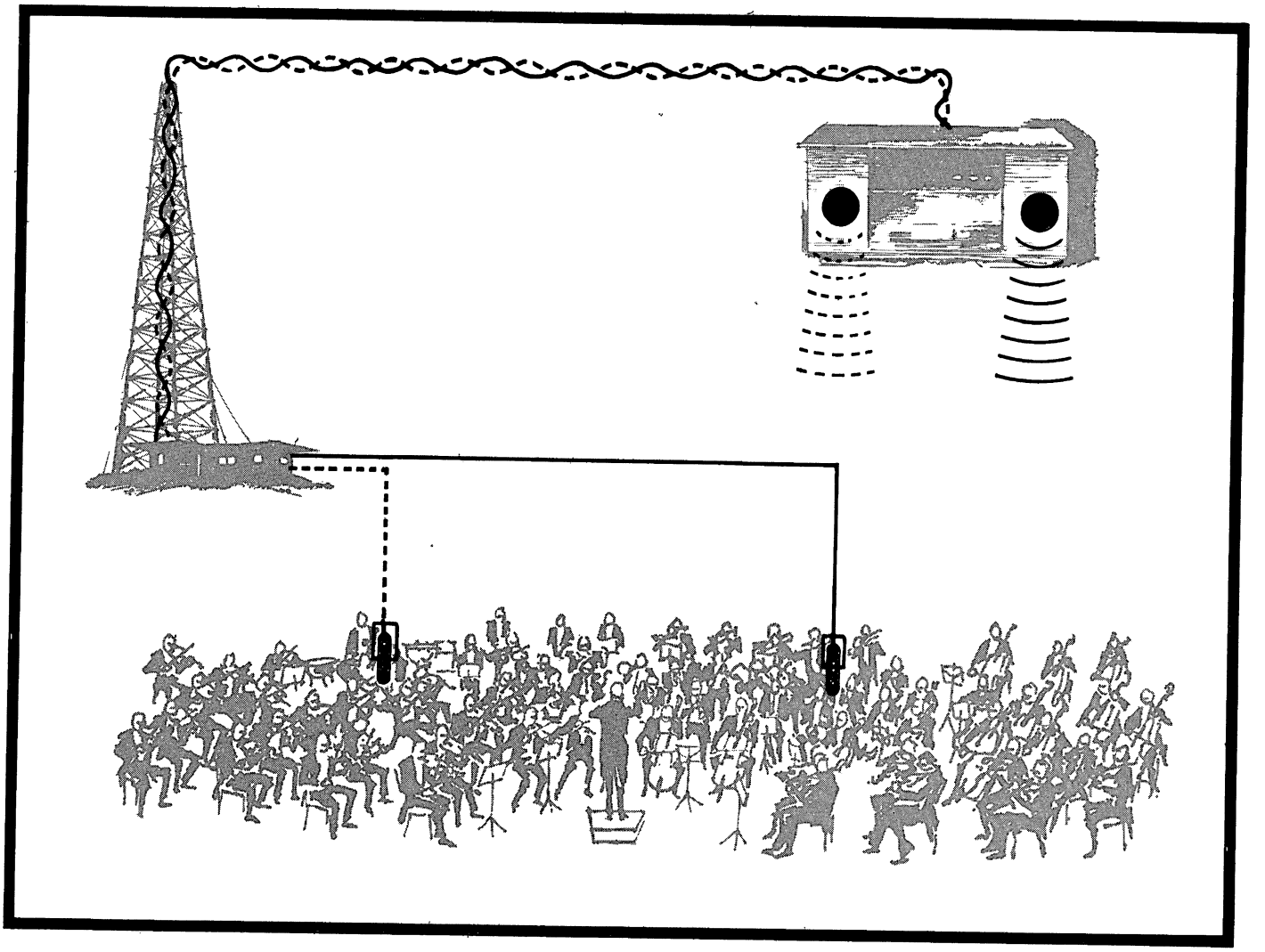
ZENITH®

SERVICE MANUAL



HIGH FIDELITY
AND STEREO FM MODELS

ZENITH RADIO CORPORATION
1900 N. AUSTIN AVENUE CHICAGO, ILLINOIS 60639

PRICE $2.50

HF 15 PART NO. 923-463

INDEX

IDENTIFICATION AND SPECIAL FEATURES CODE PGS. 5, 7 & 9

No. 1 - *Zenith - Crest.*
No. 2 - *Zenith-Crest - Battery Powered - Solid State.*
No. 3 - *Zenith-Crest - Solid State.*
No. 4 - *Zenith-Crest - Stereophonic - Solid State.*
No. 5 - *Zenith-Crest - Stereophonic High Fidelity.*
No. 6 - *Zenith-Crest - Stereophonic High Fidelity - Solid State Amplifier.*
No. 7 - *Zenith-Crest - Stereophonic High Fidelity - Solid State Amplifier - AM-FM.*
No. 8 - *Zenith-Crest - Stereophonic High Fidelity - Solid State Amplifier - AM - Stereophonic FM.*
No. 9 - *Zenith-Crest - Stereophonic High Fidelity - Solid State - AM - Stereophonic FM.*
No. 10 - *Zenith-Crest - Stereophonic High Fidelity - Solid State - Extended Bass - AM - Stereophonic FM.*
No. 11 - *Zenith-Crest - Stereophonic High Fidelity - Solid State - Five Speakers.*
No. 12 - *Zenith-Crest - Stereophonic High Fidelity - AM - Stereophonic FM - Stereophonic Tape.*
No. 13 - *Zenith-Crest - Stereophonic High Fidelity - Solid State - Extended Bass - AM - Stereophonic FM - Stereophonic Tape.*
No. 14 - *Zenith-Crest - COLOR TV - Color Emblem - Solid State - Stereophonic High Fidelity - AM - Stereophonic FM.*
No. 15 - *Zenith-Crest - COLOR TV - Color Emblem - Solid State - Stereophonic High Fidelity - AM - Stereophonic FM - Extended Bass - SPACE COMMAND SIX HUNDRED.*

No. 16 - *Zenith-Crest - Stereophonic High Fidelity - AM - Stereophonic FM.*

No. 17 - *Zenith-Crest - Solid State - AM Radio.*

FEATURES OF HIGH FIDELITY & STEREO FM MODELS

MODEL NO.	CABINET				CHASSIS			SPEAKER		
	STYLE	MATERIAL	FINISH	COLOR	MODEL	TYPE	EIA POWER OUTPUT	SIZE (IN.)	PART NO.	V.C. IMPEDANCE
X505B	Table (w/handle) (lift lide)	Plastic	Textured Plastic	Blue & White	1L20	1 Tube Phono Only	----	4	49-993	3.2
X505V	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Red & White	1L20	1 Tube Phono Only	----	4	49-993	3.2
X508L	Table (w/hamdle) (lift lid)	Plastic	Textured Plastic	Beige	1N21	1 Tube Phono Only	----	4	349-3	3.2
X508W	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Off White	1N21	1 Tube Phono Only	----	4	349-3	3.2
X508B	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Blue	1N21	1 Tube Phono Only	----	4	349-3	3.2
X510J	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Walnut Brown & Ivory	2NT20	2 Transistor Phono	----	4	349-3	3.2
X510F	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Light Olive & Off White	2NT20	2 Transistor Phono Only	----	4	349-3	3.2
X512C	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Gray Metallic & Black	4NT22	4 Transistor Phono Only (Battery/AC)	----	4 x 6	49-1090	3.2
X512P	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Pale Gold Metallic & Light Gray	4NT22	4 Transistor Phono Only (Battery/AC)	----	4 x 6	49-1090	3.2
X525B	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Blue & White	2NT21 2NT22	Transistor Phono & AM Radio	----	4	49-1039	3.2
X525W	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Off White & White	2NT21 2NT22	Transistor Phono & AM Radio	----	4	49-1039	3.2
X525P	Table (w/handle) (lift lid)	Plastic	Textured Plastic	Ochre & Off white	2NT21 2NT22	Transistor Phono & AM Radio	----	4	49-1039	3.2
X540G	Table (w/handle)	Wood	Plastic Coated	Ivory & Dark Brown	4NT20	4 Transistor Phono Only	----	2-4 x 6	49-926	3.2
X540L	Table (w/handle)	Wood	Plastic Coated	Ivory & Charcoal Grey	4NT20	4 Transistor Phono Only	----	2-4 x 6	49-926	3.2
X547X	Table (w/handle) (latched speaker enclosure)	Wood	Plastic Coated	Pearl Finish, Accent White & Walnut	4NT20	4 Transistor Phono Only	----	2-5 x 7	49-1077	3.2
X547P	Table (w/handle) (latched speaker enclosure)	Wood	Plastic Coated	Metallic Pale Gold & Gray	4NT20	4 Transistor Phono Only	----	2-5 x 7	49-1077	3.2
X550L	Table (w/handle) (hinged speaker enclosure)	Fibrit	Textured Paint	Mocha	4NT21	4 Transistor Phono Only	----	2-6 1/2	49-1084	3.2
X550W	Table (w/handle) (hinged speaker enclosure)	Fibrit	Textured Paint	Antique White	4NT21	4 Transistor Phono Only	----	2-6 1/2	49-1084	3.2

FEATURES OF HIGH FIDELITY & STEREO FM MODELS

RECORD CHANGER				CONTROL PANEL	INDICATOR LIGHT	TYPE OF IDENTIFICATION AND SPECIAL FEATURES	RECORD STORAGE	REMOTE SPEAKER
TYPE	MOUNTING	CARTRIDGE	STYLUS					
Manual Player	Shelf	142-95	Sapphire Sapphire	None	No	1	None	None
Manual Player	Shelf	142-95	Sapphire Sapphire	None	No	1	None	None
169-279	Shelf	142-156	Sapphire Sapphire	Metal Plate	No	1	None	None
169-279	Shelf	142-156	Sapphire Sapphire	Metal Plate	No	1	None	None
169-278	Shelf	142-156	Sapphire Sapphire	Metal Plate	No	1	None	None
169-284	Shelf	142-157 or 142-149	Sapphire Sapphire	Metal Plate	No	3	None	None
169-284	Shelf	142-157 or 142-149	Sapphire Sapphire	Metal Plate	No	3	None	None
169-277	Shelf	142-156	Sapphire Sapphire	Metal Plate	No	2	None	None
169-277	Shelf	142-156	Sapphire Sapphire	Metal Plate	No	2	None	None
169-297	Shelf	142-156	Sapphire Sapphire	Metal Plate	No	17	None	None
169-298	Shelf	142-156	Sapphire Sapphire	Metal Plate	No	17	None	None
169-298	Shelf	142-156	Sapphire Sapphire	Metal Plate	No	17	None	None
169-273	Hinged Panel	142-148	Sapphire Sapphire	Hot Stamped on Cabinet	No	4	None	None
169-274	Hinged Panel	142-148	Sapphire Sapphire	Hot Stamped on Cabinet	No	4	None	None
169-275	Hinged Panel	142-148	Sapphire Sapphire	Metal Plate	No	4	None	None
169-275	Hinged Panel	142-148	Sapphire Sapphire	Metal Plate	No	4	None	None
169-270	Hinged Panel	142-142	Sapphire Sapphire	Metal Plate	No	4	None	None
169-269	Hinged Panel	142-142	Sapphire Sapphire	Metal Plate	No	4	None	None

FEATURES OF HIGH FIDELITY & STEREO FM MODELS

MODEL NO.	CABINET				CHASSIS			SPEAKER		
	STYLE	MATERIAL	FINISH	COLOR	MODEL	TYPE	EIA POWER OUTPUT	SIZE (IN.)	PART NO.	V.C. IMPEDANCE
X554C	Table (w/handle) (hinged speaker enclosures)	Fibrit	Textured Paint	Colonial Black	6NT20	6 Transistors Phono Only	----	2-6 x 9 2-3 1/2	49-1111 49-978	3.2 45.
X554P	Table (w/handle) (hinged speaker enclosures)	Fibrit	Textured Paint	Pearl Beige	6NT20	6 Transistors Phono Only	----	2-6 x 9 2-3 1/2	49-1111 49-978	3.2
X560W	Table (w/handle) (hinged speaker enclosure)	Wood	Plastic Coated Cloth	Walnut	Waters Conley	10 Transistors Phono Only	----	2-8 2-4 2-3 1/2	964-18016 964-13857 964-16237	8. 6.4 34.
X562W	Table (w/handle) (hinged speaker enclosure)	Wood & Fibrit	Plastic Coated Cloth	Walnut & Brown	10NT01	10 Transistors Phono Only	16W.	3 x 14 2-5 1/4 2-3 1/2	49-830 49-1089 49-978	6.4 6.4 45.
X562Y	Table (w/handle) (hinged speaker enclosure)	Wood & Fibrit	Plastic Coated Cloth	Black & White	10NT01	10 Transistors Phono Only	16W.	3 x 14 2-5 1/4 2-3 1/2	49-830 49-1089 49-978	6.4 6.4 45.
X584W	Table (w/handle) (hinged) speaker enclosure)	Wood	Plastic Coated Cloth	Walnut & Beige	10L02Z	Phono-AM-FM	5W.	2-3 1/2 2-8	49-978 49-1009	45. 6.4
X804W	Console (lift lid)	Wood	Wood	Walnut	8NT02 6L01Z9	Phono-AM-FM	8W.	2-3 1/2 2-6 x 9	49-978 49-1063	45. 16.
X904W	Console (lift lid)	Wood	Wood	Walnut	8NT02 7L01Z9	Phono-AM-FM	8W.	2-3 1/2 2-6 x 9	49-978 49-1063	45. 16.
X905R	Console (lift lid)	Wood	Wood	Mahogany	8NT02 7L01Z9	Phono-AM-FM	8W.	2-3 1/2 2-6 x 9	49-978 49-1063	45. 16.
X905H	Console (lift lid)	Wood	Wood	Cherry	8NT02 7L01Z9	Phono-AM-FM	8W.	2-3 1/2 2-6 x 9	49-978 49-1063	45. 16.
X906M	Console (lift lid)	Wood	Wood	Maple	8NT02 7L01Z9	Phono-AM-FM	8W.	2-3 1/2 2-6 x 9	49-978 49-1063	45. 16.
X920W	Console (lift lid)	Wood	Wood	Walnut	18XT20Z	Phono-AM-FM	16W.	4-3 1/2 2-10	49-1094 49-1064	45. 16.
X922R	Console (lift lid)	Wood	Wood	Mahogany	18XT20Z	Phono-AM-FM	16W.	4-3 1/2 2-10	49-1094 49-1064	45. 16.
X922H	Console (lift lid)	Wood	Wood	Cherry	18XT20Z	Phono-AM-FM	16W.	4-3 1/2 2-10	49-1094 49-1064	45. 16.
X924M	Console (lift lid)	Wood	Wood	Maple	18XT20Z	Phono-AM-FM	16W.	4-3 1/2 2-10	49-1094 49-1064	45. 16.
X926W	Console (lift lid)	Wood	Wood	Walnut	18XT20Z	Phono-AM-FM	16W.	4-3 1/2 2-10	49-1094 49-1064	45. 16.
X930W	Console (lift lid) (Pivotal Louver Doors)	Wood	Wood	Walnut	20XT20	Phono-AM-FM	30W.	6-3 1/2 2-10	49-1094 49-1097	45. 10.
X932H	Console (lift lid) (Pivotal Louver Doors)	Wood	Wood	Cherry	20XT20	Phono-AM-FM	30W.	6-3 1/2 2-10	49-1094 49-1097	45. 10.
X934M	Console (lift lid) (Pivotal Louver Doors)	Wood	Wood	Maple	20XT20	Phono-AM-FM	30W.	6-3 1/2 2-10	49-1094 49-1097	45. 10.

FEATURES OF HIGH FIDELITY & STEREO FM MODELS

RECORD CHANGER								
TYPE	MOUNTING	CART-RIDGE	STYLUS	CONTROL PANEL	INDI-CATOR LIGHT	TYPE OF IDENTIFICATION AND SPECIAL FEATURES	RECORD STORAGE	REMOTE SPEAKER
169-251	Hinged Panel	142-151	Diamond Sapphire	Metal Plate	No	4	None	None
169-262	Hinged Panel	142-151	Diamond Sapphire	Metal Plate	No	4	None	None
159-263	Shelf	142-151	Diamond Sapphire	Metal Plate	No	6	None	None
169-262	Shelf	142-151	Diamond Sapphire	Plastic Escutcheon	No	11	None	None
169-251	Shelf	142-151	Diamond Sapphire	Plastic Escutcheon	No	11	None	None
169-263	Hinged Panel	142-151	Diamond Sapphire	Plastic Escutcheon	No	16	None	None
169-290	Shelf	142-151	Diamond Sapphire	Plastic Escutcheon	No	7	Yes	None
169-290	Shelf	142-151	Diamond Sapphire	Plastic Escutcheon	No	8	Yes	None
169-290	Shelf	142-151	Diamond Sapphire	Plastic Escutcheon	No	8	Yes	None
169-290	Shelf	142-151	Diamond Sapphire	Plastic Escutcheon	No	8	Yes	None
169-290	Shelf	142-151	Diamond Sapphire	Plastic Escutcheon	No	8	None	None
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	No	9	Yes	None
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	No	9	Yes	None
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	No	9	Yes	None
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	No	9	Yes	None
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	No	9	Yes	None
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	No	9	Yes	S2434
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	No	9	Yes	S2434
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	No	9	Yes	S2434

FEATURES OF HIGH FIDELITY & STEREO FM MODELS

MODEL NO.	CABINET				CHASSIS			SPEAKER		
	STYLE	MATERIAL	FINISH	COLOR	MODEL	TYPE	EIA POWER OUTPUT	SIZE (IN.)	PART NO.	V.C. IMPEDANCE
X938W	Console (lift lid)	Wood	Wood	Walnut	20XT20	Phono-AM-FM	30W.	6-3 1/2 2-10	49-1094 49-1097	45. 10.
X940W	Console (lift lid)	Wood	Wood	Walnut	26XT20	Phono-AM-FM	70W.	4-3 1/2 2-horn 2-12	49-1094 49-1042 49-1045	45. 6.4 6.4
X942M	Console (lift lid)	Wood	Wood	Maple	26XT20	Phono-AM-FM	70W.	4-3 1/2 2-horn 2-12	49-1094 49-1042 49-1045	45. 6.4 6.4
X950W	Console (lift lid)	Wood	Wood	Walnut	26XT20	Phono-AM-FM	70W.	4-3 1/2 2-horn 2-12	49-1094 49-1042 49-1045	45. 6.4 6.4
X952	Console (lift lid)	Wood	Wood	Dark Oak	26XT20	Phono-AM-FM	70W.	4-3 1/2 2-horn 2-12	49-1094 49-1042 49-1045	45. 6.4 6.4
X954H	Console (lift lid)	Wood	Wood	Cherry	26XT20	Phono-AM-FM	70W.	4-3 1/2 2-horn 2-12	49-1094 49-1042 49-1045	45. 6.4 6.4
X958DE	Console (lift lid)	Wood	Wood		26XT20	Phono-AM-FM	70W.	4-3 1/2 2-horn 2-12	49-1094 49-1042 49-1045	45. 6.4 6.4
X960W	Console (lift lid) (Pivotal Louver Doors)	Wood	Wood	Walnut	24XT24 6XT24	Phono-AM-FM	160W.	4-3 1/2 2-horn 2-15	49-1094 49-1004 49-1073	45. 8. 6.4
X962H	Console (lift lid)	Wood	Wood	Cherry	24XT24 6XT24	Phono-AM-FM	160W.	4-3 1/2 2-horn 2-15	49-1094 49-1004 49-1073	45. 8. 6.4
X964H	Console (lift lid)	Wood	Wood	Cherry	24XT24 6XT24	Phono-AM-FM	160W.	4-3 1/2 2-horn 2-15	49-1094 49-1004 49-1073	45. 8. 6.4
X964X	Console (lift lid)	Wood	Wood	Antique White	24XT24 6XT24	Phono-AM-FM	160W.	4-3 1/2 2-horn 2-15	49-1094 49-1004 49-1073	45. 8. 6.4
X966DE	Console (lift lid) (Pivotal (Louver Doors)	Wood	Wood	Dark Oak	24XT24 6XT24	Phono-AM-FM	160W.	4-3 1/2 2-horn 2-15	49-1094 49-1004 49-1073	45. 8. 6.4
X968M	Console (lift lid)	Wood	Wood	Maple	24XT24 6XT24	Phono-AM-FM	160W	4-3 1/2 2-horn 2-15	49-1094 49-1004 49-1073	45. 8. 6.4
25X8520W	Console (lift lid)	Wood	Wood	Walnut	23XC38Z 20XT20Z	Color-TV Phono-AM-FM	30W.	2-4 x 6 2-10	49-1106 49-1104	45. 10.
25X8530W	Console (lift lids)	Wood	Wood	Walnut	23XC38Z 26XT20	Color-TV Phono-AM-FM	70W.	6-3 1/2 2-12	49-1094 49-1082	45. 6.4
25X8540M	Console (lift lids)	Wood	Wood	Maple	23XC38Z 26XT20	Color-TV Phono-AM-FM	70W.	6-3 1/2 2-12	49-1094 49-1082	45. 6.4
25X8550H	Console (lift lids)	Wood	Wood	Cherry	23XC38Z 26XT20	Color TV- Phono-AM-FM	70W.	6-3 1/2 2-12	49-1094 49-1082	45. 6.4
25X8560H	Console (lift lids)	Wood	Wood	Cherry	23XC38Z 26XT20	Color TV- Phono-AM-FM	70W.	6-3 1/2 2-12	49-1094 49-1082	45. 6.4
25X8580H	Console (lift lids) (Folding Doors)	Wood	Wood	Cherry	23XC38Z 24XT24 6XT24	Color TV- Phono-AM-FM	160W.	4-3 1/2 2-horn 2-12	49-1094 49-1004 49-1080	45. 8. 6.4
S2434W	Table	Wood	Wood	Walnut	----	-------	---	3 1/2 6 x 9	49-1094 49-984	45. 6.4
S2437W	Table	Wood	Wood	Walnut	----	-------	---	Horn 12	49-1004 49-1102	8. 6.4

FEATURES OF HIGH FIDELITY & STEREO FM MODELS

RECORD CHANGER (SEE NOTES)				CONTROL PANEL	INDI-CATOR LIGHT	TYPE OF IDENTIFICATON AND SPECIAL FEATURES	RECORD STORAGE	REMOTE SPEAKER
TYPE	MOUNTING	CART-RIDGE	STYLUS					
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	No	9	Yes	S2434
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	9	Yes	S2437
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	9	Yes	S2437
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	9	Yes	S2437
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	9	Yes	S2437
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	9	Yes	S2437
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	9	Yes	S2437
169-292	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	10	Yes	S2437
169-292	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	10	Yes	S2437
169-292	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	10	Yes	S2437
169-292	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	10	Yes	S2437
169-292	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	10	Yes	S2437
169-292	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	10	Yes	S2437
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	14	None	S2434
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	14	None	S2434
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	14	None	S2434
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	14	None	S2434
169-290	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	14	None	S2434
169-292	Shelf	142-151	Diamond Sapphire	Die-Cast Escutcheon	Yes	15	None	S2437
-----	----	----	----	-----	No	1	----	---
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GENERAL INFORMATION

MULTIPLEX THEORY
For all theory regarding the operation of the multiplex circuits, refer to service manuals HF-14 and HF-14 Supplement.

EXTENSION SPEAKER SYSTEMS
It is recommended that only Zenith extension speakers be used in conjunction with Zenith receivers. However, if the technician should desire to use other speakers, it is imperative the total impedance be not less than that impedance indicated on the back of each receiver, adjacent to the speaker terminal board.

MUTING CONTROL
The 10K muting control which supplies a reverse bias voltage to the emitter of the 19KC amplifier is factory adjusted, and should not require readjustment. However, if the receiver is operated in an extremely noisy area, there is a possibility that there may be noise bursts of sufficient magnitude to overcome this mute voltage ... when this occurs, the Stereophonic FM Indicator will light up. To further cut off the 19KC amplifier, carefully rotate the 10K muting control in a clockwise direction. This should only be done when a stereo signal is on the air since the mute control must only be advanced to a point where the Stereo Indicator does not light up on noise, but it should not be advanced to a point where the desired stereo signal is cut off.

MULTIPLEX ALIGNMENT
These receivers have been properly aligned at the factory and will not require further adjustment. As a result, it is not recommended that any attempt be made to alter the multiplex stages. However, should any major components in these circuits require replacement or should anyone tamper with the multiplex adjustments then, of course, realignment will be necessary.

Zenith has designed and manufactured an SPTE-1 Multiplex Generator that can be used to properly align the multiplex portion of these receivers. The multiplex alignment procedure is included in later pages of this manual. The SPTE-1 Multiplex Generator is available at your Zenith Distributor.

ANTENNAS FOR STEREO FM
Due to the characteristics of the stereo FM system, it will require more signal for proper performance than does monaural FM. As a result, it may be necessary to operate the stereo FM receiver with an external antenna. The necessity for an external antenna will be determined by the signal conditions at each individual installation.

EXTERNAL FM ANTENNA
If the receiver is operated in an area of either low signal strength, high noise, or where multipath (FM ghosts) signals are present, a good external FM antenna will be required. The necessity of an external antenna as a result of weak signal or noise, will be quite evident since the set will not limit, and/or noise will be quite evident. It is extremely difficult to determine if multipath (FM ghosts) signals are present, however, should the program material be distorted, the best manner to decide if multipath signals are the cause of the problem, is to connect an external FM antenna to the receiver. Usually a TV antenna may be available for trial, but even then the results can be misleading, since many TV antennas are of low gain on FM frequencies.

FM CABINET ANTENNA
All models except the X584 contain an FM antenna built into the cabinet. This antenna consists of a length of wire cut to the desired frequency, and attached to the internal periphery of the cabinet. The X584 uses a built-in line antenna.

SIGNAL STRENGTH CHART
There are certain minimum voltages necessary for proper stereo FM reception. To help determine if there is sufficient signal available, the following developed AGC voltage versus microvolt input voltage charts have been compiled. Since the desired FM Station may not always be operating in the stereo mode when an installation is made, these AGC voltage measurements have been taken with a monaural FM signal. The point "*" of minimum AGC voltage necessary for good stereo FM reception has been indicated on these charts. For chassis 18XT20 & 20XT20 connect a V.T.V.M. to the junction of 10K, 4.7 K and C30 5 mfd (test point B).

For chassis 7L01Z9 and 10L02Z connect a V.T.V.M. to the feed-thru condenser on the top of the chassis, 3/8 of an inch to the right of the FM antenna coil. A green wire is connected to this feed-thru capacitor.

For chassis 24XT24 and 26XT20 connect a V.T.V.M. to the forward AGC input feed-thru terminal at the rear of the FM-RF tuner.

Chassis 7L01Z9

Micro-volts Input	AGC Voltage at RG Grid
0	0.35 V
20	1.50
50	1.99
100	2.32
200	2.62
500	3.00
1 K	*3.30
5 K	5.40
10 K	7.20
20 K	9.0
50 K	12.0
100 K	14.0

Chassis 10L02Z

Micro-volts Input	AGC Voltage at RF Coil
0	.46
20	.85
50	1.34
100	1.71
200	2.0
500	2.43
1 K	*2.73
5 K	3.45
10 K	3.9
20 K	4.4
50 K	5.2
100 K	6.1

Chassis 18XT20 and 20XT20

Micro-volts Input	AGC Voltage at RF Coil
0	1.4
10	1.4
20	1.4
50	1.4
100	1.4
200	1.6
500	1.9
1 K	*2.0
2 K	2.1
5 K	2.15
10 K	2.2
20 K	2.3
50 K	2.4
100 K	2.5

Chassis 24XT24 and 26XT20

Micro-volts Input	Forward AGC Voltage At Tuner Forward AGC Input Feed-Thru Terminal
100	1.35
500	2.0
1 K	*2.18
5 K	2.25
10 K	3.3
50 K	4.1
100 K	4.45

AUTOMATIC FREQUENCY CONTROL AFC

These receivers feature an automatic frequency control which automatically keeps your receiver on the exact station frequency when you are tuned to an FM station. To utilize this feature tune the receiver as instructed and then turn the band switch to AFC position.

When the desired FM station is a weak station, adjacent in frequency to a strong station, the AFC may pull the tuning into the stronger station. Under these conditions, place the bandswitch in FM position and tune the receiver as instructed.

Tuning the receivers on the frequency modulation band will require more care than on the broadcast band. A hissing sound may be noted when tuning between Frequency Modulation stations. This is normal, and will disappear as the station is tuned in. After a station is located, the pointer should be moved back and forth over it until the point of quietest reception and best tone quality is found. Correct tuning is indicated by the disappearance of background noise.

SPEAKER PHASING

It is most important that coded speaker leads be connected to coded terminals on speakers for proper polarity within each speaker group. It is also then most important that the speaker groups be in phase with each other. One excellent method is to play a monaural record as described under Automatic Balance Control.

Under these conditions the sound should appear to come from a point midway between the two speaker groups. If the sound comes from any other point than midpoint, then one speaker group is out of phase with the other and you should check polarity. One of the easiest methods of checking polarity within the speaker group is to momentarily place a 4½ volt battery across the speaker feed terminals. All the speaker cones should simultaneously move in the same direction.

POWER AMPLIFIERS

Power transistors and their circuits are unique in operation, therefore, repair procedure differs from those steps followed when repairing tube type circuits.

1. Each channel of the 6XT24, 8NT02, 8NT04, 18XT20, 20XT20, and 26XT20 amplifiers use a pair of matched power transistors in the final output state. Therefore, should one transistor fail, both transistors must be replaced simultaneously, since they will not perform properly unless matched.
2. When a power transistor is replaced the insulator between the transistor and the heat sink should also be replaced. On chassis 2NT20, 4NT20, 6XT24, 18XT20, 20XT20, and 26XT20 be certain to apply Dow Corning #340 heat conductive grease between the transistor and the insulator. Also between the insulator and the chassis. The Dow Corning grease can be obtained in 1 c.c. quantities by ordering part #205-51.
3. On chassis 8NT02 and 8NT04 place the heat conductive grease in the detent of the chassis, all around the transistor and also into the detent in the combination heat sink and retaining bracket.
4. Do not operate these amplifiers without their proper speaker load.
5. Do not short out the audio output of either channel when the amplifier is operating.
6. Should a power transistor fail (short) be certain to replace the emitter resistors for the specific channel. Also be certain to check the condition of the silicon diode rectifiers.
7. Remove transistors from their sockets before doing any soldering to the socket lugs.

FM, RF, AND IF ALIGNMENT – CHASSIS 18XT20, 20XT20, 24XT24 AND 26XT20

Alignment of these chassis will, in most cases, not be necessary unless an RF or IF transformer is replaced or if someone has tampered with the adjustments.

Because of the wide band pass required in the multiplex FM tuner, it is desirable to use an FM signal generator having a deviation of 400 KC with a sweep rate of 60 cycles as well as an oscilloscope when aligning both the IF and RF FM portions of this receiver. It is not only necessary to obtain maximum amplitude in the IF amplifier stages, but also necessary to maintain symmetry. To help achieve this symmetry, it is desirable to have 10.6, 10.7 and 10.8 megacycle markers in obtaining IF curve symmetry.

The condenser mentioned further on in the alignment procedure should be as small as possible and the ground lead of the generator must be connected to the chassis at the base of the socket, where the signal is being injected. Should the signal be injected at some point other than a socket, then the ground lead should be connected to ground as closely as possible to this point.

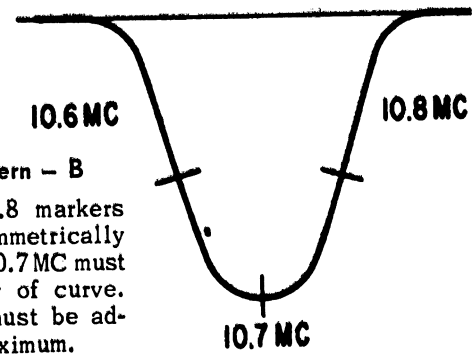
In all alignment procedures, the signal generator output should be kept just high enough to obtain an indication. This is most necessary, since on some chassis we have a zero time constant limiter which will clip the signals if their magnitude is too great, resulting in erroneous waveforms.

AM ALIGNMENT

A. On chassis 18XT20, 20XT20, 26XT20 and 24XT24 connect scope or V.T.V.M. to junction of 10 ohm resistor and .001 mfd capacitor Test Point (H). The 10 ohm resistor is connected to terminal #6 of the ratio detector transformer.

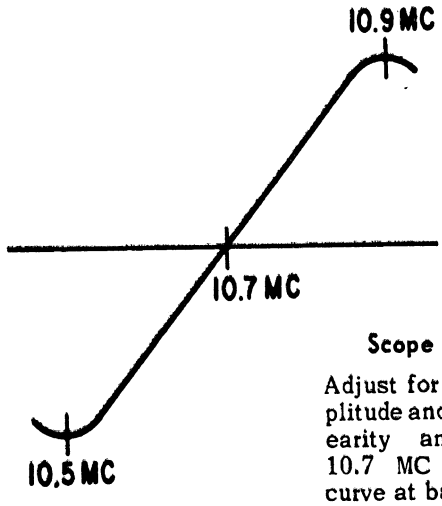
B. On chassis 18XT20, 20XT20, 26XT20 and 24XT20 connect the scope to the base of the last FM IF transistor Test Point (G). The common scope terminal should be connected to chassis.

C. An AC output meter connected across the primary or secondary of the output transformer will be satisfactory for all AM, IF and RF adjustments.



Scope Pattern – B

10.6 and 10.8 markers must be symmetrically positioned. 10.7 MC must be at center of curve. This point must be adjusted for maximum.



Scope Pattern –

Adjust for maximum amplitude and maintain linearity and symmetry. 10.7 MC must be on curve at base line.

RF AND IF ALIGNMENT CHASSIS 7L01Z9 AND 10L02Z

Alignment of these chassis will, in most cases be unnecessary unless an IF or RF transformer is replaced or the adjustments have been tampered with.

FM Discriminator Alignment: When the secondary of the discriminator is aligned use sufficient signal input to get a good positive and negative indication before setting the slug for zero reading. A center zero indicating meter is recommended for this adjustment, but is not absolutely necessary. Reversing the leads of a non-zero center meter, or observing closely when the meter starts to go to the left (negative) of zero will give the same results.

FM IF Alignment: Because of the wide band pass, it is desirable to use an FM signal generator and a cathode ray oscilloscope when aligning the FM IF channel. The instruction book for the Zenith Model 800 Signal Generator (Form Z8001) covers complete FM alignment procedure. If visual alignment equipment is unavailable, reasonably accurate alignment can be made by following the procedure outlined in this service note.

Correct alignment can only be made if the following procedure is followed:

A vacuum tube voltmeter with an isolation resistor of 2,000,000 ohms in series with the hot lead will serve for FM adjustments. This lead should be shielded.

The signal generator output should be kept just high enough to get an indication on the meter.

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	BAND	SET DIAL TO	ADJUST	PURPOSE
1(d)	Pin 7 12BE6 Conver ter	.05 Mfd.	455 Kc. 400 Cycle Modulated	BC	600 Kc.	L8, 9, 16, 17	Align IF channel for maximum output
2(d)	2 turns loosely coupled to wavemagnet		1600 Kc. 400 Cycle Modulated	BC	1600 Kc.	C32D	Set oscillator to dial scale
3(d)	2 turns loosely coupled to wavemagnet		1400 Kc. 400 Cycle Modulated	BC	1400 Kc.	C32B	Align antenna stage
4(a)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L12 coil slug pri. discr.	Align primary of discriminator for maximum reading
5(f)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L13 coil slug sec. of discr.	Adjust secondary of discriminator for zero reading
6(c)	Pin 1 (grid) on 12BA6 2nd I.F.	.05 Mfd.	10.7 Mc. Unmodulated	FM		L10 & L11 pri. & sec. of 3rd If trans.	Align 3rd IF transf. for max. reading
7(c)	Pin 1 (grid) on 12BA6 1st IF	.05 Mfd.	10.7 Mc. Unmodulated	FM		L6 & L7 2nd IF transf.	Align 2nd IF transf. for max. reading
8(c)	Pin 2 (grid) on 12DT8 converter tube socket	.05 Mfd.	10.7 Mc. Unmodulated	FM		L4 & 5 pri. & sec. of 1st IF transf.	Align 1st IF transf. for max. reading
9(c)	Antenna Post FM	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L3 osc. coil slug	Set osc. to dial scale
10(c)	(Remove line ant.)	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L2 det. coil slug	Align det. stage to max. reading

RF and IF Alignment Procedure for Chassis 7L01Z9

(a) Vacuum Tube Voltmeter Lug 1 on discriminator transformer to chassis (half discriminator load).
(c) Vacuum Tube Voltmeter from Term. #3 of T4 3rd IF Trans.
(d) Vacuum Tube Voltmeter Lug 2 of T3 to Chassis.
(f) Vacuum Tube Voltmeter Pin #1 of 19GQ7 Disc. Tube to Chassis (full discriminator load)

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	BAND	SET DIAL TO	ADJUST	PURPOSE
1(d)	Pin 7 12BE6 Converter	.05 Mfd.	455 Kc. 400 Cycle Modulated	BC	600 Kc.	L22, 23, 6, 7	Align IF channel for maximum output
2(d)	2 turns loosely coupled to wavemagnet		1600 Kc. 400 Cycle Modulated	BC	1600 Kc.	C32D	Set oscillator to dial scale
3(d)	2 turns loosely coupled to wavemagnet		1400 Kc. 400 Cycle Modulated	BC	1400 Kc.	C32B	Align antenna stage
4(a)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L14 coil slug pri-discr.	Align primary of discriminator for maximum reading
5(f)	Pin 1 (grid) on 12AU6 limiter	.05 Mfd.	10.7 Mc. Unmodulated	FM		L15 coil slug sec. of discr.	Adjust secondary of discriminator for zero reading
6(c)	Pin 1 (grid) on 12BA6 2nd I.F.	.05 Mfd.	10.7 Mc. Unmodulated	FM		L12 & L13 pri. & sec. of 3rd If transf.	Align 3rd IF transf. for max. reading
7(c)	Pin 1 (grid) on 12BA6 1st IF	.05 Mfd.	10.7 Mc. Unmodulated	FM		L10 & L11 2nd IF transf.	Align 2nd IF transf. for max. reading
8(c)	Pin 7 (grid) on 12DT8 converter tube socket	.05 Mfd.	10.7 Mc. Unmodulated	FM		L8 & 9 pri. & sec. of 1st IF transf.	Align 1st IF transf. for max. reading
9(c)	Antenna Post FM	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L3 osc. coil slug	Set osc. to dial scale
10(c)	(Remove line ant.)	270 Ohms	98 Mc. Unmodulated	FM	98 Mc.	L2 det. coil slug	Align det. stage to max. reading

RF and IF Alignment Procedure for Chassis 10L02Z

(a) Vacuum Tube Voltmeter Lug 1 on discriminator transformer to chassis (half discriminator load).
(c) Vacuum Tube Voltmeter from Term. #3 of T4 3rd IF Trans.
(d) Vacuum Tube Voltmeter Lug 2 of T10 to Chassis.
(f) Vacuum Tube Voltmeter Pin #9 of 19GQ7 Disc. Tube to Chassis (full discriminator load)

RF AND IF ALIGNMENT PROCEDURE FOR CHASSIS 18XT20 AND 20XT20

OPERATION	CONNECT GENERATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	SET DIAL TO	ADJUST IRON CORES	PURPOSE
1A	Term. #3 of T3 3rd IF Trans.	47 ohm in shunt with gen. output. Then from hot lead a 27 ohm in series with a .001 MFD capacitor.	10.7 Mc. 400 Kc. Deviation	88 Mc.	L11	Adjust Primary and secondary of ratio detector for maximum amplitude and symmetry as shown in Scope Pattern "B"
2A	Term. #3 of T3 3rd IF Trans.		10.7 Mc. 400 Kc. Deviation	88 Mc.	L12	
3B	Term. #3 of T2 2nd IF Trans.		10.7 Mc. 400 Kc. Deviation	88 Mc.	L9 & L10	Align I.F. transformers for maximum output and symmetry. This pattern is not necessarily identical to the overall Scope Pattern "A"
4B	Term. #1 of T1 1st IF Trans.		10.7 Mc. 400 Kc. Deviation	88 Mc.	L7 & L8	
5B	Connect to Test Point #D		10.7 Mc. 400 Kc. Deviation	88 Mc.	L5 & L6	
6B	Connect to Test Point #D		10.7 Mc. 400 Kc. Deviation	88 Mc.	Readjust L5, L6, L7, L8, L9 & L10	Align I.F. transformers for maximum output and symmetry as indicated in Scope Pattern "A"
7B	FM Antenna Post (Remove Antenna)	300 ohm	98 Mc. 400 Kc. Deviation	98 Mc.	L4	Set oscillator to Dial Scale.
8B	FM Antenna Post (Remove Antenna)	300 ohm	98 Mc. 400 Kc. Deviation	98 Mc.	L2	Align FM Detector stage for maximum.
9C	Test Point #L	.05 in series with hot lead of gen.	455 Kc. 400 Cycle Modulated	600 Kc.	L15, L14, L21 & L20	Align AM IF for maximum.
10C	Two turn loop loosely coupled to wave-magnet		1600 Kc. 400 Cycle Modulated	1600 Kc.	C39D	Set oscillator to dial scale.
11C	Two turn loop loosely coupled to wave-magnet		1400 Kc. 400 Cycle Modulated	1400 Kc.	C39A	Align detector and antenna stages.

For A, B, C See Page 12

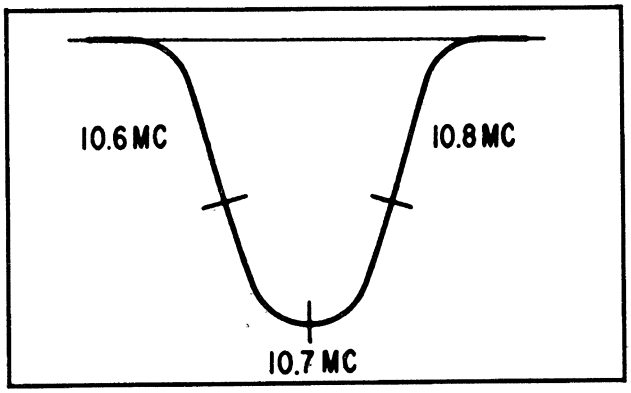
RF AND IF ALIGNMENT PROCEDURE FOR CHASSIS 24XT24 AND 26XT20

OPERATION	CONNECT GENERATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	SET DIAL TO	ADJUST IRON CORES	PURPOSE
1 A	Term. #3 of T4 4th IF Trans.	47 ohm in shunt with gen. output. Then from hot lead a 27 ohm in series with a .001 MFD capacitor.	10.7 Mc. 400 Kc. Deviation	88 Mc.	L16	Adjust Primary and secondary of ratio detector for maximum amplitude and symmetry as shown in Scope Pattern "B"
2 A	Term. #3 of T4 4th IF Trans.		10.7 Mc. 400 Kc. Deviation	88 Mc.	L17	
3 B	Term #3 of T3 3rd IF Trans.		10.7 Mc. 400 Kc. Deviation	88 Mc.	L14, L15	Align I.F. transformers for maximum output and symmetry. This pattern is not necessarily identical to the overall Scope Pattern "A"
4 B	Term. #3 of T2 2nd IF Trans.		10.7 Mc. 400 Kc. Deviation	88 Mc.	L12, L13	
5 B	Connect to emitter of TR2 Mixer Test Point #K		10.7 Mc. 400 Kc. Deviation	88 Mc.	L10, L11	
6 B	Connect to emitter of TR2 Mixer Test Point #K.		10.7 Mc. 400 Kc. Deviation	88 Mc.	L5, L6	Align I.F. transformers for maximum output and symmetry as indicated in Scope Pattern "A"
7 B	Connect to emitter of TR2 Mixer Test Point #K		10.7 Mc. 400 Kc. Deviation	88 Mc.	Readjust L5, L6, L10, L11, L12, L13, L14, L15	
8 B	FM Antenna Post (Remove Antenna)	300 ohm	98 Mc. 400 Kc. Deviation	98 Mc.	L7	Set oscillator to Dial Scale.
9 B	FM Antenna Post (Remove Antenna)	300 ohm	98 Mc. 400 Kc. Deviation	98 Mc.	L3, L2, L1	Align RF output, RF input and FM Antenna stages for maximum.
10 C	Base of TR8(26XT20) Base of TR9(24XT24) AM RF transistor	.05 in series with hot lead of gen.	455 Kc. 400 Cycle Modulated	600 Kc.	L27, L28, L19, L20, L21, L22	Align AM IF for maximum.
11 C	Two turn loop loosely coupled to wavemagnet		1600 Kc. 400 Cycle Modulated	1600 Kc.	26NT20 C47E 24XT24 C54F	Set oscillator to dial scale.
12 C	Two turn loop loosely coupled to wavemagnet		1400 Kc. 400 Cycle Modulated	1400 Kc.	26NT20 C47D, C47B 24XT24 C54D, C54B	Align detector and antenna stages.

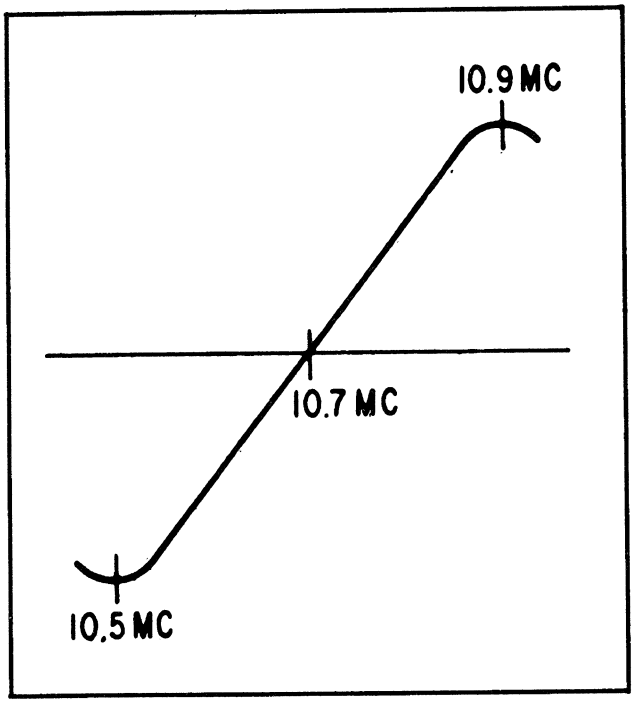
For A, B, C See Page 12

MULTIPLEX ALIGNMENT PROCEDURE CHASSIS 24XT24 AND 26XT20

Using the Zenith FM multiplex signal generator, the multiplex portion of Zenith or any FM multiplex receiver can be aligned, but first before any attempt is made to do this it is necessary that the technician be certain that the RF, IF, and ratio detector alignment is correct, and that the receiver operates normally on monaural signals.



IF CURVE



RATIO DETECTOR CURVE

Because of the wide band pass required in the multiplex FM receiver, it is desirable to use an FM signal generator having a deviation of at least 200 KC with a sweep rate of 60 cycles, as well as an oscilloscope. During the IF and ratio detector alignment it is not only necessary to obtain maximum gain, but also extremely important to maintain symmetry.

To help achieve this IF curve symmetry 10.6 and 10.8 megacycle markers must be symmetrically positioned and the 10.7 megacycle marker must be at the center of the curve. When aligning the ratio detector 10.5 and 10.9 megacycle markers are desirable to achieve S curve symmetry. The pattern illustrating marker use to obtain S curve symmetry indicates it is most necessary to adjust for maximum gain and at the same time maintain linearity and symmetry. 10.7 megacycles must be on the curve at the reference line. 10.5 megacycles and 10.9 megacycles must be at the lower and upper turn of the S curve respectively. Only when the I.F. and ratio detector circuitry have been aligned in accordance with these specifications should the technician proceed to align the multiplex portion of the receiver.

PRELIMINARY PROCEDURES

Before using the Zenith FM multiplex signal generator is it recommended that it be connected to the power source and turned on giving it a 10 to 20 minute warmup period. This will allow ample time for the RF audio and 19 KC oscillators to stabilize.

The following procedure is only necessary when the generator has been received from the factory, or has been subjected to a great deal of handling or transportation vibration. Although the 19KC pilot generator oscillator is extremely stable, there is always the possibility that it could shift from its precisely assigned frequency. As a result we have a very simple method to check the 19KC pilot frequency using an FM multiplex receiver and FM multiplex station as a frequency standard. Proceed as follows:

1. Tune your FM multiplex receiver to an FM multiplex station and when the pilot lights up, this indicates the 19KC pilot amplifier is functioning. Since the 19KC sine wave is from the transmitter it must be on frequency and can be used as a reference standard. With a cable connect the collector output of TR13, the 19KC amplifier to the vertical input of a good oscilloscope.
2. On the multiplex generator set the pilot carrier amplitude control to 10%. Place L-R, L+R and 67KC switches in OFF position and connect the composite output terminal directly to the horizontal input of the oscilloscope. On the oscilloscope you will see an oval Lissajous figure which should be motionless when the 19KC output of the generator is synchorinzed with the 19KC signal from the transmitter. Should the Lissajous figure rotate it will only be necessary to adjust the pilot carrier frequency trimmer on the multiplex generator with an IF alignment wrench until the Lissajous figure ceases to rotate. After the generator has been adjusted to zero beat, disconnect all cables.

The multiplex generator provides a composite multiplex signal as well as an RF signal, FM modulated by the composite multiplex signal.

The composite signal is very useful since it is an excellent tool that can be used in signal tracing the multiplex portion of the receiver. We do not recommend that multiplex alignment be made using only the composite signal injected at the output terminal of the ratio detector tertiary winding, since there is always some phase shift occurring in the RF, IF or ratio detector circuits. As a result, multiplex alignment made by a signal injected at the ratio detector would not be correct. For proper multiplex alignment the composite signal must FM modulate the RF carrier and then be fed into the FM antenna terminals. With the signal injected in this manner the multiplex alignment would then be the best that could possibly be obtained and separation would be the maximum for this receiver.

67 KC Trap Adjustment

1. Connect the stereo generator RF leads to the G and F FM antenna terminals and set the pilot carrier control to zero.
2. Move L + R and L - R switches to OFF position.
3. Move 67KC generator switch from OFF position up to 67KC.
4. Connect the V.T.V.M. (AC scale) and/or scope to terminal #5 of T10 19KC amplifier transformer, and chassis ground.
5. Adjust 67KC trap for minimum output.
6. Move 67KC generator switch to OFF position.

19KC Sub Carrier Amplifier, Doubler and Mute Adjustments

1. Turn generator pilot carrier amplitude control to 10% position.
2. Connect the V.T.V.M. (DC scale) and/or scope to the junction of the two frequency doubling diodes and chassis.
3. Place the stereo-monaural switch in stereo position and short Test Point #T to GND.
4. Adjust T10 19KC amplifier transformer and T11 doubler transformer for maximum output. Simultaneously adjust the mute control so the voltage at the junction of the two frequency doubling diodes never exceeds -.2 volt during this operation. The voltage must be kept at this minimum for proper alignment.
5. Remove GND from Test Point #T.
6. Turn generator pilot carrier amplitude control to 5% position.
7. Slowly rotate the mute control to a point where the stereo indicator lights up.

Separation Adjustments

1. Place stereo monaural switch in Stereo position.
2. Turn generator pilot carrier amplitude control to 10% position.
3. Move L-R and L+R generator switches from OFF position up to L-R and L+R positions.
4. Connect a V.T.V.M. (AC scale) and/or scope to the L audio output, after the 38KC filter.
5. Adjust T12 38KC detector transformer for maximum voltage at L output. The magnitude of this signal should be much greater than that at the R output. The voltage at the L output should be approximately 10 times or greater than at the R output.

TROUBLE-SHOOTING

Should a problem arise in aligning the FM multiplex portion of the receiver and the technician does not know whether the difficulty lies in the RF, IF, limiter and ratio detector portions of the receiver, or whether the difficulty lies in the multiplex portion, the multiplex generator can be used as an excellent signal tracing device to determine if the multiplex section of the receiver is functioning properly. The composite output of the multiplex generator can be injected at the output of the ratio detector. To reduce possible extraneous signals coming through the ratio detector, short the ratio detector primary with a jumper lead. The wave forms and their magnitudes may vary slightly from chassis to chassis, however, they are quite indictive of what will be seen when signal tracing the multiplex circuitry.

67KC Signal Tracing

1. Turn generator pilot carrier amplitude control to zero.
2. Move L+R and L-R switches to OFF position.
3. Move 67KC generator switch from OFF position up to 67KC. Sequentially connect an oscilloscope to the input and output of the 67KC trap. The 67KC signal at the output of the trap if it is properly nulled, will be much smaller than at the input. The voltage ratio should be approximately 20 to 1 input to output.

19KC Signal Tracing

1. Move the 67KC generator switch to OFF.
2. Rotate the generator 19KC pilot carrier amplitude control to 10% position.
3. Sequentially connect your scope to the base of composite amplifier, base of 19KC amplifier and collector of 19KC amplifier. The amplitude of the 19KC signal should greatly increase as you proceed along the 19KC chain.

Doubler and Subcarrier Signal Tracing

To determine if the doubler is functioning, place your scope at the junction of the two diodes and you will see 38KC DC pulses. Placing the scope at the collector of the subcarrier amplifier, you should see a 38KC sine wave which will indicate that the subcarrier amplifier and associated ringing circuitry is functioning properly.

Multiplex Detector Signal Tracing

1. Leave the 19KC amplitude control at 10%.
2. Move the L - R generator switch from OFF position to L - R position. You should see equal amplitude 1000 cycle sine waves at both L and R outputs.
3. Move the L+R switch from OFF up to L+R and look at the L audio output, and measure the magnitude of the 1000 cycle sine wave. If the multiplex detector and preceeding circuitry are aligned properly, the magnitude of the wave form at L should be greater than at R.

If all the waves are similar in form and magnitude to those indicated, then it can be assumed that the multiplex portion of the receiver is functioning properly and the problem lies ahead of this in the FM receiver. If any of the wave forms are missing at a latter point but are apparent at a previous point, then something is amiss in the circuitry between the two test points.

PARTS LIST

PART NO.	DESCRIPTION	PRICE
	CHASSIS 1L20	
22-2786	.068 Mfd. Capacitor - 200V.	
22-2793	.047 Mfd. Capacitor - 400V.	
22-2794	.047 Mfd. Capacitor - 600V.	
22-3762	Electrolytic Capacitory-40/150, 20/150, 20/25	2.50
54-139	3/8-32 x 9/16 Palnut-Cadmium (1 mts. each 63-5035 & 63-5036)	.03
63-1750	150 ohm Resistor 1/2W. 10%	.17
63-1849	33K ohm Resistor 1/2W. 20%	.17
63-1856	47K ohm Resistor 1/2W. 20%	.17
63-1884	220K ohm Resistor 1/2W. 20% (2 Req'd.)	.17
63-5035	Tone Control	1.40
63-5036	Volume Control & Switch	2.05
63-5373	90 ohm Fusing Type Resistor	.40
78-1542	Wafer Tube Socket	.20
79-174-12	#18 Sleeving-Yellow (4 Required)	.03
83-2715	Three Lug Terminal Strip	.05
93-1576	.054 x .129 x .250 Steel Washer (2 Req.)	
95-2041	Output Transformer	2.25
212-47	Silicon Rectifier	1.25
	CHASSIS 1N21	
11-145	Line Cord & Plug	80
22-2786	.068 Mf. Capacitor-200V.	
22-2793	.047 Mf. Capacitor-400V.	
22-2804	.022 Mf. Capacitor-200V.	
22-4600	Electrolytic Capacitor	1.95
22-4617	.01 Mf. Disc Capacitor-500V.	.10
or		
22-3	.01 Mf. Disc Capacitor-500V.	.30
43-519	Socket Contact Housing	.20
52-1202	Phono Cable & Plug	.60
63-1750	150 ohm Resistor-1/2W. 10%	.17
63-1828	10K ohm Resistor-1/2W. 20%	.17
63-1856	47K ohm Resistor-1/2W. 20%	
63-1898	470K ohm Resistor-1/2W. 20%	.17
63-5374	110 ohm Fusing Type Resistor	.35
63-6318	Volume Control	.75
63-6319	Tone Control	.80
78-1410	Molded Tube Socket (25C5)	.25
83-5305	Seven Lug Terminal Strip	.20
83-5306	Insulating Strip	.05
86-328	Wire Retaining Terminal	.03
86-334	Terminal (3 used on 43-519)	.10
95-2312	Output Transformer	1.70
212-71	Silicon Rectifier	1.25
or		
212-27	Silicon Rectifier	2.00
	CHASSIS 2NT20	
11-87	A.C. Line Cord	
22-3	.01 Mf. Disc. Capacitor-500V. (2 Required)	.30
22-3317	.1 Mf. Capacitor-200V.	.35
22-3615	1 Mf. Electrolytic Capacitor	1.25
22-3659	.047 Mf. Capacitor-400V. (2 Req'd.)	
22-4568	100 Mf. Electrolytic Capacitor	.95
22-4644	Electrolytic Capacitor	2.45
43-519	Socket Contact Housing	.20
52-1218	Single Conductor shielded lead & Plug	.55
52-1222	Four Conductor Cable	
54-384	4-40 Palnut-Cadmium (1 used on ea. 114-940)	.03
63-1827	10K ohm Resistor-1/2W. 10%	
63-1848	33K ohm Resistor-1/2W. 10%	
63-1862	68K ohm Resistor-1/2W. 10%	
63-1870	100K ohm Resistor-1/2W. 20%	
63-1880	180K ohm Resistor-1/2W. 10%	
63-1908	820K ohm Resistor-1/2W. 10%	.17
63-1912	1.0 Megohm Resistor-1/2W. 20%	.17
63-5440	Voltage Dependent Resistor	.80
63-6042	220 ohm Resistor-1W. 10%	.25
63-6319	Tone Control	.80
63-6406	430 Ohm Fusing Type Resistor	1.60
63-6407	Loudness Control	1.65
79-174-8	#18 Sleeving - Yellow - 1"	.03
79-209-8	#22 Sleeving - Yellow - 1" (part of S-67794)	.03
79-210-8	#22 Sleeving - Green - 1" (part of S-67794)	.03
79-211-8	#22 Sleeving - Blue - 1" (part of S-67794)	.03
83-5147	10 Lug Terminal Strip - Grip Type (2 required)	.25
83-5148	Insulating Strip	.03
83-5284	5 Lug Terminal Strip	.15
83-5291	Insulating Strip	.03
83-5688	Transistor Insulating Strip (part of 800-158 or S-67794)	
86-199	Terminal	.03
86-334	Socket Terminal (4 required)	
94-1419	Shoulder Bushing (One furnished as part of 800-158 & 2 use when S-67794 is used)	
94-1424	Shoulder Bushing (Furnished as part of 800-158)	
95-2341	Output Transformer	2.10
114-940	4-40 x 5/16 x 3/16 Hex Hd. Mach. Screw - Cadmium (2 mt. S-67794 or 800-158)	.03
121-314	Transistor (Driver)	.80
212-71	Rectifier	1.25
or		
212-27	Rectifier	2.00
S-67794	Transistor, Strip & Grease Assembly	5.00
or		
800-158	Transistor - Output Assbly. (121-436)	
S-73673	Wire & Terminal Assembly - Brown (Furnished as part of 800-158)	
	CHASSIS 2NT21	
11-87	A.C. Line Cord	
12-4318	Switch Mtg. Bracket	
22-2884	5 Mf Electrolytic Capacitor - 12W.	1.50
22-3317	.1 Mf Capacitor - 200V.	.35
22-3659	.047 Mf Capacitor - 400V. (2 required)	
22-4097	.022 Mf Capacitor - 200V.	.25
22-4568	100 Mf Electrolytic Capacitor - 15V.	
22-4675	Dual Electrolytic Capacitor	
43-519	Socket Contact Housing	.20
52-1222	Four Conductor Cable	
54-384	4-40 Palnut - Cadmium (1 used on ea. 114-940)	.03
58-214	Phono Plug	.10
63-1733	56 Ohm Resistor - 1/2W. - 10%	.17
63-1764	330 Ohm Resistor - 1/2W. - 10%	.17
63-1803	2700 Ohm Resistor - 1/2W. - 10%	
63-1814	4700 Ohm Resistor - 1/2W. - 20%	.17
63-1862	68K Ohm Resistor - 1/2W. - 10%	
63-1873	120K Ohm Resistor - 1/2W. 10%	.17
63-1905	680K Ohm Resistor - 1/2W. - 20%	.17
63-1912	1 Megohm Resistor - 1/2W. - 20%	.17
63-5302	350 Ohm Fusing Type Resistor - 3W.	.46
63-5440	Voltage Dependent Resistor	.80
63-6112	10K Ohm Resistor - 1W. - 10%	.15
63-6319	Tone Control	.80
63-6858	Loudness Control	
79-174-12	#18 Sleeving - Yellow - 1-1/2"	.03
79-209-8	#22 Sleeving - Yellow - 1" (Part of S-67794)	.03
79-210-8	#22 Sleeving - Green - 1" (Part of S-67794)	.03

PART NO.	DESCRIPTION	PRICE
CHASSIS 2NT21 (Cont'd)		
79-211-8	#22 Sleeving - Blue - 1" (Part of S-67794)	.03
83-5147	Ten Lug Terminal Strip	.25
83-5148	Insulating Strip	.03
83-5170	Three Lug Terminal Strip	.10
83-5171	Insulating Strip	.03
83-5284	5 Lug Terminal	.15
83-5291	Insulating Strip	.03
83-5688	Transistor Insulating Strip (Part of 800-158 or S-67794)	
85-915	Off-On, Phono. Radio Switch	
86-199	Terminal (2 required)	.03
86-334	Socket Terminal (4 used on 52-1222)	.10
94-1419	Shoulder Bushing (One furnished as part of 800-158 & 2 use when S-67794 is used)	
94-1424	Shoulder Bushing (Furnished as part of 800-158)	
95-2341	Output Transformer	2.10
114-940	4-40 x 5/16 x 3/16 Hex Hd. Machine Screw - Cadmium	.03
121-441	Transistor (Driver)	
212-71	Rectifier	1.25
S-67794 or 800-158	Transistor, Strip & Grease Assbly. Transistor - Output Assbly. (121-436)	5.00
S-73673	Wire & Terminal Assembly - Brown (Furnished as part of 800-158)	
	CHASSIS 2NT22	
22-3	.01 Mf Disc Capacitor - 500V.	.30
22-2428	1.8 Pf Gimmick Capacitor	
22-2884	5 Mf Electrolytic Capacitor - 12V.	1.50
22-2998	.1 Mf Capacitor - 50V.	.35
22-3034	.05 Mf Disc Capacitor - 25V. (3 req'd.)	.45
22-3615	1 Mf Electrolytic Capacitor	1.25
22-4509	20 Mf Electrolytic Capacitor - 25V.	.70
22-4657	Two Section Variable Capacitor	
52-1296	Three Conductor Cable	
63-1750	150 Ohm Resistor - 1/2W. 10%	.17
63-1771	470 Ohm Resistor - 1/2W. - 10%	.17
63-1772	470 Ohm Resistor - 1/2W. - 20%	.17
63-1785	1K Ohm Resistor - 1/2W. - 10%(2 req'd.)	
63-1786	1K Ohm Resistor - 1/2W. - 20%	.17
63-1792	1500 Ohm Resistor - 1/2W. - 10%	.17
63-1809	3900 Ohm Resistor - 1/2W. - 5%	
63-1810	3900 Ohm Resistor - 1/2W. - 10%	.17
63-1814	4700 Ohm Resistor - 1/2W. - 20%	.17
63-1848	33K Ohm Resistor - 1/2W. - 10%	
63-1852	39K Ohm Resistor - 1/2W. - 10%(2 req'd.)	
63-1888	300K Ohm Resistor - 1/2W. - 5%	
83-3042	Rubber Strip	.03
86-412	Antenna Terminal (4 part of S-72896)	.03
95-2171	1st I.F. Transformer	2.50
95-2403	Oscillator Transformer	
103-44	Diode	.50
103-74	Diode	.50
105-49	Integnet	1.00
113-10	6-32 x 3/16 x 1/4 Hex Hd. Machine Screw - N.P. - Int. Shakeproof Lockwasher (3 mt. 22-4657)	.03
121-312	Transistor (Converter)	.80
121-313	Transistor (I.F.)	.72
126-1206	Shield	
149-311	Iron Core Sleeve	.10
S-72896	Antenna Assembly	
	CHASSIS 4NT22	
Z-4NL	Battery (6 required when used)	
11-87	Line Cord & Plug	
22-14	.0047 Mf Disc Capacitor - 500V.	.25
22-18	.0022 Mf Disc Capacitor - 500V.	.25
22-2884	5 Mf Electrolytic Capacitor - 12V. (2 required)	1.50

PART NO.	DESCRIPTION	PRICE
22-3994	500 Mf Electrolytic Capacitor - 15V.	1.75
22-4097	.022 Mf Mylar Capacitor - 200V.	.25
22-4182	.33 Mf Mylar Capacitor - 200V.	.60
22-5171	180 Mf Electrolytic Capacitor - 6V.	.75
22-5172	500 Mf Electrolytic Capacitor - 6V.	1.05
22-5173	Dual Electrolytic Capacitor	2.75
43-519	Socket Contact Housing	.20
52-1218	Phono Cable & Plug	.55
52-1219	Three Conductor Cable	
63-1701	10 Ohm Resistor - 1/2W. - 10%	.17
63-1705	12 Ohm Resistor - 1/2W. - 10%(2 req'd.)	
63-1750	150 Ohm Resistor - 1/2W. - 10%	.17
63-1768	390 Ohm Resistor - 1/2W. - 10%(2 req'd)	.17
63-1771	470 Ohm Resistor - 1/2W. - 10%	.17
63-1775	560 Ohm Resistor - 1/2W. - 10%	.17
63-1813	4700 Ohm Resistor - 1/2W. - 10%	.17
63-1817	5600 Ohm Resistor - 1/2W. - 10% (2 required)	
63-1831	12K Ohm Resistor - 1/2W. - 10%	
63-1866	82K Ohm Resistor - 1/2W. - 10%	.17
63-1869	100K Ohm Resistor - 1/2W. - 10%	
63-1932	3.3 Megohm Resistor - 1/2W. - 10%	.17
63-5951	1.5 Ohm Resistor - 1W. - 10%(2 req'd.)	
63-6319	Tone Control	.80
63-6379	Volume Control	.90
79-174-8	#18 Sleeving - Yellow - 1"	.03
79-174-12	#18 Sleeving - Yellow - 1-1/2"	.03
79-174-34	#18 Sleeving - Yellow - 4-1/4"	.10
83-2964	Six Lug Terminal Strip	
83-5286	Eight Lug Terminal Strip	.20
83-5325	Seventeen Lug Terminal Strip	
85-889	Battery Switch	.50
86-334	Socket Terminal (3 required)	.10
90-697	Spacer (2 used on 85-889)	
95-2336	Driver Transformer	2.95
95-2337	Power Transformer	2.35
114-47	6-20 x 7/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (2 mt. 85-889)	.03
121-401	Transistor - Output - Matched (2 req'd.)	1.75
121-408	Transistor Pre-Amp	1.30
121-409	Transistor - Driver	1.30
125-140	Strain Relief Grommet	.10
136-64	Fuse - 1/4 Amp	.15
212-71 or 212-27	Silicon Rectifier Silicon Rectifier	1.25 2.00
	CHASSIS 6XT24	
22-2939	680 Pf Disc Capacitor - 500V.(2 req'd.)	.25
22-3135	.1 Mf Capacitor - 400V.	.35
22-3241	100 Mf Electrolytic Capacitor - 50V. (2 required)	1.50
22-3878	2000 Mf Electrolytic Capacitor - 75V.	6.50
22-3881	1500 Mf Electrolytic Capacitor - 50V.	5.00
22-3883	50 Mf Electrolytic Capacitor - 50V.	1.25
22-4109	.033 Mf Capacitor - 200V. (2 required)	
22-4601	.01 Mf Disc Capacitor - 1KV.	.20
22-4666	.001 Mf Disc Capacitor - 1KV.	.40
22-4673	500 Mf Electrolytic Capacitor - 50V. (2 required)	
22-5162	Three Section Electrolytic Capacitor - 50V	4.47
43-333	Three Contact Housing (Male)	.20
43-573	Six Contact Housing (Female)	.45
43-574	Nine Contact Housing (Female)	.35
54-579	10-32 x 3/8 x 3/16 Thick - Hex Nut - Cadmium (1 used on ea. 212-62)	.03
62-30	Fuse Holder	.40
63-1750	150 Ohm Resistor - 1/2W. 10% (2 required)	.17
63-1764	330 Ohm Resistor - 1/2W. - 10%	.17
63-1820	6800 Ohm Resistor - 1/2W. - 10% (2 required)	
63-1827	10K Ohm Resistor - 1/2W - 10% (2 required)	.17

PART NO.	DESCRIPTION	PRICE
CHASSIS 6XT24 (Cont'd)		
63-1912	1 Megohm Resistor - 1/2W. - 20%	.17
63-5217	2 Ohm Resistor - 10W. - 10%	.80
63-5282	.39 Ohm Resistor - 5W. - 5% (2 req'd.)	.75
63-5367	0.43 Ohm Resistor - 5W. - 5% (2 req'd.)	.75
63-5369	220 Ohm Resistor - 5W. - 10% (2 req'd.)	.75
63-5638	180 Ohm Resistor - 2W. - 10% (2 req'd.)	
63-5641	220 Ohm Resistor - 2W. - 20% (2 req'd.)	.34
63-5656	470 Ohm Resistor - 2W. - 10% (2 req'd.)	.34
63-5961	2.7 Ohm Resistor - 1W. - 10% (4 req'd.)	.25
63-6442	560 Ohm Resistor - 3W. - 10% (2 req'd.)	.30
78-402	Four Contact Socket	.15
78-1347	Electrolytic Socket (3 required)	.10
78-1486	Two Contact Transistor Socket (6 req'd.)	
79-174-12	#18 Sleeving - Yellow - 1-1/2"	.03
83-3881	Four Lug Terminal Strip	.20
83-4203	Three Lug Terminal Strip	.05
83-4633	Felt Strip	.03
83-5277	Insulating Strip - Transistor (6 required)	.03
83-5284	Five Lug Terminal Strip (6 required)	.15
83-5291	Insulating Strip - Used on 83-5284 (6 required)	.03
86-303	Terminal - Male (3 required)	.04
86-328	Wire Retaining Terminal (2 required)	.03
86-389	Terminal - Female (13 required)	.03
93-2	Rivet Washer (4 required)	.03
93-369	Internal Lockwasher Shakeproof #1210 (1 used on 212-62)	.03
93-1179	Rubber Washer	.03
95-2425	Power Transformer	
95-2427	Transformer - Driver	
95-2428	Driver Transformer	
114-271	6-20 x 1/2 x 1/4 Hex Head Self-Tap Screw - Stat. Bronze (2 mt. ea. 121-271 & 121-382)	
114-601	10 x 1/2 x 5/16 Hex Washer Head Self-Tap Screw - Stat. Bronze (4 mt. 95-2425)	.04
114-801	8-18 x 5/16 x 1/4 Hex Head Self-Tap Screw - Stat. Bronze (4 mt. ea. S-73152)	.03
121-271	Transistor - Driver (2 required)	3.05
121-382	Transistor - Power (4 required)	4.30
136-61	Fuse - 3 Amp	.35
212-62	Rectifier (2 required)	3.10
S-73152	Heat Sink Assembly (2 required)	
	CHASSIS 6LO1Z9	
12-3385	Tuner Bracket	.40
12-4199	Support Bracket	.20
17-170	Cable Clamp	.10
19-238	Coil Mtg. Clip (1 pt. of ea. S-52362 & S-61505)	.10
19-322	Coil Mtg. Clip (2 required)	.05
22-3	.01 Mf Disc Capacitor - 500V. (9 req'd.)	.30
22-5	100 Pf Disc Capacitor - 500V. (2 req'd.)	.25
22-9	100 Pf Disc Capacitor - 500V.	.25
22-14	.0047 Mf Disc Capacitor - 500V.	.25
22-16	470 Pf Disc Capacitor - 500V. (2 req'd.)	.25
22-17	.001 Mf Disc Capacitor - 1000V. (2 required)	.25
22-18	.0022 Mf Disc Capacitor - 500V.	.25
22-1888	.001 Mf Ceramic Capacitor - 500V. (used on S-62887)	.25
22-2569	.047 Mf Capacitor - 600V. (2 required)	.40
22-3456	2 x 12 Pf Disc Capacitor - 500V. (used on S-64580)	.30
22-3621	22 Pf Disc Capacitor - 500V. (used on S-64580)	.25
22-3627	.047 Mf Capacitor - 100V.	.35
22-3675	10 Pf Disc Capacitor - 500V. (used on S-64580)	.25
22-3961	Variable Capacitor	3.75
22-4613	Feed Thru Capacitor (4 required)	
22-5325	26 Pf Disc Capacitor	

PART NO.	DESCRIPTION	PRICE
24-1239	Tuner Cover	.35
26-1321	Dial Scale	
43-519	Socket Contact Housing (used on 52-1109)	.20
43-570	Socket Contact Housing - Male	.45
52-1109	Four Conductor Cable	.75
54-139	3/8-32 x 9/16 Palnut - Cadmium (used on 85-910)	.03
56-426	Roll Pin (4 required)	.05
56-512	Roll Pin (2 required)	.03
57-4806	Dial Background Plate	.25
58-214	Single Prong Plug (2 pt. of S-54511)	.10
59-655	Dial Pointer	
63-1740	82 Ohm Resistor 1/2W. - 10%	.17
63-1779	680 Ohm Resistor 1/2W. - 20% (3 req'd.)	.17
63-1786	1K Ohm Resistor 1/2W - 20%	.17
63-1814	4700 Ohm Resistor 1/2W. - 20%	.17
63-1842	22K Ohm Resistor 1/2W. - 20% (2 req'd.)	.17
63-1856	47K Ohm Resistor 1/2W. - 20%	.17
63-1859	56K Ohm Resistor 1/2W. - 20% (used on S-64580)	.17
63-1870	100K Ohm Resistor 1/2W. - 20%	.17
63-1873	120K Ohm Resistor 1/2W. - 10%	.17
63-1876	150K Ohm Resistor 1/2W. - 10% (2 req'd.)	.17
63-1877	150K Ohm Resistor 1/2W. - 20%	.17
63-1880	180K Ohm Resistor 1/2W. - 10%	.17
63-1912	1 Megohm Resistor 1/2W. - 20%	.17
63-1926	2.2 Megohm Resistor 1/2W - 20% (3 req'd)	.17
63-1939	4.7 Megohm Resistor 1/2W. - 10%	.17
63-4199	2200 Ohm Resistor 1/4W. - 10%	.17
63-4283	220K Ohm Resistor 1/4W. - 10%	.17
63-4519	2.7 Ohm Resistor 1/2W. - 10%	.17
63-5238	300 Ohm Resistor 10W. - 10%	.80
76-1398	Drive Shaft	1.00
76-1399	Extension Shaft	.25
76-1403	Guide Shaft	.10
78-1099	Three Contact Socket	.20
78-1314	Wafer Socket - 12AU6 - 12BA6 (3 required)	.30
78-1318	Wafer Socket - 12BE6	.35
78-1364	Noval Wafer Socket - 12DT8	.35
78-1590	Wafer Socket - 12AL-5	.35
79-174-12	#18 Sleeving - Yellow (4 required)	.03
79-205-8	#16 Sleeving - Yellow	
80-209	Drive Cord Tension Spring	.10
80-1140	Drive Cord Tension Spring	.10
80-1467	Retaining Spring	.05
80-1468	Grounding Spring	.05
83-2612	Two Lug Terminal Strip	.05
83-3561	Cable Retaining Strip	.05
83-3843	Twelve Lug Terminal Strip	.35
83-3862	Pointer Support Strip (1 pt. of ea. S-57222)	.20
83-4086	Insulating Strip	.03
83-4751	Special Terminal Strip	.15
33-5540	Insulating Strip (used on 85-910)	
83-5727	Insulating Strip (used on 85-910)	
83-5785	Single Lug Terminal Strip	
85-910	Bandswitch	
86-328	Wire Retaining Terminal	.03
86-334	Socket Terminal (4 used on 52-1109)	.10
86-370	Socket Terminal (5 required)	.03
93-993	Bakelite Washer (used on 85-910)	.03
94-613	Iron Core Bushing (2 required)	.10
95-1505	2nd I.F. Transformer - AM	2.50
95-1718	1st I.F. Transformer - AM	2.50
95-1866	Discriminator Transformer - FM	2.50
95-1919	2nd & 3rd I.F. Transformer - FM (2 required)	2.50
95-2120	1st I.F. Transformer - FM	2.50
103-47	Diode	3.75
105-42	R/C Network	.50
105-79	R/C Network	.50
113-8	6-32 x 1/4 x 1/4 Hex Hd. Machine Screw - Nickel Plate - Int. Lockwasher Attached (3 mt. 22-3961)	.03

PART NO.	DESCRIPTION	PRICE
CHASSIS 6LO1Z9 (Cont'd.)		
114-344	6-20 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (2 used on 12-4199)	.03
114-564	8-18 x 5/16 Hex Hd. Self-Tap Screw - Stat. Bronze - Flat Washer attached (used on S-64124)	.03
114-809	8-18 x 3/16 Hex Hd. Self-Tap Screw - Stat. Bronze (1 used on S-64124 & 2 used on ea. S-64123 & 57-4806)	.03
126-937	Tube Shield & Base	.10
126-1031	Tube Shield & Base	.10
126-1063	Shield	.15
149-211	Iron Core (part of S-61505)	.10
149-311	Ferrite Sleeve	.10
149-335	Iron Core & Spring (used on 12-3385)	.25
149-336	Iron Core & Spring (used on 12-3385)	.25
188-232	Retaining Ring (1 pt. of ea. S-57222 & 1 used on ea. 76-1398 & 76-1399)	.03
199-381	Shielded Paper Sleeve	.05
S-52362	FM Antenna Coil Assembly	.60
S-54511	Shielded Lead & Plug Assembly	1.25
S-57222	Pointer Support Strip & Ring Assembly (2 required)	.15
S-61505	AM Oscillator Coil Assembly	1.00
S-62836	Drive Cord & Eyelet Assbly. - 25-3/8"	.15
S-62887	FM Detector Coil Assembly	.60
S-63622	Drive Cord & Eyelet Assembly - 7-7/8"	.15
S-63623	Drive Cord & Eyelet Assbly. - 13-7/8"	.15
S-63625	Drive Cord & Eyelet Assbly. - 35-5/8"	.15
S-64123	Bracket & Pulley Assembly - L.H.	.50
S-64124	Bracket & Pulley Assembly - R.H.	.50
S-64572	Loop Loading Coil Assembly	1.00
S-64580	FM Oscillator Coil Assembly	1.00
	CHASSIS 7LO1Z9	
12-3385	Tuner Bracket	.40
12-4199	Support Bracket	.20
17-170	Cable Clamp	.10
19-238	Coil Mtg. Clip (1 pt of ea. S-52362 & S-61505)	.10
19-322	Coil Mtg. Clip (2 required)	.05
22-3	.01 Mf Disc Capacitor - 500V. (14 required)	.30
22-5	100 Pf Disc Capacitor - 500V. (2 required)	.25
22-9	100 Pf Disc Capacitor - 500V.	.25
22-13	.0033 Mf Disc Capacitor - 500V.	.25
22-14	.0047 Mf Disc Capacitor - 500V.	.25
22-16	470 Pf Disc Capacitor - 500V. (2 req'd.)	.25
22-18	.0022 Mf Disc Capacitor - 500V.	.25
22-1888	.001 Mf Ceramic Capacitor - 500V. (used on S-62887)	.25
22-2569	.047 Mf Capacitor - 600V. (2 required)	.40
22-3318	.001 Mf Disc Capacitor - 25V.	.25
22-3456	2 x 12 Pf Disc Capacitor - 500V. (used on S-64580)	.30
22-3537	.047 Mf Capacitor - 200V.	.30
22-3591	.1 Mf Capacitor - 200V.	.30
22-3621	22 Pf Disc Capacitor - 500V. (used on S-64580)	.25
22-3626	.22 Mf Capacitor - 100V.	.50
22-3627	.047 Mf Capacitor - 100V.	.35
22-3675	10 Pf Disc Capacitor - 500V. (used on S-64580)	.25
22-3774	2 Pf Disc Capacitor - 500V.	.25
22-3961	Variable Capacitor	3.75
22-4613	Feed Thru Capacitor (5 required)	.10
22-5325	26 Pf Disc Capacitor	.35
24-1239	Tuner Cover	
26-1321	Dial Scale	
43-519	Socket Contact Housing (used on 52-996)	.20
43-570	Socket Contact Housing	.45
52-996	Four Conductor Cable	.65
52-1242	Two Conductor Shielded Lead	.85

PART NO.	DESCRIPTION	PRICE
54-139	3/8-32 x 9/16 Palnut - Cadmium (used on 85-907)	.03
56-426	Roll Pin (4 required)	.05
56-512	Roll Pin (2 required)	.03
57-4806	Dial Background Plate	.25
58-214	Single Prong Plug (2 used on 52-1242)	.10
59-655	Dial Pointer	
63-1744	100 Ohm Resistor 1/2W. - 20%	.17
63-1779	680 Ohm Resistor 1/2W. - 20% (4 req'd.)	.17
63-1796	1800 Ohm Resistor 1/2W. - 10%	.17
63-1800	2200 Ohm Resistor 1/2W. - 20%	.17
63-1835	15K Ohm Resistor 1/2W. - 20%	.17
63-1838	18K Ohm Resistor 1/2W. - 10%	.17
63-1842	22K Ohm Resistor 1/2W. - 20%	.17
63-1845	27K Ohm Resistor 1/2W. - 10%	.17
63-1848	33K Ohm Resistor 1/2W. - 10%	.17
63-1855	47K Ohm Resistor 1/2W. - 10% (2 req'd.)	.17
63-1856	47K Ohm Resistor 1/2W - 20% (2 req'd.)	.17
63-1859	56K Ohm Resistor 1/2W. - 10% (used on S-64580)	.17
63-1862	68K Ohm Resistor 1/2W. - 10%	.17
63-1866	82K Ohm Resistor 1/2W. - 10%	.17
63-1869	100K Ohm Resistor 1/2W. - 10% (2 required)	.17
63-1880	180K Ohm Resistor 1/2W. - 10% (2 required)	.17
63-1890	330K Ohm Resistor 1/2W. - 10%	.17
63-1897	470K Ohm Resistor 1/2W. - 10%	.17
63-1912	1 Megohm Resistor 1/2W. - 20% (6 required)	.17
63-1926	2.2 Megohm Resistor 1/2W. - 20% (3 required)	.17
63-1939	4.7 Megohm Resistor 1/2W. - 10%	.17
63-1940	4.7 Megohm Resistor 1/2W. - 20%	.17
63-1954	10 Megohm Resistor 1/2W. - 20%	.17
63-4199	2200 Ohm Resistor 1/4W. - 10%	.17
63-4283	220K Ohm Resistor 1/4W. - 10%	.17
63-4519	2.7 Ohm Resistor 1/2W. - 10%	.17
63-4851	125 Ohm Resistor 4W. - 10%	.65
63-4880	Potentiometer	1.40
76-1398	Drive Shaft	1.00
76-1399	Extension Shaft	.25
76-1403	Guide Shaft	.10
78-1099	Three Contact Socket	.20
78-1314	Wafer Socket - 12AU6 - 12BA6 (3 required)	.30
78-1318	Wafer Socket - 12BE6	.35
78-1319	Noval Wafer Socket - 19EA8	.35
78-1591	Noval Wafer Socket - 12GQ7	.35
78-1595	Wafer Socket - 12DT8	.35
79-174-12	#18 Sleeving - Yellow (8 required)	.03
79-205-8	#16 Sleeving - Yellow	.03
80-209	Drive Cord Tension Spring	.10
80-1140	Drive Cord Tension Spring	.10
80-1467	Retaining Spring	.05
80-1468	Grounding Spring	.05
83-1693	Two Lug Terminal Strip	.10
83-3265	Five Lug Terminal Strip (part of S-64261)	.10
83-3561	Cable Retaining Strip	.05
83-3652	Three Lug Terminal Strip	.05
83-3843	Twelve Lug Terminal Strip	.35
83-3862	Pointer Support Strip (1 part of ea. S-57222)	.20
83-4086	Insulating Strip	.03
83-4125	Two Lug Terminal Strip	.10
83-4751	Special Terminal Strip	.15
83-5540	Insulating Strip (used on 85-907)	.10
83-5727	Insulating Strip	
83-5785	Single Lug Terminal Strip	
85-907	Bandswitch	7.05
86-334	Socket Terminal (4 used on 52-996)	.10
86-370	Socket Terminal (5 required)	.03
93-993	Bakelite Washer (used on 85-907)	.03
94-613	Iron Core Bushing (2 required)	.10

PART NO.	DESCRIPTION	PRICE
CHASSIS 7L01Z9 (Cont'd.)		
95-1505	2nd I.F. Transformer - AM	2.50
95-1718	1st I.F. Transformer - AM	2.50
95-1866	Discriminator Transformer - FM	3.00
95-1919	2nd & 3rd I.F. Transformer - FM (2 required)	2.50
95-2073	Input Mixer Transformer	2.50
95-2076	Doubler Mixer Transformer	4.50
95-2077	Detector Mixer Transformer	3.00
95-2078	Trap Coil Transformer	2.50
95-2120	1st I.F. Transformer - FM	2.50
103-23	Diode (2 required)	.75
103-34	Diode	1.35
103-47	A.F.C. Diode	3.75
105-42	R/C Network	.50
105-78	R/C Network	1.00
105-79	R/C Network (used on S-52362)	.50
113-8	6-32 x 1/4 x 1/4 Hex Hd. Machine Screw - Nickel Plate Int. Lock-washer Attached (3 used on 22-3961)	.03
114-344	6-20 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (2 used on 12-4199)	.03
114-594	8-18 x 3/8 Hex Hd. Self-Tap Screw - Stat. Bronze - Flat Washer Attached (used on 17-170)	.03
114-809	8-18 x 3/16 Hex Hd. Self-Tap Screw - Stat. Bronze (1 used on S-64261 & 2 used on ea. 57-4806 & S-64123)	.03
126-937	Tube Shield & Base	.10
126-1063	Shield	.15
126-1067	Tube Shield & Base	.10
149-211	Iron Core (part of S-61505)	.10
149-311	Ferrite Sleeve	.10
149-333	Ferrite Sleeve	.05
149-335	Iron Core & Spring (used on 12-3385)	.25
149-336	Iron Core & Spring (used on 12-3385)	.25
188-232	Retaining Ring (1 pt. of ea. S-57222 & 1 used on ea. 76-1398 & 76-1399)	.03
S-52362	FM Antenna Coil Assembly	.60
S-57222	Pointer Support Strip & Ring Assembly (2 required)	.15
S-61505	AM Oscillator Coil Assembly	1.00
S-62836	Drive Cord & Eyelet Assembly - 25-3/8"	.15
S-62887	FM Detector Coil Assembly	.60
S-63622	Drive Cord & Eyelet Assbly. - 7-7/8"	.15
S-63623	Drive Cord & Eyelet Assbly. - 13-7/8"	.15
S-63625	Drive Cord & Eyelet Assbly. - 35-5/8"	.15
S-64123	Bracket & Pulley Assembly - L.H.	.50
S-64261	Bracket & Pulley Assembly - R.H.	.65
S-64572	Loop Loading Coil Assembly	1.00
S-64580	FM Oscillator Coil Assembly	1.00
	CHASSIS 8NT02	
12-4228	Heat Sink (2 required)	.35
12-4273	Electrolytic Mtg. Bracket	.05
17-126	Cable Clamp (Joins 52-1100 & 52-1103)	.10
17-141	Cable Clamp (used on S-63542)	.20
22-3	.01 Mf Disc Capacitor - 500V.	.30
22-17	.001 Mf Disc Capacitor - 1KV	.25
22-2704	.0068 Mf Disc Capacitor - 500V. (2 required)	.30
22-3014	820 Pf Mica Capacitor - 500V. (2 required)	.35
22-3034	.05 Mf Disc Capacitor - 25V. (2 req'd.)	.45
22-3630	.068 Mf Capacitor - 50V. (2 required)	.30
22-3687	1 Mf Electrolytic Capacitor - 50V. (2 required)	.90
22-3693	Electrolytic Capacitor	4.15
22-3694	.1 Mf Capacitor - 100V. (4 required)	.35
22-3896	5 Mf Electrolytic (4 required)	1.00
22-4619	2 x 100 Mf Electrolytic Capacitor-6V.	1.15
22-4620	Dual Electrolytic Capacitor 500/25V. 200/25V.	2.85
22-5167	1000 Mf Electrolytic Capacitor - 30V.	3.20
22-5175	Electrolytic Capacitor - 25V. (2 req'd.)	1.05
22-5182	.033 Mf Capacitor - 50V. (2 required)	
43-573	Socket Contact Housing	.45
52-1100	Four Conductor Cable	.50
52-1103	Two Conductor Cable	.15
54-139	3/8-32 x 9/16 Palnut - Cadmium (1 mts. ea. 63-6371, 63-6372 & 63-6373)	.03
58-238	Three Prong Plug (part of S-63542)	.10
58-246	Two Prong A.C. Plug (pt. of S-59959)	.15
63-1743	100 Ohm Resistor - 1/2W. - 10% (2 required)	.17
63-1754	180 Ohm Resistor - 1/2W. - 10% (2 required)	.17
63-1771	470 Ohm Resistor 1/2W. - 10%	.17
63-1785	1K Ohm Resistor - 1/2W. - 10% (2 required)	
63-1799	2200 Ohm Resistor 1/2W. - 10% (2 required)	.17
63-1820	6800 Ohm Resistor 1/2W. - 10% (2 required)	
63-1848	33K Ohm Resistor 1/2W. - 10% (2 req'd.)	
63-1855	47K Ohm Resistor 1/2W. - 10% (4 req'd.)	
63-1859	56K Ohm Resistor 1/2W. - 10% (2 req'd.)	
63-1862	68K Ohm Resistor 1/2W. - 10%	
63-1869	100K Ohm Resistor 1/2W. - 10% (2 req'd.)	
63-1877	150 Ohm Resistor 1/2W. - 20% (2 req'd.)	
63-1880	180K Ohm Resistor 1/2W. - 10% (4 req'd.)	
63-1883	220K Ohm Resistor 1/2W. - 10% (2 req'd.)	.17
63-4512	1.8 Ohm Resistor 1/2W. - 10% (4 req'd.)	.15
63-4526	3.9 Ohm Resistor 1/2W. - 10% (4 req'd.)	.15
63-5193	22 Ohm Fusing Resistor	.65
63-5497	2 Ohm Resistor 3W. - 5%	.35
63-5652	390 Ohm Resistor 2W. - 10%	.30
63-5656	470 Ohm Resistor 2W. - 10%	.34
63-6017	56 Ohm Resistor 1W. - 10%	.25
63-6049	330 Ohm Resistor 1W. - 10% (2 req'd.)	.20
63-6371	Dual Treble Control	2.00
63-6372	Dual Bass Control & Switch	2.85
63-6373	Dual Loudness Control	2.80
79-174-12	#18 Sleeving - Yellow - 1-1/2"	.03
79-209-8	#22 Sleeving - Yellow - 1" (one furnished as part of 121-403)	.03
79-210-8	#22 Sleeving - Green - 1" (one furnished as part of 121-403)	.03
79-211-8	#22 Sleeving - Blue - 1" (one furnished as part of 121-403)	.03
83-3042	Rubber Strip (3 required)	.03
83-5052	6 Lug Terminal Strip - Grip Type	.20
83-5054	Insulating Strip	.03
83-5284	5 Lug Terminal Strip - Grip Type	.15
83-5291	Insulating Strip	.03
83-5326	24 Lug Terminal Strip - Grip Type	.65
83-5327	52 Lug Terminal Strip - Grip Type	1.20
83-5449	7 Lug Terminal Strip	.15
83-5540	Insulating Strip	.10
83-5770	5 Lug Terminal Strip	
86-328	Wire Retaining Terminal	.03
86-371	Socket Terminal (5 used on 43-573)	.03
93-993	Insulating Washer (used on 63-6373)	.03
94-1171	Insulating Bushing (3 required)	.10
95-2339	Autoformer	4.35
95-2340	Driver Transformer (2 required)	2.95
95-2356	Output Transformer (2 required)	2.20
114-801	8-18 x 5/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (1 mts. ea. 95-2339 & 95-2340 & 4 mt. 95-2356)	.03
114-802	8-18 x 5/16 x 1/4 Hex Washer Hd. Self-Tap Screw - Stat. Bronze (2 mt. 12-4228)	.03
114-816	8-18 x 5/16 Hex Hd. Self-Tap Screw - Stat. Bronze - Flat Washer Attached (1 mts. ea. 17-126 & 17-141)	.05
121-403	Transistor (4 required)	1.65

PART NO.	DESCRIPTION	PRICE
CHASSIS 8NT02 (Cont'd.)		
121-433	Transistor - Pre-Amp (2 required)	.90
121-434	Transistor - Driver (2 required)	.90
199-350	Spacer Sleeve (1 used on ea. 94-1171)	.03
199-397	Shielded Paper Sleeve	.05
212-71	Rectifier (3 required)	1.25
or		
212-27	Rectifier (3 required)	2.00
S-59959	A.C. Plug & Bracket Assembly	.40
S-63542	Phono Input Cable Assembly	1.25
	CHASSIS 10NT01	
11-210	A.C. Line Cord & Plug	
17-181	Cable Clamp	.03
22-3034	.05 Mf Disc Capacitor - 25V. (2 req'd.)	.45
22-3393	.01 Mf Disc Capacitor - 25V. (4 req'd.)	.40
22-3615	1 Mf Electrolytic Capacitor - 25V. (2 required)	1.25
22-3654	.47 Pf Disc Capacitor - 3V. (2 req'd.)	.45
22-3896	5 Mf Electrolytic Capacitor - 25V. (2 required)	1.00
22-4628	2 x 100 Mf Electrolytic Capacitor - 15V.	1.60
22-5167	1000 Mf Electrolytic Capacitor - 30V.	3.20
22-5168	300 Mf Electrolytic Capacitor - 25V. (2 required)	1.35
22-5251	.15 Mf Disc Capacitor - 12V. (2 used for Bass Control)	
22-5257	.1 Mf Disc Capacitor - 12V. (2 used on Chassis, & 2 used on ea. 63-6480)	
22-5258	.22 Mf Disc Capacitor - 12V. (2 req'd.)	
22-5259	.0082 Mf Disc Capacitor - 500V. (2 required)	
22-5260	2 x 500 Mf Electrolytic Capacitor-25V.	
23-23	Wire Connector (3 required)	.10
43-519	Socket Housing (Male)	.20
52-1223	Two Conductor Shielded Lead	
52-1270	Three Conductor Cable	
54-139	3/8-32 x 9/16 Palnut - Cadmium (mts. 63-6481)	.03
54-271	6-32 x 9/16 Palnut - Cadmium (1 used on ea. 114-58)	.03
58-214	Single Prong Plug (2 used on 52-1223)	.10
63-1736	68 Ohm Resistor 1/2W. - 10% (3 req'd.)	.17
63-1747	120 Ohm Resistor 1/2W. - 10% (2 req'd.)	.17
63-1761	270 Ohm Resistor 1/2W. - 10% (2 req'd.)	.17
63-1772	470 Ohm Resistor 1/2W. - 20% (2 req'd.)	.17
63-1782	820 Ohm Resistor 1/2W. - 10% (2 used for Bass Control)	.17
63-1796	1800 Ohm Resistor 1/2W. - 10% (2 required)	.17
63-1799	2200 Ohm Resistor 1/2W. - 10% (2 required)	.17
63-1800	2200 Ohm Resistor 1/2W. - 20% (2 required)	.17
63-1803	2700 Ohm Resistor 1/2W. - 10% (2 used on Chassis, & 2 used for Treble Control)	
63-1813	4700 Ohm Resistor 1/2W. - 10% (2 req'd.)	.17
63-1849	33K Ohm Resistor 1/2W. - 20% (2 req'd.)	.17
63-1866	82K Ohm Resistor 1/2W. - 10% (2 req'd.)	.17
63-1873	120K Ohm Resistor 1/2W. - 10% (2 required)	.17
63-1876	150K Ohm Resistor 1/2W. - 10% (2 required)	.17
63-1897	470 Ohm Resistor 1/2W. - 10% (2 req'd.)	.17
63-1911	1 Megohm Resistor 1/2W. - 10% (2 req'd)	
63-4533	5.6 Ohm Resistor 1/2W. - 10% (4 req'd.)	.17
63-5944	1 Ohm Resistor 1W. - 10% (4 required)	
63-6021	68 Ohm Resistor 1W. - 10%	.20
63-6052	390 Ohm Resistor 1W. - 10% (2 required)	.25
63-6480	Dual Tone Control (2 required)	
63-6481	Dual Loudness Control	
83-3265	Five Lug Terminal Strip	.10
83-3652	Three Lug Terminal Strip	.05

PART NO.	DESCRIPTION	PRICE
83-5277	Insulating Strip (1 pt. of ea. 121-418)	.03
83-5577	Terminal Board	
86-199	Shakeproof Terminal (1 used on Chassis Base, & 1 pt. of ea. 121-418)	.03
86-334	Connector Terminal (3 used on 52-1270)	.10
93-415	#6 External Shakeproof Lockwasher (2 required)	.03
93-542	Shoulder Washer (2 pt. of ea. 121-148)	
95-2386	Power Transformer	
95-2388	Driver Transformer (2 required)	
114-58	6-32 x 3/8 Hex Hd. Mach. Screw - Nickel Plate (2 mt. ea. 121-418)	.03
114-801	8-18 x 5/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (1 used on Chassis Base, & 1 used on ea. 95-2388)	.03
121-417	Transistor - Driver (2 required)	
121-418	Transistor - Power Output (4 required)	
121-433	Transistor - Pre-Amp (4 required)	
212-71	Silicon Rectifier (2 required)	
or		
212-27	Silicon Rectifier (2 required)	
	CHASSIS 10L02Z	
12-3385	Tuner Bracket	.40
12-3799	Coil Support Bracket	.25
12-3842	Antenna Mounting Bracket (2 required)	.25
12-4008	Dial Light Mounting Bracket	1.25
17-135	Cable Clamp	.20
19-238	Coil Mounting Clip (1 pt. of ea. S-52362 & S-50127)	.10
19-322	Coil Mounting Clip (2 used on 12-3799)	.05
22-3	.01 Mf Disc Capacitor - 500V. (11 req'd)	.30
22-5	100 Pf Disc Capacitor - 500V. (2 req'd.)	.25
22-9	100 Pf Disc Capacitor - 500V.	.25
22-13	.0033 Mf Disc Capacitor - 500V. (3 req'd)	.25
22-14	.0047 Mf Disc Capacitor - 500V. (5 req'd)	.25
22-16	470 Pf Disc Capacitor - 500V.	.25
22-18	.0022 Mf Disc Capacitor - 500V. (3 req'd)	.25
22-1813	.022 Mf Capacitor - 600V.	.30
22-1852	7.5 Pf Ceramic Capacitor - 500V.	.25
22-1888	.001 Mf Ceramic Capacitor - 500V. (used on S-62887)	.25
22-2514	9 Pf Disc Capacitor - 500V. (used on S-62889)	.25
22-2569	.047 Mf Capacitor - 600V. (2 required)	.40
22-2655	.01 Mf Disc Capacitor - 1400V. (used on 63-5232)	.50
22-2732	.001 Mf Feed - Thru Capacitor - 500V. (5 required)	.30
22-3318	.001 Mf Disc Capacitor - 25V	.25
22-3366	1000 Pf Mica Capacitor - 500V.	.40
22-3456	2 x 12 Pf Disc Capacitor - 500V. (used on S-62889)	.30
22-3577	.1 Mf Capacitor - 600V.	.40
22-3621	22 Pf Disc Capacitor - 500V. (used on S-62889)	.25
22-3626	.22 Mf Capacitor - 100V.	.50
22-3627	.047 Mf Capacitor - 100V. (2 required)	.35
22-3694	.1 Mf Capacitor - 100V.	.35
22-3774	2 Pf Disc Capacitor - 500V.	.25
22-3809	Variable Capacitor	3.75
22-3859	Electrolytic 10/25 100/50	2.25
22-3971	Electrolytic 60/160 250/150 300/200	5.50
22-5325	26 Pf Disc Capacitor - 500V.	
24-1068	Tuner Cover	.50
26-966	Dial Scale	6.25
44-46	Dual Connector Jack (pt. of S-59722)	.20
54-139	3/8-32 x 9/16 Palnut - Cadmium (1 used on ea. 63-5232, 63-5234, 63-5235 & 85-803)	.03
56-426	Roll Pin (4 required)	.05
56-512	Roll Pin (2 required)	.03
57-5077	Dial Background Plate	1.55
58-209	A.C Plug (pt. of S-66709)	.35

PART NO.	DESCRIPTION	PRICE
CHASSIS 10LO2Z (Cont'd.)		
58-214	Single Prong Plug (2 pt. of S-54511)	.10
59-614	Dial Pointer (2 required)	.25
63-1744	100 Ohm Resistor 1/2W. - 20% (3 req'd.)	.17
63-1772	470 Ohm Resistor 1/2W. - 20% (2 req'd.)	.17
63-1779	680 Ohm Resistor 1/2W. - 20% (2 req'd.)	.17
63-1786	1000 Ohm Resistor 1/2W. - 20% (3 req'd.)	.17
63-1796	1800 Ohm Resistor 1/2W. - 10%	.17
63-1799	2200 Ohm Resistor 1/2W. - 10%	.17
63-1807	3300 Ohm Resistor 1/2W. - 20%	.17
63-1835	15K Ohm Resistor 1/2W. - 20%	.17
63-1838	18K Ohm Resistor 1/2W. - 10%	.17
63-1842	22K Ohm Resistor 1/2W. - 20%	.17
63-1848	33K Ohm Resistor 1/2W. - 10%	
63-1852	39K Ohm Resistor 1/2W. - 10%	.17
63-1855	47K Ohm Resistor 1/2W. - 10%	.17
63-1856	47K Ohm Resistor 1/2W. - 20% (2 req'd.)	.17
63-1859	56K Ohm Resistor 1/2W. - 10% (used on S-62889)	.17
63-1862	68K Ohm Resistor 1/2W. - 10%	
63-1866	82K Ohm Resistor 1/2W. - 10% (3 req'd.)	.17
63-1869	100K Ohm Resistor 1/2W.	
63-1870	100K Ohm Resistor 1/2W. - 20% (2 req'd.)	.17
63-1880	180K Ohm Resistor 1/2W. - 10% (2 req'd.)	.17
63-1891	330K Ohm Resistor 1/2W. - 20% (2 req'd.)	.17
63-1894	390K Ohm Resistor 1/2W. 10% (2 req'd.)	.17
63-1897	470K Ohm Resistor 1/2W. - 10%	.17
63-1912	1 Megohm Resistor 1/2W. - 20% (5 req'd.)	.17
63-1926	2.2 Megohm Resistor 1/2W. - 20% (4 required)	.17
63-1939	4.7 Megohm Resistor 1/2W. - 10%	.17
63-1940	4.7 Megohm Resistor 1/2W. - 20%	.17
63-1954	10 Megohm Resistor 1/2W. - 20%	.17
63-3983	33 Ohm Resistor 5W. - 10%	.75
63-4199	2200 Ohm Resistor 1/4W. - 10%	.17
63-4519	2.7 Ohm Resistor 1/2W. - 10%	.17
63-4828	130 Ohm Resistor 4W. - 10%	.65
63-4880	Potentiometer	1.40
63-5232	Dual Loudness Control	3.50
63-5234	Dual Bass Tone Control	3.00
63-5235	Dual Treble Tone Control	3.00
63-5243	Fusing Type Resistor	.50
63-5245	110 Ohm Resistor 3W. - 10%	.45
63-5655	470 Ohm Resistor 2W. - 20%	.34
63-6007	33 Ohm Resistor 1W. 10% (2 required)	.25
63-6052	330 Ohm Resistor 1W. - 10% (2 required)	.25
76-1141	Guide Shaft	.10
76-1399	Extension Shaft	.25
76-1418	Drive Shaft	1.00
78-1156	Molded Socket (7695) (2 required)	.25
78-1314	Wafer Socket (12AU6-12BA6) (3 req'd.)	.30
78-1319	Noval Wafer Socket (19EA8-19GQ7) (2 required)	.35
78-1357	Wafer Socket (12BE6)	.35
78-1365	Noval Wafer Socket (12DT8)	.35
78-1397	Pilot Light Socket & Wire	.50
78-1562	Noval Wafer Socket (12AX7A)	.35
79-174-12	#18 Sleeving - Yellow (9 required)	.03
79-205-8	#16 Sleeving - Yellow	.03
80-1188	Tension Spring (Gang)	.10
80-1467	Retaining Spring	.05
80-1468	Grounding Spring	.05
80-1718	Tension Spring (Pointer)	.15
80-1763	Retaining Spring (1 pt. of S-61711)	.03
83-2715	Three Lug Terminal Strip	.05
83-3265	Five Lug Terminal Strip	.10
83-3670	Six Lug Terminal Strip	.15
83-3671	Five Lug Terminal Strip	.15
83-3674	Seven Lug Terminal Strip (1 required)	.20
83-3676	Four Lug Terminal Strip (3 required)	.10
83-3889	Single Lug Terminal Strip	.05
83-4764	Six Lug Terminal Strip (pt. of S-66709)	.20
83-5540	Insulating Strip (1 used on ea. 63-5232 & 85-803)	.10
85-803	Bandswitch	4.50
86-255	Spade Terminal	.03
86-312	Terminal	.03
86-328	Wire Retaining Terminal (2 required)	.03
86-413	Terminal & Screw (2 used on S-63474)	.10
90-665	Spacer (2 used on S-59722)	.03
90-667	Spacer (2 used on 63-3252)	.03
93-993	Bakelite Washer (1 used on ea. 63-5232 & 85-803)	.03
93-1183	Fibre Washer (2 used on ea. 78-1156)	.03
94-613	Iron Core Bushing (2 used on 12-3385)	.10
94-1274	Nylon Bushing (used on S-66709)	.10
95-1505	2nd I.F. Transformer (AM)	2.50
95-1718	1st I.F. Transformer (AM)	2.50
95-1866	Discriminator Transformer	2.50
95-1919	Limiter & 2nd I.F. Transformer (FM) (2 required)	2.50
95-2073	Input Coil	2.50
95-2076	Doubler Coil	4.50
95-2077	Detector Coil	3.00
95-2078	Trap Coil	2.50
95-2120	1st I.F. Transformer (FM)	2.50
95-2143	Audio Output Transformer	3.50
95-2229	Autoformer	2.00
95-2232	Audio Output Transformer	2.55
97-607	Chassis Mounting Stud (4 required)	.10
100-249	Pilot Light Bulb (2 required)	.18
103-23	Crystal Diode (2 required)	.75
103-34	Crystal Diode (2 required)	1.35
103-47	Silicon Diode	3.75
105-42	R/C Network	.50
105-78	Integnet	1.00
105-79	Integnet (used on S-52362)	.50
112-1608	8-18 x 5/16 Phillips Pan Hd. Self-Tap Screw - Black Oxide (2 used on 12-4008)	
113-26	6-32 x 1/4 x 1/4 Hex Hd. Machine Screw - External Lockwasher (2 used on 12-3799)	.03
113-160	6-32 x 11/16 x 1/4 Hex Hd. Machine Screw - Cadmium - Internal Lock-washer (2 used on 63-5232)	.03
114-26	8-18 x 1/4 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (2 used on 126-1074)	.03
114-352	6-20 x 7/8 x 1/4 Hex Hd. Self-Tap Screw Stat. Bronze (2 used on S-59722)	.03
114-594	8-18 x 3/8 Hex Hd. Self-Tap Screw - Stat. Bronze - Flat Washer Attached (2 used on S-63474)	.03
114-801	8-18 x 5/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (2 used on ea. S-63814, S-63815, & S-66709, 12-3842, 95-2232 & 95-2143 & 4 used on 57-4644)	.03
125-26	Rubber Grommet (2 used on ea. 78-1156)	.03
126-937	Tube Shield & Base	.10
126-1065	Shield	.10
126-1074	Chassis Heat Shield	.15
149-211	Iron Core (pt. of S-50127)	.10
149-335	Iron Core & Spring (used on 12-3385)	.25
149-336	Iron Core & Spring (used on 12-3385)	.25
188-232	Clamping Ring (2 required)	.03
199-396	Shielded Paper Sleeve	.05
212-27	Silicon Rectifier	2.00
S-50127	AM Oscillator Coil Assembly	1.25
S-52362	FM Antenna Coil Assembly	.60
S-54511	Shielded Lead & Plug Assembly	1.25
S-59541	Drive Cord & Eyelet Assembly	.15
S-59543	Drive Cord & Eyelet Assembly	.15
S-59722	Connector Jack & Mounting Strip Assembly	.40
S-61711	Pointer Support Strip & Ring Assbly.	.10
S-62887	Detector Coil Assembly (FM)	.60
S-62889	Oscillator Coil Assembly (FM)	1.00

PART NO.	DESCRIPTION	PRICE
CHASSIS 10LO2Z (Cont'd)		
S-63474	Wavemagnet Assembly	1.50
S-63489	Drive Cord & Eyelet Assbly. (Pointer)	.15
S-63814	Bracket & Pulley Assembly (L.H.)	.35
S-63815	Bracket & Pulley Assembly (R.H.)	.55
S-65475	Record Changer Power Cable Assbly.	1.25
S-66709	A.C. Plug Mounting Bracket Assbly.	.70
S-66710	Drive Cord & Eyelet Assbly.(Pointer)	.45
	CHASSIS 18XT20	
11-106	Line Cord	1.00
12-4009	Tuner Bracket	.36
12-4409	Switch Mtg. Bracket	
12-4411	Antenna Mtg. Bracket	
19-238	Coil Mtg. Clip (part of S-66580)	.10
19-322	Coil Mtg. Clip (3 required)	.05
20-1256	Trap Coil	.50
20-1422	Trap Coil	
22-3	.01 Mf Disc Capacitor - 500V. (2 req'd.)	.30
or		.10
22-4617	.01 Mf Disc Capacitor - 500V. (2 req'd.)	.10
22-13	.0033 Mf Disc Capacitor - 500V.	.25
22-14	.0047 Mf Disc Capacitor - 500V.(2 req'd)	.25
22-18	.0022 Mf Disc Capacitor - 500V.(2 req'd)	.25
22-2428	1.8 Pf Gimmick Capacitor (2 required)	.25
22-2729	.001 Mf Disc Capacitor - 25V.	.25
22-3010	.01 Mf Disc Capacitor - 25V. (2 required)	.45
22-3034	.05 Mf Disc Capacitor - 25V. (15 req'd.)	.45
22-3177	390 Pf Disc Capacitor (3 required)	.25
22-3400	3.9 Pf Gimmick Capacitor	.45
22-3443	.47 Mf Capacitor - 50V.	.60
22-3448	10 Mf Electrolytic Capacitor - 15V.	1.00
22-3550	3.3 Pf Gimmick Capacitor	
22-3588	.47 Mf Disc Capacitor - 12V. (2 required)	.30
22-3621	22 Pf Disc Capacitor	.25
22-3630	.068 Mf Mylar Capacitor - 50V. (2 req'd.)	.30
22-3644	820 Pf Mica Capacitor - 100V. (2 req'd.)	.75
22-3645	1000 Pf Mica Capacitor - 100V.	.75
22-3675	10 Pf Disc Capacitor	.25
22-3710	.22 Mf Capacitor - 50V. (2 required)	.50
22-3896	5Mf Electrolytic Capacitor - 25V. (7 required)	1.00
22-3973	100 Mf Electrolytic Capacitor - 25V.	1.00
22-4523	1.1 Pf Gimmick Capacitor (5 required)	.25
22-4613	Feed-Thru Capacitor (5 required)	.10
22-4620	Electrolytic Capacitor	2.85
22-4628	2 x 100 Mf Electrolytic Capacitor	1.60
22-4674	Two Section Variable Capacitor	
22-5018	.47 Mf Capacitor - 50V.	.60
22-5021	.0068 Mf Disc Capacitor - 1KV.(2 req'd.)	.30
22-5037	.005 Mf Disc Capacitor - 25V. (3 req'd.)	
22-5130	8 Pf Disc Capacitor	.15
22-5167	1000 Electrolytic Capacitor - 30V.	3.20
22-5175	200 Mf Electrolytic Capacitor (2 req'd.)	1.05
22-5182	.033 Mf Capacitor - 50V. (2 required)	
22-5188	.1 Mf Capacitor - 50V.	.35
22-5321	36 Pf Disc Capacitor	
24-1473	Tuner Cover	
43-519	Contact Housing	.20
46-5139	Push Button, Stereo-Monaural	
46-5155	Band Switch Knob	
46-5156	Tone Control Knob (2 required)	
46-5157	Tuning Knob	
46-5158	Dual Loudness Control Knob	
46-5217	Balance Control Knob	
52-1241	Three Conductor Cable	.45
52-1242	Two Conductor Shielded Lead	.85
54-139	3/8-32 x 9/16 Palnut - Cadmium (1 used on ea. 63-6853, 63-6854, 63-6855 & 85-919)	.03
54-549	Tinnerman Speed Nut (6 used on S-73277)	.03
54-633	Transistor Socket Retaining Nut (1 used on ea. 78-1442, 78-1621 & 78-1677)	.10

PART NO.	DESCRIPTION	PRICE
56-426	Roll Pin (4 required)	.05
56-512	Roll Pin (2 required)	.03
58-214	Single Prong Plug (2 required)	.70
59-784	Dial Pointer	.25
63-1701	10 Ohm Resistor - 1/2W. - 10%	.17
63-1719	27 Ohm Resistor - 1/2W. - 10%	.17
63-1736	68 Ohm Resistor - 1/2W. - 10%	
63-1743	100 Ohm Resistor - 1/2W. - 10% (4 req'd)	
63-1754	180 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1761	270 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1764	330 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1768	390 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1771	470 Ohm Resistor - 1/2W. - 10% (9 req'd)	.17
63-1778	680 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1782	820 Ohm Resistor - 1/2W. - 10% (3 req'd)	.17
63-1785	1K Ohm Resistor - 1/2W. - 10% (6 req'd)	
63-1792	1500 Ohm Resistor - 1/2W. - 10% (4 req'd)	.17
63-1796	1800 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1799	2200 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1803	2700 Ohm Resistor - 1/2W. - 10% (2 req'd)	
63-1813	4700 Ohm Resistor - 1/2W. - 10% (5 req'd)	.17
63-1817	5600 Ohm Resistor - 1/2W. - 10%	
63-1820	6800 Ohm Resistor - 1/2W. - 10% (4 req'd)	
63-1824	8200 Ohm Resistor - 1/2W. - 10% (2 req'd)	
63-1827	10K Ohm Resistor - 1/2W. - 10%	
68-1834	15K Ohm Resistor - 1/2W. - 10% (4 req'd)	.17
63-1841	22K Ohm Resistor - 1/2W. - 10%	
63-1845	27K Ohm Resistor - 1/2W. - 10%	.17
63-1848	33K Ohm Resistor - 1/2W. - 10% (3 req'd)	
63-1855	47K Ohm Resistor - 1/2W. - 10% (6 req'd)	
63-1859	56K Ohm Resistor - 1/2W. - 10%	
63-1869	100K Ohm Resistor - 1/2W. - 10% (5 req'd)	
63-1880	180K Ohm Resistor - 1/2W. - 10% (4 req'd)	
63-1883	220K Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1897	470K Ohm Resistor - 1/2W. - 10%	.17
63-1912	1 Megohm Resistor - 1/2W. - 20%	.17
63-4143	100 Ohm Resistor - 1/4W. - 10%	.17
63-4196	1800 Ohm Resistor - 1/4W. - 10%	.17
63-4199	2200 Ohm Resistor - 1/4W. - 10%	.17
63-4213	4700 Ohm Resistor - 1/4W. - 10%	.17
63-4231	12K Ohm Resistor - 1/4W. - 10%	.17
63-4245	27K Ohm Resistor - 1/4W. - 10%	.17
63-4512	1.8 Ohm Resistor - 1/2W. - 10% (4 req'd)	.15
63-4526	3.9 Ohm Resistor - 1/2W. - 10% (4 req'd)	.15
63-5192	Potentiometer	1.40
63-5614	47 Ohm Resistor - 2W. - 10%	
63-6049	330 Ohm Resistor - 1W. - 10% (2 req'd.)	.20
63-6495	Potentiometer	
63-6853	Dual Treble Control	
63-6854	Dual Loudness Control	
63-6855	Dual Bass Control	
76-1403	Tuner Guide Shaft	.10
78-1378	Four Contact Transistor Socket (2 req'd)	.40
78-1442	Transistor Socket	.30
78-1488	Dual Light Socket & Wire	
78-1489	Stereo Indicator Light Socket & Wire	
78-1621	Three Contact Transistor Socket (4 required)	.20
78-1677	Four Contact Transistor Socket (3 req'd)	.40
79-209-8	#18 Sleeving - Yellow - 1" (part of 121-403)	.03
79-210-8	#22 Sleeving - Green - 1"(part of 121-403)	.03
79-211-8	#22 Sleeving - Blue - 1" (part of 121-403)	.03
80-209	Drive Cord Tension Spring	.10
80-1140	Drive Cord Tension Spring	.10
80-1467	Shaft Retaining Spring	.05
80-1468	Grounding Spring	.05
80-1763	Retaining Spring (2 required)	.03
80-1914	Ground Spring	
83-3561	Cable Retaining Strip	.05
83-5170	Three Lug Terminal Strip	.10
83-5171	Insulating Strip	.03
83-5287	Ten Lug Terminal Strip	.25
83-5307	Pointer Support Strip (2 required)	.15

PART NO.	DESCRIPTION	PRICE
CHASSIS 18XT20 (Cont'd.)		
83-5326	Twenty-Four Lug Terminal Strip	.65
83-5327	Fifty-Two Lug Terminal Strip	1.20
83-5328	Eleven Lug Terminal Strip	.35
83-5386	Nine Lug Terminal Strip	.20
83-5430	Nine Lug Terminal Strip	.20
83-5431	Insulating Strip	.03
83-5748	Rubber Channel Strip (2 required)	
83-5749	Rubber Channel Strip (2 required)	
83-5756	Trim Strip (part of S-73277)	
83-5771	Five Lug Terminal Strip	
83-5772	Insulating Strip	
83-5773	Three Lug Terminal Strip (2 required)	
83-5785	Single Lug Terminal Strip	.10
85-892	Stereo-Monaural Switch	1.80
85-919	Five Position Bandswitch	
86-328	Wire Retaining Terminal (3 required)	.03
86-334	Socket Terminal (3 required)	.10
86-388	Connector Terminal (2 required)	.05
94-613	Iron Core Retaining Bushing (2 req'd.)	.10
95-2233	1st I.F. Transformer (AM)	1.75
95-2234	2nd I.F. Transformer (AM)	1.70
95-2236	1st I.F. Transformer (FM)	2.00
95-2313	Doudler Mixer Transformer	3.05
95-2315	Input Mixer Transformer	3.05
95-2316	Trap Coil Transformer	1.86
95-2324	Ratio Detector Transformer	4.75
95-2430	Driver Transformer (2 required)	
95-2432	Power Transformer	
95-2436	3rd I.F. Transformer (AM)	
95-2437	2nd I.F. Transformer (FM)	
95-2438	3rd I.F. Transformer (FM)	
95-2439	38 KC Transformer	
100-249	Pilot Light Bulb (2 required)	.18
100-384	Stereo Indicator Bulb	1.30
103-23	Diode (5 required)	.75
103-39	Diode	3.00
103-74	Diode	.50
103-96	Diode	1.75
105-78	R/C Network	1.00
113-10	6-32 x 3/16 x 1/4 Hex Hd. Machine Screw - Cadmium - Int. Shakeproof Lockwasher (6 required)	.03
114-77	6-20 x 5/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze	.03
114-335	8-18 x 1/2 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (4 required)	.03
114-801	8-18 x 5/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (19 required)	.03
121-348	Transistor (4 required)	1.10
121-381	Transistor	.90
121-383	Transistor	4.95
121-403	Transistor (4 required)	1.65
121-414	Transistor	1.45
121-415	Transistor (2 required)	1.45
121-428	Transistor	1.45
121-433	Transistor (2 required)	.90
121-434	Transistor (2 required)	.90
125-26	Rubber Grommet	.03
125-140	Strain Relief Grommet	.10
126-1207	Shield (FM Tuner)	
149-211	Iron Core (part of S-66580)	.10
171-50	Stereo Lens	
188-232	Clamping Ring	.03
192-389	Dial Crystal	
212-71	Rectifier (2 required)	1.25
S-62887	FM Oscillator Coil Assembly	.60
S-66580	AM Oscillator Coil Assembly	1.55
S-68976	FM Detector Coil Assembly	.80
S-71997	FM Antenna Coil Assembly	
S-73228	Chassis Mtg. Bracket Assembly - L.H.	
S-73229	Chassis Mtg. Bracket Assembly - R.H.	
S-73230	Control Panel Assembly	
S-73248	Background Strip & Dial Scale Assbly.	
S-73253	AM Antenna Assembly	
S-73277	Escutcheon Assembly	
S-73305	Drive Cord & Eyelet Assembly	
S-73306	Drive Cord & Eyelet Assembly	
S-73307	Drive Cord & Eyelet Assembly	
S-73308	Drive Cord & Eyelet Assembly	
	CHASSIS 18XT20Z	
46-5140	Push Button, Stereo-Monaural	
46-5170	Band Switch Knob	
46-5171	Tone Control Knob (2 required)	
46-5172	Dual Loudness Control Knob	
46-5218	Balance Control Knob	
83-5757	Trip Strip (part of S-73304)	
S-73303	Background Strip & Dial Scale Assbly.	
S-73304	Escutcheon Assembly	
	CHASSIS 20XT20	
11-106	Line Cord	1.00
12-4009	Tuner Bracket	.36
12-4409	Switch Mtg. Bracket	
12-4411	Antenna Mtg. Bracket	
19-238	Coil Mtg. Clip (part of S-66580)	.10
19-322	Coil Mtg. Clip (3 required)	.05
20-1256	Trap Coil	.50
20-1422	Trap Coil	
22-3	.01 Mf Disc Capacitor - 500V. (2 req'd.)	.30
or		
22-4617	.01 Mf Disc Capacitor - 500V. (2 req'd.)	.10
22-13	.0033 Mf Disc Capacitor - 500V. (3 required)	.25
22-14	.0047 Mf Disc Capacitor - 500V. (2 required)	.25
22-2376	47 Pf Disc Capacitor - 500V. (2 req'd.)	.25
22-2428	1.8 Pf Gimmick Capacitor (2 req'd.)	.25
22-2729	.001 Mf Disc Capacitor - 25V.	.25
22-3010	.01 Mf Disc Capacitor - 25V. (2 req'd.)	.45
22-3034	.05 Mf Disc Capacitor - 25V. (16 req'd.)	.45
22-3177	390 Pf Disc Capacitor - (3 required)	.25
22-3255	330 Pf Disc Capacitor - (2 required)	.25
22-3400	3.9 Pf Gimmick Capacitor	.45
22-3415	.0068 Mf Disc Capacitor - 25V. (2 required)	
22-3443	.47 Mf Capacitor - 50V. (2 required)	.60
22-3448	10 Mf Electrolytic Capacitor - 15V.	1.00
22-3550	3.3 Pf Gimmick Capacitor	
22-3599	.015 Mf Capacitor - 50V. - (2 required)	.30
22-3621	22 Pf Disc Capacitor	.25
22-3645	1000 Pf Mica Capacitor - 100V.	.75
22-3675	10 Pf Disc Capacitor	.25
22-3687	1 Mf Electrolytic Capacitor - 50V. (6 required)	.90
22-3879	1000 Mf Electrolytic Capacitor - 50V.	4.15
22-3896	5 Mf Electrolytic Capacitor - 25V. (3 required)	1.00
22-3973	100 Mf Electrolytic Capacitor - 25V.	1.00
22-4523	1.1 Pf Gimmick Capacitor (2 required)	.25
22-4613	Feed-Thru Capacitor (5 required)	.10
22-4674	Two Section Variable Capacitor	
22-5012	.15 Mf Capacitor - 50V. (4 required)	.40
22-5056	.02 Mf Disc Capacitor - 25V. (2 req'd.)	.20
22-5037	.005 Mf Disc Capacitor - 25V. (3 req'd.)	
22-5130	8 Pf Disc Capacitor	.15
22-5167	1000 Mf Electrolytic Capacitor - 30V.	3.20
22-5188	.1 Mf Capacitor - 50V.	.35
22-5249	.1 Mf Capacitor - 100V. (2 required)	.35
22-5315	300 Mf Electrolytic Capacitor - 50V. (2 required)	
22-5316	500 Mf Electrolytic Capacitor - 50V.	
22-5321	36 Pf Disc Capacitor	
24-1473	Tuner Cover	
43-519	Contact Housing	.20
46-5139	Push Button, Stereo-Monaural	
46-5155	Band Switch Knob	
46-5157	Tuning Knob	
46-5158	Loudness Control Knob	

PART NO.	DESCRIPTION	PRICE
CHASSIS 20XT20 (Cont'd)		
46-5215	Treble Tone Control Knob	
46-5216	Bass Tone Control Knob	
46-5217	Balance Control Knob	
52-1212	Two Conductor Shielded Lead	.60
52-1213	Two Conductor Shielded Lead	.60
52-1241	Three Conductor Cable	.45
52-1242	Two Conductor Shielded Lead	.85
54-139	3/8-32 x 9/16 Palnut - Cadmium (1 used on ea. 63-6854, 63-6861, 63 63-6889 & 85-920)	.03
54-549	Tinnerman Speed Nut (6 used on S-73566)	.03
54-633	Transistor Socket Retaining Nut (1 used on ea. 78-1442, 78-1621 & 78-1677)	.10
56-426	Roll Pin (4 required)	
56-512	Roll Pin (2 required)	.03
58-214	Single Prong Plug (2 required)	.70
59-614	Dial Pointer	.25
63-1701	10 Ohm Resistor - 1/2W. - 10% (2 req'd.)	.17
63-1743	100 Ohm Resistor - 1/2W. - 10% (3 req'd)	.17
63-1747	120 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1754	180 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1761	270 Ohm Resistor - 1/2W. - 10%	.17
63-1764	330 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1768	390 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1771	470 Ohm Resistor - 1/2W. - 10% (9 req'd)	.17
63-1778	680 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1782	820 Ohm Resistor - 1/2W. - 10% (3 req'd)	.17
63-1785	1K Ohm Resistor - 1/2W. - 10% (4 req'd)	
63-1792	1500 Ohm Resistor - 1/2W. - 10% (8 req'd)	.17
63-1796	1800 Ohm Resistor - 1/2W. - 10%	.17
63-1799	2200 Ohm Resistor - 1/2W. - 10% (4 req'd)	.17
63-1806	3300 Ohm Resistor - 1/2W. - 10%	.17
63-1813	4700 Ohm Resistor - 1/2W. - 10% (5 req'd)	.17
63-1817	5600 Ohm Resistor - 1/2W. - 10%	
63-1820	6800 Ohm Resistor - 1/2W. - 10% (2 req'd)	
63-1824	8200 Ohm Resistor - 1/2W. - 10% (2 req'd)	
63-1827	10K Ohm Resistor - 1/2W. - 10%	
63-1831	12K Ohm Resistor - 1/2W. - 10% (2 req'd)	
63-1834	15K Ohm Resistor - 1/2W. - 10% (7 req'd)	.17
63-1841	22K Ohm Resistor - 1/2W. - 10%	
63-1845	27K Ohm Resistor - 1/2W. - 10%	.17
63-1848	33K Ohm Resistor - 1/2W. - 10% (3 req'd)	
63-1852	39K Ohm Resistor - 1/2W. - 10% (2 req'd)	
63-1855	47K Ohm Resistor - 1/2W. - 10% (4 req'd)	
63-1869	100K Ohm Resistor - 1/2W. - 10% (3 req'd)	
63-1873	120K Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1880	180K Ohm Resistor - 1/2W. - 10% (2 req'd)	
63-1883	220K Ohm Resistor - 1/2W. - 10% (4 req'd)	.17
63-1897	470K Ohm Resistor - 1/2W. - 10%	.17
63-1911	1 Megohm Resistor - 1/2W. - 10%	
63-1912	1 Megohm Resistor - 1/2W. - 20%	.17
63-4143	100 Ohm Resistor - 1/2W. - 10%	.17
63-4196	1800 Ohm Resistor - 1/4W. - 10%	.17
63-4199	2200 Ohm Resistor - 1/4W. - 10%	.17
63-4213	4700 Ohm Resistor - 1/4W. - 10%	.17
63-4231	12K Ohm Resistor - 1/4W. - 10%	.17
63-4245	27K Ohm Resistor - 1/4W. - 10%	.17
63-4533	5.6 Ohm Resistor - 1/2W. - 10% (4 req'd)	.17
63-5192	Potentiometer	1.40
63-5325	1 Ohm Resistor - 1W. - 10% (4 req'd.)	.25
63-6010	39 Ohm Resistor - 1W. - 10%	
63-6045	270 Ohm Resistor - 1W. - 10%	.20
63-6059	560 Ohm Resistor - 1W. - 10% (2 req'd.)	.20
63-6066	820 Ohm Resistor - 1W. - 10% (3 req'd.)	.25
63-6495	Potentiometer	
63-6854	Dual Loudness Control	
63-6821	Dual Treble Control	
63-6889	Dual Bass Control	
76-1403	Tuner Guide Shaft	.10
76-1625	Tuning Shaft	
78-1347	Electrolytic Wafer Socket	.10
78-1378	Four Contact Transistor Socket (2 req'd)	.40
78-1442	Transistor Socket	.30
78-1486	Transistor Socket (4 required)	
78-1488	Dual Light Socket & Wire	
78-1489	Stereo Indicator Light Socket & Wire	
78-1621	Three Contact Transistor Socket (4 required)	.20
78-1677	Four Contact Transistor Socket (3 required)	.40
79-174-8	#18 Sleeving - Yellow - 1"	.03
80-209	Drive Cord Tension Spring	.10
80-1140	Drive Cord Tension Spring	.10
80-1467	Shaft Retaining Spring	.05
80-1468	Grounding Spring	.05
80-1763	Retaining Spring (2 required)	.03
80-1914	Ground Spring	
83-3561	Cable Retaining Strip	.05
83-3826	Two Lug Terminal Strip	
83-4194	Five Lug Terminal Strip	
83-5170	Three Lug Terminal Strip	.10
83-5171	Insulating Strip	.03
83-5277	Insulating Strip - Transistor (4 req'd.)	.03
83-5284	Five Lug Terminal Strip	.15
83-5286	Eight Lug Terminal Strip	.20
83-5287	Ten Lug Terminal Strip	.25
83-5291	Insulating Strip	.03
83-5307	Pointer Support Strip (2 required)	.15
83-5328	Eleven Lug Terminal Strip	.35
83-5386	Nine Lug Terminal Strip	.20
83-5748	Rubber Channel Strip (2 required)	
83-5749	Rubber Channel Strip (2 required)	
83-5758	Trim Strip (part of S-73566)	
83-5773	Three Lug Terminal Strip (2 required)	
83-5785	Single Lug Terminal Strip	
83-5796	Four Lug Terminal Strip (2 required)	
83-5797	Insulating Strip (2 required)	
83-5798	Eleven Lug Terminal Strip	
83-5799	Insulating Strip	
83-5800	Six Lug Terminal Strip	
83-5801	Insulating Strip	
83-5802	Fifty-Seven Lug Terminal Strip	
85-892	Stereo-Monaural Switch	1.80
85-920	Six Position Bandswitch	
86-328	Wire Retaining Terminal (3 required)	.03
86-334	Socket Terminal (4 required)	.10
86-388	Connector Terminal (2 required)	.05
94-613	Iron Core Retaining Bushing (2 req'd.)	.10
95-2233	1st I.F. Transformer (AM)	1.75
95-2234	2nd I.F. Transformer (AM)	1.70
95-2236	1st I.F. Transformer (FM)	2.00
95-2313	Doudler Mixer Transformer	3.05
95-2315	Input Mixer Transformer	3.05
95-2316	Trap Coil Transformer	1.86
95-2324	Ratio Detector Transformer	4.75
95-2430	Driver Transformer (2 required)	
95-2432	Power Transformer	
95-2436	3rd I.F. Transformer (AM)	
95-2437	2nd I.F. Transformer (FM)	
95-2438	3rd I.F. Transformer (FM)	
95-2439	38KC Transformer	
100-249	Pilot Light Bulb (2 required)	.18
100-384	Stereo Indicator Bulb	1.30
103-23	Diode (5 required)	.75
103-39	Diode	3.00
103-74	Diode	.50
103-96	Diode	1.75
105-78	R/C Network	1.00
113-10	6-32 x 3/16 x 1/4 Hex Hd. Machine Screw - Cadmium Int. Shakeproof Lockwasher (3 join S-73228, 83-3561 & 22-4674 & 1 joins 22-4674 & 12-4411)	.03
114-77	6-20 x 5/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze	
114-271	6-20 x 1/2 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (2 mt. ea. 121-418)	.03

PART NO.	DESCRIPTION	PRICE
CHASSIS 20XT20 (Cont'd)		
114-801	8-18 x 5/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (16 required)	.03
121-348	Transistor (4 required)	1.10
121-381	Transistor	.90
121-383	Transistor	4.95
121-403	Transistor (4 required)	1.65
121-414	Transistor	1.45
121-415	Transistor (2 required)	1.45
121-418	Transistor (4 required)	3.55
121-428	Transistor	1.45
121-430	Transistor (2 required)	1.10
121-442	Transistor (2 required)	
125-26	Rubber Grommet	.03
125-140	Strain Relief Grommet	.10
126-1207	Shield (FM Tuner)	
149-211	Iron Core (part of S-66580)	.10
171-50	Stereo Lens	
188-232	Clamping Ring	.03
192-389	Dia Crystal	
212-71	Rectifier (2 required)	1.25
S-62887	FM Oscillator Coil Assembly	.60
S-66580	AM Oscillator Coil Assembly	1.55
S-68976	FM Detector Coil Assembly	.80
S-71997	FM Antenna Coil Assembly	
S-73228	Chassis Mtg. Bracket Assembly - L.H.	
S-73229	Chassis Mtg. Bracket Assembly - R.H.	
S-73230	Control Panel Assembly	
S-73253	AM Antenna Assembly	
S-73305	Drive Cord & Eyelet Assembly	
S-73306	Drive Cord & Eyelet Assembly	
S-73307	Drive Cord & Eyelet Assembly	
S-73308	Drive Cord & Eyelet Assembly	
S-73548	Heat Sink & Socket Assembly (2 req'd.)	
S-73555	Control Panel Assembly	
S-73562	Tape Jack & Bracket Assembly	
S-73565	Background Strip & Dial Scale Assbly.	
S-73566	Escutcheon Assembly	
	CHASSIS 20XT20Z	
46-5140	Push Button, Stereo-Monaural	
46-5170	Bandswitch Knob	
46-5172	Loudness Control Knob	
46-5218	Balance Control Knob	
46-5223	Treble Tone Control Knob	
46-5224	Bass Tone Control Knob	
83-5759	Trim Strip (part of S-73681)	
S-73680	Background Strip & Dial Scale Assbly.	
	CHASSIS 24XT24	
12-3685	Pulley Bearing Bracket	.50
12-3686	Indicator Light Front Bracket (3 req'd.)	.10
12-3691	Switch Mtg. Bracket	.75
12-4120	Variable Capacitor Mtg. Bracket	.55
12-4393	Tuning Meter Bracket	
12-4394	Light Reflector Bracket	
12-4395	Light Reflector Bracket	
17-149	Cable Clamp	.05
19-238	Coil Mtg. Clip (1 part of ea. S-69165 & S-72828)	.10
19-464	Coil Mtg. Clip (part of S-72060)	.05
19-518	Tuning Meter Mtg. Clip (2 required)	
20-1422	Peaking Coil	
20-2033	Peaking Coil (2 required)	.40
22-9	100 Pf Disc Capacitor - 500V.	.25
22-13	.0033 Mf Disc Capacitor - 500V.	.25
22-17	.001 Mf Disc Capacitor - 1000V. (4 required)	.25
22-18	.0022 Mf Disc Capacitor - 500V. (2 req'd)	.25
22-2374	6 Pf Disc Capacitor - 500V.	.25
22-2434	2 Pf Gimmick Capacitor - 500V.	.25
22-2720	1 Pf Gimmick Capacitor - 500V. (3 req'd)	.20
22-2726	50 Mf Electrolytic Capacitor - 10V. (4 required)	1.50
22-2729	.001 Mf Disc Capacitor - 25V.	.25
22-2884	5 Mf Electrolytic Capacitor - (2 req'd.)	1.50
22-3010	.01 Mf Disc Capacitor - 25V. (6 req'd.)	.45
22-3034	.05 Mf Disc Capacitor - 500V. (22 req'd)	.45
22-3177	390 Pf Disc Capacitor (2 required)	.25
22-3246	15 Pf Disc Capacitor	.25
22-3255	330 Pf Disc Capacitor - 500V. (2 req'd)	.25
22-3362	560 Pf Disc Capacitor - 500V.	.25
22-3448	10 Mf Electrolytic Capacitor - 15V.	1.00
22-3467	12 Pf Disc Capacitor	.30
22-3527	.22 Mf Disc Capacitor - 12V.	.40
22-3652	.1 Mf Disc Capacitor - 10V.	.30
22-3670	2 Mf Electrolytic Capacitor - 6V. (2 required)	1.00
22-3675	10 Pf Disc Capacitor - 500V.	.25
22-3687	1 Mf Electrolytic Capacitor - 50V. (4 required)	.90
22-3826	.022 Mf Mylar Capacitor - 100V. (7 req'd)	.30
22-3865	Three Section Variable Capacitor	4.50
22-3861	.0068 Mf Capacitor - 100V. (4 required)	.30
22-3896	5 Mf Electrolytic Capacitor - 25V. (4 required)	1.00
22-4665	4300 Pf Capacitor - 100V.	1.20
22-5012	.15 Mf Mylar Capacitor - 50V. (6 req'd.)	.40
22-5018	.47 Mf Mylar Capacitor - 50V. (2 req'd.)	.60
22-5116	.01 Mf Disc Capacitor - 25V.	.20
22-5168	300 Mf Electrolytic Capacitor - 25V.	1.35
22-5184	.047 Mf Capacitor - 100V.	.30
24-1374	Balance & Volume Reflection Cover	.60
26-1304	FM Dial Scale	
26-1305	AM Dial Scale	
26-1306	Log Scale	
43-570	6 Contact Housing - Male	.45
43-571	9 Contact Housing - Male	.30
46-5021	Push Button - On-Off	
46-5022	Push Button (8 required)	
46-5104	Balance Control Knob	
46-5105	Loudness Control Knob	
46-5106	Bass Control Knob	
46-5107	Treble Control Knob	
46-5108	Presence Control Knob	
46-5109	Twining Control Knob	
52-1067	Two Conductor Shielded Lead - Bandswitch	.50
52-1214	Two Conductor Shielded Lead (used on 43-571)	.65
52-1215	Two Conductor Shielded Lead - Chassis	.45
52-1216	Two Conductor Shielded Lead - Chassis	.45
54-139	3/8-32 x 9/16 Palnut - Cadmium (4 required)	.03
54-541	Self Threading Palnut (5 used on S-73141)	.03
54-633	Transistor Socket Mtg. Nut (21 req'd.)	.10
54-652	Self Threading Palnut (2 used on 24-1374)	.03
56-426	Roll Pin (2 used on Chassis)	.05
56-512	Roll Pin (2 used on 94-1344)	.03
57-4431	Indicator Light Backing Plate (3 req'd)	.05
59-688	Dial Pointer	
61-256	Tone Control Pulley (3 required)	.30
63-1701	10 Ohm Resistor 1/2W. - 10% (3 req'd.)	.17
63-1733	56 Ohm Resistor - 1/2W. - 10%	.17
63-1743	100 Ohm Resistor - 1/2W. - 10% (3 req'd)	.17
63-1757	220 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1761	270 Ohm Resistor - 1/2W. - 10%	.17
63-1764	330 Ohm Resistor - 1/2W. - 10% (4 req'd)	.17
63-1766	360 Ohm Resistor - 1/2W. - 5% (2 req'd)	.34
63-1771	470 Ohm Resistor - 1/2W. - 10% (7 req'd)	.17
63-1775	560 Ohm Resistor - 1/2W. - 10% (2 req'd)	.17
63-1778	680 Ohm Resistor - 1/2W. - 10% (3 req'd)	.17
63-1782	820 Ohm Resistor - 1/2W. - 10% (3 req'd)	.17
63-1785	1K Ohm Resistor - 1/2W. - 10% (11 req'd)	.17
63-1789	1200 Ohm Resistor - 1/2W. - 10% (3 req'd)	.17
63-1792	1500 Ohm Resistor - 1/2W. - 10%	.17

PART NO.	DESCRIPTION	PRICE
CHASSIS 24XT24 (Cont'd.)		
63-1796	1800 Ohm Resistor-1/2W.-10% (2 req'd)	.17
63-1799	2200 Ohm Resistor-1/2W.-10% (5 req'd)	.17
63-1803	2700 Ohm Resistor-1/2W.-10%	.17
63-1806	3300 Ohm Resistor-1/2W.-10% (3 req'd)	.17
63-1810	3900 Ohm Resistor-1/2W.-10% (4 req'd)	.17
63-1813	4700 Ohm Resistor-1/2W.-10% (7 req'd)	.17
63-1817	5600 Ohm Resistor-1/2W.-10%	.17
63-1824	8200 Ohm Resistor-1/2W.-10%	.17
63-1825	9100 Ohm Resistor-1/2W.-5%	.34
63-1826	10K Ohm Resistor-1/2W.-5%	.34
63-1827	10K Ohm Resistor-1/2W.-10% (12 req'd)	.17
63-1831	12K Ohm Resistor-1/2W.-10%	.17
63-1834	15K Ohm Resistor-1/2W.-10% (4 req'd)	.17
63-1835	15K Ohm Resistor-1/2W.-20% (2 req'd)	.17
63-1841	22K Ohm Resistor-1/2W.-10% (4 req'd)	.17
63-1845	27K Ohm Resistor-1/2W.-10%	.17
63-1848	33K Ohm Resistor-1/2W.-10% (3 req'd)	.17
63-1852	39K Ohm Resistor-1/2W.-10% (2 req'd)	.17
63-1859	56K Ohm Resistor-1/2W.-10% (2 req'd)	.17
63-1862	68K Ohm Resistor-1/2W.-10% (4 req'd)	.17
63-1869	100K Ohm Resistor-1/2W.-10% (3 required)	.17
63-1873	120K Ohm Resistor-1/2W.-10% (2 required)	.17
63-1876	150K Ohm Resistor-1/2W.-10% (7 required)	.17
63-1897	470K Ohm Resistor-1/2W-10% (2 required)	.17
63-1925	2.2 Megohm Resistor-1/2W.-10%	.17
63-1960	15 Megohm Resistor-1/2W.-10% (2 required)	.17
63-5147	Dual Bass Control	2.75
63-5192	Potentiometer	1.40
63-5213	Dual Presence Control	3.00
63-5372	Dual Treble Control	3.00
63-5663	680 Ohm Resistor-2W.-10%	.30
63-6346	Dual Loudness Control	4.95
63-6376	Potentiometer	.60
63-6857	820 Ohm Resistor-4W.-10%	
78-1099	Three Contact Socket	.20
78-1416	Dial Light Socket & Wire	1.25
78-1444	Stereo Indicator Light Socket & Wire	.70
78-1445	Loudness Indicator Light Socket & Wire	.30
78-1569	Tone Indicator Light & Wire (3 req'd.)	.50
78-1621	Transistor Socket (14 required)	.20
78-1677	Transistor Socket (7 required)	.40
79-174-12	#18 Sleeving-Yellow (18 required)	.03
80-1188	Tension Spring - Gang	.10
80-1682	Glass Retaining Spring (5 required)	.05
80-1683	Tension Spring - Tone Pulley (3 req'd.)	.20
80-1718	Tension Spring - Pointer	.15
80-1763	Retaining Spring (1 pt. of ea. S-61711)	.03
83-1475	Cable Retaining Strip	.03
83-3641	Five Lug Terminal Strip	.10
83-4565	Rubber Channel Strip (2 required)	.05
83-4566	Rubber Channel Strip (2 required)	.20
83-4850	Five Contact Strip (pt. of S-69168)	.35
83-4997	Four Lug Terminal Strip	.10
83-5075	Two Lug Terminal Strip (3 required)	.05
83-5286	Eight Lug Terminal Strip	.20
83-5287	Ten Lug Terminal Strip	.25
83-5288	Thirteen Lug Terminal Strip (2 req'd.)	.35
83-5289	Fifteen Lug Terminal Strip	.40
83-5290	Nineteen Lug Terminal Strip (2 req'd)	.45
83-5399	Four Lug Terminal Strip (part of S-69169)	.20
83-5724	Reflector Strip	
83-5725	Function Trim Strip (pt. of S-73142)	
83-5726	Trim Strip (part of S-73141)	
83-5736	Three Lug Terminal Strip	
83-5737	Insulating Strip - Chassis	
83-5878	Insulating Strip - A.C. Switch	
85-863	Push Button Bandswitch	16.95
85-864	A.C. Switch	
86-344	Connector Terminal (used on 78-1416)	.03
86-388	Connector Terminal (2 used on 78-1444)	.05
86-390	Connector Terminal-Male (13 req'd.)	.03
93-1674	Diffusion Washer	.03
94-1344	Shaft Bushing - FM Tuner	.40
95-2313	Doubler Mixer Transformer	3.05
95-2314	Detector Mixer Transformer	2.90
95-2315	Input Mixer Transformer	3.05
95-2316	Trap Coil	1.86
95-2324	Ratio Detector Transformer	4.75
95-2325	1st I.F. Transformer - AM	1.80
95-2326	2nd I.F. Transformer - AM	1.95
95-2327	3rd I.F. Transformer - AM	2.65
95-2328	2nd I.F. Transformer - FM	1.90
95-2387	3rd & 4th I.F. Transformer - FM (2 required)	2.20
100-249	Pilot Light Bulb (9 required)	.18
100-384	Stereo Indicator Bulb	1.30
103-23	Diode (4 required)	.75
103-96	Diode	1.75
105-93	38KC Filter (2 required)	.80
113-8	6-32 x 1/4 x 1/4 Hex Hd. Machine Screw - Nickel Plate - Int. Shake-proof Lockwasher (3 used on 22-3865)	.03
114-26	8-18 x 14 x 14 Hex Hd. Self-Tap Screw - Stat. Bronze (2 required)	.03
114-344	6-20 x 1/4 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (13 required)	.03
114-390	8-18 x 7/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (5 join Chassis & S-73141)	.03
114-594	8-18 x 3/8 Hex Hd. Self-Tap Screw - Stat. Bronze - Flat Washer Attached (2 required)	.03
114-801	8-18 x 5/16 x 1/4 Hex Hd. Self-Tap S Screw - Stat. Bronze (20 required)	.03
114-804	8-18 x 1/2 Hex Hd. Self-Tap Screw - Stat. Bronze - Flat Washer Attached (4 required)	.03
121-273	Transistor - Pre-Amp (5 required)	.80
121-274	Transistor - Pre-Amp (2 required)	.80
121-333	Transistor (2 required)	.80
121-335	Transistor	1.50
121-347	Transistor	1.20
121-348	Transistor (4 required)	1.10
121-414	Transistor	1.45
121-415	Transistor (3 required)	1.45
121-437	Transistor (2 required)	
125-117	Rubber Grommet (4 required)	.03
126-1050	Tone Indicator Background Shield	.50
126-1091	Hum Shield	1.00
126-1204	Shield (used on Chassis)	
126-1216	Tone Indicator Shield (3 required)	
149-211	Iron Core (1 part of ea. S-69165 & S-72828)	.10
149-370	Iron Core (part of S-72060)	.15
171-46	Indicator Lens - Bass	
171-47	Indicator Lens - Treble	
171-48	Indicator Lens - Presence	
171-49	Indicator Lens - Stereo	
188-367	Clamping Ring (4 pt. of S-73142)	.03
192-320	Dial Crystal	.60
199-398	Shielded Paper Sleeve	
422-3	Tuning Meter	
S-61711	Pointer Support & Spring Assbly. (2 required)	.10
S-61714	Tone Indicator Mtg. Bracket Assbly.	1.50
S-61727	Drive Cord & Eyelet Assbly - Gang	.15
S-61728	Drive Cord & Eyelet Assbly - Gang	.15
S-61730	Drive Cord & Eyelet Assbly - Bass	.15
S-61731	Drive Cord & Eyelet Assbly - Presence	.15
S-69165	Detector Coil Assembly - AM	1.40

PART NO.	DESCRIPTION	PRICE
CHASSIS 24XT24 (Cont(d.)		
S-69168	Escutcheon Mtg. Bracket Assembly - R.H.	2.45
S-69169	Escutcheon Mtg. Bracket Assembly - L.H.	2.10
S-71883	Drive Cord & Eyelet Assbly - Treble	.45
S-71884	Drive Cord & Eyelet Assbly - Pointer	.40
S-72060	Antenna Coil Assembly - AM	1.30
S-72586	FM Tuner Assembly	45.80
S-72828	Oscillator Coil Assembly - AM	1.60
S-73140	Scale & Backing Plate Assembly	
S-73141	Escutcheon Assembly	
S-73142	Indicator Strip & Ring Assembly	
	CHASSIS 26XT20	
12-4209	Chassis Mounting Bracket (2 required)	.75
12-4210	Shutter Bracket	.10
12-4211	Variable Capacitor Mounting Bracket	.20
12-4254	Bottom Plate Mtg. Bracket (6 required)	.10
19-238	Coil Mounting Clip (1 pat. of ea. S-69165 or S-72828)	.10
19-326	Cable Retaining Clip	.05
19-464	Coil Mounting Clip (pt. of S-72060)	.05
20-2033	Peaking Coil	.40
22-3	.01 Mf Disc Capacitor - 500V. (3 req'd.)	.30
22-9	100 Pf Disc Capacitor - 500V.	.25
22-13	.0033 Mf Disc Capacitor - 500V. (3 reqd)	.25
22-17	.001 Mf Disc Capacitor - 1000V. (2 req'd)	.25
22-18	.0022 Mf Disc Capacitor - 500V. (2 req'd)	.25
22-2434	2 Pf Gimmick Capacitor - 500V.	.25
22-2720	1 Pf Gimmick Capacitor - 500V. (3 req'd)	.20
22-2729	.001 Mf Disc Capacitor - 25V.	.25
22-3010	.01 Mf Disc Capacitor - 25V.	.45
22-3034	.05 Mf Disc Capacitor - 25V. (2 used on S-69165) (23 required)	.45
22-3177	390 Pf Disc Capacitor - 500V. (2 req'd)	.25
22-3255	330 Pf Disc Capacitor - 200V. (2 used on S-71214) (4 required)	.25
22-3448	10 Mf Electrolytic Capacitor - 15V.	1.00
22-3467	12 Pf Disc Capacitor - 500V. (used on S-72060)	.30
22-3527	.22 Mf Disc Capacitor - 12V.	.60
22-3588	.47 Mf Disc Capacitor - 12V.	
22-3595	.33 Mf Mylar Capacitor - 50V. (4 req'd)	.60
22-3630	.068 Mf Mylar Capacitor - 50V. (2 used on S-71214)	.30
22-3652	.1 Mf Disc Capacitor - 10V.	.30
22-3675	10 Pf Disc Capacitor - 500V.	.25
22-3678	.047 Mf Capacitor - 100V. (2 required)	
22-3710	.22 Mf Mylar Capacitor - 50V. (2 used on S-71214)	.50
22-3826	.022 Mf Capacitor - 100V. (2 required)	.30
22-3879	1000 Mf Electrolytic Capacitor - 50V.	4.15
22-4110	.033 Mf Mylar Capacitor - 200V. (1 used on S-71214) (3 required)	.30
22-4601	.01 Mf Disc Capacitor - 1000V.	.20
22-4618	Three Section Variable Capacitor	4.55
22-4628	2 x 100 Mf Electrolytic Capacitor - 15V.	1.60
22-4665	4300 Pf Mica Capacitor - 300V. (used on S-72828)	1.20
22-5011	500 Mf Electrolytic Capacitor - 500V. (2 required)	3.25
22-5012	.15 Mf Capacitor - 50V. (2 required)	.40
22-5018	.47 Mf Capacitor - 50V. (2 used on S-71214) (4 required)	.60
22-5116	.01 Mf Disc Capacitor - 25V. (used on S-72060)	.20
22-5162	Three Section Electrolytic Capacitor - 300/25 - 500/50 - 500/50	4.47
22-5167	1000 Mf Electrolytic Capacitor - 30V.	3.20
22-5187	.0047 Mf Disc Capacitor - 1000V.	.20
26-1319	Dial Scale - AM (pt. of S-73406)	
26-1320	Dial Scale - FM (pt. of S-73406)	
44-48	Connector Jack (4 pt. of S-69382)	.20

PART NO.	DESCRIPTION	PRICE
46-4491	Push Button - Monaural & On-Off (2 required)	1.10
46-5109	Tuning Knob	
46-5193	Tone Control Knob - Bass & Treble (2 required)	
46-5195	Bandswitch Knob	
46-5196	Balance Control Knob	
46-5197	Loudness Control Knob	
52-1103	Two Conductor Cable (Approx. 22")	.15
52-1212	Two Conductor Shielded Lead (used on S-69382)	.60
52-1213	Two Conductor Shielded Lead (used on S-69382)	.60
54-139	3/8-32 x 9/16 Palnut - Cadmium (1 used on ea. 63-6361, 63-6362, 63-6363 & 85-923)	.03
54-549	Tinnerman Speed Nut (4 used on ea. 192-351)	.03
54-633	Transistor Socket Retaining Nut (19 required)	.10
56-426	Roll Pin (2 used on S-72586)	.05
57-5377	Chassis Bottom Plate	1.15
57-5928	Trim Plate	
58-246	Two Prong Plug - AC (pt. of S-59959)	.15
59-718	Dial Pointer	.50
61-222	Pulley (6 pt. of S-71213)	.20
62-28	Fuse Holder	.40
63-1701	10 Ohm Resistor 1/2W. - 10% (2 req'd)	.17
63-1736	68 Ohm Resistor 1/2W. - 10% (3 req'd)	.17
63-1743	100 Ohm Resistor 1/2W. - 10%	.17
63-1750	150 Ohm Resistor 1/2W. - 10%	.17
63-1757	220 Ohm Resistor 1/2W. - 10% (3 req'd)	.17
63-1761	270 Ohm Resistor 1/2W. - 10%	.17
63-1764	330 Ohm Resistor 1/2W. - 10% (2 used on S-71214) (6 required)	.17
63-1771	470 Ohm Resistor 1/2W. - 10% (1 used on S-69165) (9 required)	.17
63-1775	560 Ohm Resistor 1/2W. - 10% (2 req'd)	.17
63-1778	680 Ohm Resistor 1/2W. - 10% (3 req'd)	.17
63-1782	820 Ohm Resistor 1/2W. - 10% (3 req'd)	.17
63-1785	1000 Ohm Resistor 1/2W. - 10% (1 used on ea. S-69165 & S-72828 & 4 used on S-71214) (12 required)	
63-1789	1200 Ohm Resistor 1/2W. - 10%	.17
63-1792	1500 Ohm Resistor 1/2W. - 10%	.17
63-1796	1800 Ohm Resistor 1/2W. - 10% (2 req'd)	.17
63-1799	2200 Ohm Resistor 1/2W. - 10% (5 req'd)	.17
63-1803	2700 Ohm Resistor 1/2W. - 10%	
63-1806	3300 Ohm Resistor 1/2W. - 10% (2 req'd)	.17
63-1810	3900 Ohm Resistor 1/2W. - 10% (2 used on S-71214) (4 required)	.17
63-1813	4700 Ohm Resistor 1/2W. - 10% (5 req'd)	.17
63-1817	5600 Ohm Resistor 1/2W. - 10%	
63-1824	8200 Ohm Resistor 1/2W. - 10%	
63-1825	9100 Ohm Resistor 1/2W. - 5%	.34
63-1826	10K Ohm Resistor 1/2W. - 5%	
63-1827	10K Ohm Resistor 1/2W. - 10% (4 req'd)	.17
63-1831	12K Ohm Resistor 1/2W. - 10% (3 req'd)	
63-1834	15K Ohm Resistor 1/2W. - 10% (3 req'd)	.17
63-1842	22K Ohm Resistor 1/2W. - 20%	.17
63-1845	27K Ohm Resistor 1/2W. - 10%	.17
63-1848	33K Ohm Resistor 1/2. - 10% (2 used on S-71214) (5 required)	
63-1855	47K Ohm Resistor 1/2W. - 10% (2 req'd)	.17
63-1862	68K Ohm Resistor 1/2W. - 10% (4 req'd)	
63-1869	100K Ohm Resistor 1/2W. - 10% (1 used on 85-923) (4 required)	
63-1870	100K Ohm Resistor 1/2W. - 20% (1 used on 85-923) (2 required)	
63-1873	120K Ohm Resistor 1/2W. - 10% (used on 85-923)	.17
63-1876	150K Ohm Resistor 1/2W. - 10%	.17
63-1880	180K Ohm Resistor 1/2W. - 10% (2 req'd)	
63-1912	1 Megohm Resistor 1/2W. - 20%	.17
63-4519	2.7 Ohm Resistor 1/2W. - 10% (4 req'd)	.17

PART NO.	DESCRIPTION	PRICE
CHASSIS 26XT20 (Cont'd.)		
63-5192	Potentiometer	1.40
63-5305	.51 Ohm Resistor 5W. - 10% (2 required)	.75
63-5635	150 Ohm Resistor 2W. - 10%	.34
63-5652	390 Ohm Resistor 2W. - 10% (2 required)	.30
63-5663	680 Ohm Resistor 2W. - 10%	.30
63-6042	220 Ohm Resistor 1W. - 10% (2 required)	.25
63-6361	Dual Loudness Control	3.05
63-6362	Dual Bass Control	2.05
63-6363	Dual Treble Control	3.50
63-6376	Potentiometer	.60
63-6377	50 Ohm Resistor 3W. - 10%	.30
63-6378	.56 Ohm Resistor 5W. - 10% (2 required)	.30
78-402	Four Contact Socket	.15
78-1099	Three Contact Socket	.20
78-1347	Electrolytic Socket (2 required)	.10
78-1429	Triple Light Socket & Wire	1.00
78-1442	Three Contact Transistor Socket (6 required)	.30
78-1443	Stereo Indicator Light Socket & Wire	.50
78-1486	Power Transistor Socket (4 required)	
78-1621	Three Contact Transistor Socket (6 required)	.20
78-1677	Four Contact Transistor Socket (4 required)	.40
79-174-12	#18 Sleeving - Yellow - 1½"	.03
80-1140	Tension Spring (Pointer)	.10
80-1188	Tension Spring (Gang)	.10
80-1763	Retaining Spring (1 used on ea. 83-5307)	.03
80-1863	Shutter Bracket Return Spring	.10
83-3641	Five Lug Terminal Strip	.10
83-3652	Three Lug Terminal Strip	.05
83-5277	Insulating Strip-Transistor (4 required)	.03
83-5284	Five Lug Terminal Strip	.15
83-5286	Eight Lug Terminal Strip	.20
83-5288	Thirteen Lug Terminal Strip	.35
83-5289	Fifteen Lug Terminal Strip (2 required)	.40
83-5291	Insulating Strip (used on 83-5284)	.03
83-5307	Pointer Support Strip (2 required)	.15
83-5308	Support Strip (pt. of S-69376)	.75
83-5309	Thirty Lug Terminal Strip (pt. of S-71214)	.70
83-5328	Eleven Lug Terminal Strip (2 required)	.35
83-5329	Rubber Channel Strip (2 used on ea. 192-351)	.15
83-5399	Four Lug Terminal Strip	.20
83-5779	Trim Strip - Bandswitch (pt. of S 73405)	
83-5780	Trim Strip - Tone Control (part of S-73405)	
83-5781	Trim Strip - Push Button (pt. of S-73405)	
83-5881	Two Lug Terminal Strip	
83-5882	Insulating Strip (used on 83-5881)	
85-891	A.C. Switch	3.10
85-892	Stereo - Monaural Switch	1.80
85-923	Five Position Bandswitch	
86-328	Wire Retaining Terminal	.03
86-388	Connector Terminal (2 used on 78-1443)	.05
94-1396	Nylon Busing (used on S-72586)	.10
95-2313	Doubler Mixer Transformer	3.05
95-2314	Detector Mixer Transformer	2.90
95-2315	Input Mixer Transformer	3.05
95-2316	Trap Coil	1.86
95-2324	Ratio Detector Transformer	4.75
95-2325	1st I.F. Transformer (AM)	1.80
95-2326	2nd I.F. Transformer (AM)	1.95
95-2327	3rd I.F. Transformer (AM)	2.65
95-2328	2nd & 4th I.F. Transformer - FM (2 required)	1.90
95-2330	Driver Transformer (2 required)	3.15
95-2335	Power Transformer	12.55
95-2387	3rd I.F. Transformer (FM)	2.20
100-249	Pilot Light Bulb (3 required)	.18
100-384	Stereo Indicator Bulb	1.30
103-23	Diode (3 required)	.75
103-96	Diode	1.75

PART NO.	DESCRIPTION	PRICE
105-93	38 KC Filter	.80
113-8	6-32 x 1/4 x 1/4 Hex Hd. Machine Screw - N.P. - Int. Shakeproof Lockwasher (2 mt. ea. 22-4618, 85-891 & 85-892)	.03
114-271	6-20 x 1/2 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (2 mt. ea. 121-398)	
114-335	8-18 x 1/2 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (4 join 26XT20 & S-73405)	.03
114-344	6-20 x 1/4 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (3 used on 126-1150)	.03
114-654	6-20 x 3/8 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (2 used on S-73406 & 4 used on ea. S-73214)	.03
114-709	8-18 x 1-1/8 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (1 joins 26XT20 & S-73405)	.03
114-711	4-24 x 7/32 Hex Hd. Self-Tap Screw - Stat. Bronze - Flat Washer Attached (used on 12-4210)	.05
114-801	8-18 x 6/16 x 1/4 Hex Hd. Self-Tap Screw - Stat. Bronze (4 used on ea. 12-4209, 2 used on ea. 95-2330 & 22-4618; & 4 used on control panel assembly)	.03
114-804	8-18 x 1/2 Hex Hd. Self-Tap Screw - Stat. Bronze - Flat Washer Attached (4 used on ea. 95-2335 & S-72586)	.03
114-823	6-20 x 1/2 Hex Hd. Self-Tap Screw - Stat. Bronze - Flat Washer Attached (6 mt. 57-5377)	.03
121-273	Transistor - A.G.C. Amplifier	.80
121-305	Transistor - Pre-Driver (2 required)	.55
121-306	Transistor - Pre-Amp (2 required)	.70
121-333	Transistor - A.M. Mixer, A.M. Oscillator (2 required)	.80
121-335	Transistor - A.M. Oscillator	1.50
121-347	Transistor - Bi-Plex Detector	1.20
121-348	Transistor - Comp. Amp, 19 KC Amp, Stereo Indicator Switch (4 req'd)	1.10
121-398	Transistor - Power Amp (4 required)	2.50
121-399	Transistor - Driver (2 required)	1.20
121-414	Transistor - FM & AM 1st I.F.	1.45
121-415	Transistor - FM & AM 2nd I.F., FM 3rd I.F., FM 4th I.F. (3 required)	1.45
125-117	Rubber Grommet (4 used on S-72586)	.03
126-1106	Heat Dissipator (2 required)	.10
126-1150	Light Shield	1.45
136-40	Fuse - 2 Amp	.35
149-211	Iron Core (1 pt. of ea. S-69165 & S-72828)	.10
149-370	Iron Core (pt. of S-72060)	.15
159-154	Plug Button (2 mt. ea. 26-1319 & 26-1320)	.10
188-422	Clamping Ring (used on S-72586)	.03
199-405	Shielded Paper Sleeve	.05
205-51	Silicone Grease (pt. of ea. 121-398)	.16
212-61	Rectifier (2 required)	1.35
322-30	5 Mf Electrolytic Capacitor - 25V. (4 required)	
or		
22-2884	5 Mf Electrolytic Capacitor - 12V. (4 required)	1.50
S-49418	Drive Cord & Eyelet Assembly - Pointer (approx. 26-5/8")	.20
S-59959	A.C. Interlock & Bracket Assembly	.40
S-61578	Drive Cord & Eyelet Assembly - Gang (approx. 10-3/16")	.15
S-69165	Detector Coil Assembly (AM)	1.40
S-69376	Dial Scale Light Shield & Strip Assbly.	
S-69382	Tape Jack & Bracket Assembly	.95

PART NO.	DESCRIPTION	PRICE
CHASSIS 26XT20 (Cont'd.)		
S-71057	Drive Cord & Eyelet Assbly. - Gang (approx. 18-9/16")	.30
S-71060	Drive Cord & Eyelet Assembly - Pointer (approx. 32")	.25
S-71213	Control Panel Assembly	
S-71214	Bracket & Terminal Strip Assbly.	.95
S-72060	Antenna Coil Assembly (AM)	1.30
S-72586	FM Tuner Assembly (see FM tuner pts. list for components)	45.80
S-72828	Oscillator Coil Assembly (AM)	1.60
S-73214	Heat Sink & Socket Assbly. (2 req'd.)	
S-73405	Escutcheon Assembly	
S-73406	Dial Scale & Shield Assembly	
	MODEL S2434	
2-2583	Cabinet Back	
14-7662	Table Cabinet	
16-3176	Packing Carton	
49-984	6" x 9" PM Speaker	8.64
49-1094	3-1/2" PM Speaker	3.80
54-423	6-32 Palnut (2 mt. 49-1094 & 4 mt. 49-984)	.03
57-5204	Name Plate (part of 14-7662)	
86-255	Terminal (2 required)	.03
86-329	Connector Terminal (4 required)	.03
112-1265	6-32 x 1-1/4" Speaker Mt. Screw (2 part of 14-7662)	.05
112-1266	6-32 x 1-1/2" Speaker mt. Screw (4 part of 14-7662)	.05
114-453	6-18 x 5/8 Hex Washer Hd. Self-Tap Screw - Stat. Bronze (4 mt. 2-2583)	.10
854-15	Speed Nut (2 part of 14-7662)	
910-252	Grille Cloth (part of 14-7662)	
	MODEL S2437	
14-7661	Cabinet	
16-3174	Packing Carton	
22-4588	2 Mf Electrolytic Capacitor - 30V.	1.45
49-1004	Horntweeter	27.27
49-1102	12" PM Speaker	
54-423	6-32 Palnut (4 mt. 49-1004)	.03
54-424	8-32 Palnut (4 mt. 49-1102)	.03
57-5204	Name Plate (part of 14-7661)	
72-127	8 x 1-1/4 Phillips Flat Hd. Wood Screw - Stat. Bronze (10 pt. of 14-7661)	.05
83-5872	Terminal Strip	
83-5879	Acoustical Pad (part of 14-7661)	
86-255	Terminal (2 required)	.03
86-329	Connector Terminal (4 required)	.03
112-1266	6-32 x 1-1/2" Speaker Mt. Screw (4 part of 14-7661)	.05
112-1270	8-32 x 1-3/4" Speaker Mt. Screw (4 part of 14-7661)	.05
157-22	Fastener (2 required)	.05
854-15	Speed Nut (2 part of 14-7661)	
910-654	Grille Cloth (part of 14-7661)	
965-21	3/4 Dia. Plastic Floor Glide (4 part of 14-7661)	
	CHASSIS 6NT20	
11-183	A.C. Line Cord	.80
22-3	.01 Mf Disc Capacitor (4 Required)	.30
22-2793	.047 Mf Disc Capacitor-400V (2 Req'd.)	
22-3317	.1 Mf Capacitor - 200V. (2 Required)	.35
22-3615	1 Mf Electrolytic Capacitor (2 req'd.)	1.25
22-3896	5 Mf Electrolytic Capacitor-25V. (4 Required)	1.00
22-4617 or 22-3	.01 Mf Disc Capacitor	.10
	.01 Mf Disc Capacitor	.30
22-4636	Electrolytic Capacitor	2.05
22-5233	.015 Mf Capacitor-50V. (2 Required)	
22-5234	Dual Electrolytic Capacitor	
43-519	Socket Contact Housing	.20
52-1222	Four Conductor Cable	.30
54-384	4-40 Palnut-Cadmium (2 mt. each 121-315)	.03
58-214	Single Prong Plug (2 part of S-69705)	.10
63-1807	3300 Ohm Resistor ½W. 20% (2 req'd.)	.17
63-1828	10K Ohm Resistor ½W. 20% (2 req'd.)	.17
63-1852	39K Ohm Resistor ½W. 10% (2 req'd.)	.17
63-1855	47K Ohm Resistor ½W. 10% (2 req'd.)	.17
63-1863	68K Ohm Resistor ½W. 20% (4 req'd.)	.17
63-1869	100K ohm Resistor ½W. 10% (2 req'd.)	.17
63-1880	180K Ohm Resistor ½W. 10% (2 req'd.)	.17
63-1883	220K Ohm Resistor ½W. 10% (2 req'd.)	.17
63-1915	1.2 Megohm Resistor ½W. 10% (2 Required)	.17
63-1925	2.2 Megohm Resistor ½W. 10% (2 Required)	.17
63-5440	Voltage Dependent Resistor (2 req'd.)	.50
63-6042	220 Ohm Resistor 1W. 10% (2 req'd.)	.25
63-6140	47K Ohm Resistor 1W. 10%	
63-6461	200 Ohm Fusing Type Resistor	
63-6473	Dual Bass Control	
63-6474	Dual Treble Control	
63-6475	Dual Loudness Control	
63-6476	Balance Control	
79-174-14	#18 Sleeving-Yellow (4 Required)	.03
79-210-10	#22 Sleeving-Green (2 Required)	
79-211-10	#22 Sleeving-Blue (2 Required)	
83-3459	Two Lug Terminal Strip (2 Required)	
83-3674	Seven Lug Terminal Strip	.20
83-4871	Transistor Insulating Strip (1 used on each 121-315)	.03
83-5498	Sixteen Lug Terminal Strip	
83-5504	Three Lug Terminal Strip (2 Required)	
83-5616	Seven Lug Terminal Strip	
86-199	Terminal-Shakeproof-Phosphor Bronze-Hot Solder Dip (used on Chassis)	.03
86-344	Socket Terminal	.03
90-746	Spacer Sleeve (1 used on each 94-1171)	
94-1171	Insulating Bushing (2 Required)	.10
94-1287	Shoulder Bushing (2 used on each 121-315)	.10
95-2373	Output Transformer (2 Required)	
114-940	4-40 x 5/16 x 3/16 Hex Hd. Mach. Screw-Cadmium-(2 used on each 121-315)	
121-315	Transistor-Output (2 Required)	4.20
121-433	Transistor-Pre-Amp (2 Required)	
121-435	Transistor-Driver (2 Required)	
125-96	Strain Relief Grommet (used on 11-183)	.10
205-51	Heat Conductive Grease (Furnished as part of 121-315)	.70
S-69705	Phono Input Cable Assembly	
	PARTS OUT OF SEQUENCE	
212-71 or 212-27	Silicon Rectifier	
	Silicon Rectifier	

ALL PRICES SHOWN ARE SUGGESTED U.S. RETAIL AND ARE SUBJECT TO CHANGE WITHOUT NOTICE.

ITEM NO.	PART NO.	DESCRIPTION	
		2NT21 & 2NT22	
C1A		ANT. TRIMMER	
C1B		ANT. TUNING	
C1C	22-4657	OSC. TUNING	
C1D		OSC. TRIMMER	
C2	22-3034	.05 MFD DISC	25 V
C3	22-3	.01 MFD DISC	500 V
C4	22-2884	5 MFD ELECTROLYTIC	12 V
C5	22-3034	.05 MFD DISC	25 V
C6	22-3034	.05 MFD DISC	25 V
C7	22-2428	1.8 PF GIMMICK	500 V
C8	22-4097	.022 MFD	200 V
C9	22-3615	1 MFD ELECTROLYTIC	25 V
C10	22-3317	.1 MFD ± 20%	200 V
C11			
C12	22-4568	100 MFD ELECTROLYTIC	15 V
C13	22-4617	.01 MFD DISC	500 V
C14	22-4509	20 MFD ELECTROLYTIC	25 V
C15	22-2884	5 MFD ELECTROLYTIC	12 V
C16	22-2998	1 MFD ± 20% MYLAR TUBULAR	50 V
C17A	22-4675	80 MFD ELECTROLYTIC	50 V
C17B		100 MFD ELECTROLYTIC	150 V
C18	22-4617	.01 MFD DISC	500 V
C19	22-3659	.047 MFD	400 V
C20	22-3659	.047 MFD	400 V
R1	63-6858	VOLUME CONTROL	
R2	63-6319	TONE CONTROL	
R3	63-5440	VOLTAGE DEPENDENT RESISTOR	
R4	63-6112	10K OHMS ± 10%	1 W
R5	63-5302	350 OHMS ± 5% FUSING	3 W
S1	85-915	3 POSITION SWITCH	
L1	S-72896	WAVEMAGNET ASSEMBLY	
L2	149-311	IRON CORE SLEEVE	
L3	1N T1	OSC. TRANSFORMER PRIMARY	
L4	1N T1	OSC. TRANSFORMER SECONDARY	
L5	1N T2	1ST I.F. TRANSFORMER PRIMARY	
L6	1N T2	1ST I.F. TRANSFORMER SECONDARY	
L7	1N T3	2ND I.F. TRANSFORMER PRIMARY	
L8	1N T3	2ND I.F. TRANSFORMER SECONDARY	
T1	95-2403	OSC. TRANSFORMER	
T2	95-2171	1ST I.F. TRANSFORMER	
T3	95-2394	2ND I.F. TRANSFORMER	
T4	95-2341	OUTPUT TRANSFORMER	
X1	103-74	CRYSTAL DIODE	
X2	103-44	CRYSTAL DIODE	
SE1	212-71	SILICON RECTIFIER	
A1	105-49	INTEGNET	
SP1	49-1039	P.M. SPEAKER	

ITEM NO.	PART NO.	DESCRIPTION	
		4NT22	
C1	22-18	.0022 MFD DISC ±10%	500 V
C2	322-22	5 MFD ELECTROLYTIC	12 V
C3	22-4182	.33 MFD MYLAR ±10%	200 V
C4	322-22	5 MFD ELECTROLYTIC	12 V
C5	22-14	.0047 MFD DISC ±10%	500 V
C6	22-3994	500 MFD ELECTROLYTIC	15 V
C7	22-5171	180 MFD ELECTROLYTIC	6 V
C8	22-4097	.022 MFD MYLAR	200 V
C9	22-5172	500 MFD ELECTROLYTIC	6 V
C10A	22-5173	1000 MFD ELECTROLYTIC	15 V
C10B		500 MFD ELECTROLYTIC	15 V
R1	63-6379	5K OHM VOLUME CONTROL (TAPPED)	
R2	63-6319	50K OHM TONE CONTROL	
R3	63-5951	1.5 OHM RESISTOR 10%	1 W
R4	63-5951	1.5 OHM RESISTOR 10%	1 W
T1	95-2336	DRIVER TRANSFORMER	
T2	95-2337	POWER TRANSFORMER	
SE1	212-27	SILICON RECTIFIER	
S1	85-889	SLIDE SWITCH	
BT1	5-31	1 1/2V. BATTERY (6 REQUIRED)	
SP1	49-1090	4X6 SPEAKER	
F1	136-64	FUSE	
TR1	121-408	TRANSISTOR	
TR2	121-409	TRANSISTOR	
TR3	121-401	TRANSISTOR MATCHED PAIR	
TR4	121-401	TRANSISTOR	
TR5	121-400	TRANSISTOR (USED ON 5NT20 ONLY)	
		6L01Z9	
C1	322-17	.001 DISC	1000 V
C2	22-5325	26 PF DISC ±5%	500 V
C3	22-3456	2 X 12 PF DISC ±5%	500 V
C4	22-3621	22 PF DISC ±5%	500 V
C5	22-1888	.001 CERAMIC	500 V
C6	22-3675	10 PF DISC ±.25%	500 V
C7	22-4613	.001 F.T.	500 V
C8	22-4613	.001 F.T.	500 V
C9	22-4613	.001 F.T.	500 V
C10	22-3	.01 DISC	500 V
C11	22-14	.0047 MFD DISC	500 V
C12	22-3	.01 DISC	500 V
C13	22-18	.0022 MFD DISC	500 V
C14	22-3	.01 MFD DISC	500 V
C15	22-16	470 PF DISC	500 V
C16	22-5	100 PF DISC	500 V
C17	22-17	.001 MFD DISC	1000 V
C18	22-3627	.047 MFD	100 V

ITEM NO.	PART NO.	DESCRIPTION	
C19A		ANTENNA TUNING	
C19B	22-3961	ANTENNA TRIMMER	
C19C		A.M. OSCILLATOR TUNING	
C19D		A.M. OSCILLATOR TRIMMER	
C20	22-9	100 PF DISC ±10%	500 V
C21	22-3	.01 MFD DISC	500 V
C22	22-3	.01 MFD DISC	500 V
C23	22-3	.01 MFD DISC	500 V
C24	22-2569	.047 MFD	600 V
C25	22-4613	.001 F.T.	500 V
C26	22-3	.01 MFD DISC	500 V
C27	22-3	.01 MFD DISC	500 V
C28	22-16	470	500 V
C29	22-2569	.047 MFD	600 V
C30	22-3	.01 MFD DISC	500 V
C31	22-5	100 PF DISC	500 V
			1/4 W
R3	63-5238	300 OHM ±10%	1/4 W
			10 W
L1	S-52362	FM ANTENNA COIL	
L2	S-62887	FM DETECTOR COIL ASSEMBLY	
L3	S-64580	FM OSCILLATOR COIL ASSEMBLY	
L4	1N T1	1ST I.F. TRANSFORMER PRIMARY	
L5	1N T1	1ST I.F. TRANSFORMER SECONDARY	
L6	1N T2	2ND I.F. TRANSFORMER PRIMARY	
L7	1N T2	2ND I.F. TRANSFORMER SECONDARY	
L8	1N T3	3RD I.F. TRANSFORMER PRIMARY	
L9	1N T3	3RD I.F. TRANSFORMER SECONDARY	
L10	1N T4	DISC TRANSFORMER	
L11	1N T4	DISC TRANSFORMER	
L12	S-62838	AM ANTENNA ASSEMBLY	
L13	S-64572	LOOP LOADING COIL ASSEMBLY	
L14	1N T5	1ST I.F. AM TRANSFORMER PRIMARY	
L15	1N T5	1ST I.F. AM TRANSFORMER SECONDARY	
L16	1N T6	2ND I.F. AM TRANSFORMER PRIMARY	
L17	1N T6	2ND I.F. AM TRANSFORMER SECONDARY	
L18	S-61505	AM OSCILLATOR COIL ASSEMBLY	
L19	149-311	FERRITE SLEEVE	
T1	95-2120	1ST I.F. TRANSFORMER	
T2	95-1919	2ND I.F. TRANSFORMER	
T3	95-1919	3RD I.F. TRANSFORMER	
T4	95-1866	DISC TRANSFORMER	
T5	95-1718	1ST AM I.F. TRANSFORMER	
T6	95-1505	2ND AM I.F. TRANSFORMER	
S1	85-910	BANDSWITCH	
X1	403-2	A.F.C. DIODE	
U1	405-7	R.C. NETWORK	
U2	105-79	R.C. NETWORK	

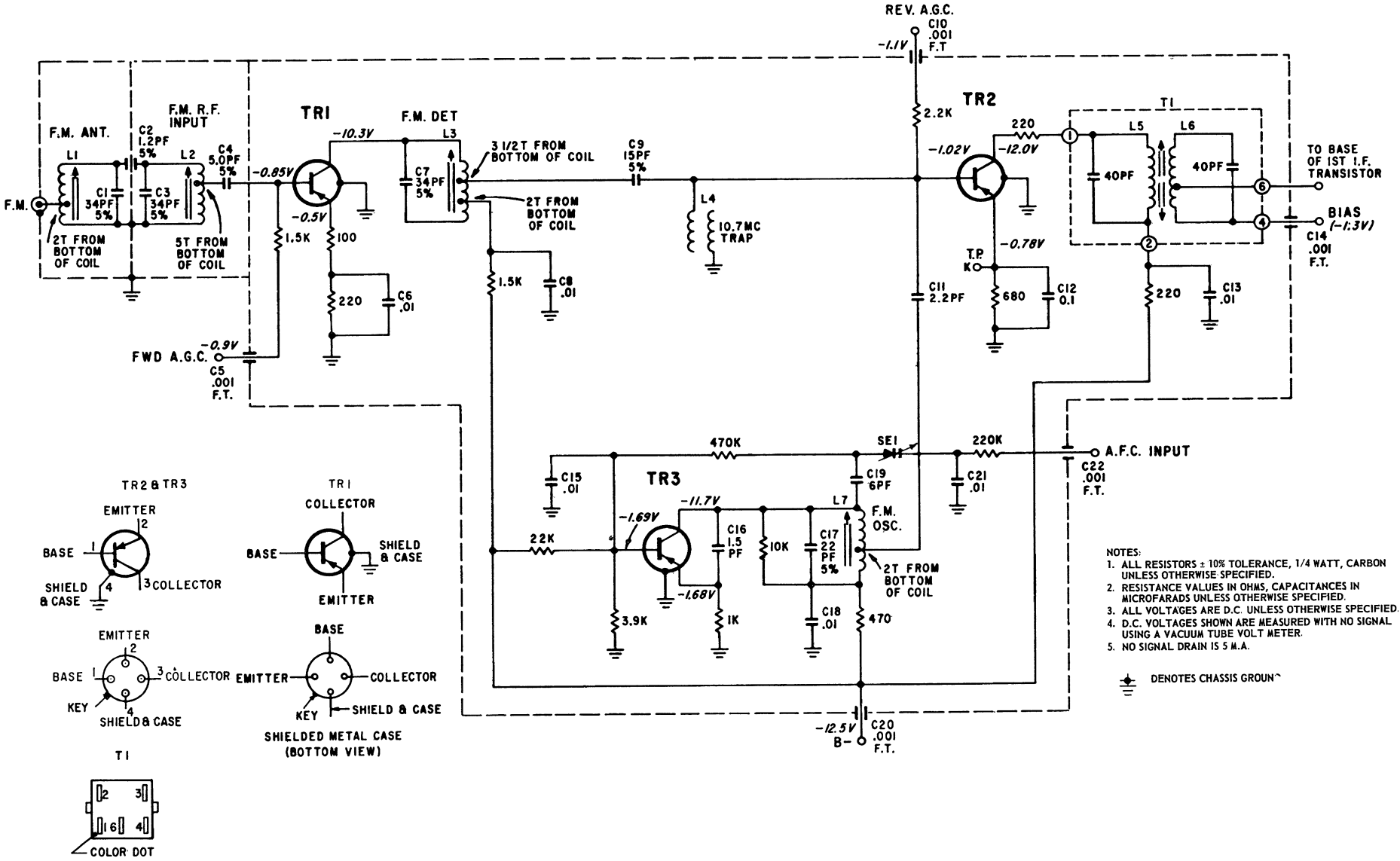
ITEM NO.	PART NO.	DESCRIPTION	
		6NT20	
C1	22-2793	.047 MFD	400 V
C2	322-15	.01 MFD	500 V
C3	322-109	1 MFD ELECTROLYTIC	25 V
C4	322-30	5 MFD ELECTROLYTIC	25 V
C5	22-5233	.015 MFD ± 20%	50 V
C6	322-15	.01 MFD	500 V
C7	322-109	1 MFD ELECTROLYTIC	25 V
C8A	22-5234	300 MFD ELECTROLYTIC	15 V
C8B		300 MFD ELECTROLYTIC	15 V
C9	22-3917	.1 MFD	200 V
C10	322-15	.01 MFD	500 V
C11	322-109	1 MFD ELECTROLYTIC	25 V
C12	22-5233	.015 MFD ±20%	50 V
C13	322-30	5 MFD ELECTROLYTIC	25 V
C14	322-15	.01 MFD	500 V
C15	322-109	1 MFD ELECTROLYTIC	25 V
C16	22-3317	.1 MFD	200 V
C17	22-2793	.047 MFD	400 V
C18	22-4617	.01 MFD	500 V
C19A	22-4636	100 MFD ELECTROLYTIC	150 V
C19B		60 MFD ELECTROLYTIC	50 V
R1A	63-6473	DUAL BASS CONTROL	
R1B			
R2A	63-6475	DUAL LOUDNESS CONTROL	
R2B			
R3	63-6476	BALANCE CONTROL	
R4	63-6042	220 OHM ±10%	1 W
R5A	63-6474	DUAL TREBLE CONTROL	
R5B			
R6	63-5440	VOLTAGE DEPENDANT RESISTOR	
R7	63-6042	220 OHM ±10%	1 W
R8	63-5440	VOLTAGE DEPENDANT RESISTOR	
R9	63-6461	200 OHM ±10%	8 W
R10	63-6140	47K OHM ±10%	1 W
T1	95-2445	OUTPUT TRANSFORMER	
T2	95-2445	OUTPUT TRANSFORMER	
SE1	212-71	SILICON RECTIFIER	
SP1	49-1087	SPEAKER 6" x 9" WOOFER	
SP2	49-978	SPEAKER 3 1/2" TWEETER	
SP3	49-1087	SPEAKER 6" x 9" WOOFER	
SP4	49-978	SPEAKER 3 1/2" TWEETER	
		6XT24	
C1	22-3883	50 MFD ELECTRO	50 V
C2	22-3241	100 MFD ELECTRO	50 V
C3	22-4673	500 MFD ELECTRO	50 V
C4	22-2939	680 PF	500 V
C5	22-4601	.01 MFD DISC	1000 V
C6	22-3135	.1 MFD	400 V
C7	22-4666	.001 MFD DISC ±10%	1400 V
C8	22-4109	.033 MFD	200 V
C9	22-4109	.033 MFD	200 V
C10	22-3241	100 MFD ELECTRO	50 V
C11	22-4673	500 MFD ELECTRO	50 V
C12	22-2939	680 PF	500 V
C13	22-3878	2000 MFD ELECTRO	75 V
C14	22-3881	1500 MFD ELECTRO	50 V
C15A		500 MFD ELECTRO	50 V
C15B	22-5162	500 MFD ELECTRO	50 V
C15C		300 MFD ELECTRO	25 V
R1	63-5338	180 OHM ± 10%	2 W
R2	63-5961	2.7 OHMS ± 10%	1 W
R3	63-5369	220 OHM ± 10%	5 W
R4	63-5961	2.7 OHMS ± 10%	1 W
R5	63-6442	560 OHMS ± 10%	3 W
R6	63-5282	0.39 OHMS ± 5%	5 W
R7	63-5367	0.43 OHMS ± 5%	5 W
R8	63-5641	220 OHMS ± 20%	2 W
R9	63-5217	2 OHMS ± 10%	10 W
R10	63-5338	180 OHMS ± 10%	2 W
R11	63-5961	2.7 OHMS ± 10%	1 W
R12	63-6442	560 OHMS ± 10%	3 W
R13	63-5961	2.7 OHMS ± 10%	1 W
R14	63-5282	0.39 OHMS ± 5%	5 W
R15	63-5367	0.43 OHMS ± 5%	5 W
R16	63-5641	220 OHMS ± 20%	2 W
R17	63-5369	220 OHMS ± 10%	5 W
R18	63-5656	470 OHM ± 10%	2 W
R19	63-5656	470 OHM ± 10%	2 W
T1	95-2428	DRIVER TRANSFORMER	
T2	95-2427	DRIVER TRANSFORMER	
T3	95-2425	POWER TRANSFORMER	
F1	136-61	3 AMP. FUSE (TYPE C)	
M1	S-73151	9 CONTACT HOUSING ASSEMBLY	
M2	S-69074	6 CONTACT HOUSING ASSEMBLY	
M3	S-61236	2 CONTACT HOUSING ASSEMBLY	
PL10	100-249	PHONO LAMP #1847, 6.3V., 150MA	
PL11	100-249	CAB'T. LAMP #1847, 6.3V., 150MA	
SE1	212-62	SILICON RECTIFIER	
SE2	212-62	SILICON RECTIFIER	
		7L01Z9	
C1			
C2	22-3939	26 PF DISC ±5%	500 V
C3	22-1888	.001 MFD CERAMIC	500 V
C4	22-4613	.001 F.T.	500 V
C5	22-3318	.001 DISC	25 V
C6	22-3456	2 X 12 PF DISC ±5%	500 V
C7	322-126	22 PF DISC ±5%	500 V
C8	22-3675	10 PF ±5%	500 V
C9	22-4613	.001 F.T.	500 V
C10	22-3	.01 MFD DISC	500 V
C11	22-4613	.001 F.T.	500 V
C12	22-4613	.001 F.T.	500 V
C13	22-3	.01 MFD DISC	500 V
C14	322-81	.0047 MFD DISC ±10%	500 V
C15	22-3	.01 MFD DISC	500 V
C16	322-82	.0022 MFD DISC ±10%	500 V
C17	22-3	.01 MFD DISC	500 V
C18	322-16	100 PF DISC	500 V
C19	22-3537	.047 MFD	200 V
C20	22-3	.01 MFD DISC	500 V
C21	22-3774	2 PF DISC ±.25% PF	500 V
C22	322-16	100 PF DISC	500 V
C23	322-27	.0033 MFD DISC ±10%	500 V
C24	22-3591	.1 MFD ±10%	200 V
C25	22-3	.01 MFD DISC	500 V
C26	22-3626	.22 MFD ±10%	100 V
C27	322-123	470 PF DISC ±10%	500 V
C28			
C29			
C30			
C31	322-103	.047 MFD ±20%	100 V
C32A	22-3961	ANTENNA TUNING	
C32B		ANTENNA TRIMMER	
C32C		OSCILLATOR TUNING	
C32D		OSCILLATOR TRIMMER	
C33	322-90	100 PF ±10%	500 V
C34	22-3	.01 MFD DISC	500 V
C35	22-3	.01 MFD DISC	500 V
C36	22-2569	.047 MFD	600 V
C37	322-123	470 PF DISC ±10%	500 V
C38	22-3	.01 MFD DISC	500 V
C39	22-2569	.047 MFD	600 V
C40	22-3	.01 MFD DISC	500 V
C41			
C42			
C43	22-4613	.001 F.T.	500 V
C44	22-3	.01 MFD DISC	500 V
C45	22-3	.01 MFD DISC	500 V
C46	22-3	.01 MFD DISC	500 V
C47	22-3	.01 MFD DISC	500 V
R1	63-4880	POTENTIOMETER	25 K
R2	63-4851	125 OHM WW ±10%	4 W
R3	63-4283	220K ±10%	1/4 W
R4	63-4199	2.2K ±10%	1/4 W
L1	S-52362	FM ANTENNA COIL ASSEMBLY	

ITEM NO.	PART NO.	DESCRIPTION
		7L01Z9 (Continued)
L2	S-62887	FM DETECTOR COIL ASSEMBLY
L3	S-64580	FM OSCILLATOR COIL ASSEMBLY
L4	1N T1	1ST I.F. COIL PRIMARY
L5	1N T1	1ST I.F. COIL SECONDARY
L6	1N T2	2ND I.F. COIL PRIMARY
L7	1N T2	2ND I.F. COIL SECONDARY
L8	1N T3	2ND I.F. COIL PRIMARY
L9	1N T3	2ND I.F. COIL SECONDARY
L10	1N T4	3RD I.F. COIL PRIMARY
L11	1N T4	3RD I.F. COIL SECONDARY
L12	1N T5	DISCRIMINATOR COIL PRIMARY
L13	1N T5	DISCRIMINATOR COIL SECONDARY
L14	S-62838	AM ANTENNA COIL ASSEMBLY
L15	S-64572	LOOP LOADING ASSEMBLY
L16	1N T10	1ST I.F. COIL ASSEMBLY PRIMARY
L17	1N T10	1ST I.F. COIL ASSEMBLY SECONDARY
L18	S-61505	AM OSCILLATOR COIL ASSEMBLY
L19	149-311	FERRITE SLEEVE
PL1	S-64646	NEON INDICATOR
S1	85-907	BANDSWITCH
T1	95-2120	1ST I.F. TRANSFORMER FM
T2	95-1919	2ND I.F. TRANSFORMER FM
T3	95-1505	2ND I.F. TRANSFORMER AM
T4	95-1919	3RD I.F. TRANSFORMER FM
T5	95-1866	DISCRIMINATOR TRANSFORMER FM
T6	95-2073	INPUT MULTIPLEX TRANSFORMER
T7	95-2076	DOUBLE MULTIPLEX TRANSFORMER
T8	95-2078	TRAP COIL TRANSFORMER
T9	95-2077	DETECTOR MULTIPLEX TRANSFORMER
T10	95-1718	1ST I.F. TRANSFORMER AM
CV1	403-2	A.F.C. DIODE
A1	405-7	R.C. NETWORK
A2	105-79	R.C. NETWORK
A3	105-78	R.C. NETWORK
X1	103-23	CRYSTAL DIODE
X2	103-23	CRYSTAL DIODE
X3	103-34	GERMANIUM DIODE
X4	103-34	GERMANIUM DIODE
		8NT02
C1	322-20	.05 MFD DISC 25 V
C2	322-20	.05 MFD DISC 25 V
C3	322-72	1 MFD ELECTROLYTIC 50 V
C4	322-72	1 MFD ELECTROLYTIC 50 V
C5	322-30	5 MFD ELECTROLYTIC 25 V
C6	322-30	5 MFD ELECTROLYTIC 25 V
C7	322-40	.001 DISC ± 10% 1KV
C8	22-3694	.1 MFD ±10% 1KV

ITEM NO.	PART NO.	DESCRIPTION
C9	322-40	.001 DISC ± 10% 1KV
C10	22-3694	.1 MFD ± 10% 100 V
C11	322-30	5 MFD ELECTROLYTIC 25 V
C12	322-30	5 MFD ELECTROLYTIC 25 V
C13	22-4619	2 X 100 MFD D ELECTROLYTIC 6 V
C14	22-3014	820 PF MICA ± 10% 500 V
C15	22-3014	820 PF MICA ± 10% 500 V
C16	22-3630	.068 MFD ± 10% 50 V
C17	22-3630	.068 MFD ± 10% 50 V
C18	22-5182	.033 MFD ± 20% 50 V
C19	22-5182	.033 MFD ± 20% 50 V
C20	22-2704	.0068 MFD DISC ± 10% 500 V
C21	22-2704	.0068 MFD DISC ± 10% 500 V
C22	22-5175	200 MFD ELECTROLYTIC 25 V
C23	22-5175	200 MFD ELECTROLYTIC 25 V
C24A		60 MFD ELECTROLYTIC 150 V
C24B	22-3693	150 MFD ELECTROLYTIC 150 V
C24C		150 MFD ELECTROLYTIC 200 V
C25	322-15	.01 MFD DISC 500 V
C26	22-5167	1000 MFD ELECTROLYTIC 30 V
C27A	22-4620	500 MFD ELECTROLYTIC 25 V
C27B		200 MFD ELECTROLYTIC 25 V
R1A&B	63-6372	DUAL BASS CONTROL & NON-STEREO SWITCH
R2A&B	63-6373	DUAL LOUDNESS CONTROL
R3	63-6049	330 OHM RESISTOR ± 10% 1 W
R4	63-6049	330 OHM RESISTOR ± 10% 1 W
R5A&B	63-6371	DUAL TREBLE CONTROL
R6	63-5652	390 OHM RESISTOR ± 10% 2 W
R7	63-5656	470 OHM RESISTOR ± 10% 2 W
R8	63-5193	22 OHM RESISTOR ± 10%
R9	63-6017	56 OHM RESISTOR ± 10% 1 W
R10	63-5497	2 OHM RESISTOR ± 5% 3 W
T1	95-2340	DRIVER TRANSFORMER
T2	95-2340	DRIVER TRANSFORMER
T3	95-2356	OUTPUT TRANSFORMER
T4	95-2356	OUTPUT TRANSFORMER
T5	95-2339	AUTOFORMER
SE1	212-37	SILICON RECTIFIER
SE2	212-71	SILICON RECTIFIER
SE3	212-71	SILICON RECTIFIER
SW1	ON R1	MONAURAL - STEREO SWITCH
		8NT04
C1	322-20	.05 MFD DISC 25 V
C2	322-20	.05 MFD DISC 25 V
C3	322-72	1 MFD ELECTROLYTIC 50 V
C4	322-72	1 MFD ELECTROLYTIC 50 V
C5	322-30	5 MFD ELECTROLYTIC 25 V
C6	322-30	5 MFD ELECTROLYTIC 25 V

ITEM NO.	PART NO.	DESCRIPTION
C7	322-40	.001 DISC ± 10% 1KV
C8	22-3694	.1 MFD ±10% 1KV
C9	322-40	.001 DISC ± 10% 1KV
C10	22-3694	.1 MFD ± 10% 100 V
C11	322-30	5 MFD ELECTROLYTIC 25 V
C12	322-30	5 MFD ELECTROLYTIC 25 V
C13	22-4619	2 X 100 MFD D ELECTROLYTIC 6 V
C14	22-3014	820 PF MICA ± 10% 500 V
C15	22-3014	820 PF MICA ± 10% 500 V
C16	22-3630	.068 MFD ± 10% 50 V
C17	22-3630	.068 MFD ± 10% 50 V
C18	22-5182	.033 MFD ± 20% 50 V
C19	22-5182	.033 MFD ± 20% 50 V
C20	22-2704	.0068 MFD DISC ± 10% 500 V
C21	22-2704	.0068 MFD DISC ± 10% 500 V
C22	22-5175	200 MFD ELECTROLYTIC 25 V
C23	22-5175	200 MFD ELECTROLYTIC 25 V
C24	22-5167	1000 MFD ELECTROLYTIC 30 V
C25A	22-4620	500 MFD ELECTROLYTIC 25 V
C25B		200 MFD ELECTROLYTIC 25 V
R1A&B	63-6372	DUAL BASS CONT. & MON-STEREO SWITCH
R2A&B	63-6373	DUAL LOUDNESS CONTROL
R3	63-6049	330 OHM RESISTOR ± 10% 1 W
R4	63-6049	330 OHM RESISTOR ± 10% 1 W
R5A&B	63-6371	DUAL TREBLE CONTROL
R10	63-6017	56 OHM RESISTOR ± 10% 1 W
T1	95-2340	DRIVER TRANSFORMER
T2	95-2340	DRIVER TRANSFORMER
T3	95-2353	POWER TRANSFORMER
SE1	212-71	SILICON RECTIFIER
SE2	212-71	SILICON RECTIFIER
SW1	ON R1	MONAURAL - STEREO SWITCH
M1	S-71063	PHONO AC CABLE ASS'Y.
		10NT01
C1	322-20	.05 MFD DISC 25 V
C2	22-3654	.47 MFD 3 V
C3	322-109	1 MFD ELECTROLYTIC 25 V
C4	22-5251	.15 MFD ELECTROLYTIC ± 20% 12 V
C5	22-5257	.1 MFD ± 20% 12 V
C6	22-5259	.0082 MFD ± 20% 500 V
C7	22-5257	.1 MFD ± 20% 12 V
C8	22-5257	.1 MFD ± 20% 12 V
C9	22-5258	.22 MFD ± 20% 12 V
C10		
C11	322-30	5 MFD ELECTROLYTIC 25 V
C12	22-4628	2 x 100 MFD ELECTROLYTIC 15 V
C13	322-3	.01 MFD 25 V

ITEM NO.	PART NO.	DESCRIPTION	
		10NT01 (Continued)	
C14	322-3	.01 MFD	25 V
C15	22-5168	300 MFD ELECTROLYTIC	25 V
C16	22-4649	70 MFD	15 V
C17	322-20	.05 MFD	25 V
C18	22-3654	.47 MFD	3 V
C19	322-109	1 MFD ELECTROLYTIC	25 V
C20			
C21	22-5251	.15 MFD ± 20%	12 V
C22	22-5257	.1 MFD ± 20%	12 V
C23	22-5259	.0082 MFD ± 20%	500 V
C24	22-5257	.1 MFD ± 20%	12 V
C25	22-5257	.1 MFD ± 20%	12 V
C26	22-5258	.22 MFD ± 20%	12 V
C27	322-30	5 MFD ELECTROLYTIC	25 V
C28	322-3	.01 MFD	25 V
C29	22-3654	.01 MFD	25 V
C30	22-5168	300 MFD ELECTROLYTIC	25 V
C31	22-5167	1000 MFD ELECTROLYTIC	30 V
C32	22-5260	2 x 500 MFD ELECTROLYTIC	25 V
R1A R1B	63-6480	50K DUAL BASS CONTROL	
R2A R2B	63-6480	50K DUAL TREBLE CONTROL	
R3A R3B	63-6481	50K DUAL LOUDNESS CONTROL	
R4	63-6052	390 OHM	1 W
R5	63-5944	1 OHM	1 W
R6	63-5944	1 OHM	1 W
R7	63-6052	390 OHM	1 W
R8	63-5944	1 OHM	1 W
R9	63-5944	1 OHM	1 W
R10	63-6021	68 OHM ± 10%	1 W
T1	95-2388	DRIVER TRANSFORMER	
T2	95-2388	DRIVER TRANSFORMER	
T3	95-2386	POWER TRANSFORMER	
SE1	212-27	SILICON RECTIFIER	
SE2	212-27	SILICON RECTIFIER	
SP1	49-1089	5 1/4" P.M. SPEAKER	
SP2	49-978	3 1/2" P.M. SPEAKER	
SP3	49-880	3 x 14 P.M. SPEAKER	
SP4	49-1089	5 1/4" P.M. SPEAKER	
SP5	49-978	3 1/2" P.M. SPEAKER	
M1	S-72500	HOUSING AND CABLE ASSEMBLY	
		S-72586	
C1	22-3258	34 PF DISC 5%	500 V
C2	22-5164	1.2 PF GIMMICK 5%	500 V
C3	22-3258	34 PF DISC 5%	500 V
C4	22-3604	5.0 PF DISC 5%	500 V
C5	22-4613	.001 MFD FEED THRU	500 V
C6	322-3	.01 MFD	25 V
C7	22-3258	34 PF DISC 5%	500 V
C8	322-3	.01 MFD	25 V
C9	22-2642	15 PF DISC	500 V
C10	22-4613	.001 MFD FEED THRU	500 V
C11	22-3479	2.2 PF DISC 5%	500 V
C12	22-3652	0.1 MFD DISC	10 V
C13	322-3	.01 MFD DISC	25 V
C14	22-4613	.001 MFD FEED THRU	500 V
C15	322-3	.01 MFD	25 V
C16	322-44	1.5 PF GIMMICK	500 V
C17	22-3621	22 PF DISC	500 V
C18	322-3	.01 MFD DISC	25 V
C19	22-2374	6 PF DISC	500 V
C20	22-4613	.001 MFD FEED THRU	500 V
C21	322-3	.01 MFD DISC	25 V
C22	22-4613	.001 MFD FEED THRU	500 V
L1	S-62887	FM ANTENNA COIL ASSEMBLY	
L2	S-62887	FM RF INPUT COIL ASSEMBLY	
L3	S-62887	FM DET. COIL ASSEMBLY	
L4	20-1256	TRAP COIL 10.7 MC	
L5	1N T1		
L6	1N T1		
L7	S-62887	FM OSCILLATOR COIL ASSEMBLY	
SE1	103-39	DIODE	
T1	95-2322	1ST FM-I.F. TRANSFORMER 10.7 MC	
TR1	121-383	FM-RF TRANSISTOR	
TR2	121-428	FM-MIXER TRANSISTOR	
TR3	121-432	FM-OSCILLATOR TRANSISTOR	

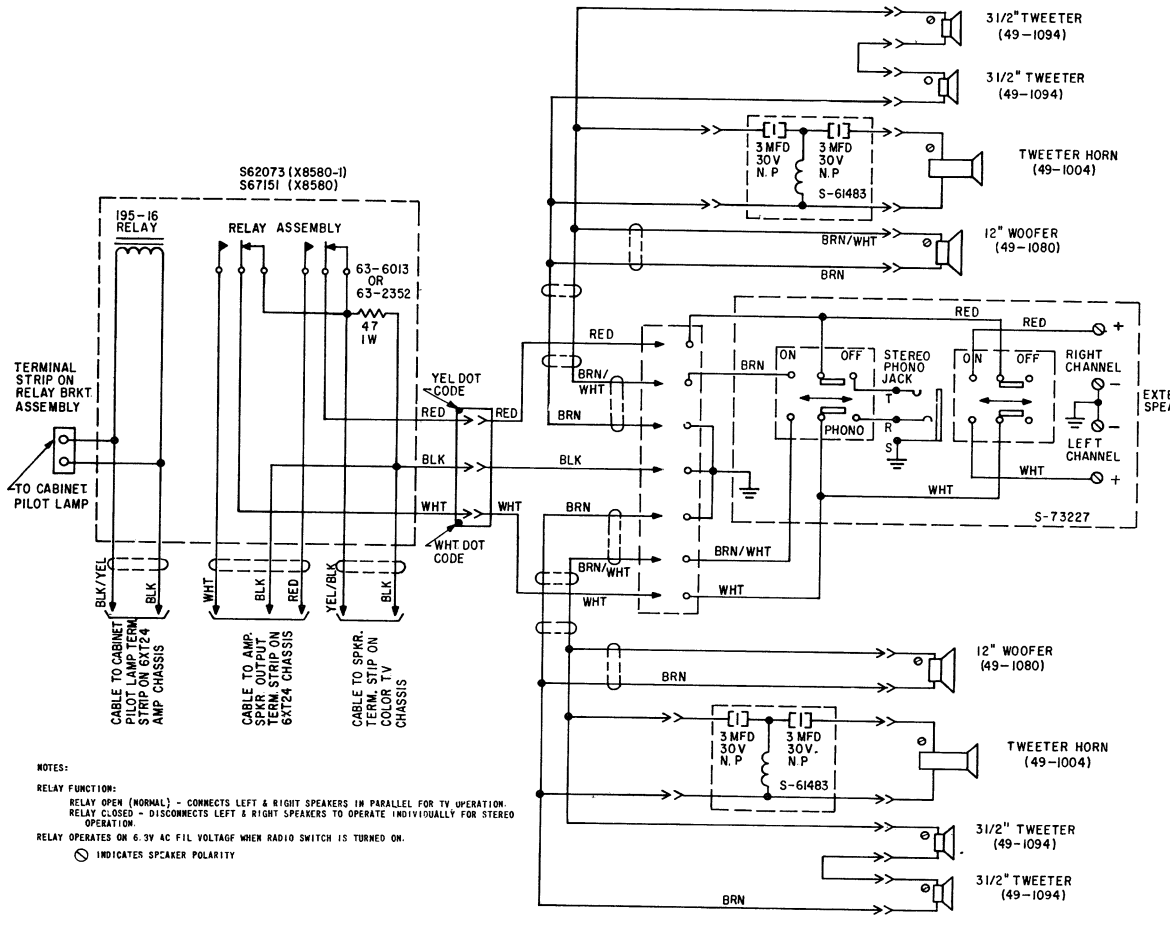


NOTES:
1. ALL RESISTORS ± 10% TOLERANCE, 1/4 WATT, CARBON UNLESS OTHERWISE SPECIFIED.
2. RESISTANCE VALUES IN OHMS, CAPACITANCES IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
3. ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.
4. D.C. VOLTAGES SHOWN ARE MEASURED WITH NO SIGNAL USING A VACUUM TUBE VOLT METER.
5. NO SIGNAL DRAIN IS 5 M.A.

DENOTES CHASSIS GROUND

S-72586 FM TUNER

SPEAKER HOOKUP FOR MODELS 25X8580
SOCKET AND CABLE ASSEMBLY



NOTES:

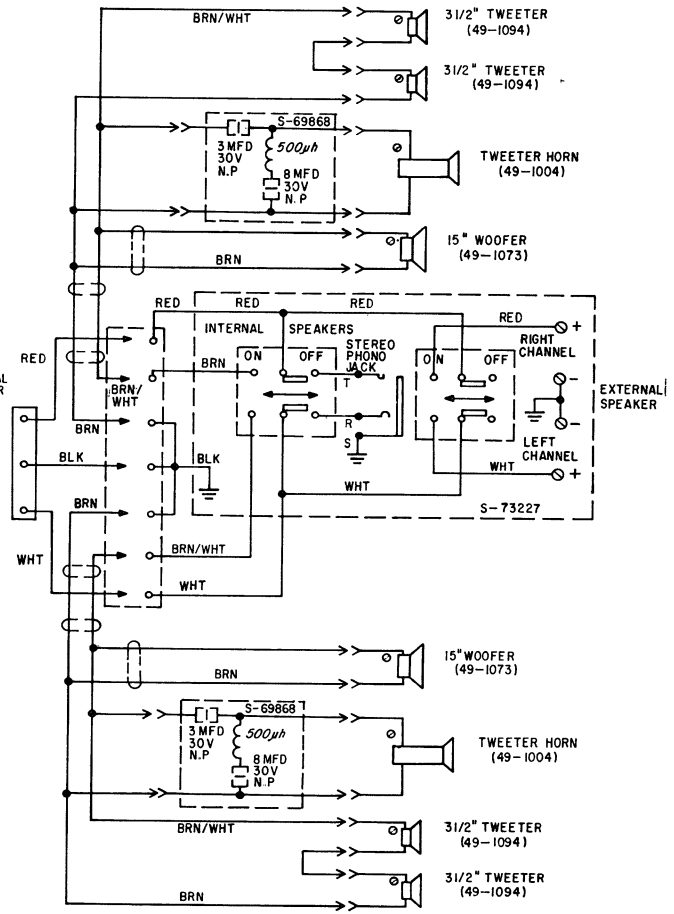
RELAY FUNCTION:

RELAY OPEN (NORMAL) - CONNECTS LEFT & RIGHT SPEAKERS IN PARALLEL FOR TV OPERATION.
RELAY CLOSED - DISCONNECTS LEFT & RIGHT SPEAKERS TO OPERATE INDIVIDUALLY FOR STEREO OPERATION.

RELAY OPERATES ON 6.3V AC FIL VOLTAGE WHEN RADIO SWITCH IS TURNED ON.

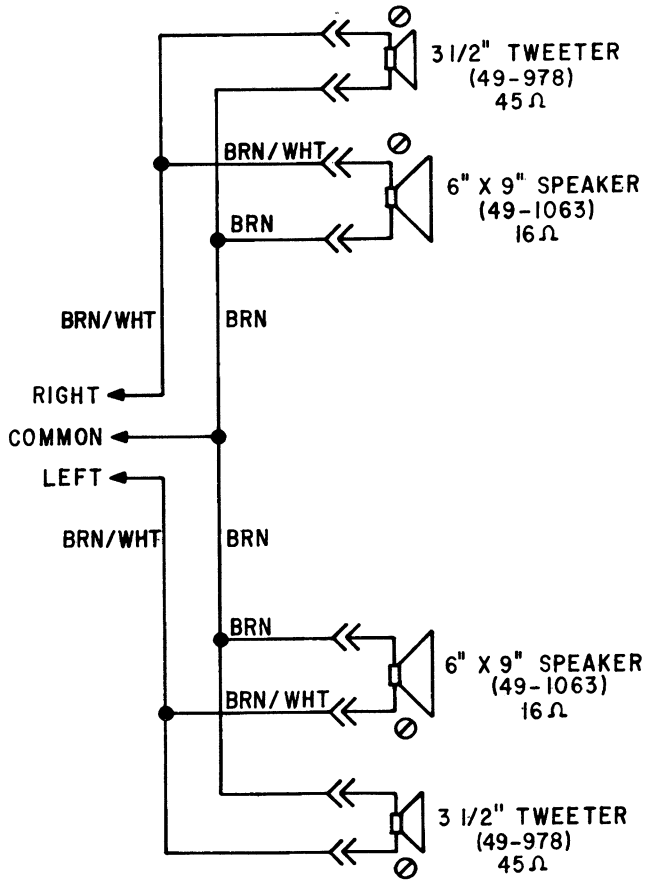
⊘ INDICATES SPEAKER POLARITY

SPEAKER HOOKUP FOR MODELS X960, X962, X964, X966, X968, BRACKET SOCKET & CABLE ASSEMBLY



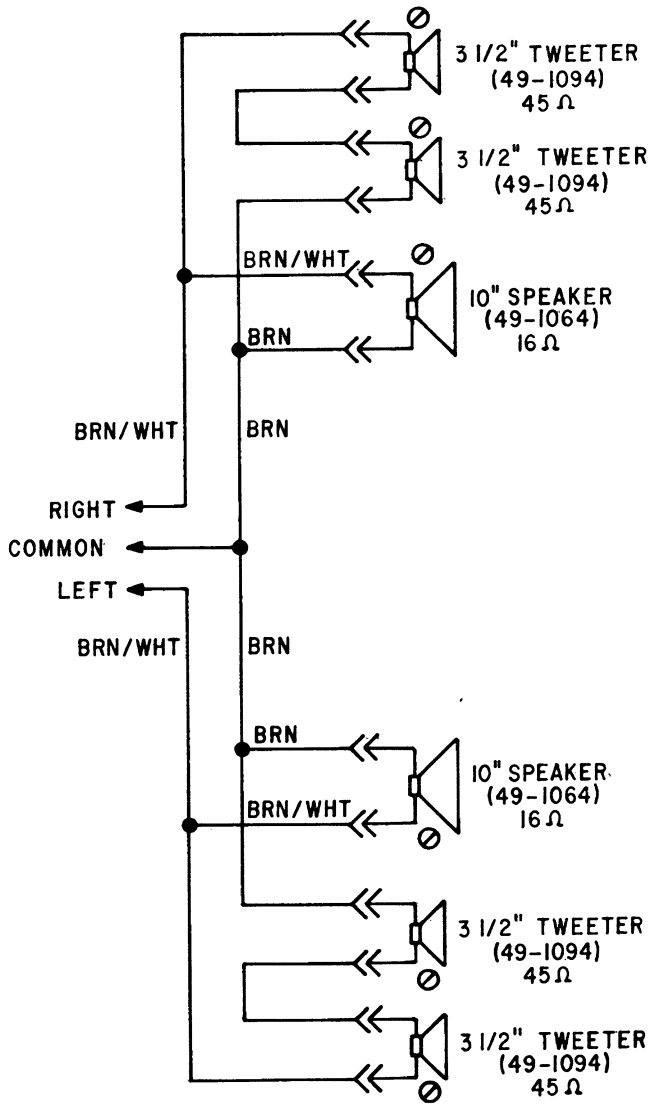
SPEAKER SCHEMATICS

SPEAKER WIRING FOR MODELS
X804, X904
X805, X905
X806, X906

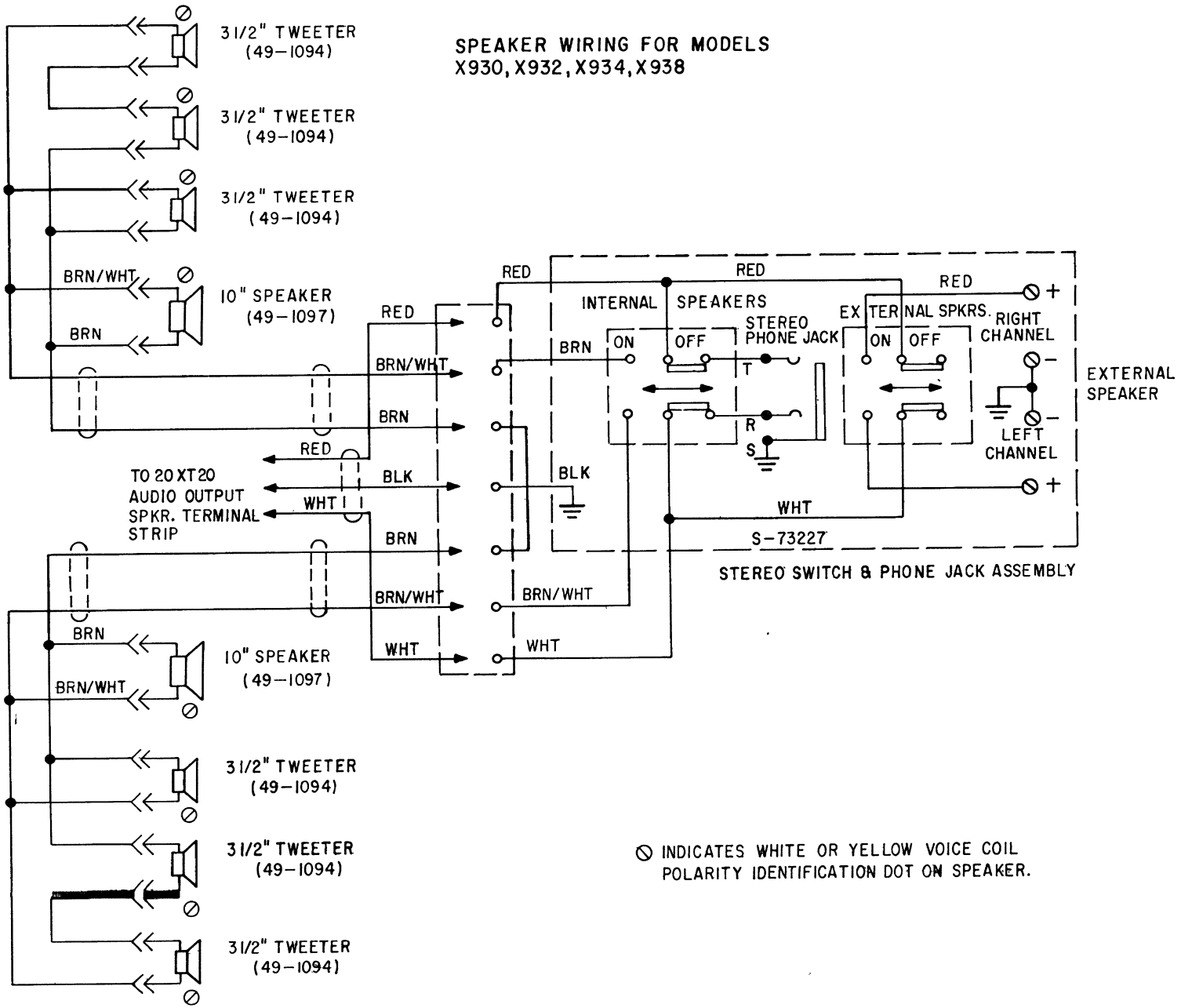


NOTE:
⊘ INDICATES WHITE OR YELLOW VOICE COIL POLARITY IDENTIFICATION DOT ON SPEAKER

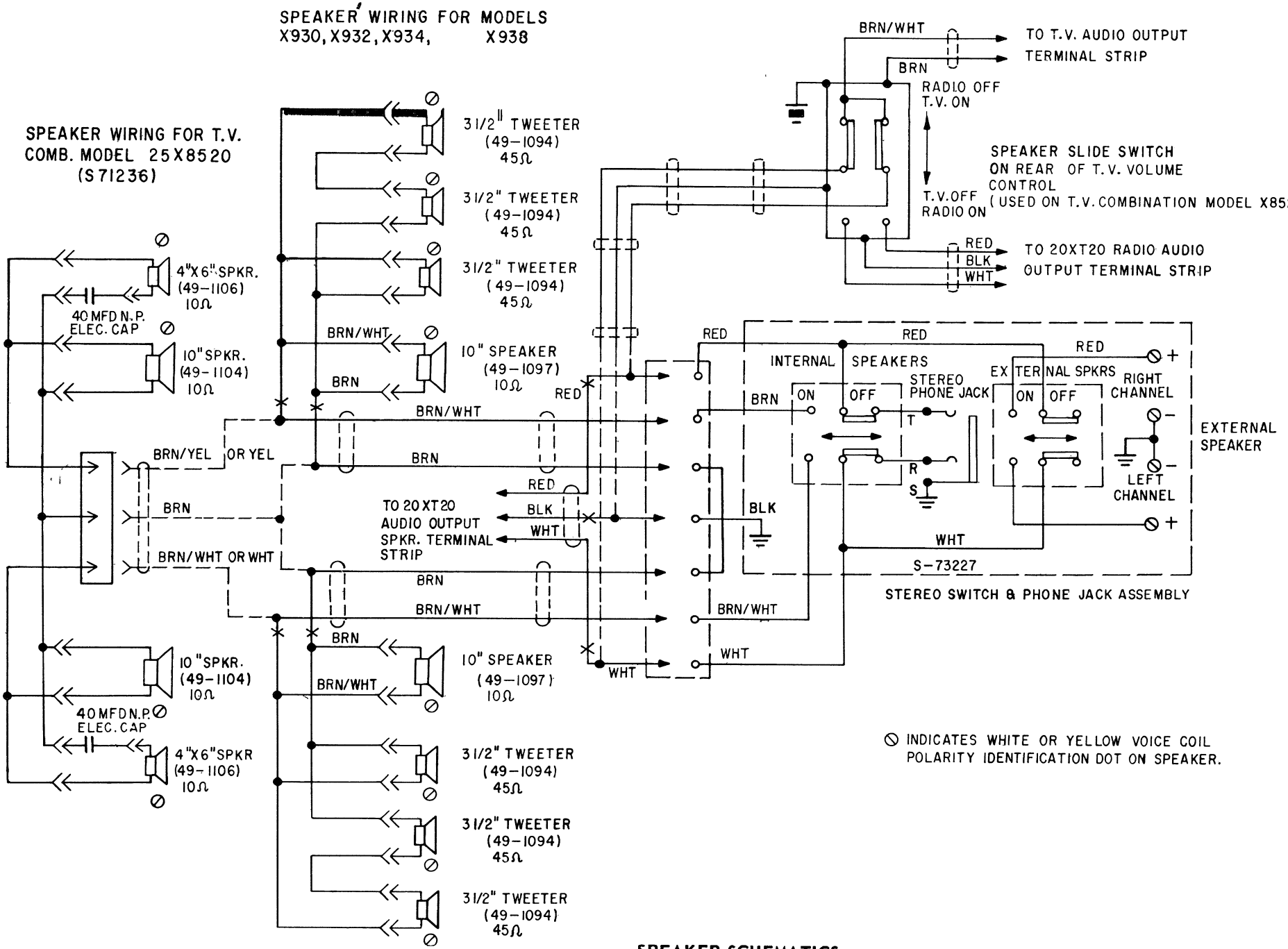
SPEAKER WIRING FOR MODELS
X920, X922
X924, X926



SPEAKER SCHEMATICS



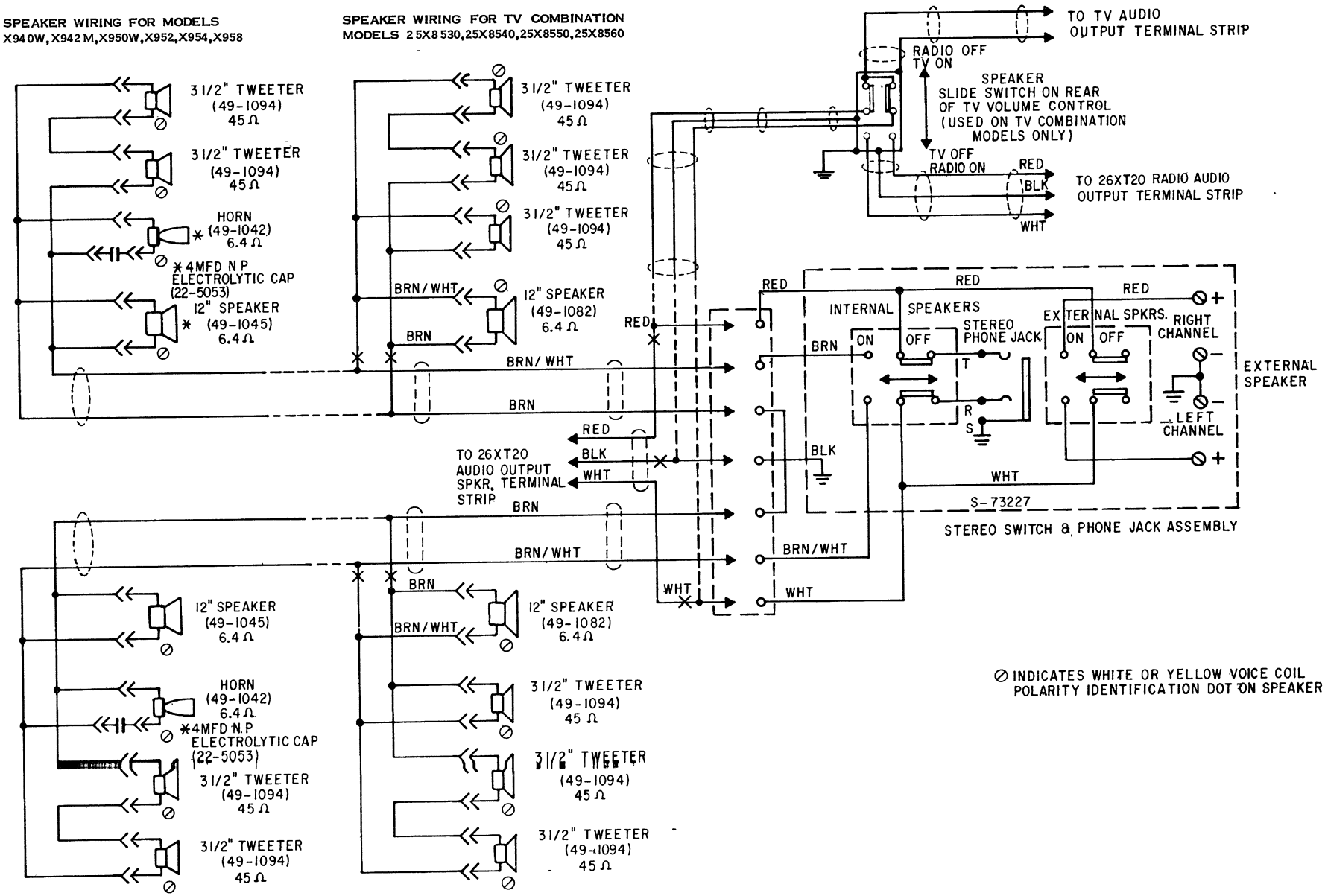
SPEAKER SCHEMATICS



SPEAKER SCHEMATICS

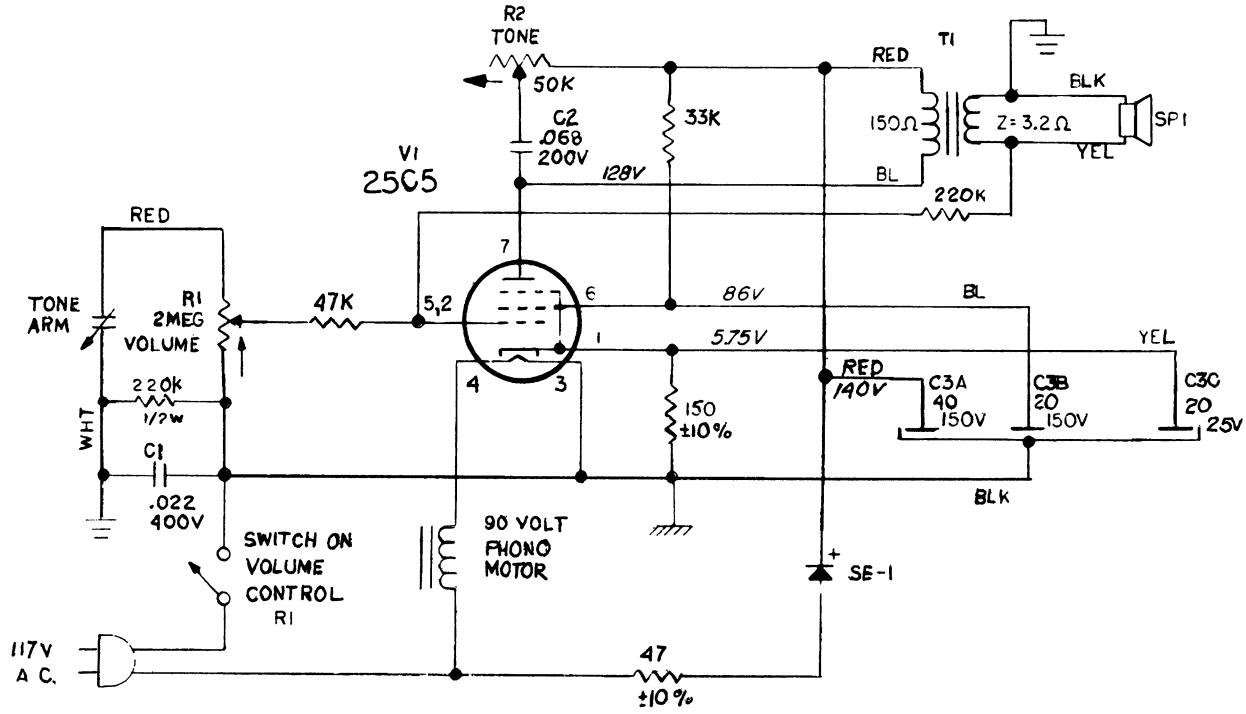
* MODEL (X958DE) SAME AS MODEL X940 EXCEPT USES 49-900 12" SPKR., 49-1004 HORN AND 8MFD SERIES CROSSOVER CAPACITOR

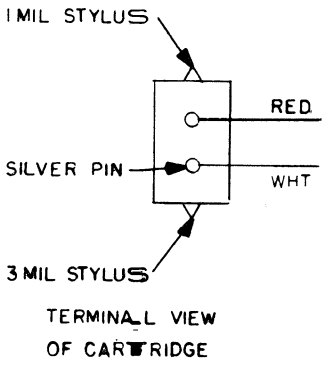
SPEAKER WIRING SCHEMATIC FOR STEREO CONSOLES & TV COMBINATIONS USING THE 26XT20 CHASSIS



⊘ INDICATES WHITE OR YELLOW VOICE COIL POLARITY IDENTIFICATION DOT ON SPEAKER

SPEAKER SCHEMATICS



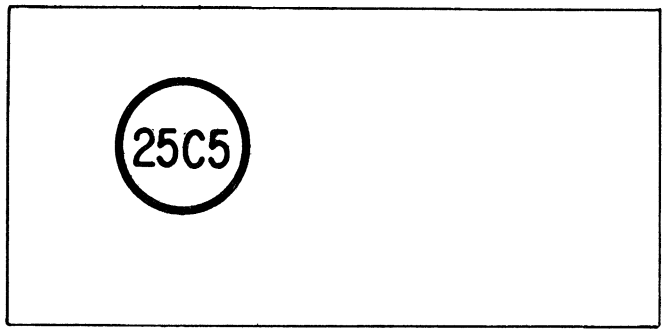


NOTES:
ARROW ON CONTROLS INDICATES CLOCKWISE ROTATION.
ALL VOLTAGES MEASURED FROM COMMON RETURN TO POINTS INDICATED WITH AN A.C. - D.C. VACUUM TUBE VOLTMETER.
ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.
ALL CAPACITOR VALUES IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE ±20% TOLERANCE, 1/2 ATT CARBON UNLESS OTHERWISE SPECIFIED.

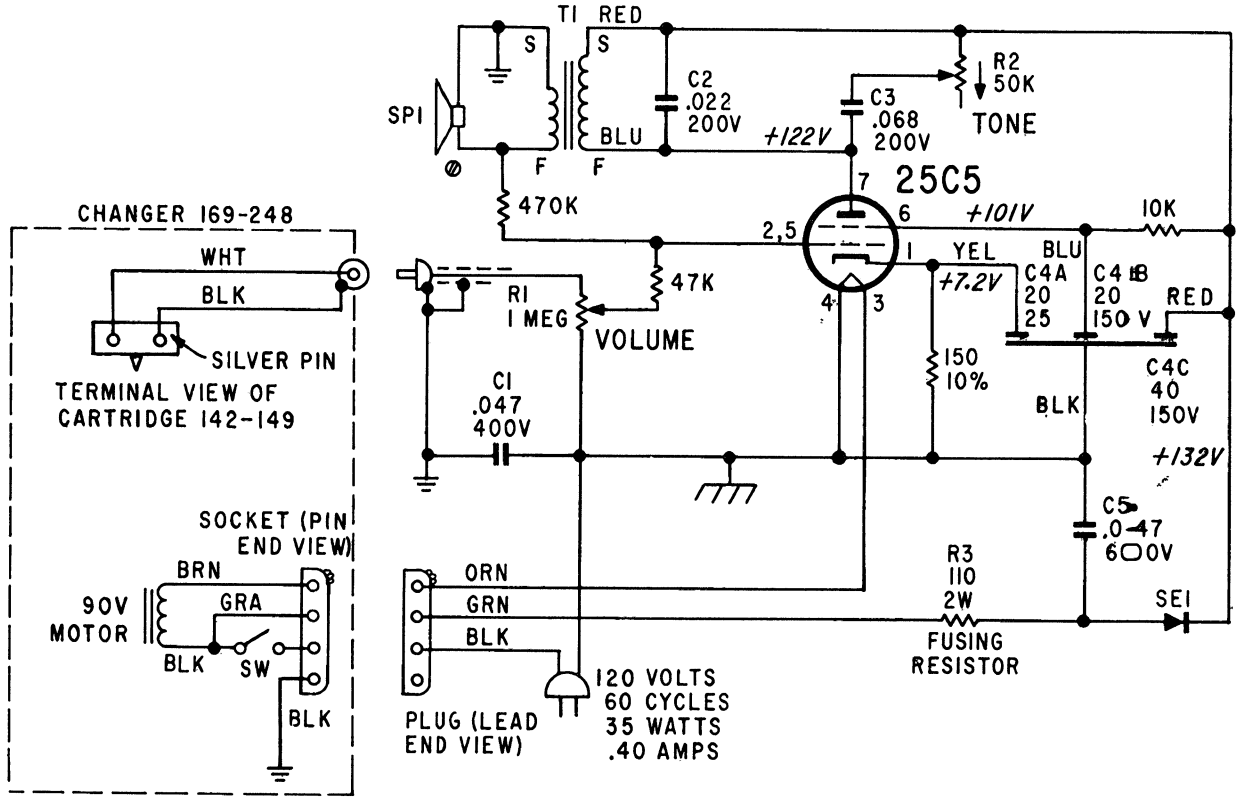
DENOTES COMMON RETURN B-

DENOTES CHASSIS

1L20 SCHEMATIC



1L20 TUBE LAYOUT



NOTES:

ARROW ON CONTROLS INDICATES CLOCKWISE ROTATION.

ALL VOLTAGES MEASURED FROM COMMON RETURN TO POINTS INDICATED WITH A VACUUM TUBE VOLTMETER.

ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.

ALL CAPACITOR VALUES IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

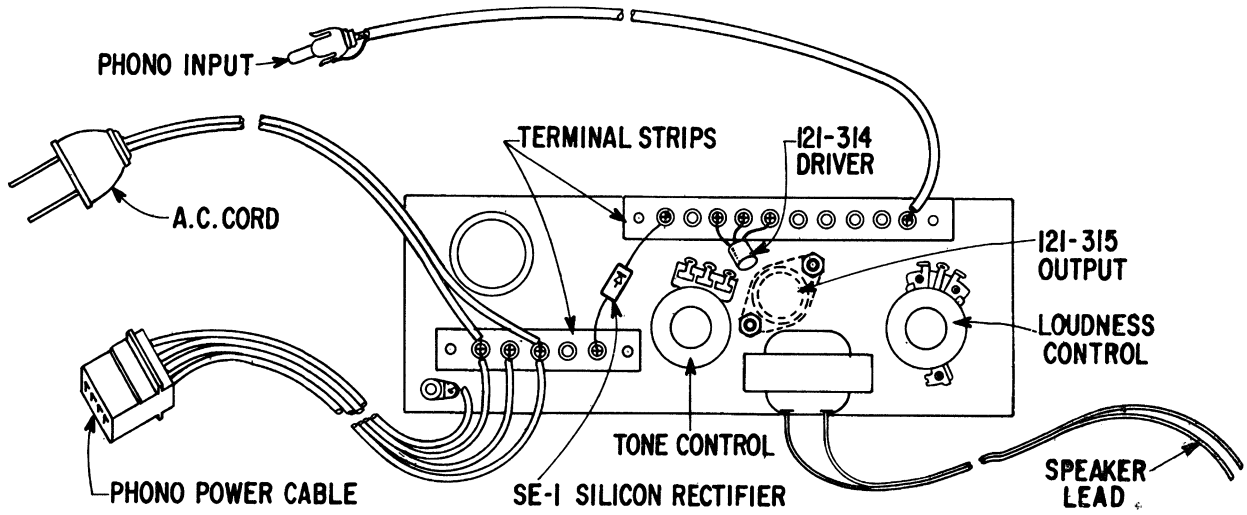
ALL RESISTORS ARE ±20% TOLERANCE, 1/2 WATT CARBON UNLESS OTHERWISE SPECIFIED.

DENOTES COMMON RETURN B-

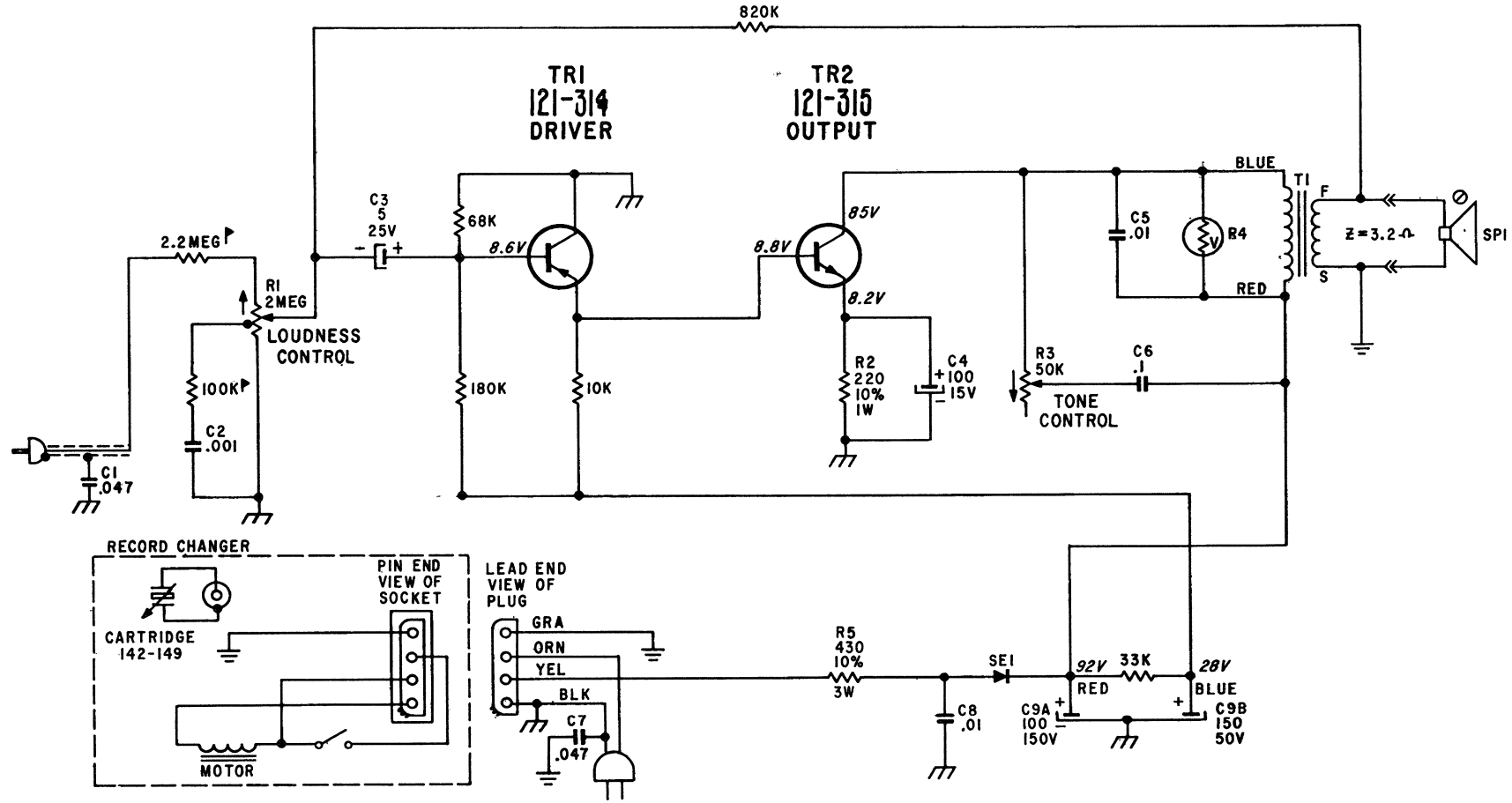
DENOTES CHASSIS

⌀ SPEAKER PHASING DOT

1N21 SCHEMATIC



2NT20 CHASSIS LAYOUT



NOTES:

ALL RESISTORS ARE 1/2 W ±10% UNLESS OTHERWISE SPECIFIED.

ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.

⊘ INDICATES SPEAKER POLARITY.

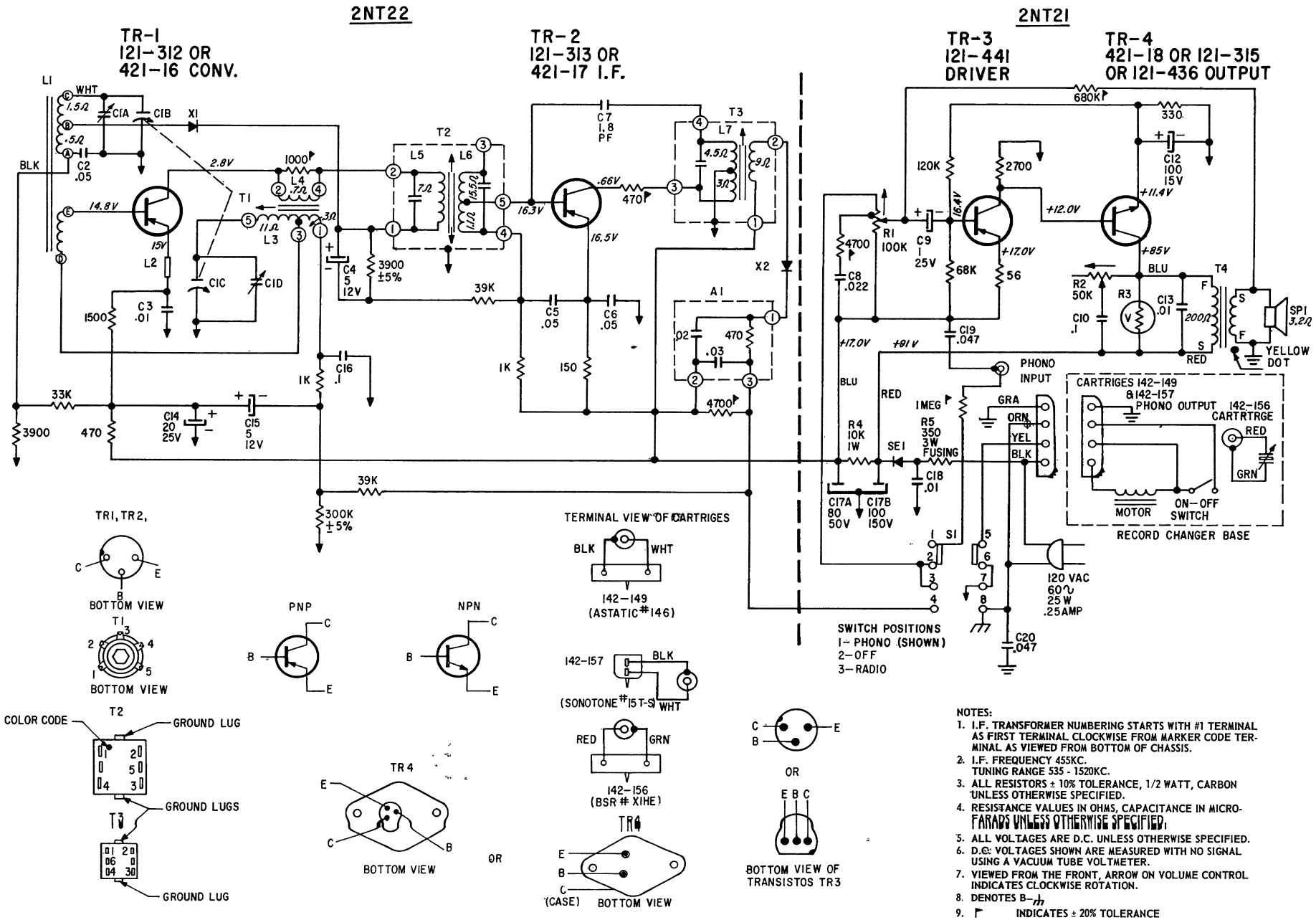
ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED AND ARE MEASURED FROM B- TO POINTS INDICATED WITH A V.T.V.M.

DENOTES AMPLIFIER CHASSIS BASE ⏚

DENOTES B- ⏚

▶ INDICATES 20% MAY BE USED.

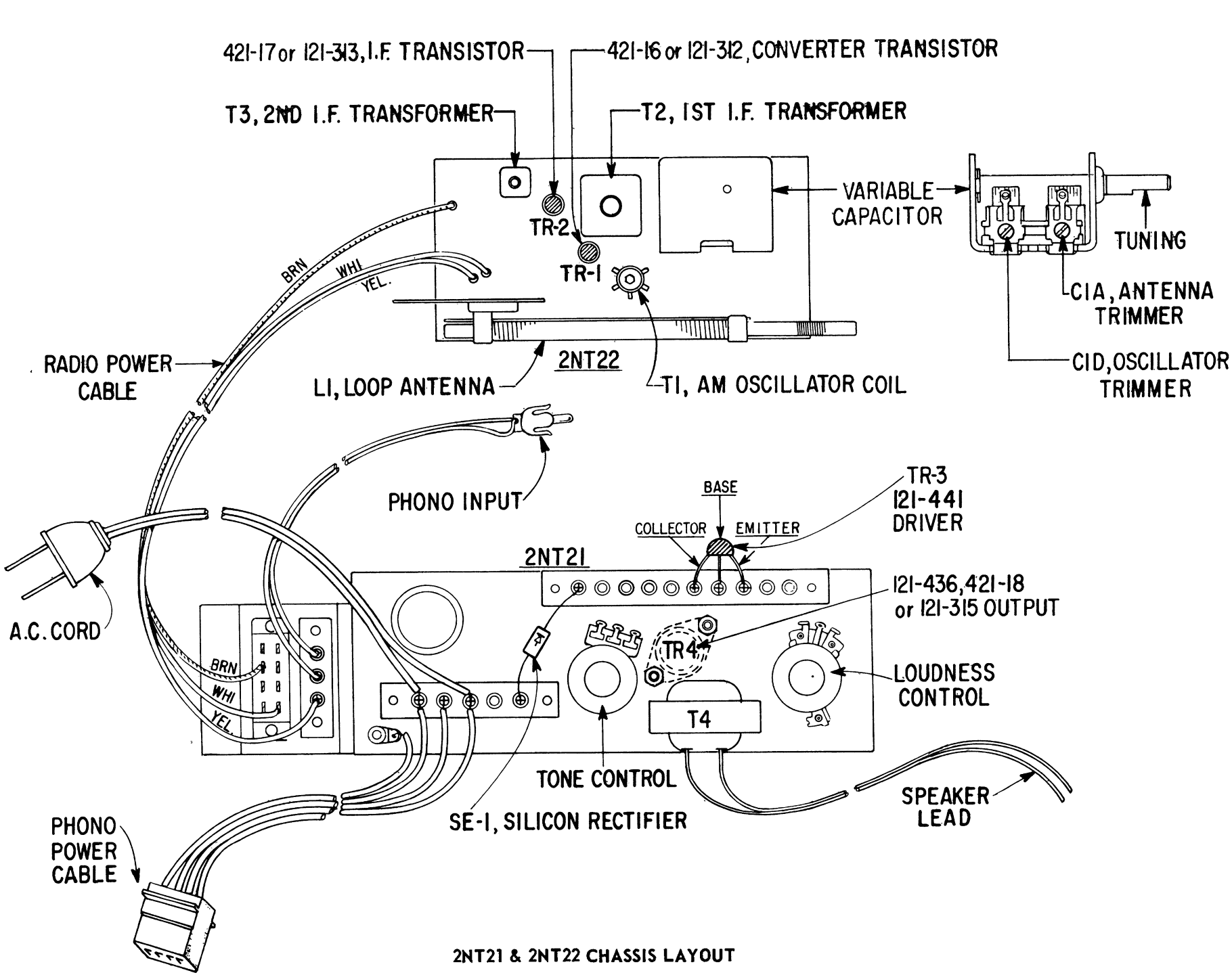
2NT20 SCHEMATIC



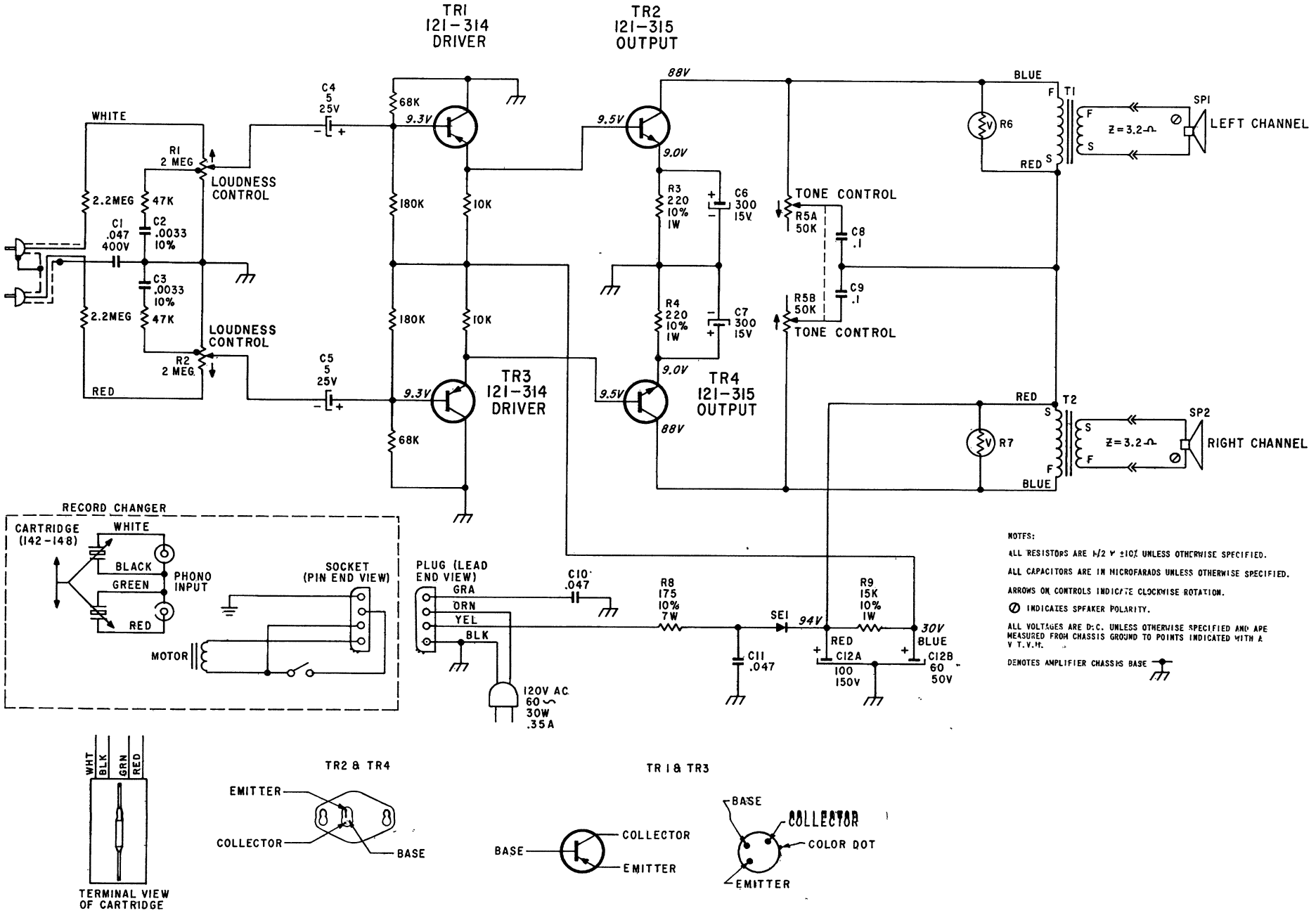
NOTES:

1. I.F. TRANSFORMER NUMBERING STARTS WITH #1 TERMINAL AS FIRST TERMINAL CLOCKWISE FROM MARKER CODE TERMINAL AS VIEWED FROM BOTTOM OF CHASSIS.
2. I.F. FREQUENCY 455KC.
   TUNING RANGE 535 - 1520KC.
3. ALL RESISTORS ± 10% TOLERANCE, 1/2 WATT, CARBON UNLESS OTHERWISE SPECIFIED.
4. RESISTANCE VALUES IN OHMS, CAPACITANCE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
5. ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.
6. D.C. VOLTAGES SHOWN ARE MEASURED WITH NO SIGNAL USING A VACUUM TUBE VOLTMETER.
7. VIEWED FROM THE FRONT, ARROW ON VOLUME CONTROL INDICATES CLOCKWISE ROTATION.
8. DENOTES B-
9. INDICATES ± 20% TOLERANCE
10. DENOTES COMMON CONNECTION
11. DENOTES CHASSIS
12. INDICATES COLLECTOR OF TRANSISTOR.

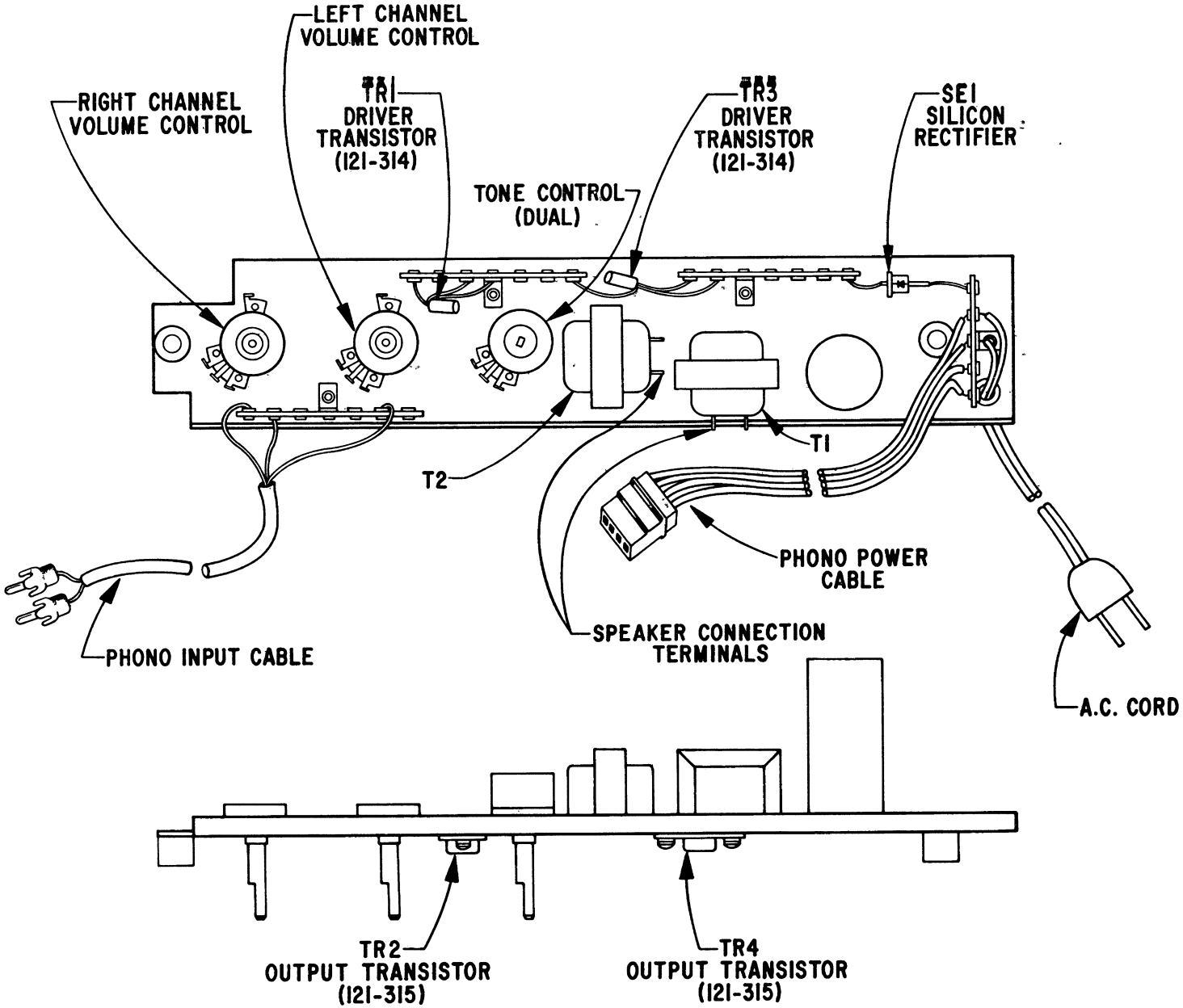
2NT21 & 2NT22 SCHEMATIC



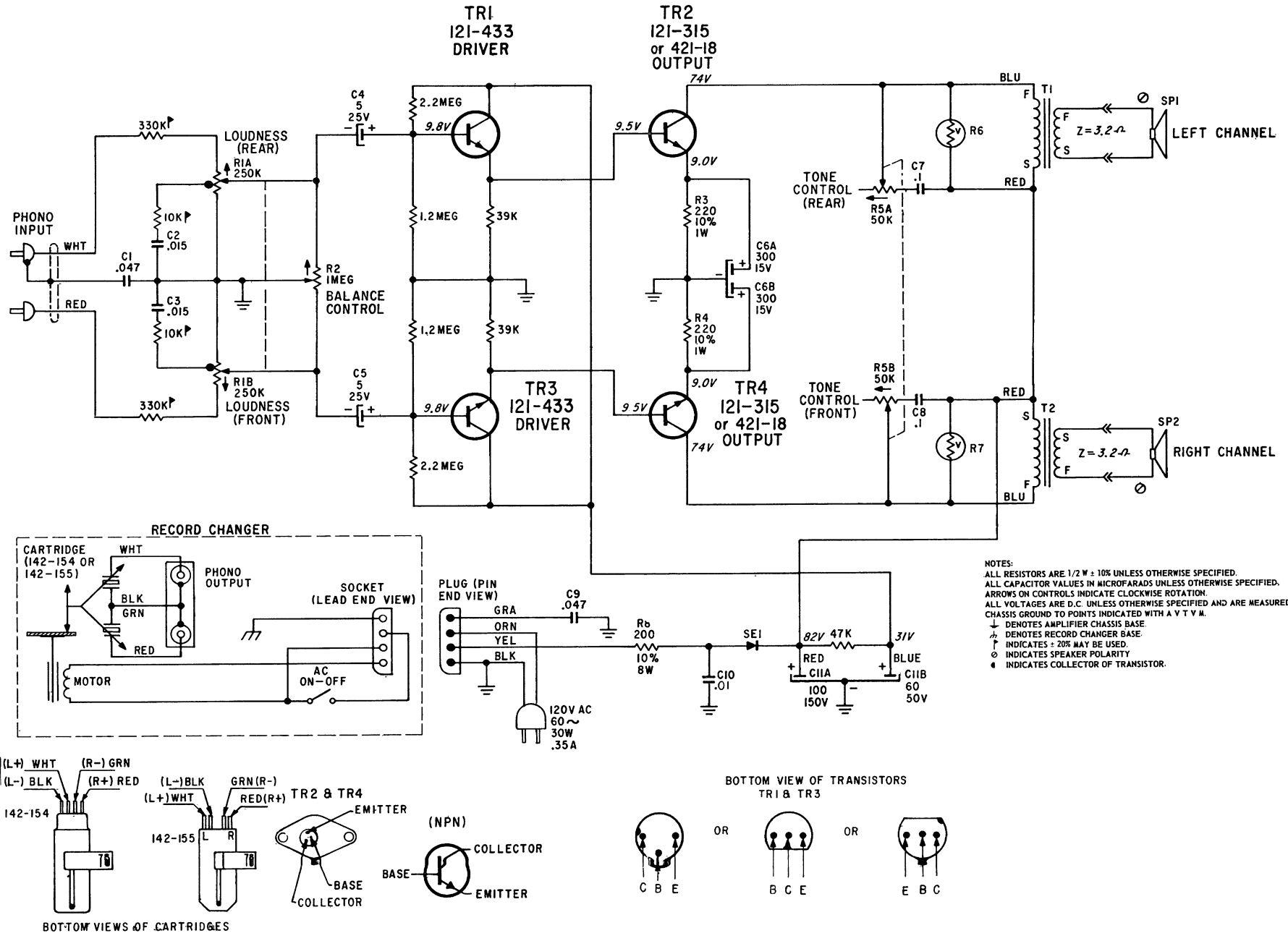
2NT21 & 2NT22 CHASSIS LAYOUT



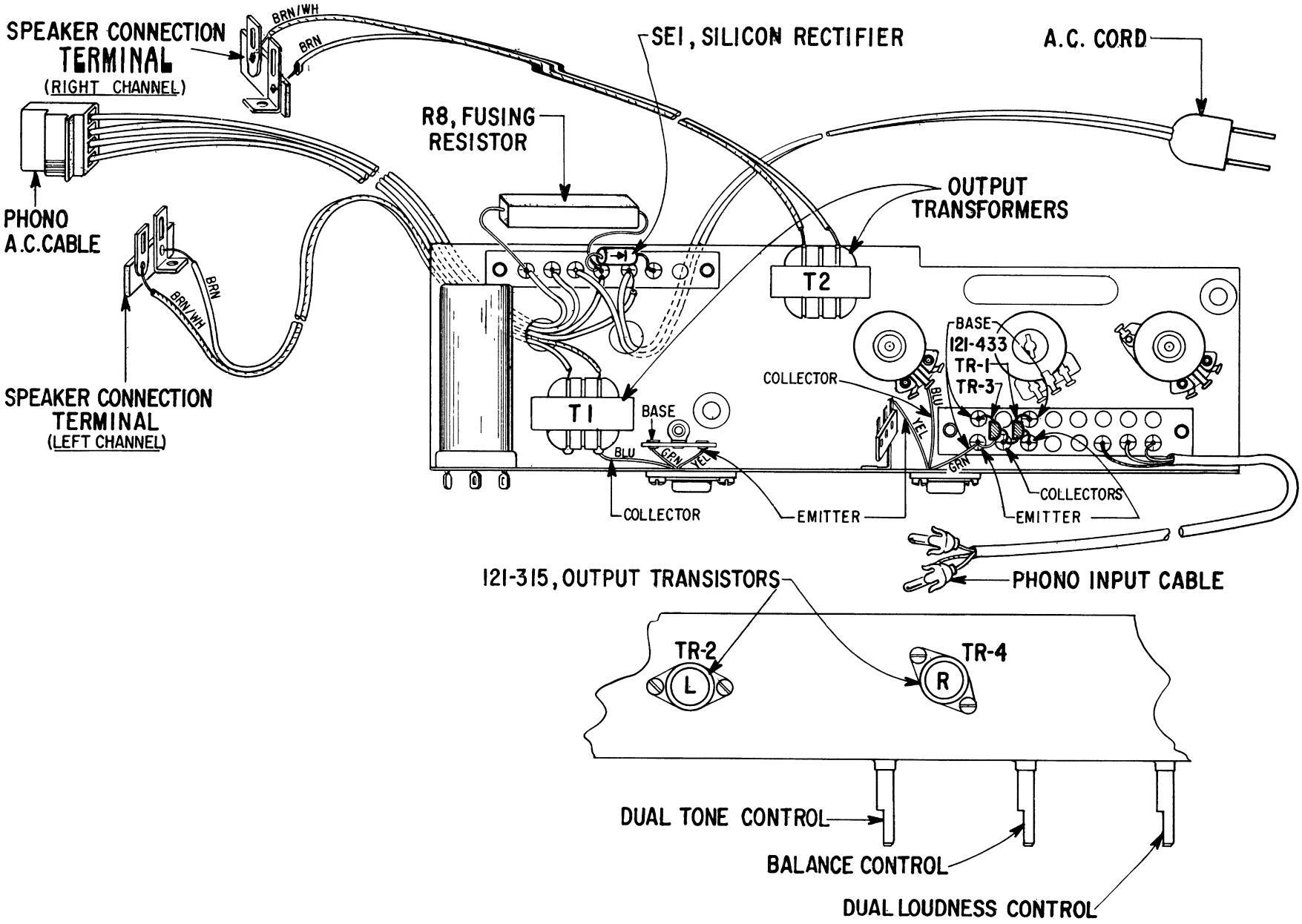
4NT20 SCHEMATIC



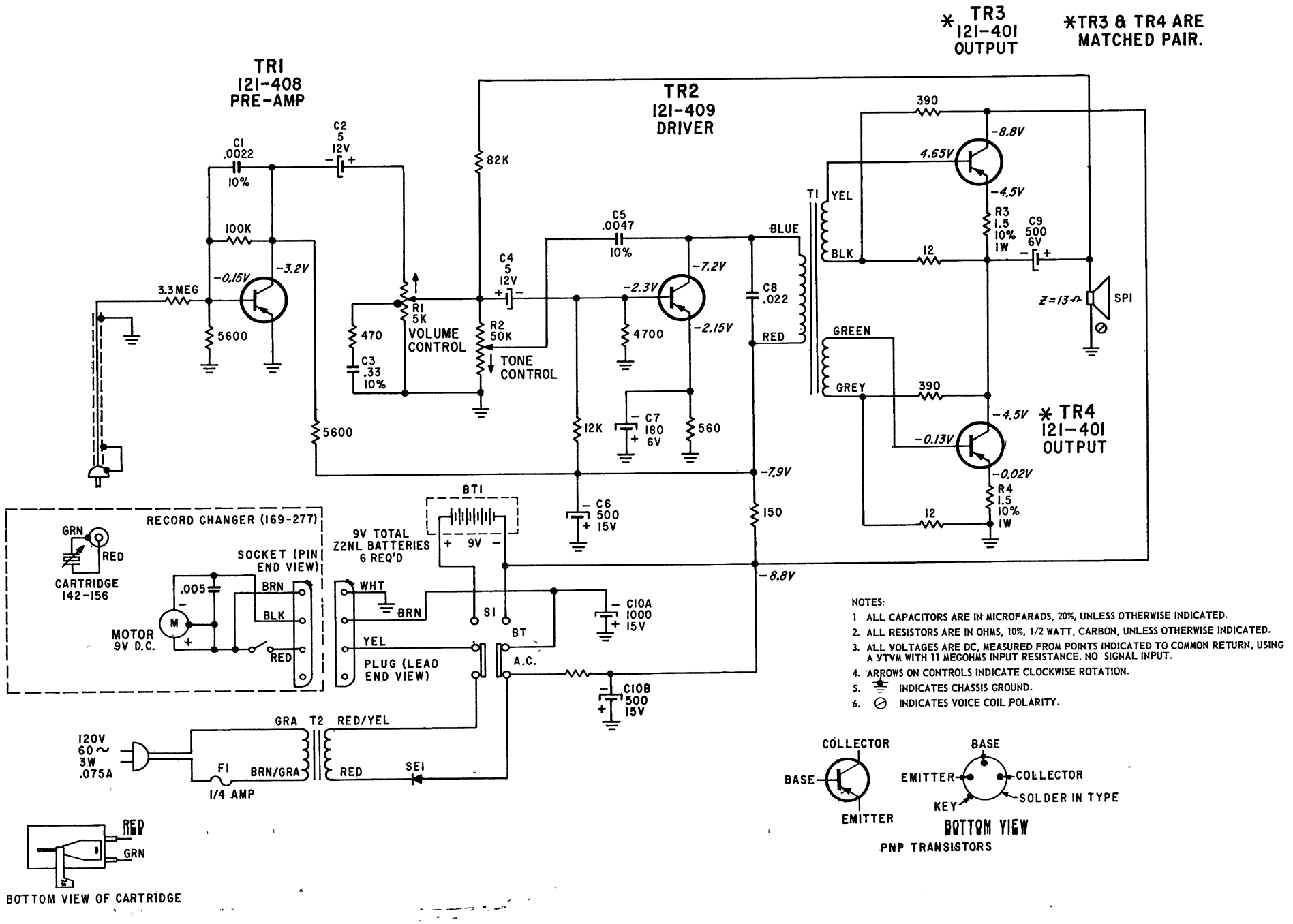
4NT20 CHASSIS LAYOUT



4NT21 SCHEMATIC



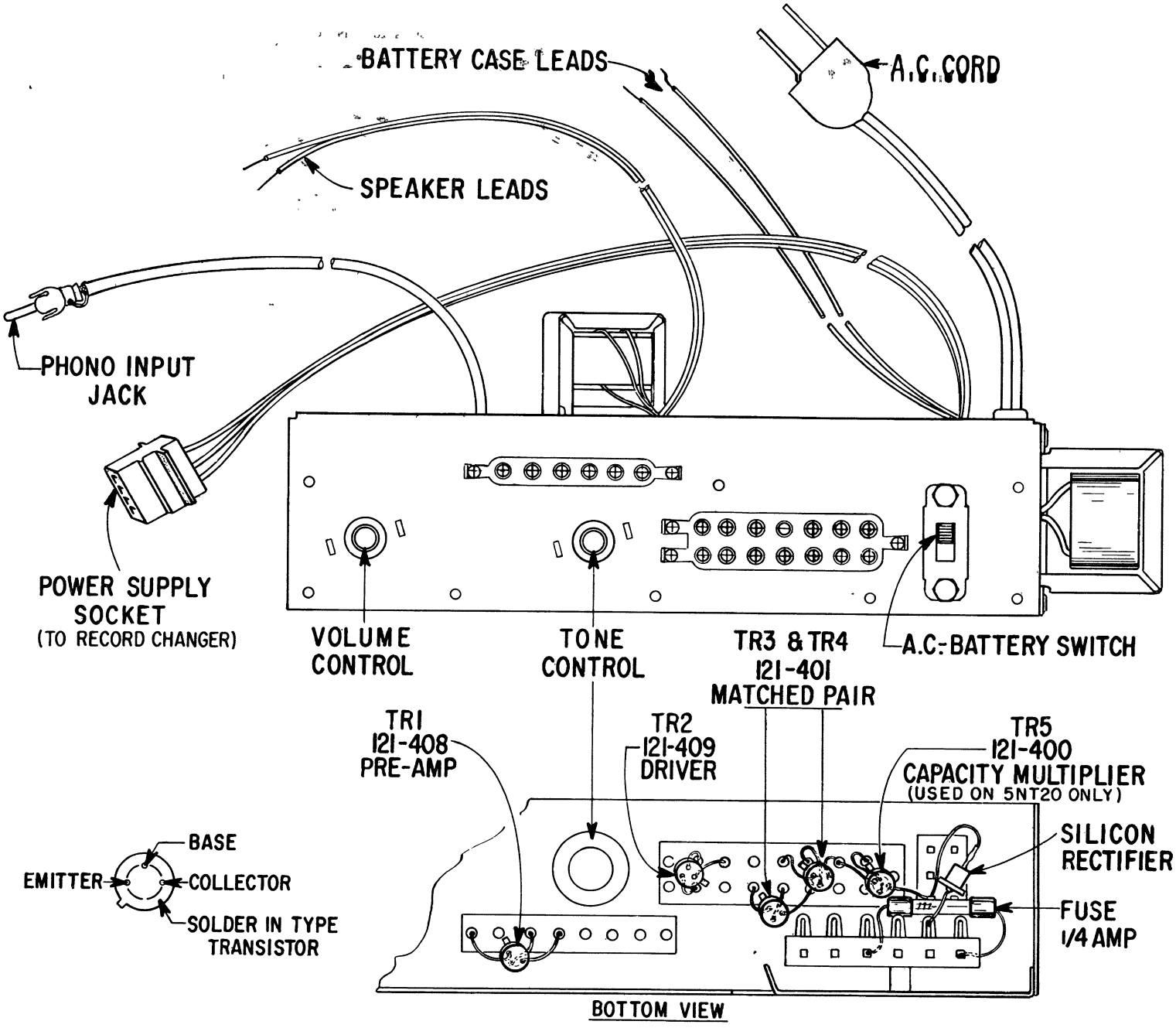
4NT21 CHASSIS LAYOUT



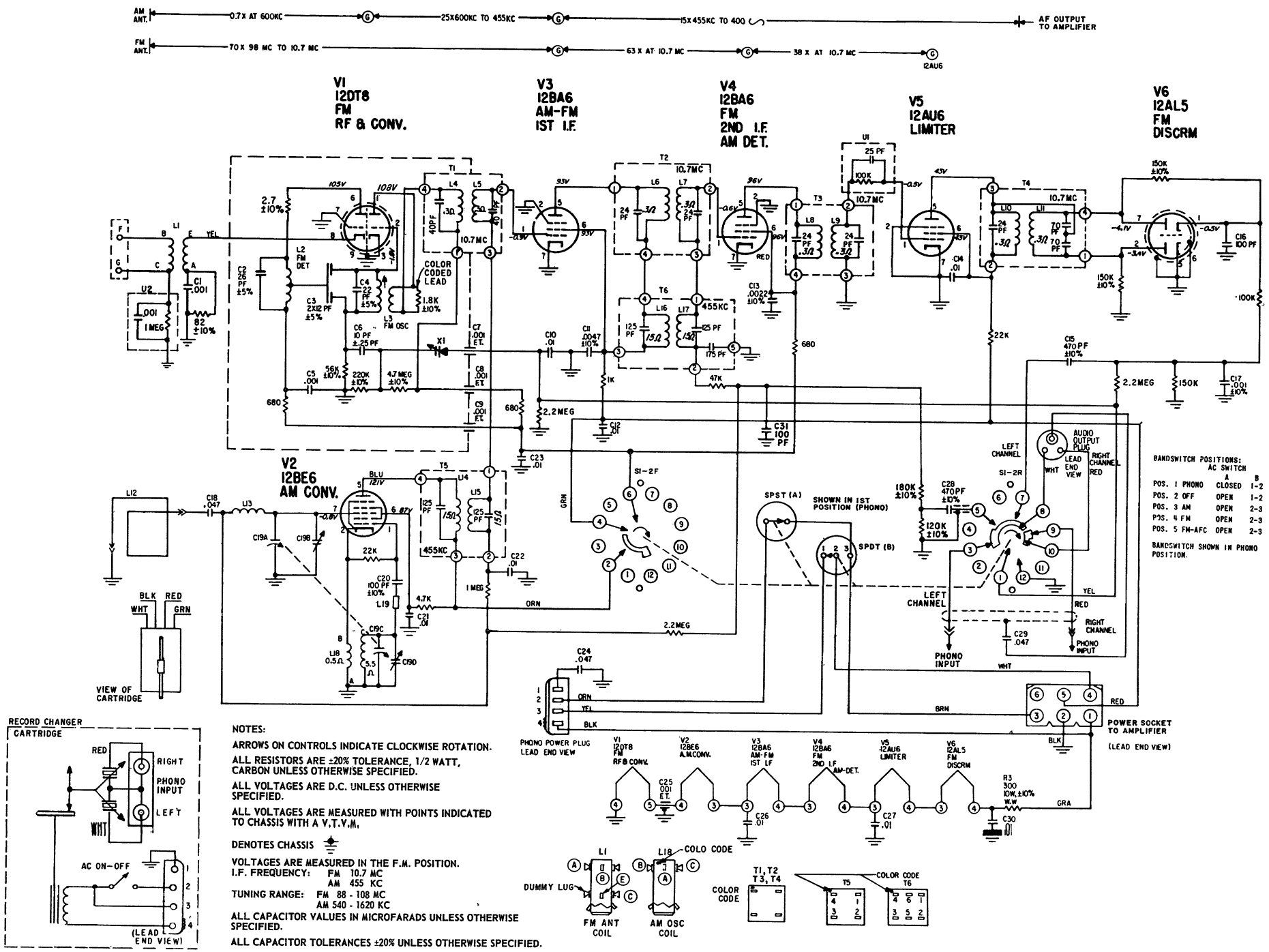
NOTES:

1. ALL CAPACITORS ARE IN MICROFARADS, 20%, UNLESS OTHERWISE INDICATED.
2. ALL RESISTORS ARE IN OHMS, 10%, 1/2 WATT, CARBON, UNLESS OTHERWISE INDICATED.
3. ALL VOLTAGES ARE DC, MEASURED FROM POINTS INDICATED TO COMMON RETURN, USING A VTVM WITH 11 MEGOHMS INPUT RESISTANCE. NO SIGNAL INPUT.
4. ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.
5. ⏚ INDICATES CHASSIS GROUND.
6. ⊘ INDICATES VOICE COIL POLARITY.

4NT22 SCHEMATIC



4NT22 CHASSIS LAYOUT



NOTES:

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.

ALL RESISTORS ARE ±20% TOLERANCE, 1/2 WATT, CARBON UNLESS OTHERWISE SPECIFIED.

ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.

ALL VOLTAGES ARE MEASURED WITH POINTS INDICATED TO CHASSIS WITH A V.T.V.M.

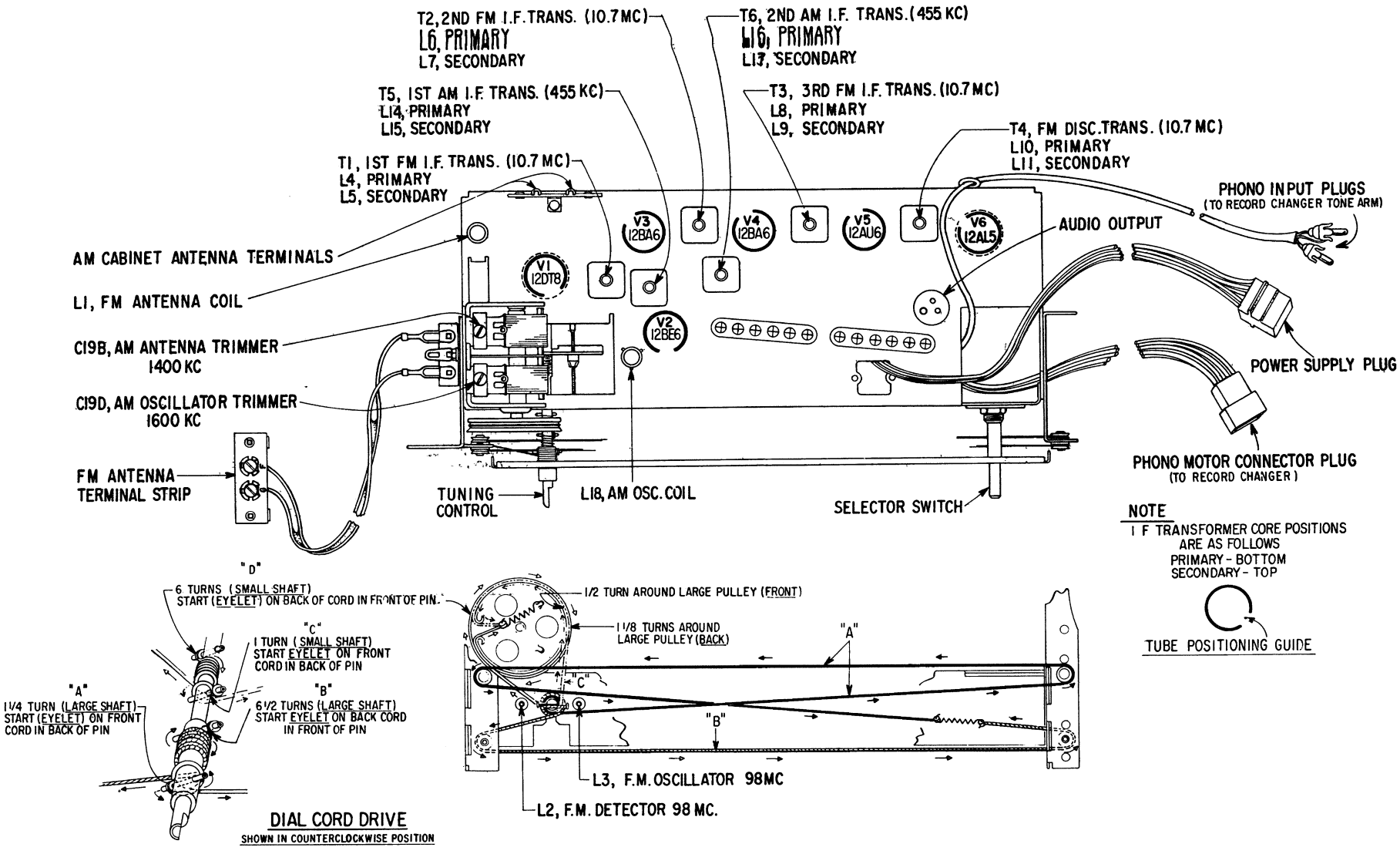
DENOTES CHASSIS

VOLTAGES ARE MEASURED IN THE F.M. POSITION.
I.F. FREQUENCY: FM 10.7 MC
AM 455 KC
TUNING RANGE: FM 88 - 108 MC
AM 540 - 1620 KC

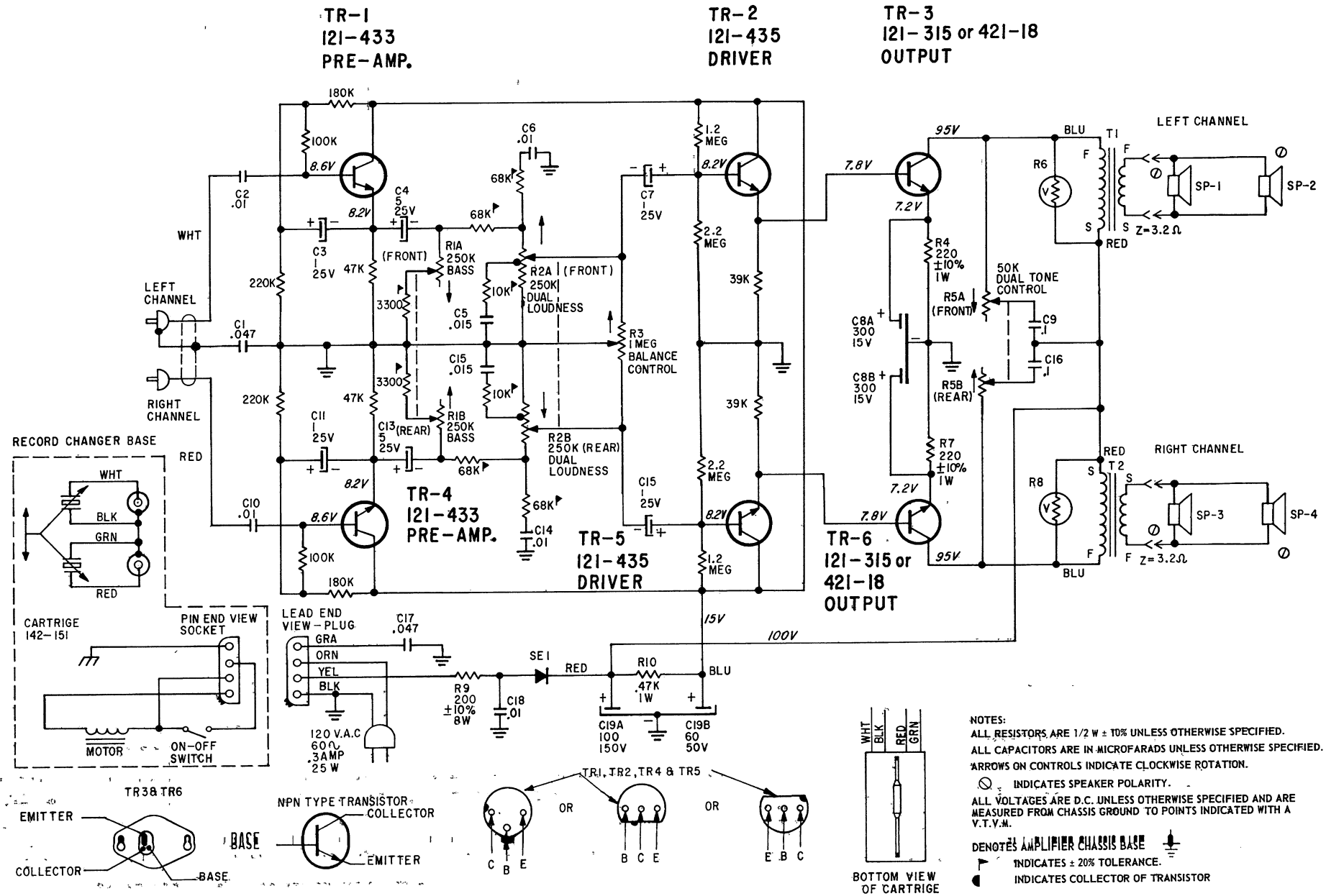
ALL CAPACITOR VALUES IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

ALL CAPACITOR TOLERANCES ±20% UNLESS OTHERWISE SPECIFIED.

6L01Z9 SCHEMATIC (FOR ALIGNMENT SEE HF14 PG. 35)

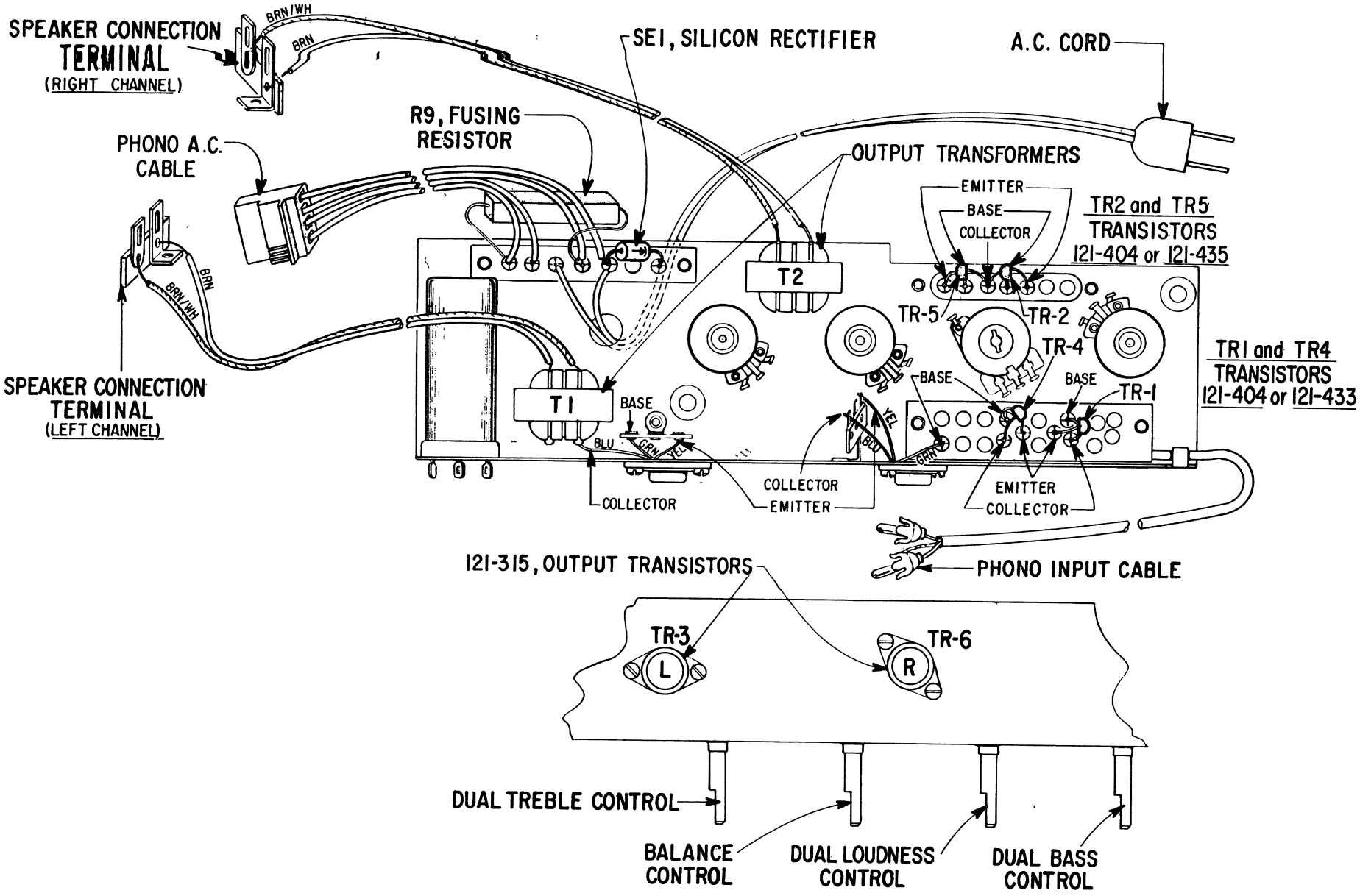


6L01Z9 TUBE LAYOUT

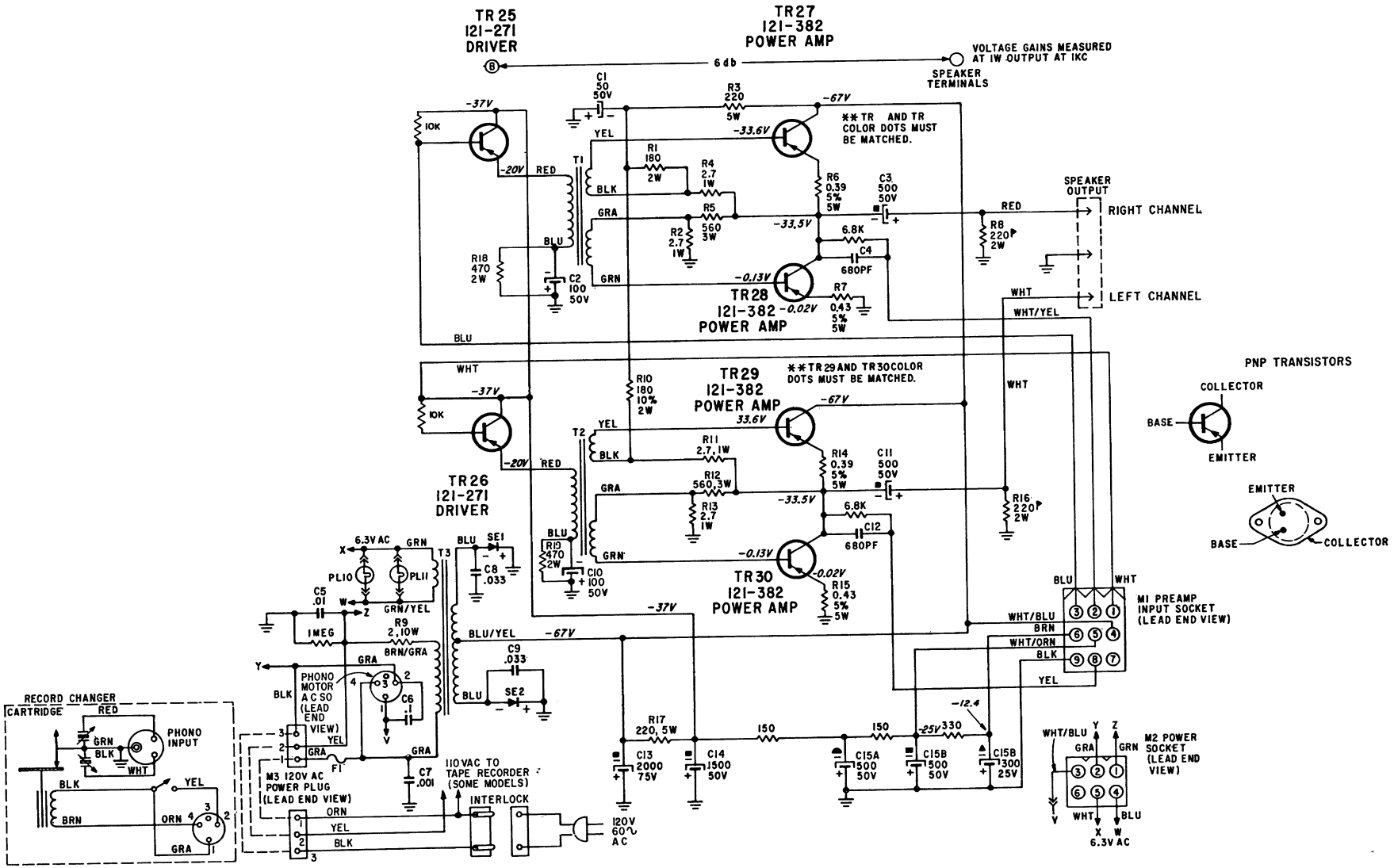


NOTES:
ALL RESISTORS ARE 1/2 W ± 10% UNLESS OTHERWISE SPECIFIED.
ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.
⊘ INDICATES SPEAKER POLARITY.
ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED AND ARE MEASURED FROM CHASSIS GROUND TO POINTS INDICATED WITH A V.T.V.M.
DENOTES AMPLIFIER CHASSIS BASE
INDICATES ± 20% TOLERANCE.
INDICATES COLLECTOR OF TRANSISTOR

6NT20 SCHEMATIC



6NT20 CHASSIS LAYOUT



6XT24 SCHEMATIC

NOTES:

ALL RESISTORS ARE 1/2 WATT, CARBON, ±10% TOLERANCE UNLESS OTHERWISE SPECIFIED.

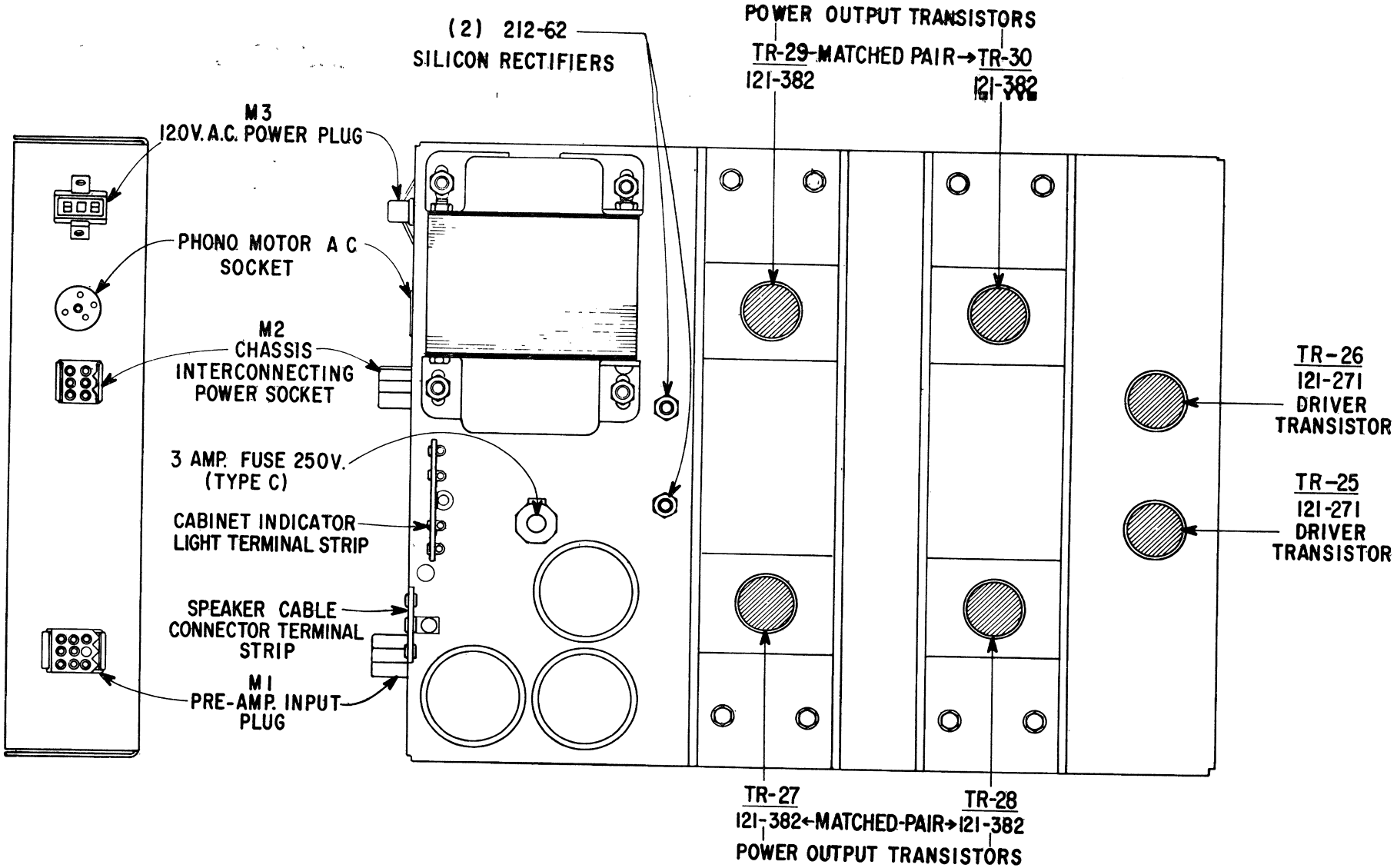
ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.

ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

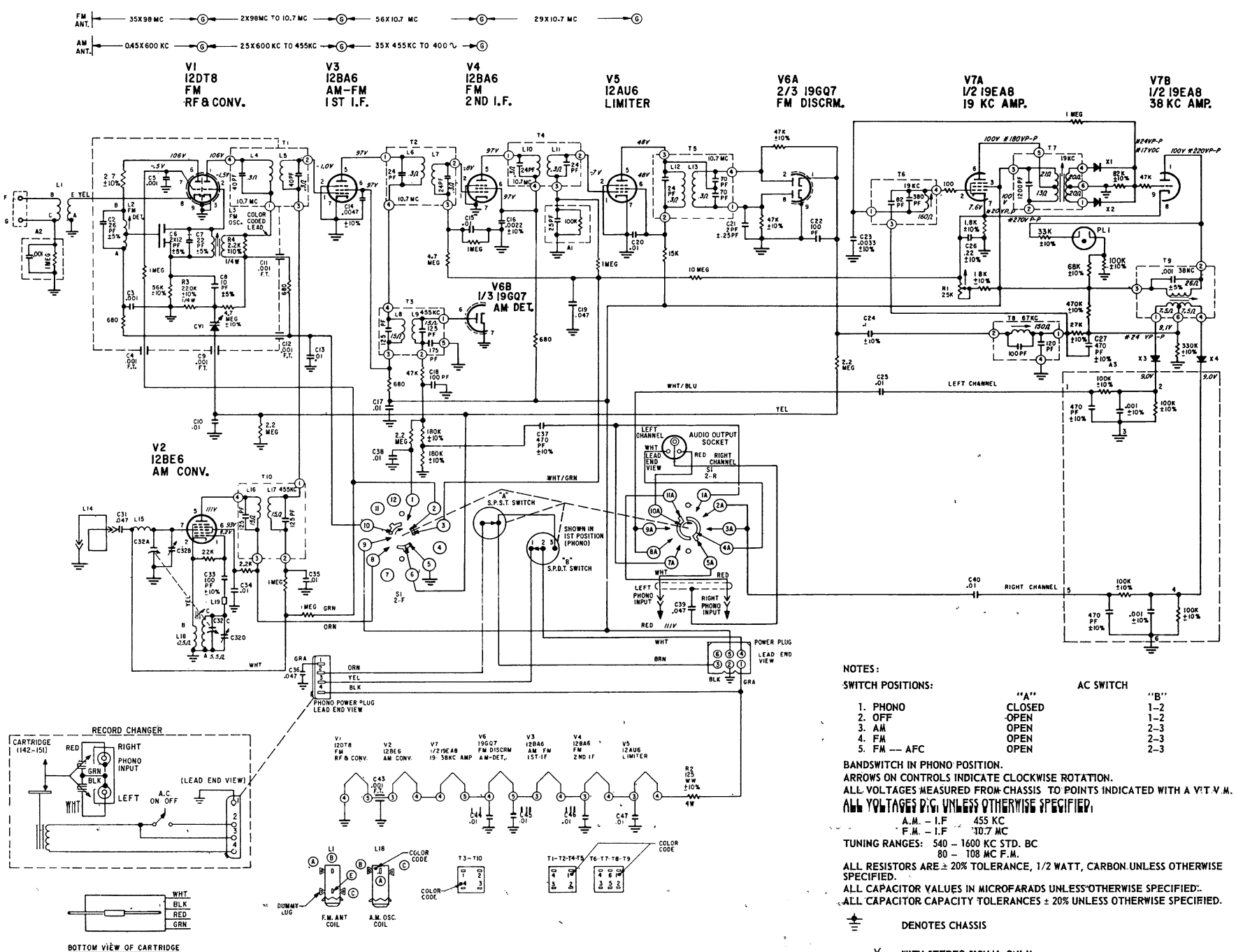
D.C. VOLTAGES SHOWN ARE MEASURED FROM CHASSIS WITH NO SIGNAL USING A VACUUM TUBE VOLTMETER.

⚑ INDICATES ± 20% MAY BE USED.

DENOTES CHASSIS ⏚



6XT24 CHASSIS LAYOUT



NOTES:

SWITCH POSITIONS:

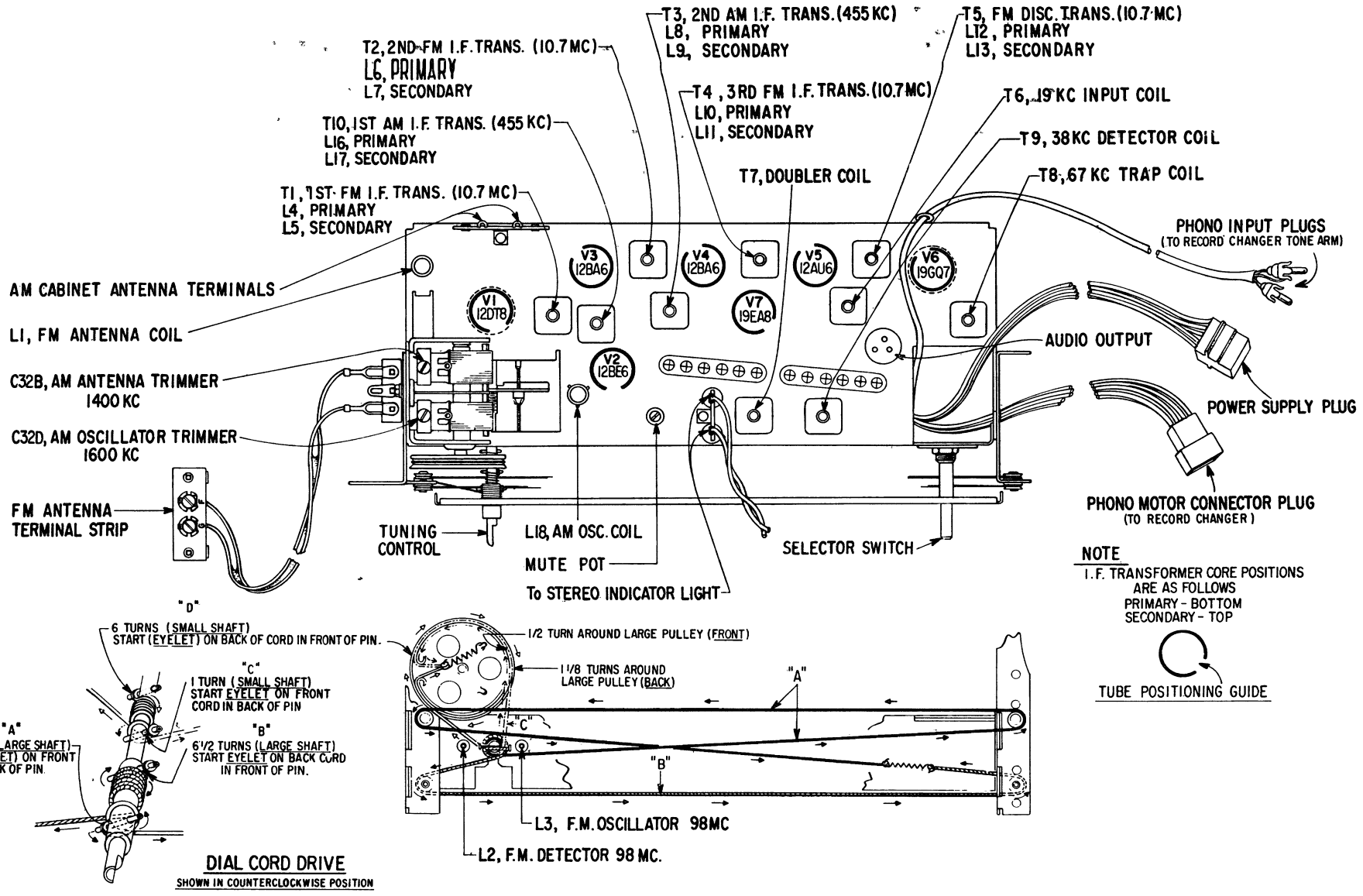
	AC SWITCH "A"	"B"
1. PHONO	CLOSED	1–2
2. OFF	OPEN	1–2
3. AM	OPEN	2–3
4. FM	OPEN	2–3
5. FM — AFC	OPEN	2–3

BANDSWITCH IN PHONO POSITION.
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.
ALL VOLTAGES MEASURED FROM CHASSIS TO POINTS INDICATED WITH A V.T.V.M.
ALL VOLTAGES D.C. UNLESS OTHERWISE SPECIFIED.
A.M. – I.F. 455 KC
F.M. – I.F. 10.7 MC
TUNING RANGES: 540 – 1600 KC STD. BC
80 – 108 MC F.M.
ALL RESISTORS ARE ± 20% TOLERANCE, 1/2 WATT, CARBON UNLESS OTHERWISE SPECIFIED.
ALL CAPACITOR VALUES IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
ALL CAPACITOR CAPACITY TOLERANCES ± 20% UNLESS OTHERWISE SPECIFIED.

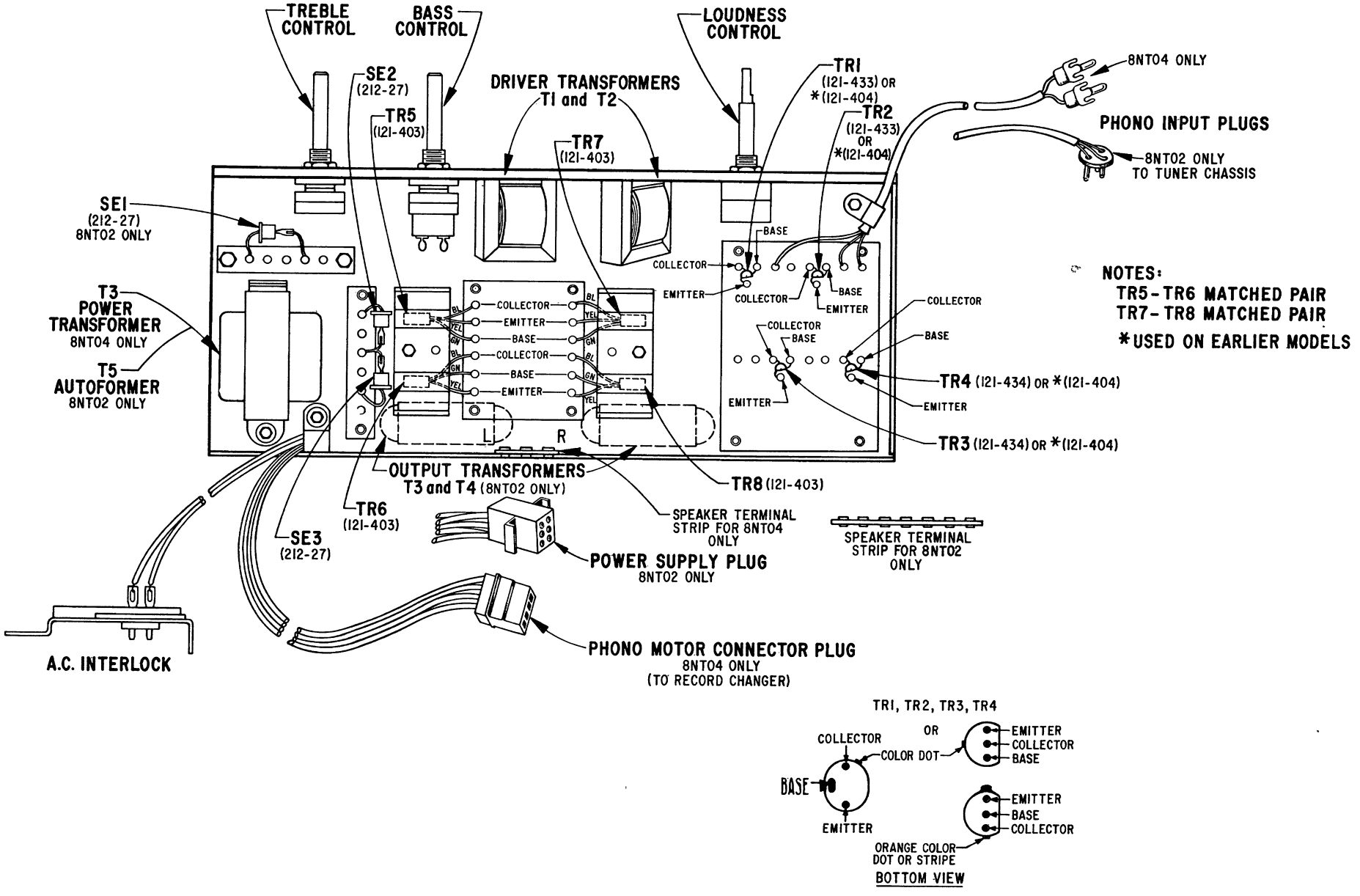
⏚ DENOTES CHASSIS

✳ WITH STEREO SIGNAL ONLY

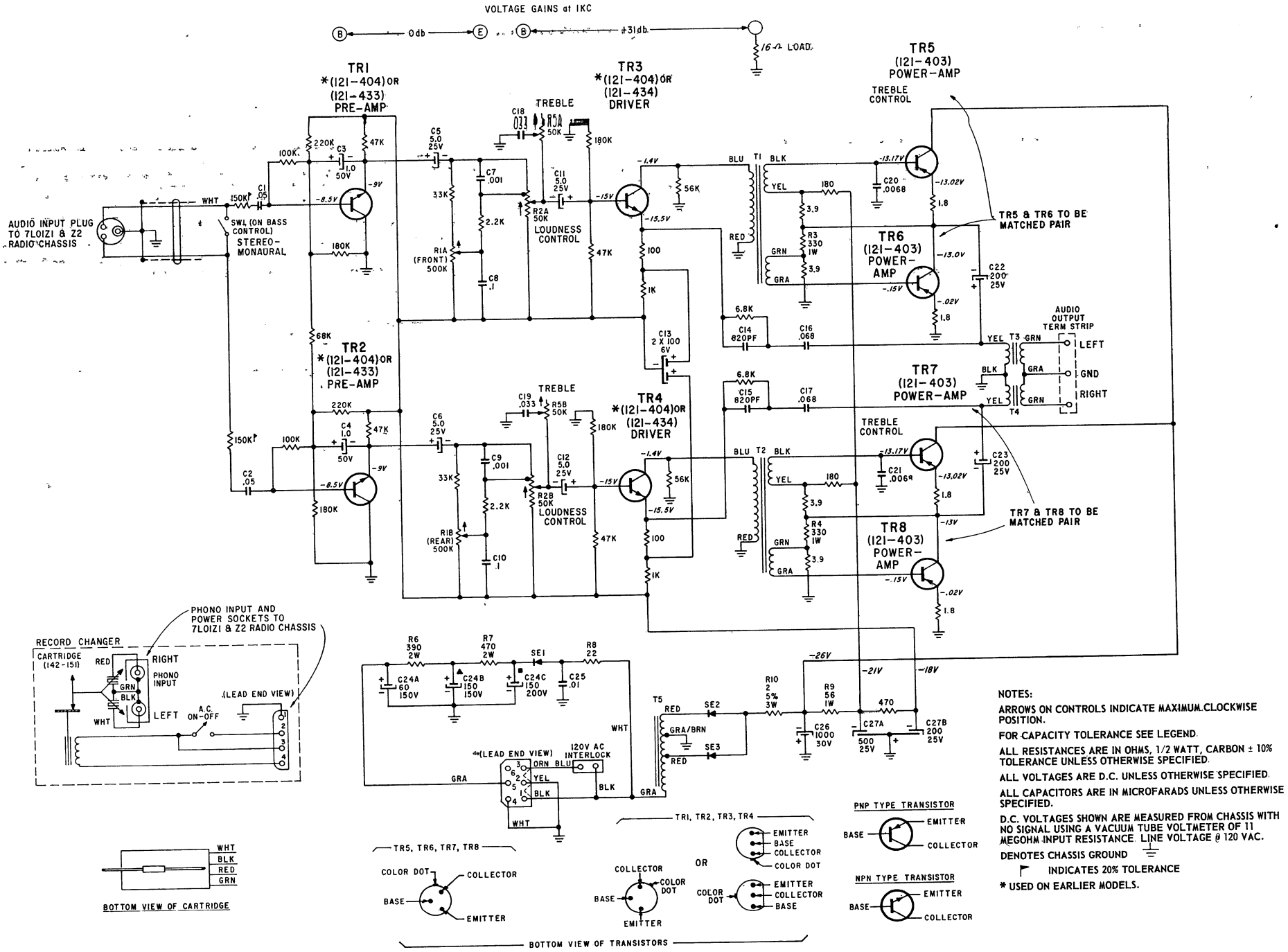
7L01Z9 SCHEMATIC



7L01Z9 CHASSIS LAYOUT



8NT02 & 8NT04 CHASSIS LAYOUT



NOTES:

ARROWS ON CONTROLS INDICATE MAXIMUM CLOCKWISE POSITION.

FOR CAPACITY TOLERANCE SEE LEGEND.

ALL RESISTANCES ARE IN OHMS, 1/2 WATT, CARBON ± 10% TOLERANCE UNLESS OTHERWISE SPECIFIED.

ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.

ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

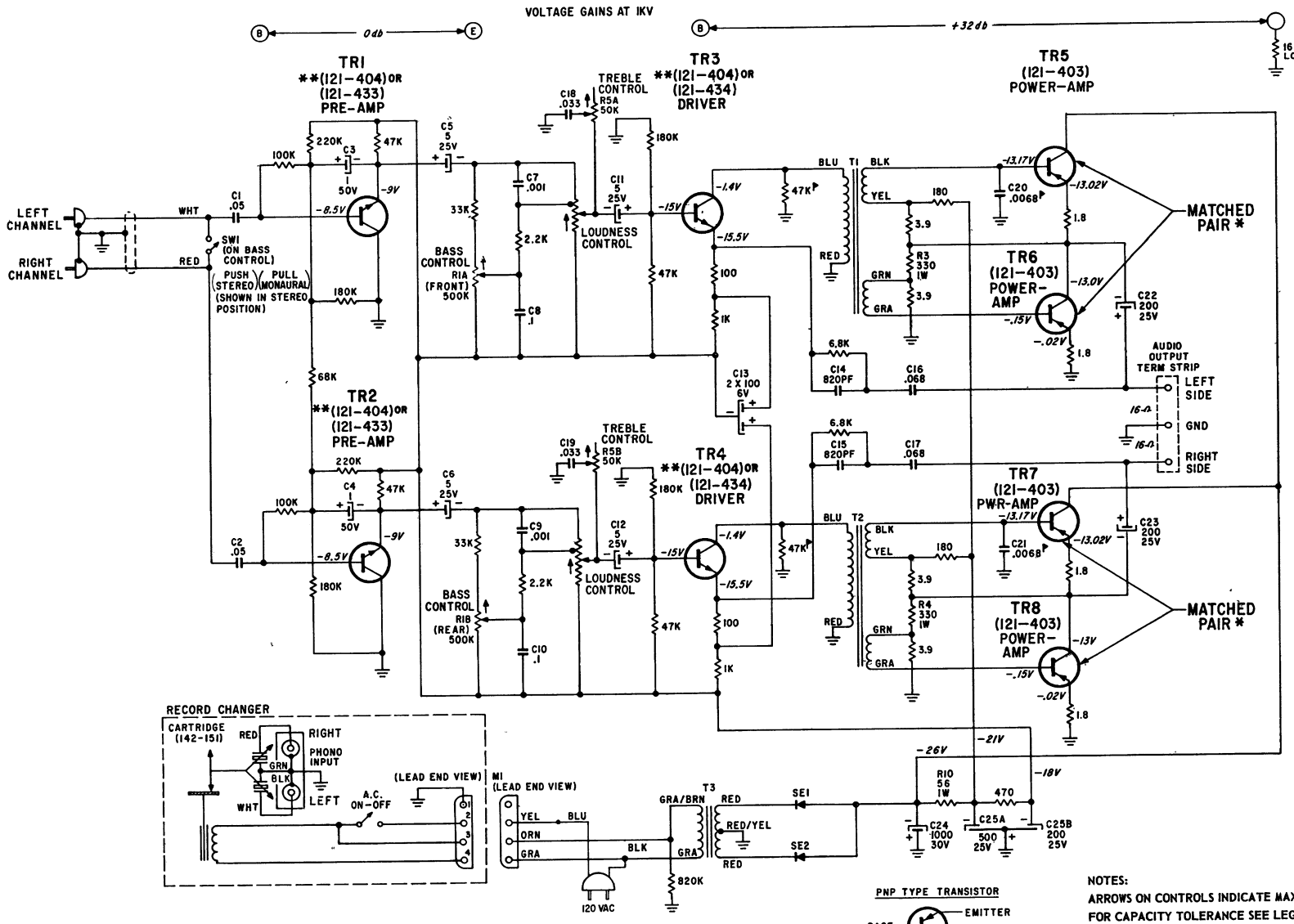
D.C. VOLTAGES SHOWN ARE MEASURED FROM CHASSIS WITH NO SIGNAL USING A VACUUM TUBE VOLTMETER OF 11 MEGOHM INPUT RESISTANCE. LINE VOLTAGE @ 120 VAC.

DENOTES CHASSIS GROUND

INDICATES 20% TOLERANCE

* USED ON EARLIER MODELS.

8NT02 SCHEMATIC



NOTES:

ARROWS ON CONTROLS INDICATE MAXIMUM CLOCKWISE POSITION.

FOR CAPACITY TOLERANCE SEE LEGEND.

ALL RESISTANCES ARE IN OHMS, 1/2 WATT, CARBON, ± 10% TOLERANCE UNLESS OTHERWISE SPECIFIED.

ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.

ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

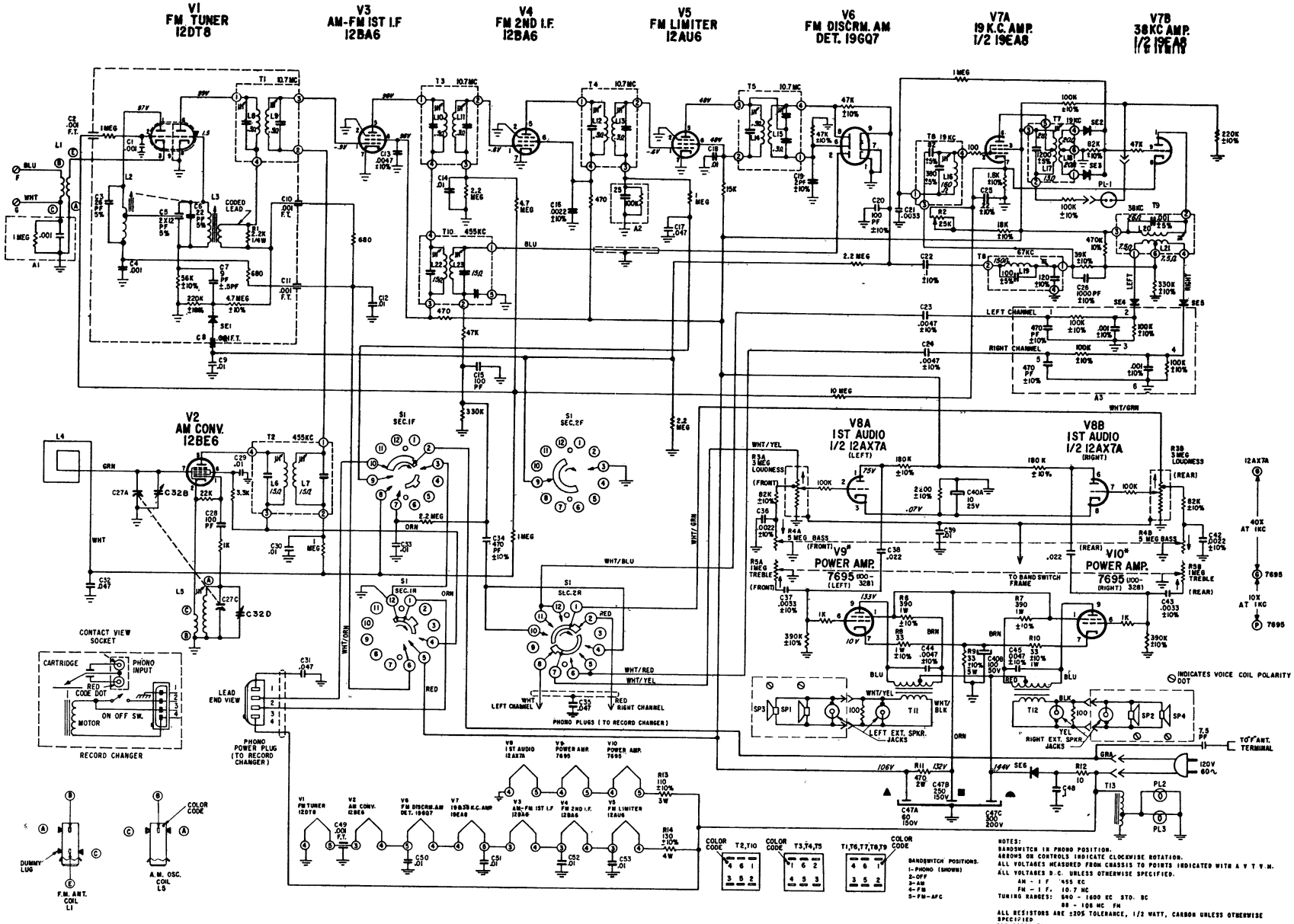
D.C. VOLTAGES SHOWN ARE MEASURED FROM CHASSIS WITH NO SIGNAL USING A VACUUM TUBE VOLTMETER OF 11 MEGOHM INPUT RESISTANCE. LINE VOLTAGE @ 120 VAC.

DENOTES CHASSIS GROUND ⏚

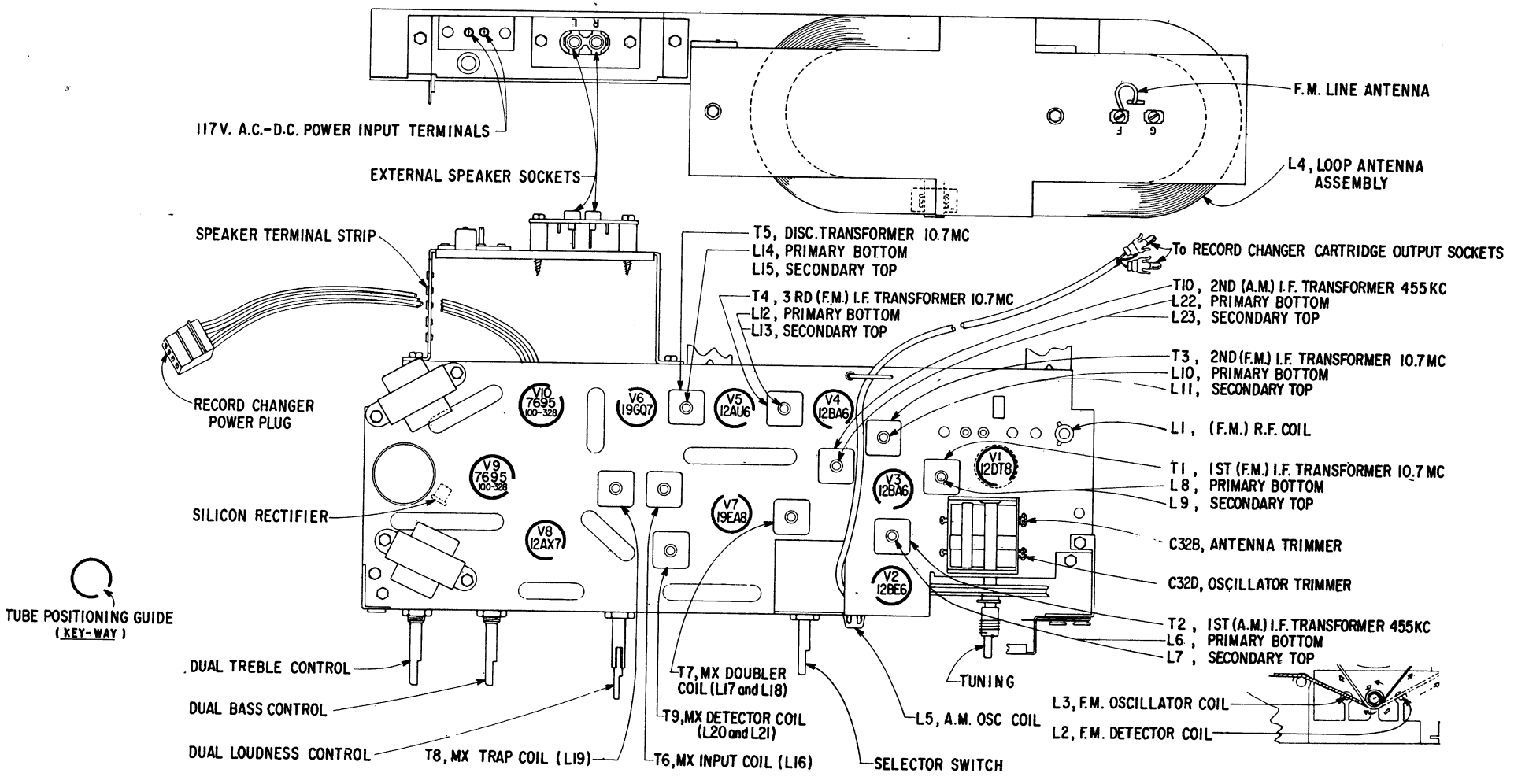
⚑ INDICATES 20% TOLERANCE

** USED ON EARLIER MODELS.

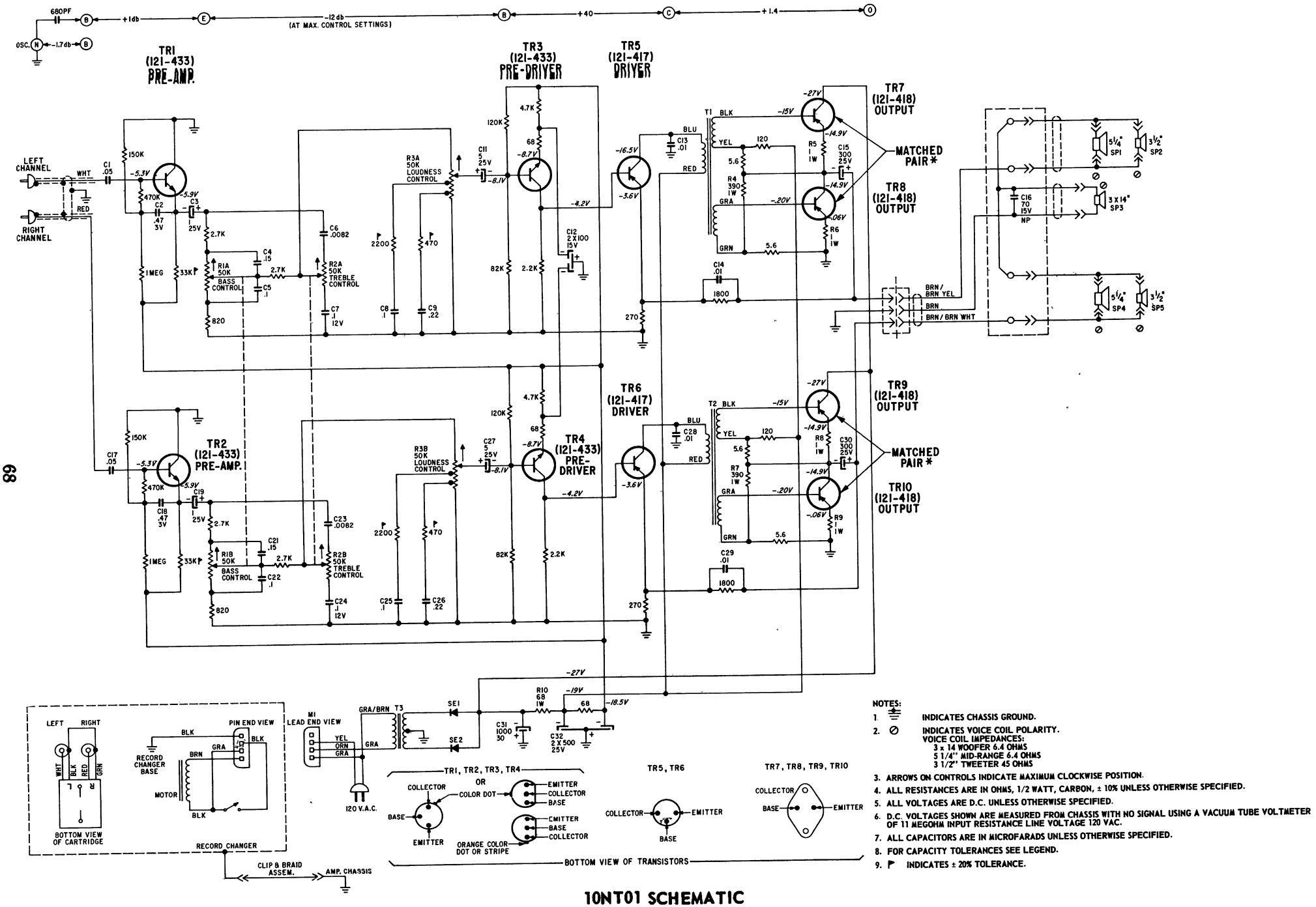
8NT04 SCHEMATIC



10L02Z SCHEMATIC



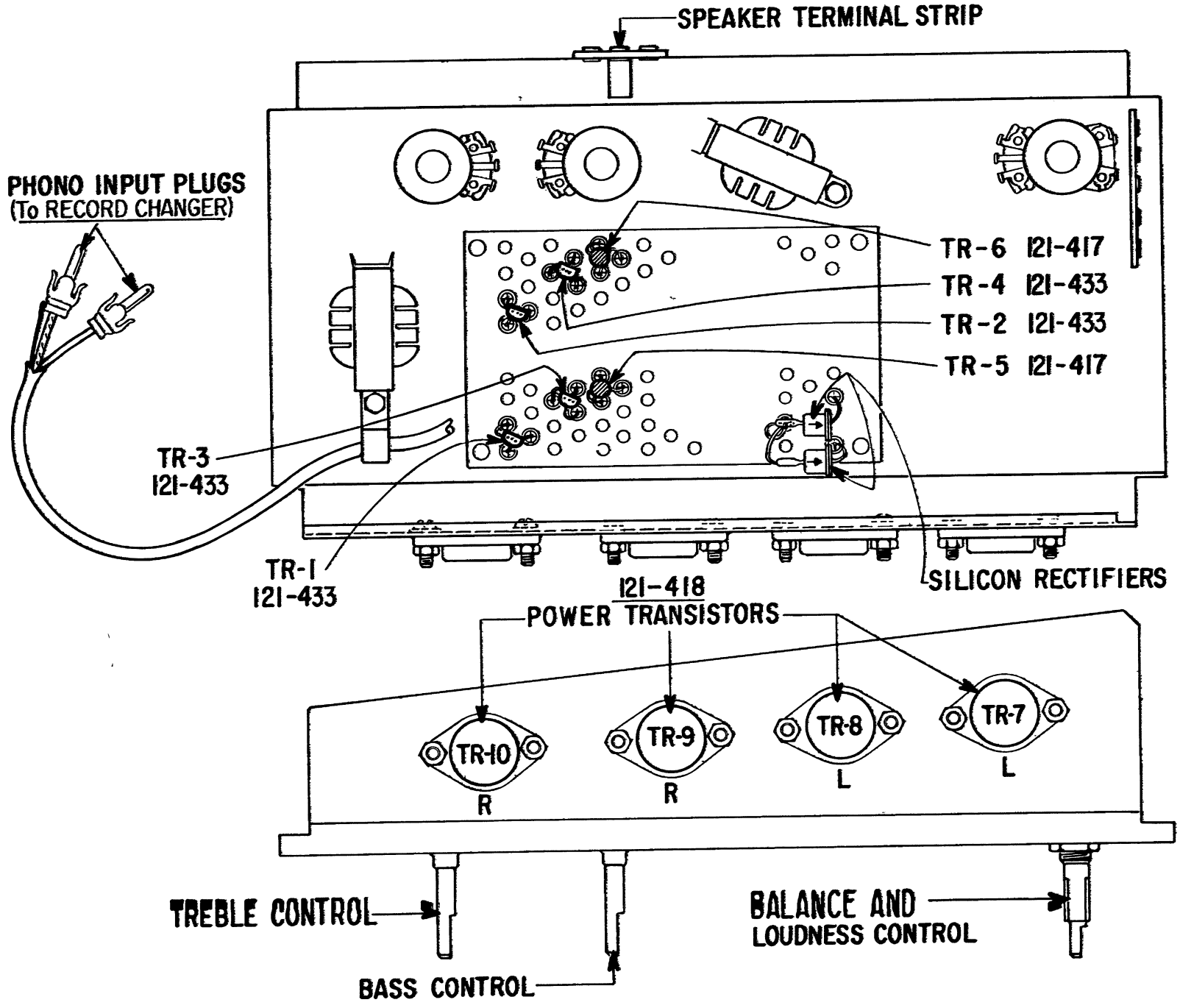
10L02Z CHASSIS LAYOUT



10NT01 SCHEMATIC

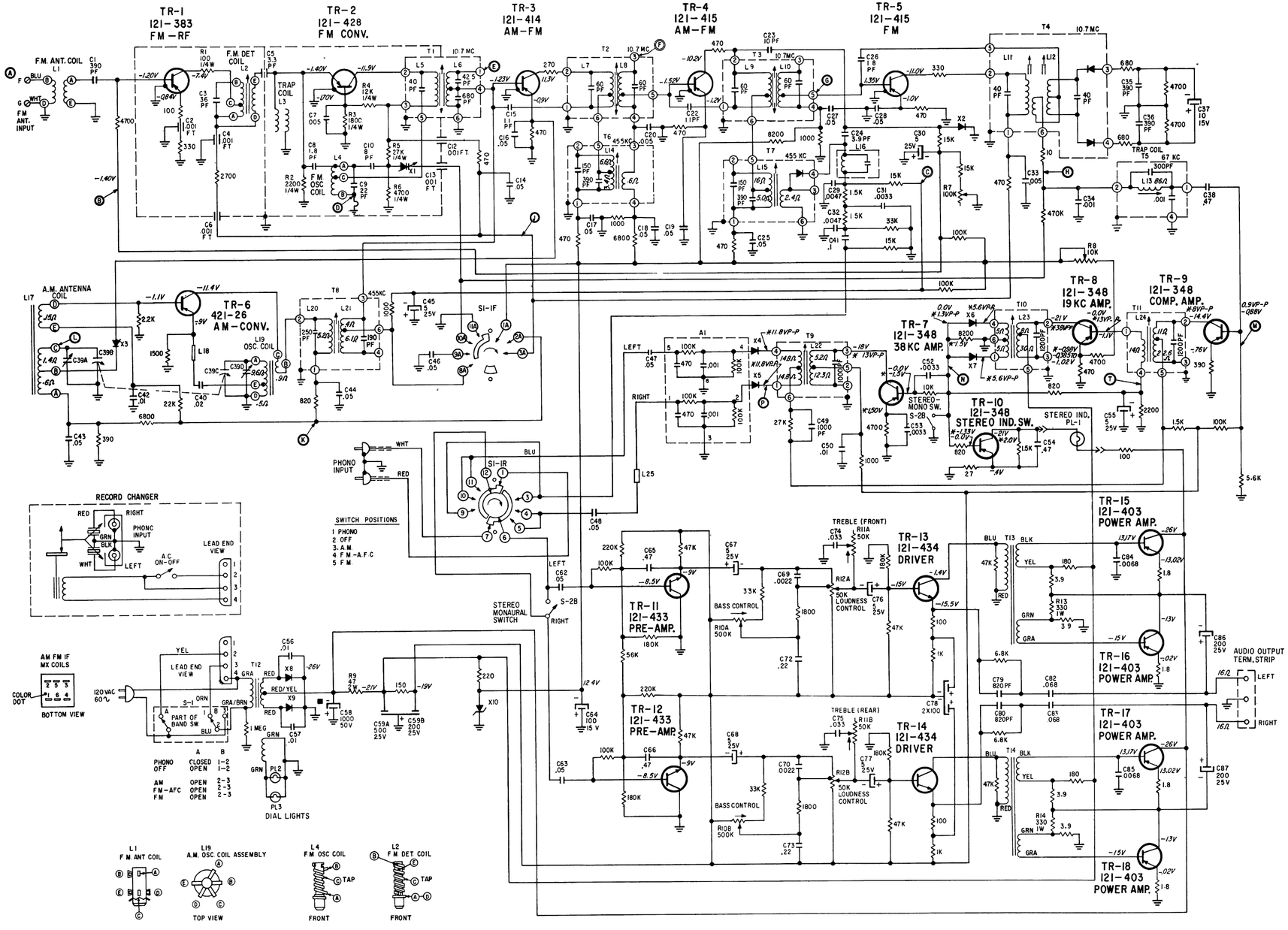
NOTES:

1. INDICATES CHASSIS GROUND.
2. INDICATES VOICE COIL POLARITY.
   VOICE COIL IMPEDANCES:
   3 x 14 WOOFER 6.4 OHMS
   5 1/4" MID-RANGE 6.4 OHMS
   3 1/2" TWEETER 45 OHMS
3. ARROWS ON CONTROLS INDICATE MAXIMUM CLOCKWISE POSITION.
4. ALL RESISTANCES ARE IN OHMS, 1/2 WATT, CARBON, ± 10% UNLESS OTHERWISE SPECIFIED.
5. ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.
6. D.C. VOLTAGES SHOWN ARE MEASURED FROM CHASSIS WITH NO SIGNAL USING A VACUUM TUBE VOLTMETER OF 11 MEGOHM INPUT RESISTANCE LINE VOLTAGE 120 VAC.
7. ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
8. FOR CAPACITY TOLERANCES SEE LEGEND.
9. ▶ INDICATES ± 20% TOLERANCE.



10NT01 CHASSIS LAYOUT

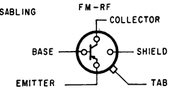
NOTES

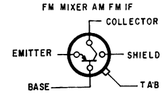


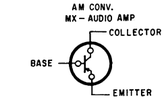
18XT20 & 18XT20Z SCHEMATIC

TEST POINTS

A- FM ANT. INPUT
B- FM RF AGC (FWD)
C- FM IF AGC (REV.)
D- 1 ST IF INPUT
E- 2 ND IF INPUT
F- 3 RD IF INPUT
G- 3 RD IF OUTPUT
H- FM DETECTOR OUTPUT
J- B- FM
K- B- AM
L- AM IF INPUT
M- MX 67KC REJECTION & MX PHASE
N- MX DOUBLER OUTPUT
P- MX PHASING
R-
T- MX DISABLING

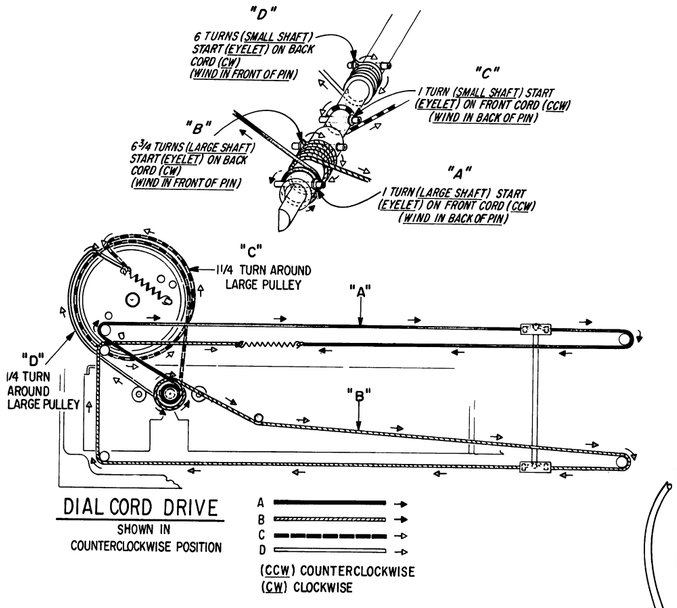




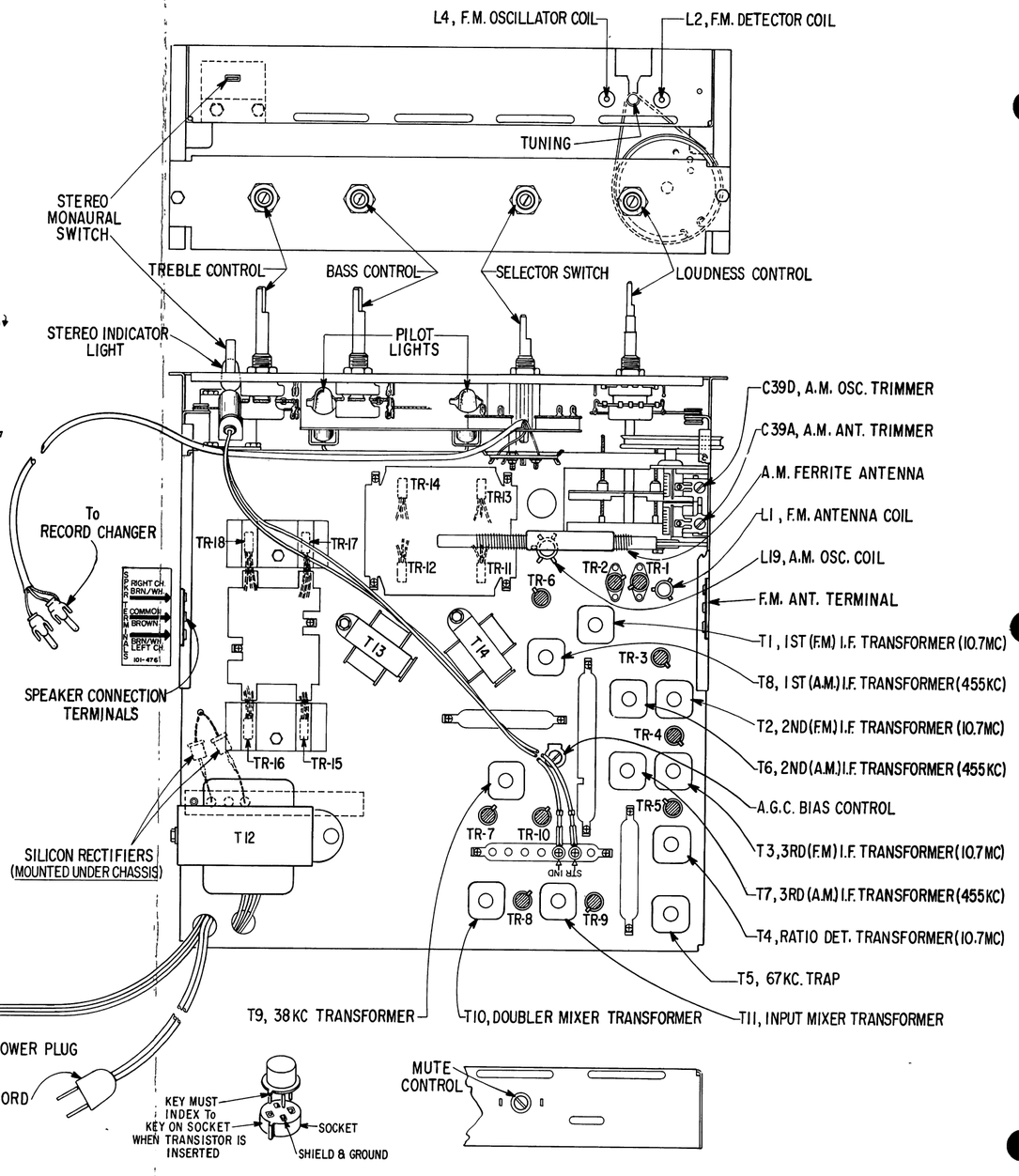


NOTES:
ALL RESISTORS ARE 1/2 WATT CARBON, ± 10% TOLERANCE UNLESS OTHERWISE SPECIFIED.
FOR CAPACITY TOLERANCES (SEE LEGEND).
▶ INDICATES ± 20% TOLERANCE.
TUNING RANGES: 540 – 1620 KC STD. AM
88 – 108 MC FM
AMP. MOD. I.F. FREQ: 455 KC
FREQ. MOD. I.F. FREQ: 10.7 MC
ALL VOLTAGES MEASURED FROM COMMON RETURN TO POINTS INDICATED WITH ▲
VACUUM TUBE VOLTMETER. ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED. ALL CAPACITOR VALUES IN MFD UNLESS OTHERWISE SPECIFIED.
DENOTES CHASSIS ⏚
DENOTES VALUES PRESENT ONLY WITH STEREO SIGNAL. ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.
ALL CABLE PLUGS AND SOCKETS AS SHOWN ARE LEAD END (REAR) VIEW.
CIRCLED LETTERS INDICATE ALIGNMENT AND TEST POINTS.
OUTPUT TRANSISTORS (121-398) TO HAVE SAME COLOR CODE.

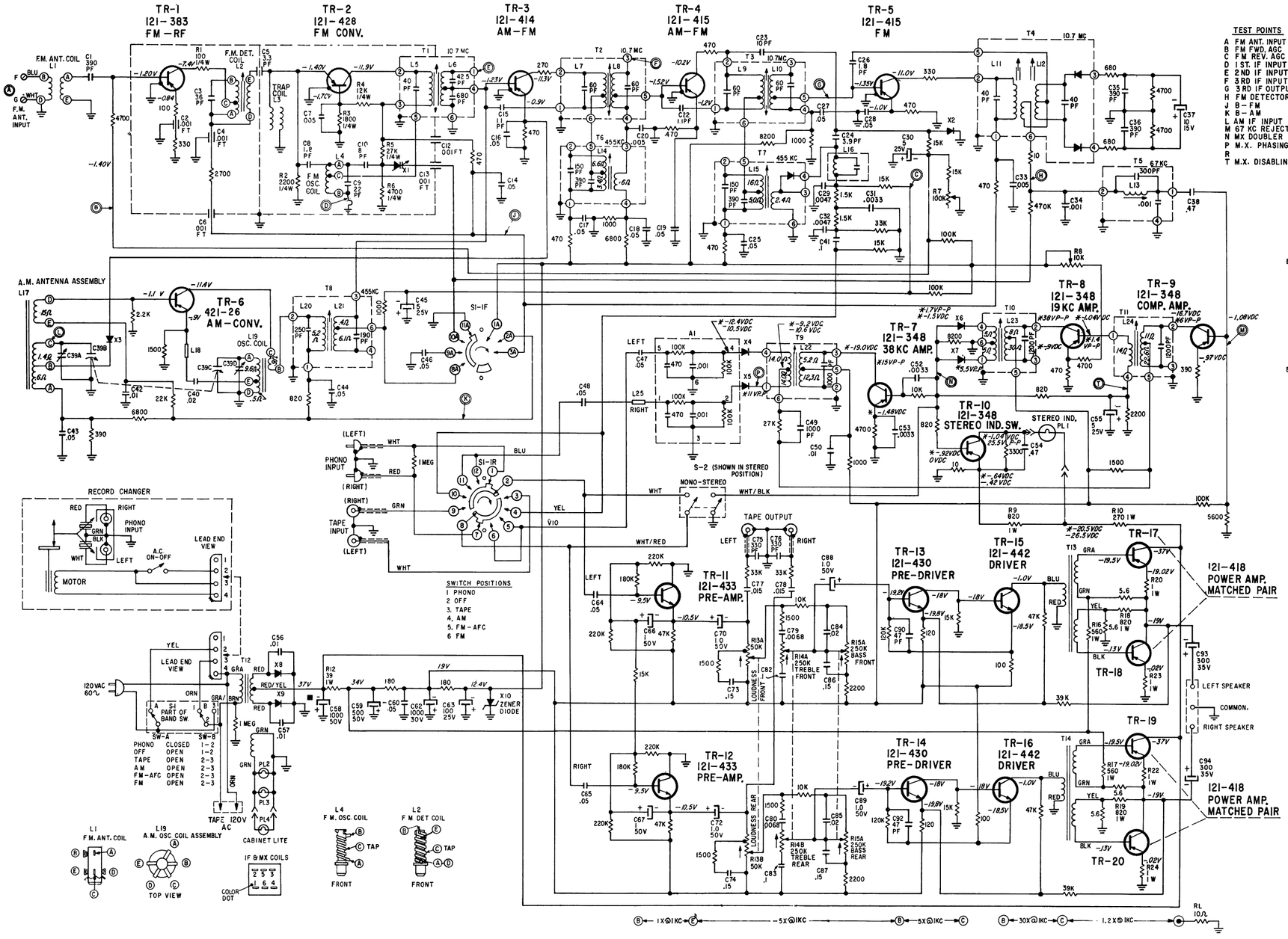
ITEM NO.	PART NO.	DESCRIPTION	
C1	22-3177	390 PF DISC ±10%	500 V
C2	22-4613	.001 F.T.	500 V
C3	22-5321	36 PF DISC ±5%	500 V
C4	22-4613	.001 F.T. ±20%	500 V
C5	22-3550	3.3 PF GIMMICK ± 10%	
C6	22-4613	.001 F.T.	500 V
C7	22-5037	.005 MFD DISC ±20%	25 V
C8	22-2428	1.8 PF GIMMICK ±10%	
C9	22-3621	22 PF DISC ±5%	500 V
C10	22-5130	8 PF DISC ±5%	500 V
C11			
C12	22-4613	.001 F.T.	500 V
C13	22-4613	.001 F.T.	500 V
C14	22-3034	.05 MFD DISC ±20%	25 V
C15	22-4523	1.1 PF GIMMICK ±10%	
C16	22-3034	.05 MFD DISC ±20%	25 V
C17	22-3034	.05 MFD DISC ±20%	25 V
C18	22-3034	.05 MFD DISC ±20%	25 V
C19	22-3034	.05 MFD DISC ±20%	25 V
C20	22-5037	.005 DISC ±20%	25 V
C21			
C22	22-4523	1.1 PF GIMMICK ±10%	
C23	22-3675	10 PF DISC ±10%	500 V
C24	22-3400	3.9 PF GIMMICK ±10%	
C25	22-3034	.05 MFD DISC ±20%	25 V
C26	22-2428	1.8 PF GIMMICK ±10%	
C27	22-3034	.05 MFD DISC ±20%	25 V
C28	22-3034	.05 MFD DISC ±20%	25 V
C29	22-14	.0047 MFD DISC ±10%	500 V
C30	22-3896	5 MFD ELECTROLYTIC	25 V
C31	22-13	.0033 MFD DISC ±10%	500 V
C32	22-14	.0047 MFD DISC ±10%	500 V
C33	22-5037	.005 DISC ±20%	25 V
C34	22-2729	.001 DISC ±20%	25 V
C35	22-3177	390 PF DISC ±10%	500 V
C36	22-3177	390 PF DISC ±10%	500 V
C37	22-3448	10 MFD ELECTROLYTIC	15 V
C38	22-5018	.47 MFD ±10% MYLAR	50 V
C39A	22-4674	TWO SECTIONS VARIABLE CAP.	
C39B	22-4674	TWO SECTIONS VARIABLE CAP.	
C39C	22-4674	TWO SECTIONS VARIABLE CAP.	
C39D	22-4674	TWO SECTIONS VARIABLE CAP.	
C40	22-3033	.02 MFD DISC ±20%	25 V
C41	22-5188	.1 MFD ±10% MYLAR	50V
C42	22-3010	.01 MFD DISC ±20%	25 V
C43	22-3034	.05 DISC ±20%	25 V
C44	22-3034	.05 DISC ±20%	25 V
C45	22-3034	5 MFD ELECTROLYTIC	25 V
C46	22-3034	.05 MFD DISC ±20%	25 V
C47	22-3034	.05 MFD DISC ±20%	25 V
C48	22-3034	.05 MFD DISC ±20%	25 V
C49	22-3645	1000 PF MICA CAP ±10%	100 V
C50	22-3010	.01 MFD DISC ±20%	25 V
C51			
C52	22-13	.0033 MFD DISC ±10%	500 V
C53	22-13	.0033 MFD DISC ±10%	500 V
C54	22-5018	.47 MFD MYLAR ±10%	50 V
C55	22-3896	5 MFD ELECTROLYTIC	25 V
C56	22-3	.01 MFD DISC	500 V
C57	22-3	.01 MFD DISC	500 V
C58	22-5167	1000 MFD ELECTROLYTIC	30 V
C59A	22-4620	500 MFD ELECTROLYTIC	25 V
C59B	22-4620	200 MFD ELECTROLYTIC	25 V
C60			
C61			
C62	22-3034	.05 MFD DISC ±20%	25 V
C63	22-3034	.05 MFD DISC ±20%	25 V
C64	22-3973	100 MFD ELECTROLYTIC	25 V
C65	22-3588	.47 MFD DISC	12 V
C66	22-3588	.47 MFD DISC	12 V
C67	22-3896	5 MFD ELECTROLYTIC	25 V
C68	22-3896	5 MFD ELECTROLYTIC	25 V
C69	22-18	.0022 MFD DISC	500 V
C70	22-18	.0022 MFD DISC	500 V
C71			
C72	22-5249	.22 MFD DISC ±10%	50 V
C73	22-5249	.22 MFD DISC ±10%	50 V
C74	22-5182	.033 MFD DISC	50 V
C75	22-5182	.033 MFD DISC	50 V
C76	22-3896	5 MFD ELECTROLYTIC	25 V
C77	22-3896	5 MFD ELECTROLYTIC	25 V
C78	22-4628	2 x 100 MFD ELECTROLYTIC	15 V
C79	22-3644	820 PF MICA	100 V
C80	22-3644	820 PF MICA	100 V
C81			
C82	22-3630	.068 MFD MYLAR	50 V
C83	22-3630	.068 MFD MYLAR	50 V
C84	22-5021	.0068 MFD DISC	1 KV
C85	22-5021	.0068 MFD DISC	1 KV
C86	22-5175	200 MFD ELECTROLYTIC	25 V
C87	22-5175	200 MFD ELECTROLYTIC	25 V
R1	63-4143	100 OHMS ±10%	1/4 W
R2	63-4199	2.2K OHMS ±10%	1/4 W
R3	63-4196	1.8K OHMS ±10%	1/4 W
R4	63-4231	12K OHMS ±10%	1/4 W
R5	63-4245	27K OHMS ±10%	1/4 W
R6	63-4213	4.7K OHMS±10%	1/4 W
R7	63-6495	POTENTIOMETER	
R8	63-5192	POTENTIOMETER	
R9	63-5634	47 OHMS ±10%	2 W
R10A	63-6855	DUAL BASS CONTROL	
R10B	63-6855		
R11A	63-6853	DUAL TREBLE CONTROL	
R11B	63-6853		
R12A	63-6854	DUAL LOUDNESS CONTROL	
R12B	63-6854		
R13	63-6049	330 OHMS ±10%	1 W
R14	63-6049	330 OHMS ±10%	1 W
T1	95-2236	1st I.F. TRANSFORMER F.M. 10.7 MC	
T2	95-2437	2nd I.F. TRANSFORMER F.M. 10.7 MC	
T3	95-2438	3rd I.F. TRANSFORMER F.M. 10.7 MC	
T4	95-2324	RATIO DETECTOR TRANSFORMER 10.7 MC	
T5	95-2316	TRAP COIL 67KC	
T6	95-2234	2nd I.F. TRANSFORMER A.M. 455KC	
T7	95-2436	3rd I.F. TRANSFORMER A.M. 455KC	
T8	95-2233	1st I.F. TRANSFORMER A.M. 455KC	
T9	95-2439	38 KC TRANSFORMER	
T10	95-2313	DOUBLER MIXER TRANSFORMER	
T11	95-2315	INPUT MIXER TRANSFORMER 19 KC	
T12	95-2432	POWER TRANSFORMER	
T13	95-2430	DRIVER TRANSFORMER	
T14	95-2430	DRIVER TRANSFORMER	
L1	S-71997	FM ANTENNA COIL ASSEMBLY	
L2	S-68976	FM DETECTOR COIL ASSEMBLY	
L3	20-1256	TRAP COIL	
L4	S-62887	FM OSCILLATOR COIL ASSEMBLY	
L5	IN T1	1st I.F. PRI. 10.7 MC	
L6	IN T1	1st I.F. SEC. 10.7 MC	
L7	IN T2	2nd I.F. PRI. 10.7 MC	
L8	IN T2	2nd I.F. SEC. 10.7 MC	
L9	IN T3	3rd I.F. PRI. 10.7 MC	
L10	IN T3	3rd I.F. SEC. 10.7 MC	
L11	IN T4	RATIO DET. PRI. 10.7 MC	
L12	IN T4	RATIO DET. SEC. 10.7 MC	
L13	IN T5	TRAP COIL MIXER	
L14	IN T6	2nd I.F. A.M. 455 KC	
L15	IN T7	3rd I.F. A.M. 455 KC	
L16	20-1422	FM COIL	
L17	S-73253	AM ANTENNA ASSEMBLY	
L18	149-333	IRON CORE SLEEVE	
L19	S-66580	AM OSCILLATOR COIL ASSEMBLY	
L20	IN T8	1st AM I.F. PRI. 455 KC	
L21	IN T8	1st AM I.F. SEC. 455 KC	
L22	IN T9	38 KC TRANSFORMER	
L23	IN T10	DOUBLER MIXER TRANSFORMER	
L24	IN T11	INPUT MIXER TRANSFORMER	
L25	149-333	IRON CORE SLEEVE	
PL1	100-384	STEREO IND. BULB	
PL2	100-249	PILOT LIGHT #1847	
PL3	100-249	PILOT LIGHT #1847	
S1	85-19	5 POSITION BAND SWITCH	
S2A	85-892	STEREO MONAURAL SWITCH	
S2B			
A1	105-78	R/C NETWORK	
X1	103-39	SILICON DIODE	
X2	103-23	DIODE	
X3	103-74	CRYSTAL DIODE	
X4	103-23	DIODE	
X5	103-23	DIODE	
X6	103-23	DIODE	
X7	103-23	DIODE	
X8	212-71	SILICON RECTIFIER	
X9	212-71	SILICON RECTIFIER	
X10	103-96	ZENER DIODE	



TRANSISTORS			
No.	PART No.	DESCRIPTION	REQ'D
TR 1	121-383	F.M.-R.F.	
TR 2	121-428	F.M. CONV	
TR 3	121-414	A.M.-F.M	
TR 4	121-415	A.M.-F.M	
TR 5	121-415	F.M	
TR 6	121-26	A.M CONV.	
TR 7	121-348	38 KC AMP	
TR 8	121-348	19 KC AMP	
TR 9	121-348	COMP. AMP.	
TR 10	121-348	STEREO IND. SW.	
TR 11	121-433	PRE-AMP	
TR-12	121-433	PRE-AMP	
TR-13	121-434	DRIVER	
TR-14	121-434	DRIVER	
TR-15	121-403	POWER AMP	
TR-16	121-403	POWER AMP	
TR-17	121-403	POWER AMP.	
TR-18	121-403	POWER AMP	



18XT20 & 18XT20Z CHASSIS LAYOUT



TEST POINTS

A FM ANT. INPUT
B FM FWD. AGC
C FM REV. AGC
D 1ST. IF INPUT
E 2ND IF INPUT
F 3RD IF INPUT
G 3RD IF OUTPUT
H FM DETECTOR OUTPUT
J B-FM
K B-AM
L AM IF INPUT
M 67 KC REJECTION & MX PHASE
N MX DOUBLER OUTPUT
P M.X. PHASING
R
T M.X. DISABLING

FM-RF
COLLECTOR
BASE
SHIELD
EMITTER
TAB

AM FM-IF FM MIXER
COLLECTOR
EMITTER
SHIELD
BASE
TAB

AM CONV. MX-AUDIO AMP
COLLECTOR
BASE
EMITTER

NOTES:

ALL RESISTORS ARE 1/2 WATT CARBON, ± 10% TOLERANCE UNLESS OTHERWISE SPECIFIED.

FOR CAPACITY TOLERANCES (SEE LEGEND).
▶ INDICATES ± 20% TOLERANCE.

TUNING RANGES: 540 – 1620 KC STD. AM
88 – 108 MC FM

AMP. MOD. I.F. FREQ.: 455 KC

FREQ. MOD. I.F. FREQ.: 10.7 MC

ALL VOLTAGES MEASURED FROM COMMON RETURN TO POINTS INDICATED WITH A VACUUM TUBE VOLTMETER. ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED. ALL CAPACITOR VALUES IN MFD UNLESS OTHERWISE SPECIFIED.

DENOTES CHASSIS ⏚

* DENOTES VALUES PRESENT ONLY WITH STEREO SIGNAL. ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.
ALL CABLE PLUGS AND SOCKETS AS SHOWN ARE LEAD END (REAR) VIEW.

CIRCLED LETTERS INDICATE ALIGNMENT AND TEST POINTS.

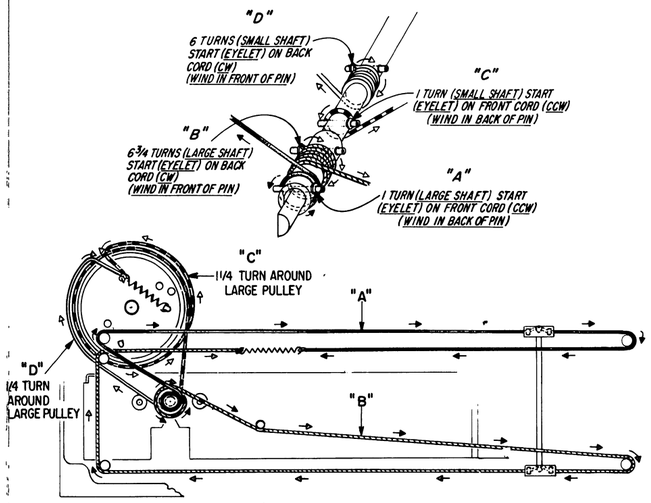
OUTPUT TRANSISTORS (121-418) TO HAVE SAME COLOR CODE.

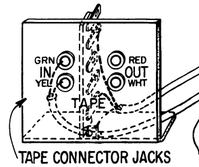
AUDIO D.C. VOLTAGES MEASURED AT ZERO SIGNAL.

AUDIO GAIN MEASUREMENTS MADE AT 1 WATT OUTPUT, ALL CONTROLS AT MAXIMUM, PHONO POSITION.

20XT20 & 20XT20Z SCHEMATIC

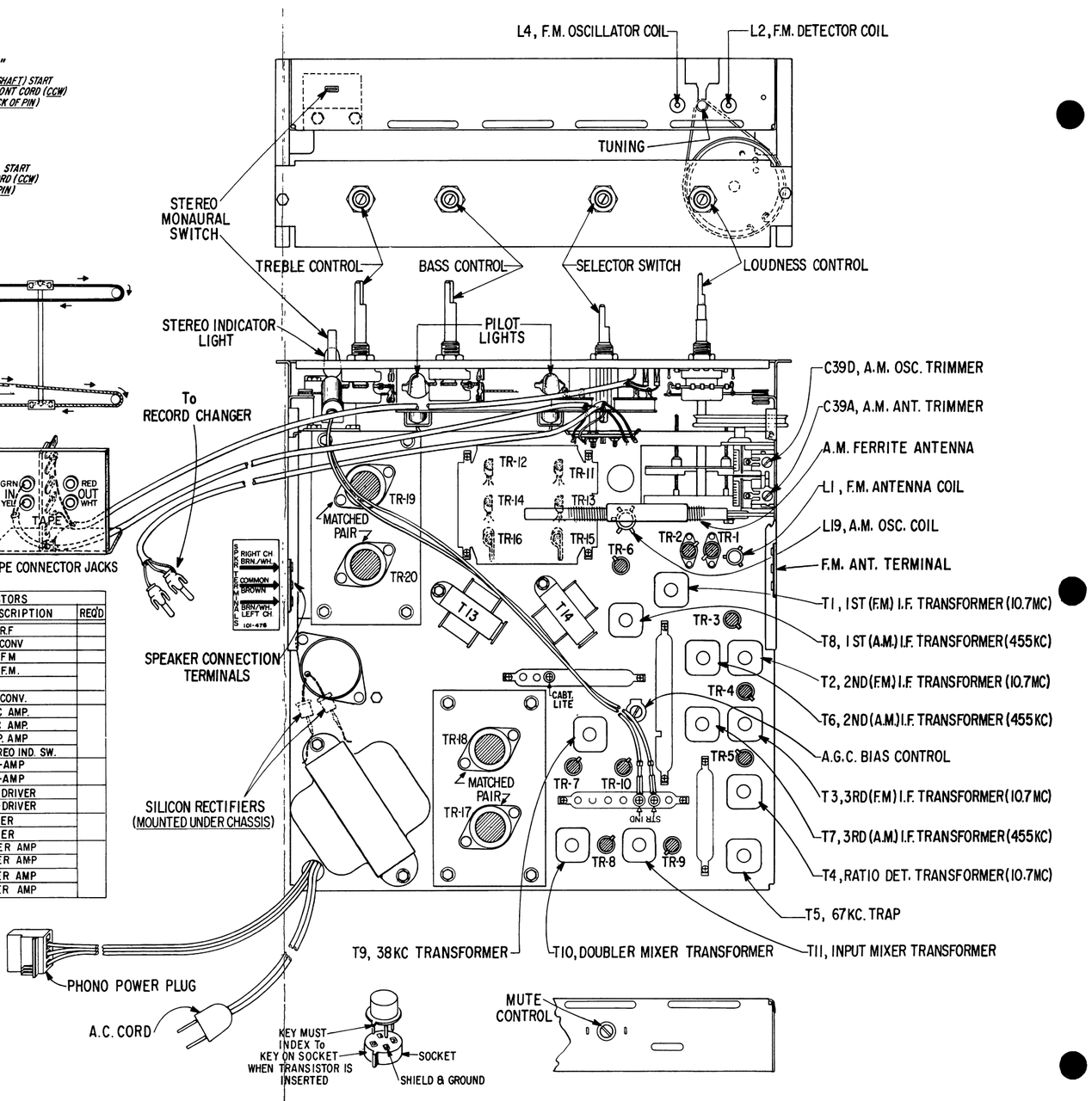
ITEM NO.	PART NO.	DESCRIPTION		ITEM NO.	PART NO.	DESCRIPTION	
C1	22-3177	390 PF DISC ± 10%	500 V	C92	22-2376	47 PF ± 10%	500 V
C2	22-4613	.001 F.T.	500 V	C93	22-5315	300 MFD ELECTROLYTIC	35 V
C3	22-5321	36 PF DISC ± 5%	500 V	C94	22-5315	300 MFD ELECTROLYTIC	35 V
C4	22-4613	.001 F.T. ± 20%	500 V				
C5	22-3550	3.3 PF GIMMICK ± 10%		R1	63-4143	100 OHMS ± 10%	1/4 W
C6	22-4613	.001 F.T.	500 V	R2	63-4213	2.2K OHMS ± 10%	1/4 W
C7	22-5037	.005 MFD DISC ± 20%	25 V	R3	63-4196	1.8K OHMS ± 10%	1/4 W
C8	22-2428	1.8 PF GIMMICK ± 10%		R4	63-4231	12K OHMS ± 10%	1/4 W
C9	22-3621	22 PF DISC ± 5%	500 V	R5	63-4245	27K OHMS ± 10%	1/4 W
C10	22-5130	68 PF DISC ± 5%	500 V	R6	63-4213	4.7K OHMS ± 10%	1/4 W
C11				R7	63-6495	POTENTIOMETER	
C12	22-4613	.001 F.T.	500 V	R8	63-5192	POTENTIOMETER 10K	
C13	22-4613	.001 F.T.	500 V	R9	63-6066	820 OHMS ± 10%	1 W
C14	22-3034	.05 MFD DISC ± 20%	25 V	R10	63-6045	270 OHMS ± 10%	1 W
C15	22-4523	1.1 PF GIMMICK ± 10%		R11			
C16	22-3034	.05 MFD DISC ± 20%	25 V	R12	63-6010	39 OHMS ± 10%	1 W
C17	22-3034	.05 MFD DISC ± 20%	25 V	R13A	63-6854	DUAL LOUDNESS CONTROL	
C18	22-3034	.05 MFD DISC ± 20%	25 V	R13B	63-6854		
C19	22-3034	.05 MFD DISC ± 20%	25 V	R14A	63-6861	TREBLE FRONT	
C20	22-5038	.005 DISC ± 20%	25 V	R14B	63-6861	TREBLE REAR	
C21				R15A	63-6889	DUAL BASS CONTROL	
C22	22-4523	1.1 PF GIMMICK ± 10%		R16B	63-6889		
C23	22-3675	10 PF DISC ± 10%	500 V	R16	63-6059	560 OHMS ± 10%	1 W
C24	22-3400	3.9 PF GIMMICK ± 10%		R17	63-6059	560 OHMS ± 10%	1 W
C25	22-3034	.05 MFD DISC ± 20%	25 V	R18	63-6066	820 OHMS ± 10%	1 W
C26	22-2428	1.8 PF GIMMICK ± 10%		R19	63-6066	820 OHMS ± 10%	1 W
C27	22-3034	.05 MFD DISC ± 20%	25 V	R20	63-5325	1 OHM ± 10%	1 W
C28	22-3034	.05 MFD DISC ± 20%	25 V	R21			
C29	22-14	.0047 MFD DISC ± 10%	500 V	R22	63-5325	1 OHM ± 10%	1 W
C30	22-3896	5 MFD ELECTROLYTIC	25 V	R23	63-5325	1 OHM ± 10%	1 W
C31	22-13	.0033 MFD DISC ± 10%	500 V	R24	63-5325	1 OHM ± 10%	1 W
C32	22-14	.0047 MFD DISC ± 10%	500 V				
C33	22-5037	.005 DISC ± 20%	25 V	T1	95-2236	1st I.F. TRANSFORMER F.M. 10.7 MC	
C34	22-2729	.001 DISC ± 20%	25 V	T2	95-2437	2nd I.F. TRANSFORMER F.M. 10.7 MC	
C35	22-3177	390 PF DISC ± 10%	500 V	T3	95-2438	3rd I.F. TRANSFORMER F.M. 10.7 MC	
C36	22-3177	390 PF DISC ± 10%	500 V	T4	95-2324	RATIO DETECTOR TRANSFORMER 10.7	
C37	22-3448	10 MFD ELECTROLYTIC	15 V	T5	95-2316	TRAP COIL	
C38	22-5018	.47 MFD ± 10%	50 V	T6	95-2234	2nd I.F. TRANSFORMER A.M. 455 KC	
C39A	22-4674	TWO SECTIONS VARIABLE CAP.		T7	95-2436	3rd I.F. TRANSFORMER A.M. 455 KC	
C39B	22-4674	TWO SECTIONS VARIABLE CAP.		T8	95-2233	1st I.F. TRANSFORMER A.M. 455 KC	
C39C	22-4674	TWO SECTIONS VARIABLE CAP.		T9	95-2439	38 KC TRANSFORMER	
C39D	22-4674	TWO SECTIONS VARIABLE CAP.		T10	95-2313	DOUBLER MIXER TRANSFORMER	
C40	22-3033	.02 MFD DISC ± 20%	25 V	T11	95-2315	INPUT MIXER TRANSFORMER	
C41	22-5188	.1 MFD ± 10%	50 V	T12	95-2433	POWER TRANSFORMER	
C42	22-3010	.01 MFD DISC ± 20%	25 V	T13	95-2431	DRIVER TRANSFORMER	
C43	22-3034	.05 DISC ± 20%	25 V	T14	95-2431	DRIVER TRANSFORMER	
C44	22-3034	.05 DISC ± 20%	25 V				
C45	22-3896	5 MFD ELECTROLYTIC	25 V	L1	S-71997	FM ANTENNA COIL ASSEMBLY	
C46	22-3034	.05 MFD DISC ± 20%	25 V	L2	S-68976	FM DETECTOR COIL ASSEMBLY	
C47	22-3034	.05 MFD DISC ± 20%	25 V	L3	20-1256	TRAP COIL	
C48	22-3034	.05 MFD DISC ± 20%	25 V	L4	S-62887	FM OSCILLATOR COIL ASSEMBLY	
C49	22-3645	1000 PF MICA CAP ± 10%	100 V	L5	IN T1	1st I.F. PRI. 10.7 MC	
C50	22-3010	.01 MFD DISC ± 20%	25 V	L6	IN T1	1st I.F. SEC. 10.7 MC	
C51				L7	IN T2	2nd I.F. PRI. 10.7 MC	
C52	22-13	.0033 MFD DISC ± 10%	500 V	L8	IN T2	2nd I.F. SEC. 10.7 MC	
C53	22-13	.0033 MDS DISC ± 10%	500 V	L9	IN T3	3rd I.F. PRI. 10.7 MC	
C54	22-5018	.47 MFD ± 10%	50 V	L10	IN T3	3rd I.F. SEC. 10.7 MC	
C55	22-3896	5 MFD ELECTROLYTIC	25 V	L11	IN T4	RATIO DET. PRI. 10.7 MC	
C56	22-3	.01 MFD DISC	500 V	L12	IN T4	RATIO DET. SEC.\10.7 MC	
C57	22-3	.01 MFD DISC	500 V	L13	IN T5	TRAP COIL MIXER	
C58	22-3879	1000 MFD ELECTROLYTIC	50 V	L14	IN T6	2nd I.F. A.M. 455 KC	
C59	22-5316	500 MFD ELECTROLYTIC	50 V	L15	IN T7	3rd I.F. A.M. 455 KC	
C60	22-3896	.05 MFD DISC ± 20%	25 V	L16	20-1422	TRAP COIL 10.7 MC	
C61				L17	S-73253	AM ANTENNA ASSEMBLY	
C62	22-5167	1000 MFD ELECTROLYTIC	30 V	L18	149-333	IRON CORE SLEEVE	
C63	22-3973	100 MFD ELECTROLYTIC	25 V	L19	S-66580	AM OSCILLATOR COIL ASSEMBLY	
C64	22-3034	.05 MFD DISC ± 20%	25 V	L20	IN T8	1st AM I.F. PRI. 455 KC	
C65	22-3034	.05 MFD DISC ± 20%	25 V	L21	IN T8	1st AM I.F. SEC. 455 KC	
C66	22-3687	1 MFD ELECTROLYTIC	50 V	L22	IN T9	38 KC TRANSFORMER	
C67	22-3687	1 MFD ELECTROLYTIC	50 V	L23	IN T10	DOUBLER MIXER TRANSFORMER	
C68				L24	IN T11	INPUT MIXER TRANSFORMER	
C69				L25	149-333	IRON CORE SLEEVE	
C70	22-3687	1 MFD ELECTROLYTIC					
C71				PL1	100-384	STEREO IND. BULB	
C72	22-3687	1 MFD ELECTROLYTIC	50 V	PL2	100-249	PILOT LIGHT #1847	
C73	22-5012	.15 MFD ± 10%	50 V	PL3	100-249	PILOT LIGHT #1847	
C74	22-5012	.15 MFD ± 10%	50 V	PL4	100-249	PILOT LIGHT #1847	
C75	22-3255	330 PF ± 10%	500 V				
C76	22-3255	330 PF ± 10%	500 V	S1	85-920	6 POSITION BANDSWITCH	
C77	22-3599	.015 MFD ± 10%	50 V	S2	85-892	STEREO MONAURAL SWITCH	
C78	22-3599	.015 MFD ± 10%	50 V				
C79	22-3415	.0068 MFD ± 10%	25 V	A1	105-78	R/C NETWORK	
C80	22-3415	.0068 MFD ± 10%	25 V				
C81				X1	103-39	SILICON DIODE	
C82	22-3596	.1 MFD ± 20%	50 V	X2	103-23	DIODE	
C83	22-3596	.1 MFD ± 20%	50 V	X3	103-74	CRYSTAL DIODE	
C84	22-5056	.02 MFD DISC ± 20%	25 V	X4	103-23	DIODE	
C85	22-5056	.02 MFD DISC ± 20%	25 V	X5	103-23	DIODE	
C86	22-5012	.15 MFD ± 10%	50 V	X6	103-23	DIODE	
C87	22-5012	.15 MFD ± 10%	50 V	X7	103-23	DIODE	
C88	22-3687	1 MFD ELECTROLYTIC	50 V	X8	212-71	SILICON RECTIFIER	
C89	22-3687	1 MFD ELECTROLYTIC	50 V	X9	212-71	SILICON RECTIFIER	
C90	22-2376	47 PF ± 10%	500 V	X10	103-96	ZENER DIODE	
C91							



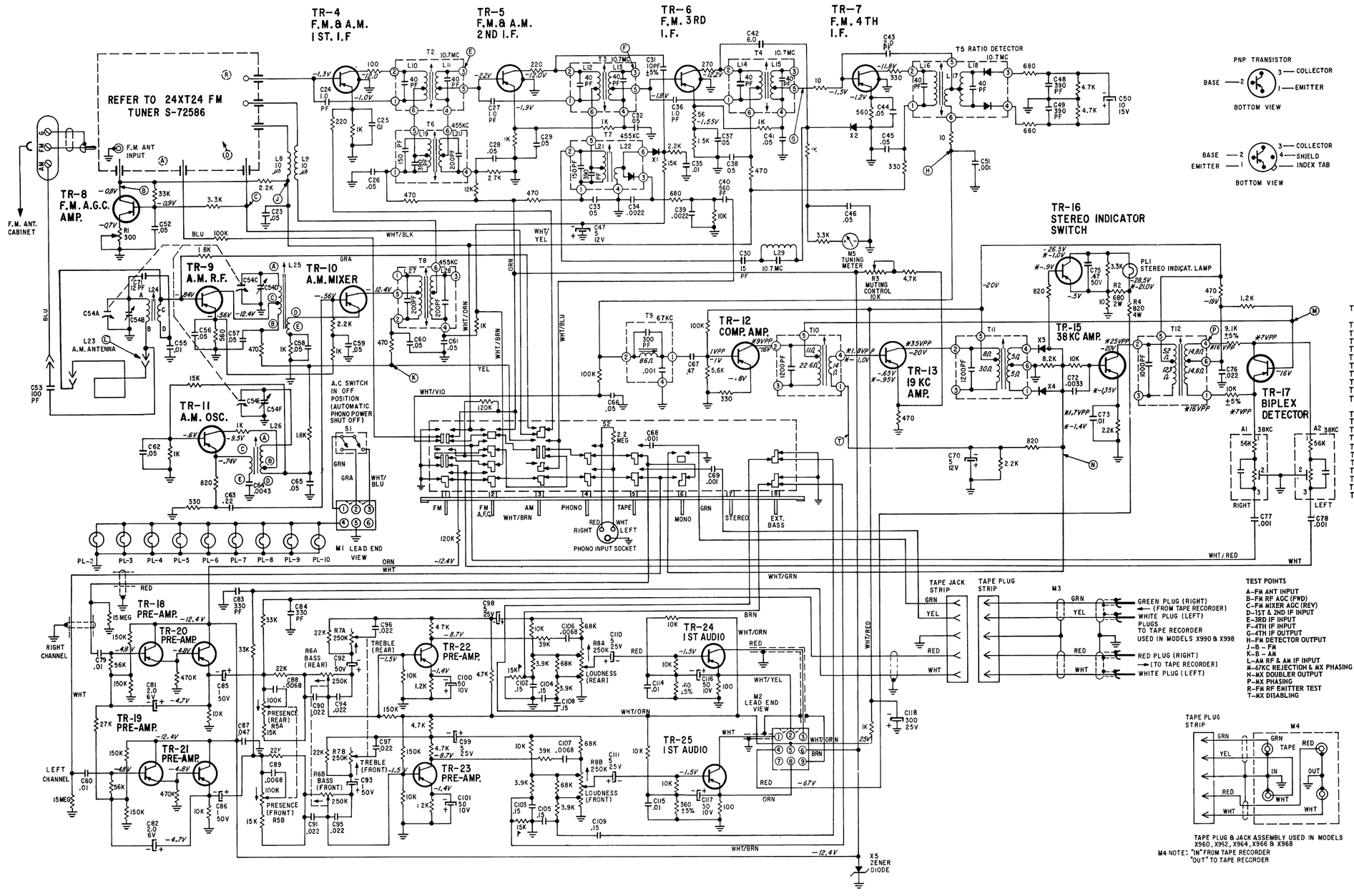


TAPE CONNECTOR JACKS

TRANSISTORS			
No.	PART No.	DESCRIPTION	REQ'D
TR 1	121-383	F.M.-R.F.	
TR 2	121-428	F.M. CONV	
TR 3	121-414	A.M.-F.M	
TR 4	121-415	A.M.-F.M.	
TR 5	121-415	F.M	
TR 6	421-26	A.M. CONV.	
TR 7	121-348	38 KC AMP.	
TR 8	121-348	19 KC AMP.	
TR 9	121-348	COMP. AMP	
TR 10	121-348	STEREO IND. SW.	
TR 11	121-433	PRE-AMP	
TR-12	121-433	PRE-AMP	
TR-13	121-430	PRE-DRIVER	
TR-14	121-430	PRE-DRIVER	
TR-15	121-442	DRIVER	
TR-16	121-442	DRIVER	
TR-17	121-418	POWER AMP	
TR-18	121-418	POWER AMP	
TR-19	121-418	POWER AMP	
TR-20	121-418	POWER AMP	



20XT20 & 20XT20Z CHASSIS LAYOUT



TRANSISTOR DESCRIPTION

TR- 4 F.M. & A.M. 1ST I.F. (121-414)
TR- 5 F.M. & A.M. 2ND I.F. (121-415)
TR- 6 F.M. 3RD I.F. (121-415)
TR- 7 F.M. 4TH I.F. (121-415)
TR- 8 A.G.C. AMP. (121-273)
TR- 9 A.M. RF (121-333)
TR-10 A.M. MIXER (121-333)
TR-11 A.M. OSC. (121-335)
TR-12 COMP. AMP. (121-348)
TR-13 19 KC AMP. (121-348)

TR-15 38 KC AMP (121-348)
TR-16 STEREO INDICATOR SWITCH (121-348)
TR-17 BIPLEX DETECTOR (121-347)
TR-18 PRE AMP. (121-273)
TR- 19 PRE AMP. (121-273)
TR-20 PRE AMP. (121-273)
TR-21 PRE AMP. (121-273)
TR- 22 PRE AMP. (121-274)
TR- 23 PRE AMP. (121-274)
TR-24 1ST AUDIO (121-437)
TR-25 1 ST AUDIO (121-437)

NOTES:
ALL RESISTORS ARE 1/2 WATT CARBON, ± 10% TOLERANCE UNLESS OTHERWISE SPECIFIED.
FOR CAPACITY TOLERANCES (SEE LEGEND)
INDICATES ± 20% TOLERANCE.
TUNING RANGES: 540 – 1620 KC STD. AM
88 – 108 MC FM
AMP. MOD. I.F. FREQ: 455 KC
FREQ. MOD. I.F. FREQ: 10.7 MC
ALL VOLTAGES MEASURED FROM COMMON RETURN TO POINTS INDICATED WITH A VACUUM TUBE VOLTMETER. ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.
ALL CAPACITOR VALUES IN MFD UNLESS OTHERWISE SPECIFIED.
1ST POSITION F.M.
2ND POSITION F.M.–A.F.C.
3RD POSITION A.M.
4TH POSITION PHONO.
5TH POSITION TAPE
6TH POSITION MONO.
7TH POSITION STEREO
8TH POSITION EXT. BASS.
(VIEWED FROM FRONT OF CHASSIS)
DENOTES CHASSIS
* DENOTES VALUES PRESENT ONLY WITH STEREO SIGNAL. ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.
* ALL CABLE PLUGS AND SOCKETS AS SHOWN ARE LEAD END (REAR) VIEW, FOR AUDIO AND POWER SUPPLY SCHEMATIC ALIGNMENT POINTS:
A
CIRCLED LETTERS INDICATE ALIGNMENT AND TEST POINTS.

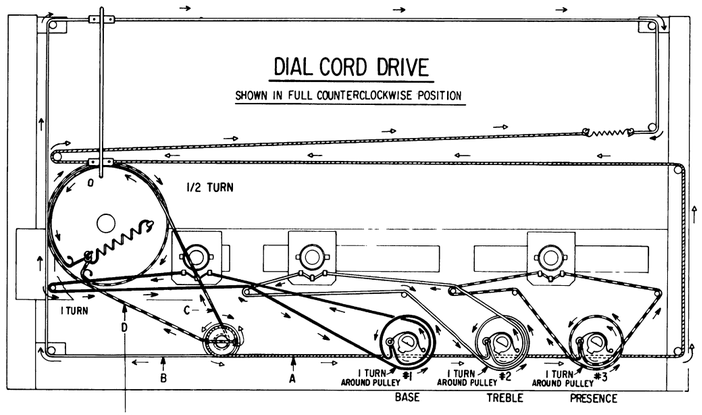
TAPE JACK STRIP
TAPE PLUG STRIP
M3
GREEN PLUG (RIGHT) ← (FROM TAPE RECORDER)
WHITE PLUG (LEFT) PLUGS TO TAPE RECORDER USED IN MODELS X990 & X998
RED PLUG (RIGHT) → (TO TAPE RECORDER)
WHITE PLUG (LEFT)

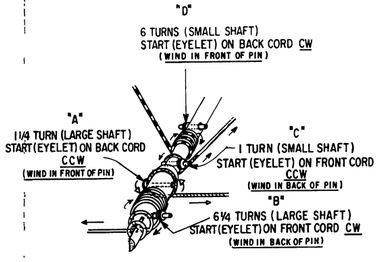
TEST POINTS
A–FM ANT INPUT
B–FM RF AGC (FWD)
C–FM MIXER AGC (REV)
D–1ST & 2ND IF INPUT
E–3RD IF INPUT
F–4TH IF INPUT
G–4TH IF OUTPUT
H–FM DETECTOR OUTPUT
J–B – FM
K–B – AM
L–AM RF & AM IF INPUT
M–67KC REJECTION & MX PHASING
N–MX DOUBLER OUTPUT
P–MX PHASING
R–FM RF EMITTER TEST
T–MX DISABLING

TAPE PLUG STRIP
M4
TAPE PLUG & JACK ASSEMBLY USED IN MODELS X960, X952, X964, X966 & X968
M4 NOTE: "IN" FROM TAPE RECORDER
"OUT" TO TAPE RECORDER

24XT24 SCHEMATIC

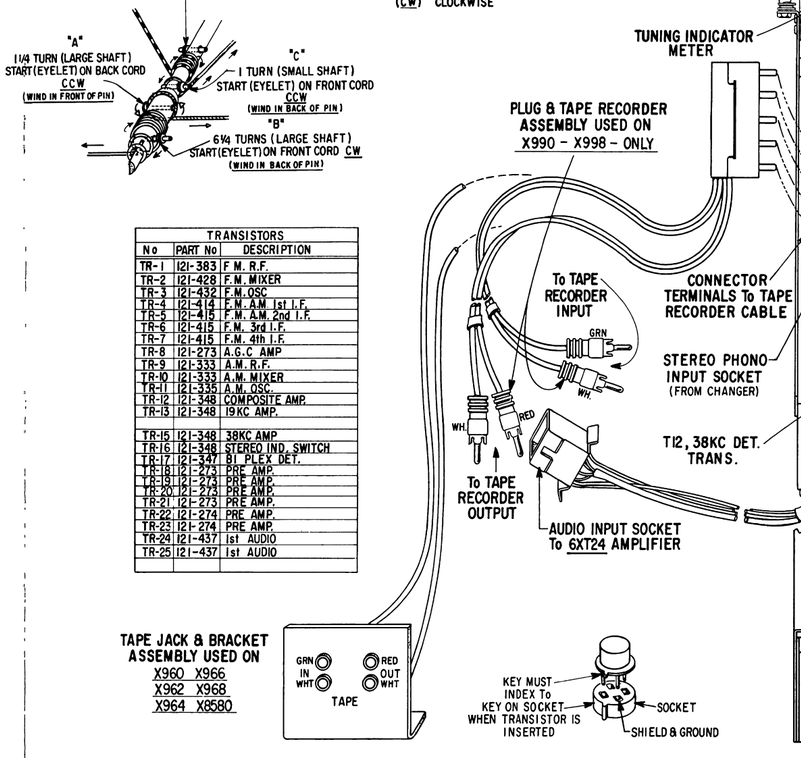
ITEM NO.	PART NO.	DESCRIPTION		ITEM NO.	PART NO.	DESCRIPTION	
C23	322-20	.05 MFD DISC	25 V	C108	322-84	.15 MFD ±10%	50 V
C24	322-47	1.0 PF GIMMICK	500 V	C109	322-84	.15 MFD ±10%	50 V
C25	22-3652	0.1 MFD DISC	10 V	C110	322-30	5 MFD ELECTROLYTIC	25 V
C26	322-20	.05 MFD DISC	25 V	C111	322-30	5 MFD ELECTROLYTIC	25 V
C27	322-47	1.0 PF GIMMICK	500 V	C112			
C28	322-20	.05 MFD DISC	25 V	C113			
C29	322-20	.05 MFD DISC	25 V	C114	322-3	.01 MFD DISC	25 V
C30	22-3246	15 PF DISC	500 V	C115	322-3	.01 MFD DISC	25 V
C31	22-3675	10 PF DISC	500 V	C116	322-21	50 MFD ELECTROLYTIC	10 V
C32	322-20	.05 MFD DISC	25 V	C117	322-21	50 MFD ELECTROLYTIC	10 V
C33	322-20	.05 MFD DISC	25 V	C118	22-5168	300 MFD ELECTROLYTIC	25 V
C34	322-82	.0022 DISC	500 V				
C35	322-3	.01 MFD DISC	25 V	R1	63-6376	POTENTIOMETER	
C36	322-47	1.0 PF GIMMICK	500 V	R2	63-5663	680 OHM	2 W
C37	322-20	.05 MFD DISC	25 V	R3	63-5192	POTENTIOMETER (MUTING)	
C38	322-20	.05 MFD DISC	25 V	R4	63-6857	820 OHM	4 W
C39	322-82	.0022 DISC	500 V	R5A	63-5213	PRESENCE CONTROL (REAR)	
C40	322-2	560 PF DISC ±10%	500 V	R5B		PRESENCE CONTROL (FRONT)	
C41	322-20	.05 MFD DISC	25 V	R6A	63-5147	BASE CONTROL (REAR)	
C42	22-2374	6 PF ±10%	500 V	R6B		BASE CONTROL (FRONT)	
C43	22-2434	2.0 PF GIMMICK	500 V	R7A	63-5372	TREBLE CONTROL (REAR)	
C44	322-20	.05 MFD DISC	25 V	R7B		TREBLE CONTROL (FRONT)	
C45	322-20	.05 MFD DISC	25 V	R8A	63-6346	LOUDNESS CONTROL (REAR)	
C46	382-20	.05 MFD DISC	25 V	R8B		LOUDNESS CONTROL (FRONT)	
C47	322-22	5 MFD ELECTROLYTIC	12 V				
C48	322-32	390 PF DISC	500 V	L8	20-2033	PEAKING COIL	
C49	322-32	390 PF DISC	500 V	L9	20-2033	PEAKING COIL	
C50	322-108	10 MFD ELECTROLYTIC	15 V	L10	IN T2	2nd I.F. TRANSFORMER (FM) PRI.	
C51	22-2729	.001 MFD DISC	25 V	L11	IN T2	2nd I.F. TRANSFORMER (FM) SEC.	
C52	322-20	.05 MFD DISC	25 V	L12	IN T3	3rd I.F. TRANSFORMER (AM) PRI.	
C53	322-90	100 PF DISC	500 V	L13	IN T3	3rd I.F. TRANSFORMER (AM) SEC.	
C54A		ANTENNA TUNING		L14	IN T4	4th I.F. TRANSFORMER (FM) PRI.	
C54B		ANTENNA TRIMMER		L15	IN T4	4th I.F. TRANSFORMER (FM) SEC.	
C54C	22-3665	DETECTOR TUNING		L16	IN T5	RATIO DETECTOR TRANSFORMER PRI.	
C54D		DETECTOR TRIMMER		L17	IN T5	RATIO DETECTOR TRANSFORMER	
C54E		OSCILLATOR TUNING		L18	IN T5	RATIO DETECTOR TRANSFORMER	
C54F		OSCILLATOR TRIMMER		L19	IN T6	2nd I.F. TRANSFORMER (AM) PRI.	
C55	22-5116	.01 MFD DISC ±10%	25 V	L20	IN T6	2nd I.F. TRANSFORMER (AM) SEC.	
C56	322-20	.05 MFD DISC	25 V	L21	IN T7	3rd I.F. TRANSFORMER (FM) PRI.	
C57	322-20	.05 MFD DISC	25 V	L22	IN T7	3rd I.F. TRANSFORMER (FM) SEC.	
C58	322-20	.05 MFD DISC	25 V	L23	S-64803	AM ANTENNA (CABINET)	
C59	322-20	.05 MFD DISC	25 V	L24	S-72060	ANTENNA COIL ASSEMBLY (AM)	
C60	322-20	.05 MFD DISC	25 V	L25	S-69165	DETECTOR COIL ASSEMBLY (AM)	
C61	322-20	.05 MFD DISC	25 V	L26	S-72828	OSCILLATOR COIL ASSEMBLY (AM)	
C62	322-20	.05 MFD DISC	25 V	L27	IN T8	1st AM I.F. TRANSFORMER PRI.	
C63	22-3527	.22 MFD DISC	12 V	L28	IN T8	1st AM I.F. TRANSFORMER SEC.	
C64	22-4665	4300 PF DUREZ	100 V	L29	20-1422	PARALLEL TRAP	
C65	322-20	.05 MFD DISC	25 V				
C66	322-20	.05 MFD DISC	25 V	T2	95-2328	2nd I.F. TRANSFORMER (FM)	
C67	322-88	.47 MFD ±10%	50 V	T3	95-2387	3rd I.F. TRANSFORMER (FM)	
C68	322-40	.001 MFD DISC	1000 V	T4	95-2387	4th I.F. TRANSFORMER (FM)	
C69	322-40	.001 MFD DISC	1000 V	T5	95-2324	RATIO DETECTOR TRANSFORMER	
C70	322-22	5 MFD ELECTROLYTIC	12 V	T6	95-2326	2nd I.F. TRANSFORMER (AM)	
C71	22-3467	12 PF DISC	500 V	T7	95-2452	3rd I.F. TRANSFORMER (AM)	
C72	322-27	.0033 MFD DISC	500 V	T8	95-2325	1st I.F. TRANSFORMER (AM)	
C73	322-3	.01 MFD DISC	25 V	T9	95-2316	TRAP COIL 67 KC	
C74				T10	95-2315	19 KC INPUT TRANSFORMER	
C75	322-88	.47 MFD ±10%	50 V	T11	95-2313	19 KC DOUBLER TRANSFORMER	
C76	322-105	.022 MFD	100 V	T12	95-2314	38 KC DETECTOR TRANSFORMER	
C77	322-40	.001 MFD DISC	1000 V				
C78	322-40	.001 MFD DISC	1000 V	A1	105-93	38 KC FILTER	
C79	322-3	.01 MFD DISC	25 V	A2	105-93	38 KC FILTER	
C80	322-3	.01 MFD DISC	25 V				
C81	322-26	2 MFD ELECTROLYTIC	6 V	M1	S-69172	HOUSING & CABLE ASSBLY. (6 CONTACT)	
C82	322-26	2 MFD ELECTROLYTIC	6 V	M2		HOUSING & CABLE ASSBLY. (9 CONTACT)	
C83	22-3555	330 PF DISC ±10%	500 V	M3	S-71064	TAPE CONNECTOR & PLUG ASSBLY.	
C84	22-3255	330 PF DISC ±10%	500 V	M4		TAPE CONNECTOR & BRKT. ASSBLY.	
C85	322-72	1 MFD ELECTROLYTIC	50 V	M5	422-3	TUNING METER	
C86	322-72	1 MFD ELECTROLYTIC	50 V				
C87	22-5184	.047 MFD ±10%	100 V	PL1	100-384	STEREO INDICATOR BULB	
C88	22-3891	.0068 MFD ±10%	100 V	PL2	100-249	PILOT LIGHT #1847	
C89	22-3891	.0068 MFD ±10%	100 V	PL3	100-249	PILOT LIGHT #1847	
C90	322-105	.022 MFD ±10%	100 V	PL4	100-249	PILOT LIGHT #1847	
C91	322-105	.022 MFD ±10%	100 V	PL5	100-249	PILOT LIGHT #1847	
C92	322-72	1 MFD ELECTROLYTIC	50 V	PL6	100-249	PILOT LIGHT #1847	
C93	322-72	1 MFD ELECTROLYTIC	50 V	PL7	100-249	PILOT LIGHT #1847	
C94	322-105	.022 MFD ±10%	100 V	PL8	100-249	PILOT LIGHT #1847	
C95	322-105	.022 MFD ±10%	100 V	PL9	100-249	PILOT LIGHT #1847	
C96	322-105	.022 MFD ±10%	100 V	PL10	100-249	PILOT LIGHT #1847	
C97	322-105	.022 MFD ±10%	100 V				
C98	322-30	5 MFD ELECTROLYTIC	25 V	S1	85-864	A.C. SWITCH	
C99	322-30	5 MFD ELECTROLYTIC	25 V	S2	85-863	PUSH BUTTON BANDSWITCH	
C100	322-21	50 MFD ELECTROLYTIC	10 V				
C101	322-21	50 MFD ELECTROLYTIC	10 V	X1	103-23	DIODE	
C102	322-84	.15 MFD ±10%	50 V	X2	103-23	DIODE	
C103	322-84	.15 MFD ±10%	50 V	X3	103-23	DIODE	
C104	322-84	.15 MFD ±10%	50 V	X4	103-23	DIODE	
C105	322-84	.15 MFD ±10%	50 V	X5	103-96	DIODE (ZENER)	
C106	22-3891	.0068 MFD ±10%	100 V				
C107	22-3891	.0068 MFD ±10%	100 V				

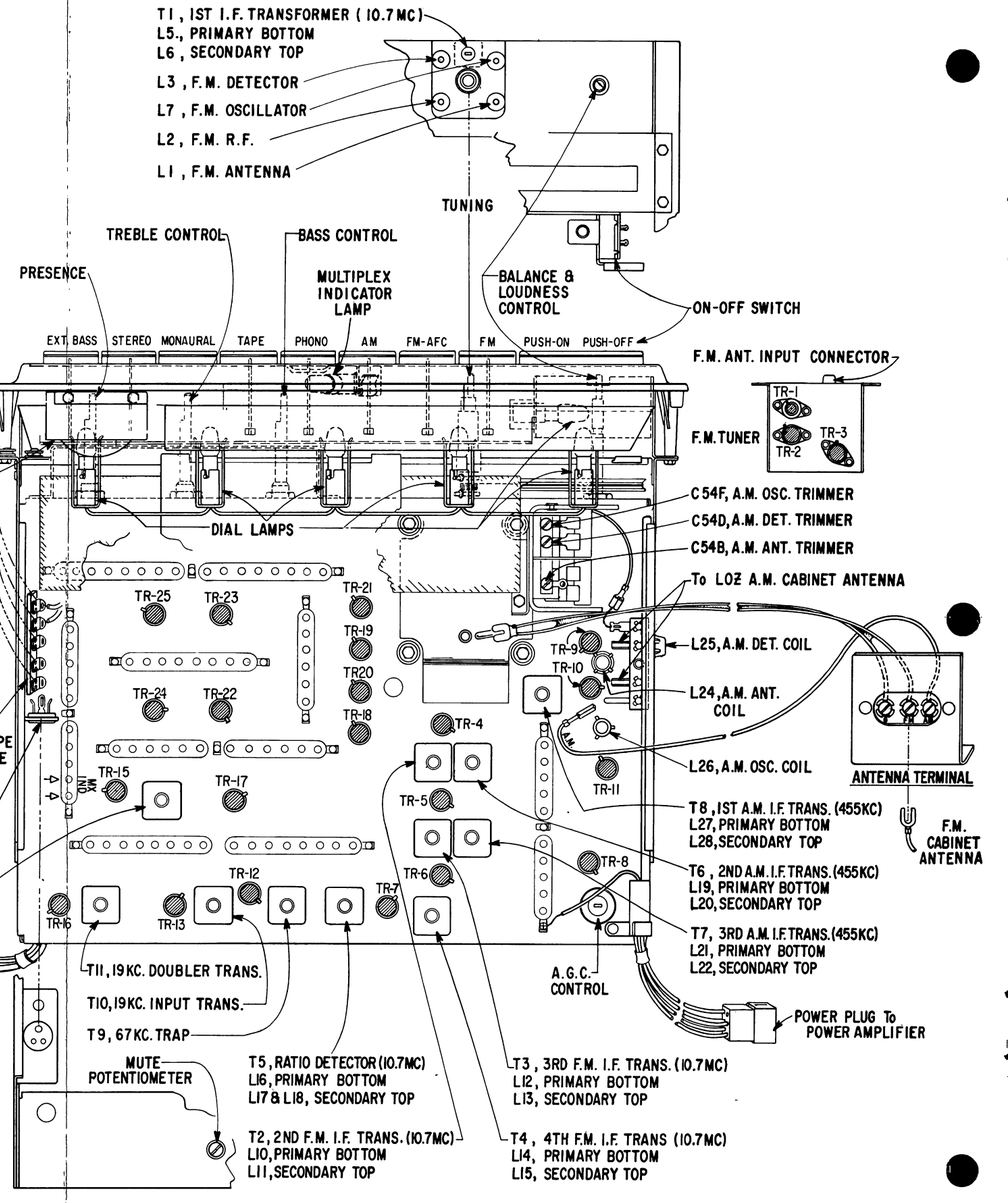




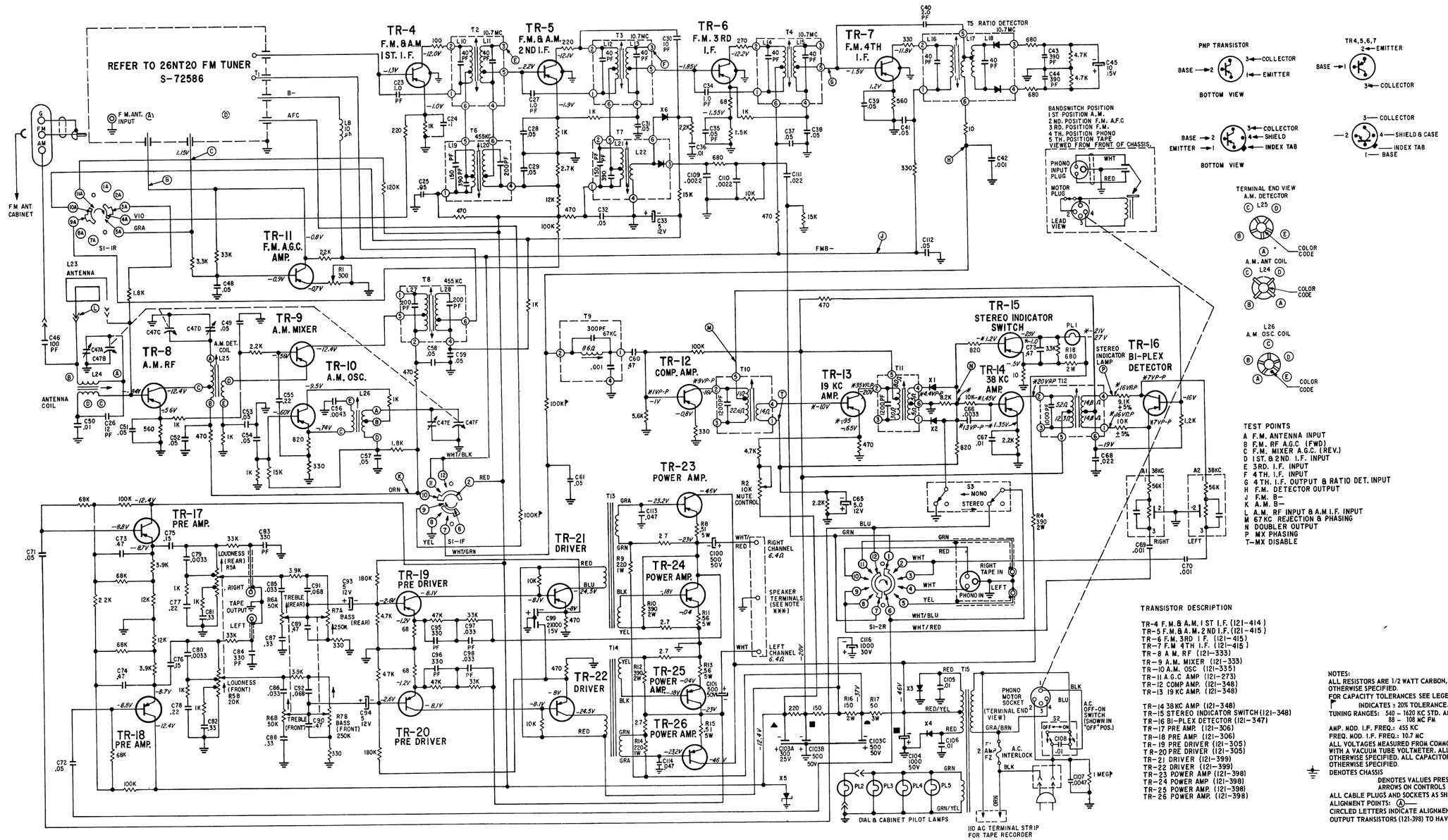
TRANSISTORS		
No	PART No	DESCRIPTION
TR-1	121-383	F M. R.F.
TR-2	121-428	F.M. MIXER
TR-3	121-432	F.M. OSC
TR-4	121-414	F.M. A.M. 1st I.F.
TR-5	121-415	F.M. A.M. 2nd I.F.
TR-6	121-415	F.M. 3rd I.F.
TR-7	121-415	F.M. 4th I.F.
TR-8	121-273	A.G.C AMP
TR-9	121-333	A.M. R.F.
TR-10	121-333	A.M. MIXER
TR-11	121-335	A.M. OSC.
TR-12	121-348	COMPOSITE AMP.
TR-13	121-348	19KC AMP.
TR-15	121-348	38KC AMP
TR-16	121-348	STEREO IND. SWITCH
TR-17	121-347	BI PLEX DET.
TR-18	121-273	PRE AMP.
TR-19	121-273	PRE AMP.
TR-20	121-273	PRE AMP.
TR-21	121-273	PRE AMP.
TR-22	121-274	PRE AMP.
TR-23	121-274	PRE AMP.
TR-24	121-437	1st AUDIO
TR-25	121-437	1st AUDIO

TAPE JACK & BRACKET ASSEMBLY USED ON
X960 X966
X962 X968
X964 X8580





24XT24 CHASSIS LAYOUT



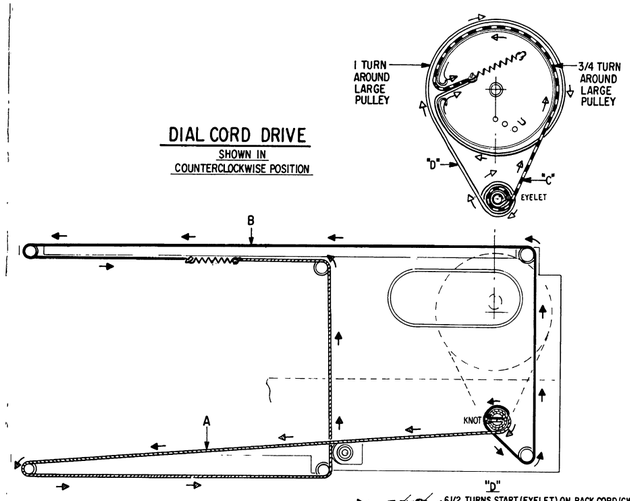
26XT20 SCHEMATIC

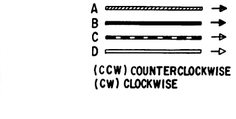
ITEM NO.	PART NO.	DESCRIPTION	
C23	322-47	1 PF GIMMICK ±10%	500 V
C24	22-3652	.1 MFD DISC	10 V
C25	322-20	.05 MFD DISC	25 V
C26	22-3467	12 PF DISC	500 V
C27	322-47	1 PF GIMMICK ±10%	500 V
C28	322-20	.05 MFD DISC	25 V
C29	322-20	.05 MFD DISC	25 V
C30	22-3675	10 PF DISC ±5%	500 V
C31	322-20	.05 MFD DISC	25 V
C32	322-20	.05 MFD DISC	25 V
C33	322-30	5 MFD ELECTROLYTIC	25 V
C34	322-47	1 PF GIMMICK ±10%	500 V
C35	322-20	.05 MFD DISC	25 V
C36	322-15	.01 MFD DISC	500 V
C37	322-20	.05 MFD DISC	25 V
C38	322-20	.05 MFD DISC	25 V
C39	322-20	.05 MFD DISC	25 V
C40	22-2434	2 PF GIMMICK ±10%	500 V
C41	322-20	.05 MFD DISC	25 V
C42	322-9	.001 MFD DISC	25 V
C43	322-32	390 PF DISC ±10%	500 V
C44	322-32	390 PF DISC ±10%	500 V
C45	322-108	10 MFD ELECTROLYTIC	15 V
C46	322-90	100 PF DISC ±10%	500 V
C47A		ANTENNA TUNING	
C47B		ANTENNA TRIMMER	
C47C		DETECTOR TUNING	
C47D	22-4618	DETECTOR TRIMMER	
C47F		OSCILLATOR TUNING	
C47E		OSCILLATOR TRIMMER	
C48	322-20	.05 MFD DISC	25 V
C49	322-20	.05 MFD DISC	25 V
C50	22-5116	.01 MFD DISC	25 V
C51	322-20	.05 MFD DISC	25 V
C52	322-20	.05 MFD DISC	25 V
C53	322-20	.05 MFD DISC	25 V
C54	322-20	.05 MFD DISC	25 V
C55	22-3527	.22 MFD DISC	12 V
C56	22-4665	.0043 MFD DUREZ ±10%	300 V
C57	322-20	.05 MFD DISC	25 V
C58	322-20	.05 MFD DISC	25 V
C59	322-20	.05 MFD DISC	25 V
C60	322-88	.47 MFD MYLAR ±10%	50 V
C61	322-20	.05 MFD DISC	25 V
C62			
C63			
C64			
C65	322-30	5 MFD ELECTROLYTIC	25 V
C66	322-27	.0033 MFD DISC ±10%	500 V
C67	322-3	.01 MFD DISC	25 V
C68	322-105	.022 MFD MYLAR ±10%	100 V
C69	322-40	.001 MFD DISC	500 V
C70	322-40	.001 MFD DISC	500 V
C71	322-20	.05 MFD DISC	25 V
C72	322-20	.05 MFD DISC	25 V
C73	22-3588	.47 MFD DISC	12 V
C74	22-3588	.47 MFD DISC	12 V
C75	322-84	.15 MFD MYLAR ±10%	50 V
C76	322-84	.15 MFD MYLAR ±10%	50 V
C77	322-86	.22 MFD MYLAR ±10%	50 V
C78	322-86	.22 MFD MYLAR ±10%	50 V
C79	322-27	.0033 MFD DISC ±10%	500 V
C80	322-27	.0033 MFD DISC ±10%	500 V
C81	322-85	.33 MFD DISC MYLAR ±10%	50 V
C82	322-85	.33 MFD DISC MYLAR ±10%	50 V
C83	22-3255	330 PF DISC ±10%	500 V
C84	22-3255	330 PF DISC ±10%	500 V
C85	22-4110	.033 MFD MYLAR ±10%	200 V
C86	22-4110	.033 MFD MYLAR ±10%	200 V
C87	322-85	.33 MFD MYLAR ±10%	50 V
C88	322-85	.33 MFD MYLAR ±10%	50 V
C89	322-88	.47 MFD MYLAR ±10%	50 V
C90	322-88	.47 MFD MYLAR ±10%	50 V
C91	22-3630	.068 MFD MYLAR ±10%	50 V
C92	22-3630	.068 MFD MYLAR ±10%	50 V
C93	322-30	5 MFD ELECTROLYTIC	25 V
C94	322-30	5 MFD ELECTROLYTIC	25 V
C95	22-3255	330 PF DISC ±10%	500 V
C96	22-3255	330 PF DISC ±10%	500 V
C97	22-4110	.033 MFD MYLAR ±10%	200 V
C98	22-4110	.033 MFD MYLAR ±10%	200 V
C99	22-4628	2 × 100 MFD ELECTROLYTIC	15 V
C100	22-5011	500 ELECTROLYTIC	50 V
C101	22-5011	500 ELECTROLYTIC	50 V
C102			
C103A		300 ELECTROLYTIC	25 V
C103B	22-5162	500 ELECTROLYTIC	50 V
C103C		500 ELECTROLYTIC	50 V
C104	322-113	1000 MFD ELECTROLYTIC	50 V
C105	322-15	.01 MFD DISC	500 V
C106	322-15	.01 MFD DISC	500 V

ITEM NO.	PART NO.	DESCRIPTION	
C107	22-5187	.0047 MFD DISC	1 KV
C108	22-4601	.01 MFD DISC ±10%	1000 V
C109	322-82	.0022 MFD DISC ±10%	500 V
C110	322-82	.0022 MFD DISC ±10%	500 V
C111	322-105	.022 MFD DISC ±10%	100 V
C112	322-20	.05 MFD DISC	25 V
C113	22-3678	.047 MFD DISC ±10%	100 V
C114	22-3678	.047 MFD DISC ±10%	100 V
C115			
C116	22-5167	1000 MFD ELECTROLYTIC	30 V
R1	63-6376	POTENTIOMETER	
R2	63-5192	POTENTIOMETER (MUTING)	
R3			
R4	63-5663	680 OHMS ±10%	2 W
R5A	63-6361	LOUDNESS CONTROL (REAR)	
R5B		LOUDNESS CONTROL (FRONT)	
R6A	63-6363	TREBLE CONTROL (REAR)	
R6B		TREBLE CONTROL (FRONT)	
R7A	63-6362	BASS CONTROL (REAR)	
R7B		BASS CONTROL (FRONT)	
R8	63-5305	.51 OHMS ±10%	5 W
R9	63-6042	220 OHMS ±10%	1 W
R10	63-5652	390 OHMS ±10%	2 W
R11	63-6378	.56 OHMS ±10%	5 W
R12	63-5652	390 OHMS ±10%	2 W
R13	63-6378	.56 OHMS ±10%	5 W
R14	63-6042	220 OHMS ±10%	1 W
R15	63-5305	.51 OHMS ±5%	5 W
R16	63-5635	150 OHMS ±10%	2 W
R17	63-6377	50 OHMS ±10%	3 W
R18	63-5666	820 OHMS ±10%	2 W
L8	20-2033	R.F. CHOKE COIL	
L9			
L10	IN T2	2nd. I.F. TRANSFORMER (FM) PRI.	
L11	IN T2	2nd I.F. TRANSFORMER (FM) SEC.	
L12	IN T3	3rd I.F. TRANSFORMER (AM) PRI.	
L13	IN T3	3rd I.F. TRANSFORMER (AM) SEC.	
L14	IN T4	4th I.F. TRANSFORMER (FM) PRI.	
L15	IN T4	4th I.F. TRANSFORMER (FM) SEC.	
L16	IN T5	RATIO DETECTOR TRANSFORMER PRI.	
L17	IN T5	RATIO DETECTOR TRANSFORMER SEC.	
L18	IN T5	RATIO DETECTOR TRANSFORMER 3RD	
L19	IN T6	2nd I.F. TRANSFORMER (AM) PRI.	
L20	IN T6	2nd I.F. TRANSFORMER (AM) SEC.	
L21	IN T7	3rd I.F. TRANSFORMER (FM) PRI.	
L22	IN T7	3rd I.F. TRANSFORMER (FM) SEC.	
L23	S-64803	A.M. ANTENNA (CABINET)	
L24	S-72060	ANTENNA COIL ASSEMBLY (AM)	
L25	S-69165	DETECTOR COIL ASSEMBLY (AM)	
L26	S-72828	OSCILLATOR COIL ASSEMBLY (AM)	
L27	IN T8	1st I.F. TRANSFORMER (AM) PRI.	
L28	IN T8	1st AM FM TRANSFORMER (AM) SEC.	
A1	105-93	38 KC FILTER	
A2	105-93	38 KC FILTER	
F1	136-40	2 AMP. FUSE	
PL1	100-384	STEREO INDICATOR LIGHT	
PL2	100-249	STEREO LIGHT #1847	
PL3	100-249	PILOT LIGHT #1847	
PL3	100-249	PILOT LIGHT #1847	
PL4	100-249	PILOT LIGHT #1847	
PL5	100-249	PILOT LIGHT #1847	
S1	85-923	FIVE POSITION BANDSWITCH	
S2	85-891	A.C. SWITCH	
S3	85-892	STEREO MONAURAL SWITCH	
T2	95-2328	2nd I.F. TRANSFORMER (FM)	
T3	95-2387	3rd I.F. TRANSFORMER (FM)	
T4	95-2328	4th I.F. TRANSFORMER (FM)	
T5	95-2324	RATIO DETECTOR TRANSFORMER	
T6	95-2326	2nd I.F. TRANSFORMER (AM)	
T7	95-2452	3rd I.F. TRANSFORMER (AM)	
T8	95-2325	1st AM I.F. TRANSFORMER	
T9	95-2316	TRAP COIL 67 KC	
T10	95-2315	19 KC MULTIPLEX TRANSFORMER	
T11	95-2313	19 KC DOUBLER TRANSFORMER	
T12	95-2314	38 KC DETECTOR TRANSFORMER	
T13	95-2330	DRIVER TRANSFORMER	
T14	95-2330	DRIVER TRANSFORMER	
T15	95-2335	POWER TRANSFORMER	
X1	103-23	DIODE	
X2	103-23	DIODE	
X3	212-61	RECTIFIER	
X4	212-61	RECTIFIER	
X5	103-96	DIODE (ZENER)	
X6	103-23	DIODE	

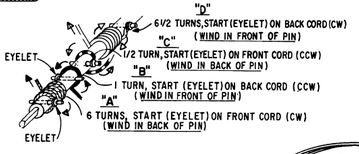
DIAL CORD DRIVE

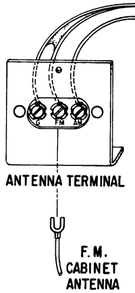
SHOWN IN COUNTERCLOCKWISE POSITION





(CCW) COUNTERCLOCKWISE
(CW) CLOCKWISE



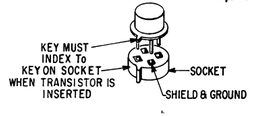


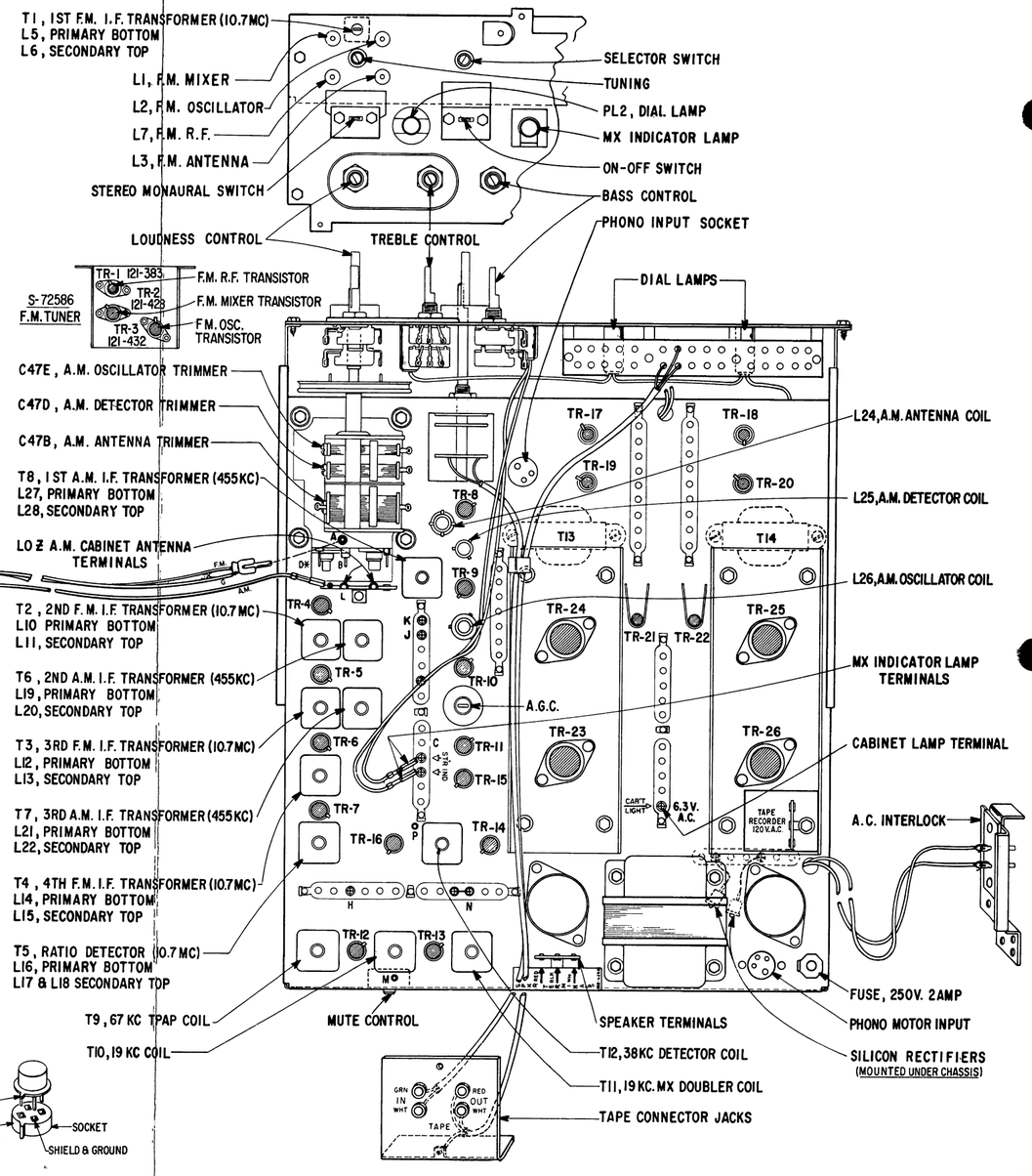
TRANSISTORS			
NO.	PART N	DESCRIPTION	REQ'D
TR-4	121-414	A.M. FM. IST I.F.	1
TR-5	121-415	A.M. F.M. 2ND I.F.	3
TR-6	121-415	3RD F.M. I F	
TR-7	121-415	4TH F.M. I.F.	
TR-8	121-333	A.M. R.F.	2
TR-9	121-333	A.M. MIXER	
TR-10	121-335	A.M. OSCILLATOR	1
TR-11	121-273	A.G.C AMP	1
TR-12	121-348	COMPOSITE AMP	4
TR-13	121-348	19KC AMP	
TR-14	121-348	38KC AMP	
TR-15	121-348	STEREO IND. CONTROL	
TR-16	121-347	BI-PLEX DET.	1
TR-17	121-306	PRE AMP	2
TR-18	121-306	PRE AMP	
TR-19	121-305	PRE-DRIVER	2
TR-20	121-305	PRE-DRIVER	
TR-21	121-399	DRIVER	2
TR-22	121-399	DRIVER	
TR-23	121-398	POWER AMP	4
TR-24	121-398	POWER AMP	
TR-25	121-398	POWER AMP	
TR-26	121-398	POWER AMP	

TEST POINTS	
A	F M ANTENNA INPUT
B	F.M.-R F A.G.C (FWD)
C	F M MIXER A.G.C (REV)
D	1st & 2nd I.F INPUT
H	F.M. DET OUTPUT
J	F.M. B-
K	A.M. B-
L	A.M. R.F. INPUT + and A.M. I.F. INPUT
M	67KC REJECTION and PHASING
N	DOUBLER OUTPUT
P	PHASING

(1st & 2nd I.F. INPUT)

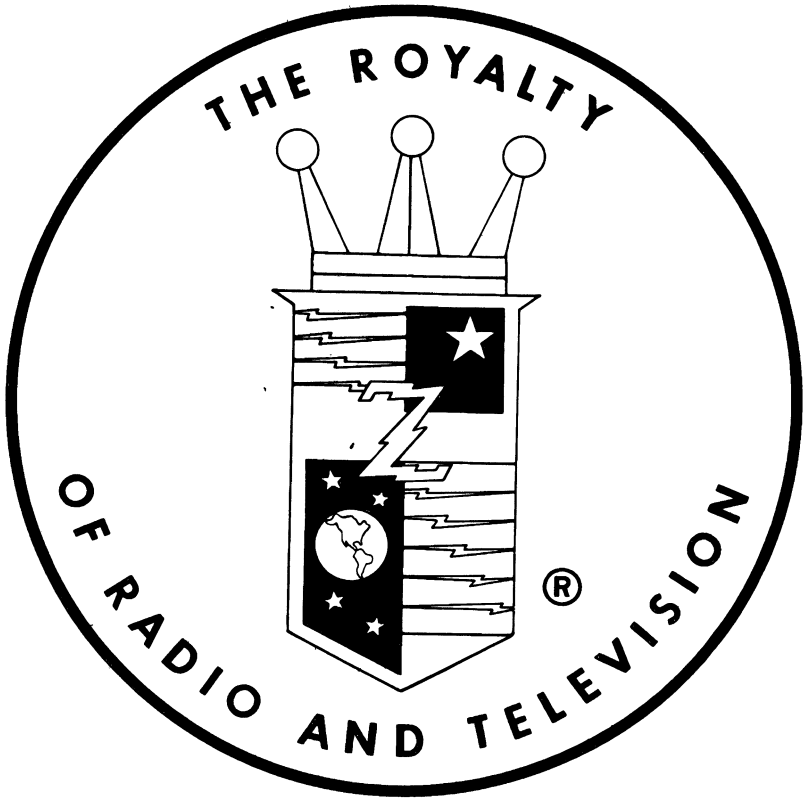
* MIXER EMITTER TEST POINT BROUGHT OUT OF SOCKET EYELET





26XT20 CHASSIS LAYOUT

NOTES



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