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GUIDES FOR OVER 5000 MODELS

1957

1956

1955

H. G. CISIN'S

VOL. 2

TV TUBE LOCATOR

A NEW

SPEED

TV SERVICING SYSTEM

TV TUBE LOCATOR - VOL. 2

1955, 1956, 1957 MODELS

A large majority of the common television troubles, both picture and sound are caused by inoperative or defective tubes. Such faults can be cured rapidly by tube replacements. This book contains charts showing the location of each tube in thousands of television models. Each tube is designated not only by its type number, but also by a code letter, which shows exactly what effect the tube has on the operation of the TV set. Through this new copyrighted method, very rapid TV repair is made possible if defective tubes are causing the trouble.

This new system is explained in detail on the following pages. The following list of common picture faults clearly shows which tubes should be replaced to effect a rapid elimination of the trouble. For example, if the list shows that a tube or tubes coded "D" will cause a particular trouble, merely refer to the FAULT INDICATING TUBE LOCATION CHART of the set in question. This shows where the "D" tubes are located in the set. Remove and replace these tubes and the job is completed. If sound fails but picture is perfect, locate and replace the "S" tubes.

TABLE OF TV TROUBLES WHICH MAY RESULT FROM DEFECTIVE OR INOPERATIVE TUBES SHOWING TUBES TO BE REPLACED TO CURE EACH SPECIFIC FAULT

PICTURE FAULT:	REPLACE TUBES MARKED:	PICTURE FAULT:	REPLACE TUBES MARKED:	PICTURE FAULT:	REPLACE TUBES MARKED:
Absent all channels		Edges wavy, sides	H	Moves up and down (rolls), vertically jittery, sometimes tears vertically	HV V
Sound and bright area also absent (set dead)	D	Edges wavy, top and bottom	V	Moves up and down vertically and cannot be stopped	V
Sound normal - bright area absent	B	Engraved effect	P C PC	Multiple images horizontally	H
Sound normal - bright area normal	P	Enlarged (expanded abnormally)	H B BH F	Multiple images vertically	V
Sound absent - bright area normal	PS	Enlarged (vertically)	V	Narrows intermittently	H BH BH*
Absent all channels, thin horizontal bright line	V	Fading all channels		Negative pattern	P C PC
Absent all channels, thin vertical bright line	H	Bright area and sound intermittent	D	Non-adjustable contrast	C
Airplane flutter	C	Bright area normal, sound fading	P PS	Non-adjustable focus	H BH* B F
Background unstable	G	Bright area intermittent, sound normal	(B BH H F) (BH*)	Non-adjustable horizontal hold	H
Bars horizontal, alternate dark and light		Fading single channel, with sound fading	PS (**)	Non-adjustable vertical hold	V HV
Hum in speaker	D	Faint		Non-adjustable linearity, horizontal	H BH
Sound normal	P G PG	Sound and bright area normal	P	Non-adjustable linearity, vertical	V
Bas relief (engraved effect or negative picture)	C P PC	Sound weak, bright area normal	PS	Non-adjustable height	V
Blooming, expanded abnormally	B	Sound weak, bright area weak	D	Non-adjustable width	H BH*
Blurred		Focus defective	F (***)	Normal picture, sound absent	S
Sound normal, bright area weak	B	Fold-over, bottom sound normal	V	Normal picture, sound weak or otherwise defective	S
Sound normal, bright area normal	P	Fold-over, left side, sound normal	H BH	Not coincident with sound	PS (**)
Sound weak, bright area normal	PS	Fold-over, right side, sound normal	H BH	Pie-crust edges	
Sound weak, bright area weak	D	Fold-over, top	V	Sound normal	H
Brightness and focus slow in reaching normal level		Height insufficient	V	Sound crackling	B
Sound slow	D	Hold control ineffective (rolling)	V HV	Pin-cushion shape	B BH*
Sound normal	(***)	Horizontal bars, one dark, one light		Quality poor	
Brightness excessive	C	Sound - hum in speaker	D	Bright area weak, sound normal	H BH BH*
Brightness insufficient		Sound normal	P G	Bright area weak, sound weak	PS (**)
Sound weak or absent	D	Horizontal bars varying in number and brilliance		Bright area normal, sound normal	P
Sound normal	B	Sound normal	P	Reversed brightness control	D BH H
Compressed at left	H	Sound weak	PS	Reversed contrast	C P PC
Compressed at right	H	Horizontal white bars only when station is tuned in	PS (**)	Right half on left side	H
Compressed at bottom	V	Horizontal movement hold control ineffective	H	Rolling up or down	V
Compressed at top	V	Horizontal non-linearity (squeezed or stretched horizontally)	H BH	"S" shaped at sides	H BH BH*
Contrast almost reversed	C	Horizontal pulling, weaving or tearing	PG	Shading poor	
Contrast insufficient	C	Horizontal pulling accompanied by wavy lines	H BH*	Sound weak or absent	C
Darkened		Horizontal strips missing from picture	PS (**)	Sound normal	PS (**)
Sound absent or weak	PS	Incomplete vertically	V	Snow all channels	PS P C
Sound normal	P	Intermittent all channels		Spread at right horizontally	BH*
Darkened, upper or lower half		Bright area and sound intermittent	D	Stretched at bottom	V
Sound normal	P G PG	Bright area normal, sound fading	P PS	Stretched at left	BH H BH*
Hum in speaker	PS	Bright area intermittent, sound normal	(B BH H) (F BH*)	Stretched at right	BH* H
Details absent or poor all channels		Intermittent, some but not all channels	PS (**)	Stretched at top	V
Sound normal	P	Intermittent movement horizontally and vertically	HV	Top half at bottom, black bar between	V
Sound weak	PS	Intermittently dwarfed vertically	V	Two or more complete pictures vertically	V
Diagonal bars, alternate dark and light	H	Jagged at edges		Unstable background	G
Double image together with displaced horizontal lines	H	Sound normal	P	Vertical dark faint line or lines on left side	BH*
Dwarfed horizontally and vertically		Ruzzing or fading sound	PS	Vertical bars, bright at left	BH H BH*
Sound normal	B H BH BH*	Jittery horizontally	H BH*	Vertical bars at right	H
Sound weak	D	Jittery vertically	HV V	Vertically dwarfed and/or out of shape vertically	V
Dwarfed horizontally	H	Left portion on right side with vertical black bar between	H	Vertical jitter	HV
Dwarfed vertically	V	Linearity, horizontal, non-adjustable	H BH BH*	Washed out and very slow in appearing	
Echo effect (thin black & white lines after vertical picture lines)		Linearity, vertical, non-adjustable	V	Sound and brightness slow in appearing	D
Sound normal	P	Moves up and down and from side to side	HV	Sound normal	(***)
Huzzing or fading sound	PS	Moves up and down and from side to side with reduced size, sound weak or absent	D	White horizontal bar top or bottom	V
Edges jagged				Width insufficient	BH* H
Sound normal	H			Width intermittently variable	BH H BH*
Sound crackling	B				

* High Voltage Warning
 (***) Tube or tubes nearest front
 (**) Defective picture tube

New Speed TV Servicing System

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TV TUBE LOCATOR

By H.G.Cisin, Consulting Engineer

Recent improvements in the design and construction of TV receivers emphasize the fact that the tubes are the weakest parts of the TV set and therefore they are most likely to be the source of trouble.

This volume of TV TUBE LOCATOR contains Trouble Indicating Tube Location Guides covering thousands of recent TV models from 1955 up to and including the newest 1957 sets. Each guide gives the location and exact type designation of every tube in the TV receiver, plus a clear explanation of each tube function.

This latter important feature, accomplished by means of a copyrighted simplified system of coding, serves the purpose of indicating where each particular tube trouble originates. In addition, the charts in this book show the location of fuses, tell whether heaters are connected in series or in parallel and each chart also lists picture tube types for every model shown.

The problem of locating a defective tube is a relatively simple one. The tube with the open heater advertises itself when it fails to light up. A tube with other defects fails to function as it should and this fact immediately becomes evident in the faulty performance of the set. Each tube has a certain job to do. When the tube becomes faulty, that job remains undone.

Certain tubes must strengthen picture and sound signals enough to make them useful. Tubes which do this to both types of signals simultaneously are coded "PS" on the tube location guides in this book.

Tubes which strengthen picture and sound signals after they have been separated from each other are coded "P" if they handle the picture signals and "S" if they carry the sound signals.

The picture tube must convert the picture signal from an electrical impulse to a pin-point of light. As the electrical signal varies in strength, the point of light varies in intensity, creating the lights and shadows of the picture.

The TV set must utilize tubes and circuits which will move the spots of light across the face of the picture tube at certain predetermined rates of speed. Such movement takes place simultaneously, both horizontally and vertically. Tubes which cause the spots of light to move in a horizontal direction are coded "H" on the tube guides in this book. Those which cause, amplify or otherwise control a vertical movement are marked "V". The spots of light, each changing in intensity in accordance with the received signal, are put on the screen of the picture tube line by line until a complete picture is formed

and this picture is immediately replaced by another one, the entire action taking place at such enormous speeds that the images appear to move, exactly as in the case of the movies.

It is necessary for the screen or face of the picture tube to be illuminated by a bright area known as a "raster" and in practically all modern TV sets this brightness is partly attained through the use of circuits and tubes which cause horizontal movement. Hence, such tubes are labeled "BH" on the tube charts.

In practically every set however, one tube (in some cases several tubes) works along with the "BH" tubes furnishing the high voltage necessary to brighten up the picture tube. Such tubes are marked "B" and if they fail or become defective, the bright area disappears, even though the sound remains normal. All "B" tubes use extremely high voltage and are marked on the tube charts with an asterisk (*), thus giving warning that special precautions must be observed before they are to be handled or replaced. Certain "BH" tubes are also dangerous to handle, unless safety precautions are taken, and these tubes also are marked with an asterisk.

Before replacing "B" or "BH" tubes, check fuse marked "B" on tube guide. Many sets have this protective fuse. It is also a good idea to check the high voltage condenser before replacing the "B" tube.

Certain tubes in the TV set are used to keep the picture steady on the screen. These are the "timing" tubes which keep the picture at the set in time with the action at the transmitter. Such tubes are coded "HV".

The TV set must employ rectifying tubes or other devices known as selenium rectifiers which will transform the current from the house lighting supply into a steady type of current (direct current) suitable for keeping all the other tubes in the TV set at the correct operating conditions. Such tubes are marked "D" because if they stop functioning the set goes dead and picture, bright area and sound all disappear.

All models which use selenium rectifiers are clearly labelled on the tube location guides in this book. If the selenium rectifier itself is shown, this is coded "D". When a rectifier tube stops functioning, it is a good idea to check the associated electrolytic filter condensers before making a replacement, since a shorted condenser will also spoil the replacement tube.

Most sets which use selenium rectifiers and many sets which use tube rectifiers use protective fuses. Fuses should be checked before changing tubes. Where shown on the tube location guides these fuses are also coded "D".

Many sets have one or more tubes which serve to keep the picture from fading out or becoming too strong under varying conditions. Such tubes are coded "C". These tubes also keep the contrast at the level predetermined by the adjustment of the contrast control.

Some sets are equipped with a tube which serves the purpose of making the background of the picture conform to the transmitted background. For example, if the action is taking place in a darkened room, background illumination should appear darkened, whereas if the stage is set to represent a well-lit, sunny room, the background should appear brightly illuminated. Such a tube is coded "G". It should be noted that these tubes are not used in all TV sets, as circuit arrangements which do not require tubes are used in many sets for the same purpose.

Sets which employ electrostatic focusing picture tubes use a special tube to supply rectified voltage to the focusing element of the picture tube. These tubes are coded "F".

While the above covers the action of practically all tubes in the modern TV set, certain other components are marked or coded on the tube charts in this book, where this is desirable. For example, a fuse or a resistor used as a fuse in the power supply circuit, if burned out, can cause the entire set to go "dead" and hence such fuses are indicated and coded "D", as mentioned above. Similarly, a burned out fuse in the high voltage section will cause the bright area to disappear, without affecting sound and hence such a fuse is marked "B".

As noted above, many sets now use selenium rectifiers instead of tube rectifiers and if these become defective the entire set may become inoperative and hence these rectifiers are labeled "D". Crystals are finding a wider variety of use in modern TV sets. In some instances they are being used instead of tubes to handle picture signals or combined picture and sound signals, these being indicated on the tube guides with the coding "P" or "PS" as the case may be. Crystals are also used in some of the newer sets to detect sound signals in which case they are coded "S" or to handle the timing signals. The latter are coded "HV".

Many tubes perform double or even triple functions. In some cases such tubes really consist of two or even more separate tube sections all in a single glass enclosure. In other instances the elements within the tubes are arranged to permit multiple functioning. As an example, one tube may handle picture and sound signals in one of its sections and in another section such a tube may control picture background, contrast or even timing. Consequently the charts which follow show tubes coded "PSG", "PSC", "PSHV" etc.

All tube charts in this book, with the exception of models having a vertical chassis, show tube locations looking at the top of the chassis. In general, the vertical chassis models are shown from the side where the tubes are inserted. The front of each horizontal chassis is plainly marked in order to make it easy to identify the tubes in the faulty set with those in the chart which applies to that set.

For purposes of simplification, the letters "G" and "GT" have been omitted from tube type

designations. However, when a tube is removed from a set it should be carefully examined to determine whether the letters "G" or "GT" are stamped or etched on the tube following the regular tube designation. When the new tube is purchased, the same type tube should be obtained. For example, if the tube location chart shows a 6BQ6 tube and the tube removed reads 6BQ6G, it is preferable to obtain a 6BQ6G tube, rather than a 6BQ6GT tube, particularly if this was the type tube originally used by the manufacturer.

It is not necessary, however to obtain exactly the same make tube as a replacement, since tubes made by recognized companies such as RCA, GE, Hytron, etc. work equally well, provided the correct tube type is obtained. There is one important exception to this in the case of 1B3 tubes. In many instances it is imperative that the 1B3 tube be replaced with the identical brand previously employed. Some manufacturers connect the unused pins of the 1B3 internally to one of the heater pins. This could cause serious trouble if the set happens to employ one or more of the unused pins as tie-points for associated circuit components.

It should be noted that in the following tube charts, tubes such as 6BQ6GA, 6BQ6GTA, 5U4GA, 5U4GB, 6SN7GTA, 6SN7GTB, etc. are indicated with their complete type designations. In the case of models using heaters in a series string circuit, this is particularly important, since if the set originally employed a 6SN7GTB, this was utilized by the manufacturer for this particular service, since in this type tube the heater warm-up time is carefully controlled for series-string service. Therefore, it would be highly undesirable to replace a 6SN7GTB with a 6SN7GTA which lacks this control feature, if the TV set uses heater string circuits.

Incidentally, all charts in this book which use series string heaters are so marked. In sets which employ a low-voltage power transformer, with heaters connected in parallel, either of the above mentioned tubes could be used interchangeably.

Examination of the tube charts will show that three different size circles are used to denote tube locations. In general, the smallest circle is used when designating the position of miniature types, the medium size circle for "GT" or "octal" or metal tubes, and the largest circle is used to mark the location of the so-called "G" tubes. Thus, a small circle would in every case represent a miniature tube, a medium sized circle marked 6BQ6 would actually represent a 6BQ6GT tube, whereas a large circle marked 6BQ6 would indicate a 6BQ6G tube. Of course a large circle would also be used in the case of a 6BQ6GA tube.

Tubes require replacement either because they burn out or develop internal shorts and fail to function or because they become weak and gassy and function only partially. In the case of tube burn-out, the desired signal cannot pass and disappears. In other defects, the signal may get through, but picture or sound becomes weak or otherwise faulty or the timing becomes defective and the picture is badly distorted or replaced by weaving diagonal lines.

Present day television sets may be classified according to heater connections under four general headings:

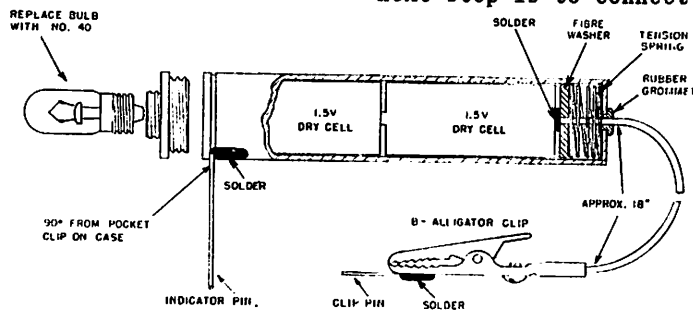
- 1 - All heaters connected in parallel
- 2 - All heaters connected in series
- 3 - Heaters in several series strings, which in turn are connected in parallel
- 4 - Some heaters connected in series or in series parallel, balance in parallel.

In locating defective tubes, it is necessary to know how the heaters are connected and this information is given in all the tube location guides in this book. Guides of TV models having their heaters connected in series, in series-parallel or partly in series and partly in parallel, are plainly indicated. If no mention is made of heater connections, this indicates that all heaters are in parallel. Heaters are sometimes referred to as "filaments". Actually, the correct term for tubes having a separate cathode, is "heater", since this is the element in the tube which causes the cathode to heat up and give off electrons.

Sets which have all heaters connected in parallel, all have a low voltage power transformer. Current for energizing the heaters is obtained from windings on this transformer. When tube heaters are connected in parallel, an open heater in any tube has no effect on the other tubes in the set. Since only one tube at a time is usually inoperative in these sets, the resulting trouble is limited to the function of that particular tube. For example, an open in a tube which amplifies sound results only in the loss of sound.

However, a different condition exists in sets which use series connected heaters or combinations including series heaters. In sets which have all heaters connected in a single series string, an open heater in one tube will cause all the tubes in the set to become inoperative. Incidentally, such sets do not employ a low voltage power transformer.

A heater to cathode short in such a set may cut a portion of the tubes entirely out of the circuit and thus cause the balance of the tubes to receive too much heater voltage and as a result could cause the burn-out of several tubes.



Modified Flashlight Tester

Sets which have heaters connected in series parallel, usually have two separate series strings, both fed from the same voltage supply. An open in one string will cause all the tubes in that string to become inoperative. If other tubes are in series with the two strings, there will be an increase in voltage across the string without the open heater, which may cause additional burn-outs.

Some TV sets have some heaters connected in a series string, or in two parallel connected series strings and the balance of the tube heaters

connected in parallel. An open in the series connected portion of the heater circuit will not affect the parallel connected tubes. However, let us take as an example one of the Raytheon TV sets which has a 25AX4 damper tube, a 25BQ6 horizontal output tube and a 25BK5 sound output tube, and all other tubes with heaters in parallel.

Assume that the heater of the 25BQ6 tube becomes open. Since this tube controls brightness (as does the 25AX4 damper) the picture tube will go dark. Since no current can reach the heater of the series connected 25BK5 sound output tube, sound will be lost as well and the set will be in the condition referred to as "dead".

From the above, it can readily be seen that in all sets which employ series connected heaters whether in single or multiple strings, one of the problems which is certain to arise sooner or later is that of finding the location of one or more burnt out tubes when these happen to have their heaters connected in series with other tubes.

An efficient instrument for locating and checking for such open heaters is made by the Superior Instruments Company. This is their Model 70 Utility Tester. A book of operating instructions comes with the tester and this includes detailed directions for checking various types of tubes.

A pen-light type of flashlight when modified as suggested by Westinghouse in the illustration makes a handy instrument for locating "open" in series heater circuits. A low current drain (150 mil) bulb such as the type 40 screw base or type 47 bayonet base is necessary for checking across a large number of tubes and the higher voltage rating of these types results in longer bulb life. This test is made with the power off and the plug removed from the A.C. outlet.

Best procedure is to remove the middle tube in the series string and check across its heater terminals. If the flashlight fails to light up, the tube must be replaced. If it lights, the next step is to connect the alligator clip to the

chassis (B minus) and work back to the end of the string, first in one direction and then in the other until the open is located. In making this check, the first step is to work towards the B minus, removing the tube nearest the center tube and inserting the indicator pin in the heater terminal of socket nearest the B minus point. If the indicator lights, that particular tube was the open one. When checking series string sets with power on, make sure plug is connected so that no voltage exists between chassis and external ground, by connecting 117 volt lamp between chassis and metal on outlet.

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14UY3C	7	A	20X5GZ	21	C	C2256	21	C	CS2337ZN	17	B
14UY3D	7	A	20XP5	21	C	C2316Z	18	B	CS2338Z	17	B
14YP3B, BK, C, D	6	A	20SP5A	21	C	C2317Z	18	B	CS2338ZN	17	B
17SX3	20	C	20Y4B	8	A	C2319Z	18	B	CS2356Z	17	B
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17X32	22	C	20Y4E	9	A	C2327Z	18	B	CS2365Z	16	B
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17Z3D	5	A	20Y4F	9	A	C2336ZN	15	B	CS2367FZ	16	B
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18SX4FZ	16	B	20Y4MS	9	A	C2356ZN	15	B	F25B7	11	B
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18X4CZ	15	B	20Y4LF	9	A	C2566FZN	15	B	F2327Z	18	B
18X4EZ, PZ, GZ	15	B	20Y4LS	9	A	C2567FZ	15	B	F2328Z	18	B
18XP4BZ	14	B	20Z4EF	1	A	C2567FZN	15	B	FA2326Z	19	C
18XP4HZ	14	B	20Z4FF	1	A	C2826Z	18	B	FA2327Z	19	C
18Y4B	12	B	20Z4PS	1	A	C2827Z	18	B	FA2328Z	19	C
18Y4BS	12	B	21A3Z	18	B	CA2256	21	C	K23A6	13	B
18Y4BSA	12	B	21A3AZ	18	B	CA2306BZ	21	C	K23A7	13	B
18Y4E	12	B	21B3Z	19	C	CA2306Z	21	C	K2256	21	C
18Y4EF	12	B	21C3Z	18	B	CA2307BZ	21	C	K2257	21	C
18Y4EFA	12	B	21D3Z	19	C	CA2307Z	21	C	KA2256	21	C
18Y4ES	12	B	21G3Z	18	B	CA2316Z	19	C	KA2257	21	C
18Y4ESA	12	B	21H3Z	19	C	CA2317Z	19	C	K2366Z	21	C
13Y4L	12	B				CA2326Z	19	C	K2367Z	21	C
18Y4LS	12	B	C23A1	12	B	CA2826Z	19	C	L23B6	11	B
18Y4LSA	12	B	C23A2	12	B	CA2827Z	19	C	L23B7	11	B
18Y4PSA	12	B	C23A3	12	B	CS23A11	3	A	L2326Z	18	B
18Z4ES	2	A	C23A6	12	B	CS23A12	3	A	L2327Z	18	B
18Z4ESA	2	A	C23A7	12	B	CS23A13	3	A	LA2326Z	19	C
18Z4FS	2	A	C23A8	12	B	CS23A16C	3	A	LA2327Z	19	C
18Z4FSA	2	A	C23A11	5	A	CS23A26	3	A	T18A1	22	C
18Z4LSA	2	A	C23A12	5	A	CS23A27	3	A	T18A1N	22	C
18Z4PS	2	A	C23A13	5	A	CS23B1	10	B	T18A2	22	C
18Z4PSA	2	A	C23A26	5	A	CS23B2	10	B	T18A2N	22	C
19S24D	3	A	C23A27	5	A	CS23B3	10	B	T18A3	22	C
19S24DF	3	A	C23B1	9	A	CS23B16	10	B	T18A3N	22	C
19S24DT	3	A	C23B2	9	A	CS23B16C, 17C	3	A	T23A1	5	A
19S24ES	3	A	C23B2H	9	A	CS23B26	10	B	T23A2	5	A
19S24FS	3	A	C23B3	9	A	CS23B27	10	B	T23A3	5	A
19S24PS	3	A	C23B16	9	A	CS25B6	10	B	T23A6	5	A
19Y4G	13	B	C23B17	9	A	CS25B7	10	B	T23A7	5	A
19Y4GF	13	B	C23B18	9	A	CS323A6	3	A	T23B1	9	A
19Y4RF	13	B	C23B26	9	A	CS323A7	3	A	T23B2	9	A
19Y4PRS	13	B	C23B27	9	A	CS323A16	3	A	T23B6	9	A
20AX5	21	C	C25B 6	9	A	CS323A17	3	A	T23B7	9	A
20AX5A	21	C	C25B 7	9	A	CS323A19	3	A	T23B16	8	A
20AX5B	21	C	C25B 3	9	A	CS323B2	4	A	T23B17	8	A
20AX5CZ	21	C	C323A6	2	A	CS323B3	4	A	T23B18	8	A
20AX5D	21	C	C323A7	2	A	CS323B26	4	A	T23B26	9	A
20AX5EZ	21	C	C323A16	2	A	CS323B27	4	A	T23B27	9	A
20AX5F	21	C	C323A17	2	A	CS325A6	3	A	T25B26	9	A
20AX5GZ	21	C	C323A19	2	A	CS325A7	3	A	T25B27	9	A
20SX5EZ	21	C	C323B2	1	A	CS325B26	4	A	T140	6	A
20SY4E	10	B	C323B3	1	A	CS325B27	4	A	T141	6	A
20SY4F	10	B	C323B26	1	A	CS2306BZN	21	C	T142	6	A
20SY4FF	10	B	C323B27	1	A	CS2306Z	21	C	T143	6	A
20SY4L	10	B	C325A6	2	A	CS2307BZ	21	C	T144AL	6	A
20SY4LF	10	B	C325A6A	2	A	CS2307Z	21	C	T145AL	6	A
20SY4LS	10	B	C325A7	2	A	CS2317	10	B	T171	6	A
20SZ4EF	4	A	C325A7A	2	A	CS2336Z	17	B	T172AL	6	A
20SZ4FF	4	A	C325B26	1	A	CS2336ZN	17	B	T173AL	6	A

ADMIRAL	No.	P	ADMIRAL	No.	P	ADMIRAL	No.	P	ADMIRAL	No.	P
T323A1	1	A	TS23B27	10	B	Cape Cod (VHF)	15	B	Palo Alto	22	C
T323A1A	1	A	TS25B26	10	B	Cape Cod (VHF-UHF)	17	B	Panama	21	C
T323A2A	1	A	TS25B27	10	B	Capri	21	C	Park Ave (VHF)	18	B
T323A3	1	A	TS140	7	A	California (VHF)	18	B	Pasadena	22	C
T323A3A	1	A	TS141	7	A	California			Plymouth (VHF)	9	A
T323B1	1	A	TS142	7	A	(VHF-UHF)	19	C	Riviera (VHF)	18	B
T323B2	1	A	TS143	7	A	Casablanca (VHF)	18	B	Riviera (VHF-UHF)	19	C
T323B3	1	A	TS144AL	7	A	Casablanca			Santa Barbara(VHF)	18	B
T1010	6	A	TS145AL	7	A	(VHF-UHF)	19	C	Sarasota	21	C
T1011AL	6	A	TS171	7	A	Catalina (VHF)	18	B	Saratoga (VHF)	9	A
T1012AL	6	A	TS172AL	7	A	Catalina (VHF-UHF)	19	C	South Hampton (VHF)	25	B
T1013AL	6	A	TS173AL	7	A	Claremont (VHF)	9	A	South Hampton		
T1801,N	22	C	TS323A1	3	A	Claremont(VHF-UHF)	10	B	(VHF-UHF)	17	B
T1802,N	22	C	TS323A2	3	A	Caracas (VHF)	8	A	Sweden (VHF)	9	A
T1806,N	22	C	TS323A3	3	A	Colonial (VHF)	8	A	Tampa (VHF)	14	B
T1807,N	22	C	TS323B1	4	A	Coral Gables (VHF)	18	B	Toronto	13	B
T1831	21	C	TS323B2	4	A	Coral Gables			Trinidad (VHF)	18	B
T1832	21	C	TS323B3	4	A	(VHF-UHF)	19	C	Trinidad (VHF-UHF)	19	C
T1842	21	C	TS1010	7	A	Cuba (VHF)	8	A	Tucson	21	C
T2212B	21	C	TS1011AL	7	A	Daytona	21	C	Vancouver (VHF)	11	B
T2242BZ	21	C	TS1012AL	7	A	Deauville (VHF)	18	B	Venice (VHF)	11	B
T2301D	12	C	TS1801	22	C	Deauville(VHF-UHF)	19	C	Westchester (VHF)	18	B
T2301DSA	2	A	TS1802	22	C	Delmonico (VHF)	13	B	Westchester		
T2301SZ,Z	14	B	TS1806	22	C	Del-Monte (VHF)	18	B	(VHF-UHF)	19	C
T2302DSA	2	A	TS1807	22	C	Del-Monte(VHF-UHF)	19	C	Westwood (VHF)	18	B
T2302Z	14	B	TS2301DRW	10	B	Denmark (VHF-UHF)	10	B	Westwood (VHF-UHF)	19	C
T2302ZN	14	B	TS2301Z	16	B	Denmark (VHF)	9	A			
T2303DSA	2	A	TS2301ZN	16	B	Delray (VHF)	9	A	Monterrey	21	C
T2311Z	18	B	TS2302DRW	10	B	Delray (VHF-UHF)	10	C	Montevideo(VHF)	9	A
T2312Z	18	B	TS2302Z	16	B	El Dorado (VHF)	18	B	Montreal (VHF)	9	A
T2316Z	18	B	TS2302ZN	16	B	El Dorado(VHF-UHF)	19	C	Montreal (VHF-UHF)	10	B
T2317Z	18	B	TS2303DRW	10	B	Florida (VHF)	15	B			
T2318Z	18	B	TS2326Z	16	B	Florida (VHF-UHF)	17	B			
T2319Z	18	B	TS2326ZN	16	B	Gotham (VHF)	15	B			
T2326SZ	14	B	TS2327Z	16	B	Gotham (VHF-UHF)	17	B	AIR CHIEF		
T2326Z	14	B	TS2327ZN	16	B	Havana	21	C	13-G-176,178,179..	3	D
T2326ZN	14	B	TS2501Z	16	B	Hawaii (VHF)	14	B	13-G-177,180,181..	2	D
T2327SZ	14	B	TS2502Z	16	B	Hollywood (VHF)	18	B	13-G-183	1	C
T2327Z	14	B	TS2506FZ	16	B	Hollywood (VHF-UHF)	19	C			
T2327ZN	14	B	TS2507FZ	16	B	Honolulu (VHF)	14	B			
T2336Z	14	B				Jamaica (VHF)	14	B			
T2336ZN	14	B	Algiers (VHF)	22	C	Jamaica (VHF-UHF)	16	B	AIRLINE		
T2337Z	14	B	Algiers (VHF-UHF)	20	C	Key West	21	C	GSE-4004A	1	C
T2337ZN	14	B	Alhambra (VHF)	22	C	Lisbon (VHF)	12	B	GSE-4006A	1	C
T2501Z	15	B	Alhambra(VHF-UHF)	20	C	Lombardy (VHF)	12	B	GSE-4104A	1	C
T2502Z	15	B	Ardmore	21	C	Madeira (VHF)	9	A	GSE-5001A	7	D
T2506FZ	15	B	Arizona	21	C	Madeira (VHF-UHF)	10	B	GSE-5004A	7	D
T2507FZ	15	B	Asheville	21	C	Malabar (VHF)	9	A	GSE-5101A	7	D
TA1812B	21	C	Atlanta (VHF)	22	C	Malabar (VHF-UHF)	10	B	GSE-5104A	7	D
TA1831	21	C	Atlanta(VHF-UHF)	20	C	Manhattan	21	C	GSL-3164A	2	C
TA1832	21	C	Bahamas (VHF)	14	B	Martinique (VHF)	14	B	GSL-3164B	2	C
TA1842	21	C	Bahamas (VHF-UHF)	8	A	Martinique			GSL-3164C	2	C
TA2212B	21	C	Bar Harbor (VHF)	18	B	(VHF-UHF)	16	B	GSL-3183A	2	C
TA2311Z	19	C	Bar Harbor			Mediterranean (VHF)	9	A	GSL-3183B	2	C
TA2312Z	19	C	(VHF-UHF)	19	C	Mediterranean			GSL-3183C	2	C
TA2316Z	19	C	Bel-Aire (VHF)	18	B	(VHF-UHF)	10	B	GSL-4013A	3	C
TA2318Z	19	C	Bel-Aire(VHF-UHF)	19	C	Miami (VHF)	9	A	GSL-4014A	3	C
TA2319Z	19	C	Belvedere (VHF)	9	A	Miami (VHF-UHF)	10	B	GSL-4015A	3	C
TS18A1	20	C	Belvedere			Montego (VHF)	9	A	GSL-4018A	3	C
TS18A1N	20	C	(VHF-UHF)	10	B	Montego (VHF-UHF)	10	B	GSL-4102A	2	C
TS18A2	20	C	Berkeley (VHF)	9	A	Morocco (VHF)	9	A	GSL-4102B	2	C
TS18A2N	20	C	Berkeley(VHF-UHF)	10	B	Morocco (VHF-UHF)	10	B	GSL-4102C	2	C
TS18A3	20	C	Bermuda (VHF)	18	B	Naples (VHF)	9	A	GSL-4113A	3	C
TS18A3N	20	C	Bermuda (VHF-UHF)	19	C	Nassau (VHF)	14	B	GSL-4114A	3	C
TS23A1	3	A	Beverly Hills(VHF)	18	B	Nassau (VHF-UHF)	16	B	GSL-4115A	3	C
TS23A2	3	A	Beverly Hills			Neptune (VHF)	9	A	GSL-4116A	2	C
TS23A3	3	A	(VHF-UHF)	19	C	Neptune (VHF-UHF)	10	B	GSL-4118A	3	C
TS23A6	3	A	Boulevard (VHF)	9	A	Newport (VHF)	9	A	WG-5000A	4	C
TS23A7	3	A	Boulevard			Newport (VHF-UHF)	10	B	WG-5000B	4	C
TS23B1	10	B	(VHF-UHF)	10	B	Norway (VHF)	9	A	WG-5000C	4	C
TS23B2	10	B	Brentwood (VHF)	12	B	Orlando (VHF)	9	A	WG-5000D	4	C
TS23B6	10	B	Burlingame(VHF)	9	A	Orlando (VHF-UHF)	10	B	WG-5000E	4	C
TS23B7	10	B	Burlingame			Palm Springs	22	C	WG-5000F	4	C
TS23B26	10	B	(VHF-UHF)	10	B	Palm Beach	22	C			

AIRLINE	No.	P a g e	ATR	No.	P a g e	CAPEHART	No.	P a g e	CBS-COLUMBIA	No.	P a g e
WG-5000G	4	C	26003	-	D	11C216BC-4	2	E	6TR327	4	F
WG-5002A	8	D	26004	-	D	11C216BD-5	2	E	6TR328	4	F
WG-5002B	8	D	26005	-	D	16C216BD-4	2	E	7K325	2	E
WG-5002C	8	D				16C216BD-5	2	E	7K325U	2	E
WG-5003B	8	D				16C216FD-4	2	E	7K326	2	E
WG-5003C	8	D				16C216FD-5	2	E	7K326U	2	E
WG-5100A	5	D				16C216MD-4	2	E	7K329U	2	E
WG-5102A	6	D				16C216MD-5	2	E	7K330U	2	E
WG-5102B	8	D				18C215-4	1	E	7K332U	2	E
WG-5103A	6	D				18C215-5	1	E	7K333U	2	E
WG-5103B	8	D				18C215M-4	1	E	7K334U	2	E
						18C215M-5	1	E	7KR329	2	E
						21T215BD-4	1	E	7KR330	2	E
						21T215BD-5	1	E	7KR332	2	E
						21T215MD-4	1	E	7KR333	2	E
						21T215MD-5	1	E	7KR334	2	E
						22C215BD-4	1	E	7KR335	2	E
						22C215BD-5	1	E	7KR336	2	E
						22C215MD-4	1	E	7T307	2	E
						22C215MD-5	1	E	7T307U	2	E
						23T215BD-4	1	E	7T309	2	E
						23T215BD-5	1	E	7T309U	2	E
						23T215MD-4	1	E	7T310	2	E
						23T215MD-5	1	E	7T310U	2	E
						24T215BNL-6	1	E	7TR311	2	E
						CT-109	1	E	7TR312	2	E
						CT-125	1	E	22C05	1	E
						CT-139	1	E	22C07	1	E
						CT-140	1	E	22C07B, M	1	E
						CT-157	1	E	22C09	1	E
						CT-158	1	E	22C09B	1	E
						CT-171	1	E	22CK009	3	E
						CT-172	1	E	22CK010	3	E
						CX-38C-4	1	E	22CX1	3	E
						CX-38C-5	1	E	22CX2	3	E
						CX-38S	2	E	22CX3	3	E
									22CX4	3	E
									22TK301	3	E
									22TK321	3	E
									22TX1	3	E
									22TX2	3	E
									22T09, B, EB	1	E
									22T19, B	1	E
									23CK011	3	E
									23CK012	3	E
									23CS013	3	E
									23CS014	3	E
									23TK001	3	E
									23TK002	3	E
									23TK003	3	E
									23TK004	3	E
									23C49L	1	E
									23C49LB	1	E
									23C49S	1	E
									23C49SB	1	E
									23C49SM	1	E
									23C59	1	E
									23C59B	1	E
									23CK011	3	E
									23CK012	3	E
									23CS013	3	E
									23CS014	3	E
									23T15	1	E
									23T19	1	E
									23TK001	3	E
									23TK002	3	E
									23TK003	3	E
									23TK004	3	E
									23TS005	3	E
									23TS006	3	E
									23TS007	3	E
									23TS008	3	E
									921-11	1	E
									921-12	1	E

CBS-COLUMBIA -----			CORONADO -----			CROSLEY -----			CROSLEY -----		
No.	Page		No.	Page		No.	Page		No.	Page	
921-13	1	E	45TV11-43-9095A	-	F	H-21COSHa	2	F	J-17TOWH	2	F
921-14	1	E	45TV11-43-9096A	-	F	H-21COSHb	1	F	J-17TOWU	1	F
921-21	1	E	45TV11-43-9097A	-	F	H-21COS Hd	2	F	J-21CABH	3	F
921-94	1	E	45TV11-43-9098A	-	F	H-21COSUc	1	F	J-21CABU	3	F
922-7	1	E	45TV11-43-9130A	-	F	H-21COWH	4	F	J-21CAMH	3	F
922-8	1	E	45TV11-43-9131A	-	F	H-21COWU	4	F	J-21CAMU	3	F
1601	3	E				H-21HCBH	4	F	J-21RABH	3	F
1602	3	E				H-21HCBhb	1	F	J-21RABU	3	F
1603	3	E	CROSLEY			H-21HCBU	4	F	J-21RAMH	3	F
1604	3	E	AC-10B	3	F	H-21HCMHb	1	F	J-21RAMU	3	F
1605	3	E	AC-M	3	F	H-21HCMU	4	F	J-21TABH	3	F
1606	3	E	AH-10B	3	F	H-21HCMUc	1	F	J-21TABU	3	F
1607	3	E	AT-B	3	F	H-21HCWUc	1	F	J-21TAMH	3	F
1608	3	E	AT-M	3	F	H-21COWHa	2	F	J-21TAMU	3	F
1610	3	E	AT-70B	3	F	H-21COWHb	1	F	J-21TAWH	3	F
1611	3	E	AT-70M	3	F	H-21COWUc	1	F	J-21TAWU	3	F
2001	4	F	AT-70W	3	F	H-21COW Hd	2	F	J-21TJBH	2	F
2002	4	F	AT-71B	3	F	H-21HCBH	4	F	J-21TJMH	2	F
2003	4	F	AT-71M	3	F	H-21HCBHa	2	F	J-21TKBF	8	G
2017	4	F	AT-71W	3	F	H-21HCBHd	2	F	J-21TKBU	8	G
3001	2	E	G-17TOBH	4	F	H-21HCBU	4	F	J-21TKLBF	8	G
3002	2	E	G-17TOBKH	4	F	H-21HCMHa	2	F	J-21TKLBU	8	G
3003	2	E	G-17TBU	4	F	H-21HCMHd	2	F	J-21TKLMU	8	G
3012	2	E	G-17TOMH	4	F	H-21HCWH	4	F	J-21TKLMF	8	G
3013	2	E	G-17TOMU	4	F	H-21HCWHa	2	F	J-21TKMU	8	G
3015	2	E	G-17TOWH	4	F	H-21HCWHd	2	F	J-21TKMF	8	G
U3C627	3	E	G-17TOWEH	4	F	H-21HCWU	4	F	J-21TOWH	2	F
U3C628	3	E	H-17TOBH	4	F	H-21HKBF	2	F	JR-21CDBF	5	F
U3C631	3	E	H-17TOBHd	2	F	H-21HKBU	2	F	JR-21CDBU	5	F
U3C632,633	3	E	H-17TOBHd	2	F	H-21HKMF	2	F	JR-21CDTMF	5	F
U3C634	3	E	H-17TOBU	4	F	H-21HKMU	2	F	JR-21CDTMU	5	F
U3C635	3	E	H-17TOBUc	1	F	H-21HPBHa	2	F	JR-21CGDBF	5	F
U3C636	3	E	H-17TOMH	4	F	H-21HPBHd	2	F	JR-21CGDBV	5	F
U3T602	3	E	H-17TOMHa	2	F	H-21HPBUc	1	F	JR-21PDBF	5	F
U3T615	3	E	H-17TOM Hd	2	F	H-21LPKBF	7	F	JR-21PDBU	5	F
U3T616	3	E	H-17TOMNHa	2	F	H-21LPKBU	7	F	JR-21PDMF	5	F
U3T621	3	E	H-17TOMUc	1	F	H-21LPKMU	7	F	JR-21PDMU	5	F
U3T622	3	E	H-17TOWH	4	F	H-21HPWHa	2	F	425	4	F
U3T623	3	E	H-17TOWHa	2	F	H-21HPWHd	2	F	431	7	F
U3T624	3	E	H-17TOW Hd	2	F	H-21HPWUC	1	F	431-1, 1A, 1AX	7	F
U22C05	1	E	H-17TOMU	4	F	H-21TOBH	4	F	431-1B, 1BX	7	F
U22C07, B	1	E	H-17TOWU	4	F	H-21TCOBH	2	F	431-1C, 1CX	7	F
U22T09, B, EB	1	E	H-17TOWUc	1	F	H-21TCOMH	2	F	431-2, -3, -4	7	F
U22T19, B	1	E	G-21TOBH	4	F	H-21TCOMH	2	F	431-4A, -4CX	7	F
U22TK301	3	E	G-21TOBU	4	F	H-21TKBF	2	F	432, 432-1	7	F
U22TK321	3	E	G-21TOMH, MU	4	F	H-21TKBU	2	F	432-1A, 1AX	7	F
U23C49	1	E	G-21TOWH, WU	4	F	H-21TKMF	2	F	432-3, 3A	7	F
U23C59	1	E	H-21CCOBH	2	F	H-21TKMU	2	F	432--3AX	7	F
U23CS013	3	E	H-21CCOMH	2	F	H-21TOBH, d	2	F	434	7	F
U23CS014	3	E	H-21CCOWH	2	F	H-21TOBHb	1	F	441, A, B	7	F
U23T15	1	E	H-21CKBF	2	F	H-21TOBUC	1	F	441BX, C	7	F
U23T19	1	E	H-21CKBU	2	F	H-21TOBUf	2	F	442, A, AX, B, BX	7	F
U23TK001	3	E	H-21CKMF	2	F	H-21TOMH	4	F	442, C, D	7	F
U23TK002	3	E	H-21CKMU	2	F	H-21TOMHa	2	F	443, -3	7	F
U23TK003	3	E	H-21COBH	4	F	H-21TOMHb	1	F	445	7	F
U23TK004	3	E	H-21COBU	4	F	H-21TOM Hd	2	F	466, A, A1	7	F
U23TS005	3	E	H-21COMH	4	F	H-21TOMUc	1	F	467, A, A1	7	F
U23TS006	3	E	H-21COMU	4	F	H-21TOMUf	2	F	468	7	F
U23TS007	3	E	H-21COSBH	4	F	H-21TOWH	4	F	469	7	F
U23TS008	3	E	H-21COSH	4	F	H-21TOWHa	2	F	472, A, B	8	G
			H-21COBHa	2	F	H-21TOWHb	1	F	473, A, B	8	G
CORONADO			H-21COBHb	1	F	H-21TOWUc	1	F	476, 477	8	G
45TV11-43-9027A	-	F	H-21COBHd	2	F	H-21TOW Hd	2	F	474, 475	5	F
45TV11-43-9028A	-	F	H-21COBUc	1	F	H-21TOWUf	2	F	478, 479	5	F
45TV11-43-9085A	-	F	H-21COMHa	2	F	J-17TABH	3	F	481, 482	3	F
45TV11-43-9086A	-	F	H-21COMHb	1	F	J-17TABU	3	F	483, 484, 487	3	F
45TV11-43-9086A	-	F	H-21COMHc	1	F	J-17TAMH	3	F			
45TV11-43-9088A	-	F	H-21COM Hd	2	F	J-17TAMU	3	F	DUMONT		
45TV11-43-9089A	-	F	H-21COMUc	2	F	J-17TAWH	3	F			
45TV11-43-9090A	-	F	H-21COSBHa	2	F	J-17TAWU	3	F	RA301	7	G
45TV11-43-9091A	-	F	H-21COSBHb	1	F	J-17TAWU	3	F	RA301A1, A2	7	G
45TV11-43-9092A	-	F	H-21COSBHd	2	F	J-17TJBH	2	F	RA312	6	G
45TV11-43-9093A	-	F	H-21COSBU	4	F	J-17TJBU	1	F	RA313	6	G
45TV11-43-9094A	-	F	H-21COSBUc	1	F	J-17TJMH	2	F	RA-321	5	G
						J-17TJMU	1	F			

DUMONT	P a g e	EMERSON	P a g e	EMERSON	P a g e	FADA	P a g e
No.		No.		No.		No.	
RA-321	5 G	1055D, F, H	5 H	1163D	3 H	UH21L2EB	- H
RA-322	5 G	1056D	5 H	1164D	3 H	UH21L2LO	- H
RA-340	4 G	1057D	5 H	1165D	3 H	V211TBM	- H
RA-340A1, A3, A4	4 G	1066D	5 H	1176	4 H		
RA-341	4 G	1067D, F	5 H	1177	4 H		
RA-241A1, A3, A4	4 G	1068D	5 H	1178	4 H	FIRESTONE	
RA-342	4 G	1069D	5 H	1179	4 H		
RA-342A2, A3, A4	4 G	1070D	5 H	1180	4 H	13-G-183	1 C
RA-342A5, A6	4 G	1071D, F	5 H	1181	4 H	13-G-177, 180, 181	2 D
RA-343	4 G	1072E	5 H	1186	4 H		
RA-343A2, A3, A4	4 G	1073D	5 H	1187	4 H	GENERAL ELECTRIC	
RA-343A5, A6	4 G	1074D	5 H	1188	4 H		
RA-350	3 G	1075D, F, H	5 H	1189	4 H	14T007	8 J
RA-351	3 G	1084D	5 H			14T008	8 J
RA-370	1 G	1085D, F, H	5 H	120220D	1 G	14T009	8 J
RA-371	1 G	1086D	5 H	120233D, F	5 H	14T010	8 J
RA-380	2 G	1087D, F	5 H	120234D	5 H	14T011	8 J
RA-381	2 G	1088D	5 H	120235D	5 H	14T012	8 J
		1089D, F	5 H	120236D	5 H	14T014	8 J
Brewster	2 G	1090D	5 H	120237D	5 H	17T20	3 H
Berkeley	2 G	1091D, F	5 H	120238D, F	5 H	21C40	1 H
Bedford	2 G	1092D	5 H	120239D, F	1 G	21C103	3 H
Bryan	2 G	1093D, F	5 H	120241D, F	5 H	21C104	3 H
Bellmor	2 G	1098D	5 H	120245D, N	5 H	21C105	3 H
Conover	4 G	1099D	5 H	120249D, F	5 H	21C106	5 J
Croft	4 G	1100D	5 H	120251D	1 G	21C107	5 J
Culver	4 G	1101D, 1102D, F	5 H	120254D	1 G	21C108	5 J
Darien	4 G	1104D	3 H	120255D, F, H	2 H	21C109	5 J
Derbyshire	1 G	1104F, H, J, L	2 H	120256D, F, H, N	2 H	21C110	2 H
D'Orsay	4 G	1105	2 H	120257D, P	3 H	21C111	2 H
Douglas	4 G	1106D, F	3 H	120258D	3 H	21C112	2 H
Shelby	1 G	1106H, J, L, N, P, R	2 H	120259F, H, N	2 H	21C113	2 H
Stanford	1 G	1107D, F	2 H	120263D, P	3 H	21C123	2 H
Templer	4 G	1108D, F	3 H	120265D	3 H	21C124	2 H
Thorndyke	4 G	1109D	3 H	120269L	2 H	21C125	2 H
Wilshire	1 G	1110D	3 H	120273F	2 H	21C126	2 H
Windsor	1 G	1111D	3 H	120275L	2 H	21C130	1 H
		1112D	3 H	120276L	2 H	21C131	1 H
		1113D	3 H	120277D	3 H	21C133	2 H
		1114, D, F, H	2 H	120278D	3 H	21C134	2 H
		1115D	2 H	120279B	3 H	21C135	2 H
		1116D	3 H	120282P	3 H	21C136	2 H
		1117D	3 H	120292P, V	4 H	21C137	9 J
		1120D	3 H	120293T, X	4 H	21C141, 2	2 H
		1121D	3 H	120299V	4 H	21C151	1 H
		1122D	3 H	120300X	4 H	21C152	1 H
		1122F	3 H			21C156	1 H
		1123D	3 H			21C157	1 H
		1124D, F	3 H	FADA		21C160	9 J
		1125D	3 H	17KD	- H	21C240, -UHF	6 J
		1126D, F	3 H	17L1	- H	21C241, -UHF	6 J
		1127D	3 H	17L2	- H	21C242, -UHF	6 J
		1128F	2 H	17L2EB	- H	21C243, -UHF	6 J
		1130D, F	2 H	17L2LO	- H	21C244, -UHF	6 J
		1132F	2 H	21KA	- H	21C347	7 J
		1138D, F	3 H	21K1	- H	21C348	7 J
		1139D	3 H	21K1LO	- H	21C349	7 J
		1140D, F	3 H	21L1	- H	21C350	7 J
		1141D	3 H	21L2	- H	21C351	7 J
		1142D	2 H	21L2EB	- H	21T22	3 H
		1143D	2 H	21L2LO	- H	21T23	3 H
		1144D	3 H	21L3	- H	21T24	3 H
		1145D	3 H	21L3BM	- H	21T25	3 H
		1150D, F	3 H	21T10	- H	21T26, -UHF	6 J
		1151D	3 H	UH17KD	- H	21T27, -UHF	6 J
		1152D, F	3 H	UH17L1	- H	21T30	7 J
		1153D	3 H	UH17L2	- H	21T31	7 J
		1154D, F	3 H	UH17L2EB	- H	21T32	4 H
		1155D	3 H	UH17L2LO	- H	21T33	4 H
		1156D, F	3 H	UH21KA	- H	21T34	3 H
		1157D	3 H	UH21K1	- H	21T36	5 J
		1158A	3 H	UH21K1LO	- H	21T37	5 J
		1160D	3 H	UH21L1	- H	21T038	2 H
		1161D	3 H	UH21L2	- H	21T039	2 H
		1162D, F	3 H			21T040	2 H

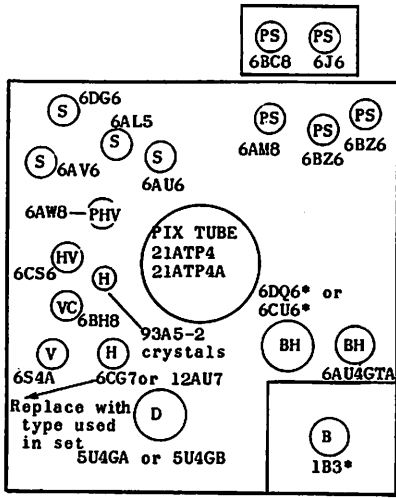
GENERAL ELECTRIC			HOFFMAN			MAGNA VOX			MOTOROLA		
No.	Page		No.	Page		No.	Page		No.	Page	
21T041	2	H	21B194, U, U2	1	K	CMUA440AA	2	L	17T20, B, E, M	5	M
21T042	2	H	21B352S, U, U2	1	K	CMUA441AA	2	L	17T21	5	M
21T043	2	H	21B364, U, U2	1	K	CMUA4465AA	4	L	17T22B, E	5	M
21T045	2	H	21B367, U, U2	1	K	CMUA466AA	4	L	17T23B	5	M
21T050	9	J	21B729S, U, U2	1	K	CMUA469AA	4	L	17T24CH	5	M
21T060	9	J	21B552, L, N, NU, U.	2	K	CMUA470AA	4	L	17T25BL	5	M
24C180	2	H	21B729U	2	K	CMUA471AA	4	L	17T25GR, TN	5	M
24C181	2	H	21M193, U, U2	1	K	CMUA472AA	4	L	17T26PK, WH	5	M
24C182	9	J	21M351S, U, U2	1	K	CMUA473AA	4	L	21C3, B	6	M
24C245	6	J	21M363, U, U2	1	K	CMUA474AA	4	L	21C4, B	2	M
24T070	2	H	21M366, U, U2	1	K	CMUA475AA	3	L	21K19, B	5	M
24T071	2	H	21M351, L, LU, N	2	K	CMUA476AA, 479AA	3	L	21K21, B	6	M
9T001	10	J	21M351NU, U	2	K	CMUA480AA	3	L	21K22	6	M
9T002	10	J	21M728S, SU, SU2	1	K	CMUA481AA	3	L	21K26, B	5	M
M Line Portable	8	J	21M728L, LU, N, NU.	2	K	CMUD471AA	4	L	21K29, B, W	7	M
O Line	1	H	21M728U	2	K	CTA440AA	2	L	21K30, B, W	7	M
T Line	10	J	21P180S	1	K	CTA441AA	2	L	21K37B, BA, BAA	3	M
S Line	2	H	21P195U, U2	1	K	CTA442AA	2	L	21K38, B	1	M
ST Line	2	H	21P353S, SU	1	K	CTA465AA	4	L	21K39, B	3	M
HALLICRAFTERS			21P353, L, LU, N, NU	2	K	CTA466AA	4	L	21K40, B	3	M
17TT700E, M	1	J	21P365, U, U2	1	K	CTA469AA	4	L	21K41, B	2	M
17TT701E, M	1	J	21P368, U, U2	1	K	CTA470AA	4	L	21K42, B	2	M
17TT710	1	J	21P730, U	2	K	CTA471AA	4	L	21K43, B	2	M
17TT711	1	J	21P730S, SU, SU2	1	K	CTA472AA	4	L	21K44, B, W	2	M
17TT760T	1	J	21P731S, U, U2	1	K	CTA473AA	4	L	21K45	2	M
17TT761T	1	J	21P731, L, LU, N, NU	2	K	CTA474AA	4	L	21K48B, M	3	M
21K330BA, MA	6	K	21P731U	2	K	CTA475AA	3	L	21K53B	4	M
21K331B, M	5	K	21SF179	1	K	CTA476AA	3	L	21K53BA	4	M
21K340BA, MA	6	K	21U208, N, NU, U	2	K	CTA479AA	3	L	21K53M, MA	4	M
21K340B, M	7	K	21U208S, SU, SU2	1	K	CTA480AA	3	L	21K55B, BA, MA	4	M
21K341B, M	5	K	24B732, U	2	K	CTA481AA	3	L	21T15	5	M
21K520B, M	2	J	24M354, U	2	K	CTD471AA	4	L	21T16, B, E	5	M
21K521B, M	2	J	24P356, U	2	K	V/U18-01AA	1	L	21T17, B	5	M
21K540B, M	2	J	24P733U	2	K	V/U18-02AA	1	L	21T19, B	6	M
21KT640BC	4	K	24U211, U	2	K	V/U18-03AA	1	L	21T21, B, E	7	M
21KT850B, M	1	J	40B-21, B, L, N	2	K	V/U18-04AA	1	L	21T22, B	7	M
21T320B, M, W	7	K	410-24, B	2	K	V/U21-01AA	1	L	21T25CH, PK, TN	1	M
21T321B, M, W	5	K	411-21	1	K	V/U21-02AA	1	L	21T26B, BA, BR, BRA	3	M
21T420B, M	6	K	412-21	1	K	V/U21-03AA	1	L	21T26CH, CHA	3	M
21T421B, M	6	K	326, U	3	K	V/U21-04AA	1	L	21T27B, MA, PK	3	M
21T440B, M	4	K	1144 Series	3	K	MAJESTIC			21T28, B	3	M
21T441B, M	4	K	PG-1144	3	K	40	2	L	21T32B, BA	4	M
21TT500B, M	2	J	PT-1144	3	K	50	2	L	21T32CH, CHA, MGA.	4	M
21TT501B, M	2	J	SG-1144, U	3	K	52	2	L	21T34B, BA	4	M
21TT750M	1	J	HOTPOINT			116 Series	1	L	21T34M, MA	4	M
21TT751M	1	J	9S101	1	K	125 Series	2	L	24K4	6	M
21TT851B, M	1	J	9S102	1	K	126 Series	2	L	24K5	6	M
24K240B, M	3	J	14S201	4	L	2TT22	1	L	24K7, B	6	M
24K241B, M	3	J	14S202	4	L	2TT23	1	L	24K9, B	3	M
24K551B, M	2	J	14S203	4	L	21C36	1	L	24K10, B	2	M
24KT550B, M	2	J	17S301	2	K	21C37	1	L	24K11, B	2	M
24KT551B, M	2	J	17S302	2	K	21C38	1	L	24K13B, M	4	M
24T430B, M	6	K	21S401	3	L	21C39	1	L	24T3BR	3	M
24T431B, M	6	K	21S451	3	L	21D39	1	L	24T4, B	2	M
24T450B, M	4	K	21S452	3	L	21D56	1	L	24T5BG, MG	4	M
24T451B, M	4	K	21S501	3	L	21D57	1	L	TS-418, Y	5	M
24TT510B, M	2	J	21S502	3	L	21D58	1	L	TS-528, Y	6	M
24TT511B, M	2	J	21S551	3	L	21D59	1	L	TS-530, Y	1	M
27K250B, M	3	J	21S552	3	L	METEOR			TS-531, Y	7	M
27K251B, M	3	J	21S801	3	L	456.34700	-	L	TS-533, Y	2	M
A2000D	2	J	21S802	3	L	456.34800	-	L	TS-534, Y, YB	3	M
B2000D	2	J	HS-Q56	4	L	528.34700	-	L	TS-537, Y	4	M
C2000D	2	J	HS-U56	3	L	528.34701	-	L	TTS-537, Y	4	M
D2000D	2	J	HS-T56	1	K	528.34800	-	L	TS-603, Y	6	M
A2005	1	J	MM Line	2	K	528.34801	-	L	VTS-418, Y	5	M
B2005	1	J	MAGNA VOX			528.34801	-	L	VTS-518, Y	5	M
C2005	1	J	18 Series	1	L	PC4103, A	-	L	WTS-518, Y	5	M
D2005	1	J	21 Series	1	L	PC4109, A	-	L	WTS-531, Y	7	M
HOFFMAN			600 Series	2	L	MONTGOMERY WARD			Y17T20, B	5	M
21B179S, U, U2	1	K	650 Series	4	L	See Airline			Y17T22B, E	5	M
									Y17T23, B	5	M
									Y21C3, B	6	M
									Y21C4, B	2	M

MOTOROLA	P a g e	OLYMPIC	P a g e	PACKARD-BELL	P a g e	PHILCO	P a g e
No.		No.		No.		No.	
Y21K19	5 M	17TR19	2 N	21SC1,U	- N	E2004SP	3 N
Y21K21B	6 M	17TW27	4 N	21ST1,U	- N	E4208S	4 P
Y21K22	6 M	21CB35	6 N	24ST1,U	- N	E4204,L	7 P
Y21K23,B	6 M	21CB41	6 N			E4206SL	7 P
Y21K24	6 M	21CF61	3 N	PHILCO		E4206STM	7 P
Y21K26,B	5 M	21CF63	3 N	7L70,U	4 P	E4207SC	7 P
Y21K29,B,W	7 M	21CH59	3 N	7L71,U	4 P	E4600	7 P
Y21K30,B,W	7 M	21CC55	6 N	7L40,U	7 P	E4602,L,TL,TM	7 P
Y21K33E	7 M	21CC70	6 N	7L41,U	7 P	E4604,HM	7 P
Y21K37B,BA,BR,BRA	3 M	21CL81	3 N	7L45,U	7 P	E4605,L,T	4 P
Y21K38,B	1 M	21CS12	2 N	7P50,U	7 P	E4608	7 P
Y21K39,B	3 M	21CS18	2 N	18D3020C (330)	1 N	E4610N	7 P
Y21K40,B	3 M	21CU15	2 N	18D3020UC (330)	1 N	E4612G	7 P
Y21K41,B	2 M	21CU16	2 N	18D3020G,UG (330)	1 N	E4614S,SL	7 P
Y21K42,B	2 M	21CX29	4 N	18D3020L,UL (330)	1 N	E4700N	7 P
Y21K43,B	2 M	21CZ51	5 N	18D3020M,UM (330)	1 N	E6200	7 P
Y21K44,B,W	2 M	21CZ72	5 N	18D3122,U (330)	1 N	E6204M,L	7 P
Y21K45	2 M	21DB71	6 N	22C4011X (300)	1 N	E6602M,L,T,TL	7 P
Y21K53B,BA,M,MA	4 M	21DC71	6 N	22C4019 (300)	1 N	E6604M,L,T	7 P
Y21K55B,BA,M,MA	4 M	21DZ73	5 N	22C4020	2 N	E6606	4 P
Y21T15	5 M	21KB24	6 N	22C4020	2 N	E6608TN	4 P
Y21T16,B,E	5 M	21KB26	6 N	22C4120,L (300)	1 N	E6610L,M	4 P
Y21T17,B	5 M	21KB36	6 N	22C4123 (300)	1 N	UE2002C	3 N
Y21T19,B	6 M	21KB76	6 N	22C4124 (300)	1 N	UE2004F,G,SP	3 N
Y21T21,B,E	7 M	21KC44	6 N	22C4127 (300)	1 N	UE4204,L	7 P
Y21T22,B	7 M	21KC46	6 N	22C4128	2 N	UE4206SL,STM	7 P
Y21T25CH	1 M	21KC56	6 N	22C4132L	2 N	UE4207SC	7 P
Y21T25PK,TN	1 M	21KS22	2 N	22C4124,L	6 P	UE4208S	4 P
Y21T26B,BR,BRA,CH	3 M	21TB34	6 N	22C4126,L	6 P	UE4600	7 P
Y21T26CHA,BA	3 M	21TB40	6 N	22C4129	6 P	UE4602,L,TL,TM	7 P
Y21T27B,MA,PK	3 M	21TC54	6 N	22C4310,L (300)	1 N	UE4604,HM	7 P
Y21T28,B	3 M	21TF60	3 N	22C4312,L	6 P	UE4605,C,T	4 P
Y21T32B,BA	4 M	21TF62	3 N	22C4410	6 P	UE4608	7 P
Y21T32CH,CHA	4 M	21TL80	3 N	22D4030E,UE (330)	1 N	UE4610N	7 P
Y21T32MGA	4 M	21TS11	2 N	22D4030L,UL (330)	1 N	UE4612G	7 P
Y21T34B,BA,M,MA	4 M	21TS17	2 N	22D4032 (330)	1 N	UE4614S,SL	7 P
Y24K4,B	6 M	21TU14	2 N	22D4034,L (390)	1 N	UE4700N	7 P
Y24K5,B	6 M	21TX28	4 N	22D4136,U (330)	1 N	UE4802M,L	7 P
Y24K7	6 M	21TZ56	5 N	22D4136L,UL (330)	1 N	UE4804L	7 P
Y24K9,B	3 M	21KZ23	5 N	22D4138,U,L,UL (330)	1 N	UE6200	7 P
Y24K10,B	2 M	21KZ35	5 N	22D4140,L (390)	1 N	UE6204M,L	7 P
Y24K11,B	2 M	21KZ39	5 N	22D4144,L (392)	1 N	UE6602M,L,T,TL	7 P
Y24K13B,M	4 M	22DB101	6 N	22D4148,L (440)	1 N	UE6604M,L,T	7 P
Y24T3BR	3 M	22DB116	6 N	22D4150,U,L,UL (330)	1 N	UE6606	4 P
Y24T4,B	2 M	22DB120	6 N	22D4152HM,M (390)	1 N	UE6608TN	4 P
Y24T5BG,MG	4 M	22DB121	6 N	22D4154,U (330)	1 N	UE6610L	4 P
		22DB122	6 N	22D4156,L (392)	1 N	UE6610M	4 P
		22DB123	6 N	22D4158,U (330)	1 N	TV-300	1 N
		22DB124	6 N	22D4159 (392)	1 N	TV-301	1 N
		22DC100	6 N	22D4160,L (392)	1 N	TV-304	1 N
		22DC101	6 N	22D4162,L (440)	1 N	TV-330	1 N
		22DC116	6 N	22D4164 (440)	1 N	TV-350	6 P
		22DC120	6 N	22D4320L,M,T,W (330)	1 N	TV-354	5 P
		22DC121	6 N	22D4324HM,L (392)	1 N	TV-390	1 N
		22DC122	6 N	22D4326 (392)	1 N	TV-390	1 N
		22DC123	6 N	24C6005	1 N	TV-392	1 N
		22DC124	6 N	24C6010	5 P	TV-394	1 N
		22DZ101	5 N	24C6012	5 P	TV-396	1 N
		22DZ116	5 N	24C6105M	1 N	TV-400	2 N
		22DZ120	5 N	24C6108 (304)	1 N	TV-440	1 N
		22DZ121	5 N	24C6109,L	5 P	TV-444	1 N
		22DZ122	5 N	24C6110,L	5 P		
		22DZ123	5 N	24C6112	5 P	PHILHARMONIC	
		22DZ124	5 N	24C6310	5 P		
AL	3 N	24CJ68	6 N	24D6018 (396)	1 N	54CLO21	- P
BD,BF	1 M	24CJ68BK,MK	6 N	24D6120L,M (394)	1 N	54CM21	- P
R,S,U	2 N	24CK77	6 N	24D6122L,M (394)	1 N	54TW21	- P
W,X	4 N	C21BD35	1 M	24D6126L,M (444)	1 N		
Z	5 N	C21BF21	1 M	24D6320C M (444)	1 N	RCA	
17CA20,X	6 N	K21BD34	1 M	7010,U	3 N		
17CR20	2 N	T21BD19	1 M	7011,U	3 N	8PT7010	11 Q
17TA19,BX	6 N	T21BF20	1 M	E2002C	3 N	8PT7011	11 Q
17TA32	6 N	AA,AB	6 N	E2004F	3 N	8PT7012	11 Q
17TA33	6 N	AC,AJ,AK	6 N	E2004G	3 N	8PT7014	11 Q
17TR10	2 N						

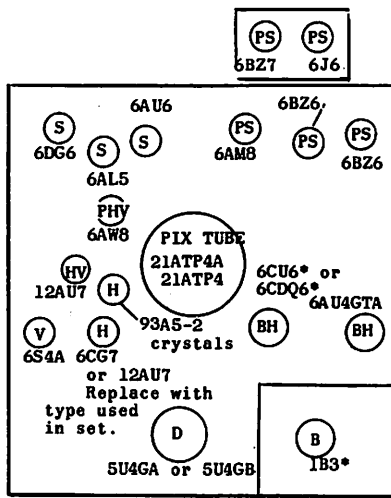
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	No.			No.			No.			No.	
8PT7030, T	11	Q	21S521, N	1	P	24S531, U	5	Q	Dixon	10	Q
8PT7031, T	11	Q	21S521NU, U	1	P	24S532, U	5	Q	Dorrance	1	P
8PT7032, T	11	Q	21S522, N, NU, U	1	P	24T420, U	5	Q	Eaton	10	Q
8PT7034, T	11	Q	21S523N, NU, U	1	P	24T435, U	5	Q	Edgemont	14	R
14S7052, U	13	R	21S525, U	1	P	24T6142, U	2	P	Ellis	1	P
14S7070, U	13	R	21S526, N, NU, U	1	P	24T6285, U	2	P	Ellsworth	16	R
14A7071, U	13	R	21S537, N, NU, U	1	P	24T6287, U	2	P	Endicott	16	R
14S7074, U	13	R	21S548	1	P	24T7272, U	14	R	Enfield	15	R
17S450	1	P	21S548N, NU	7	Q	24T7275, U	14	R	Farrington	16	R
17S450R	3	P	21S548U	1	P	24T7277, U	14	R	Felton	1	P
17S450RU	3	P	21S632, U	9	Q	KCS84C, E, F, H, J, K	5	Q	Fenway	15	R
17S450U	1	P	21S5022, U	1	P	KCS87	1	P	Gladstone	2	P
17S451, U	1	P	21S5251, U	1	P	KCS87A, C, D	1	P	Glenalden	14	R
17S453	1	P	21S5252, U	1	P	KCS88	1	P	Glenwood	2	P
17S453R, RU	3	P	21S6052, U	9	Q	KCS88A, B, BX, C, CX	1	P	Hanson	2	P
17S453U	1	P	21S6053, U	9	Q	KCS88D, DX, E, EX, F	1	P	Haverton	2	P
17S500R, RU	3	P	21S6055, U	9	Q	KCS88H, J, JX, K, KX	1	P	Highland	1	P
21D527, U	4	P	21S6057, U	9	Q	KCS88L, LX, M, MX	1	P	Kent	1	P
21D667U	2	P	21T635, U	2	P	KCS88N, NP	7	Q	Lambert	1	P
21D670U	2	P	21T639, U	12	Q	KCS88P, V, VA, VAX	1	P	Markham	15	R
21D641U	2	P	21T6082U	2	P	KCS88VX	1	P	Medalist	5	Q
21D645U	2	P	21T6083U	2	P	KCS89, A, B, C	6	Q	Newton	3	P
21D647U	2	P	21T6114U	2	P	KCS90, A	4	P	Oakmont	14	R
21D678U	2	P	21T6115U	2	P	KCS92	7	Q	Personal	11	Q
21D652U	2	P	21T6117U	2	P	KCS92A, AX	1	P	Pickford	1	P
21D667, U	2	P	21T6125, U	2	P	KCS92B, BX	1	P	Princeton	2	P
21D670, U	2	P	21T6127, U	2	P	KCS92C, CX	1	P	Radnor	1	P
17S6022K, KU, U	8	Q	21T6255U	2	P	KCS92D, DX	1	P	Raeburn	15	R
17S6025K, KU, U	8	Q	21T6256U	2	P	KCS92E, EX	1	P	Ramstead	15	R
17S6026K	8	Q	21T6257U	2	P	KCS92F, FX	1	P	Rittenhouse	2	P
17S6027K, KU, U	8	Q	21T7112U	10	Q	KCS92H, HX	1	P	Rupert	1	P
21D7425, U	15	R	21T7113U	10	Q	KCS92J, K	7	Q	Sewell	5	Q
21D7427, U	15	R	21T7117U	10	Q	KCS92L, LX	1	P	Somerton	15	R
21D7445, U	15	R	21T7152U	10	Q	KCS92M, MX	1	P	Special 21	3	P
21D7446, U	15	R	21T7153U	10	Q	KCS92X	1	P	Sportster	13	R
21D7447, U	15	R	21T7157U	10	Q	KCS93, A, B, C	3	P	Teletimer 21	2	P
21D7479, U	15	R	21T7355U	10	Q	KCS94, A	8	Q	Thrifton	8	Q
21D7485, U	15	R	21T7357U	10	Q	KCS95, A, B, C	9	Q	Towne	9	Q
21D7487, U	15	R	21T7385, U	15	R	KCS96, A, B, C, D, E	2	P	Trafton	1	P
21D7488, U	15	R	21T7386, U	15	R	KCS97, A, AA, AB, AC	2	P	Trent	3	P
21D7485, U	15	R	21T7387, U	15	R	KCS97AD, D, E, F, H	2	P	Vincent	2	P
21D7487, U	15	R	21T7415, U	15	R	KCS97J, K, N, P, R, T	2	P	Wayfarer	13	R
21D7488, U	15	R	21T7416, U	15	R	KCS97U, W	2	P	Wayland	2	P
21D7505U	15	R	21T7417, U	15	R	KCS98A, C, E, F	10	Q	Whitman	15	R
21D7506U	15	R	24D542	5	Q	KCS100B, D, K	11	Q	Winfield	2	P
21D7507U	15	R	24D542U	6	Q	KCS101, A	12	Q	Winthrop	2	P
21D7174, U	14	R	24D543	5	Q	KCS102, B, D	13	R	Wister	3	P
21D7175, U	14	R	24D543U	6	Q	KCS103, A, B, C, D	14	R			
21D7176, U	14	R	24D544	5	Q	KCS103N, P, R, T	14	R			
21D7177, U	14	R	24D544U	6	Q	KCS104A	15	R			
21D7215, U	14	R	24D655, U	2	P	KCS104AA, AB, AC, AD, 16	16	R			
21D7216, U	14	R	24D658, U	2	P	KCS104 AE, AF	16	R			
21D7217, U	14	R	24D673, U	2	P	KCS104B, C, D, E	15	R			
21D7235, U	14	R	24D676, U	2	P	KCS104F, H, J, K, L	15	R			
21D7237, U	14	R	24D679, U	2	P	Adair	10	Q			
21S348K, KU	1	P	24D7295, U	14	R	Allen	14	R			
21S355K, KU	1	P	24D7296, U	14	R	Allison	2	P			
21S357K, KU	1	P	24D7297, U	14	R	Ardmore	14	R			
21S362K, KU	1	P	24D7315, U	14	R	Arlen	1	P			
21S369K, KU	1	P	24D7317, U	14	R	Ashburn	3	P			
21S500, U	1	P	24D7545, U	16	R	Bailey	14	R			
21S501, U	1	P	24D7547, U	16	R	Barbizon	2	P			
21S502, U	1	P	24D7566, U	16	R	Barrett	5	Q			
21S503, N, NU, U	1	P	24D7568, U	16	R	Baylor	5	Q			
21S504, N, NU, U	1	P	24D7587, U	16	R	Benson	1	P			
21S505, N, NU, U	1	P	24D7705, U	16	R	Brady	8	Q			
21S506, N, NU, U	1	P	24D7706, U	16	R	Brantley	16	R			
21S507, N, NU, U	1	P	24D7708, U	16	R	Bromley	1	P			
21S510, NU, U	1	P	24D7726, U	16	R	Carrol	1	P			
21S511, N, NU, U	1	P	24D7728, U	16	R	Chalfont	2	P			
21S516, N, NU, U	1	P	24S512, U	5	Q	Chatfield	2	P			
21S517, U	1	P	24S513, U	5	Q	Chatsworth	16	R			
21S518, U	1	P	24S514, U	5	Q	Collingswood	2	P			
21S519, N, NU, U	1	P	24S529, U	5	Q	Consolette	1	P			
									RAYTHEON		
									21T38	3	R
									21T40	1	R
									21T41	1	R
									21T43	1	R
									21T44	1	R
									21T45	1	R
									21T46	1	R
									21T254AGH	2	R
									21T254AS	2	R
									C-214B	1	R
									C-214M	1	R
									C-216B, M, -218	1	R
									C2169B, M	2	R
									C2174	2	R
									C2175B, M	3	R
									M-210B, M	1	R
									UC-213B, M	1	R
									UC-215B, M	1	R
									UC-217B, M	1	R
									UC219	1	R
									UM-211B, M	1	R
									UC-2169, B, M	2	R
									UC-2184	2	R

RAYTHEON	P a g e	SILVERTONE	P a g e	SILVERTONE	P a g e	SPARTON	P a g e
No.	e	No.	e	No.	e	No.	e
Aristocrat Series..	1 R	5114-2,2W	5 S	528.32000	6 S	15V215,P,T	1 T
		5115,A,C,D	2 S	528.32001	6 S	16U215,P,T	1 T
SEARS-ROEBUCK		5115-2	3 S	528.32100	4 S	17A203	2 T
See Silvertone		5116,B,C,D	2 S	528.32200	4 S	17A204	2 T
SENTINAL		5116-2	5 S	528.32201	4 S	18A203	2 T
		5117,A,B,C,D	2 S	528.32202	4 S	18A204	2 T
1U-701	2 R	5118	6 S	528.32800	2 S	19A203	2 T
1U-711	2 R	5119	4 S	528.32900	2 S	19A204	2 T
1U-714	2 R	5124,A,B	2 S	528.33000	2 S	19A209	2 T
1U-721	2 R	5125	2 S	528.33100	2 S	19A210	2 T
1U-724	2 R	5126,A,B,C,CC	2 S	528.33400	2 S	20T203	2 T
1U-752	2 R	5127,A,B,C	2 S	528.33500	2 S	20T204	2 T
1U-755	2 R	5128,B,C,D	2 S	528.33501	2 S	20T209	2 T
1U-758	2 R	5129,A,B,C,D	2 S	528.33800	2 S	20T210	2 T
1U-762	2 R	5130,B,C,D	2 S	528.33900	2 S	20T403	2 T
1U-765	2 R	5131,A,B,C,D	2 S	528.34000	2 S	20T404	2 T
1U-768	2 R	5132	6 S	528.34100	2 S	21CL12,U	1 T
1U-791	2 R	5132A,B	2 S	528.34200	2 S	21CL13,U	1 T
1U-911	3 S	5133	4 S	528.34300	2 S	21CM11,U	1 T
1U-914	3 S	5133A,B	2 S	528.34301	2 S	21CM12,U	1 T
1U-921	3 S	5134	2 S	528.34400	2 S	21CM13,U	1 T
1U-924	3 S	5135	2 S	528.34500,34501	1 S	21TL10,U	1 T
1U-991	3 S	5136	2 S	528.34600	2 S	21TM10,U	1 T
1U-1101	1 R	5137	2 S	528.34601	2 S	21T203	2 T
1U-1111	1 R	5139	6 S	528.34700	2 S	21T204	2 T
1U-1121	1 R	5149	6 S	528.34800	2 S	22A403	2 T
1U-1124	1 R	5150	4 S	528.34801	2 S	22A404	2 T
1U-1126	1 R	5155	4 S	549.16000	5 S	22V174B	2 T
1U-1127	1 R	5160-2	1 S	549.16002	5 S	22V214B	2 T
1U-1131	1 R	41102,A	2 S	549.16003	5 S	22V244B	3 T
1U-1134	1 R	41122,A	2 S	549.16004	5 S	23A205	3 T
1U-1136	1 R	41282A,B	2 S	549.16005	3 S	23A206	3 T
1U-1137	1 R	41292,A	2 S	549.16100	1 S	23U174B	2 T
1U-1145	1 R	41302A	2 S	PC-41102	2 S	23U214B	2 T
1U-1147	1 R	41312,A	2 S	PC-41122	2 S	23U244B	3 T
1U-1155	1 R	456.31300	2 S	PC-41282,A	2 S	24T201	2 T
1U-1157	1 R	456.31400	2 S	PC-41292A	2 S	24T202	2 T
1U-1001B	4 S	456.31500	2 S	PC-41302,A	2 S	24T301	2 T
1U-1011B	4 S	456.31600	2 S	PC-41312A	2 S		
1U-1017B	4 S	456.31700	2 S	PC-5100,A	2 S	STEWART-WARNER	
1U-1034B	4 S	456.31800	2 S	PC-5101,A	2 S	17T-9620	2 T
2011B	3 S	456.32800	2 S	PC-5106,A	2 S	21C-9600K,KB,L,LB	1 T
2017B	3 S	456.32900	2 S	PC-5110,A,CX	2 S	21C-9600M,MB,P	1 T
2911	3 S	456.33000	2 S	PC-5112,A,CX	2 S	21C-9630C,CB,D	2 T
2914	3 S	456.33100	2 S	PC-5114,B,C,D	2 S	21T-9600A,B,D	1 T
21101	1 R	456.33400	2 S	PC-5116,B,C,D	2 S	21T-9630A,AB	2 T
21121	1 R	456.33500	2 S	PC-5117,B,C,D	2 S		
21145	1 R	456.33800	2 S	PC-5118A	2 S	STROMBERG-CARLSON	
		456.33900	2 S	PC-5119A	2 S	K-21	- T
		456.34000	2 S	PC-5124	2 S	KH-21	- T
		456.34100	2 S	PC-5125	2 S	KV-21	- T
SETCHELL CARLSON		456.34200	2 S	PC-5126,A	2 S	K-22	- T
P-61	- S	456.34300	2 S	PC-5127	2 S	KH-22	- T
C-100	- S	456.34400	2 S	PC-5128,B,C,D	2 S	KV-22	- T
		456.34500	2 S	PC-5129,B,C,D	2 S		
		456.34501	2 S	PC-5130,A,B,C,D	2 S	SYLVANIA	
		456.34502	2 S	PC-5131,B,C,D	2 S	1-521-1,2,3,6,7,8	5 U
		456.34503	2 S	PC-5132A	2 S	1-522-1,2,3,6	7 U
4103	2 S	456.34600	2 S	PC-5133A	2 S	1-525-1,2	9 U
4109,A	2 S	456.34601	2 S	PC-5134	2 S	1-526-1,3,4,5,6	8 U
4142H	6 S	456.34602	2 S	PC-5135	2 S	1-527-1,2	3 T
4143H	4 S	456.34603	2 S	PC-5136	2 S	1-530-1,2,3,4,5,6	5 U
4149H	6 S	528.31300	2 S	PC-5137	2 S	1-532-1,2	4 U
4150H	4 S	528.31301	2 S	PC-5190,A,B	2 S	1-532-3,4,5,6,7	2 T
4152H	6 S	528.31301	2 S	PC-5191,A	2 S	1-533-1,2,3,4,5	1 T
4155H	4 S	528.31401	2 S	PC-5192,A,B	2 S	1-533-7,8,9	1 T
5100,A,AA	2 S	528.31500	2 S	PC-5266	2 S	14P101	9 U
5101,A	2 S	528.31600	2 S	PC-5770	2 S	14P201	9 U
5106,A,AA,B	2 S	528.31700	2 S			21C401 Series	4 U
5106-2	5 S	528.31701	2 S	SPARTON		21C402 Series	8 U
5107,A,B	2 S	528.31701	2 S	13C505	3 T	21C402U Series	8 U
5110,A,B,C,CC	2 S	528.31800	2 S	13C506	3 T		
5112,A,C	2 S	528.31801	2 S				
5114,B,C,D	2 S	528.31900	6 S				
		528.31901	6 S				

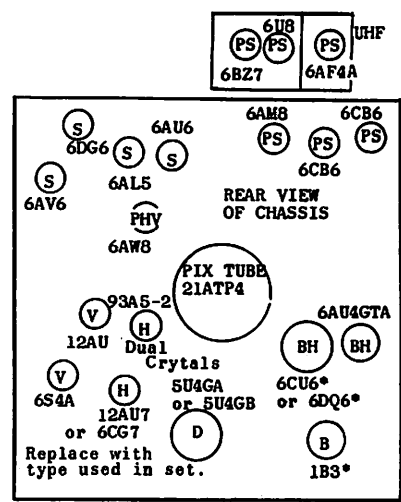
SYLVANIA -----		P	TRAV-LER -----		P	WESTINGHOUSE -----		P	WESTINGHOUSE -----		P
		a			a			a			a
No.		e	No.		e	No.		e	No.		e
21C403 Series	4	U	412L5	1	U	H21K114	2	V	V2316, -11, -12	1	V
21C404 Series	2	T	417E4	1	U	H21KU111, 112, 113, 114	2	V	V2317, -61, -62	1	V
21C405 Series	2	T	417E5	1	U	H21T101, 104, 105, 106	2	V	V2326, -101	1	V
21C501 Series	1	T	417F5	1	U	H21T107, 108	2	V	V2327, -601	1	V
21C502 Series	1	T	417G5	1	U	H21TU101, 104, 105	2	V	V2340, -25	1	V
21C503 Series	6	U	510A4	1	U	H21TU106, 107, 108	2	V	V2341, -15, -25, -35, -45	1	V
21C504 Series	6	U	511A4	1	U	H24K125, 126	2	V	V2342	1	V
21C505 Series	6	U	513A4	1	U	H24K127, 128	2	V	V2343	1	V
21C508 Series	2	T	513A5	1	U	H24KU125, 126	2	V	V2344	2	V
21C509 Series	2	T	514A4	1	U	H24KU127, 128	2	V	V2345	2	V
21C601 Series	1	T	514A5	1	U	H24T117, 118, 119	2	V	V2354	2	V
21C602 Series	6	U	518B4	1	U	H24T120, 121, 122	2	V	V2355	2	V
21C605 Series	1	T	518B5	1	U	H24TU117, 118, 119	2	V	V2350, -204	1	V
21C607 Series	1	T	517-67	1	U	H24TU120, 121, 122	2	V	V-2351	1	V
21D801 Series	6	U	521-73	1	U	H892T17, TU17	1	V	V2352	1	V
21D802 Series	1	T	517-82, U	1	U	H894T17, TU17	1	V	V2353	1	V
21T101 Series	4	U	517-100	1	U	H896T21, TU21	1	V	ZENITH		
21T102 Series	4	U	521-75	1	U	H898T21, TU21	1	V			
21T103 Series	8	U	521-76	1	U	H899T21, TU21	1	V			
21T103U Series	8	U	521-77	1	U	H900C21, CU21	1	V			
21T104 Series	4	U	521-78	1	U	H901C21, KU21	1	V			
21T201 Series	1	T	521-79, U	1	U	H902K21, KU21	1	V			
21T202 Series	6	U	521-80, U	1	U	H903K21, KU21	1	V			
21T203 Series	6	U	521-81, U	1	U	H904K21, KU21	1	V			
21T204 Series	6	U	521-110	1	U	H905K21, KU21	1	V			
21T207 Series	2	T	521-115	1	U	H908T17, TU17	1	V			
21T208 Series	2	T	521-R90, U	1	U	H909T17, TU17	1	V			
21T301 Series	1	T	521-R91, U	1	U	H910T17, TU17	1	V			
21T302 Series	6	U	524-83	1	U	H912T21, TU21	1	V			
21T303 Series	1	T	524-84, U	1	U	H913T21, TU21	1	V			
24C601 Series	1	T	524-85, U	1	U	H914T21, TU21	1	V			
24C602 Series	7	U	524-86, U	1	U	H916T17, A	1	V			
24C603 Series	1	T	617-30	2	U	H916TU17, A	1	V			
24T101 Series	4	U	617-33	2	U	H919T17, A	1	V			
24T201 Series	2	T	617-34	2	U	H919TU17, A	1	V			
510 Series	6	U	621-31	2	U	H920T17, A	1	V			
511 Series	3	T	621-32	2	U	H920TU17, A	1	V			
513 Series	6	U	621-R40	2	U	H921T17, A	1	V			
514, U Series	5	U	627A6	2	U	H921TU17, A	1	V			
520 Series	6	U	5210-61, U	1	U	H924T21, A	1	V			
521 Series	6	U	5210-61, U	1	U	H924T21C	1	V			
525, U Series	6	U	TRUETONE			H924TU21	1	V			
526 Series	6	U	2D1430D, E	-	U	H927T21, C	1	V			
529, U Series	5	U	2D1534A	-	U	H927TU21, C	1	V			
571 Series	6	U	2D1536A	-	U	H928T21, C	1	V			
573 Series	6	U	2D2431C	-	U	H928TU21, C	1	V			
575 Series	6	U	2D2433B	-	U	H929T21, C	1	V			
577 Series	6	U	2D2434A	-	U	H929TU21, C	1	V			
596B, BU, M, MU Series	7	U	WELLS-GARDNER			H934T21	1	V			
612, U Series	8	U	321AM51-A-432	-	U	H934TU21	1	V			
613 Series	6	U	321AM51-A-486	-	U	H935T21	1	V			
614, U Series	8	U	321AM55-A-432-1	-	U	H935TU21	1	V			
620 Series	6	U	321AM55-A-486-2	-	U	H938K21	1	V			
621 Series	6	U	321AM56-A-432-1	-	U	H938KU21	1	V			
622, U Series	8	U	321AM56-A-486-2	-	U	H941K21	1	V			
626 Series	6	U	321GM47-486	-	U	H941KU21	1	V			
670 Series	6	U	2321AM51-A-488	-	U	H942K21	1	V			
675 Series	6	U	2321AM55-A-488-2	-	U	H942KU21	1	V			
676 Series	6	U	2321AM56-A-488-2	-	U	H950T24	1	V			
677 Series	6	U	2321GM47-488	-	U	H950TU24	1	V			
TRAV-LER			WESTERN AUTO			H951T24, TU24	1	V			
317-56	1	U	See Truetime			H954K24, KU24	1	V			
317-67	1	U				H955K24, KU24	1	V			
321-75	1	U				H956K24, KU24	1	V			
321-76	1	U				H965K21, C	1	V			
321-770	1	U				H965KU21, C	1	V			
412E4	1	U				H966K21, C	1	V			
412E5	1	U				H966KU21, C	1	V			
412F4	1	U				H974T21, TU21	1	V			
412F5	1	U				H975T21, TU21	1	V			
412G5	1	U				H976T21, TU21	1	V			
412K5	1	U				H978T17, TU17	1	V			
			WESTINGHOUSE			H979T17, TU17	1	V			
						H980T17, TU17	1	V			
						If you do not find the TV model you require listed, you can get a TROUBLE INDICATING TUBE LOCATION GUIDE (chart) for any desired model by writing to Harry G. Cisin, Amagansett, N.Y. giving make and model No. of set and including tube layout, stamped self-addressed envelope, plus 50¢ to cover cost. Chassis # is necessary for Magnavox sets. If mfr's tube layout is not available, make a rough layout showing position and type designation of each tube. Do not send serial number.					



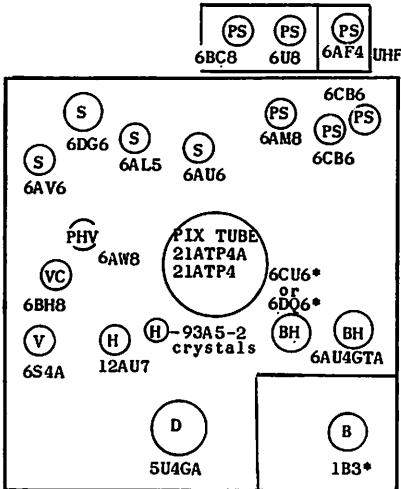
ADMIRAL (1)



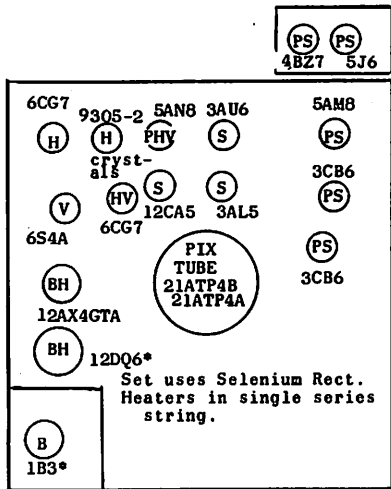
ADMIRAL (2)



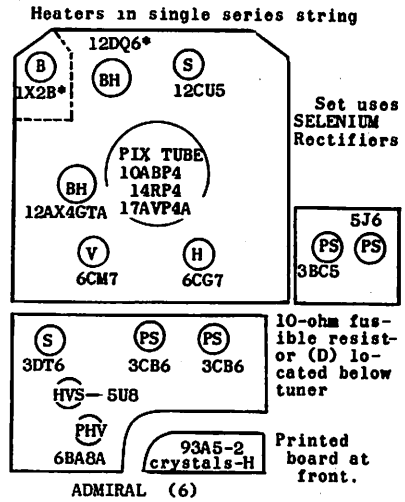
ADMIRAL (3)



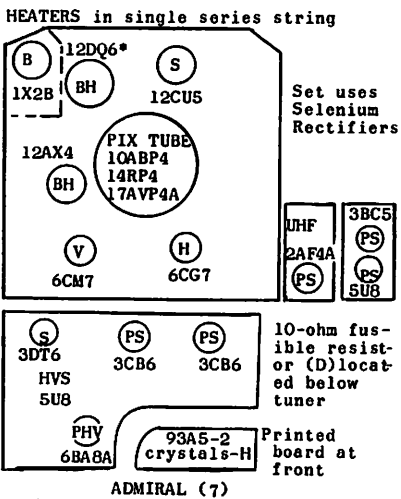
ADMIRAL (4)



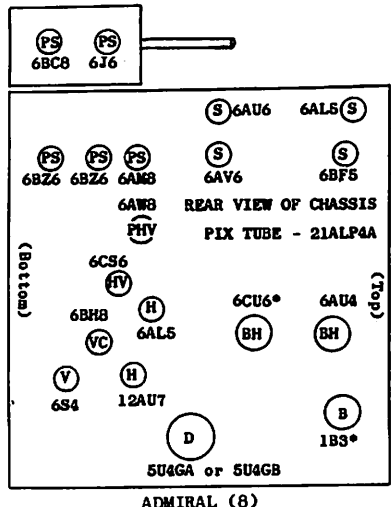
ADMIRAL (5)



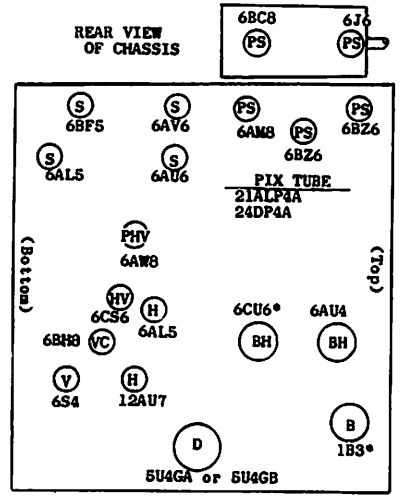
ADMIRAL (6)



ADMIRAL (7)

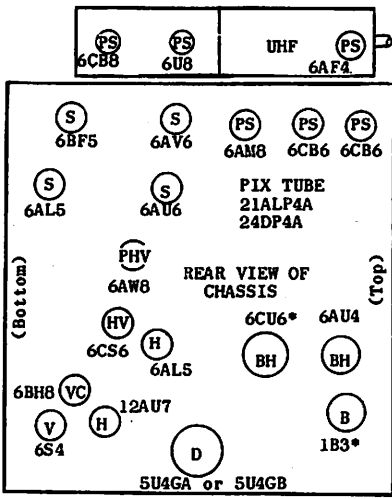


ADMIRAL (8)

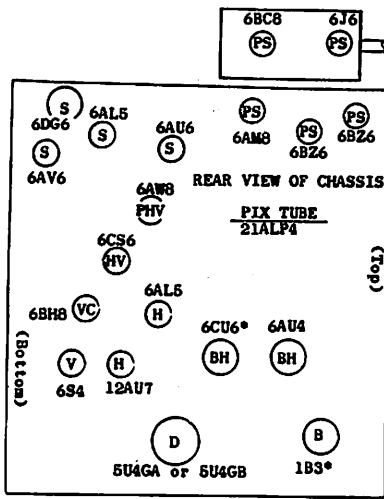


ADMIRAL (9)

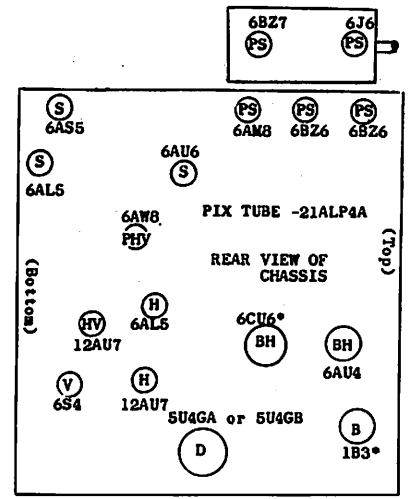
- | | | |
|------------------------|--|--------------------------|
| Picture ----- P | Horizontal Movement ----- H | Pix, S'nd & Br. Area - D |
| Sound ----- S | Vertical Movement ----- V | Background ----- G |
| Picture & Sound --- PS | Horizontal & Vertical Movement -- HV or VH | Focus ----- F |
| Bright Area ----- B | Horiz. Movement & Br. Area ----- BH or HB | Contrast ----- C |
| | High Voltage Warning ----- (*) Asterisk | |



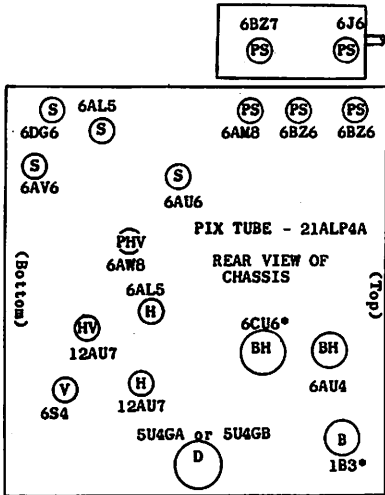
ADMIRAL (10)



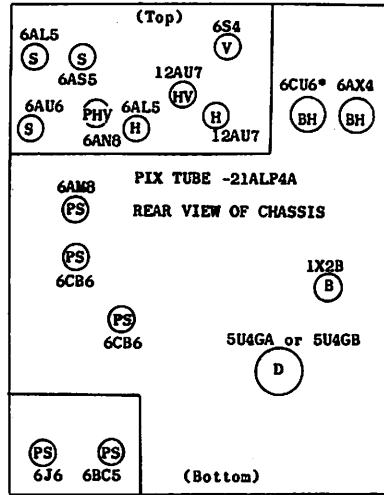
ADMIRAL (11)



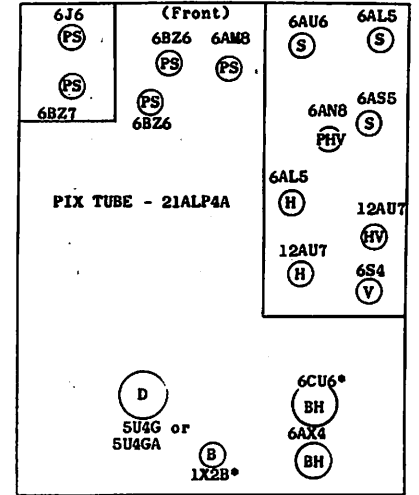
ADMIRAL (12)



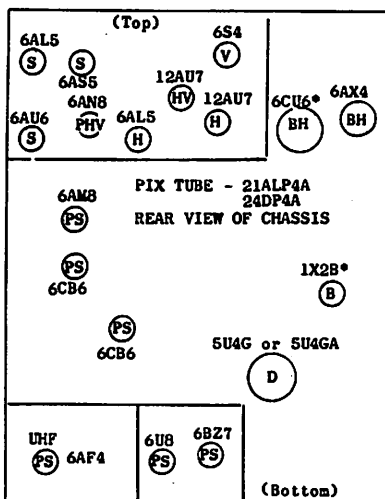
ADMIRAL (13)



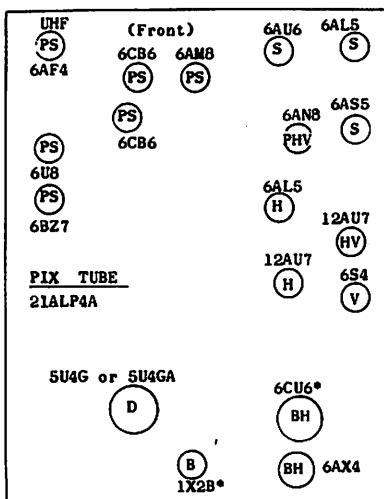
ADMIRAL (14)



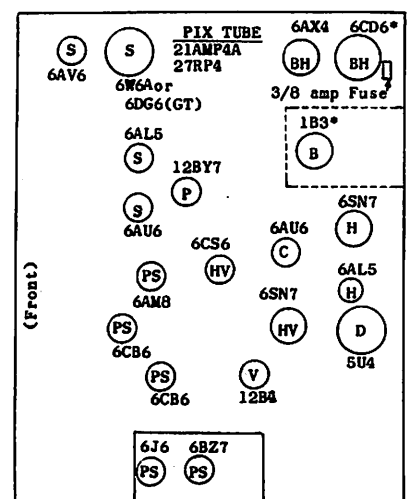
ADMIRAL (15)



ADMIRAL (16)

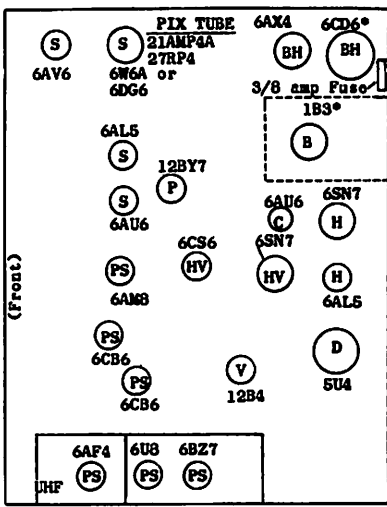


ADMIRAL (17)

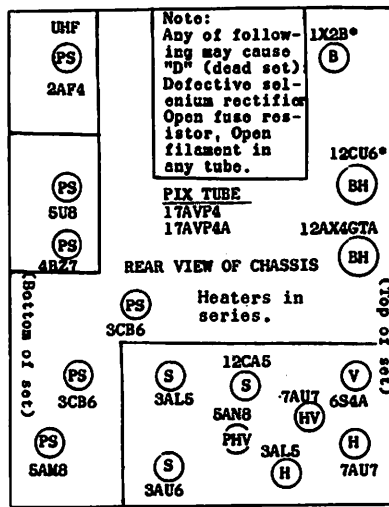


ADMIRAL (18)

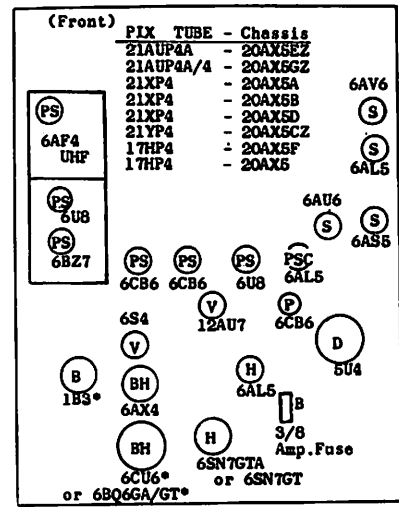
Picture ----- P Horizontal Movement ----- H Pix, S'nd & Br. Area - D
 Sound ----- S Vertical Movement ----- V Background ----- G
 Picture & Sound --- PS Horizontal & Vertical Movement -- HV or VH Focus ----- F
 Bright Area ----- B Horiz. Movement & Br. Area ----- BH or HB Contrast ----- C
 High Voltage Warning ----- (*) Asterisk



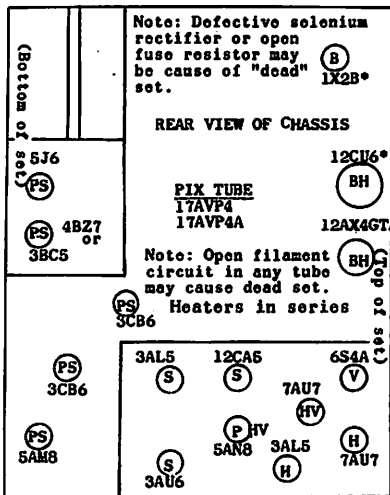
ADMIRAL (19)



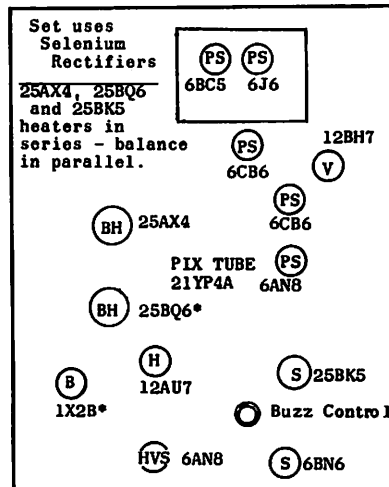
ADMIRAL (20)



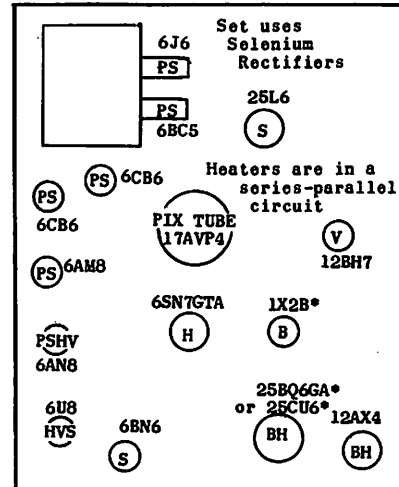
ADMIRAL (21)



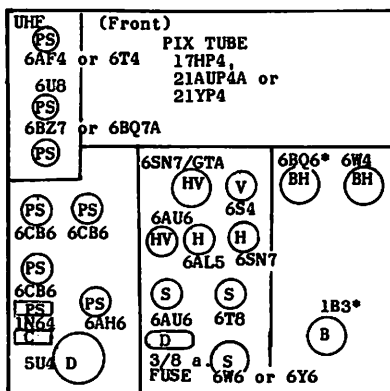
ADMIRAL (22)



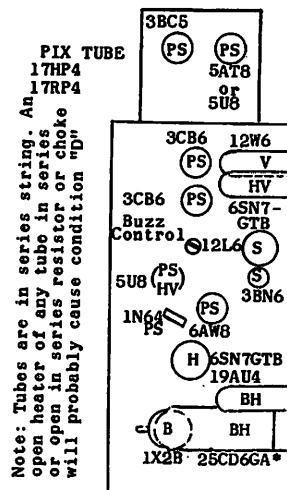
AIR CHIEF(1) FIRESTONE (1)



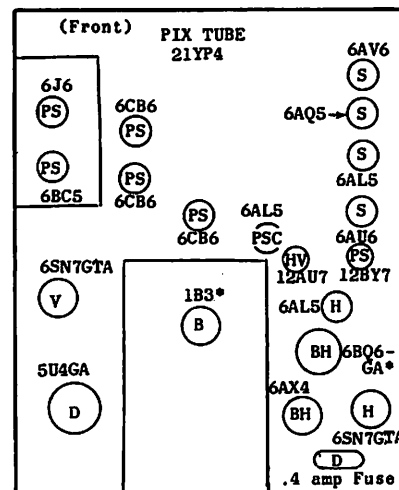
AIRLINE (1)



AIRLINE (2)

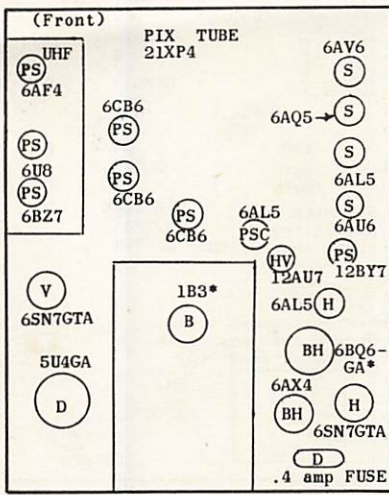


AIRLINE (3)

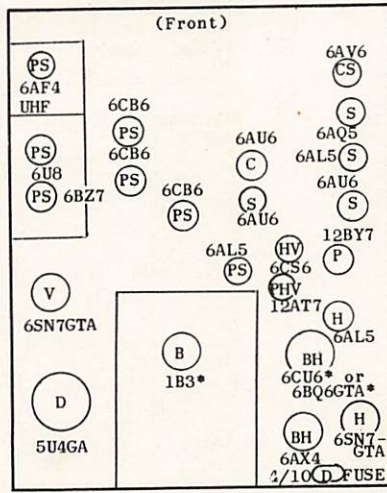


AIRLINE (4)

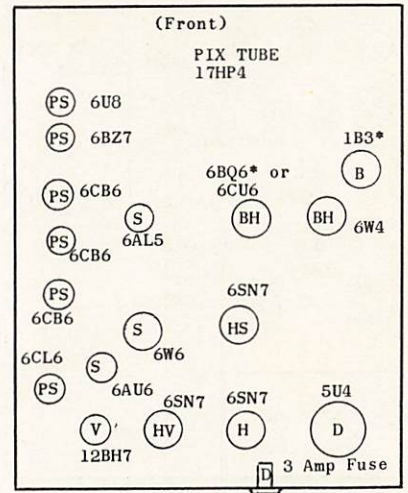
Picture ----- P Horizontal Movement ----- H Pix, S'nd & Br. Area - D
Sound ----- S Vertical Movement ----- V Background ----- G
Picture & Sound --- PS Horizontal & Vertical Movement -- HV or VH Focus ----- F
Bright Area ----- B Horiz. Movement & Br. Area ----- BH or HB Contrast ----- C
High Voltage Warning ----- (*) Asterisk



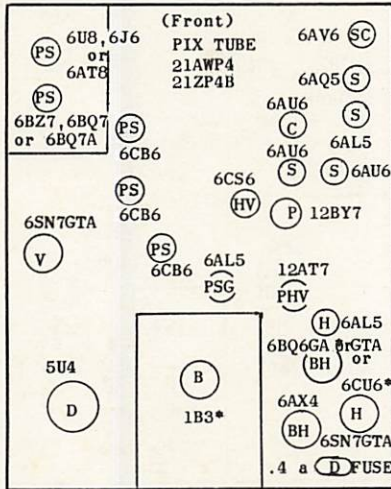
AIRLINE (5)



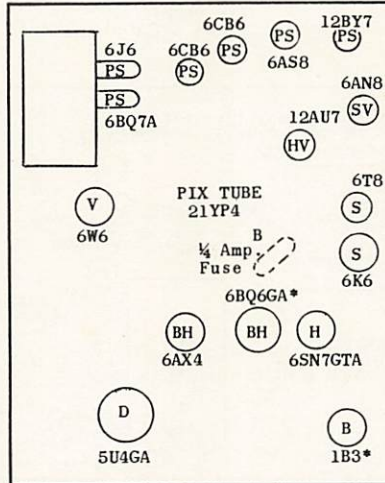
AIRLINE (6) AIR CHIEF (2)
FIRESTONE (2)



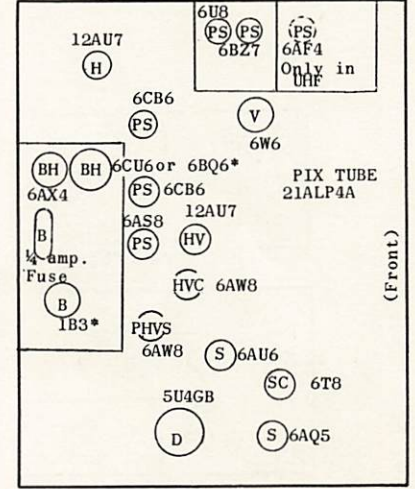
AIRLINE (7)



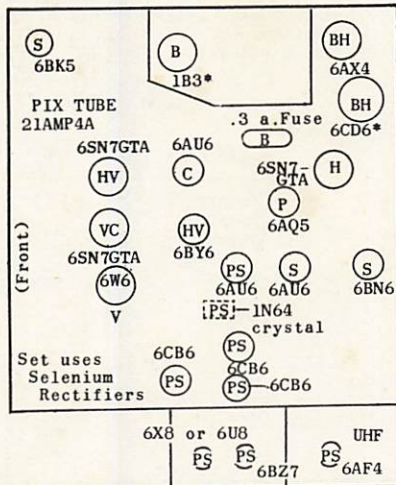
AIRLINE (8)
AIR CHIEF (3)



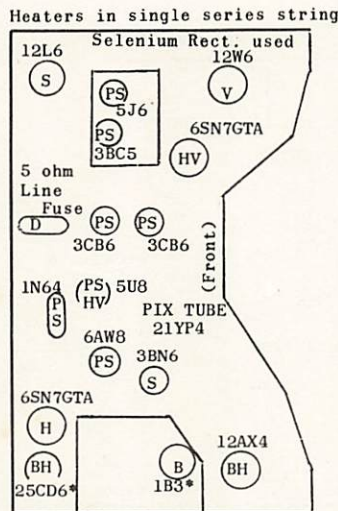
AMBASSADOR - AMC (AIMCEE)



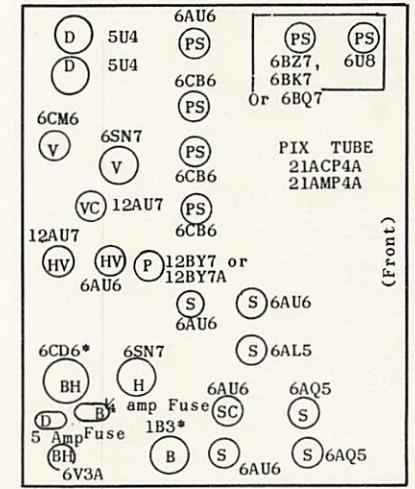
ANDREA



ARVIN (1)



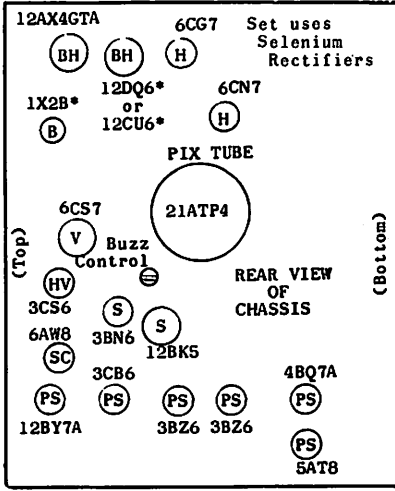
ARVIN (2)



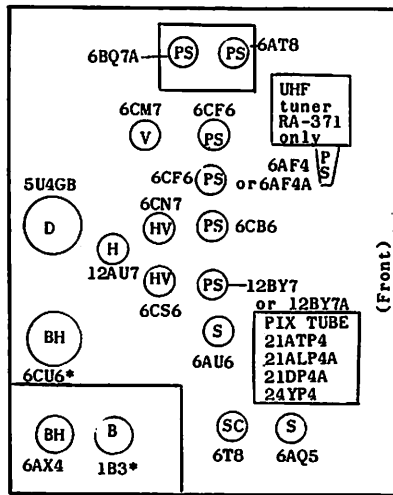
ATR

- | | | |
|------------------------|--|--------------------------|
| Picture ----- P | Horizontal Movement ----- H | Pix, S'nd & Br. Area - D |
| Sound ----- S | Vertical Movement ----- V | Background ----- G |
| Picture & Sound --- PS | Horizontal & Vertical Movement -- HV or VH | Focus ----- F |
| Bright Area ----- B | Horiz. Movement & Br. Area ----- BH or HB | Contrast ----- C |
| | High Voltage Warning ----- (*) Asterisk | |

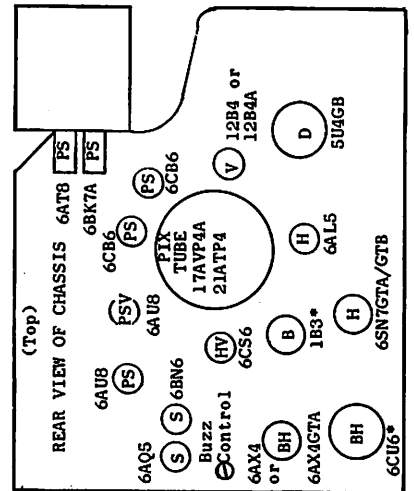
Heaters in single series circuit



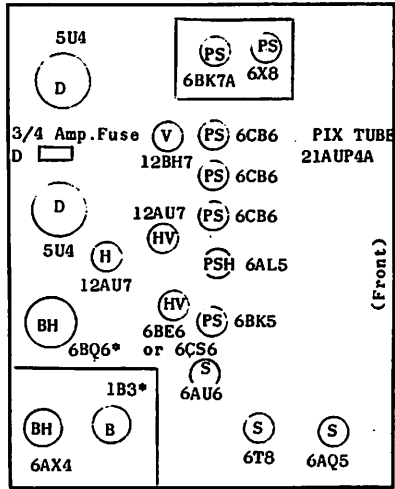
CROSLY (8)



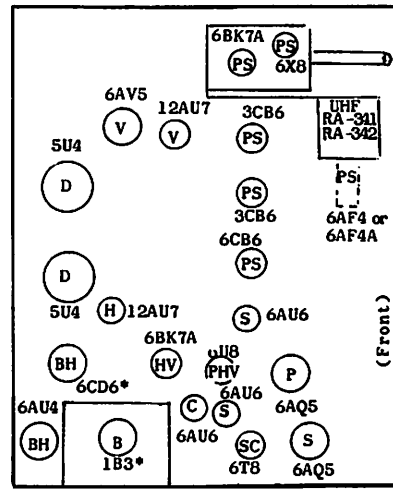
DUMONT (1)



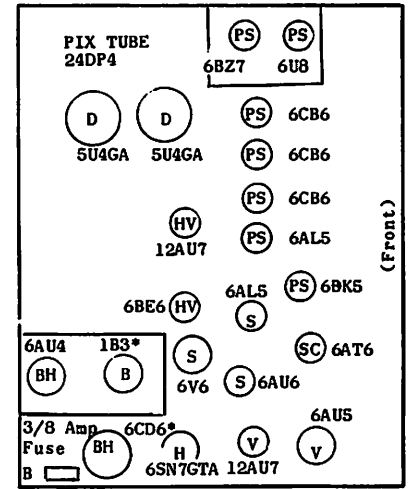
DUMONT (2)



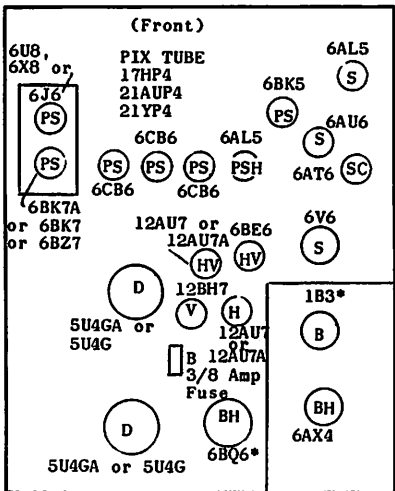
DUMONT (3)



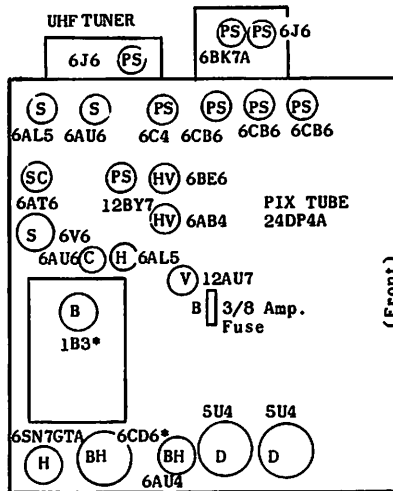
DUMONT (4)



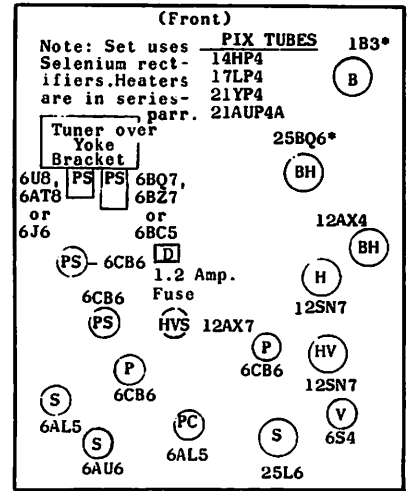
DUMONT (5)



DUMONT (6)



DUMONT (7)

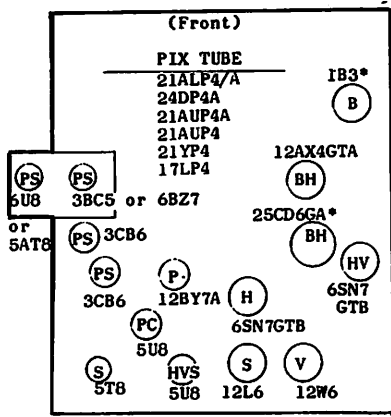


EMERSON (1)

Picture ----- P
Sound ----- S
Picture & Sound --- PS
Bright Area ----- B

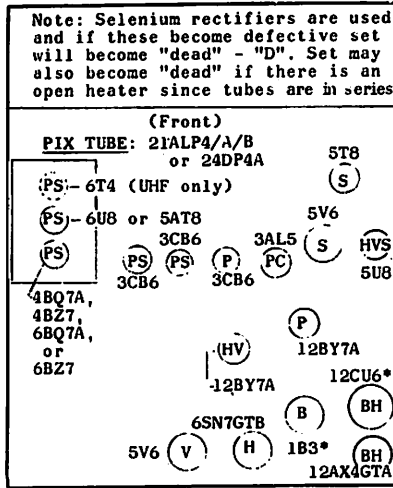
Horizontal Movement ----- H
Vertical Movement ----- V
Horizontal & Vertical Movement -- HV or VH
Horiz. Movement & Br. Area ----- BH or HB
High Voltage Warning ----- (*) Asterisk

Pix, S'nd & Br. Area - D
Background ----- G
Focus ----- F
Contrast ----- C

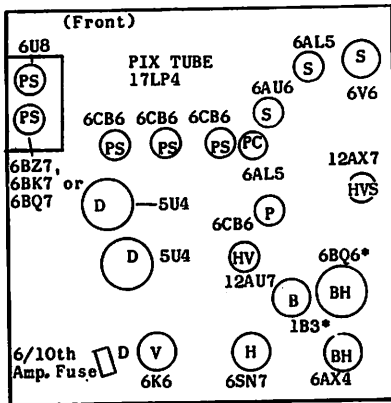
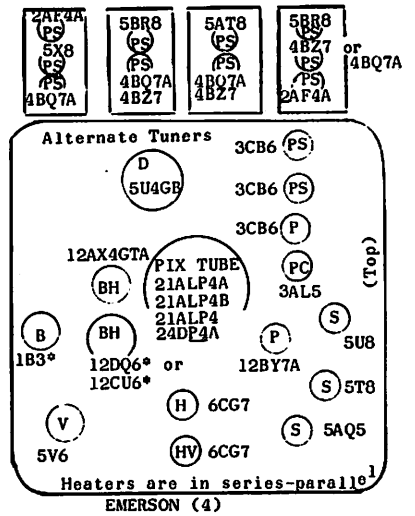


Note: Set uses selenium rectifiers. Heaters are in series.

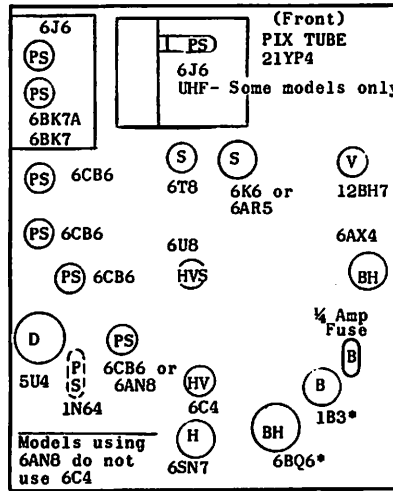
EMERSON (2)



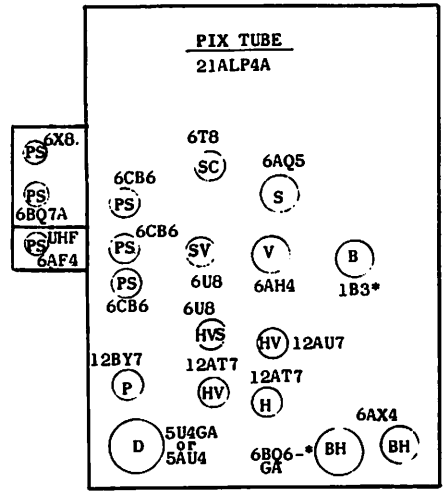
EMERSON (3)



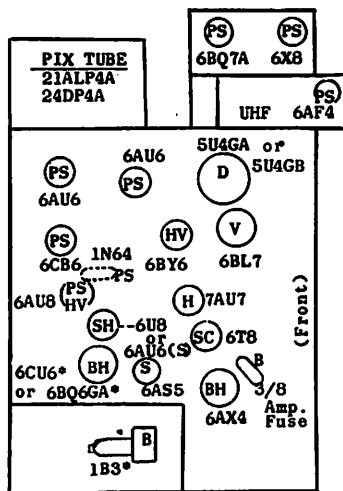
EMERSON (5)



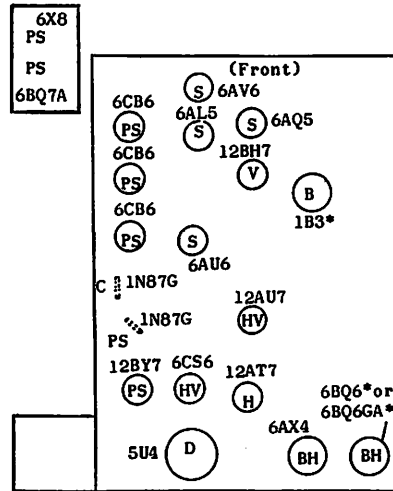
FADA



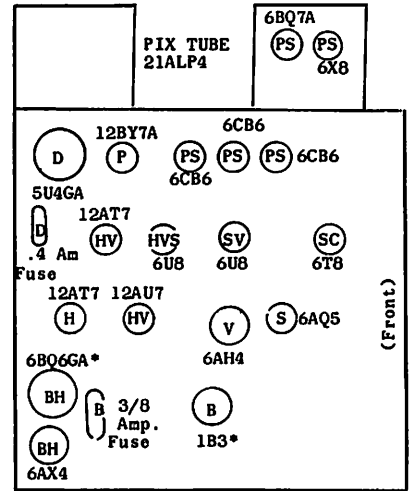
GENERAL ELECTRIC (1)



GENERAL ELECTRIC (2)



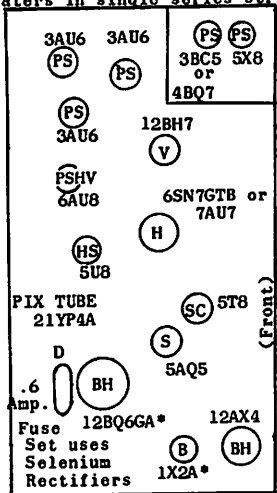
GENERAL ELECTRIC (3)



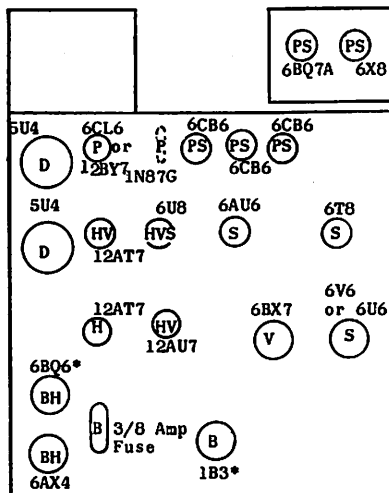
GENERAL ELECTRIC (4)

Picture ----- P
Sound ----- S
Picture & Sound --- PS
Bright Area ----- B
Horizontal Movement ----- H
Vertical Movement ----- V
Horizontal & Vertical Movement -- HV or VH
Horiz. Movement & Br. Area ----- BH or HB
High Voltage Warning ----- (*) Asterisk
Pix, S'nd & Br. Area - D
Background ----- G
Focus ----- F
Contrast ----- C

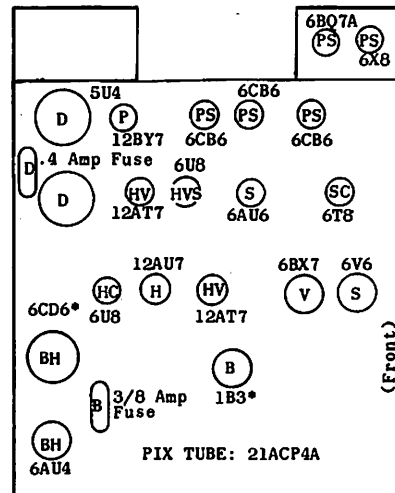
Heaters in single series string



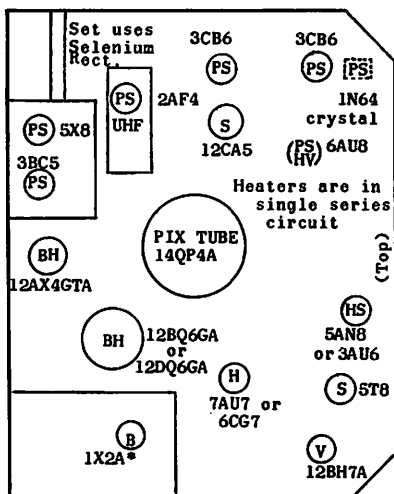
GENERAL ELECTRIC (5)



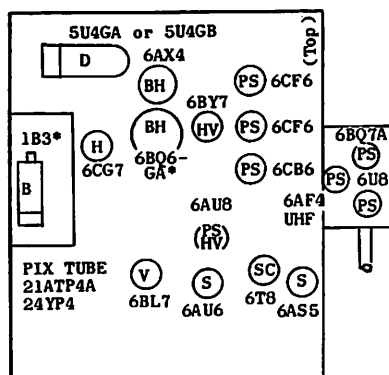
GENERAL ELECTRIC (6)



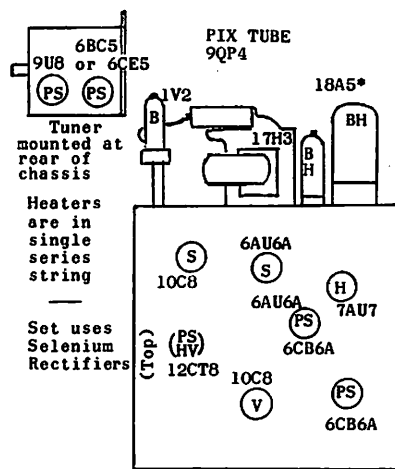
GENERAL ELECTRIC (7)



GENERAL ELECTRIC (8)

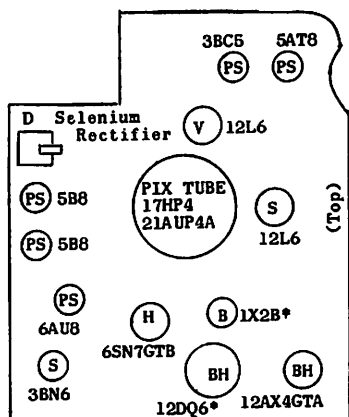


GENERAL ELECTRIC (9)

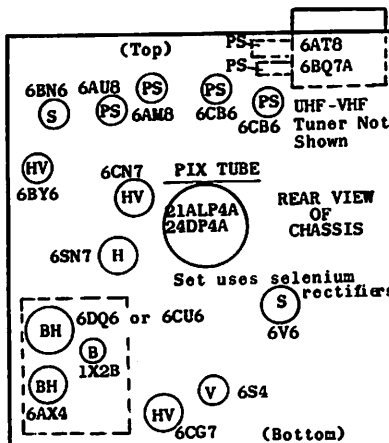


General Electric (10)

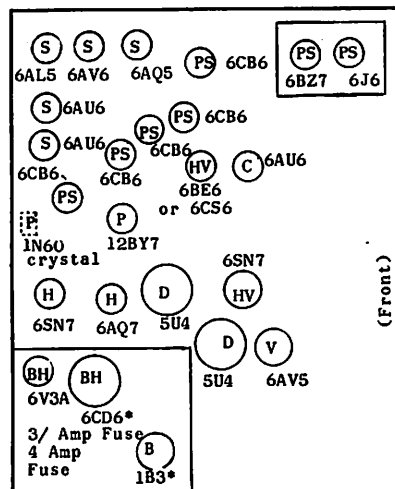
Heaters in single series circuit
Set uses selenium rectifiers



HALLCRAFTERS (1)

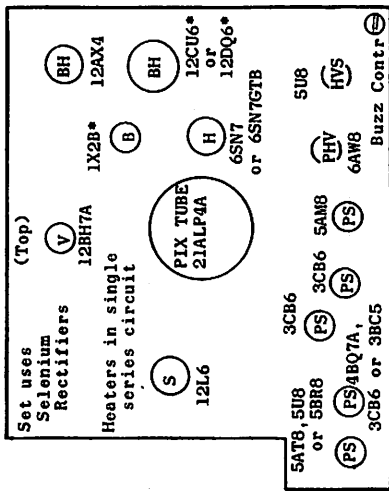


HALLCRAFTERS (2)

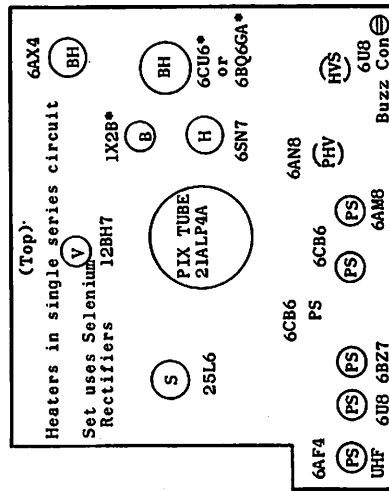


HALLCRAFTERS (3)

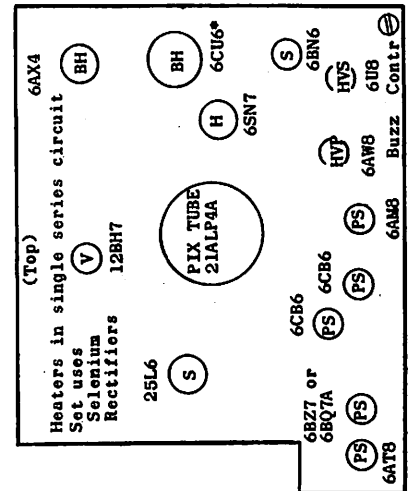
Picture -----	P	Horizontal Movement -----	H	Pix, S'nd & Br. Area -	D
Sound -----	S	Vertical Movement -----	V	Background -----	G
Picture & Sound ---	PS	Horizontal & Vertical Movement --	HV or VH	Focus -----	F
Bright Area -----	B	Horiz. Movement & Br. Area -----	BH or HB	Contrast -----	C
		High Voltage Warning ----- (*)	Asterisk		



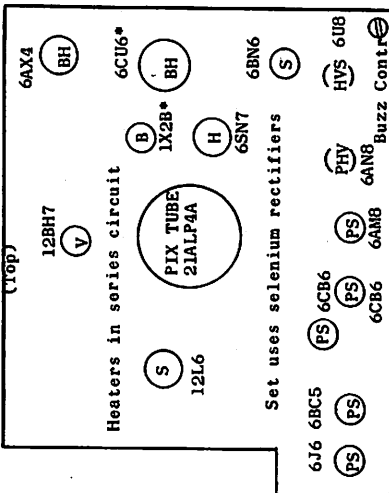
HALLICRAFTERS (4)



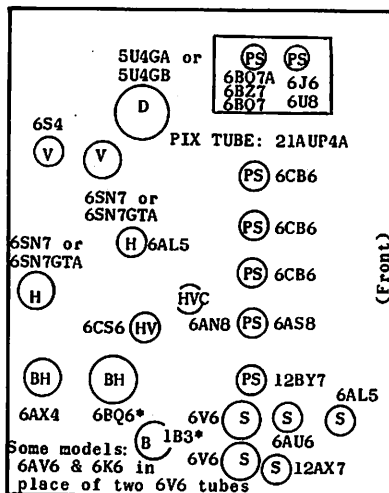
HALLICRAFTERS (5)



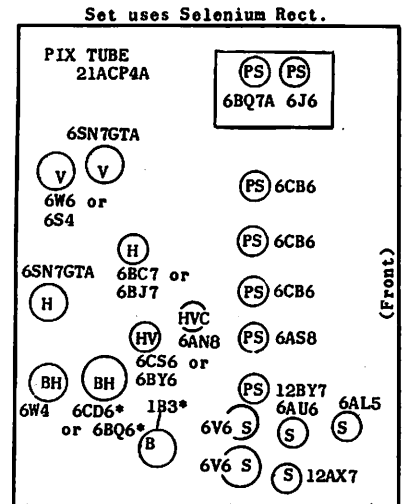
HALLICRAFTERS (6)



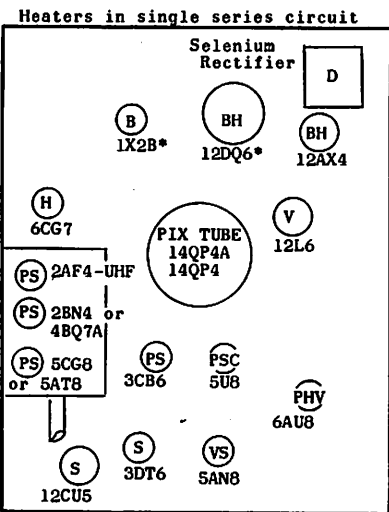
HALLICRAFTERS (7)



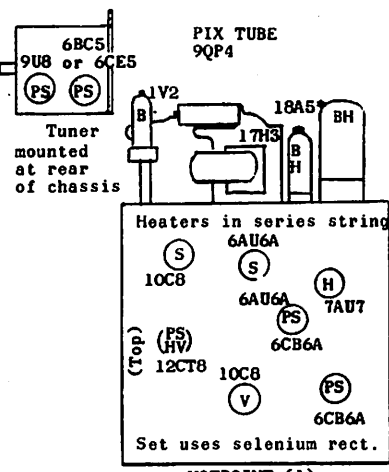
HOFFMAN (1)



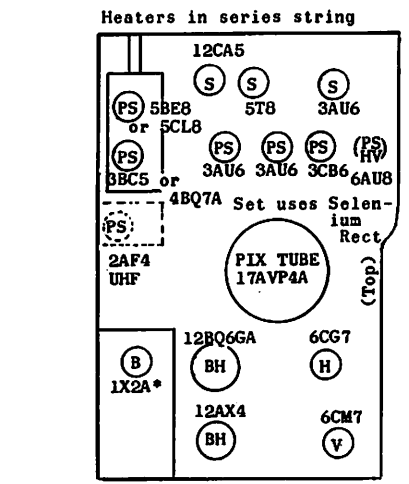
HOFFMAN (2)



HOFFMAN (3)



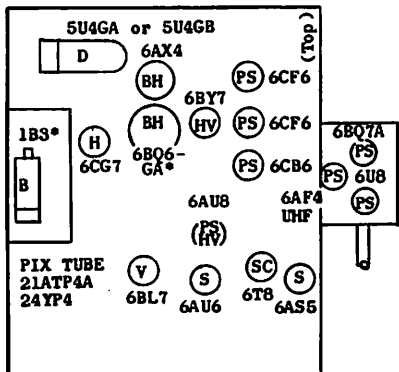
HOTPOINT (1)



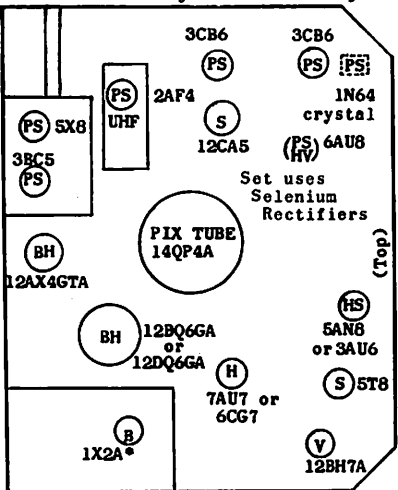
HOTPOINT (2)

Picture ----- P	Horizontal Movement ----- H	Pix, S'nd & Br. Area - D
Sound ----- S	Vertical Movement ----- V	Background ----- G
Picture & Sound ---- PS	Horizontal & Vertical Movement -- HV or VH	Focus ----- F
Bright Area ----- B	Horiz. Movement & Br. Area ----- BH or HB	Contrast ----- C
	High Voltage Warning ----- (*) Asterisk	

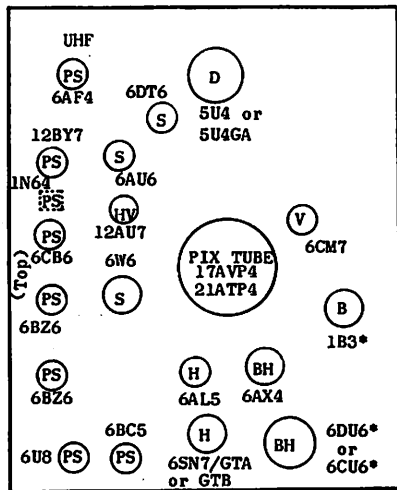
Heaters in single series string



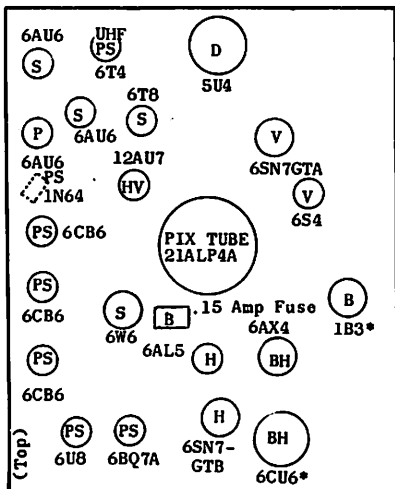
HOTPOINT (3)



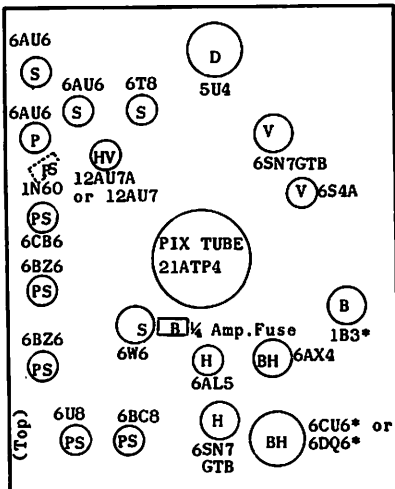
HOTPOINT (4)



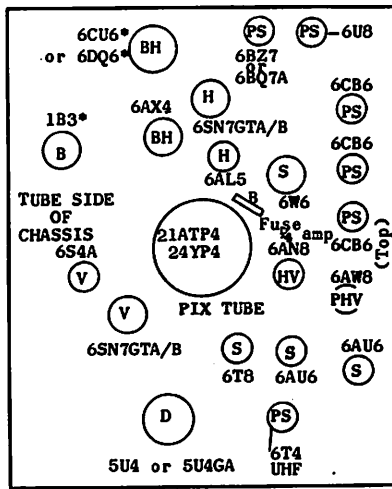
MAGNAVOX (1)



MAGNAVOX (2)

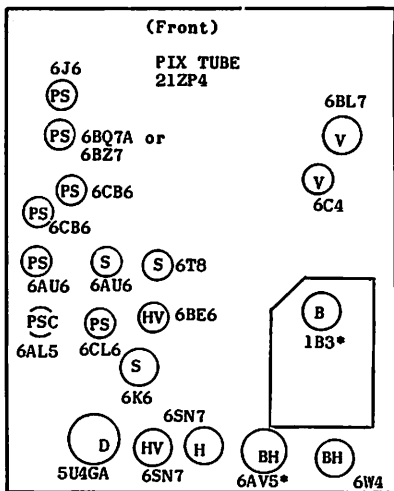


MAGNAVOX (3)

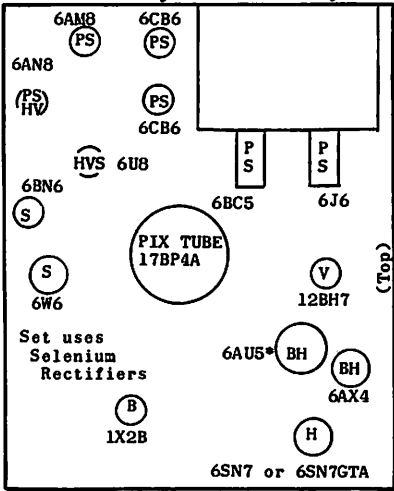


MAGNAVOX (4)

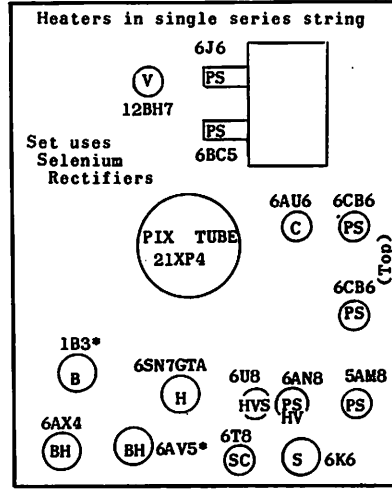
Heaters in single series string



MAJESTIC (1)



MAJESTIC (2)



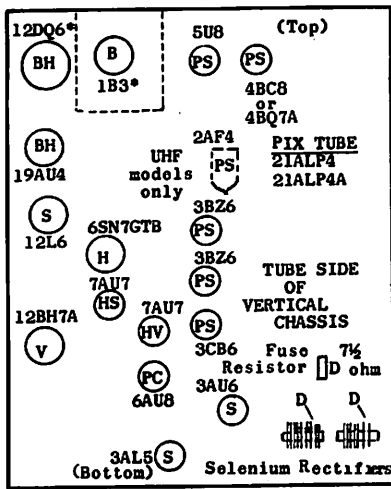
METEOR

Picture ----- P
Sound ----- S
Picture & Sound --- PS
Bright Area ----- B

Horizontal Movement ----- H
Vertical Movement ----- V
Horizontal & Vertical Movement -- HV or VH
Horiz. Movement & Br. Area ----- BH or HB
High Voltage Warning ----- (*) Asterisk

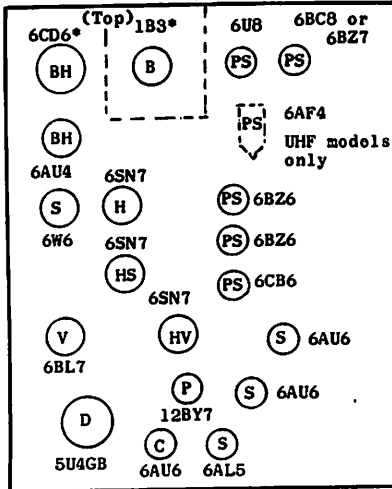
Pix, S'nd & Br. Area - D
Background ----- G
Focus ----- F
Contrast ----- C

Heaters in single series string



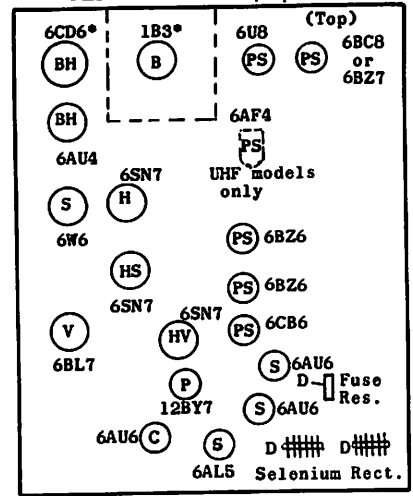
MOTOROLA (1)

PIX TUBE: 21ALP4A, 24DP4A



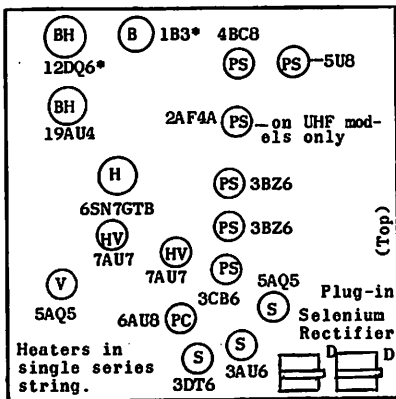
MOTOROLA (2)

PIX TUBE: 21ALP4A, 24DP4A



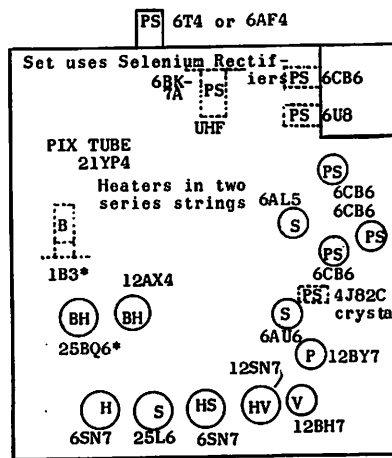
MOTOROLA (3)

PIX TUBE 21ATP4A, 21ATP4B, 24YP4



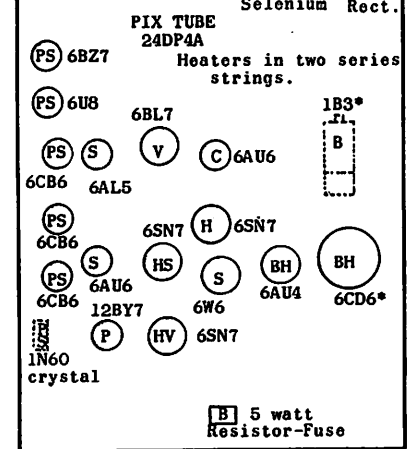
MOTOROLA (4)

UHF



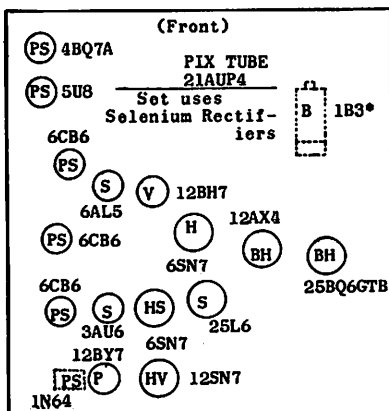
MOTOROLA (5)

(Front) Set uses Selenium Rect.

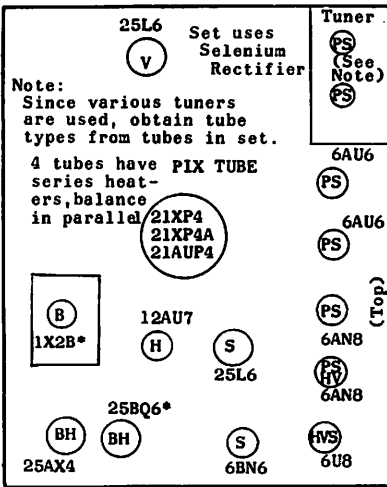


MOTOROLA (6)

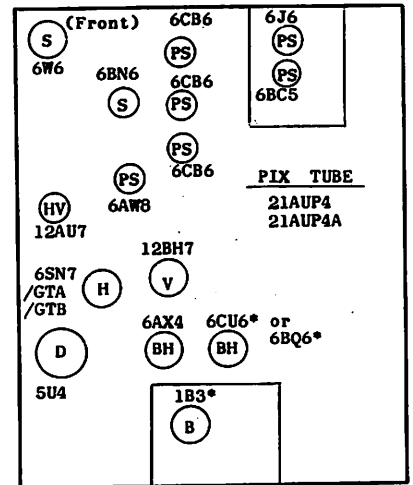
HEATERS IN TWO SERIES STRINGS



MOTOROLA (7)

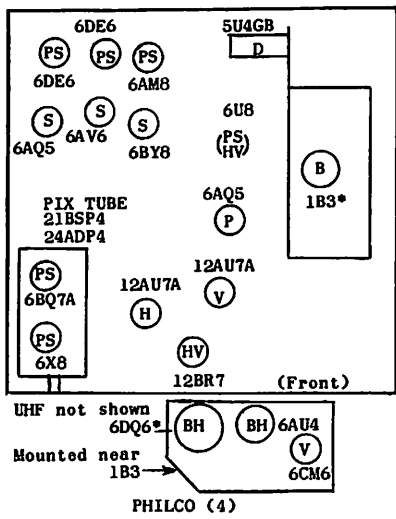


MUNTZ

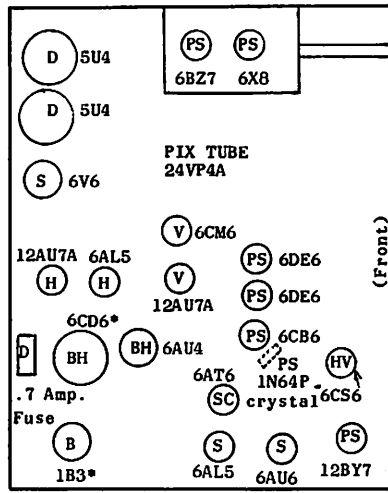


OLYMPIC (1)

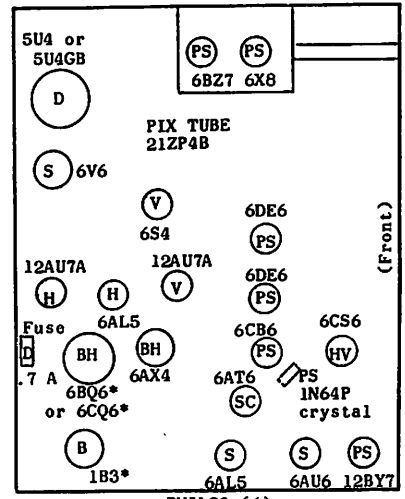
- Picture ----- P
- Sound ----- S
- Picture & Sound --- PS
- Bright Area ----- B
- Horizontal Movement ----- H
- Vertical Movement ----- V
- Horizontal & Vertical Movement -- HV or VH
- Horiz. Movement & Br. Area ----- BH or HB
- High Voltage Warning ----- (*) Asterisk
- Pix, S'nd & Br. Area - D
- Background ----- G
- Focus ----- F
- Contrast ----- C



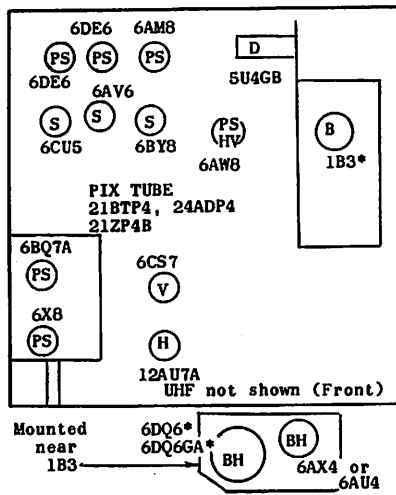
PHILCO (4)



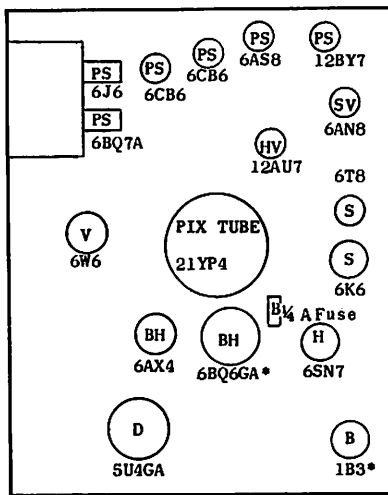
PHILCO (5)



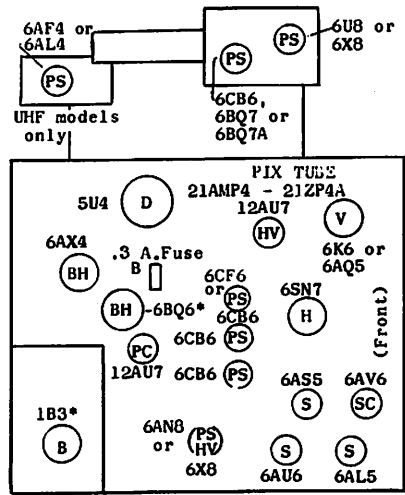
PHILCO (6)



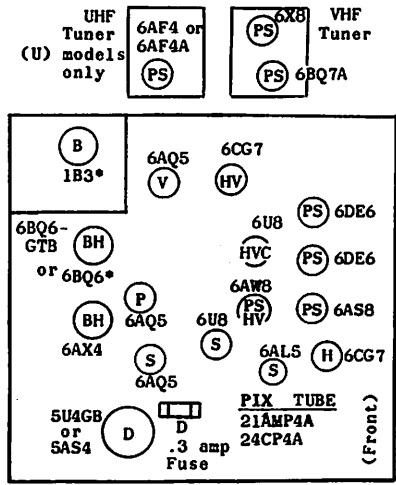
PHILCO (7)



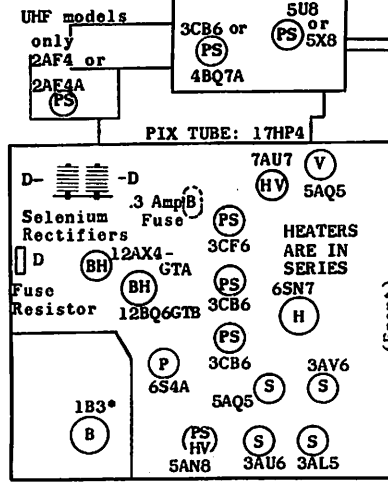
PHILHARMONIC



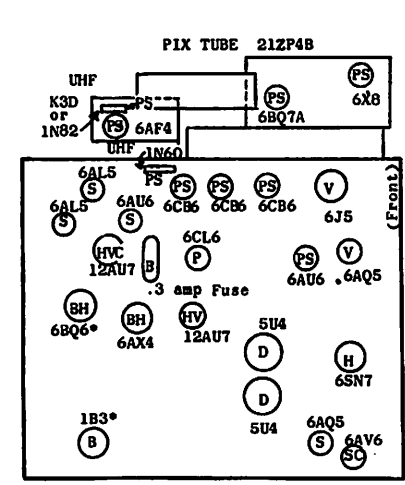
RCA (1)



RCA (2)

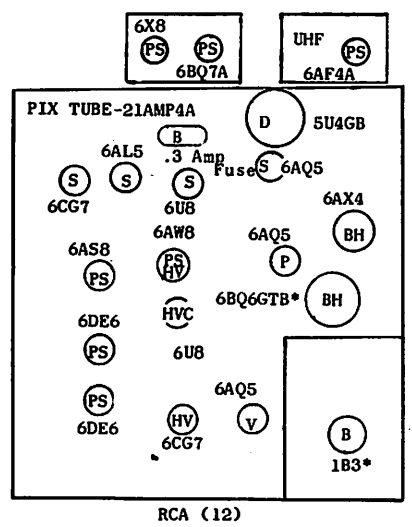
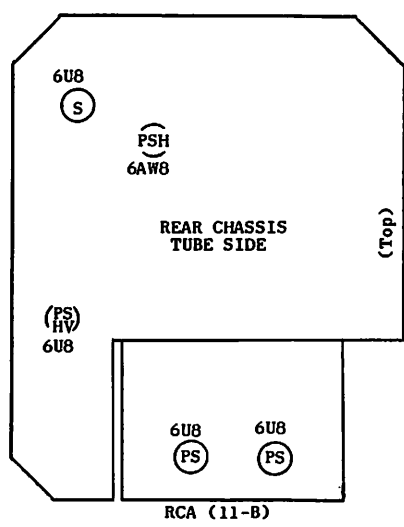
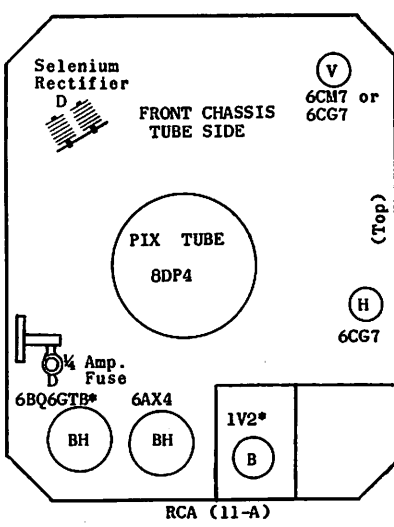
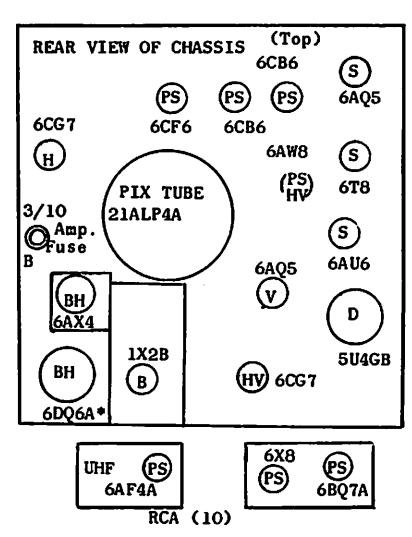
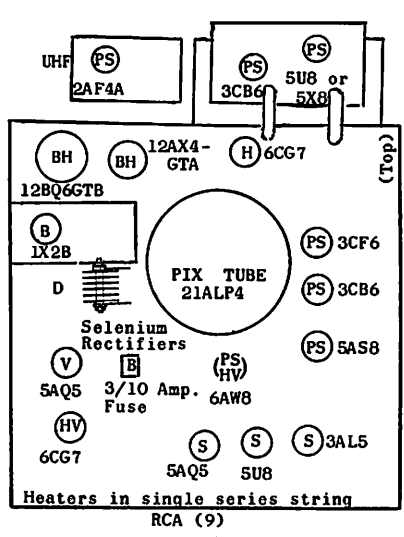
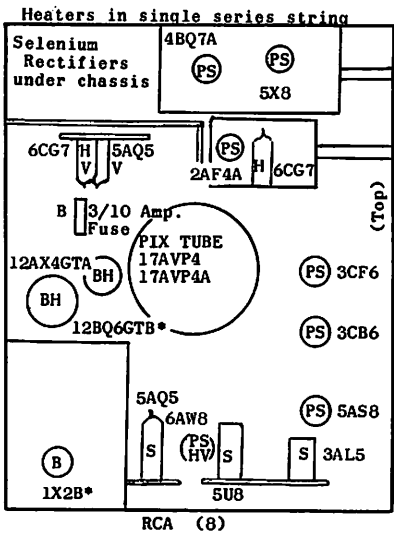
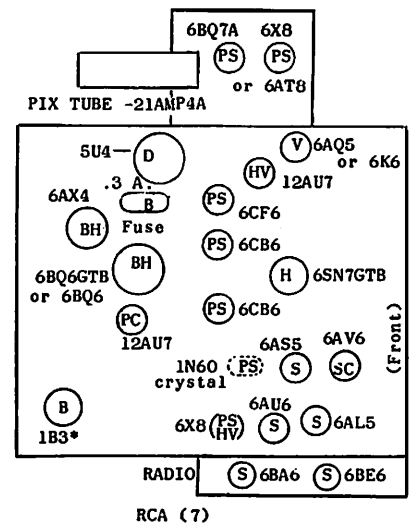
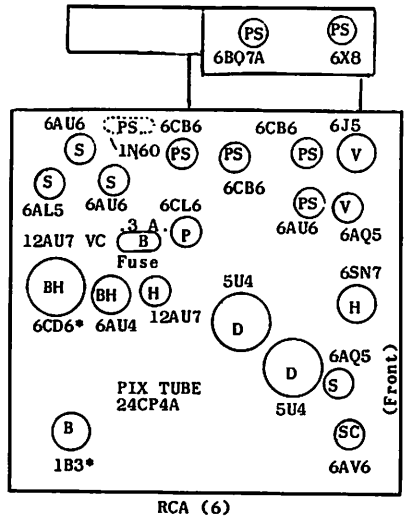
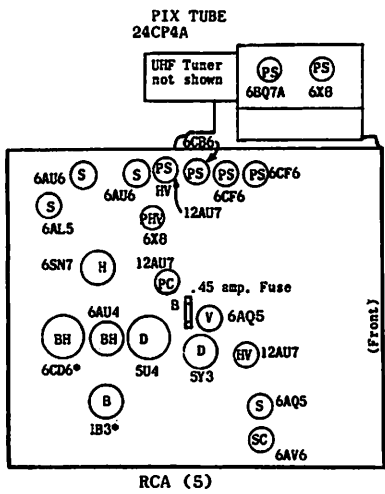


RCA (3)



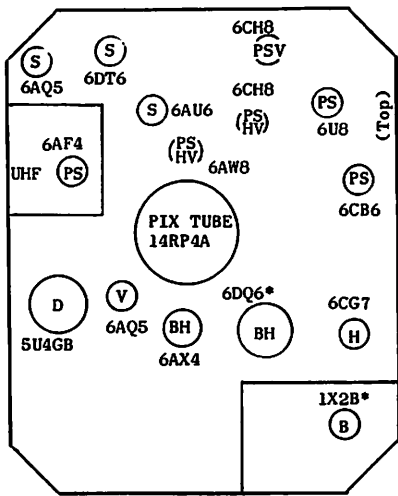
RCA (4)

Picture -----	P	Horizontal Movement -----	H	Pix, S'nd & Br. Area - D
Sound -----	S	Vertical Movement -----	V	Background -----
Picture & Sound ---	PS	Horizontal & Vertical Movement --	HV or VH	Focus -----
Bright Area -----	B	Horiz. Movement & Br. Area -----	BH or HB	Contrast -----
		High Voltage Warning -----	(*) Asterisk	

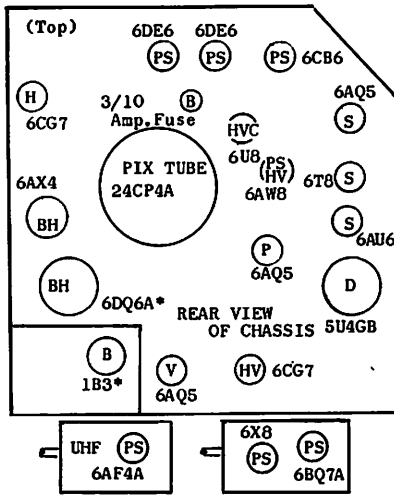


- | | | |
|------------------------|--|--------------------------|
| Picture ----- P | Horizontal Movement ----- H | Pix, S'nd & Br. Area - D |
| Sound ----- S | Vertical Movement ----- V | Background ----- G |
| Picture & Sound --- PS | Horizontal & Vertical Movement -- HV or VH | Focus ----- F |
| Bright Area ----- B | Horiz. Movement & Br. Area ----- BH or HB | Contrast ----- C |
| | High Voltage Warning ----- (*) Asterisk | |

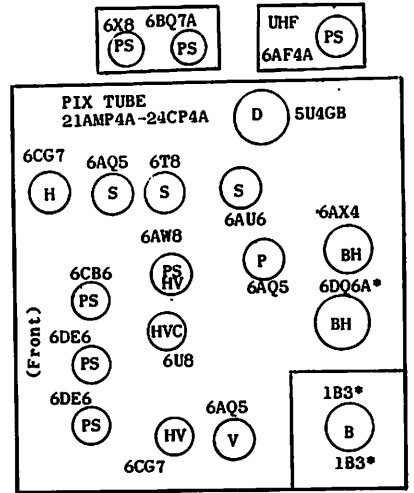




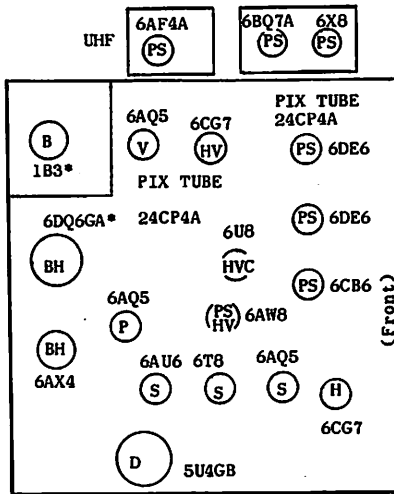
RCA (13)



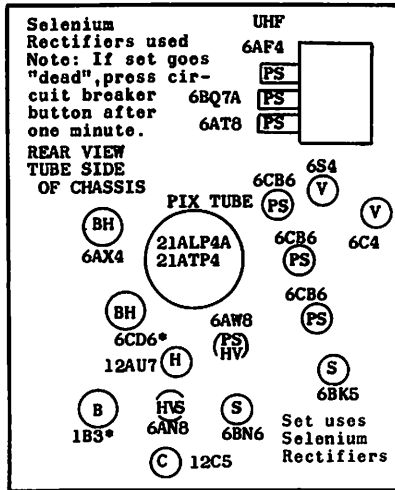
RCA (14)



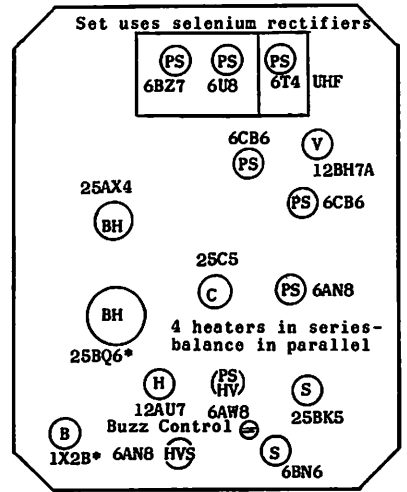
RCA (15)



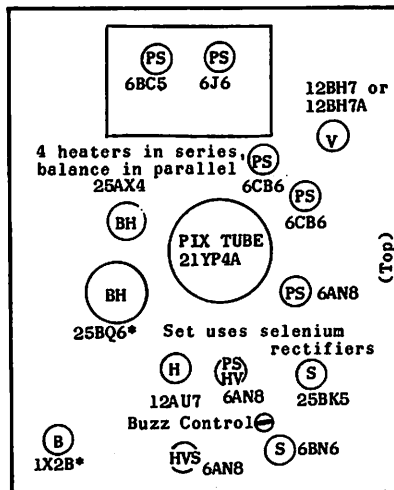
RCA (16)



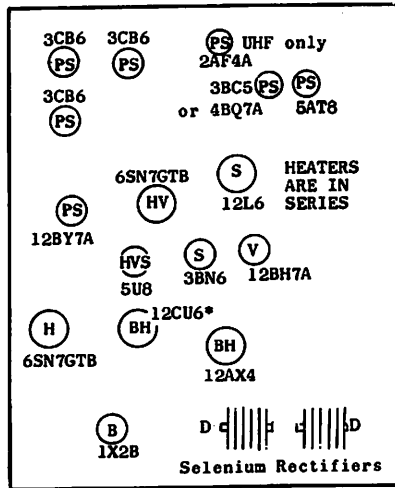
RAYTHEON (1)



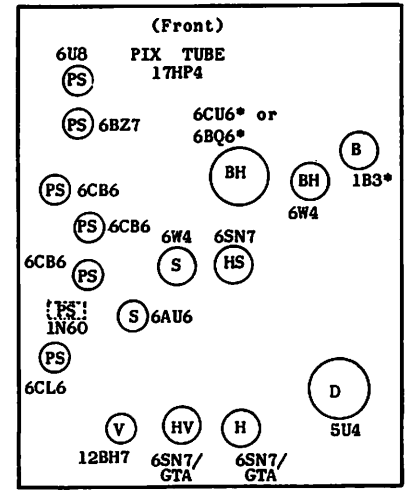
RAYTHEON (2)



RAYTHEON (3)



SENTINEL (1)

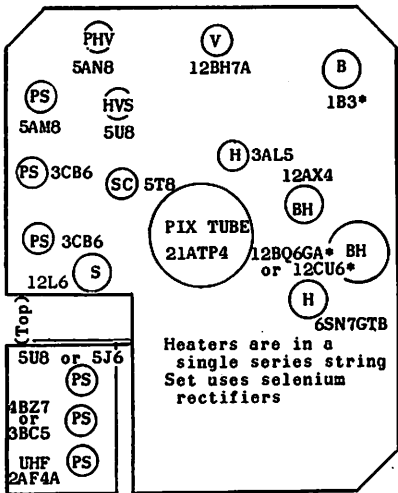


SENTINEL (2)

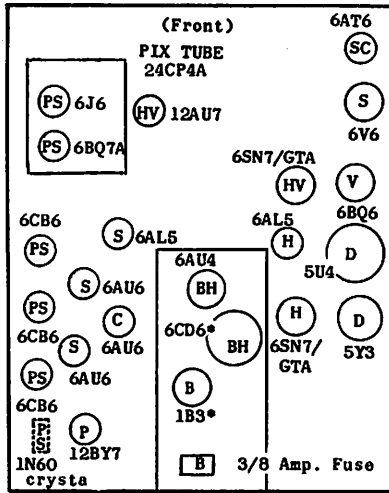
- Picture ----- P
- Sound ----- S
- Picture & Sound --- PS
- Bright Area ----- B

- Horizontal Movement ----- H
- Vertical Movement ----- V
- Horizontal & Vertical Movement -- HV or VH
- Horiz. Movement & Br. Area ----- BH or HB
- High Voltage Warning ----- (*) Asterisk

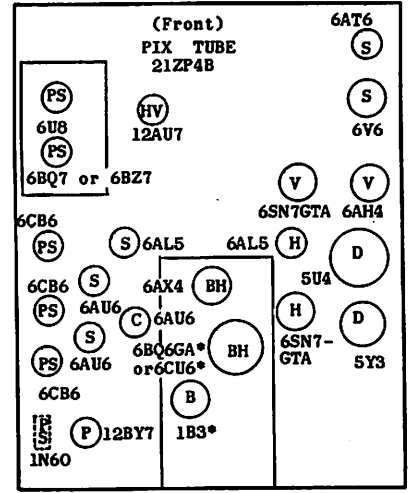
- Pix, S'nd & Br. Area - D
- Background ----- G
- Focus ----- F
- Contrast ----- C



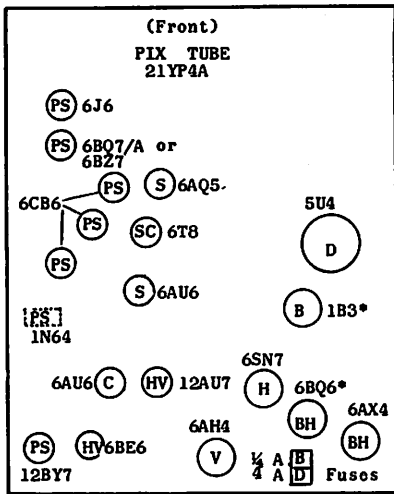
SPARTON (1)



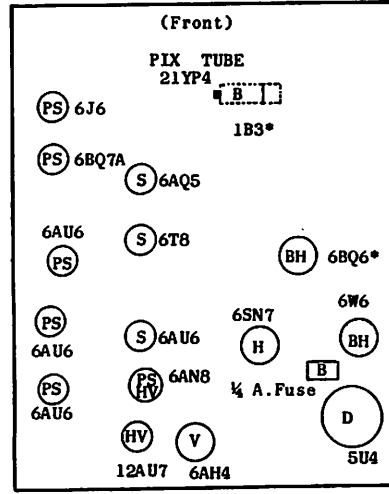
SPARTON (3)



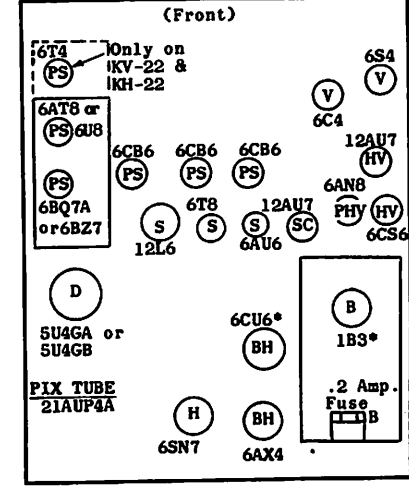
SPARTON (2)



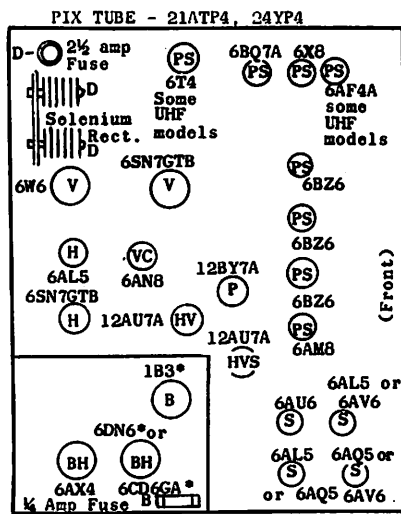
STEWART-WARNER (1)



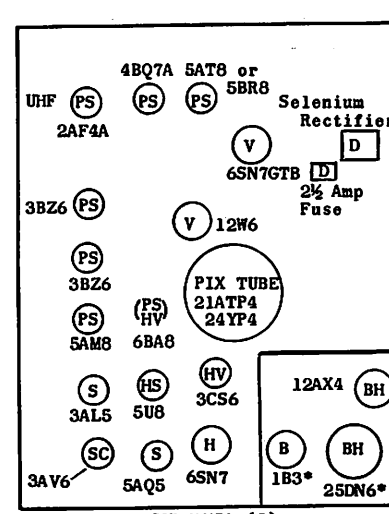
STEWART-WARNER (2)



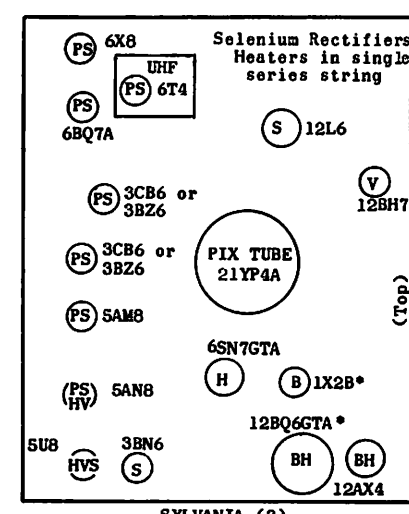
STROMBERG-CARLSON



SYLVANIA (1)



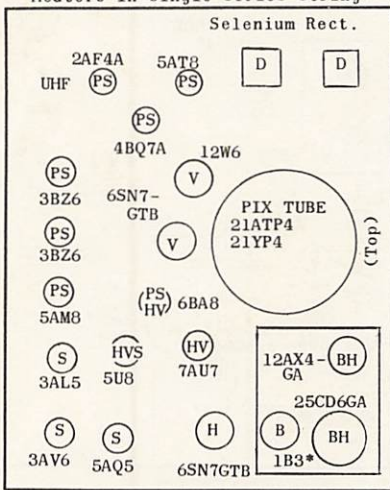
SYLVANIA (2)



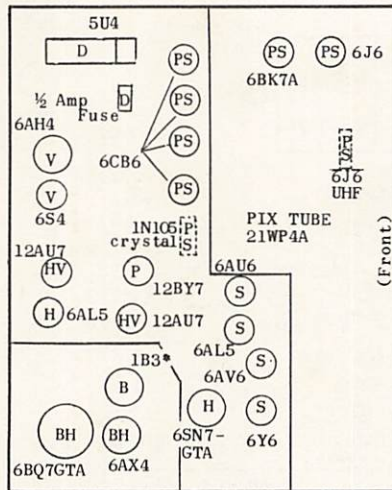
SYLVANIA (3)

Picture ----- P Horizontal Movement ----- H Pix, S'nd & Br. Area - D
 Sound ----- S Vertical Movement ----- V Background ----- G
 Picture & Sound --- PS Horizontal & Vertical Movement -- HV or VH Focus ----- F
 Bright Area ----- B Horiz. Movement & Br. Area ----- BH or HB Contrast ----- C
 High Voltage Warning ----- (*) Asterisk

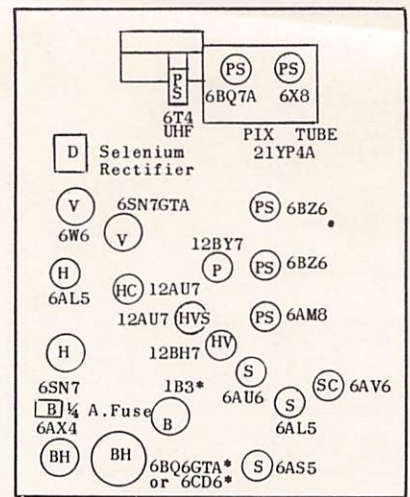
Heaters in single series string



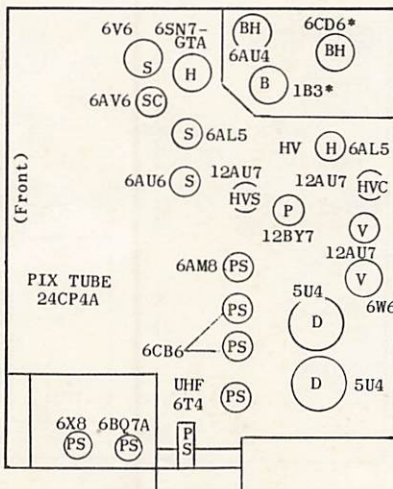
SYLVANIA (4)



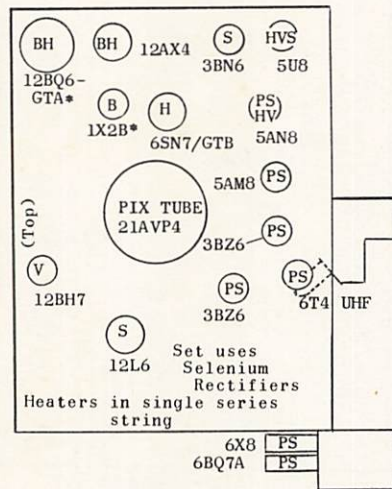
SYLVANIA (5)



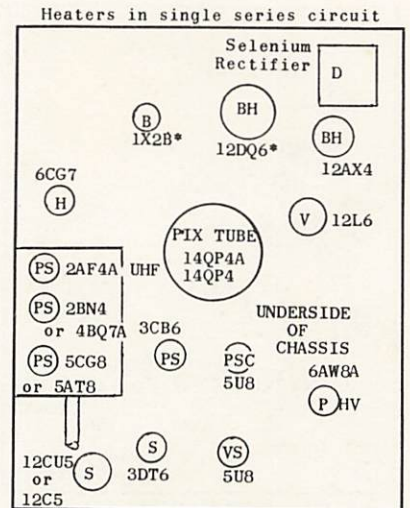
SYLVANIA (6)



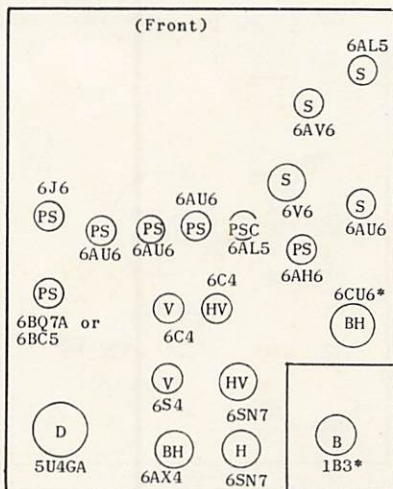
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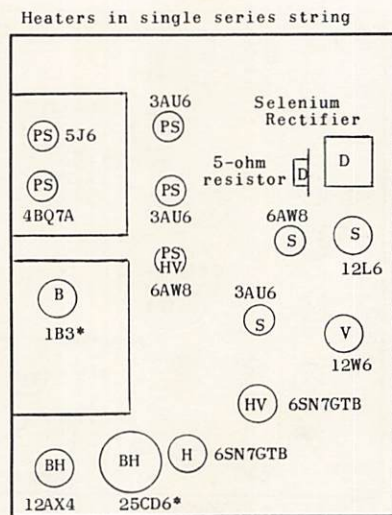
SYLVANIA (8)



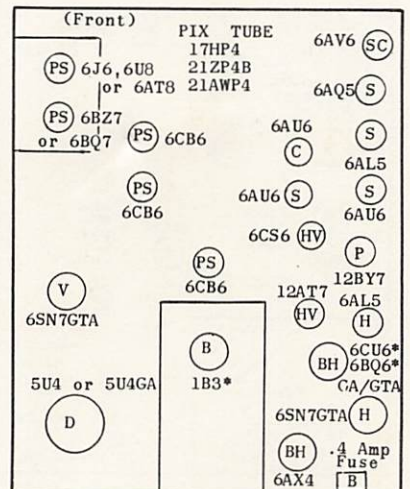
SYLVANIA (9)



3Amp Fuse TRAV-LER (1)



TRAV-LER (2)



TRUETTONE WELLS-GARDNER

- Picture ----- P
- Sound ----- S
- Picture & Sound --- PS
- Bright Area ----- B
- Horizontal Movement ----- H
- Vertical Movement ----- V
- Horizontal & Vertical Movement -- HV or VH
- Horiz. Movement & Br. Area ----- BH or HB
- High Voltage Warning ----- (*) Asterisk
- Pix, S'nd & Br. Area - D
- Background ----- G
- Focus ----- F
- Contrast ----- C

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 Vol. 2 (No. TT2) '52-'53 sets
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 Vol. 4 (No. TT4) '54-'55 models
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