

COMPLETE INDEX

FOR

**VOLUMES XVI, XVII, XVIII, XIX
AND XX**

AND

HOW IT WORKS

FOR

VOLUME XX



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IMPEDANCE MATCHING

OF RECEIVERS TO TRANSMISSION LINES

By JOHN F. RIDER

QUITE frequently communication receivers have input impedance ratings which do not properly match the impedance of the transmission line which feeds it. Surprisingly enough such mismatch can very greatly affect the sensitivity of the receiver, so much so that we have, on more than one occasion, noted great dissatisfaction expressed by the owner of the receiver concerning its performance. The receiver was condemned, whereas in truth, there was nothing at all wrong with the receiver; rather it was a simple case of incorrect use of matching the line to the receiver.

Increase in sensitivity, amounting to as much as 18 db, has been noted when such a receiver was properly matched to its transmission line. The loss of this amount of signal strength in a communication system is sufficient in every case to very materially influence the utility of the device. The matching method to be described is intended to remedy such conditions.

Matching Considerations

It must, of course, be understood that any impedance-matching arrangement, which is based upon a match at a specific frequency such as shall be described, is most effective at the frequency used in the equation. However, it must also be understood that a certain latitude in operation prevails and while the matching may be done at one frequency, it will be found effective over a range of frequencies. Thus, if the center frequency of a band is selected, the matching system will be found to be effective over that band, provided that the band is not too broad, although the greatest effectiveness will be found at the frequency for which the match is planned.

Range of Frequencies

The range of frequencies over which an improvement will be noted with such a match is a variable depending a great deal upon the operating parameters employed. In amateur communication receivers, the design of the circuitry is such that if, for example, the 10-meter band is selected and an impedance match is planned at the midfrequency, or around 28.8 Mc, an improvement will be noted throughout the range of from 28 to 29.7 Mc. Naturally, the improvement will

decrease both sides of the match frequency, becoming least at the extremes of the band. This means that the choice of the matching frequency, relative to the portion of the band over which the receiver will be operated most in any one location, is an important consideration. This is so because the less the bandwidth over which the receiver is expected to perform, the less will be the loss when matching is accomplished at the midpoint or center frequency of that band.

For example, let us assume that, for one amateur station, the normal frequency of operation extends from 28 to 29 Mc and, in another station, it extends from 28 to 29.7 Mc. Let us further assume that the receiver in each case is matched to the transmission line at the center frequency of each band, which for the first case is 28.5 Mc and for the second case is about 28.8 Mc. If both stations are receiving a 28-Mc signal, a lower loss will occur with the station that is matched to 28.5 Mc. Admittedly, the difference is not too great but since communication operations demand the utmost in signal strength, such conditions warrant more than just casual thought.

Quarter-Wave Line

The basis of matching is the use of the impedance-transforming properties of a quarter-wave line which is shorted at one end and has the other end open. The open end joins the higher impedance of the two sources to be matched, which, in the example to be illustrated, is the receiver. Somewhere along the line between the open end and the shorted end is the point where the transmission line or lower impedance is connected as shown in Fig. 1. This point is dependent upon the ratio of the lower to higher impedance and hence upon the ratio of the line impedance to receiver impedance. Regardless of the characteristic impedance of a line, the open end of the shorted quarter-wave line will present a very high impedance. Therefore, the open end of a shorted quarter-wave line may be connected across a point without loading the circuit at that point. By tapping a feed point onto such a shorted quarter-wave line at the appropriate place along its length, the system can be employed to make one end look like the impedance of the load and the other end look like the impedance of the source, thus making the source devices see the proper impedances at the respective ends.

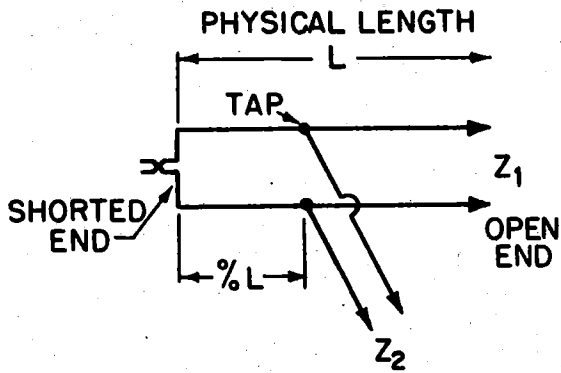


Fig. 1.—Diagram of quarter-wave stub used for impedance matching transmission line to receiver. One end of the stub is shorted and the other end open. The lower impedance to be matched is the one that is connected to the tap along the stub. The higher impedance is connected to the open end. Calculations as to the length L and the tap are included in the text.

Impedance Calculations

The determination of the impedance and physical length of the quarter-wave section and also the proper tapping point is simple if certain definite steps are followed. The impedance of the matching section is determined by the following equation

$$Z_s = \sqrt{Z_1 \times Z_2}$$

where Z_s is the impedance of the quarter-wave section, Z_1 is the impedance of the antenna transmission line, and Z_2 is the impedance of the load, which in this case is the receiver.

Let us take two typical cases. The first of these calls for the matching of a 52-ohm line to a 300-ohm receiver. Substituting these numbers into the equation above, as follows,

$$Z_s = \sqrt{52 \times 300}$$

results in the approximate answer of 125 ohms. This quotient indicates that the characteristic impedance of the line which will be used for the quarter-wave section must be 125 ohms. No such line is available commercially so that a compromise must be made by using that commercial line which most closely approximates 125 ohms. Such a line is the conventional 150-ohm line used in television systems.

Free-Space Length

Assuming that a line with a characteristic impedance of 150 ohms will be used one-quarter wave long, the next consideration is the determination of the free-space length of this line. In order to compute this

length, it is necessary to select the frequency at which the match will be made. Let us assume that operation will be carried on in the 10-meter band and that since, in the majority of cases, operation is limited to the band embracing 28 to 29 Mc, a satisfactory midfrequency is 28.5 Mc, so we shall use 28.5 Mc as the base frequency. The equation which gives the result in inches for the free-space length of this line is

$$\frac{2950}{f_o}$$

where f_o is the base frequency. Substituting our figures, the equation reads

$$\frac{2950}{28.5}$$

Thus the free-space length of this line is 103.5 inches. However, the determination of the free-space length of the line is only the first step. We must now determine the physical length based upon the velocity of propagation along the line. According to Table I relative to the commonplace transmission lines available on the open market, the velocity of propagation of the 150-ohm twin lead is 77 per cent, which means that the free-space length must be multiplied by 0.77 in order to arrive at the final or physical length of the line.

TABLE I

Line	Velocity of Propagation
75-ohm twin	68%
150-ohm twin	77%
300-ohm twin	82%
72-ohm coaxial (RG59U)	66%
95-ohm twin shielded	66%

This length is found to be 80 inches which means that the quarter-wave matching section made of 150-ohm twin lead will be 80 inches long. One end will remain open and the other end will be shorted by exposing a small piece of each of the conductors and soldering them together. The minimum amount necessary to enable soldering should be exposed.

Tap Location

The location of the tap where the transmission line will be connected is determined from Table II. Since Z_2 in our example is 52 ohms and Z_1 is 300 ohms, the ratio of Z_2/Z_1 is 17.3. As can be seen, this ratio lies between 0.15 and 0.20 on Table II or between 25 and 30 per cent in from the shorted end. An approximation corresponding to midway between these two limits results in the tapping point being about 27.5 per cent

from the shorted end. Since the line is 80 inches long, 27.5 per cent amounts to 22 inches, and this is the location of the tap from the shorted end.

TABLE II
STUB CONNECTIONS FOR SPECIFIC IMPEDANCE RATIOS

$\frac{Z_2}{Z_1}$	% of L from Shorted End	$\frac{Z_2}{Z_1}$	% of L from Shorted End
0.05	14	0.55	53
0.10	20	0.60	56
0.15	25	0.65	59
0.20	30	0.70	63
0.25	34	0.75	67
0.30	37	0.80	70
0.35	41	0.85	75
0.40	44	0.90	80
0.45	47	0.95	90
0.50	50	1.00	100

where: Z_1 is the larger of the two impedances
 Z_2 is the smaller impedance.

Courtesy Crosley Div. Avco Mfg. Corp.

Let us take another example in which the transmission-line impedance is 104 ohms, such as would be the case if two 52-ohm coaxial lines were used in parallel with the shields joined. The solution is as follows

$$\begin{aligned} \text{Stub impedance } Z_s &= \sqrt{104 \times 300} \\ &= 176 \text{ ohms.} \end{aligned}$$

Closest to this value is the 150-ohm line.

Free-space length for the midfrequency of the chosen band is

$$\begin{aligned} \frac{2950}{28.5} &= 103.5 \text{ inches.} \\ \text{Physical length} &= 103.5 \times 0.77 \\ &= 80 \text{ inches.} \end{aligned}$$

The location of the tap is computed as follows

$$\frac{Z_2}{Z_1} = \frac{104}{300} = 34.7$$

Percentage of L from shorted end (see Table II) is, therefore, approximately 41 per cent. Thus the tap length is

$$80 \times 0.41 = 32.8 \text{ inches.}$$

It is, of course, possible that the transmission line may have a higher impedance than the receiver. The solution of the matching-section length is carried out in exactly the same way as before except that the connections are inverted, that is, the open end of the line would be connected to the higher impedance, which is the transmission line, and the tapped point along the line would be connected to the receiver. For the sake of illustration, the process of solving a typical case,

such as a 600-ohm line and a 300-ohm receiver, is to use the 300-ohm impedance as Z_2 and the 600-ohm impedance as Z_1 , in which case the location of the tap will be midway along the length of the line. Such a match would require the use of a 425-ohm *open line* because commercial transmission lines approximating this impedance are not available. As can be seen, the application of such matching stubs is much more convenient when the transmission-line impedance is less than that of the receiver, if for no other reason than that commercial lines approximating the required impedances are more easily available. As a matter of fact, in the case just given where the transmission line is of a higher impedance than the receiver, the use of a 300-ohm twin lead in place of the 425-ohm open line would afford some benefit, although not as much as if the proper line were used. At any rate, it would be preferable to no matching section at all.

The early reference to the possible gain in signal strength may seem incongruous with respect to the losses due to impedance mismatch, yet it has been found in virtually every case that proper match of this type affords very substantial improvements. The possible reason for this is that the rating of receiver input systems is nominal and that, in many cases, the actual input impedance exceeds the nominal rating by an appreciable magnitude so that the match attained in this fashion is more beneficial than would be anticipated from a 4:1 or 5:1 mismatch in impedance.

Band Changing

It is, of course, natural to consider the matter of behavior of the bands other than the 10-meter band for which the impedance match is used. What is the action when the receiver, which is matched on 10 meters, is used on another band? Obviously a quarter-wave section on 10 meters becomes an eighth-wave section on 20 meters, and the match no longer prevails. As a matter of fact, it would be detrimental to operation. Thus, the individual who employs a communication receiver on various bands is faced with the problem of providing the number of such matching stubs between the transmission line and the receiver, each of which may be switch-controlled so as to place the proper line into the circuit. In the event that different antennas and different transmission lines are used for operation in the different joints, individual matching sections can be constructed along the lines described for each of the joints. The open ends of these stubs may all be connected at the receiver end without doing too much harm, provided that the receiver presents the higher of the two impedances involved in each of the stub calculations.

COUPLED CIRCUITS

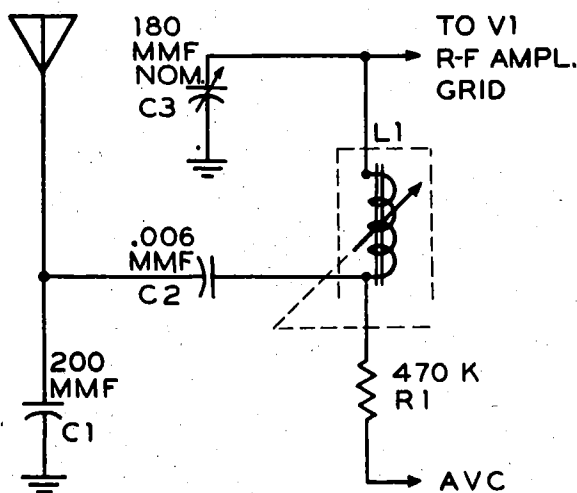
BY WILLARD MOODY

COMMUNICATIONS and standard commercial receivers use a variety of coupling methods for transferring energy from one part of a circuit to another. This energy may be in the form of a modulated or unmodulated r-f signal. It may, in some cases, be an i-f or an audio signal.

Various coupled circuits used in receivers shown schematically in Volume XX will be illustrated and described.

Motorola 309

The r-f input circuit of this set appears in Fig. 1. At first glance, the circuit appears to be quite simple.

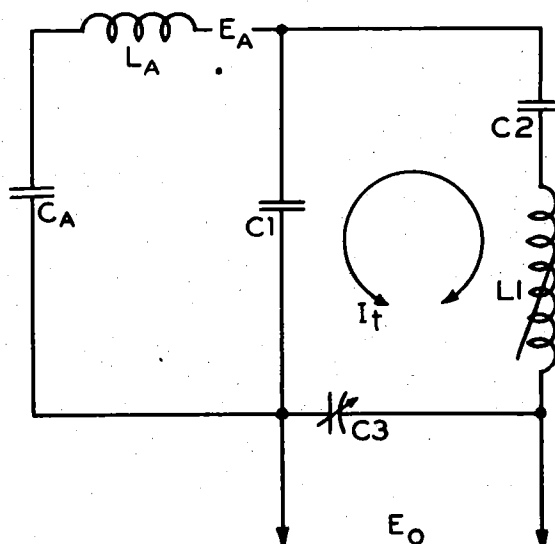


After Motorola

Fig. 1.—R-f input circuit of Motorola 309 auto radio.

Actually, there is more to it than meets the eye upon quick inspection. A careful study reveals some interesting aspects.

Suppose that, to simplify the analysis, we redraw the circuit as shown in Fig. 2. The capacitance C_A , for the sake of simplicity, may be assumed to be the lumped antenna capacitance, and the inductance L_A is the lumped antenna inductance.



Courtesy Motorola

Fig. 2.—Equivalent and simplified circuit of Motorola 309 input arrangement.

How did we arrive at these assumptions? Consider that the antenna is a relatively short vertical wire or rod, much less than a half-wave long at broadcast frequencies. Then we have the equivalent antenna circuit shown in Fig. 3. The automobile frame is equivalent to a counterpoise and has such a large capacitance to earth or ground that we may consider the automobile metal body and frame to be at ground potential. As a vertical wire is used, its inductance will be the principal factor and its capacitance to ground will be relatively small. It will be a low-capacitance type antenna.

As we move along the antenna from the terminal A to the tip T we find that each elemental section of the antenna conductor has the property of inductance. We have shown L_1 , L_2 , and L_3 , as the series inductances. Every inch of the conductor, or even smaller linear parts, has an L value. If we add $L_1 + L_2 + L_3$, we get a lumped or sum inductance value which we have called L_A in Fig. 2.

Similarly, every inch of the conductor or point on it has a capacitance with respect to the frame of the car and, therefore, to earth or ground, since the car or

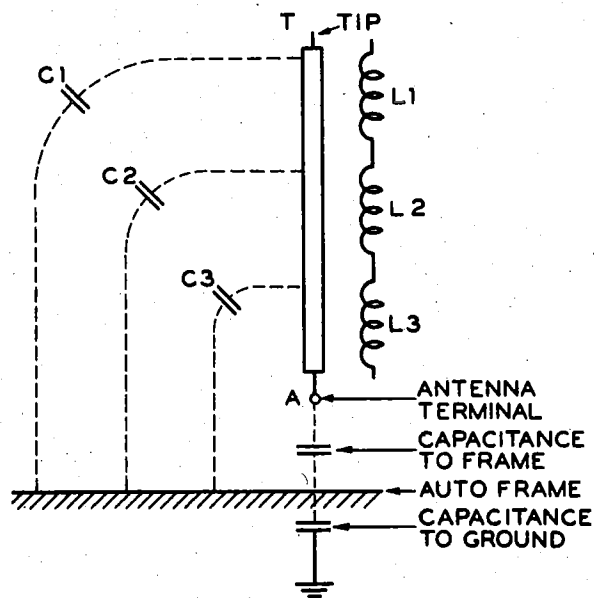


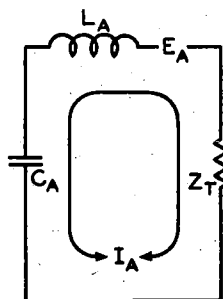
Fig. 3.—Diagram of vertical antenna circuit used with auto radio.

automobile frame is virtually at ground potential. As we move from terminal A to the tip of the antenna, the capacitance of a point on the antenna with respect to ground decreases, since the distance between the point and ground has also increased. C3 is greater than C2; C2 is greater than C1, etc. Consequently, we can consider that the main component of capacitance will be C3 and the return path for current flow at the end of the antenna will be C1. This end value is shown as C_A in Fig. 2, and it should not be confused with C1 in Fig. 2 or Fig. 1.

As C1 is very large, comparatively, and is in shunt with C3, with reference to Fig. 2 and Fig. 3, we can simplify the circuit considerably by neglecting C3 and considering only C1.

Now, with reference to Fig. 2, the voltage induced in the antenna when a radio wave links with it is marked E_A . This voltage causes a current to flow in the

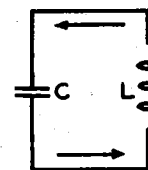
Fig. 4.—Equivalent series-resonant circuit.



antenna circuit, which is a series circuit consisting of E_A , L_A , C_A and the parallel L-C circuit. For further simplicity, this parallel L-C circuit of C1, C3 and L1-C2 may be represented by an impedance symbol Z_T , as shown in Fig. 4. At resonance of this circuit C1-C3-C2-L1, Z_T has a maximum value and the value of I_A is a minimum value. The voltage across Z_T is I_A multiplied by Z_T and is a maximum. Off resonance, the voltage decreases according to the slope of the selectivity curve, as in any tuned circuit.

This aspect of the C1-C2-L1-C3 circuit as a series impedance Z_T , resistive in nature, is one feature of the circuit. However, from parallel resonant circuit theory, we know that when energy is fed to an L-C circuit such as that in Fig. 5, the circuit will oscillate and a maximum circulating current will be obtained at resonance. The frequency of resonance is given by the familiar equation or formula shown in the drawing.

Fig. 5.—Simple L-C circuit in which oscillation occurs and exchange of energy between inductance and capacitance.



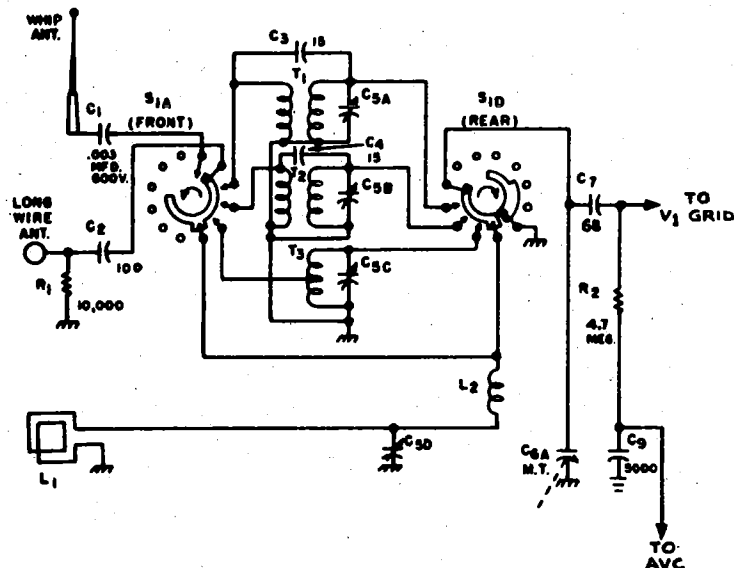
This current is marked I_t in Fig. 2 and is apart from the exciting current I_A in Fig. 4. In this receiver, the Motorola 309, from a practical standpoint, the tuning is controlled in traversing the receiver dial, by varying the inductance of L1. At resonance, when I_t is a maximum, the voltage across C3 (Fig. 2) is also a maximum. This follows from the fundamental fact that $E_o = IX_o$ in a capacitance circuit. Above resonance, the voltage across L1 rises and that across C3 drops, since the reactance of L increases and that of C3 diminishes. This follows from the familiar formulas $X_L = 2\pi fL$ and $X_o = 1/(2\pi fC)$.

C3 is essentially a trimmer capacitor which is adjusted at the high end of the band. The output voltage of the network is marked E_o in Fig. 2 and is the signal potential fed to V1, which is an r-f amplifier tube in the receiver.

This concludes the discussion on the Motorola 309 input circuit. It has been demonstrated that this circuit, which appears to be simple, can be considered more complex than would ordinarily seem to be the case, upon closer inspection.

Hallcrafters S-72

The input circuit of this receiver is shown in Fig. 6. The switching system permits selection of four bands



After Hallicrafters
Fig. 6.—Antenna input and switching circuit of
Hallicrafters S-72.

of frequencies. Band 1 extends from 550 to 1,600 kc; Band 2 extends from 1,500 kc to 4.4 Mc; Band 3 extends from 4.5 to 11.5 Mc; and Band 4 extends from 11 to 30 Mc.

$L1$ is a loop antenna. $C5d$ is a trimmer on broadcast operation. $L2$ is an antenna loading coil used only on the broadcast band. $T1$ is used on Band 4; $T2$ on Band 3; and $T3$ on Band 2.

The bandswitch elements $S1A$ and $S1B$ permit selection of $L1$, $T3$, $T2$, or $T1$. The switch is shown in the broadcast-band position. The long-wire antenna circuit is connected through $C2$ and $S1A$ to $L2$ and $S1B$. The circuit then traces to the $V1$ grid circuit. The whip antenna is disconnected on Band 1, which is the broadcast band.

When the switch is rotated to the 2nd position, referring to $S1A$ and a counterclockwise direction, $S1B$ moves simultaneously in a clockwise direction. These two switch segments are ganged together by a common shaft.

On the 2nd position, $L2$ is connected to the tap on $T3$ for Band 2 operation from 1,500 kc to 4.4 Mc. The long-wire and whip antennas are connected to each other through $C2$, $S1A$, and $C1$. The $V1$ grid is connected to $T3$. The loop and $L2$ are out of the circuit.

In the third setting of the switch, the loop is disconnected from the $V1$ grid circuit, and $T2$ is connected to the whip and long-wire antenna circuit.

In the fourth position of the bandswitch, $T1$ is connected to the whip and long-wire antenna circuit and the loop is out of the circuit (not connected). As shown, the antenna input circuit coupling and characteristics are varied to suit the requirements for broadcast, medium, and high frequencies.

Motorola 79XM21

This receiver uses a rather unusual method of coupling the $V1$ r-f amplifier to the $V2$ converter. Fig. 7 is a breakdown circuit used for explanation. On f.m., the plate load for $V1$ consists essentially of $L4$ shunted by the input impedance of the following $V2$ stage. $R3$ is shorted by $S2B$ on f.m.

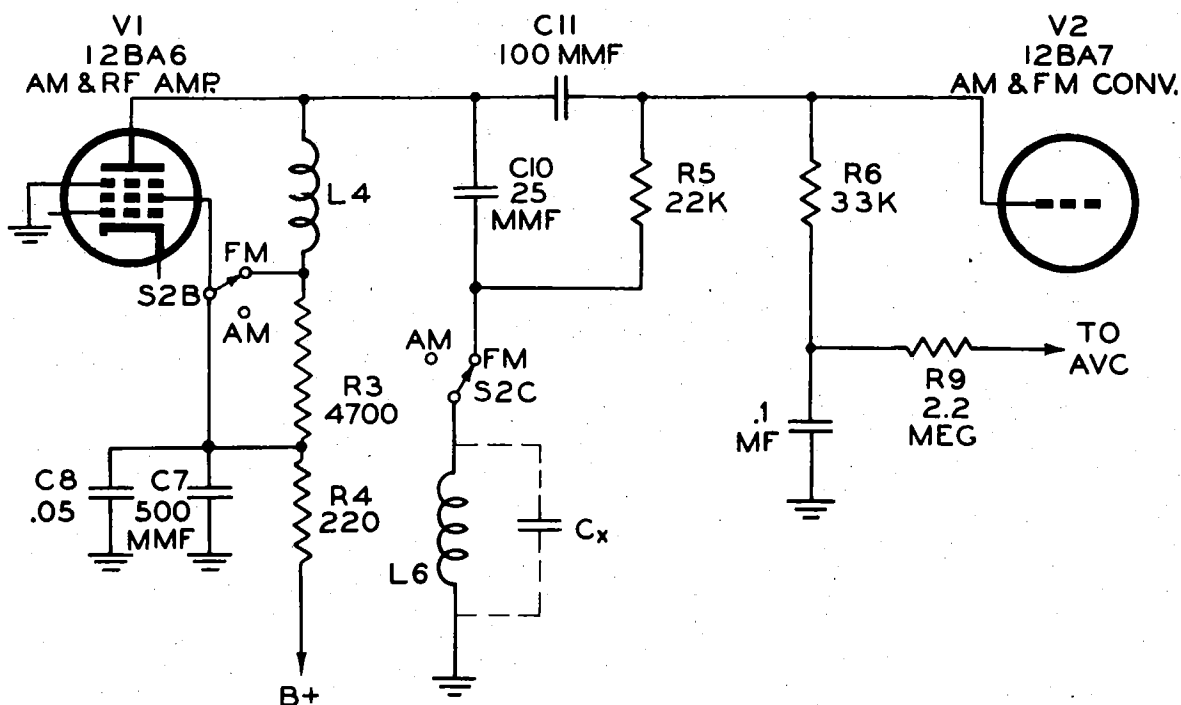
$S2C$ connects $L6$ in the circuit on f.m. As $L6$ is the equivalent of a parallel $L-C$ tuned circuit, functioning as a quarter-wave transmission line of variable length, we may visualize $L6$ as being a coil with a paralleled capacitance C_X . Both the L and C values of the line are varied as the shorting plunger is moved into the coil-capacitor ($L6$) assembly, and the shorter in electrical length the line is made, the higher becomes the operating frequency.

Conversely, as the line length is increased electrically, the frequency becomes lower. Basically, we know that maximum voltage across the load will be obtained when the impedance is a maximum, and this condition is secured at resonance for a particular frequency.

On f-m frequencies of the order of 88 to 108 Mc, the reactance of $C11$ is negligible and that of $C10$ is very small. Therefore, we can visualize, at resonance, a simple resistive impedance of high value between $S2C$ and ground, across the terminals of $L6-C_X$.

The voltage across this impedance is essentially that across the input circuit of $V2$, since $R5$ is small in value and the reactances of $C11$ and $C10$ are insignificant.

On a.m., $R3$ is not shorted by $S2B$ and the $V1$ plate load is essentially the total impedance of $L4$ and $R3$ shunted by the input impedance of the $V2$ stage. The impedance of $L4$, however, is so small as to be negligible at broadcast frequencies and the input impedance

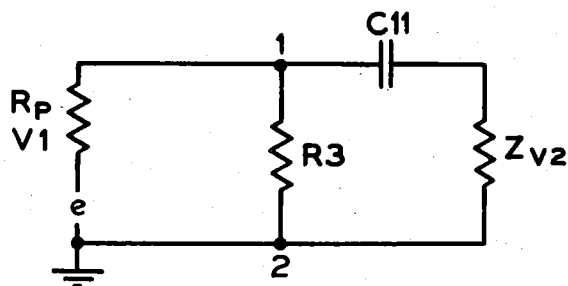


After Motorola

Fig. 7.—Coupling of $V1$ r-f amplifier to $V2$ converter in Motorola 79XM21.

of the $V2$ stage is so high that, for all practical purposes, the $V1$ plate load R_P is 4,700 ohms. $C10$ has an appreciable reactance at broadcast frequencies and may be considered to have been removed from the circuit on a.m.

The coupled circuit now may be simplified to that of Fig. 8, as an approximation. Note that the f-m quarter-



Courtesy Motorola

Fig. 8.—Simplified coupled circuit in Motorola 79XM21.

wave line is out of the coupled circuit on a-m operation. With reference to Fig. 8, e is the internal voltage of $V1$ considered as a potential generator, Z_{V2} is the input impedance of tube $V2$ and the lower terminal of $R3$ is

considered to be grounded since the reactance of the parallel combination of $C8-C7$ may be considered negligible.

$C11$ and Z_{V2} , it is seen, form the elements of a simple voltage divider. The potential across $R3$ is applied to Z_{V2} through $C11$, which is the linking element in the coupled circuit. The voltage attenuation of $C11$ tends to increase with decreasing frequency, but as the input impedance of $V2$ is essentially capacitive and rises with decreased frequency, a compensating or balancing action is achieved.

For maximum voltage across terminals 1-2, $R3$ should have a high value, and the net impedance across these terminals should be high, but by making $R3$ low in value a broader band-pass characteristic is obtained at the expense of voltage gain.

The tuned input circuit of $V1$ is not shown here but is shown in the complete schematic in Volume XX, and is adequate for preselection on the broadcast band.

RCA 9BX5

Coupling between the 1U4 i-f plate- and grid-return circuits, shown in Fig. 9, results in gain reduction accompanied by increased stability at the i-f level. A

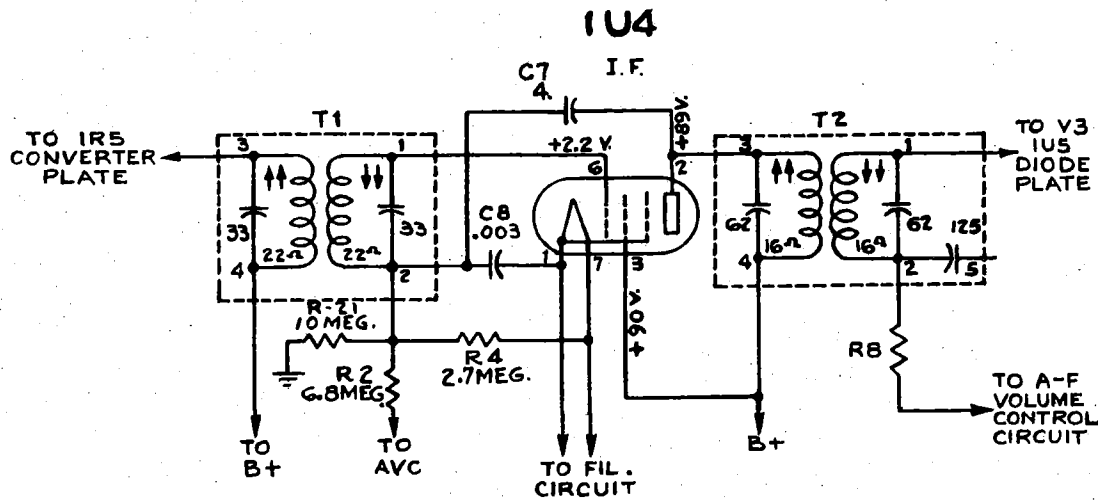


Fig. 9.—Coupled circuit in RCA 9BX5.

After RCA

signal voltage developed in the plate circuit is fed to C8, a 0.003- μ f capacitor, through C7, a 4- μ f unit. A voltage drop develops across C7 and the impedance of C8 is not large at the i-f level. However, only a small amount of voltage is required and a sufficient potential for the desired purpose, negative feedback, is obtained across C8. This potential acts in series with the grid-filament input circuit of the 1U4. As the feedback voltage is out of phase with the input voltage across the secondary of T1, partial cancellation results. The stage is thus limited in the tendency to oscillate, a trouble often encountered in i-f stages.

RCA 9X641

This receiver uses an unusual coupling circuit for signal transfer from r-f plate to converter grid, as shown in Fig. 10. L1-C8 is a resonant primary circuit. L2-C2, C5, is the usual resonant secondary circuit. However, the capacitance loading effect of the V2 input circuit is minimized by tapping down on the secondary coil and a voltage reduction is also secured. The primary purpose of the circuit is evidently to achieve selectivity and equalized sensitivity over the tuning range. Capacitive coupling at the high end of the band is obtained by means of the "gimmick", an r-f cable, shown in the drawing. An r-f voltage is transferred through this capacitance from the 12SK7 r-f plate to the 12SA7 converter grid. This is equivalent to the usual coupling capacitance or "gimmick" often found to provide coupling between the primary and secondary of broadcast antenna transformers in receivers.

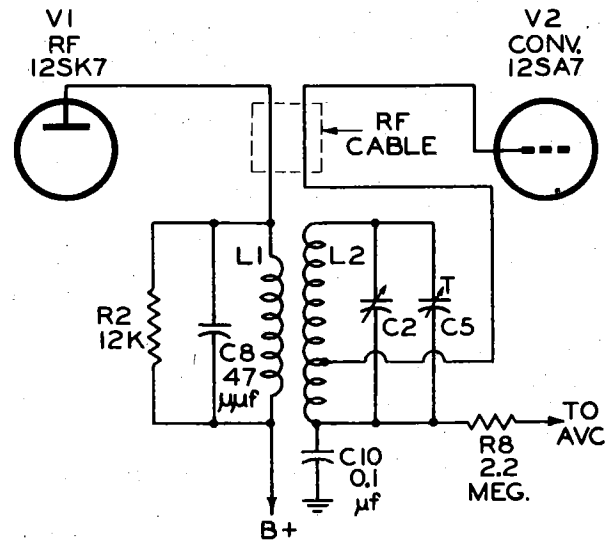
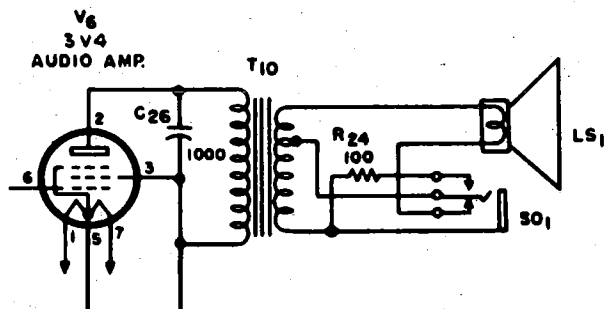


Fig. 10.—Signal transfer from r-f plate to converter grid in RCA 96X641.

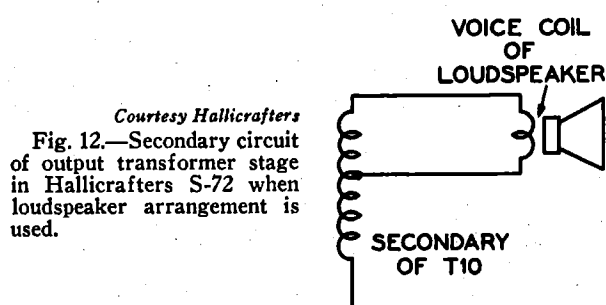
After RCA

Hallicrafters S-72

The output circuit of this receiver is shown in Fig. 11. This coupled circuit uses a transformer. The voice coil is connected in the circuit of Fig. 11, which can be simplified to the equivalent circuit in Fig. 12. The plug is out of the headphone jack. The voice coil is connected across a section of the secondary. The impedance of the voice coil is usually quite low, less than about 10 ohms. The impedance of the headphones will usually be quite high, 2,000 ohms or higher. To accom-

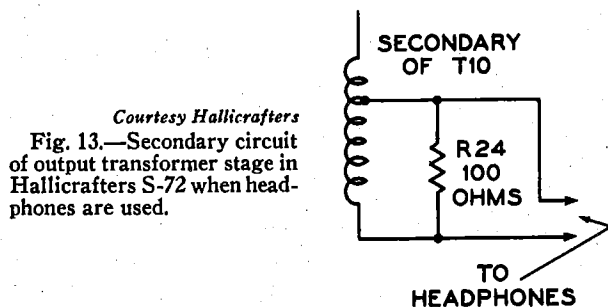


After Hallicrafters
Fig. 11.—Audio output circuit of Hallicrafters S-72.



Courtesy Hallicrafters
Fig. 12.—Secondary circuit of output transformer stage in Hallicrafters S-72 when loudspeaker arrangement is used.

moderate the changed impedance of the circuit when a headphone plug is inserted in *S01*, the circuit is equivalent to that of Fig. 13. The voice coil is disconnected, silencing the loudspeaker. The 100-ohm loading re-

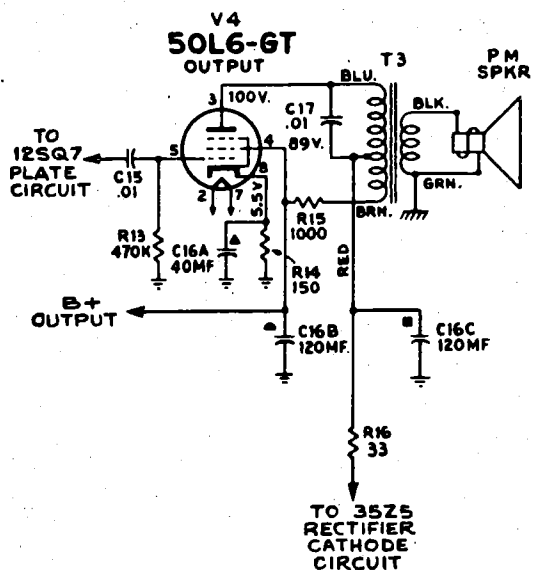


Courtesy Hallicrafters
Fig. 13.—Secondary circuit of output transformer stage in Hallicrafters S-72 when headphones are used.

sistor limits the voltage across the headphone circuit to prevent damage and overloading of the headphones.

RCA 9X571

Coupling between the upper section of the primary winding of *T3* and the lower portion permits hum cancellation in the output transformer. With reference to Fig. 14, a hum current may be assumed to flow from



After RCA
Fig. 14.—Hum reduction circuit in output stage of RCA 9X571.

the 50L6 plate to the primary tap, producing core flux having a hum frequency cyclic change. An opposite current, producing an opposing electromagnetic field and cancelling the first hum flux, may be assumed to flow from the screen circuit and *R15* through the lower portion of the *T3* primary and to the tap. The common path from the tap to the 35Z5 cathode is through *R16*. *C16C* assists in hum reduction.

Using the circuit arrangement described, economy and efficiency are obtained simultaneously.

INDEX TO A-M AND F-M DATA IN RIDER'S "HOW IT WORKS"

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6D127	C18-2	---
6D130, Series A	18-17	18-19
8A510	C17-9	---
8AF25	20-10	20-14
11AF21, Series A	16-5	16-9
5240, Series A	17-14	17-16
<u>BENDIX RADIO DIV.</u>		
0526	20-1	20-6
PAR-80	18-1	18-4
	C19-1	---
PAR-80A	18-1	18-3
	18-5	---
R526M	17-3	17-4
55L2, 55L3, 55P2, 55P3	20-7	20-9
55X4	20-10	20-12
65P4	20-13	20-15
69B8, 69M8, 69M9	19-1	19-8
	C20-1	---
75B5, 75M5, 75M8, 75P6, 75W5	20-16	20-23
79M7	20-24	20-30
95B3, 95B3 Revised, 95B4, 95M3, 95M3 Revised, 95M4, 95M9, 95M9 Revised	20-31	20-39

MODEL	FROM	THROUGH
<u>BENDIX RADIO DIV. (Cont'd)</u>		
110, 110W, 111, 111W, 112, 114, 115	18-6	18-8
	C19-1	---
300, 300W, 301, 302	18-9	18-11
416A	17-1	17-2
526A, 526B, 526C, 526E	20-1	20-6
613	18-12	18-14
626A	16-1	16-3
	C19-1	---
646A	15-5	15-6
	C19-1	---
697A	17-5	17-6
847B	17-7	17-14
	18-15	18-20
	C19-1	---
1217B	19-9	19-19
	C20-1	---
1217D	19-20	19-33
	C20-1	---
1518, 1519	18-21,22	18-27
1521	18-28	18-37
1524, 1525	18-21,22	18-27
1531, 1533	18-38	18-40
<u>DAVID BOGEN CO., INC.</u>		
R502	18-3	18-4
R601	18-1,2	---
<u>BREWSTER</u> See <u>MEISSNER MFG. DIV.</u> <u>MAGUIRE INDUSTRIES, INC.</u>		
<u>BROWNING LABORATORIES, INC.</u>		
RJ-12, RJ-14	18-1	18-3
RJ-20, RJ-22, Tuner	20-1	20-7
RV-10, RV-11	18-4	18-8
<u>BRUNSWICK</u> See <u>RADIO & TELEVISION INC.</u>		
<u>BUICK</u> See <u>UNITED MOTORS SERVICE</u>		
<u>BUTLER BROTHERS</u> (AIR KNIGHT) (SKYROVER)		
RD-290	Misc.18-3	---
RD-291	Misc.18-3	---
RD-292	Misc.19-7	---
RD-295	Misc.19-7	---
<u>CADILLAC</u> See <u>UNITED MOTORS SERVICE</u>		
<u>CAPEHART-FARNSWORTH CORP.</u> Also See <u>FARNSWORTH TELEV. & RADIO CORP.</u>		
M-2AM, Series	20-11	20-16
M-2FM, Series;		
M-2 220,		
M-2 260	20-1	20-12
M-3AM, Series	20-11	20-16
M-3FM, Series;		
M-3 175,		
M-3 220	20-1	20-12
M-4	20-17	20-20
400-K, Series	20-21	20-31
A-7, Amplifier	20-29	---
400M, Extended and Remote Control	20-32	20-43
<u>CAPITOL RADIO CORP.</u>		
UN61	18-1	---
	18-4	---
UN62	18-2	---
UN72, UN72PC	18-3	18-4
<u>CHANCELLOR</u> See <u>RADIONIC EQUIPMENT CO.</u>		
<u>CHEVROLET DIV. - GENERAL MOTORS</u> Also See <u>MOTOROLA INC.</u> Also See <u>UNITED MOTORS SERVICE</u>		
985792	C17-1	---
986067	16-1	16-4
<u>CHRYSLER</u> See <u>PHILCO CORP.</u>		

**CISCO
COAST**

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
<u>CISCO</u> See CITIES SERVICE OIL CO.			<u>COAST-TO-COAST STORES (Cont'd)</u> <u>CENTRAL ORGANIZATION, INC.</u>		
<u>CITIES SERVICE OIL CO.</u> (CISCO)			ME5, See SENTINEL Model 289T	15-8 15-17	15-10 15-19
1A5	17-1	17-2	ME6, See SENTINEL Model 285P	16-11	16-13
9A5	17-3	17-4	ME7, See WARWICK Model 11011	17-1 20-1	17-2 20-2
<u>CLARION</u> See WARWICK MFG. CO.			ME8		
<u>COAST-TO-COAST STORES</u> <u>CENTRAL ORGANIZATION INC.</u> (MUSICAIRE)			ME40, -See SENTINEL Model 289T	15-8 15-17	15-10 15-19
MA360, See WARWICK Model C100	15-1	---	ME50, See SENTINEL Model 285P	16-11	16-13
MA361	19-1	19-2	ME60, See SENTINEL Model 286P	16-14	16-16
MD3, See INTERNATIONAL DETROLA Model 571X	15-15	15-17	ME70, See SENTINEL Model 286PR	16-14	16-16
MD6, See TEMPLETONE Model E-514	15-5	15-6	ME80, See SENTINEL Model 286P	16-14	16-16
MD8, See INTERNATIONAL DETROLA Model 554	15-2	15-4	ME90, See SENTINEL Model 286P	16-14	16-16
MD9, See INTERNATIONAL DETROLA Model 579	15-7 15-23	--- 15-24	ME100, See SENTINEL Model 286P	16-14	16-16
MD10, See INTERNATIONAL DETROLA Model 572	15-7 15-18	--- 15-20	ME110, See SENTINEL Model 286P	16-14	16-16
MD11, See TEMPLETONE Model F-617	15-4	---	ME120, See SENTINEL Model 286P	16-14	16-16
MD12, See INTERNATIONAL DETROLA Models 571B, 571X	15-12	15-17	5CX001, See SENTINEL Model 100X	9-29	9-30
MD13, See INTERNATIONAL DETROLA Model 576	15-7 15-21	--- 15-22	5T08, See SENTINEL Model 80B	10-8	10-11
MD15, See SENTINEL Model 284T	15-6	15-8	5T27, See SENTINEL Model 72A	9-13	9-14
MD16, See SENTINEL Model 284NR	15-6	15-8	5T37, See SENTINEL Model 73B	10-7	10-8
MD17, See SENTINEL Model 294T	15-13	15-16	5T601, See SENTINEL Model 106A	10-26 10-32	--- 10-33
MD19, See SENTINEL Model 284NI	15-6	15-8	5T55, See SENTINEL Model 55U	8-24	---
MD20, See SENTINEL Model 284NB	15-6	15-8	5TX001, See SENTINEL Model 100X	9-29	9-30
MD22, See WARWICK Model C110	16-1	---	6AA27, See SENTINEL Model 72A	9-13	9-14
MD23, See WARWICK Model C-102	15-3	---	6AAE27, See SENTINEL Model 72A	9-13	9-14
MD24, See INTERNATIONAL DETROLA Model 7270	16-3 16-5	--- 16-6	6C28, See SENTINEL Model 82A	9-21 10-1 10-12	9-22 10-2 ---
MD25, See INTERNATIONAL DETROLA Model 571A	15-12	15-14	6C39, See SENTINEL Model 93L	9-25	9-26
MD26, MD27	19-3	19-4	6C56, See SENTINEL Model 65B	8-27	---
MD28, MD29	Misc. 17-3	---	6CE69, See SENTINEL Model 96BE	10-25	10-26
MD42, MD43, MD44	19-5	19-7	6T28, See SENTINEL Model 82A	9-21 10-1 10-12	9-22 10-2 ---
MD300, See SENTINEL Model 309-W	17-2 17-10	---	6T39, See SENTINEL Model 93L	9-25	9-26
MD310, See SENTINEL Model 309-I	17-2 17-10	---	6T56, See SENTINEL Model 65B	8-27	---
MD320, See SENTINEL Model 309-R	17-2 17 10	---	6TE27, See SENTINEL Model 72A	9-13	9-14
MD380, See SENTINEL Model 294W	15-13	15-16	6TE69, See SENTINEL Model 96BE	10-25	10-26
MD390, See SENTINEL Model 294I	15-13	15-16	7C59, See SENTINEL Model 95B	10-1 10-12 10-23	10-2 --- 10-24
MD400, See SENTINEL Model 294T	15-13	15-16	7CE87, See SENTINEL Model 78B	10-1 10-9 10-10	10-2 10-10 ---
MD450, See SENTINEL Model 302-W	17-4	17-9	7T59, See SENTINEL Model 95B	10-1 10-12 10-23	10-2 --- 10-24
MD460, See SENTINEL Model 302-I	17-4	17-9	7TE87, See SENTINEL Model 78B	10-1 10-9 10-12	10-2 10-10 ---
MD470, See SENTINEL Model 302-T	17-4	17-9	8CE68, See SENTINEL Model 86AE	10-1 10-12 10-15	10-2 --- 10-16
MD480, See SENTINEL Model 293CT	16-17	16-18			
MD490, See SENTINEL Model 302-T	17-4	17-9			
MD500, See SENTINEL Model 293CT	16-17	16-19			
MD510, See SENTINEL Model 302-T	17-4	17-9			
ME1	19-1	19-2			

COAST

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
	COAST-TO-COAST STORES (Cont'd) CENTRAL ORGANIZATION, INC.			COAST-TO-COAST STORES (Cont'd) CENTRAL ORGANIZATION, INC.	
11C67, See SENTINEL Model 76A	9-17	9-19	022-F, See SENTINEL Model 220	12-20	12-21
14AC, See SENTINEL Model 14A	9-1,2 9-5	---	031BCE, See SENTINEL Model 130B	10-51	10-52
19A66, See SENTINEL Model 19A	8-7	---	031BCGE, See SENTINEL Model 130B	10-51	10-52
19A102, See SENTINEL Model 19A	8-7	---	031BT, See SENTINEL Model 130B	10-51	10-52
20A100, See SENTINEL Model 20A	7-1	---	081XL, See SENTINEL Model 180XL	11-13	11-14
20A102, See SENTINEL Model 20A	7-1	---	091ATE, See SENTINEL Model 190A	11-25,26 11-29	---
30A, See SENTINEL Model 30A	8-8	---	100AC, See SENTINEL Model 110A	10-37	10-39
36L73, See SENTINEL Model 36L	8-12	---	122-CE, See SENTINEL Model 221	12-22	12-24
36L102, See SENTINEL Model 36L	8-12	---	122-T, See SENTINEL Model 221	12-22	12-24
37B91, See SENTINEL Model 37B	8-13	---	142-C, See SENTINEL Model 241	12-35	12-36
37BT, See SENTINEL Model 37B	8-13	---	142-T, See SENTINEL Model 241	12-35	12-36
38B92, See SENTINEL Model 38B	8-14	---	142-W, See SENTINEL Model 241	12-35	12-36
38B102, See SENTINEL Model 38B	8-14	---	172-C, See SENTINEL Model 271	13-35	13-36
46A102, See SENTINEL Model 46A	9-9,10	9-11	172-T, See SENTINEL Model 271	13-35	13-36
46A108, See SENTINEL Model 46A	9-9,10	9-11	212C, See SENTINEL Model 212	12-1	12-2
46AC, See SENTINEL Model 46A	9-9,10	9-11	212-I, See SENTINEL Model 212	12-1	12-2
46ACE, See SENTINEL Model 46A	9-9,10	9-11	212-T, See SENTINEL Model 212	12-1	12-2
46AT, See SENTINEL Model 46A	9-9,10	9-11	212-W, See SENTINEL Model 212	12-1	12-2
46ATE, See SENTINEL Model 46A	9-9,10	9-11	262-P, See SENTINEL Model 262	13-23	13-24
47A112, See SENTINEL Model 47A	7-2	7-4	302ULT, See SENTINEL Model 203UL	11-49	11-50
47ACE, See SENTINEL Model 47A	7-2	7-4	341LC, See SENTINEL Model 143L	10-46 10-63	---
48A107, See SENTINEL Model 48A	8-17	---	341LT, See SENTINEL Model 143L	10-46 10-63	---
50B93, See SENTINEL Model 50B	8-19	8-20	362-C, See SENTINEL Model 263	13-25	13-26
50B102, See SENTINEL Model 50B	8-19	8-20	372-C, See SENTINEL Model 273	13-26 13-37	---
51BL, See SENTINEL Model 151BL	10-72	10-74	372-T, See SENTINEL Model 273	13-26 13-37	---
52A, See SENTINEL Model 52A	8-21	---	402AA, See SENTINEL Model 204A	11-51	11-52
52A110, See SENTINEL Model 52A	8-21	---	412-Q, See SENTINEL Model 214	12-2 12-5 12-14	---
52ACE, See SENTINEL Model 52A	8-21	---	412-W, See SENTINEL Model 214	12-2 12-5 12-14	---
52ATE, See SENTINEL Model 52A	8-21	---	421ACE, See SENTINEL Model 124AE	10-43	10-44
60BT, See SENTINEL Model 60B	8-25	---	421AT, See SENTINEL Model 124A	10-43	10-44
63BC, See SENTINEL Model 63B	8-26	---	421ATE, See SENTINEL Model 124A	10-43	10-44
63BT, See SENTINEL Model 63B	8-26	---	441XC, See SENTINEL Model 144X	10-31 10-65	---
66BCE, See SENTINEL Model 66B	9-3,4 9-6	---	441XT, See SENTINEL Model 144X	10-31 10-65	---
67LC, See SENTINEL Model 67L	10-4	10-5	462-T, See SENTINEL Model 264	13-27	13-28
67LT, See SENTINEL Model 67L	10-4	10-5	491UTI, See SENTINEL Model 194UL	11-31	11-32
68BC, See SENTINEL Model 68B	10-4 10-6	---	491UTW, See SENTINEL Model 194UL	11-31	11-32
68BT, See SENTINEL Model 68B	10-4 10-6	---	491UTWD, See SENTINEL Model 194UL	11-31	11-32
70AT, See SENTINEL Model 70A	8-28	---			
99ACE, See SENTINEL Model 99AE	10-29	10-31			
002XC, See SENTINEL Model 200X	11-43	11-44			
002XT, See SENTINEL Model 200X	11-43	11-44			

**CORONET
ELEC. LAB**

MODEL FROM THROUGH
CORONET RADIO & TELEVISION CO. (Cont'd)

1481	20-5	---
1491	20-6	---
1585	16-1	16-2
1701	16-3	16-4
1701X, Arista	18-1	18-5

CROWWELL

See W.T. KNOTT CO., INC.
Also See MERCANTILE STORES CO., INC. (N.Y.)

CROSLEY CAR CO.
See ZENITH RADIO CORP.

**CROSLEY DIV.
AVCO MFG. CORP.**

9-101	18-1	18-3
	C19-1	---
9-101, Revised	19-1	19-3
9-102	18-4	18-6
9-103, 9-104W	18-7	18-9
9-105, 9-106W	19-4	19-7
9-113, 9-114W	19-8	19-10
9-117	18-10	18-11
9-113W	18-4	18-6
9-119, 9-120W	18-12	18-13
9-121, 9-122W	19-22	19-25
9-201, 9-202M, 9-203B	18-14	18-19
	C19-1	---
9-204, 9-205M	19-11	19-18
9-207M	20-1	20-8
9-209	19-19	19-21
9-209, Revised	19-26	19-29
9-209L	19-26	19-29
9-212B	19-19	19-21
	C20-1	---
9-212M	19-19	19-21
9-212M, Revised	19-26	19-29
9-212ML, 9-213B	19-26	19-29
9-302	18-20	18-23
10-145M	20-9	20-11
10-307M	20-12	20-14
52TQ	C18-2	---
56FC	16-1	16-3
56PA, 56PB	C17-1	---
	C18-2	---
56TD	16-4	16-6
56TD-W	17-1	17-2
56TN	17-3	17-6
56TN-L	16-6	16-9
56TP-L	18-24	18-26
56TR, 56TS	18-27	18-29
56TU	17-7	17-8
56TU-Q, 56TV-Q	18-30	18-32
56TX-L	16-2	---
	16-6	---
	16-12	16-13
	17-9	17-10
56TY		
56TZ, 1st and 2nd Production	16-6	---
	16-10	16-11
56XTA, 56XTW	16-8	---
	16-14	16-15
	16-19	---
	17-11	17-12
57TK, 57TL		
57TQ, 1st and 2nd Production	16-6	---
	16-10	16-11
58TA	17-13	17-14
58TC	17-15	17-16
58TH, 58TH-Q	18-33	18-36
58TK	17-17	17-18
58TL	17-13	17-14
58TW	17-15	17-16
58XA, 58XA-10, 58XA-20	18-37	18-39
58XTA, 58XTW, Revised	20-15	20-18
58XW, 58XW-10, 58XW-20	18-37	18-39
66CS, 66CSM	16-16	16-19
66CS(0)	18-40	18-43
	C18-2	---
66CS(s)	16-16	16-19
66CT	18-44	18-46
66TC-S	16-19	16-22
66XTA, 66XTA-10, 66XTA-20	18-47	18-49
66XTW, 66XTW-10, 66XTW-20	19-39	19-41
68CP, 68CR	19-42	19-44
68TA, 68TW	19-45	19-47
86CR	16-23, 24	16-30
86CR, Revised	17-19, 20	17-26

MODEL FROM THROUGH
CROSLEY DIV. (Cont'd)
AVCO MFG. CORP.

86CS	16-23, 24	16-30
86CS, Revised; 87CQ, 88CR	17-19, 20	17-26
88TA, 88TC	18-50	18-60
146CS, 146CS(V)	17-27, 28	17-39, 40
148CP, 148CP(W), 148CQ, 148CR	19-48	19-63

J.W. DAVIS & CO.
(WATTERSON)

4810, 4820	Misc.20-3	---
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DAYTON
See W.W. GRAINGER CO.

DELCO
See UNITED MOTORS SERVICE

DETROLA
See INTERNATIONAL DETROLA CORP.

DEWALD RADIO

A-504, A-505	20-1	---
A-507	16-1	---
A-509	16-2	16-3
A-514	17-2	---
B-400	17-1	---
B-401	18-1	---
B-504	18-2	18-3
B-506	18-4	---
B-511	18-5	18-6
B-512	19-1	19-2
B-612	19-3	19-5
C-615	20-2	20-3
C-800	20-4	20-5
JB-523	17-2	---

DUAL ENGINEERING CORP.

A6-C5389	Misc.17-4	---
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ECA
See ELECTRONIC CORP. OF AMERICA

ECHOPHONE
See THE HALLICRAFTERS CO.

ECKENROTH CO., INC.

100, Musagrard	Misc.18-4	---
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ECKO
See ECKSTEIN RADIO & TELEVISION CO.

ECKSTEIN RADIO & TELEVISION CO.
(ECKO)
(KARADIO)

The Airport	17-3	17-7
The Amateur	17-3	17-7
The International	17-3	17-7
T-5	17-1	17-2
80-A (The Amateur), 80-B (The Airport), 80-C (The International)	17-3	17-7
1275	20-1	20-2

EDWARD'S FM RADIO CORP.

F-M Tuner	16-1	16-2
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ELECTROMATIC MFG. CORP.

A.P.H. 301-A	Misc.17-5	---
A.P.H. 301-B	Misc.17-5	---
A.P.H. 301-C	Misc.17-5	---
607AC	Misc.19-8	---

ELECTRONIC CORP. OF AMERICA
(ECA)

131	17-1	---
132	18-1	18-4
201	Misc.16-3	---
204	17-2	---

ELECTRONIC LABORATORIES, INC.

Orthosonic	16-5	16-7
Radio Utiliphone	16-1	16-4
76RU, Radio Utiliphone, Ch. 2865	16-1	16-4

ELEC. LAB EMERSON

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
<u>ELECTRONIC LABORATORIES, INC. (Cont'd)</u>			<u>EMERSON RADIO & PHONOGRAPH CORP. (Cont'd)</u>		
710PB-AC, 710PB-DC, 710PC-AC, 710PC-DC, Ch. 2887	17-1	17-4	561, Ch. 120001B	19-13	19-15
710T, Orthosonic, Ch. 2875	16-5	16-7	563, Ch. 120063B	19-19	19-24
2701, Issue B	C17-1	---	564, Ch. 120027, 120042, 120065	18-7	18-9
2811	16-8	---	565, Ch. 120018B	19-9	19-12
2865, Ch.	C18-3	---	568, Ch. 120070A, 120070B	19-16	19-18
2875, Ch.	16-1	16-4	569, Ch. 120062A	18-13	18-15
2887, Ch.	16-5	16-7	570, Ch. 120064	18-16	18-17
	17-1	17-4	572, Ch. 120027, 120042, 120065	18-7	18-9
			573, Ch. 120039B	19-25	19-28
			574, Ch. 120064	18-16	18-17
			575, Ch. 120068A, 120068B	20-1	20-5
			576, Ch. 120069A	19-29	19-31
			577, Ch. 120012B	18-18	18-20
			579, Ch. 120034A	19-32	19-34
			580, Ch. 120064	18-16	18-17
			581, Ch. 120014A, 120014B	20-6	20-8
			583, Ch. 120039B	19-25	19-28
			586, Ch. 120023B, 120083B	19-35	19-39
			587, Ch. 120033A, 120033B	20-9	20-11
			590, Ch. 120101A, 120101B	20-12	20-16
			591, Ch. 120055A	19-40	19-42
			593, Ch. 120063B	19-19	19-24
			594, 595, Ch. 120071A	20-6	20-8
			596, Ch. 120034A	19-32	19-34
			597, Ch. 120073B, 120074A	20-17	20-20
			599, 601, Ch. 120075B	20-21	20-23
			603, Ch. 120063B	19-19	19-24
			605, Ch. 120076B	19-43	19-46
			607, Ch. 120073B, 120074A	20-17	20-20
			610, Ch. 120100A, 120100B	20-9	20-11
			613, Ch. 120085A, 120085B	20-24	20-27
			615, Ch. 120001B	19-13	19-15
			616, Ch. 120100A, 120100B	20-9	20-11
			623, Ch. 120101A, 120101B	20-12	20-16
			635, Ch. 120108B	20-12	20-16
			643, Ch. 120111A	20-28	20-31
			1002, 1003, Ch. 129003	16-19	16-20
			120000, Ch.	16-1	16-3
			120001B, Ch.	19-13	19-15
			120002, Ch.	16-4	16-7
			120004, Ch.	16-2	---
				16-8	---
				16-8	---
				17-11	17-12
				C17-1	---
				17-6	17-8
				120007, Ch.	16-9
				120011, Ch.	16-9
				120012B, Ch.	18-18
				120013, Ch.	17-9
				120014A, 120014B, Ch.	20-6
				120016, Ch.	17-30
				120018B, Ch.	19-9
				120020, Ch.	16-4
				120022, Ch.	16-9
				120023B, Ch.	19-35
				120027, Ch.	18-7
				120029, 120030, Ch.	16-1
				120031, Ch.	17-9
				120032, Ch.	16-1
				120033A, 120033B, Ch.	20-9
				120034A, Ch.	19-32
				120035, Ch.	16-1
				120036, Ch.	17-13
				120037, Ch.	16-2
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**EMERSON
FARNSWORTH**

MODEL	FROM	THROUGH
EMERSON RADIO & PHONOGRAPH CORP. (Cont'd)		
120057A, Ch.	19-1	---
120058, Ch.	17-28	17-29
120059A, Ch.	18-12	---
120062A, Ch.	18-13	18-15
120063B, Ch.	19-19	19-24
120064, Ch.	18-16	18-17
120065, Ch.	18-7	18-9
120068A, 120068B, Ch.	20-1	20-5
120069A, Ch.	19-29	19-31
120070A, 120070B, Ch.	19-16	19-18
120071A, Ch.	20-6	20-8
120073B, 120074A, Ch.	20-17	20-20
120075B, Ch.	20-21	20-23
120076B, Ch.	19-43	19-46
120083B, Ch.	19-35	19-39
120085A, 120085B, Ch.	20-24	20-27
120100A, 120100B, Ch.	20-9	20-11
120101A, 120101B, Ch.	20-12	20-16
120108B, Ch.	20-12	20-16
120111A, Ch.	20-28	20-31
129003, Ch.	16-19	16-20

EMOR RADIO, LTD.

100	16-1	16-2
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EMPIRE DESIGNING CORP.

55	Misc.16-4	---
57	Misc.16-4	---

EMPIRE MFG. CORP.

G7-801	Misc.19-9	---
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ESPEY MFG. CO., INC.

FJ-97A, Ch., Revised	16-1	16-2
7B	17-1,2	17-3,4
7B, Revised	17-5,6	17-7,8
7B, AC-DC	19-1,2	---
7B-1	18-1,2	---
7B-1T	Misc.20-4	---
7B-12	19-3	19-5
501	18-3	18-4
502K	19-6	19-7
509	18-1,2	---
	C20-1	---
511	19-9,10	---
512	19-11,12	---
513	19-13,14	---
514	19-15	---
528	19-8	---
5181	16-3	16-6
10536A	19-16	---
20516	18-5	---

FADA RADIO & ELECTRIC CO., INC.

C33	18-1	---
F711, F750	18-2	18-4
FM16	17-1,2	17-11
P80	17-12	---
P80, Late	18-5	18-7
P82	17-13	17-15
P100	17-14	17-17
P111	20-1	20-3
6A39	17-18	17-20
172	16-1	16-2
368	18-8	18-10
372	17-21	17-23
602	C17-2	---
711, 740	17-15	---
	17-20	---
	17-24	---
	C19-1	---
790	19-1	19-4
790, Series B, etc.	19-5	19-8
795, F-M Tuner	19-9	19-11
830	20-4	20-6
845	20-7	20-9
855	20-10	20-12
1001	17-25	17-27
1005	19-12	19-14

**FARNSWORTH TELEV. & RADIO CORP.
(CAPEHART)**

AC-55, Ch. C2-3	C18-3	---
ACL55, ACL56, AKL58, AKL59	C18-3	---

MODEL	FROM	THROUGH
FARNSWORTH TELEV. & RADIO CORP. (Cont'd)		
BT-68	16-1	16-2
C-152, C-153, Ch.	15-7	15-9
	C20-2	---
C-156, C-157, Ch.	16-3	16-5
C-164, Ch.	19-1	19-6
C-170, Ch.	17-3	17-10
	C20-2	---
C-171, Ch.	18-1	18-5
C-172, Ch.	19-1	19-6
C-193, Ch.	16-3	16-5
C-194, Ch.	17-3	17-10
	C20-2	---
C-196, Ch.	17-1	17-3
C-201, C-216, Ch.	17-3	17-10
	C20-2	---
C2-3, Ch.	C18-3	---
EF-451, Ch. C-196	17-1	17-3
EK-081, Ch. C-156;		
EK-082, Ch. C-157;		
EK-083, Ch. C-193	16-3	16-5
EK-263, EK-264, EK-265	C17-3	---
EK-681, Ch. C-156	16-3	16-5
ET-060	C17-3	---
ET-061	C17-1	---
	C17-3	---
ET-063, ET-064, ET-065,		
ET-066	C17-3	---
ET-069	C17-1	---
	C17-9	---
ET-650BRZ, ET-651BKZ,		
ET-651BUZ, ET-651RDZ,		
Ch. C-171	18-1	18-5
ET-667BRV, Ch. C-172;		
ET-667BRX, Ch. C-164;		
ET-668WTV, Ch. C-172;	19-1	19-6
ET-668WTX, Ch. C-164	18-6	18-12
GK-084, GK-085, GK-086, GK-087		
GK-100, Ch. C-170;		
GK-102, Ch. C-194;		
GK-103, Ch. C-216;	17-3	17-10
GK-104, Ch. C-201	C20-2	---
GK-111, GK-112, GK-113,		
GK-114, GK-115	17-3	17-10
GK-140, GK-141, GK-142,		
GK-143, GK-144, Preliminary	16-6	16-11
	18-15	---
	C18-3	---
	C20-2	---
GK-266, Ch. C-152;		
GK-267, Ch. C-153	15-7	15-9
	C20-2	---
GK-699	17-11	17-16
GP-350	17-17	17-18
GT-050, GT-051	17-19	17-20
GT-060, GT-061, GT-064, GT-065	17-21	---
GT-699	17-11	17-16
K-084, K-086	18-6	18-12
	C20-1	---
K-262P	19-7	19-9
K-267, Ch. C-153	15-7	15-9
	C20-2	---
K-287P	18-6	18-12
K-289	18-6	18-12
	C20-1	---
K-699, Ch. C-152	15-7	15-9
	C20-2	---
N4 Series, Capehart	19-10	19-18
P4 Series, Capehart	19-10	19-18
P7, P9, P10 Series, Capehart	19-19	19-33
	C20-2	---
P-860	18-13,14	---
19N3, Panamuse	18-17	18-44
19N4, Capehart	19-10	19-18
21N2, Panamuse	18-17	18-44
21P4, Capehart	19-10	19-18
24N4, Capehart	19-10	19-18
24P4, Capehart	19-10	19-18
25N2, 26N2, Panamuse	18-17	18-44
26N4, Capehart	19-10	19-18
29P4, 30P4, Capehart	19-10	19-18
31N4, Capehart	19-10	19-18
31P4, Capehart	19-10	19-18
32P9, 33P9, 34P10, 35P7	19-19	19-33
100N Series, Capehart	18-16	18-44
114N4, Capehart	19-10	19-18
116N4, Capehart	19-10	19-18

FARNSWORTH GAMBLE

MODEL FROM THROUGH
FARNSWORTH TELEV. & RADIO CORP. (Cont'd)

116P4, Capehart 19-10 19-18
118P4, Capehart 19-10 19-18
400M Series, Capehart 19-34 19-54
400N Series, Capehart 18-16 18-44

FEDERAL RECORDER CO.
DIV. C.G. CONN. LTD.

Little Pro 20-8 20-9
PR-12 20-1 20-7
12LP, Little Pro 20-8 20-9
12LP, Revised 20-10 20-16
101 20-17 20-19
106 20-27 20-28
111, 116 20-20 20-21
118, 119 20-22 20-24
201 20-25 20-26
211 20-27 20-28
301 20-29 20-30
306, 311 20-31 20-32
401, 402, 403, 404, 405,
406, 407 20-33 20-35

FEDERAL TEL. & RADIO CORP.

1021 16-5 16-8
C20-3 ---
1024TB 17-1 17-3
C20-3 ---
1025TB 16-1 16-4
1027 16-1 16-4
C19-1 ---
1028TB, 1029 17-1 17-3
C20-3 ---
1030T 16-5 16-8
1031, 1032 16-5 16-8
C20-3 ---
1034 17-1 17-3
C19-1 ---
1035 16-1 16-4
C19-1 ---
1040TB 17-4 17-6
1540 16-5 16-8
C20-3 ---
1540T 16-5 16-8
6001 PO 19-1 19-2

FERGUSON RADIO CORP.

5X47 Misc.16-5 ---
7X47 Misc.16-5 ---

FERRAR RADIO & TELEVISION CORP.

C81B 17-1 17-4
T61B 17-5 17-7
TA61B 17-8 17-11

THE FIRESTONE TIRE & RUBBER CO.
(AIR CHIEF)

Brilliantone 16-11 ---
16-14 ---
Diplomat 17-7 17-9
Georgian 17-22 17-29
The Journal 19-27 19-29
The Marlborough 18-34 18-40
Mercury 17-5 17-7
The Metropolitan 18-34 18-40
The Narrator 18-7 18-10
The Newscaster 18-24 18-26
Reporter 17-12 17-14
The Sunrise 19-30 19-32
R-3157A 12-6 ---
12-19,20 12-21
C19-1 ---
S-7402-8 20-1 20-2
S-7404-9 17-1 17-4
S-7425-1 19-1 ---
4-A-1, Mercury 17-5 17-7
4-A-3, Diplomat 17-7 17-9
4-A-10, Reporter 17-12 17-14
4-A-10, Late 18-1 18-3
4-A-11 18-4 18-6
4-A-12, The Narrator 18-7 18-10
4-A-15 18-11,12 18-23
4-A-17 16-1 16-2
16-9 ---
4-A-26, The Newscaster 18-24 18-26
4-A-27, Cameo 17-15 17-16

MODEL FROM THROUGH
THE FIRESTONE TIRE & RUBBER CO. (Cont'd)

4-A-30 18-27,28 18-31
4-A-37 17-17 17-21
4-A-39 20-3 20-8
4-A-40 20-9 20-12
4-A-41 17-7 ---
17-10 17-11
17-22 17-29
19-2 19-15
18-32 18-33
4-A-42, Georgian
4-A-60 19-2 19-15
4-A-61, The Cameo 18-32 18-33
4-A-62, The Marlborough;
4-A-63, The Metropolitan 18-34 18-40
4-A-64, 4-A-65 19-16 19-23
4-A-67 19-24 19-26
4-A-68, The Journal 19-27 19-29
4-A-69, The Sunrise 19-30 19-32
4-B-6 17-30 17-34
4-B-31, The Roamer 19-33 19-37
4-C-3 19-38 19-40
4-C-13 19-41 19-43
7379-1 16-3 16-5
7383-4 16-6 16-8
7384-2 17-35 17-36
7396-1 16-9 16-11
7402-4 C18-3 ---
7402-6, Roamer 16-8 ---
16-12 16-13
16-11 ---
16-14 ---
7405-2 17-37 17-38
7405-3 16-3 16-5
7405-4 17-37 17-38
7406-1 16-3 16-5
7423-5 C18-3 ---
7423-6 C17-2 ---

FM SPECIALTIES, INC.

Fidelotuner 17-1 17-4
C18-3 ---
Fidelotuner, Revised 18-1 18-2

FONOTALK CORP.

500BI, 500BW Misc.18-5 ---

FORD MOTOR CO.
See ZENITH RADIO CORP.

GAMBLE-SKOGMO, INC.
(CORONADO)

7P Series 18-1 18-3
43-5005 17-1 17-7
43-5006 19-1 19-4
43-6301 17-8 17-10
43-6321 18-4 18-7
43-6485 20-1 20-2
43-6730 20-3 20-4
43-6927 19-5 19-10
43-6951 19-11 19-16
43-7601, 43-7601A, 43-7601B 16-1 16-5
C17-3 ---
16-1 16-6
43-7602 16-1 16-6
43-7603, 43-7604 19-17 19-22
43-7651, 43-7652 19-23 19-29
43-7660 18-8 18-14
43-7660B 20-5 20-9
43-7851 19-30 19-35
43-8129A, 43-8130A,
43-8130B, 43-8131A, 43-8131B 19-36 19-37
43-8160 16-7 16-9
43-8177, 43-8178, 43-8179 17-11 17-13
43-8180 17-14 17-16
43-8213 15-1 ---
17-17 17-18
17-19 17-22
43-8305 17-23 17-26
43-8312 17-27 17-29
43-8351, 43-8352 17-30 17-33
43-8437 16-10 16-12
43-8470 17-34 17-37
43-8471 17-37 17-40
43-8576 16-2 ---
16-13 16-16
43-9196 17-16 ---
17-41 17-42
43-9201 17-43 17-45
43-9751 17-26 ---
17-46 17-47

**GAMBLE
GEN. TEL.**

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
<u>GAMBLE-SKOGMO, INC. (Cont'd)</u>			<u>GENERAL ELECTRIC CO. (Cont'd)</u>		
43-9865	19-38	19-39	150	19-10	19-12
94RA1-43-6945A	20-10	20-13		C20-4	---
94RA1-43-6945B	20-14	20-17	160	19-17	19-21
94RA1-43-7605A	20-18	20-21		C20-4	---
94RA1-43-7656A, 94RA1-43-7657A	20-22	20-26	165	20-23	20-26
94RA1-43-7751A	20-27	20-30	180	16-1	16-2
94RA1-43-7853A	20-31	20-34	200	18-19	18-20
94RA1-43-8510A	20-35	20-38	201, 202	18-19	18-20
94RA1-43-8520B	20-39	20-42		C20-4	---
94RA1-43-8511A	20-35	20-38	203, 205	18-19	18-20
94RA1-43-8511B	20-39	20-42	210, 211, 212	18-21	18-25
94RA2-43-9195A	20-43	20-44		C19-2	---
94RA31-43-8115A, 94RA31-43-8115B,				C20-5	---
94RA31-43-8116A	20-45	20-47	219, 220, 221	15-28	15-31
94RA31-43-9841A	20-48	20-51		C17-10	---
94RA33-43-8130C, 94RA33-43-8131C	20-52	20-53		C18-3	---
				C20-5	---
<u>GAROD RADIO CORP.</u>				20-27	20-29
The Companion	16-2	---	226	18-26	18-28
The Ensign	16-1	16-2	230, Kaiser-Fraser	C19-2	---
The Thriftee	19-1	---		C20-4	---
BP24, BP25	17-1	17-2	233, Kaiser-Fraser	18-29	18-36
3AP	17-3	---		C20-4	---
4A1, 4A2	17-4	17-5	250	15-32	15-36
4AP	17-3	---		C17-3	---
4B1	18-1	18-2		C19-1	---
5A1, The Ensign	16-1	16-2		C20-5	---
5A2-Y	17-6	---	254	16-3	16-5
5A3	18-3	---		C18-3	---
5A4, The Thriftee	19-1	---	260	16-6	16-12
5AP1-Y, The Companion	16-2	---		C18-3	---
5D3, 5D3A	16-3	16-4		C20-5	---
5D5	17-7	17-8	280	16-13	16-16
5K-1	Misc.20-5	---	304	18-37	18-39
5RC-1	17-9	---	321A	15-46	15-52
6A	17-10	---		C20-5	---
6A2	17-11	---	324, 328	19-22	19-27
9FMP, 9FMPA, 9FMPU	18-4	18-5	329, 330	20-30	20-31
11FMP	19-2	19-4	354, 355	19-28	19-35
62B	18-6	18-7	356, 357, 358	18-40	18-44
306	18-8	---		C20-5	---
			376, 377, 378	19-36	19-41
<u>GENERAL ELECTRIC CO.</u>				C20-5	---
Musaphonic	17-1,2	17-15	417	16-16	16-24
	C19-2	---		C20-5	---
A51, A56	C17-10	---	417A	17-27,28	17-38
	C18-3	---		C17-2	---
GB-400	17-24	17-25	502	C20-5	---
GD-50	19-1	---		17-4	17-7
GD-506	19-1	---		17-39,40	17-47
GD-510, GD-511, GD-512,			801	C19-2	---
GD-512W, GD-512X, GD-513	18-2	18-3		16-25,26	16-38
GD-550	19-1	---	<u>GENERAL IMPLEMENT CORP.</u>		
H-639AC-DC	C18-3	---	1A5	17-1	17-2
L-604	C18-3	---	9A5	Misc.19-10	---
LB-673	17-25	17-26	<u>GENERAL MOTORS CORP.</u>		
LM1A, Charging Cable	18-1	---	See <u>UNITED MOTORS SERVICE</u>		
X-415	18-4	18-12	<u>GENERAL TELEVISION & RADIO CORP.</u>		
XFM-1	19-2	19-7		16-1	16-2
YRB60-12	C18-3	---	4B5	19-1	19-2
YRB79-1, YRB79-2, YRB83-1	17-19	17-20	5A5	16-2	16-4
YRB92-2	C18-3	---	5B5	19-3	19-4
4SJ3A1	20-1	20-2	6C5	16-2	---
41, 42, 43, Musaphonic	17-1,2	17-15	9A5	16-4	16-5
	C19-2	---		18-1	---
	C20-3	---	9B6P	19-5	19-6
44, 45, Musaphonic	17-1,2	17-15	14A4F	19-7	19-8
	C19-2	---	17A5	17-1	---
50	15-1	15-4	20A3A, 20A3P	18-2	---
	C19-2	---	21A4	18-3	---
	C20-3	---	22A5C	16-2	---
60, 62	17-16	17-18	23A6	16-4	---
64, 65	20-3	20-8		16-6	---
66, 67, Clock Radio	20-9	20-12	24B6	16-2	---
102, 102W, 107, 107W	18-13	18-14		16-4	---
112	18-15	18-16		16-7	16-8
113	18-17	18-18		16-2	---
114, 114W, 115, 115W	18-13	18-14	25B5	16-4	---
118, 119M, 119W	19-8	19-10		16-2	---
	C20-3	---		16-4	---
123, 124	20-13	20-15		16-9	16-10
135, 136	20-16	20-18	26B5	17-2	17-4
140	17-21	17-23	27CSL	18-4	---
	C19-2	---	526, 534, 547, 549, 558, 588,		
141, 143	20-19	20-22	591 (Single-ended tubes)	18-5	---
145	19-13	19-16			
	C20-4	---			

**GEN. TEL.
HOWARD**

MODEL FROM THROUGH
GENERAL TELEVISION & RADIO CORP. (Cont'd)

526, 534, 547, 549, 558, 588,
591 (Double-ended tubes) 18-6 ---
635 19-9 ---

GILFILLAN BROS., INC.

Overland 16-3 ---
56A, 56B, 56C, 56D, 56E 16-1 ---
58M, 58W 18-3 ---
66AM 16-2 ---
66B, Series 2, Series 3,
Overland 16-3 ---
66DM 16-2 ---
66PM 16-4 ---
68-48 18-1,2 ---
68B, 68D 18-4 ---
68F 17-1 17-2
86 Series 16-5 16-6
108C-M 17-3,4 17-5,6
118C-M 17-7,8 17-9,10

GLOBE ELECTRONICS, INC.

454 18-1 18-3
552 19-1 19-2
558 19-3 19-4
559 19-5 19-6

**THE B. F. GOODRICH CO.
(MANTOLA)**

AG, Ch. 19-22 19-23
R-635 16-1 16-4
R-655W C18-3 ---
R-661 16-5 16-6
R-685 18-1 18-2
R-743-W 17-1 17-2
R-75152 17-3 17-5
R-76162 17-10 17-12
R-76262 17-13 17-15
R-78162, R-78262 18-3 18-10
W, Ch. 19-26 19-29
11-701 19-1 19-3
92-523, 92-524, 92-525,
92-526 20-1 20-6
93-104, 93-105, 93-106 19-4 19-10
93-107, 93-108 19-11 19-17
75434 17-6 17-7
76143 17-8 17-9
92502 18-11 18-12
92503, 92504 19-18 19-19
92505, 92506 19-20 19-21
92514, 92515, Ch. AG 19-22 19-23
92516, 92517 19-24 19-25
92752, Ch. W 19-26 19-29

GOTHAM

See HAROLD SHEPHERS, INC.

**W. W. GRAINGER CO.
(DAYTON)**

1R73, See FONOTALK
Model 500BI Misc.18-5 ---
1R74, See FONOTALK
Model 500BW Misc.18-5 ---

**W. T. GRANT CO.
(GRANTLINE)**

Series H, Ch. Misc.19-11 ---
Series R, Ch. Misc.19-11 ---
300, Series B 17-1 ---
405/7 17-2 ---
500, 501, Series A 16-1 16-2
502, 503, Series A 16-5 ---
510, Series A 16-3 16-5
16-6 16-8

GRANTLINE

See W. T. GRANT CO.

THE HALLICRAFTERS CO.

Sky Courier 19-1 19-5
Skyranger 16-20 16-28
Skyrider Panoramic 17-1 17-5
C18-3 C18-4
Super Skyrider 16-3,4 16-16
CA-2 18-1 18-5
EC-1B, Echophone 16-1 16-2
EC-306 18-6 18-9

MODEL FROM THROUGH
THE HALLICRAFTERS CO. (Cont'd)

EC-403, Echophone 16-29,30 16-36
EC-403, Revised 20-14 20-21,22
EC-404, Echophone 16-29,30 16-36
EC-404, Revised 20-14 20-21,22
EX-102, EX-103 20-1 20-4
EX-104, EX-106 20-5 20-13
EX-306 18-6 18-9
RE-1, Sky Courier 19-1 19-5
S-38 C17-3 ---
S-39, Skyranger 16-20 16-28
S-40 C17-3 ---
S-40A C18-3 ---
S-47 17-17,18 17-29
S-51 20-23,24 20-33
S-53 19-6 19-13
S-55, S-56 19-14 19-22
S-58 19-23 19-28
S-59 19-29 19-34
S-72 20-34 20-39,40
SP-44, Skyrider Panoramic 17-1 17-5
C18-3 C18-4
SX-28A, Super Skyrider 16-3,4 16-16
SX-42 17-6 17-16
C18-4 ---
C19-3 ---
SX-43 18-10 18-28
SX-62 20-41,42 20-51
400, 406, 409, 410, 411, 412 19-35,36 19-45
414 19-46 19-53

HEATH CO.

FM-1, FM Tuner 20-1 20-4

**HOFFMAN RADIO CORP.
(MISSION BELL)**

A202, A309, Ch. 119 16-1 16-2
A700, Ch. 110S 16-4 ---
B400, Ch. 118 16-2 16-3
B502, Ch. 113 17-1 17-6
B503, Ch. 115 15-9 ---
17-8 17-13
17-1 ---
B504, Ch. 123 17-3,4 17-7
18-1 18-2
B508, B509, B510, Ch. 129 17-10 17-13
B1000, Ch. 114 15-6 15-10
C501, Ch. 108 C20-5 ---
17-1 17-6
C502, Ch. 113 C19-3 ---
17-1 ---
17-3,4 17-7
C19-3 ---
15-6 15-10
C20-5 ---
17-1 17-6
C19-3 ---
17-1 ---
17-3,4 17-7
C19-3 ---
20-1 20-6
C530, Ch. 137 18-3 18-8
C1006, C1007, Ch. 131, 132 15-6 15-10
108, Ch. C20-5 ---
16-4 ---
110S, Ch. 17-1 17-6
113, Ch. C19-3 ---
17-10 17-13
114, Ch. 15-9 ---
115, Ch. 17-8 17-13
118, Ch. 16-2 16-3
119, Ch. 16-1 16-2
123, Ch. 17-1 ---
17-3,4 17-7
129, Ch. 18-1 18-2
131, 132, Ch. 18-3 18-8
137, Ch. 20-1 20-6
530, Ch. 137 20-1 20-6

HOWARD RADIO CO.

FM-718 17-20 17-21,22
M901-A 16-1 ---
472-AC, 472-AF 17-4 17-10
472-C, 472-F 17-1 17-7
474 17-11 17-14
481-A 19-1 ---
481-B, 481-C, 481-M 18-1 18-6

**HOWARD
MAGNAVOX**

MODEL	FROM	THROUGH
<u>HOWARD RADIO CO. (Cont'd)</u>		
482, 482-A	19-2	19-7
718, Series X	17-15	17-19
718-FM-5-6	17-23	17-28
901-A	16-1	---
	C17-4	---
901-AP-A	16-2	---
902-A	18-7	18-8
906	16-3	16-4
906-C	16-4	16-6
906-S	17-29	17-33
906-SB	18-9	18-11
909-M	17-34	17-37
909-MR	C18-4	---
<u>HUDSON MOTOR CAR CO.</u> See ZENITH RADIO CORP.		
<u>INTERNATIONAL DETROLA CORP.</u> (DETROLA)		
339, 340, 340-1	C18-4	---
582	16-1	16-4
626, with octal tubes	17-1	---
626, with miniature tubes	17-2	---
626, with octal tubes	17-3	---
2744	C18-4	---
7156	17-4	17-6
7270	16-3	---
	16-5	16-6
7901	17-7	17-12
<u>INTERSTATE HOME EQUIPMENT CORP.</u>		
68F	Misc.18-6	---
<u>INTERSTATE STORES BUYING CORP.</u> (PLYMOUTH)		
501	20-1	20-2
503	20-3	20-4
<u>JEWEL RADIO CORP.</u>		
Pixie	19-3	19-4
Trixie	19-5	19-7
300	19-1	19-2
304, Pixie	19-3	19-4
500	18-1	18-4
505, Clock Radio	18-5	18-7
801, Trixie	19-5	19-7
814	19-8	19-9
910	20-1	---
920A	20-2	---
921, 935, 936	20-3	20-4
949	20-5	---
955	20-6	---
964	20-7	---
970	20-8	---
980	20-9	---
<u>KAISER-FRAZER</u> See GENERAL ELECTRIC CO.		
<u>THE KAPPLER CO.</u>		
102T, Tuner	19-1	19-3
<u>KARADIO</u> See ECKSTEIN RADIO & TELEVISION CO.		
<u>KAROLA</u> See RADIO & TELEVISION PRODUCTS CO.		
<u>KERNWOOD RADIO CORP.</u>		
5-Tube, AC-DC	Misc.19-12	---
<u>KETAY MFG. CORP.</u>		
RP507T	Misc.15-8 C20-5	---
<u>KNIGHT</u> See ALLIED RADIO CORP.		
<u>W. T. KNOTT CO., INC.</u> (CROWWELL)		
205	Misc.17-6	---
<u>KRAFT MFG. & DISTRIBUTING CO.</u>		
Puppytune	Misc.19-13	---

MODEL	FROM	THROUGH
<u>LAFAYETTE</u> See RADIO WIRE TELEVISION		
<u>LA MAGNA MFG. CO.</u> (LAMCO)		
3000	18-1	18-3
<u>LAMCO</u> See LA MAGNA MFG. CO.		
<u>LAUREHK RADIO MFG. CO.</u>		
L-52	Misc.16-6	---
<u>LEANDER ELECTRONICS CORP.</u>		
707	17-1	17-3
<u>LEAR, INC.</u>		
565, 565BL, 566, 567, 568	16-1	16-3
662, 663, 665	16-4	16-6
667PC	Misc.18-7	---
861-PC, 1281-PC	19-1	19-5
6610, 6610PC, 6611, 6611PC, 6612, 6612PC, Early and Late Production	17-1	17-6
6614, 6615, 6616	16-7	---
6617PC	16-5	16-6
	16-8	---
6618	16-4	16-6
6619	16-7	---
<u>LINCOLN, LINCOLN-CONTINENTAL, LINCOLN-MERCURY,</u> <u>LINCOLN-ZEPHYR</u> See ZENITH RADIO CORP.		
<u>LINCOLN RADIO</u> See CONCORD RADIO CORP.		
<u>LYTLE & CANON</u>		
6A47WT, 6A47WTR, 6AWC2, 6AWC3	20-1	20-9
<u>MAGIC TONE</u> See RADIO DEVELOPMENT & RESEARCH CORP.		
<u>MAGNA ELECTRONICS CO.</u>		
M300-6, M400-6	Misc.17-7	---
<u>THE MAGNAVOX CO.</u>		
Playfellow	20-1	20-4
AMP-101A	17-1	17-2
AMP-101C	17-1	17-2
	C20-5	---
AMP-108	17-3,4	17-6
AMP-109	18-1,2	18-3
AMP-109B, AMP-109C, AMP-109D	18-1,2	18-3
	C20-6	---
AMP-110	17-7,8	17-10
AMP-111	18-4	18-7
AMP-111D, AMP-111E	18-4	18-7
	C20-5	---
AMP-116	19-23,24	19-25
CR-190	C17-4	---
CR-197, CR-197A, CR-197B, CR-197C, CR-197D, CR-197E	16-1,2 C20-6	16-7 ---
CR-198, CR-198A, CR-198B, CR-198C, CR-198D, CR-198E, CR-198F, CR-198H, CR-198J	16-5 C20-6	16-11 ---
CR-199	16-12	16-16
CR-200 Series	18-8	18-15
CR-202, CR-202A, CR-202B, CR-202C, CR-202D	18-16	18-25,26
	C20-6	---
CR-203A, CR-203B	17-11,12	17-17
CR-204 Series	18-27,28	18-37
CR-206	19-1,2	19-7
CR-207A, CR-207B, CR-207C, CR-207D	17-13	---
	17-18	17-24
CR-208A, CR-208B	17-13	---
	17-25,26	17-31
CR-208C	17-13	17-25,26
	C20-7	---
CR-209A, CR-209B, CR-209C, CR-209D, CR-209E	19-8	19-15
CR-210A, CR-210B, CR-210C	19-16	19-21,22
CR-215, Ch.	20-1	20-4
CR-216	20-5	20-13

**MIDWEST
MONT-WARD**

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
<u>MIDWEST RADIO CORP. (Cont'd)</u>			<u>MONTGOMERY WARD (Cont'd)</u>		
ST-12, Ch. SGT-12	16-1	16-4	74BR-2708A, 74BR-2708B,	18-15	18-22
ST-16, Ch. SGT-16	16-4	16-12	74BR-2708C	18-5, 6	18-7, 8
TM-8	17-4	17-6	74BR-2710A	18-10	18-14
8X12, Ch. RGT-12	18-4	18-6	74BR-2715A	18-23	18-30
88, 88A, Ch. RTM-8	18-1	18-3	74BR-2717A	18-31	18-34
98	18-1	18-3	74KR-1210A	17-39	17-41
	C19-4	---	74KR-2706A, 74KR-2706B,		
712, Ch. SGT-12	16-1	16-4	74KR-2713A	17-43	17-46
716, 716A, Ch. SGT-16	16-4	16-12	74WG-1050B	C18-4	---
816, Ch. RGT-16	18-7	18-12	74WG-1050D	15-75	15-77
916, Ch. LB-16	19-4	19-6		C19-5	---
922, Ch. LC-12	19-1	19-3		16-5	16-7
<u>MINERVA CORP. OF AMERICA</u>				C17-5	---
			74WG-1052B	17-47	17-49
W702	18-1	18-3	74WG-1054A	C18-6	---
W725	19-1	19-2	74WG-1056A	17-50	17-52
W729, Portapal	18-4	18-6	74WG-1057A	16-3	---
729, Portapal	16-1	16-2	74WG-1207B	16-8	16-10
410, 411	19-3	19-4		17-53	17-56
<u>MISSION BELL</u>			74WG-1509A, 74WG-1509B	17-53	17-56
See <u>HOFFMAN RADIO CORP.</u>			74WG-1510A, 74WG-1510B	C18-5	---
<u>MITCHELL MFG. CO.</u>			74WG-1801C	C18-5	---
Lullaby Bed Lamp Radio	Misc. 18-9	---	74WG-1801D	17-57	17-59
1260	20-1	20-2	74WG-1802A, 74WG-1803A	C18-4	---
<u>MOLDED INSULATION CO.</u>			74WG-1804B	C17-4	---
RS-1	16-1	---	74WG-1804C	17-60	17-62
RS-1A	16-2	---	74WG-1804D, 74WG-1805A	C17-10	---
<u>MONITOR EQUIPMENT CORP.</u>			74WG-1807B	C18-5	---
M-403	16-3	16-4		17-63	17-65
M-500	19-1	19-2	74WG-2002A	17-58	17-59
M-510	16-5	16-6	74WG-2004A	17-66	---
M-3070	17-1	17-4		C17-5	---
RA-50	17-5	17-6	74WG-2009B	16-13	16-17
RAM-47	18-1	18-2	74WG-2010B	C18-5	---
TA-56M, TC-56M, TW-56M	16-1	16-2	74WG-2500B		
<u>MONTGOMERY WARD</u>			74WG-2504A, 74WG-2504B,	17-67	17-71
<u>(AIRLINE)</u>			74WG-2504C	16-16	---
04BR-420B	C18-4	---	74WG-2505A	16-22	16-26
14WG-635B	C18-4	---		C17-5	---
54KP-1209B	16-1	16-4	74WG-2700A	17-72	17-75
54WG-2700A	C17-5	---	74WG-2703A	C18-5	---
62-49, 62-68, 62-68X, 62-88	17-1	17-2	74WG-2704A, 74WG-2704B,	18-35	18-37
64BR-916A	17-3	---	74WG-2704C	18-38	18-40
64BR-916B	17-4	---	74WG-2705A	18-41	18-43
64BR-1051A	C17-4	---		18-44	18-46
64BR-1051B	C17-4	---	84BR-1065A	19-1	19-3
64BR-1513A, 64BR-1514A	17-5	17-8	84BR-1065A	18-44	18-46
64BR-1808A	17-9	17-14	84BR-1503B, 84BR-1508B	19-4	19-6
64WG-1050B, 64WG-1050C	15-75	15-77	84BR-1515A, 84BR-1516A	19-7	19-8
	C19-5	---	84BR-1517A, 84BR-1518A	18-23	18-30
64WG-1050D	15-75	15-77	84BR-1815A, 84BR-1816A	19-9	19-13
	C18-4	---	84BR-2003C	19-14	19-18
	C19-5	---	84BR-2005A	19-19	19-24
64WG-1052B	16-5	16-7	84BR-2715A, 84BR-2715B	19-25	19-29
64WG-1207A, 64WG-1207B	16-3	---	84BR-2715C	19-9	19-13
	16-8	16-10	84BR-2715D	19-30	19-34
64WG-1804B	C18-4	---	84BR-2726A	20-1	20-5
64WG-1804C	16-3	---	84BR-2726B	20-6	20-10
	16-10	16-12	84BR-2733A	18-47	18-48
64WG-1807B	C17-4	---	84GCB-1062A	19-35	19-37
	C17-10	---	84HA-1527A, 84HA-1528A	19-38	19-41
	C18-5	---	84HA-1810A	19-42	19-45
64WG-2009B	C17-5	---	84HA-1810C	20-11	20-19, 20
64WG-2010A, 64WG-2010B	16-13	16-17	84HA-2725A	20-21, 22	20-28
64WG-2500B	C18-5	---	84HA-2727A	18-49	18-51
64WG-2700A	C17-5	---	84KR-1209B	18-52	18-53
64WG-2700B	C18-5	---	84KR-1520A	18-54	18-56
	17-15	17-17	84KR-2510A	19-46	19-48
74BR-1053A	17-18	17-20	84KR-2716A	19-49	19-51
74BR-1055A	17-21	17-23	84KR-2723A	18-57	18-60
74BR-1501B, 74BR-1502B	17-24	17-25	84WG-1056B	18-61	18-63
74BR-1507A, 74BR-1508A	17-5	17-8	84WG-1060A	18-64	18-66
74BR-1513B, 74BR-1514B	16-17	16-21	84WG-1060C	19-52	19-55
74BR-1812A	C18-5	---	84WG-1804D, 84WG-1806A	19-84	19-93
74BR-1812B	17-26	17-28	84WG-2015A, 84WG-2015B	19-56	19-59
74BR-2001A	17-29	17-31	84WG-2504D	18-67	18-70
74BR-2003A, 74BR-2003B	C18-5	---	84WG-2506A	18-76	18-78
74BR-2003C	17-32	17-38	84WG-2704D	18-79	18-90
74BR-2702A, 74BR-2702B	18-1	18-9	84WG-2712A, 84WG-2712B		
74BR-2707A			84WG-2714A, 84WG-2714B,		
			84WG-2714C, 84WG-2714D,	19-60	19-72
			84WG-2714E		

MONT-WARD MOTOROLA

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
<u>MONTGOMERY WARD (Cont'd)</u>			<u>MOTOROLA, INC. (Cont'd)</u>		
84WG-2714F	19-73	19-77	HS-125, Ch.	19-45	19-50
84WG-2714G	19-78	19-83	HS-127, HS-127A, Ch.	20-54	20-59
84WG-2718A, 84WG-2718B	19-93	19-101	HS-128, Ch.	20-70	20-83, 84
84WG-2720A	19-93	19-101	HS-132, Ch.	20-70	20-83, 84
84WG-2721A, 84WG-2721B, 84WG-2721C	20-29	20-36	HS-133, Ch.	20-85, 86	20-98
84WG-2721D	20-37	20-41	HS-140, Ch.	20-29	20-32
84WG-2724A	19-93	19-101	HS-144, Ch.	19-58	19-63
84WG-2728A	20-42	20-47	HS-148, Ch.	20-60	20-63
84WG-2732A, 84WG-2732B	20-48	20-53	HS-150, Ch.	19-82	19-90
84WG-2734A	20-42	20-47	HS-155, Ch.	19-82	19-90
94BR-1535A	20-54	20-58	HS-158, Ch.	19-33	19-38
94WG-1059A	20-59	20-62	HS-160, Ch.	20-21	20-24
94WG-1804D	20-63	20-65	HS-165, Ch.	20-8	20-14
94WG-2742A	20-66	20-69	HS-168, Ch.	20-99	20-105
94WG-2742C, 94WG-2742D	20-70	20-74	HS-175, Ch.	20-64	20-69
94WG-2745A	20-75	20-79	HS-183, Ch.	20-15	20-20
94WG-2746A, 94WG-2746B	20-80	20-84	HS-184, Ch.	20-25	20-28
94WG-2747A	20-85	20-89	HS-187, Ch.	20-38	20-43
94WG-2748A, 94WG-2748B	20-90	20-95	HS-188, Ch.	20-33	20-37
94WG-2749A	20-96	20-100	KR8, Ch. 8A	19-6	19-12
			NH6	16-6	16-7
<u>MOTOROLA INC.</u>				16-18	16-22
Airboy	17-1	17-3	NH8, Ch. 8A	19-6	19-12
AR-96-23, Airboy	17-1	17-3	OE2, Ch. 8A	19-6	19-12
AT-58	19-1	19-5	OE6	16-7	---
BK8, BK8X, Ch. 8A	19-6	19-12	OE8, Ch. 8A	16-9	16-17
CR6	16-1	16-8	PC3, Ch. 8A	19-6	19-12
CR7	15-9	15-10	PC6	16-7	---
	16-1	16-8		16-9	16-17
	C20-7	---	PC8, Ch. 8A	19-6	19-12
CR8	19-13	19-22	PD6	16-6	16-7
CT6	16-7	---		16-23	16-28
	16-9	16-17	PT10, Tuner	18-67	18-69
CT8, Ch. 8A	19-6	19-12	PT14, Tuner	18-1	18-3
CT9, 1949 Chevrolet	20-1	20-7	SR6, Ch. 8A	19-6	19-12
E-33-T	19-105	19-107	SR7	18-4	18-6
E-34-T	19-127	19-129	ST54, Tuner	17-4	17-9
FD6	16-6	16-7	ST56, Tuner	19-23	19-32
	16-18	16-22	5A1, Ch. HS-6	15-1	---
FD8, Ch. 8A	19-6	19-12		17-10	17-13
HS-6, Ch.	15-1	---	5A5, Ch. HS-15	15-2	---
	17-10	17-13		17-10	---
HS-15, Ch.	15-2	---	5A7, Ch. HS-62	17-14	17-17
	17-10	---		17-18	17-21
	17-14	17-17		17-23	---
HS-26, Ch.	18-20	18-24	5A7A, Ch. HS-62A	17-25	17-26
HS-32, Ch.	15-62	---		17-18	17-20
	17-56	17-60		17-22	---
HS-36, HS-36A, Ch.	18-52	18-72	5A9B, 5A9M, 5A9S, Ch. HS-62A;	17-24	17-26
HS-38, Ch.	19-91	19-107	5A9UB, 5A9UM, Ch. HS-165		
HS-39, Ch.	19-91	19-107	8A, Ch.	20-8	20-14
HS-58, Ch.	17-80	17-84	8FDT, Ch. 8A	19-6	19-12
HS-59, Ch.	17-75	17-79	8GMT, Ch. 8A	19-6	19-12
HS-60, Ch.	17-52	17-55	47B11	17-27	17-31
HS-62, Ch.	17-18	17-21	48L11, Ch. HS-113	18-7	18-12
	17-23	---	49L11Q, 49L13Q, Ch. HS-183	20-15	20-20
	17-25	17-26	55F11	17-17	---
HS-62A, Ch.	17-18	17-20		17-32	17-35
	17-22	---	56X11, Ch. HS-94	17-36	17-39
	17-24	17-26	57B61V, Ch. HS-77	17-40	17-51
HS-63, Ch.	20-8	20-14	57X11, 57X12, Ch. HS-60	17-52	17-55
HS-64, Ch.	17-68	17-74	58A11, 58A12, Ch. HS-158	19-33	19-38
HS-67, Ch.	18-25, 26	18-39	58G11, 58G12, Ch. HS-160	20-21	20-24
	15-62	---	58L11, Ch. HS-114	18-13	18-19
	17-56	17-60	58R11, Ch. HS-116	19-39	19-44
HS-69, Ch.	17-43	17-46	58R11A, Ch. HS-184	20-25	20-28
	17-48	17-49	58R12, Ch. HS-116	19-39	19-44
	17-61, 62	17-67	58R12A, Ch. HS-184	20-25	20-28
HS-70, Ch.	17-43	17-46	58R13, Ch. HS-116	19-39	19-44
	17-48	17-49	58R13A, Ch. HS-184	20-25	20-28
	17-66	---	58R14, Ch. HS-116	19-39	19-44
	17-95, 96	17-100	58R14A, Ch. HS-184	20-25	20-28
HS-77, Ch.	17-40	17-51	58R15, Ch. HS-116	19-39	19-44
HS-87, Ch.	19-108	19-129	58R15A, Ch. HS-184	20-25	20-28
HS-89, Ch.	19-64	19-81	58R16, Ch. HS-116	19-39	19-44
HS-91, Ch.	18-47	18-51	58R16A, Ch. HS-184	20-25	20-28
HS-94, Ch.	17-36	17-39	58X11, Ch. HS-125	19-45	19-50
HS-97, Ch.	19-64	19-81	58X11Q, Ch. HS-140	20-29	20-32
HS-98, Ch.	18-52	18-72	58X12, Ch. HS-125	19-45	19-50
HS-102, Ch.	18-73, 74	18-88	58X12Q, Ch. HS-140	20-29	20-32
HS-113, Ch.	18-7	18-12	59F11, Ch. HS-188	20-33	20-37
HS-114, Ch.	18-13	18-19	59L11Q, 59L12Q, Ch. HS-187	20-38	20-43
HS-116, Ch.	19-39	19-44	65F21, Ch. HS-26	18-20	18-24
HS-119, Ch.	18-40	18-46	65T21, Ch. HS-32; 65T21B, Ch. HS-67	15-62	---
HS-122, Ch.	19-51	19-57		17-56	17-60
HS-124, Ch.	20-44	20-53			

**MOTOROLA
NOBLITT**

MODEL	FROM MOTOROLA, INC. (Cont'd)	THROUGH
67F11, 67F12, 67F12B, Ch. HS-63	17-68	17-74
67F14, Ch. HS-122	19-51	19-57
67F61BN, Ch. HS-69	17-43	17-46
	17-48	17-49
	17-61,62	17-67
67L11, Ch. HS-59	17-75	17-79
67T61BN, Ch. HS-69	17-43	17-46
	17-48	17-49
	17-61,62	17-67
67X11, 67X12, 67X13, Ch. HS-58	17-80	17-84
67XM21, Ch. HS-64	18-25,26	18-39
68F11, 68F12, 68F14, 68F14B, 68F14M, Ch. HS-124	20-44	20-53
68L11, Ch. HS-119	18-40	18-46
68T11, Ch. HS-144	19-58	19-63
68X11, 68X11A, Ch. HS-127, HS-127A	20-54	20-59
68X11Q, Ch. HS-148	20-60	20-63
68X12, 68X12A, Ch. HS-127, HS-127A	20-54	20-59
68X12Q, 68X13Q, Ch. HS-148	20-60	20-63
69L11, Ch. HS-175	20-64	20-69
75F21, Ch. HS-91	18-47	18-51
75F31, 75F31A, 75F31B, 76F31, Ch. HS-36, HS-36A, HS-98	18-52	18-72
PT10, Tuner	18-67	18-69
77FM21, 77FM22, 77FM22M, 77FM22WM, 77FM23, Ch. HS-89, HS-97	19-64	19-81
77XM21, 77XM22, 77XM22B, Ch. HS-102	18-73,74	18-88
78FM21, 78FM21M, Ch. HS-132; 78FM22M, Ch. HS-128	20-70	20-83,84
78F11, 78F11-M, 78F12-M, Ch. HS-150, HS-155	19-82	19-90
79XM21, 79XM22, Ch. HS-168	20-99	20-105
85F21	17-59	---
	17-85	17-91
85K21	17-59	---
	17-86	17-88
	17-91	17-94
87T61BN, Ch. HS-70	17-43	17-46
	17-48	17-49
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	17-95,96	17-100
	20-85,86	20-98
88FM21, Ch. HS-133		
95F31, Ch. HS-38; 95F31B, 95F31M, Ch. HS-39; 95F33, Ch. HS-38	19-91	19-107
E-33-T	19-105	19-107
107F31, 107F31B, Ch. HS-87	19-108	19-129
E-34-T	19-127	19-129
309	20-106	20-109
402	C18-5	---
405	16-7	---
	16-16	---
	16-29	---
	16-33	---
	16-35	16-36
408	18-89	18-91
409	19-130	19-132
505	15-9	---
	15-77	---
	16-7	---
	16-16	---
	16-30	---
	16-33	---
	16-35	16-36
508	18-90	---
	18-92	18-94
509	20-110	20-112
605	16-7	---
	16-16	---
	16-31	---
	16-33	16-36
608	18-90	---
	18-95	18-97
609	20-113	20-115
705	16-7	---
	16-16	---
	16-32	16-36
708	18-90	---
	18-98	18-100
709	20-116	20-118

MODEL	FROM	THROUGH
<u>MUSICAIRE</u>		
See COAST-TO-COAST STORES CENTRAL ORGANIZATION INC.		
<u>NASH</u>		
See RADIO CORP. OF AMERICA Also See ZENITH RADIO CORP.		
<u>NATIONAL ACOUSTIC PRODUCTS</u>		
WRA-1	Misc.16-7	---
<u>NATIONAL CO., INC.</u>		
HRO Series	17-7	17-20
HRO-5	17-4	17-6
HRO-5-1 Series	17-16	17-17
HRO-5A1	17-21	17-34
HRO-5R	17-4	17-6
HRO-5RA	17-16	---
HRO-5T	17-4	17-6
HRO-5TA	17-16	---
HRO-7	17-21	---
	17-28	---
	17-35	17-48
HRO-M, HRO-MX, HRO-M-RR, HRO-M-TM	17-1	17-3
NC-57	18-1	18-16
NC-108R, NC-108T	19-1	19-10
NC-173	17-49,50	17-62
NC-183	19-11	19-35
686S	17-28	---
697	17-21	---
<u>NATIONAL COOPERATIVES, INC.</u>		
R-546	Misc.16-8	---
R-646	Misc.19-15	---
6A47WT, 6A47WTC, 6A47WTR, 6AFMT, 6AMM, 6AWC2, 6AWC3	18-1,2	18-8
<u>NATIONAL UNION RADIO CORP.</u>		
Fraternity	17-1	---
G-517-B, G-517-W, Fraternity	17-1	---
G-613	16-1	16-2
G-615	16-3	16-4
G-617-SN	Misc.18-10	---
571	17-2	17-4
<u>NOBLITT-SPARKS INDUSTRIES, INC.</u> (ARVIN)		
RE-91, Ch.	19-12	19-13
RE-200, Ch.	19-12	19-13
RE-200M, Ch.	C17-6	---
RE-202, Ch.	16-1	16-4
	C20-7	---
RE-204, Ch.	C17-6	---
RE-206-1, Ch.	20-17	20-18
RE-206-2, Ch.	17-16	17-18
RE-209, Ch.	17-1	17-4
RE-228, Ch.	17-5	17-8
RE-231, Ch.	16-1	16-4
	C20-7	---
RE-232, Ch.	19-1	19-3
RE-233, Ch.	18-1	18-3
RE-237, Ch.	17-9,10	17-15
	C19-4	---
RE-242, Ch.	19-13	19-14
RE-243, Ch.	18-6	18-7
RE-244, Ch.	19-4	19-6
RE-248, Ch.	18-4	18-6
RE-251, Ch.	19-7	19-8
RE-252, Ch., Revised	20-1	20-4
RE-253, Ch.	18-8	18-12
RE-254, RE-255, RE-256, Ch.	19-4	19-6
RE-259, Ch.	19-4	19-6
RE-260, Ch.	20-14	20-16
RE-265, Ch.	19-9	19-11
RE-267, Ch.	20-7	20-10
RE-273, Ch.	20-11	20-13
RE-274, Ch.	20-5	20-6
140P, Ch. RE-209	17-1	17-4
150TC, 151TC, Ch. RE-228	17-5	17-8
152T, 153T, Ch. RE-233	18-1	18-3
160T, 161T, Ch. RE-232	19-1	19-3
182TFM, Ch. RE-237	17-9,10	17-15
	C19-4	---
240P, Ch. RE-243	18-6	18-7
241P, Ch. RE-244, RE-254, RE-255, RE-256, RE-259	19-4	19-6
242T, 243T, Ch. RE-251	19-7	19-8

NOBLITT PHILCO

MODEL	FROM	THROUGH
<u>NOBLITT-SPARKS INDUSTRIES, INC. (Cont'd)</u>		
244P, Ch. RE-244, RE-254, RE-255, RE-256, RE-259	19-4	19-6
250P, Ch. RE-248	18-4	18-6
253T, 254T, 255T, 256T, Ch. RE-252, Revised	20-1	20-4
264T, 265T, Ch. RE-265	19-9	19-11
280TFM, 281TFM, Ch. RE-253	18-8	18-12
341T, Ch. RE-274	20-5	20-6
350P, 351P, Ch. RE-267	20-7	20-10
356T, 357T, Ch. RE-273	20-11	20-13
360TFM, 361TFM, Ch. RE-260	20-14	20-16
442, Ch. RE-91, RE-200	19-12	19-13
444AH, Ch. RE-91, RE-200	19-12	19-13
444AM, 444M, Ch. RE-200M	C17-6	---
544	C17-10	---
544AR	C17-5	---
544R	C17-5	---
	C17-10	---
547, 547A, Ch. RE-242	19-13	19-14
552AN, 552N, 555, 555A, Ch. RE-202, RE-231	16-1	16-4
	C20-7	---
	C17-6	---
558, Ch. RE-204	20-17	20-18
664, 664A, Ch. RE-206-1	20-17	20-18
665	16-5	16-7
2410P, Ch. RE-244, RE-254, RE-255, RE-256, RE-259	19-4	19-6
6640, Ch. RE-206-2	17-16	17-18

NORTHERN RADIO CO.

Type N600, Model A	19-1	19-21
Type N600, Model AJ	18-1	18-8
Type N600, Model B	19-1	19-21
Type N600, Model BJ	18-1	18-8
Type N600, Model C	19-1	19-21
Type N600, Model CJ	18-1	18-8
Type N600, Model D	19-1	19-21
Type N600, Model DQ	19-1	19-21
Type N600, Model DQT	19-1	19-21
Type N600, Model DT	19-1	19-21
Type N600, Model E	19-1	19-21
Type N600, Model ED	19-1	19-21
Type N600, Model EDJ	18-1	18-8
Type N602, Model A	19-1	19-21
Type N602, Model B	19-1	19-21
Type N602, Model C	19-1	19-21
Type N602, Model D	19-1	19-21
Type N602, Model DQT	19-1	19-21
Type N602, Model DT	19-1	19-21
Type N602, Model E	19-1	19-21
Type N602, Model ED	19-1	19-21
N605-E	16-1	16-4

OLDSMOBILE

See UNITED MOTORS SERVICE

OLYMPIC RADIO & TELEVISION INC.

PQ61	18-1	18-2
PT50, PT51	18-4	---
6-507	18-5	18-6
6-604V-110, 6-604V-220, Early	17-1	17-4
6-604V-110, 6-604V-220, Late	17-3	17-6
6-604W-110, 6-604W-150, 6-604W-220, Early	17-1	17-4
6-604W-110, 6-604W-150, 6-604W-220, Late	17-3	17-6
6-606U	17-7	17-9
6-608-110, 6-608-220	18-7	18-10
6A-501V-U, 6A-501W-U, 6A-502-U	C18-7	---
6A-606	16-1	16-2
6A-606-U	17-8	---
	17-10	17-11
6B-606	16-3	16-4
7-421V, 7-421W, 7-421X	18-2	18-3
7-435V, 7-435W	18-13	18-15
7-526	16-5	16-6
7-532V, 7-532W	19-1	19-3
7-537V, 7-537W	19-3	19-5
7-622	19-6	19-8
7-638	19-6	19-8
7-724	17-12	17-14
7-925, 7-934	19-9,10	19-13
7-936	19-9,10	19-13
7-939	19-9,10	19-13
8-618, 8-618-220	18-10	18-12
8-925	19-14	19-15,16

MODEL	FROM	THROUGH
<u>OLYMPIC RADIO & TELEVISION INC. (Cont'd)</u>		
8-934, 8-936	19-14	19-15,16
530	18-16	---
730	19-17	---

OPERADIO MFG. CO.

Misc.17-9

THE ORTHON CORP.

605, 615, 705, 715	20-1	20-2
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PACENT ENGINEERING CORP.

9-R	18-1	18-2
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PACKARD-BELL CO.

Phonocord	17-8	17-13
5DA	16-1	16-2
5DB, 100	20-1	20-2
471	17-1	17-2
568	16-3	16-4
571, 572	17-3	17-4
581	20-1	20-2
673	17-5	17-7
673A, 673B	18-1	18-3
682	20-3	20-4
771, 771X	18-4	18-6
791	20-5	20-7
861, Phonocord	17-8	17-13
872	17-14	17-16
880	18-1	18-3
881	18-7	18-9
882	18-10	18-12
884, 892	19-1	19-3
1063	18-13	18-16
1181, 1181A	20-8	20-11
1272	19-4	19-10
1273	19-11	19-14
1472	19-15,16	19-19

PACKARD MOTOR CAR CO.

Also See PHILCO CORP.

PA-33915, Early; PA-33915, Late; See STEWART-WARNER Models 3341, 3341-R Late, 3371	18-11	18-14
PA-351099, PA-351100; See STEWART- WARNER Models R-3271, R-3271C	18-7	18-8
PA-351101, PA-351102; See STEWART- WARNER Models R-3291, R-3291C	18-9	18-10
PA-353832; See STEWART-WARNER Models 3341, 3341-R Late, 3371	18-11	18-14

PENTRON CORP.

748, Astra-Sonic	Misc.19-16	---
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PHILCO CORP.

Mopar 802, Chrysler	19-1	19-9
C-4608, Codes 121, 122; Mopar 802, Chrysler	19-1	19-9
CR-2, Code 121	16-1	16-3
CR-4, Code 121	16-4	---
	16-6	16-8
CR-6, Code 121	16-5	16-8
CR-8	19-10	19-15,16
CR-9	19-17,18	19-23
CR-10	20-1	20-7
CR-12	20-8	20-13,14
P-4635, Packard	20-26	20-33
P-4735, Packard	19-24	19-29,30
S-4624, S-4625, Studebaker	20-34	20-41
S-4626, S-4627, Studebaker	19-31	19-38
S-4824, Studebaker	20-42	20-46
UN6-100	18-1	18-7
UN6-400	19-39	19-46
UN6-450	17-1	17-5
UN6-500	17-5	17-9
UN6-550	18-8	18-15
46-131	20-47	20-54
46-132	20-55	20-62
46-200, Code 125	16-9	16-11
46-421, 46-421-I	19-47	19-54
46-427	18-16	18-23
46-1203, Code 125	16-12	16-14
47-204, 27-205	20-63	20-68
47-1227	19-55	19-69,70
47-1230	19-71	19-83,84
48-141, 48-145	18-24	18-31

RCA

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
	RADIO CORP. OF AMERICA (Cont'd)			RADIO CORP. OF AMERICA (Cont'd)	
QB12, Ch. RC-529A	15-8 C17-5	15-12 ---	RC-618, RC-618A, Ch.	19-16 C20-9	19-25 ---
QB13, Ch. RC-529A, RC-612	16-7 16-19	---	RC-618B, RC-618C, Ch.	19-35 C20-8	19-44 ---
QB55, Ch. RC-563A	15-27 C18-8	15-29 ---	Revised	C20-10	---
QB55X, Ch. RC-563K	C19-5	---	RC-618D, Ch.	20-13	---
QU51C, QU51M, QU55, Ch. RC-568, RC-568A	17-9 C19-5	17-11 ---	RC-1000C, Ch.	20-11	20-14
	14-37	14-41	RC-1004E, Ch.	16-48	16-50
	14-64	---		15-25	15-26
	C17-6	---		17-27	17-28
QU61, Ch. RC-568B	15-55 C18-7	15-59 ---	RC-1011, RC-1011A, RC-1011B, Ch.	C17-6	---
	C19-6	---		15-26	---
QU62, Ch. RC-602B	17-12 C19-5	17-20 ---		15-31	---
QU72, QU72A, Ch. RC-1035	17-21	17-24		15-49	15-50
RC-368, Ch.	19-65	19-70		C17-6	---
RC-396, Ch.	11-15 C17-5	11-16 ---	RC-1017, Ch.	C17-7	---
RC-474D, Ch.	16-25	16-27		C18-8	---
RC-490, Ch.	19-54	19-55		15-16	---
RC-507U, Ch.	16-14	16-18		15-24	---
RC-529A, Ch.	15-8 16-7	15-12 ---	RC-1017A, Ch.	C17-7	---
	16-19	16-24		15-33	---
	C17-5	---	RC-1017B, Ch.	15-37	15-39
RC-563A, Ch.	15-27 C18-8	15-29 ---	RC-1023, Ch.	15-51	15-52
	C19-5	---		C17-6	---
RC-563K, Ch.	17-9 C19-5	17-11 ---	RC-1023B, Ch.	C19-6	---
RC-568, RC-568A, Ch.	14-37 14-64	14-41 ---		15-33	15-36
	C17-6	---		15-51	15-52
RC-568B, Ch.	15-55 C18-7	15-59 ---	RC-1023C, Ch.	C17-6	---
	C19-6	---		C19-6	---
RC-585, Ch.	16-1	16-7		15-33	15-36
RC-589, RC-589A, RC-589B, RC-589D, RC-589U, RC-589UA, RC-589UB, Ch.	15-22 C18-8	15-24 ---	RC-1034, Ch.	15-51	15-52
	C18-9	---		C17-6	---
RC-594C, Ch.	15-4 C19-5	15-7 ---		C17-7	---
RC-594D, Ch.	15-52 C17-6	15-54 ---	RC-1035, Ch.	C20-10	---
	C17-7	---	RC-1037B, Ch.	17-21	17-24
RC-601, RC-601A, Ch.	17-1	17-3	RC-1038, RC-1038A, Ch.	20-1	20-2
	17-6	17-8		15-89	15-91
RC-601D, RC-601E, Ch.	17-3	17-8	RC-1040, RC-1040A, Ch.	C18-10	---
RC-602, RC-602A, Ch.	18-3 C19-5	18-10 ---		15-87	15-88
	C20-7	---	RC-1040B, Ch.	C17-7	---
RC-602B, Ch.	17-12 C19-5	17-20 ---		C20-10	---
RC-605, Ch.	15-44 C17-7	15-48 ---	RC-1040C, RC-1040D, Ch.	15-87	15-88
RC-606, Ch.	16-35 C19-5	16-39 ---		C17-7	---
	C19-7	---	RC-1044, Ch.	C19-7	---
RC-606C, Ch.	19-49	19-53		C20-10	---
RC-608, Ch.	16-39 C18-8	16-43 ---	RC-1044B, Ch.	C20-8	---
	C20-11	---		C20-10	---
RC-610, RC-610C, Ch.	19-56 C20-11	19-64 ---	RC-1045, Ch.	16-8	16-9
RC-612, Ch.	16-7	---	RC-1046, Ch.	16-11	16-13
RC-613A, Ch.	16-19 18-55	16-24 18-60		C17-6	---
	C19-5	---	RC-1046A, Ch.	16-8	16-13
RC-615, Ch.	C20-11	---		16-10	16-13
	18-15	18-16	RC-1046B, Ch.	C17-6	---
	19-47	19-48	RC-1045, Ch.	17-25	17-26
	C19-5	---	RC-1046, Ch.	17-29	17-30
RC-616, Ch.	18-17 C20-9	18-24 ---		C19-5	---
RC-616A, Ch.	19-16 C20-9	19-25 ---	RC-1046C, RC-1046D, RC-1046E, Ch.	17-29	17-30
RC-616F, Ch.	18-17	18-24		C19-5	---
RC-616H, Ch.	19-16 C20-9	19-25 ---	RC-1047, Ch.	17-29	17-30
	C20-9	---		C19-5	---
	18-17	18-24	RC-1050, RC-1050A, Ch.	16-28	16-30
	19-16	19-25		C19-6	---
	C20-9	---	RC-1050B, Ch.	18-49	18-50
	18-17	18-24		C19-7	---
	C20-9	---	RC-1057A, Ch.	C20-11	---
	19-16	19-25		18-49	18-50
	C20-9	---	RC-1057B, Ch.	C20-11	---
	18-17	18-24		18-53	18-54
	19-16	19-25		C20-11	---
	C20-9	---		20-21	20-23

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
	<u>RADIO CORP. OF AMERICA (Cont'd)</u>			<u>RADIO CORP. OF AMERICA (Cont'd)</u>	
RC-1058, RC-1058A, Ch.	18-51	18-52	8X541, 8X542, 8X543, 8X544, 8X545,		
	C19-7	---	8X546, 8X547, Ch. RC-1065,		
RC-1059, RC-1059A, Ch.	19-5	19-9	RC-1065A	18-45	18-46
	C20-7	---		C20-11	---
	C20-10	---	8X681, 8X682, Ch. RC-1061	19-26	19-29
RC-1059B, RC-1059C, Ch.	20-3	20-6	9BX5, Ch. RC-1059B, RC-1059C	20-3	20-6
RC-1060, RC-1060A, Ch.	19-10	19-15	9BX56, Ch. RC-1068	20-7	20-10
	C20-8	---	9W51, Ch. RC-1079D	20-24	20-26
	C20-9	---	9W101, Ch. RC-618B	19-35	19-44
RC-1061, Ch.	19-26	19-29		C20-8	---
RC-1063A, Ch.	19-45	19-46		C20-10	---
	C20-10	---	Revised	20-13	---
RC-1064, Ch.	18-41	18-42	9W102, Ch. RC-618D	20-11	20-14
	18-47	18-48	9W103, Ch. RC-618B; 9W105,		
	C17-6	---	Ch. RC-618C	19-35	19-44
	C20-10	---		C20-8	---
RC-1065, RC-1065A, Ch.	18-45	18-46		C20-10	---
	C20-11	---	Revised	20-13	---
RC-1066, RC-1066A, Ch.	18-43	18-44	9X561, Ch. RC-1079B; 9X562,		
	C19-6	---	Ch. RC-1079C	20-15	20-16
	20-7	20-10	9X571, Ch. RC-1079; 9X572,		
RC-1068, Ch.			Ch. RC-1079A	20-17	20-18
RC-1069, RC-1069A, RC-1069B,			9X641, Ch. RC-1080; 9X642,		
RC-1069C, Ch.	19-1	19-4	Ch. RC-1080A	20-19	20-20
RC-1070, Ch.	19-30	19-34	9Y7, Ch. RC-1057B	20-21	20-23
	C20-10	---	9Y51, Ch. RC-1077	20-27	20-30
RC-1077, Ch.	20-27	20-30	54B1, Ch. RC-589; 54B1-N,		
RC-1079, RC-1079A, Ch.	20-17	20-18	Ch. RC-589D; 54B2, Ch. RC-589A;		
RC-1079B, RC-1079C, Ch.	20-15	20-16	54B3, Ch. RC-589B, Second		
RC-1079D, Ch.	20-24	20-26	Production, Ch. RC-589U,		
RC-1080, RC-1080A, Ch.	20-19	20-20	RC-589UA, RC-589UB	15-22	15-24
RK-117, Ch.	17-44	17-55		C18-8	---
	C18-9	---		C18-9	---
	C19-6	---	54B5, Ch. RC-1047	16-28	16-30
RK-121, Ch.	17-31	17-43		C19-6	---
	C18-10	---	55F, Ch. RC-1004E	15-25	15-26
	C20-12	---		C17-6	---
RK-121C, Ch.	18-25	18-40	55U, Ch. RC-1017	15-16	---
	18-25	---		15-24	---
RS-123, Ch.	C20-9	---		C17-7	---
	17-31	17-55			
	C18-9	C18-10	56X, 56X2, 56X3, Ch. RC-1011,		
	C19-6	---	RC-1011A, RC-1011B	15-26	---
	C20-12	---		15-31	---
RS-123D, Ch.	18-25	18-40		C17-6	---
	C20-9	---		C17-7	---
RS-1000, Ch.	17-27	17-28		C18-8	---
RS-1001, Ch.	20-1	20-2	56X5, Ch. RC-1023	15-32	15-34
X60, Ch. RC-474D	16-25	16-27		C17-6	---
5Q5, Ch. RC-396	11-15	11-16		C17-7	---
	C17-5	---	56X10, Ch. RC-1023B	15-34	15-36
5Q12	11-4	11-34		C17-6	---
	11-33	---		C17-7	---
	C17-6	---	56X11, Ch. RC-1023A	15-37	15-39
8B41, Ch. RC-1069; 8B42,				C17-6	---
Ch. RC-1069A; 8B43, Ch. RC-1069B;			59V1, Ch. RC-605	15-44	15-48
8B46, Ch. RC-1069C	19-1	19-4		C17-7	---
8BX5, Ch. RC-1059, RC-1059A	19-5	19-9	61-1, 61-2, 61-3, Ch. RC-1011,		
	C20-7	---	RC-1011A, RC-1011B	15-49	15-50
	C20-10	---		C17-6	---
8BX6, Ch. RC-1040C, RC-1040D	18-11	18-14		C17-7	---
	C20-8	---	61-5, Ch. RC-1023	15-33	---
	C20-10	---		15-51	15-52
8BX54, 8BX55, Ch. RC-1059, RC-1059A	19-5	19-9		C17-6	---
	C20-7	---	61-6, 61-7, Ch. RC-594D	15-52	15-54
	C20-10	---		C17-6	---
8BX65, Ch. RC-1040C, RC-1040D	18-11	18-14		C17-7	---
	C20-8	---	61-8, Ch. RC-1034	16-31	16-32
	C20-10	---		C17-6	---
8F43, Ch. RC-1037B	20-1	20-2	61-8, Ch. RC-1064	18-47	18-48
8R71, 8R72, 8R74, 8R75, 8R76,				C17-6	---
Ch. RC-1060, RC-1060A	19-10	19-15	61-9, Ch. RC-1034	16-31	16-32
	C20-8	---		C17-6	---
	C20-9	---	61-9, Ch. RC-1064	18-47	18-48
8V7, Ch. RC-615	18-15	18-16		C17-6	---
	C19-5	---	61-10, Ch. RC-1023A, RC-1023B,		
8V90, Ch. RC-618, RC-618A; 8V91,			RC-1023C	15-33	---
Ch. RC-616A, RC-616H	19-16	19-25		15-51	15-52
	C20-9	---		C17-6	---
8V112, Ch. RC-616, RC-616F	18-17	18-24		C19-6	---
	C20-9	---	62-1, Ch. RC-1017A, RC-1017B	16-33	16-34
8V151, Ch. RK-121C, RS-123D	18-25	18-40		C19-7	---
	C20-9	---	65BR9, Ch. RC-1045	17-25	17-26
8X53, Ch. RC-1064	18-41	18-42	65F, Ch. RC-1004E; CV-42,		
	C20-10	---	Ch. RS-1000	17-27	17-28
8X71, 8X72, Ch. RC-1070	19-30	19-34	65U-1	15-85	15-86
	C20-10	---		C19-7	---
8X521, 8X522, Ch. RC-1066, RC-1066A	18-43	18-44			
	C19-6	---			

RCA RADIO WIRE

MODEL	FROM	THROUGH
<u>RADIO CORP. OF AMERICA (Cont'd)</u>		
65X1, 65X2, Ch. RC-1034	15-61 C17-7 C20-10	15-62 --- ---
65X8, 65X9, Ch. RC-1034	15-61 C17-7	15-62 ---
66BX, Ch. RC-1040, RC-1040A, RC-1040B	15-87 C17-7 C20-10	15-88 --- ---
66BX, Ch. RC-1040B	15-87 C17-7 C19-7	15-88 --- ---
66X1, 66X2, Ch. RC-1038; 66X3, 66X4, 66X7, 66X8, 66X9, Ch. RC-1038A	15-89 C18-10 17-29	15-91 --- 17-30
66X11, Ch. RC-1046A	17-29 C19-5	17-30 ---
66X11, Ch. RC-1046C	17-29 C18-10 C19-5	17-30 --- ---
66X12, Ch. RC-1046	17-29 C19-5	17-30 ---
66X12, Ch. RC-1046D	17-29 C18-10 C19-5	17-30 --- ---
66X13, Ch. RC-1046B	17-29 C19-5	17-30 ---
66X13, Ch. RC-1046E	17-29 C18-10 C19-5	17-30 --- ---
66X14, 66X15, Ch. RC-1046B 67AV1, 67V1, Ch. RC-606	17-29 16-35 C19-5 C19-7	17-30 16-39 --- ---
68R1, 68R2, 68R3, 68R4, Ch. RC-608	16-39 C18-8 C20-11	16-43 --- ---
75X11, Ch. RC-1050, RC-1050A	18-49 C19-7 C20-11	18-50 --- 18-50
75X11, Ch. RC-1050B	18-49 C20-11	18-50 ---
75X12, Ch. RC-1050, RC-1050A	18-49 C19-7 C20-11	18-50 --- 18-50
75X12, Ch. RC-1050B	18-49 C20-11	18-50 ---
75X14, 75X15, 75X16, Ch. RC-1050, RC-1050A, RC-1050B	18-49 C20-11	18-50 ---
75ZU, Ch. RC-1063A	19-45 C20-10	19-46 ---
76ZX11, Ch. RC-1058, RC-1058A 76ZX12, Ch. RC-1058, RC-1058A	18-51 18-51 C19-7	18-52 18-52 ---
77U, Ch. RC-1057A	18-53 C20-11	18-54 ---
77V1, Ch. RC-615 77V2, Ch. RC-606C 85T8 96X5, Ch. RC-490 112A	19-47 19-49 16-44 19-54 4-56 C17-8	19-48 19-53 16-47 19-55 4-58 ---
515, Ch. RC-1000C 610V1, Ch. RC-610C; 610V2, Ch. RC-610	16-48 19-56 C20-11	16-50 19-64 ---
612V1, 612V3, 612V4, Ch. RK-121, RS-123	17-31 C18-10 C20-12	17-43 --- ---
710V2, Ch. RC-613A	18-55 C19-5 C20-11	18-60 --- ---
711V1, Ch. RK-117, RS-123	17-44 C18-9	17-55 ---
711V2, Ch. RK-117, RS-123	17-44 C18-9 C19-6	17-55 --- ---
711V3, Ch. RK-117, RS-123	17-44 C18-9	17-55 ---
<u>THE RADIO CRAFTSMEN INC.</u>		
6-Tube Kit RC-8	17-1 18-1	17-2 18-5

MODEL	FROM	THROUGH
<u>RADIO DEVELOPMENT & RESEARCH CORP. (MAGIC TONE)</u>		
504 508 900	Misc.17-10 Misc.19-18 Misc.19-18	--- --- ---
<u>RADIO DISPLAYS CO.</u>		
Bear Bottle Type B-500, C-500, P-500	19-1 Misc.18-3	19-2 ---
<u>RADIO ENGINEERING LABS., INC.</u>		
646 646B 647 647B 648 648B	18-1,2 20-1 18-1,2 20-1 18-1,2 20-1	18-12 20-10 18-12 20-10 18-12 20-10
<u>RADIO KITS, INC.</u>		
B4 FM-7 SSC 3W10A 210	18-1 19-1 17-1 19-4 17-3	18-2 19-3 17-3 19-7 17-5
<u>RADIO MFG. ENGINEERS INC.</u>		
VHF-152 VHF-152A 84 84A	19-1 17-1 18-1 18-5 18-2 18-14	19-10 17-10 18-3 18-13 18-11 18-15
<u>RADIONIC EQUIPMENT CO. (CHANCELLOR)</u>		
Y62W 14B 35P 240T	18-1 16-1 Misc.17-11 16-2	18-2 --- --- ---
<u>RADIO & TELEVISION INC. (BRUNSWICK)</u>		
D-1000, D-1100 D-6876 SF-6810 T-2200, T-2200X T-4000 T-4000X T-4400, T-4400X T-5000 T-9000	19-1 16-1 16-1 19-1 16-1 16-1 18-1 18-3 19-1	19-7 16-5 16-5 19-7 16-5 16-5 18-3 18-5 19-7
<u>RADIO & TELEV. PRODUCTS CO. (KAROLA)</u>		
47-601 47-602	Misc.19-19 18-1	--- 18-2
<u>RADIO WIRE TELEVISION (LAFAYETTE)</u>		
A-23 A-41 B-43 B-80, See WELLS GARDNER Model 7L BB-60, BB-61 BP-12 C-29, See GAROD Model 389 C-36, See GAROD Model 4159 C-95 C-104 CC-24, CC-25 CC-58A D-13 D-45, D-46 D-50, D-51, D-53, D-54 E-76, E-77 F-62 FA-15 J-4 J-5 J-51P J-62, J-62C JA-328	18-1 18-6 18-8 8-33 18-8 16-1 11-4 11-14 10-16 10-25 18-9 18-15 18-16 18-18 18-19 18-22 20-1 18-23 19-1,2 16-3 18-26 18-27 16-4 18-28 18-29	18-5 18-7 --- --- 16-2 --- --- 10-26 18-14 --- 18-21 --- 20-2 18-25 19-6 --- --- --- --- ---

RADIO WIRE SEARS

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
<u>RADIO WIRE TELEVISION (Cont'd)</u> (LAFAYETTE)			<u>REGAL ELECTRONICS CORP. (Cont'd)</u>		
JL-5	18-30	---	1749	17-4	17-7
JL-6	19-7	---	7152	18-2	---
JL-7, JL-8	19-8	---	7162	18-3	18-4
JS-1	19-9	19-10	7163	18-5	18-6
JS-2	19-11	---	7251	19-11	---
JS-115	19-12	---	<u>REMLER CO., LTD.</u>		
JS-135	19-13	---	Scottie	19-1	---
JS-135A	19-14	---	MP5-5-3	C17-8	---
JS-166, JS-167	19-15	---	5100	Misc.16-9	---
JS-172, See FADA Models P24, PL72	13-2	---		C18-11	---
JS-173	19-16	---	5300B, 5300BI, 5300I	Misc.17-13	---
JS-174	19-17	---	5310, Early	18-1	18-2
JS-176	19-18	---		18-4	---
JS-183	19-19	---	5310, Late	18-1	---
JS-184, JS-185	19-16	---		18-3	18-4
JS-186, JS-187	19-20	---	5400	18-1	---
JS-188, JS-189, JS-190	20-3	---		18-4	18-5
JS-191	20-4	---	5410	18-1	---
JS-193	20-5	---		18-5	---
JS-241, See FADA Model 177	13-9	---	5500	18-1	---
JS-242	20-6	---		18-4	18-5
JS-256	20-5	---	5505	18-1	---
JS-300	20-4	---		18-5	---
JS-310, See FADA Model 278	13-19	---	5510	18-1	---
JS-319	19-12	---		18-5	---
M-8	20-7	---	5515	18-1	---
M-19	20-8	20-9		18-5	---
M-61	20-10	---	5520	18-1	---
M-62, M-62C	20-11	---		18-4	18-5
M-70	17-1,2	17-6	5530	18-1	---
M-70A	17-6	17-11		18-4	18-5
M-71	17-1,2	17-6	5535	18-1	---
M-72, M-73	C18-8	---		18-5	---
MB-3, MB-3A	20-12	20-14	5560	18-4	18-5
MC-10	20-15	---	5565	18-4	18-5
MC-11	16-5	16-6	6000, Scottie	19-1	---
MC-16	20-16	---	7110, 7120	19-2	19-6
1-421	20-17	---	<u>REXEL MERCHANDISE CO.</u>		
1-422	20-18	---	L-266	16-1	16-2
1-427	20-19	---	L-266-A	16-3	16-4
1-524	20-20	---	L-266-U	16-5	16-6
1-542	20-17	---	<u>ROBERT-LAWRENCE ELECTRONICS CORP.</u>		
1-819	20-21	20-22	101-6T	17-1	17-2
1-1205	20-23	20-25	102-L-6T	17-3	17-5
1E-629	20-31	---	201W-6T	17-1	17-2
617, 618	20-26	---	<u>ROD RADIO MANUFACTURING CO.</u>		
619, 620	20-27	---	6R608	Misc.20-6	---
621, 622	20-28	20-29	<u>RYAN SALES CO.</u>		
651, 653	20-32	---	CST53	16-1	16-2
655	20-33	---	<u>THE SARGENT-RAYMENT CO.</u>		
1030TP	20-30	---	SR28FAM	Misc.20-7	---
1300	20-34	---	<u>SCOTT RADIO LABS., INC.</u>		
<u>THE RADOLEK CO.</u>			Export Receiver	18-1	18-41
35	Misc.17-12	---	Imperial, All Wave	16-1	---
<u>RAYMOND ROSEN & CO.</u>			Metropolitan	18-81,82	18-83,84
MI-13154	18-1,2	18-5	SLR-12-A	18-42	18-80
<u>REGAL ELECTRONICS CORP.</u>			16A, Metropolitan	18-81,82	18-83,84
BP-48	19-1	---	500	19-1	19-19
CR-761	19-2	19-4	800-B	C17-8	---
CR-762	20-1	20-2	800-B6	16-2	---
CR-762T	20-2	20-3	<u>SEARS, ROEBUCK & CO.</u> (SILVERTONE)		
L-43	19-5	---	100.156, Ch.	18-1	18-8
W800	16-1	---	100.184, Ch.;	20-20	20-27
	C20-11	---	Moto-Matic Tuner	20-6	20-19
W900	16-2	16-3	100.185, Ch.;	20-28	20-35
	C20-13	---	Moto-Matic Tuner	20-6	20-19
78	19-6	---	100.186, Ch.;	20-36	20-43
205	19-7	---	Moto-Matic Tuner	20-6	20-19
208	C18-11	---	101.393, Ch.	C18-11	---
700	17-1	---	101.471, Ch.	18-9	18-14
747	17-2	17-3	101.581, Ch.	11-64	---
777	18-1	---		11-80	---
800	16-1	---		11-82	---
	C20-11	---		C19-8	---
801	16-1	---	101.622-2E, Ch.	19-11	19-14
	C20-11	---			
900	16-2	16-3			
	C20-13	---			
1049	16-2	---			
	16-4	---			
1107	19-8	---			
1500	19-9	19-10			

SEARS

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
	SEARS, ROEBUCK & CO. (Cont'd)			SEARS, ROEBUCK & CO. (Cont'd)	
101.662-3C, Ch.	19-11	19-14	132.807-2, Ch.	C18-11	---
101.662-4E, Ch.	19-11	19-14	132.816, 132.816A, Ch.	20-1	20-3
101.662-5F, Ch.	19-11	19-14	132.818-1, Ch.	18-52	18-53
101.666A, 101.666-1B, Ch.	19-15	19-17	132.820, Ch.	18-20	18-22
101.667B, Ch.	19-18	19-21	132.825-1, 132.825-2, 132.825-3,		
101.667-1B, Ch.	19-22	19-25	132.825-4, Ch.	19-1	19-5
101.800A, 101.800-1, Ch.	C18-11	---	132.826, 132.826-1, Ch.	19-8	19-10
101.802-1, Ch.	15-15	15-18	132.838, Ch.	17-6	17-7
	C19-8	---		17-15	---
101.802A, Ch.	15-15	15-18	132.839, Ch.	17-8	17-10
	C19-8	---	132.840, Ch.	19-26	19-28
101.807, Ch.	16-1	16-3		C20-13	---
101.807A, Ch.	16-1	16-3	132.841, Ch.	18-56	---
101.808, Ch.	16-1	16-3		18-58	18-60
	C19-8	---		C20-13	---
101.808-1C, 101.808-1D, Ch.	C18-11	---	132.841, Revised, Ch.	18-57	---
	C19-8	---	132.857, Ch.	20-63	20-64
101.809, Ch.	16-1	16-5	132.858, Ch.	20-65	20-66
	16-4	16-5	132.868, Ch., Revised	20-44	20-47
	16-8	---	132.871, Ch.	20-67	20-69
	C18-11	---	135.242, Ch.	20-58	20-59
101.809-1A, 101.809-1B, Ch.	16-1	16-5	135.243, Ch.	20-60	20-62
	16-4	---	135.244, Ch.	20-70	20-72
	16-8	---	139.151, Ch.	17-1	---
	C18-11	---	141.416, Ch.	18-23	18-25
	C20-13	---	141.417, Ch.	C18-11	---
101.809-2, Ch.	16-1	16-5	434.140, Ch.	20-4	20-5
	16-4	---	478.206, Ch.	20-48	20-52
	16-8	---	478.206-1, Ch.	20-53	20-57
	C18-11	---	547.245, Ch.	20-73	20-75
	C20-13	---	3351, 3451, 3551, Ch. 132.802-2C,		
101.809-3C, Ch.	16-1	16-5	132.802-2E, 132.802-2E	C18-11	---
	16-4	---	4486, Ch. 100.156	18-1	18-8
	16-8	---	4518, Ch. 101.393	C18-11	---
	C18-11	---	4586, 4586-A, 4586-B, Ch. 100.156	18-1	18-8
	C20-13	---	4663, 4763, Ch. 101.471	18-9	18-14
101.810, Ch.	18-39	18-43	5372, 5372-B, Ch. 109.371,		
101.810-1A, Ch.	18-41	18-42	109.371-1	18-15	18-19
	18-44	---	6011, Ch. 132.816; 6012,		
101.810-3, Ch.	18-39	18-43	Ch. 132.816A	20-1	20-3
101.811, Ch.	16-1	16-5	6015, 6016, Ch. 132.820	18-20	18-22
	16-4	---	6050, Ch. 132.825, 132.825-1,		
	16-8	---	132.825-2, 132.825-3, 132.825-4	19-1	19-5
	C18-11	---	6052, Ch. 110.452; 6052A,		
	C19-8	---	Ch. 110.452-1	19-6	19-7
101.813, Ch.	17-11	17-12	6071, Ch. 132.826, 132.826-1	19-8	19-10
	17-15	---	6106, Ch. 101.662-2E; 6106A,		
101.814, 101.814-1A, Ch.	18-26	18-29	Ch. 101.662-4E	19-11	19-14
101.814-2B, Ch.	18-29	18-30	6111, Ch. 101.662-3C; 6111A,		
	18-33	18-34	Ch. 101.662-5F	19-11	19-14
101.814-3B, Ch.	18-29	---	6200A, 6203, Ch. 101.800-1,		
	18-31	---	101.800A	C18-11	---
	18-33	---	6230A, Ch. 101.802-1	15-15	15-18
	18-35	---		C19-8	---
101.814-4C, Ch.	18-26	18-29	6285, Ch. 101.666A, 101.666-1B	19-15	19-17
101.814-5C, Ch.	18-29	---	6290, Ch. 101.667B	19-18	19-21
	18-31	---	6290, Ch. 101.667-1B	19-22	19-25
	18-33	---	6362, 6363, 6364, Ch. 101.581	11-64	---
	18-35	---		11-80	---
101.814-6C, Ch.	18-29	18-35		11-82	---
	18-32	18-35		C19-8	---
101.817, Ch.	17-2	17-3	6686, Ch. 139.151	17-1	---
	17-15	---	7020, Ch. 101.807	16-1	16-3
101.817-1A, 101.817-2A, Ch.	17-2	17-3	7021, Ch. 101.807A	16-1	16-3
	17-5	---	7025, Ch. 132.807-2	C18-11	---
	C20-12	---	7046, Ch. 141.416	18-23	18-25
101.819A, Ch.	18-49	18-51	7054, Ch. 101.808	16-1	16-3
101.820, Ch.	17-4	17-5		C19-8	---
	17-15	---	7056, Ch. 141.417	C18-11	---
101.821, Ch.	18-53	18-55	7070, Ch. 101.817	17-2	17-3
101.822, 101.822A, Ch.	19-45	19-47		17-15	---
101.823, 101.823A, 101.823-1,			7080, Ch. 101.809; 7080A,		
101.823-1A, Ch.	16-6	16-8	Ch. 101.809-2	16-1	---
101.828, 101.828-1A, Ch.	18-45	18-48		16-4	16-5
101.829, Ch.	19-33	19-34		16-8	---
101.833, 101.833-1A, Ch.	19-38	19-41		C18-11	---
101.834, Ch.	17-13	17-14		C20-13	---
101.835, Ch.	19-42	19-44	7085, Ch. 101.814	18-26	18-29
101.839, Ch.	19-29	19-30	7086, Ch. 110.466	18-36	18-38
101.849, Ch.	19-48	19-50	7090, Ch. 101.810 101.810-3	18-39	18-43
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101.852, Ch.	19-31	19-32		16-4	16-5
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110.452, 110.452-1, Ch.	19-6	19-7		C18-11	---
110.466, 110.466-1, Ch.	18-36	18-38		C19-8	---
110.473, Ch.	19-35	19-37	7102, Ch. 101.814-1A	18-26	18-29
132.802-2C, 132.802-2D,			7103, Ch. 110.466-1	18-36	18-38
132.802-2E, Ch.	C18-11	---			

**SEARS
SILVERTONE**

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<u>SEARS, ROEBUCK & CO. (Cont'd)</u>		
7105, 7106, Ch. 101.828, 101.828-1A	18-45	18-48
7111, Ch. 434.140	20-4	20-5
7165, Ch. 101.823, 101.823-1	16-6	16-8
7166, Ch. 101.823A, 101.823-1A	16-6	16-8
7210, Ch. 101.820	17-4	17-5
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7216, Ch. 101.184; Moto-Matic Tuner	20-20	20-27
7217, Ch. 100.185; Moto-Matic Tuner	20-6	20-19
7218, 7222, Ch. 100.186; Moto-Matic Tuner	20-28	20-35
7226, Ch. 101.819A	20-6	20-19
7230, Ch. 101.802A	20-36	20-43
	20-6	20-19
	18-49	18-51
	15-15	15-18
	C19-8	---
8000, Ch. 132.838	17-6	17-7
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8003, Ch. 132.818-1	18-52	18-53
8005, Ch. 132.839	17-8	17-10
8010, Ch. 132.840	19-26	19-28
8011, Ch. 132.840	19-26	---
	C20-13	---
8020, Ch. 132.841	18-56	---
	18-58	18-60
	C20-13	---
8020, Revised, Ch. 132.841	18-57	---
8021, Ch. 132.868, Revised	20-44	20-47
8022, Ch. 478.206	20-48	20-52
8024, 8025, Ch. 478.206-1	20-53	20-57
8050, Ch. 101.813	17-11	17-12
	17-15	---
8051, Ch. 101.839	19-29	19-30
8052, Ch. 101.808-1C	C18-11	---
	C19-8	---
8053, Ch. 101.808-1D	C18-11	---
	C19-8	---
8070, Ch. 101.817-1A; 8070A, Ch. 101.817-2A	17-2	17-3
	17-5	---
	C20-12	---
8071, Ch. 135.242	20-58	20-59
8072, Ch. 101.834	17-13	17-14
8073, Ch. 135.243	20-60	20-62
8080, Ch. 101.852	19-31	19-32
8083, 8083A, Ch. 101.809-1A; 8084, 8084A, Ch. 101.809-1B	16-1	---
	16-4	16-5
	16-8	---
	C18-11	---
	C20-13	---
8085, Ch. 101.814-4C	18-26	18-29
8086, Ch. 101.814-5C	18-29	---
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	18-33	---
	18-35	---
8086A, 8086B, Ch. 101.814-6C	18-29	---
	18-32	18-35
8090, Ch. 101.821	18-53	18-55
8092, Ch. 101.810-1A	18-41	18-42
	18-44	---
8100, Ch. 101.829	19-33	19-34
8101, 8101A, 8101B, 8101C, Ch. 101.809-3C	16-1	---
	16-4	16-5
	16-8	---
	C18-11	---
	C20-13	---
8102, Ch. 101.814-2B	18-29	18-30
	18-33	18-34
8102A, Ch. 101.814-3B	18-29	---
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8102B, Ch. 101.814-2B	18-29	18-30
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8103, Ch. 110.473	19-38	19-41
8105, 8105A, 8106, 8106A, Ch. 101.833, 101.833-1A	19-42	19-44
8230, Ch. 101.835	19-45	19-47
8270, 8270A, Ch. 101.822, 101.822A	20-63	20-64
9000, Ch. 132.857	20-65	20-66
9005, 9006, Ch. 132.858	20-67	20-69
9022, Ch. 132.871	19-48	19-50
9054, Ch. 101.849	20-70	20-72
9073, Ch. 135.244	20-70	20-72

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<u>SEARS, ROEBUCK & CO. (Cont'd)</u>		
9101, Ch. 101.809-3C	16-1	---
	16-4	16-5
	16-8	---
	C18-11	---
	C20-13	---
9260, Ch. 101.850	19-51	19-52
9270, Ch. 547.245	20-73	20-75

THE SEIBERLING RUBBER CO.

1A5	17-1	17-2
9AC	17-3	17-4

SENTINEL RADIO CORP.

L-284I, L-284NA, L-284NI, L-284NH, L-284W	16-8	16-10
1U-248	18-4	18-6
1U-284GA	16-6	16-7
	16-19	---
1U-285P	16-11	16-13
1U-286	C18-12	---
1U-293CT	16-17	16-19
1U-309-I, 1U-309-R, 1U-309-W	17-1	17-3
1U-313I, 1U-313W	19-9	19-11
1U-314E, 1U-314I, 1U-314W	19-12	19-14
1U-316PM, 1U-316PT	19-15	19-17
1U-330-I, 1U-330-R, 1U-330-W	19-21	19-23
216J	18-1	18-3
247	16-1	16-2
	16-10	---
248	18-4	18-6
276P	16-4	16-5
284GA	16-6	16-7
	16-19	---
285P	16-11	16-13
286P, 286PR	16-14	16-16
	C18-11	---
292-K	20-1	20-3
293CT	16-17	16-19
296-B, 296-M	19-1	19-8
302-I, 302-T, 302-W	17-4	17-9
309-I, 309-N, 309-R, 309-W	17-2	---
	17-10	---
313I, 313W	19-9	19-11
314E, 314I, 314W	19-12	19-14
315-I, 315-W	20-4	20-8
316PM, 316PT	19-15	19-17
319PM, 319PT	19-18	19-20
323-K	20-9	20-11
329-I, 329-R, 329-W, Series A, Series B	20-12	20-14
330-I, 330-R, 330-W	19-21	19-23
331-I, 331-R, 331-W	20-15	20-17
332-I, 332-W	20-18	20-20
333-I, 333-W	20-21	20-25
510	16-20	---

SETCHELL-CARLSON, INC.

Dor-A-Fone	20-2	---
408	17-1	---
416	C18-11	---
427	16-1	---
	C18-12	---
437	17-2	---
447	16-2	---
449	20-1	---
458RD, Dor-A-Fone	20-2	---
469	20-3	---
4182	20-4	---
4382	20-5	---

HAROLD SHEVERS INC.
(GOTHAM)

8121	18-1	18-7
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SIGNAL ELECTRONICS, INC.

AF252	20-1	20-3
241	19-1	19-2
341A	20-4	---
341T	Misc.16-10	---

SILVERTONE
See SEARS, ROEBUCK & CO.

SIMMONS STEWART

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
<u>SIMMONS CO.</u>			<u>SPIEGEL (AIRCASLE)</u>		
AB-1, Electronic Blanket	19-2	---	CB-7553	19-1	19-2
AC-1, Electronic Blanket	19-1	---	G-516	19-3	19-4
AC-2, Electronic Blanket	19-2	---	G-518	17-1	---
<u>SKYROVER</u>			G-521	18-1	18-2
See BUTLER BROTHERS			G-722	18-3	18-5
<u>SONORA RADIO & TELEV. CORP.</u>			G-724	18-6	18-8
A, Ch.	16-1	---	G-725	17-3	17-6
A-11, Ch. A	16-1	---	SC-448, F-M Tuner	20-1	20-3
EA-33	19-1	19-2	T-2625	16-1	16-3
KBU-168	C18-11	---	WAU-243	19-5	19-6
RBMU-176	16-2	---	9	18-9	18-10
RDA, RDAU	17-1	17-2	77	18-11	18-16
RDU-209	C17-8	---	179	18-17	18-19
RET	17-3	17-5	180	18-20	18-22
RCMF-212, RCMF-230	16-3	---	201	20-4	---
RK-215, RKRU-215	16-2	---	211	20-5	20-6
	16-4	---	212	20-7	20-8
	17-6	17-8	213	20-9	20-10
RMR	17-6	---	572	19-7	---
RMR-219, RMR-220, RMR-245	C18-11	---	770	18-11	18-16
RO-222, ROU-222	16-5	---	831	16-4	16-6
RYMU-224	16-6	---	5000	17-7	---
RZLU	17-9	17-10	5000-2	17-8	---
RZU-222	17-11	17-12	5003	17-9	---
WA, WAU	16-4	---	5008	17-10	---
	16-7	---	5011, 5012	19-8	19-9
WBRU-239	18-1	18-2	5015	17-11	---
WCU-246, WCU-247	17-13	---	5019	17-12	17-13
WDU	17-14	17-15	5020	16-3	---
WEU-240, WEU-262	18-3	18-4		16-7	---
WGF, WGFU	16-8	---	5021	17-14	---
WJ, WJU	17-16	---	5024	17-15	---
WKRU-254	19-3	19-4	5025	17-13	---
WLRU-219, WLRU-220A, WLRU-254A	19-5	19-6		17-16	---
WTRU-254A	18-5	18-7	5027	19-10	19-11
100I, 100M	18-8	---	5028	19-12	19-13
101B, 101B-B	18-9	---	5029	18-23	18-24
102B, 102G	18-10	---	5030, 5031	17-17	---
171, 172	Misc. 20-8	---	5035	18-25	---
401	19-7	19-8	5036	20-11	20-12
402A	C18-11	---	5050	17-18	---
402F	19-5	19-6	5051	19-14	---
			5052	17-2	---
<u>SOUND VIEW MARINE CO.</u>			6041	19-15	---
Sea Mate	Misc. 17-14	---	6042, 6050	20-13	---
			6612	18-26	18-29
<u>THE SPARKS-WITHINGTON CO. (SPARTON)</u>			7541, 7547	19-16	19-18
4E10, Ch.	20-14	20-16	8714, 8715, 8718	19-16	19-18
5-07-PA	19-1	19-4	10001	18-30	---
5A10, Ch.	20-10	20-13	10002	18-31	---
5-16, 5-AW16	17-1	17-2	10003	20-14	---
5-26, 5-26PS, 5-26X	16-1	16-2	10005	20-15	20-16
6-26, 6-26PA	16-12	16-14	10023	20-17	---
6-66	18-1	18-2	11305	18-32	18-33
6F1	16-3	16-5	11802	18-34	18-35
6F1D	16-5	16-8	13203	19-19	19-20
6F2D	16-9	16-11	108014, 108504	18-36	18-38
8L9, 8L9A, Ch.	20-1	20-9	114114	18-40	18-42
8-57, Ch.	18-3	18-10	121104	20-18	20-22
	C19-8	---	121124	20-23	20-27
9L8, Ch.	19-14	19-22	127084	18-38	18-39
10 Series, 10-21	17-3	17-6	131504	19-21	19-24
10-76-PA	17-7,8	17-14	132564	18-43	18-44
12L7, Ch.	19-5,6	19-13	138104	19-25	19-26
121, Ch. 8L9, 8L9A	20-1	20-9	138124	19-27	19-28
122, Ch. 8L9A	20-1	20-9	139144	20-28	20-33
130, 132, 135, 139, Ch. 5A10	20-10	20-13	147114	19-29	19-30
141, 142, Ch. 8L9A	20-1	20-9	149654	20-34	20-37
150, 151, 152, 155, Ch. 4E10	20-14	20-16	150084	20-38	20-41
843SX	17-15,16	17-22			
1000, 1001, 1003, Ch. 12L7	19-5,6	19-13	1010	20-1	20-2
1005, 1006, 1007, 1008, Ch. 8-57	18-3	18-10	1020	20-3	20-4
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1020, 1021, 1023, Ch. 12L7	19-5,6	19-13	<u>STARK SOUND ENGINEERING CORP.</u>		
1035, 1035A, 1036, 1036A, 1037, 1037A, Ch. 9L8	19-14	19-22			
1058, 1059, 1060, 1061, 1064, Ch. 8L9, 8L9A	20-1	20-9			
1071MGP, Ch. 8L9A	20-1	20-9			
1072, Ch. 8L9, 8L9A	20-1	20-9			
1072MGP, Ch. 8L9A	20-1	20-9			
<u>SPARTON</u>					
See THE SPARKS-WITHINGTON CO.					
			<u>STEWART-WARNER CORP.</u>		
			A41T1, Code 9032A	17-1	17-3
				C20-13	---
			A51T1, Code 9020A;		
			A51T2, Code 9020B;		
			A51T3, Code 9020C;		
			A51T4, Code 9020D	17-4	17-6
				C20-13	---
			A61C20, Code 9034-P; A61CR1,		
			Code 9034C; A61CR1LP,		
			(Continued on next line)		

STEWART TELE-TONE

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
<u>STEWART-WARNER CORP. (Cont'd)</u>			<u>STEWART-WARNER CORP. (Cont'd)</u>		
Code 9034-CLPW; A61CR2, Code 9034-D; A61CR2LP, Code 9034-DLP; A61CR3, Code 9034-E; A61CR4, Code 9034-F; A61CR4X, Code 9034-FX; A61CR4LP, Code 9034-FLP; A61CR4LPX, Code 9034-FLPX; A61CR5, Code 9034-G; A61CR6, Code 9034-H; A61CR7, Code 9034-J; A61CR7LPW, Code 9034-JLPW; A61CR7LPWX, Code 9034-JLPWX; A61CR7X, Code 9034-JX; A61CR8, Code 9034-K; A61CR9, Code 9034-L; A61CR10, Code 9034-M; A61CR11, Code 9034-N; A61CR12, Code 9034-GR; A61CR12LP, Code 9034-GRLP; A61CR13, Code 9034-GL; A61CR13LP, Code 9034-GLLP; A61CR14, Code 9034-GM; A61CR14LP, Code 9034-GMLP; A61CR15, Code 9034-GT; A61CR15LP, Code 9034-GTLP; A61CR16, Code 9034-FH; A61CR16LP, Code 9034-FHLP; A61CR17, Code 9034-CM; A61CR17LP, Code 9034-CMLP; A61CR21, Code 9034-R	17-3 17-7 C20-14 17-6 17-9	--- 17-8 --- --- 17-10	9034-FX, 9034-G, 9034-GL, 9034-GLLP, 9034-GM, 9034-GMLP, 9034-GR, 9034-GRLP, 9034-GT, 9034-GTLP, 9034-H, 9034-J, 9034-JLPW, 9034-JLPWX, 9034-JX, 9034-K, 9034-L, 9034-M, 9034-N, 9034-P, 9034-R, Codes	17-3 17-7 C20-14 18-1,2 20-7 20-11 19-8 19-8 20-1 20-5 20-3 20-15	--- 17-8 --- 18-6 20-10 20-14 19-14 19-14 20-2 20-6 20-4 20-18
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A92CR3, A92CR6	17-11,12	17-21	1204AH, 1204AI, 1204AJ, 1204AK, Ch. 112021	18-4 C19-8	18-6 ---
B51T1, Code 9044-A; B51T2, Code 9044-B; B51T3, Code 9044-C; B51T4, Code 9044-D	20-1	20-2	1210M2-M, 1210M2-W, 1210M2-Y, 1210PG-M, 1210PG-W, 1210PL-M, Series 10-11	17-1,2 C19-8 C18-12 18-1 C19-8	17-7 --- --- 18-3 ---
B61T1, Code 9046-A; B61T2, Code 9046-B	20-3	20-4	1235 1400, 1400 Special	18-1 C19-8	18-3 ---
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C51T1, Code 9045-A; C51T2, Code 9045-B	20-5	20-6	112021, Ch.	18-4 C19-8	18-6 ---
R-3271, R-3271C R-3291, R-3291C	18-7 18-9	18-8 18-10	<u>STUDEBAKER</u> See PHILCO CORP.		
51T126, 51T136, 51T146, 51T176, Codes 9018-B, 9018-C, 9018-F, 9018-H	18-15 15-7	18-16 15-8	<u>SYMPHONY RADIO & TELEV. CORP.</u>		
61T, Code 9022T	C20-14	---	Biltmore 200, 200L-R 250 255 260 348	18-1 18-3 19-1 19-2 18-4 18-5	18-2 --- --- --- --- 18-6
61T1R, Code 9022A; 61T16W, Code 9022AW; 61T26, Code 9022B	15-7 C20-14 C18-12	15-8 ---	<u>TAFFET RADIO & TELEV. CO.</u>		
61TR36, Code 9029-B 61TR46, Code 9029-H 61TR56, Code 9029-J 61TR66, Code 9029-K 61TR76, Code 9029-L	C18-12 C18-12 C18-12 C18-12 C18-12	---	A-46 Series C47, D47, E47, Series TP41 653	Misc.19-20 Misc.18-15 Misc.18-15 20-1	--- --- --- 20-2
3341, 3341-R Late, 3371 9010A 9013-A 9017-A, 9017-B 9018-B, 9018-C, 9018-F, 9018-H, Codes	18-11 16-1,2 16-8 C17-8	18-14 16-8 16-12 ---	<u>TELECHRON, INC.</u>		
9020A, 9020B, 9020C 9020D, Codes	17-4 C20-13	17-6 ---	Musalarm 8H59, Musalarm 8H67	16-1 16-1 18-1	16-4 16-4 18-4
9022A, 9022AW, 9022B, 9022T, Codes	15-7 C20-14	15-8 ---	<u>TELECOIN CORP.</u>		
9026A, 9026B, 9026C, 9026D, Ch. 9029-B, 9029-H, 9029-J, 9029-K, 9029-L, Codes	19-1 C18-12	19-7 ---	<u>TELE-TONE RADIO CORP.</u>		
9032A, Code	17-1 C20-13	17-3 ---	M5T54	16-1	16-2
9034-C, 9034-CLPW, 9034-CM, 9034-CMLP, 9034-D, 9034-DLP, 9034-E, 9034-F, 9034-FH, 9034-FHLP, 9034-FLP, 9034-FLPX. (Continued on next line)	17-1 C20-13	17-3 ---	Dynamite Series H Series N A, Ch. AA, AB, Ch. AD, Ch. AE, Ch. AG, Ch. AH, Ch. AM, Ch.	Misc.16-11 Misc.16-11 Misc.16-11 15-2 C20-15 18-3 18-1 18-5 18-6 Misc.19-21 18-9	--- --- --- --- --- 18-2 --- --- ---

**TELE-TONE
U. MOTORS**

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AT, Ch.	18-7, 8	---
AZ, Ch.	18-10	---
CA, Ch.	17-1	17-2
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Y, Ch.	18-4	---
110, Ch. D	15-4	---
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117, 117A, 118, 119	C17-8	---
119, Ch. D	15-4	---
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124, Ch. D	15-4	---
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125, Ch. A	15-2	---
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127, Ch. A	15-2	---
	C20-15	---
131, Ch. A	15-2	---
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132, Ch. D	15-4	---
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133, Ch. CA	17-1	17-2
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138, Series N	Misc.16-11	---
139, 140, 141, Ch. H	C18-13	---
145, Ch. R	17-1	17-2
148, Ch. S	18-1	---
149, Ch. H	C18-13	---
150, Ch. T	17-2	17-3
152, Ch. R	17-1	17-2
152, Ch. W	17-2	17-3
154, 155, Ch. W	17-2	17-3
	C20-15	---
156, Ch. U	17-4	---
157, Ch. H	C18-13	---
158, Ch. AT	18-7, 8	---
159, Early, Late, Ch. AA, AB	18-3	---
160, Ch. Y	18-4	---
161, Ch. T	17-2	17-3
	C18-13	---
163, Ch. H	C18-13	---
164, Ch. H	C18-13	---
165 Early, Ch. AD	18-1	18-2
165 Late, Ch. AG	18-6	---
166 Early, Ch. AE	18-5	---
166 Late, Ch. AN	18-6	---
167, Ch. T	17-2	17-3
	C18-13	---
168, Ch. T	17-2	17-3
	C18-13	---
171, Ch. T	17-2	17-3
	C18-13	---
172, Ch. U	17-4	---
	C20-15	---
173, Ch. W	17-2	17-3
	C20-15	---
174, Ch. T	17-2	17-3
	C18-13	---
175, Ch. AG	18-6	---
176, Ch. U	17-4	---
	C20-15	---
177, Ch. W	17-2	17-3
	C20-15	---
184, Ch. AM	18-9	---
185, Ch. AH	Misc.19-21	---
190, Ch. AZ	18-10	---
198, Ch. AT	18-7, 8	---

See TEMPLE
TEMPLETONE RADIO MFG. CORP.
TEMPLETONE RADIO MFG. CORP.
(TEMPLE)

G-410	18-1	---
G-415	18-2	18-3

MODEL	FROM TEMPLETONE RADIO MFG. CORP. (Cont'd)	THROUGH
G-418	17-1	---
G-513, G-515	18-4	18-5
G-516	19-1	---
G-521	18-6	18-7
G-522	18-8	18-9
G-612	17-2	---
G-615, G-618	19-2	19-3
G-722, G-723	19-4	19-6
G-724	18-10	18-12
G-725	17-3	17-6
G-1430	19-7, 8	19-10
G-5100, G-5101	18-4	18-5
H-127	17-3	17-6
H-411	19-11	---
H-415	18-2	18-3
H-501	19-12	19-13
H-521	19-14	---
H-622	19-15	19-16

TOM THUMB
See AUTOMATIC RADIO MFG. CO., INC.

TRADIO, INC.

L5	17-1	17-2
L-U6	17-3	17-5
TF6	Misc.18-16	---
T-U6-1	17-6	17-10

TRANSVISION INC.

7-Inch Kit	16-1, 2	16-4
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TRAV-LER RADIO CORP.

SD54, Ch.	18-4	---
5003, 5004, 5005, 5006	16-1	---
5015	17-1	---
5019	16-2	---
5021	18-1	---
5025	18-2	18-3
5027	17-2	17-3
5028	17-3	17-4
5030, 5031	16-3	---
5035, Ch. SD54	18-4	---
5036	18-5	---
5044	20-1	---
5049	18-6	---
5050	17-5	---
5051	17-6	---
5052	17-7	---
5054	19-1	---
5055	17-8	---
5056	19-2	---
5066	19-3	---
6040	19-4	---
6050, 6053	20-2	20-3

TRUETONE
See WESTERN AUTO SUPPLY CO.

UNITED MOTORS SERVICE
(DELCO)

Auto Permiability Tuner	20-1	20-7
R-705	17-1	17-6
	C19-8	---
	C20-15	---
Electro Tuner	18-1	18-5
R-1226	18-6	18-7
R-1227, R-1228, R-1229	16-1	16-2
R-1230, R-1230A, R-1231,		
R-1231A, R-1232	17-7	17-11
R-1233	18-8	18-10
R-1236	20-8	20-12
R-1238	19-1	19-4
R-1241	19-5	19-8
R-1242	19-9	19-12
R-1243	19-13	19-16
R-1244, R-1245, R-1246	19-17	19-20
R-1248, R-1249, R-1250	20-13	20-19
R-1251, R-1252, X	17-12	17-27, 28
	17-31, 32	---
R1251, R1252, XX, XXX	17-12	---
	17-15, 16	---
	17-21	17-31, 32
R-1253, R-1254	18-11, 12	18-19
R-1408, R-1409	16-3	16-4
R-1410	19-21	19-24
508	19-25	19-28
608	19-29	19-33

WESTERN ZENITH

MODEL	FROM	THROUGH
<u>WESTERN AUTO SUPPLY CO. (Cont'd)</u>		
D3615	20-29	20-31
D3619	19-51	19-53
D3630, D3630N	19-54	19-55
D3635	19-56	19-58
D3720	17-27	17-29
D3721	17-30	17-32
D3722	19-59	19-60
D3809	20-32	20-34
D3810	18-51	18-53
D3811	20-35	20-37
D3840	20-38	20-40
D3910	20-41	20-43
D4620	20-48	20-53
D4630A, D4630B, D4630C, D4630D, D4630E, D4630F	18-54	18-68
D4818	20-44	20-47
D4832A, D4832B	18-69	18-72
	C20-15	---
D4842A, D4842B	20-54	20-57
<u>WESTINGHOUSE ELECTRIC CORP.</u>		
H-104, H-104A	C17-9	---
H-104B, Ch. V-2102-3	17-1	17-4
H-104B, Ch. V-2102-5	17-4	17-8
H-105, H-105A	C17-9	---
H-105B, Ch. V-2102-3	17-1	17-4
H-105B, Ch. V-2102-5	17-4	17-8
H-107, H-107A	C17-9	---
H-107B, Ch. V-2102-3	17-1	17-4
H-107B, Ch. V-2102-5	17-4	17-8
H-108, H-108A	C17-9	---
H-108B, Ch. V-2102-3	17-1	17-4
H-108B, Ch. V-2102-5	17-4	17-8
H-110, Ch. V-2102-1	C18-13	---
H-110A, Ch. V-2102-2	C18-13	---
H-110B, Ch. V-2102-3	17-1	17-4
H-110B, Ch. V-2102-5	17-4	17-8
H-111, Ch. V-2102-1	C18-13	---
H-111A, Ch. V-2102-2	C18-13	---
H-111B, Ch. V-2102-3	17-1	17-4
H-111B, Ch. V-2102-5	17-4	17-8
H-113, H-114, H-116, H-117, H-119	16-1,2	16-7
H-122	15-5	15-7
	C17-9	---
H-124	15-8	15-10
	C19-8	---
H-125, H-126, H-127	15-8	15-10
	C20-15	---
H-130	15-5	15-7
	C17-9	---
H-133	16-8	---
	16-10	---
H-137, Ch. V-2102-1	C18-13	---
H-137A, Ch. V-2102-2	C18-13	---
H-137B, Ch. V-2102-3	17-1	17-4
H-137B, Ch. V-2102-5	17-4	17-8
H-138, Ch. V-2102-1	C18-13	---
H-138A, Ch. V-2102-2	C18-13	---
H-138B, Ch. V-2102-3	17-1	17-4
H-138B, Ch. V-2102-5	17-4	17-8
H-142	18-1	18-5
H-148	16-9	16-10
H-153, H-155, H-156	15-5	15-7
	C19-9	---
H-157	17-9	17-11
H-161, Ch. V-2118	18-6	18-11
H-163	18-1	18-5
H-164	18-12	18-19
	C19-9	---
	C20-15	---
H-165	17-12	17-14
	C19-9	---
H-166, H-166A, H-167	18-12	18-19
	C19-9	---
	C20-15	---
H-168, H-168A, H-168B, Ch. V-2118	18-6	18-11
H-169	19-1	19-11
H-171, H-171A, H-171C	15-5	15-7
	C19-9	---
H-172, H-175	18-1	18-5
H-178	19-12	19-14
H-182	18-20	18-22
H-183, H-183A	19-15	19-17
	C20-15	---

MODEL	FROM	THROUGH
<u>WESTINGHOUSE ELECTRIC CORP. (Cont'd)</u>		
H-184	15-5	15-7
	C19-9	---
H-185	18-23	18-25
	C19-9	---
H-186, H-187	18-26	18-30
	C19-8	---
	C20-15	---
H-188, Ch. V-2133	19-18	19-19
	C20-16	---
H-190, H-191, H-191A, Ch. V-2134	19-20	19-23
	C20-16	---
H-195	18-23	18-25
	C19-9	---
H-198, Ch. V-2137-2	20-1	20-4
H-199, Ch. V-2137-1	20-5	20-8
H-202, Ch. V-2128-2	19-24	19-28
	C20-16	---
H-203, Ch. V-2137	19-29	19-32
H-204, Ch. V-2128-2; H-204A, Ch. V-2128-4	19-24	19-28
	C20-16	---
H-210, H-211, Ch. V-2144, V-2144-1	19-33	19-35
	C20-16	---
H-212, Ch. V-2137	19-29	19-32
H-214, H-214A, Ch. V-2103-3	20-9	20-11
H-300T5, H-301T5, Ch. V-2148	20-15	20-17
H-302P5, Ch. V-2151-1	20-18	20-20
H-303P4, H-304P4, Ch. V-2153	20-12	20-14
V-2102-1, V-2102-2, Ch.	C18-13	---
V-2102-3, Ch.	17-1	17-4
V-2102-5, Ch.	17-4	17-8
V-2103-3, Ch.	20-9	20-11
V-2118, Ch.	18-6	18-11
V-2128-2, V-2128-4, Ch.	19-24	19-28
	C20-16	---
V-2133, Ch.	19-18	19-19
	C20-16	---
V-2134, Ch.	19-20	19-23
	C20-16	---
V-2137, Ch.	19-29	19-32
V-2137-1, Ch.	20-5	20-8
V-2137-2, Ch.	20-1	20-4
V-2144, V-2144-1, Ch.	19-33	19-35
	C20-16	---
V-2148, Ch.	20-15	20-17
V-2151-1, Ch.	20-18	20-20
V-2153, Ch.	20-12	20-14
WR-478	17-15	17-16
<u>WILCOX-GAY CORP.</u>		
6A10, 6A20	17-1	---
6B10, 6B20, 6B30, 6B40, 6B42	15-4	---
	C19-10	---
6B45B, 6B45M, 6B45W	17-2	---
7D42, 7D44	19-1,2	---
7E40, 7E44	19-3,4	19-7
8J10	18-1	18-2
	C19-9	C19-10
<u>WILLY'S</u>		
See ZENITH RADIO CORP.		
<u>WOOLAROC</u>		
See PHILLIPS PETROLEUM CO.		
<u>ZENITH RADIO CORP.</u>		
Auto Permiability Tuner	20-1	20-11
DB47, Hudson	18-11	18-12
DB-48, Hudson	20-24	20-31
G500, Ch. 5G40	20-12	20-14
G510, Ch. 5G02	20-15	20-16
G511, Ch. 5G01	20-17	20-18
G615, Ch. 6G05	20-19	20-20
G660, G663, G665, Ch. 6G01	20-90	20-92
4C54, Ch.	16-1	16-3
4E41, Ch.	17-1	17-2
	C20-17	---
4F40, Ch.	20-21	20-23
4G800, Ch. 4E41	17-1	17-2
	C20-17	---
4G903, Ch. 4F40	20-21	20-23
4K040, 4K040G, Ch. 4C54	16-1	16-3
5C01, 5C02, 5C04, Ch.	15-8	15-9
	C17-10	---
	C20-16	---

ZENITH AERO-METAL

MODEL	FROM	THROUGH	MODEL	FROM	THROUGH
<u>ZENITH RADIO CORP. (Cont'd)</u>			<u>ZENITH RADIO CORP. (Cont'd)</u>		
5C40, 5C40Z, Ch.	16-4	---	.6MN988, Nash	20-32	20-38
	16-6	---	6MW083, Ch. 6C83, Willy's	16-16	16-19
5C40ZZ, Ch.	16-5	16-6	6R087Z, Ch. 6C22Z	17-12	---
5C50, Ch.	17-5	17-6		17-14	17-15
5C51, Ch.	17-3	17-4	6R087ZZ, Ch. 6C22ZZ	17-13	17-15
5C80, Ch., Crosley	16-7	16-9	6R880, Ch. 6E03	18-16	18-18
5D0 Series,			6R886, Ch. 6E02	17-16	17-17
Ch. 5C01, 5C02, 5C04	15-8	15-9		18-19	18-20
	C17-10	---		C19-10	---
	C20-16	---	6R886Z, Ch. 6E02Z	17-16	17-17
5D810, Ch. 5E02	18-1	18-2		C20-18	---
5D811, Ch. 5F01	18-3	18-4	6S624BT, Ch. 6B16BT	19-3	19-4
5E02, Ch.	18-1	18-2	6S624CT, Ch. 6B16CT	19-3	19-4
5F01, Ch.	18-3	18-4	6S643AT, Ch. 6B16AT	19-3	19-4
5G01, Ch.	20-17	20-18	6S643BT, Ch. 6B16BT	19-3	19-4
5G02, Ch.	20-15	20-16	6S643CT, Ch. 6B16CT	19-3	19-4
5G003, Ch. 5C40;			6S659AT, Ch. 6B16AT	19-3	19-4
5G003Z, Ch. 5C40Z	16-4	---	6S659BT, Ch. 6B16BT	19-3	19-4
	16-6	---	7E01, Ch.	19-5,6	19-12
5G003ZZ, Ch. 5C40ZZ	16-5	16-6	7E02, Ch.	18-21,22	18-25
5G036, Ch. 5C51	17-3	17-4	7E22, Ch.	18-33,34	18-36
5G40, Ch.	20-12	20-14		C19-10	---
5K037, Ch. 5C50	17-5	17-6	7F01, Ch.	20-43	20-46
5MX080, Ch. 5C80, Crosley	16-7	16-9	7F02, Ch.	20-55	20-58
5R0 Series,			7F03, Ch.	20-39	20-42
Ch. 5C01, 5C02, 5C04	15-8	15-9	7F04, Ch.	20-47	20-50
	C17-10	---	7F04Z, Ch.	20-51	20-54
	C20-16	---	7H820, Ch. 7E01	19-5,6	19-12
6B16AT, 6B16BT, 6B16CT, Ch.	19-3	19-4	7H822, Ch. 7E02	18-21,22	18-25
6C01, Ch.	15-26	---	7H918, Ch. 7F03	20-39	20-42
	C20-18	---	7H920, Ch. 7F01	20-43	20-46
6C05, Ch.	15-2	---	7H921, Ch. 7F04	20-47	20-50
	15-28	15-29	7H921Z, Ch. 7F04Z	20-51	20-54
	C20-16	---	7H922, Ch. 7F02	20-55	20-58
6C06, Ch.	18-29	18-31,32	7ML780, Lincoln	18-26	18-28
6C22Z, Ch.	17-12	---	7ML780E, Lincoln	19-13	19-25
	17-14	17-15	7ML781, Lincoln-Continental	18-26	18-28
6C22ZZ, Ch.	17-13	17-15	7R070, Ch. 6C06	18-29	18-31,32
6C40, Ch.	15-30	15-31	7R887, Ch. 7E22	18-33,34	18-36
	C17-8	---		C19-10	---
	C20-18	---	8B03, Ch., Lincoln-Zephyr	16-20	16-24
6C41, Ch.	16-10	16-12	8C01, Ch.	15-71	15-74
6C50, Ch.	16-13	16-15		C17-10	---
6C83, Ch., Willy's	16-16	16-19		C20-17	---
6D0 Series	15-2	---	8C40, Ch.	15-63	15-70
	15-26	---		C20-18	---
	15-28	15-29	8E20, Ch.	19-16	19-21
	C17-10	---	8E82, Ch., Lincoln	20-74	20-81
	C20-16	---	8E90, Ch., Lincoln-Mercury	20-82	20-89
	C20-18	---	8G005, 8G005YX, Ch. 8C40	15-63	15-70
6D815, Ch. 6E05	18-5	18-6		C20-18	---
6E02, Ch.	17-16	17-17	8H023, 8H034, Ch. 8C01	15-71	15-74
	18-19	18-20		C17-10	---
	C19-10	---		C20-17	---
6E02Z, Ch.	17-16	17-17	8H832, Ch. 8E20	19-16	19-21
	C20-18	---	8H861, Ch. 8E20	19-16	19-21
6E03, Ch.	18-16	18-18	8MF880, Ford	20-59	20-66
6E05, Ch.	18-5	18-6	8MF881, Ford	20-67	20-73
6E40, Ch.	18-7,8	18-10	8MF980, Ford	20-59	20-66
	C20-17	---	8ML692, Ch. 8B03, Lincoln-Zephyr	16-20	16-24
6E89, Ch.	20-24	20-31	8ML882, 8ML882Z, Ch. 8E82,		
6G01, Ch.	20-90	20-92	Lincoln	20-74	20-81
6G001, 6G001YX, Ch. 6C40	15-30	15-31	8ML982, 8ML982Z, Ch. 8E82,		
	C17-8	---	Lincoln	20-74	20-81
	C20-18	---	8MM890, Ch. 8E90, Lincoln-Mercury	20-82	20-89
6G004Y, Ch. 6C41	16-10	16-12	8MM990, Ch. 8E90, Lincoln-Mercury	20-82	20-89
6G05, Ch.	20-19	19-20	9E21, Ch.	19-22	19-29,30
6G038, Ch. 6C50	16-13	16-15		C20-18	---
6G801, Ch. 6E40	18-7,8	18-10	9F22, Ch.	19-31,32	19-35
	C20-17	---	9H881, 9H882R, 9H885, 9H888R,		
6MF780, Ford	17-7	17-9	Ch. 9E21	19-22	19-29,30
6MH089, DB47, Hudson	18-11	18-12		C20-18	---
6MH889, Ch. 6E89, DB-48,			9H984, 9H984LP, Ch. 9F22	19-31,32	19-35
Hudson	20-24	20-31	11C21Z, Ch.	C18-13	---
6MN088, 6MN788, Nash	17-10	17-11	12H090, 12H091, 12H092,		
6MN788E, Nash	19-1	19-2	12H093, 12H094, Ch. 11C21Z	C18-13	---
6MN790, Mercury	18-13	18-15	13D22, Ch.	19-36	19-46
			14H789, Ch. 13D22	19-36	19-46

RECORD CHANGERS

<u>ADMIRAL CORP.</u>				<u>ADMIRAL CORP. (Cont'd)</u>	
RC-161	RCD.CH.17-1	RCD.CH.17-6		RC-210, RC-211, RC-212	RCD.CH.20-1
RC-161A	RCD.CH.17-7	---		RC-221, RC-222	RCD.CH.20-9
RC-170, RC-170A	RCD.CH.16-1	RCD.CH.16-7		RC-400	RCD.CH.20-21
RC-180, RC-181	RCD.CH.18-1	RCD.CH.18-9			RCD.CH.20-29
RC-182	RCD.CH.18-10	RCD.CH.18-12			
RC-195, RC-196, RRC-197	RCD.CH.20-1	RCD.CH.20-8			
RC-200	RCD.CH.17-8	RCD.CH.17-13			
				<u>AERO-METAL PRODUCTS</u>	
			46-A	RCD.CH.16-1	RCD.CH.16-4

**CAPEHART
WIRERECORDER**

MODEL	FROM	THROUGH
<u>CAPEHART-FARNSWORTH CORP.</u>		
Also See FARNSWORTH TELEV. & RADIO CORP.		
P-43	RCD. CH. 20-1	RCD. CH. 20-15
P-77	RCD. CH. 20-16	RCD. CH. 20-19
P-777	RCD. CH. 20-16	RCD. CH. 20-24
41-E2	RCD. CH. 20-5	RCD. CH. 20-32
<u>CRESCENT INDUSTRIES, INC.</u>		
C-200	RCD. CH. 17-1	RCD. CH. 17-6
C-250	RCD. CH. 18-1	RCD. CH. 18-6
<u>EMERSON RADIO & PHONOGRAPH CORP.</u>		
819003	RCD. CH. 17-1	RCD. CH. 17-4
<u>FARNSWORTH TELEV. & RADIO CORP. (CAPEHART)</u>		
P51	RCD. CH. 17-1	RCD. CH. 17-6
	C17-2	---
P52	C17-2	---
P56, P56MP	RCD. CH. 17-1	RCD. CH. 17-16
	C17-2	---
P57	C17-2	---
P62	RCD. CH. 18-10	RCD. CH. 18-24
P71, Capehart	RCD. CH. 19-1	RCD. CH. 19-10
	C20-3	---
P72, P73	RCD. CH. 18-1	RCD. CH. 18-9
	C20-3	---
16-E, Capehart	RCD. CH. 19-11	RCD. CH. 19-44
41-E, Capehart	RCD. CH. 18-25	RCD. CH. 18-46
	C20-13	---
<u>GARRARD SALES CORP.</u>		
65	RCD. CH. 19-1	RCD. CH. 19-5
70	RCD. CH. 19-6	RCD. CH. 19-9
<u>GENERAL ELECTRIC CO.</u>		
P1	RCD. CH. 18-1	RCD. CH. 18-3
P2	RCD. CH. 19-1	RCD. CH. 19-4
P3	RCD. CH. 17-1	RCD. CH. 17-4
P4	RCD. CH. 17-5	RCD. CH. 17-9
	C19-1	---
P8	RCD. CH. 20-1	RCD. CH. 20-5
P10	RCD. CH. 20-6	RCD. CH. 20-10
P11	RCD. CH. 20-11	RCD. CH. 20-12
<u>THE GENERAL INDUSTRIES CO.</u>		
RC130, RC130L	RCD. CH. 17-1	RCD. CH. 17-9
<u>GENERAL INSTRUMENT CORP.</u>		
700F, 700R	RCD. CH. 19-1, 2	RCD. CH. 19-9
<u>INTERNATIONAL DETROLA CORP.</u>		
650	RCD. CH. 17-1	RCD. CH. 17-13
7000	RCD. CH. 17-14	RCD. CH. 17-15
<u>LEAR, INC.</u>		
PC-206A	RCD. CH. 17-1	RCD. CH. 17-6
<u>MILWAUKEE STAMPING CO.</u>		
11200	RCD. CH. 20-1	RCD. CH. 20-14
<u>MOTOROLA INC.</u>		
B-27-RC, B-28-RC, B-29-RC, B-31-RC, B-32-RC, B-33-RC, WR6, WR7, WR8, Ch. HS-18	RCD. CH. 18-1	RCD. CH. 18-28
HS-18, Ch.	RCD. CH. 18-28	---
RC-30-A, RC-34, RC-35	RCD. CH. 18-28	---
	RCD. CH. 19-1	RCD. CH. 19-10
<u>OAK MFG. CO.</u>		
9000	RCD. CH. 20-1	RCD. CH. 20-10
<u>PHILCO CORP.</u>		
D-10, D-10A	RCD. CH. 18-1	RCD. CH. 18-13
M-4	RCD. CH. 18-14	RCD. CH. 18-31
M-7	RCD. CH. 18-32	RCD. CH. 18-45
M-8	RCD. CH. 19-1	RCD. CH. 19-17
M-9	RCD. CH. 19-18	RCD. CH. 19-34
M-9C	RCD. CH. 19-35	RCD. CH. 19-54

WIRE RECORDERS

MODEL	FROM	THROUGH
<u>MAJESTIC RADIO & TELEVISION CORP.</u>		
7B04A, Ch.	WIREC. 17-1	WIREC. 17-4
7YR752, Ch. 7B04A	WIREC. 17-1	WIREC. 17-4
<u>WEBSTER CHICAGO CORP.</u>		
	WIREC. 17-1	WIREC. 17-10

MODEL	FROM	THROUGH
<u>PHILCO CORP. (Cont'd)</u>		
M-12C	RCD. CH. 19-55	RCD. CH. 19-74
M-15	RCD. CH. 19-75	RCD. CH. 19-82
M-20	RCD. CH. 20-1	RCD. CH. 20-16
<u>RADIO CORP. OF AMERICA</u>		
RP-168, Series	RCD. CH. 19-1	RCD. CH. 19-8
RP-176	RCD. CH. 17-1	RCD. CH. 17-12
	C20-7	---
	C20-8	---
RP-177, RP-177A, RP-177B	RCD. CH. 18-1	RCD. CH. 18-13
	C20-8	---
RP-178, RP-178-2, RP-178-3	RCD. CH. 18-14	RCD. CH. 18-23
	C20-7	---
RS-132, Ch.	RCD. CH. 19-9	RCD. CH. 19-10
9EY3, Ch. RS-132	RCD. CH. 19-9	RCD. CH. 19-10
9JY	RCD. CH. 19-11	RCD. CH. 19-12
960001-1, 960001-2, 960001-3	C17-5	---
960001-4, 960001-5, 960001-6	C18-11	---
960015	C17-5	---
	C18-10	---
960276	RCD. CH. 19-13	RCD. CH. 19-22
<u>RUSSELL ELECTRIC CO.</u>		
C-9	RCD. CH. 17-1	RCD. CH. 17-6
C-10, C-10M	RCD. CH. 18-1	RCD. CH. 18-3
<u>SEARS, ROEBUCK & CO.</u>		
101.204	RCD. CH. 18-1	RCD. CH. 18-5
101.206	RCD. CH. 18-6	RCD. CH. 18-9
101.211, 101.211-1, 101.211-2, 101.211-3, 101.211-4	RCD. CH. 19-1	RCD. CH. 19-14
<u>J. P. SEEBURG CORP.</u>		
M	RCD. CH. 17-1	RCD. CH. 17-28
<u>STEWART-WARNER CORP.</u>		
A-505650	RCD. CH. 18-1	RCD. CH. 18-10
VM-504932, VM-504992	RCD. CH. 17-4	RCD. CH. 17-10
VM-505049	RCD. CH. 17-11	RCD. CH. 17-13
VM-505339	RCD. CH. 17-14	RCD. CH. 17-19
VM-506261	C18-11	---
W-504138	RCD. CH. 17-1	RCD. CH. 17-3
<u>TRAV-LER RADIO CORP.</u>		
A	RCD. CH. 20-1	RCD. CH. 20-9
<u>V-M CORP.</u>		
800	RCD. CH. 17-1	RCD. CH. 17-4
<u>WEBSTER CHICAGO CORP.</u>		
70	RCD. CH. 17-1	RCD. CH. 17-9
133-6, 146	RCD. CH. 20-1	RCD. CH. 20-11
148	RCD. CH. 18-1	RCD. CH. 18-11
156	RCD. CH. 19-1	RCD. CH. 19-11
160, 161, 164	RCD. CH. 20-1	RCD. CH. 20-11
246	RCD. CH. 20-12	RCD. CH. 20-24
256, 256-1	RCD. CH. 20-25	RCD. CH. 20-37
<u>WILCOX-GAY CORP.</u>		
6D40B, 6B40M, 6B42M, 6B42W	RCD. CH. 17-1	RCD. CH. 17-6
6B45B, 6B45W	RCD. CH. 17-7	RCD. CH. 17-12
7E40, 7E44	RCD. CH. 19-1	RCD. CH. 19-2
<u>ZENITH RADIO CORP.</u>		
S-11468	RCD. CH. 15-1	RCD. CH. 15-9
	C20-16	---
S-13200	RCD. CH. 15-1	RCD. CH. 15-8
	C19-10	---
S-13675	RCD. CH. 19-1	RCD. CH. 19-17
S-14002	RCD. CH. 19-1	RCD. CH. 19-17
S-14004	RCD. CH. 18-1	RCD. CH. 18-6
S-14006	RCD. CH. 19-1	RCD. CH. 19-17
S-14007	RCD. CH. 18-1	RCD. CH. 18-6
S-14008	RCD. CH. 19-1	RCD. CH. 19-17

WIRERECORDER CORP.

MODEL	FROM	THROUGH
A-1	WIREC. 17-1	WIREC. 17-8
PA	WIREC. 17-9	WIREC. 17-14