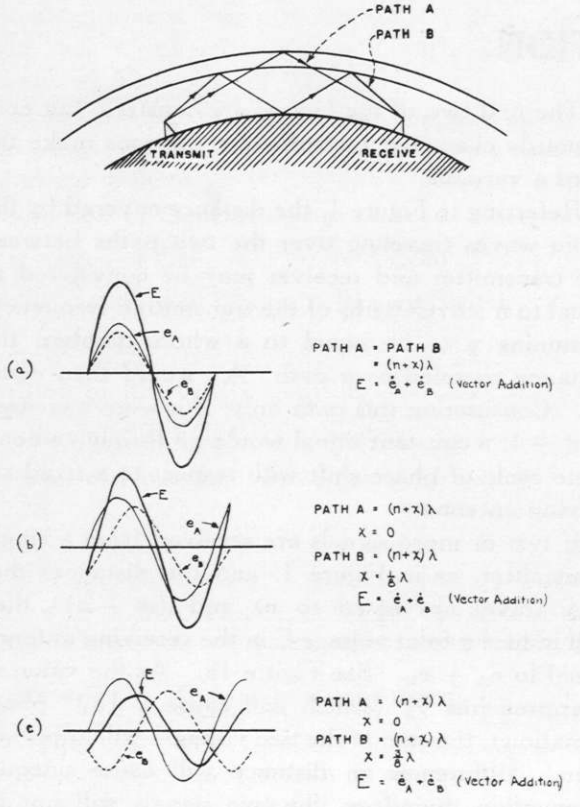


Figure 1—Reflected Waves

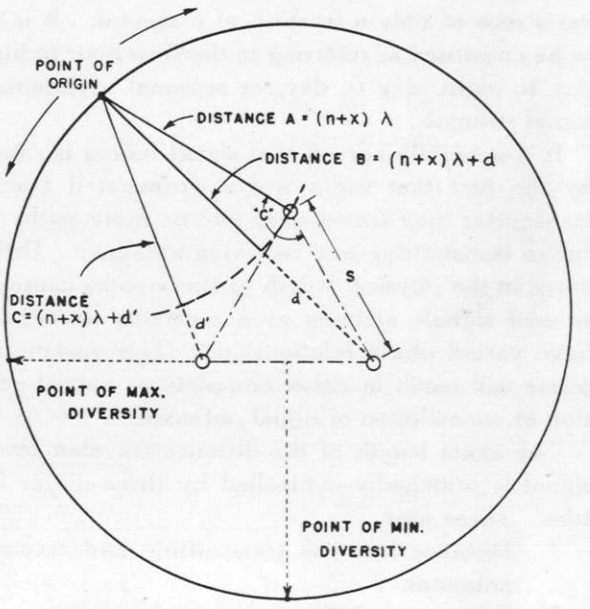


Figure 2—Diversity Reception

For optimum performance on the usual communication channels, a spacing of approximately 1,000 feet (304.78 meters) between antennas is recommended. If, however, this amount of area is not available, excellent diversity action can be obtained at smaller separations.

Spacing the antennas less than this distance results in greater probability of fading in transmission at lower frequencies due to the lesser diversity. Spacings greater than this distance entail attenuation in the transmission lines that negate the possible benefits. For maximum signal strength, the individual antennas in the array should be directed with respect to the transmitter azimuth.

DESCRIPTION

GENERAL

The RDM-1 Diversity Receiver is designed for reception of either continuous wave or modulated carrier signals at frequencies between 535 and 32,000 kilocycles. Three complete Radio Receivers together with a Tone Keyer, Monitoring Unit, Monitoring Unit Power Supply, Loudspeaker Assembly, and an Antenna Panel are mounted on a single rack. The Tone Keyer electronically selects the strongest output signal of the three individual rceiver units and suppresses the output of the other two. Output of the complete Diversity Receiver may be taken from the Tone Keyr or from any one of the three component radio receivers, all of which are terminated with suitable impedances to match either a transmission line, loudspeaker, or headphones. Voltage tap switches are provided to permit operation of all units of the receiver with power supplies in the two ranges of 100 to 165 and 190 to 260 volts 50/60 cycle alternating current. For operation of the complete receiver 450 watts are required.

The block diagram, Figure 3, illustrates the functions of the several components of the Diversity Radio Receiving Equipment, Navy Model RDM-1. A signal is received simultaneously on the three Antennas and Radio Receiver Units. The Monitoring Unit, which is connected to the i-f sections of all three receivers, may be used at any time during operation. Depending on the setting of the control switches on the Tone Keyer, the signal may be taken from the diode rectifier of the receivers and presented to the common load in the Tone Keyer or returned to the audio amplifying section of the originating receiver. When a signal is returned to the originating receiver, the receiver functions as a single unit. When one or more signals are fed to the common load the strongest is selected and is amplified in the Tone Keyer circuits. The output of the Tone Keyer may be either taken directly through the 600-ohm output terminal or may be further amplified by the audio amplifying sections of any one of the component receivers in operation. Selection is made by means of the SPEAKER switch on the Loudspeaker Assembly.

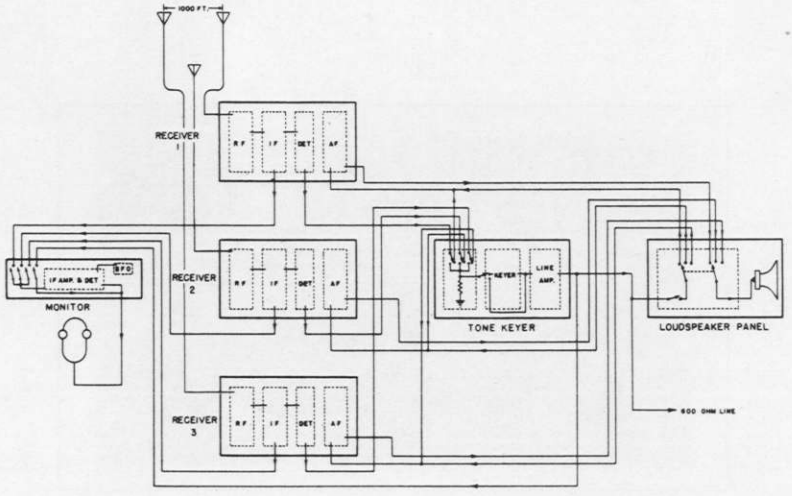


Figure 3—RDM-1 Functional Block Diagram

ANTENNA PANEL, NAVY TYPE CRV-23425-A

The antenna panel is a terminal plug board expressly designated for use with diversity receiving equipment. The panel is mounted at the top of the cabinet.

Each panel contains nine two-pin receptacles. One receptacle is provided for one leg of each three leg antenna array. The three receiver antenna cables are provided with banana plug assemblies which may be inserted into the two-pin receptacles.

Operation of the panel is extremely simple, it being necessary only to shift any one of the patch cords to a desired position.

RADIO RECEIVERS, NAVY TYPE CRV-46246-B

a. Introduction

The three component receivers used in each RDM-1 Diversity Radio Receiver Equipment are complete, self-contained units and are capable of high quality reception when used individually. In the design of the unit, great care has been taken in order to secure high standards of sensitivity, selectivity, stability, and reliability.

The sensitivity of the receiver is limited only by the tube noise originating in the first tube and its associated circuits. A large part of this noise is due to "shot" effect in the first amplifier tube and thermal agitation in the first tuned circuit. A signal, to be intelligible, must produce a voltage on the grid of an order of magnitude the same as or greater than these inherent noise voltages. An efficient coupling system between the antenna and the first r-f tube of the receiver is of great importance. This has been the subject of considerable development, and the system used on this receiver gives optimum coupling with antenna or transmission line impedances of 200 ohms, over the entire frequency range of the receiver, except on the broadcast band. This band utilizes a low frequency primary which resonates at a frequency well below the band when connected to a 200-mmf. antenna.

Selectivity in a radio receiver is necessarily a compromise with fidelity of the reproduced signal. The unit is designed to have five degrees of selectivity, three of which include a crystal filter. To insure good frequency stability, rugged construction of parts and wiring in the high frequency oscillator circuit have been included in the design. These factors, together with electronic voltage stabilization of the oscillator plate supply, temperature compensation, and proper oscillator excitation, provide a high degree of stability.

b. The Unit as an Individual Receiver

The receiver covers short wave, standard broadcast, and C.W. service; its principal use is for short wave communications. It is designed to withstand severe climatic and line voltage variations without appreciable impairment of performance. Its features include:

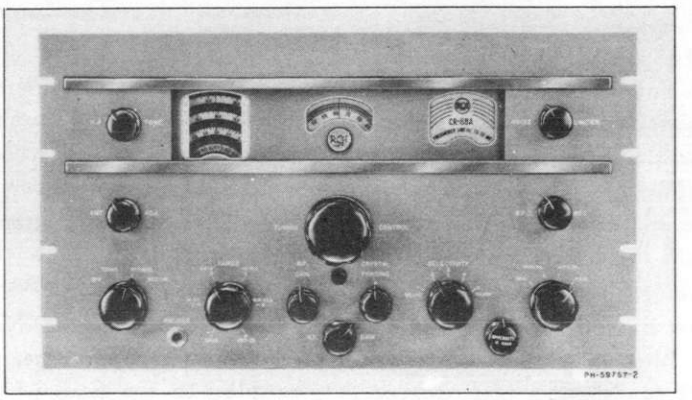


Figure 4—Radio Receiver, Navy Type CRV-46246-B

Mechanical band spread with single control for ease of tuning a previously logged station.

Automatic noise limiter which automatically limits interference to a percentage of modulation determined by the setting of a NOISE LIMITER control.

Continuously variable tone control.

Antenna trimmer for circuit alignment.

Crystal filter for ultra-sharp selectivity when required.

Exceptionally good oscillator stability through normal variations in line voltage.

Two tuned r-f stages ahead of the first detector insure high image ratio on all bands.

Twelve tuned i-f circuits giving a very high degree of selectivity.

Temperature compensated oscillator circuits on all bands.

Ceramic insulation throughout on gang condenser, sockets, range switch, and selectivity switch.

Tuning dial lock to prevent accidental detuning.

c. Circuit Description

The circuit is shown schematically in Figure 28. It consists of two stages of r-f amplification, first detector, first heterodyne oscillator, three stages of i-f amplification, second detector, noise limiter, second heterodyne oscillator, a-f amplifier stage, output power stage, and power supply system.

The antenna coupling system is designed to provide optimum coupling from a 200-ohm transmission line, except in the broadcast band. The first tuned circuit is provided with a trimmer condenser which is adjustable from the front panel. This insures a proper antenna circuit alignment for most antenna impedances.

For the standard broadcast band, conventional antenna and ground connections should be used.

The antenna terminal board on the rear of the chassis is provided with three terminals (see Figure 28), two of which may be joined together with a link. When a single wire antenna is used, the link should be closed and the antenna connected to "A." If a ground is used, connection should be made to "G." If a transmission line or balanced input is used, the "link" should be opened and the line connected to terminal "A" and the center terminal.

The r-f amplifier is designed to provide ample selectivity ahead of the first detector for minimizing cross modulation and the blocking effect of strong interfering signals, and for obtaining a high degree of image signal suppression. The amplification is adjusted to provide optimum signal-to-noise ratio by making noise contributions of circuits following the first tube negligible in comparsion with the noise contributed by the first r-f grid circuit. Each tuned circuit in a receiver contributes some noise voltage, but by making the gain of the first tube high, noise contributed by succeeding circuits is unimportant.

BAND SPREAD—The mechanical spread with single control knob enables the operator to quickly tune a previously logged station. The log scale on the main dial and the separate vernier dial provide for exact logging and tuning.

The first heterodyne oscillator is aligned to track with the r-f amplifier at 455 kc. higher than the signal frequency, thus producing a 455 kc. intermediate frequency in the first detector plate circuit which is amplified further in the i-f stages. The oscillator anode voltage is controlled by an RCA-VR150-30 regulator tube to provide maximum frequency stability under conditions of variations in power supply voltage.

The first detector plate circuit is tuned to the intermediate frequency and a balanced link circuit is used to couple the first detector plate and first i-f grid circuits. A 455 kc. crystal is connected in one arm of the link circuit, and a phasing capacitor is connected in the other. The impedances of the coils in the link circuit are designed so that the crystal selectivity characteristic is not impractically sharp. The bandwidth at two times resonant input may be adjusted to 400 cycles, 1,500 cycles, or 3,000 cycles. For this adjustment see "Operation."

Three stages of i-f amplification are used; RCA-6SG7 tubes are used in all stages and an RCA-6H6 tube is used for automatic volume control and second detector. The first i-f transformer has a tuned primary and secondary and is coupled through the crystal filter link. The second and third i-f transformers are composed of four tuned circuits each. These circuits are varied in coupling by the selectivity switch. The fourth i-f transformer has two tuned circuits.

The third i-f stage is not connected to the a.v.c. nor to the manual volume control. Therefore, a good a.v.c. characteristic with little overload distortion is obtained. This also permits the C.W. oscillator to be coupled to the grid circuit of this stage, giving a comparatively high detector excitation voltage with small electrical coupling to the oscillator circuit.

The second heterodyne (C.W.) oscillator is a triode RCA-6J5 tube, which is electrostatically coupled to the final i-f stage. A panel control is provided to permit variation of the frequency of the heterodyne oscillator and resultant audio beat note.

Particular care has been taken in the design of the circuit constants to minimize oscillator harmonics.

Voltage for automatic volume control is obtained from the second detector. A variable delay is obtained depending on the setting of the r-f gain control. The second heterodyne (C.W.) oscillator excitation voltage is maintained at a slightly lower value than the a.v.c. diode bias voltage so that it will not decrease the sensitivity of the receiver.

Three manual volume controls are provided: An audio gain control which is employed when the a.v.c. is in use to obtain the desired output level; an i-f gain control which is used only when the receiver is operated in diversity; and an r-f gain control.

The noise limiter circuit utilizes an RCA-6H6 tube and limits the noise interference to 100% modulation and to continuously lower percentages down to any modulation whatsoever, determined by the setting of the NOISE LIMITER control.

A NOISE LIMITER switch in conjunction with a.v.c. provides for use of the noise limiter on C.W. or on modulated reception when interference is present.

The RCA-6K6GT output tube is resistance coupled from the a-f amplifier, an RCA-6SJ7 tube, and operates into an output transformer which has taps for matching a 2.5- or 600-ohm load, or headphones. The headphones winding is designed so that a maximum of approximately 10 milliwatts of power may be delivered to 20,000-ohm phones. Terminals are provided on the rear apron for the 2.5- and 600-ohm impedances. The ouput from the 600-ohm winding is fed directly to the 600-ohm terminals, neither of which is grounded and may be used to feed a balanced 600-ohm line. The output from the 2.5-ohm tap is fed to the 2.5-ohm terminals through a two-position jack mounted on the panel. With the phone plug inserted into the jack in the first position, the phones are in parallel with the 2.5-ohm output and both are on. When the plug is pushed into the second position, the phones are connected to the phone winding and the 2.5-ohm output is cut off from the rear terminals. If no load is connected to the 2.5- or 600-ohm output terminals, the phones should always be used in the second position, as under this condition a load resistor is shunted across the 2.5-ohm tap to maintain impedance matching of the system.

The power pack mounted on the receiver chassis consists of a power transformer, rectifier tube RCA-5Y3GT, and filter. A tap switch is provided on the rear apron for changing the power transformer voltage tap. (See Figures 11 and 28.) The voltage for which the switch is set may be read directly on the switch.

Interstage shielding is provided to insure stability under all operating conditions and to minimize oscillator radiation. Complete external shielding prevents coupling to any portion of the circuit except through the antenna circuit.

TONE KEYER, NAVY TYPE CRV-35049-A

The Tone Keyer is used to combine the output of the several radio receiver units used in the complete diversity system. The Tone Keyer has, in addition to its own power rectifier, switching arrangements and controls to permit operation of one or any combination of all three radio receivers in diveristy. Refer to Figure 27 for complete schematic of the Tone Keyer.

When reception of C.W. signals is desired, the C.W.-PHONE switch is rotated to either the FAST A.G.C. or the SLOW A.G.C. position. These positions refer to the two optional time constants of the automatic gain control and are equal to 0.05 second and one second respectively. One or more of the receivers can be fed into this unit by throwing the corresponding switches to their IN position. The diode output of all receivers in operation is presented to a common load which is made up of resistors R4 and R50. As the diode outputs are negative voltages, the strongest signal will place a potential on the plates of any other diode that will make the plate negative with respect to its cathode. This immediately stops conduction in the circuit. The action is illustrated in Figure 5 which is a simplified functional schematic of the networks involved. With a signal of 12 volts R.M.S. introduced to the rectifier circuit of Receiver 1, the current passing through the load which is also common to the rectifier circuits of Receivers 2 and 3 will cause a voltage drop in the load that will make the plate side negative with respect to ground. As all the receiver rectifier cathodes are at ground potential, this effectively prevents conduction in Receivers 2 and 3 unless a signal is introduced with peaks high enough to drive the plate positive in spite of the negative potential impressed by Receiver 1. When this occurs, Receiver 1 will not conduct and the current through the load will be supplied by the larger signal.

The dominating signal is applied to the input of a d-c amplifier limiter circuit. Bias for the grid of the first section of the double triode tube VI, the first stage of the amplifier, is controlled by the potentiometers R6 and R8 which are the fine and coarse threshold adjustments respectively. It will be noted that the THRESHOLD control covers the entire range between zero bias and the maximum value as determined by the setting of the COARSE THRESHOLD control. The value of bias is adjusted to plate current saturation in order to prevent passage of any signal unless its voltage is sufficiently negative to overcome this bias. Variations in plate voltage are amplified by the directly coupled second section of the same tube and then directly coupled to the first section of the double triode V3. The output of this section of tube V3 is fed to the grids of tube V2 which is also a double triode, operating in push-pull arrangement. This balanced amplifier automatically cancels the effect of transmitter key surges. Also impressed on the V2 grids is the output of the tone oscillator tube V4. The two sections of V4 are connected in push-pull. The frequency of oscillation is controlled by the setting of the TONE switch which places various capacity values across the primary of transformer T2 to form a resonant circuit.

Bias on the grids of both sections of tube V2 is adjusted so that unless a signal voltage is added to "key" the output of the oscillator, plate current will flow and the amplifier will be biased to cut off. Output of both sections of the tube V2 is further amplified by a conventional transformer coupled line amplifier which uses the second section of tube V3. The output of this amplifier is the output of the unit. A filter section is provided in the input circuit of the first section of tube V3. Switch (S10), the FILTER control, permits selection of eight values of capacity varying between 820 micromicrofarads and 0.1 microfarad which are placed directly between grid and cathode. These capacities, in conjunction with R12, form a low pass filter. The time constant of the filter can be adjusted to prevent passage of the relatively high frequency noise voltages, but permit a signal pulse to key the push-pull amplifier.

The CAL-KEY control switch when thrown to the CAL position causes continuous keying of the push-pull amplifier V2 and permits accurate calibration of output level on the meter when the METER switch is thrown to the OUTPUT position.

For phone reception, the C.W.-PHONE switch is rotated to either the MOD. or MOD. NOISE LIMITER position. In the first of these two positions, the signal is fed directly to the line amplifier circuit utilizing the second section of tube V3. The d-c amplifier limiters with their threshold controls and noise filter circuit are not used in either type of phone service. With the switch in the MOD. NOISE LIMITER position, the modulation components of the signal are limited by the double diode V8. The

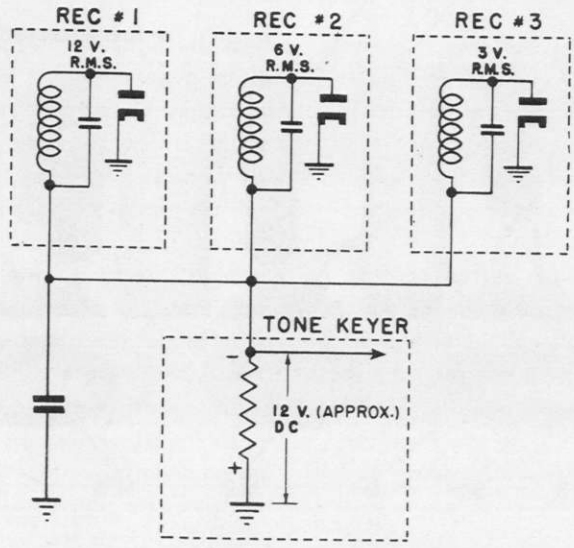


Figure 5—Tone Keyer Selection

THRESHOLD control, operating R50, is utilized to limit signals with a modulation percentage higher than that selected by the control setting. The output is fed to the line amplifier. Operation of the system for phone reception with the phone noise limiter in the circuit entails a drop of ten decibels with respect to the output level without the phone noise limiter.

A microammeter is provided on the front panel. When the METER INPUT switch is rotated to the first three positions the meter indicates the current flowing in the diode circuits of the three component receivers. When the switch is rotated to the COMB. position, the current through the common load in the Tone Keyer may be measured. The METER switch is thrown to the INPUT position for these measurements.

The Amphenol connector J4 is provided near the rear of the chassis to permit operation of the Tone Keyer from the output of a frequency shift adapter if future development should make this desirable.

MONITORING UNIT, NAVY TYPE CRV-23424-A, AND MONITORING UNIT POWER SUPPLY, NAVY TYPE CRV-20289-A

The Monitoring Unit provides means for accurately tuning the component receivers and also permits "besting" without interruption of the operation of the complete Diversity Receiver. Refer to Figure 26 for the schematic of the unit. Suitable switching arrangements are provided to allow a signal taken from the coupling network between the second and third i-f amplifiers of each of the receivers to be fed into the Monitoring Unit individually or in any combination.

An additional switch permits connection of the Tone Keyer output to the same phone jacks. This connection is merely for the convenience of the operator as the Tone Keyer output does not go through any of the Monitoring Unit circuits.

The signal is amplified by the two pentodes, tubes V1 and V2, which are connected as conventional transformer coupled i-f amplifiers. A.V.C. is supplied to both tubes by the double diode, V3. The two sections of the double triode tube V5 serve as an oscillator and a detector. The oscillator section is controlled by crystal Y1 and is maintained at a constant frequency of 455 kc. When the ZERO-TONE switch is in the ZERO position, the output of the oscillator is mixed with the amplified signal in the detector section of the tube. When the switch is in its TONE position, the crystal is not in the circuit and the frequency of the oscillator is increased to 456 kc. This produces a 1000 c.p.s. beat note. The rectified output is impressed on the

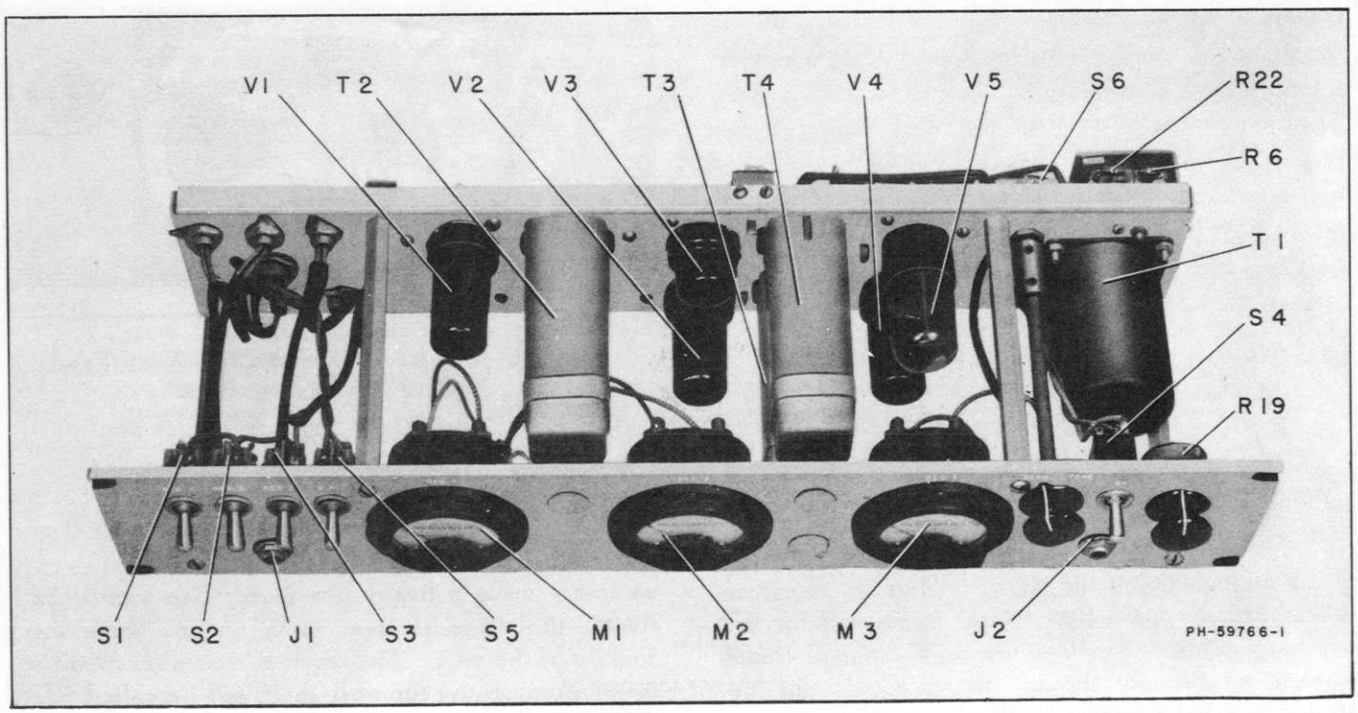


Figure 6—Monitoring Unit, Navy Type CRV-23424-A—Chassis Top Oblique View

grid of pentode tube V4 and amplified. The frequency of the beat note may be varied by adjusting C17 which may be reached through the rear panel cover. The amplified signal is available through the two phone jacks.

Three meters mounted on the panel indicate the instantaneous diode detector current of the component receivers.

The Monitoring Unit Power Supply provides the correct plate, screen, and heater voltages for the Monitoring Unit. Refer to Figure 25 for the circuit arrangements. The output of the full wave rectifier tube V1 is filtered by a conventional capacity input network. The voltage regulator tube V2 stabilizes the filter output voltage to insure stability of the beat frequency oscillator. Taps are provided on the power transformer to permit operation over a wide range of supply voltage. Provision has been made for installation of a frequency shift adaptor in the event that such an addition proves desirable for further expansion of receiver use.

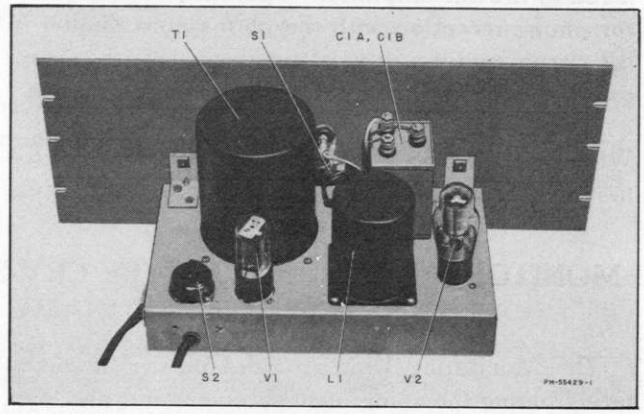


Figure 7—Monitoring Unit Power Supply, Navy Type CRV-20289-A—Chassis Top View

LOUDSPEAKER ASSEMBLY, NAVY TYPE CRV-49526-A

The Loudspeaker Assembly contains a permanent magnet type of dynamic loudspeaker and two controlling switches. The SPEAKER switch provides a means of switching the output of the Tone Keyer to the audio amplifier section of one of the receivers in use in diversity. Selection of one of the receivers also connects the loudspeaker to its output. For this type of operation, the FUNCTION switch is thrown to the DIV. position. The output of any one of the three receivers operating as a complete unit may be applied to the loudspeaker by rotating the FUNCTION switch to the SINGLE position and selecting the desired receiver by means of the SPEAKER switch.

Refer to Figure 24 for schematic diagram of the switching arrangements and Figure 8 for rear view of panel.

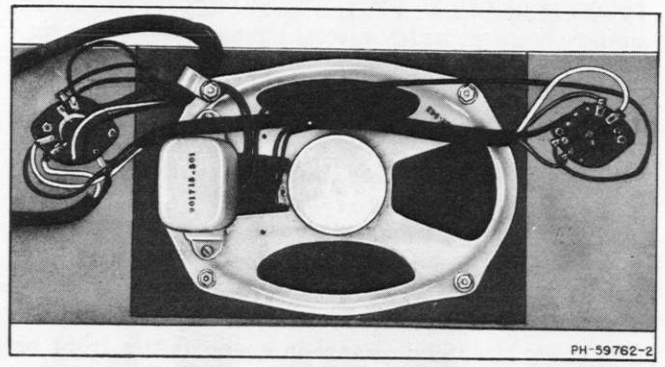


Figure 8—Loudspeaker Assembly, Navy Type CRV-49526-A—Rear View

INSTALLATION

All major units of the RDM-1 Diversity Receiver are separately packaged. Refer to Page 5 for list of components. The Cabinet and Antenna Panel already assembled should be uncrated and installed in a level section of floor area that will permit access to the rear of the unit. Ground the rack assembly using a heavy bus wire. See Figure 29. Install the three receiver units on the three top shelves of the rack. The receiver that is selected for installation on the topmost shelf will be called RECEIVER #1 with RECEIVER #2 and RECEIVER #3 placed on the next two shelves. Before install-

ing each receiver, remove all packing pads, corrugated collars, etc., that have been used to insure safe shipment. Check to see that all tubes are firmly seated in their sockets. It will be necessary to remove the metal plates that shield the r-f section for this examination.

Install the Monitoring Unit just below Receiver #3 after the protective packing material has been removed and tubes checked as above.

Install the Tone Keyer on the fourth shelf of the rack. Check tubes and remove any packing material.

Install the Loudspeaker Assembly in the rack below the Tone Keyer. Immediately below it will be found a blank panel. Install the Monitoring Unit Power Supply in the lowest position at the bottom of the rack, below the blank panel.

The set of interconnecting cables which is supplied with the instrument will permit the establishment of all required connections between the several units.

IMPORTANT: BEFORE MAKING FINAL CONNECTION TO AN EXTERNAL POWER SOURCE, CHECK THE SETTINGS OF THE VOLTAGE TAP SWITCHES MOUNTED ON THE REAR OF THE CHASSIS OF EACH RECEIVER UNIT, THE TONE KEYER, AND THE MONITORING UNIT POWER SUPPLY, FIVE SWITCHES IN ALL. BE SURE THAT THE OPERATING RANGE SELECTED IS CORRECT FOR THE VOLTAGE OF THE EXTERNAL POWER SOURCE.

The power supply line should be separately fused.

Assemble all antenna transmission lines to the jacks that are provided on the antenna panel, which will be found at the top of the rack assembly.

Assemble antenna panel in space at top front of cabinet with six #12-24 screws supplied, using holes in rack and brackets.

Assemble power distribution box inside lower rear flange of cabinet with three #6-32 x ½ inch long screws supplied, using drilled holes in rear of cabinet.

Assemble spreader to brackets inside top rear of cabinet with two #12-24 x ½ inch long screws and two #12 washers supplied, using tapped holes in brackets.

Assemble ground lug securely in hole at bottom rear of cabinet as shown to provide good ground.

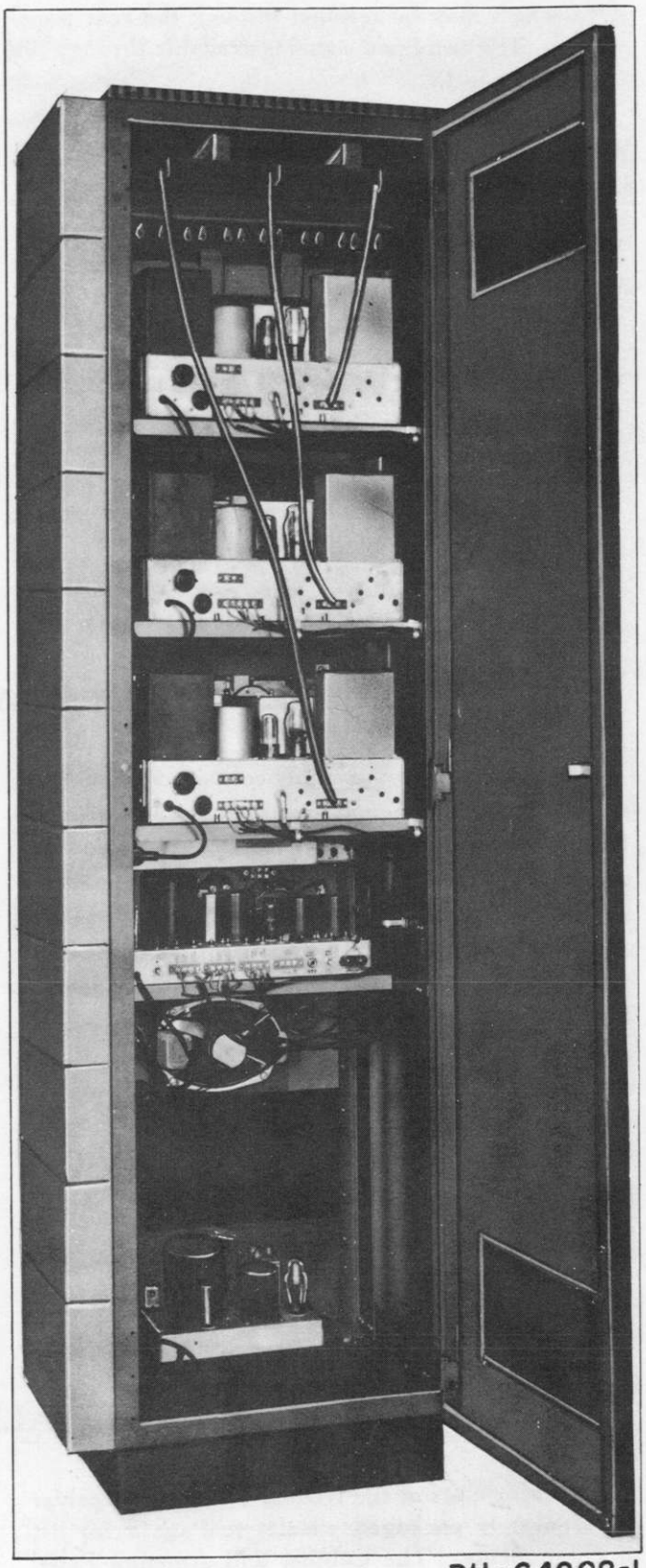


Figure 9—Diversity Radio Receiving Equipment, Navy Model RDM-1—Rear View

OPERATION

1. DIVERSITY RECEPTION—C.W. TRANSMISSION

The overall sequence of steps for operation of the RDM-1 Diversity Radio Receiving Equipment for Diversity Reception of C.W. signals is as follows:

1. Tune the individual receivers to the frequency of the desired transmitted signal.
2. Equalize the amplitude of the output of each of the receivers.
3. Adjust the controls of the Tone Keyer for most intelligible signal with minimum interference and noise voltage.
4. Adjust the output of the Tone Keyer to the desired tone and power level. **Keep in mind during operation of the unit the fact that all of the adjustments are more or less interrelated.**

Throw the power switches on all receivers to the REC.-MOD. position and those on the Tone Keyer and the Monitoring Unit Power Supply to their ON position.

A. Component Receiver Adjustments

1. Set the power-transmit-receive switch on the receiver panel to the REC.-MOD. position. **Use only this position for diversity reception.**
2. Set RANGE switch to the band required.
3. Set SELECTIVITY switch for the required operating conditions. **For best reception always use the narrowest possible selectivity position.**
4. Set the noise limiter-a.v.c. control to A.V.C. position.
5. Set the R.F. GAIN control to maximum gain (fully clockwise). This setting should not be varied during diversity operation.
6. Set the DIVERSITY I.F. GAIN control to maximum gain (fully clockwise).
7. Set the A.F. GAIN control to about one-half of maximum gain.
8. Plug a set of headphones into either of the two phone jacks on the Monitoring Unit and tune the receiver to the signal desired by throwing REC. 1 switch upward. All other switches in this group remain down.

   The main tuning dial is on the left and consists of a disc with seven scales, one for each of the six bands and a logging scale. The standard broadcast band is calibrated in kilocycles and the other five bands in megacycles.

   The vernier tuning dial is in the center and has a scale with arbitrary calibrations for exact tuning and log records of particular communication stations. It is used in conjunction with the logging scale on the main tuning dial to give additional figures for logging.
9. After the desired station has been identified, turn the ZERO-TONE control on the Monitoring Unit counterclockwise to the ZERO position.
10. Throw the B.F.O. switch to its ON position.
11. Tune the incoming signal for zero beat.
12. Adjust the ANTENNA TRIMMER for maximum background noise.
13. Turning the ZERO-TONE switch clockwise to the TONE position will present the signal in the headphones at a 1000-cycle tone frequency. NOTE: During these adjustments the intensity of the signal may be varied by adjustment of the MONITOR control.

Repeat the above steps and tune Receiver #2 and then Receiver #3 by throwing the corresponding switch upward. All other switches remain down. It may be advantageous during long periods of reception to retune one or more of the receiver units in order to correct for temperature changes, etc. This can be done by using the above described method without interrupting operation of the complete instrument.

After the three receivers are correctly tuned, adjust the output level of each unit by reference to the meters on the Monitoring Panel. With the R.F. GAIN controls set for maximum gain, adjust the DIVERSITY I.F. GAIN control so that the sensitivity of each receiver and its associated antenna is the same. The least sensitive would therefore be at maximum gain and the other two receivers would be brought down to the same degree of sensitivity. This is done by observing the peak diode output of each receiver as indicated on the corresponding meter. As the meter pointers will swing with signal

amplitude, close attention is required to read the **maximum** values registered. The i-f gain on the more sensitive receivers should be reduced until all three of the meters reach the same peaks. It will be noted that as the levels of all three units approach equality, the three meters will tend to become active whereas in the case of **wide** variation of output levels, only one of the meter pointers will move. When diversity action is properly established, all three of the meters should tend to be equally active and the meter on the Tone Keyer will be stable, showing little or no fading.

When the output of a single receiver or of two or three receivers in diversity is fed into the Tone Keyer, by throwing the correspondingly numbered switches to the REC.-MOD. position, the NOISE LIMITERS on the individual receivers do not function.

B. Tone Keyer Adjustments

The line output level is controlled by the OUTPUT control on the Tone Keyer. Output decibels for a keyed C.W. signal may be read on the meter by throwing the METER switch to the OUTPUT position and by setting the CAL-KEY switch to the CAL position.

The output may be amplified by the audio amplifying section of any one of the three receivers in use in diversity by setting the SPEAKER switch on the Loudspeaker panel to the number corresponding to any of the receivers that may be in operation. The FUNCTION switch is turned to DIVERSITY. In this service, the loudspeaker volume level is controlled by the A.F. GAIN control of the selected receiver and by the OUTPUT control on the Tone Keyer panel.

When the component receivers are used in diversity with function switches turned to REC.-MOD., the individual Beat Frequency Oscillators are not in operation. Any one of eight tone frequencies generated in the Tone Keyer, or, if desired, the frequency of an external source, can be selected by turning the TONE switch on the Keyer to the proper one of nine positions. The tones available and corresponding selector switch points are: 1—595 cycles, 2—765 cycles, 3—935 cycles, 4—1105 cycles, 5—1275 cycles, 6—1445 cycles, 7—1615 cycles, 8—1785 cycles, 9—external tone source. (Higher tone frequencies give better results with high keying speeds.) An external source, if used, should be able to supply 2.5 volts R.M.S. across 5000 ohms.

(1.) The Threshold Controls

The THRESHOLD control sets the minimum value of voltage from the diode output of the individual receiver which will permit that receiver to "key on" the oscillator in the Tone Keyer. The change of voltage needed to make the keyer go from no output to full output is less than 0.2 volt, and is entirely independent of the total value of threshold voltage. If the THRESHOLD were set to a value of say 8 volts, noise and interference with peak values up to 8 volts which might be received would not operate the keyer and would give no output, while a signal of 8.2 volts or any greater amplitude would give the full output of the Tone Keyer, unaffected by the noise and interference. In this way, it is possible to make perfect tape recordings even when the desired signal has a large interference component. The COARSE THRESHOLD control is calibrated in six steps between 0 and 60 volts which represent the full range of the receivers' diode output, from the lowest contact potential (about 0.4 volt) to 60 volts. A fine THRESHOLD adjustment is provided to permit more exact settings. The COARSE THRESHOLD adjustment can be set either to the maximum diode voltage of the receiver used with the Tone Keyer (30 volts for the units used in the RDM-1 Diversity Receiver), or, when a very weak signal is being received, at a voltage that is just high enough to permit the keying of the instrument by the desired signal but too high to permit keying by interference or noise voltages.

A practical method for setting the COARSE THRESHOLD is to consider full scale deflection of the meter on the Tone Keyer panel equivalent to thirty volts of diode output. The METER switch should be on INPUT for this reading. Set the COARSE THRESHOLD to a voltage equivalent to the deflection of the meter pointer. If, for example, the meter indicates two-thirds of full deflection, the COARSE THRESHOLD control should be set at two-thirds of 30 volts or 20 volts; for half deflection, the control should be set at 15 volts. Starting at its fully clockwise position, the THRESHOLD fine control is rotated in a counterclockwise direction until the signal interrupts the continuous keying. At this setting, noise voltages with amplitudes less than the signal will not key the oscillator. With the RDM-1 Receiver, the setting of the COARSE THRESHOLD control should at no time be higher than 30 volts.

The lowest threshold setting is limited by the signal voltage at maximum fading; therefore, the

lower the value of threshold voltage used, the more the signal can fade before any of the characters are lost. The higher the value of threshold voltage used, the larger the amplitude of noise peaks and interference which can be prevented from introducing spurious characters (fills) into the final output. If the lowest amplitude of the signal at the point of greatest fading is **higher** than the maximum noise and/or interference voltage, with proper adjustment of the threshold controls, perfect tape recordings can be made even without the help of the noise filter. With many types of noise, by using the noise filter, perfect tapes can be made when the noise peak voltages are higher than the signal voltage.

(2.) The Noise Filter

The operating principle of the noise filter circuit is based on the fact that all voltages, strong enough to overcome the threshold bias, are brought to the same amplitude. The filter control takes advantage of the differences in the time-duration of actual signal voltages and the voltages created by noise or interference. The noise filter, which is a variable time constant circuit, makes it possible to eliminate any voltage **regardless of its source or regardless of its original amplitude, if its time duration is less than the selected time constant of the circuit.** The time constant selected for operation should be slightly less than the duration of the "dot" character in the transmission speed of the incoming signal. Thus, perfect, unmarred tape recordings can be made from signals which have a noise or interference component of shorter duration than the shortest character transmitted, even though the **amplitude** of noise or interference voltage is far greater than that of the signal voltage. The longer the time constant (or the higher the setting of the NOISE FILTER control) the longer can be the duration of noise and/or interference pulses that can be eliminated from the output. It is obvious therefore, that the amount of filter that can be used is limited and is in inverse proportion to the keying speed of the incoming signal. If too much filter is used (too long a time constant), the shortest component of the signal, namely the dots, would be eliminated. In practice, considerable improvement in output can be realized even with keying speeds as high as 600 W.P.M. The FILTER switch should be set for the highest keying speed apt to be received. Up to 300 W.P.M. may be received on Position 5. The C.W.-PHONE switch should be set to the FAST A.G.C. time constant and the THRESHOLD control turned clockwise as far as possible without getting either noise, a continuous tone, or "heavy" keying (characters too long and spacing too short). Under adverse conditions, turning the FILTER switch to a higher number tends to reduce noise and permits the reception of weaker signals by allowing a more sensitive setting on the THRESHOLD control. If the FILTER switch is set at too high a value, the characters tend to become distorted.

(3.) Coordination of Controls

For best reception of code signals, it is essential that the several Tone Keyer controls be adjusted to best values with respect to the setting of the others. An experienced operator will be able to adjust the THRESHOLD and NOISE FILTER controls to a compromise point that will minimize the number of "drop-outs" of characters caused by signal fading and "fills" caused by excessive noise and/or interference. It will be found that for every combination of operating conditions, one setting of these controls will produce the most intelligible tape recording in the case of either very weak signals or extremely strong noise and/or interference. Generally speaking, after the NOISE FILTER has been adjusted to its best position, the lowest threshold voltage (the highest clockwise setting) that will completely eliminate interference or "fills" will usually give the best output, as the signal can then fade to the lowest level without being lost.

Due to the effectiveness of the three d-c amplifier limiters, the maximum amplitude of the signal is of no consequence. An increase of signal value from 1 microvolt to 1 volt or one million times, will make no discernible variation in the keyed tone after the threshold voltage has been exceeded.

The Tone Keyer will operate with the C.W.-PHONE switch on either the FAST or SLOW position. Fast or slow corresponds to automatic gain control time constants of approximately 1/20 of a second and 1 second respectively. The shorter time constant must be used when rapid fading is encountered, while the use of the slow time constant tends to attenuate noise during pauses in transmission. When "fills" between characters of the incoming signal are encountered, the SLOW A.G.C. setting must be used. With **extremely** rapid transmission, the "fills" may persist even when the SLOW A.G.C. constant is used. This will indicate that transmission is being attempted with too high a keying speed for the conditions of reception. If there is any "dropping" or "splitting" of characters, the FAST A.G.C. is recommended.

2. DIVERSITY RECEPTION—PHONE TRANSMISSION

When used for reception of amplitude modulated carriers, the C.W.-PHONE switch on the Tone Keyer should be rotated to either the MOD. or MOD. N.L. position. This will feed the output of the one or more receivers that may be in operation in diversity into the line amplifier circuit in the Tone Keyer. When the C.W.-PHONE switch is so placed, the threshold and noise filter circuits are not in operation. The output of the line amplifier can be returned to any of the three receivers for audio amplification by rotating the FUNCTION switch on the Loudspeaker panel to the DIVERSITY position, and the SPEAKER switch to one of the receivers in operation.

If the MOD. N.L. position of the C.W.-PHONE switch on the Tone Keyer is used, the THRESHOLD control serves to limit the modulation components of the incoming signal. Turning the knob in a counterclockwise direction will increase the limiting action of the filter. When the instrument is used with the MOD. N.L. setting, there will be a drop of approximately 10 db in output level.

NOTE: An amplitude modulated code signal may be received using the PHONE reception technique, if desired. In this service, however, the benefits of the THRESHOLD and NOISE FILTER are sacrificed. Likewise, there can be no control over the frequency of the output tone.

Summary—Diversity Reception

Step 1. Allow ample "warm-up" time to insure that all units of the equipment reach operating temperature.

2. Tune each receiver individually to the desired signal by means of the Monitor Panel and adjust the sensitivity of each receiver by using the DIVERSITY I.F. GAIN control so that the outputs of the units to be used in diversity are equal.

3. For Phone Reception:

a. Adjust the OUTPUT control on the Tone Keyer for desired output level.

b. Select one receiver to be used as an audio amplifier and make correct adjustment of the FUNCTION and SPEAKER switches on the Loudspeaker panel.

3. For C.W. Operation:

The FILTER control and THRESHOLD adjustment must be set, each with reference to the setting of the other.

a. Adjust the THRESHOLD control to the lowest value that will permit keying of the oscillator by the incoming signal at the level of maximum fading.

b. Adjust the FILTER control to maximum value which will still permit keying of the oscillator by the shortest duration (the dot) character of the desired signal. With conditions of strong interference and weak signal, a compromise adjustment of the FILTER and the THRESHOLD controls will give the most intelligible signal. Optimum output of the unit is secured with the **highest** value of FILTER (the longest time constant) and the **highest** usable THRESHOLD setting.

c. Adjust output to desired level and feed to the selected channel.

3. SINGLE RECEIVER C.W. AND PHONE

Any single receiver, or two or three receivers may be operated simultaneously as individual units each with its own A.F. GAIN control and NOISE LIMITER functioning by throwing the corresponding toggle switches on the Tone Keyer to their OUT position. The outputs are then available through the receiver phone plugs, external speaker connections in the rear of the chassis, or through the Loudspeaker panel. For output through the speaker, the FUNCTION switch is rotated to the SINGLE position and the SPEAKER switch is rotated to the number corresponding to the receiver in operation. Receiver output may be fed into the 600-ohm line terminals of the Tone Keyer by plugging a patch cord into the phone jack of the Receiver and the phone jack of the Tone Keyer. The POWER switch on

the Tone Keyer may be left in the OFF position. Tune individual receiver units as follows:

Step 1. Turn Receiver on and set the power-transmit-receive switch for the required type of operation. The four possible positions of this control, starting from the most fully counterclockwise position are:

(1) Power off.

(2) Transmit position, which gives energized tube filaments, open plate circuits.

(3) Normal reception, for amplitude modulated carriers.

(4) C.W. reception. Selection of this position places the Beat Frequency Oscillator in operation.

2. Set RANGE switch for band required.

3. Set ANTENNA ADJ. trimmer for maximum background noise.

4. Set SELECTIVITY switch for the required operating conditions. This is a five position switch. Bandwidths and control of selectivity are illustrated in the curves of Figure 18. The positions are:

(1) I-F bandwidth for high fidelity reception of an amplitude modulated carrier

(2) I-F bandwidth for normal reception of an amplitude modulated carrier.

(3) I-F bandwidth for C.W. code signals or sharply modulated carriers. In this position the crystal filter is used.

(4) I-F bandwidth for sharpest C.W. code reception—crystal filter used.

(5) I-F bandwidth for sharpest C.W. code reception—crystal filter used.

5. Set noise limiter-a.v.c. switch for the required operating condition. This is a four position switch. Starting with the fully counterclockwise position, these are:

(1) MANUAL. This position is used for C.W. reception where no interference is encountered. The noise limiter is not in the circuit and there is no a.v.c. Gain must be adjusted manually.

(2) MANUAL N.L. This position should be used for C.W. reception where interference is present. The noise limiter circuit is functioning but not the a.v.c. action. Gain must be adjusted manually.

(3) A.V.C. N.L. This position should be used for reception of a modulated signal when interference is encountered. Both the noise limiter and the a.v.c. circuits will be in operation.

(4) A.V.C. For use when receiving a modulated signal with no interference present. The noise limiter circuit is not operating but a.v.c. action is in effect.

6. Set R. F. GAIN control at maximum. This continuously variable sensitivity control is used in conjunction with the DIVERSITY I.F. GAIN control and the A.F. GAIN (Volume) control for all manual variation of gain. It should as a rule be set for maximum gain (fully clockwise) when a.v.c. is in use or it may on occasion be turned back to eliminate interference.

7. Set DIVERSITY I.F. GAIN control at maximum (fully clockwise).

8. Set A.F. GAIN control to about one-half of maximum gain.

9. Tune in desired station. Extremely accurate tuning may be obtained by setting the B.F.O. control in a vertical position and tuning for zero beat. This method can be used with any type of incoming signal providing that the power-transmit-receive switch is placed in the REC.-C.W. position.

10. Reset A.F. GAIN control to give desired output volume.

11. When receiver is operating with the noise limiter and a.v.c. switch on either the MAN. N.L. or the A.V.C. N.L. positions, adjust the NOISE LIMITER control for optimum percentage value of noise limitation. The full clockwise position limits the noise interference to 100% modulation. As the control is turned in a counterclockwise direction, the noise interference is limited to continuously lower percentages of modulation so that in the fully counterclockwise position, the NOISE LIMITER is operative on any modulation whatsoever. Normally, the fully clockwise position will be used, but under extreme conditions of interference, a balance point should be found for maximum intelligibility of signal with best modulation and least noise.

12. Reset the SELECTIVITY switch and R.F. GAIN control for requirements arising from variation of interference and station transmission in accordance with operating conditions at the time of reception.

13. Set the TONE control for preferred tone for signal being received. This is a continuously variable control for reducing high frequency response. In fully clockwise position, the full tone is obtained and as the knob is turned counterclockwise, high frequency tones are attenuated.

14. For C.W. reception set the B.F.O. control to give the desired pitch. If the receiver is subjected to vibration, the tuning may be locked by turning the knurled screw directly beneath the tuning knob in a clockwise direction. Turning this screw moderately tight will lock the tuning.

MAINTENANCE

GENERAL

As the Diversity Radio Receiving Equipment, Navy Model RDM-1 is made up of seven completely independent components, maintenance problems are greatly simplified. Any impaired operation can be rapidly traced to the faulty component merely by taking the output of each unit individually. The suggested procedure is to start with the several receivers operating as complete units and examine the outputs of each by oscilloscope or, for a rough check, with headphones. The outputs should then be checked individually in the Monitoring Unit and fed singly and in all combinations to the Tone Keyer. The final check is that of the Loudspeaker panel which should include operation of the unit in both positions of the FUNCTION switch and all three positions of the SPEAKER switch. These steps will definitely allocate any trouble to the correct component unit. After the faulty unit has been determined, the interconnecting cables should be checked for open circuits or shorts.

RADIO RECEIVERS, NAVY TYPE CRV-46246-B

A noticeable decrease in the sensitivity of the receiver usually indicates worn out vacuum tubes. If the sensitivity is low, remove and check the tubes in a reliable tube tester or substitute new tubes one at a time. See diagram, Figure 10. Tube socket voltages are given in Table II.

A switch may operate defectively on certain positions after long periods of inoperation. Usually rotating the switch back and forth several times will clean the contacts and operation will become normal.

A bad range-switch contact is likely to cause a change in the sensitivity of the receiver, or the frequency of a received signal, as the switch is moved back and forth slightly in a certain frequency band position. A further check is to turn the switch off and on at one particular frequency band several times and note the apparent sensitivity of the receiver each time the switch comes into position. The sensitivity should be the same each time and may be adequately judged for this test by listening to the receiver background noise.

The R.F. Unit, which consists of the tuning condenser, tuning unit, range switch, and all of the r.f. and oscillator coils and trimmers, is mounted on a separate base which bolts to the main base. The various coils and trimmers on this base may be easily replaced by means of a single nut which screws on the individual mounting bushings. However, if a major repair is to be made such as replacement of the range switch, it is necessary first to remove the complete R.F. Unit from the receiver. To do this the following procedure should be observed:

1. Remove the knobs by means of the small wrench

held in the spring clip on the right-hand side of the chassis. This wrench fits the set screws in all knobs except the main tuning knob. For this knob use an ordinary small screwdriver.

2. Remove the panel by removing the eight nuts with which it is held to the support brackets.

3. Remove the large cover from the top of the R.F. Unit, by removing the four knurled nuts with which it is supported.

4. Remove the small cover from the tuning condenser, by removing the eight knurled nuts with which it is supported.

5. Remove the dial light sockets where they are clipped on to the tuning unit.

6. Remove the antenna trimmer shaft extension by loosening set screws in coupling with same wrench as used above for knobs.

7. Remove support bracket from flywheel tuning shaft.

8. Remove main dial, vernier dial, and flywheel by loosening set screws with same wrench as used for knobs.

9. Disconnect the eight leads which connect the R.F. Unit to the main base. These leads are as follows:
   (a) Two on the antenna terminal board (blue and black).
   (b) One on number 7 pin of the 6K6GT output tube (brown).
   (c) One on terminal E of the crystal load circuit (yellow).
   (d) One on terminal E of the first i.f. transformer (red).
   (e) One on terminal F of the first i.f. transformer (blue).
   (f) One on pin 6 of the second i.f. tube (green).
   (g) One on pin 7 of the second i.f. tube (brown).

   In addition, the by-pass condenser which grounds to the R.F. Unit near the second i.f. tube must be disconnected.

10. Remove eleven screws which hold R.F. Unit to main base. Three of these are on under side of chassis along the front edge. The other eight are removed from the top.

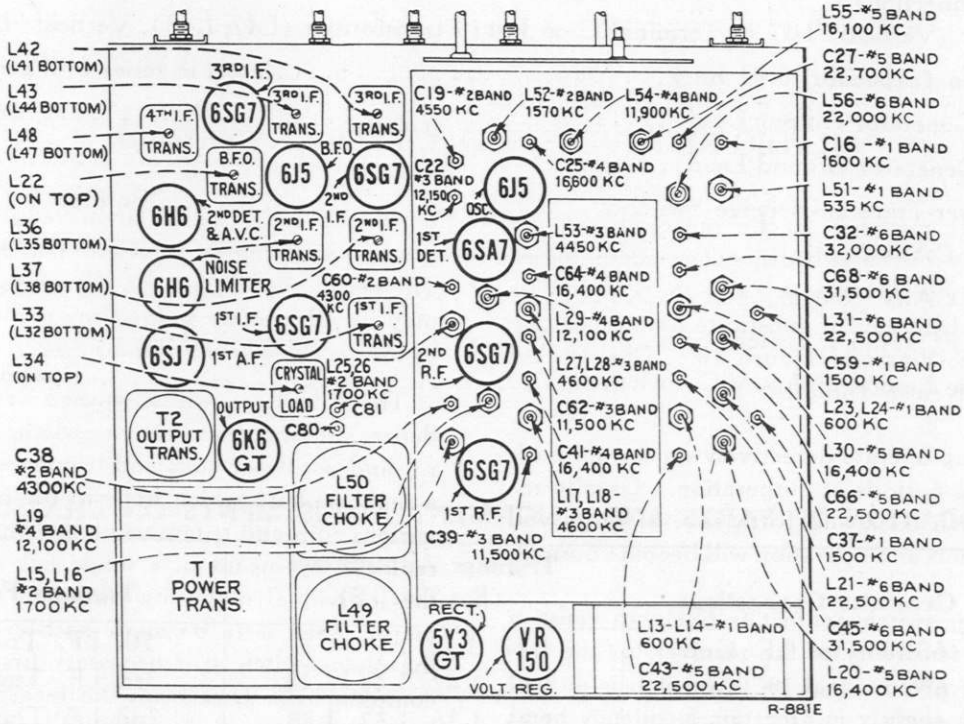


Figure 10—Radio Receiver, Navy Type CRV-46246-B—Diagram of Top of Chassis

11. Remove clamp securing coaxial monitor cable (black vinylite) to the R.F. Unit.

12. The R.F. Unit may now be removed from the bottom by lifting up first the rear of the R.F. Unit and sliding it back out of the opening. After the unit has been repaired, it may be reassembled by following the above procedure in reverse order.

Alignment

Special tools for alignment of r.f. and i.f. circuits are provided. They are mounted in fuse clips on either side of the gang condenser cover, and are available after removing the large R.F. Unit cover. The shorter one of the two is for adjustment of all r.f. and i.f. coils and the longer one is for adjustment of the plunger type trimmers. One end of this tool is for turning the locknut on the trimmers and the other end has a hook for engaging in the hole in the end of the plungers. After adjustment, the locknut should be securely tightened.

I.F. Alignment

The intermediate frequency is 455 kc. The most satisfactory method of i.f. alignment is by means of a sweep oscillator and cathode ray oscilloscope. Follow the sequence as given below:

Before performing step 4 below, set CRYSTAL PHASING control C75 at approximately one-half of its maximum capacity. This is approximately its final setting and changing it appreciably will slightly detune the first i-f transformer.

With SELECTIVITY switch in position 2 the i-f bandwidth is normal without over-coupling in the transformers. With SELECTIVITY switch in position 1, the second and third i-f transformers are expanded and over-coupled. It is well in going through the alignment steps outlined above to check the i-f curves on the oscilloscope screen with switch in position 1 to see that the curves expand symmetrically.

Adjustment of CRYSTAL PHASING Control

The adjustment is best made by means of a signal generator and a high resistance sensitive d-c voltmeter such as the RCA VoltOhmyst. Place SELECTIVITY switch in position 3. Connect the generator to the grid of the 6SA7 first detector, and the Voltmeter to Terminal C on last i-f transformer (L47, L48). Tune the generator to about 7 kc. off i-f resonance and adjust the CRYSTAL PHASING control C75 for minimum response. Loosen control knob on front panel if necessary, and reset pointer in vertical position.

Oscilloscope Connections
Vertical "HI" to Terminal C on last i-f transformer (L47, L48), Vertical "LO" to chassis

Dummy Antenna (capacitor, 0.01 mf.) ..... Insert in series with generator output

Connection of Generator Output Lead ..... See chart below

Connection of Generator Ground Lead ..... To chassis

Position of Power-Transmit-Receive Switch ..... Position 3 (REC.-MOD.)

Position of R.F. GAIN Control ..... Fully clockwise

Position of I.F. GAIN Control ..... Fully clockwise

Position of SELECTIVITY Switch ..... Position 2

Position of Noise Limiter and A.V.C. Switch ..... Position 4 (A.V.C.)

LOCATION OF PARTS AND ALIGNMENT ADJUSTMENTS ON CHASSIS

Steps	Generator Connections	Trimmer Adjustments (See Fig. 15)	Trimmer Function
1	6SG7—3rd I.F. Grid	L47, L48	5th I.F. Transformer
2	6SG7—2nd I.F. Grid	L41, L42, L43, L44	3rd I.F. Transformer
3	6SG7—1st I.F. Grid	L35, L36, L37, L38	2nd I.F. Transformer
4	6SA7—1st Det. Grid	L32, L33	1st I.F. Transformer

Adjustment of Crystal Load Circuit

Make connections as for the preceding adjustment.

(a) Place SELECTIVITY switch in position 3. Rock the signal generator frequency and adjust the signal generator frequency and adjust the crystal load circuit trimmer L34 for symmetrical round top curve.

(b) Place the SELECTIVITY switch in position 4. Rock the signal generator frequency and adjust trimmer C81 for symmetrical curve.

(c) Place the SELECTIVITY switch in position 5. Adjust trimmer C80 rocking the signal generator as for (a) and (b) above.

The above three adjustments are very critical and must be made carefully to obtain symmetrical curves.

Adjustment of Wave Trap

A wave trap is connected across the broadcast band antenna primary to increase the rejection of i-f signal frequencies. With the range switch on position 1, apply a modulated i-f signal to the antenna and ground terminals. Adjust the wave trap trimmer L57 (see Figure 11) for minimum output. The wave trap should be adjusted before the final r-f alignment on No. 1 band, or the antenna coil alignment may be affected.

R.F. Alignment

A signal generator covering a range from 535 kc. to 32 megacycles and an output voltmeter are required. It is desirable to connect a speaker across the output terminals. The output voltmeter should then be connected across the speaker voice coil. The output impedance is 2.5 ohms. Remove the cover from over the R.F. Unit by loosening the four knurled screws and lifting off.

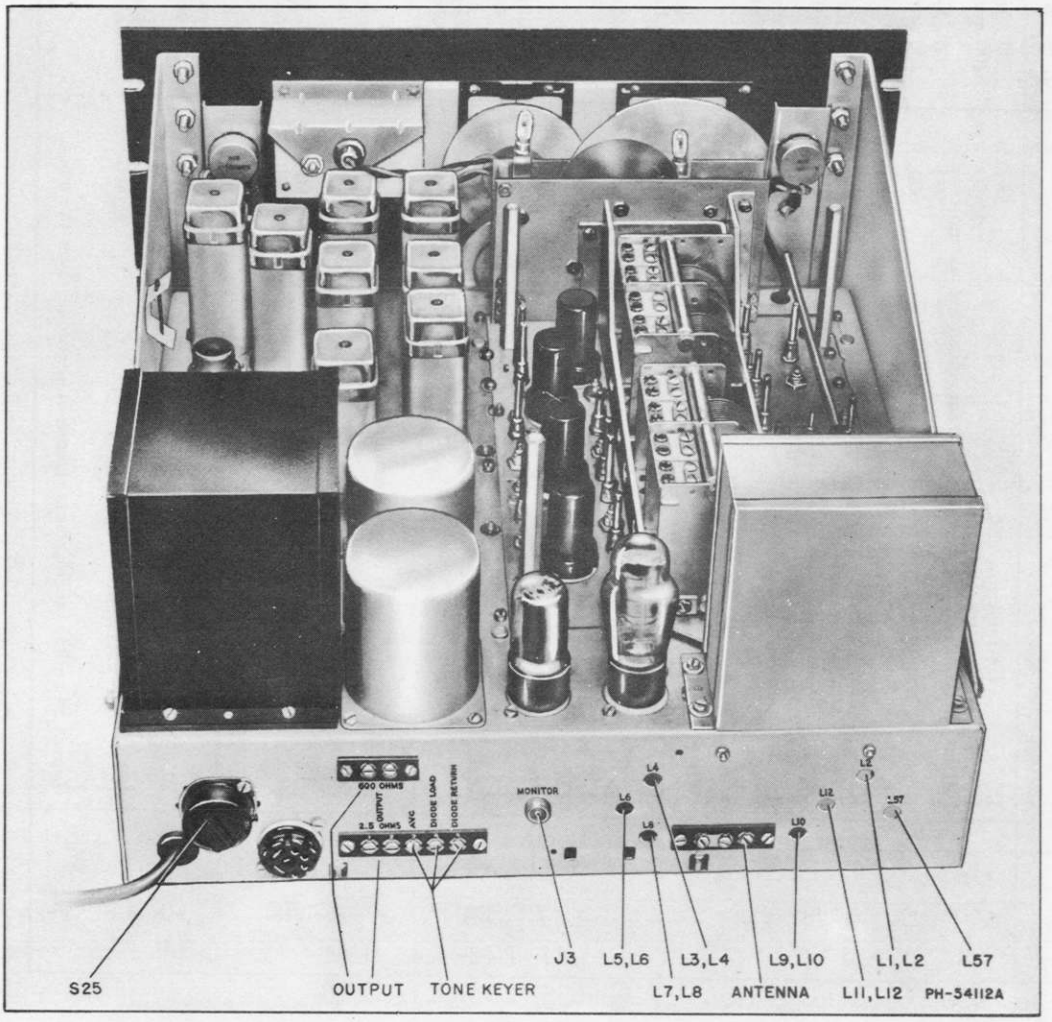


Figure 11—Radio Receiver, Navy Type CRV-46246-B—Chassis Rear View

LOCATION OF PARTS AND ALIGNMENT ADJUSTMENTS ON CHASSIS

Operation No.	Range Switch Position	Position of Dial	Generator Frequency	Dummy Antenna	Position of Antenna Trimmer	Trimmer Adjustments for Max. Peak Output (See Figures 15 and 16)	Trimmer Function
1	1	Extreme low end	535	200 mmfd		L51	Low end osc.
2	1	Extreme high end	1,600	200 mmfd		C16	High end osc.
3	Repeat 1 and 2 until extreme end frequencies are as indicated.						
4	1	1,500 kc.	1,500	200 mmfd	Max. output	C37, C59	1st & 2nd R-F
5	1	600 kc.	600	200 mmfd	Untouched	L2, L14, L24	Ant. & 1st & 2nd R-F
6	Repeat 4 and 5 until circuits remain in alignment over the band.						
7	2	Extreme low end	1,570	200 ohms		L52	Low end osc.
8	2	Extreme high end	4,550	200 ohms		C19	High end osc.
9	Repeat 7 and 8 until extreme end frequencies are as indicated.						
10	2	4,300 kc.	4,300	200 ohms	Max. output	C38, C60	1st & 2nd R-F
11	2	1,700 kc.	1,700	200 ohms	Untouched	L4, L16, L26	Ant. & 1st & 2nd R-F
12	Repeat 10 and 11 until circuits remain in alignment over the band.						
13	3	Extreme low end	4,450	200 ohms		L53	Low end osc.
14	3	Extreme high end	12,150	200 ohms		C22	High end osc.
15	Repeat 13 and 14 until extreme end frequencies are as indicated.						
16	3	11,500 kc.	11,500	200 ohms	Max. output	C39, C62	1st & 2nd R-F
17	3	4,600 kc.	4,600	200 ohms	Untouched	L6, L18, L28	Ant. & 1st & 2nd R-F
18	Repeat 16 and 17 until circuits remain in alignment over the band.						
*19	4	Extreme low end	11,900	200 ohms		L54	Low end osc.
20	4	Extreme high end	16,600	200 ohms		C25	High end osc.
21	Repeat 19 and 20 until extreme end frequencies are as indicated.						
22	4	16,400 kc.	16,400	200 ohms	Max. output	C41, C64	1st & 2nd R-F
23	4	12,100 kc.	12,100	200 ohms	Untouched	L8, L19, L29	Ant. & 1st & 2nd R-F
24	Repeat 22 and 23 until circuits remain in alignment over the band.						
*25	5	Extreme low end	16,100	200 ohms		L55	Low end osc.
26	5	Extreme high end	22,700	200 ohms		C27	High end osc.
27	Repeat 25 and 26 until extreme end frequencies are as indicated.						
28	5	22,500 kc.	22,500	200 ohms	Max. output	C43, C66	1st & 2nd R-F
29	5	16,400 kc.	16,400	200 ohms	Untouched	L10, L20, L30	Ant. & 1st & 2nd R-F
30	Repeat 28 and 29 until circuits remain in alignment over the band.						
*31	6	Extreme low end	22,000	200 ohms		L56	Low end osc.
32	6	Extreme high end	32,000	200 ohms		C32	High end osc.
33	Repeat 31 and 32 until extreme end frequencies are as indicated.						
34	6	31,500 kc.	31,500	200 ohms	Max. output	C45, C68	1st & 2nd R-F
35	6	22,500 kc.	22,500	200 ohms	Untouched	L12, L21, L31	Ant. & 1st & 2nd R-F
36	Repeat 34 and 35 until circuits remain in alignment over the band.						

On all bands the oscillator tracks above the signal frequency.
If more than one peak is obtainable on oscillator, use the higher frequency peak.

*NOTE: On all coils, except Nos. 4, 5 and 6 band oscillator coils (L54, L55 and L56) turning the core clockwise increases the inductance. On the previous three mentioned coils, turning the core clockwise decreases the inductance.

Output Meter Connections . . . . . Across speaker voice coil
Dummy Antenna . . . . . See alignment chart
Generator Modulation . . . . . 30% at 400 cycles
Position of TONE Control . . . . . Fully clockwise
Position of ANT. ADJ. Trimmer . . . . . See alignment chart
Position of Power-Transmit-Receive Switch . . . . . Position 3 (REC.-MOD.)
Position of RANGE Switch . . . . . See alignment chart
Position of R.F. GAIN Control . . . . . Fully clockwise
Position of A.F. GAIN Control . . . . . Fully clockwise
Position of Noise Limiter and A.V.C. Switch . . . . . Position 4 (A.V.C.)
Position of SELECTIVITY Switch . . . . . Position 2
Position of I.F. GAIN Control . . . . . Fully clockwise

Adjustment of Beat Frequency Oscillator

Tune in a signal to exact resonance, with power-transmit-receive switch at REC.-MOD. Turn on Beat Frequency Oscillator by turning switch to REC.-C.W. If zero beat does not fall within the range of the B.F.O. control, adjust B.F.O. trimmer L22 (see Fig. 10) until zero beat occurs at the mid-point setting of the B.F.O. control.

TABLE II—TUBE SOCKET VOLTAGES—RADIO RECEIVER

Tube	Symbol	Plate	Screen	Cathode
RCA-6SG7 1st R.F. Amplifier	V1	235	150	0
RCA-6SG7 2nd R.F. Amplifier	V2	235	150	0
RCA-6J5 Oscillator	V3	110		0
RCA-6SA7 1st Detector	V4	235	50	2
RCA-6SG7 1st I.F. Amplifier	V5	235	150	1.1
RCA-6SG7 2nd I.F. Amplifier	V6	235	150	0.8
RCA-6SG7 3rd I.F. Amplifier	V7	235	150	3.1
RCA-6H6 2nd Det. & A.V.C.	V8			
RCA-6H6 Noise Limiter	V9			
RCA-6SJ7 1st Audio Amplifier	V10	83	34	0
RCA-6K6GT Power Output	V11	256	240	0
RCA-6J5 B.F.O.	V12	40		0
RCA-VR-150-30 Voltage Regulator	V13	150		0
RCA-5Y3GT Rectifier	V14			300

TONE KEYER, NAVY TYPE CRV-35049-A

The Tone Keyer is adjusted by the manufacturer and should ordinarily require no readjustment over long periods of time.

Replacement of tubes V1 or V2, or variation of their operating characteristics due to prolonged usage will entail readjustment of potentiometer R11 which is the bias control in the D-C Amplifier-Limiter circuit. The desired setting of R11 is at the point where the lowest single diode contact potential of the three receivers is just strong enough to "key on" the keyed amplifier. The procedure for determining this setting is as follows: Disconnect the antennas from all receivers. After the usual warm-up period, set R.F. GAIN control on all receivers for minimum gain and throw the RECEIVER 1 control switch on the Tone Keyer to the IN position. RECEIVERS 2 and 3 remain on OUT. Turn C.W.-PHONE switch to FAST A.G.C. Advance THRESHOLD control to highest setting and turn R11 to lowest value. (Oscillator will not be "keyed on" with this setting.) Rotate the adjustment on R11 until the oscillator **just** "keys" on. Place RECEIVER 2 and then 3 in the circuit consecutively to determine if a lower setting that will still key the oscillator on one of the three receivers may be found. With final setting of R11, all of the three receivers will key the oscillator.

Replacement or aging of tube V2, the push-pull keyed amplifier, may necessitate adjustment of R23. This potentiometer balances the two sections of the tube. Adjustment is made by feeding a signal strong enough to key the oscillator into the Tone Keyer and then stopping the oscillator by either removing tube V4 from its socket or by turning the TONE selector to the EXTERNAL position and not applying an external oscillator. R23 is then adjusted for minimum key clicks by listening to the Tone Keyer output with headphones or, for more exact adjustment, by examination of the output with an oscilloscope. Inability to secure a balance indicates a poorly matched tube.

Oscillator frequency controls R39 to R46 are set by the manufacturer and ordinarily should require no adjustment. If the effects of severe jarring, long time drift in inductance or capacity values make readjustment desirable, new settings can be found by throwing the CAL-KEY switch to the CAL position and adjusting each unit individually. Adjust for zero beat using headphones or an oscilloscope and an accurately calibrated audio oscillator.

Adjustment of R38 will vary the power output of the oscillator and hence the highest keyed tone level that can be reached with the unit output level control. The only reason for varying this control

TABLE III—SOCKET VOLTAGES—TONE KEYER UNIT

Tube	Function	Type	Fil.		Plate		Cathode		Grid	
			Pin	Volts	Pin	Volts	Pin	Volts	Pin	Volts
V1 A	D-C Amp.-Limiter	6SL7-GT	7	6.15	2	30	3	0	1	−.65*
B	D-C Amp.-Limiter				5	30	6	20	4	20
V2 A	Keyed Amp.	6SL7-GT	7	6.15	2	150	3	85	1	75*
B	Keyed Amp.				5	150	6	85	4	75*
V3 A	D-C Amp. Limiter	6SN7-GT	7	6.15	2	85	3	52	1	30
B	Line Amp.				5	145	6	0	4	−4
V4 A	P. P. Oscillator	6SL7-GT	7	6.15	2	75	3	44	1	59‡
B	P. P. Oscillator				5	75	6	44	4	59‡
V5	Power Rectifier	5Y3-GT/G	2 to 8	4.85	6–4	255 ac	2–8	238	—	—
V6	Voltage Regulator	VR150-30	—	—	5	150	2	0	—	—
V7	Voltage Regulator	VR75-30	—	—	5	0	2	−75	—	—
V8	Phone Noise Lim.	6H6	7	6.15	5–3	0	8–4	0	—	—

*Measurements must be made with V.T.V.M. (Voltohmyst).

‡Oscillator Grid Voltages must be measured as −1 volt with respect to cathode. Measurements to Ground will stop oscillation.

would be to change the maximum output level, as changing of tubes has very little effect on the oscillator output. Variation in the setting may, however, change the oscillator frequency and necessitate readjustment of rheostats R39 to R46, inclusive. It is desirable to use the lowest possible oscillator output level to minimize distortion.

MONITORING UNIT, NAVY TYPE CRV-23424-A AND MONITORING UNIT POWER SUPPLY, NAVY TYPE CRV-20289-A

The Monitoring Unit and Power Supply should normally require little attention. In case of failure check all tubes and measure socket voltages. Refer to Figure 26 which is the schematic diagram for the unit and make a complete continuity check of the circuit.

The unit can be aligned using conventional test methods. Apply a 455 kc. signal to one of the three input plugs, J1, J2, J3. The corresponding switch is thrown upward. Remove the three plug buttons on the front panel of the unit and the metal shield on the rear of the chassis. Adjust transformer T3 first and then adjust T2. Refer to Figure 19 for optimum response curves. Output may be taken from the phone jacks and measured by either an oscilloscope or an output meter.

The oscillator in the Monitoring Panel is set by the manufacturer to produce a 1000-cycle note in the headphones when used for C.W. reception with the ZERO-TONE switch in the TONE position. This tone can be varied by adjustment of C17 to any desired audio pitch.

TABLE IV—SOCKET VOLTAGES—MONITORING UNIT

Type	Function	Type	Fil.		Plate		Screen		Cathode		Grid*	
			Pin	Volts	Pin	Volts	Pin	Volts	Pin	Volts	Pin	Volts
V1	1st I.F. Amp.	6SG7	7	6.1	8	233	6	90	5	1.25	4	-0.35
V2	2nd I.F. Amp.	6SG7	7	6.1	8	233	6	90	5	1.22	4	-0.40
V3	A.V.C.	6H6	7	6.1	3-5	0.4*	—	—	4-8	0	—	—
V4	A.F. Output	6SJ7	7	6.1	8	147	6	72	5	2.3	4	0
V5	2nd Detector	6SN7-GT	7	6.1	5	78	—	—	6	12.5	4	0
	V.F.O.‡	6SN7-GT	7	6.1	2	18	—	—	3	0	1	-2.4
	BFO XTAL‡‡	6SN7-GT	7	6.1	2	25	—	—	3	0	1	-8.8

*Measurement must be made with V.T.V.M. (Voltohmyst)

‡With ZERO-TONE switch in TONE position.

‡‡With ZERO-TONE switch in ZERO position.

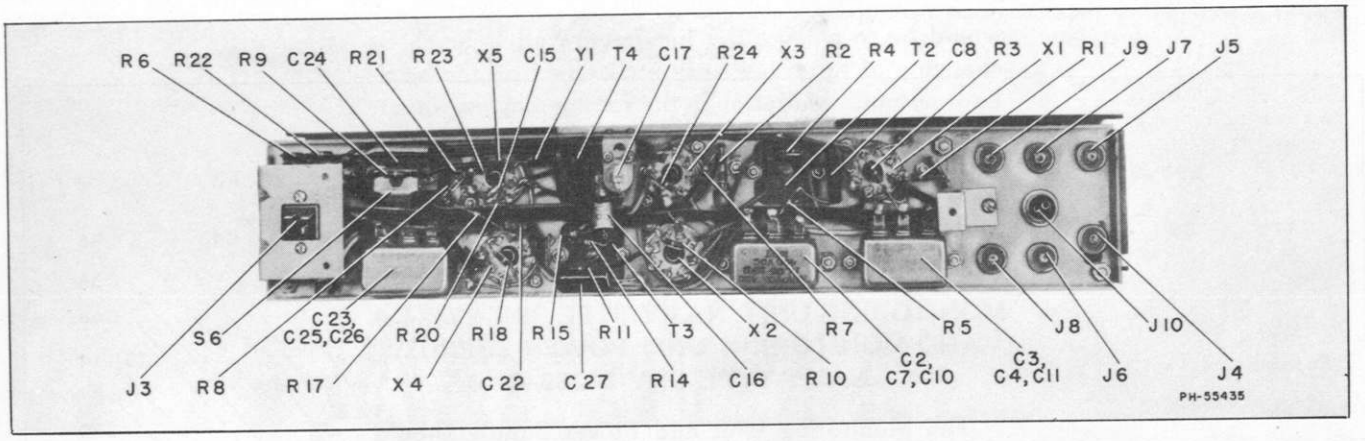


Figure 12—Monitoring Unit, Navy Type CRV-23424-A—Chassis Rear View

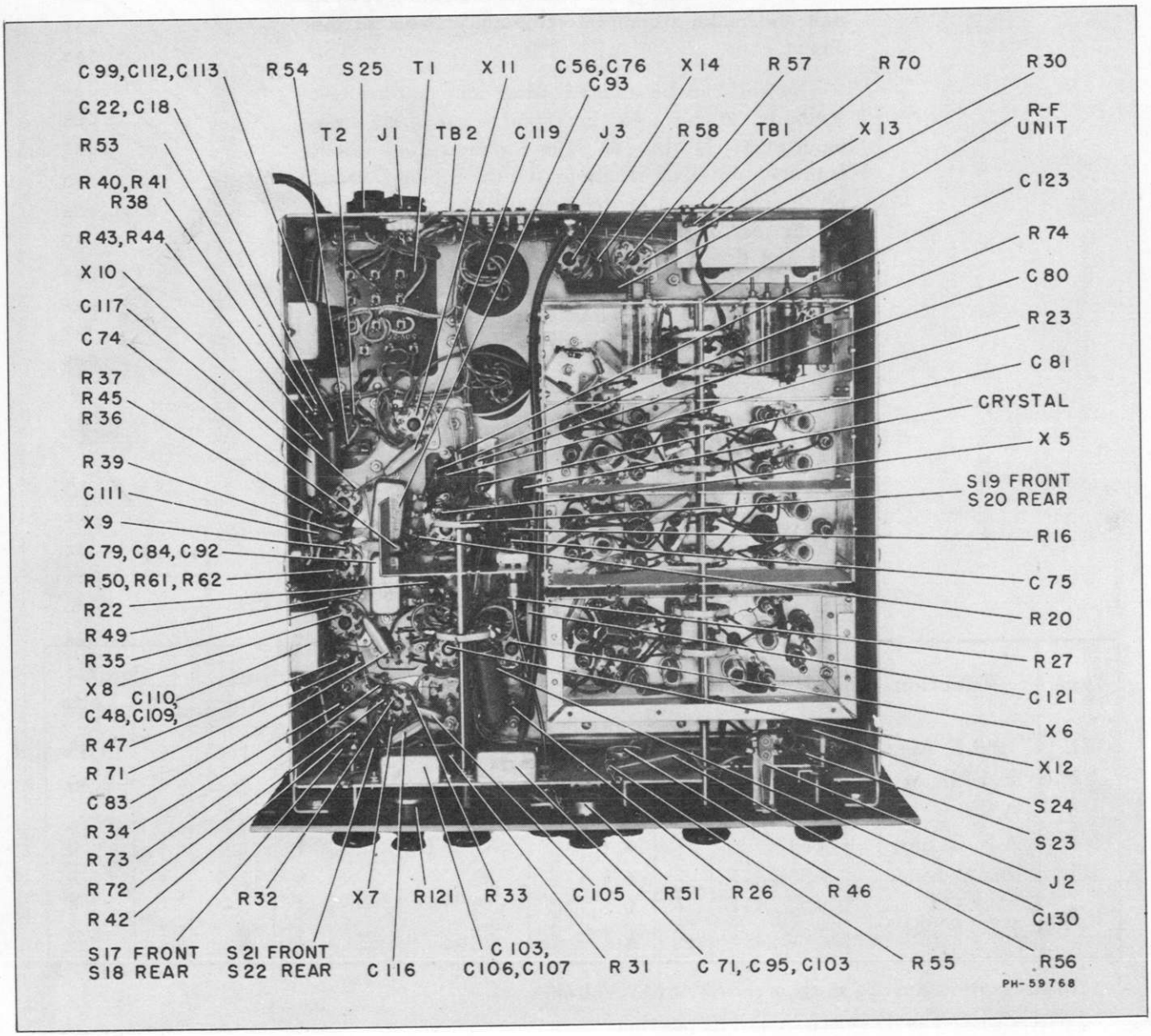


Figure 13—Radio Receiver, Navy Type CRV-46246-B—Chassis Bottom View

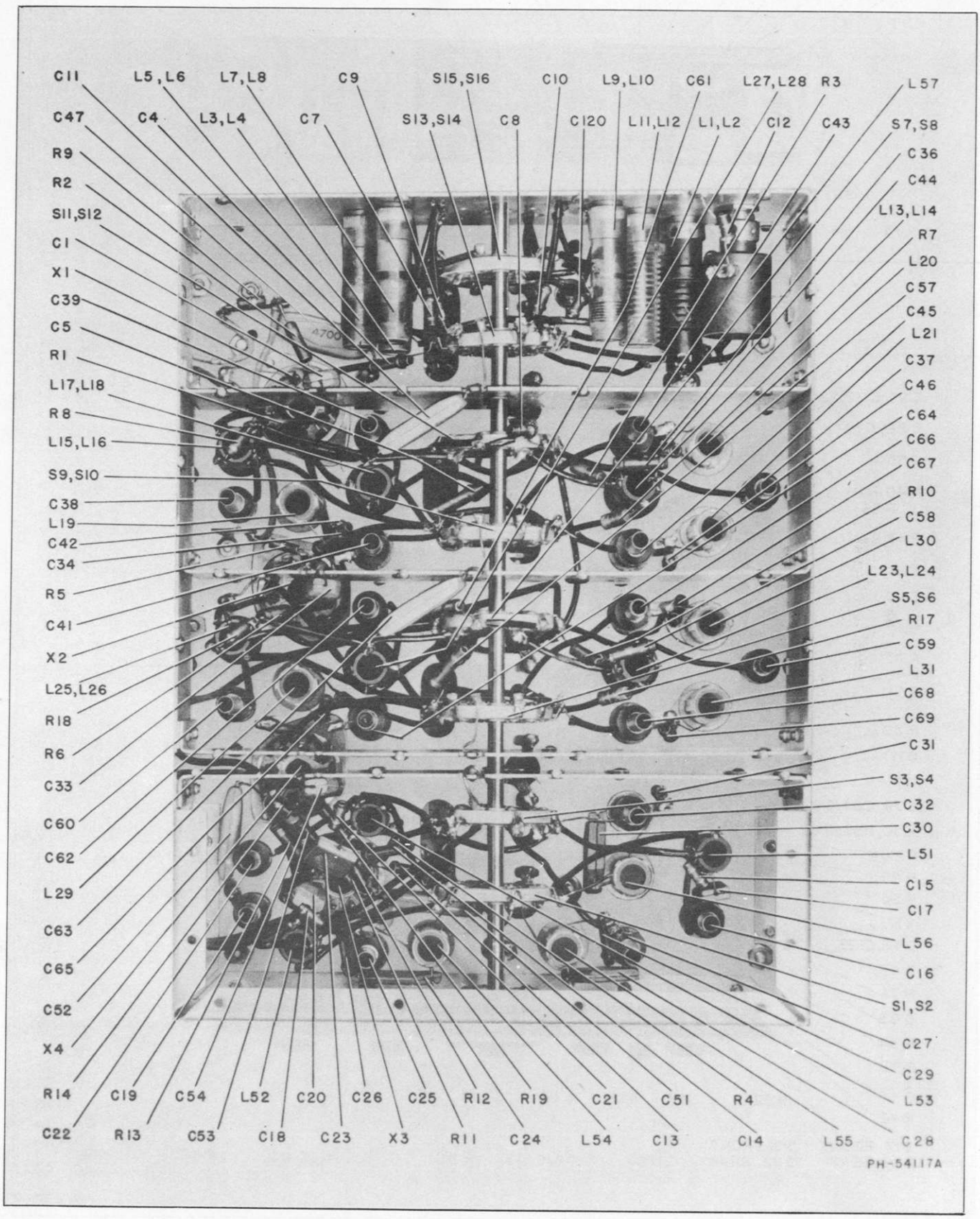


Figure 14—Radio Receiver, Navy Type CRV-46246-B—R.F. Unit

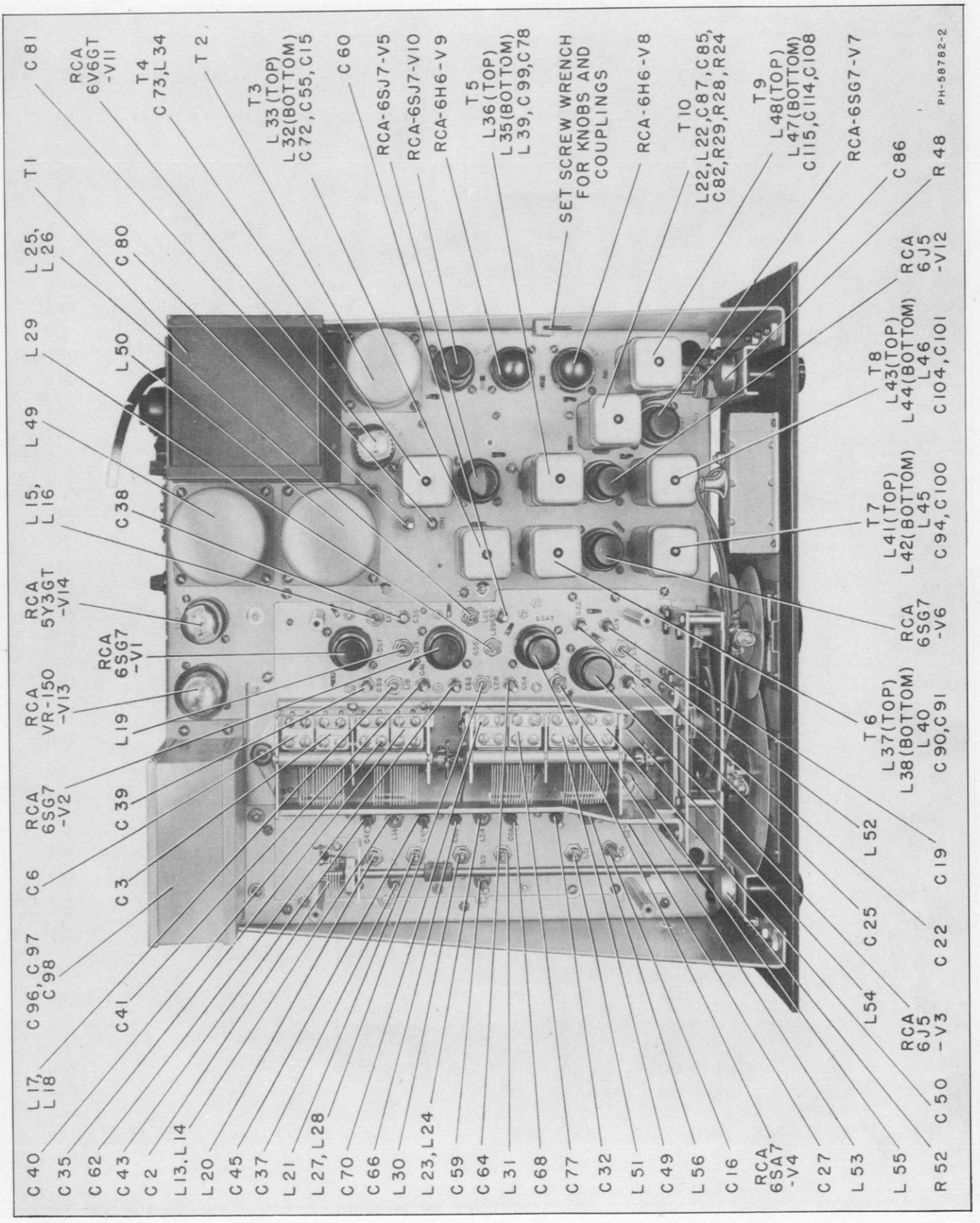


Figure 15—Radio Receiver, Navy Type CRV-46246-B—Chassis Top View, Covers Removed

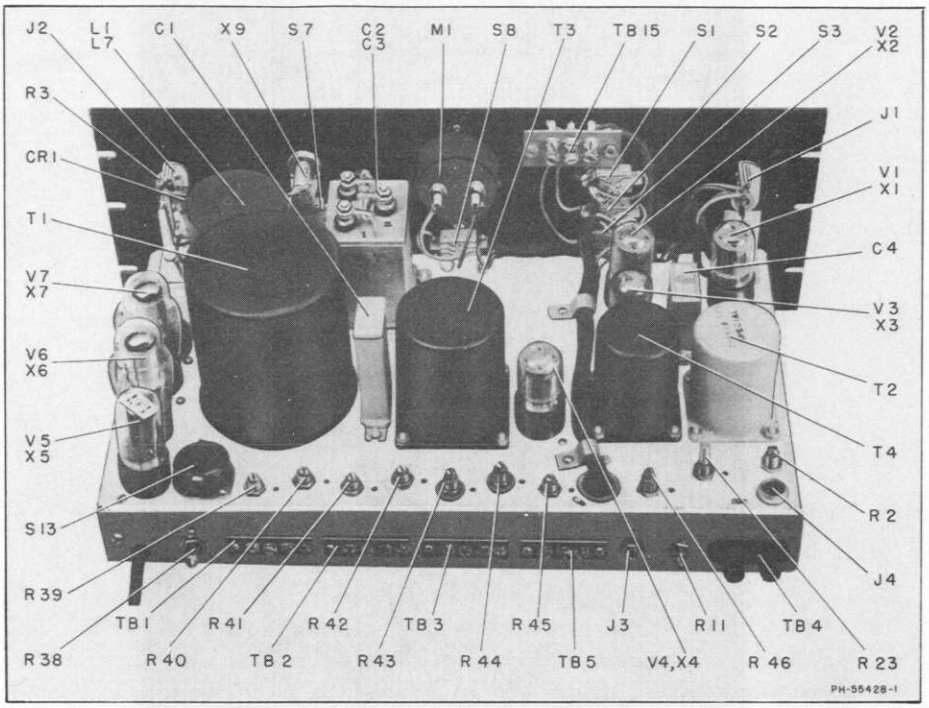


Figure 16—Tone Keyer, Navy Type CRV-35049-A—Chassis Bottom View

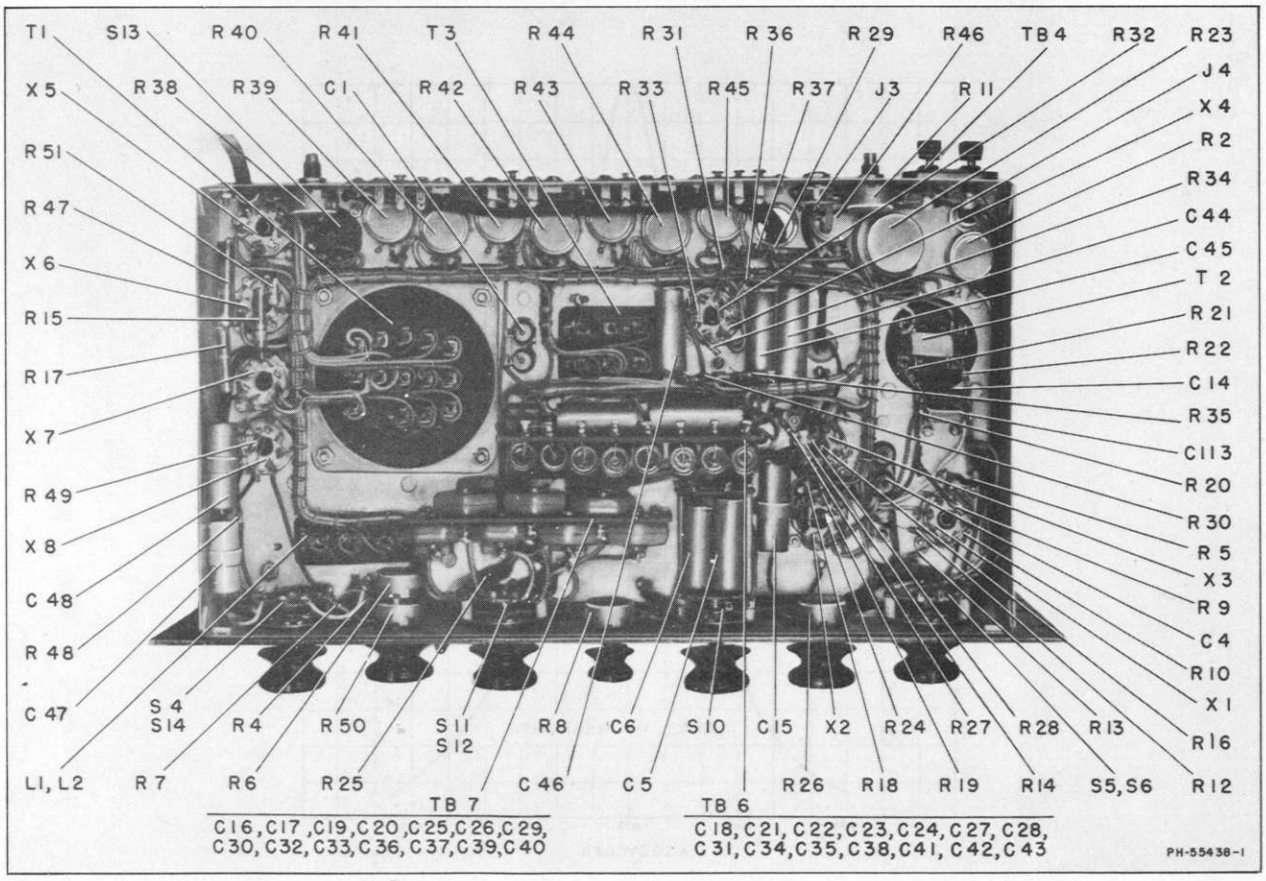


Figure 17—Tone Keyer, Navy Type CRV-35049-A—Chassis Bottom View

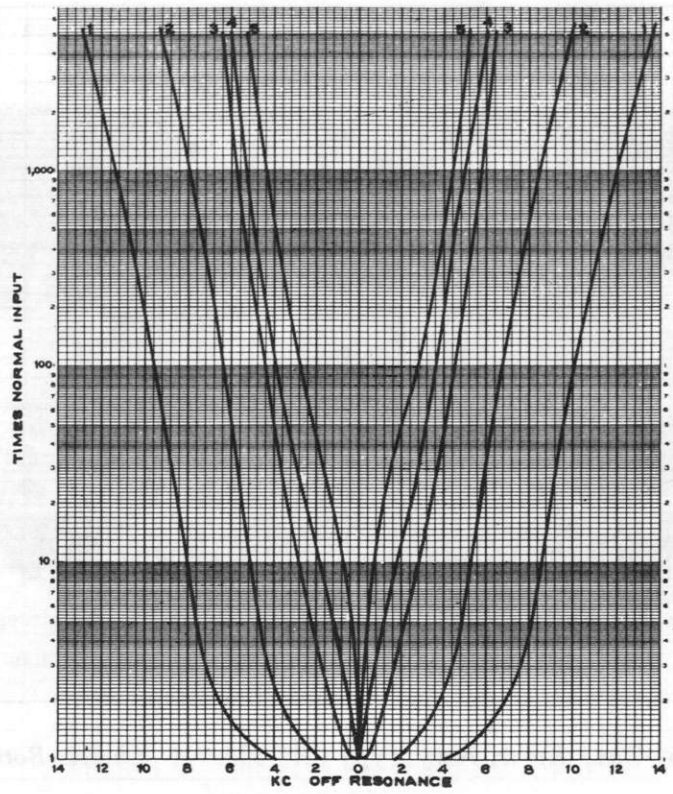


Figure 18—Radio Receiver, Navy Type CRV-46246-B—Selectivity Curves

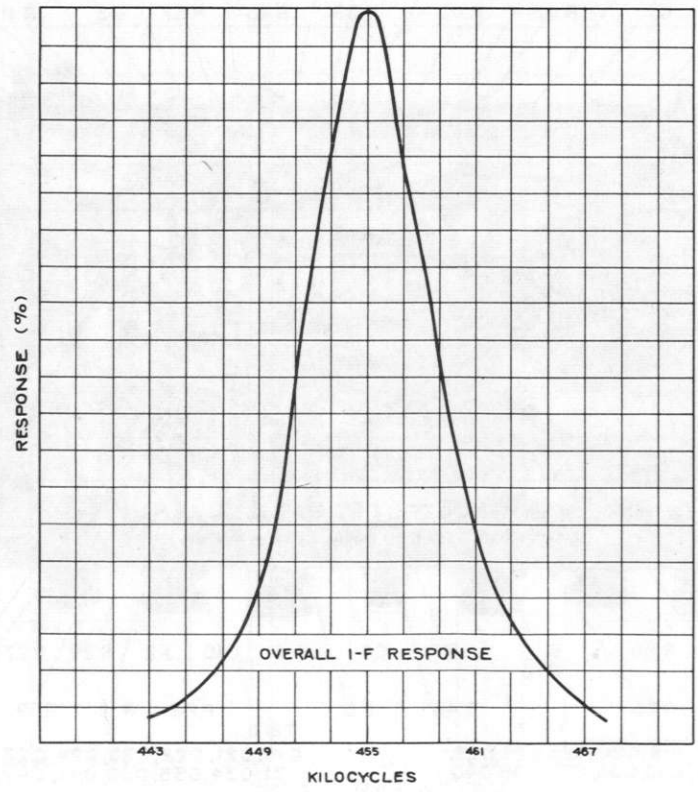


Figure 19—Monitoring Unit, Navy Type CRV-23424-A —Selectivity Curves

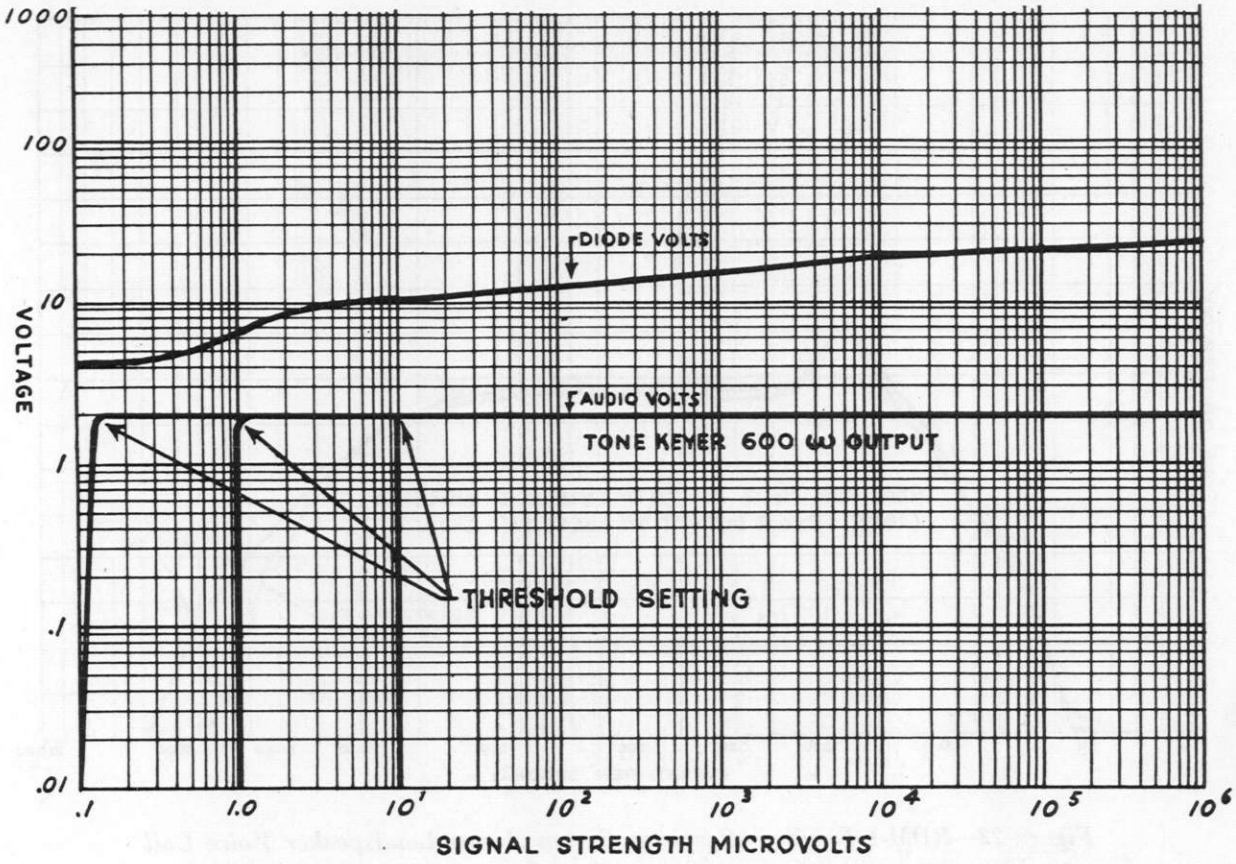


Figure 20—Tone Keyer, Navy Type CRV-35049-A—Diode Output vs. Signal Input Curves and Threshold Characteristic

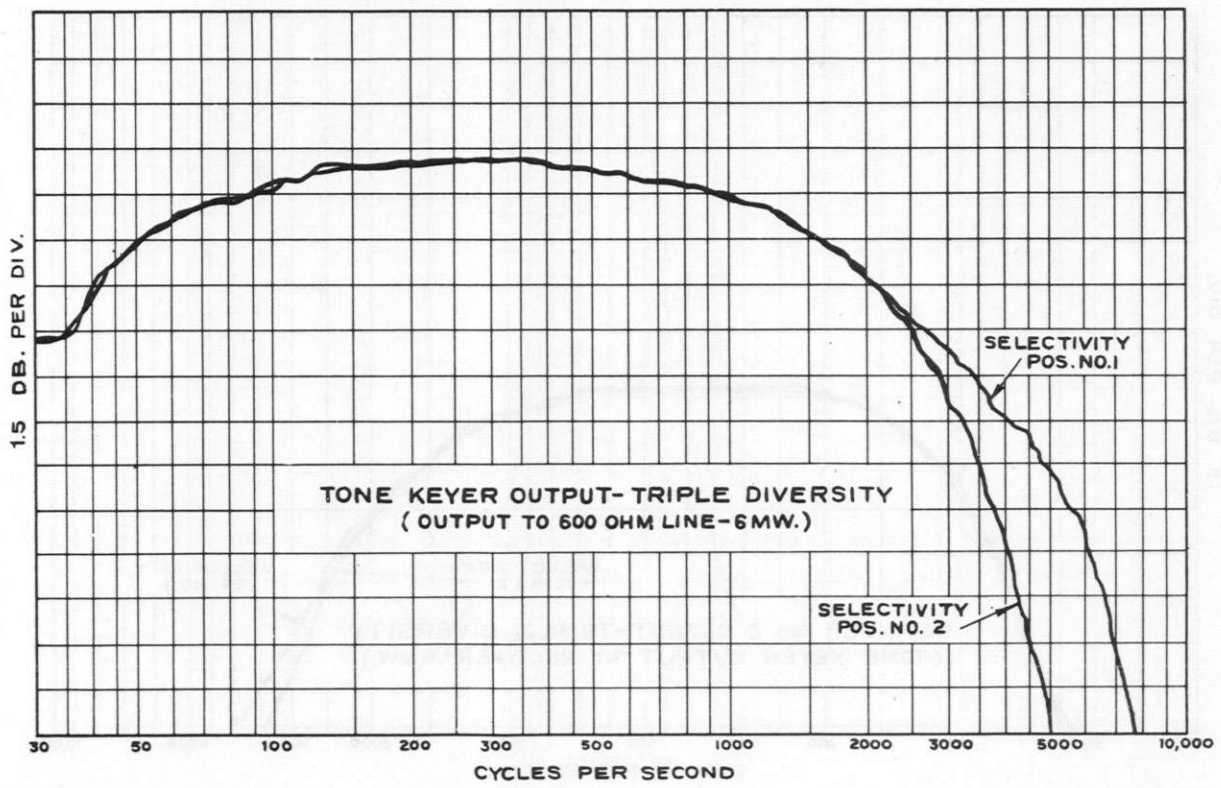


Figure 21—Tone Keyer, Navy Type CRV-35049-A—Response Curves, Transmission Line

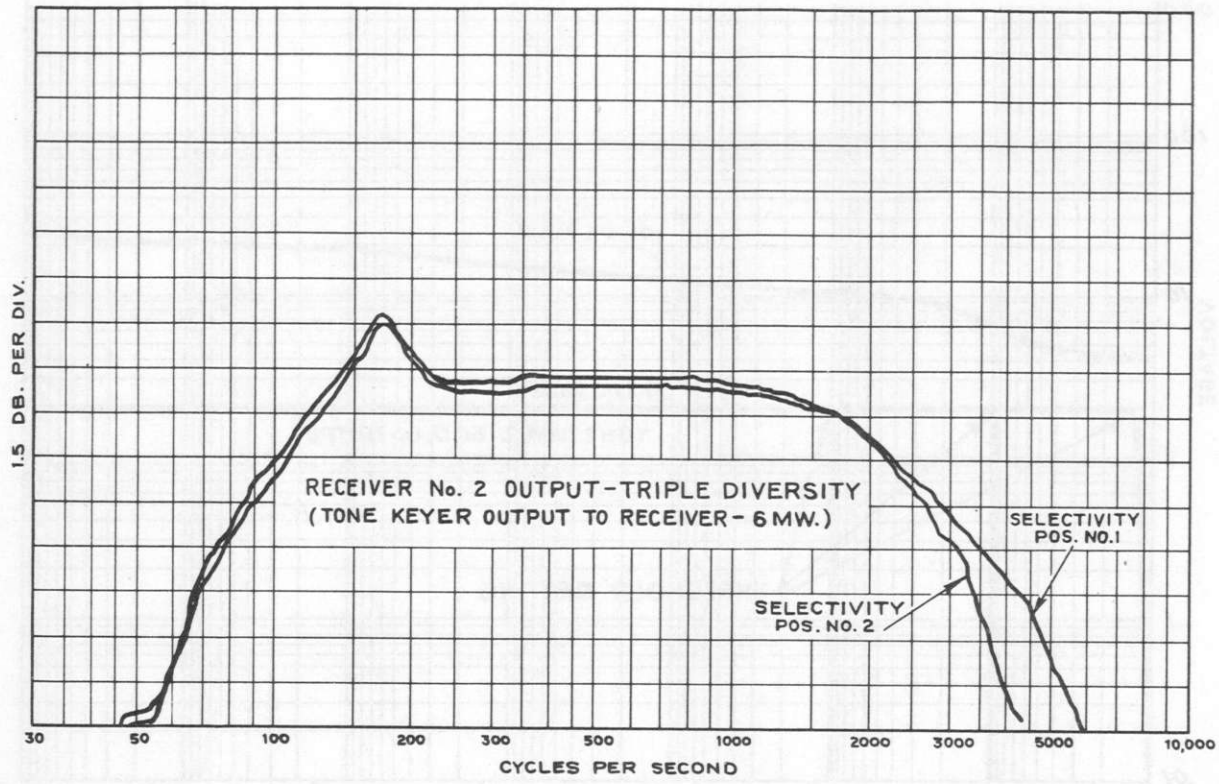


Figure 22—RDM-1 Fidelity—Response Curves Across Loudspeaker Voice Coil

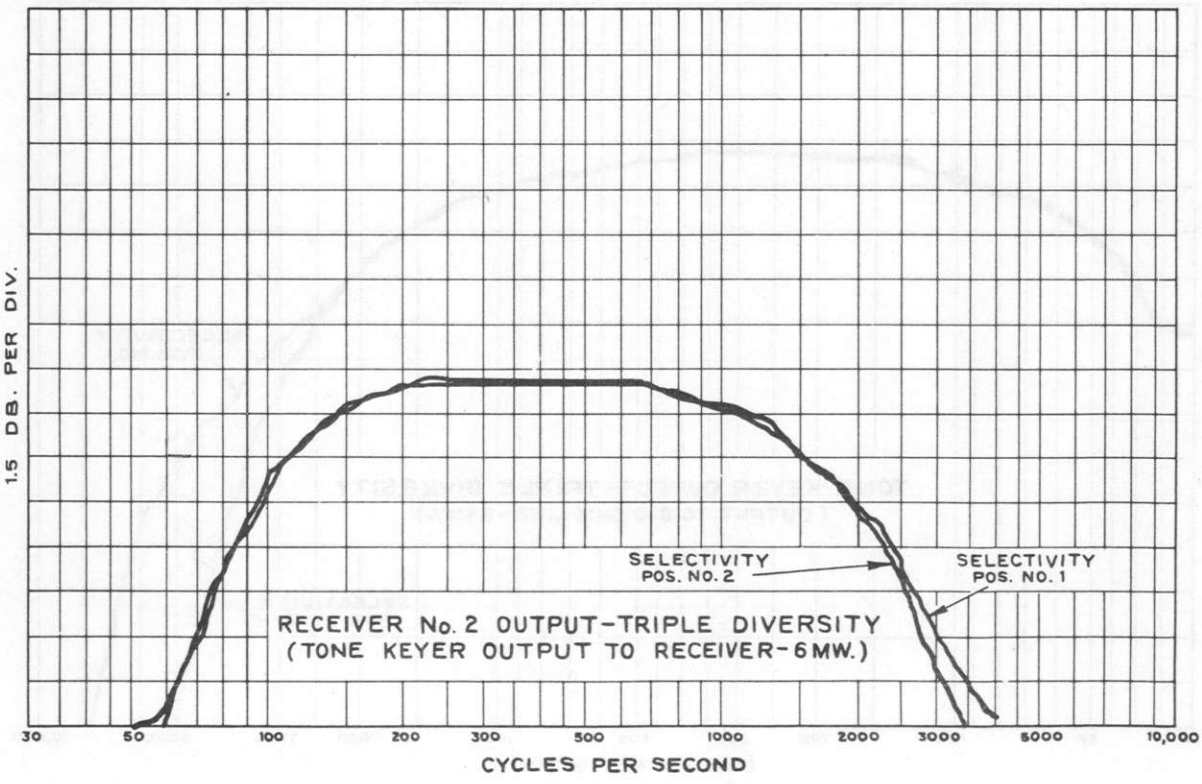


Figure 23—RDM-1 Fidelity—Response Curves Across 2.5-Ohm Resistance Load

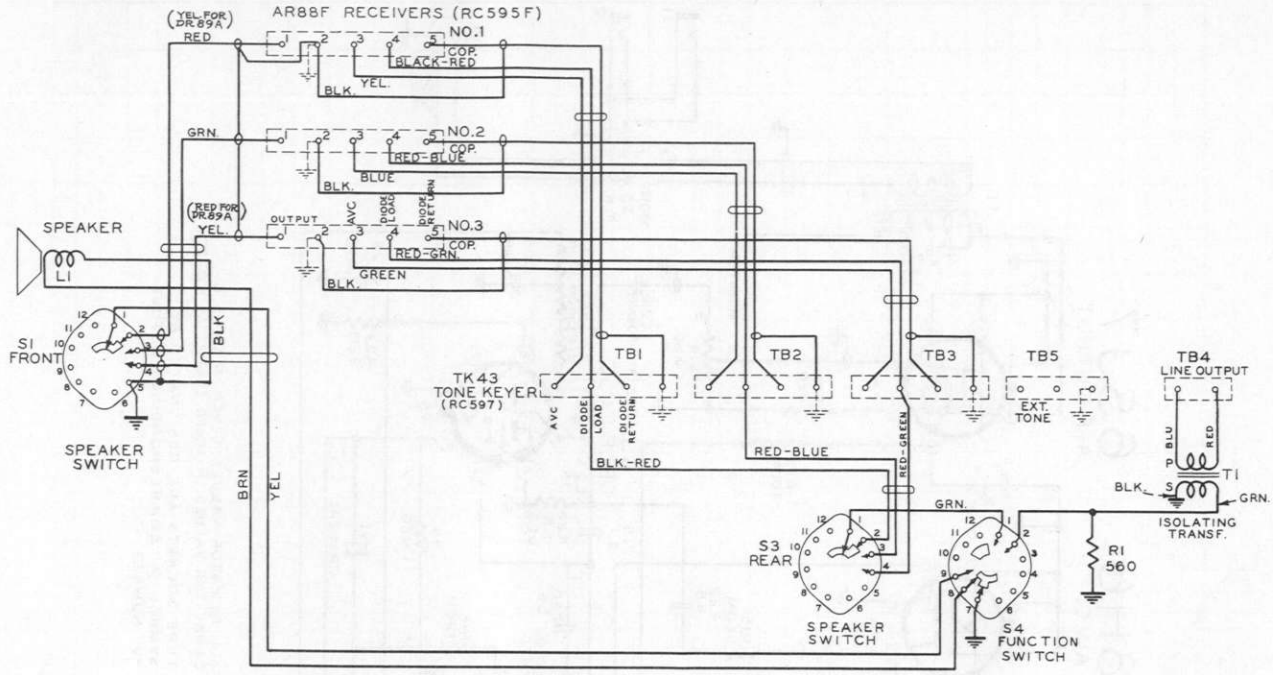


Figure 24—Loudspeaker Assembly—Navy Type CRV-49526-A—Schematic Diagram (M-253909, sub 6)

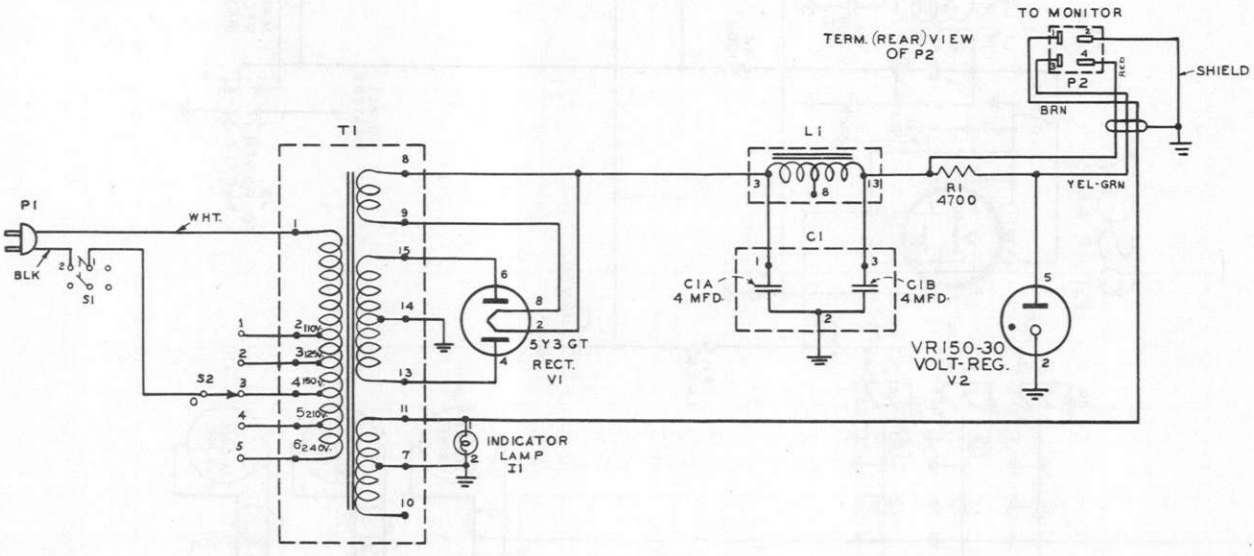


Figure 25—Monitoring Unit Power Supply, Navy Type CRV-20289-A—Schematic Diagram (M-253978, sub 5)

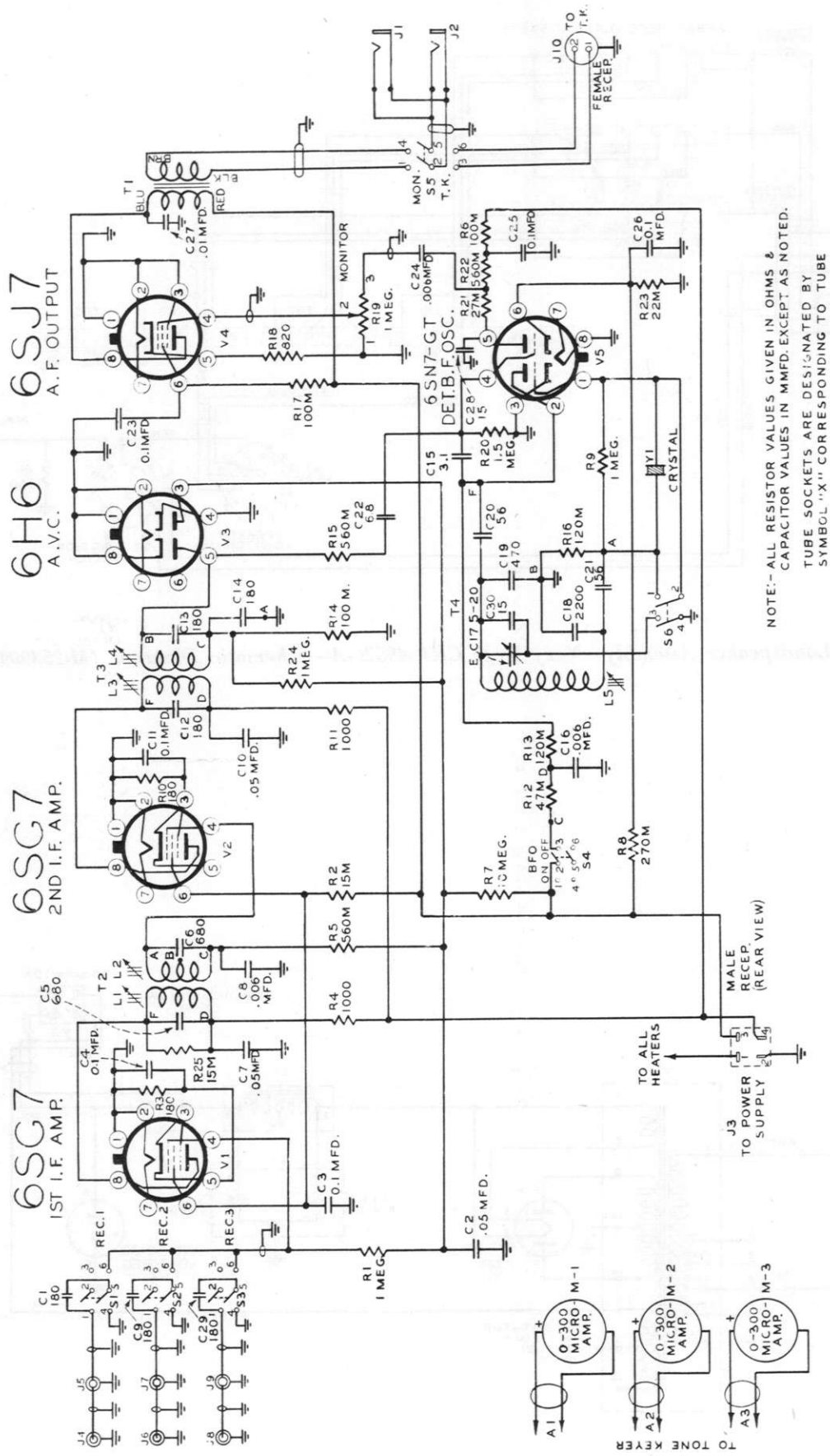


Figure 26—Monitoring Unit—Navy Type CRV-23424-A Schematic Diagram (P-255508, sub 5)

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-1. WEIGHTS AND DIMENSIONS OF SPARE PARTS BOXES

EQUIPMENT SPARES						STOCK SPARES
Spare Parts Box	Overall Dimensions			Volume	Weight	Supplied in Bulk as Items of a Kind
	Height	Width	Depth			
1	18	24	18	7776		

All Dimensions in Inches or Cubic Inches

TABLE 8-2. SHIPPING WEIGHTS AND DIMENSIONS OF SPARE PARTS BOXES

EQUIPMENT SPARES						
Shipping Box Number	Spare Parts Box	Overall Dimensions			Volume	Weight
		Height	Width	Depth		
	1	20½	29	22¾	13525	

All Dimensions in Inches or Cubic Inches

TABLE 8-3. LIST OF MAJOR UNITS

SYMBOL GROUP	QUANTITY	NAME OF MAJOR UNIT	NAVY TYPE DESIGNATION
1-199	3	Radio Receiver	CRV-46246-B
1- 99	1	Tone Keyer	CRV-35049-A
1- 99	1	Loudspeaker Assembly	CRV-49526-A
1- 99	1	Monitoring Unit	CRV-23424-A
1- 99	1	Monitoring Unit Power Supply	CRV-20289-A
1- 99	1	Cabinet	CRV-10692
1- 99	1	Antenna Panel	CRV-23425-A

TABLE 8-4 COMBINED PARTS AND SPARE PARTS LIST

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

PARTS							SPARE PARTS				
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
	RECEIVER CRV-46246-B										
A-1	CRYSTAL UNIT, quartz; 455 kc; —40 to +70 deg C temp range; 2 tinned copper lead term, #20 AWG x 3" lg approx, spaced approx 1 9/32"; sq flat Durez #114-SB or equivalent body, 5 3/32" sq x 0.478" approx thk; 2 SS electrodes; 1.031" lg x 0.572" wd x 0.040" min 0.055" max thk o/a air gap not externally adj; marked on one side w/ 455, X, and on other side w/ RCA, one ear-marked red color, one ear-marked green color.	For Phasing Xtal Unit		1	MI-19454-4	A-1	1	1	1		52
C-1	CAPACITOR, fixed: mica; 4700 mmf p/m 10%, 500 vdcw; temp coef 1tr D, case 53/64" lg x 53/64" h x 9/32" thk less term; thermosetting plastic case; 2 axial wire term	For V-1 Screen Bypass	CM30D472K		727868-163	C-1 C-11, C-33, C-47, C-51, C-52, C-54, C-63, C-83, C-117, C-118, C-121, C-122	13				
C-2	CAPACITOR, var: air dielectric plate meshing type; single sect; 3 to 25 mmf p/m 10% SLC characteristic; 0.030" air gap; 1 3/32" lg x 1 7/32" h x 15/16" wd excluding shaft, 1/4" diam x 2 5/32" lg shaft; extension shaft adj; 9 brass nickel pl plates; 360 deg rotation; ceramic, grade G, ins; one solder lug and one post term; two 3/32" lg mtg posts on front end w/ two #4-40 tapped holes on 2 1/32" mtg/c; ceramic ins wax impr; torque 3.5 to 7 in. oz	For Ant Trimmer	-484828	1	253132-2	C-2	1				
C-3	CAPACITOR, variable: air dielectric: plate meshing type; C-3, 14 to 402.0 mmf; p/o an 8-sect variable cap c/o C-3, 14 to 402.0 mmf C-6, 11 to 60.3 mmf C-35, 14 to 361.8 mmf C-40, 11 to 120.6 mmf C-49, 11 to 120.6 mmf C-50, 14 to 361.8 mmf C-70, 11 to 120.6 mmf C-77, 14 to 361.8 mmf SLF characteristics; 1000 v DC test each sect; 12" lg x 4 1/8" wd x 3 3/4" h o/a; shaft 1/4" diam x 2 3/32" lg; extension shaft adj; 19 aluminum plates ea in sect #1 (C-50), sect #3 (C-77), sect 5 (C-35), 7 ea in sect #2 (C-49), sect 4 (C-70), sect 6 (C-40), 21 in sect 7 (C-3) and 4 in sect 8 (C-6); clockwise 180 deg rotation; steatite ceramic ins; 8 solder lug term; 4 mtg holes 0.180" diam on 2" and 2.734" x 3.687" mtg/c on front end and one 3/8" diam mtg hole in bottom ctr rear end; silver cont rings; silver-plated wiper springs; ceramic ins wax impr; c/o two 4-sect var cap tandem assembled on cad pl steel mtg plate, w/ flexible insulating coupling connecting the two units; marked w/ NT # R.S.W. Note: Manufacturer's drawing number is for complete assembly.	For Variable Tuning Capacitor 1st RF Stage	-484748	509	92444-505	C-3, C-6, C-35, C-40, C-49, C-50, C-70, C-77	8	1	1		4

C-4	CAPACITOR, fixed: ceramic dielectric; 220 mmf p/m 10% negative temp coef 750 (tol p/m 110) mmf/mf/deg c; 500 vdcw; 0.860" max lg x 0.250" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdc test, color coded or w/ capacity, tolerance, and temp coef	For V-1 Grid Coupling		727 Type C	90581-341	C-4, C-5, C-14, C-34, C-57	5				
C-5	Same as C-4	For V-2 Grid Series Coupling										
C-6	CAPACITOR, variable: air dielectric; plate meshing type; 11 to 60.3 mmf; p/o an 8-sect variable capacitor; see C-3	For Variable Tuning Capacitor 1st RF Stage										
C-7	CAPACITOR, fixed: ceramic dielectric; 18 mmf p/m 10%; negative temp coef 750 (tol p/m 110) mmf/mf/deg C; 500 vdcw; 0.400" max lg x 0.200" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance and temp coef	For 1st RF Grid Coil L-6 Shunt	-484847-10	207 Type A	90581-315	C-7	1					
C-8	CAPACITOR, fixed: ceramic dielectric; 33 mmf p/m 10%; negative temp coef 750 (tol p/m 110) mmf/mf/deg C; 500 vdcw, 0.400" max lg x 0.200" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance and temp coef	For V-2 Grid Series Coupling	-484848-10	207 Type A	90581-321	C-8	1					
C-9	CAPACITOR, fixed: ceramic dielectric; 22 mmf p/m 10%; negative temp coef 750 (tol +110 —110) mmf/mf/deg C, 500 vdcw; 0.400" lg x 0.200" diam; 2 radial wire leads; uninsulated; color coded	For 1st RF Grid Coil L-8 Shunt	-482805-10	207 Type A	90581-317	C-9, C-10	2					
C-10	Same as C-9	For 1st RF Grid Coil L-10 Shunt	-482805-10									
C-11	Same as C-1	For V-1 Plate Supply Bypass	CM30D472K									
C-12	CAPACITOR, fixed: ceramic dielectric; 56 mmf p/m 5%; negative temp coef 750 (tol p/m 110) mmf/mf/deg C; 500 vdcw; 0.400" max lg x 0.200" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance, and temp coef	For Ant Series	-484838-5	207 Type A	90581-227	C-12	1					
C-13	CAPACITOR, fixed: ceramic dielectric; 82 mmf p/m 5%; negative temp coef 220 (tol p/m 30) mmf/mf/deg C; 500 vdcw; 0.860" max lg x 0.250" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance and temp coef	For Osc Grid	-484375-5	727 Type C	90578-231	C-13, C-26, C-29, C-42, C-65, C-67, C-69	7					
C-14	Same as C-4	For V-3 Plate Coupling										
C-15	CAPACITOR, fixed: ceramic dielectric; 12 mmf p/m 5%; negative temp coef 470 (tol +70 —70) mmf/mf/deg C; 500 vdcw; 0.400" lg x 0.200" diam; 2 radial wire leads; uninsulated; color coded	For Osc Coil L-51	-484779-5	207 Type N470A	90580-211	C-15, C-18, C-21	3					

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
C-16	CAPACITOR, variable: air dielectric; trimmer; plunger type; 2 to 12 mmf; 2⅞" lg x 0.515" diam; bus wire term; single hole mtg by 5/16"-32 thd bushing; ceramic ins; wrench adj	For Osc Coil L-51 Trimmer	-484831	1	95534-503	C-16, C-19, C-22, C-37, C-59	5	1	1		16
C-17	CAPACITOR, fixed: mica dielectric; 525 mmf p/m 1%; 500 vdcw; D characteristic; case 51/64" lg x 15/32" wd x 7/32" thk; molded bakelite case; 2 axial wire lead term; color coded	For Osc Coil L-51	CM20D5250	1	72081-36	C-17	1				
C-18	Same as C-15	For Osc Coil L-52	-484779-5								
C-19	Same as C-16	For Osc Coil L-52 Trimmer	-484831								
C-20	CAPACITOR, fixed: mica dielectric; 1550 mmf p/m 2%; 500 vdcw; D characteristic; case 53/64" lg x 53/64" wd x 9/32" thk; molded bakelite case; 2 axial wire lead term; color coded	For Osc Coil L-52	CM30D1551G	1	72081-39	C-20	1				
C-21	Same as C-15	For Osc Coil L-53	-484779-5								
C-22	Same as C-16	For Osc Coil L-53 Trimmer	-484831								
C-23	CAPACITOR, fixed: mica dielectric; 3000 mmf p/m 5%; 500 vdcw; temp coef ltr E; 25/32" sq x 9/32" thk max; molded low loss bakelite case; 2 axial wire lead term; marked w/ Navy type # and RMA color code; wax impr	For Osc Coil L-53	-481036-E5	714 Type #1464	721133-9	C-23, C-28	2				
C-24	CAPACITOR, fixed: mica dielectric; 2700 mmf p/m 5%; 500 vdcw; temp coef ltr E; 25/32" sq x 9/32" thk max; molded low loss bakelite case; 2 axial wire lead term; marked w/ Navy type # and RMA color code; wax impr	For Osc Coil L-54	-481432-E5	714 Type #1464	721133-8	C-24	1				
C-25	CAPACITOR, variable: air dielectric; trimmer; plunger type; 2 to 19 mmf; 3⅝" lg x 0.515" diam o/a; bus wire and solder lug term; single hole mtg by 5/16"-32 thd bushing; ceramic insulation; wrench adj; 500 vdct; marked w/Navy Type # and mfr prefix ltr	For Osc Coil L-54 Trimmer	-484830-A	1	95534-501	C-25, C-27, C-32, C-41, C-43, C-45, C-64, C-66, C-68	9	1	1		16
C-26	Same as C-13	For Osc Coil L-54 Shunt	-484375-5								
C-27	Same as C-25	For Osc Coil L-55 Trimmer	-484830-A								
C-28	Same as C-23	For Osc Coil L-55	-481036-E5								
C-29	Same as C-13	For Osc Coil L-55 Shunt	-484375-5								

C-30	CAPACITOR, fixed: mica; 3900 mmf p/m 5%; 500 vdcw; temp coef ltr D; $^{25}/_{32}$" sq x $^{9}/_{32}$" thk max; molded low loss compound case; 2 axial wire lead term; wax impr; RMA color coded; marked w/ Navy type #	For Osc Coil L-56	CM30D392J		720538-46	C-30	1				
C-31	CAPACITOR, fixed: ceramic dielectric; 75 mmf p/m 5%; negative temp coef 150 (tol p/m 30) mmf/mf/deg C; 500 vdcw; 0.860" max lg x 0.250" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance and temp coef	For Osc Coil L-56	-484843-5	727 Type C	90577-230	C-31	1				
C-32	Same as C-25	For Osc Coil L-56 Trimmer	-484830-A								
C-33	Same as C-1	For V-2 Screen Bypass	CM30D472K								
C-34	Same as C-4	For V-2 Grid Coupling									
C-35	CAPACITOR, variable: air dielectric; plate meshing type; 14 to 361.8 mmf; p/o an 8-sect variable capacitor; see C-3	For Variable Tuning Capacitor 2nd RF Stage									
C-36	CAPACITOR, fixed: ceramic dielectric; 180 mmf p/m 5%; negative temp coef 750 (tol p/m 110) mmf/mf/deg C; 500 vdcw; 0.860" max lg x 0.250" max diam case: 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance, and temp coef	For V-1 Plate Coil L-13 Shunting		727 Type C	90581-239	C-36, C-58	2				
C-37	Same as C-16	For 2nd RF Coil L-14 Trimmer	-484831								
C-38	CAPACITOR, variable: air dielectric; trimmer; plunger type; 2 to 19 mmf; $^{3}/_{8}$" lg x 0.515" diam; bus wire term; single hole mtg by 5/16"-32 thd bushing; ceramic ins; wrench adj; 500 vdct; marked w/Navy Type # and mfr prefix ltr	For 2nd RF Grid Coil L-16 Trimmer	-484830	1	95534-502	C-38, C-39, C-60, C-62, C-80, C-81	6	1	1		20
C-39	Same as C-38	For 2nd RF Grid Coil L-18 Trimmer	-484830								
C-40	CAPACITOR, variable: air dielectric; plate meshing type; 11 to 120.6 mmf; p/o an 8-sect variable capacitor; see C-3	For Variable Tuning Capacitor 2nd RF Stage									
C-41	Same as C-25	For 2nd RF Grid Coil L-19 Trimmer	-484830-A								
C-42	Same as C-13	For 2nd RF Grid Coil L-19 Shunt	-484375-5								
C-43	Same as C-25	For 2nd RF Grid Coil L-20 Trimmer	-484830-A								
C-44	CAPACITOR, fixed: ceramic dielectric; 91 mmf p/m 5%; temp coef O (tol p/m 30) mmf/mf/deg C; 500 vdcw; 0.860" lg x 0.250" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance and temp coef	For 2nd RF Grid Coil L-20 Shunt	-484842-5	727 Type C	90575-232	C-44	1				
C-45	Same as C-25	For 2nd RF Grid Coil L-21 Trimmer	-484830-A								

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
C-46	CAPACITOR, fixed: ceramic dielectric; 85 mmf p/m 5%; temp coef O (tol p/m 60) mmf/mf/deg C; 500 vdcw; 0.860" max lg x 0.225" max diam; radial wire leads; uninsulated	For 2nd RF Grid Coil L-21 Shunt	CC35CH850J		98054-9	C-46	1				
C-47	Same as C-1	For V-1 AVC Bus Bypass	CM30D472K								
C-48	CAPACITOR, fixed: paper dielectric; p/o a 3-sect cap C-48, C-109, C-110 and for C-103, C-106, and C-107; 50,000 mmf +25% —10% ea sect; 400 vdcw; HS metal can; 1 13/16" lg x 15/16" d x 13/16" h; mineral oil filled and impr; 3 solder lug term on side; no int gnd connections; 2 int mtg ears w/ 3/16" diam mtg hole in ea, spaced 2 1/8" c to c Note: Manufacturer's drawing number is for complete assembly.	For AVC Bus Bypass	-484782	714 Type 430	98034-1	C-48, C-103, C-106, C-107, C-109, C-110	6				
C-49	CAPACITOR, variable: air dielectric; plate meshing type; 11 to 120.6 mmf; p/o an 8-sect var cap; see C-3	For Variable Tuning Capacitor Osc Stage									
C-50	CAPACITOR, variable: air dielectric; plate meshing type; 14 to 361.8 mmf; p/o an 8-sect var cap; see C-3	For Variable Tuning Capacitor Osc Stage									
C-51	Same as C-1	For V-3 Plate Supply Filter Bypass	CM30D472K								
C-52	Same as C-1	For V-4 Cathode Bypass	CM30D472K								
C-53	CAPACITOR, fixed: ceramic dielectric; 6.8 mmf p/m 1.0 mmf; negative temp coef 750 (tol p/m 110) mmf/mf/deg C; 500 vdcw; 0.400" max lg x 0.200" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance, and temp coef	For V-4 Osc Grid Coupling	-484845	207 Type A	90581-305	C-53	1				
C-54	Same as C-1	For V-4 Screen Bypass	CM30D472K								
C-55	CAPACITOR, fixed: mica; 680 mmf p/m 5%; 500 vdcw; 0 to 0.01% per deg C between —40 deg C and +85 deg C; case 51/64" lg x 15/32" wd x 7/32" thk; molded low loss bakelite case; two axial wire leads	Fixed Tank Capacitor for T-3	CM20C681J		72079-10	C-55, C-72, C-78, C-89, C-90, C-91, C-94, C-100, C-101, C-104	10				
C-56	CAPACITOR, fixed: paper dielectric; p/o a 3-sect capacitor C-56, C-76, C-93; 10,000 mmf +25% —10% ea sect; 400 vdcw; HS metal can; 1 13/16" lg x 15/16" d x 13/16" h; mineral oil filled and impr; 3 solder lug term on side; no int gnd connections; 2 integral mtg ears w/ 3/16" diam hole in ea spaced 2 1/8" c to c Note: Manufacturer's drawing number is for complete assembly	For V-4 Plate Supply Bypass	-484785	714 Type 430	98034-4	C-56, C-76, C-93	3				

C-57	Same as C-4	For V-4 Grid to V-2 Plate Coupling										
C-58	Same as C-36	For V-2 Plate Coil L-23 Shunting										
C-59	Same as C-16	For 1st Detector Coil L-23 Trimmer	-484831									
C-60	Same as C-38	For 1st Detector Grid Coil L-26 Trimmer	-484830									
C-61	CAPACITOR, fixed: ceramic dielectric; 15 mmf p/m 10%; negative temp coef 750 (tol p/m 110) mmf/mf/deg C; 500 vdcw; 0.400" max lg x 0.200" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance, and temp coef	For V-2 Plate Circuit	-484846-10	207 Type A	90581-313	C-61, C-120, C-123	3					
C-62	Same as C-38	For 1st Detector Grid Coil L-28 Trimmer	-484830									
C-63	Same as C-1	For V-2 Plate Supply Bypass	CM30D472K									
C-64	Same as C-25	For 1st Detector Grid Coil L-29 Trimmer	-484830-A									
C-65	Same as C-13	For 1st Detector Grid Coil L-29 Shunt	-484375-5									
C-66	Same as C-25	For 1st Detector Grid Coil L-30 Trimmer	-484830-A									
C-67	Same as C-13	For 1st Detector Grid Coil L-30 Shunt	-484375-5									
C-68	Same as C-25	For 1st Detector Grid Coil L-31 Trimmer	-484830-A									
C-69	Same as C-13	For 1st Detector Grid Coil L-31 Shunt	-484375-5									
C-70	CAPACITOR, variable: air dielectric; plate meshing type; 11 to 120.6 mmf; p/o an 8-sect var cap; see C-3	For Variable Tuning Capacitor 1st Detector Stage										
C-71	CAPACITOR, fixed: paper dielectric; p/o a 3-sect cap C-71, C-95, C-102, and for C-79, C-84 and C-92; 100,000 mmf +25% —10% ea sect; 400 vdcw; HS metal can; 1 13/16" lg x 15/16" d x 1 5/16" h; mineral oil filled and impr; 3 solder lug term on side; no int gnd connections; 2 integral mtg ears w/ 3/16" diam mtg hole in ea spaced 2 1/8" c to c Note: Manufacturer's drawing number is for complete assembly.	Screen Bypass for 1st and 2nd IF Tubes	-484783	714 Type 430	98034-2	C-71, C-79, C-84, C-92, C-95, C-102	6					
C-72	Same as C-55	Secd Tank Capacitor for T-3	CM20C681J									
C-73	CAPACITOR, fixed: mica dielectric; 150 mmf p/m 5%; 500 vdcw; D characteristic; case 51/64" lg x 15/32" wd x 7/32" thk; molded bakelite case; 2 axial wire lead term; color coded	Tank Capacitor for Crystal Load Coil	CM20D151J		72081-38	C-73	1					
C-74	CAPACITOR, fixed: paper dielectric; single section; 6000 mmf +40% —20%; 400 vdcw; molded phenolic case; case 1 11/64" lg x 41/64" h x 17/64" thk less term; wax impr; 2 axial wire lead term; no int gnd; color coded, 1000 vdct	For Diversity IF Gain Control Bypass	-484777	794 EPC-10	727895-128	C-74	1					

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
C-75	CAPACITOR, var: air dielectric; plate meshing type; single sect; 3 to 14 mmf p/m 10%; SLC characteristic; 0.030" air gap; 25/32" lg x 1 7/32" h x 15/16" wd excluding shaft, shaft 1/4" diam x 1 3/16" lg; extension shaft adj; 5 nickel pl brass plates; 360 deg rotation; ceramic grade G, ins; one solder lug and one post term; two 3/32" lg mtg posts on front end w/ two #4-40 tapped holes on 21/32" mtg/c; ceramic ins wax impr; torque 4 to 10.5 in. oz	For Xtal Phasing	-484829	1	253132-6	C-75	1				
C-76	Same as C-56; one sect of a 3-sect capacitor	RF Bypass for L-33 and L-34									
C-77	CAPACITOR, variable: air dielectric; plate meshing type; 14 to 361.8 mmf; p/o an 8-sect variable capacitor; see C-3	For Variable Tuning Capacitor 1st Detector Stage									
C-78	Same as C-55	Pri Tank Capacitor for T-5	CM20C681J								
C-79	Same as C-71; one sect of a 3-sect capacitor	For V-5 Plate Supply Bypass									
C-80	Same as C-38	For T-4 Xtal Load L-34 Trimmer	-484830								
C-81	Same as C-38	For T-4 Xtal Load L-34 Trimmer	-484830								
C-82	CAPACITOR, fixed: mica; 56 mmf p/m 5%; 500 vdcw; temp coef D; case 1 1/16" lg x 15/32" wd x 7/32" thk; molded bakelite case; 2 axial wire lead term; color coded	Osc Feedback	CM25D560J		722013-517	C-82, C-88	2				
C-83	Same as C-1	For V-3 Plate Supply Filter Bypass	CM30D472K								
C-84	Same as C-71; one sect of a 3-sect capacitor	RF Filter									
C-85	CAPACITOR, fixed: mica; 470 mmf p/m 10%; 500 vdcw; temp coef D; case 51/64" lg x 15/32" wd x 7/32" thk; molded bakelite case; 2 axial wire lead term; color coded	Fixed Tank Capacitor for T-10	CM20D471K		722005-589	C-85	1				
C-86	CAPACITOR, variable: air dielectric; plate meshing type; single sect; 3 to 25 mmf p/m 10%; SLC characteristic; 0.030" air gap; 1 3/32" lg x 1 7/32" h x 15/16" wd excluding shaft, 1/4" diam x 1 3/4" lg shaft; extension shaft adj; 9 nickel pl brass plates; 360 deg rotation; ceramic, grade G, ins; one solder lug and one post term; two 3/32" lg mtg posts on front end w/ two #4-40 tapped holes on 21/32" mtg/c; ceramic ins wax impr; torque 3.5 to 7 in. oz	For BFO Trimmer	-484827	1	253132-1	C-86	1				
C-87	CAPACITOR, fixed: mica; 2000 mmf p/m 5%; 500 vdcw; characteristic D; case 53/64" lg x 53/64" wd x 9/32" thk; molded bakelite case; 2 axial wire lead term	Grid to Gnd RF Return for T-10	CM30D202J		727868-254	C-87	1				

C-88	Same as C-82	Grid Coupling	CM25D560J								
C-89	Same as C-55	Secd Tank Capacitor of T-5	CM20C681J								
C-90	Same as C-55	Pri Tank Capacitor of T-6	CM20C681J								
C-91	Same as C-55	Secd Tank Capacitor of T-6	CM20C681J								
C-92	Same as C-71; one sect of a 3-sect capacitor	Matching Coupling Capacitor for T-5 and T-6									
C-93	Same as C-56; one sect of a 3-sect capacitor	RF Bypass									
C-94	Same as C-55	Pri Tank Capacitor for T-7	CM20C681J								
C-95	Same as C-71; one sect of a 3-sect capacitor	RF Bypass									
C-96	CAPACITOR, fixed: p/o a 3-sect fixed paper cap c/o C-96 4 mf +20% —10%, C-97 4 mf +20% —10%, C-98 4 mf +20% —10%; 500 vdcw; HS metal can; case 4⅝" lg x 2 7/16" wd x 5¼" lg less term and mtg flange; castor oil impr; 5 solder lug term 11/16" lg on top, one term ctr others on ¾" x 2¾" ctrs, term w/ ceramic ins, no int gnd connections; two integral mtg bkt w/ four ¼" diam mtg holes on 5 3/32" x 1¼" mtg ctrs; test voltage 1500 v, marked w/ mfr prefix and NT # Note: Manufacturer's drawing number is for complete assembly	For Power Rect Filter Input	-484775	1	449114-2	C-96, C-97, C-98	3	1	1		20
C-97	CAPACITOR, fixed: p/o a 3-sect fixed paper capacitor; see C-96	For Power Rect Filter 2nd Sect									
C-98	CAPACITOR, fixed: p/o a 3-sect fixed paper capacitor; see C-96	For Power Rect Filter Output									
C-99	CAPACITOR, fixed: paper dielectric; p/o a 3-sect capacitor C-99, C-112, C-113; 250,000 mmf +25% —10%; 400 vdcw ea sect; HS metal can; 2 1/16" lg x 1 13/16" d x 15/16" h; mineral oil filled and impr; 3 solder lug term on side; no int gnd connections, 2 integral mtg ears w/ 3/16" diam hole in ea space 2 7/16" c to c Note: Manufacturer's drawing number is for complete assembly	For V-10 Grid Return Bypass	-484784	714 #430	98034-3	C-99, C-112, C-113	3				
C-100	Same as C-55	Secd Tank Capacitor for T-7	CM20C681J								
C-101	Same as C-55	Pri Tank Capacitor for T-8	CM20C681J								
C-102	Same as C-71; one sect of a 3-sect capacitor	Matching Coupling Capacitor for T-7 and T-8									
C-103	Same as C-48; one sect of a 3-sect capacitor	For V-7 Screen Bypass									
C-104	Same as C-55	Secd Tank Capacitor for T-8	CM20C681J								

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
C-105	CAPACITOR, fixed: mica; 560 mmf p/m 10%; 500 vdcw; temp coef ltr D; case 53/64" lg x 53/64" h x 9/32" thk less term; theromo-setting plastic case; 2 axial wire lead term	For V-7 Grid Coupling	CM30D561K		727868-141	C-105	1				
C-106	Same as C-48; one sect of a 3-sect capacitor	Cathode Bypass Capacitor for 3rd IF									
C-107	Same as C-48; one sect of a 3-sect capacitor	RF Bypass									
C-108	CAPACITOR, fixed: mica dielectric; 180 mmf p/m 5%; 500 vdcw; D characteristic, case 51/64" lg x 15/32" wd x 7/32" thk; molded bakelite case; 2 axial wire lead term; color coded	Pri Tank Capacitor for T-9	CM20D181J		72081-42	C-108, C-114, C-115	3				
C-109	Same as C-48; one sect of a 3-sect capacitor	Filter									
C-110	Same as C-48; one sect of a 3-sect capacitor	Filter									
C-111	CAPACITOR, fixed: mica; 2700 mmf p/m 10%; 500 vdcw; temp coef ltr D; case 53/64" lg x 53/64" h x 9/32" thk less term; thermo-setting plastic case; 2 axial wire term	Audio Coupling	CM30D272K		727868-157	C-111, C-116	2				
C-112	Same as C-99; one sect of a 3-sect capacitor	Screen Bypass on 1st Audio Tube									
C-113	Same as C-99; one sect of a 3-sect capacitor	Plate Filter Capacitor on 1st Audio Tube									
C-114	Same as C-108	Secd Tank Capacitor for T-9	CM20D181J								
C-115	Same as C-108	RF bypass	CM20D181J								
C-116	Same as C-111	For Noise Limiter AF Gain Control Coupling	CM30D272K								
C-117	Same as C-1	Tone Control Filter	CM30D472K								
C-118	Same as C-1	Audio Coupling	CM30D472K								
C-119	CAPACITOR, fixed: paper dielectric; 3000 mmf p/m 20%; 1000 vdcw; HS metal can; ½" diam x 1¼" lg; castor oil filled and impr; 2 axial wire lead term; no int gnd connections; ctr radial mtg strap w/ two 5/32" diam holes spaced 7/32" c to c; incl outer ins tube	For V-11 Plate Bypass	-484786-20	714 Type 89	251248-3	C-119	1				
C-120	Same as C-61	For 1st RF Grid Coil L-12 Shunt	-484846-10								
C-121	Same as C-1	For V-3 Plate Supply Bypass	CM30D472K								
C-122	Same as C-1	Audio Coupling	CM30D472K								

C-123	Same as C-61	For Xtal Phasing Circuit	-484846-10									
C-124	CAPACITOR, fixed: ceramic dielectric; 2 mmf p/m o.5 mmf; temp coef ltr G, 500 vdcw; ¼" max diam x 0.562" max lg; 2 axial wire leads; ins	For BFO Coupling to 3rd IF Grid Circuit	CC21BG020-J	1	722407-5	C-124	1					
C-125	CAPACITOR, fixed: ceramic dielectric; 10 mmf p/m 1.0 mmf; negative temp coef 750 (tol p/m 110) mmf/mf/deg C; 500 vdcw; 0.400" max lg x 0.200" max diam case; 2 radial wire lead terms; non-insulated; 1000 vdct, color coded or stamped w/ capacity, tolerance, temp coef	For Xtal Phasing Circuit	-483400-10	727 Type A	90581-309	C-125	1					
C-126 to C-129	Not Used											
C-130	CAPACITOR, fixed: paper dielectric; 500,000 mmf —20% +60%; 120 vdcw; paper case; 2 3/16" lg x 25/32" wd x 7/16" thk max; oil impr; 2 axial braided wire lead term, ea 7/32" wd x 7/8" lg; oper temp +75 deg C; humidity resistant; wax covered	For V-6 Cathode Bypass	-484788	216 Type 2105	97672-1	C-130	1					
E-1	KNOB: round; black molded compound; for ¼" diam shaft; 2 holes tapped for #10-32 set screws; 2" diam x 1¼" h; brass insert; 5/8" d shaft hole; 8 equally spaced indents; ctb 7/8" diam x 3/16" d	For Tuning Control		1	712336-503	E-1	1					
E-2	KNOB: round; black molded compound; for ¼" diam shaft; double #8-32 set screws, 1 7/16" diam x 7/8" h; brass insert; 5/16" d shaft hole; 8 equally spaced indents; ctb 1 1/16" diam x 1/8" d; single white line	For Off Xmtr Rec Mod Rec CW Switch		1	712336-505	E-2, E-3, E-4, E-5	4					
E-3	Same as E-2	For Range Switch										
E-4	Same as E-2	For Selectivity Control										
E-5	Same as E-2	For Manual Noise Limiter, AVC Noise Limiter, AVC Control										
E-6	KNOB: round; black molded compound; for ¼" diam shaft; single #8-32 set screw; 1" diam x 5/8" h; brass insert; ½" d shaft hole; 8 equally spaced indents; ctb 5/8" diam x 3/32" d; single white line	For HF Tone Control		1	712336-507	E-6, E-7, E-8, E-9, E-10, E-11, E-12	7					
E-7	Same as E-6	For Antenna Adj Control										
E-8	Same as E-6	For Noise Limiter Control										
E-9	Same as E-6	For BFO Adj Control										
E-10	Same as E-6	For RF Gain Control										
E-11	Same as E-6	For Xtal Phasing Control										

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
E-12	Same as E-6	For AF Gain Control									
E-13	KNOB: round; black molded phenolic compound; for ¼" diam shaft; double #8-32 set screws; marked "Diversity IF Gain"; 1" diam x ⅝" h; brass insert; ½" d shaft hole; 8 equally spaced indents; single white line; ctb ⅝" diam x 3/32" d	For Diversity IF Gain Control		1	868236-4	E-13	1				
E-14 to E-22	Not Used										
E-23	CAP: for IF transf shield can; gray finished aluminum; 1 13/32" sq x 61/64" h o/a; skirt mtd over top end of IF transf can, skirt 1.378" sq x ⅜" approx d inside measurements; one 9/32" diam hole in top ctr	For IF Transf Shield Cans		1	78945-19	E-23	1				
E-24	CLIP: fuse holding; white nickel pl phosphor bronze; 2 1/32" wd x 15/32" d x 1 1/16" h o/a; 30 amp 250 v; 9/16" ID jaw opening; one 0.140" diam mtg hole bottom ctr	For Xtal Unit A-1		1223 P-3213	849249-2	E-24	1				
E-25 and E-26	Not Used										
E-27	CLIP: fuse; phosphor bronze, nickel pl; 5/16" lg x 1 1/32" wd x 29/64" h o/a; jaw opening for ¼" diam fuse cap; one 0.131" diam mtg hole ctr bottom	For Mtg Trimmer Adj Tool Holder		784 Cat #1011	99045-1	E-27	2				
E-28	CLIP: fuse; phosphor bronze, nickel pl; 7/16" lg x 13/32" wd x ¾" h o/a; jaw opening for 13/32" diam fuse cap; one 0.196" diam hole ctr bottom	For Mtg Air Trimmer Adj Tool Holder		784 Cat #2049	99045-3	E-28	2				
E-29	BOARD, terminal: general purpose; 15 brass solder lug term; term irregularly spaced; lam phenolic board 1/16" thk; 4 7/8" lg x 2 13/16" wd x 1 3/32" d o/a; 4 mtg holes 0.156" diam on 2.312" x 4⅜" mtg/c	For Mtg Resistors and Wiring Terminations		1	98958-2	E-29	1				
H-1	TOOL, alignment: vulcanized gray fibre, hard bone grade; 8 15/32" lg x 7/16" diam o/a; 0.323" across flats hex steel wrench one end, flat steel hook 0.333" lg x 0.050" thk other end; fibre handle diamond medium knurled	For Trimmer Adj Tool		1	81059-501	H-1	1	1	1		4
H-2	TOOL, alignment: vulcanized gray fibre, hard bone grade; 6 3/16" lg x ¼" diam o/a; 3/16" wd steel scdr projecting 3/16" from one end, other end w/ ⅛" wd steel scdr recessed w/ tip 3/32" from end of handle in axial hole 5/32" diam x 3/16" d w/ 1/32" x 45 deg cham	For Air Trimmer Adj Tool		1	86183-501	H-2	1	1	1		4

H-3	WRENCH: Allen set screw, short series type; 5/64" across flats; 23/64" lg x 25/32" wd; steel, parkerized; L-shape for Allen #8 set screw and #4 cap screw	For #8 Set Screws in Knobs		731 Short Series	828505-12	H-3	1				
I-1	LAMP, incandescent: 6-8 v 0.25 amp, 1.6 w; bulb T-3¼, clear, 1⅛" lg o/a; miniature bayonet base; ¾ candle power, 3000 hr life; burn any position	For Pilot Lamps		1050 Mazda #44	61114-15	I-1, I-2, I-3	3				
I-2	Same as I-1	For Pilot Lamps									
I-3	Same as I-1	For Pilot Lamps									
I-4	LAMPHOLDER ASSEMBLY: for dial lighting; c/o two miniature bayonet lampholders Amer Rad Hdwe cat #1540, one lampholder Cinch; wired in parallel w/ #20 AWG stranded RC wire; approx 9" lg x 1 3/16" wd x 1" d o/a; mts by mtg clips on rec panel rear; 4 solder lug term	For Dial Lights		1	98983-501	I-4	1				
J-1	SOCKET, tube: octal; saddle and retainer ring mtg; two #6-32 tapped mtg holes on 1⅝" mtg/c; round steatite body 1¼" diam x 31/64" lg less term w/ flat oval zinc pl steel saddle 1⅜" wd x 2" lg x 1/16" thk; marked w/ Navy type #; body wax impr; silver pl phosphor bronze coat; term hot solder dipped; key at 7:30 o'clock	For Source of AC Line V and DC Rect Filter V for Ext Use	-49373	30 Type SS8M	421395-509	J-1, X-5, X-6, X-10, X-13, X-14	6				
J-2	JACK, telephone: for 2-cond plug 0.25" diam; 2¼" lg x 15/16" h x ⅝" wd o/a back of panel; cont arrangement J1-1C; no mtg facilities provided; single mtg hole for ⅜" diam bushing; bushing ⅜"-32 thd x ⅜" lg; wax impr bakelite ins; solder lug term	For Output Phone	-491852	382 CXB-116482-3	98965-2	J-2	1				
J-3	CONNECTOR, receptacle: one round male (solder bead) cont; straight; ⅝" diam x ⅝" lg o/a; cylindrical brass, chrome pl body; lam bakelite insert; one hole mtd by ¼" lg x ⅜"-24 thd on one end, other end ⅝"-27 thd for coupling nut; incl one solder lug term, int tooth lockwasher, flat washer and hex mtg nut for chassis mtg; marked w/ NT #49659	For Chassis	-49659	30 Cat #PC1-M	253979-7	J-3	1	1	1		20
L-1	COIL, RF: p/o ant-transf; band #1; 2 wnd, L-1 pri one pie and L-2 secd 6 pie universal wnd; single pie wnd 400½ turns #38 AWG, 6 pie wnd 120 turns 15 strands #43 litz; 29/32" diam x 3⅛" lg o/a; bakelite form, powdered iron core; form ½" OD x 2⅛" lg; adj powdered iron core tuned; scdr slotted stud ctr mtg end; bushing mtd w/ ⅜"-32 thd x ¼" lg; 3 solder lug term opposite mtg end; one term colored green; wax impr Note: Manufacturer's drawing number is for complete assembly	For Antenna Coupling Coil Band #1	-472242	1	95520-502	L-1	1	1	1		24
L-2	COIL, RF: p/o RF transf; see L-1	For Antenna Coupling Coil Band #1									

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
L-3	COIL, RF: p/o ant-transf; #2 band; two wnd, pri L-3 and secd L-4, single layer wnd; unshielded; 19 and 40 turns respectively #30 AWG E wire; 0.531" diam x 3" lg o/a; polystyrene form; adj magnetite core; form 0.531" diam x 1⅞" lg; scdr adj through base of form; mts by ⅜"-32 thd on base; 4 wire leads Note: Manufacturer's drawing number is for complete assembly	For Antenna Coupling Coil Band #2	-472256	1	95521-501	L-3	1	1	1		24
L-4	COIL, RF: p/o antenna transf; see L-3	For Antenna Coupling Coil Band #2									
L-5	COIL, RF: p/o antenna transf; #3 band; 2 wnd, pri L-5 and secd L-6, single layer wnd; unshielded; 15 turns #26 AWG E wire and 10 turns #30 AWG E wire respectively; 0.531" diam x 3" lg o/a; polystyrene form; adj magnetite core; form 0.531" diam x 1⅞" lg; scdr adj through base of form; mts by ⅜"-32 thd on base; 4 wire leads; red dot color code Note: Manufacturer's drawing number is for complete assembly	For Antenna Coupling Coil Band #3 (RF coil part of Ant Transf)	-472257	1	95521-502	L-5	1	1	1		24
L-6	COIL, RF: p/o antenna transf; see L-5	For Antenna Coupling Coil Band #3									
L-7	COIL, RF: p/o antenna transf; #4 band; 2 wnd, pri L-7 and secd L-8, single layer wnd; unshielded; 10 turns #26 AWG E wire and 10 turns #30 AWG E wire respectively; 0.531" diam x 3" lg o/a; polystyrene form; adj magnetite core; form 0.531" diam x 1⅞" lg; scdr adj through base of form; mts by ⅜"-32 thd on base; 4 wire leads; white dot color code Note: Manufacturer's drawing number is for complete assembly	For Antenna Coupling Coil Band #4	-472258	1	95521-503	L-7	1	1	1		24
L-8	COIL, RF: p/o antenna transf; see L-7	For Antenna Coupling Coil Band #4									
L-9	COIL, RF: p/o antenna transf; #5 band; 2 wnd, pri L-9 and secd L-10, single layer wnd, unshielded; 7 turns #30 AWG E wire and 7 turns #24 AWG E wire respectively; 0.531" diam x 3" lg o/a; polystyrene form; adj magnetite core; form 0.531" diam x 1⅞" lg; scdr adj through base of form; mts by ⅜"-32 thd on base; 4 wire leads; black dot color code Note: Manufacturer's drawing number is for complete assembly	For Antenna Coupling Coil Band #5	-472259	1	95521-504	L-9	1	1	1		24
L-10	COIL, RF: p/o antenna transf; see L-9	For Antenna Coupling Coil Band #5									

L-11	COIL, RF: p/o antenna transf; #6 band; 2 wnd, pri L-11 and secd L-12, single layer wnd; unshielded; 3⅛ and 5⅛ turns respectively #22 AWG tinned wire; ¾" diam x 3 13/32" lg o/a; polystyrene form; adj magnetite core; form ¾" diam x 1⅞" lg scdr adj through base of form; mts by ⅜"-32 thd on base; 4 wire leads; black dot color code Note: Manufacturer's drawing number is for complete assembly	For Antenna Coupling Coil Band #6	-472255	1	95519-507	L-11	1	1	1		24
L-12	COIL, RF: p/o antenna transf; see L-11	For Antenna Coupling Coil Band #6									
L-13	COIL, RF: p/o RF transf, band #1; 2 wnd; 1 pie universal wnd used as pri (L-13 or L-23); 5 pie universal wnd used as secd (L-14 or L-24); 1 pie wnd w/ 400½ turns #38 AWG, 5 pie wnd w/ 10 strand #42 AWG litz wire; 29/32" diam x 3¼" lg o/a; bakelite form, powdered iron core; form ½" OD x 2⅛" lg; adj powdered iron core tuned; scdr slotted stud ctr mtg end; bushing mtd w/ ⅜"-32 thd x ¼" lg; 4 solder lug term opposite mtg end; one term colored green; wax impr Note: Manufacturer's drawing number is for complete assembly	For 1st RF Plate Coil Band #1	-472248	1	95520-508	L-13	1	1	1		44
L-14	COIL, RF: p/o RF transf; see L-13	For 2nd RF Grid Coil Band #1									
L-15	COIL, RF: p/o RF transf band #2; 2 wnd: single layer wnd used as pri (L-15 or L-25); one pie universal wnd used as secd (L-16 or L-26); 37 turns #30 AWG layer wnd, 200 turns #36 AWG universal wnd; 29/32" diam x 3¼" lg o/a; bakelite form, powdered iron core; form ½" OD x 2⅛" lg; adj powdered iron core tuned; scdr slotted stud ctr mtg end; bushing mtg w/ ⅜"-32 thd x ¼" lg; 4 solder lug term opposite mtg end; one term colored green; wax impr Note: Manufacturer's drawing number is for complete assembly	For 1st RF Plate Coil Band #2	-472243	1	95520-503	L-15	1	1	1		44
L-16	COIL, RF: p/o RF transf; see L-15	For 2nd RF Grid Coil Band #2									
L-17	COIL, RF: p/o RF transf, band #3; 2 wnd; single layer wnd used as pri (L-17 or L-27); one pie universal wnd used as secd (L-18 and L-28); 15½ turns #26 AWG layer wnd, 90 turns #36 AWG universal wnd; 29/32" diam x 3¼" lg o/a; bakelite form, powdered iron core; form ½" OD x 2⅛" lg; adj powdered iron core tuned; scdr slotted stud ctr mtg end; bushing mtd w/ ⅜"-32 thd x ¼" lg; 4 solder lug term opposite mtg end; one term colored green; wax impr Note: Manufacturer's drawing number is for complete assembly	For 1st RF Plate Coil Band #3	-472244	1	95520-504	L-17	1	1	1		44
L-18	COIL, RF: p/o RF transf; see L-17	For 2nd RF Grid Coil Band #3									

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
L-19	COIL, RF: #4 band; single wnd single layer wnd; unshielded; 8 9/16 turns #22 AWG tinned wire; 3/4" diam x 3 13/32" lg o/a; polystyrene form; adj magnetite core; form 3/4" diam x 1 7/8" lg; scdr adj through base of form; mts by 3/8"-32 thd on base; 2 wire leads	For 2nd RF Grid Coil Band #4	-472249	1	95519-501	L-19, L-29	2	1	1		44
L-20	COIL, RF: #5 band; single wnd, single layer wnd; unshielded; 4 9/16 turns #22 AWG tinned wire; 3/4" diam x 3 13/32" lg o/a; polystyrene form; adj magnetite core; form 3/4" diam x 1 7/8" lg; scdr adj through base of form; mts by 3/8"-32 thd on base; 2 wire leads; red dot color code	For 2nd RF Grid Coil Band #5	-472250	1	95519-502	L-20, L-30	2	1	1		44
L-21	COIL, RF: #6 band; single wnd, single layer wnd; unshielded; 2 1/16 turns #22 AWG tinned wire; 3/4" diam x 3 13/32" lg o/a; polystyrene form; form 3/4" diam x 1 7/8" lg; adj magnetite core; scdr adj through base of form; mts by 3/8"-32 thd on base; 2 wire leads; white dot color code	For 2nd RF Grid Coil Band #6	-472251	1	95519-503	L-21, L-31	2	1	1		44
L-22	Not Used										
L-23	COIL, RF: p/o RF transf; see L-13	For 2nd RF Plate Coil Band 1									
L-24	COIL, RF: p/o RF transf; see L-13	For 1st Detector Grid Coil Band #1									
L-25	COIL, RF; p/o RF transf; see L-15	For 2nd RF Plate Coil Band #2									
L-26	COIL, RF; p/o RF transf; see L-15	For 1st Detector Grid Coil Band #2									
L-27	COIL, RF: p/o RF transf; see L-17	For 2nd RF Plate Coil Band #3									
L-28	COIL, RF: p/o RF transf; see L-17	For 1st Detector Grid Coil Band #3									
L-29	Same as L-19	For 1st Detector Grid Coil Band #4	-472249								
L-30	Same as L-20	For 1st Detector Grid Coil Band #5	-472250								
L-31	Same as L-21	For 1st Detector Grid Coil Band #6	-472251								
L-32	COIL, RF: pri wnd p/o IF transf T-3; one 4 pie universal wnd; unshielded; 7 strands of 0.0028" diam Litz wire; 30 turns ea pie; 2 wire lead term; mts in T-3	Pri Tank Coil for T-3		1	92428-501 Item 3	L-32, L-33	2				
L-33	Same as L-32 except secd of T-3	Secd Tank Coil for T-3									

L-34	COIL, RF: single wnd coil; p/o T-4, xtal load transf; peak frequency 455 kc, one 6 pie universal wnd coil w/ 2 taps, unshielded; 0.760" p/m 0.015" diam x 3.187" lg o/a; phenolic form, air core; form 0.437" diam x 3.187" lg; this is u/w one adjustable iron core supplied in o/a transf can assem; mts in shield can; 4 wire lead term	Xtal Loading		1	92428-506	L-34	1				
L-35	COIL, RF: primary wnd; p/o IF transformer T-5; one 4 pie universal wnd; unshielded; 7 strands of 0.0028 diam Litz wire; 30 turns ea pie; 2 wire lead term; mts in T-5	Pri Tank Coil for T-5		1	92428-503 Item 3	L-35, L-36, L-37, L-38, L-41, L-42, L-43, L-44	8				
L-36	Same as L-35 except secd for T-5	Secd Tank Coil for T-5									
L-37	Same as L-35 except pri for T-6	Pri Tank Coil for T-6									
L-38	Same as L-35 except secd for T-6	Secd Tank Coil for T-6									
L-39	COIL, RF: p/o IF transf; 1 single turn; unshielded; 7 strands 0.0028" Litz wire; mts in T-4, T-6, T-7, T-8; 2 wire lead term; wnd in between terms of L-36, L-37, L-42, L-43	Tertiary Wnd for T-5		1	92428-8	L-39, L-40, L-45, L-46	4				
L-40	Same as L-39	Tertiary Wnd for T-6									
L-41	Same as L-35 except pri for T-7	Pri Tank Coil for T-7									
L-42	Same as L-35 except secd for T-7	Secd Tank Coil for T-7									
L-43	Same as L-35 except pri for T-8	Pri Tank Coil for T-8									
L-44	Same as L-35 except secd for T-8	Secd Tank Coil for T-8									
L-45	Same as L-39	Tertiary Wnd for T-7									
L-46	Same as L-39	Tertiary Wnd for T-8									
L-47	COIL, RF: pri L-47, secd L-48; peak frequency 455 kc; two 4 pie universal wnd coil; unshielded; 0.680" p/m 0.015" diam x 3.187" lg o/a; phenolic form, air core; form 0.437" diam x 3.187" lg; this is u/w 2 adj iron cores supplied in o/a transf can assem; mts in shield can; 4 wire lead term; p/o 2nd det input transf, T-9 Note: Manufacturer's drawing number is for complete assembly.	Pri Tank Coil for T-9		1	92428-502	L-47, L-48	2				
L-48	Same as L-47	Secd Tank Coil for T-9									
L-49	REACTOR: filter choke; 30 hy, 90 ma; 400 ohms p/m 10% DC resistance; 2000 v test; incl metal case; 2 13/16" lg x 2 13/16" wd x 3 1/4" h; fl mtd w/ 4 holes 0.180" diam on 2 7/16" x 2 7/16" mtg/c; 2 solder lug term on bottom; wax impr, compound potted; duty cyc 100%; oper temp 50 deg C max ambient; permissible temp rise of wnd 40 deg C max	For Power Rect Filter Inductor	-304515	1	901433-2	L-49, L-50	2	1	1		20
L-50	Same as L-49	For Power Rect Filter Inductor	-304515								

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
L-51	COIL, RF: osc, band #1 single layer wnd; 95¼ turns #36 AWG; 2⁹⁄₃₂" diam approx x 3¼" lg o/a; bakelite form, powdered iron core: form ½" OD x 2⅛" lg; adj powdered iron core tuned; scdr slotted stud ctr mtg end; bushing mtd w/ ⅜"-32 thd x ¼" lg; 3 solder lug term opposite mtg end; wax impr	For Osc Coil Band #1	-472245	1	95520-505	L-51	1	1	1		20
L-52	COIL, RF: osc, band #2; single layer wnd; 45¼ turns #30 AWG 2⁹⁄₃₂" diam x 3¼" lg o/a; bakelite form, powdered iron core; form ½" OD x 2⅛" lg; adj powdered iron core tuned; scdr slotted stud ctr mtg end; bushing mtd w/ ⅜"-32 thd x ¼" lg; 3 solder lug term opposite mtg end; wax impr	For Osc Coil Band #2	-472246	1	95520-506	L-52	1	1	1		20
L-53	COIL, RF: osc, band #3; single layer wnd, 17¼ turns #26 AWG; 2⁹⁄₃₂" diam x 3¼" lg o/a; bakelite form, powdered iron core; form ½" OD x 2⅛" lg; adj powdered iron core tuned; scdr slotted stud ctr mtg end; bushing mtd w/ ⅜"-32 thd x ¼" lg; 3 solder lug term opposite mtg end; wax impr	For Osc Coil Band #3	-472247	1	95520-507	L-53	1	1	1		20
L-54	COIL, RF: osc, #4 band; single wnd, single layer wnd; unshielded; 10⁵⁄₁₆ turns #22 AWG tinned wire tapped at 6³⁄₁₆ turns; ¾" diam x 3¹³⁄₃₂" lg o/a; polystyrene form; form ¾" diam x 1⅞" lg; adj powdered iron core; scdr adj through base of form; mts by ⅜"-32 thd on base; 3 wire leads; blue dot color code	For Osc Coil Band #4	-472252	1	95519-504	L-54	1	1	1		20
L-55	COIL, RF: osc, #5 band; single wnd, single layer wnd; unshielded; 7¹³⁄₁₆ turns #22 AWG tinned wire tapped at 4⁷⁄₁₆ turns; ¾" diam x 3¹³⁄₃₂" lg o/a; polystyrene form; form ¾" diam x 1⅞" lg; adj powdered iron core; scdr adj through base of form; mts by ⅜"-32 thd on base; 3 wire leads; green dot color code	For Osc Coil Band #5	-472253	1	95519-505	L-55	1	1	1		20
L-56	COIL, RF: osc, #6 band; single wnd, single layer wnd; unshielded; 5⅛ turns #22 AWG tinned wire tapped at 2³⁄₁₆ turns; ¾" diam x 3¹³⁄₃₂" lg o/a; polystyrene form; form ¾" diam x 1⅞" lg; adj powdered iron core; scdr adj through base of form; mts by ⅜"-32 thd on base; 3 wire leads; orange dot color code	For Osc Coil Band #6	-472254	1	95519-506	L-56	1	1	1		20
L-57	COIL, RF: wave trap coil; single 3 pie universal wnd; cylindrical lam paper, bakelite varnish impr sleeve type shield; 360 turns 5 cond #40 AWG LITZ wire; 1⅛" lg x 1.000" diam less term; lam phenolic form; powdered iron core; form ½" OD x 1¹⁹⁄₃₂" lg; adj powdered iron core; scdr adj ctr mtg bushing; one hole mtg by bushing ⅜"-32 thd ¼" lg; 2 solder lug term ctr on opposite sides	For Wave Trap	-472216	1	76299-506	L-57	1	1	1		20

N-1	DIAL: for tuning; c/o tuning dial RCA part/dwg #29933-1, one disc RCA part/dwg #98946-3, one disc RCA part/dwg #98946-4, one hub RCA part/dwg #99853-4; dial calibrated from 550 kc to 31.9 mc in 6 bands; 5 11/16" diam x 5/8" d o/a; mts on 1/4" diam shaft w/ two #8-32 thd x 3/16" lg set screws	For Tuning		1	98947-501	N-1	1				
N-2	DIAL: for vernier tuning; c/o vernier tuning dial RCA part/dwg #29934-1, 1 disc RCA part/dwg #98946-3, 1 disc RCA part/dwg #98946-4, 1 hub RCA part/dwg #99853-4; dial calibrated 0 to 95 over 360 deg; 3 5/8" diam x 5/8" d o/a; mts on 1/4" diam shaft w/ two #8-32 thd x 3/16" lg set screws	For Vernier Tuning		1	98947-502	N-2	1				
N-3	GLASS: dial window; clear transparent plexiglass, deep umber gray opague background fin, ivory translucent trim lines and background of numerals; rectangular; 11 21/32" lg x 3" h x 0.060" thk o/a; four 0.144" diam mtg holes and seven 0.144" wd x 0.206" mtg slots, 2 mtg holes and 4 mtg slots in line across top all 3/16" from longer side, 1st hole on 1/4" mtg ctr from left edge, 2nd hole on 3 1/8" ctr, 1st slot on 4 27/32" ctr, 2nd slot on 6 29/32" ctr, 3rd slot on 8 9/32" ctr, 4th slot on 11 13/32" ctr, 2 holes and 3 slots in line on bottom all 3/16" from edge, 1st hole 1/4" ctr to left edge, 2nd hole on 3 1/8" ctr, 1st slot on 5 7/8" ctr, 2nd slot on 8 9/32" ctr, 3rd slot on 11 13/32" ctr, all mtg ctrs indicated to left edge band indicating window w/ numerals 1 to 6 either side bottom to top, upper left edge marked w/ 29932, upper right edge marked w/ G-4344; band indicating—coarse tuning window near left end, vernier window in ctr, equipment identification near right end, two 0.136" diam holes on 13/32" vertical ctr under vernier window	For Windows for Dials		1	29932-3	N-3	1				
N-4	FRAME: dial window; c/o 1 frame RCA part/dwg #99805-2, 1 dial wire RCA part/dwg #99805-3; steel, satin black synthetic fin; rectangular; 3 1/8" lg x 3 3/8" wd x 0.080" thk o/a, two 0.144" wd x 0.269" lg oval mtg slots on 2.875" mtg ctr 3/16" from 3 3/8" lg side; ctr cutout 2 1/4" wd x 2 3/8" lg w/ corners 1/8" radius, dial wire 0.020"; diam ctr across window on 2 1/4" dimension, wire held by extruding frame	For Window Dial Line Assembly		1	99805-501	N-4	1				
N-5	FRAME: vernier dial window; c/o 1 frame RCA part/dwg #99806-2, 1 dial wire RCA part/dwg #99806-3; steel, satin black synthetic fin; rectangular 2.892" lg x 2 3/16" wd x 0.196" thk o/a; two 0.144" wd x 0.269" lg oval mtg slots on 2.062" mtg ctr 3/16" from 2.892" lg side; ctr cutout 2.392" lg x 1 7/16" wd w/ corners on 1/8" radius, dial wire 0.020" diam ctr across window on 2 1/16" dimension, wire held by extruding frame	For Window Dial Line Assembly		1	99806-501	N-5	1				

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
O-1	DRIVE, tuning: c/o 2 zinc pl rectangular parallel support plates mtg 5 spring loaded brass split gears, 5 brass spur gears, 3 steel shafts w/ cone type adj ball bearings, one with bushing, a split clutch, and a stop; tuning to vernier shaft ratio 2 2/9:1, tuning to main dial shaft ratio 54.89:1, tuning to var capacitor shaft ratio 103.68:1, tuning shaft rotates 340 deg to 180 deg rotation of var capacitor shaft; 6 5/8" lg x 1 1/32" wd approx x 5" h approx excluding shafts and mtg studs; tuning shaft 2 3/16" lg, main dial and vernier shafts ea 1 1/8" lg on front, var capacitor shaft on rear 1 3/16" lg, all shaft 1/4" diam; four #8-32 thd x 5/16" lg mtg studs on bottom rear support plate on 1.907" x 2.825" x 1.718" mtg/c; 2 in oz torque max; 4.5 to 6 in oz torque required to slip clutch; steel parts rust resistant; brass parts nickel pl	For Tuning		161 P-70014	92417-1	O-1	1	1	1		16
O-2	COUPLING, rigid: sleeve type; 1/4" shaft size opening ea end; two #8-32 set screw mtg; 1/2" diam x 13/16" lg o/a; black fibre sleeve 3/8" OD w/ SS band 1/2" OD x 1/4" wd on ea end; ins from shafts	For Antenna Trimmer Capacitor C-2 Shaft		1	99630-2	O-2	1	1	1		20
O-3	COUPLING, flexible: phosphor bronze flexible ring, brass hubs, 4 Allen set screws, lam phenolic body: round, 1 3/32" diam x 5/8" lg o/a; four #8-32 hollow hex head, cup point Allen set screws, 2 in ea hub for mtg on 1/4" diam shafts; nonconductor	Conects Dial Gears to Main Variable Capacitor		1	98950-1	O-3	1	1	1		20
O-4	FLYWHEEL: for tuning shaft; zinc pl cast iron; 3" OD x 1/2" approx wd o/a; bored for 1/4" diam shaft; shaft mtd w/ two #8-32 set screws set at 15 deg angle 120 deg apart in hub	For Tuning Drive Unit		1	99818-2	O-4	1				
O-5	SHAFT: tuning; screw steel, zinc pl; 0.250" +0.000" —0.002" diam x 92 1/32 p/m 1/64" lg o/a; both ends cham 1/32" x 45 deg	For Drive Shaft for C-2		1	99631-2	O-5	1				
O-6	SHAFT ASSEM: flexible for tuning: c/o 4 17/32" lg flexible shaft white SS #130 R-36 terminated one end w/ cad pl steel coupling w/ 1/4" shaft hole 5/16" d in end, other end terminated w/ 1/4" diam cad pl steel shaft 2 1/8" lg; and fitted w/ cad pl brass bushing w/ hex hd 1/2" across flats and 3/8"-32 thd 1/4" lg; 7 3/32" lg x 1/2" across flats o/a; shaft projects 1 1/64" from hex end of bushing; bushing located on shaft w/ one c washer at ea end locking in 1/32" wd x 0.185" d grooves in shaft; coupling mts w/ two #8-32 set screws	For Drive Shaft Assembly for C-75 Xtal Phasing Capacitor		1	982629-501	O-6	1				
P-1	CONNECTOR, plug: 8 round male cont, polarized; straight; 1 1/4" diam x 1" lg o/a; round black molded bakelite body; mts in std octal tube socket; cont #1 and #2 connected w/ #20 AWG wire jumper soldered to cont, also cont #3 and #4	For Plug for J-1 Socket on Chassis Rear Apron	-49767	1	99895-501	P-1	1				

R-1	RESISTOR, fixed: comp; 47,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-1 Screen Dropping	*RC20BF473K		82283-82	R-1, R-6, R-29	3					
R-2	RESISTOR, fixed: comp; 2.2 meg p/m 20%; ½ w; F characteristic; ⅜" lg x 1/64" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded; wax impr and coated	For V-1 Grid AVC Series	*RC20BF225M		82283-33	R-2, R-33, R-36, R-47, R-72	5					
R-3	RESISTOR, fixed: comp; 1000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For 1st RF Plate Circuit Supply Filter	*RC20BF102K		82283-62	R-3, R-10, R-12, R-16, R-22, R-26, R-31, R-34	8					
R-4	RESISTOR, fixed: comp; 56,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-3 Grid Leak	*RC20BF563K		82283-83	R-4	1					
R-5	RESISTOR, fixed: comp; 1 meg p/m 20%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-2 Grid AVC Series	*RC20BF105M		82283-31	R-5, R-37, R-70, R-73	4					
R-6	Same as R-1	Screen Dropping Resistor for Second RF Tube	RC20BF473K									
R-7	RESISTOR, fixed: WW; 10 ohms p/m 10%; ½ w at 40 deg C ambient temp rise of 50 deg C; ⅝" lg x 3/16" diam, p/m 1/32" tol; bakelite ins, waxed, humidity and fungus resistant; 2 axial wire lead term; RMA color coded; temp coef 0.017%/ deg C	V-2 Grid Suppressor	-63678-100	321 Type BW½	867970-338	R-7, R-17, R-61, R-62	4					
R-8	RESISTOR, fixed: comp; 5600 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-1 Plate Coil L-15 Shunt	*RC20BF562K		82283-71	R-8, R-18, R-55	3					
R-9	RESISTOR, fixed: comp; 100,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For RF Grid AVC Bus Filter	*RC20BF104K		82283-86	R-9, R-14, R-41	3					
R-10	Same as R-3	For 2nd RF Plate Circuit Supply Filter	RC20BF102K									
R-11	RESISTOR, fixed: comp; 10,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For Osc Plate Loading	*RC20BF103K		82283-74	R-11	1					
R-12	Same as R-3	For Osc Plate Circuit Supply Filter	RC20BF102K									
R-13	RESISTOR, fixed: comp; 560 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded; wax impr and coated	For V-4 Cathode Bias	*RC20BF561K		82283-59	R-13	1					
R-14	Same as R-9	For V-4 Osc Grid Loading	RC20BF104K									

* For Replacement use.

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
R-15	RESISTOR, fixed; comp; 15,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	Pri Shunt Resistor on T-3	*RC20BF153K		82283-76	R-15	1				
R-16	Same as R-3	For V-4 Plate Circuit Supply Filter	RC20BF102K								
R-17	Same as R-7	For V-4 Grid Suppressor	-63678-100								
R-18	Same as R-8	For V-2 Plate Coil L-25 Shunt	RC20BF562K								
R-19	RESISTOR, fixed: comp; 33,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-4 Screen Series	*RC20BF333K		82283-80	R-19, R-49	2				
R-20	RESISTOR, fixed: comp; 100 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-5 Cathode Bias	*RC20BF101K		82283-50	R-20, R-39	2				
R-21	RESISTOR, var: comp; 5000 ohms p/m 10%; 1 w, wattage determined at +25 deg C; 3 solder lug term; 1⅛" diam x 9/16" d; encl metal case; round metal shaft ¼" diam x ¾" lg; RCA taper curve #252638-6 w/ resistance of 3750 ohms at 35% rotation, 4500 ohms at 50%, 4700 ohms at 65%; ins cont arm, w/o off position; normal torque; mtg bushing ⅜"-32 thd x ⅜" lg; nonturn device at 9 o'clock on 17/32" rad; ambient temp range —40 to +65 deg C; corrosion and humidity resistant; marked w/ NT #	For IF Gain Control	-636900-M10	722 Type J	980027-10	R-21	1				
R-22	Same as R-3	For V-5 Plate Circuit Supply Filter	RC20BF102K								
R-23	RESISTOR, fixed: comp; 560,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-5 AVC Bus Series Resistor to Grid	*RC20BF564K		82283-95	R-23, R-27, R-50, R-57, R-58, R-74	6				
R-24	RESISTOR, fixed: comp; 120,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam; bakelite ins; 2 axial wire lead term; RMA color coded, wax impr and coated	Grid Leak Resistor for BFO	*RC20BF124K		82283-87	R-24, R-28	2				
R-25	RESISTOR, fixed: WW; 15 ohms p/m 10%; ½ w at 40 deg C ambient temp w/ temp rise of 50 deg C; ⅝" lg x 3/16" diam, p/m 1/32" tol; bakelite ins, waxed, humidity and fungus resistant; 2 axial wire lead term; RMA color coded; temp coef 0.017%/ deg C	V-6 Cathode Bias	RU3B150K		867970-340	R-25, R-45, R-59	3				

R-26	Same as R-3	For V-6 Plate Circuit Supply Filter	RC20BF102K									
R-27	Same as R-23	For V-6 AVC Bus Series Resistor to Grid	RC20BF564K									
R-28	Same as R-24	Plate Resistor for BFO	RC20BF124K									
R-29	Same as R-1	Plate Filter Resistor for BFO	RC20BF473K									
R-30	RESISTOR, fixed: WW; 2700 ohms p/m 10%; 4 w; 1¾" lg x 5/16" OD; 2 radial wire lead term	For IF 1st Detector AVC Screens and Osc Plate Supply		752	90497-3	R-30	1					
R-31	Same as R-3	For V-7 Screen Circuit Supply Filter	RC20BF102K									
R-32	RESISTOR, fixed: comp; 390 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded; wax impr and coated	For V-7 Cathode Bias	*RC20BF391K		82283-57	R-32	1					
R-33	Same as R-2	For V-7 Grid Loading	RC20BF225M									
R-34	Same as R-3	For V-7 Plate Circuit Supply Filter	RC20BF102K									
R-35	RESISTOR, fixed: comp; 680,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded; wax impr and coated	For V-9 1st Diode Plate Circuit Filter	*RC20BF684K		82283-96	R-35	1					
R-36	Same as R-2	For V-10 Control Grid	RC20BF225M									
R-37	Same as R-5	For V-10 Bias Supply Filter	RC20BF105M									
R-38	RESISTOR, fixed: comp; 1.5 megohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded; wax impr and coated	Screen Dropping Resistor for BFO	*RC20BF155K		82283-100	R-38	1					
R-39	Same as R-20	For V-10 Cathode Bias	RC20BF101K									
R-40	RESISTOR, fixed: comp; 270,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	1st Audio Plate	*RC20BF274K		82283-91	R-40	1					
R-41	Same as R-9	Plate Filter Resistor on 1st AF Tube	RC20BF104K									
R-42	RESISTOR, fixed: comp; 390,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For RF Gain Positive Bus Series Dropping	*RC20BF394K		82283-93	R-42	1					
R-43	RESISTOR, fixed: WW; 100 ohms p/m 10%; 4 w; body dimen 1¾" lg x 5/16" OD; 2 radial wire lead term	For Power Supply Output Voltage Divider		752	90497-1	R-43	1					

* For Replacement use.

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
R-44	RESISTOR, fixed: WW; 160 ohms p/m 10%; 4 w; body dimen 1¾" lg x 5/16" OD; 2 radial wire lead term	For Power Supply Output Voltage Divider		752	90497-2	R-44	1				
R-45	Same as R-25	Bias Voltage Divider	RU3B150K								
R-46	RESISTOR, var: comp; 66,000 ohms p/m 10%; 1 w, wattage determined at 25 deg C; 3 solder lug term; 1⅛" diam x 9/16" d; encl metal case; round metal shaft ¼" diam x 1¾" lg; linear taper; ins cont arm w/o off position; mtg bushing ⅜"-32 thd x ⅜" lg; non-turn device at 9 o'clock on 17/32" rad; ambient temp range —40 to +65 deg C; corrosion resistant	For RF Gain and Noise Limiter Control	-636898-W10	722 Type J	980027-8	R-46, R-48	2				
R-47	Same as R-2	For V-8 AVC Diode Plate	RC20BF225M								
R-48	Same as R-46	For Noise Limiter Control	-636898-W10								
R-49	Same as R-19	For V-9 2nd Diode Plate Circuit Voltage Divider	RC20BF333K								
R-50	Same as R-23	For V-9 Diode Loading	RC20BF564K								
R-51	RESISTOR, var: comp; 2 meg p/m 20%; 1 w, wattage determined at +25 deg C; 3 solder lug term; 1⅛" diam x 9/16" d; encl metal case; round metal shaft ¼" diam x ¾" lg; RCA taper curve #78385 w/ resistance of rotation 150,000 ohms at 35% 1.3 meg at 65%; 320,000 ohms at 50%, ins cont arm, w/o off position; normal torque; mtg bushing ⅜"-32 thd x ⅜" lg non-turn device at 9 o'clock on 17/32" rad; ambient temp range —40 to +65 deg C; corrosion resistant; marked w/ NT #	For Audio Gain Control	-636899-M20	722 Type J	980027-9	R-51	1				
R-52	RESISTOR, var: comp; 1 meg p/m 20%; wattage determined at +25 deg C; 3 solder lug term; encl metal case 1⅛" diam x 9/16" d, ¼" diam round metal shaft 1 11/16" lg; max resistance change at 70,000 ohms at 35% clockwise rotation, 160,000 ohms at 50% rotation, 380,000 ohms at 65% rotation; contact arm ins from case, w/ off position; normal torque; ⅜"-32 thd x ⅜" lg mtg bushing, non-turn device at 9 o'clock on 17/32" radius; ambient temp range —40 deg C to +65 deg C (—40 deg F to +149 deg F), corrosion resistant, marked w/ NT #, 980027-7	For Tone Control	-632882-W20	722 Type J	980027-7	R-52	1				
R-53	RESISTOR, fixed: comp; 330,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-11 Grid Bias Series	*RC20BF334K		82283-92	R-53	1				

R-54	RESISTOR, fixed: comp; 2700 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-10 Cathode Line Coupling	*RC20BF272K		82283-67	R-54	1					
R-55	Same as R-8	For RF Gain Voltage Divider	RC20BF562K									
R-56	RESISTOR, fixed: WW; 5 ohms p/m 10%; 4 w; 1¾" lg x 5/16" OD; 2 radial wire lead term	For Output No Load Impedance Matching Shunting		752	90497-4	R-56	1					
R-57	Same as R-23	For Rect Filter	RC20BF564K									
R-58	Same as R-23	For Rect Filter	RC20BF564K									
R-59	Same as R-25	For V-1 Plate Suppressor	RU3B150K									
R-60	Not Used											
R-61	Same as R-7	For V-9 Heater Series Parallel	-63678-100									
R-62	Same as R-7	For V-9 Heater Series Parallel	-63678-100									
R-63 to R-69	Not Used											
R-70	Same as R-5	For Antenna Gnd Shunt	RC20BF105M									
R-71	RESISTOR, fixed: comp; 10 meg p/m 20%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol, bakelite ins, RSW and humidity; 2 axial wire lead term: RMA color coded	For AVC Plate Supply Series	*RC20BF106M		82283-37	R-71	1					
R-72	Same as R-2	For Voltage Divider in AVC Diode Plate Supply Circuit	RC20BF225M									
R-73	Same as R-5	For AVC Plate Supply Voltage Divider	RC20BF105M									
R-74	Same as R-23	For Xtal Phasing Coil L-34 Shunt	RC20BF564K									
S-1	SWITCH SECTION, rotary: p/o 8 wafer, 16 sect switch; 16-pole, 6-position switch; complete switch assembly includes S-1 to S-16 incl; silver contacts, silver faced, silver pl cont; steatite low loss ceramic; 11 13/16" lg x 9 5/32" wd x 3¼" h excluding shaft and mtg; shorting type cont; detent action; solder lug term; 35 #6-32 x 5/16" lg mtg studs, 16 on top spaced 2½" c to c 4 rows spaced 2½", 2½" and 2 11/16" apart, 19 on bottom spaced 1 23/32", 3 19/32" and 2⅜" c to c on front compartment shield, studs on next shield spaced 3⅛", and 4⅝" c to c, studs on next 3 shields spaced 2⅛", 3 9/16" and 2⅛" c to c, also one mtg bushing on shaft end w/ ⅜"-32 x ⅜" lg thr; brass shaft ¼" diam x 3 7/16" lg; non-turn device at 6 o'clock on 17/32" rad; incl 6 cad pl steel shields, 4 partitioning and one rear end and one top shield; all ins wax impr; rust resistant Note: Manufacturer's drawing number is for complete assembly	For Band Selection or Range		1	253097-1	S-1, S-2, S-3, S-4, S-5, S-6, S-7, S-8, S-9, S-10, S-11, S-12, S-13, S-14, S-15, S-16	16	1	1		36

* For Replacement use.

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
S-2	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-3	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-4	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-5	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-6	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-7	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-8	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-9	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-10	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-11	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-12	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-13	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-14	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-15	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									
S-16	SWITCH SECTION: rotary; p/o 16-pole, 6-position switch assem; see S-1	For Band Selection or Range									

S-17	SWITCH SECTION, rotary: p/o 4-pole, 5-position switch assem c/o 2 wafers, 4 sect; symbols S-17 to S-20 incl; silver pl clip cont, silver rotor cont; steatite low loss ceramic; 7 23/32" lg approx x 4 1/4" wd x 3 19/32" h approx excluding shaft; shorting type cont; detent action; solder lug term; front end w/ 3/8"-32 thd x 3/8" lg bushing mtg, rear end w/ 2 mtg studs 5/16" lg on 2 11/16" mtg/c; steel shaft 1/4" diam x 1 13/16" lg; incl cad pl steel shield on rear end; nonturn device at 12 o'clock on 17/32" rad on front end; wax impr ins; rust resistant Note: Manufacturer's drawing number is for complete assembly	For Selectivity		1	253134-2	S-17, S-18, S-19, S-20	4	1	1		36
S-18	SWITCH SECTION, rotary: p/o 4-pole, 5-position switch assem; see S-17	For Selectivity									
S-19	SWITCH SECTION, rotary: p/o 4-pole, 5-position switch assem; see S-17	For Selectivity									
S-20	SWITCH SECTION, rotary: p/o 4-pole, 5-position switch assem; see S-17	For Selectivity									
S-21	SWITCH SECTION, rotary: p/o 2 pole, 4 position; switch assem c/o 1 wafer, 2 sect, symbols S-21 and S-22; silver faced, silver pl cont; phenolic wafer type LTS-E-4; 3/4" lg x 1 13/16" wd x 1 1/2" h o/a approx excluding shaft; shorting type cont; detent action; solder lug term; one hole mtg, bushing 3/8"-32 thd 3/8" lg; shaft 1/4" diam x 1 13/16" lg; nonturn device at 12 o'clock on 17/32" rad; all ins wax impr; rust resistant; marked w/ 253099-2 Note: Manufacturer's drawing number is for complete assembly	For AVC Noise Limiter		1	253099-2	S-21, S-22	2	1	1		16
S-22	SWITCH SECTION: rotary; p/o 2-pole, 4-position switch assem; see S-21	For AVC Noise Limiter									
S-23	SWITCH SECTION, rotary: p/o 3-pole, 4 position; switch assem c/o 1 wafer, 2 sect, symbols S-23 and S-24; w/ SPST switch; silver pl clip cont, silver rotor cont; lam bakelite; 1 3/8" lg x 1 13/16" wd x 1 7/16" d approx excluding shaft; shorting type cont; detent action; solder lug term; mtg by bushing 3/8"-32 thd x 3/4" lg 1/4" diam x 1 13/16" lg shaft; nonturn device at 12 o'clock on 17/32" rad; wax impr ins; rust resistant; SPST switch rated 3 amp 125 v, 1 amp 250 v and RSW Note: Manufacturer's drawing number is for complete assembly	For OFF Xmtr Rec		1	253098-2	S-23, S-24	2	1	1		20
S-24	SWITCH SECTION: rotary; p/o 3-pole, 4-position switch assem; see S-23	For OFF Xmtr Rec									
S-25	SWITCH, rotary: single pole, 8 positions; 250 v max; brass cont w/ nickel pl phosphor bronze movable cont; black bakelite body integral w/ steel saddle; 1 1/2" wd x 1 7/8" lg x 1" h less term; 9 solder lug term; saddle mtd w/ 2 holes 0.156" diam 1 1/2" c to c; marked w/ 110-125-150-220-240 on positions 1 to 5 w/ positions 6 to 8 left blank	For Voltage Selector Switch for Primary of T-1	-241328	30 Cat #36-806	99585-2	S-25	1	1	1		20

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
T-1	TRANSFORMER, power: filament and plate type; input 110/125/150/210/240 v, 60 cyc, single ph; 3 out-put wnd; secd #1—690 v CT, 100 ma; secd #2—6.45 v, 4.5 amp; secd #3—5 v, 2 amp; secd #2—1000 v test, other wnd 2500 v test; wax impr, potted; incl metal case; 4 3/16" wd x 4 3/4" lg x 5 3/8" h excluding term; 13 solder lug term on bottom; 4 holes 0.199" diam in mtg fl on 2 1/4" x 4 3/8" mtg/c; electrostatic shield int grid	For Power	-304514	1	901432-2	T-1	1	1	1		24
T-2	TRANSFORMER, AF: plate coupling type; pri 12 hy inductance at 30 v 60 cyc AC w/ 22 ma DC, 1500 v test pri, 500 v test secd; encl metal case; 2 1/4" sq x 2 3/4" h; turns ratio of pri to #1 secd 55:1 p/m 3%, pri to #1 and #2 secd 10.9:1 p/m 3% secd 3.5:1 p/m 3%; 7 solder lug term on bottom; fl mtd w/ 4 holes 0.180" diam on 1 7/8" x 1 7/8" mtg/c; wax impr; compound potted; duty cyc 100%; oper temp 50 deg C max ambient; permissible temp rise of wnd 40 deg C max	For AF Output	-304518	1	901666-2	T-2	1	1	1		24
T-3	TRANSFORMER, IF: 455 kc; input 1st IF; shielded; 1 3/8" wd x 1 5/8" d x 4 7/8" lg o/a; pri L-32 and secd L-33; tuned by adj powdered iron cores; double tuned; mts w/ two #6-32 spade bolts on 1 5/16" mtg/c; 8 solder lug term, 2 on top, 6 on bottom; wnd wax impr; incl 2 fixed capacitors C-55 and C-72 and 1 fixed resistor R-15; marked w/ black dot	For 1st Det Output	-472237	1	92430-507	T-3	1	1	1		20
T-4	COIL, RF: 455 kc; xtal lead; shielded; 1 3/8" wd x 1 5/8" d x 4 7/8" h o/a; single wnd coil L-34; adj iron core tuning; mts w/ two #6-32 spade bolts on 1 5/16" mtg/c; 6 solder lug term on bottom; wnd wax impr; incl 1 fixed capacitor C-73; marked w/ white dot	For Xtal Phasing Link Transf and 1st IF Input	-472241	1	92430-511	T-4	1	1	1		24
T-5	TRANSFORMER, IF: 455 kc; inter-stage, 1st/2nd IF shielded; 1 3/8" wd x 1 5/8" d x 4 7/8" h o/a; pri L-35 and secd L-36 and RF coupling coil L-39, w/ adj powdered iron cores; double tuned; mts w/ two #6-32 spade bolts on 1 5/16" mtg/c; 9 solder lug term 3 on top, 6 on bottom; wnd wax impr; incl 2 fixed capacitors C78 and C89; marked w/ orange dot	For 1st IF Output	-472239	1	92430-509	T-5, T-6, T-7, T-8	4	1	1		52
T-6	Same as T-5 except coils symbolized L-37, L-38, and L-40 and capacitors C-90 and C-91	For 2nd IF Input	-472239								
T-7	Same as T-5 except coils symbolized L-41, L-42, and L-45 and capacitors C-94 and C-100	For 2nd IF Output	-472239								
T-8	Same as T-5 except coils symbolized L-43, L-44, and L-46 and capacitors C-101 and C-104	For 3rd IF Input	-472239								

T-9	TRANSFORM, IF: 455 kc; output 4th IF; shielded; 1⅜" wd x 1⅝" d x 4⅞" lg o/a; pri L-47 and secd L-48; adj powdered iron core; double tuned; mts w/ two #6-32 spade bolts on 1⁵⁄₁₆" mtg/c; 8 solder lug term, 2 on top, 6 on bottom; wnd wax impr; incl 3 fixed capacitors C-108, C-114, and C-115 marked w/ red dot	For 3rd IF Output	-472238	1	92430-508	T-9	1	1	1		20
T-10	TRANSFORMER, IF: 455 kc; BFO; shielded; 1⅜" wd x 1⅝" d x 4⅞" h o/a; tuned by means of coil L-22 w/ adj iron core; mts w/ two #6-32 spade bolts on 1⁵⁄₁₆" mtg/c; 9 solder lug, 3 on top, 6 on bottom; wnd wax impr; incl 4 fixed capacitors C-82, C-85, C-87, and C-88 and 3 fixed resistors R-24, R-28, and R-29; marked with blue dot	For BFO	-472240	1	92430-510	T-10	1	1	1		20
TB-1	BOARD, terminal: general purpose; 3 brass screw term w/ hot tin dipped ends; term spaced 7⁄16" between ctr; lam phenolic board; 3⁄32" thk, 2⅛" lg x ⅝" wd x 1¹⁄₁₆" d o/a; two 0.136" diam holes on 1¾" mtg/c; RWS; captive screws; incl one brass shorting link fastened by LH term screw and connecting same to ctr screw term; LH term marked G, RH term marked A	For Antenna and Ground Connections		1	254373-6	TB-1	1				
TB-2	BOARD, terminal. general purpose; 2 brass screw term w/ hot tin dipped ends; term equally spaced 7⁄16" c to c; lam phenolic board; 3⁄32" thk, 1¹⁄₁₆" lg x ⅝" wd x 1¹⁄₁₆" d o/a; two 0.136" diam holes on 1⁵⁄₁₆" mtg/c; RWS; captive screws	For 600-ohm Output Connections		1	254373-7	TB-2	1				
TB-3	RECEIVER SUB ASSEMBLY: resistor-capacitor; c/o 1 resistor RCA part/dwg #82283-33, 1 resistor RCA part/dwg #82283-31, 1 resistor RCA part/dwg #867970-340, 1 resistor RCA part/dwg #82283-100, 1 resistor RCA part/dwg #82283-86, 1 resistor RCA part/dwg #82283-91, 1 resistor RCA part/dwg #90497-2. 1 resistor RCA part/dwg #82283-92, 1 capacitor RCA part/dwg #86034-534, 3 capacitors RCA part/dwg #86079-531, 1 terminal board RCA part/dwg #98958-2; 4⅞" lg x 2¹³⁄₁₆" h x 4⁹⁄₆₄" d o/a; four 0.156" diam mtg holes on 2³⁄₁₆" x 4⅜" mtg ctrs	For Mtg Resistors and Capacitors		1	95507-504	TB-3	1				
TB-4	BOARD, terminal; general purpose; 5 brass screw term w/ hot tin dipped ends; term spaced 7⁄16" between ctr; lam phenolic board, 3⁄32" thk; 3" lg x ⅝" wd x 1¹⁄₁₆" d o/a; two 0.136" diam holes on 2⅝" mtg/c; term marked 1 to 5; RWS; captive screws	For Output and Tone Keyer Connections		1	254373-5	TB-4	1				
TB-5	BOARD, terminal: general purpose; 2 hot solder dipped brass solder lug term; term ⅜" c to c; 3⁄32" thk lam phenolic board; ¾" lg x 1¹⁄₁₆" wd x 33⁄64" thk o/a; mtg ear p/o RH term w/ one hole 0.140" diam; fungus resistant	For Wiring Terminations		1	897192-5	TB-5	1				
TB-6	BOARD, terminal: general purpose; one hot solder dipped brass solder lug term; term ⅜" c to c w/ mtg ear; 3⁄32" thk lam phenolic board; ¾" lg x 1¹⁄₁₆" wd x 33⁄64" thk o/a; mtg ear one end w/ one hole 0.140" diam; fungus resistant; RH term	For Wiring Terminations		1	897192-3	TB-6	1				

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
TB-7	Not Used										
TB-8	BOARD, terminal: general purpose; one hot solder dipped brass solder lug term; term 3/8" c to c w/ mtg ear; 3/32" thk lam phenolic board; 1 1/16" lg x 3/8" wd x 33/64" thk o/a; mtg ear one end w/ one hole 0.140" diam; fungus resistant	Insulated Tie Point for R-71, R-72, R-73, X-7 and X-8		1	897192-1	TB-8, TB-14	2				
TB-9	BOARD, terminal: general purpose; 3 hot solder dipped brass solder lug term; term spaced 3/8" c to c, 3/32" thk lam phenolic board; 1 1/8" lg x 1 1/16" wd x 33/64" thk o/a; mtg ear p/o RH term w/ one hole 0.140" diam; fungus resistant	For Wiring Terminations		1	897193-5	TB-9	1				
TB-10 and TB-11	Not Used										
TB-12	BOARD terminal: general purpose; 2 hot solder dipped brass solder lug term; term 3/8" c to c with mtg ear; 1/16" thk bakelite board; 1 1/8" lg x 13/32" wd x 1 1/16" thk o/a; mtg ear ctr w/ one hole 0.140" diam; wax impr	For Wiring Terminations		133 1520	81641-23	TB-12	1				
TB-13	BOARD, terminal: general purpose; one hot solder dipped brass solder lug term; term 3/8" c to c w/ mtg ear; 1/16" thk bakelite board; 25/32" lg x 3/8" wd x 31/64" thk o/a; mtg ear one end w/ one hole 0.140" diam; wax impr	For Wiring Terminations		133 1512-R	81641-57	TB-13	1				
TB-14	Same as TB-8	Insulated Tie Point for C-74, R-20, X-9 and X-5									
V-1	TUBE, electron: triple-grid semi-variable mu	For 1st RF Amplifier	JAN 6SG7	516		V-1, V-2, V-5, V-6, V-7	5				
V-2	Same as V-1	For 2nd RF Amplifier	JAN 6SG7								
V-3	TUBE, electron: detector amplr triode	For Osc	JAN 6J5	516		V-3, V-12	2				
V-4	TUBE, electron: pentode converter	For 1st Detector	JAN 6SA7	516		V-4	1				
V-5	Same as V-1	For 1st IF Amplifier	JAN 6SG7								
V-6	Same as V-1	For 2nd IF Amplifier	JAN 6SG7								
V-7	Same as V-1	For 3rd IF Amplifier	JAN 6SG7								
V-8	TUBE, electron: twin diode	For 2nd Detector and AVC	JAN 6H6	516		V-8, V-9	2				
V-9	Same as V-8	For Noise Limiter	JAN 6H6								
V-10	TUBE, electron: triple-grid detector amplr	For 1st AF Amplifier	JAN 6SJ7	516		V-10	1				

V-11	TUBE, electron: pentode power amplr	For 2nd AF Amplifier Output Stage	JAN 6K6GT	516		V-11	1					
V-12	Same as V-3	For BFO	JAN 6J5									
V-13	TUBE, electron: voltage regulator	For Voltage Regulator	JAN VR150/30	516		V-13	1					
V-14	TUBE, electron: full-wave, high-vacuum rectifier.	For Power Rectifier	JAN 5Y3GT	516		V-14	1					
W-1	CABLE ASSEM, power: UL type SJ, two #18 AWG stranded cond, 300 v working; 13½" lg excluding termination; GE cat # Junior Plug on one end, other end terminated in 2 leads ea 3½" lg and ea stripped back ½"; GE 2 cond #18 SJ special all rubber cord w/ Junior Plug	For Power Cord	-62424 (1' 2½")	1	811638-3	W-1	1					
X-1	SOCKET, tube: octal; saddle and retainer ring mtg; two #6-32 tapped mtg holes on 1⅝" mtg/c; round steatite body 1¼" diam x 31/64" lg less term w/ flat oval zinc pl steel saddle 1⅜" wd x 2" lg x 1/16" thk; marked w/ Navy type #; body wax impr; silver pl phosphor bronze coat; term hot solder dipped; key at 12 o'clock	For V-1 Tube	-49373	30 Type #SS8M	421395-507	X-1, X-2, X-7, X-8, X-11	5					
X-2	Same as X-1	For V-2 Tube	-49373									
X-3	SOCKET, tube: octal; saddle and retainer ring mtg; two #6-32 tapped mtg holes on 1⅝" mtg/c; round steatite body 1¼" diam x 31/64" lg less term w/ flat oval zinc pl steel saddle 1⅜" wd x 2" lg x 1/16" thk; marked w/ Navy type #; body wax impr; silver pl phosphor bronze coat; term hot solder dipped; key at 4:30 o'clock	For V-3 Tube	-49373	30 Type #SS8M	421395-508	X-3, X-4, X-9	3					
X-4	Same as X-3	For V-4 Tube	-49373									
X-5	Same as J-1	For V-5 Tube	-49373									
X-6	Same as J-1	For V-6 Tube	-49373									
X-7	Same as X-1	For V-7 Tube	-49373									
X-8	Same as X-1	For V-8 Tube	-49373									
X-9	Same as X-3	For V-9 Tube	-49373									
X-10	Same as J-1	For V-10 Tube	-49373									
X-11	Same as X-1	For V-11 Tube	-49373									
X-12	SOCKET, tube: octal; saddle and retainer ring mtg; two #6-32 tapped mtg holes on 1⅝" mtg/c; round steatite body 1¼" diam x 31/64" lg less term w/ flat oval zinc pl steel saddle 1⅜" wd x 2" lg x 1/16" thk; marked w/ Navy type #; body wax impr; silver pl phosphor bronze coat; term hot solder dipped; key at 3:00 o'clock	For V-12 Tube	-49373	30 Type #SS8M	421395-510	X-12	1					
X-13	Same as J-1	For V-13 Tube	-49373									
X-14	Same as J-1	For V-14 Tube	-49373									

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
TONE KEYER CRV-35049-A											
C-1	CAPACITOR, fixed: paper dielectric; 2 sect; 0.875 mf p/m 15% ea sect; 400 vdcw; HS metal case; 3⅛" h x 1⅜" lg x ¾" wd case less term and mtg; castor oil impr; two 11/16" h solder lug term on 3/16" h stand-off insl on ⅝" mtg ctr on top of case; both sect w/ int gnd; integral mtg bkt on top w/ two 5/32" wd cut out to edge slots on 1⅞" mtg ctr; case stamped with N.T. #, dwg #, rating and voltage	For V-1 1st Sect Input Bypass	-484780-15	714 416B	8886184-2	C-1	1				
C-2	CAPACITOR, fixed: one sect of a 2-sect capacitor (C-2 and C-3) paper dielectric; 2 sections; 4 mf cap each sect p/m 20%; 500 vdcw ea sect; HS metal can; case 3 3/32" h x 2⅛" wd x 2 13/16" lg less mtg flange and term; castor oil impr; 3 solder lug term 15/32" h, 2 term on 1¼" mtg ctr, 3rd term ctr of 1st pair on ⅝" mtg ctr all bottom of case; no int gnd connections; two integral mtg bkts 7/16" wd x 2⅛" lg flush w/ bottom ⅛" from one end along 2 13/16" lg side, four 3/16" diam mtg holes on 1¼" x 2⅝" mtg ctrs; case marked w/ #449101-2 Note: Manufacturer's drawing number is for complete assembly	For Power Rect Filter Input	-484804-20	793 Type #NDK	449101-2	C-2, C-3	2	1	1		8
C-3	CAPACITOR, fixed: one sect of a 2-sect capacitor C-2 and C-3; see C-2	For Power Rect Filter 2nd Sect Input									
C-4	CAPACITOR, fixed: paper dielectric; 1 mf p/m 10%; 400 vdcw; 100 vacw; HS metal can; 1 11/32" wd x 2 3/32" d x 1⅞" h; castor oil filled and impr; 2 solder lug term on top on ⅝" mtg ctr; no int gnd connection; mtd w/ mtg bkt RCA part/dwg #90545-1, bkt w/ 2 mtg holes 0.173" diam 1 15/16" c to c; bkt not incl, marked w/ Navy type #, also cap and v rating, dwg #	For Power Rect Filter Output	-48595-A10	1	720555-52	C-4	1				
C-5	CAPACITOR, fixed: paper dielectric; 100,000 mmf p/m 20%; 400 vdcw; HS metal can w/ paper tube cover; 11/16" max diam x 2 3/16" max lg; mineral oil impr; 2 axial wire lead term 2½" +⅛" —¼" lg; no int gnd; oper temp range —54 to +85 deg C; RSW and humidity; max pf 0.6% at 1000 cyc; outside foil indicated	For Noise Filter Network	-484787-20	1	72080-501	C-5, C-44	2				
C-6	CAPACITOR, fixed: paper dielectric; 50,000 mmf p/m 20%; 400 vdcw; HS metal can w/ paper tube cover; 11/16" diam max x 1 23/32" max lg; mineral oil impr; 2 axial wire lead term 2½" lg; oper temp range —54 to +85 deg C; RSW and humidity; max pf 0.6% at 1000 cyc; outside foil indicated	For Noise Filter Network	-484798-20	714 Type #489-MX	72068-523	C-6, C-45, C-46	3				
C-7	CAPACITOR, fixed: paper dielectric; 30,000 mmf p/m 20%; 400 vdcw; HS metal can w/ outside paper tube; 11/16" diam x 1 11/16" lg o/a max; mineral oil impr; 2 axial wire lead term; no int gnd connection; marked w/ "400 vdcw" and 72068-521; oper temp range —54 to +85 deg C; 0.6% max pf at 1000 cyc RSW	For Noise Filter Network	-484800-20	714 Type #489-MX	72068-521	C-7	1				

C-8	CAPACITOR, fixed: paper dielectric; 15,000 mmf p/m 20%; 400 vdcw; HS metal can w/ outside paper tube; 17/32" diam x 1 7/8" lg o/a max; mineral oil impr; 2 axial wire lead term; no int gnd connection; marked w/ "400 vdcw" and 72068-517; oper temp range —54 to +85 deg C; 0.6% max pf at 1000 cyc; RSW	For Noise Filter Network	-484791-20	714 Type #489-MX	72068-517	C-8	1					
C-9	CAPACITOR, fixed: paper dielectric; single sect; 6000 mmf p/m 10%; 400 vdcw; molded phenolic case; case 1 11/64" lg x 41/64" h x 17/64" thk less term; wax impr; 2 axial wire lead term; no int gnd; color coded, 1000 v test	For Noise Filter Network	-482570-10	794 EPC-10	727895-158	C-9	1					
C-10	CAPACITOR, fixed: paper dielectric; single sect; 3000 mmf +40% —20%; 600 vdcw; molded phenolic case; case 1 11/64" lg x 41/64" wd x 17/64" thk less term; wax impr; 2 axial wire lead term; no int gnd; color coded, 1500 v test	For Noise Filter Network	-484778	794 EPC-10	727895-184	C-10	1					
C-11	CAPACITOR, fixed: mica; 1800 mmf p/m 10%; 500 vdcw; B characteristic; 53/64" sq x 9/32" thk o/a max; molded low loss bakelite case; 2 axial wire lead term; RMA color coded	For Noise Filter Network	CM30B182K		722017-565	C-11	1					
C-12	CAPACITOR, fixed: mica; 820 mmf p/m 10%; 500 vdcw; B characteristic; 53/64" sq x 9/32" thk o/a max; molded low loss bakelite case; 2 axial wire lead term; RMA color coded	For Noise Filter Network	CM30B821K		722017-557	C-12	1					
C-13	CAPACITOR, fixed: mica; 1000 mmf p/m 10%; 500 vdcw; temp coef ltr B; 53/64" max sq x 9/32" max thk; molded bakelite case; 2 axial wire lead term; RMA color coded	For Tone Osc Output Filter Network	CM30B102K		722017-559	C-13, C-14	2					
C-14	Same as C-13	For Tone Osc Output Filter Network	CM30B102K									
C 15	CAPACITOR, fixed: paper dielectric; 100,000 mmf p/m 20%; 400 vdcw; HS metal can w/ paper cover tube; 11/16" diam max x 2 3/16" max lg; mineral oil impr; 2 axial wire lead term; no int gnd; mtg bkt extends 13/16" from ctr of capacitor w/ two 5/32" diam holes 7/32" c to c; oper temp range —54 +85 deg C; RSW and humidity; max pf 0.8% at 1000 cyc; outside foil indicated	For V-3 Line Amplr Grid Coupling	-484781-20	1	72061-513	C-15	1					
C-16	CAPACITOR, fixed: mica dielectric; 3900 mmf p/m 2%; 2500 vdcw; temp coef ltr "D"; case 1 25/32" lg x 1 11/32" h x 15/32" thk o/a; molded phenolic case; 2 brass bushing term tapped #6-32 thd through case on ctr line and 1.250" mtg ctrs; mts by term; case stamped w/ Jan #, working and test voltage	For Tone Osc Freq Control Circuit Network	CM55D392G		32202-639	C-16	1					
C-17	CAPACITOR, fixed: mica dielectric; 680 mmf p/m 2%; 500 vdcw; temp coef ltr "C"; case 53/64" lg x 53/64" h x 9/32" thk less term: molded phenolic case; 2 axial wire lead term; color coded	For Tone Osc Freq Control Circuit Network	CM30C681G		722020-555	C-17	1					
C-18	CAPACITOR, fixed: paper dielectric; 20,000 mmf p/m 10%; 400 vdcw; HS metal can w/ outside paper tube; 11/16" diam x 1 11/16" lg o/a max; mineral oil impr; 2 axial wire lead term; no int gnd connection; marked w/ "400 vdcw" and 72068-521; oper temp rang —54 to +85 deg C; 0.6% max pf at 1000 cyc; RSW	For Tone Osc Freq Control Network		714 Type #489-MX	72068-520	C-18, C-27, C-28, C-34, C-41	5					

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
C-19	CAPACITOR, fixed: mica dielectric; 5100 mmf p/m 2%; 1200 vdcw; temp coef ltr "D"; case 1 25/32" lg x 1 11/32" h x 15/32" thk o/a; molded phenolic case; 2 brass insert term w/ #6-32 thd tapped holes through case on ctr line and 1.250" mtg ctr; mts by term; case stamped w/ Jan #, working and test voltages	For Tone Osc Freq Control Circuit Network	CM55D512G		32203-521	C-19	1				
C-20	CAPACITOR, fixed: mica dielectric; 470 mmf p/m 2%; 500 vdcw; temp coef ltr "C"; case 51/64" lg x 15/32" h x 7/32" thk less term; molded phenolic case; 2 axial wire lead term; color coded	Tone Osc Frequency Control Circuit Network	CM20C471G		722004-589	C-20	1				
C-21	CAPACITOR, fixed: paper dielectric; 25,000 mmf p/m 10%; 400 vdcw; HS metal can w/ outside paper tube; 1 1/16" diam x 1 11/16" lg; mineral oil impr; 2 axial wire lead term; no int gnd connection; marked w/ rating and dwg #; oper tem range —54 deg C to +85 deg C; max pf 0.6% at 1000 cyc	For Tone Osc Freq Control Network		714 Type #489-MX	72068-516	C-21	1				
C-22	CAPACITOR, fixed: mica dielectric; 6800 mmf p/m 2%; 300 vdcw; temp coef ltr "D"; case 53/64" lg x 53/64" h x 11/32" thk less term; molded phenolic case; 2 axial wire lead term; color coded	For Tone Osc Freq Control Network	CM35D682G		722031-559	C-22	1				
C-23	CAPACITOR, fixed: mica dielectric; 160 mmf p/m 2%; 500 vdcw; temp coef ltr "C"; case 51/64" lg x 15/32" h x 7/32" thk less term; molded phenolic case; 2 axial wire lead term; color coded	For Tone Osc Freq Control Network	CM20C161G		722004-578	C-23	1				
C-24	CAPACITOR, fixed: paper dielectric; 30,000 mmf p/m 10%; 400 vdcw; HS metal can w/ outside paper tube; 1 1/16" diam x 1 11/16" lg; mineral oil impr; 2 axial wire lead term; no int gnd connection; marked w/ rating and dwg #; oper temp range —54 deg C to +85 deg C	For Tone Osc Freq Control Network		714 Type #489-MX	72068-522	C-24	1				
C-25	CAPACITOR, fixed: mica dielectric; 7500 mmf p/m 2%; 1200 vdcw; temp coef ltr "D"; case 1 25/32" lg x 1 11/32" h x 15/32" thk o/a; molded phenolic case; 2 brass insert term w/ #6-32 thd tapped holes through case on ctr line and 1.250" mtg ctr; mts by term; case stamped w/ Jan #, working and test voltages	For Tone Osc Freq Control Circuit Network	CM55D752G		32203-565	C-25	1				
C-26	CAPACITOR, fixed: mica dielectric; 1500 mmf p/m 2%; 500 vdcw; temp coef ltr "D"; case 53/64" lg x 53/64" h x 9/32" thk less term; molded phenolic case; 2 axial wire lead term; color coded	For Tone Osc Freq Control Circuit Network	CM30D152G		722022-563	C-26	1				
C-27	Same as C-18	For Tone Osc Freq Control Network									

C-28	Same as C-18	For Tone Osc Freq Control Network										
C-29	CAPACITOR, fixed: mica dielectric; 10,000 mmf p/m 2%; 1200 vdcw; temp coef ltr "D"; case 1 25/32" lg x 1 11/32" h x 15/32" thk o/a; molded phenolic case; 2 brass insert term w/ #6-32 thd tapped holes through case on ctr line and 1.250" mtg ctr; mts by term; case stamped w/ Jan #, working and test voltages	For Tone Osc Freq Control Circuit Network	CM55D103G		32203-597	C-29	1					
C-30	CAPACITOR, fixed: mica dielectric; 2000 mmf p/m 2%; 500 vdcw; temp coef ltr "D"; case 53/64" lg x 53/64" h x 9/32" thk less term; molded phenolic case; 2 axial wire lead term; color coded	For Tone Osc Freq Control Network	CM30D202G		722022-566	C-30	1					
C-31	CAPACITOR, fixed: paper dielectric; 50,000 mmf p/m 10%; 400 vdcw; HS metal can: 1 1/16" max diam x 1 23/32" max lg; mineral oil impr; 2 axial wire lead term 2½" lg; oper temp range —54 to +85 deg C; RSW and humidity; max pf 0.6% at 1000 cyc; incl mtg bkt w/ two 3/32" diam holes 7/32" c to c, bkt extends 13/16" from ctr of capacitor	For Tone Osc Freq Control Network		714 Type #489-MX	72068-524	C-31, C-35, C-42	3					
C-32	CAPACITOR, fixed: mica dielectric; 15,000 mmf p/m 2%; 600 vdcw; temp coef ltr "D"; case 1 25/32" lg x 1 11/32" h x 15/32" thk o/a; molded phenolic case; 2 brass insert term w/ #6-32 thd tapped holes through case on ctr line and 1.250" mtg ctr; mts by term; case stamped w/ Jan #	For Tone Osc Freq Control Circuit Network	CM55D153G		32204-509	C-32	1					
C-33	CAPACITOR, fixed: mica dielectric; 1600 mmf p/m 2%; 500 vdcw; temp coef ltr "D"; case 53/64" lg x 53/64" h x 9/32" thk less term; molded phenolic case; 2 axial wire lead term; color coded	For Tone Osc Freq Control Network	CM30D162G		722022-564	C-33	1					
C-34	Same as C-18	For Tone Osc Freq Control Network										
C-35	Same as C-31	For Tone Osc Freq Control Network										
C-36	CAPACITOR, fixed: mica dielectric; 22,000 mmf p/m 2%; 600 vdcw; D characteristic; 1 25/32" lg x 1 11/32" wd x 15/32" thk o/a; molded phenolic case; two #6-32 tap term holes through case on ctr line and 1.250" mtg ctrs; mts by term holes	For Tone Osc Freq Control Circuit Network	CM55D223G		32204-553	C-36	1					
C-37	CAPACITOR, fixed: mica dielectric; 2700 mmf p/m 2%; 500 vdcw; temp coef ltr "D"; case 53/64" lg x 53/64" h x 9/32" thk less term; molded phenolic case; 2 axial wire lead term; color coded	For Tone Osc Freq Control Network	CM30D272G		722022-569	C-37	1					
C-38	CAPACITOR, fixed: paper dielectric; 100,000 mmf p/m 10%; 400 vdcw; HS metal can w/ paper tube cover; 1 1/16" max diam x 2 3/16" max lg; mineral oil impr; 2 axial wire lead term 2½" +⅛" —¼" lg; no internal grd; oper temp range —54 to +85 deg C; RSW and humidity; max pf 0.6% at 1000 cyc; outside foil indicated	For Tone Osc Freq Control Network		1	72080-502	C-38, C-43	2					

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
C-39	CAPACITOR, fixed: mica dielectric; 33,000 mmf p/m 2%; 600 vdcw; temp coef ltr "D"; case $1\frac{25}{32}$" lg x $1\frac{11}{32}$" h x $1\frac{5}{32}$" thk o/a; molded phenolic case; 2 brass insert term w/ #6-32 thd tapped holes through case on ctr line and 1.250" mtg ctr; mts by term; case stamped w/ Jan #, working and test voltages	For Tone Osc Freq Control Circuit Network	CM55D333G		32204-597	C-39	1				
C-40	CAPACITOR, fixed: mica dielectric; 7500 mmf p/m 2%; 300 vdcw; temp coef ltr "C"; case $\frac{53}{64}$" lg x $\frac{53}{64}$" wd x $1\frac{1}{32}$" thk less term; molded phenolic case; 2 axial wire leads; color coded	For Tone Osc Freq Control Network	CM35C752G		722029-560	C-40	1				
C-41	Same as C-18	For Tone Osc Freq Control Network									
C-42	Same as C-31	For Tone Osc Freq Control Network									
C-43	Same as C-38	For Tone Osc Freq Control Network									
C-44	Same as C-5	For V-4 Anode Supply Bypass	-484787-20								
C-45	Same as C-6	For V-4 Anode Coupling	-484798-20								
C-46	Same as C-6	For V-4 Anode Coupling	-484798-20								
C-47	CAPACITOR, fixed: paper dielectric; 100,000 mmf p/m 20%; 400 vdcw; HS metal can; $\frac{5}{8}$" max diam x 2" max lg; mineral oil impr; 2 axial wire lead term; no int gnd; oper temp range —54 to +85 deg C; RSW and humidity; max pf 0.6% at 1000 cyc; incl mtg bkt w/ two $\frac{5}{32}$" diam holes $\frac{7}{32}$" c to c, bkt extends $1\frac{3}{16}$" from ctr of capacitor	For V-8 2nd Diode Sect Anode Bypass		714 Type #489-MX	72068-505	C-47	1				
C-48	CAPACITOR, fixed: paper dielectric; 50,000 mmf p/m 20%; 400 vdcw; HS metal can; $\frac{5}{8}$" max diam x $1\frac{1}{2}$" lg; mineral oil impr; 2 axial wire lead term; no int gnd; oper temp range —54 to +85 deg C; RSW and humidity; max pf 0.6% at 1000 cyc; incl mtg bkt w/ two $\frac{5}{32}$" diam holes $\frac{7}{32}$" c to c, bkt extends $1\frac{3}{16}$" from ctr of capacitor	For V-8 Diode Coupling	-483254-20	714 Type #489-MX	72068-525	C-48	1				
CR-1	RECTIFIER, metallic: selenium; input 10 vac at 1000 cyc, output 10 ma at 6.8 vdc; sq w/ integral mtg ear, $\frac{3}{8}$" sq x $1\frac{5}{32}$" h, lip extends $\frac{5}{16}$" from one side at bottom; single $\frac{1}{8}$" diam mtg hole ctr of lip; 4 ins wire lead term $1\frac{7}{8}$" lg ea w/ $\frac{3}{8}$" bare termination, one red and one black protruding from ctr one side and two yellow from other; moisture and fungus proofed, marked w/ NT #	For Line Amplr Output Rectifier for M-1	-20638	564 Series LTR DS	258278-3	CR-1	1	1	1		36
E-1 to E-9	Not Used										

E-10	KNOB, round: black molded compound; for ¼" diam shaft; double #8-32 set screws; 1 7/16" diam x ⅞" h; brass insert; 11/16" d shaft hole; 8 equally spaced indents; ctb 1 1/16" diam x ⅛" d; single white line	For S-5, S-6, R-26, S-10, S-11, S-12, R-50, R-6, S-4, S-14		1	712336-505	E-10	6					
E-11	KNOB, round: black molded compound; for ¼" diam shaft; single #8-32 set screw: 1" diam x ⅝" h; brass insert; ½" d shaft holes; 8 equally spaced indents; ctb ⅝" diam x 3/32" d; single white line	For R-8		1	712336-507	E-11	1					
H-1	NUT, knurled: white nickel pl brass; 15/32"-32 thd; 11/32" OD x 1/16" thk; straight knurl across circumference	For Mtg S-5, S-6, R-26, S-10, S-11, S-12, R-50, R-6, S-4, S-14		1	60514-101	H-1	6					
H-2	NUT, lock: palnut type; bright white nickel pl spring steel; ⅜"-32 thd; 0.147" h o/a; ½" across flats, ⅝" OD	For Mtg R-11 and R-38		1554 Type WT	99186-3	H-2	2					
I-1	LAMP, incandescent: 12-16 v, 0.1 amp, 1.4 w, bulb T-3¼ clear, 1 3/16" lg o/a; miniature bayonet base; burn any position	For Power Off On Indicating Pilot		1050 Mazda #1813	849546-1	I-1	1					
I-2	LENS, indicator light: ruby; thd type; smooth glass frosted back lens; ⅝" diam x ⅝" lg, mtg thd 1 1/16"-28 thd x ⅜" lg; brass nickel pl bezel; two solder lug term on back	For Pilot Lamp Socket and Jewel		776 Bayonet Type	983504-5	I-2	1					
J-1	JACK, telephone: for 2 cond ½" diam plug; 1.288" lg x 15/16" wd x ¾" h o/a; J-1 cont arrangement; mtg bushing ⅜"-32 thd x 0.272" lg; polished white nickel pl finish	Freq Shift Keying Adapter	-49025-B	1277	868986-4	J-1	1					
J-2	JACK, telephone: for 2-cond plug 0.25" diam; 1 15/16" wd x ⅞" lg back of panel x ⅞" h o/a; cont arrangement J-1, no mtg facilities provided; single mtg hole for ⅜" diam bushing; bushing ⅜"-32 thd x ½" lg; metal parts cad pl	For Line Output Phone	-491851	1277 Type X-157C	982648-1	J-2, J-3	2					
J-3	Same as J-2	For Line Output Phone	-491851									
J-4	CONNECTOR, receptacle: 2 round female cont; straight; ⅞" diam x 1 3/16" lg o/a; cylindrical cad pl brass shells; molded bakelite insert; one hole chassis mtg w/ 1 3/32" lg x ⅝"-27 thd one end, ⅝"-27 thd for coupling nut other end; incl 2 solder lug term, int tooth lockwasher, flat washer, and hex mtg nut; marked w/ NT #	For Freq Shift Adapter Chassis	-49613	30 Cat #PC2F	253979-8	J-4	1	1	1		8	
L-1	REACTOR: filter choke; part of reactor which includes L-1 and L-2; complete reactor, dual sect; 34.4 hy at 3 v 60 cyc AC w/ 20 ma DC; 1150 ohms p/m 16% DC resistance per sect; 1500 v test; metal case, impr and potted: 2 13/16" sq x 3¼" h less term; 4 holes 0.180" diam on 2 7/16" x 2 7/16" mtg/c; 3 solder lug term on bottom; marked 901669-1; marked at term w/ 3, 8, 13; term #13 common to both sect Note: Manufacturer's drawing number is for complete assembly	For Power Rect Filter Inductor	-304521	1	901669-2	L-1	1	1	1		8	
L-2	REACTOR: filter choke; incl with L-1; see L-1	For Power Rect Filter Inductor										

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	# Box	Quan.	# Box	Quan.
M-1	METER, audio level: DC; 0-200 ua; round, plastic flush mtg case; bbl 2.21" max diam x 1.6" max lg less term, fl 2.695" max diam 0.38" max d; 2% accuracy; D'Arsonval movement; 6 mw. 600 ohms, 200 ua for full scale deflection; 21 scale divisions, black numerals, white background; requires rectifier; 3 mtg holes ⅛" diam equally spaced in fl on 1.218" rad; 2 stud term ¼"-28 thd x 0.67" lg; spcl scale markings of 0, 2, 4, 6, 8, 10 on upper scale and 10, 8, 6, 4, 2, 0, 1, 2, 3, 4, 5 on lower scale, upper scale marked Input Diode Current, lower scale marked Audio Output level—D.B. +; damping factor greater than 2; response time less than 3 sec; marked w/ NT #	For Output Level Indication	-22718	1377 Type OX-33	258277-2	M-1	1	1	1		16
R-1	Not Used										
R-2	RESISTOR, variable: comp; 2000 ohms p/m 10%; 1 w wattage rating determined at 50 deg C max; 3 solder lug term; 1⅛" diam x 1/16" d; incl metal case, round metal shaft w/ scdr slot in end, ¼" diam x ½" lg; linear taper; ins cont arm, w/o off position; normal torque; mtg bushing ⅜"-32 thd x ¼" lg, non-turn device at 9 o'clock on 17/32" rad; RSW and humidity; 1000 v DC test between term and bushing	For M-1 Meter Shunt When in Rec Output Position	-636532-K10	722 Type J	440424-11	R-2	1				
R-3	RESISTOR, fixed: comp; 10,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For CR-1 Rect Input	*RC20BF103K		82283-74	R-3	1				
R-4	RESISTOR, fixed: comp; 33,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-1 Input Loading	*RC20BF333K		82283-80	R-4	1				
R-5	RESISTOR, fixed: comp; 1 meg p/m 20%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-1 Grid	*RC20BF105M		82283-31	R-5	1				
R-6	RESISTOR, variable: comp; 10,000 ohms p/m 10% front sect, 66,000 ohms p/m 10% rear sect; 1 w, wattage determined at +50 deg C; 6 solder lug term; 1⅛" diam x 1 9/32" d; encl metal cases; round metal shaft ¼" diam x ¾" lg; linear tapers; ins cont arms w/o off position; normal torque; mtg bushing ⅜"-32 thd x ⅜" lg, non-turn device at 9 o'clock on 17/32" rad; RSW and humidity; 1000 v DC test between term and bushing Note: Manufacturer's drawing number is for complete assembly	Threshold Control Resistor (Part of R-6, R-50 Dual Pot)	-636896-M10	722 Type Ltr JJ	440451-10	R-6	1	1	1		16

R-7	RESISTOR, fixed: comp; 2700 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol, bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-1 Cathode Voltage Divider Fixed	*RC20BF272K		82283-67	R-7	1					
R-8	RESISTOR, variable: comp; 10,000 ohms p/m 10%; 1 w, wattage rating determined at 50 deg C max; 3 solder lug term; 1⅛" diam x 9/16" d; encl metal case; round metal shaft ¼" diam x 11/16" lg; linear taper; ins cont arm, w/o off position; normal torque; mtg bushing ⅜"-32 thd x ⅜" lg, non-turn device at 9 o'clock on 17/32" rad; RSW and humidity; 1000 v test between term and bushings	Coarse Threshold Control	-636557-M10	722 Type J	440424-10	R-8	1					
R-9	RESISTOR, fixed: comp; 270,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-1 1st Sect Plate Loading	*RC20BF274K		82283-91	R-9, R-13	2					
R-10	RESISTOR, fixed: comp; 470,000 ohms p/m 20%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-1 2nd Sect Grid	*RC20BF474M		82283-29	R-10, R-12	2					
R-11	RESISTOR, var: comp; 50,000 ohms p/m 10%; 1 w, wattage rating determined at 50 deg C; 3 solder lug term; 1⅛" diam x 9/16" d; encl metal case; round metal shaft w/ scdr slot in end ¼" d x ½" lg; linear taper; ins cont arm, w/o off position; normal torque; mtg bushing ⅜"-32 thd x ¼" lg, non-turn device at 9 o'clock on 17/32" rad; RSW and humidity; 1000 v DC test between term and bushing	For V-1 2nd Sect Bias Control Variable	-636046-K10	722 Type J	440424-13	R-11, R-39, R-40, R-41, R-42, R-43, R-44, R-45, R-46	9					
R-12	Same as R-10	For V-3 Grid Resistor and for Low Pass Filter Network	RC20BF474M									
R-13	Same as R-9	For V-1 2nd Sect Plate Loading	RC20BF274K									
R-14	RESISTOR, fixed: comp; 22,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-3 1st Sect Cathode Voltage Divider	*RC20BF223K		82283-78	R-14	1					
R-15	RESISTOR, fixed: comp; 15,000 ohms p/m 10%; 1 w; F characteristic; 0.225" diam x 0.562" lg; bakelite ins wax impr, humidity resistant; 2 axial wire lead term; RMA color coded	For V-3 DC Amplr Limiter Plate Supply Voltage Divider	RC30BF153K		90496-76	R-15	1					
R-16	RESISTOR, fixed: comp; 150,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-3 1st Sect Plate Loading	*RC20BF154K		82283-88	R-16	1					
R-17	RESISTOR, fixed: comp; 12,000 ohms p/m 10%; 1 w; F characteristic; 0.225" diam x 0.562" lg; bakelite ins wax impr, humidity resistant; 2 axial wire lead term; RMA color coded	For V-3 DC Amplr Limiter Plate Supply Voltage Divider	RC30BF123K	722 GB	90496-75	R-17	1					
R-18	RESISTOR, fixed: comp; 820,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-2 1st Sect Grid	*RC20BF824K		82283-97	R-18, R-19	2					

* For Replacement use.

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
R-19	Same as R-18	For V-2 2nd Sect Grid	RC20BF824K								
R-20	RESISTOR, fixed: comp; 150,000 ohms p/m 20%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For Tone Osc Output Filter Network	*RC20BF154M		82283-26	R-20, R-52	2				
R-21	RESISTOR, fixed: comp; 560,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For Tone Osc Output Filter Network	*RC20BF564K		82283-95	R-21, R-22, R-36, R-37, R-49	5				
R-22	Same as R-21	For Tone Osc Output Filter Network	RC20BF564K								
R-23	RESISTOR, variable: comp; 500 ohms p/m 10%; 1 w, wattage rating determined at 50 deg C max; 3 solder lug term: 1⅛" diam x 9/16" d; encl metal case; round metal shaft w/ scdr slot in end ¼" diam x ½" lg; lin taper; ins cont arm, w/o off position; normal torque; mtg bushing ⅜"-32 thd x ¼" lg, non-turn device at 9 o'clock on 17/32" rad; RSW and humidity; 1000 v DC test between term and bushing	For V-2 Common Cathode	-636511-K10	722 Type J	440424-12	R-23	1				
R-24	RESISTOR, fixed: comp; 100,000 ohms p/m 20%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-2 Output Load Shunting	*RC20BF104M		82283-25	R-24	1				
R-25	RESISTOR, fixed: comp; 10,000 ohms p/m 20%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For T-2 Pri Shunt Resistor for Ext Tone Source Position	*RC20BF103M		82283-19	R-25	1				
R-26	RESISTOR, variable: comp; 1 meg p/m 20%; 1 w, wattage rating determined at 50 deg C max; 3 solder lug term; 1⅛" diam x 9/16" lg; encl metal case; round metal shaft ¼" diam x ¾" lg; RCA taper curve #252638-2 w/ resistance 75,000 ohms at 35% rotation, 100,000 ohms at 50%, 240,00 ohms at 65%; ins cont arm w/o off position; normal torque; mtg bushing ⅜"-32 thd x ⅜" lg, non-turn device at 9 o'clock on 17/32" rad; RSW and humidity; 1000 v DC test between term and bushing	For V-3 Line Amplr Input Control Variable	-635525-M20	722 Type J	440424-14	R-26	1				
R-27	RESISTOR, fixed: comp; 8.2 meg p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m /32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-3 Line Amplr Grid Bias Voltage Divider	*RC20BF825K		82283-109	R-27	1				
R-28	RESISTOR, fixed: comp; 470,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-3 Line Amplr Grid Bias Voltage Divider	*RC20BF474K		82283-94	R-28	1				

R-29	RESISTOR, fixed: comp; 47,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-4 Plate Supply Series	*RC20BF473K		82283-82	R-29, R-30, R-35	3					
R-30	Same as R-29	For V-4 2nd Sect Grid Coupling	RC20BF473K									
R-31	RESISTOR, fixed: comp; 680,000 ohms p/m 20%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-4 2nd Sect Grid	*RC20BF684M		82283-30	R-31, R-34, R-48	3					
R-32	RESISTOR, fixed: comp; 3.3 meg p/m 20%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V-4 2nd Sect Grid Leak	*RC20BF335M		82283-34	R-32, R-33	2					
R-33	Same as R-32	For V-4 1st Sect Grid Leak	RC20BF335M									
R-34	Same as R-31	For V-4 1st Sect Grid	RC20BF684M									
R-35	Same as R-29	For V-4 1st Sect Grid Coupling	RC20BF473K									
R-36	Same as R-21	For V-4 Sect 1 Plate Loading	RC20BF564K									
R-37	Same as R-21	For V-4 Sect 2 Plate Loading	RC20BF564K									
R-38	RESISTOR, variable: comp; 1 meg p/m 20%; 1 w, wattage rating determined at 50 deg C max; 3 solder lug term; 1⅛" diam x 9/16" lg; encl metal case; round metal shaft w/ scdr slot in end. ¼" diam x ½" lg; RCA taper curve #252638-2 w/ resistance 75,000 ohms at 35% rotation, 100,000 ohms at 50%, 240,000 ohms at 65%; ins cont arm w/o off position; normal torque; mtg bushing ⅜"-32 thd x ¼" lg, non-turn device at 9 o'clock on 17/32" rad; RSW and humidity; 1000 v DC test between term and bushing	For V-4 Cathode Bias Control Variable	-636901-K20	722 Type J	440424-16	R-38	1					
R-39	Same as R-11	For Osc Freq Control Variable	-636046-K10									
R-40	Same as R-11	For Osc Freq Control Variable	-636046-K10									
R-41	Same as R-11	For Osc Freq Control Variable	-636046-K10									
R-42	Same as R-11	For Osc Freq Control Variable	-636046-K10									
R-43	Same as R-11	For Osc Freq Control Variable	-636046-K10									
R-44	Same as R-11	For Osc Freq Control Variable	-636046-K10									
R-45	Same as R-11	For Osc Freq Control Variable	-636046-K10									
R-46	Same as R-11	For Osc Freq Control Variable	-636046-K10									

* For Replacement use.

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
R-47	RESISTOR, fixed: comp; 1000 ohms p/m 10%; 2 w; F characteristic; 0.688" lg x 0.312" diam; ins; 2 axial wire leads; color coded	For Power Rect Filter Network		722 Type HB	99126-62	R-47	1				
R-48	Same as R-31	For V-8 2nd Sect Diode Anode Series	RC20BF684M								
R-49	Same as R-21	For V-8 Diode Input Loading	RC20BF564K								
R-50	RESISTOR, variable: comp; 10,000 ohms p/m 10% front sect, 66,000 ohms p/m 10% rear sect; see R-6	Noise Limiter Control (Part of R-6, R-50 Dual Pot)	-636896-M10	722 Type LTR JJ	440451-10	R-50	1				
R-51	RESISTOR, fixed: comp; 180 ohms p/m 10%; ½ w; F characteristics; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; axial wire lead term; RMA color coded	For V-6 Cathode	*RC20BF181K		82283-53	R-51	1				
R-52	Same as R-20	For T-2 Pri Shunt	RC20BF154M								
R-53	RESISTOR, fixed: WW; 10 ohms p/m 10%; ½ w at 40 deg C ambient temp rise of 50 deg C; ⅝" lg x 3/16" diam, p/m 1/32" tol; bakelite ins, waxed, humidity and fungus resistant; 2 axial wire lead term; RMA color coded; temp coef 0.017%/deg C	For V-8 Heater Circuit Parallel Series	-63678-100	321 Type BW 1/2	867970-338	R-53, R-54	2				
R-54	Same as R-53	For V-8 Heater Circuit Parallel Series	-63678-100								
S-1	SWITCH, toggle: DPDT; 3 amp 250 vdc; 6 amp 125 vdc; molded body; 1¼" lg x 11/16" wd x 11/16" h less term, bushing, and handle; bat handle ⅝" lg; position #1 normally closed, position #2 normally closed; 6 solder lug term; 1 hole mtg bushing 15/32"-32 thd x 15/32" lg w/ keyway; non-ferrous nickel pl handle and bushing, silver pl contacts	For Rec #1 Off On	-241347	47 Cat #B1027V	8886211-1	S-1, S-2, S-3, S-8	4				
S-2	Same as S-1	For Rec #2 Off On	-241347								
S-3	Same as S-1	For Rec #3 Off On	-241347								
S-4	SWITCH SECTION, rotary: p/o 3 pole, 4 position switch assem c/o 1 wafer, 2 sect; symbols S-4 and S-14; silver faced, silver pl cont; lam low loss bakelite wafer; ⅞" lg x 19/16" wd x 1⅞" d o/a approx, excluding shaft; shorting type cont; detent action; solder lug term; one hole mtg, bushing ⅜"-32 thd x ⅜" lg, shaft ¼" diam x ¾" lg; non-turn device at 12 o'clock on 17/32" rad; all ins wax impr; rust resistant; marked w/ 95816-1 Note: Manufacturer's drawing number is for complete assembly	For CW Phone Selector		1	95816-1	S-4	1	1	1		16

S-5	SWITCH SECTION, rotary: p/o 2 pole, 4 position switch assem c/o 1 wafer, 2 sect; symbols S-5 and S-6, silver faced, silver pl cont; lam low loss bakelite wafer; ⅞" lg x 1 9/16" wd x 1⅞" h o/a approx, excluding shaft; shorting type cont; detent action; solder lug term; one hole mtg, bushing ⅜"-32 thd x ⅜" lg, shaft ¼" diam x ¾" lg; non-turn device at 12 o'clock on 17/32" rad; all ins wax impr; rust resistant; marked w/ 95815-1 Note: Manufacturer's drawing number is for complete assembly	For Meter Input		1	95815-1	S-5	1	1	1		16
S-6	SWITCH SECTION: rotary; p/o 2-pole, 4 position switch assem; see S-5.	Part of S-5									
S-7	SWITCH, toggle: DPDT; rated 3 amp 250 v DC or 6 amp 125 v DC; black molded phenolic body; body 1¼" lg x 11/16" wd x 11/16" h less handles, mtg bushing and term; bat type handle ⅝" lg; locking type mechanism; 6 solder lug term; mts by 15/32"-32 thd x ¼" lg mtg bushing; oper temp range —54 deg C to +70 deg C, lever and bushing nonferrous metal nickel pl, cont bronze w/ silver pl, term hot tin dipped, marked w mfg dwg # and NT #, rated 5000 operations under rated load	For Off On Power	241374	1	8896135-1	S-7, S-9	2				
S-8	Same as S-1	For Input-Output Circuit Selector Switch for M-1	-241347								
S-9	Same as S-7	For Calibrating Tone Osc									
S-10	SWITCH, rotary: single pole, 9 position; silver faced, silver pl cont; lam low loss bakelite wafer; 3 1/16" lg x 1 9/16" wd x 1⅞" h o/a approx excluding shaft; shorting type cont; detent action; solder lug term; one hole mtg, bushing ⅜"-32 thd x ⅜" lg, shaft ¼" diam x ¾" lg; non-turn device at 10:30 o'clock on 17/32" rad; all ins wax impr; rust resistant; marked w/ 95813-1	For Noise Filter Selector		1	95813-1	S-10	1	1	1		16
S-11	SWITCH SECTION, rotary: p/o 3 pole, 9 position switch assem c/o 1 wafer, 2 sect; symbols S-11 and S-12; silver faced, silver pl cont; lam low loss bakelite wafer; ⅞" lg x 1 9/16" wd x 1⅞" h o/a approx, excluding shaft; shorting type cont; detent action; solder lug term; one hole mtg, bushing ⅜"-32 thd x ⅜" lg, shaft ¼" diam x ¾" lg; non-turn device at 12 o'clock on 17/32" rad; all ins wax impr; rust resistant; marked w/ 95814-1 Note: Manufacturer's drawing number is for complete assembly	For Tone Freq Selector		1	95814-1	S-11	1	1	1		8
S-12	SWITCH SECTION, rotary: p/o 3-pole, 9-position switch assem; see S-11	Part of S-11									
S-13	SWITCH, rotary: single pole, 8 positions; 250 v max; brass cont w/ nickel pl phosphor bronze movable cont; black bakelite body integral w/ steel saddle; 1½" wd x 1⅞" lg x 1" h less term; 9 solder lug term; saddle mtd w/ 2 holes 0.156" diam 1½" c to c; marked w/ 110-125-150-220-240 on positions 1 to 5 w/ positions 6 to 8 left blank	For Voltage Selector Switch for Pri of Power Transf	-241328	30 Type 36-806	99585-2	S-13	1	1	1		16

* For Replacement use.

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
S-14	SWITCH SECTION: rotary; p/o 3-pole, 4-position switch assem; see S-4	For Part of S-4									
T-1	TRANSFORMER, power: plate and filament type; 240/210/150/125/110 v, 50/60 cyc, single ph input; 3 output wnd; secd #1-12.6/6.3 v at 2 amp CT, secd #2—5 v at 2 amp, secd #3—584/292 v at 0.045 amp DC, CT; 2500 v test; air cooled; sheet metal case; 4" sq x 4½" h less term; 14 solder lug term on bottom; 4 holes in fl 0.180" diam on 3⅜" x 3⅜" mtg/c; pri 1500 v test; CT all p/m 1% max neutral; black finish	For Power	-304522	1	901670-2	T-1	1	1	1		16
T-2	TRANSFORMER, AF: plate coupling type; 1.8 hy +3% —2% at 3 v 1000 cyc AC, 0 amps DC, 500 v test; encl metal case, lam Numetal core; 2¼" sq x 2¾" h; turns ratio pri to secd 1:1 p/m 5%; 4 solder lug term on bottom; fl mtd w/ 4 holes 0.180" diam on 1⅞" x 1⅞" mtg/c; wax impr; compound potted; incl 2 fixed resistors in case; one approx 150 ohms, other approx 680,000 ohms	For Tone Osc Output	-304520	1	901738-2	T-2	1	1	1		16
T-3	TRANSFORMER, AF: plate coupling type; pri 14,000 ohms secd 3500 ohms impedance at 10 v 60 cyc; 1500 v test; encl metal case, lam steel core; 2 13/16" sq x 3¼" h; turns ratio pri to secd 2:1; 6 solder lug term on bottom; fl mtd w/ 4 holes 0.180" diam on 2.437" x 2.437" mtg/c; pri and secd CT; wax impr; compound potted	For V-2 Keyed Amplr Sect Output	-304519	1	901686-2	T-3	1	1	1		16
T-4	TRANSFORMER, AF; plate coupling type; pri 42.5 hy p/m 10% at 30 v, 60 cyc AC w/ 10 ma DC; 2000 v test wnd to core and case; encl metal case; 2¼" sq x 2¾" h; turns ratio of pri to secd 8.4:1; 4 color coded flexible wire lead term 12" lg protruding from bottom ctr; fl mtd w/ 4 holes 0.180" diam on 1⅞" x 1⅞" mtg c; wax impr; compound potted; continuous duty	For V-3 Line Amplr Output	-304516	1	901623-4	T-4	1	1	1		16
TB-1	BOARD, terminal: general purpose term bd strip; 3 solder lug and stud type term; 7/16" between terms; lam phenolic board 3/32" thk; 2⅛" lg x ⅝" wd x 1 1/16" thk o/a; two 0.173" diam mtg holes on 1.750" mtg ctrs	For Rear of Chassis Cable Connections		1	254373-8	TB-1, TB-2, TB-3, TB-5	4				
TB-2	Same as TB-1	For Rear of Chassis Cable Connections									
TB-3	Same as TB-1	For Rear of Chassis Cable Connections									
TB-4	BOARD, term; general purpose binding post strip; two #6-32 thd x 19/64" lg brass stud term on bottom and 2 screw type ins binding posts on top; posts ⅞" c to c; molded bakelite board; 2" lg x 1 1/16" wd x 1 7/16" h max o/a; one #6-32 mtg stud in ctr; term studs protrude from ctr of bosses molded integral on bottom of board, bosses ¼" lg x 1 1/32" diam	For Ext Tone Source Connecting Cable (When used)		755 Cat #21-R	252725-1	TB-4	1				

TB-5	Same as TB-1	For Rear of Chassis Cable Connections										
TB-6	BOARD, terminal; general purpose; 21 brass post terminals, 2 brass solder lugs; 7 post terms on each, longer side spaced 11/16" between ctrs on 1 9/16" x 4 1/8" mtg ctrs, 4 post terms in ctr on 21/32" x 1 15/16" mtg ctrs, 1 1/16" from one end, 3 post terms on 5/32" x 5/16" x 1 1/4" mtg ctrs, 9/16" from same end 2 solder lugs in ctr of other end on 21/32" mtg ctr x 5/16" from end; lam phenolic board; overall size 5 1/2" lg x 2 3/8" wd x 9/16" thk; 2 brass mtg studs #6-32 thd x 1/2" lg, riveted on one longer side on 4 9/16" centers	For Tone Osc Freq Control Network Paper Capacitor Mtg		1	449117-501	TB-6	1				
TB-7	BOARD, terminal: general purpose binding post strip; 14 term holes, 7 in ea row, rows spaced 1 1/4" apart, 23/32" between holes; lam phenolic board 3/32" thk; 5 5/8" lg x 2 3/8" wd x 0.312" thk o/a; mts by two #6-32 thd x 1/2" lg studs on 5" mtg ctrs; wax impr	For Tone Osc Freq Control Network Mica Capacitor Mtg		1	253797-502	TB-7	1				
TB-8	BOARD, terminal; general purpose; 3 hot solder-dipped brass solder lug term; term spaced 3/8" and 3/4" c to c; 3/32" thk lam phenolic board; 1 1/2" lg x 11/16" wd x 33/64" thk o/a; mtg ear 9/16" ctr to RH end w/ one hole 0.140" diam; fungus resistant	For Wiring Terminations		1	897194-2	TB-8	1				
TB-9	BOARD, terminal: general purpose; 2 hot solder-dipped brass solder lug terms; 3/4" c to c; 3/32" thk phenolic board; 1 1/8" lg x 11/16" wd x 33/64" thk o/a; mtg ear in ctr w/ one hole 0.140" diam; fungus resistant	For Wiring Terminations		1	897193-1	TB-9, TB-10	2				
TB-10	Same as TB-9	For Wiring Terminations										
TB-11	BOARD, terminal; general purpose; 4 hot solder-dipped brass solder lug term; term spaced 3/8", 3/4" and 3/8" c to c; 3/32" thk lam phenolic board; 1 7/8" lg x 11/16" wd x 33/64" d o/a; mtg ear ctr w/ one hole 0.140" diam; fungus resistant	For Wiring Terminations		1	897195-1	TB-11, TB-12, TB-13	3				
TB-12	Same as TB-11	For Wiring Terminations										
TB-13	Same as TB-11	For Wiring Terminations										
TB-14	BOARD, term: general purpose; 3 hot solder dipped brass solder lug term; term spaced 3/4" and 3/8", c to c; 3/32" thk lam phenolic board; 1 1/2" lg x 11/16" wd x 33/64" thk o/a; mtg ear 9/16" ctr to LH end w/ one 0.140" diam mtg hole; fungus resistant	For Wiring Terminations		1	897194-1	TB-14	1				
TB-15	BOARD, terminal: general purpose binding screw term strip; 6 brass screw term w/ solder lug through panel ends; term equally spaced 1/2" c to c in 2 rows 1/2" apart; 3/32" thk lam phenolic board; 2 1/2" lg x 1 1/8" wd x 11/16" d o/a; 2 mtg holes 0.173" diam on 2" mtg/c; term marked on board w/ #1 to 6 incl; term #1 and #4, #2 and #5, #3 and #6 are shorted w/ 0.032" diam bus wire	For Mtg 3 Links in Rec #1, #2, #3 Leads to Meter Input		1	258354-501	TB-15	1				
V-1	TUBE, electron: twin triode	For DC Amplr Limiter	JAN 6SL7GT	516		V-1, V-2, V-4	3					

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
V-2	Same as V-1	For Keyed Amplr	JAN 6SL7GT								
V-3	TUBE, electron: twin triode	For DC Amplr Limiter and Line Amplr	JAN 6SN7GT	516		V-3	1				
V-4	Same as V-1	For PP Osc	JAN 6SL7GT								
V-5	TUBE, electron: full-wave, high-vacuum rectifier	For Power Rect	JAN 5Y3GT	516		V-5	1				
V-6	TUBE, electron: voltage regulator, glow discharge type, DC operating voltage 150 v at 40 max ma	For Voltage Regulator	JAN OD3/VR-150	516		V-6	1				
V-7	TUBE, electron: voltage regulator, glow discharge type, DC operating voltage 75 v at 40 max ma	For Voltage Regulator	JAN OD3/VR-75	516		V-7	1				
V-8	TUBE, electron: twin diode	For Phone Noise Limiter	JAN 6H6	516		V-8	1				
W-1	CABLE ASSEM, power: UL type SJ, two #18 AWG stranded cond, 300 v working; 17½" lg excluding terminations; GE cat #Junior Plug on one end, other end terminated in 2 leads ea 3½" lg and ea stripped back ½"; GE 2 cond #18 SJ special all rubber cord w/ Junior Plug	For Power Supply Service Connecting Cord	62424 (1' 6½")	1	811638-4	W-1	1				
X-1	SOCKET, tube: octl; ring and saddle mtg; two mtg holes 0.140" diam on 1½" mtg/c; round steatite body 1$^{3}/_{32}$" diam approx x 1$^{7}/_{32}$" d excluding term; w/ flat oval cad pl steel saddle 1¼" wd x 1$^{25}/_{32}$" lg; marked w/ Navy type #; body wax impr; silver pl phosphor bronze cont; term and 4 gnd lugs, hot solder dipped	For V-1 Tube	-49380	699	871415-1	X-1, X-2, X-3, X-4, X-5, X-6, X-7, X-8	8				
X-2	Same as X-1	For V-2 Tube	-49380								
X-3	Same as X-1	For V-3 Tube	-49380								
X-4	Same as X-1	For V-4 Tube	-49380								
X-5	Same as X-1	For V-5 Tube	-49380								
X-6	Same as X-1	For V-6 Tube	-49380								
X-7	Same as X-1	For V-7 Tube	-49380								
X-8	Same as X-1	For V-8 Tube	-49380								

MONITORING UNIT CRV-23424-A

C-1	CAPACITOR, fixed: mica; 180 mmf p/m 5%; 500 vdcw; temp coef ltr D; 5/64" lg x 15/32" wd x 7/32" thk; molded bakelite case; 2 axial wire leads	For 1st IF Input Coupling Cap to Rec #1	CM20D181J		727858-229	C-1, C-9, C-29	3					
C-2	CAPACITOR, fixed: paper dielectric; p/o a 3-sect cap C-2, C-7, C-10; 50,000 mmf +25% —10% ea sect; 400 vdcw; HS metal can; 1 13/16" lg x 15/16" d x 13/16" h; mineral oil filled and impr; 3 solder lug term on side; no int gnd connections; 2 integral mtg ears w/ 3/16" diam mtg hole in ea, spaced 2 1/8" c to c Note: Manufacturer's drawing number is for complete assembly	For AVC Bus Bypass	-484782	714 Type #430	98034-1	C-2	1					
C-3	CAPACITOR, fixed: paper dielectric; p/o a 3-sect cap C-3, C-4, C-11, and for C-23, C-25, C-26; 100,000 mmf +25% —10% ea sect; 400 vdcw; HS metal can 1 13/16" lg x 15/16" d x 15/16" h; mineral oil filled and impr; 3 solder lug term on side; no int gnd connections; 2 integral mtg ears w/ 3/16" diam mtg hole in ea spaced 2 1/8" c to c Note: Manufacturer's drawing number is for complete assembly	For 1st and 2nd IF Screen Bypass	-484783	714 Type #430	98034-2	C-3, C-23	2					
C-4	CAPACITOR, fixed: p/o a 3-sect cap; 100,000 mmf +25% —10% ea sect; see C-3	For 1st IF Cathode Bias Resistor Bypass										
C-5	Part of T-2	1st IF Trimmer Capacitor			72079-10	C-5, C-6	2					
C-6	Same as C-5 (Part of T-2)	1st IF Trimmer Capacitor										
C-7	CAPACITOR, fixed: p/o a 3-sect cap; 50,000 mmf +25% —10% ea sect; see C-2	For 1st IF Plate Supply Bypass										
C-8	CAPACITOR, fixed: paper dielectric; single sect; 6000 mmf +40% —20%; 400 vdcw; molded phenolic case, case 1 11/64" lg x 41/64" h x 17/64" thk less term; wax impr; 2 axial wire lead term; no int gnd; color coded, 1000 vdct	For V-2 Grid Return Circuit Bypass	-484777	794 EPC-10	727895-128	C-8, C-16, C-24	3					
C-9	Same as C-1	For 1st IF Input Coupling Cap to Rec #2	CM20D181J									
C-10	CAPACITOR, fixed: p/o a 3-sect cap; 50,000 mmf +25% —10% ea sect; see C-2	RF Bypass										
C-11	CAPACITOR, fixed: p/o a 3-sect cap; 100,000 mmf +25% —10% ea sect; see C-3	For 2nd IF Cathode Bias Resistor Bypass										
C-12	Part of T-3	2nd IF Trimmer Capacitor	CM20D181J		72081-42	C-12, C-13, C-14	3					
C-13	Same as C-12 (Part of T-3)	2nd IF Trimmer Capacitor										
C-14	Same as C-12 (Part of T-3)	2nd IF RF Plate Bypass Capacitor										
C-15	CAPACITOR, fixed: ceramic dielectric; 3.1 mmf p/m 0.1 mmf; temp coef 0 (tol p/m 0.000060); 1000 vdcw; 0.375" lg x 0.175" diam less term; 2 radial wire leads; uninsulated; pf less than 0.10% at 1000 kc, 2000 vdc test—stamped with green dot, moisture resistant	For Coupling Capacitor Between Osc and AF Grid V-5		714 Type #430	98047-4	C-15	1					

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
C-16	Same as C-8	For Osc Plate Supply Circuit Bypass	-484777								
C-17	CAPACITOR, variable: ceramic dielectric; rotary, single sect; 5 to 20 mmf; 500 vdcw; temp coef —300 mmf/mf/deg C p/m 20% tol; 55/64" lg x 41/64" wd x 3/8" h less term; 2 solder lug term; 2 mtg holes 0.120" diam on 7/16" mtg/c; scdr slot adj; steatite ceramic base, special ceramic dielectric rotor; all metal parts silver pl except tinned term ends; RSW and humidity; position indicating orange dot on rotor	For Osc Tank Trimmer Capacitor for 450 KC	CV11B200	321 TS2A	868903-2	C-17	1				
C-18	CAPACITOR, fixed: mica; 2000 mmf p/m 5%; 500 vdcw; characteristic D; case 53/64" lg x 53/64" wd x 9/32" thk; molded bakelite case; 2 axial wire lead term	RF Bypass Capacitor for T-4	CM30D202J		727868-254	C-18	1				
C-19	CAPACITOR, fixed: mica; 470 mmf p/m 10%; 500 vdcw; temp coef D; case 51/64" lg x 15/32" wd x 7/32" thk; molded bakelite case; 2 axial wire lead term; color coded	Plate Bypass Capacitor for T-4	CM20D471K		722005-589	C-19	1				
C-20	CAPACITOR, fixed: mica; 56 mmf p/m 5%; 500 vdcw; temp coef D; case 1 1/16" lg x 15/32" wd x 7/32" thk; molded bakelite case; 2 axial wire lead term; color coded	Plate Coupling Capacitor for T-4	CM25D560J		722013-517	C-20, C-21	2				
C-21	Same as C-20	Grid Coupling Capacitor for T-4	CM25D560J								
C-22	CAPACITOR, fixed: ceramic dielectric; 6.8 mmf p/m 10%; negative temp coef 750 (tol p/m 110) mmf/mf/deg C; 500 vdcw; 0.400" max lg x 0.200" max diam; 2 radial wire leads; uninsulated	For Det Input Coupling	-484845	207 Type A	90581-305	C-22	1				
C-23	CAPACITOR, fixed: p/o a 3-sect cap; 100,000 mmf +25% —10% ea sect; see C-3	RF Bypass									
C-24	Same as C-8	For Coupling Capacitor Between V-5 and V-4	-484777								
C-25	CAPACITOR, fixed: p/o a 3-sect cap; 100,000 mmf +25% —10% ea sect; see C-3	RF Bypass									
C-26	CAPACITOR, fixed: p/o a 3-sect cap; 100,000 mmf +25% —10% ea sect; see C-3	RF Bypass									
C-27	CAPACITOR, fixed: paper dielectric; single sect; 10,000 mmf p/m 10%; 400 vdcw; molded phenolic case; case 1 11/64" lg x 41/64" h x 17/64" thk less term; wax impr, 2 axial wire lead term; no int gnd; color coded, 1000 v test	For V-4 Plate Bypass	-481755-10	794 EPC	727895-161	C-27	1				

C-28	CAPACITOR, fixed: ceramic dielectric; 15 mmf p/m 10%; negative temp coef 750 (tol p/m 110) mmf/mf/deg C; 500 vdcw; 0.400" max lg x 0.200" max diam; 2 radial wire leads; uninsulated	For Det Plate HF By-pass	-484846	207 Type A	90581-313	C-28, C-30	2					
C-29	Same as C-1	For 1st IF Input Coupling Capacitor to Rec #3	CM20D181J									
C-30	Same as C-28	For Osc Tank Fixed Capacitor for 456 KC										
E-1 to E-6	Not Used											
E-7	KNOB, round: black molded compound; for ¼" diam shaft; single #8-32 set screw; 1" diam x ⅝" h; brass insert; ½" d shaft holes; 8 equally spaced indents; ctb ⅝" x 3/32" d; single white line	For Zero Tone Switch		1	712336-507	E-7, E-8	2					
E-8	Same as E-7	For AF Input Gain Control Pot										
E-9	CAP: for IF transf shield can; gray finished aluminum; 1 13/32" sq x 6 1/64" h o/a; skirt mtd over top end of IF transf can, skirt 1.378" sq x ⅝" approx d inside measurements; one 9/32" diam hole in top ctr	For T-2 and T-4 Shields		1	78945-19	E-9	1					
J-1	JACK, telephone: for 2-cond plug 0.25" diam; 1 15/16" wd x ⅞" lg back of panel x ⅞" h o/a; cont arrangement J-1, no mtg facilities provided; single mtg hole for ⅜" diam bushing; bushing ⅜"-32 thd x ½" lg; metal parts cad pl	For Monitor Input Connection Through S-5	-491851	1277 Type X-157C	982648-1	J-1, J-2	2					
J-2	Same as J-1	For Tone Keyer Input Connection Through S-5	-491851									
J-3	CONNECTOR, receptacle: 4 flat male polarized cont; straight; ¾" wd x 1 9/32" lg x 9/16" h less cont; 45 v 5 amp DC; molded bakelite rectangular body; one piece saddle mtg w/ 2 holes 0.147" diam spaced 1" c to c; phosphor bronze silver pl cont; mtg saddle and rivet nickel pl	For Power Supply Connection	-49634	334 Part P-304-AB	864765-5	J-3	1	1	1		8	
J-4	CONNECTOR, receptacle: one round male (solder bead) cont; straight; ⅝" diam x ⅝" lg o/a; cylindrical brass, chrome pl body; lam bakelite insert; one hole mtg x ¼" lg x ⅜"-24 thd on one end, other end ⅝"-27 thd for coupling nut; incl one solder lug term, int tooth lockwasher, flat washer, and hex mtg nut for chassis mtg; marked w/ NT #	For Input from Rec #1	-49659	30 Cat #PC1-M	253979-7	J-4, J-5, J-6, J-7, J-8, J-9	6	1	1		36	
J-5	Same as J-4	For Input from Tone Keyer	-49635									
J-6	Same as J-4	For Input from Rec #2	-49635									
J-7	Same as J-4	For Input from Tone Keyer	-49635									

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
J-8	Same as J-4	For Input from Rec #3	-49635								
J-9	Same as J-4	For Input from Tone Keyer	-49635								
J-10	CONNECTOR, receptacle: two round female cont; straight; 7/8" diam x 13/16" lg o/a; cylindrical cad pl brass shells; molded bakelite insert; one hole chassis mtg w/ 13/32" lg x 5/8"-27 thd one end, 5/8"-27 thd for coupling nut other end; incl 2 solder lug term, int tooth lockwasher, flat washer and hex mtg nut; marked w/ NT #	For Tone Keyer Input Connection	-49613	30 Cat #PC2-F	253979-8	J-10	1	1	1		8
L-1	COIL, RF: pri L-1, secd L-2; p/o T-2, 1st IF transf; peak freq 455 kc; two 4 pie universal wnd coils; unshielded; 0.590" p/m 0.010" diam x 3.187" lg o/a; phenolic form, air core; form 0.437" diam x 3.187" lg; this is u/w 2 adjustable iron cores supplied in o/a transf can assem; mts in shield can; 6 wire lead term Note: Manufacturer's drawing number is for complete assembly	For Pri of T-2 (Part of T-2)		1	92428-501	L-1, L-2	2				
L-2	Same as L-1 except secd for T-2	For Secd of T-2									
L-3	COIL, RF: pri L-3, secd L-4; p/o T3, 2nd IF transformer; peak frequency 455 kc; two 4 pie universal wnd coils: unshielded; 0.680" p/m 0.015" diam x 3.187" lg o/a; phenolic form, air core; form 0.437" diam x 3.187" lg; this is u/w 2 adjustable iron cores supplied in o/a transformer can assembly; mts in shield can; 4 wire lead term NOTE: Manufacturer's part/drawing number is for complete part.	For Pri of T-3 (Part of T-3)		1	92428-502 Item 6	L-3, L-4	2				
L-4	Same as L-3 except secd for T-3	For Secd of T-3									
L-5	COIL, RF: p/o T-4 beat freq osc; one 4 pie universal wnd; unshielded; 7 strands 0.0028" diam Litz wire; 40 turns ea pie; 2 wire lead term; mts in T-4	BFO Tank Coil (Part of T-4)		1	92428-504 Item 13	L-5	1				
M-1	METER, ammeter: DC; 0-300 ua; round, plastic flush mtg case; 2.21" max diam x 1.6" d behind fl, fl 2.695" max diam x 0.38" d max; accuracy p/m 2% full scale reading; D'Arsonval movement, 150 mv drop max; calibrated for 0.09" thk steel panel; black markings and pointer, white background: self-contained; 3 mtg holes 1/8" diam on 1.218" rad spaced 120 deg on fl; 2 stud term 1/4"-28 thd x 0.69" lg spaced 1" c to c	For Rec #1 Diode Det Output	MR24W300 DCUA		426703-39	M-1, M-2, M-3	3	1	1		20
M-2	Same as M-1	For Rec #2 Diode Det Output	MR24W300 DCUA								
M-3	Same as M-1	For Rec #3 Diode Det Output	MR24W300 DCUA								

R-1	RESISTOR, fixed: comp; 1 meg p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; axial wire lead term; RMA color coded	For V-1 Grid Loading	*RC20BF105K		82283-98	R-1, R-9, R-24	3					
R-2	RESISTOR, fixed: comp; 15,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For 1st and 2nd IF Screen V Dropping	*RC20BF153K		82283-76	R-2, R-25	2					
R-3	RESISTOR, fixed: comp; 180 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; axial wire lead term; RMA color coded	For V-1 Cathode Bias	*RC20BF181K		82283-53	R-3, R-10	2					
R-4	RESISTOR, fixed: comp; 1000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-1 Plate Series	*RC20BF102K		82283-62	R-4, R-11	2					
R-5	RESISTOR, fixed: comp; 560,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-2 Grid Return Series	*RC20BF564K		82283-95	R-5, R-15, R-22	3					
R-6	RESISTOR, fixed: comp; 100,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded	For V-5 Plate Supply V Divider	*RC20BF104K		82283-86	R-6, R-14, R-17	3					
R-7	RESISTOR, fixed: comp; 10 meg p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, RSW and humidity; axial wire lead term; RMA color coded	For V Dropping Resistor in Regulated Power Bus	*RC20BF106K		82283-110	R-7	1					
R-8	RESISTOR, fixed: comp; 270,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For V Divider in Det Plate Supply Circuit	*RC20BF274K		82283-91	R-8	1					
R-9	Same as R-1	For BFO Xtal Shunt	RC20BF105K									
R-10	Same as R-3	For V-2 Cathode Bias	RC20BF181K									
R-11	Same as R-4	For V-2 Plate Series	RC20BF102K									
R-12	RESISTOR, fixed: comp; 47,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32"; bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For Plate Dropping	*RC20BF473K		82283-82	R-12	1					
R-13	RESISTOR, fixed: comp; 120,000 ohms p/m 10%; ½ w; characteristic F; ⅜" lg x 0.140" diam; bakelite ins; 2 axial wire lead term; RMA color coded, wax impr and coated	For Plate Dropping	*RC20BF124K		82283-87	R-13, R-16	2					
R-14	Same as R-6	For V-3 Input Filter	RC20BF104K									
R-15	Same as R-5	For Det Series Input	RC20BF564K									
R-16	Same as R-13	BFO Grid Leak	RC20BF124K									

* For Replacement use.

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
R-17	Same as R-6	For V-4 Screen Supply Series	RC20BF104K								
R-18	RESISTOR, fixed: comp; 820 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; axial wire lead term; RMA color coded	For V-4 Cathode Bias	*RC20BF821K		82283-61	R-18	1				
R-19	RESISTOR, variable: comp; 1 meg p/m 20%; 1 w, wattage rating determined at 50 deg C max; 3 solder lug term; 1⅛" diam x 9/16" lg; encl metal case; round metal shaft ¼" diam x ¾" lg; RCA taper curve #252638-2 w/ resistance 75,000 ohms at 35% rotation, 100,000 ohms at 50%, 240,000 ohms at 65%; ins cont arm w/o off position; normal torque; mtg bushing ⅜"-32 thd x ⅜" lg, non-turn device at 9 o'clock on 17/32" rad; RSW and humidity; 1000 v DC test between term and bushing	For AF Input Gain Control Pot	-635525-M20	722 Type J	440424-14	R-19	1				
R-20	RESISTOR, fixed: comp; 1.5 megohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; 2 axial wire lead term; RMA color coded; wax impr and coated	For Det Grid Loading	*RC20BF155K		82283-100	R-20	1				
R-21	RESISTOR, fixed: comp; 27,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam p/m 1/32" tol; bakelite ins, RSW and humidity; axial wire lead term; RMA color coded	For V Divider in Det Plate Circuit	*RC20BF273K		82283-79	R-21	1				
R-22	Same as R-5	For V-5 AF Output and Plate V Divider	RC20BF564K								
R-23	RESISTOR, fixed: comp; 22,000 ohms p/m 10%; ½ w; F characteristic; ⅜" lg x 0.140" diam, tol p/m 1/32", bakelite ins, humidity resistant; 2 axial wire lead term; RMA color coded	For Det Cathode Bias V Divider	*RC20BF223K		82283-78	R-23	1				
R-24	Same as R-1	For AVC Bus V Divider	RC20BF105K								
R-25	Same as R-2	Plate Filter Network	RC20BF153K								
S-1	SWITCH, toggle: DPDT; 3 amp 250 vdc, 6 amp 125 vdc; molded body, 1¼" lg x 11/16" wd x 11/16" h less term, bushing, and handle; bat handle ⅝" lg; position #1 normally closed, position #2 normally closed; 6 solder lug term; 1 hole mtg bushing 15/32"-32 thds x 15/32" lg w/ keyway; non-ferrous nickel pl handle and bushing, silver pl contacts	For Rec #1 Off On	-241347	47 Cat #81027V (Special)	8886211-1	S-1, S-2, S-3, S-4, S-5	5				
S-2	Same as S-1	For Rec #2 Off On	-241347								
S-3	Same as S-1	For Rec #3 Off On	-241347								

S-4	Same as S-1	For BFO Off On	-241347								
S-5	Same as S-1	For Monitor, Tone Keyer Selector	-241347								
S-6	SWITCH, rotary: DPST; 3 amp, 125 v, 1 amp, 250 v; lam phenolic body; 25/32" wd x 1 3/8" lg x 1 1/16" h excluding shaft; 2 solder lug term; single hole mtg, bushing 3/8"-32 thd x 1/4" lg, shaft 5 1/2" lg x 0.248" diam	For Zero Tone	-241329	1	428585-5	S-6	1	1	1		8
T-1	TRANSFORMER, AF: plate coupling type; pri 42.5 hy p/m 10% at 30 v, 60 cyc AC w/ 10 ma DC; 2000 v test wnd to core and case; encl metal case; 2 1/4" sq x 2 3/4" h; turns ratio of pri to secd 8.4:1.4; color coded flexible wire lead term 12" lg protruding from bottom ctr; fl mtd w/ 4 holes 0.180" diam on 1 7/8" x 1 7/8" mtg/c; wax impr; compound potted; continuous duty	For V-4 Load Coupling Output	-304516	1	901623-4	T-1	1	1	1		16
T-2	TRANSFORMER, IF: 455 kc; input 1st IF; shielded; 1 3/8" wd x 1 5/8" d x 4 7/8" lg o/a; pri L-1 and secd L-2; tuned by adj powdered iron core; double tuned; mts w/ two #6-32 spade bolts on 1 5/16" mtg/c; 8 solder lug term, 2 on top, 6 on bottom; wnd wax impr, incl 2 fixed cap C-5 and C-6, and 1 fixed resistor R-25; marked w/ black dot	For V-1 Output 1st IF	-472237	1	92430-507	T-2	1	1	1		8
T-3	TRANSFORMER, IF: 455 kc; output 4th IF; shielded; 1 3/8" wd x 1 5/8" d x 4 7/8" lg o/a; pri L-3 and secd L-4; adj powdered iron cores; double tuned; mts w/ two #6-32 spade bolts on 1 5/16" mtg/c; 8 solder lug term, 2 on top, 6 on bottom; wnd wax impr; incl 3 fixed cap C-12, C-13, and C-14; marked w/ red dot	For V-2 Output 2nd IF	-472238	1	92430-508	T-3	1	1	1		8
T-4	TRANSFORMER, IF: 455 kc; BFO; shielded; 1 3/8" wd x 1 5/8" d x 4 7/8" h o/a; tuned by means of coil L-5 w/ adj iron core; mts w/ two #6-32 spade bolts on 1 5/16" mtg/c; 9 solder lug term, 3 on top, 6 on bottom; wnd wax impr; incl 4 fixed cap C-18, C-19, C-20, and C-21 and 3 fixed resistors R-12, R-13, and R-16; marked w/ blue dot	For BFO	-472240	1	92430-510	T-4	1	1	1		8
TB-1	BOARD, terminal: general purpose; 1 hot solder-dipped brass solder lug term; term 3/8" c to c w/ mtg ear; 3/32" thk lam phenolic board; 3/4" lg x 1 1/16" wd x 33/64" thk o/a; mtg ear one end w/ one hole 0.140" diam; fungus resistant; RH term	For Wiring Terminations		1	897192-3	TB-1	1				
TB-2	BOARD, terminal: general purpose; 2 hot solder-dipped brass solder lug term; 3/4" c to c; 3/32" thk phenolic board; 1 1/8" lg x 1 1/16" wd x 33/64" thk o/a; mtg ear in ctr w/ one hole 0.140" diam; fungus resistant	For Wiring Terminations		1	897193-1	TB-2, TB-3	2				
TB-3	Same as TB-2	For Wiring Terminations									
TB-4	BOARD, terminal: general purpose; one hot solder-dipped brass solder lug term; term 3/8" c to c w/ mtg ear; 3/32" thk lam phenolic board; 25/32" lg x 21/32" wd x 33/64" thk o/a; mtg ear one end w/ one hole 0.140" diam; fungus resistant; LH term	For Wiring Terminations		1	897192-2	TB-4	1				

* For Replacement use.

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
TB-5	BOARD, terminal: general purpose; 4 hot solder-dipped brass solder lug term; term spaced 3/8" - 3/4" and 3/8" c to c; 3/32" thk lam phenolic board; 1 7/8" lg x 11/16" wd x 33/64" d o/a; mtg ear ctr w/ one hole 0.140" diam; fungus resistant	For Wiring Terminations		1	897195-1	TB-5	1				
TB-6	BOARD, terminal: general purpose; 3 hot solder-dipped brass solder lug term; term spaced 3/8" and 3/4" c to c; 3/32" thk lam phenolic board; 1 1/2" lg x 11/16" wd x 33/64" thk o/a; mtg ear 9/16" ctr to RH end w/ one hole 0.140" diam; fungus resistant	For Wiring Terminations		1	897194-2	TB-6	1				
V-1	TUBE, electron: triple-grid semi-variable mu	For 1st IF Amplr	JAN 6SG7	516		V-1, V-2	2				
V-2	Same as V-1	For 2nd IF Amplr	JAN 6SG7								
V-3	TUBE, electron: twin diode	For AVC	JAN 6H6	516		V-3	1				
V-4	TUBE, electron: triple-grid detector amplr	For AF Amplr	JAN 6SJ7	516		V-4	1				
V-5	TUBE, electron: twin triode	For Det and BFO	JAN 6SN7GT	516		V-5	1				
X-1	SOCKET, tube: octal; ring and saddle mtg; two mtg holes 0.140" diam on 1 1/2" mtg/c; round steatite body 1 3/32" diam approx x 17/32" d excluding terms; w/ flat oval cad pl steel saddle 1 1/4" wd x 1 25/32" lg; marked w/ NT #; body wax impr; silver pl phosphor bronze cont; term and 4 gnd lugs, hot solder dipped	For V-1 Tube	-49380	699	871415-1	X-1, X-2, X-3, X-4, X-5	5				
X-2	Same as X-1	For V-2 Tube	-49380								
X-3	Same as X-1	For V-3 Tube	-49380								
X-4	Same as X-1	For V-4 Tube	-49380								
X-5	Same as X-1	For V-5 Tube	-49380								
Y-1	CRYSTAL UNIT, quartz: 455 kc; —40 to +70 deg C temp range; 2 tinned copper lead term, #20 AWG x 3" lg approx, spaced approx 1 9/32"; sq flat Durez #114-SB or equivalent body, 25/32" sq x 0.478" approx thk; 2 SS electrodes; 1.031" lg x 0.572" wd x 0.040" min, 0.055" max thk o/a air gap not externally adj; marked on one side w/ 455, X, and other side w/ RCA, one ear-marked red color, one ear-marked green color	For BFO Xtal for Control at 455 KC		1	MI-19454-4	Y-1	1	1	1		24

MONITORING UNIT POWER SUPPLY CRV-20289-A

C-1	CAPACITOR, fixed: one sect of a 2-sect cap (C-1A and C-1B); paper dielectric; 2 sect; 4 mf cap ea sect p/m 20%; ea sect 500 vdcw; HS metal can; case 3 5/32" h x 2 1/8" wd x 2 13/16" lg less mtg flange and term; castor oil impr; 3 solder lug term 1 5/32" h, 2 term on 1 1/4" mtg ctr, 3rd term ctr of 1st pair on 5/8" mtg ctr all bottom of case; no int gnd connections; 2 integral mtg bkts 7/16" wd x 2 1/8" lg flush w/ bottom 1/8" from one end along 2 13/16" lg side, four 3/16" diam mtg holes on 1 1/4" x 2 5/8" mtg/c; case marked w mfr dwg # Note: Manufacturer's drawing number is for complete assembly.	Power Filter	-484804-20	793 Type NDK	449101-2	C-1	1	1	1		8
C-1A	CAPACITOR, fixed: p/o a 2-sect cap; 4 mf p/m 20%; see C-1	Input Filter									
C-1B	CAPACITOR, fixed: p/o a 2-sect cap; 4 mf p/m 20%; see C-1	Output Filter									
E-1	BOARD, terminal: general purpose: 4 hot solder dipped brass solder lug term; term spaced 3/8" c to c; 3/32" thk lam phenolic board; 2 1/4" lg x 1 1/16" wd x 33/64" thk o/a; mtg ear ea end w/ 0.140" diam hole in ea on 1 7/8" mtg/c; fungus resistant	For Wiring Terminations		1	897196-1	E-1	1				
I-1	LAMP, incandescent: 12-16 v, 0.1 amp, 1.4 w, bulb T-3-1/4 clear, 1 3/16" lg o/a; miniature bayonet base; burn any position	Pilot		1050 Mazda #1813	849546-1	I-1	1				
I-2	LENS, indicator light: ruby; thd type; smooth glass frosted back lens; 5/8" diam x 5/8" lg mtg thd 1 1/16"-28 thd x 3/8" lg; brass nickel pl bezel; two solder lug term on back of mtg frame	Pilot Light Jewel		776 Bayonet Type	983504-5	I-2	1				
L-1	REACTOR: filter choke; dual sect; 34.4 hy at 3 v 60 cyc AC w/ 20 ma DC; 1150 ohms p/m 16% DC resistance per sect; 1500 v test; metal case, impr and potted; 2 13/16" sq x 3 1/4" h less term; 4 holes 0.180" diam on 2 7/16" x 2 7/16" mtg/c; 3 solder lug term on bottom; marked 901669-2; marked at term w/ 3, 8, 13; term #13 common to both sect	Power Filter	-304521	1	901669-2	L-1	1	1	1		16
P-1	Not Used										
P-2	CONNECTOR, plug: 4 flat female polarized cont; straight; 1 5/16" lg x 3/4" wd x 1 1/16" thk o/a; rectangular metal body; molded bakelite insert; 3/8" diam cable opening; body heavy nickel pl; cont silver pl	Terminates Output End of 4-Conductor Power Cable	-491834	334 Part S304 FHT	864765-6	P-2	1	1	1		8
R-1	RESISTOR, fixed: WW; 4700 ohms p/m 10%; 4 w; 1 3/4" lg x 5/16" OD; 2 radial wire lead term	V Regulator Series Resistor Current Limiting		752 WL 1 3/4 4700 p/m 10%	90497-8	R-1	1				
S-1	SWITCH, toggle: DPDT; rated 3 amp 250 v DC or 6 amp 125 v DC; black molded phenolic body; body 1 1/4" lg x 1 1/16" wd x 1 1/16" h less handles, mtg bushing and term; bat type handle 5/8" lg; locking type mechanism; 6 solder lug term; mts by 1 5/32"-32 thd x 1/4" lg mtg bushing; oper temp range —54 deg C to +70 deg C, lever and bushing non-ferrous metal nickel pl, cont bronze w/ silver pl, term hot tin dipped, marked w mfg dwg # and NT #, rated 5000 operations under rated load	Off On	241374	1	8896135-1	S-1	1				

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
S-2	SWITCH, rotary: single pole, 8 positions; 250 v max; brass cont w/ nickel pl phosphor bronze movable cont; black bakelite body integral w/ steel saddle; 1½" wd x 17/8" lg x 1" h less term; 9 solder lug term; saddle mtd w/ 2 holes 0.156" diam, 1½" c to c; marked w/ 110-125-150-220-240 on positions 1 to 5 w/ positions 6 to 8 left blank	V Tap Selector	-241328	30 Cat #36-1	99585-2	S-2	1	1	1		8
T-1	TRANSFORMER, power: plate and filament type; 240/210/150/125/110 v, 50/60 cyc, single ph input; 3 output wnd; secd #1—12.6/6.3 v at 2 amp CT, secd #2—5 v at 2 amp, secd #3—584/292 v at 0.045 amp DC, CT; 2500 v test; air cooled; sheet metal case; 4" sq x 4½" h less term; 14 solder lug term on bottom; 4 holes in fl 0.180" diam on 3⅜" x 3⅜" mtg/c; pri 1500 v test; CT all p/m 1% max neutral; black finish	Power	-304522	1	901670-2	T-1	1	1	1		16
V-1	TUBE, electron: full-wave, high vacuum rectifier	Power Rectifier	JAN 5Y3GT	516		V-1	1				
V-2	TUBE, electron: voltage regulator, glow discharge type, DC operating voltage 150 v at 40 max ma	Voltage Regulator	JAN 0D3/VR150	516		V-2	1				
W-1	CABLE ASSEM: special purpose; one #14 AWG 41 strands #30 AWG and two #22 AWG cond of 7 strands #30 AWG ea, vinyl resin ins, color coded, 300 v working; cotton braid, flame lacquer coated, 3 cond twisted and w/ braided tinned copper shielding o/a, 9/32" diam cable; 42⅜" lg excluding terminations; 4 cont plug HB Jones part #S-304-FHT one end, other end w/ four 1⅜" lg leads ctr and tinned ⅜" incl shielding lead	To Connect Monitor w/ Power Unit	-62422 (3'7" p/m 1")	1	258639-502	W-1	1	1	1		8
W-2	CABLE ASSEM, power: UL type SJ, two #18 AWG stranded cond 300 v working; 17½" lg excluding terminations; GE cat # Junior Plug on one end, other end terminated in 2 leads ea 3½" lg and ea stripped back ½"; GE 2 cond #18 SJ special all rubber cord w/ Junior Plug	To Connect Power Unit to Supply Line	-62424 (1' 6½")	1	811638-4	W-2	1				
X-1	SOCKET, tube: octal; ring and saddle mtg; two mtg holes 0.140" diam on 1½" mtg/c; round steatite body 13/32" diam approx x 17/32" d excl terms; w/ flat oval cad pl steel saddle 1¼" wd x 125/32" lg; marked w/ NT #; body wax impr; silver pl phosphor bronze cont; term and 4 gnd lugs, hot solder dipped	For Rectifier Tube	-49380	699	871415-1	X-1, X-2	2				
X-2	Same as X-1	For V Regulator Tube	-49380								

LOUDSPEAKER ASSEMBLY CRV-49526-A

E-1	KNOB: round; black molded compound; for ¼" diam shaft; double #8-32 set screws; 1 7/16" diam x ⅞" h; brass insert; 9/16" d shaft hole; 8 equally spaced indents; ctb 11/16" diam x ⅛" d; single white line	For S-1 and S-4 Knobs		1	712336-505	E-1	2				
L-1	SPEAKER, 6" wd x 9" lg elliptical cone; PM field; output 4 w max; voice coil impedance 2.0 ohms at 190 cyc; 9¼" lg x 6⅝" h x 3 9/32" d o/a; fl mtd w/ 4 holes ⅜" diam on 4⅝" x 6 9/16" mtg/c; dust screen around voice coil; 70 to 85 cyc per sec resonance	For Audible Signal	-491833	1	92563-2	L-1	1	1	1		8
R-1	RESISTOR, fixed: comp; 560 ohms p/m 10%, ½ w; F characteristic; ⅜" lg x 9/64" diam p/m 1/32" tol; bakelite ins; RSW and humidity; 2 axial wire lead term; RMA color coded; wax impr and coated	Transformer Impedance Matching	*RC20BF561K		82283-59	R-1	1				
S-1	SWITCH SECTION, rotary: p/o 2-pole, 3-position switch assem c/o 2 wafers, 4 sect; symbols S-1 and S-3; 2 sect; silver pl clip cont, silver rotor cont; lam bakelite; 1⅞" lg x 1 13/16" wd x 1 7/16" d approx excluding shaft; shorting type cont; detent action; solder lug term; mtg by bushing ⅜"-32 thd x ⅜" lg; ¼" diam x ¾" lg shaft; non-turn device at 12 o'clock on 1 7/32" rad; wax impr ins; rust resistant Note: Manufacturer's drawing number is for complete assembly	For Speaker Switch		1	253799-2	S-1	1	1	1		16
S-2	Not Used										
S-3	SWITCH SECTION, rotary; p/o 2-pole, 3-position switch assem; see S-1	For Speaker Switch									
S-4	SWITCH, rotary: 2 pole, 3 positions; 1 sect; silver pl clip cont; silver rotor cont; lam bakelite; ⅞" lg x 1 13/16" wd x 1 7/16" d approx excluding 1 shaft; shorting type cont; detent action; solder lug term; mtg by bushing ⅜"-32 thd x ⅜" lg; ¼" diam x ¾" lg shaft; non-turn device at 12 o'clock on 1 7/32" rad; wax impr ins; rust resistant	For Function Switch		1	253798-1	S-4	1	1	1		16
T-1	TRANSFORMER, AF: plate coupling type; pri 1800 ohms impedance at 3 v 60 cyc AC w/o amp DC; metal half shell case laminated iron core, 3 11/16" lg x 1 11/16" wd x 2 13/32" h o/a; turns ratio pri to secd 1 to 1.09; freq response —0.5 db at 100 cyc to —1.5 db at 5000 cyc; no int shield; 4 flexible wire leads protruding from bottom; 2 mtg legs on base w/ two 0.180" diam mtg holes on 3¼" mtg ctrs; 1000 v test, continuous duty	For Line Output Isolating	-304517	1	901715-2	T-1	1	1	1		8
W-1	CABLE ASSEMBLY, special purpose: three #22 AWG tinned copper stranded cond and one braided cond of 16 strands #36 tinned copper; 3 cond of 7 strands #30 AWG and one cond of 16 strands #36 braided vinyl resin ins, color coded on 3 cond, braided shield cond w/ glazed cotton braid ins; 300 v working; braided tinned copper shield, black glazed cotton braid N.E.M.A. #701 o/a ¼" diam o/a; 67" lg w/ 2 branches ea 16" lg, one leaving cable 27" from one end and one leaving cable 39" from same end, all dimen excluding terminations, one end and both branches terminated in 1" leads and spade lugs, other end terminated in 4 leads ea 2" lg w/ ends stripped 5/16" and tinned	For Speaker Input Cable		1	446625-501	W-1	1	1	1		8

* For Replacement use.

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
W-2	CABLE ASSEMBLY, special purpose: five #22 AWG stranded tinned copper cond, ea cond 7 strands #30 AWG; vinyl resin ins, cotton braid, color coded; 300 v working; black glazed cotton braid o/a; 44" lg excluding term; five 3" leads stripped 5/16" and tinned on one end, other end 1¼" lead w/ tinned brass spade term, 2nd term identical w/ 1st projects from o/a braid 2⅜" from one end of braid, 3rd term ditto 4¾" from end of braid, 4th and 5th term ditto 11½" from end of braid	For AF Amplr Input Cable		1	970213-502	W-2	1	1	1		8
W-3	CABLE ASSEMBLY, special purpose: four #18 AWG stranded tinned copper cond; 16 strands #30 AWG ea cond, 1/64" wall vinyl resin covered w/ glazed cotton color coded braid treated w/ flame resistant lacquer, 300 v working, full coverage black glazed cotton braid o/a; 16¾" lg o/a; green, yellow, brown, and black cond projecting at one end, brown and 2 black cond projecting through outer braid 4½" from end, other end yellow, green, and black cond projecting	For Switch Interconnecting Cable		1	940292-501	W-3	1	1	1		8
			CABINET CRV-10692								
J-1	CONNECTOR, receptacle: 2 flat parallel female cont; straight; 2 31/32" lg x 1¼" approx wd x ⅞" approx d o/a; 15 amp 125 v, 10 amp 250 v; rectangular molded brown bakelite body; mts in Wiremold Plugmold cat #2100 w/ locking clamp incl as p/o connector	For Power Outlet Receptacles on Cabinet Rack	-491854	1604 Cat #2127	940289-7	J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8	8				
J-2	Same as J-1	For Power Outlet Receptacles on Cabinet Rack	-491854								
J-3	Same as J-1	For Power Outlet Receptacles on Cabinet Rack	-491854								
J-4	Same as J-1	For Power Outlet Receptacles on Cabinet Rack	-491854								
J-5	Same as J-1	For Power Outlet Receptacles on Cabinet Rack	-491854								
J-6	Same as J-1	For Power Outlet Receptacles on Cabinet Rack	-491854								
J-7	Same as J-1	For Power Outlet Receptacles on Cabinet Rack	-491854								
J-8	Same as J-1	For Power Outlet Receptacles on Cabinet Rack	-491854								

ANTENNA PANEL CRV-23425-A											
J-9	CONNECTOR, receptacle: single round female cont; straight; nickel pl brass hex head ⅜" across flats x ⅞" approx h; 7/16" wd x 19/32" approx lg o/a; cylindrical nickel pl brass body integral w/ head; cond attached by ring type solder lug term mtd under mtg nut; one hole flush mtg w/ hex mtg nut; body w/ ¼"-28 thd x ⅜" approx lg male mtg thd	For Ant Connections		252 Type #274-J	99015-1	J-9, J-10, J-11, J-12, J-13, J-14, J-15, J-16, J-17, J-18, J-19, J-20, J-21, J-22, J-23, J-24, J-25, J-26, J-27	19				
J-10	Same as J-9	For Ant Connections									
J-11	Same as J-9	For Ant Connections									
J-12	Same as J-9	For Ant Connections									
J-13	Same as J-9	For Ant Connections									
J-14	Same as J-9	For Ant Connections									
J-15	Same as J-9	For Ant Connections									
J-16	Same as J-9	For Ant Connections									
J-17	Same as J-9	For Ant Connections									
J-18	Same as J-9	For Ant Connections									
J-19	Same as J-9	For Ant Connections									
J-20	Same as J-9	For Ant Connections									
J-21	Same as J-9	For Ant Connections									
J-22	Same as J-9	For Ant Connections									
J-23	Same as J-9	For Ant Connections									
J-24	Same as J-9	For Ant Connections									
J-25	Same as J-9	For Ant Connections									
J-26	Same as J-9	For Ant Connections									
J-27	Same as J-9	For Ant Connections									
CABLES											
J-1	CONNECTOR, receptacle: 2 male curved parallel polarized blades; straight; 2½" diam x 1 15/32" lg less term; 20 amp 250 v; fl cylindrical metal body nickel pl; molded black bakelite insert, locking type; two 0.203" diam mtg holes in body fl on 2 1/16" mtg/c; marked w/ NT #	For Single Plug	-49886	306 Cat #9105 Male	886485-4	J-1	1	1	1		36
P-1	CONNECTOR, plug: 2 female curved parallel pol cont; straight; 1 11/16" diam x 2 7/16" lg o/a; 20 amp 250 v; cylindrical molded body w/ metal shell at cable end; incl cable clamp	For Power Cable	-49639	306 Cat #7101	258274-4	P-1	1	1	1		8
P-2	CONNECTOR, plug: one round male (solder bead) cont; straight; 2 1/16" lg x ¾" diam approx o/a; cylindrical chrome pl die cast metal body; lam bakelite wafer insert; opening for ¼" diam max cable; mtd by captive coupling nut w/ ⅝"-27 female thd; incl cord protector coil spring; marked w/ NT #	For Monitor to Rec Cable	-49660	30 Cat #MC1F	253979-9	P-2	1	1	1		20

MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

TABLE 8-4 (Continued)

PARTS								SPARE PARTS			
								Equip.		Stock	
Symbol Desig.	NAME OF PART AND DESCRIPTION	FUNCTION	JAN and (Navy Type) No.	Mfr. and Mfr's Desig.	Contractor's Drawing and Part No.	All Symbol Designations Involved	Total No. Per Equip.	Box #	Quan.	Box #	Quan.
P-3	CONNECTOR, plug: one round male (solder bead) cont; angle type, 80 deg approx; 1 11/16" ctr to end lg x 3/4" diam approx o/a, cylindrical chrome pl die cast metal body; lam bakelite wafer insert; opening for 1/4" max diam cable; mtd by captive coupling nut w/ 5/8"-27 female thd; incl cord protector coil spring; marked w/ NT #	For Monitor to Rec Cable	-491835	30 Cat #MC1F	253979-6	P-3	1	1	1		20
P-4	CONNECTOR, Plug: two round male polarized cont; straight; 1 1/16" diam x 1 13/16" lg less cont; cylindrical chrome pl brass body; black molded bakelite insert; 5/16" diam cable opening; 1 1/16" OD milled coupling nut w/ 5/8"-27 female thd; marked w/ NT #	For Monitor to Tone Keyer Cable	-49614	30 Cat #MC2M	253979-10	P-4	1	1	1		8
P-5	CONNECTOR, plug: one round male banana type cont; straight; nickel pl beryllium copper cont springs, cont 3/4" lg; 1 1/8" lg x 5/16" across flats approx o/a; 10 amp rating on resistive load; body c/o, thd brass nickel pl stud w/ hex head fitted w/ cont; mtg stud #6-32 thd x 3/8" lg w/ #6-32 hex nut	For Ant Cables W-1, W-2, W-3		252 Cat #274P	99025-1	P-5	1	1	1		8
W-1	CABLE ASSEM, special purpose: two #18 AWG stranded tinned copper wire, Flammol, white and black coded, med duty cord; 45" lg excluding terminations; plug assem RCA part/dwg #842456-502 one end, other end terminates w/ 2 brass hot solder dipped spade term RCA part/dwg #61580-1; 1 1/4" lg zinc tag on cable marked w/ NT #	For Connecting Rec #1 to Ant Jacks	-62410 (3' 9")	1	253934-507	W-1	1	1	1		8
W-2	CABLE ASSEM, special purpose: two #18 AWG stranded tinned copper wire, Flammol, white and black coded, med duty cord; 56" lg excluding terminations; plug assem RCA part/dwg #842456-502 one end, other end terminates w/ 2 brass hot solder dipped spade term RCA part/dwg #61580-1; 1 1/4" lg zinc tag on cable marked w/ NT #	For Connecting Rec #2 to Ant Jacks	-62410 (4' 8")	1	253934-508	W-2	1	1	1		8
W-3	CABLE ASSEM, special purpose: two #18 AWG stranded tinned copper wire, Flammol, white and black coded, med duty cord; 71" lg excluding terminations; plug assem RCA part/dwg #842456-502 one end, other end terminates w/ 2 brass hot solder dipped spade term RCA part/dwg #61580-1; 1 1/4" lg zinc tag on cable marked w/ NT #	For Connecting Rec #3 to Ant Jacks	-62410 (5' 11")	1	253934-509	W-3	1	1	1		8
W-4	CABLE ASSEM, special purpose: 2 cond #22 AWG stranded of seven #30 AWG tinned copper wire ea, 1/64" vinyl resin ins w/ glazed blue cotton braid, flame resistant lacquer, 300 v working, close braid tinned copper wire o/a; full coverage black glazed cotton braid outside covering; 11 3/8" lg less terminations; Amphenol connector cat #MC2M one end, other end 2 Beldin code #CONTUSE spade term; 1 1/4" lg tag on cable marked w/ NT #	For Connecting Monitor to Tone Keyer	-62414 (0' 11")	1	254057-502	W-4	1	1	1		8

W-5	LINE, RF transmission: Army-Navy type #RG.58/U cable; 27½" lg excluding terminations; 28½" lg approx o/a; Amphenol connector cat #MCIF one end, Amphenol connector cat #MCIF-A other end; 1¼" lg tag on cable marked w/ NT #	For Connecting Rec #3 to Monitor	AN-CG-516/U (2' 3½")	1	254059-507	W-5	1	1	1		8
W-6	LINE, RF transmission: Army-Navy type #RG.58/U cable; 37" lg excluding terminations; 38" lg approx o/a; Amphenol connector cat #MCIF one end, Amphenol connector cat #MCIF-A other end; 1¼" lg tag on cable marked w/ NT #	For Connecting Rec #2 to Monitor	AN-CG-516/U (3' 1")	1	254059-508	W-6	1	1	1		8
W-7	LINE, RF transmission: Army-Navy type #RG.58/U cable; 49" lg excluding terminations; 50" lg approx o/a; Amphenol connector cat #MCIF one end, Amphenol connector cat #MCIF-A other end; 1¼" lg tag on cable marked w/ NT #	For Connecting Rec #1 to Monitor	AN-CG-516/U (4' 1")	1	254059-509	W-7	1	1	1		8
W-8	CABLE ASSEMBLY, power: two #16 AWG wires; 10 ft lg less terminations; one end terminated in G. E. connector #49 x 685 (except made of black textalite), other end terminated in NT connector #49639	For Power Cable	-62413 (10')	1	258272-503	W-8	1	1	1		8
W-9	CABLE ASSEM, special purpose: c/o 4 condr, one Army Navy type RG.54/U cable, shield of RG.58/U as 2nd cond, 3rd and 4th cond ea #22 AWG stranded tinned copper cond of 7 strands #30 AWG ea w/ 1/64" thk wall vinyl resin ins and glazed color coded cotton braid treated w/ flame resistant lacquer, 300 v working, these 2 cond spiral wrapped over the RG.58/U cable w/ full coverage black cotton braid o/a; 42" lg less terminations; one Bundy cat #YAV 18-G28 side spade term and three RCA part/dwg #61580-1 spade term terminating ea end; 1¼" lg tag on cable marked w/ NT #	For Connecting Rec #3 to Tone Keyer	AN-CG-520/U (3' 6")	1	970229-504	W-9	1	1	1		8
W-10	CABLE ASSEM, special purpose: c/o 4 condr, one Army Navy type RG.54/U cable, shield of RG.58/U as 2nd cond, 3rd and 4th cond ea #22 AWG stranded tinned copper cond of 7 strands #30 AWG ea w/ 1/64" thk wall vinyl resin ins and glazed color coded cotton braid treated w/ flame resistant lacquer, 300 v working, these 2 cond spiral wrapped over the RG.58/U cable w/ full coverage black cotton braid o/a; 54" lg less terminations; one Bundy cat #YAV 18-G28 side spade term and three RCA part/dwg #61580-1 spade term terminating ea end; 1¼" lg tag on cable marked w/ NT #	For Connecting Rec #2 to Tone Keyer	AN-CG-520/U (4' 6")	1	970229-505	W-10	1	1	1		8
W-11	CABLE ASSEM, special purpose: c/o 4 condr, one Army Navy type RG.54/U cable, shield of RG.58/U as 2nd cond, 3rd and 4th cond ea #22 AWG stranded tinned copper cond of 7 strands #30 AWG ea w/ 1/64" thk wall vinyl resin ins and glazed color coded cotton braid treated w/ flame resistant lacquer, 300 v working, these 2 cond spiral wrapped over the RG.58/U cable w/ full coverage black cotton braid o/a; 67" lg less terminations; one Bundy cat #YAV 18-G28 side spade term and three RCA part/dwg #61580-1 spade term terminating ea end; 1¼" lg tag on cable marked w/ NT #	For Connecting Rec #1 to Tone Keyer	AN-CG-520/U (5' 7")	1	970229-506	W-11	1	1	1		8

TABLE 8-5. CROSS REFERENCE PARTS LIST
MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

INDEX REFERENCE					
	Radio Receiver	CRV-46246-B	(1)	Monitoring Unit Power Supply CRV-20289-A	(5)
	Tone Keyer	CRV-35049-A	(2)	Cables	(6)
	Loudspeaker Assembly	CRV-49526-A	(3)	Cabinet CRV-10692	(7)
	Monitoring Unit	CRV-23424-A	(4)	Antenna Panel CRV-23425-A	(8)

JAN (OR AWS) DESIGNATION	Key Symbol	Index Reference	JAN (OR AWS) DESIGNATION	Key Symbol	Index Reference	JAN (OR AWS) DESIGNATION	Key Symbol	Index Reference	JAN (OR AWS) DESIGNATION	Key Symbol	Index Reference
CC21BG020J	C-124	1	CM55D223G	C-36	2	RC20BF225M	R-2	1	JAN 5Y3GT	V-5	2
CC35CH850J	C-46	1	CM55D333G	C-39	2	RC20BF272K	R-7	2	JAN 5Y3GT	V-14	1
CM20C161G	C-23	2	CM55D392G	C-16	2	RC20BF272K	R-54	1	JAN 6H6	V-3	4
CM20C471G	C-20	2	CM55D512G	C-19	2	RC20BF273K	R-21	4	JAN 6H6	V-8	1
CM20C681J	C-5	4	CM55D752G	C-25	2	RC20BF274K	R-8	4	JAN 6H6	V-8	2
CM20C681J	C-55	1	CV11B200	C-17	4	RC20BF274K	R-9	2	JAN 6J5	V-3	1
CM20D151J	C-73	1	MR24W300DCUA	M-1	4	RC20BF333K	R-4	2	JAN 6K6GT	V-11	1
CM20D181J	C-1	4	RC20BF101K	R-20	1	RC20BF333K	R-19	1	JAN 6SA7	V-4	1
CM20D181J	C-108	1	RC20BF102K	R-3	1	RC20BF334K	R-53	1	JAN 6SG7	V-1	1
CM20D471K	C-85	1	RC20BF102K	R-4	4	RC20BF335M	R-32	2	JAN 6SG7	V-1	4
CM20D471K	C-19	4	RC20BF103K	R-3	2	RC20BF391K	R-32	1	JAN 6SJ7	V-4	4
CM20D5250	C-17	1	RC20BF103K	R-11	1	RC20BF394K	R-42	1	JAN 6SJ7	V-10	1
CM25D560J	C-20	4	RC20BF103M	R-25	2	RC20BF473K	R-1	1	JAN 6SL7GT	V-1	2
CM25D560J	C-82	1	RC20BF104K	R-9	1	RC20BF473K	R-12	4	JAN 6SN7GT	V-3	2
CM30B102K	C-13	2	RC20BF104K	R-6	4	RC20BF473K	R-29	2	JAN 6SN7GT	V-5	4
CM30B182K	C-11	2	RC20BF104M	R-24	2	RC20BF474K	R-28	2	JAN OD3VR/75	V-7	2
CM30B821K	C-12	2	RC20BF105K	R-1	4	RC20BF474M	R-10	2	JAN OD3VR/150	V-2	5
CM30C681G	C-17	2	RC20BF105M	R-5	2	RC20BF561K	R-13	1	JAN OD3VR/150	V-6	2
CM30D152G	C-26	2	RC20BF105M	R-5	1	RC20BF561K	R-1	3	JAN VR150/30	V-13	1
CM30D162G	C-33	2	RC20BF106K	R-7	4	RC20BF562K	R-8	1			
CM30D202G	C-30	2	RC20BF106M	R-71	1	RC20BF563K	R-4	1			
CM30D202J	C-18	4	RC20BF124K	R-13	4	RC20BF564K	R-5	4	NAVY TYPE	Key Symbol	Index Reference
CM30D202J	C-87	1	RC20BF124K	R-24	1	RC20BF564K	R-21	2	-20638	CR-1	2
CM30D272G	C-37	2	RC20BF153K	R-2	4	RC20BF564K	R-23	1	-22718	M-1	2
CM30D272K	C-111	1	RC20BF153K	R-15	1	RC20BF684K	R-35	1	-48595-A10	C-4	2
CM30D392J	C-30	1	RC20BF154K	R-16	2	RC20BF684M	R-31	2	-49025-B	J-1	2
CM30D472K	C-1	1	RC20BF154M	R-20	2	RC20BF821K	R-18	4	-49373	J-1	1
CM30D561K	C-105	1	RC20BF155K	R-20	4	RC20BF824K	R-18	2	-49373	X-1	1
CM30D1551G	C-20	1	RC20BF155K	R-38	1	RC20BF825K	R-27	2	-49373	X-3	1
CM35C752G	C-40	2	RC20BF181K	R-51	2	RC30BF123K	R-17	2	-49373	X-12	1
CM35D682G	C-22	2	RC20BF181K	R-3	4	RC30BF153K	R-15	2	-49380	X-1	2
CM55D103G	C-29	2	RC20BF223K	R-14	2	RU3B150K	R-25	1	-49380	X-1	4
CM55D153G	C-32	2	RC20BF223K	R-23	4	JAN 5Y3GT	V-1	5	-49380	X-1	5

TABLE 8-5 (Continued)

INDEX REFERENCE

Radio Receiver	CRV-46246-B	(1)
Tone Keyer	CRV-35049-A	(2)
Loudspeaker Assembly	CRV-49526-A	(3)
Monitoring Unit	CRV-23424-A	(4)
Monitoring Unit Power Supply	CRV-20289-A	(5)
Cables		(6)
Cabinet	CRV-10692	(7)
Antenna Panel	CRV-23425-A	(8)

NAVY TYPE	Key Symbol	Index Reference	NAVY TYPE	Key Symbol	Index Reference	NAVY TYPE	Key Symbol	Index Reference	NAVY TYPE	Key Symbol	Index Reference
-49613	J-4	2	-304516	T-1	4	-472254	L-56	1	-484791-20	C-8	2
-49613	J-10	4	-304516	T-4	2	-472255	L-11	1	-484798-20	C-6	2
-49614	P-4	6	-304517	T-1	3	-472256	L-3	1	-484800-20	C-7	2
-49634	J-3	4	-304518	T-2	1	-472257	L-5	1	-484804-20	C-2	2
-49639	P-1	5	-304519	T-3	2	-472258	L-7	1	-484804-20	C-1	5
-49659	J-3	1	-304520	T-2	2	-472259	L-9	1	-484804-20	C-1A	5
-49659	J-4	4	-304521	L-1	2	-481036-E5	C-23	1	-484804-20	C-1B	5
-49660	P-2	6	-304521	L-1	5	-481432-E5	C-24	1	-484828	C-2	1
-49767	P-1	1	-304522	T-1	2	-481755-10	C-27	4	-484829	C-75	1
-49886	J-1	6	-304522	T-1	5	-482570-10	C-9	2	-484830	C-38	1
-62410 (3'9")	W-1	6	-472216	L-57	1	-482805-10	C-9	1	-484830A	C-25	1
-62410 (4'8")	W-2	6	-472237	T-3	1	-483254-20	C-48	2	-484831	C-16	1
-62410 (5'11")	W-3	6	-472237	T-2	4	-483400-10	C-125	1	-484838-5	C-12	1
-62413 (10')	W-8	6	-472238	T-3	4	-484375-5	C-13	1	-484842-5	C-44	1
-62414 (11")	W-4	6	-472238	T-9	1	-484748	C-3	1	-484843-5	C-31	1
-62422 (3'7" p/m 1")	W-1	5	-472239	T-5	1	-484775	C-96	1	-484845	C-22	4
-62424 (1'2½")	W-1	1	-472240	T-4	4	-484777	C-8	4	-484845	C-53	1
-62424 (1'6½")	W-1	2	-472240	T-10	1	-484777	C-74	1	-484846-10	C-28	4
-62424 (1'6½")	W-2	5	-472241	T-4	1	-484778	C-10	2	-484846-10	C-61	1
-63678-100	R-7	1	-472242	L-1	1	-484779-5	C-15	1	-484847-10	C-7	1
-63678-100	R-53	2	-472243	L-15	1	-484780-15	C-1	2	-484848-10	C-8	1
-241328	S-2	5	-472244	L-17	1	-484781-20	C-15	2	-491833	L-1	3
-241328	S-13	2	-472245	L-51	1	-484782	C-2	4	-491834	P-2	5
-241328	S-25	1	-472246	L-52	1	-484782	C-48	1	-491835	P-3	6
-241329	S-6	4	-472247	L-53	1	-484783	C-3	4	-491851	J-1	4
-241347	S-1	2	-472248	L-13	1	-484783	C-71	1	-491851	J-2	2
-241347	S-1	4	-472249	L-19	1	-484784	C-99	1	-491852	J-2	1
-241374	S-7	2	-472250	L-20	1	-484785	C-56	1	-491854	J-1	7
-241374	S-1	5	-472251	L-21	1	-484786-20	C-119	1	-632882-W20	R-52	1
-304514	T-1	1	-472252	L-54	1	-484787-20	C-5	2	-635525-M20	R-19	4
-304515	L-49	1	-472253	L-55	1	-484788	C-130	1			

TABLE 8-5 (Continued)

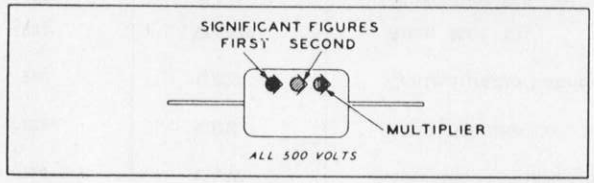
INDEX REFERENCE					
	Radio Receiver	CRV-46246-B	(1)	Monitoring Unit Power Supply CRV-20289-A	(5)
	Tone Keyer	CRV-35049-A	(2)	Cables	(6)
	Loudspeaker Assembly	CRV-49526-A	(3)	Cabinet CRV-10692	(7)
	Monitoring Unit	CRV-23424-A	(4)	Antenna Panel CRV-23425-A	(8)

NAVY TYPE	Key Symbol	Index Reference	NAVY TYPE	Key Symbol	Index Reference	ARMY NAVY TYPE	Key Symbol	Index Reference	ARMY NAVY TYPE	Key Symbol	Index Reference
-635525-M20	R-26	2	-636896-M10	R-6	2	AN CG-516/U (2'3½")	W-5	6	AN CG-520/U (3'6")	W-9	6
-636046-K10	R-11	2	-636898-W10	R-46	1	AN CG-516/U (3'1")	W-6	6	AN CG-520/U (4'6")	W-10	6
-636511-K10	R-23	2	-636899-M20	R-51	1	AN CG-516/U (4'1")	W-7	6	AN CG-520/U (5'7")	W-11	6
-636532-K10	R-2	2	-636900-M10	R-21	1						
-636557-M10	R-8	2	-636901-K20	R-38	2						

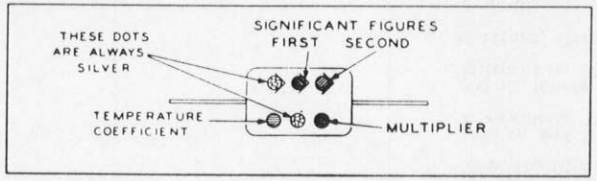
TABLE 8–6. APPLICABLE COLOR CODES AND MISCELLANEOUS DATA

CAPACITOR COLOR CODES

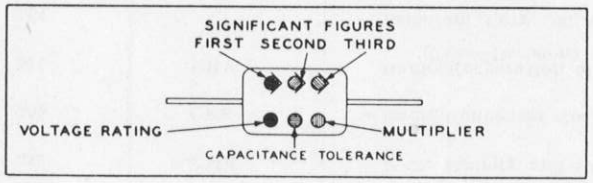
RMA 3-DOT COLOR CODE FOR MICA-DIELECTRIC CAPACITORS



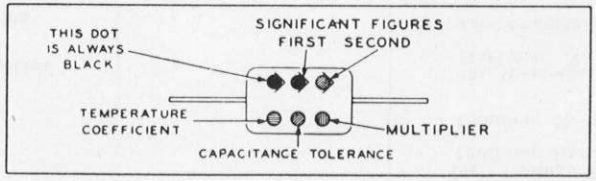
JAN 6-DOT COLOR CODE FOR PAPER-DIELECTRIC CAPACITORS



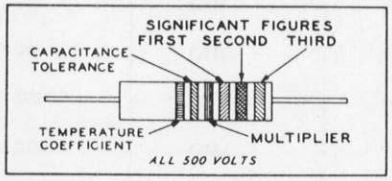
RMA 6-DOT COLOR CODE FOR MICA-DIELECTRIC CAPACITORS



JAN 6-DOT COLOR CODE FOR MICA-DIELECTRIC CAPACITORS

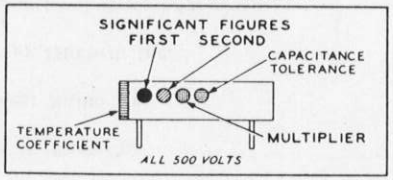


RMA COLOR CODE FOR TUBULAR CERAMIC-DIELECTRIC CAPACITORS

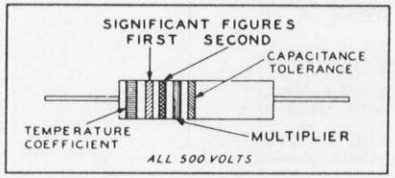


JAN COLOR CODE FOR FIXED CERAMIC-DIELECTRIC CAPACITORS

RADIAL TYPE NON-INSULATED



AXIAL TYPE INSULATED



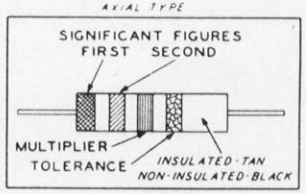
RMA: RADIO MANUFACTURERS ASSOCIATION
JAN: JOINT ARMY-NAVY

RESISTORS		CAPACITORS						
				MULTIPLIER				
TOLERANCE	MULTIPLIER	SIGNIFICANT FIGURE	COLOR	RMA MICA AND CERAMIC-DIELECTRIC	JAN MICA AND PAPER-DIELECTRIC	JAN CERAMIC DIELECTRIC	VOLTAGE RATING	TEMPERATURE COEFFICIENT
	1	0	BLACK	1	1	1		A
	10	1	BROWN	10	10	10	100	B
	100	2	RED	100	100	100	200	C
	1,000	3	ORANGE	1,000	1000	1000	300	D
	10,000	4	YELLOW	10,000			400	E
	100,000	5	GREEN	100,000			500	F
	1,000,000	6	BLUE	1,000,000			600	G
	10,000,000	7	VIOLET	10,000,000			700	
	100,000,000	8	GRAY	100,000,000		0.01	800	
	1,000,000,000	9	WHITE	1,000,000,000		0.1	900	
5	0.1		GOLD	0.1	0.1		1000	
10	0.01		SILVER	0.01	0.01		2000	
20			NO COLOR				500	

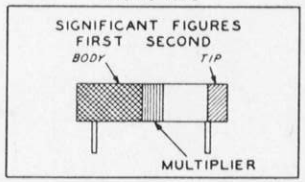
RESISTOR COLOR CODES

RMA COLOR CODE FOR FIXED COMPOSITION RESISTORS

AXIAL TYPE

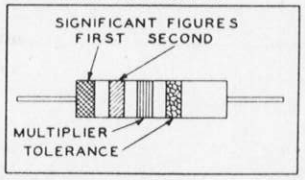


RADIAL TYPE



JAN COLOR CODE FOR FIXED COMPOSITION RESISTORS

AXIAL TYPE INSULATED



RADIAL TYPE NON-INSULATED

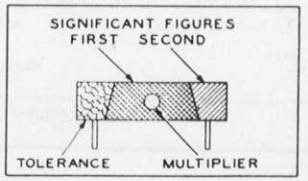
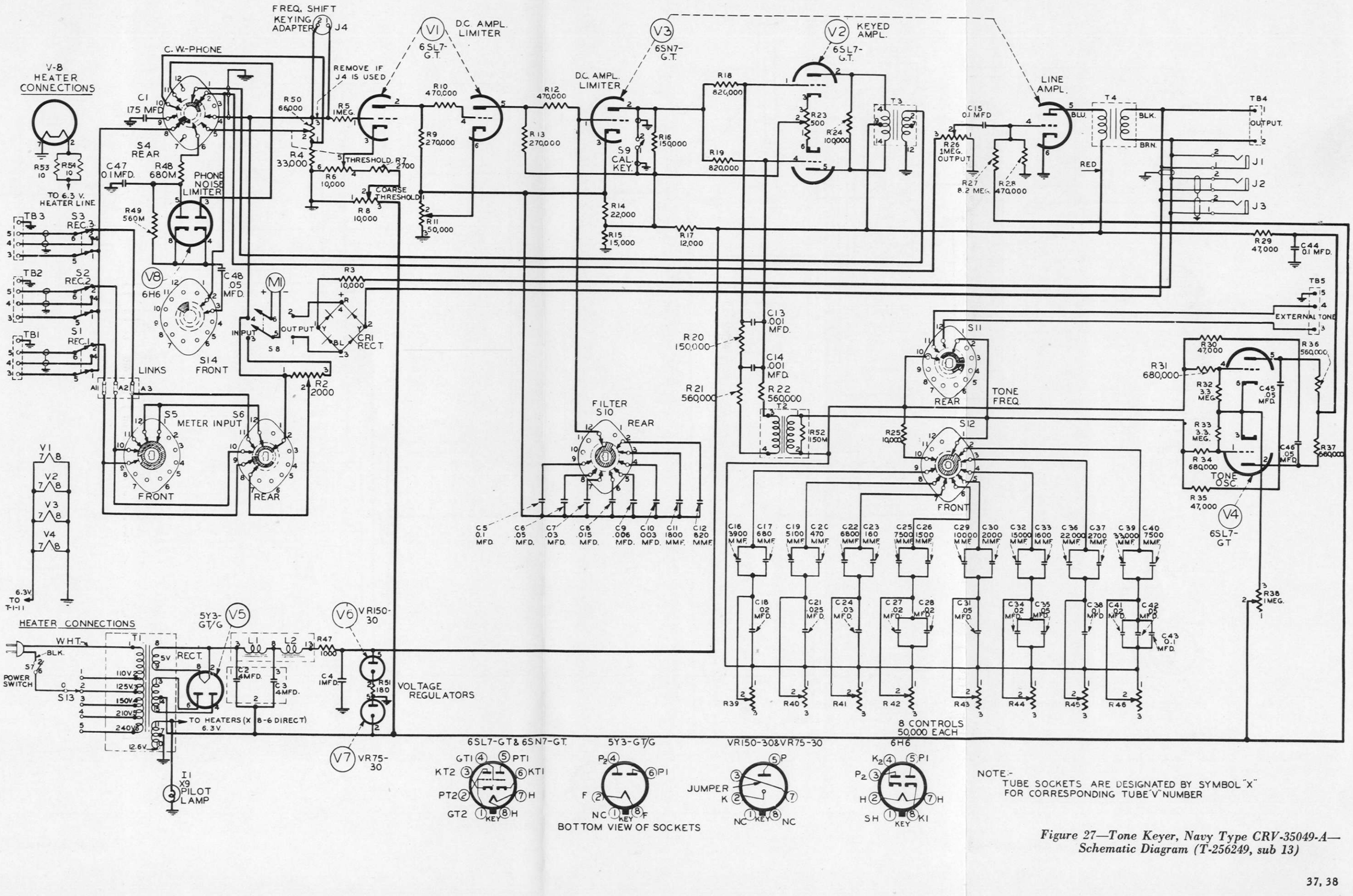


TABLE 8-7. LIST OF MANUFACTURERS
MODEL RDM-1 DIVERSITY RADIO RECEIVING EQUIPMENT

CODE NUMBER	MFR. PREFIX	NAME	ADDRESS
1	CRV	Radio Corporation of America (Victor Division)	Front and Cooper Streets Camden, N. J.
30	CPH	American Phenolic Corp.	1830 S. 54th Street Cicero, Ill.
47	CHH	Arrow Hart and Hegeman Electric Co.	102 Hawthorne Street Hartford, Conn.
133	CMG	Cinch Mfg. Co.	2339 W. Van Buren Street Chicago, Ill.
161		Crowe Name Plate and Mfg. Co.	401 N. Broad Street Philadelphia, Pa.
207	CER	Erie Resistor Corp.	644 W. 12th Street Erie, Pa.
216	CBV	John E. Fast Co.	3123 N. Crawford Avenue Chicago, Ill.
252	CAG	General Radio Co.	30 State Street Cambridge, Mass.
306	CHU	Harvey Hubbell, Inc.	Bridgeport, Conn.
321	CIR	International Resistance Corp.	401 N. Broad Street Philadelphia, Pa.
334	CJC	Howard B. Jones Co.	2300 Wabanasia Avenue Chicago, Ill.
382	CMA	P. R. Mallory and Co.	1941 Thomas Street Indianapolis, Ind.
509	CRK	Radio Condenser Co.	Camden, N. J.
516	CRV	Radio Corporation of America (Tube Division)	151 Westside Avenue Harrison, N. J.
564		Selenium Corp. of America	Los Angeles, Calif.
699	CUF	Ucinite Co. (Division of United Carr Fastener)	1 Nevada Street Newtonville, Mass.
714	CAW	Aerovox Wireless Corp.	742 Belleville Avenue New Bedford, Mass.
722	CBZ	Allen Bradley Co.	1326 S. 2nd Street Milwaukee, Wis.
727	CBN	Central Radio Laboratory	900 E. Keefe Avenue Milwaukee, Wis.
731	CAYT	Allen Mfg. Co.	Hartford, Conn.
752	CAD	Ward Leonard Co.	6 S. Street Mount Vernon, N. Y.
755	CEB	H. H. Eby Co.	4700 Stenton Avenue Philadelphia, Pa.
776	CAYS	Drake Mfg. Co.	1713 Hubbard Street Chicago, Ill.
784	CLF	Littelfuse Laboratories, Inc.	4757 N. Ravenswood Avenue Chicago, Ill.
793	CD	Cornell Dubilier Electric Corp.	1000 Hamilton Blvd. S. Plainfield, N. J.
794	CTD	Tobe Deutschmann Corp.	Canton, Mass.

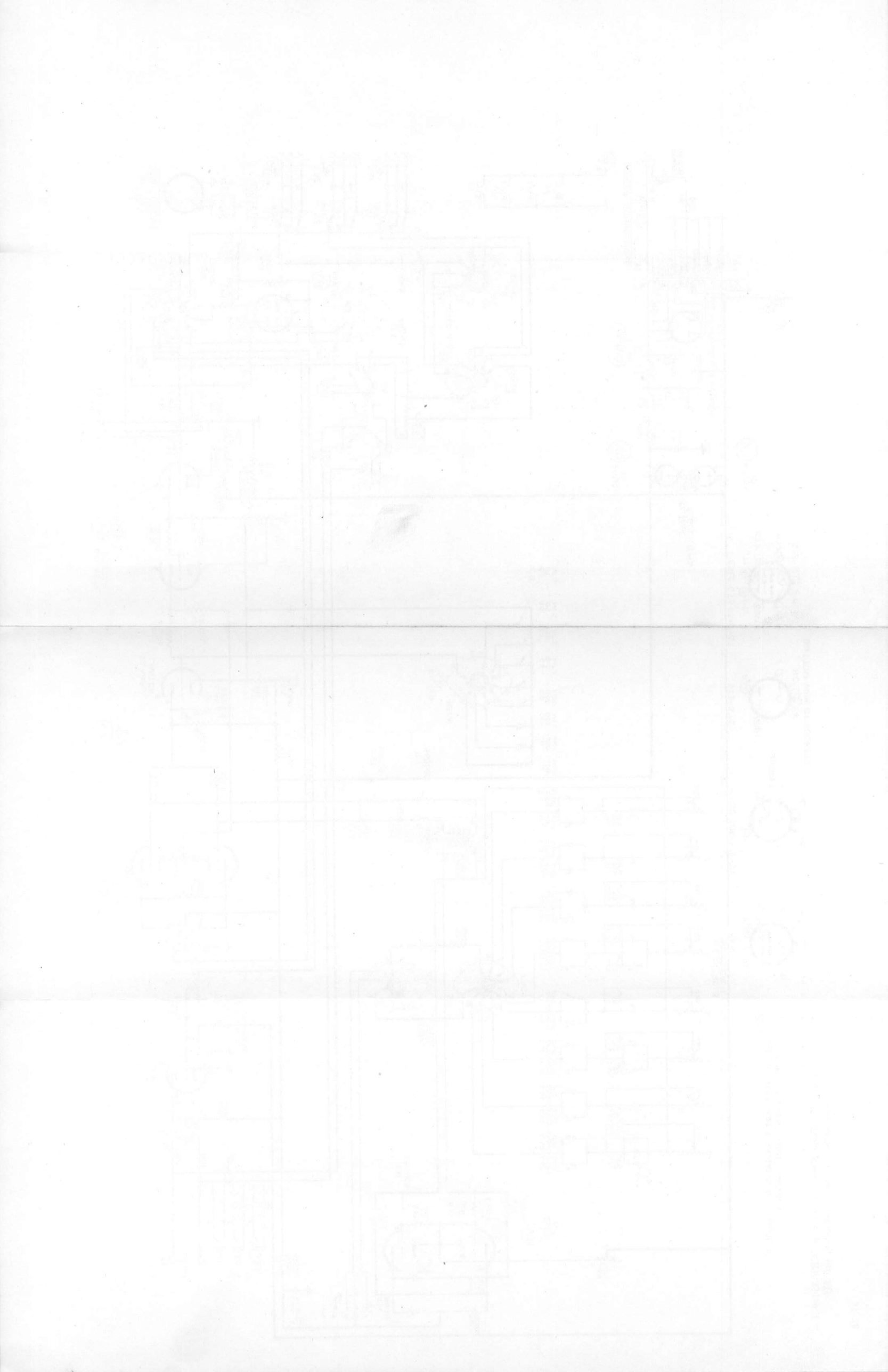
1050		General Electric Mazda Corp.	Bloomfield, N. J.
1223	CSP	Seymour Products Co.	1937 Lightfoot Street Seymour, Conn.
1277	CRA	Utah Radio Products Co.	812 Orleans Street Chicago, Ill.
1377		Westinghouse Electric and Mfg. Co.	Mansfield, Ohio
1382		Westinghouse Electric and Mfg. Co.	Newark, N. J.
1554		Palnut Company	61 Cordier Street Irvington, N. J.
1604		Wiremold Company	Hartford, Conn.

IB-39505-WXY-1



NOTE:-
TUBE SOCKETS ARE DESIGNATED BY SYMBOL "X" FOR CORRESPONDING TUBE "V" NUMBER

Figure 27—Tone Keyer, Navy Type CRV-35049-A—Schematic Diagram (T-256249, sub 13)



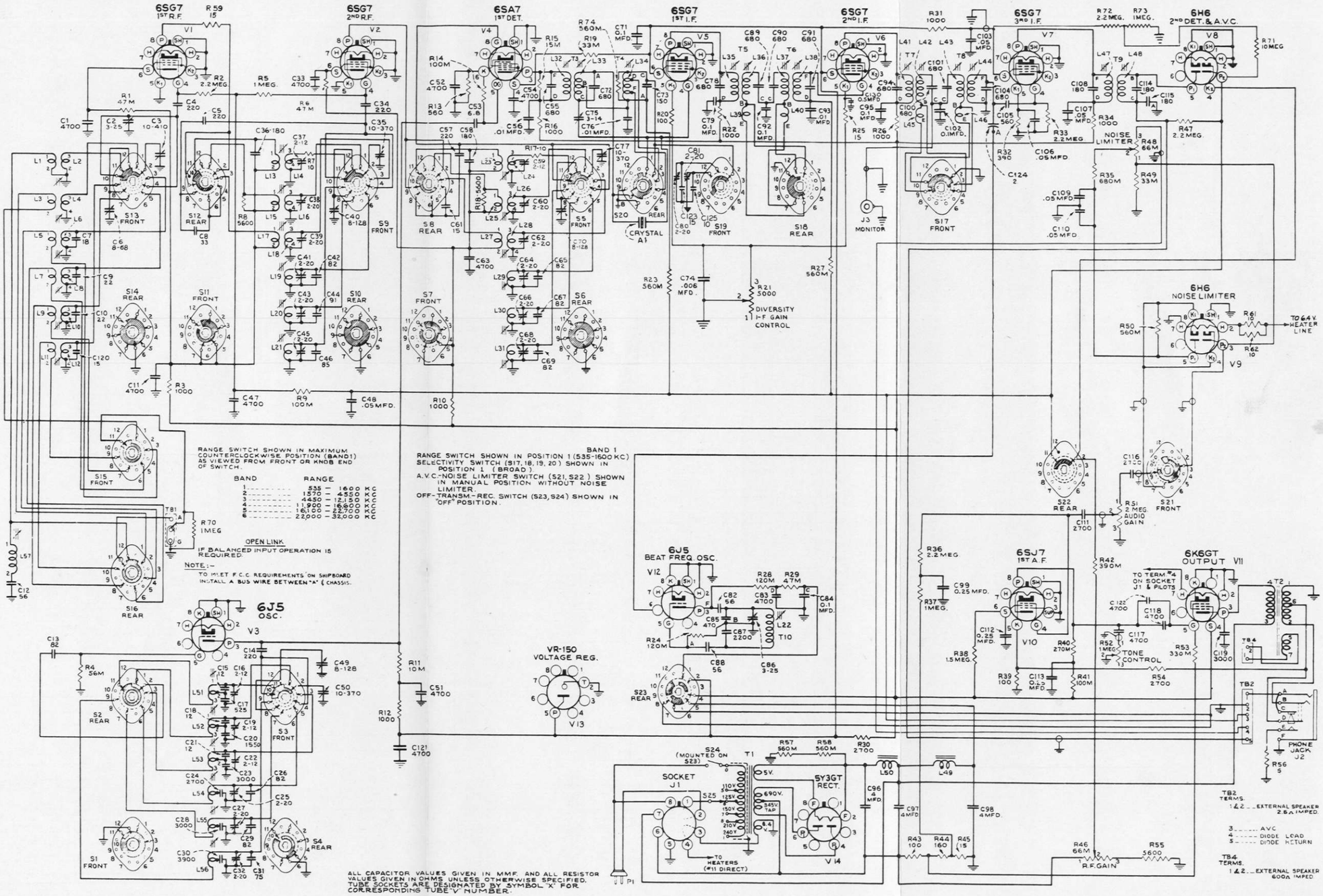


Figure 28—Radio Receiver, Navy Type CRV-46246-B Schematic Diagram (W-309158, sub 1)

Figure 29—Interconnecting Cable Arrangements (T-626542)